### C-V8XPRO202210



# **SMART IN ONE**

# HEATPUMP

#### Midea Building Technologies Division Midea Group

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

ISO

9001

ISO

14001

ISO

45001

















01/02





#### **Benefits of Midea VRF**



## For Building Owners

Energy Saving Management Reliable Operation Backup Solution









### For Construction Companies

Green Solutions Space Saving Design Intelligent Management

🎄 🗞 🕎







#### **Application Solutions**

#### **Office Complexes**

#### Enjoy comfort while working

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

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

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

### Hospitals/ Schools/ Airports

#### Meeting all expectations

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 perfect for modern hospitals.









## Design Service











MSSP Online VRF system design

#### BIM building information import





## Installation service

# Management service



Automatic refrigerant charge



Automatic commissioning report

Degradation of energy efficiency 25%

MCFD Energy consumption and airflow simulation optimization







# The probability of Filth blockage 80%



# Continuous energy saving service

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# After-sales service

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#### Intelligent maintenance tool



# Cloud-based big data analytics

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



## **Technical Support Platform (TSP)**

TSP is a platform for customers to provide professional technical support. Through TSP, you can inquire product information, documentation, spare parts and troubleshooting, initiate technical questions and quality complaint process, and also support self-service spare parts order.

#### Website address: https://tsp.midea.com/



#### My order

Inquire spare parts from exploded view and place spare parts order directly in TSP.

#### **Document inquiry and download**

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

#### **Technical inquiry & FAQ**

Initiate technical questions online, and our technicians answer them online in time. Find a quick solution in the FAQ.

#### **Troubleshooting**

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

#### Complain

Initiate the product quality complaint process online, and our after-sales engineers handle related complaints in time.

## Mobile Intelligence Service App (MISA)

MISA is the mobile terminal of TSP, with the same functions as TSP. The mobile service makes technical support more timely and convenient.

https://link.midea.com

Θ





## Midea Global Spare Parts Center

Mexico

Brazil

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.

(HQ Spare parts center) + 10 (Regional Spare parts center) + NThe "Z (Country Spare parts inventory)" Spare Parts Layout can ensure the timely supply of global after-sales spare parts.



O HQ Spare parts center **Q** Regional Spare parts center

China

Vietnam



#### **Outdoor Unit Lineup**

V8X (Combinable series)





Note: Four units combination are possible for the 8-26 HP models, for four units combination please contact Midea.

#### V8Xi (Individual series)





## The V8X Series

VRF uses a variety of algorithms and self-learning technology to monitor the operation of the equipment through operating parameters and timely maintenance, so that the equipment always runs in optimal condition throughout its life cycle.

22-28	30-38
VEX	VEX
-	

10732	10122		
VEIX	YEX	VEX	-
		-	

## **Outdoor Unit Functions**

		Vov	Vov:	
•:	equipped as standard;	O: customization option; X: without this function	VOX	VOXI
	HyperLink	Midea original communication bus chip greatly simplifies installation and saves installation cost	•	•
ogies	ShieldBox	IP55 Fully sealed electric control box realizes resisting all factors that cause intrusion and damage to the electric control box	•	•
Technold	SuperSense	19 sensors achieves the state of each part of the refrigerant pipeline can be known in the whole process	•	•
ovative <sup>-</sup>	Meta 2.0	Triple variable control to maximize the comfort and energy efficiency	•	•
Inn	Zen air 2.0	Provides comfort and healthy air supply	•	•
	Doctor M 2.0	Intelligent diagnostic technology makes maintenance easier and more efficient	•	•
	Full DC inverter technology	All electrical components of outdoor and indoor units are DC power supply, improving electrical efficiency and achieving energy saving		•
	Enhanced Vapor Injection (EVI) compressor	Increases refrigerant circulation and improves both cooling and heating capacity	•	•
iiciency	Micro-channel refrigerant subcooling	The refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing the sound	•	•
High Eff	Low standby power consumption	The standby power consumption is as low as 3.5W	•	•
	G-type heat exchanger	Large capacity outdoor unit with G-type heat exchanger, which can increase the heat exchanger area and saves floor space	•	•
	60-step energy manage- ment	The system can be set 40% to 100% capacity output in 1% increments	•	•
	Duty cycling (unit)	Equalizes the running time of the outdoor units in a multiple-unit system, significantly extending unit lifespan (available for combined unit)	•	×
	Duty cycling (compressor)	Equalizes the running time of the compressor in each unit, significantly extending compressor lifespan (available for unit with two compressors)	•	•

		Vov	Vovi	
•:	equipped as standard;	O: customization option; X: without this function	VSX	VSXI
	Backup operation (unit)	If one unit fails, the other units provide backup so that the system can continue operating (available for combined unit)	•	х
	Backup operation (compressor)	If one compressor fails, the other compressor provide backup so that the system can continue operating (available for unit with two compressors)	•	•
	Backup operation (fan motor)	If one fan motor fails, the other fan motor provide backup so that the system can continue operating (available for unit with two fan motors)	•	•
	Backup operation (sensor)	If one sensor fails, the virtual sensor provide backup so that the system can continue operating	•	•
	Precise oil control	Ensures all outdoor compressor oil is at a safe level, eliminating any compressor oil shortage problems.	•	•
	Heavy anti-corrosion protection	Can be customized with heavy anti-corrosion treatment for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life		0
	UL anti-corrosion certificate	It has been certified by UL that our VRF outdoor unit can withstand 27 years of simulated severe corrosion under a salt contaminated traffic environment	0	0
oility	Micro-channel refrigerant cooling PCB	10 times higher than ordinary refrigerant pipe cooling efficiency	•	•
ligh Relia	Chassis electrical heater	Prevents condensation on the chassis from freezing in winter	Ο	Ο
1	Anti-snow shield	ti-snow shield Prevents the snow accumulating on the outdoor unit, guaranteeing the unit operating stable in snowy days		0
	Auto snow-blowing function	Blows away accumulated snow on the outdoor unit, guaranteeing the unit operating stable in snowy days	•	•
	Auto dust-clean function	Blows away accumulated dust on the outdoor unit, guaranteeing the unit operating stable in dusty environment	•	•
	Alarm output	In case of system malfunction, remote output error information, remind maintenance personnel timely maintenance		•
	Fire alarm input	In case of fire, receive fire information in time and stop the system immediately to avoid serious problems	•	•



#### **Outdoor Unit Functions**

0:	equipped as standard;	O: customization option; X: without this function	V8X	V8XI
	Silent mode	15-step silent mode selections provide more freedom and convenience to match the customer needs	•	•
Enhanced Comfort	Humidity control	Combined with the optional humidity sensor, the room humidity can be controlled by 35% to 75%	0	0
	Intelligent defrosting technology	Calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting	•	•
	Auto cooling-heating changeover	Automatically selects cooling or heating mode to achieve the set temperature (available in changeover priority mode)	•	•
	Additional ambient temperature sensor	The additional external ambient temperature sensor can detect the true outdoor ambient temperature, correctly judge whether the system is running in cooling or heating in auto priority mode, ensuring indoor comfort	0	0
	0.1 °C control precision	Control precision of the sensor can reach 0.1°C, ensuring less room temperature fluctuation	•	•
	Multiple priority modes	10 priority modes meet the requirements of all scenarios	•	•
	Wide capacity range	Meets all customer requirements from small to large buildings	8-38HP (single) 40-114HP (combined)	8-38HP
ation Ran	Wide range of indoor units	Provides 12 types and more 100 models of VRF indoor units to meet different application scenarios	•	•
le Applica	Wide operation range	Operates stably under extreme conditions	-15-55℃ (C) -30-30℃ (H)	-15-55°C (C) -30-30°C (H)
Wide	Long piping capability	Benefits for the system design, installation flexibility, as well as the less installation cost	•	•
	Auto addressing (ODU-IDU)	Distributes addresses to indoor units automatically, simplifying the installation	•	•
	Auto addressing (ODU-ODU)	Distributes addresses to slave outdoor units automatically, further simplifying the installation (available for combined unit)	•	×

		Vov		
•:	equipped as standard;	O: customization option; X: without this function	V8X	VSXI
	Automatic refrigerant charging	Makes installation and service easier and more efficient	0	0
	Automatic refrigerant recycling	Refrigerant can recycle to ODUs or IDUs and normal ODUs, making the maintenance easier and more efficient	•	•
	Bluetooth module	It can be used for fault information storage, operation parameter enquiry, system parameter setting, quick after-sales PCB replacement, indoor and outdoor units programme upgrade, etc., simplifying installation and maintenance.	0	0
	Digit display	4 digit 7-segment display can be intuitive for parameter setting, parameter check and error check	•	•
	High external static pressure	Up to 120Pa ESP allows easy handling in a variety of installation environments	0-20Pa 🔵 20-120Pa 🔾	0-20Pa 🔵 20-120Pa 🔾
	Arbitrary topology of communication wire	Supports any communication topology, greatly simplifies installation and reduces installation cost	•	•
Service	2-core non-polarity communication wiring between the indoor and outdoor units	Simplifies installation and reduces wiring failures	•	•
n And	Long communication wiring	Communication wiring up to 2000m makes installation more flexible	•	•
stallatic	Wide combination ratio	Combination ration can be extended to 50%-200% under certain conditions which can meet different project requirements	50-130% 50-200% (for single unit system)	50-130% 50-200%
Easy In	Supports manual and automatic defrosting	Improves maintenance efficiency	•	•
	Supports manual and automatic oil return	Improves maintenance efficiency	•	•
	Easy software program upgrade <sup>*</sup>	The software program can be upgraded via on-site USB and burning, or remotely via the web	•	•
	Flexible controller connection	Central controller and BMS gateway can connect to ODU at the same time, central controller can connect to ODU or IDU	•	•
	Refrigerant amount diagnosis	The unit can diagnose excessive or insufficient amounts of refrigerant, prompt maintenance personnel to check the system in time to avoid serious malfunction	•	•
	Easy system commissioning and checking	System commissioning and checking can easily be done on-site or remotely via the web	•	•
	Intelligent maintenance tool	Intelligent bluetooth after-sales kit can simplify maintenance and improve maintenance efficiency	0	Ο

Note: \*1: The web function needs to be realized through the data cloud gateway, and the data cloud gateway needs to be purchased separately.





