

Midea Group

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# MDV

1999

CAC field

Entered the

MDV was created in 1999 under HBT (HVAC & Building Technologies) Division as a professional climatic solution brand for sales via specialized air-conditioning companies. MDV's brand portfolio (range of products produced under MDV brand) consists of cutting-edge technology and commercial and industrial equipment. These include VRF (Variable Refrigerant Flow) systems, air source heat pump, chillers and fan-coils, compressor condensing units, light commercial air-conditioners, used in commercial segment. Focusing on the professional channel for more than 10 years, MDV brand is recognized worldwide as one "professional HVAC solutions".



2011-2014 Launched the DC Inverter V4 Plus Series

complete product

successfully enter the

lines help Midea

mainstream VRF

successively,

market

2011-2012

inverter technology

Developed DC

with Toshiba

2009

2008

2000-2001

ooperated with Toshiba and

Copeland, enter VRF

Developed DC inverter technology

with Toshiba

Developed DC inverter technology

with Toshiba

2020

2018-2019

for hot regions

Launched the All DC

Inverter Cooling Only VC Pro VRF,ultra cool Launched in the

new generation

V6R VRF globally

heat recovery

# **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 mannower
- 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

- $\, \bullet \, \text{Top}$  class compact design, 16kW capacity with only  $0.42 m^2$  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



03 | Benefits for Midea VRF



# **Application Solutions**

## Office Complexes

#### Enjoy comfort while working

High-rise office building



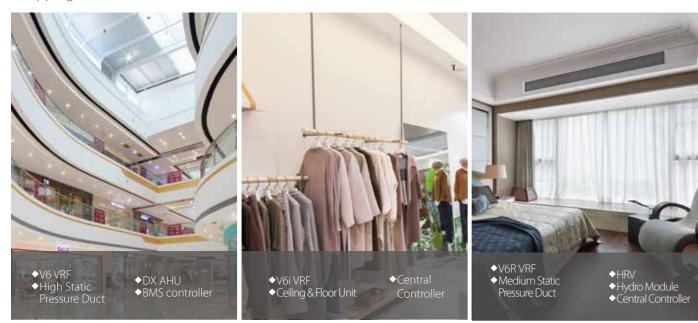
Small and medium-sized office buildings

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



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



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

# **Other Applications**

#### Meeting all expectations

Hospitals Schools Airports



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.

05 | Application Solutions Application Solutions

# **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.





















07 | MHBT Learning Academy | 08

# **Engineering Capability Midea Tool and Support**

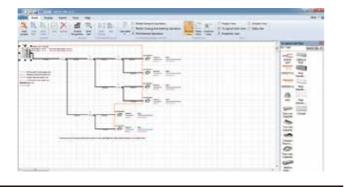
Midea dedicated to provide the best HVAC engineering supportand solutions focused on effectively designed, built, supervised, and maintained throughout the lifecycle, providing our customers a faster, easier, and a more accurate way in everyday duties.



#### MSSP-Drag/Drop Design

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

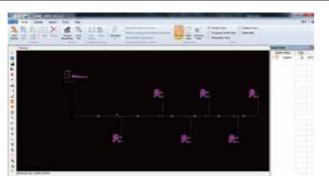
Note: MSSP (Midea Selection Software Platform)



#### MSSP-CAD Design

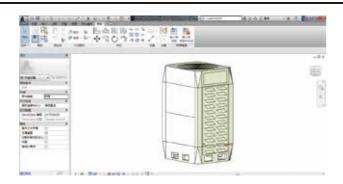
MSSP-CAD design enables an visual and fast selection and provides comprehensive system design reports and calculations.

Note: MSSP (Midea Selection Software Platform)



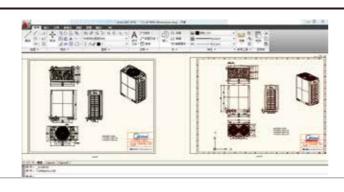
#### **Revit Family**

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.



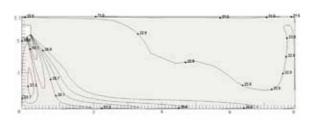


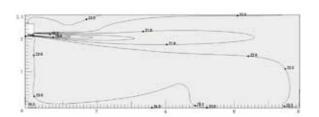
#### Simulation

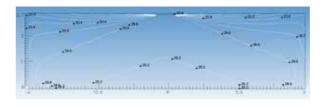
#### CFD (Computational Fluid Dynamics)

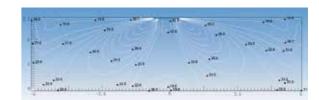
CFD Analysis is applied in areas of estimating: indoor airflow and temperature distribution. By running a simulation before construction, engineers estimate possible issues and find optimal solutions of malfunction that could occur after construction

### Temperature distribution

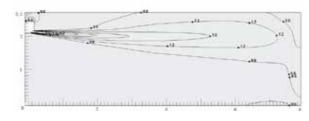


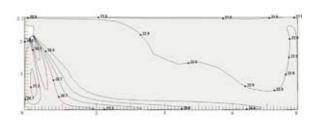


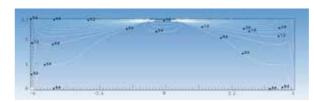


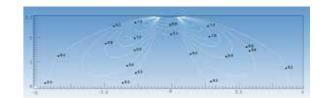


#### Airflow distribution











# **Midea Global Spare Parts Center**

The global spare parts 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.











11 | Outdoor Unit Lineup | 12



# **INDEX**

## INDOOR UNITS

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







#### **OUTDOOR UNITS**

#### Air cooled - heat pump VRF

033 VRF MDV6

041 VRF MDV6i

045 VRF MDV4i - side discharge

047 Mini VRF

### Air cooled - heat recovery VRF

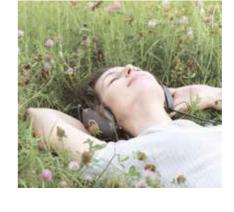
053 VRF MDV6R



### **BRANCH JOINTS**

167 Branch Joints

175 Branch Headers





# CONTROL SYSTEMS

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

13 | Outdoor Unit Lineup Outdoor Unit Lineup | 14



# OUTDOOR UNITS

Air Cooled - Heat Pump VRF Air Cooled - Heat Recovery

# **Outdoor Unit Lineup**

НР			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
	VRF MDV6	36										•	•	•	•	•	•	•	•	•	•	•	•	•	
	VRF MDV6i - Top Discharge	36										•	•	•	•										
Air Cooled -	VRF MDV6i - Side Discharge	0										•	•												
Heat Pump	VRF MDV4i - Side Discharge													•	•										
	Mini VRF - Standard	9			•	•	•	•																	
	Mini VRF - Mini C Series		•	•	•		•																		
Air Cooled - Heat Recovery	VRF MDV6R  Combination unit	Who was a second and a second a													•	•						•		•	

Single drift Combination di

17 | Outdoor Unit Lineup



# **Outdoor Unit Functions**

			Air Cooled - Heat Pump			Air Cooled - Heat Pump		Air Cooled - Heat Recovery
Functions		VRF MDV6	VRF MDV6i- top discharge	VRF MDV6i- side discharge	VRF MDV4i- side discharge	Mini VRF - standard	Mini VRF - Mini C series	VRF MDV6R
	META technology	•	•	×	×	×	×	•
Key Technology	Zen air	•	•	•	•	•	•	•
	Doctor M.	•	•	×	×	×	×	•
	Full inverter compressors	•	•	•	•	•	•	•
	Enhanced Vapor Injection (EVI) compressor	•	•	×	×	×	×	•
High	Full DC fan motors	•	•	•	•	•	•	•
High Efficiency	Plate Heat Exchanger (PHE) subcooling	•	•	×	×	×	×	•
	G-type heat exchanger	• (24-32HP)	(24-32HP)	×	×	×	×	×
	7 levels of energy management	40-100%	40-100%	×	×	×	×	40-100%
	Duty cycling	•	×	×	×	×	×	•
	Precise oil control	•	•	•	•	•	•	•
	Backup operation (compressor)	•	•	×	×	×	×	•
	Backup operation (module)	•	×	×	×	×	×	•
	Anti-corrosion protection	•	•	•	•	•	•	•
High Reliability	UL anti-corrosion certificate	•	•	×	×	×	×	×
nenabiney	Refrigerant cooling PCB	•	•	•	×	×	•	•
	Real-time refrigerant amount monitoring	•	•	×	×	×	×	•
	Auto snow-blowing function	0	0	×	×	×	×	0
	Dust-clean function	0	0	×	×	×	×	0
	Gas leak protection	×	×	×	×	×	×	•
	Silent mode	Nght silent mode+silent mode+super silent mode	Nght silent mode+silent mode+super silent mode	×	×	×	×	Nght silent mode+silent mode+super silent mode
	Intelligent defrosting technology	•	•	•	•	•	•	•
Enhanced Comfort	Continuous heating (alternate defrost)	×	×	×	×	×	×	•
	Connectable to high temperature hydro module for hot water	×	×	×	×	×	×	•
	Multiple priority modes	•	•	•	•	•	•	×
	Auto addressing	•	•	•	•	•	•	•
	Automatic refrigerant charging	0	0	×	×	×	×	0
	Automatic refrigerant recycling	0	0	×	×	×	×	0
	Multi-functional diagnosis box	0	0	×	×	×	×	•
Easy Installation	Maintenance mode	•	•	×	×	×	×	•
and Service	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:

19 | Outdoor Unit Lineup | 20

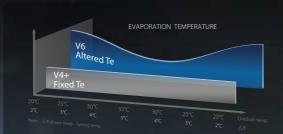
<sup>•:</sup> equipped as standard; •: customization option; ×: without this function

# **KEY TECHNOLOGIES**

# SETA\* 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



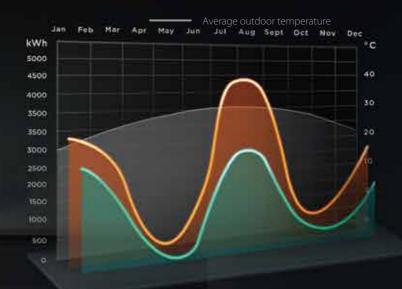
Through the data monitoring of a replacement project in Hangzhou from 2018 to 2019, we obtained the following actual data.



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

#### 2019-V6(META)

The total electricity consumption is 16904kWh from 2019 to 2020.



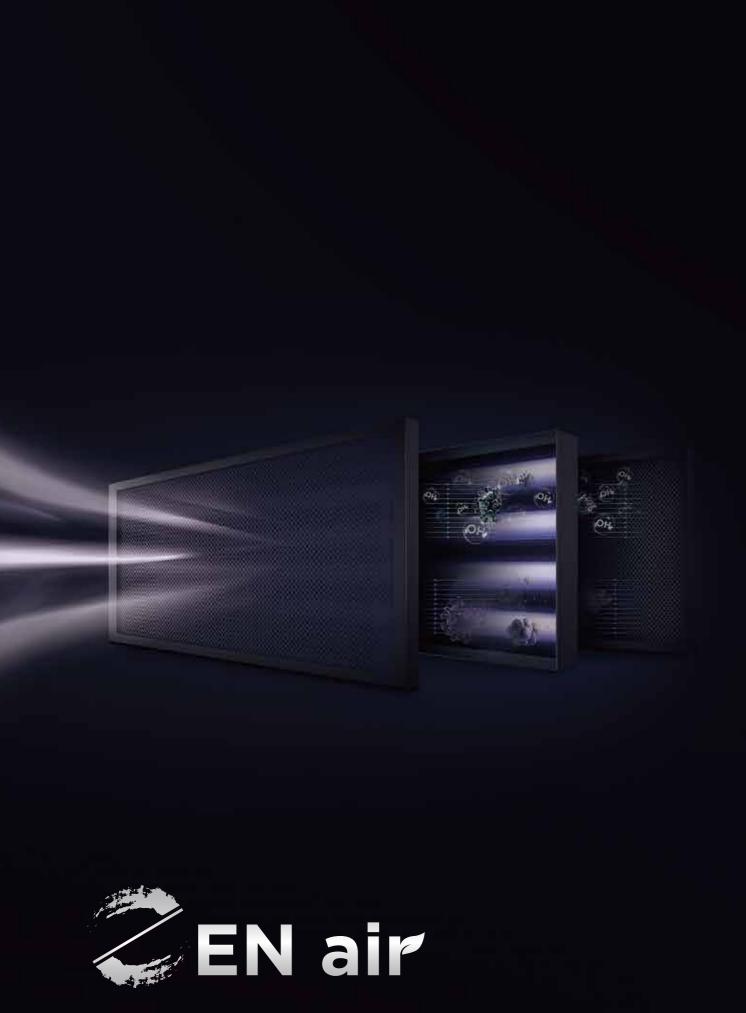


Save 1074USD electricity cost all year round.

# **A DESIGN STUDIO**

In Fuyang District, Hangzhou, China.

The total usable area is 312 m<sup>2</sup>



# HEALTH

ENSURES PURITY FOR EVERY INDOOR BREATH

#### **PURO-AIR KIT**

**SAFE** indoor air, from the invisible care **PURIFICATION** speed industry leader









**UV** Guard

an 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

ZONING FLOW

5-LEVEL WINGING FI OW

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

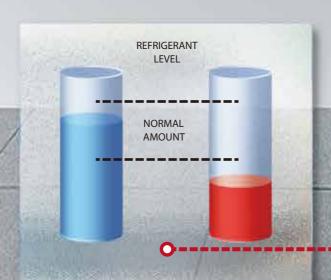


# REFRIGERANT DETECTOR

REAL TIME REFRIGERANT
AMOUNT MONITORING TO
ALARM AND ENSURE
CONSISTENT PERFORMANCE





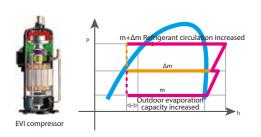




#### **HIGH EFFICIENCY**

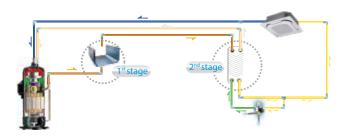
#### High Efficiency Enhanced Vapor Injection (EVI) Compressor

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



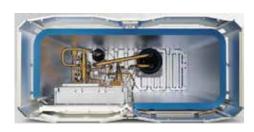
#### Plate Heat Exchanger (PHE) Subcooling

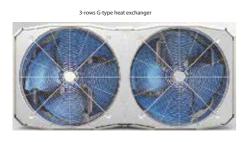
Plate Heat Exchanger as a secondary intercooler boosts up refrigerant subcooling and improves 10% energy efficiency.



#### 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.





Super big size far

#### 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.



#### Unit backup

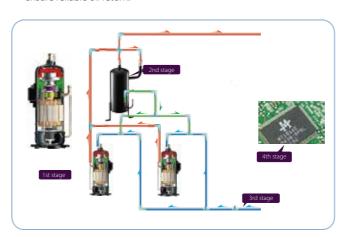
In a multi-unit system, if one module fails, the other modules provide backup so that the system can continue operating.



#### 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.



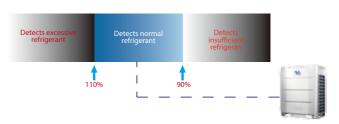
#### Refrigerant Cooling PCB

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.



#### 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.



27 | Outdoor Units | 28

#### **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.



#### 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

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

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.



#### **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 mis

#### 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



#### **UL Anti-Corrosion Certificate**

### **WIDE CAPACITY RANGE**

#### Wide Capacity Range

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



#### Wide Product Portfolio

MDV 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.



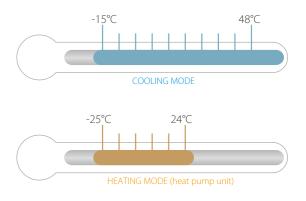
#### Wide Range of Indoor Units

MDV 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.



#### 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.

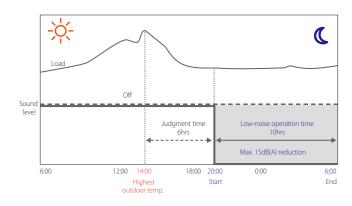


• In night silent mode and silent mode, only maximum fan speed is limited to meet the normal silent requirement.



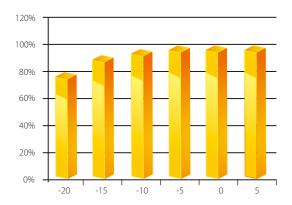
In super silent mode, both maximum fan speed and compressor frequency are limited to meet higher silent requirement.

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.



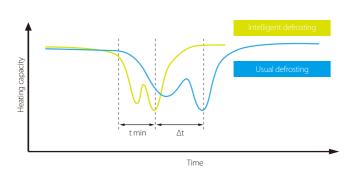
#### **Enhanced Heating Capacity**

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 at four minutes.



#### **Multiple Priority Modes**

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



#### **EASY INSTALLATION AND SERVICE**

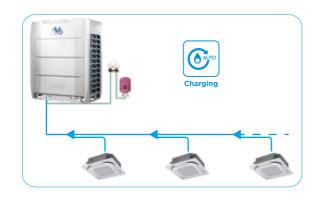
#### **Auto Addressing**

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.



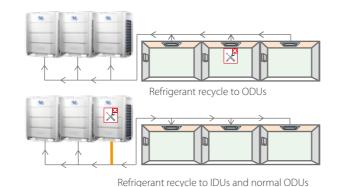
#### **Automatic Refrigerant Charging**

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.



# Multi-Functional Diagnosis Box

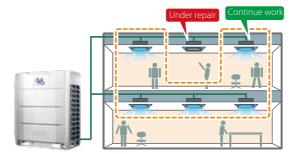
An multi-functional diagnosis box can be installed on the unit's side columns, enabling installation and service engineers to activate Auto-commissioning or check the operating status without removing the front panel. It can also perform automatic data backup of a maximum of 30 sets of error data.



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.



#### **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 Progateway 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.



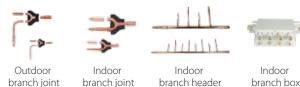
#### High External Static Pressure

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.



#### MDV Unified Branch Piping

The unified MDV 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.

31 | Outdoor Units





Indoor Units
VRF indoor units



Fresh Air Processing Unit 100% fresh air supply



Ventilation

Heat recovery ventilator (HRV)



AHU Connection Kit
Connect to MDV or third party DX AHU



Control Systems
Smart control systems



# VRF MDV6 Series Heat Pump

Optimized design for small to large buildings

- META Technolog
- Zen Air Technology
- Doctor M Technolog
- Enhanced Vapor Injection (EVI) Compresse
- Triple Configu
- High Efficiency G-Shape Heat Exchange
- ESP up to 120P
- Plate Heat (PHF) Subcooling
- Precise Oil Control Technolog
- Multi Silent Mode
- Duty Cycling
- Paskus Operatio
- III Anti Carrasian Cartificat
- Refrigerant Cooling PCF
- Dust-clean Function
- Multi-Functional Diagnosis Ro
- Automatic Refrigerant Detecting/Charging/Recyc

#### Wide Capacity Range

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

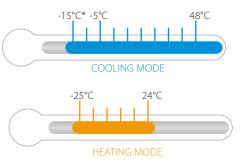




#### Wide Operating Temperature Range

The MDV6 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.

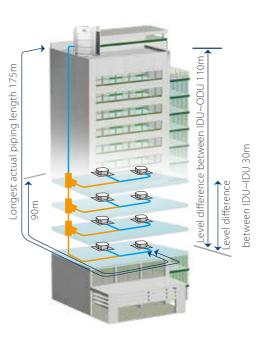
\* Cooling operation at -15°C is available as a customization option.



#### 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 MDV6 Series - Heat

#### 380~415V, 3N, 50Hz

Capacity		HP	8	10	12	14				
Model			MDVO-V6252V2R1BE	MDVO-V6280V2R1BE	MDVO-V6335V2R1BE	MDVO-V6400V2R1BE				
Power supply		V/N/Hz		380-4	15/3/50					
	Canacity	kW	25.2	28.0	33.5	40.0				
C 1: 1	Capacity	kBut/h	86.0	95.5	114.3	136.5				
Cooling	Power input	kW	5.93	6.75	8.7	9.9				
	cover supply  Capacity  Power input  EER  Capacity  Power input  COP  Capacity  Power input  COP  Capacity  Power input  COP  Total capacity  Max. quantity  Type  Quantity  Type  Quantity  Max. ESP  Type		4.25	4.15	3.85	4.05				
	Capacity	kW	25.2	28.0	33.5	40.0				
	Сараспу	kBut/h	86.0	95.5	114.3	136.5				
Heating <sup>2</sup> (Rated)	Power input	kW	4.82	5.46	6.6	8.5				
	COP	kW/kW	5.23	5.13	5.10	4.70				
	Capacity	kW	27.0	31.5	37.5	45.0				
	' '	kBut/h	92.1	107.5	128.0	153.5				
Heating* (iviax)	Power input	kW	5.39	6.54	7.88	10.27				
	COP	kW/kW	5.01	4.82	4.76	4.38				
Connectable	Total capacity			50-130% of outo	door unit capacity					
Indoor Unit	loor Unit Max. quantity		13	16	20	23				
Compressors	Type			DC ir	nverter					
Compressors	Quantity				1					
			DC							
Fan motors	Quantity				1					
	Max. ESP	Pa			customization option	20 default; up to 120 customization option				
Refrigerant	Type			R4	10A					
<u> </u>	Factory charge	kg		11		13				
Pipe	Liquid pipe	mm		12.7	Ф15.9	Ф15.9				
connections <sup>3</sup>	Gas pipe	mm	Φ.	25.4	Ф28.6	Ф31.8				
Airflow rate		m³/h		11000		13000				
Sound pressure I		dB(A)		58	60	62				
Sound power lev		dB(A)		78	81	85				
Net dimensions		mm		990×1635×790		1340×1635×850				
Packed dimensions (WxHxD) mm		mm	1090×1805×860 1405×1805×910							
Net weight kg			227		277					
Gross weight kg				242		304				
Ambient temp.	Cooling	°C			to 48					
operating range	Heating	°C		-25	to 24					

Capacity		HP	16	18	20	22				
Model			MDVO-V6450V2R1BE	MDVO-V6500V2R1BE	MDVO-V6560V2R1BE	MDVO-V6615V2R1BE				
Power supply		V/N/Hz		380-41	5/3/50					
	Canacity	kW	45.0	50.0	56.0	61.5				
C1:1	Capacity	kBut/h	153.5	170.6	191.1	209.8				
Cooling	Power input	kW	12.0	12.5	15.1	18.4				
	EER	kW/kW	3.75	4.00	3.70	3.35				
	Capacity	kW	45.0	50.0	56.0	61.5				
Llasting? (Datad)	Capacity	kBut/h	153.5	170.6	191.1	209.8				
Heating <sup>2</sup> (Rated)	Power input	kW	9.8	10.6	12.7	15.0				
	COP	kW/kW	4.60	4.70	4.40	4.10				
	Capacity	kW	50.0	56.0	63.0	69.0				
	' '	kBut/h	170.6	191.1	215.0	235.4				
Heating <sup>2</sup> (Max)	Power input	kW	11.76	12.84	15.29	17.78				
	COP	kW/kW	4.25	4.36	4.12	3.88				
Connectable	Total capacity			50-130% of outd	loor unit capacity					
Indoor Unit	Max. quantity		26	29	33	36				
Compressors	Туре			DC in	nverter					
Compressors	Quantity		1 2							
	Туре		DC							
Fan motors	Quantity		1		2					
	Max. ESP	Pa			customization option					
Refrigerant	Туре			R4	10A					
	Factory charge	kg	13		17					
Pipe	Liquid pipe	mm	Ф15.9		Ф19.1					
connections <sup>3</sup>	Gas pipe	mm	Ф31.8		Ф31.8					
Airflow rate		m³/h	13000		17000					
Sound pressure I		dB(A)	(	55		6				
Sound power lev	rel	dB(A)		8	38					
Net dimensions (		mm	1340×1635×850		1340×1635×825					
Packed dimensic	ns (WxHxD)	mm		1405×1	805×910					
Net weight		kg	277		348					
Gross weight kg			304		368					
Ambient temp.	Cooling	°C			o 48					
operating range	Heating	°C		-25	to 24					

- 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.

## VRF MDV6 Series - Heat

#### 380~415V, 3N, 50Hz

Capacity		HP	24	26	28				
Model			MDVO-V6670V2R1BE	MDVO-V6730V2R1BE	MDVO-V6785V2R1BE				
Power supply		V/N/Hz		380-415/3/50					
	Capacity	kW	67.0	73.0	78.5				
c i 1	Capacity	kBut/h	228.6	249.1	267.8				
Cooling <sup>1</sup>	Power input	kW	18.1	20.9	24.2				
	EER	kW/kW	3.70	3.49	3.25				
	Capacity	kW	67.0	73.0	78.5				
1	Capacity	kBut/h	228.6	249.1	267.8				
Heating <sup>2</sup> (Rated)	Power input	kW	15.33	18.11	21.16				
	COP	kW/kW	4.37	4.03	3.71				
	Ci-	kW	75.0	81.5	87.5				
1	Capacity	kBut/h	255.9	278.1	298.6				
Heating <sup>2</sup> (Max)	Power input	kW	18.56	21.68	26.04				
	COP	kW/kW	4.04	3.76	3.36				
Connectable	Total capacity			50-130% of outdoor unit capacity					
ndoor Unit	Max. quantity		39	43	46				
	Type			DC inverter					
Compressors	Quantity			2					
	Туре			DC					
an motors	Quantity			2					
	Max. ESP	Pa		20 default; up to 120 customization option					
ofrianzant	Туре			R410A					
Refrigerant	Factory charge	kg		22					
Pipe	Liquid pipe	mm	Φ19.1	Ф22	2				
connections <sup>3</sup>	Gas pipe	mm	Ф31.8	Ф31	.8				
Airflow rate		m³/h		25000					
Sound pressure le	evel 4	dB(A)	67	68	3				
Sound power lev		dB(A)	89	90	)				
Net dimensions (				1730 × 1830 × 850					
acked dimensio	mensions (WxHxD) mm			1800×2000×910					
let weight	weight kg		430						
Gross weight kg			453						
Ambient temp.	Cooling	°C	-5 to 48						
operating range	Heating	°C	-25 to 24						

Capacity		HP	30	32				
Model			MDVO-V6850V2R1BE	MDVO-V6900V2R1BE				
Power supply		V/N/Hz	380-41	5/3/50				
	Capacity	kW	85.0	90.0				
Cooling	Capacity	kBut/h	290.0	307.1				
.ooiirig	Power input	kW	27.4	31.0				
	EER	kW/kW	3.10	2.90				
	Capacity	kW	85.0	90.0				
	' '	kBut/h	290.0	307.1				
Heating <sup>2</sup> (Rated)	Power input	kW	22.9	25.7				
	COP	kW/kW	3.71	3.50				
	Capacity	kW	95.0	100.0				
	Capacity	kBut/h	324.1	341.2				
Heating <sup>2</sup> (Max)	Power input	kW	27.78	30.67				
	COP	kW/kW	3.42	3.26				
onnectable	Total capacity		50-130% of outd	oor unit capacity				
door Unit	Max. quantity		50	53				
ompressors	Туре		DC in	verter				
.011101633013	ressors Quantity		2					
	Туре		DC					
an motors	Quantity			2				
	Max. ESP	Pa		customization option				
efrigerant	Туре			10A				
_	Factory charge	kg		25				
ipe	Liquid pipe	mm	Φ2					
onnections <sup>3</sup>	Gas pipe	mm	Ф3					
irflow rate		m³/h		000				
ound pressure le		dB(A)		58				
ound power lev		dB(A)	-	90				
et dimensions (		mm		830 × 850				
acked dimensio	ns (WxHxD)	mm		000×910				
et weight		kg		75				
Gross weight kg		kg	50	07				
Ambient temp.	Cooling	°C	-5 to 48					
perating range	Heating	°C	-25 t	to 24				

- 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.

Outdoor Units | 36 35 | Outdoor Units



## VRF MDV6 Series - Heat

#### 380~415V, 3N, 50Hz

Packed dimensions (WxHxD)         mm         (1090x1805x860)+(1405x1805x910)         (1405x1805x910)x2         (1090x1805x860)+(1800x2000x91)           Net weight         kg         227+348         277+348         227+430           Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48	Capacity		HP	34	36	38	40					
Cooling	Model			MDVO-V6950V2R1BE	MDVO-V61015V2R1BE	MDVO-V61065V2R1BE	MDVO-V61120V2R1BE					
Cooling	Combination typ	e		12HP+22HP	14HP+22HP	16HP+22HP	12HP+28HP					
Cooling	Power supply		V/N/Hz		380-41	5/3/50						
Cooling   EBU/h   334.1   346.3   363.4   382.1		Capacity	kW	95.0	101.5	106.5	112.0					
Heating   Refigerant   Factory charge   Refigerant   Type   Quantity   Type   Testory charge   Refigerant   Type   Testory charge   Refigerant   Type   Testory charge   Refigerant   Type   Ty	C1:1	Сарасіту	kBut/h	324.1	346.3	363.4	382.1					
Heating2 (Rated   Capacity   KW   95.0   101.5   106.5   112.0	Cooling	Power input	kW	27.1	28.2	30.4	32.9					
Heating2 (Rated   Power input   RW   21.6   23.5   24.8   27.7		EER	kW/kW	3.51	3.59	3.51	3.41					
Heating2 (Rated)   Power input   KW   21.6   23.5   24.8   27.7		Capacity	kW	95.0	101.5	106.5	112.0					
Fower Input	Heating? (Dated)	' '										
Heating  (Max)	nealing (nateu)	Power input	kW	21.6	23.5	24.8	27.7					
Capacity   KBut/h   363.4   389.0   406.0   426.5		COP		4.40	4.32	4.30	4.04					
Heating² (Max   Power input		Canacity	kW	106.5	114.0	119.0	125.0					
Power input   kW   25.66   28.06   29.55   33.92     COP	Heating <sup>2</sup> (May)	' '		363.4	389.0	406.0	426.5					
Connectable Indoor Unit         Total capacity         50-130% of outdoor unit capacity           Indoor Unit         Max. quantity         56         59         63         64           Compressors         Type         DC inverter         DC	ricating (iviax)			25.66								
Indoor Unit			kW/kW	4.15			3.69					
Type	Connectable	Total capacity			50-130% of outd	oor unit capacity						
Type	Indoor Unit	Max. quantity		56			64					
Type	Compressors											
Fan motors    Quantity   3   20 default; up to 120 customization option	Compressors	- /										
Max. ESP   Pa   20 default; up to 120 customization option		7.1										
Refrigerant         Type Factory charge         kg         11+17         13+17         11+22           Pipe connections³         Liquid pipe Gas pipe         mm         Φ19.1         Φ19.1           Airflow rate         m³/h         28000         30000         36000           Sound pressure level⁴         dB(A)         69           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)+(1730×1830×85)           Packed dimensions (WXHxD)         mm         (1090×1805×860)+(1405×1805×910)         (1405×1805×910)×2         (1090×1805×860)+(1800×2000×91)           Net weight         kg         227+348         277+348         227+430           Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48	Fan motors	- /				9						
Factory charge   kg		Max. ESP	Pa									
Factory charge   kg	Refrigerant											
connections <sup>3</sup> Gas pipe         mm         031.8         038.1           Airflow rate         m³/h         28000         30000         36000           Sound pressure level         dB(A)         69           Sound power level         dB(A)         91           Net dimensions (WxHxD)         mm         (990x1635x790)+(1340x1635x825)         (1340x1635x850)+(1340x1635x825)         (990x1635x790)+(1730x1830x85           Packed dimensions (WxHxD)         mm         (1090x1805x860)+(1405x1805x910)         (1405x1805x910)x2         (1090x1805x860)+(1800x2000x91)           Net weight         kg         227+348         277+348         227+430           Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48		, ,	kg		13-		11+22					
Airflow rate         m³/h         28000         30000         36000           Sound pressure level         dB(A)         69           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)+(1730×1830×85           Packed dimensions (WxHxD)         mm         (1090×1805×860)+(1405×1805×910)         (1405×1805×910)×2         (1090×1805×860)+(1800×2000×91           Net weight         kg         227+348         277+348         227+348           Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48	Pipe	Liquid pipe	mm	1 11								
Sound pressure level         dB(A)         69           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)+(1730×1830×85           Packed dimensions (WXHxD)         mm         (1090×1805×860)+(1405×1805×910)         (1405×1805×910)×2         (1090×1805×860)+(1800×2000×91           Net weight         kg         227+348         277+348         227+430           Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48		Gas pipe		1 2 2 2		*****						
Sound power level         dB(A)         91           Net dimensions (WxHxD)         mm         (990x1635x790)+(1340x1635x825)         (1340x1635x850)+(1340x1635x825)         (990x1635x790)+(1730x1830x85)           Packed dimensions (WxHxD)         mm         (1090x1805x860)+(1405x1805x910)         (1405x1805x910)x2         (1090x1805x860)+(1800x2000x91)           Net weight         kg         227+348         277+348         227+430           Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48				28000			36000					
Net dimensions (WxHxD)         mm         (990x1635x790)+(1340x1635x825)         (1340x1635x850)+(1340x1635x825)         (990x1635x790)+(1730x1830x85)           Packed dimensions (WxHxD)         mm         (1090x1805x860)+(1405x1805x910)         (1405x1805x910)x2         (1090x1805x860)+(1800x2000x91)           Net weight         kg         227+348         277+348         227+430           Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48												
Packed dimensions (WxHxD)         mm         (1090x1805x860)+(1405x1805x910)         (1405x1805x910)x2         (1090x1805x860)+(1800x2000x91)x2           Net weight         kg         227+348         277+348         227+430           Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48			dB(A)									
Net weight         kg         227+348         277+348         227+430           Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48			mm	7 1	, ,	,	(990×1635×790)+(1730×1830×850)					
Gross weight         kg         242+368         304+368         242+453           Ambient temp.         Cooling         °C         -5 to 48		ns (WxHxD)	mm	, , ,			(1090×1805×860)+(1800×2000×910)					
Ambient temp. Cooling °C -5 to 48			kg				227+430					
				242+368			242+453					
25 to 24		Cooling										
operating range   Heating   C   -25 to 24	operating range	Heating	°C		-25 t	:0 24						

Capacity		HP	42	44	46	48					
Model			MDVO-V61175V2R1BE	MDVO-V61230V2R1BE	MDVO-V61285V2R1BE	MDVO-V61345V2R1BE					
Combination typ	e		20HP+22HP	22HP+22HP	22HP+24HP	22HP+26HP					
Power supply		V/N/Hz		380-41	15/3/50						
	Capacity	kW	117.5	123.0	128.5	134.5					
Cooling <sup>1</sup>	Сарасну	kBut/h	400.9	419.7	438.4	458.9					
Cooling	Power input	kW	33.5	36.7	36.5	39.3					
	EER	kW/kW	3.51	3.35	3.52	3.43					
	Capacity	kW	117.5	123.0	128.5	134.5					
	Capacity	kBut/h	400.9	419.7	438.4	458.9					
Heating <sup>2</sup> (Rated)	Power input	kW	27.7	30.0	30.43	33.21					
	COP	kW/kW	4.24	4.10	4.22	4.05					
	Capacity	kW	132.0	138.0	144.0	150.5					
Heating <sup>2</sup> (Max)	Capacity	kBut/h	450.4	470.9	491.3	513.5					
rieating (iviax)	Power input	kW	33.07	35.57	36.35	39.46					
	COP	kW/kW	3.99	3.88	3.96	3.81					
Connectable Total capacity			50-130% of outdoor unit capacity								
Indoor Unit	Max. quantity		64								
Compressors	Type		DC inverter								
Compressors	Quantity		4								
	Type		DC								
an motors	Quantity		4								
	Max. ESP	Pa	20 default; up to 120 customization option								
Refrigerant	Type			R4	10A						
	Factory charge	kg	17	×2	17-	+22					
Pipe	Liquid pipe	mm		Ф1	9.1						
connections <sup>3</sup>	Gas pipe	mm		Ф3	38.1						
Airflow rate		m³/h	340	000	420	000					
Sound pressure le	evel 4	dB(A)		-	70						
Sound power lev	el	dB(A)		9	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	3×2	348-	+430						
Gross weight		kg	368	3×2	368-	+453					
Ambient temp.	Cooling	°C		-5 t	0 48						
operating range	Heating	°C		-25	to 24						

- 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 MDV6 Series - Heat

#### 380~415V, 3N, 50Hz

Capacity		HP	50	52	54	56					
Model			MDVO-V61400V2R1BE	MDVO-V61460V2R1BE	MDVO-V61515V2R1BE	MDVO-V61570V2R1BE					
Combination typ	oe .		22HP+28HP	26HP+26HP	26HP+28HP	28HP+28HP					
Power supply		V/N/Hz	'	380-415/3/50							
	Cit.	kW	140.0	146.0	151.5	157.0					
c 1. 1	Capacity	kBut/h	477.7	498.2	516.9	535.7					
Cooling <sup>1</sup>	Power input	kW	42.5	41.8	45.1	48.3					
	EER	kW/kW	3.29	3.49	3.36	3.25					
	Canacity	kW	140.0	146.0	151.5	157.0					
Heating <sup>2</sup> (Rated)	Capacity	kBut/h	477.7	498.2	516.9	535.7					
leating" (hateu)	Power input	kW	36.2	36.22	39.3	42.3					
	COP	kW/kW	3.87	4.03	3.86	3.71					
	Capacity	kW	156.5	163.0	169.0	175.0					
Heating <sup>2</sup> (Max)	Capacity	kBut/h	534.0	556.2	576.6	597.1					
leating (Max)	Power input	kW	43.83	43.35	47.72	52.08					
	COP	kW/kW	3.57	3.76	3.54	3.36					
onnectable	Total capacity			50-130% of outdoor u	unit capacity						
ndoor Unit	Max. quantity			64							
'amarassars	Type			DC inverter							
Compressors	Quantity		4								
	Туре		DC								
an motors	Quantity		4								
	Max. ESP	Pa		20 default; up to 120 cust	omization option						
lafriaarant	Туре			R410A							
Refrigerant	Factory charge	kg	17+22		22×2						
ipe	Liquid pipe	mm	·	Ф19.1		Ф19.1					
connections <sup>3</sup>	Gas pipe	mm		Ф38.1		Ф41.3					
Airflow rate		m³/h	42000		50000						
ound pressure le	evel <sup>4</sup>	dB(A)	·	70							
ound power lev		dB(A)		92							
let dimensions (		mm	(1340×1635×825)+(1730×1830×850)		(1730×1830×850)×2						
Packed dimensions (WxHxD) mm			(1405×1805×910)+(1800×2000×910)	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )							
let weight		kg	348+430		430×2						
Gross weight		kg	368+453	3101130							
Ambient temp.	Cooling	°C	-5 to 48								
operating range	Heating	°C		-25 to 24							

Capacity		HP	58	60	62	64					
Model			MDVO-V61635V2R1BE	MDVO-V61685V2R1BE	MDVO-V61750V2R1BE	MDVO-V61800V2R1BE					
Combination typ	oe .		28HP+30HP	28HP+32HP	30HP+32HP	32HP+32HP					
Power supply		V/N/Hz		380-415/3/50							
	Capacity	kW	163.5	168.5	175.0	180.0					
C 1	Capacity	kBut/h	557.9	574.9	597.1	614.2					
Cooling <sup>1</sup>	Power input	kW	51.6	55.2	58.5	62.1					
	EER	kW/kW	3.17	3.05	2.99	2.90					
	Canacity	kW	163.5	168.5	175.0	180.0					
	Capacity	kBut/h	557.9	574.9	597.1	614.2					
Heating <sup>2</sup> (Rated)	Power input	kW	44.1	46.9	48.7	51.4					
	COP kW/kW		3.70	3.59	3.59	3.50					
	Ci+.	kW	182.5	187.5	195.0	200.0					
Heating? (Marr)	Capacity	kBut/h	622.7	639.8	665.3	682.4					
Heating <sup>2</sup> (Max)	Power input	kW	53.82	56.72	58.45	61.35					
	COP	kW/kW	3.39	3.31	3.34	3.26					
Connectable	Total capacity	1		50-130% of outdoor unit capacity							
Indoor Unit	Max. quantity		64								
C	Туре		DC inverter								
Compressors	Quantity		4								
	Туре		DC								
Fan motors	Quantity		4								
	Max. ESP	Pa	20 default; up to 120 customization option								
Dofrigorant	Туре	1		R4	10A						
Refrigerant	Factory charge	kg	22+	-25	25	×2					
Pipe	Liquid pipe	mm		Ф1	9.1						
connections <sup>3</sup>	Gas pipe	mm		Ф4	1.3						
Airflow rate		m³/h	490	000	480	000					
Sound pressure le	evel 4	dB(A)		7	70						
Sound power lev	el	dB(A)		ç	92						
Net dimensions (	WxHxD)	mm		(1730×18	30×850)×2						
Packed dimensio	ns (WxHxD)	mm	(1800×2000×910)×2								
Net weight kg		430+	-475	475	5×2						
Gross weight kg		453+507 507×2									
Ambient temp.	Cooling	°C	-5 to 48								
operating range	Heating	°C		-25 t	to 24						

- 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.

37 | Outdoor Units Outdoor Units | 38



#### VRF MDV6 Series - Heat

#### 380~415V, 3N, 50Hz

Capacity		HP	66	68	70	72					
Model			MDVO-V61850V2R1BE	MDVO-V61915V2R1BE	MDVO-V61965V2R1BE	MDVO-V62020V2R1BE					
Combination typ	е		12HP+22HP+32HP	14HP+22HP+32HP	16HP+22HP+32HP	12HP+28HP+32HP					
Power supply		V/N/Hz		380-415/3/	50						
	Canacity	kW	185.0	191.5	196.5	202.0					
Cooling <sup>1</sup>	Capacity	kBut/h	631.2	653.4	670.5	689.2					
Cooling	Power input	kW	58.1	59.3	61.4	63.9					
	EER	kW/kW	3.18	3.23	3.20	3.16					
	Capacity	kW	185.0	191.5	196.5	202.0					
Heating <sup>2</sup> (Rated)	Сараспу	kBut/h	631.2	653.4	670.5	689.2					
nealing" (nateu)	Power input	kW	47.3	49.2	50.5	53.4					
	COP	kW/kW	3.91	3.89	3.89	3.78					
	Canacity	kW	206.5	214.0	219.0	225.0					
Heating <sup>2</sup> (Max)	Capacity	kBut/h	704.6	730.2	747.2	767.7					
icating (wax)	Power input	kW	56.34	58.73	60.22	64.59					
	COP	kW/kW	3.67	3.64	3.64	3.48					
Connectable	Total capacity			50-130% of outdoor unit capacity							
Indoor Unit	Max. quantity			64							
Compressors Type				DC inverte	er						
Compressors	Quantity			5							
	Туре			DC							
Fan motors	Quantity		5								
	Max. ESP	Pa	20 default; up to 120 customization option								
Refrigerant	Туре			R410A							
	Factory charge	kg	11+17+25	13+1	11+22+25						
Pipe	Liquid pipe	mm	Ф19.1		Ф22.2						
connections <sup>3</sup>	Gas pipe	mm	Ф41.3		Ф44.5						
Airflow rate		m³/h	52000		000	60000					
Sound pressure l		dB(A)		71							
Sound power lev	el	dB(A)		93							
Net dimensions (	WxHxD)	mm	(990×1635×790)+(1340×1635×825)+	(1340×1635×850)+(1340×16	635×825)+(1730×1830×850)	(990×1635×790)+					
net dimensions (WXHXD) mm			(1730×1830×850)	(13 10/(1033/030) 1 (13 10/(1	3337(023) 1 (1730/1030/1030)	(1730×1830×850)×2 (1090×1805×860)+					
Packed dimensions (WxHxD) mm			(1090×1805×860)+(1405×1805×910)+	+(1405×1805×910)+ (1405×1805×910)×2+(1800×2000×910)							
	TIS (TTALIAD)		(1800×2000×910)	, , , , , , , , , , , , , , , , , , ,	` ´	(1800×2000×910)×2					
Net weight kg			227+348+475		48+475	227+430+475					
Gross weight		kg	242+368+507 304+368+507 242+453+507								
Ambient temp.	Cooling	°C	-5 to 48								
operating range	Heating	°C	-25 to 24								

Capacity		HP	74	76	78	80		
Model			MDVO-V62075V2R1BE	MDVO-V62130V2R1BE	MDVO-V62185V2R1BE	MDVO-V62245V2R1BE		
Combination typ	е		20HP+22HP+32HP	22HP+22HP+32HP	22HP+24HP+32HP	22HP+26HP+32HP		
Power supply		V/N/Hz		380-41	5/3/50			
	Cit.	kW	207.5	213.0	218.5	224.5		
a 1	Capacity	kBut/h	708.0	726.8	745.5	766.0		
Cooling <sup>1</sup>	Power input	kW	64.5	67.8	67.5	70.3		
	EER	kW/kW	3.22	3.14	3.24	3.19		
	Capacity	kW	207.5	213.0	218.5	224.5		
	Capacity	kBut/h	708.0	726.8	745.5	766.0		
Heating <sup>2</sup> (Rated)	Power input	kW	53.4	55.7	56.13	58.91		
	COP	kW/kW	3.88	3.82	3.89	3.81		
	Capacity	kW	232.0	238.0	244.0	250.5		
11	Capacity	kBut/h	791.6	812.1	832.5	854.7		
Heating <sup>2</sup> (Max)	Power input	kW	63.75	66.24	67.02	70.13		
	COP	kW/kW	3.64	3.59	3.64	3.57		
Connectable	Total capacity		50-130% of outdoor unit capacity					
ndoor Unit	Max. quantity		64					
Compressors	Type		DC inverter					
Complessors	Quantity		6					
	Type		DC					
Fan motors	Quantity		6					
	Max. ESP	Pa	20 default; up to 120 customization option					
Refrigerant	Type		R410A					
	Factory charge	kg	17×2+25 17+22+25					
Pipe	Liquid pipe	mm		Ф22	2.2			
connections <sup>3</sup>	Gas pipe	mm		Ф44	4.5			
Airflow rate		m³/h	580	000	660	00		
Sound pressure l	evel 4	dB(A)		7.	2			
Sound power lev		dB(A)		9.	4			
Net dimensions (		mm	(1340×1635×825)×2	2+(1730×1830×850)	(1340×1635×825)+(	1730×1830×850)×2		
Packed dimensio	ns (WxHxD)	mm	(1405×1805×910)×2+(1800×2000×910) (1405×1805			1800×2000×910)×2		
Net weight		kg	348×2		348+43			
Gross weight		kg	368×2	2+507	368+45	3+507		
Ambient temp.	Cooling	°C		-5 tc	48			
operating range	Heating	°C		-25 to	o 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, 0xdoor 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 MDV6 Series - Heat

#### 380~415V, 3N, 50Hz

Capacity	HP		82	84	86	88		
Nodel			MDVO-V62300V2R1BE	MDVO-V62360V2R1BE	MDVO-V62415V2R1BE	MDVO-V62470V2R1BE		
Combination typ	e		22HP+28HP+32HP	26HP+26HP+32HP	26HP+28HP+32HP	28HP+28HP+32HP		
Power supply		V/N/Hz	i i	380-415/3/5	50			
	Capacity	kW	230.0	236.0	241.5	247.0		
Cooling <sup>1</sup>	Capacity	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		
	Capacity	kW	230.0	236.0	241.5	247.0		
Heating <sup>2</sup> (Rated)	Capacity	kBut/h	784.8	805.2	824.0	842.8		
realing* (Rated)	Power input	kW	61.9	61.92	65.0	68.0		
	COP	kW/kW	3.72	3.81	3.72	3.63		
	Cit.	kW	256.5	263.0	269.0	275.0		
Heating² (Max)	Capacity	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	Total capacity		50-130% of outdoor unit capacity					
ndoor Unit	Max. quantity		64					
Compressors	Туре		DC inverter					
.ompressors	Quantity		6					
	Туре		DC					
an motors	Quantity		6					
	Max. ESP	Pa	20 default; up to 120 customization option					
Refrigerant	Туре		R410A					
5	Factory charge	kg	17+22+25		22×2+25			
Pipe	Liquid pipe	mm	Ф22.2		Ф25.4			
connections <sup>3</sup>	Gas pipe	mm	Ф44.5		Ф50.8			
Airflow rate		m³/h	66000		74000			
ound pressure le	evel 4	dB(A)		72				
ound power lev	el	dB(A)		94				
let dimensions (	WxHxD)	mm	(1340×1635×825)+(1730×1830×850)×2		(1730×1830×850)×3			
acked dimensio	ns (WxHxD)	mm	(1405×1805×910)+(1800×2000×910)×2	(1800×2000×910)×3				
Net weight		kg	348+430+475		430×2+475			
Gross weight		kg	368+453+507		453×2+507			
Ambient temp.	Cooling	°C		-5 to 48				
operating range	Heating	°C		-25 to 24				

Capacity		HP	90	92	94	96		
Model			MDVO-V62535V2R1BE	MDVO-V62585V2R1BE	MDVO-V62650V2R1BE	MDVO-V62700V2R1BE		
Combination typ	e		28HP+30HP+32HP	28HP+32HP+32HP	30HP+32HP+32HP	32HP+32HP+32HP		
Power supply		V/N/Hz		380-415	5/3/50			
	Canacity	kW	253.5	258.5	265.0	270.0		
c 1: 1	Capacity	kBut/h	864.9	882.0	904.2	921.2		
Cooling <sup>1</sup>	Power input	kW	82.6	86.2	89.5	93.1		
	EER	kW/kW	3.07	3.00	2.96	2.90		
	Capacity	kW	253.5	258.5	265.0	270.0		
11	Capacity	kBut/h	864.9	882.0	904.2	921.2		
Heating <sup>2</sup> (Rated)	Power input	kW	69.8	72.6	74.4	77.1		
	COP	kW/kW	3.63	3.56	3.56	3.50		
	Capacity	kW	282.5	287.5	295.0	300.0		
Heating <sup>2</sup> (Max)	Сараспу	kBut/h	963.9	981.0	1006.5	1023.6		
nealing (iviax)	Power input	kW	84.49	87.39	89.13	92.02		
	COP	kW/kW	3.34	3.29	3.31	3.26		
Connectable	Total capacity		50-130% of outdoor unit capacity					
Indoor Unit	Max. quantity		64					
Compressors	Type		DC inverter					
Complessors	Quantity		6					
	Туре		DC					
Fan motors	Quantity		6					
	Max. ESP	Pa	20 default; up to 120 customization option					
Refrigerant	Type		R410A					
	Factory charge	kg	22+25×2 25+25×2					
Pipe	Liquid pipe	mm		Ф25				
connections <sup>3</sup>	Gas pipe	mm	Φ50.8					
Airflow rate		m³/h	73000 72000					
Sound pressure le	evel 4	dB(A)	72					
Sound power level		dB(A)	94					
Net dimensions (WxHxD)		mm		(1730×183				
Packed dimensions (WxHxD)		mm		(1800×200				
Net weight		kg	430+4		475			
Gross weight		kg	453+5		507	×3		
Ambient temp.	Cooling	°C		-5 to				
operating range	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 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 1 m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

39 | Outdoor Units Outdoor Units | 40



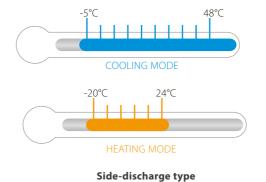
#### Wide Capacity Range

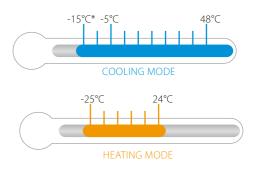
MDV6i VRF has two options, side-discharge and top-discharge. For side-discharge type, it has four models, 7/8/9/10/12HP. For top-discharge type, the capacity is from 8HP to 32HP in 2HP increments.

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)			
	36	36	1/6	16 16			

#### Wide Operation Range

The MDV6i VRF can operate stably in a wide ambient temperature range.



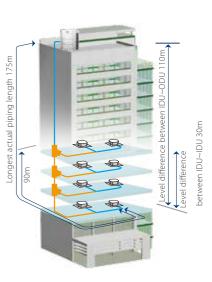


Top-discharge type

#### Long Piping Capability

Piping length	Capability (m)			
riping length	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		

<sup>\*</sup>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.



<sup>\*</sup> Cooling operation at -15°C is available as a customization option.



## VRF MDV6i Series - Heat Pump (Top-discharge type)

#### 380~415V, 3N, 50Hz

Capacity	•	HP	8	10	12	14	16	18	
Model			MDVO-V6i252V2R1BE	MDVO-V6i280V2R1BE	MDVO-V6i335V2R1BE	MDVO-V6i400V2R1BE	MDVO-V6i450V2R1BE	MDVO-V6i500V2R1B	
Power supply		V/Ph/Hz		380-415/3/50			380-415/3/50		
	Capacity	kW	25.2	28	33.5	40	45	50	
Control 1	Capacity	kBtu/h	86	95.5	114.3	136.5	153.5	170.6	
Cooling <sup>1</sup>	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	
	Canacity	kW	25.2	28	33.5	40	45	50	
Llastica? (Data d)	Capacity	kBtu/h	86	95.5	114.3	136.5	153.5	170.6	
Heating <sup>2</sup> (Rated)	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	
	Capacity	kW	27.0	31.5	37.5	45.0	50.0	56.0	
	Capacity	kBtu/h	92.1	107.5	128.0	153.5	170.6	191.1	
Heating² (Max)	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						
Connected indoor unit	Maximum quantity		13	16	20	23	26	29	
Compressors	Туре				DC in	iverter			
Compressors	Quantity					1			
	Туре		DC						
Fan motors	Quantity		1						
	Max. ESP	Pa	20 Default; up to 80 customization option			20 Default;	up to 120 customizat	ion option	
Refrigerant	Туре		R410A						
heiligeratit	Factory charge	kg		11			13		
Pipe connections <sup>3</sup>	Liquid pipe	mm	Ф12.7	Ф12.7	Ф15.9	Ф15.9	Ф15.9	Ф19.1	
ripe connections	Gas pipe	mm	Ф25.4	Ф25.4	Ф28.6		Ф31.8		
Airflow rate		m³/h		11000			13000		
Sound pressure level⁴		dB(A)	58	58	60	62	65	65	
Sound power level		dB(A)	78	78	81	85	88	88	
Net dimensions (W×H×D)		mm		990×1635×790			1340×1635×850		
Packed dimensions (W×H×D) mm		mm		1090×1805×860		1405×1805×910			
Net weight		kg		227		277	277	295	
Gross weight		kg		242		304	304	322	
Ambient temp enerating	Cooling	90			-5 t	o 48			
Ambient temp. operating range	Heating	90		-25 to 24					

Capacity		HP	20	22		
Model			MDVO-V6i560V2R1BE	MDVO-V6i615V2R1BE		
Power supply		V/Ph/Hz	380-415/3/50			
	Capacity	kW	56	61.5		
Cooling	Capacity	kBtu/h	191.1	209.8		
Cooling <sup>1</sup>	Power input	kW	16	20.2		
	EER		3.5	3.05		
	Capacity	kW	56	61.5		
11	Capacity	kBtu/h	191.1	209.8		
Heating <sup>2</sup> (Rated)	Power input	kW	13.8	17.6		
	COP		4.05	3.5		
	Capacity	kW	63.0	69.0		
	Capacity	kBtu/h	215.0	235.4		
Heating <sup>2</sup> (Max)	Power input	kW	16.61	20.83		
	COP		3.79	3.31		
Connected indoor unit	Total capacity		50-130% of outc	door unit capacity		
Connected indoor unit	Maximum quar	ntity	33	36		
Compressors	Туре		DC ir	nverter		
Compressors	Quantity		2			
	Туре		DC			
an motors	Quantity		2			
	Max. ESP	Pa	20 Default; up to 120 customization option			
Refrigerant	Туре		R410A			
reingerant	Factory charge	kg	17			
Pipe connections <sup>3</sup>	Liquid pipe	mm	Φ1	19.1		
ripe connections	Gas pipe	mm	Ф31.8			
Airflow rate		m³/h	17000			
Sound pressure level <sup>4</sup>		dB(A)	66			
Sound power level		dB(A)	88			
Net dimensions (W×H×D) mm		mm	1340×1635×825			
Packed dimensions (W×H×D) mm		mm	1405×1805×910			
Net weight		kg	344			
Gross weight		kg	364			
Ambient temp energia	Cooling	9-	-5 t	to 48		
Ambient temp. operating ra	nge Heating	90	-25	to 24		

- 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			MDVO-V6i670V2R1BE	MDVO-V6i730V2R1BE	MDVO-V6i785V2R1BE	MDVO-V6i850V2R1BE	MDVO-V6i900V2R1BE		
Power supply V/Ph/Hz			380-415/3/50						
	Canacity	kW	67	73	78.5	85	90		
	Capacity	kBtu/h	228.6	249.1	267.8	290	307.1		
Cooling <sup>1</sup>	Power input	kW	21.6	21.6	24.9	28.3	32.1		
	EER		3.1	3.4	3.15	3	2.8		
	Canadia.	kW	67	73	78.5	85	90		
Llastica? (Data d)	Capacity	kBtu/h	228.6	249.1	267.8	290	307.1		
Heating <sup>2</sup> (Rated)	Power input	kW	17.27	18.58	22.49	24.3	26.5		
	COP		3.88	3.93	3.49	3.5	3.4		
	C	kW	75.0	81.5	87.5	95.0	100.0		
	Capacity	kBtu/h	255.9	278.1	298.6	324.1	341.2		
Heating <sup>2</sup> (Max)	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						
Connected indoor unit	Maximum quantity		39	43	46	50	53		
Compressors	Туре		DC inverter						
Compressors	Quantity		2						
	Type		DC						
Fan motors	Quantity		2						
	Max. ESP	Pa	20 Default; up to 120 customization option						
Defrigerant	Туре	•	R410A						
Refrigerant	Factory charge	kg	22 25				5		
Pipe connections <sup>3</sup>	Liquid pipe	mm	Ф19.1	Ф19.1 Ф22.2					
Pipe connections	Gas pipe	mm		Ф31.8		Ф38.1			
Airflow rate		m³/h		25000		240	000		
Sound pressure level <sup>4</sup>		dB(A)	67		6	8			
Sound power level		dB(A)	89		9	0			
Net dimensions (W×H×D)		mm			1730×1830×850				
Packed dimensions (WxHxD) mm		mm	1800×2000×910						
Net weight		kg	407	4.	29	47	75		
Gross weight		kg	430	4.	52	50	)7		
Ambient temp, enerating	Cooling	9			-5 to 48				
Ambient temp. operating range	Heating	9			-25 to 24				

# VRF MDV6i Series - Heat Pump (Side-discharge type)

# 380~415V, 3N, 50Hz

HP		7	8	9	10	12			
Model			MDVO-V6iS200V2R1BE	MDVO-V6iS224V2R1BE	MDVO-V6iS260V2R1BE	MDVO-V6iS280V2R1BE	MDVO-V6iS335V2R1BE		
Power supply		V/N/Hz		380-415/3/50					
	Capacity	kW	20	22.4	26	28.5	33.5		
C. Italia	Сараспу	kBtu/h	68.2	76.4	88.7	97.2	114.3		
Cooling <sup>1</sup>	Power input	kW	4.90	6.83	9.63	12.28	14.38		
	EER		4.08	3.28	2.70	2.32	2.33		
	Capacity	kW	20	22.4	26	28.5	33.5		
Heating <sup>2</sup>	Сараспу	kBtu/h	68.2	76.4	88.7	97.2	114.3		
(Nominal)	Power input	kW	4.21	4.98	5.53	6.16	8.1		
	COP		4.75	4.50	4.70	4.63	4.14		
	Capacity	kW	22.5	25	28.5	31.5	37.5		
Heating <sup>2</sup>	Capacity	kBtu/h	76.8	85.3	97.2	107.5	128.0		
(Max)	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	Total capacity			50-	130% of outdoor unit capa	city			
ndoor unit	Maximum quantity		11	13	15	16	20		
Comprossor	Туре				DC inverter				
Compressor	Quantity		1						
Fan motors	Туре		DC						
ran motors	Quantity		2						
Dofrigoront	Туре		R410A						
Refrigerant	Factory charge	kg	6.5	6.5	6.5	6.5	8		
Pipe	Liquid pipe	mm	Ф9.53	Ф9.53	Ф9.53	Ф9.53	Ф12.7		
connections <sup>3</sup>	Gas pipe	mm	Ф19.1	Ф19.1	Ф22.2	Ф22.2	Ф25.4		
Airflow rate	·	m³/h	9000	9000	10000	11000	11300		
Sound pressure l	level <sup>4</sup>	dB(A)	58	58	59	60	61		
Net dimensions	(W×H×D)	mm			1120×1558×528				
Packed dimensions (W×H×D)		mm			1270×1720×565				
Net weight		kg	143	143	144	144	157		
Gross weight		kg	159	159	160	160	173		
Operating	Cooling	°C			-5 to 48				
temperature ran	ge Heating	°C			-20 to 24				

- 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.

43 | Outdoor Units Outdoor Units | 44





VRF indoor units



Ventilation

Heat recovery ventilator (HRV)



Control Systems Smart control systems



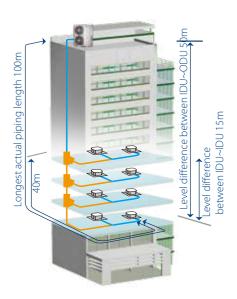
AHU Connection Kit Connect to Midea or third party DX AHU



# VRF MDV4I Series Heat Pump for small and medium-sized buildings Capacity up to 16HP Connectable Indoor Units Quantity up to 2

### Long Piping Capability

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



# MDV4i - Heat Pump

HP			14	16		
Model			MDVO-V4iS400V2R1BE	MDVO-V4iS450V2R1BE		
Power supply		V/N/Hz	380-415	5/3/50		
Cooling <sup>1</sup>	Capacity	kW 40.0		45.0		
	Power input	kW	15.09	13.55		
	EER		2.65	3.32		
Heating <sup>2</sup>	Capacity	kW	40.0	45.0		
	Power input	kW	10.0	11.11		
	COP		4.00	4.05		
Connectable	Total capacity		50~130% of outdo	oor unit capacity		
indoor unit	Max. quantity		23	26		
Compressor	Туре		DC inverter			
	Quantity		2			
Fan motor	Туре		DC m	otor		
	Quantity		2			
Refrigerant	Туре		R410	0A		
	Factory charging	kg	9	12		
Pipe	Liquid pipe	mm	Ф12.7	Ф12.7		
connections	Gas pipe	mm	Ф22.2	Ф25.4		
Air flow rate		m³/h	16575	16575		
Sound power	level <sup>3</sup>	dB(A)	82	83		
Net dimension	n (W×H×D)	mm	1360×1650×540	1460×1650×540		
Packing size (	W×H×D)	mm	1450×1785×560	1550×1785×560		
Net weight		kg	240	275		
Gross weight		kg	260	290		
Operating temperature range		°C	Cooling: -5~48; Heating: -15~24			

- 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.







Ventilation

Heat recovery ventilator (HRV)



Control Systems
Smart control systems



AHU Connection Kit
Connect to MDV or third party DX AHU



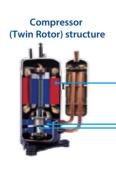
# VRF Mini Series Heat Pump

# 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 makes the output of the outdoor unit to be 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 the limiting the impact on the environment.



#### 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:

2 balance weights

#### **Highly Stable Moving Parts:**

Optimal material matching rollers and vanes Optimize compressor drive technology Highly robust bearings Compact structure

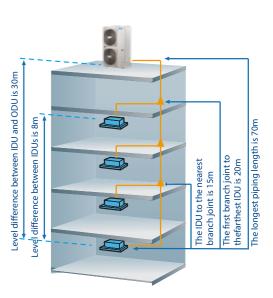
#### Wide Capacity Range

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	12-18kW
ARV.		ACU -	

#### Long Piping Capability

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



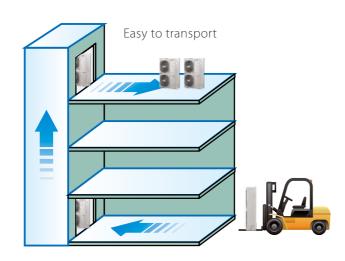


#### More Convenient Piping Connector – Branch Box



#### 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 380~415V, 3N, 50Hz

Model			MDVO-Mi120V2R1B(A)	MDVO-Mi140V2R1B(A)	MDVO-Mi160V2R1B(A)	MDVO-Mi180V2R1B(A)			
Power supply		V/N/Hz	380-415/3/50						
	Capacity	kW	12.3	14	15.5	17.5			
Cooling	Power input	kW	3.25	3.85	4.39	5.47			
	EER		3.78	3.64	3.53	3.2			
	Capacity	kW	13.2	15.4	17	19			
Heating	Power input	kW	3.47	4.05	4.58	5			
	COP		3.8	3.8	3.71	3.8			
Connectable	Total capacity			45~130% of outd	oor unit capacity				
indoor unit	Max. quantity		6	6	7	9			
	Туре		DC Inverter						
Compressor	Quantity		1						
Can motor	Туре		DC						
Fan motor	Quantity		2						
	Туре			0A					
Refrigerant	Factory charging	kg	3.3	3.9	3.9	4.5			
	Liquid pipe	mm		Ф9	.53				
Pipe connections	Gas pipe	mm	Ф1	5.9	Ф1	9.1			
Air flow rate		m³/h		6000		6800			
Sound power leve	·	dB(A)	72	73	73	74			
Net dimension (W	×H×D)	mm		900×13	27×400				
Packing size (W×H	H×D)	mm		1030×14	156×435				
Net weight		kg	9	5	102	107			
Gross weight		kg	10	06	113	118			
Operating temper	ature range	°C		Cooling: -15~43;	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.

Outdoor Units | 50 49 | Outdoor Units



## Mini VRF (Standard Series) - Heat Pump 380~415V, 3N, 50Hz

Model			MDVO-Mi120V2R1A(B)	MDVO-Mi140V2R1A(B)	MDVO-Mi160V2R1A(B)		
Power supply		V/N/Hz	380-415/3/50				
	Capacity	kW	12.5	16			
Cooling	Power input	kW	3.31	3.74	4.47		
	EER		3.78	3.74	3.58		
	Capacity	kW	14	16	17.5		
Heating	Power input	kW	3.68	4.21	4.72		
	COP		3.8	3.8	3.71		
Connectable	Total capacity			45~130% of outdoor unit capacity			
indoor unit	Max. quantity		7	8	9		
-	Туре		DC Inverter				
Compressor	Quantity		1				
-	Туре		DC				
Fan motor	Quantity		2				
0.6	Туре						
Refrigerant	Factory charging	kg	2.8	3.2	3.8		
	Liquid pipe	mm		Ф9.53			
Pipe connections	Gas pipe	mm	Ф1	5.9	Ф19.1		
Air flow rate		m³/h		6000			
Sound power leve	al .	dB(A)	72	73	73		
Net dimension (W	/×H×D)	mm	900×1327×400				
Packing size (W×F	H×D)	mm		1030×1456×435			
Net weight		kg	95	99	100		
Gross weight		kg	105	109	110		
Operating temper	rature range	°C		Cooling: -15~46; Heating: -15~27			

## Mini VRF (Mini C series) - Heat Pump 220~240V, 1N, 50Hz

HP			3	4	4.5			
Model			MDVO-Mi80V2R1EE(C) MDVO-Mi100V2R1EE(C) MDVO-Mi120V2R1E					
Power suppl	у	V/N/Hz	220-240/1/50					
	Capacity	kW	7.2	9.0	12.2			
Cooling	Capacity	kBtu/h	24.6	30.7	40.9			
Cooling <sup>1</sup>	Power input	kW	2.18	2.64	4.32			
	EER		3.30	3.41	2.83			
Car	Capacity	kW	7.2	9.0	14.0			
	Capacity	kBtu/h	24.6	30.7	47.8			
Heating <sup>2</sup>	Power input	kW	1.82	2.10	3.17			
	COP		3.95	4.29	4.40			
Connectable	Total capacity			45~130% of outdoor unit capacity				
indoor unit Max	Max. quantity		4	7				
C	Туре		DC inverter					
Compressor	Quantity		1					
	Туре		DC					
Fan motor	Quantity		1					
D-6:	Туре			R410A				
Refrigerant	Factory charge	kg	2.2	2.35	3			
Pipe connections	Liquid pipe	mm		Ф9.53				
connections	Gas pipe	mm		Ф15.9				
Airflow rate		m³/h	3700	5200	5000			
Sound press	ure level	dB(A)	54	54	56			
Net dimension	ons (W×H×D)	mm	982×712×440	950×840	)×426			
Packed dime	ensions (W×H×D)	mm	1048×810×485	1025×95	0×510			
Net weight		kg	55	72.5	84			
Gross weigh	t	kg	59.5	82	93			
Operating te	mperature range	°C		Cooling: -5~55, Heating: -15~27				

HP			5	6
Model			MDVO-Mi140V2R1EE(C)	MDVO-Mi160V2R1EE(C)
Power suppl	ly	V/N/Hz	220-240/1/!	50
	Capacity	kW	14.0	15.5
CI:1	Capacity	kBtu/h	47.8	52.9
Cooling <sup>1</sup>	Power input	kW	4.56	5.35
	EER		3.07	2.90
Capacity	Capacity	kW	16.0	18.0
12	Capacity	kBtu/h	54.6	61.4
Heating <sup>2</sup>	Power input	kW	4.08	5.71
	COP		3.92	3.20
Connectable	Total capacity		45~130% of outdoor	unit capacity
indoor unit	Max. quantity		8	9
	Туре		DC inverte	er
Compressor Quant	Quantity		1	
an motor	Туре		DC	
Fall IIIOLOI	Quantity		1	
Refrigerant	Туре		R410A	
heiligelalit	Factory charge	kg	3.4	3.8
Pipe	Liquid pipe	mm	Ф9.53	Ф9.53
connections	Gas pipe	mm	Ф15.9	Ф19.1
Airflow rate		m³/h	5400	5200
Sound press	ure level	dB(A)	56	56
Net dimensi	ons (W×H×D)	mm	1040×865×5	523
Packed dime	ensions (W×H×D)	mm	1120×980×5	560
Net weight		kg	91.4	95.4
Gross weigh	t	kg	101.4	105.4
Operating to	emperature range	°C	Cooling: -5~55, Heat	ing: -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.

51 | Outdoor Units Outdoor Units | 52

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 MDV or third party DX AHU



Control Systems
Smart control systems



# VRF MDV6R 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.







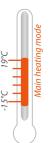


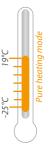
#### Wide Operation Range

The MDV6R VRF system has a wide operation range in cooling mode, heating mode and simultaneous cooling and heating mode.





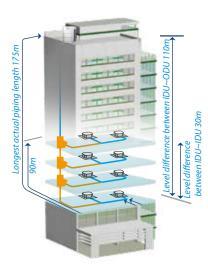




#### Long Piping Capability

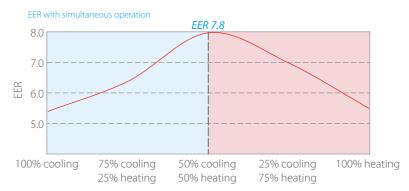
Piping length	Capability (m)
Total piping length	1000
Longest piping length-actual (equivalent)	175 (200)
Longest piping length after first branch	40/90*
Largest level difference between IDUs and ODU-ODU up (down)	110 (110)
Largest level difference between IDUs	30

<sup>\*</sup>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

MDV6R 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).