# NNOVATE V E **TECHNOLOGIE**



HyperLink New & Unique Shield BOX New & Unique SUperSonse New & Unique **ETA 2.0** ENair 2.0 **D**හCTOR m. 2.0













Midea original communication bus chip greatly simplifies installation and saves installation cost.



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

#### Arbitrary Topology Communication

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



#### Super Anti-interference Capability

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



#### Flexible Power Supply for Indoor Units \_

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



## ShieldBox New & Unique

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



Fully enclosed electronic components are isolated from the external environment to protect against corrosion, sand, humidity, snowstorm and other harsh conditions, and prevent small animals and insects from entering the chamber. To provide comprehensive protection for internal electronic devices, improve the overall environmental tolerance.

#### All Microchannel Refrigerant Cooling

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



#### Built-in Circulating Fan

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



#### PTC Heater

The unique PTC heater, with precise temperature control sensor, can still ensure that the temperature inside the chamber is within the normal operating temperature range of electronic devices even in the low-temperature environment of -30°C.



#### 5 High Precision Temperature Sensors

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



#### New & Unique **SuperSense**

The status of the refrigerant is known anywhere throughout the process, ensuring high **RELIABILITY** and COMFORT.



Up to 19 sensors are distributed throughout the refrigerant system, and the status of the refrigerant is known anywhere throughout the process, ensuring stable operation. At the same time, combined with the digital twin technology of the refrigerant system, a virtual sensor can be created in the event of a physical sensor failure, so that the system does not shut down in the event of a sensor failure, ensuring comfort.

#### Complete Sensors

The V8X Series VRF has the industry's most comprehensive range of 19 condition sensors with built-in data models for compressors, heat exchangers, throttling components and more. By analyzing sensor data in real time, it can sense the status of the refrigerant anywhere in the system.



#### Refrigerant Amount Diagnosis\*

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



\*This function is available at the end of July 2022.

#### Virtual Sensor Backup

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



#### Midea ETA (META) 2.0

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





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

#### **STEP 1:** Architectural space feature recognition

Variable Refrigerant Flow

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

#### **STEP 2:** System refrigerant temperature determination

Variable Refrigerant Temperature

(15)

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

#### **STEP 3:** Adaptive indoor airflow and refrigerant flow

Variable Indoor Airflow

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







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



Automatic matching of the corresponding refrigerant temperature to the load.



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

	V8X refrigerant regulation	
Compressor output Indoor temperature		
	Setting temperature	- Time (min)

#### **Zen Air 2.0**

Further upgraded ZEN AIR technology to maximize COMFORT.



0.5°C temperature adjustment, 7 fan speeds selection, sleep mode, silent mode, windless technology, high efficiency filter, a variety of sterilization device and other advanced technologies used in V8X Series VRF are dedicated to creating a quiet, comfortable and healthy indoor environment.

#### 360° Airflow

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



#### Individual Louver Control

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



#### Long Distance Air Delivery\*

The Four-way Cassette has an additional 50Pa static pressure for long airflow delivery and is capable of being used in spaces up to 4.5m in floor height.



\*This function is available as a customization option.

#### 7 Fan Speeds

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



#### Sleep Mode

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



#### Innovative Puro-air Kit

Protectors of health and safety



From Germany -OSRAM quality UV light source

<sup>st</sup> The world's first air conditioning sterilization product certification 99.9% Effective killing rate of white grape fungus  $\checkmark$ 99.9% Effective killing rate of H1N1

98% Effective killing rate of natural bacteria



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

#### **Doctor M 2.0**

Further upgraded DOCTOR M technology to maximize EASY SERVICE.



Based on a cloud-based platform of big data and artificial intelligence, the V8X Series VRF can monitor the operation status of each unit in real time, predict system faults in advance and provide data analysis for system maintenance. Intelligent Bluetooth module and special Bluetooth after-sales kit can further simplify maintenance and improve maintenance efficiency.

#### Intelligent Maintenance Tool

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



\*The Bluetooth module is available as a customization option.

#### Real-time Monitoring of Operating Parameters

The V8X Series VRF synchronizes and stores all the unit parameters to the cloud through the data cloud gateway, including the running status, locking status, dirty blocking rate, all spot inspection parameters and so on. Users can guery real-time and historical parameters on computers, tablets and mobile phones at any time.



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

#### Cloud-based Big Data Analytics

Midea V8X Series VRF transmits the system operation data to the cloud in real time through the data cloud gateway, and timely reminds the system of abnormal conditions through big data analysis, helping users to proactively avoid the risk of failure that has not yet occurred and minimize hidden problems.



# **High Efficiency**

#### **W** Full DC Inverter Technology

#### Full DC Inverter for Outdoor Components

The V8X Series VRF uses full DC inverter compressor and fan motor to achieve high precision stepless speed adjustment according to system operation, and ensures that the system is always in optimum condition, operating more efficiently, more consistently and with less noise.



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

#### Full DC Inverter for Indoor Components

Speed (RPM)

accurate temperature control, a more constant indoor temperature and higher energy efficiency.





#### Enhanced Vapor Injection (EVI) Compressor

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





#### **M** Advanced Subcooling Technology

The V8X Series VRF uses a micro-channel heat exchanger to further cool the refrigerant and the refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing the sound of refrigerant flow.



#### **W** Low Standby Power Consumption

Compared to the standby power consumption of traditional VRF of about 30W, the V8X Series VRF uses optimized control scheme to further reduce standby power consumption to as low as 3.5W.



29/30



#### **%** 60-step Energy Management

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



# **High Reliability**

#### **Quadruple Backup**

In two fans, two compressors and multiple units, one can run in backup for another. Additionally, the V8X series VRF generates a corresponding virtual sensor for each physical sensor by means of a digital algorithm, which serves as a backup for each other, ensuring no shutdown in the event of a fault, and further guaranteeing comfort.

## Unit Backup

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



Operation compressor Failed compressor

Intelligent load-bearing between units during normal operation

VBX	VBX	

Continue operating in case of failure of one unit

## **Compressor Backup**

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



Intelligent load-bearing between compressors during normal operation



Continue operating in case of failure of one compressor

## 2 Fan Backup

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



In normal operation, each fan runs on demand



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

#### Sensor Backup 4

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



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

#### **Z** Double Duty Cycling

#### 1 Unit Duty Cycling

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



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

#### **ShieldBox**

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







#### 2 Compressor Duty Cycling

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



<sup>nd</sup> cycle



Compressor start-up sequence

#### **SuperSense**

V8X Series VRF uses up to 19 sensors for each outdoor unit and 4 sensors for each indoor unit. The operating status of the system refrigerant is clearly visible, which can realize intelligent analysis of operation parameters, intelligent error diagnosis and forecasting, and visualized energy saving.



#### **Precise Oil Control**

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

2



Oil balance pipes between gas-liquid

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.

distribution to keep compressors running normally.



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

#### **W Heavy 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.

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



#### **W UL Anti-Corrosion Certificate\***

It has been certified by UL that our VRF outdoor unit can contaminated traffic environment.

#### **M** Auto Snow-blowing Function

accumulation of snow by itself.



VBX	

#### **M** Auto Dust-clean Function



# **Enhanced Comfort**

#### **Advanced Silent Technology**

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





15 silent options

Night silent mode

\*The entry and exit time of the night silent mode can be set in the wired controller.

#### **W** Humidity Control, More Comfortable\*

The optional humidity control function can accurately control the indoor humidity. The default dehumidification mode ensures that the indoor humidity is always in the most comfortable range of 35~75%.



#### **M** Auto Cooling-heating Changeover

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



#### **10** Priority Modes

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



#### Additional Ambient Temperature Sensor\*

The V8X Series VRF can be equipped with an additional external ambient temperature sensor to determine whether the system is operating in cooling or heating in auto priority mode. For some installations, the ambient temperature sensor fixed on the unit cannot detect the true ambient temperature, resulting in the system operating in an inappropriate mode and affecting indoor comfort. The external ambient temperature sensor can detect the true outdoor ambient temperature, correctly judge whether the system is running in cooling or heating, ensuring indoor comfort.

\*This function is available as a customization option.



# Wide Application Range

#### **Wide Capacity Range**

The V8X Series VRF are available in individual series and combinable series. The individual series has capacities from 8HP to 38HP and the combinable series from 8HP to 114HP, perfectly suited for small to large buildings.



#### **Wide Range of Indoor Units**

8-20HF

The V8X Series VRF offers 12 types of over 100 models of indoor units to meet different scenarios of applications such as offices, shopping malls, hotels, airports, schools, hospitals, etc.

22-28HP

30-38HP



#### **Wide Operation Range**

Thanks to the EVI compressor and refrigerant cooling technology, the V8X Series VRF can operate at temperatures as low as -30°C for heating and up to 55°C for cooling.



#### **Z Long Piping Capability**

The total piping length of the V8X system can be up to 1100m, the level difference between indoor and outdoor units can be up to 110m and the level difference between indoor units can be up to 40m, making the V8X Series VRF perfectly suitable for all buildings.

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

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

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

4 Level difference between IDUs: 40m

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



# **Easy Installation and** Service

#### **K** Free Wiring

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



#### **Space Saving**

The V8X Series VRF has large capacity and small size, with a capacity of up to 36 HP in a single unit. A single unit can provide cooling/heating for a space of 400m<sup>2</sup>. The space-saving advantages are particularly obvious for large projects.



#### **Auto Addressing**

Addresses for all indoor units and combined outdoor units can be assigned automatically by the V8X system, further simplifying installation.



#### **External Static Pressure up to 120Pa\***

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

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

#### **M** Automatic Refrigerant Charging\*

making installation and maintenance easier and more efficient.



#### **M** Automatic Refrigerant Recycling

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





Compared to manual refrigerant charging, automatic refrigerant charging greatly simplifies the process,



#### **Maintenance Mode**

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



#### **Wide Combination Ratio**\*

Compared to traditional VRF with combination ratio of 50-130%, the V8X Series VRF can be extended to 50-200%, and the wider combination ratio allows for more flexible system configuration. The larger combination ratio can be applied to long-term part-load operation scenarios, allowing for further reduction in installation costs.



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



#### **Z Easy Software Program Upgrade**

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

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

#### **%** Smart Commissioning/Maintenance Tool

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

#### Useful in the following situations:

- Installation
- Service maintenance



#### Main functions:

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





#### **Specifications**

#### V8X (Combinable series)

HP			8	10	12	14
Model			MV8X-252WV2GN1(PRO)	MV8X-280WV2GN1(PRO)	MV8X-335WV2GN1(PRO)	MV8X-400WV2GN1(PRO)
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Caraatita	kW	25.2	28	33.5	40
C a allia al	Capacity	kBtu/h	86.0	95.5	114.3	136.5
Cooling	Power input	kW	5.3	6.5	7.8	9.8
	EER		4.76	4.32	4.29	4.10
	Capacity	kW	27	31.5	37.5	45
Lleating?	Capacity	kBtu/h	92.1	107.5	128.0	153.5
Heating-	Power input	kW	5.0	6.2	7.8	9.5
	COP		5.39	5.11	4.80	4.72
Connected	Total capacity		50-130%	50-130%	50-130%	50%-130%
indoor unit	Maximum quan	tity	13	16	19	23
Comproscore	Туре		DC inverter	DC inverter	DC inverter	DC inverter
Compressors	Quantity		1	1	1	1
	Туре		DC	DC	DC	DC
Ean motors	Quantity		1	1	1	1
Fairmotors	Airflow rate	m³/h	12600	12600	13500	14400
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	7	7	7	7
Dina compositions?	Liquid pipe	mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7
Pipe connections.	Gas pipe	mm	Ø25.4	Ø25.4	Ø25.4	Ø25.4
Sound pressure lev	vel <sup>4</sup>	dB(A)	56	57	59	59
Sound power leve	4	dB(A)	83	84	85	86
Net dimensions (V	V×H×D)	mm	940×1760×825	940×1760×825	940×1760×825	940×1760×825
Packed dimension	s (W×H×D)	mm	1005×1945×890	1005×1945×890	1005×1945×890	1005×1945×890
Net weight		kg	195	195	197	197
Gross weight		kg	213	213	215	215
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP				20	22	
Model			MV8X-450WV2GN1(PRO)	MV8X-500WV2GN1(PRO)	MV8X-560WV2GN1(PRO)	MV8X-615WV2GN1(PRO)
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	45	50	56	61.5
C a alia al		kBtu/h	153.5	170.6	191.1	209.8
Cooling	Power input	kW	10.7	12.2	14.0	15.6
	EER		4.19	4.11	4.00	3.95
	Capacity	kW	50	56	63	69
l la atria ar?	Capacity	kBtu/h	170.6	191.1	215.0	235.4
Heating <sup>2</sup>	Power input	kW	10.7	12.8	14.4	16.6
	СОР		4.66	4.39	4.37	4.15
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%
indoor unit	Maximum quan	tity	26	29	33	36
<u></u>	Туре		DC inverter	DC inverter	DC inverter	DC inverter
Compressors	Quantity		1	1	1	2
	Туре		DC	DC	DC	DC
Fan matera	Quantity		1	1	1	2
Fan motors	Airflow rate	m³/h	15600	15600	16500	22000
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	8	8	8.4	9.3
Din a como a ti a ca 3	Liquid pipe	mm	Ø15.9	Ø15.9	Ø15.9	Ø15.9
Pipe connections	Gas pipe	mm	Ø28.6	Ø28.6	Ø28.6	Ø28.6
Sound pressure lev	/el <sup>4</sup>	dB(A)	59	60	61	62
Sound power level	4	dB(A)	86	88	89	89
Net dimensions (W	/×H×D)	mm	940×1760×825	940×1760×825	940×1760×825	1340×1760×825
Packed dimension	s (W×H×D)	mm	1005×1945×890	1005×1945×890	1005×1945×890	1405×1945×890
Net weight		kg	213	213	215	295
Gross weight		kg	230	230	232	315
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

#### Notes:

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference.
Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 5m with zero level difference.

Diameters given are those of the unit's stop valves.
Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

HP		24	26	28	30	
Model			MV8X-670WV2GN1(PRO)	MV8X-730WV2GN1(PRO)	MV8X-785WV2GN1(PRO)	MV8X-850WV2GN1(PRO)
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Conceitu	kW	67	73	78.5	85
Ca alia al	Capacity	kBtu/h	228.6	249.1	267.9	290.0
Cooling	Power input	kW	17.9	18.8	20.6	22.4
	EER		3.75	3.89	3.81	3.79
	Capacity	kW	75	81.5	87.5	95
Heating <sup>2</sup>	Capacity	kBtu/h	255.9	278.1	298.6	324.2
Heating	Power input	kW	18.5	19.8	21.4	24.4
	COP		4.06	4.12	4.08	3.89
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%
indoor unit	Maximum quan	tity	39	43	46	50
Compressors Type Quantity			DC inverter	DC inverter	DC inverter	DC inverter
			2	2	2	2
	Туре		DC	DC	DC	DC
Fan matara	Quantity		2	2	2	2
Fan motors	Airflow rate	m³/h	22000	21500	21500	29000
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	9.3	12	12	19
Dine connections?	Liquid pipe	mm	Ø15.9	Ø15.9	Ø15.9	Ø22.2
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø28.6	Ø28.6	Ø28.6	Ø31.8
Sound pressure le	vel <sup>4</sup>	dB(A)	62	62	62	63
Sound power leve	4	dB(A)	92	93	93	93
Net dimensions (V	(×H×D)	mm	1340×1760×825	1340×1760×825	1340×1760×825	1880×1760×825
Packed dimension	s (W×H×D)	mm	1405×1945×890	1405×1945×890	1405×1945×890	1945×1945×890
Net weight		kg	295	315	315	373
Gross weight		kg	315	335	335	403
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP		32	34	36	38	
Model			MV8X-900WV2GN1(PRO)	MV8X-950WV2GN1(PRO)	MV8X-1010WV2GN1(PRO)	MV8X-1060WV2GN1(PRO)
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Conceitu	kW	90	95.2	101	106
Ca alia al	Capacity	kBtu/h	307.1	324.8	344.6	361.7
Cooling	Power input	kW	24.7	26.4	28.7	30.6
	EER	2	3.65	3.60	3.52	3.46
	Capacity	kW	100	106	112	119
Heating <sup>2</sup>	Capacity	kBtu/h	341.2	361.7	382.2	406.0
Heating	Power input	kW	26.2	28.3	30.7	33.1
	COP		3.81	3.74	3.65	3.60
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%
indoor unit	Maximum quan	tity	53	56	59	62
Compressors Type Quantity			DC inverter	DC inverter	DC inverter	DC inverter
			2	2	2	2
Туре			DC	DC	DC	DC
Fan motors	Quantity		2	2	2	2
Fairmotors	Airflow rate	m³/h	28000	28000	29000	29000
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	21	21	21	21
Din	Liquid pipe	mm	Ø22.2	Ø22.2	Ø22.2	Ø22.2
Pipe connections <sup>o</sup>	Gas pipe	mm	Ø34.9	Ø34.9	Ø34.9	Ø34.9
Sound pressure le	vel <sup>4</sup>	dB(A)	64	64	66	66
Sound power leve	4	dB(A)	93	94	94	94
Net dimensions (V	V×H×D)	mm	1880×1760×825	1880×1760×825	1880×1760×825	1880×1760×825
Packed dimension	s (W×H×D)	mm	1945×1945×890	1945×1945×890	1945×1945×890	1945×1945×890
Net weight		kg	405	405	408	408
Gross weight		kg	435	435	438	438
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

Notes:

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference.
Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 5m with zero level difference.

Diameters given are those of the unit's stop valves.
Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

HP		40	42	44	46			
Model (Combinatio	on unit)		MV8X-1115WV2GN1(PRO)	MV8X-1170WV2GN1(PRO)	MV8X-1230WV2GN1(PRO)	MV8X-1285WV2GN1(PRO)		
Combination type			18HP+22HP	18HP+24HP	18HP+26HP	18HP+28HP		
Power supply		V/N/Hz	380-415/3/50(60) 380-415/3/50(60)		380-415/3/50(60)	380-415/3/50(60)		
	Capacity	kW	111.5	117.0	123.0	128.5		
Cooling	Capacity	kBtu/h	380.4	399.2	419.7	438.5		
Cooling	Power input	kW	27.8	30.1	31.0	32.8		
	EER		4.01	3.89	3.97	3.92		
Corpority		kW	125.0	131.0	137.5	143.5		
Lloating?	Capacity	kBtu/h	426.5	447.0	469.2	489.7		
Heating	Power input	kW	29.4	31.3	32.6	34.2		
	COP		4.25	4.19	4.22	4.20		
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%		
indoor unit	Maximum quan	tity		64				
Compressors Type Quantity			DC inverter	DC inverter	DC inverter	DC inverter		
			3	3	3	3		
Туре			DC	DC	DC	DC		
	Quantity		3	3	3	3		
Fair motors	Airflow rate	m³/h	37600	37600	37100	37100		
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)		
Defrigerent	Туре		R410A	R410A	R410A	R410A		
Reingerant	Factory charge	kg	8+9.3	8+9.3	8+12	8+12		
Dina compositions?	Liquid pipe	mm		Ø19.1				
Pipe connections <sup>o</sup>	Gas pipe	mm	Ø38.1					
Sound pressure lev	/el <sup>4</sup>	dB(A)		64	Ļ			
Sound power level	4	dB(A)	92	94	94	94		
Net dimensions (W×H×D)		mm	(940×1760×825)+ (1340×1760×825)	(940×1760×825)+ (1340×1760×825)	(940×1760×825)+ (1340×1760×825)	(940×1760×825)+ (1340×1760×825)		
Packed dimension	s (W×H×D)	mm	(1005×1945×890)+ (1405×1945×890)	(1005×1945×890)+ (1405×1945×890)	(1005×1945×890)+ (1405×1945×890)	(1005×1945×890)+ (1405×1945×890)		
Net weight		kg	213+295	213+295	213+315	213+315		
Gross weight		kg	230+315	230+315	230+335	230+335		
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55		
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30		