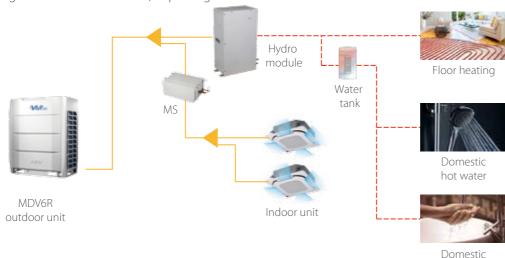


EER in simultaneous cooling and heating mode are based on the following conditions: Outdoor temperature 7°CDB/6°CWB, indoor temperature 27°CDB/19°CWB for cooling, indoor temperature 20°CDB for heating.



#### **Hot Water Supply**

The MDV6R 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

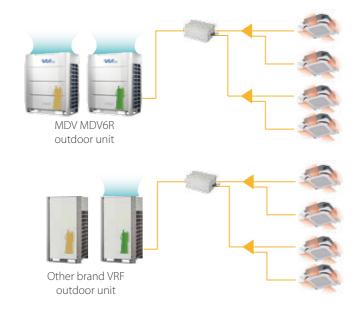
Normally, it is necessary to stop the heating operation during defrosting. However, the continuous heating operation method makes it possible to perform defrosting while the heating operation continues. With the combination model, units perform defrosting alternately. While one unit is performing defrosting,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



Note: This function is only available when the indoor units connected in MDV6R 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.



Operation compressor

Standby compressor

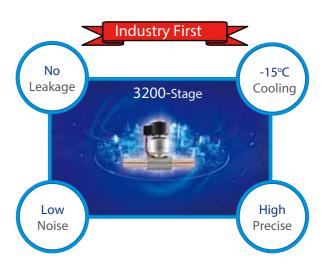
hot water

#### Intelligent MS Box

The MDV6R 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



55 | Outdoor Units | 56



## VRF MDV6R Series - Heat Recovery

#### 380~415V, 3N, 50Hz

HP			8	10	12	14	16	18		
Model name			MDVO-V6R252V2R1BE	MDVO-V6R280V2R1BE	MDVO-V6R335V2R1BE	MDVO-V6R400V2R1BE	MDVO-V6R450V2R1BE	MDVO-V6R500V2R1BE		
Power supply V/N/Hz 380-415/3/50										
	Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0		
Cooling <sup>1</sup>	Power input	Power input kW		7.18	8.64	9.83	12.00	13.81		
	EER		4.27	3.90	3.88	4.07	3.75	3.62		
	Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0		
Heating <sup>2</sup> (Rated)	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		
	Capacity	kW	25.0	31.5	37.5	45.0	50.0	56.0		
Heating <sup>2</sup> (Max)	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	Total capacity				50-200% of outdo	or unit capacity				
indoor unit	Maximum quantity				6	4				
Compressor	Туре		DC inverter							
Compressor	Quantity		1							
	Туре		Propeller							
	Motor type		DC							
Fan	Quantity		1 2							
	Static pressure	Pa	0,20,40,60,80(Selectable)							
	Air flow rate	m³/h	9000	9500	10000	14000	14900	15800		
Refrigerant	Туре				R4'	10A				
Reingerant	Factory charge	kg		8			10			
Pipe	Liquid pipe	mm		Ф12.7			Ф15.9			
	Low pressure gas pipe	mm		Ф25.4			Ф28.6			
connections <sup>3</sup>	High pressure gas pipe	mm		Ф19.1		Ф22.2				
Sound pressure le	vel <sup>4</sup>	dB(A)	58	58	60	61	64	65		
Sound power leve	4	dB(A)	78	78	81	81	88	88		
Net dimensions (V		mm		990×1635×790			1340×1635×825			
Packed dimension		mm		1090×1805×860			1405×1805×910			
Net weight				232			300			
Gross weight		kg kg		248			325			
	Cooling	°C(DB)			-15	~ 52				
Ambient temp.	Heating	°C(WB)			-25 -	~ 19				
operation range	Domestic hot water	°C(DB)			-20 -					
	Domestic Hot water	C(DD)			201					

HP			20	22	24		
Model name			MDVO-V6R560V2R1BE	MDVO-V6R615V2R1BE	MDVO-V6R680V2R1BE		
Combination type			10HP+10HP	10HP+12HP	10HP+14HP		
Power supply		V/N/Hz		380-415/3/50			
	Capacity	kW	56.0	61.5	68.0		
Cooling <sup>1</sup>	Power input	kW	14.36	15.82	17.01		
, and the second	EER		3.90	3.89	4.00		
	Capacity	kW	56.0	61.5	68.0		
Heating <sup>2</sup> (Rated)	Power input	kW	10.92	12.03	13.72		
-	COP		5.13	5.11	4.96		
	Capacity	kW	63.0	69.0	76.5		
Heating <sup>2</sup> (Max)	Power input	kW	14.24	16.60	16.90		
	COP		4.43	4.16	4.53		
Connected	Total capacity			50-200% of outdoor unit capacity			
ndoor unit	Maximum quantity			64			
Compressor	Туре		DC inverter				
Compressor	Quantity			2			
	Type		Propeller				
	Motor type			DC			
Fan	Quantity		2	2	3		
	Static pressure	Pa	0,20,40,60,80(Selectable)				
	Air flow rate	m³/h	19000 19500		23500		
Refrigerant	Туре		R410A				
reingerant	Factory charge	kg	16	16	18		
Pipe	Liquid pipe	mm	Ф15.9	Ф15.9	Ф15.9		
connections <sup>3</sup>	Low pressure gas pipe	mm	Ф28.6	Ф28.6	Ф34.9		
Connections	High pressure gas pipe	mm	Ф28.6	Ф28.6	Ф28.6		
Sound pressure lev	/el <sup>4</sup>	dB(A)	61	62	63		
Sound power level	4	dB(A)	81	83	83		
Net dimensions (W	/×H×D)	mm	(990×1635×790)×2	(990×1635×790)×2	990×1635×790+1340×1635×825		
Packed dimension	ns (W×H×D)	mm	(1090×1805×860)×2	(1090×1805×860)×2	1090×1805×860+1405×1805×910		
Net weight		kg	232×2	232×2	232+300		
Gross weight		kg	248×2	248×2	248+325		
	Cooling	°C(DB)		-15 ~ 52	·		
Ambient temp.	Heating	°C(WB)		-25 ~ 19			
operation range	Domestic hot water	°C(DB)		-20 ~ 43			
	Donnesde not water	(DD)					

- 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. 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.

  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 MDV6R Series - Heat Recovery

#### 380~415V, 3N, 50Hz

HP			26	28	30			
Model name			MDVO-V6R735V2R1BE	MDVO-V6R785V2R1BE	MDVO-V6R835V2R1BE			
Combination type			12HP+14HP	12HP+16HP	12HP+18HP			
Power supply		V/N/Hz		380-415/3/50				
	Capacity	kW	73.5	78.5	83.5			
Cooling <sup>1</sup>	Power input	kW	18.46	20.64	22.45			
	EER		3.98	3.80	3.72			
	Capacity	kW	73.5	78.5	83.5			
Heating <sup>2</sup> (Rated)	Power input	kW	14.83	16.35	18.47			
	COP		4.96	4.80	4.52			
	Capacity	kW	82.5	87.5	93.5			
Heating <sup>2</sup> (Max)	Power input	kW	19.27	21.74	24.25			
	COP		4.28	4.02	3.86			
Connected	Total capacity			50-200% of outdoor unit capacity				
ndoor unit	Maximum quantity			64				
Compressor	Туре		DC inverter					
Lompressor	Quantity							
1	Туре		Propeller Propeller					
	Motor type		DC					
an	Quantity		3					
	Static pressure	Pa	0,20,40,60,80(Selectable)					
	Air flow rate	m³/h	24000	24900	25800			
) - f :	Type			R410A				
Refrigerant	Factory charge	kg	18					
Pipe	Liquid pipe	mm		Ф19.1				
	Low pressure gas pipe	mm		Ф34.9				
connections <sup>3</sup>	High pressure gas pipe	mm		Ф28.6				
Sound pressure lev	/el <sup>4</sup>	dB(A)	64	65	66			
Sound power level	4	dB(A)	84	89	89			
Net dimensions (W		mm		990×1635×790+1340×1635×825				
Packed dimension		mm	1090x1805x860+1405x1805x910					
Net weiaht	- (	kg		232+300				
Gross weight		kg	238+335 248+325					
	Cooling	°C (DB)		-15 ~ 52				
Ambient temp.	Heating	°C (WB)		-25 ~ 19				
operation range	Domestic hot water	°C (DB)	7					
	Domestic not water	-C (DR)		-20 43				

HP			32	34	36		
Model name			MDVO-V6R900V2R1BE	MDVO-V6R950V2R1BE	MDVO-V6R1000V2R1BE		
Combination type			16HP+16HP	16HP+18HP	18HP+18HP		
Power supply		V/N/Hz		380-415/3/50			
	Capacity	kW	90.0 95.0		100.0		
Cooling <sup>1</sup>	Power input	kW	24.00	25.81	28.72		
	EER		3.75	3.68	3.48		
Heating <sup>2</sup> (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		
	Capacity	kW	100.0	106.0	112.0		
Heating <sup>2</sup> (Max)	Power input	kW	24.52	27.03	29.54		
	COP		4.08	3.92	3.79		
Connected	Total capacity			50-200% of outdoor unit capacity			
indoor unit	Maximum quantity			64			
Compressor	Туре			DC inverter			
compressor	Quantity		2				
	Туре		Propeller Propeller				
	Motor type		DC				
Fan	Quantity		4				
	Static pressure	Pa	0,20,40,60,80(Selectable)				
	Air flow rate	m³/h	29800	30700	31600		
Refrigerant	Туре		R410A				
nengerant	Factory charge	kg		20			
Pipe	Liquid pipe	mm		Ф19.1			
connections <sup>3</sup>	Low pressure gas pipe	mm		Ф34.9			
	High pressure gas pipe	mm		Ф28.6			
Sound pressure leve	<u> </u>  4	dB(A)	67	68	68		
Sound power level		dB(A)	91	91	91		
Net dimensions (W:	×H×D)	mm		(1340×1635×825)×2			
Packed dimensions	(W×H×D)	mm		(1405×1805×910)×2			
Net weight		kg		300×2			
Gross weight kg		kg	325×2				
A 1:	Cooling	°C (DB)		-15 ~ 52			
Ambient temp.	Heating	°C (WB)		-25 ~ 19			
operation range	Domestic hot water	°C (DB)					

- 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 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.

57 | Outdoor Units Outdoor Units | 58



## VRF MDV6R Series - Heat Recovery

#### 380~415V, 3N, 50Hz

HP			38	40	42	44		
Model name			MDVO-V6R1070V2R1BE	MDVO-V6R1120V2R1BE	MDVO-V6R1185V2R1BE	MDVO-V6R1235V2R1BE		
Combination type			12HP+12HP+14HP	12HP+12HP+16HP	12HP+14HP+16HP	12HP+16HP+16HP		
Power supply		V/N/Hz	380-415/3/50					
	Capacity	kW	107.0	112.0	118.5	123.5		
Cooling <sup>1</sup>	Powerinput	kW	27.10	29.27	30.46	32.64		
	EER		3.95	3.83	3.89	3.78		
	Capacity	kW	107.0	112.0	118.5	123.5		
Heating <sup>2</sup> (Rated)	Powerinput	kW	21.40	22.92	24.62	26.13		
	COP	· ·	5.00	4.89	4.81	4.73		
	Capacity	kW	120.0	125.0	132.5	137.5		
Heating <sup>2</sup> (Max)	Powerinput	kW	28.75	31.23	31.53	34.01		
	COP		4.17	4.00	4.20	4.04		
Connected	Total capacity		•	50-200% of outdo	or unit capacity			
indoor unit	Maximum quantity			64				
Compressor	Туре		DC inverter					
Complessor	Quantity		3					
	Туре		Propeller					
	Motor type		DC					
Fan	Quantity		4		5			
	Static pressure	Pa	0,20,40,60,80(Selectable)					
	Air flow rate	m³/h	34000	34900	38900	39800		
Defice	Туре		,	R410	)A			
Refrigerant	Factory charge	kg	26	5	28			
Dies	Liquid pipe	mm		Φ19	.1			
Pipe	Low pressure gas pipe	mm		Ф41.	.3			
connections <sup>3</sup>	High pressure gas pipe	mm		Ф34	.9			
Sound pressure lev	a 4	dB(A)	65	67	67	68		
Sound power level		dB(A)	86	89	89	91		
Net dimensions (W		mm	(990×1635×790)×2+134	40×1635×825	990×1635×790+(1340×	1635×825)×2		
Packed dimension		mm	(1090×1805×860)×2+14		1090×1805×860+(1405×			
		kg	232×2+		232+300			
Gross weiaht		kg	222+300 248×2+325 248×2+325 248×2+325					
	Coolina	°C (DB)	Z IO/CZ I	-15 ~				
Ambient temp.	Heating	°C (WB)		-25 ~				
operation range	Domestic hot water	°C (DB)		-20 ~ 4				
	Dolllestic Hot water	C (DB)		-20 ≈ 1	7.7			

HP			46	48	50	52	54			
Model name			MDVO-V6R1300V2R1BE	MDVO-V6R1350V2R1BE	MDVO-V6R1400V2R1BE	MDVO-V6R1450V2R1BE	MDVO-V6R1500V2R1BE			
Combination type			14HP+16HP+16HP	16HP+16HP+16HP	16HP+16HP+18HP	16HP+18HP+18HP	18HP+18HP+18HP			
Power supply		V/N/Hz			380-415/3/50					
	Capacity	kW	130.0	135.0	140.0	145.0	150.0			
Cooling <sup>1</sup>	Power input	kW	33.83	36.00	37.81	39.62	41.44			
-	EER		3.84	3.75	3.70	3.66	3.62			
	Capacity	kW	130.0	135.0	140.0	145.0	150.0			
Heating <sup>2</sup> (Rated)	Power input	kW	27.83	29.35	31.47	33.59	35.71			
	COP		4.67	4.60	4.45	4.32	4.20			
	Capacity	kW	145.0	150.0	156.0	162.0	168.0			
Heating <sup>2</sup> (Max)	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	Total capacity			50-200	% of outdoor unit capacity					
indoor unit	Maximum quantity				64					
Compressor	Туре			DC inverter						
·	Quantity		3							
	Туре		Propeller							
	Motor type		DC							
Fan	Quantity		6							
	Static pressure	Pa	0,20,40,60,80(Selectable)							
	Air flow rate	m³/h	43800	44700	45600	46500	47400			
Refrigerant	Туре				R410A					
nemgerarit	Factory charge	kg			30					
Pipe	Liquid pipe	mm		Φ19.1						
connections <sup>3</sup>	Low pressure gas pipe	mm			Ф41.3					
COTTTECTIONS	High pressure gas pipe	mm			Ф34.9					
Sound pressure leve	el <sup>4</sup>	dB(A)	68	69	69	69	70			
Sound power level <sup>4</sup>	1	dB(A)	91	93	93	93	93			
Net dimensions (W:	×H×D)	mm	(1340×1635×825)×3							
Packed dimensions (W×H×D) mm		(1405×1805×2910)×3								
Net weight		kg			300×3					
Gross weight		kg			325×3					
A 11	Cooling	°C (DB)			-15 ~ 52					
Ambient temp.	Heating	°C (WB)			-25 ~ 19					
operation range	Domestic hot water °C (VB)		-20 ~ 43							

- 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 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 MDV6R 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 inde	oor unit groups		1	4	6	8	10	12			
Max. number of inde	oor units per group		8	5	5	5	5	5			
Max. number of dov	vnstream indoor units		8	20	30	40	47	47			
Max. capacity of eac	h group of indoor units	kW	32	16	16	16	16	16			
Max. total capacity of	of all downstream indoor units	kW	32	49	63	85	85	85			
	Liquid pipe	mm	Ø9.53/Ø12.7	Ø9.53/Ø12.7/Ø15.9/Ø19.	Ø9.53/Ø12.7/Ø15.9/Ø19.1	Ø12.7/Ø15.9/Ø19.1/Ø22.2	Ø12.7/Ø15.9/Ø19.1/Ø22.2	Ø12.7/Ø15.9/Ø19.1/Ø22.2			
Pipe connections to ODU <sup>1</sup>	Low pressure gas pipe	mm	Ø15.9/Ø19.1/Ø22.2	Ø19.1/Ø22.2/Ø28.6	Ø19.1/Ø22.2/Ø28.6	Ø22.2/Ø28.6/Ø34.9	Ø22.2/Ø28.6/Ø34.9	Ø22.2/Ø28.6/Ø34.9			
10 000	High pressure gas pipe	mm	Ø12.7/Ø15.9/Ø19.1	Ø15.9/Ø19.1/Ø22.2/Ø28.6	Ø15.9/Ø19.1/Ø22.2/Ø28.6	Ø19.1/Ø22.2/Ø28.6	Ø19.1/Ø22.2/Ø28.6	Ø19.1/Ø22.2/Ø28.6			
Pipe connections	Liquid pipe	mm	Ø6.35/Ø9.53	Ø6.35/Ø9.53	Ø6.35/Ø9.53	Ø6.35/Ø9.53	Ø6.35/Ø9.53	Ø6.35/Ø9.53			
to IDU <sup>1</sup>	Gas pipe	mm	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9	Ø12.7/Ø15.9			
Sound pressure leve		dB(A)	40	44	45	47	47	47			
Sound power level <sup>1</sup>		dB(A)	60	63	65	65	65	65			
Net dimensions (W×H×D) mi		mm	440×195×296	668×250×574	668×250×574	974×250×574	974×250×574	974×250×574			
Packed dimensions (W×H×D) mm		mm	740×275×405	1020×390×850	1020×390×850	1320×390×850	1320×390×850	1320×390×850			
Net weight kg		10.5	33	36	48	51	54				
Gross weight		kg	14	58	61	79	82	85			
Mata.				-							

# VRF MDV6R Series - High temperature hydro



Model			SMK-D140HN1-3				
Power supply			220-240V~50Hz				
Heating Capacity <sup>1</sup>		kW	14				
Operating	Heating	°C	-20~30				
temperature range	Domestic hot water	°C	-20~43				
Water temperature		°C	25~80				
Water flow rate	Nominal (MinMax.)	m³/h	2.4 (1.2-2.9)				
Allowable water pre	essure	Bar	1-10				
Туре			R134a				
Refrigerant	Factory charge	kg	1.2				
Sound pressure level dB(A)		dB(A)	44				
Net dimensions (W>	(H×D)	mm	450x795x300				
Packed dimensions	(W×H×D)	mm	735×820×380				
Net / Gross weight		kg	58/67.2				
	Connection type		Brazing				
Refrigerant pipe	Liquid pipe diameter	mm	Ф9.53				
	Gas pipe diameter	mm	Ф12.7				
	Connection type		External thread				
Water pipe	Inlet pipe diameter	mm	Ф25.4				
	Outlet pipe diameter	mm	Ф25.4				
Unit installation am	Unit installation ambient temperature range °C		0~40				
Unit installation pla	ce		Indoor only				
Note:							

59 | Outdoor Units Outdoor Units | 60

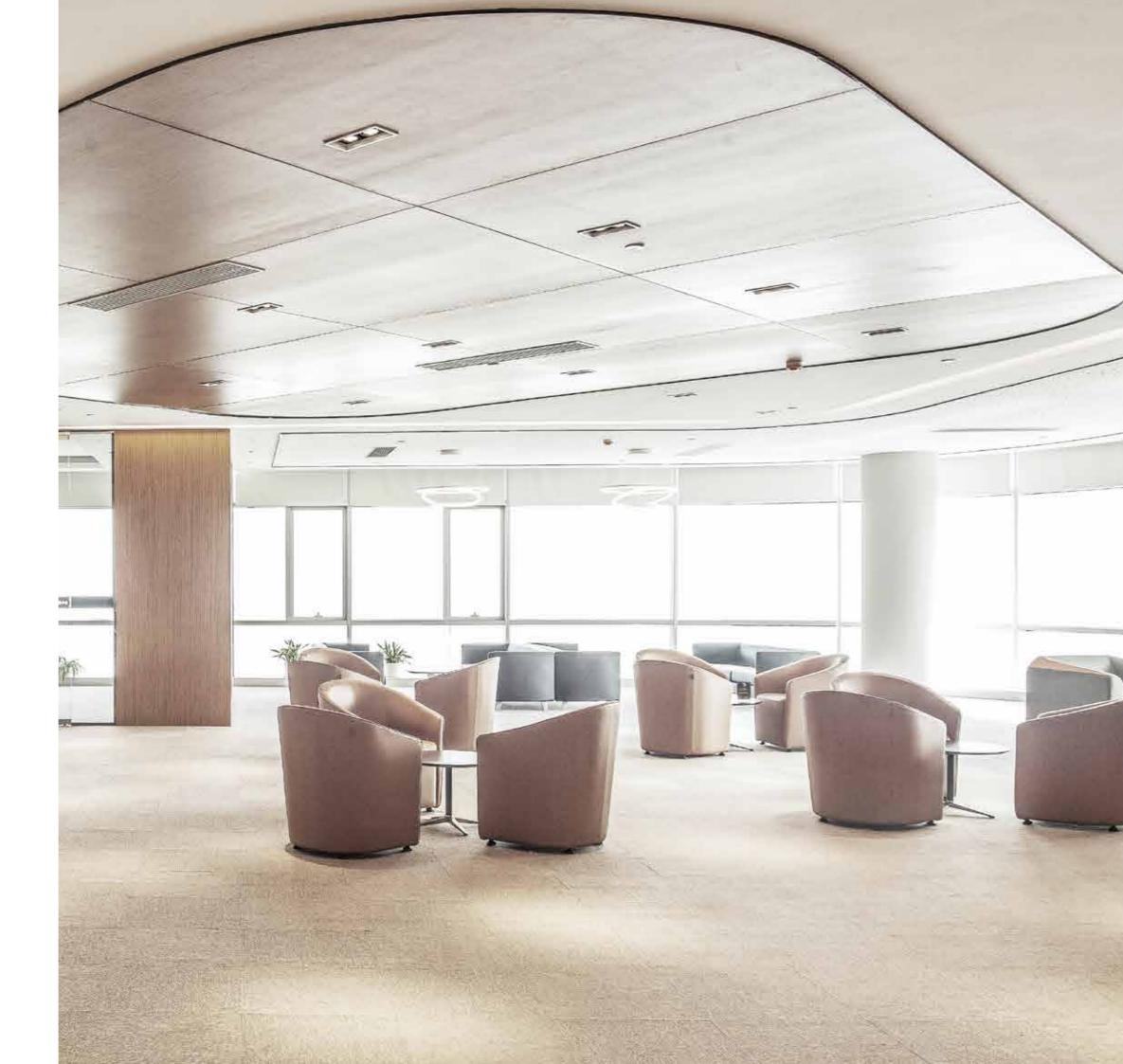
Note:

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

Nominal heating capacity is based on the following conditions: ambient temperature  $7^{\circ}\text{C DB/6}^{\circ}\text{C WB}$ ; water inlet/outlet temperature  $40^{\circ}\text{C DB/45}^{\circ}\text{C}$ .



One-way Cassette
Two-way Cassette
Compact Four-way Cassette
Four-way Cassette
Medium Static Pressure Duct
High Static Pressure Duct
Wall Mounted
Ceiling & Floor
Floor Standing
Console
Fresh Air Processing Unit
Heat Recovery Ventilator
Puro-Air Kit



# **Inoor Unit Lineup**

kW		1.5	1.8	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0	20.0	25.0	28.0	40.0	45.0	56.0
Btu/h		5k	6k	7k	9k	12k	15k	19k	24k	27k	30k	34k	38k	42k	48k	55k	68k	85k	96k	136k	154k	191k
One-way Cassette			•	•	•	•	•	•	•													
Two-way Cassette				•	•	•	•	•	•													
Four-way Cassette					•	•	•	•	•	•	•	•	•		•							
Compact Four-way Cassette			1.7	•	•	•	•	5.2														
Medium Static Pressure Duct			1.7	•	•	•	•	•	•	•	•		•									
High Static Pressure Duct									•		•		•			•	•	•	•	•	•	•
Wall Mounted	-		1.7	•	•	•	•	•	•	•	•											
Ceiling & Floor						•	•	•	•	•	•		•		•	•						
Floor Standing - Concealed				•	•	•	•	•	•													
Floor Standing - Exposed	THE REAL PROPERTY.			•				•	•	•												
Console				•	•	•	•															
Fresh Air Processing Unit	TI FII													•	•							

2<sup>nd</sup> Gen. DC Indoor Units

2<sup>nd</sup> Gen. AC Indoor Units

Notes:
Fresh air processing unit is not available for V4+W and Mini VRF Series.
No controller is supplied inside the indoor unit package. Controllers must be purchased separately.

63 | Indoor Units Indoor Units | 64



# **Indoor Unit Functions**

		Functions	One-way Cassette	Two-way Cassette	Compact Four-way Cassette	Four-way Cassette	Medium Static Pressure Duct	High Static Pressure Duct	Wall Mounted	Ceiling & Floor	Floor Standing	Console	Fresh Air Processing Unit
	Cold air prevention	When starting to warm up, the fan speed is automatically adjusted according to coil temperature to prevent cold air discharge. After warming up, fan speed is set as desired	•	•	•	•	•	•	•	•	•	•	•
	Quiet operation	All indoor units are quiet operation	•	•	•	•	•	•	•	•	•	•	•
	Auto cooling-heating	Automatically selects cooling or heating mode to achieve the set	•	•	•	•	•	•	•	•	•	•	•
	changeover <sup>1</sup>	temperature Indoor unit displays can be shut off at night, creating a better environment											
Comfort	Digital display on/off	for rest		•	•	•		•	•	•			•
Commont	Buzzer sound on/off	The buzzer sound of the indoor unit can be turned off to create a quieter environment	•	•	•	•	•	•	•	•	•	•	•
	Heat stratification	The heat stratification compensation function in HEAT mode obtains a value	•	•				•					•
	compensation	that more closely reflects the true temperature of the air conditioned space											
	Two thermistors control	The indoor temperature can be checked using the thermistor in the remote controller as well as from the indoor unit	•	•	•	•	•	•	•	•	•	•	•
	0.5°C/1°C setting temperature adjustment	Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control	•	•	•	•	•	•	•	•	•	•	•
	Air filter	Removes airborne dust particles to ensure a steady supply of clean air	•	•	•	•	•	•	•	•	•	•	•
Health	Fresh air intake	A reserved outside air intake port allows outdoor air to be introduced directly into the unit	<b>(</b> 45-71)	•	(AC series) × (DC series)	•	•	×	×	×	×	×	•
	Dirty filters indicator signal	The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter	•	•	•	•	•	•	•	•	•	•	•
	Vertical swing	Possibility to select automatic vertical moving of the air discharge louvre, for uniform air flow and temperature distribution	5 steps setting+auto	5 steps setting+auto	5 steps setting+auto	5 steps setting+auto	×	×	5 steps setting+auto	5 steps setting+auto	×	5 steps setting+auto	×
	Horizontal swing	Possibility to select automatic horizontal moving of the air discharge louvre, for uniform air flow and temperature distribution	Manually set fixed angle+auto (45-71)		×	×	×	×	×	Manually set fixed angle+auto	×	×	×
	Fan speed steps	3 or 7 fan speeds can be selected to optimize comfort levels		3+auto (AC series) 7+auto (DC series)			3+auto (AC series) 7+auto (DC series)		7+auto	3+auto (AC series) 7 7+auto (DC series) 7	3+auto (AC series) 7+auto (DC series)	3+auto (AC series) 7+auto (DC series)	3+auto (AC series) 7+auto (DC series)
Air flow	Individual louver control	Individual louver control via the wired remote controller makes it simple to fix the position of each flap individually	×	×	×	(360° panel)	×	×	×	×	×	×	×
	Auto fan speed	Automatically controls rotation speed of fan depending on indoor load to achieve efficiency and comfort simultaneously	•	•	•	•	•	•	•	•	•	•	•
	Soft wind mode	Supply air against the ceiling to create windless environment	×	×	×	•	×	×	×	×	×	×	×
	Adjustable ESP	ESP can be adjusted over a wide range to ensure constant airflow	×	×	×	×	•	•	×	×	×	×	•
	Timer	Timer can be set to start and stop operation anytime on a daily or weekly basis	•	•	•	•	•	•	•	•	•	•	•
	Infrared remote control	Infrared remote control with LCD to remotely control your indoor unit	•	•	•	•	•	•	•	•	•	•	•
Remote control &	Wired remote control	Wired remote control to remotely control your indoor unit	•	•	•	•	•	•	•	•	•	•	•
timer	Group control	Up to 16 indoor units can be in a group control system	•	•	•	•	•	•	(DC series) × (AC series)	•	•	•	•
	Centralized control	Centralized control to control several indoor units from one single point	•	•	•	•	•	•	(ric series)	•	•	•	•
	°C/°F setting	Temperature unit °C or °F can be set according to your usage habits	•	•	•	•	•	•	•	•	•		•
	Energy saving <sup>2</sup>	Using Infrared Sensor Controller automatically turns indoor units on or off upon sensing that the room is occupied or unoccupied, ensuring climate control whilst minimizing energy consumption	•	•	•	•	•	•	•	•	•	•	•
	Auto-restart	The unit restarts automatically at the original settings after power failure	•	•	•	•	•	•	•	•	•	•	•
	Self-diagnosis	Simplifies maintenance by indicating system faults or operating anomalies	•	•	•	•	•	•	•	•	•	•	•
Other	Drain pump	Facilitates condensation draining from the indoor unit	•	•	•	•	•	0	×	×	×	×	0
functions	Fan only	The air conditioner can be used as fan, blowing air without cooling or heating	•	•	•	•		•	•	•	•	•	•
	· ·	Long-distance startup or shutoff the system	0	0	0	0	0	0	0	0	0	0	0
	Long-distance alarm function	Long-distance alarm when an error occurs	0	0	0	0	0	0	0	0	0	0	0
	Multiple protections	Multiple protections make the unit run more reliably		•				•					
			•								•		
	Easy cleaning	The unit is easy cleaning thanks to the rational design		_		_		_	_		_	•	

65 | Indoor Units Indoor Units | 66

Note:
•: equipped as standard; o: customization option; x: without this function

1. Please contact your local dealer for detailed information.

2. Energy saving function needs to be realized with the infrared sensor controller.



# Meeting corner location requirements and at the same time maintaining the required visual appearance.

## **Key Features**

One-way Ca	ssette	DC Series	AC Series
	Quiet operation	•	•
Comfort	0.5°C/1°C setting temperature adjustment	•	•
Comion	Digital display on/off	•	•
	Buzzer sound on/off	•	•
l loolth	Fresh air intake	• (45 to 71)	• (45 to 71)
Health	Dirty filters indicator signal	•	•
A:	Multiple fan speeds	7+auto	3+auto
Air flow	Multiple steps vertical swing	5+auto	5+auto
Easy	Minimized height	•	•
installation	High-lift drain pump	Rated head: 1200mm Raise height: 750mm	Rated head: 1200mm Raise height: 750mm

#### Note:

### **COMFORT**

#### **Quiet Operation**

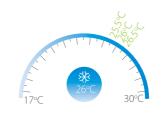
The One-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 22dB(A).



#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.





#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



#### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



## **HEALTH**

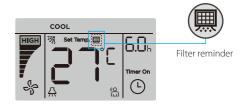
#### Fresh Air Intake

A reserved outside air intake port allows outdoor fresh air to be introduced directly into the unit, negating the need for a separate ventilation system.



#### **Dirty Filters Indicator Signal**

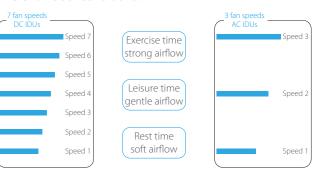
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



## **AIR FLOW**

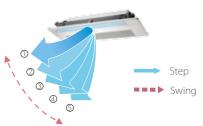
#### Multiple Fan Speeds

The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.



#### Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



67 | Indoor Units | 68

Note:
•: equipped as standard



## **EASY INSTALLATION**

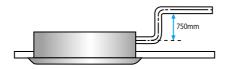
#### Easy Installation

The slim, compact design make the One-way Cassette ideal for interiors with limited ceiling space. Models 18 to 36 are just 153mm high whilst models 45 to 71 are 189mm high.



#### High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.



## Specifications - DC Series

Model			MDVI-18C1VR1E	MDVI-22C1VR1E	MDVI-28C1VR1E	MDVI-36C1VR1E				
Power supply			1-phase, 220-240V, 50Hz							
	Cit.	kW	1.8	2.2	2.8	3.6				
Cooling <sup>1</sup>	Capacity	kBtu/h	6.1	7.5	9.6	12.3				
	Power input	W	25	25	30	30				
	Canacity	kW	2.2	2.6	3.2	4.0				
Heating <sup>2</sup>	Capacity	kBtu/h	7.5	8.9	10.9	13.6				
	Power input	W	25	25	30	30				
Airflow rate		m³/h	380/355/330/30	0/286/263/240	460/440/410/38	80/355/330/300				
Sound pressure lev	rel <sup>3</sup>	dB(A)	30/28/27/26	5/25/24/22	37/36/35/34/32/31/30	38/37/35/34/32/31/30				
Sound power leve		dB(A)	44/42/41/40	0/39/38/36	51/50/49/48/46/45/44	52/51/49/48/46/45/44				
	Net dimensions <sup>4</sup> (WxHxD)	mm	1054×153×425							
ndoor unit	Packed dimensions (WxHxD)	mm		1155×	245×490					
	Net/Gross weight	kg	11.8/	15.3	12.3/15.8					
	Net dimensions (W×H×D)	mm		1180>	25×465					
Panel	Packed dimensions (W×H×D)	mm	1232×107×517							
	Net/Gross weight	kg		3.5	(5.2					
Pipe connections L	Liquid/Gas pipe	mm		Ф6.35	D12.7					
	Drain pipe	mm	OD Ф25							

Model			MDVI-45C1VR1E	MDVI-56C1VR1E	MDVI-71C1VR1E			
Power supply			1-phase, 220-240V, 50Hz					
	Canacity	kW	4.5	5.6	7.1			
Cooling <sup>1</sup>	Capacity	kBtu/h	15.4	19.1	24.2			
	Power input	W	40	48	60			
Heating <sup>2</sup>	Capacity	kW	5.0	6.3	8.0			
	Capacity	kBtu/h	17.1	21.5	27.3			
	Power input	W	40	48	60			
Airflow rate		m³/h	693/662/638/600/556/510/476	792/763/728/688/643/589/549	933/873/815/749/689/637/592			
Sound pressure lev	/el³	dB(A)	39/37/36/35/34/32/31	41/39/38/37/36/35/33	43/41/40/39/37/36/35			
Sound power leve		dB(A)	53/51/50/49/48/46/45	57/55/54/53/51/50/49				
	Net dimensions <sup>4</sup> (WxHxD)	mm	1275×189×450					
Indoor unit	Packed dimensions (WxHxD)	mm	1370×295×505					
	Net/Gross weight	kg	16.1/20.4	16.4/20.7	17.6/22.4			
	Net dimensions (W×H×D)	mm		1350×25×505				
Panel	Packed dimensions (W×H×D)	mm	1410×95×560					
	Net/Gross weight	kg		4/5.4				
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7	Ф9.53	3/Ф15.9			
	Drain pipe	mm		OD Φ25				

- $1. Indoor temperature 27^{\circ}C DB, 19^{\circ}C WB; outdoor temperature 35^{\circ}C DB; equivalent refrigerant piping length 7.5m with zero level difference.$
- 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 1.4m below the unit in a semi-anechoic chamber.
- 4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Specifications - AC Series

Model			MDVI-18C1R1E	MDVI-22C1R1E	MDVI-28C1R1E	MDVI-36C1R1E				
Power supply			1 phase, 220-240V, 50Hz							
Cooling <sup>1</sup>	Capacity	kW	1.8	2.2	2.8	3.6				
Cooling.	Input	W	41	41	41	41				
	Capacity	kW	2.2	2.6	3.2	4				
Heating <sup>2</sup>	Input	W	41	41	41	41				
Indoor fan motor	Туре				AC					
Quantity			1							
Airflow rate (H/M/L) m³/h			523/404/275	523/404/275	573/456/315	573/456/315				
Sound pressure le	vel (H/M/L) <sup>3</sup>	dB(A)	37/34/30	37/34/30 37/34/30 39/37/34						
Refrigerant type			R410A							
	Dimension <sup>4</sup> (WxHxD)	mm	1054×153×425							
Indoor unit	Packing (WxHxD)	mm	1155×245×490							
	Net/Gross weight	kg	12.5/16	12.5/16	13/16.5	13/16.5				
	Dimension (WxHxD)	mm	1180×25×465							
Panel	Packing (WxHxD)	mm	1232×107×517							
	Net/Gross weight	kg	3.5/5.2							
Pipe connections	Liquid pipe	mm	Ф6.35							
	Gas pipe	mm	Ф12.7							
	Drain pipe	mm	OD Ф25							

Model			MDVI-45C1R1E	MDVI-56C1R1E	MDVI-71C1R1E				
Power supply				1 phase, 220-240V, 50Hz					
Cooling <sup>1</sup>	Capacity	kW	4.5	5.6	7.1				
Cooling	Input	W	48	48	60				
Heating <sup>2</sup>	Capacity	kW	5	6.3	8				
пеанну	Input	W	48	48	60				
Indoor fan motor	Туре			AC					
Indoor ian motor	Quantity			1					
Airflow rate (H/M/L) m³/h			693/600/476	792/688/549	933/749/592				
Sound pressure lev	vel (H/M/L) <sup>3</sup>	dB(A)	41/39/35	42/40/36	44/41/37				
Refrigerant type			R410A						
	Dimension <sup>4</sup> (WxHxD)	mm		1275×189×450	1275×189×450				
Indoor unit	Packing (WxHxD)	mm		1370×295×505					
	Net/Gross weight	kg	18.5/22.8	18.8/23.1	19.5/23.8				
	Dimension (WxHxD)	mm		1350×25×505					
Panel	Packing (WxHxD)	mm		1410×95×560					
	Net/Gross weight	kg		4/5.4					
Dino	Liquid pipe	mm	Ф6.35	Ф9.53	Ф9.53				
Pipe connections	Gas pipe	mm	Ф12.7	Ф15.9	Ф15.9				
	Drain pipe	mm		OD Ф25					

- $1. Indoor temperature 27^{\circ}C DB, 19^{\circ}C WB; outdoor temperature 35^{\circ}C DB; equivalent refrigerant piping length 7.5m with zero level difference.$
- $2. Indoor temperature 20 ^{\circ} C DB; outdoor temperature 7 ^{\circ} C DB, 6 ^{\circ} C WB; equivalent refrigerant piping length 7.5 m with zero level difference.$
- 3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
- 4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Indoor Units | 70 69 | Indoor Units



### Compact and lightweight two-way airflow, perfect for limited ceiling space applications.

## **Key Features**

Two-way Cassette	е	DC Series	AC Series
	Quiet operation	•	•
<i>C C C C C C C C C C</i>	0.5°C/1°C setting temperature adjustment	•	•
Comfort	Digital display on/off	•	•
	Buzzer sound on/off	•	•
	Fresh air intake	•	•
Health	Dirty filters indicator signal	•	•
A* . G .	Multiple fan speeds	7+auto	3+auto
Air flow	Multiple steps vertical swing	5+auto	5+auto
	Minimized height	•	•
Easy installation	High-lift drain pump	Rated head: 1200mm Raise height: 750mm	Rated head: 1200mm Raise height: 750mm

Note

### **COMFORT**

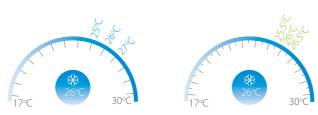
#### **Quiet Operation**

The Two-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 24dB(A).



#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



#### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



### **HEALTH**

#### Fresh Air Intake

A reserved outside air intake port allows outdoor fresh air to be introduced directly into the unit, negating the need for a separate ventilation system.



#### **Dirty Filters Indicator Signal**

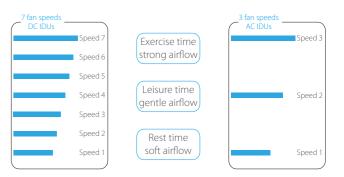
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



### **AIR FLOW**

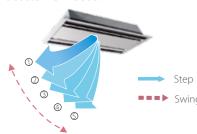
#### Multiple Fan Speeds

The DC Series supplies 7 indoor fan speeds and AC Series supplies 3 indoor fan speeds to meet the needs of different indoor conditions.



#### Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



<sup>•:</sup> equipped as standard



## **EASY INSTALLATION**

#### High Airflow

A high airflow rate ensures even airflow and temperature throughout the room, even in high ceiling installations.



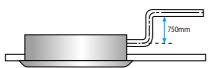
#### Easy Installation

The slim, compact design make the Two-way Cassette ideal for interiors with limited ceiling space. Models 18 to 36 are just 153mm high whilst models 45 to 71 are 189mm high.



#### High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.



### Specifications - DC Series

Model			MDVI-22C2VR1E	MDVI-28C2VR1E	MDVI-36C2VR1E	MDVI-45C2VR1E	MDVI-56C2VR1E	MDVI-71C2VR1E		
Power supply			1-phase, 220-240V, 50Hz							
	Caracit	kW	2.2 2.8		3.6	4.5	5.6	7.1		
Cooling <sup>1</sup>	Capacity	kBtu/h	7.5	9.6	12.3	15.4	19.1	24.2		
	Power input	W	35	40	40	50	69	98		
	Capacity	kW	2.6	3.2	4.0	5.0	6.3	8.0		
Heating <sup>2</sup>	Capacity	kBtu/h	8.9	10.9	13.6	17.1	21.5	27.3		
	Power input	W	35	40	40	50	69	98		
Airflow rate r		m³/h	654/612/571/530/488/449/410		725/679/641/591 /554/509/458	850/792/731/670 /631/592/550	980/925/855/800 /755/702/670	1200/1115/1068/1000 /921/808/770		
Sound pressure	level <sup>3</sup>	dB(A)	33/31/30/29/27/25/24		35/33/32/30/29/27/25	37/36/35/34/32/31/30	39/37/36/35/33/31/30	44/42/41/40/38/36/34		
Sound power le	vel	dB(A)	49/47/46/45/43/41/40		51/49/48/46/45/43/41	53/52/51/50/48/47/46	55/53/52/51/49/47/46	60/58/57/56/54/52/50		
	Net dimensions <sup>4</sup> (WxHxD)	mm	1172×299×591							
Indoor unit	Packed dimensions (WxHxD)	mm	1355×400×675							
	Net/Gross weight	kg	33.5	/42.0			35/43.5			
	Net dimensions (W×H×D)	mm	1430×53×680							
Panel Packed dimensions (W×H×D)		mm	1525×130×765							
Net/Gross weight		kg			10.5	5/15				
Pipe connections	Liquid/Gas pipe	mm	Ф6.35	/Ф12.7		Ф9.53/Ф15.9				
i ipe con l'ilections	Drain pipe	mm			OD	Ф32				

## Specifications - AC Series

Model			MDVI-22CR1E	MDVI-28CR1E	MDVI-36CR1E	MDVI-45CR1E	MDVI-56CR1E	MDVI-71CR1E		
Power supply			1 phase, 220-240V, 50Hz							
Cooling <sup>1</sup> Capacity k			2.2	2.8	3.6	4.5	5.6	7.1		
Cooling	Input	W	57	57	60	92	108	154		
Heating <sup>2</sup>	Capacity	kW	2.6	3.2	4	5	6.3	8		
	Input	W	57	57	60	92	108	154		
Indoor fan motor					A	AC				
Quantity						1				
Refrigerant type			R410A							
Airflow rate (H/M/L)		m³/h	654/530/410	654/530/410	725/591/458	850/670/550	980/800/670	1200/1000/770		
Sound pressure leve	el (H/M/L) <sup>3</sup>	dB(A)	33/29/24	36/32/29	36/32/29	39/35/30	39/35/30	44/40/34		
	Dimension⁴ (WxHxD)	mm	1172×299×591							
Indoor unit	Packing (WxHxD)	mm	1355×400×675							
	Net/Gross weight	kg		34/42.5	36/44.5					
	Dimension (WxHxD)	mm	1430x53x680							
Panel Packing (WxHxD) mm		mm	1525×130×765							
Net/Gross weight kg			10.5/15							
Pipe	Liquid pipe	mm	Ф6.35 Ф9.53							
connections	Gas pipe	mm			Ф12.7		4	15.9		
COTTRECTIONS	Drain pipe	mm			OD	Φ32				

- 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 1.4m below the unit in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



## Compact design allows installation in shallow ceilings.

### **Key Features**

Compact Four-way	Cassette	DC Series	AC Series
	Quiet operation	•	•
Comfort	0.5°C/1°C setting temperature adjustment	•	•
	Digital display on/off	•	•
	Buzzer sound on/off	•	•
	Fresh air intake	×	•
Health	Dirty filters indicator signal	•	•
	360° airflow	•	•
Air flow	Multiple fan speeds	7+auto	3+auto
	Multiple steps vertical swing	5+auto	5+auto
Easy installation	Compact size	•	•
	High-lift drain pump	Rated head: 1000mm Raise height: 500mm	Rated head: 1000mm Raise height: 500mm

•: equipped as standard; ×: without this function

Indoor Units | 74 73 | Indoor Units



### **COMFORT**

#### **Quiet Operation**

The Compact Four-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 22dB(A).



#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.





#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



#### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



### **HEALTH**

#### Fresh Air Intake

A reserved outside air intake port allows outdoor fresh air to be introduced directly into the unit, negating the need for a separate ventilation system.



#### **Dirty Filters Indicator Signal**

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



### **AIR FLOW**

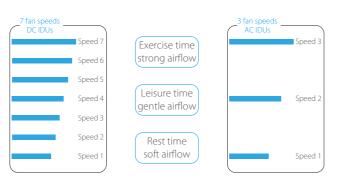
#### 360° Airflow

The Compact Four-way Cassette's 360 ° air outlets provide strong airflow circulation to cool or heat every corner of a room and evenly control temperature.



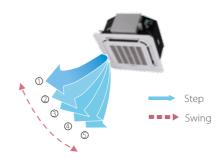
#### Multiple Fan Speeds

The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.



#### Multiple Steps Vertical Swing

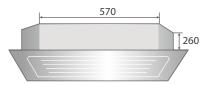
There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



### **EASY INSTALLATION**

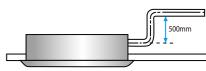
#### **Compact Size**

The slim and compact body has reduced the restriction enables the Compact Four-way Cassette successful installation in various ceiling spaces.



#### High-lift Drain Pump

A drain pump with a 500mm raise height is fitted as standard, simplifying installation of the drain piping.



### Specifications - DC Series

Model			MDVI-17C4CVR1E	MDVI-22C4CVR1E	MDVI-28C4CVR1E	MDVI-36C4CVR1E	MDVI-45C4CVR1E	MDVI-52C4CVR1E	
Power supply			1-phase, 220-240V, 50Hz						
	Capacity	kW	1.7 2.2 2.8		3.6	4.5	5.2		
Cooling <sup>1</sup>	Capacity	kBtu/h	5.8	7.5	9.6	12.3	15.4	17.7	
	Power input	W	35	35	35	40	50	62	
Capacity	Capacity	kW	2.2	2.4	3.2	4.0	5.0	5.6	
Heating <sup>2</sup>	Capacity	kBtu/h	7.5	8.2	10.9	13.6	17.1	19.1	
	Power input	W	35	35	35	40	50	62	
Airflow rate		m³/h	380/345/313/300/ 288/268/238	414/380/345/313/288/268/238		521/485/450/409/380/350/314		635/580/481/446/ 410/380/350	
Sound pressure lev	/el³	dB(A)	35/34/33/29/26/23/22			41/38/35/32/30/29/28		52/48/35/32/ 30/29/28	
Sound power leve	1	dB(A)	51/50/49/45/42/39/38			56/53/50/47/45/44/43 60/55/50/47/ 45/44/43			
	Net dimensions <sup>4</sup> (WxHxD)	mm	630×260×570						
Indoor unit	Packed dimensions (WxHxD)	mm	700×345×660						
	Net/Gross weight	kg		18/23.8		19.2/25.0			
	Net dimensions (W×H×D)	mm			647×5	0×647			
Panel Packed dimensions (WxHxD)  Net/Gross weight		mm			715×12	23×715			
		kg	2.5/4.5						
Pipe connections Liquid/Gas pipe		mm			Ф6.35/	Φ12.7			
i ibe connections	Drain pipe	mm			OD	Ф25			

### Specifications - AC Series

Model			MDVI-15C4CR1E	MDVI-22C4CR1E	MDVI-28C4CR1E	MDVI-36C4CR1E	MDVI-45C4CR1E		
Power supply					1 phase, 220-240V, 50Hz				
Cooling <sup>1</sup>	Capacity	kW	1.5	2.2	2.8	3.6	4.5		
cooling.	Input	W	36	50	50	56	56		
Heating <sup>2</sup>	Capacity	kW	1.7	2.4	3.2	4	5		
ieating-	Input	W	36	50	50	56	56		
Indoor fan Type					AC				
notor	Quantity				1				
efrigerant type				R410A					
irflow rate (H/N	/L)	m³/h	400/283/208	414/313/238	414/313/238	521/409/314	521/409/314		
ound pressure l	evel (H/M/L) <sup>3</sup>	dB(A)	35/33/23	36/33/23	36/33/23	42/36/29	42/36/29		
	Dimension <sup>4</sup> (WxHxD)	mm	570×260×630						
idoor unit	Packing (WxHxD)	mm	675×285×675						
	Net/Gross weight	kg		17/20		18.5,	/21.5		
	Dimension (WxHxD)	mm			647×50×647				
anel	Packing (WxHxD)	mm			715×123×715				
	Net/Gross weight	kg			2.5/4.5				
ino	Liquid pipe	mm	Ф6.35						
ipe	Gas pipe	mm			Ф12.7				
Onnections Drain pipe mm			ODФ25						

#### 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 1.4m below the unit in a semi-anechoic chamber.
- 4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



360° airflow for immediate, equal distribution of wider-angle cooling and heating, idea for standard ceilings.

### **Key Features**

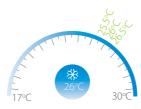
Four-way Cassette		DC Series	AC Series
	Quiet operation	•	•
Comfort	0.5°C/1°C setting temperature adjustment	•	•
Comore	Digital display on/off	•	•
	Buzzer sound on/off	•	•
Health	Air filter	○ (G3-class)	•
	Fresh air intake	•	•
	Dirty filters indicator signal	•	•
	360° airflow	•	•
Air flow	Individual louver control	0	0
	Soft wind	•	•
	Multiple fan speeds	7+auto	3+auto
	Multiple steps vertical swing	5+auto	5+auto
Easy installation	Compact size	•	•
	High ceiling installation	•	•
	High-lift drain pump	Rated head: 1200mm Raise height: 750mm	Rated head: 1200mm Raise height: 750mm

### **COMFORT**

#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.





#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



#### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



### **HEALTH**

#### Optional G3-class Air Filter

The DC Four-way Cassette supports 30Pa external static pressure for the G3-class filter installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size  $> 10 \mu m$ ), creating a cleaner living environment.



The optional filter comply with

Note: This function is available for 360° panel only.

#### **Ionizer Sterilization**

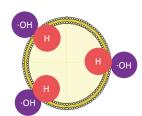
The powerful lonizer protects you from bad odors and harmful bacteria. The circulating sterilization rate is over 96%.







3.Components of bacterial tissues are destroyed and become ineffective (realize sterilization)



2.OHradical extraction of hydrogen from bacterial



4. OH radicals eventually reduce to natural water molecules (pollution-free)



### **Dirty Filters Indicator Signal**

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



Note: •: equipped as standard; •: customization option



### **AIR FLOW**

#### 360° Airflow

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



#### Individual louver control\*

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



\*This function is available as a customization option.

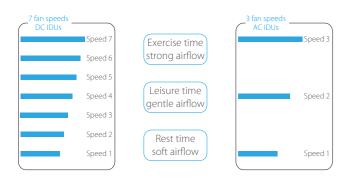
#### Soft Wind Mode

In soft wind mode, supply air against the ceiling to create windless environment, more comfort.



#### Multiple Fan Speeds

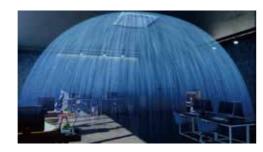
The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.



### **EASY INSTALLATION**

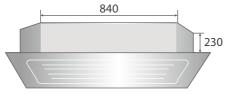
#### High Ceiling Installation

The Four-way Cassette reserves a super high fan speed for high ceiling installation, it can provide power full cooling and heating up to 4.2m in height from floor.



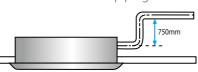
#### **Compact Size**

The height of models 28 to 80 are just 230mm whilst models 90 to 160 are 300mm, making the Four-way Cassette idea for standard ceilings.



#### High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.



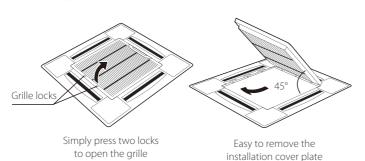
#### Sub Duct

Connecting a sub-duct enables an indoor unit to be used to also cool a smaller nearby space.



#### Convenient Panel Installation

The user-friendly design makes the panels very easy to install and simplifies field work.



### Specifications - DC Series

Model			MDVI-28C4VR1E	MDVI-36C4VR1E	MDVI-45C4VR1E	MDVI-56C4VR1E	MDVI-71C4VR1E		
Power supply				1 phase, 220-240V, 50Hz					
	Consite	kW	2.8	3.6	4.5	5.6	7.1		
Cooling <sup>1</sup>	Capacity	kBtu/h	9.6	12.3	15.4	19.1	24.2		
	Power input	W	40	45	50	60	70		
Heating <sup>2</sup> Capacity	Consitu	kW	3.2	4.0	5.0	6.3	8.0		
	kBtu/h	10.9	13.6	17.1	21.5	27.3			
	Power input	W	40	45	50	60	70		
Airflow rate m³/h		m³/h	801/751/711/658/637/611/542		893/866/804/744/714/698/635		977/937/864/800/778/738/671		
Sound pressure leve	el <sup>3</sup>	dB(A)	32/31/30/28/28/26/23		35/34/31/31	/30/28/26	35/35/34/31/30/28/27		
Sound power level		dB(A)	47/46/45/43/43/41/39		50/49/46/46/45/42/40		50/49/47/47/45/42/41		
	Net dimensions <sup>4</sup> (WxHxD)	mm			840×230	0×840			
Indoor unit	Packed dimensions (WxHxD)	mm			955×260	0×955			
	Net/Gross weight	kg	21.	3/25.8		23.2/2	23.2/27.6		
	Net dimensions (W×H×D)	mm			950×54.	5×950			
Panel Packed dimensions (WxHxD) mm			1035×90×1035						
	Net/Gross weight	kg	5.5/8.2						
Pipe connections	Liquid/Gas pipe	mm		Ф6.35/Ф12.7			Φ9.53/Φ15.9		
i ipe connections	Drain pipe	mm			OD (	)32			

Model			MDVI-80C4VR1E	MDVI-90C4VR1E	MDVI-100C4VR1E	MDVI-112C4VR1E	MDVI-140C4VR1E		
Power supply			1 phase, 220-240V, 50Hz						
Constitution of the consti		kW	8.0	9.0	10.0	11.2	14.0		
Cooling <sup>1</sup>	Capacity	kBtu/h	27.3	30.7	34.1	38.2	47.8		
	Power input	W	96	100	150	160	170		
	Canadity	kW	9.0	10.0	11.0	12.5	16.0		
Heating <sup>2</sup>	Capacity	kBtu/h	30.7	34.1	37.5	42.7	54.6		
	Power input	W	96	100	150	160	170		
Airflow rate		m³/h	1203/1131/1064/ 977/912/840/774	1349/1294/1230/ 1201/1111/1029/970	1700/1600/1440/1250/ 1200/1150/1100	1700/1600/1440/1250/ 1200/1150/1100	1800/1650/1500/1300/ 1250/1200/1150		
Sound pressure lev	rel <sup>3</sup>	dB(A)	36/35/34/31/31/29/28	37/35/34/31/31/30/28	/35/34/31/31/30/28 43/42/40/38/37/35/34				
Sound power level		dB(A)	52/49/48/46/46/42/42	53/49/48/46/46/44/43 58/57/55/53/52/50/49 6			60/59/57/56/55/54/52		
	Net dimensions <sup>4</sup> (WxHxD)	mm	840×230×840		840×3	800×840			
ndoor unit	Packed dimensions (WxHxD)	mm	955×260×955		955×3	330×955			
	Net/Gross weight	kg	23.2/27.6		28.4/33.8		30.7/35.8		
	Net dimensions (W×H×D)	mm			950×54.5×950				
Panel Packed dimensions (WxHxD)  Net/Gross weight		mm			1035×90×1035				
		kg	5.5/8.2						
Liquid/Gas pipe		mm		Φ9.53/Φ15.9					
Pipe connections	Drain pipe	mm		OD \$32					

#### lotes:

- 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  $20^{\circ}$ C DB; outdoor temperature  $7^{\circ}$ C DB,  $6^{\circ}$ C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- 3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
- 4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



## Specifications - AC Series

Model			MDVI-28C4R1E	MDVI-36C4R1E	MDVI-45C4R1E	MDVI-56C4R1E	MDVI-71C4R1E	
Power supply			1 phase, 220-240V, 50Hz					
Cooling <sup>1</sup>	Capacity	kW	2.8	3.6	4.5	5.6	7.1	
cooling.	Power input	W	80	80	88	88	88	
Heating <sup>2</sup>	Capacity	kW	3.2	4	5	6.3	8	
	Power input	W	80	80	88	88	88	
Indoor fan Type					AC	'		
motor	Quantity				1			
Refrigerant typ	pe '		R410A					
Airflow rate (H/M/L) m³/h			764/638//554	764/638//554	905/740//651	905/740//651	950/767//663	
Sound pressure	e level (H/M/L)³	dB(A)	32/31/30	32/31/30	36/34/33	36/34/33	38/36/35	
	Dimension⁴ (WxHxD)	mm	840×230×840					
ndoor unit	Packing (WxHxD)	mm	955×260×955					
	Net/Gross weight	kg	21.5	/26.7		23.7/28.9		
	Dimension (WxHxD)	mm			950×50×950			
Panel	Packing (WxHxD)	mm			1035×89×1035			
	Net/Gross weight	kg	5.8/7.9					
	Liquid pipe	mm	Ф6.35			Ф9.53		
ipe connections	Gas pipe	mm		Ф12.7		Ф15.9		
	Drain pipe	mm			ОDФ32			

Model			MDVI-80C4R1E	MDVI-90C4R1E	MDVI-100C4R1E	MDVI-112C4R1E	MDVI-140C4R1E		
Power supply			1 phase, 220-240V, 50Hz						
Cooling <sup>1</sup>	Capacity	kW	8	9	10	11.2	14		
Cooling	Power input	W	110	140	165	165	176		
Heating <sup>2</sup>	Capacity	kW	9	10	11.1	12.5	16		
	Power input	W	110	140	165	165	176		
Indoor fan Type					AC				
motor Quantity					1				
Refrigerant typ	pe e		R410A						
Airflow rate (H/M/L) m³/h			1200/1021/789	1332/1129/908	1651/1304/1127	1651/1304/1127	1658/1335/1130		
Sound pressur	e level (H/M/L)³	dB(A)	42/39/37	43/39/38	45/42/40	45/42/40	46/41/39		
	Dimension <sup>4</sup> (WxHxD)	mm	840×230×840	840×230×840 840×300×840					
ndoor unit	Packing (WxHxD)	mm	955×260×955		955×	330×955			
	Net/Gross weight	kg	23.7/28.9	28.7/34.1	28.7/34.1	28.7/34.1	30.9/36.3		
	Dimension (WxHxD)	mm			950×50×950				
Panel	Packing (WxHxD)	mm	1035x89x1035						
	Net/Gross weight	kg	5.8/7.9						
Pipe connections	Liquid pipe	mm	Ф9.53						
	Gas pipe	mm	Ф15.9						
	Drain pipe	mm			ОDФ32				

- 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 1.4m below the unit in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



### Slim, compact design for limited space with duct distribution to the indoor space. **Key Features**

Medium Static P	ressure Duct	DC Series	AC Series		
	Quiet operation	•	•		
Comfort	0.5°C/1°C setting temperature adjustment	•	•		
Joinnoit	Digital display on/off	•	•		
	Buzzer sound on/off	•	•		
Health	Air filter	(G3-class)	(G3-class)		
	Innovative puro-air kit	•	•		
	Fresh air intake	•	•		
	Dirty filters indicator signal	•	•		
Air flow	Adjustable ESP	10-steps	×		
All HOW	Multiple fan speeds	7+auto	3+auto		
	Compact size	•	•		
Easy installation	Stylish air discharge panel	(17 to 71)	(17 to 71)		
Easy installation	Flexible air inlet port installation	•	•		
	High-lift drain pump	Rated head: 1200mm Raise height: 750mm	Rated head: 1200mm Raise height: 750mm		

<sup>•:</sup> equipped as standard; •: customization option; •: without this function

### **COMFORT**

#### **Quiet Operation**

The Medium Static Pressure Duct indoor unit utilizes centrifugal blowers, reducing noise levels to as low as 23dB(A), and is an excellent choice for hotels and other noise-sensitive locations.



#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.





#### Digital Display and Buzzer Sound On/Off

Indoor unit displays can be shut off at night and buzzer sound can be set off to not disturb the user, creating a better environment for rest.



### **HEALTH**

#### Optional G3-class Air Filter

G3-class filter is optional for Medium Static Pressure Duct installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size  $> 10~\mu m$ ), creating a cleaner living environment.



The optional filter comply with EN779:2012

#### Innovative Puro-air Kit

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. It is also innovatively designed so that it could prevent UV damage to the eyes, skin, and respiratory tract.

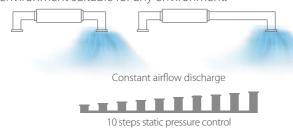


Ozone -Free
UV leakage-Free

#### **AIR FLOW**

#### Static Pressure 10 Steps Control

Depending on the installation environment, Medium Static Pressure Duct is controlled the static pressure up to 10 steps via wired remote controller, for providing comfortable environment suitable for any environment.



#### Multiple Fan Speeds

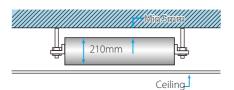
The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.



### **EASY INSTALLATION**

#### **Compact Size**

Models 22 to 71 are just 210mm high whilst models 80 to 112 are 270mm high and model 140 to 160 are 300mm high.



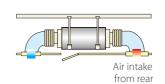
#### Stylish Air Discharge Panel

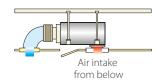
Stylish air discharge panel can be integrated with any decoration style (optional for models 17 to 71).



#### Flexible Air Inlet Port Installation

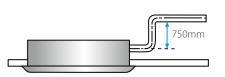
To provide the flexibility to adapt to differing installation situations, the air inlet may be positioned either on the underside or the rear of the unit.





#### High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.



### Specifications - DC Series

Standard Series

Model			MDVI-17D2VR1E	MDVI-22D2VR1E	MDVI-28D2VR1E	MDVI-36D2VR1E		
Power supply			1 phase, 220-240V, 50Hz					
	Cit.	kW	1.7	2.2	2.8	3.6		
Cooling <sup>1</sup>	Capacity	kBtu/h	5.8	7.5	9.6	12.3		
	Power input	W	40	40	40	45		
	Capacity	kW	2.2	2.6	3.2	4.0		
Heating <sup>2</sup>	Capacity	kBtu/h	7.5	8.2	10.9	13.6		
	Power input	W	40	40	40	45		
Airflow rate m <sup>3</sup> /h		m³/h		520/480/440/400/360/330/300		580/540/500/460/430/400/37		
External static pres	ssure	Pa	10(0~50) 10 (0~70)					
Sound pressure le	vel <sup>3</sup>	dB(A)	32/31/29/28/26/25/23			33/32/31/30/28/27/25		
Sound power leve	el	dB(A)		50/49/47/46/44/43/41 51/50				
	Net dimensions <sup>4</sup> (WxHxD)	mm		780×210	×500			
Indoor unit	Packed dimensions (WxHxD)	mm		870×285	×525			
	Net/Gross weight	kg	18/21					
D:	Liquid/Gas pipe	mm	Φ6.35/ Φ12.7					
Pipe connections	Drain pipe	mm	OD Ф25					

Model			MDVI-45D2VR1E	MDVI-56D2VR1E	MDVI-71D2VR1E			
Power supply			1 phase, 220-240V, 50Hz					
	Capacity	kW	4.5	5.6	7.1			
Cooling <sup>1</sup>	Сарасіту	kBtu/h	15.4	19.1	24.2			
	Power input	W	92	92	98			
Heating <sup>2</sup>	Capacity	kW	5.0	6.3	8.0			
	Сарасіту	kBtu/h 17.1		21.5	27.3			
	Power input	W	92	92	98			
Airflow rate		m³/h	800/740/680/620/540/480/400	830/760/720/680/640/600/560	1000/960/900/840/780/720/680			
External static pres	sure	Pa	10 (0~70)					
Sound pressure lev	vel <sup>3</sup>	dB(A)	36/34/32/31/29/27/25	36/34/33/32/30/29/28	37/35/33/32/30/29/28			
Sound power leve		dB(A)	54/52/50/49/47/45/43	54/52/51/50/48/47/46	55/53/51/50/48/47/46			
	Net dimensions <sup>4</sup> (WxHxD)	mm	1000×2	210×500	1220×210×500			
Indoor unit	Packed dimensions (WxHxD)	mm	1090x2	85x525	1335×285×525			
	Net/Gross weight	kg	21.5	5/25	25.7/30.2			
Pipe connections	Liquid/Gas pipe	mm	Ф6.35/ Ф12.7	Ф9.53/	Ф9.53/Ф15.9			
ripe connections	Drain pipe	mm						

<sup>\*</sup>The indoor unit needs to be customized in order to use the Puro-air Kit.



Model			MDVI-80D2VR1E	MDVI-90D2VR1E	MDVI-112D2VR1E	MDVI-140D2VR1E			
Power supply				1 phase, 220-240V, 50Hz					
	Capacity	kW	8.0 9.0		11.2	14.0			
Cooling <sup>1</sup>	Capacity	kBtu/h	27.3	30.7	38.2	47.8			
	Power input	W	110	120	200	250			
	Capacity	kW	9.0	10.0	12.5	15.5			
Heating <sup>2</sup>	Capacity	kBtu/h	30.7	34.1	42.7	52.9			
	Power input	W	110	120	200	250			
Airflow rate	irflow rate m		1260/1180/1100	/1020/940/860/780	1500/1430/1360/1290/1210/1140/1080	1960/1860/1760/1660/1560/1460/1360			
External static pres	sure	Pa	20 (10~100)			40 (30~150)			
Sound pressure lev	rel <sup>3</sup>	dB(A)	37/35/34/3	3/31/29/28	39/38/38/37/35/34/33	41/39/38/37/36/35/33			
Sound power leve		dB(A)	55/53/52/5	1/49/47/46	57/56/56/55/53/52/51	59/57/56/55/54/53/51			
	Net dimensions <sup>4</sup> (WxHxD)	mm		1230×27	0×775	1290×300×865			
Indoor unit	Packed dimensions (WxHxD)	mm		1355×35	5×795	1400×375×925			
	Net/Gross weight	kg	36.5/44.5		37/45	46.5/55.5			
Pipe connections	Liquid/Gas pipe	mm			Ф9.53/Ф15.9				
Tipe confilections	Drain pipe	mm			OD Φ25				

- 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 1.4m below the unit in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

### Specifications - DC Series

#### **ESP Increased Series**

Model			MDVI-22D2VR1E(A)	MDVI-28D2VR1E(A)	MDVI-36D2VR1E(A)			
Power supply			1-phase, 220-240V, 50Hz					
	Canacity	kW	2.2	2.8	3.6			
Cooling <sup>1</sup>	Capacity	kBtu/h	7.5	9.6	12.3			
	Power input	W	22	27	34			
	Capacity	kW	2.6	3.2	4			
Heating <sup>2</sup>	Capacity	kBtu/h	8.2	10.9	13.6			
	Power input	W	22	27	34			
Airflow rate <sup>3</sup> m <sup>3</sup> /h			430/420/410/400/390/380/370	500/480/460/430/400/380/370	580/540/500/460/430/400/370			
External static pressu	ure	Pa	30 (0~80)					
Sound pressure level	4	dB(A)	26/26/25/25/24/22/21	28/27/26/25/24/22/22	31/30/28/26/25/23/22			
Sound power level		dB(A)	46/46/45/44/43/42/41	47/47/46/45/44/43/42	50/49/47/45/44/41/40			
	Net dimensions <sup>5</sup> (W×H×D)	mm		920×210×450				
Indoor unit	Packed dimensions (W×H×D)	mm		1140×292×560				
	Net/Gross weight	kg		21/25				
Dia	Liquid/Gas pipe	mm		Ф6.35/Ф12.7				
Pipe connections	Drain pipe	mm	OD Ф25					

Model			MDVI-45D2VR1E(A)	MDVI-56D2VR1E(A)	MDVI-71D2VR1E(A)		
Power supply			1-phase, 220-240V, 50Hz				
	Camarita	kW	4.5	5.6	7.1		
Cooling <sup>1</sup>	Capacity	kBtu/h	15.4	19.1	24.2		
	Power input	W	55	63	79		
	Canacity	kW	5	6.3	8		
Heating <sup>2</sup>	Capacity	kBtu/h	17.1	21.5	27.3		
	Power input	W	55	63	79		
Airflow rate <sup>3</sup> m <sup>3</sup> /h			910/850/790/730/670/610/550	1000/945/885/825/765/705/635	1270/1200/1130/1060/990/920/850		
External static pressu	ire	Pa	30 (0~150)				
Sound pressure level	4	dB(A)	37/36/35/33/31/29/27	38/36/35/33/31/29/28	38/37/35/34/31/29		
Sound power level		dB(A)	56/54/53/52/50/47/45	57/56/55/52/50/49/48	59/58/57/55/54/53/50		
	Net dimensions <sup>5</sup> (W×H×D)	mm	920×270×570	920×270×570	1140×270×710		
Indoor unit	Packed dimensions (W×H×D)	mm	1145×355×705	1145×355×705	1370×365×855		
	Net/Gross weight	kg	29/34	29/34	36/42		
Dina anatiana	Liquid/Gas pipe	mm	Φ6.35/Φ12.7	Ф6.35/Ф12.7 Ф9.53/Ф15.9 Ф9.53,			
Pipe connections	Drain pipe	mm		OD Φ25			

- 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 1.4m below the unit in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Specifications - AC Series

Model			MDVI-22D2R1E	MDVI-28D2R1E	MDVI-36D2R1E	MDVI-45D2R1E	MDVI-56D2R1E					
Power supply	У		1 phase, 220-240V,50Hz									
Cooling <sup>1</sup>	Capacity	kW	2.2	2.8	3.6	4.5	5.6					
Cooling.	Input	W	57	57	61	98	103					
Heating <sup>2</sup>	Capacity	kW	2.6	3.2	4	5	6.3					
пеанну	Input	W	57	57	61	98	103					
Indoor fan Type				AC								
motor	Quantity		1									
Refrigerant ty	/pe			R410A								
Airflow rate (	H/M/L)	m³/h	550/397/309	550/397/309	605/442/351	800/573/479	800/573/479					
External static	pressure (Std(Min~Max))	Pa	10(0~30)	10(0~30)	10(0~30)	10(0~30)	10(0~30)					
Sound pressi	ure level (H/M/L) <sup>3</sup>	dB(A)	31/24/21	31/24/21	35/28/24	36/29/26	36/29/27					
	Dimension <sup>4</sup> (WxHxD)	mm		778x210x500		997x210x500						
Indoor unit	Packing (WxHxD)	mm		870×285×525		1115×285×525						
	Net/Gross weight	kg		17.5/20	22/	/25						
	Liquid pipe	mm		4		Ф9.53						
Piping connections	Gas pipe	mm		(		Ф15.9						
	Drain pipe	mm			OD Φ25							

Model			MDVI-71D2R1E	MDVI-80D2R1E	MDVI-90D2R1E	MDVI-112D2R1E	MDVI-140D2R1E				
Power supply			1 phase, 220-240V,50Hz								
Cooling <sup>1</sup>	Capacity	kW	7.1	8	9	11.2	14				
Cooling	Input	W	140	198	200	313	274				
Heating <sup>2</sup>	Capacity	kW	8	9	10	12.5	15.5				
	Input	W	140	198	200	313	274				
ndoor fan	Туре			AC							
notor	Quantity			1							
Refrigerant ty	pe			R410A							
Airflow rate (F	H/M/L)	m³/h	985/738/630	1345/1165/1013	1345/1165/1013	1800/1556/1400	1905/1636/1400				
external static	pressure (Std(Min~Max))	Pa	10(0~30)	20(10~50)	20(10~50)	40(10~80)	40(10~100)				
Sound pressu	re level (H/M/L) <sup>3</sup>	dB(A)	36/30/27	45/40/37	45/40/37	48/42/38	48/43/39				
	Dimension <sup>4</sup> (WxHxD)	mm	1218x210x500		1230×270×775		1290×300×865				
ndoor unit	Packing (WxHxD)	mm	1335x285x525		1355×350×795		1400×375×925				
	Net/Gross weight	kg	27.5/31		37.5/43		46.5/55.5				
	Liquid pipe	mm									
Piping connections	Gas pipe	mm									
	Drain pipe	mm			OD Ф25						

- 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 1.4m below the unit in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



### High external static pressure with long duct distribution, ideal for large sized spaces.

### **Key Features**

High Static Press	ure Duct	DC Series	AC Series
	Quiet operation	•	•
f t	0.5°C/1°C setting temperature adjustment	•	•
Comfort	Digital display on/off	•	•
	Buzzer sound on/off	•	•
Health	Air filter	○ (G3-class)	(G3-class)
	Innovative puro-air kit	0	0
	Dirty filters indicator signal	•	•
۸:	Adjustable ESP	20-steps	×
Air flow	Multiple fan speeds	7+auto	3+auto
	Compact size	•	•
For Conclude	Flexible duct design	•	•
Easy installation	Double-skin drainage pan	•	•
	High-lift water pump box	0	0

### **COMFORT**

#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.