HP		48	50	52	54				
Model (Combinatio	on unit)		MV8X-1350WV2GN1(PRO)	MV8X-1400WV2GN1(PRO)	MV8X-1455WV2GN1(PRO)	MV8X-1510WV2GN1(PRO)			
Combination type			18HP+30HP	24HP+26HP	24HP+28HP	16HP+38HP			
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60) 380-415/3/50(60)		380-415/3/50(60)			
	Capacity	kW	135.0	140.0	145.5	151.0			
Cooling	Capacity	kBtu/h	460.6	477.7	496.5	515.2			
Cooling	Power input	kW	34.6	36.7	38.5	41.3			
	EER		3.90	3.81	3.78	3.66			
Can	Capacity	kW	151.0	156.5	162.5	169.0			
Heating <sup>2</sup>	Capacity	kBtu/h	515.3	534.0	554.5	576.6			
	Power input	kW	37.2	38.3	39.9	43.8			
	COP		4.06	4.09	4.07	3.86			
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%			
indoor unit	Maximum quan	tity		64					
Compressors Type Quantity			DC inverter	DC inverter	DC inverter	DC inverter			
			3	4	4	3			
Туре			DC	DC	DC	DC			
Can motors Q	Quantity		3	4	4	3			
Fairmotors	Airflow rate	m³/h	44600	43500	43500	44600			
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)			
Pofrigorant	Туре		R410A	R410A	R410A	R410A			
Reingerant	Factory charge	kg	8+19	9.3+12	9.3+12	8+21			
Dina connections <sup>3</sup>	Liquid pipe	mm							
Pipe connections*	Gas pipe	mm							
Sound pressure lev	/el <sup>4</sup>	dB(A)		65		67			
Sound power level	4	dB(A)	94	96	96	95			
Net dimensions (W	/×H×D)	mm	(940×1760×825)+ (1880×1760×825)	(1340×1760×825)×2	(1340×1760×825)×2	(940×1760×825)+ (1880×1760×825)			
Packed dimensions	s (W×H×D)	mm	(1005×1945×890)+ (1945×1945×890)	(1405×1945×890)×2	(1405×1945×890)×2	(1005×1945×890)+ (1945×1945×890)			
Net weight		kg	213+373	295+315	295+315	213+408			
Gross weight		kg	230+403	315+335	315+335	230+438			
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55			
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30			

#### Notes:

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference.
Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 5m with zero level difference.
Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V8X 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.

HP		56	58	60	62			
Model (Combinatio	on unit)		MV8X-1560WV2GN1(PRO)	MV8X-1620WV2GN1(PRO)	MV8X-1675WV2GN1(PRO)	MV8X-1730WV2GN1(PRO)		
Combination type	1		18HP+38HP	20HP+38HP	22HP+38HP	24HP+38HP		
Power supply		V/N/Hz	380-415/3/50(60) 380-415/3/50(60) 380-415/3/50(60		380-415/3/50(60)	380-415/3/50(60)		
	Conocity	kW	156.0	162.0	167.5	173.0		
Capling	Capacity	kBtu/h	532.3	552.8	571.5	590.3		
Cooling	Power input	kW	42.8	44.6	46.2	48.5		
	EER		3.64	3.63	3.63	3.57		
Capacity		kW	175.0	182.0	188.0	194.0		
Lleating?	Capacity	kBtu/h	597.1	621.0	641.4	661.9		
Heating-	Power input	kW	45.9	47.5	49.7	51.6		
	COP		3.81	3.83	3.78	3.76		
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%		
indoor unit	Maximum quantity			64				
Compressors Type Quantity			DC inverter	DC inverter	DC inverter	DC inverter		
			3	3	4	4		
	Туре		DC	DC	DC	DC		
For motors	Quantity		3	3	4	4		
Fan motors	Airflow rate	m³/h	44600	45500	51000	51000		
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)		
Defrigerent	Туре		R410A	R410A	R410A	R410A		
Reingerant	Factory charge	e kg	8+21	8.4+21	9.3+21	9.3+21		
Dina connections	Liquid pipe	mm	Ø19.1					
Pipe connections <sup>3</sup>	Gas pipe	mm		Ø41.3	i			
Sound pressure lev	/el <sup>4</sup>	dB(A)	67	67	68	68		
Sound power level	4	dB(A)	95	95	95	96		
Net dimensions (W	/×H×D)	mm	(940×1760×825)+ (1880×1760×825)	(940×1760×825)+ (1880×1760×825)	(1340×1760×825)+ (1880×1760×825)	(1340×1760×825)+ (1880×1760×825)		
Packed dimension	s (W×H×D)	mm	(1005×1945×890)+ (1945×1945×890)	(1005×1945×890)+ (1945×1945×890)	(1405×1945×890)+ (1945×1945×890)	(1405×1945×890)+ (1945×1945×890)		
Net weight		kg	213+408	215+408	295+408	295+408		
Gross weight		kg	230+438	232+438	315+438	315+438		
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55		
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30		

HP		64	66	68	70	
Model (Combinatio	on unit)		MV8X-1790WV2GN1(PRO)	MV8X-1845WV2GN1(PRO)	MV8X-1910WV2GN1(PRO)	MV8X-1960WV2GN1(PRO)
Combination type	<u>)</u>		26HP+38HP	28HP+38HP	30HP+38HP	32HP+38HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Constality	kW	179.0	184.5	191.0	196.0
Cooling <sup>1</sup>		kBtu/h	610.8	629.6	651.7	668.8
Cooling	Power input	kW	49.4	51.2	53.0	55.3
	EER		3.62	3.60	3.60	3.54
Canaaitu		kW	200.5	206.5	214.0	219.0
llestin =2	Capacity	kBtu/h	684.1	704.6	730.2	747.2
Heating <sup>2</sup>	Power input	kW	52.9	54.5	57.5	59.3
	COP	-	3.79	3.79	3.72	3.69
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%
indoor unit	ndoor unit Maximum quantity			64	-	1
Compressors Type Quantity			DC inverter	DC inverter	DC inverter	DC inverter
			4	4	4	4
	Туре		DC	DC	DC	DC
For motors	Quantity		4	4	4	4
Fan motors	Airflow rate	m³/h	50500	50500	58000	57000
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	12+21	12+21	19+21	21×2
Din a comparation of	Liquid pipe	mm	Ø19.1	•	Ø22.2	
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø41.3	3	Ø44.5	5
Sound pressure lev	vel <sup>4</sup>	dB(A)	68	68	68	68
Sound power level	4	dB(A)	97	97	97	97
Net dimensions (V	√×H×D)	mm	(1340×1760×825)+ (1880×1760×825)	(1340×1760×825)+ (1880×1760×825)	(1880×1760×825)×2	(1880×1760×825)×2
Packed dimension	s (W×H×D)	mm	(1405×1945×890)+ (1945×1945×890)	(1405×1945×890)+ (1945×1945×890)	(1945×1945×890)×2	(1945×1945×890)×2
Net weight		kg	315+408	315+408	373+40	8
Gross weight		kg	335+438	335+438	403+43	8
Ambient temp	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

#### Notes:

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference.
Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 5m with zero level difference.
Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V8X 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.

HP		72	74	76			
Model (Combinatio	on unit)		MV8X-2010WV2GN1(PRO)	MV8X-2070WV2GN1(PRO)	MV8X-2120WV2GN1(PRO)	MV8X-2175WV2GN1(PRO)	
Combination type	<u>)</u>		34HP+38HP	36HP+38HP	38HP+38HP	18HP+22HP+38HP	
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	
Capacity		kW	201.2	207.0	212.0	217.5	
	Capacity	kBtu/h	686.5	706.3	723.4	742.1	
Cooling	Power input	kW	57.0	59.3	61.2	58.4	
	EER	-	3.53	3.49	3.46	3.72	
Capacity		kW	225.0	231.0	238.0	244.0	
Capacit	Capacity	kBtu/h	767.7	788.2	812.0	832.5	
Heating	Power input	kW	61.4	63.8	66.2	62.5	
	COP		3.66	3.62	3.60	3.90	
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%	
indoor unit	Maximum quantity			64	-	•	
Compressors Type Quantity			DC inverter	DC inverter	DC inverter	DC inverter	
			4	4	4	5	
	Туре		DC	DC	DC	DC	
Fan mataka	Quantity		4	4	4	5	
Fan motors	Airflow rate	m³/h	57000	58000	58000	66600	
Static press		Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	
Defrigerent	Туре		R410A	R410A	R410A	R410A	
Reingerant	Factory charge	kg	21×2	21×2	21×2	8+9.3+21	
Die e e e e e e e e e e e e e e e e e e	Liquid pipe	mm	Ø22.2				
Pipe connections <sup>3</sup>	Gas pipe	mm		Ø44.5	5		
Sound pressure lev	vel <sup>4</sup>	dB(A)	68	69	69	68	
Sound power level	4	dB(A)	97	97	97	96	
Net dimensions (W×H×D) mm		mm	(1880×1760×825)×2	(1880×1760×825)×2	(1880×1760×825)×2	(940×1760×825)+(1340×1760 ×825)+(1880×1760×825)	
Packed dimension	s (W×H×D)	mm	(1945×1945×890)×2	(1945×1945×890)×2	(1945×1945×890)×2	(1005×1945×890)+(1405×1945 ×890)+(1945×1945×890)	
Net weight		kg	405+408		408×2	213+295+408	
Gross weight		kg	435+438		438×2	230+315+438	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30	

HP		80	82	84	86	
Model (Combination unit)		MV8X-2230WV2GN1(PRO)	MV8X-2290WV2GN1(PRO)	MV8X-2345WV2GN1(PRO)	MV8X-2410WV2GN1(PRO)	
Combination type			18HP+24HP+38HP	18HP+26HP+38HP	18HP+28HP+38HP	20HP+28HP+38HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	223.0	229.0	234.5	241.0
C a a liza arl	Capacity	kBtu/h	760.9	781.4	800.2	822.3
Cooling	Power input	kW	60.7	61.6	63.4	65.2
	EER		3.67	3.72	3.70	3.70
	Capacity	kW	250.0	256.5	262.5	270.0
l la atia a2	Capacity	kBtu/h	853.0	875.2	895.7	921.3
Heating <sup>2</sup>	Power input	kW	64.4	65.7	67.3	70.3
	COP		3.88	3.90	3.90	3.84
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%
indoor unit	Maximum quant	tity		64		
Туре	Туре		DC inverter	DC inverter	DC inverter	DC inverter
Quantity			5	5	5	5
	Туре		DC	DC	DC	DC
Fan matara	Quantity		5	5	5	5
Fan motors	Airflow rate	m³/h	66600	66100	66100	73600
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	8+9.3+21	8+12+21	8+12+21	8+19+21
Dina connections <sup>3</sup>	Liquid pipe	mm	Ø22.2		Ø25.4	
Pipe connections	Gas pipe	mm	Ø44.5		Ø50.8	3
Sound pressure lev	/el <sup>4</sup>	dB(A)		68		
Sound power level	4	dB(A)	97	97	97	97
Net dimensions (W×H×D)		mm	(940×1760×825)+ (1340×1760×825)+ (1880×1760×825)	(940×1760×825)+ (1340×1760×825)+ (1880×1760×825)	(940×1760×825)+ (1340×1760×825)+ (1880×1760×825)	(940×1760×825)+ (1880×1760×825)×2
Packed dimensions	s (W×H×D)	mm	(1005×1945×890)+ (1405×1945×890)+ (1945×1945×890)	(1005×1945×890)+ (1405×1945×890)+ (1945×1945×890)	(1005×1945×890)+ (1405×1945×890)+ (1945×1945×890)	(1005×1945×890)+ (1945×1945×890)×2
Net weight		kg	213+295+408	213+315+408	213+315+408	213+373+408
Gross weight		kg	230+315+438	230+335+438	230+335+438	230+403+438
Ambient temp	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

Notes:

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 V8X 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.

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$ \begin{array}{c c} \mbox{Cooling'} & \begin{tabular}{ c c c c c } \hline Cooling' & \begin{tabular}{ c c c c } \hline KW & 246.0 & 251.5 & 257.0 & 262.0 \\ \hline kBtu/h & 839.4 & 858.2 & 876.9 & 894.0 \\ \hline Power input & kW & 67.3 & 69.1 & 71.9 & 73.4 \\ \hline EER & & 3.66 & 3.64 & 3.57 & 3.57 & 3.57 \\ \hline \\ $		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		
$\begin{tabular}{ c c c c c c c } \hline Power input & kW & 67.3 & 69.1 & 71.9 & 73.4 \\ \hline EER & 3.66 & 3.64 & 3.57 & 3.57 \\ \hline EER & 3.66 & 3.64 & 3.57 & 3.57 \\ \hline Acpacity & kW & 275.5 & 281.5 & 288.0 & 294.0 \\ \hline Acpacity & kW & 275.5 & 281.5 & 288.0 & 294.0 \\ \hline Acpacity & kW & 71.4 & 73.0 & 76.9 & 79.0 \\ \hline Power input & kW & 71.4 & 73.0 & 76.9 & 79.0 \\ \hline Power input & kW & 71.4 & 73.0 & 76.9 & 79.0 \\ \hline COP & & 3.86 & 3.86 & 3.75 & 3.72 \\ \hline Connected & Total capacity & 50-130\% & 50-130\% & 50-130\% & 50-130\% \\ \hline Indoor unit & Maximum quantity & 50-130\% & 50-130\% & 50-130\% & 50-130\% \\ \hline Compressors & \hline Quantity & 6 & 6 & 5 & 5 \\ \hline Quantity & & 6 & 6 & 5 & 5 \\ \hline Airflow rate & m^3/h & 72500 & 72500 & 73600 & 73600 \\ \hline Static pressure & Pa & 20-20 (standard) & 20-20 (standard) & 20-20 (customized) & 20-120 (custo$		
$\begin{tabular}{ c c c c c c c } \hline EER & $$3.66$ & $$3.64$ & $$3.57$ & $$3.57$ & $$3.57$ & $$3.57$ & $$3.57$ & $$3.57$ & $$3.57$ & $$3.57$ & $$3.57$ & $$$281.5$ & $$288.0$ & $$294.0$ & $$294.0$ & $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$		
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$ \begin{array}{c c c c c c c } \hline COP & \hline & 3.86 & \hline & 3.86 & \hline & 3.75 & \hline & 3.72 \\ \hline Connected & \hline & Total capacity & 50-130\% & 50-130\% & 50-130\% & 50-130\% & 50-130\% & \hline & 64 & \hline & 64 & \hline & 64 & \hline & 56 & \hline & 56 & \hline & 57 & \hline & 7ype & DC & DC & DC & DC & \hline & 0.50 & \hline & 7ype & DC & DC & DC & DC & \hline & 0.50 & \hline & 72500 & 73600 & 20-120 (customized) & 20$		
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Quantity     6     6     5     5       Fan motors     Type     DC	r	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		
Pan motors     Quantity     6     6     5     5       Airflow rate     m³/h     72500     72500     73600     73600       Static pressure     Pa     0-20 (standard) 20-120 (customized)     0-20 (standard)		
Airflow rate     m³/h     72500     72500     73600     73600       Static pressure     Pa     0-20 (standard) 20-120 (customized)       Refrigerant     Type     R410A     R410A     R410A     R410A     R410A       Factory charge     kg     9.3+12+21     9.3+12+21     8+21×2     8+21×2		
Static pressure     Pa     0-20 (standard) 20-120 (customized)     0-20 (standard) 20-120 (customized)     0-20 (standard) 20-120 (customized)     0-20 (standard) 20-120 (customized)       Refrigerant     Type     R410A     R410A     R410A     R410A       Factory charge     kg     9.3+12+21     9.3+12+21     8+21×2     8+21×2		
Type     R410A     R410A     R410A     R410A       Factory charge     kg     9.3+12+21     9.3+12+21     8+21×2     8+21×2	rd) nized)	
Feature     Factory charge     kg     9.3+12+21     9.3+12+21     8+21×2     8+21×2		
Liquid pipe mm Ø25.4 Ø25.4	Ø25.4	
Pipe connections' Gas pipe mm Ø50.8 Ø50.8		
Sound pressure level <sup>4</sup> dB(A)     69     69     69     70		
Sound power level <sup>4</sup> dB(A)     98     98     97     98		
Net dimensions (W×H×D)     mm     (1340×1760×825)×2+ (1880×1760×825)     (1340×1760×825)×2+ (1880×1760×825)     (940×1760×825)+ (1880×1760×825)     (940×1760×825)+ (1880×1760×825)×2	25)+ 25)×2	
Packed dimensions (W×H×D)     mm     (1405×1945×890)×2+ (1945×1945×890)     (1405×1945×890)×2+ (1945×1945×890)     (1005×1945×890)+ (1945×1945×890)×2     (1005×1945×890)+ (1945×1945×890)×2	90)+ 90)×2	
Net weight     kg     295+315+408     295+315+408     213+408×2     213+408×2	2	
Gross weight kg 315+335+438 315+335+438 230+438×2 230+438×	2	
Ambient temp.     Cooling     °C(DB)     -15 to 55     -15 to 55     -15 to 55     -15 to 55		
operation range     Heating     °C(DB)     -30 to 30     -30 to 30     -30 to 30     -30 to 30		

HP		96	98	100	102				
Model (Combinatio	on unit)		MV8X-2680WV2GN1(PRO)	MV8X-2735WV2GN1(PRO)	MV8X-2790WV2GN1(PRO)	MV8X-2850WV2GN1(PRO)			
Combination type			20HP+38HP+38HP	22HP+38HP+38HP	24HP+38HP+38HP	26HP+38HP+38HP			
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)			
	Capacity	kW	268.0	273.5	279.0	285.0			
Cooling	Capacity	kBtu/h	914.5	933.2	952.0	972.5			
Cooling	Power input	kW	75.2	76.8	79.1	80.0			
	EER		3.56	3.56	3.53	3.56			
Caraaitu		kW	301.0	301.0 307.0		319.5			
l la atia a?	Capacity	kBtu/h	1027.0	1047.4	1067.9	1090.1			
Heating-	Power input	kW	80.6	82.8	84.7	86.0			
	COP		3.73	3.71	3.70	3.72			
Connected	Total capacity		50-130%	50-130%	50-130%	50-130%			
indoor unit Maximum quantity		tity		64					
Compressors Type Quantity			DC inverter	DC inverter	DC inverter	DC inverter			
			5	6	6	6			
Туре			DC	DC	DC	DC			
Fan matava	Quantity		5	6	6	6			
Fan motors	Airflow rate	m³/h	74500	80000	80000	79500			
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)			
Defrigerent	Туре		R410A	R410A	R410A	R410A			
Reingerant	Factory charge	kg	8.4+21×2	9.3+21×2	9.3+21×2	12+21×2			
Dia a construction of	Liquid pipe	mm	Ø25.4		Ø25.4				
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø50.8	}	Ø50.8	3			
Sound pressure lev	/el <sup>4</sup>	dB(A)		7	0				
Sound power level	4	dB(A)	98	98	98	99			
Net dimensions (W×H×D) m		mm	(940×1760×825)+ (1880×1760×825)×2	(1340×1760×825)+ (1880×1760×825)×2	(1340×1760×825)+ (1880×1760×825)×2	(1340×1760×825)+ (1880×1760×825)×2			
Packed dimensions	s (W×H×D)	mm	(1005×1945×890)+ (1945×1945×890)×2	(1405×1945×890)+ (1945×1945×890)×2	(1405×1945×890)+ (1945×1945×890)×2	(1405×1945×890)+ (1945×1945×890)×2			
Net weight		kg	215+408×2	295+408×2	295+408×2	315+408×2			
Gross weight		kg	232+438×2	315+438×2	315+438×2	335+438×2			
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55			
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30			

#### Notes:

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 V8X 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.

нр		104	106	108	
Model (Combination ur	nit)		MV8X-2905WV2GN1(PRO)	MV8X-2970WV2GN1(PRO)	MV8X-3020WV2GN1(PRO)
Combination type			28HP+38HP+38HP	30HP+38HP+38HP	34HP+36HP+38HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
		kW	290.5	297.0	302.0
	Capacity	kBtu/h	991.3	1013.4	1030.5
Cooling <sup>1</sup>	Power input	kW	81.8	83.6	85.7
	EER		3.55 3.55		3.52
		kW	325.5	333.0	337.0
	Capacity	kBtu/h	1110.6	1136.2	1149.9
Heating <sup>2</sup>	Power input	kW	87.6	90.6	92.1
	СОР		3.72	3.68	3.66
Connected indoor unit Maximum quantity			50-130%	50-130%	50-130%
			64		
Compressors Type Quantity			DC inverter	DC inverter	DC inverter
			6	6	6
Туре			DC	DC	DC
	Quantity		6	6	6
Fan motors	Airflow rate	m³/h	79500	87000	86000
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
	Туре		R410A	R410A	R410A
Refrigerant	Factory charge	kg	12+21×2	19+21×2	21×3
	Liquid pipe	mm	Ø2	5.4	Ø25.4
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø5	0.8	Ø50.8
Sound pressure level <sup>4</sup>		dB(A)		70	
Sound power level <sup>4</sup>		dB(A)	99	99	99
Net dimensions (W×H×D)		mm	(1340×1760×825)+ (1880×1760×825)×2	(1880×1760×825)×3	(1880×1760×825)×3
Packed dimensions (W	(×H×D)	mm	(1405×1945×890)+ (1945×1945×890)×2	(1945×1945×890)×3	(1945×1945×890)×3
Net weight		kg	315+408×2	373+408×2	405+408×2
Gross weight		kg	335+438×2	403+438×2	435+438×2
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30

Notes:

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference.
Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 5m with zero level difference.
Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V8X 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.