#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



#### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.

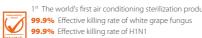


### **HEALTH**

#### Innovative Puro-air Kit

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. It is also innovatively designed so that it could prevent UV damage to the eyes, skin, and respiratory tract.

# Puro-Air Kit Protectors of health and safety SEAM From Germany-OSRAM quality UV light source



98% Effective killing rate of natural bacteria



<sup>\*</sup>The indoor unit needs to be customized in order to use the Puro-air Kit.

#### Optional G3-class Air Filter

G3-class filter is optional for High Static Pressure Duct installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size  $> 10 \mu m$ ), creating a cleaner living environment

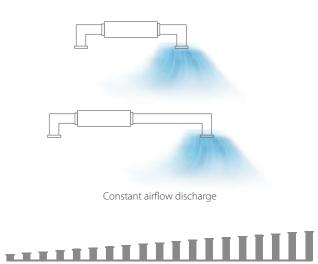


The optional filte comply with EN779:2012

## **AIR FLOW**

#### Static Pressure 20 Steps Control

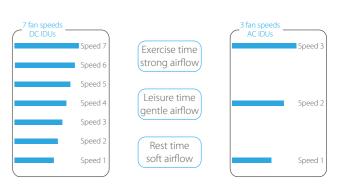
Depending on the installation environment, High Static Pressure Duct is controlled the static pressure up to 20 steps via wired remote controller, for providing comfortable environment suitable for any environment.



20 steps static pressure control

#### Multiple Fan Speeds

The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

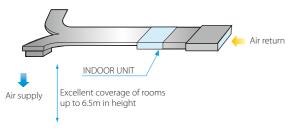




## **EASY INSTALLATION**

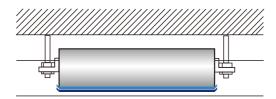
### Flexible Duct Design

High Static Pressure Duct supplies a wide static pressure from 30Pa to 400Pa which can support short to long duct with high ceiling air supply.



### Double-skin Drainage Pan

A double-skin drainage pan provides double protection for ceilings.



### Specifications - DC Series

Model			MDVI-71D3VR1E	MDVI-80D3VR1E	MDVI-90D3VR1E	MDVI-112D3VR1E		
Power supply			1-phase, 220-240V, 50Hz					
	Capacity	kW	7.1	8.0	9.0	11.2		
Cooling <sup>1</sup>	Capacity	kBtu/h	24.2	27.3	30.7	38.2		
	Power input	W	180	180	220	380		
Heating <sup>2</sup>	Capacity	kW	8.0	9.0	10.0	12.5		
	Capacity	kBtu/h	27.3	30.7	34.1	42.7		
	Power input	W	180	180	220	380		
Airflow rate	Airflow rate m <sup>3</sup> /h			260/1227/1193/1160	1420/1373/1327/1280/1233/1187/1140	1870/1783/1697/1610/1523/1437/1350		
External static pres	sure	Pa	100(30~200)					
Sound pressure lev	rel <sup>3</sup>	dB(A)	42/41/40/	40/39/39/38	45/44/43/42/41/40/39	48/47/46/45/43/42/41		
Sound power level		dB(A)	60/59/58/	58/57/57/56	63/62/61/60/59/58/57	66/65/64/63/61/60/59		
	Net dimensions <sup>4</sup> (WxHxD)	mm			965×423×690			
Indoor unit	Packed dimensions (WxHxD)	mm			1090×440×768			
	Net/Gross weight	kg	41	/47	48/55	48/55		
Pipe connections	Liquid/Gas pipe	mm			Ф9.53/Ф15.9			
Tipe conflections	Drain pipe	mm		OD Φ25				

Model			MDVI-140D3VR1E	MDVI-160D3VR1E	MDVI-200D3VR1E	MDVI-250D3VR1E			
Power supply			1-phase, 220-240V, 50Hz						
	Capacity	kW	14.0	16.0	20.0	25.0			
Cooling <sup>1</sup>	Capacity	kBtu/h	47.8	54.6	68.2	85.3			
	Power input	W	420	700	990	1200			
	Capacity	kW	16.0	17.0	22.5	26.0			
Heating <sup>2</sup>	Capacity	kBtu/h	54.6	58.0	76.8	88.7			
	Power input	W	420	700	990	1200			
Airflow rate		m³/h	2240/2133/2027/1920/1813/1707/1600	2660/2530/2400/2270/2140/2010/1880	4330/4230/4130/4030/3930/3830/373				
External static press	sure	Pa	100	170(20~250)					
Sound pressure lev	rel <sup>3</sup>	dB(A)	45/44/43/42/41/40/40	46/45/44/43/42/41/40	51/50/50/4	9/49/48/47			
Sound power level		dB(A)	63/62/61/60/59/58/58	64/63/62/61/60/59/58	69/68/68/6	57/67/66/65			
	Net dimensions <sup>4</sup> (WxHxD)	mm	1322	×423×691	1454×5	515×931			
Indoor unit	Packed dimensions (WxHxD)	mm	1436	×450×768	1509×5	550×990			
	Net/Gross weight	kg	68/76		130/	/142			
Pipe connections	Liquid/Gas pipe	mm	Ф9.5	і3/Ф15.9	Φ12.7/Φ22.2				
Tipe conflections	Drain pipe	mm	0	D Φ25	OD Φ32				

Model			MDVI-280D3VR1E	MDVI-400D3VR1E	MDVI-450D3VR1E	MDVI-560D3VR1E		
Power supply			1-phase, 220-240V, 50Hz					
	Capacity	kW	28.0	40.0	45.0	56.0		
Cooling <sup>1</sup>	Сараспу	kBtu/h	95.0	136.5	153.6	191.1		
	Power input	W	1200	1800	1800	2272		
	Canacity	kW	31.5	45.0	56.0	63.0		
Heating <sup>2</sup>	Capacity	kBtu/h	107.5	153.6	191.1	215.0		
	Power input	W	1200	1800	1800	2272		
Airflow rate	Airflow rate		4330/4230/4130/4030/3930/3830/3730	6500/6150/5800/5450/5100/4750/4400		7400/7000/6600/6200/5800/5400/5000		
External static pres	sure	Pa	170(20~250)	300 (100~400)		300 (100~400)		
Sound pressure lev	rel <sup>3</sup>	dB(A)	51/50/49/49/48/48/47	60/59/58/	/57/55/54/52	59/58/57/56/55/53/51		
Sound power level		dB(A)	69/68/67/67/66/66/65	78/77/76/	/75/73/72/70	77/76/75/74/73/71/69		
	Net dimensions <sup>4</sup> (WxHxD)	mm	1454×515×931	2010×	(680×905	2010×680×905		
Indoor unit	Packed dimensions (WxHxD)	mm	1509×550×990	2095×	(800×964	2095×800×964		
	Net/Gross weight	kg	130/142	220	)/245	218/248		
Pipe connections	Liquid/Gas pipe	mm	Φ12.7/Φ22.2	Ф15.9	9/Φ28.6	Ф15.9/Ф28.6		
	Drain pipe	mm		OD 032				

- 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 1.4m below the unit in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Specifications - AC Series

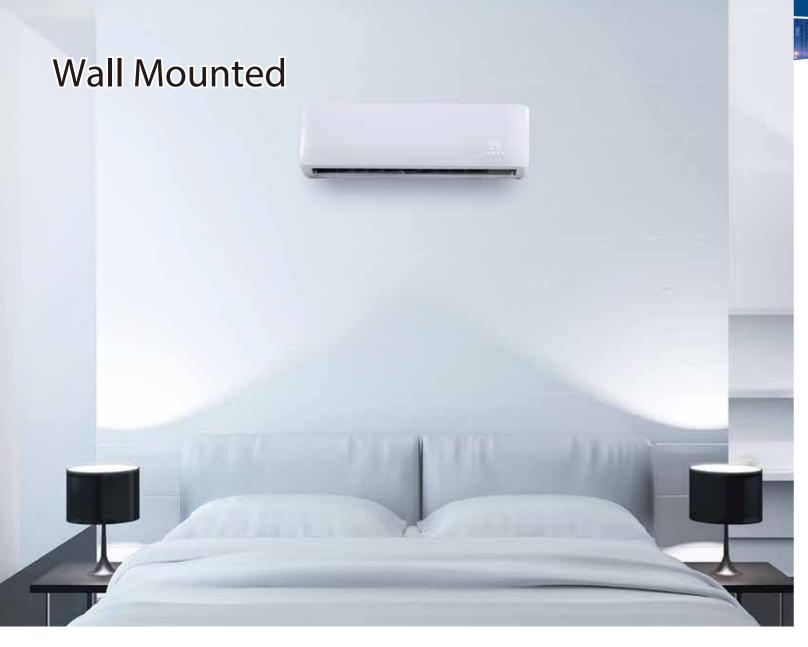
Model			MDVI-71D3R1E	MDVI-80D3R1E	MDVI-90D3R1E	MDVI-112D3R1E	MDVI-140D3R1E	MDVI-160D3R1E			
Power suppl	ly		1 phase, 220-240V,50Hz								
Caaliaal	Capacity	kW	7.1	8	9	11.2	14	16			
Cooling <sup>1</sup>	Input	W	263	263	423	524	724	940			
Heating <sup>2</sup>	Capacity	kW	8	9	10	12.5	16	17			
	Input	W	263	263	423	524	724	940			
Indoor fan Type			AC								
motor	Quantity		1								
Refrigerant type				R410A							
Airflow rate (	(SH/H/M/L)	m³/h	1395/1315/1248/1204	1361/1285/1217/1175	1801/1687/1643/1431	2063/1939/1716/1533	2965/2561/2207/1905	3417/2875/2587/2383			
External statio	pressure (Std(Min~Max))	Pa	25(25~ 196)	37(37~ 196)	37(37~ 196)	50(50~ 196)	50(50~ 196)	50(50~ 196)			
Sound press	ure level (SH/H/M/L) <sup>3</sup>	dB(A)	48/46/44/43	48/46/45/43	52/49/47/45	52/49/47/46	53/50/48/46	54/52/50/48			
	Dimension <sup>4</sup> (WxHxD)	mm		965×	423×690		1322×	423×691			
Indoor unit	Packing (WxHxD)	mm		1090>	<440×768		1436×	450×768			
	Net/Gross weight	kg	45/50	45/50	46.5/52.4	48/53	67/73	67/73			
	Liquid pipe	mm									
Piping connections	Gas pipe	mm									
	Drain pipe	mm			OD	Ф25					

Model			MDVI-200D3R1E	MDVI-250D3R1E	MDVI-280D3R1E	MDVI-400D3R1E	MDVI-450D3R1E	MDVI-560D3R1E	
Power supply	у		1 phase, 220-240V,50Hz						
Cooling <sup>1</sup>	Capacity	kW	20	25	28	40	45	56	
Cooling	Input	W	1408	1408	1408	2100	2100	2800	
Heating <sup>2</sup>	Capacity	kW	22.5	26	31.5	45	50	63	
	Input	W	1408	1408	1408	2100	2100	2800	
Indoor fan	Туре				A	AC			
motor Quantity			2			3			
Refrigerant t	ype				R4	10A			
Airflow rate (	SH/H/M/L)	m³/h	4600/3765/2900/2100			7500/5800/4310/3090	7500/5800/4310/3090	8400/5859/4300/3100	
External statio	pressure (Std(Min~Max))	Ра	250(50~300)			300(50~400)			
Sound pressi	ure level (SH/H/M/L) <sup>3</sup>	dB(A)		57/56/52/47		60/58/54/49	60/58/54/49	61/56/51/46	
	Dimension <sup>4</sup> (WxHxD)	mm	1454×515×931			2010×680×905			
Indoor unit	Packing (WxHxD)	mm	1509×550×990			2095×800×964			
Net/Gross weight kg		124/135			202/233	202/233	202/233		
	Liquid pipe	mm		Ф12.7			Ф15.9		
Piping connections Gas pipe		mm		Ф22.2		Ф28.6			
	Drain pipe	mm			OD Φ	32			

- 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 1.4m below the unit in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



## Stylish panel, ideal for rooms with no or narrow ceilings.

## **Key Features**

Wall Mounted		DC Series	AC Series
	Quiet operation	•	•
Comfort	0.5°C/1°C setting temperature adjustment	•	•
	Digital display on/off	•	•
	Buzzer sound on/off	•	•
	Air filter	•	•
Health	Dirty filters indicator signal	•	•
A: fl	Multiple fan speeds	7+auto	7+auto
Air flow	Multiple steps vertical swing	5+auto	5+auto
	Compact size	•	•
Easy installation	Pure white stylish panel	4 options	4 options
	Exposed installation, no need ceilings	•	•
	Flexible pipe outlet direction	•	•

## **COMFORT**

#### **Quiet Operation**

The minimum noise level of Wall Mounted is as low as 29dB(A), idea for hotels and other noise-sensitive locations.

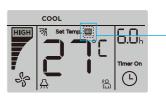


### **HEALTH**

### Dirty Filters Indicator Signal

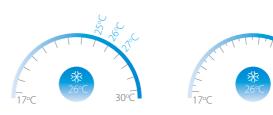
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.





#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



#### Buzzer Sound On/Off

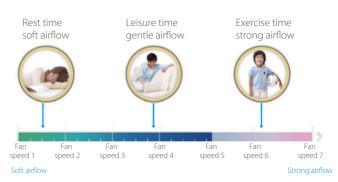
Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



### **AIR FLOW**

#### Multiple Fan Speeds

Both DC and AC Series come with 7 indoor fan speed options to meet the needs of different indoor conditions.



#### Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



<sup>•:</sup> equipped as standard



## **EASY INSTALLATION**

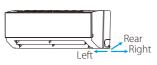
#### Pure White Stylish Panel

Pure white stylish panel with four options (M2, M9, M10 and M11), perfect fusion in all kinds of decoration.



### Flexible Pipe Outlet Direction

Multi-outlet pipe method for both refrigerant pipe and drain pipe: left/right/rear, more flexible for installation.



#### Exposed Installation, No Need Ceilings

The Wall Mounted can be installed against a wall, no need ceilings, simplifying installation.



## Specifications - DC Series

Model			MDVI-17WMVR1E	MDVI-22WMVR1E	MDVI-28WMVR1E		
Power supply			1 phase, 220-240V, 50Hz				
	Capacity	kW	1.7	2.2	2.8		
Cooling <sup>1</sup>	Capacity	kBtu/h	5.8	7.5	9.6		
	Power input	W	28	28	28		
	Capacity	kW	2.2	2.4	3.2		
Heating <sup>2</sup>	Сараспу	kBtu/h	7.5	8.2	10.9		
	Power input	W	28	28	28		
Airflow rate		m³/h	411/402/393/385/378/368/356	422/411/402/393/380/368/356	417/402/386/370/353/338/316		
Sound pressure le	vel <sup>3</sup>	dB(A)	31/30/30/30/29/29/29 31/30/30/30/29/29/29		31/30/30/30/29/29/29		
Sound power leve		dB(A)	46/45/45/45/44/44	46/45/45/45/44/44	46/45/45/45/44/44		
	Net dimensions <sup>4</sup> (WxHxD)	mm		835×280×203			
Indoor unit	Packed dimensions (WxHxD)	mm		935×385×320			
	Net/Gross weight	kg	8.4/12.1	8.4/12.1	9.5/13.1		
Dina connections	Liquid/Gas pipe			Ф6.35/Ф12.7			
Pipe connections	Drain pipe	mm	OD Φ16				

Model			MDVI-36WMVR1E	MDVI-45WMVR1E	MDVI-56WMVR1E		
Power supply			1 phase, 220-240V, 50Hz				
	Capacity	kW	3.6	4.5	5.6		
Cooling <sup>1</sup>	Capacity	kBtu/h	12.3	15.4	19.1		
, and the second	Power input	W	30	40	45		
	Capacity	kW	4.0	5.0	6.3		
Heating <sup>2</sup>	Сарасту	kBtu/h	13.6	17.1	21.5		
	Power input	W	30	40	45		
Airflow rate		m³/h	656/628/591/573/544/515/488	594/563/535/507/478/450/424	747/713/685/648/613/578/547		
Sound pressure le	vel <sup>3</sup>	dB(A)	33/32/32/31/31/30/30 35/34/33/33/32/31/31		38/37/36/36/35/34/34		
Sound power level		dB(A)	48/47/47/46/46/45/45	50/49/48/48/47/46/46	53/52/51/51/50/49/49		
	Net dimensions <sup>4</sup> (WxHxD)	mm	990×315×223				
Indoor unit Packed dimensions (WxHx[		mm		1085×420×335			
	Net/Gross weight	kg	11.4/15.5	12.8,	/16.9		
Dina connections	Liquid/Gas pipe	mm	Ф6.35/	Φ12.7	Ф9.53/Ф15.9		
Pipe connections	Drain pipe	mm		OD Φ16			

	Didiri pipe		05 7.0						
Model			MDVI-71WMVR1E	MDVI-80WMVR1E	MDVI-90WMVR1E				
Power supply			1 phase, 220-240V, 50Hz						
	Capacity	kW	7.1	8.0	9.0				
Cooling <sup>1</sup>	Capacity	kBtu/h	24.2	27.3	30.7				
	Power input	W	55	55	82				
	Capacity	kW	8.0	9.0	10.0				
Heating <sup>2</sup>	Capacity	kBtu/h	27.3	30.7	34.1				
	Power input	W	55	55	82				
Airflow rate		m³/h	1195/1130/1065/1005/940/875/809 1195/1130/1065/1005/940/875/809		1421/1300/1125/1067/1005/934/867				
Sound pressure lev	/el³	dB(A)	44/43/42/39/38/37/36 44/43/42/39/38/37/36		48/46/45/43/41/40/38				
Sound power level		dB(A)	59/58/57/54/53/52/51	59/58/57/54/53/52/51	63/61/60/58/56/55/53				
	Net dimensions <sup>4</sup> (WxHxD)	mm	1194×343×262						
Indoor unit	Packed dimensions (WxHxD)	mm		1290×375×460					
Net/Gross weight		kg		17.0/22.4					
Dina connections	Liquid/Gas pipe	mm		Ф9.53/Ф15.9					
Pipe connections	Drain pipe	mm		OD Φ16					

- 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. ound pressure level is measured 1m in front and 1m below the unit in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Specifications - AC Series

Model			MDVI-22WMR1E	MDVI-28WMR1E	MDVI-36WMR1E	MDVI-45WMR1E			
Power supply			1 phase, 220-240V, 50Hz						
Caaliaal	Capacity	kW	2.2	2.8	3.6	4.5			
Cooling <sup>1</sup>	Input	W	29	29	31	45			
Hastin =?	Capacity	kW	2.4	3.2	4	5			
Heating <sup>2</sup>	Input	W	29	29	31	45			
Indoor fan Type				A	AC .				
motor Quantity		1							
Refrigerant type			R410A						
Airflow rate		m³/h	446/429/424/409/394/382/373	457/445/433/421/419/410/402	447/429/399/369/339/333/303	648/618/582/563/546/505/476			
Sound pressure l	level <sup>3</sup>	dB(A)	34/33/33/32/32/31/31	33/33/32/32/31/31/31	36/35/34/33/32/32/32	37/36/34/34/33/32/31			
	Dimension <sup>4</sup> (WxHxD)	mm		835×280×203					
Indoor unit	Packing (WxHxD)	mm		915x353x300		1075x395x300			
Net/Gross weight kg		8.5/11.0	8.5/11.0	9.7/12.2	13.8/16.4				
Liquid pipe		mm	Ф6.35						
Pipe connections	Gas pipe	mm		12.7					
	Drain pipe	mm		OD Φ16					

Model			MDVI-56WMR1E	MDVI-71WMR1E	MDVI-80WMR1E	MDVI-90WMR1E			
Power supply			1 phase, 220-240V, 50Hz						
Capacity		kW	5.6	7.1	8	9			
Cooling <sup>1</sup>	Input	W	54	77	77	90			
Lloatin a?	Capacity	kW	6.3	8	9	10			
Heating <sup>2</sup>	Input	W	54	77	77	90			
Indoor fan Type			A	C					
motor Quantity			1						
Refrigerant type	2		R410A						
Airflow rate		m³/h	798/764/723/691/665/627/595	1240/1171/1107/1045/976/914/869	1248/1194/1119/1056/993/914/863	1427/1403/1303/1232/1186/1096/1043			
Sound pressure	level <sup>3</sup>	dB(A)	42/41/40/39/38/37/36	42/41/40/39/38/37/36 48/47/45/44/42/39/38 48/47/45/43/42/39/38 52/51/50/					
	Dimension <sup>4</sup> (WxHxD)	mm	990×315×223	1194×343×262					
Indoor unit	Packing (WxHxD)	mm	1075x395x300		1265x420x345				
Net/Gross weight kg		13.8/16.4	13.8/16.4 17.4/20.8		17.6/21.0 17.6/21.0				
	Liquid pipe	mm		Ф9.53					
Pipe connections	Gas pipe	mm		Ф15.9					
	Drain pipe	mm		OD Φ16					

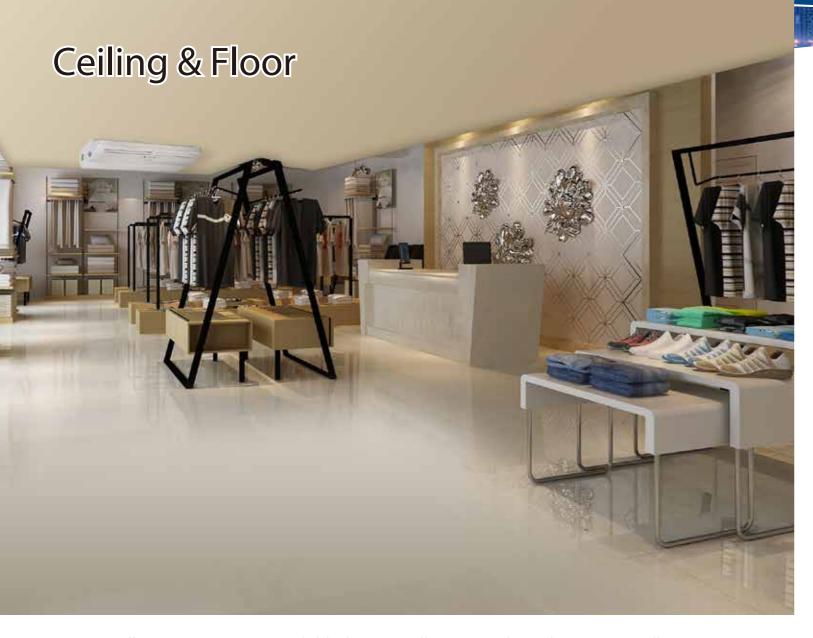
- Notes:

  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. ound pressure level is measured 1m in front and 1m below the unit in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Two installation options are available: horizontally against the ceiling or vertically against the floor/wall, idea for wide rooms with no ceilings.

## **Key Features**

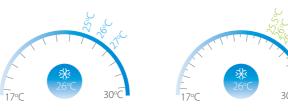
Ceiling & Floor		DC Series	AC Series
	Quiet operation	•	•
- ·	0.5°C/1°C setting temperature adjustment	•	•
Comfort	Digital display on/off	•	•
	Buzzer sound on/off	•	•
11 lab	Air filter	•	•
Health	Dirty filters indicator signal	•	•
	Multiple fan speeds	7+auto	3+auto
Air flow	Multiple steps vertical swing	5+auto	5+auto
	Horizontal swing	•	•
	Pure white stylish panel with slim design	•	•
Easy installation	Exposed installation, easy installation and maintenance	•	•
	Two installation options	•	•

#### Note:

### **COMFORT**

#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



#### Buzzer Sound On/Off

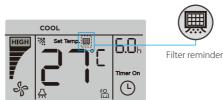
Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



### **HEALTH**

#### Dirty Filters Indicator Signal

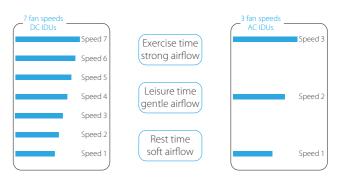
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



### **AIR FLOW**

#### Multiple Fan Speeds

The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.

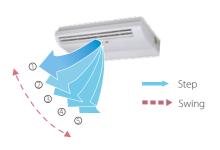


# Multiple Steps Vertical Swing and Horizontal Swing

Vertical air flow direction can be adjusted 5 steps and horizontal air flow direction can be adjusted manually, both vertical and horizontal can be set auto swing.



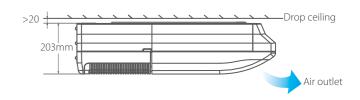
Horizontal & Ver tical



### **EASY INSTALLATION**

#### Pure White Stylish Panel with Slim Design

Pure white stylish panel with slim design, perfect fusion in all kinds of decoration.



<sup>•:</sup> equipped as standard



#### Exposed Installation, Easy Installation and Maintenance

The Ceiling & Floor unit is exposed installation, it is easy installation and maintenance. It can be serviced through the bottom of the machine, easy to access the key components of the unit.



#### **Two Installation Options**

A sleek design suits installation either on the ceiling or floor, providing flexibility to accommodate a wide range of room designs.





The unit can be installed either horizontally on the ceiling or vertically against the wall.

### Specifications - DC Series

Model			MDVI-36CFVR1E	MDVI-45CFVR1E	MDVI-56CFVR1E	MDVI-71CFVR1E	
Power supply			1 phase, 220-240V, 50Hz				
			3.6	4.5	5.6	7.1	
Cooling <sup>1</sup>	Capacity	kBtu/h	12.3	15.4	19.1	24.2	
	Power input	W	49	115	115	115	
		kW	4.0	5.0	6.3	8.0	
Heating <sup>2</sup>	Capacity	kBtu/h	13.6	17.1	21.5	27.3	
	Power input	W	49	115	115	115	
Airflow rate		m³/h	550/525/500/480/460/440/420	20 800/750/700/650/600/550/500			
Sound pressure lev	vel <sup>3</sup>	dB(A)	40/39/38/38/37/36/36	40/39/38/38/37/36/36 43/42/41/41/39/38/38			
Sound power level		dB(A)	53/52/51/51/50/49/49		56/55/54/54/52/51/51		
	Net dimensions <sup>4</sup> (WxHxD)	mm	990×660×203				
Indoor unit	Indoor unit Packed dimensions (WxHxD)			1089×744	×296		
Net/Gross weight		kg	27/33		28/34		
Pipe connections	Liquid/Gas pipe	mm	Ф6.35/Ф12	2.7	Ф9.53/0	D15.9	
ripe conflections	Drain pipe	mm	OD Φ16		6		

Model			MDVI-80CFVR1E	MDVI-90CFVR1E	MDVI-112CFVR1E	MDVI-140CFVR1E	
Power supply			1 phase, 220-240V, 50Hz				
	Consti	kW	8.0	9.0	11.2	14.0	
Cooling <sup>1</sup>	Capacity	kBtu/h	27.2	30.7	38.2	47.8	
	Power input	W	130	130	180	180	
		kW	9.0	10.0	12.5	15.0	
Heating <sup>2</sup>	Capacity	kBtu/h	30.7	34.1	42.7	51.2	
	Power input	W	130	130	180	180	
Airflow rate		m³/h	1280/1245/1210/1170/1130/1085/1050		1890/1830/1765/1700/1660/1620/1580		
Sound pressure lev	rel <sup>3</sup>	dB(A)	45/44/43/43/42/41/40		47/46/45/45/44/43/42		
Sound power level		dB(A)	58/57/56/5	6/55/54/53	60/59/58/58/57/56/55		
	Net dimensions <sup>4</sup> (WxHxD)	mm	1280×6	660×203	1670×680×244		
Indoor unit	ndoor unit Packed dimensions (WxHxD)		1379×7	44×296	1915×760×330		
Net/Gross weight kg		kg	35/41		48/58		
Liquid/Gas pipe		mm		Ф9.53,	53/Φ15.9		
Pipe connections	Drain pipe	mm	OD		Ф16		

## Specifications - AC Series

Model			MDVI-36CFR1E	MDVI-45CFR1E	MDVI-56CFR1E	MDVI-71CFR1E		
Power supply			1 phase, 220-240V,50Hz					
Cooling <sup>1</sup>	Capacity	kW	3.6	4.5	5.6	7.1		
Cooling.	Input	W	49	120	122	125		
Llastin a?	Capacity	kW	4	5	6.3	8		
Heating <sup>2</sup>	Input	W	49	120	122	125		
Indoor fan	Туре	Туре			AC			
notor Quantity			1					
Refrigerant type			R410A					
Airflow rate (H/M/	L)	m³/h	650/570/500 800/600/500					
Sound pressure le	vel (H/M/L) <sup>3</sup>	dB(A)	40/38/36 43/41/38					
	Dimension⁴ (WxHxD)	mm		990	×203×660			
Indoor unit	Packing (WxHxD)	mm		1089	9×296×744			
Net/Gross weight k		kg	26/32		28/34			
	Liquid pipe	mm	Φ	6.35	(	Þ9.53		
Piping connections	Gas pipe	mm	Ф12.7		(	Ф15.9		
	Drain pipe	mm	OD		DDΦ25	Φ25		

Model			MDVI-80CFR1E	MDVI-90CFR1E	MDVI-112CFR1E	MDVI-140CFR1E		
Power supply			1 phase, 220-240V,50Hz					
Cooling	Capacity	kW	8	9	11.2	14		
Cooling <sup>1</sup>	Input	W	130	130	182	182		
Heating <sup>2</sup>	Capacity	kW	9	10	12.5	15		
	Input	W	130	130	182	182		
Indoor fan	Туре				AC			
motor Quantity				1	2			
Refrigerant type	'		R410A					
Airflow rate (H/M/	L)	m³/h	1200/900/700		1980/1860/1730			
Sound pressure le	vel (H/M/L) <sup>3</sup>	dB(A)	45/43/40		47/45/42			
	Dimension⁴ (WxHxD)	mm	1280	×203×660	1670×244×680			
Indoor unit	Packing (WxHxD)	mm	1379	×296×744	1764×329×760			
Net/Gross weight		kg	34	4.5/41	5	54/59		
	Liquid pipe	mm			Ф9.53			
Piping connections	Gas pipe	mm	Ф1		015.9			
	Drain pipe	mm		(	DDΦ25			

- 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. Floor standing: Sound level is measured 1m horizontally and 1m vertically from the air-outlet.

  Ceiling mounted: Sound level is measured 1m horizontally and 1m vertically from the air-outlet.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

 $<sup>1.</sup> Indoor temperature 27^{\circ}C DB, 19^{\circ}C WB; outdoor temperature 35^{\circ}C DB; equivalent refrigerant piping length 7.5m with zero level difference.$ 

<sup>2.</sup> Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

3. Floor standing: Sound level is measured 1m horizontally and 1m vertically from the air-outlet.

Ceiling mounted: Sound level is measured 1m hozorantally and 1m vertically from the air-outlet.

4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Floor standing unit with multi casing options can be installed quickly and easily in new or existing facilities in a variety of applications.

### **Key Features**

Floor Standing		DC Series
	Quiet operation	•
Comfort	0.5°C/1°C setting temperature adjustment	•
Comfort	Digital display on/off	•
	Buzzer sound on/off	•
Health	Air filter	•
пеанп	Dirty filters indicator signal	•
Air flow	Multiple fan speeds	7+auto
	Pure white stylish panel with slim design	•
Easy installation	Exposed installation, easy installation and maintenance	•
	Multiple Appearance Options	•

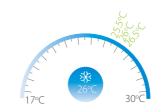
Note

### **COMFORT**

#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.





#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



#### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



### **HEALTH**

#### Dirty Filters Indicator Signal

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.





### **AIR FLOW**

#### Multiple Fan Speeds

7 indoor fan speeds provide control flexibility to meet the needs of different indoor conditions.



### **EASY INSTALLATION**

#### **Multiple Appearance Options**

The Floor Standing Unit has three appearance options to meet different installation requirement, the F3B (concealed) unit is designed to be concealed in walls while the F4 (front air intake) and F5 (underside air intake) offer a choice of air intake options.



F3B (conceale



F4 (front air intake)



F5 (underside air intake)

<sup>•:</sup> equipped as standard



## Specifications - DC Series

#### Concealed

Model			MDVI-22FS3VR1E	MDVI-28FS3VR1E	
Power supply			1 phase, 220-240V, 50Hz		
	Capacity	kW	2.2	2.8	
Cooling <sup>1</sup>	Capacity	kBtu/h	7.5	9.6	
	Power input	W	40	45	
	Capacity	kW	2.4	3.2	
Heating <sup>2</sup>	Сарасіту	kBtu/h	8.2	10.9	
	Power input	W	40	45	
Airflow rate		m³/h	530/504/478/456/439/418/400	569/540/515/485/462/443/421	
Sound pressure lev	vel <sup>3</sup>	dB(A)	36/35/34/33/31/30/29	36/35/34/33/31/30/29	
Sound power level		dB(A)	54/53/52/51/49/48/47	54/53/52/51/49/48/47	
	Net dimensions <sup>4</sup> (WxHxD)	mm	840×545×212		
Indoor unit	Packed dimensions (W×H×D)	mm	939×63	39×305	
	Net/Gross weight	kg	21.4/25.6		
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/	Φ12.7	
ripe connections	Drain pipe	mm	Φ*	16	

Model			MDVI-36FS3VR1E	MDVI-45FS3VR1E	
Power supply			1 phase, 220-2		
	Capacity	kW	3.6	4.5	
Cooling <sup>1</sup>	Capacity	kBtu/h	12.3	15.4	
	Power input	W	55	60	
	Capacity	kW	4.0	5.0	
Heating <sup>2</sup>	Capacity	kBtu/h	13.6	17.1	
	Power input	W	55	60	
Airflow rate	·	m³/h	624/591/557/522/473/420/375	660/625/583/542/501/475/440	
Sound pressure lev	vel <sup>3</sup>	dB(A)	37/36/35/34/32/31/30	37/36/35/34/32/31/30	
Sound power leve	l	dB(A)	55/54/53/52/51/49/48 55/54/53/52/51/49		
	Net dimensions <sup>4</sup> (WxHxD)	mm	1040×5	45×212	
ndoor unit	Packed dimensions (W×H×D)	mm	1139×639×305		
	Net/Gross weight	kg	26.1/30.6		
D:	Liquid/Gas pipe	mm	Φ6.35/	Φ12.7	
Pipe connections	Drain pipe	mm	Φ	16	

Model			MDVI-56FS3VR1E	MDVI-71FS3VR1E	MDVI-80FS3VR1E	
Power supply			1 phase, 220-240V, 50Hz			
	Capacity	kW	5.6	7.1	8.0	
Cooling <sup>1</sup>	Capacity	kBtu/h	19.1	24.2	27.3	
	Power input	W	88	110	130	
	Capacity	kW	6.3	8.0	9.0	
Heating <sup>2</sup>	Сарасіту	kBtu/h	21.5	27.3	30.7	
	Power input	W	88	110	130	
Airflow rate	•	m³/h	1150/1094/1028/970/925/886/830	1380/1290/1205/1100/1033/955/870	1380/1290/1205/1100/1033/955/870	
Sound pressure lev	/el³	dB(A)	41/39/37/35/33/32/31	44/42/40/39/37/35/33	44/42/40/39/37/35/33	
Sound power level		dB(A)	59/57/55/53/51/50/49	62/60/58/57/55/53/51	62/60/58/57/55/53/51	
	Net dimensions <sup>4</sup> (WxHxD)	mm	1340×545×212			
Indoor unit	Packed dimensions (W×H×D)	mm		1425×639×345		
	Net/Gross weight	kg	31/39		32.7/40.7	
Pipe connections	Liquid/Gas pipe	mm		Ф9.53/Ф15.9		
ripe connections	Drain pipe	mm		Ф16		

- 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 1m in front and 1m above the floor in a semi-anechoic chamber.
  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Specifications - DC Series

#### Exposed

Model			MDVI-22FS4VR1E	MDVI-28FS4VR1E	
			MDVI-22FS5VR1E	MDVI-28FS5VR1E	
Power supply			1 phase, 220-2	40V, 50Hz	
	Capacity	kW	2.2	2.8	
Cooling <sup>1</sup>	Capacity	kBtu/h	7.5	9.6	
9	Power input	W	40	45	
	Canacity	kW	2.4	3.2	
Heating <sup>2</sup>	Capacity	kBtu/h	8.2	10.9	
J	Power input	W	40	45	
Airflow rate		m³/h	530/504/478/456/439/418/400	569/540/515/485/462/443/421	
Sound pressure le	vel <sup>3</sup>	dB(A)	36/35/34/33/31/30/29	36/35/34/33/31/30/29	
Sound power leve		dB(A)	54/53/52/51/49/48/47	54/53/52/51/49/48/47	
		mm (F4)	1000×5	96×225	
	Net dimensions <sup>4</sup> (WxHxD)	mm (F5)	1000×677×220		
1 1	D     .	mm (F4)	1089×683×312		
Indoor unit	Packed dimensions (W×H×D)	mm (F5)	1182×683×312		
	No. (Commercial)	kg (F4)	28,2/32,8		
	Net/Gross weight	kg (F5)	28.2/35.8		
Din	Liquid/Gas pipe	mm	Φ6.35/	Φ12.7	
Pipe connections	Drain pipe	mm	Φ	16	

Model			MDVI-36FS4VR1E	MDVI-45FS4VR1E		
Douger cumply			MDVI-36FS5VR1E	MDVI-45FS5VR1E		
Power supply			1 phase, 220-			
	Capacity	kW	3.6	4.5		
Cooling <sup>1</sup>	Capacity	kBtu/h	12.3	15.4		
	Power input	W	55	60		
	Capacity	kW	4.0	5.0		
Heating <sup>2</sup>	Сарасіту	kBtu/h	13.6	17.1		
_	Power input	W	55	60		
Airflow rate		m³/h	624/591/557/522/473/420/375	660/625/583/542/501/475/440		
Sound pressure le	vel <sup>3</sup>	dB(A)	37/36/35/34/32/31/30	37/36/35/34/32/31/30		
Sound power level		dB(A)	55/54/53/52/51/49/48	55/54/53/52/51/49/48		
·	No. diameter (AMALLE)	mm (F4)	1200×596×225			
	Net dimensions <sup>4</sup> (WxHxD)	mm (F5)	1200×677×220			
Indoor unit	Packed dimensions (W×H×D)	mm (F4)	1289×683×312			
indoor unit	Packed difficisions (WXHXD)	mm (F5)	1382×683×312			
	Net/Gross weight	kg (F4)	33.1/38.2			
	Net/Gross weight	kg (F5)	33.5/41.8			
Dina connections	Liquid/Gas pipe	mm	Ф6.35/	Φ12.7		
Pipe connections	Drain pipe	mm	Φ	16		

Model			MDVI-56FS4VR1E	MDVI-71FS4VR1E	MDVI-80FS4VR1E	
Model			MDVI-56FS5VR1E	MDVI-71FS5VR1E	MDVI-80FS5VR1E	
Power supply			1 phase, 220-240V, 50Hz			
	Capacity	kW	5.6	7.1	8.0	
Cooling <sup>1</sup>	Сарасіту	kBtu/h	19.1	24.2	27.3	
	Power input	W	88	110	130	
	Capacity	kW	6.3	8.0	9.0	
Heating <sup>2</sup>	Сарасіту	kBtu/h	21.5	27.3	30.7	
	Power input	W	88	110	130	
Airflow rate		m³/h	1150/1094/1028/970/925/886/830	1380/1290/1205/1100/1033/955/870	1380/1290/1205/1100/1033/955/870	
Sound pressure lev	vel <sup>3</sup>	dB(A)	41/39/37/35/33/32/31	44/42/40/39/37/35/33	44/42/40/39/37/35/33	
Sound power level		dB(A)	59/57/55/53/51/50/49	62/60/58/57/55/53/51	62/60/58/57/55/53/51	
	No. diameter (AMALLE)	mm (F4)		1500×596×225		
	Net dimensions <sup>4</sup> (WxHxD)	mm (F5)	1500×677×220			
Indoor unit	De also di dise anni anno (MA (LIXID)	mm (F4)	1589×683×312			
indoor unit	Packed dimensions (W×H×D)	mm (F5)	1682×683×312			
	Nat/Caraaaaainht	kg (F4)	38.4/44.6		40.4/46.2	
	Net/Gross weight	kg (F5)	39/47.7		40.7/49.4	
Dina connections	Liquid/Gas pipe	mm		Ф9.53/Ф15.9		
Pipe connections	Drain pipe	mm		Ф16		

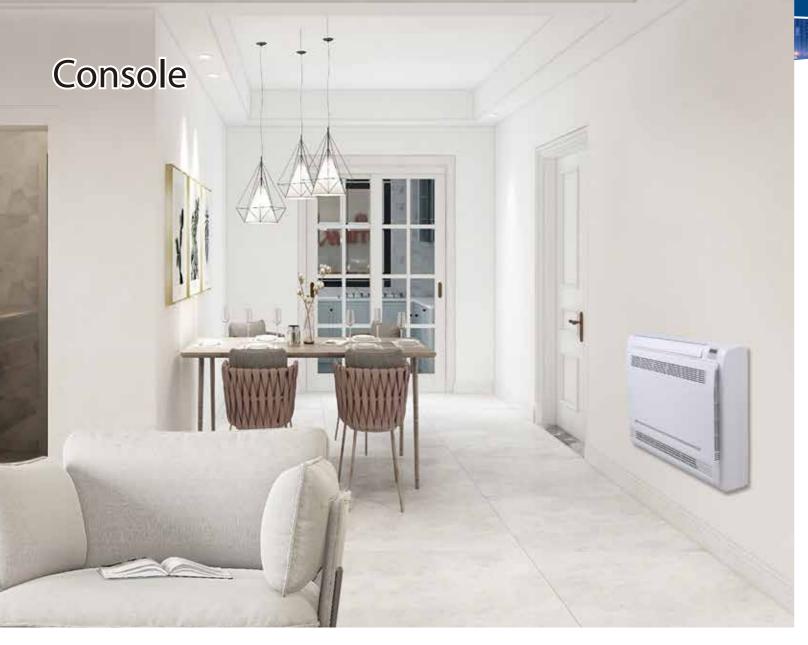
- Notes:

  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 1m in front and 1m above the floor in a semi-anechoic chamber.

  4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



# Optimal heating comfort thanks to dual airflow, can be floor standing or installed against a wall

### **Key Features**

Console		DC Series
	Optimal heating comfort	•
	Quiet operation	•
Comfort	0.5°C/1°C setting temperature adjustment	•
	Digital display on/off	•
	Buzzer sound on/off	•
Health	Air filter	•
пеанп	Dirty filters indicator signal	•
	Two air outlets and four air inlets	•
Air flow	Multiple fan speeds	7+auto
	Multiple steps vertical swing	5+auto
Ency installation	Pure white stylish panel with compact size	•
Easy installation	Exposed installation, easy installation and maintenance	•

Note:

•: equipped as standard

### **COMFORT**

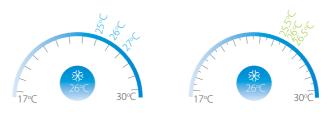
#### **Optimal Heating Comfort**

Thanks to the two air outlets, hot air can be supplied from below, just like floor heating, which is more comfortable when heated from the foot.



#### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



#### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



### **HEALTH**

#### **Dirty Filters Indicator Signal**

The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.





### **AIR FLOW**

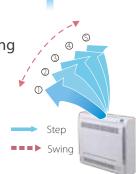
#### Two Air Outlets And Four Air Inlets

The Console unit's combination of four air inlets and two air outlets ensure that cooling and heating is distributed in all directions.



### Multiple Steps Vertical Swing

There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



## **EASY INSTALLATION**

#### Pure White Stylish Panel With Compact Size

Pure white stylish panel with slim design, perfect fusion in all kinds of decoration.

Super compact design can be install in existing building. Its low height enables the unit to fit perfectly beneath a window. Good choose for office.





## Specifications - DC Series

Model			MDVI-22COVR1E	MDVI-28COVR1E	MDVI-36COVR1E	MDVI-45COVR1E	
Power supply			1 phase, 220-240V, 50Hz				
		kW	2.2	2.8	3.6	4.5	
Cooling <sup>1</sup>	Capacity	kBtu/h	7.5	9.6	12.3	15.4	
	Power input	W	20	25	25	35	
	_	kW	2.6	3.2	4.0	5.0	
Heating <sup>2</sup>	Capacity	kBtu/h	8.9	10.9	13.4	17.1	
	Power input	W	20	25	25	35	
Airflow rate		m³/h	430/401/374/345/302/268/229	510/482/456/430/355/286/229		660/614/561/512/478/436/400	
Sound pressure le	evel <sup>3</sup>	dB(A)	38/36/34/32/28/27/26	39/37/35/33/31/29/27		42/41/40/39/37/36/36	
Sound power leve	el	dB(A)	54/52/50/48/44/43/42	55/53/51/49/47/45/43		58/57/56/55/53/52/52	
	Net dimensions <sup>4</sup> (WxHxD)	mm	700×600×210				
Indoor unit	Indoor unit Packed dimensions (WxHxD)		810×710×305				
Net/Gross weight		kg	14/19 15/20				
	Liquid/Gas pipe	mm	Φ6.35/Φ12.7				
Pipe connections	Drain pipe	mm		OD	Ф16		
Notes:							



Integrated with ventilation and air processing, combining fresh air treatment and air conditioning via single system.

## **Key Features**

Fresh Air Process	ing Unit	DC Series with large airflow	DC Series with small airflow
	100% fresh air processing unit	•	•
	Discharge Air temperature control	•	•
Comfort	Quiet operation	•	•
Comfort	0.5°C/1°C setting temperature adjustment	•	•
	Digital display on/off	•	•
	Buzzer sound on/off	•	•
Health	Air filter	● ○ (G3-class)	○ (G3-class)
	Dirty filters indicator signal	•	•
Air flow	Adjustable ESP	20-steps	20-steps
AII HOW	Multiple fan speeds	7+auto	7+auto
	Wide operation range	-10~43°C	-10~50°C
Easy installation	Flexible duct design	•	•
	High-lift water pump box	0	0

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 1m in front and 1m above the floor in a semi-anechoic chamber.

4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Note:
•: equipped as standard; •: customization option;

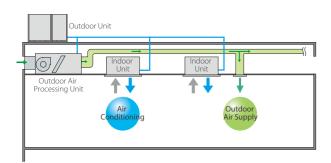


### **COMFORT**

#### 100% Fresh Air Processing Unit

Both fresh air filtration and heating/cooling can be achieved in a single system.

Indoor units and the Fresh Air Processing Unit can be connected to the same refrigerant system, increasing design flexibility and greatly reducing total system costs.



#### Discharge Air Temperature Control

Different from the normal indoor unit adopts return air temperature control, the fresh air processing unit adopts discharge air temperature control, thereby reducing the air conditioning load.

Target return air temperature control





Target discharge air temperature control

#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better



#### Buzzer Sound On/Off

Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



### **HEALTH**

#### Optional G3-class Air Filter

G3-class filter is optional for Fresh Air Processing Unit installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size > 10  $\mu$ m), creating a cleaner living environment.

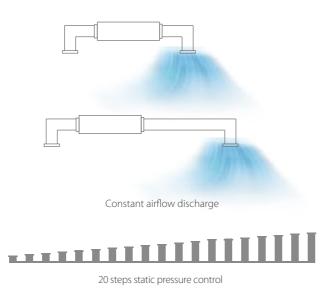


The optional filter comply with EN779:2012

#### **AIR FLOW**

#### Static Pressure 20 Steps Control

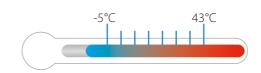
Depending on the installation environment, Medium Static Pressure Duct is controlled the static pressure up to 20 steps via wired remote controller, for providing comfortable environment suitable for any environment.



### **EASY INSTALLATION**

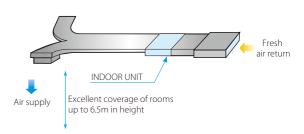
#### Wide Operation Range

The Fresh Air Processing Unit can be installed practically anywhere. The unit operates at outdoor ambient up to 43°C in cooling mode and down to -5°C in heating mode.



#### Flexible Duct Design

Fresh Air Processing Unit supplies a wide static pressure from 30Pa to 400Pa which can support short to long duct with high ceiling air supply.



## Specifications - DC Series (with large airflow)

Model			MDVI-125OAVR1E	MDVI-1400AVR1E	
Power supply			1 phase, 220-240V, 50Hz		
		kW	12.5	14.0	
Cooling <sup>1</sup>	Capacity	kBtu/h	42.6	47.8	
	Power input	W	480	480	
		kW	10.5	12.0	
Heating <sup>2</sup>	Capacity	kBtu/h	36.0	41.0	
Power input		W	480	480	
Airflow rate		m³/h	2000/1917/1833/1750/1667/1583/1500		
External static pres	ssure	Pa	150(100~250)		
Sound pressure lev	/el³	dB(A)	48/47/46/45/44/43/42		
Sound power level	I	dB(A)	66/65/64/63/62/61/60		
	Net dimensions <sup>4</sup> (WxHxD)	mm	1322x423x691		
Indoor unit Packed dimensions (WxHxD)		mm	1436×450×768		
	Net/Gross weight	kg	kg 68/76		
	Liquid/Gas pipe		Φ9.53/Φ15.9		
Pipe connections	Drain pipe	mm	OD	Φ25	

#### Notes:

- 1. Outdoor temperature 33°C DB, 28°C WB;equivalent refrigerant piping length 7.5m with zero level difference.
- 2. Outdoor temperature 0°C DB, -2.9°C WB;equivalent refrigerant piping length 7.5m with zero level difference.
- 3. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
- 4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.
- All specifications are measured at standard external static pressure.

The Fresh Air Processing Unit can be used either independently or in conjunction with other types of indoor unit. If used independently, the total capacity of the Fresh Air Processing Units must be between 50% and 100% of that of the outdoor units. If used in conjunction with other types of indoor unit, the total capacity of the indoor units and Fresh Air Processing Units must be between 50% and 100% of that of the outdoor units and the total capacity of the Fresh Air Processing Units must not exceed 30% of that of the outdoor units.

# Heat Recovery Ventilator (HRV)

#### Wide Capacity Range

The HRV has AC Series and DC Series options. The airflow is from 200m<sup>3</sup>/h to 2000m<sup>3</sup>/h which can meet the requirements of most scenarios.



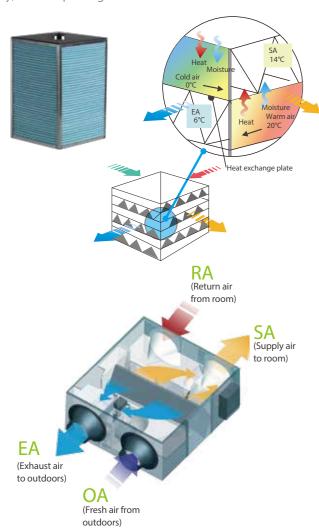


200/300/400/500/800/1000m<sup>3</sup>/h

1500/2000m<sup>3</sup>/h

# Energy Saving, Heat Recovery for Both Heat and Humidity

The heat recovery ventilator (HRV) can greatly reduce energy loss and room temperature fluctuations caused by the ventilation process. The Midea HRV's strong performance is a result of the advanced technology incorporated into its design. The heat exchanger core is made of specially treated paper which gives enhanced temperature and humidity control. It prevents energy being wasted by recovering waste heat from the outgoing air, thus offering much greater levels of efficiency, while improving comfort levels too.

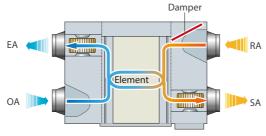


#### Multiple Operation Modes

Multiple operation modes: Auto, Bypass, Heat recovery, Free cooling mode (available for DC Series Only), Air supply mode and Exhaust mode (available for AC Series Only).

#### Heat exchange mode

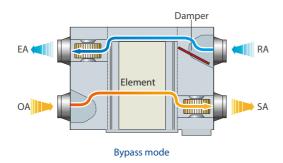
The flows of incoming and outgoing air pass close to each other, allowing heat transfer between the two channels. During summer, incoming air is cooled by the indoor air being exhausted and in winter, incoming air is warmed.



Heat exchange mode

#### Bypass mode

In mild climates or seasons, where temperature and humidity differences between indoors and outdoors are small, the HRV can work as a conventional ventilation fan. In standard bypass mode the supply and exhaust fans run at the same speed.



#### Air supply mode

Air supply mode is where the supply fan is set to run faster than the exhaust fan, which is useful in mild climate installations with high fresh air ventilation requirements.

#### Exhaust mode

Exhaust mode is where the exhaust fan is set to run faster than the supply fan, which is useful in mild climate installations with large amounts of exhaust air to be expelled.

#### Auto mode

The controller chooses heat exchange mode or bypass mode according to the temperature difference between outdoors and indoors. Both fans are set to run at low speed.

#### Free Cooling Mode

Free cooling mode is only available for DC Series HRV. Free cooling operation is an energy saving function operating when outdoor ambient temperature is below indoor ambient temperature, it uses low temperature fresh air to cool down indoor temperature, reducing the running costs.



#### High Efficiency Filter

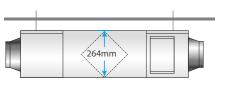
Standard Built-in G4-class dust filter, optional F7-class filter for air supply side and M5-class filter for exhaust air side in line with EU legislations can be customized.





#### **Easy Installation**

Slim and compact design of units, making the installation more convenient.



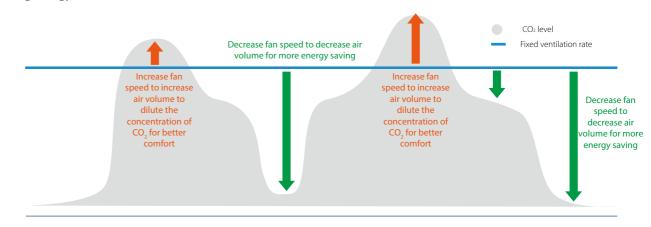
#### Wide Range of Controllers

The HRV has its special wired controller KJR-27B for standard functions control and compatible with group controller WDC-120G/WK for new functions (CO2 sensor function, differential pressure sensor function) control. It also can be centralized control with VRF system through centralized controller and network control with VRF system through Midea BMS gateways.



### CO<sub>3</sub> Sensor Option

Enough fresh air is needed to create an enjoyable environment, but ventilating constantly is leading to energy waste. Therefore, an optional  $CO_2$  sensor can be installed which switches off the ventilation system when there is enough fresh air in the room, thus saving energy.





### Specifications - DC Series

Model		CNHR-2-Mi D200	CNHR-2-Mi D300	CNHR-2-Mi D400	CNHR-2-Mi D500
Power supply	1-phase, 220-240V~50Hz				
Input power (H/M/L)(F7+M5)	W	80/40/25	100/55/35	110/70/40	150/95/50
Nominal Temperature Efficiency (standard G4) (H/M/L)	%	79.5/81.1/83.5	75.5/78.8/82.5	77.7/79.0/81.3	80.6/82.2/85.5
Nominal Enthalpy Efficiency (standard G4) (H/M/L)	%	75.0/77.5/79.6	72.1/75.0/79.3	73.5/75.3/78.0	74.0/76.6/80.5
Nominal Temperature Efficiency (F7+M5) (H/M/L)	%	81.8/85.4/87.5	80.4/81.8/83.5	79.2/81.1/83.3	77.2/79.4/82.5
Nominal Enthalpy Efficiency (F7+M5) (H/M/L)	%	81.2/83.1/85.0	79.4/81.2/84.0	79.6/81.8/84.2	72.3/75.6/78.6
Fresh air external static pressure (H speed +F7+M5)	Pa	75	70	70	65
Discharge air external static pressure (H speed +F7+M5)	Pa	100	110	110	110
Nominal air flow	m³/h	200	300	400	500
Sound pressure level (H/M/L)	dB(A)	33/29.5/25.5	36.5/33.5/30	36.5/32/28	36/30.5/24.5
Sound power level (H)	dB	45	48	48	50
Net dimensions (WxDxH)	mm	1195×801×272	1195×914×272	1276×1204×272	1311×1106×390
Packed dimensions (WxDxH)	mm	1275×880×420	1275×994×420	1360×1284×420	1390×1244×540
Net/Gross weight	kg	53.6/63.5	59/75.5	71.5/91.5	74.4/98
Duct diameter	mm	Ф144	Ф144	Ф198	Ф244
Operating temperature range	°C		-7 to 43 DB, Rł	H 80% or lower	

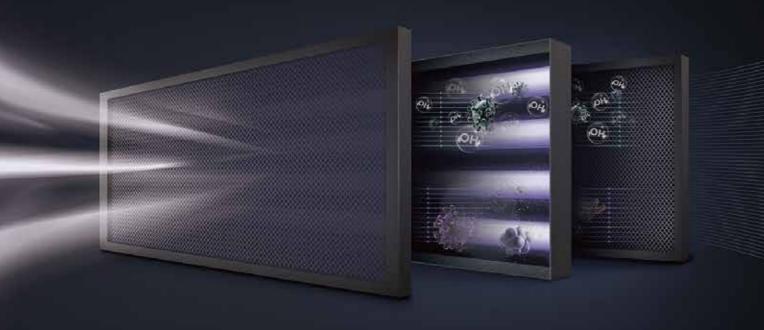
Model		CNHR-2-Mi D800	CNHR-2-Mi D1000	CNHR-2-Mi D1500	CNHR-2-Mi D2000		
Power supply			1-phase, 220-240V~50Hz				
Input power (H/M/L)(F7+M5)	W	320/170/80	420/230/100	680/320/200	950/500/230		
Nominal Temperature Efficiency (standard G4) (H/M/L)	%	78.7/82.1/86.8	82.8/84.0/87.4	75.5/78.6/80.2	77.2/79.5/83.4		
Nominal Enthalpy Efficiency (standard G4) (H/W/L)	%	72.3/75.4/79.0	76.0/76.0/80.1	69.4/71.2/74.8	74.7/77.0/80.6		
Nominal Temperature Efficiency (F7+M5) (H/M/L)	%	74.9/77.1/80.8	75.4/78.0/81.4	83.8/84.6/86.2	78.8/80.5/83.4		
Nominal Enthalpy Efficiency (F7+M5) (H/M/L)	%	71.1/74.4/78.0	67.3/71.1/75.0	74.6/76.2/78.8	71.1/75.0/79.6		
Fresh air external static pressure (H speed +F7+M5)	Pa	100	110	150	160		
Discharge air external static pressure (H speed +F7+M5)	Pa	155	145	180	180		
Nominal air flow	m <sup>3</sup> /h	800	1000	1500	2000		
Sound pressure level (H/M/L)	dB(A)	42/39/34	44/39/33.5	51.5/46.5/41.5	53/48.5/42.5		
Sound power level (H)	dB	55	54	69	70		
Net dimensions (WxDxH)	mm	1311×1286×390	1311×1526×390	1740×1375×615	1811×1575×685		
Packed dimensions (WxDxH)	mm	1390×1424×540	1390×1670×540	1830×1520×770	1900×1720×845		
Net/Gross weight	kg	80/104	90/112	181.5/213	208.5/245		
Duct diameter	mm	Ф244	Ф244	346×326	346×326		
Operating temperature range	°C	-7 to 43 DB, RH 80% or lower					

Note:
1. For the units model of CNHR-2-Mi D300 ~CNHR-2-Mi D1000, there are 3-speed adjustable air-volume (Hi, Med, Low).
2. The parameters in the above table are measured at high speed.

Note:
1. For the units model of CNHR-2-Mi D300 ~CNHR-2-Mi D1000, there are 3-speed adjustable air-volume (Hi, Med, Low).
2. The parameters in the above table are measured at high speed.

## **PURO - AIR KIT**

SAFE INDOOR AIR, FROM THE INVISIBLE CARE
PURIFICATION SPEED INDUSTRY LEADER















First Global Tick-mark Certification Of Purification Ac Products

Premium Osram Hns Uv Lamp Made In Europe

99.9% Killing Rate Of Staphylococcus Albus Within 10 Minutes

99.9% Killing Rate Of H1n1 Within 30 Minutes

98.2% Killing Rate Of Natural Airborne Bacteria Within 30 Minutes

# Indoor air pollution is affecting our...

We spend 80% of our time indoors. On average, a person consumes about 8000 liters of air in a day. According to the EPA, indoor air pollution could be five times greater than outdoor air. Over 99% of particles in the air are smaller than 1 micron, and they cannot sink because of their lightweight. When a person sneezes, around 100,000 contagious germs may be sent into the air.

Puro-Air kit can effectively remove bacteria, viruses and odors from indoor air to provide a healthy and safe indoor environment. Its innovative design also prevents UV damage to the eyes, skin, and respiratory tract.

Individuals at risk or respiratory and dermatological problems due to poor IAQ

..health

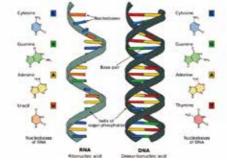
different chemical, dculate and biological materials can effect our health





UVGI is increasingly widely used in the sterilization of HVAC equipment. W.J.Kowalski and others have obtained the effect of UV sterilization on the concentration of indoor pollutants through experiments. It can be seen that the virus , bacteria and spores exposed to UV irradiation with an intensity of 25 mW / cm2 is significantly reduced. The results show that the microorganisms carried in the air can be killed by applying a certain intensity and time of UV irradiation (200-270nm) under appropriate conditions[1].

[1].HVAC Design Manual for Hospitals and Clinics, ASHRAE









Andrea Bianco, Mara Biasin and others have confirmed through experiments that UV-C irradiation has the potential virucidal effects on SARS-CoV-2. The potential virucidal effects of UV-C irradiation on SARS-CoV-2 were evaluated for different illumination doses and virus concentrations. These results could explain the epidemiological trends of COVID-19 and are important for the development of novel sterilizing methods to contain SARS-CoV-2 infection[2].

[2]Refer to UV-C irradiation is highly effective in inactivating and inhibiting SARS-CoV-2 replication, Andrea Bianco, Mara Biasin



- 1. 2 models, power range from 60W to 120W
- 2. 2 UV lamps and 4 UV lamps are optional
- 3. Application air flow rate of 2 UV lamps model can be up to 2600 m3/h
- 4. Application air flow rate of 4 UV lamps model can be up to 4300 m3/h.
- **5.** UVGI high efficient
- 6. Innovative structural design
- 7. Higher safty,Ozone-free and UV leakage-free
- **8.** Flexibility Control
- **9.** Higher reliability
- 10. Higher killing rate for viruses and bacteria,99.9% killing rate of Staphylococcus albus in 10 minutes,99.9% killing rate of H1N1 and 98% killing rate of natural bacteria in 30 minutes
- **11.** Be widely used in many scenes



Precise
253.7nm
UV wave length





Durable
9000hr
80% output



Model	Description Key component		Box size	Air flow(m³/h)
HFB1-P-U02	UV Health function box	2x(UV lamp,230V,30W)	BOXI	2600
HFB1-P-U04	UV Health function box	4x(UV lamp,230V,30W)	BOXI	4300

	BOX Dimension WxHxD(mm)	Air-flow(m³/h)	Air velocity(m/s)	Pressure loss(Pa)
HFB1 Puro-Air 1120x418x420		4000	2.44	65
		3500 2.13 3000 1.86 2500 1.52	2.13	50
	1120410420		40	
	1120X418X420		30	
		2000	1.19	20
		1500	0.94	12

#### **Electrical Data**

Lamp Power	30 W
Lamp Voltage	96 V
Input Voltage	230 V

Note: The OSRAM HNS G13 lamp can be purchased from the market for replacement.

#### Geometric Data

Face to Face A max 894.3 mm

Face to end of opposite pin B min 899.3 mm

Face to end of opposite pin B max 901.7 mm

Overall length C max 908.8 mm

Radiation length a 824 ± 2 mm

Tube diameter D max 25.5 ± 2 mm

#### Spectral Data

Base G13

Radiation flux (254nm) 12.0 W

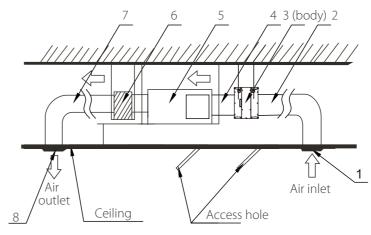
Initial UV-C irradiance > 0.31 W/m2 @ 2 meter

Lifetime 9000 hrs

UV-C irradiance @ 9000hrs > 0.24 W/m2 @ 2 meter

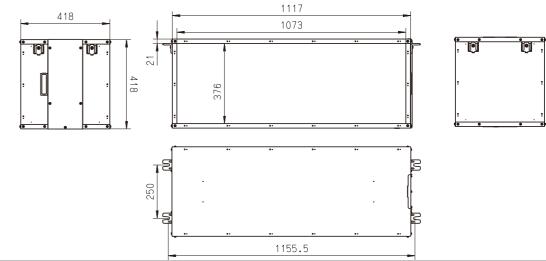
### **Air Duct Installation**

- 1. The air inlet flange and air outlet flange are connected to air ducts, respectively.
- 2. Seal the connection parts of the flange and air duct with aluminum foil tape.
- 3. Use screws (prepared on site) to connect the air duct to the unit.



	Legend
1	Air inlet mesh(prepared on site)
2	Air outlet mesh(prepared on site)
3	PURO-AIR KIT
4	Air duct(prepared on site)
5	Master unit of the air conditioner
6	Air plenum(prepared on site)
7	Air outlet duct(prepared on site)
8	Air outlet(prepared on site)

## **Dimensions (mm)**





# CONTROL SOLUTIONS

Remote Controllers
Wired Controllers
Central Controllers
Data Converter
Network Control System
BMS Gateways
Accessories



# CONTROLLER LINEUP for MDV6/MDV6i/MDV6R/Mini C

Wireless Remote Controllers	Wired Remote Controllers	Central Controllers Data converter	Network Control System	BMS Gateways	Accessories
886 	7 2 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		and the second	(A) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Hotel Key Card Interface Module
RM05B(A) RM12F	WDC-86E/KD WDC-120G/WK(A)	CCM-180A/BWS(A)	IMMP-BAC(A)	IMMP-BAC(A)	MA-HKCW MA-HKCS
			+		Infrared Sensor Controller
	□ Ai ○.  □ Vi ⊃		HVIVIEW -		
	WDC-120G/WK(HTHM)	CCM-270B/WS(A)	IMMP-S(A)	GW-LON(A)	MA-IS
		CON 15	CCM-270B/WS(A)	GW-MOD(A)	Diagnosis software  MCAC-DIAG-B(A)
		CCM-15	+		
			INVIOLE S	GW-KNX + GD - GW-KNX + GW-KN	XYE Extension Kit IDU Online Kit
			IMMP-S(A)	GW-KNX,GW-KNX(A)*	MA-EK MCAC-PIDU

Note: 1. GW-KNX(A) is only used for High Temperature Hydro Module in MDV6R systems. 2. The diagnosis software is only compatible with MDV6/MDV6i outdoor unit.

119| Control Solutions | 120



# CONTROLLER LINEUP for MDV4i/ Mini VRF- Standard Series

Wireless Remote Controllers	Wired Remote Controllers	Central Controllers	Network Control System Data Converter	BMS Gateways	Accessories
RM05B(A)	WDC-86E/KD	CCM-180A/BWS(A)	M-interface Gateway	IMMP-BAC(A)	Hotel Key Card Interface Module  MA-HKCW  MA-HKCS
RM12F	WDC-120G/WK(A)	CCM-270B/WS(A)	IMM Software	GW-LON(A)	Infrared Sensor Controller  MA-IS
		MD-CCM09	CCM-15	Modbus Gateway  CCM-18A/N CCM-18A/N-U	Network Electricity Distribution Module (Special for Mini VRF)  MD-NIM10
		CCM30		GW-KNX  GW-KNX	XYE Indoor Unit Online Kit  MA-EK MCAC-PIDU

121| Control Solutions | 122



Model	RM05B(A)	RM12F	
On / Off	•	•	
Mode selection	•	•	
Temperature setting	● (0.5°C or 1°C steps)	● (0.5°C or 1°C steps)	
7-speed fan control	•	•	
Auto swing	•	•	
5-step swing louver	•	•	
Address setting	•	•	
Follow me	×	•	
Eco mode	•	•	
Silent mode	•	•	
Display shut-off	•	•	
Daily timer	•	•	
Keyboard lock	•	•	
Background light	•	•	
Indoor Unit parameter setting	•	•	
Dimensions (H×W×D) (mm)	150×65×20	170×48×20	
Batteries	1.5V (LR03/AAA) × 2		
Indoor unit series	2 <sup>nd</sup> generation AC/DC IDU		

Note:

e: equipped as standard; x: without this function

### 0.5°C/1°C Setting Temperature Adjustment

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.