нр		110	112	114		
Model (Combination u	init)		MV8X-3070WV2GN1(PRO)	MV8X-3130WV2GN1(PRO)	MV8X-3180WV2GN1(PRO)	
Combination type			34HP+38HP+38HP	36HP+38HP+38HP	38HP+38HP+38HP	
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	
		kW	307.2	313.0	318.0	
	Capacity	kBtu/h	1048.2	1068.0	1085.1	
Cooling <sup>1</sup>	Power input	kW	87.6	89.9	91.8	
	EER		3.50	3.48	3.46	
		kW	344.0	350.0	357.0	
	Capacity	kBtu/h	1173.7	1194.2	1218.0	
Heating <sup>2</sup>	Power input	kW	94.5	96.9	99.3	
	СОР		3.64	3.61	3.60	
Connected	Connected Total capacity		50-130%	50-130%	50-130%	
indoor unit Maximum quantity		64				
Туре			DC inverter	DC inverter	DC inverter	
Compressors	Quantity		6	6	6	
	Туре		DC	DC	DC	
	Quantity		6	6	6	
Fan motors	Airflow rate	m³/h	86000	87000	87000	
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	
	Туре		R410A	R410A	R410A	
Refrigerant	Factory charge	kg	21×3	21×3	21×3	
	Liquid pipe	mm	Ø28.6	Ø28.6	Ø28.6	
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø54.0	Ø54.0	Ø54.0	
Sound pressure level <sup>4</sup>		dB(A)		70		
Sound power level <sup>4</sup>		dB(A)	99	99	99	
Net dimensions (W×H	×D)	mm	(1880×1760×825)×3	(1880×1760×825)×3	(1880×1760×825)×3	
Packed dimensions (V	V×H×D)	mm	(1945×1945×890)×3	(1945×1945×890)×3	(1945×1945×890)×3	
Net weight		kg	405+408×2	408×3	408×3	
Gross weight		kg	435+438×2	438×3	438×3	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	

Notes:

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference.
Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 5m with zero level difference.
Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent liquid piping lengths of 90m or longer, please refer to the V8X 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.

#### V8Xi (Individual series)

HP				10	12	14
Model		MV8Xi-252WV2GN1(PRO)	MV8Xi-280WV2GN1(PRO)	MV8Xi-335WV2GN1(PRO)	MV8Xi-400WV2GN1(PRO)	
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	25.2	28.0	33.5	40.0
		kBtu/h	86.0	95.5	114.3	136.5
Cooling	Power input	kW	5.7	7.4	8.9	10.9
	EER		4.41	3.80	3.75	3.66
	Canaaitu	kW	27.0	31.5	37.5	45.0
	Capacity	kBtu/h	92.1	107.5	128.0	153.5
Heating <sup>2</sup>	Power input	kW	5.4	6.7	8.2	10.7
	COP		4.98	4.72	4.57	4.19
Connected	Total capacity		50%-130%	50%-130%	50%-130%	50%-130%
indoor unit	Maximum quantity		13	16	19	23
<u></u>	Туре		DC inverter	DC inverter	DC inverter	DC inverter
Compressors	Quantity		1	1	1	1
	Туре		DC	DC	DC	DC
-	Quantity		1	1	1	1
Fan motors	Airflow rate	m³/h	12600	12600	13500	14400
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	7	7	7	7
Dia a construction of	Liquid pipe	mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø25.4	Ø25.4	Ø25.4	Ø25.4
Sound pressure le	vel <sup>4</sup>	dB(A)	56	57	59	59
Sound power leve	4	dB(A)	83	84	85	86
Net dimensions (W×H×D)		mm	940×1760×825	940×1760×825	940×1760×825	940×1760×825
Packed dimensions (W×H×D)		mm	1005×1945×890	1005×1945×890	1005×1945×890	1005×1945×890
Net weight		kg	195	195	197	197
Gross weight		kg	213	213	215	215
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP					20	22
Model			MV8Xi-450WV2GN1(PRO)	MV8Xi-500WV2GN1(PRO)	MVXi-560WV2GN1(PRO)	MV8Xi-615WV2GN1(PRO)
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Consoitu	kW	45.0	50.0	56.0	61.5
Capling	Capacity	kBtu/h	153.5	170.6	191.1	209.8
Cooling	Power input	kW	12.8	14.7	16.7	18.8
	EER		3.52	3.41	3.35	3.27
	Consoitu	kW	50.0	56.0	63.0	69.0
I I a a thin an?	Capacity	kBtu/h	170.6	191.1	215.0	235.4
Heating-	Power input	kW	11.7	13.7	16.0	17.4
	COP		4.26	4.09	3.94	3.96
Connected	Total capacity		50%-130%	50%-130%	50%-130%	50%-130%
indoor unit	Maximum quan	tity	26	29	33	36
Camaranaaa	Туре		DC inverter	DC inverter	DC inverter	DC inverter
Compressors	Quantity		1	1	1	2
	Туре		DC	DC	DC	DC
For motors	Quantity		1	1	1	2
Fan motors	Airflow rate	m³/h	15600	15600	16500	22000
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	8	8	8.4	9.3
Dina connections	Liquid pipe	mm	Ø15.9	Ø15.9	Ø15.9	Ø15.9
Pipe connections <sup>o</sup>	Gas pipe	mm	Ø28.6	Ø28.6	Ø28.6	Ø28.6
Sound pressure lev	vel <sup>4</sup>	dB(A)	60	61	62	62
Sound power level	4	dB(A)	86	88	89	89
Net dimensions (V	/×H×D)	mm	940×1760×825	940×1760×825	1340×1760×825	1340×1760×825
Packed dimensions (W×H×D)		mm	1005×1945×890	1005×1945×890	1405×1945×890	1405×1945×890
Net weight		kg	213	213	215	295
Gross weight		kg	230	230	232	315
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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.

HP		24	26	28	30	
Model		MV8Xi-670WV2GN1(PRO)	MV8Xi-730WV2GN1(PRO)	MV8Xi-785WV2GN1(PRO)	MV8Xi-850WV2GN1(PRO)	
Power supply	Power supply V/N/Hz		380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	67.0	73.0	78.5	85.0
Coolingi	Capacity	kBtu/h	228.6	249.1	267.9	290.0
Cooling	Power input	kW	20.9	22.4	24.0	26.5
	EER		3.20	3.26	3.27	3.21
	Capacity	kW	75.0	81.5	87.5	95.0
Llooting?		kBtu/h	255.9	278.1	298.6	324.2
Heating	Power input	kW	19.6	21.5	23.6	26.4
	COP		3.83	3.79	3.71	3.60
Connected	Total capacity		50%-130%	50%-130%	50%-130%	50%-130%
indoor unit	Maximum quan	tity	39	43	46	50
Comprossors	Туре		DC inverter	DC inverter	DC inverter	DC inverter
Compressors	Quantity		2	2	2	2
	Туре		DC	DC	DC	DC
Fan matara	Quantity		2	2	2	2
Fan motors	Airflow rate	m³/h	22000	21500	21500	29000
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	9.3	12	12	19
Dine connections <sup>3</sup>	Liquid pipe	mm	Ø15.9	Ø15.9	Ø15.9	Ø22.2
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø28.6	Ø28.6	Ø28.6	Ø31.8
Sound pressure le	vel <sup>4</sup>	dB(A)	62	62	63	64
Sound power leve	4	dB(A)	92	93	93	93
Net dimensions (V	V×H×D)	mm	1340×1760×825	1340×1760×825	1880×1760×825	1880×1760×825
Packed dimension	Packed dimensions (W×H×D)		1405×1945×890	1405×1945×890	1945×1945×890	1945×1945×890
Net weight		kg	295	315	315	373
Gross weight	Gross weight k		315	335	335	403
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

HP		32	34	36	38	
Model		MV8Xi-900WV2GN1(PRO)	MV8Xi-950WV2GN1(PRO)	MV8Xi-1010WV2GN1(PRO)	MV8Xi-1060WV2GN1(PRO)	
Power supply V/N/Hz		380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)	
	Constraited	kW	90.0	95.2	101.0	106.0
C a a lin al	Capacity	kBtu/h	307.1	324.8	344.6	361.7
Cooling	Power input	kW	28.2	30.5	32.8	35.2
	EER	1	3.19	3.12	3.08	3.01
	Conceitu	kW	100.0	106.0	112.0	119.0
Linetine?	Capacity	kBtu/h	341.2	361.7	382.2	406.0
Heating-	Power input	kW	28.7	31.8	34.5	37.9
	COP		3.49	3.33	3.25	3.14
Connected	Total capacity		50%-130%	50%-130%	50%-130%	50%-130%
indoor unit	Maximum quan	tity	53	56	59	62
Companyage	Туре		DC inverter	DC inverter	DC inverter	DC inverter
Compressors	Quantity		2	2	2	2
	Туре		DC	DC	DC	DC
Fan motors	Quantity		2	2	2	2
	Airflow rate	m³/h	28000	28000	29000	29000
	Static pressure	Pa	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)	0-20 (standard) 20-120 (customized)
Defrigerent	Туре		R410A	R410A	R410A	R410A
Reingerant	Factory charge	kg	21	21	21	21
Dine connections <sup>3</sup>	Liquid pipe	mm	Ø22.2	Ø22.2	Ø22.2	Ø22.2
Pipe connections <sup>5</sup>	Gas pipe	mm	Ø34.9	Ø34.9	Ø34.9	Ø34.9
Sound pressure le	vel <sup>4</sup>	dB(A)	64	66	66	67
Sound power leve	4	dB(A)	93	94	94	94
Net dimensions (V	Net dimensions (W×H×D)		1880×1760×825	1880×1760×825	1880×1760×825	1880×1760×825
Packed dimensions (W×H×D)		mm	1945×1945×890	1945×1945×890	1945×1945×890	1945×1945×890
Net weight		kg	405	405	408	408
Gross weight		kg	435	435	438	438
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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.