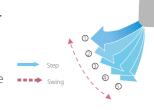
#### Digital Display On/Off

Indoor unit displays can be shut off at night, creating a better environment for rest.



### 5 Swing Angles for Louver

Thanks to the 5 swing angles for indoor unit louver, the air flow direction can be controlled more precisely.



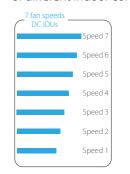
#### Follow Me

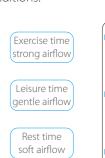
With the follow me function, the indoor unit responds to the temperature measured by the temperature sensor built-in to the wireless remote controller, rather than the temperature sensor in the indoor unit itself, enabling more precise control of the temperature in the user's immediate environment.



### Multiple Fan Speed Control

The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.











Model	WDC-86E/KD	WDC-120G/WK (A)
On / Off	•	•
Mode selection	•	•
Temperature setting	● (0.5°C or 1°C steps)	● (0.5°C or 1°C steps)
Dual temperature set points	•	•
7-speed fan control	•	•
Auto swing	•	•
s-step swing louver	•	•
Address setting	•	•
Follow me	•	•
Eco mode	•	•
Room temperature display	•	•
F/°C display	•	•
Keyboard lock	×	•
Background light	•	•
Daily timer	•	•
Veekly schedule timer	×	•
Auto restart	•	•
? permission levels	×	•
3i-directional communication	•	
Group control	×	•
Main or secondary controller setting	•	•
Display shut-off	•	•
illent mode	•	•
Remote signal receiver	•	•
Elean filter reminder	•	•
extension function	×	•
Daylight saving time	×	•
Clock display	×	•
Oot matrix display	×	•
irror check function	•	•
system parameter querying	•	•
After Hours/Off Timer function	•	•
anguage	English	English, French, Spanish, Polish
IRV control	×	
Puro-Air Kit control	×	•
system setting control	•	•
Dimensions (WxHxD) (mm)	86x86x18	120x120x20
Power supply	18V DC	18V DC
ndoor unit series	2 <sup>nd</sup> generation	on AC/DC IDU

Note:
•: equipped as standard; ×: without this function when the 2<sup>nd</sup> generation AC indoor units connect to group controller WDC-120G/WK(A), the indoor units need to customize D1 D2 terminals.



Model	WDC-120G/WK(HTHM)
On / Off	•
Mode selection	•
Water Outlet Temperature Control	•
Silent Mode	•
Screen lock	•
Room Temperature Control	•
Multiple Set Points	•
Address setting	•
Disinfection Mode	•
Holiday Home Mode	•
Holiday Away Mode	•
°F/°C display	•
Keyboard lock	•
Background light	•
Daily timer	•
Weekly schedule timer	•
Auto restart	•
Child Lock	•
Bi-directional communication	•
Service Call	•
DHW Temperature Control	•
Parameter Checking	•
Silent mode	•
Remote signal receiver	•
Maximum Power Limitation	•
Operating Parameters Checking	•
Heating Temperature Control	•
Clock display	
Dot matrix display	•
Error check function	•
Language	English, French, Spanish, Polish
Dimensions (WxHxD) (mm)	120x120x20
Power supply	18V DC
Indoor unit series	High Temperature Hydro Module

#### Note:

•: equipped as standard

#### **Group Control**

One controller can be used to unify the settings across up to 16 indoor units.



Note: when the  $2^{nd}$  generation AC indoor units connect to group controller WDC-120G/WK, the indoor units need to customize D1 D2 terminals. Group control is not available for 2nd generation AC Wall Mounted Series.

#### Main or Secondary Controller Setting

Two controllers can be used together with single indoor unit. Operating mode and settings would be set according to the most recent instruction received. The controller display screens are synchronized so that both displays update when a setting is adjusted.



Two or more indoor units

#### 2 Permission Levels

2 permission levels ensure users can easily access control functions and allow administrators convenient access to operating parameters.



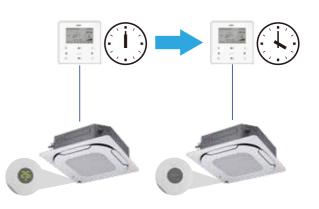
#### Buzzer Sound On/Off

The buzzer sound of the indoor unit can be turned off to create a quieter environment.



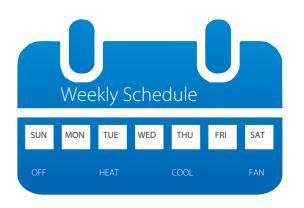
#### Off Timer Function

We can use the wired controller to set an automatic off timer or after hours function for the indoor unit.



#### Weekly Schedule Timer

The weekly schedule timer allows users to set multiple schedules each with its own operating mode, temperature settings and fan speeds.



#### **Bi-directional Communication**

The wired controller can query the system operating parameters thanks to the new bi-directional communication functionality. In addition, settings including static pressure, cold draft prevention and temperature compensation can be configured on the wired controller.



Note: This function is only available for MDV6/MDV6i/MDV6r/MDV4i(10-12HP) outdoor unit connected to 2nd generation DC indoor unit.

127| Control Solutions Control Solutions

# Central Controllers





### Features

Function				
	CCM-180A/BWS	CCM-270B/WS		
Max. number of indoor units	64	384		
Max. number of refrigerant systems	8	48		
Touch screen	(6.2-inch)	(10.1-inch)		
On/Off	•	•		
Mode selection	•	•		
Temperature setting	● (0.5°C steps)*			
7-speed fan control		•*		
Auto swing	•	•		
5-step swing louver*	•	•		
Room temperature display	•	•		
Holiday setting	•	•		
°C/°F display	•	•		
Schedule management	•	•		
Clock display	•	•		
2 permission levels	•	•		
Extension function	•	×		
ndoor unit type/model recognition		*		
Indoor unit with capacity larger than 16kW recognition		•*		
HRV Control	•	•		
/isual schematic	×	•		
Energy management	•	•		
Group management	•	•		
Error check function	•	•*		
System parameter querying	•	•		
USB output	•	•		
Report display	Error report	Error report and operation record		
Operation log	×	operation record		
LAN access	X	•		
Language supported	l English, Chinese, French, Spanish, Portuguese, Italian, German, Polish, Turkish, Hungarian, Russian, Korean			
Dimensions (W×H×D) (mm)	182×123×34	270×183×27		
Power supply	12V DC	24V AC		
Outdoor unit series or indoor unit series	All series			

Note:
•: equipped as standard; ×: without this function
\*means this function is only available for MDV6/MDV6i/MDV6R/MDV4i(10-12HP), Mini C outdoor unit.



Function	0			
	CCM30	CCM09		
Max. number of indoor units	64	64		
Max. number of refrigerant systems	8	8		
Touch screen	×	×		
On/Off	•	•		
Mode selection	•	•		
Temperature setting	(1°C steps)			
7-speed fan control	3-speed	fan control		
Auto swing	•	•		
5-step swing louver*	×	×		
Room temperature display	•	•		
Holiday setting	×	×		
°C/°F display	•	•		
Schedule management	•	Weekly timer		
Clock display	×	×		
2 permission levels	×	×		
Extension function	×	×		
Indoor unit type/model recognition	×	×		
Indoor unit with capacity larger than 16kW recognition	ldentify as two or four units (depend on units model)			
HRV Control	•	•		
Visual schematic	×	×		
Energy management	Mode/Remote controller limit			
Group management	×	×		
Error check function	•	•		
System parameter querying	•			
USB output	×	×		
Report display	×	×		
Operation log	×	×		
LAN access	×	×		
Language supported		glish		
Dimensions (W×H×D) (mm)	179×119×74	179×119×74		
Power supply	198-242V AC (50/60Hz)			
Outdoor unit series or indoor unit series	MDV4i/Mini VRF-Standard Series ODU MDV4i/Mini VRF- Standard Series ODU			

- equipped as standard; ×: without this function
  \*means this function is only available for MDV6/MDV6i/MDV6R/MDV4i outdoor unit.

#### **Touch Screen**

Colorful touch screen and vivid display make operation more convenient and simple.



#### **Electricity Charge Distribution**

The controllers use the patented MDV Calculation Method to estimate the electricity consumption of the outdoor units and then divide it among the indoor units so that the electricity charges can be equitably divided among building occupants.



#### **Energy Management**

User can set limits or locks on an indoor unit, such as minimum cooling temperature, maximum heating temperature, fan speed, operation mode, swing lock, remote controller lock and wired controller lock.



#### Unit Model Recognition

The controller recognizes the model of indoor and outdoor units and different models are represented by different icons.

icos	Model	Scom -	Model
-	Low static pressure and middle static pressure (L-DUCT/M-DUCT)	$\equiv$	Vertical concessed installation/vertical surface mounting (FS)
-	High static pressure (H-DUCT)	•	Four-way Cassette
g.m	Further (FAPU)	188	Compact Four-way Cassette (COMPACT)
_	Wall mounting (WALL)	100	Celling floor type (C&F)
0	Old (Ou (1st Gen. (SU)	=	Two-way Cassette
	Dise-way Caccetts	EZ.	CONSOLE
	Group control device icon	Ħ	New ODU (New generation ODU)

#### **Visual Schematic**

By importing floor plans and then dragging and dropping the indoor units to their actual positions on the floor plan, users can create a tailored system schematic which enables monitoring and control of the indoor units through a clear visual representation of the system layout.



#### **Group Management**

Units can be viewed according to group, system or location, making unit management clearer and more convenient.



#### **Outdoor Unit Configuration**

Outdoor unit configuration and settings can be monitored and controlled without having to go outdoors.



Note: This function is only available for MDV6/MDV6i outdoor unit.

131 | Control Solutions Control Solutions | 132



### Schedule Management

Daily, weekly or annual schedules can be used to set unit settings such as on/off, operating mode, set temperature, fan speed and swing.



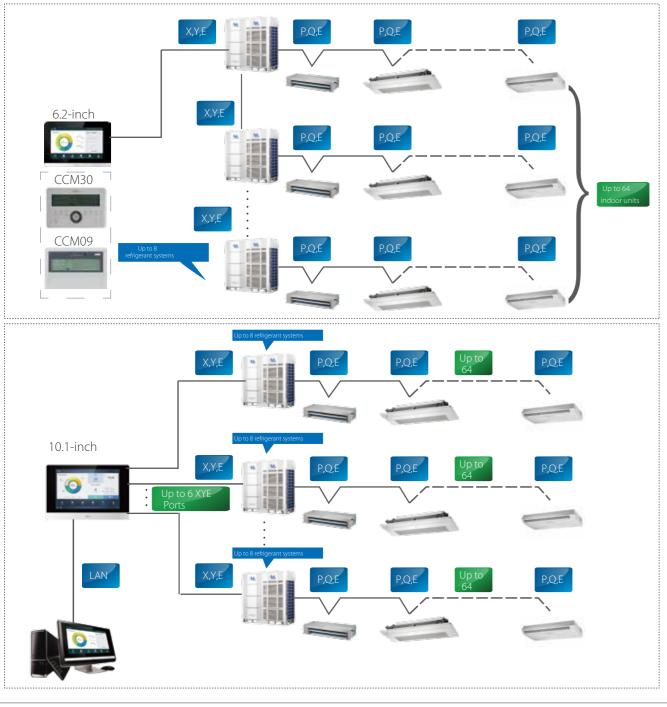
### LAN Access

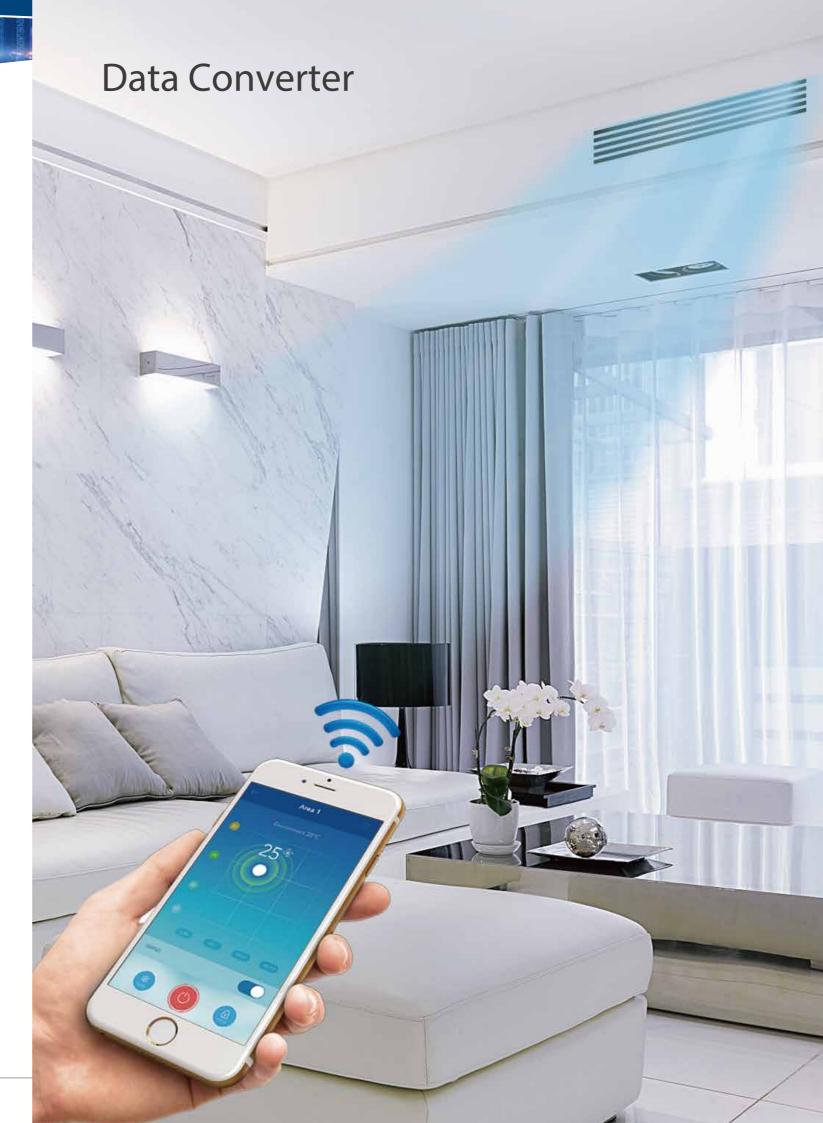
A desktop or laptop PC can be used for browser-based access via a LAN connection.



### Wiring Flexibility

The controllers can be connected to the master outdoor unit directly.







Hardware model

#### CCM-15 Application scenarios Mobile Phone Application Cloud Server Website Max. number of CCM-15 for one mobile APP 10 10 640 640 Max. number of indoor units Max. number of refrigerant systems 80 80 On/Off Mode selection (1°C steps) (1°C steps) Temperature setting 7-speed fan control × × Auto swing 5-step swing louver × Room temperature display °C/°F display Weekly timer Indoor unit type recognition Energy management Group management User group management Operation log Device log Login record Error log Configuration Account registration Virtual × Mode display English, French, Spanish Languages supported English, French, Spanish Dimensions (W×H×D) (mm) 187×115×28 Power supply 1 phase, 100-240V, 50/60Hz Outdoor unit series All series\*

#### **High Compatibility**

Compatible with a variety of operating systems.



#### User Friendly Interface

Clear, stylish interface designed by leading industrial designers.



#### Cloud Server Website

In addition to "M-control", users can control air conditioners and query the status of air conditioning equipment anytime and anywhere through the cloud server website.



#### Virtual Experience

After downloading "M-control", you can experience the operation of the interface through the virtual experience function without registration.



#### **Easy Configuration**

User groups can be joined simply by scanning a QR code.



#### **Convenient Operation**

Drag the position of the floating bubbles to change temperature and fan speed.



#### **Anytime Control**

Remote access to CCM-15 allows anytime, anywhere control.



#### Clear Icons

Clear, color-coded icons allow unit operating states to be viewed at a glance.



135| Control Solutions Control Solutions | 136

equipped as standard; x: without this function
 \*For the MDV6R series , the CCM-15 is under development.



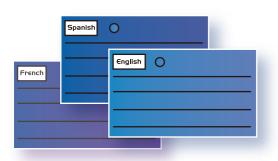
#### **Group Management**

The user can group the air conditioners equipment, and the air conditioner in the same group can be controlled together just with one tap.



#### Multiple Language Options

Supports multiple languages so that users of different languages can operate easily.



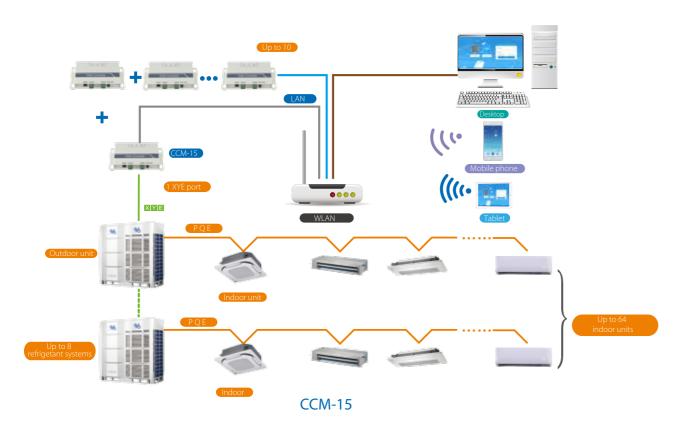
#### 2 Permission Levels

Administrators can set different permissions for different users to facilitate better management of devices.



### Flexibility

The Data Converter can be connected directly to a network of indoor/outdoor units.







Software model		IMMP-S(A)			
Hardware model	IMMP-BAC(A)	CCM-270B/WS(A)	M-interface		
Max. number per software system  Max. number of indoor units	10	10 3840	1024		
Max. number of indoor units  Max. number of refrigerant systems	2560 320	480	16		
	● (0.5°C steps)	(0.5°C steps)	(1°C steps)		
Temperature setting  7-speed fan control*	(0.5 C steps)	(0.5 C steps)	× (3-speed)		
Auto swing			(3-speed)		
5-step swing louver		•	×		
Outdoor unit Eco mode setting		•	×		
Holiday setting		•	×		
Schedule management		•	^		
		•			
Clock display					
2 permission levels					
Unit model recognition			×		
Electricity charge distribution					
Visual schematic					
Energy management					
Group management		•			
Error check function					
System parameter querying					
Report output					
Operation log		•			
LAN access	Enalish, Chinese, French, Spanish	English, Chinese, French, Spanish, Portuguese, Italian, German,			
Languages supported	Polish, Turkish, Hungaria	Polish, Turkish, Hungarian, Russian, Korean			
Dimensions (WxHxD) (mm)	251×319×61	270×183×27	251×319×66		
Power supply	1 phase, 100-240V, 50/60Hz	24V AC	1 phase, 100-240V, 50/60Hz  MDV4i/Mini VRF-Standard Series		
Outdoor unit series	MDV6/MDV6i/MDV	MDV6/MDV6i/MDV4i/Mini C			

#### Note:

#### User-friendly Interface

Simple, practical user interface makes for a user-friendly experience even for first-time users.



#### Outdoor Unit Configuration

Outdoor unit configuration and settings can be monitored and controlled without having to go outdoors.



Note: This function is only available for MDV6/MDV6i outdoor unit.

#### **Electricity Charge Distribution**

The IMMPRO uses the patented MDV Calculation Method to estimate the electricity consumption of the outdoor units and then divide it among the indoor units so that the electricity charges can be equitably divided among building occupants.



#### Public and Idle Devices

Marking a unit as a public device or idle device ensures the electricity charge distribution is more accurate and reasonable.



#### Floor Plan

By importing floor plans and then dragging and dropping the indoor units to their actual positions on the floor plan, users can create a tailored system schematic which enables monitoring and control of the indoor units through a clear visual representation of the system layout.



#### Schedule Management

Daily, weekly or annual schedules can be used to set unit settings such as on/off, operating mode, set temperature, fan speed and swing.



#### **Xpress Installation**

With the Xpress Installation wizard, IMMPRO can be installed quickly and easily without requiring support from a technical support engineer.



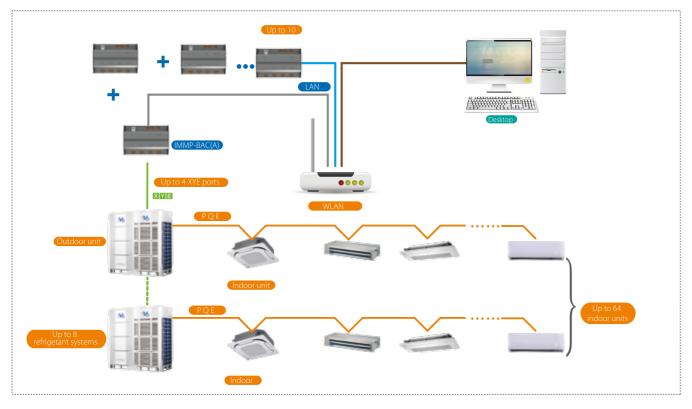
139| Control Solutions Control Solutions

<sup>•:</sup> equipped as standard; ×: without this function

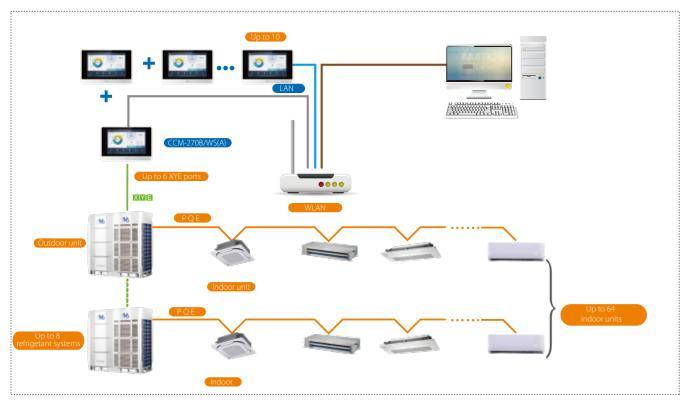
<sup>\*</sup>means this function is only available for MDV6/MDV6i/MDV6R/MDV4i(10-12HP) outdoor unit.



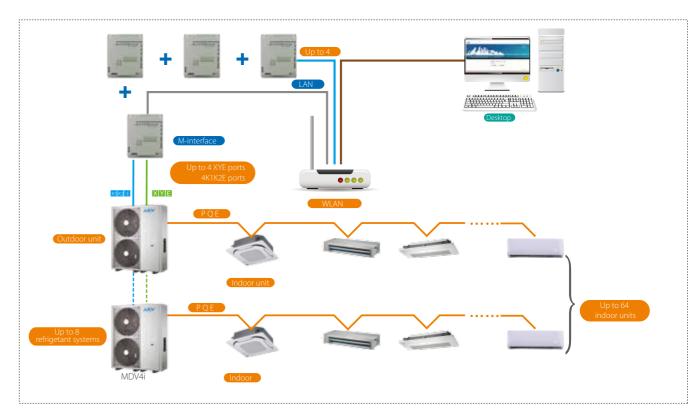
## Network Flexibility



IMMP-BAC(A)



CCM-270B/WS(A)



M-interface

141| Control Solutions | 142

## M-BMS MAX

Project Qty Level A

57,028

Current month

5,325

VRF.

3,204 Air-cooled modular chiller water system 450

An-cooled heat pump 1,541 Centrifugal/screw chiller water system 138

2019年12月24日 20:16:23

30

12.2 Wester

12.26

12.27

Friday

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) (

16-26°C Wwind 2level

13-25°C Cloudy 21°C rudy

16-22°C Light rain

0.00

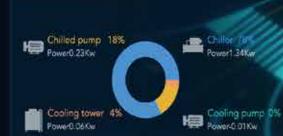
hain Indexe	111		
			Toda
_	Outdoor temp. 🖰	-	19.3
_	RH %	-	81.5
	SAMPLE CONTRACTOR		470

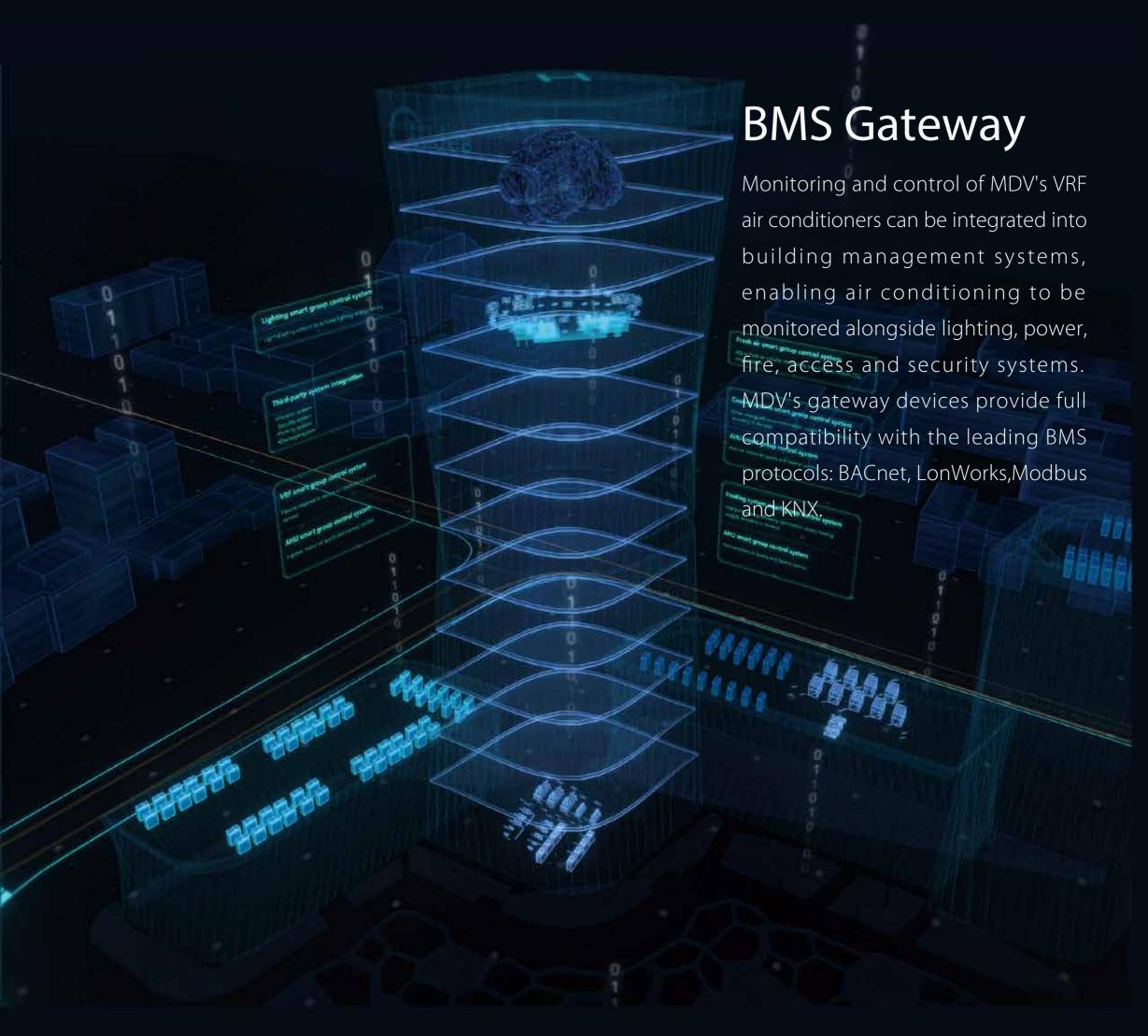
82.27 RH % 81.56
19.30 WB temp. C 17.29
18.28 Dew-point temp. C 16.15
13.30 Moisture content g/kg 11.60
2.32 Total power kW 1.26

Real-Time Monitoring Data









### Features

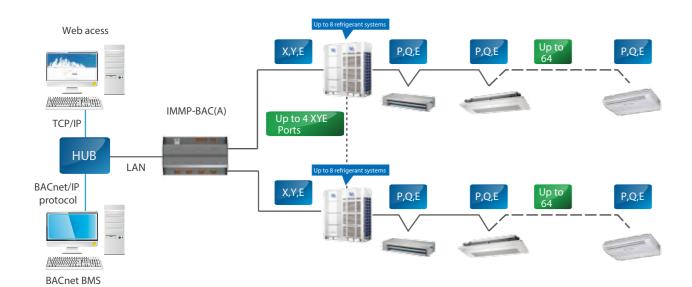
## BACnet Gateway

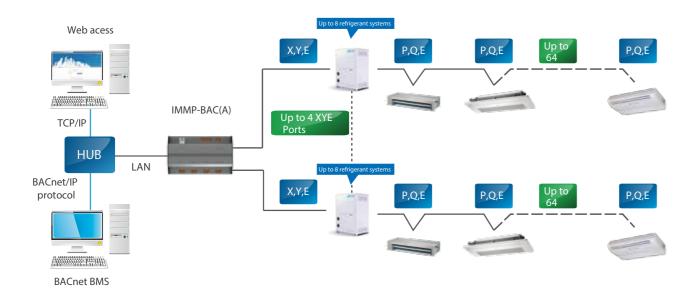
### Full Integration

The Bacnet Gateway allows MDV VRF systems to be monitored and controlled alongside other building management technology that use the BACnet protocol such as access control, fire detection and lighting systems.

### **Network Flexibility**

The gateway can be connected to master outdoor units' XYE or K1K2E ports directly.





Note: Need to use a protocol conversion kit if you want to get the ODU parameters also for MDV4i ODU

Model		IMMP-BAC(A)	
Max. number of device	es (include indoor and outdoor units)	256	
Max. number of refrige	erant systems	32	
	On / Off	•	
	Mode selection	•	
Control	Temperature setting	•	
	Fan speed	•	
	Energy management	•	
	Room temperature display	•	
Indoor unit	Error status	•	
monitoring	Error alarms	•	
	Operating mode	•	
	Outdoor ambient temperature	•	
	Fan speed	•	
Outdoor unit	Compressor operating frequency	•	
monitoring	Discharge temperature	•	
	System pressure	•	
	Error status	•	
	Error alarms	•	
LAN access		•	
BTL certification		•	
	Siemens	APOGEE	
	Trane	TRACER	
Compatibility	Honeywell	ALERTON	
	Schneider	Andover Continuum	
	Johnson Controls	METASYS	
Dimensions (HxWxD)( mm)		116×190×67	
Power supply		24V AC~50/60Hz	
Outdoor unit series		All series	

Note

•: equipped as standard

#### Features

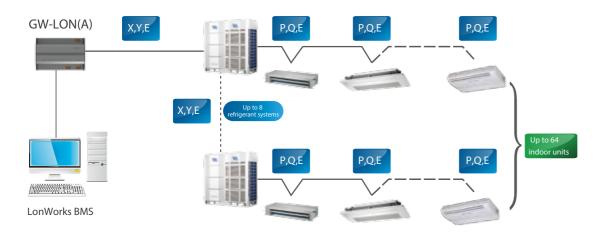
## LonWorks Gateway

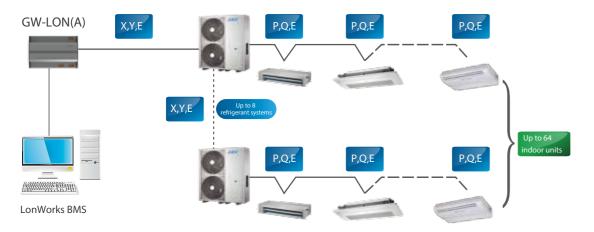
### Full Integration

The LonWorks Gateway allows MDV VRF systems to be monitored and controlled alongside other building management technology on the LonWorks platform such as security, fire safety and lighting systems.

### **Network Flexibility**

The gateway can be connected to master outdoor units' XYE port directly.





Model		GW-LON(A)
Max. number of indoor units		32
Max. number of refrigerant system	ms	8
	Mode selection	•
	Temperature setting	•
Control	Fan speed	
	Group shut down	
	On / Off	•
	Operating mode	•
	Set temperature	•
	Fan speed	•
Indoor unit monitoring	Online status	•
	Operating status	•
	Room temperature	•
	Error status	•
Outdoor unit monitoring	Error status	•
Dimensions (HxWxD)( mm)		116×170×67
Power supply		24V AC~50/60Hz
Outdoor unit series		All series

147 | Control Solutions Control Solutions | 148

Note:
•: equipped as standard



#### Features

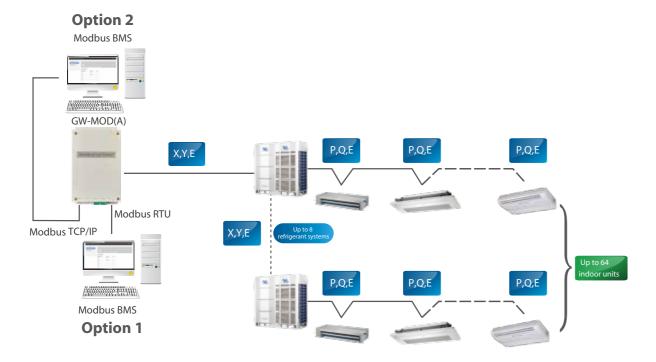
## Modbus Gateway

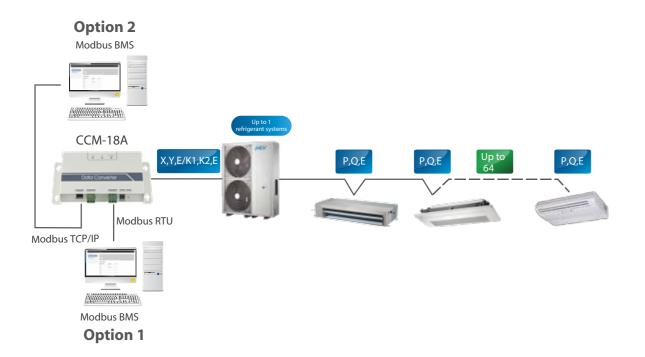
### **Full Integration**

The Modbus Gateway enables seamless connection of MDV VRF systems with building management systems built on the Modbus communication protocol.

### **Network Flexibility**

The gateway can be connected to master outdoor units' XYE or K1K2E ports directly.





Model		GW-MOD(A)	CCM-18A/N	CCM-18A/N-U
Max. number of indoor u	Max. number of indoor units		64	16
Max. number of refrigerar	nt systems	8	1	1
	On / Off	•	•	•
	Mode selection	•	•	•
Control	Temperature setting	•	•	•
	Fan speed	•	•	•
	Group on/off	•	•	•
	Online status	•	•	•
Indoor unit	Room temperature	•	•	•
monitoring	Error status	•	•	•
	Operating mode	•	•	•
	Operating mode	•	•	×
Outdoor unit	Number of operating IDUs	•	•	×
monitoring	Outdoor ambient temperature	•	•	×
	Error status	•	•	×
LAN access	LAN access		•	•
Dimensions (HxWxD)( mr	Dimensions (HxWxD)( mm)		187×115×28	
Power supply	Power supply		1 phase, 100-240V, 50/60Hz	
Outdoor unit series	Outdoor unit series		MDV4i/Mini \	/RF-Standard Series

Note:

•: equipped as standard; ×: without this function



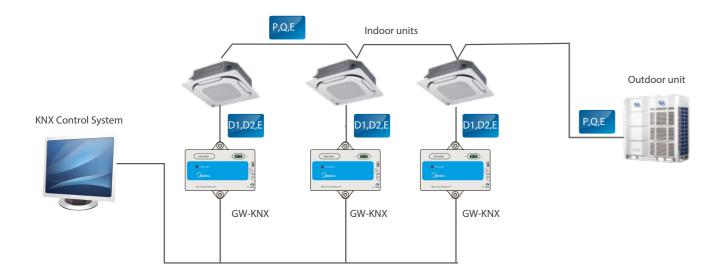
## KNX Gateway

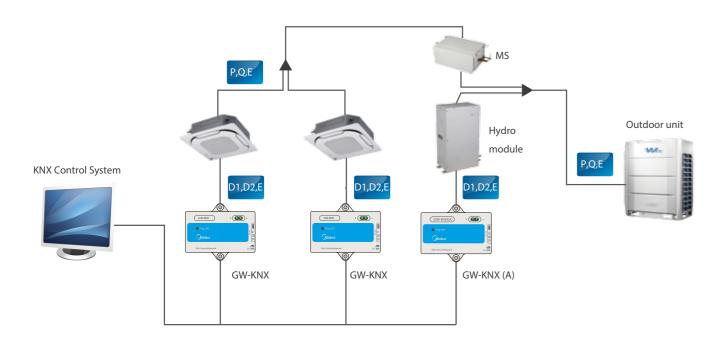
### **Full Integration**

The KNX Gateway enables full integration of MDV VRF systems with home and building management systems built on the KNX network communications protocol. KNX is the only global standard for housing and building control, and has been adopted by 70% of Europe's smart home market.

### **Network Flexibility**

The gateway can be connected to indoor units' XYE or D1D2E ports directly.





#### Features

Model		GW-KNX
Max. number of indoor uni	its	1
	On / Off	
	Mode selection	•
Control	Temperature setting	• (1°C steps)
	7-speed fan control	(3-speed)
	Swing	•
	On / Off	•
	Mode selection	•
Manthada	Temperature setting	
Monitoring	Fan speed	•
	Swing	
	Room temperature	
	Error alarm	
Dimensions (HxWxD)( mm	)	85×51×16
Power supply		29VDC (KNX bus supply)
Indoor unit series		2 <sup>nd</sup> generation AC/DC IDU

Model		GW-KNX(A)	
Max. number o	of HTHM	1	
	On / Off	•	
	Room temperature	•	
Control	Water outlet temperature	•	
	Mode Switching	•	
	Temperature control in water heating mode	•	
	On / Off	•	
	Current running mode	•	
	Water outlet temperature	•	
Monitoring	Room temperature	•	
	Control status	•	
	Current temperature in water heating mode	•	
	Error codes	•	
Dimensions (H	xWxD)( mm)	85×51×16	
Power supply		29VDC (KNX bus supply)	
Indoor unit series		High Temperature Hydro Module for MDV6R	

#### Note:

•: equipped as standard



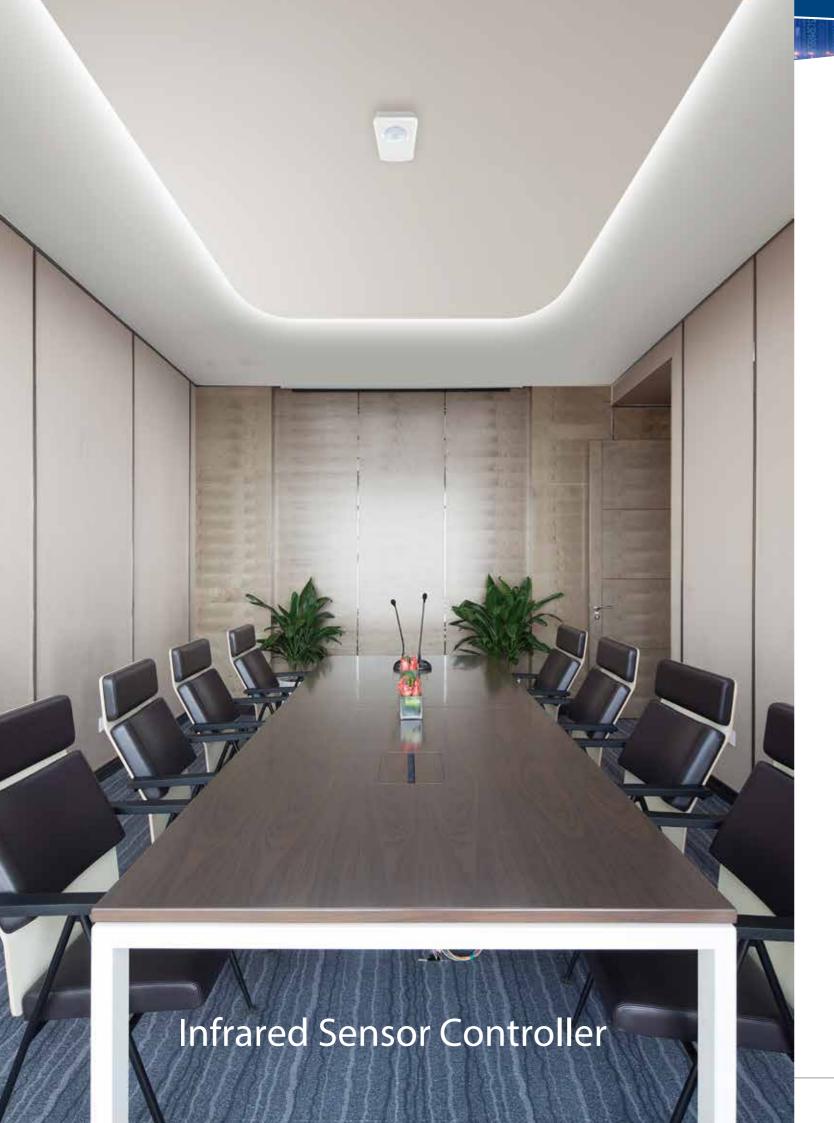
### Full Integration

The Hotel Key Card Interface Modules enable power supply to indoor units to be integrated with hotel key card power supply management systems, which are designed to save energy by only running appliances whilst guests are present in their room.

### Features

Model	MA-HKCW	MA-HKCS
Appearance	Total Control	
Network flexibility	CN20 & ON/OFF CN2  Key card  AC contactor	CN20 & ON/OFF CN2 Key card
Auto restart	•	•
Compatiblity	Remote and wired controller	Remote and wired controller
Dimensions (H×W×D) (mm)	15.5×86×72.8	87×150×70
Power supply	5V DC (Supplied by indoor unit)	220V AC
Indoor unit series	All s	eries

•: equipped as standard

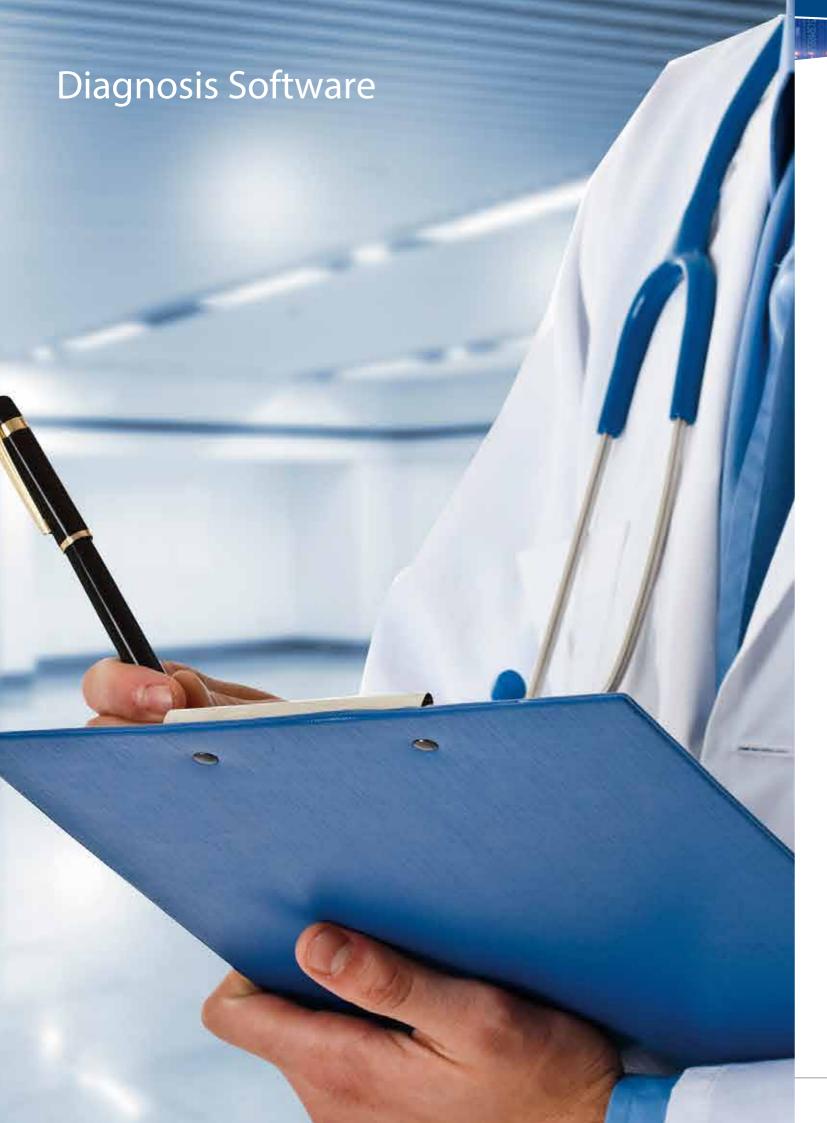


### **Full Integration**

Using infrared sensors to detect movement, the MD-NIM09 Infrared Sensor Controller automatically turns indoor units on or off upon sensing that the room is occupied or unoccupied. Suitable for hotels, offices, conference rooms and residences, the Infrared Sensor Controller ensures climate control whilst minimizing energy consumption.

### Features

Model	MA-IS
Appearance	
Network flexibility	CN20 & ON/OFF CN2 CN1 CN1 Infrared sensor
Dimensions (H×W×D)(mm)	Sensor 46×30×25.6, Control box 86×72.8×15.5
Power supply	5V DC (Supplied by indoor unit)
Indoor unit series	all series



### Monitor and Diagnose

MDV's VRF Diagnosis Software tool is used to monitor VRF systems and diagnose system errors.

System settings and operating parameters can be accessed easily and data logs can be reviewed for fault prevention purposes.

### Features

Model		MCAC-DIAG-B(A)	
Max. number of indoor units		64	
Max. number of refrigerant s	ystems	1	
	Mode selection	•	
Control	Temperature setting	•	
	Fan speed	•	
	Operating mode	•	
	Capacity	•	
	Compressor operating frequency	•	
Outdoor unit	Operating current	•	
monitoring	Error status	•	
	Temperatures	T3,T4,Tp (See note 1)	
	Valve statuses	SV4, SV5, SV6, ST1 (See note 2)	
	EXV position	•	
	Operating mode	•	
	Capacity	•	
Indoor unit	Fan speed	•	
monitoring	Address	•	
	Temperatures	T1, T2, T2B, TS (See note 3)	
	EXV position	•	
Error codes		•	
Toubleshooting		•	
Data logs		•	
Diagrams		System schematic, refregetrant flow diagram, parameter chart	
Languages supported		English, Chinese, French, Spanish, Portuguese, Italian, German, Polish, Turkish, Hungarian, Russian, Korean	
Outdoor unit series		MDV6/MDV6i ODU	
Noto			

- Heat exchanger temperature, outdoor ambient temperature, discharge temperature.
   Oil return valve, defrosting valve, EXV bypass valve, four-way valve.
- 3. Indoor ambient temperature, indoor heat exchanger mid-point temperature, indoor heat exchanger outlet temperature, set temperature.



### **Expert Diagnosis**

MDV'sVRF Diagnosis Software is specially designed to allow service engineers, to understand the operating status of the system at a glance.



### Use-friendly Interface

A stylish and simple interface with rich graphical representations makes diagnosing system issues quick and convenient.



### Parameter Querying

Access all the system parameters easily.



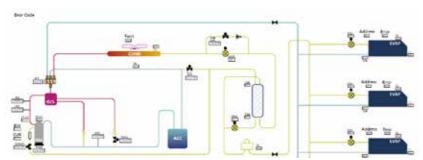
### Data Logs

Data logs including operating records and error reports are saved by the software which is useful for discovering system issues.

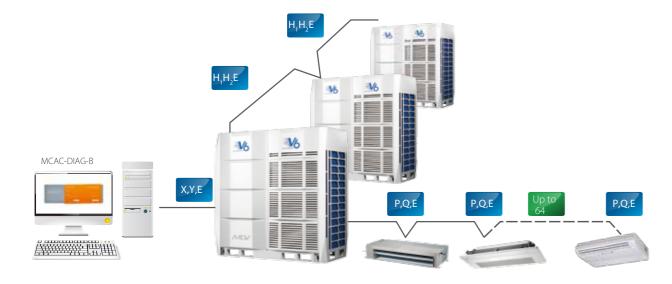


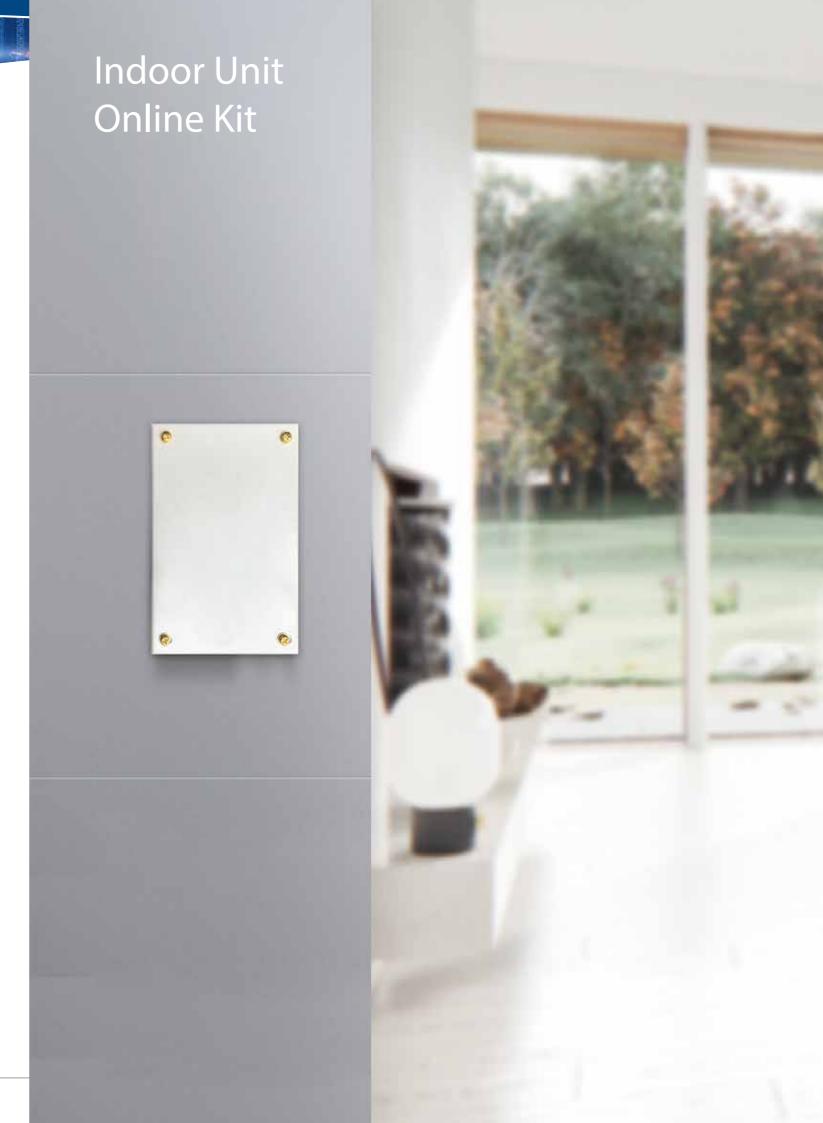
### Diagrams

A system schematic, refregetrant flow diagram and parameter chart can be generated to provide a graphical interpretation of the system status.



### Wiring Schematic



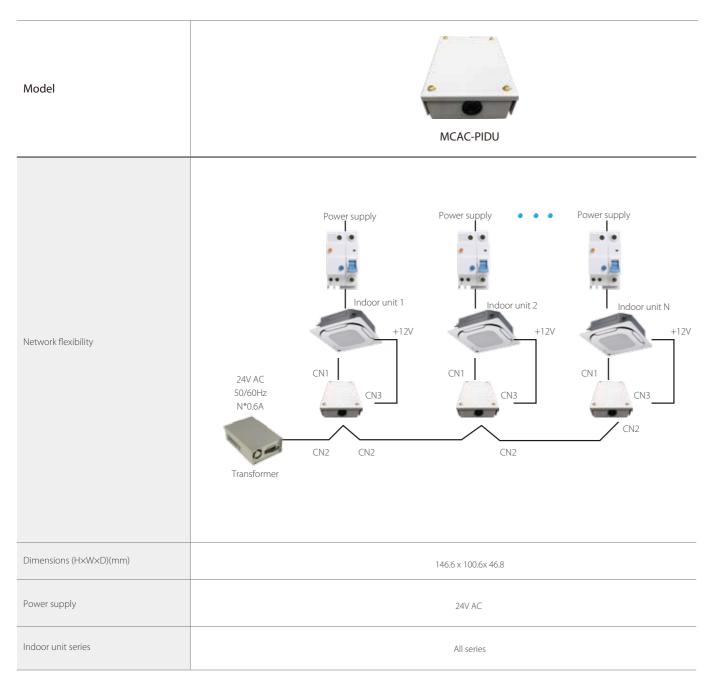




### IDU Online Kit

If the power supply for one indoor unit fails, the indoor unit will still remain online and the whole VRF system will not stop. The IDU online kit will keep the indoor unit online, thus keeping the other indoor units of the system working normally and prevent unnecessary shutdown.

#### **Features**

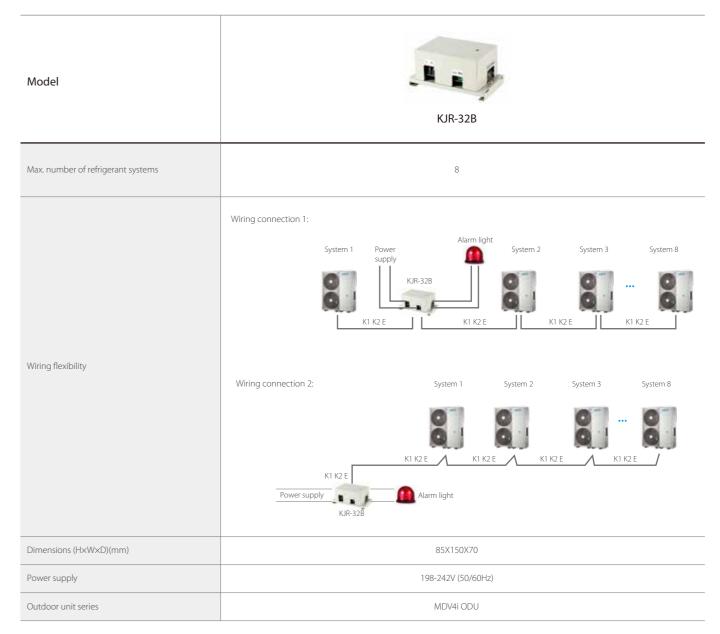


### Remote Alarm Module

#### Simple Design

KJR-32B is specially designed for engineering applications. It does not display the ODU's working parameters parameters. When the outdoor unit fails, this module can output an alarm signal to remind you that the outdoor unit has failed.

#### Features



161| Control Solutions Control Solutions



## Network Electricity Distribution Module

### Simple Design

MD-NIM10 is designed specifically for Mini VRF. It provides the OAE ports and Mini VRF can be connected to the IMM network control system to realize network electricity distribution.

#### **Features**

Model	MD-NIM10
Max. number of outdoor unit	1
Wiring flexibility	MD-NIM10  K1 K2 E  OAE  Ammeter  M-interface  Mini VRF  Indoor units
Dimensions (HxWxD)(mm)	85X150X70
Power supply	198-242V (50/60Hz)
Outdoor unit series	Mini VRF - Standard Series

### XYE Extension Kit

### Simple Design

The MA-EK is used to extend the XYE port of outdoor unit as the 2-way one which can connect to 2 Central Controllers or gateways.

#### Features

catales	
Model	MA-EK
Max. number of refrigerant systems	8
Wiring flexibility	IMMP-BAC(A)  Up to 8 Refrigerant Systems  P,Q,E P,Q,E G4 P,QE CCM-180A/BWS(A)
Dimensions (HxWxD)(mm)	128X225X28
Power supply	12V DC
Outdoor unit series	all series*

\*Note: Need to use a protocol conversion kit if you want to get the ODU parameters also for MDV4+W/ MDV4+I(Except 10/12HP) ODU



### VRF DX AHU Control Box

### High Efficiency

AHU Control Box facilitates raising the EER/COP of the complete AHU system.



### Wide Capacity Range

Four control boxes can be used in parallel, giving an overall capacity range of 0.8HP to 80HP.



AHUKZ-00B: 2.2~9kW AHUKZ-01B: 9~20kW AHUKZ-02B: 20~36kW AHUKZ-03B: 36~56kW



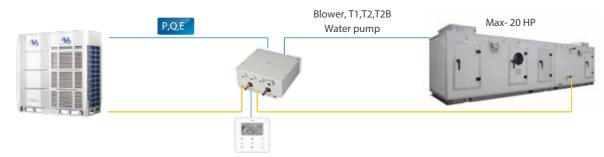
AHUKZ-00D: 2.2~9kW AHUKZ-01D: 9~20kW AHUKZ-02D: 20~36kW AHUKZ-03D: 36~56kW

### Compatible with VRF Systems

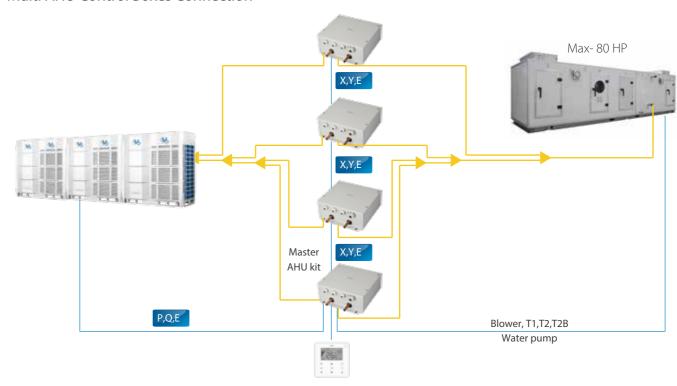
AHU Control Box are compatible with MDV VRF outdoor units and can be used together with all types of MDV VRF indoor units.



### Single AHU Control Box Connection



### Multi AHU Control Boxes Connection



#### Specifications

Model name	AHUKZ-00D	AHUKZ-01D	AHUKZ-02D	AHUKZ-03D	
Capacity A (kW)	2.2≤A<9	9≤A≤20	20 <a≤36< td=""><td>36<a≤56< td=""></a≤56<></td></a≤36<>	36 <a≤56< td=""></a≤56<>	
Power supply		220-240V~50/60Hz			
Liquid pipe (in/out) (mm)	Ф9.53/Ф9.53	Ф9.53/Ф9.53	Φ12.7/Φ12.7	Ф15.9/Ф15.9	
Dimension (WxHxD) (mm)		341x	133x395		
Weight (kg)	5.7	5.7	5.8	6.0	
Operation range (cooling on coil) (oC)		1	7-43		
Operation range (heating on coil) (oC)		1	0-30		
Applicable outdoor units		Heat pump / heat recovery / cooling only			
Model name	AHUKZ-00B	AHUKZ-01B	AHUKZ-02B	AHUKZ-03B	
Capacity A (kW)	2.2≤ A<9	9≤A≤20	20 <a≤36< td=""><td>36<a≤56< td=""></a≤56<></td></a≤36<>	36 <a≤56< td=""></a≤56<>	
Power supply		220-240\	/~50/60Hz		
Liquid pipe (in/out) (mm)	Ф9.53/Ф9.53	Ф9.53/Ф9.53	Ф12.7/Ф12.7	Ф15.9/Ф15.9	
Dimension (WxHxD) (mm)		350×150×375			
Weight (kg)	8.4	8.4	8.7	8.9	
Operation range (cooling on coil) (oC)		17-43			
Operation range (heating on coil) (oC)		5-30			
Applicable outdoor units		Heat pump / cooling only			



# Branch Joints

### For Heat Pump Outdoor Units

Туре	Appearance	Model	PackedDimensions mm	GrossWeight kg	Note
Branch joints for MDV6 VRF		FQZHW-02N1E	255×150×185	2.0	Connecting two outdoor units
		FQZHW-03N1E	345×160×285	4.3	Connecting three outdoor units
Branch joints for MDV4W VRF		FQZHW-02N1D	255×150×185	1.5	Connecting two outdoor units
	-»- -»-	FQZHW-03N1D	345×160×285	3.4	Connecting three outdoor units
	<u>-&gt;-                                   </u>	FQZHW-04N1D	475×165×300	4.8	Connecting four outdoor units

### For Heat Recovery Outdoor Units

Туре	Appearance	Model	Packed Dimensions mm	GrossWeight kg	Note
Branch joints between outdoor unit		FQZHW-02SB	272×167×232	2.2	Connecting two outdoor units
		FQZHW-03SB	472×157×312	5.0	Connecting three outdoor units
		FQZHW-04SB	745×160×335	7.5	Connecting four outdoor units
		FQZHN-01SB	257×127×107	0.8	
		FQZHN-02SB	287×137×107	0.9	
Branch joints between MS and outdoor unit		FQZHN-03SB	297×167×177	1.4	
		FQZHN-04SB	372×197×187	2.3	
		FQZHN-05SB	432×222×227	3.3	



## Branch Joints

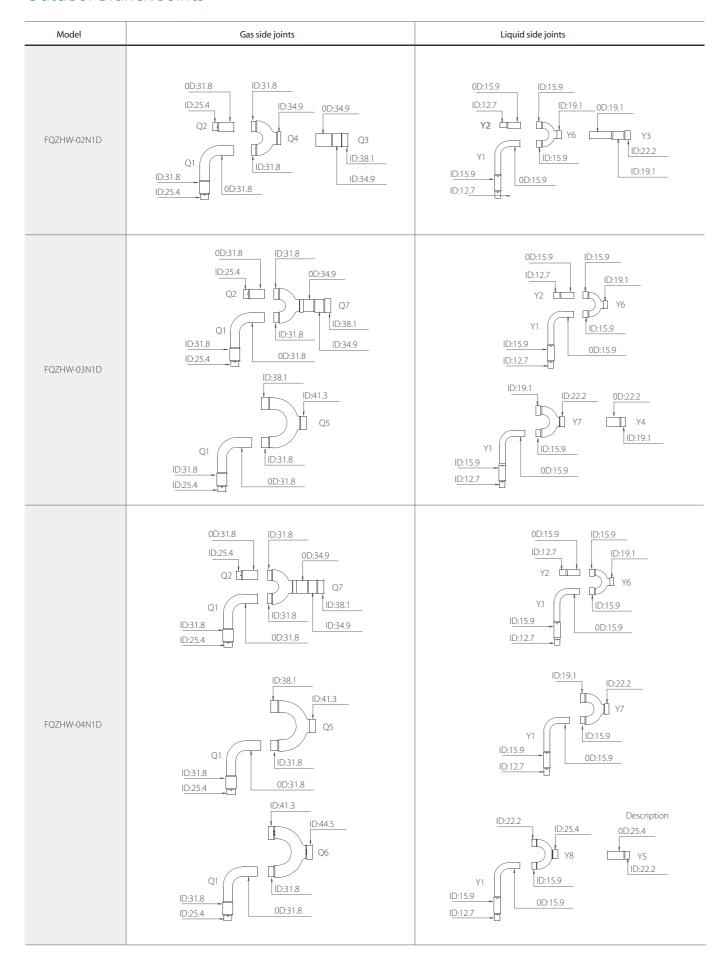
### For Indoor Units

Туре	Appearance	Model	PackedDimensions mm	GrossWeight kg	Note
Branch joints for indoor units		FQZHN - 01D	290×105×100	0.4	/
		FQZHN - 02D	290×105×100	0.6	/
		FQZHN - 03D	310×130×125	0.9	/
		FQZHN - 04D	350×180×170	1.5	/
		FQZHN - 05D	365×195×215	1.9	/
		FQZHN - 06D	390×230×255	3.1	/
		FQZHN - 07D	390×230×255	3.4	/

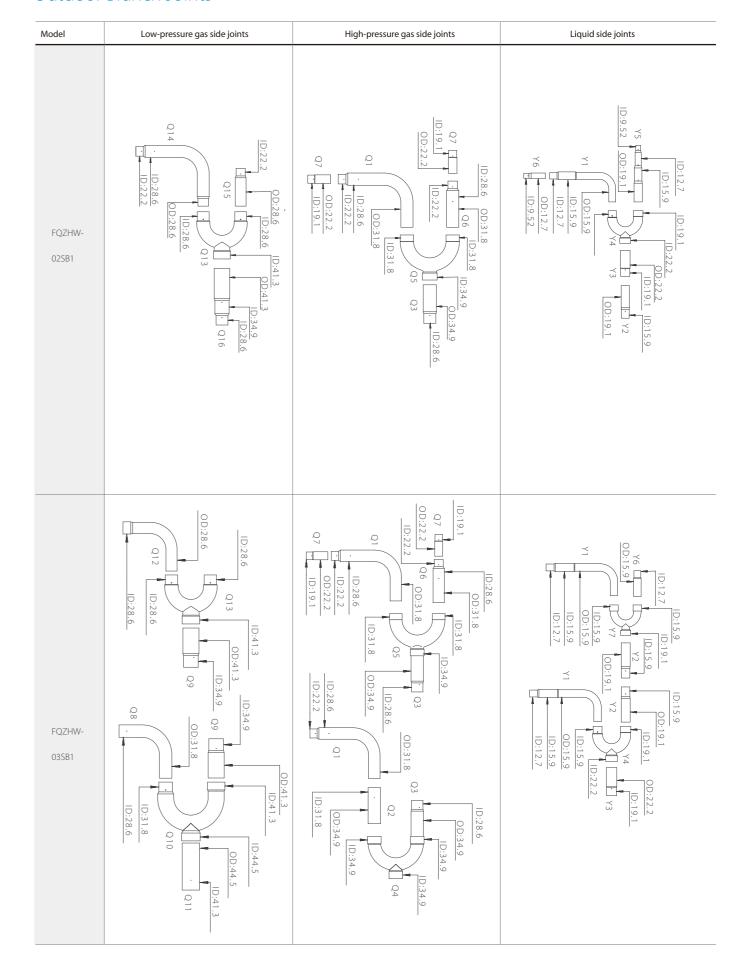
# Dimensions Outdoor Branch Joints

Outdoor Branch Joints						
Model	Gas side joints	Liquid side joints				
FQZHW-02N1E	O1 CD:318	1D:19.1				
FQZHW-03N1E	D:31.8 OD;38.1 D:38.1 OD;44.5 OD;44.5 OD;38.1 D:38.1 D:38.6 OD;31.8 D:28.6 OD;31.8 D:28.6	1D:19.1 1D:				

### **Outdoor Branch Joints**



### **Outdoor Branch Joints**



### Branch Joints between MS and Outdoor Unit

Model	Low-pressure gas side joints	High-pressure gas side joints	Liquid side joints	Converter pipe
FQZHN- 01SB1	ID:15.9 ID:15.9	ID:12.7 ID:12.7	ID:9.53 OD:12.7 ID:12.7 ID:12.7 OD:12.7 ID:9.53	
FQZHN- 02SB1	ID:15.9 ID:19.1 OD:22.2 ID:22.2 ID:22.2 ID:22.2 ID:19.1	ID:12.7 ID:15.9 OD:19.1 ID:19.1 ID:19.1 ID:19.1 ID:15.9	ID:9.53 OD:12.7 ID:12.7 ID:12.7 ID:12.7 OD:12.7 ID:12.7 OD:12.7 ID:9.53	
FQZHN- 03SB1	ID:15.9 ID:19.1 ID:22.2 OD:28.6 ID:28.6 ID:28.6	ID:15.9 ID:15.9 ID:19.1 ID:22.2 OD:28.6 ID:28.6 ID:28.6 OD:28.6 ID:28.6 ID:22.2	ID:12.7 ID:12.7 ID:15.9 OD:19.1 ID:19.1 ID:19.1 ID:15.9 ID:19.1 ID:15.9 ID:12.7	ID:9.53
FQZHN- 04SB1	ID:19.1 ID:22.2 ID:28.6 OD:34.9 ID:34.9	ID:15.9 ID:19.1 ID:22.2 OD:28.6 ID:28.6 ID:28.6	ID:9.52 ID:12.7 ID:15.9 OD:19.1 ID:19.1 ID:19.1 ID:19.1 OD:19.1	D:22.2  D:22.2  D:15.9   OD:19.1   OD:19.1   OD:19.1   OD:19.1   OD:19.1
FQZHN- 05SB1	D:34.9 D:41.3 D:41.3 D:41.3 D:44.5	OD:19.1 ID:22.2 ID:28.6 OD:34.9 ID:34.9 ID:34.9 OD:34.9 ID:34.9 OD:34.9	ID:15.9 ID:19.1 OD:22.2 ID:22.2 ID:22.2 ID:22.2 ID:19.1	

### Indoor Branch Joints

Model	Gas side joints	Liquid side joints
FQZHN-01D	(ID:15.9) (ID:15.9) (ID:19.1) (ID:19.1) (ID:19.1)	D:64 D:95 OD:95 OD:95 D:95
FQZHN-02D	(D:12.7 (D:19.1) (D:19.1) (D:19.1) (D:22.2 OD:22.2 OD:22.2	1D:9.5 1D:9.5 1D:9.5 1D:9.5 1D:12.7 1D:12.7 1D:12.7
FQZHN-03D	D:15.9 D:22.2 D:22.2 D:22.2 D:28.6 OD:28.6 OD:28.6 D:28.6	(ID:12.7) (ID:12.7) (ID:12.9) OD:15.9 OD:15.9
FQZHN-04D	DD:22.2   DD:28.6   DD:28.6   DD:34.9   DD:34.	(1D:12.7) (1D:12.7) (1D:15.9) (1D:15.9) (1D:19.1) (1D:19.1)
FQZHN-05D	D:34.9 D:34.9 D:34.9 D:34.9 D:34.9 D:34.9 D:34.9 D:34.3 D:34.3 D:34.3 D:34.3 D:34.3 D:34.3 D:34.3 D:34.3 D:34.3 D:34.5 D:	(D:15.9 (D:19.1) (D:19.1) (D:19.1) (D:22.2 OD:22.2 OD:22.2
FQZHN-06D	D:34.9 D:54 D:54 D:54 D:554 D:554 D:554 D:554 D:554 D:554 D:555 D:	(ID:19.1) (ID:19.1) (ID:22.2 (ID:22.2 (ID:22.2 (ID:22.2 (ID:22.2
FQZHN-07D	D34.9 D534 D0534 D054 D0554	D:15.9 D:19.1 D:22.2 D:22.2 D:22.2 D:22.2 D:22.2 D:22.8 D:28.6 D:28.6 D:28.6 D:28.6 D:28.6 D:28.6



## Branch Header

## NOTE

### For Indoor Units