## C-VCMAX202309

# **SMART IN ONE**

The Bar

ISO

1500

ISO

9001

ISO

400

Midea Building Technologies Division

#### Midea Group

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Midea reserves the right to change the specifications of the product, and to withdraw replace products without prior notification or public announcement. Midea is constant

developing and improving its products



# Catalogue Catalogue Series VRF



VEMAT



## **Outdoor Unit Lineup**

VC MAX (Combinable series)







## **Outdoor Unit Functions**

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

#### **Outdoor Unit Functions**

Functions								
	•: equipped as standard; O: customization option							
nced   fort	Precise oil control	Ensures all outdoor compressor oil is at a safe level, eliminating compressor oil shortages	•					
	Heavy anti-corrosion protection	Can be customized with heavy anti-corrosion treatment for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life	0					
	UL anti-corrosion certificate	It has been certified by UL that our VRF outdoor unit can withstand 27 years of simulated severe corrosion under a salt contaminated traffic environment	0					
	Micro-channel refrigerant cooling PCB	10 times higher than ordinary refrigerant pipe cooling efficiency	•					
	Auto dust-clean function	Blows away accumulated dust on the outdoor unit, guaranteeing stable unit operations in a dusty environment	•					
	Resistant to magnitude 8 earthquakes	A reinforced frame footprint to prevent tipping and deformation damage in magnitude 8 earthquakes	0					
	Resistant to violent typhoon	A reinforced trusses and double fastening for stable operation even under violent typhoon	Ο					
	Alarm output	In the event of system malfunction, remotely output error information and remind maintenance personnel to conduct maintenance	Ο					
	Fire alarm input	In the event of fire, receive fire information in time and stop the system immediately to avoid serious problems	•					
	Silent mode	15-step silent mode selections provide more freedom and convenience to match the needs of customers	•					
Enha Com	0.1 °C control precision	Control precision of the sensor can reach 0.1°C, ensuring less fluctuations in room temperature	•					
Jge	Wide capacity range	Meets all customer requirements from small to large buildings	8-30HP (single) 32-90HP (combined)					
e Application Ran	Wide range of indoor units	Provides 12 types and more than 100 models of VRF indoor units to meet the needs of different application scenarios	•					
	Wide operation range	Operates stably under extreme conditions	-15~55°C					
Wio	Long piping capability	Benefits for the system design, installation flexibility, as well as the less installation cost	•					
	Auto addressing (ODU-IDU)	Distributes addresses to indoor units automatically, simplifying the installation	•					

### **Outdoor Unit Functions**

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

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



# INNOVATIVE TECHNOLOGIES

# HyperLink New & Unique

# Shield BOX New & Unique

# SuperSonse New Unique

# **ච**ಲCTOR m. 2.0



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



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

#### Arbitrary Topology Communication

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



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

#### Super Anti-interference Capability

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







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



of high voltage

of equipment



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



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

#### All Microchannel Refrigerant Cooling

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

#### Built-in Circulating Fan

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

#### 5 High Precision Temperature Sensors

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







## SuperSense New&Unique

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



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

#### Complete Sensors

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



#### Refrigerant Amount Diagnosis

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



#### Virtual Sensor Backup

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



#### Midea ETA (META) 2.0

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





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



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

## ("") Variable

**STEP 2:** System refrigerant temperature determination

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

**STEP 3:** Adaptive indoor airflow and

Refrigerant

Temperature

Variable Indoor Airflow

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



refrigerant flow

```
23/24
```





Refrigerant fl coordination Automatic calculation of the building load and the required refrigerant quantity based on the sensor parameters. Refrigerant temperature Automatic matching of the corresponding refrigerant temperature to the load. 7 fan speed Automatic matching of the corresponding indoor airflow to the load and refrigerant temperature. VC MAX refrigerant regulation Compressor output Indoor temperature Setting temperature Time (min)

#### **Zen Air 2.0**

Further upgraded ZEN AIR technology to maximize COMFORT.



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

#### 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.



#### Long Distance Air Delivery\*

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



\*This function is available as a customization option.

#### 7 Fan Speeds

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



#### Sleep Mode

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



#### Innovative Puro-air Kit

Protectors of health and safety



rom Germanv OSRAM quality UV light source

#### Ozone -Free UV leakage-Free

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

#### **Doctor M 2.0**

Further upgraded DOCTOR M technology to maximize EASY SERVICE.



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

#### Intelligent Maintenance Tool

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



\*The Bluetooth module is available as a customization option

#### Real-time Monitoring of Operating Parameters

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



\*The data cloud gateway needs to be purchased separately.



#### Cloud-based Big Data Analytics

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



# Efficiency gh

#### **W** Full DC Inverter Technology

#### Full DC Inverter for Outdoor Components

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



#### Full DC Inverter for Indoor Components

distribution

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





Uniform temperature distribution



#### **M** Enhanced Vapor Injection (EVI) Compressor

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

#### Mathematical Advanced Subcooling Technology

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



#### **W** Low Standby Power Consumption

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







#### **%** 60-step Energy Management

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




#### **W** Quadruple Backup

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

#### Unit Backup

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



Intelligent load-bearing between units during normal operation

Continue operating in case of failure of one unit

Operation compressor 👘 Failed compressor

#### **Compressor Backup** 3

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





Intelligent load-bearing between compressors during normal operation



operating in case of failure of one compressor



#### Fan Backup

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



In normal operation, each fan runs on demand



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

#### Sensor Backup 4

New & Uniqu

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



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

#### **Z** Double Duty Cycling

#### Unit Duty Cycling

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



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

#### **ShieldBox**

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







#### Compressor Duty Cycling

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



Compressor start-up sequence

#### **SuperSense**

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



#### **Precise Oil Control**

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



#### **W Heavy Anti-corrosion Protection\***

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

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



#### **W UL Anti-Corrosion Certificate\***

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

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



#### Resistant to Magnitude 8 Earthquakes\*

The VC MAX Series VRF has a reinforced frame footprint to prevent tipping and deformation damage and can still operate normally in magnitude 8 earthquakes. \*This function is available as a customization option.

Resistant to Violent Typhoons\*

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

\*This function is available as a customization option.

#### **Auto Dust-clean Function**

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







#### Match Point

## Enhanced Comfort

## Wide Application Range

#### **Z Advanced Silent Technology**

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



15 silent options

#### **W** Fast Cooling

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



#### **Wide Capacity Range**

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





#### **Wide Operation Range**

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





#### **Wide Range of Indoor Units**

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



## Easy Installation and Service

#### **W** Free Wiring

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



#### **Z Long Piping Capability**

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

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

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

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

4 Level difference between IDUs: 40m

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



#### **Z** External Static Pressure up to 120Pa\*

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

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





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#### **M** Auto Addressing

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



#### **Maintenance Mode**

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



#### Matter Automatic Refrigerant Charging\*

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



#### **Z Automatic Refrigerant Recycling**

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



#### **Wide Combination Ratio**\*

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





VC MAX Series VRF System

**Z** Easy Software Program Upgrade

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

\*The data cloud gateway needs to be purchased separately.



#### **%** Smart Commissioning/Maintenance Tool

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

#### Useful in the following situations:

- Installation
- Service maintenance

#### Main functions:

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

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



#### VC MAX Series VRF

HP			8	10	12
Model name			MVC-M224WV2GN1	MVC-M280WV2GN1	MVC-M335WV2GN1
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	22.4	28	33.5
Cooling <sup>1</sup>	Capacity	kBtu/h	76.4	95.5	114.2
Cooling	Power input	kW	4.8	6.8	8.8
	EER		4.65	4.14	3.81
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
indoor unit	Maximum quant	ity	13	10           4WV2GN1         MVC-M280WV2GN1           3/50(60)         380-415/3/50(60)           .4         28           .4         95.5           8         6.8           .55         4.14           outdoor unit         50-130% of outdoor unit           .55         4.14           outdoor unit         50-130% of outdoor unit           .68         55           .10         1           .11         C           .12         DC           .11         1           .12         DC           .11         1           .12         .20-120           .12600         0           .12600         0           .12600         0           .27         .012600           .27         .012.7           .54         .425.4           .7         .58           .27         .940×1760×825           .45×890         .1010×1945×890           .5         .185           .200         .200	19
Compressor	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		1	1	1
	Туре		DC	DC	DC
	Quantity		1	1	1
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m³/h	12600	12600	13500
Defrigerant	Туре		R410A	R410A	R410A
Reingerant	Factory charge	kg	7.4	7.4	7.4
Pipe	Liquid pipe	mm	Ф12.7	Φ12.7	Φ12.7
connections <sup>2</sup>	Gas pipe	mm	Φ25.4	Φ25.4	Φ25.4
Sound pressu	re level <sup>3</sup>	dB(A)	57	58	60
Net dimensions (W×H×D)		mm	940×1760×825	940×1760×825	940×1760×825
Packed dimensions (W×H×D)		mm	1010×1945×890	1010×1945×890	1010×1945×890
Net weight		kg	185	185	185
Gross weight		kg	200	200	200
Ambient temp range (Cooling	). operation g)	°C	-15 to 55	-15 to 55	-15 to 55

HP			14	16	18
Model name			MVC-M400WV2GN1	MVC-M450WV2GN1	MVC-M500WV2GN1
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	40	45	50
Cooling <sup>1</sup>	Capacity	kBtu/h	136.4	153.5	170.5
Cooling	Power input	kW	9.7	12.3	13.4
	EER		4.12	3.67	3.74
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
indoor unit	Maximum quant	ity	14         16           MVC-M400WV2GN1         MVC-M450WV2GN1         MVC-1           380-415/3/50(60)         380-415/3/50(60)         380-415/3/50(60)         380-415/3/50(60)           40         45         136.4         153.5           9.7         12.3         12.3           4.12         3.67         50-130% of outdoor unit capacity         50-130% of outdoor unit capacity           50-130% of outdoor unit capacity         50-130% of outdoor unit capacity         50-130% of outdoor unit capacity           23         26         26           Scroll DC inverter         Scroll DC inverter         Scroll DC inverter           1         1         1           0-20 (default); 20-120 (customized)         0-20 (customized)         0-20 (customized)           (customized)         0-20 (customized)         0-20 (customized)         0(customized)           15600         15600         15600         1600           R410A         R410A         8.4         8.4           015.9         015.9         015.9         0428.6           60         61         940×1760×825         940           1010×1945×890         1010×1945×890         1010	29	
Compressor	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		1	1	1
	Туре		DC	DC	DC
	Quantity		1	1	1
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m³/h	15600	15600	16500
Defrigerant	Туре		R410A	R410A	R410A
Reingerant	Factory charge	kg	8.4	8.4	10
Pipe	Liquid pipe	mm	Ф15.9	Ф15.9	Φ15.9
connections <sup>2</sup>	Gas pipe	mm	Φ28.6	Φ28.6	Φ28.6
Sound pressu	re level <sup>3</sup>	dB(A)	60	61	62
Net dimensions (W×H×D)		mm	940×1760×825	940×1760×825	940×1760×825
Packed dimensions (W×H×D)		mm	1010×1945×890	1010×1945×890	1010×1945×890
Net weight		kg	200	200	212
Gross weight		kg	215	215	232
Ambient temp range (Cooling	). operation	°C	-15 to 55	-15 to 55	-15 to 55

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

#### **Specifications**

#### VC MAX Series VRF

HP		20	22	24	
Model name			MVC-M560WV2GN1	MVC-M615WV2GN1	MVC-M670WV2GN1
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	56	61.5	67
	Capacity	kBtu/h	191.0	209.7	228.5
Cooling	Power input	kW	17.4	17.3	19.0
	EER		3.21	3.55	3.52
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
indoor unit	Maximum quant	ity	33	20         22         24           1560WV2GN1         MVC-M615WV2GN1         MVC-M670WV2GN1           115/3/50(60)         380-415/3/50(60)         380-415/3/50(60)           56         61.5         67           191.0         209.7         228.5           17.4         17.3         19.0           3.21         3.55         3.52           of outdoor unit capacity         50-130% of outdoor unit capacity         50-130% of outdoor unit capacity           33         36         39           IIDC inverter         Scroll DC inverter         Scroll DC inverter           1         1         1           DC         DC         DC           1         2         2           default); 20-120 (customized)         0-20 (default); 20-120 (customized)         0-20 (default); 20-120 (customized)           16500         21500         21500           R410A         R410A         R410A           10         12.8         12.8           015.9         019.1         019.1           028.6         031.8         031.8           63         63         64           ×1760×825         1340×1760×825         1340×1760×825	
Camaraaaar	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		1	1	1
	Туре		DC	DC	DC
	Quantity		1	2	2
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m³/h	16500	21500	21500
Defrigerent	Туре		R410A	R410A	R410A
Reingerant	Factory charge	kg	10	12.8	12.8
Pipe	Liquid pipe	mm	Φ15.9	Ф19.1	Ф19.1
connections <sup>2</sup>	Gas pipe	mm	Φ28.6	Φ31.8	Ф31.8
Sound pressu	re level <sup>3</sup>	dB(A)	63	63	64
Net dimensions (W×H×D)		mm	940×1760×825	1340×1760×825	1340×1760×825
Packed dimensions (W×H×D)		mm	1010×1945×890	1410×1945×890	1410×1945×890
Net weight		kg	225	260	260
Gross weight		kg	245	285	285
Ambient temp range (Cooling	p. operation g)	°C	-15 to 55	-15 to 55	-15 to 55

HP		26	28	30	
Model name			MVC-M730WV2GN1	MVC-M785WV2GN1	MVC-M850WV2GN1
Power supply	,	V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Canadity	kW	73	78.5	85
	Capacity	kBtu/h	248.9	267.7	289.9
Cooling	Power input	kW	19.4	22.3	26.4
	EER		3.76	3.52	3.22
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
indoor unit	unit Maximum quantity Type Sc	43	46	50	
Comprossor	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		2	2	2
	Туре		DC	DC	DC
	Quantity		2	2	2
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m³/h	22000	22000	22000
Defrigerant	Туре		R410A	R410A	R410A
Reingerani	Factory charge	kg	15.4	15.4	15.4
Pipe	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2
connections <sup>2</sup>	Gas pipe	mm	Φ31.8	Ф31.8	Φ31.8
Sound pressu	ire level <sup>3</sup>	dB(A)	64	64	64
Net dimensions (W×H×D)		mm	1340×1760×825	1340×1760×825	1340×1760×825
Packed dimensions (W×H×D)		mm	1410×1945×890	1410×1945×890	1410×1945×890
Net weight		kg	325	325	325
Gross weight		kg	350	350	350
Ambient temp range (Coolin	o. operation g)	°C	-15 to 55	-15 to 55	-15 to 55

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

#### **VC MAX Series VRF**

HP			32	34	36
Model name (	Combination unit)		MVC-M900WV2GN1	MVC-M960WV2GN1	MVC-M1010WV2GN1
Combination t	type		16HP+16HP	14HP+20HP	16HP+20HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	90.0	96.0	101.0
Cooling		kBtu/h	307.0	327.4	344.5
Cooling	Power input	kW	24.6	27.1	29.7
	EER		3.66	3.54	3.40
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
indoor unit	Maximum quanti	ity	32         34         36           MVC-M900WV2GNI         MVC-M960WV2GNI         MVC-M010WV2           16HP+16HP         14HP+20HP         16HP+20HP           1N/Hz         380-415/3/50(60)         380-415/3/50(60)         380-415/3/50(60)           kW         90.0         96.0         101.0           3tu/h         307.0         327.4         344.5           kW         24.6         27.1         29.7           3.66         3.54         3.40           50-130% of outdoor unit capacity         50-130% of outdoor unit capacity         50-130% of outdoor unit capacity         50-130% of outdoor unit capacity           53         56         59           Scroll DC inverter         Scroll DC inverter         Scroll DC inverter           2         2         2         2           Pa         0-20 (default); 20-120 (customized)         0-20 (default); 20         0-20 (default); 20           mm         0410A         R410A         R410A         R410A           kg         8.4×2         8.4+10         8.4+10           mm         0431.8         0431.8         0438.1           IB(A)         64         65         65           mm         (1010×1945×890)×2	59	
Campragaar	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		2	2	2
	Туре		DC	DC	DC
	Quantity		2	2	2
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m³/h	31200	32100	32100
Pofrigorant	Туре		R410A	R410A	R410A
Reingerant	Factory charge	kg	8.4×2	8.4+10	8.4+10
Pipe	Liquid pipe	mm	Ф19.1	Φ19.1	Φ19.1
connections <sup>2</sup>	Gas pipe	mm	Ф31.8	Ф31.8	Φ38.1
Sound pressu	re level <sup>3</sup>	dB(A)	64	65	65
Net dimensior	ns (W×H×D)	mm	(940×1760×825)×2	(940×1760×825)×2	(940×1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2	(1010×1945×890)×2	(1010×1945×890)×2
Net weight		kg	200×2	200+225	200+225
Gross weight		kg	215×2	215+245	215+245
Ambient temp range (Cooling	p. operation g)	°C	-15 to 55	-15 to 55	-15 to 55

HP			38	40	42
Model name (	Combination unit)		MVC-M1060WV2GN1	MVC-M1120WV2GN1	MVC-M1170WV2GN1
Combination	type		18HP+20HP	16HP+24HP	18HP+24HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	106.0	112.0	117.0
Cooling <sup>1</sup>		kBtu/h	361.5	382.0	399.0
Cooling	Power input	kW	30.8	31.3	32.4
	EER		3.44	3.58	3.61
Connected	Total capacity		50-130% of outdoor unit	50-130% of outdoor unit	50-130% of outdoor unit
indoorunit			capacity	capacity	capacity
	Maximum quanti	ity	62	64	64
Compressor	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		2	2	2
	Туре		DC	DC	DC
	Quantity		2	3	3
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m³/h	33000	37100	38000
Pofrigorant	Туре		R410A	R410A	R410A
Reingerant	Factory charge	kg	10×2	8.4+12.8	10+12.8
Pipe	Liquid pipe	mm	Ф19.1	Φ19.1	Φ19.1
connections <sup>2</sup>	Gas pipe	mm	Ф38.1	Ф38.1	Φ38.1
Sound pressu	re level <sup>3</sup>	dB(A)	66	66	66
Net dimensior	ns (W×H×D)	mm	(940×1760×825)×2	(940×1760×825)+(1340× 1760×825)	(940×1760×825)+(1340× 1760×825)
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2	(1010×1945×890)+(1410× 1945×890)	(1010×1945×890)+(1410× 1945×890)
Net weight		kg	212+225	200+260	212+260
Gross weight		kg	232+245	215+285	232+285
Ambient temp range (Cooling	o. operation g)	°C	-15 to 55	-15 to 55	-15 to 55

Notes:

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

#### **Specifications**

#### VC MAX Series VRF

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

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

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

#### **VC MAX Series VRF**

HP			56	58	60
Model name (	Combination unit	)	MVC-M1580WV2 <u>GN1</u>	MVC-M1635WV2GN1	MVC-M1700WV2GN1
Combination t	type		26HP+30HP	28HP+30HP	30HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	158.0	163.5	170.0
Cooling		kBtu/h	538.8	557.6	579.8
Cooling'	Power input	kW	45.8	48.7	52.8
	EER		3.45	3.36	3.22
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
indoor unit	Maximum quant	ity	30         30         30           MVC-M1580WV2GN1         MVC-M1635WV2GN1         MVC-1           26HP+30HP         28HP+30HP         30           380-415/3/50(60)         380-415/3/50(60)         380-           158.0         163.5         380-           538.8         557.6         45.8           45.8         48.7         3.36           50-130% of outdoor unit capacity         50-130% of outdoor unit capacity         50-130%           64         64         64           Scroll DC inverter         Scroll DC inverter         Scroll DC inverter           4         4         4           0-20 (default); 20-120         0-20 (default); 20-120         0-20 (default); 20-120           (customized)         (customized)         (c           44000         44000         (du)           4410A         R410A         (du)           15.4×2         15.4×2         (du)           019.1         019.1         (du)           041.3         041.3         (du)           67         67         (du)           (140×1760×825)×2         (1340×1760×825)×2         (1340           (1410×1945×890)×2         350×2         350×2	64	
Compressor	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		4	4	4
	Туре		DC	DC	DC
	Quantity		4	4	4
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m³/h	44000	44000	44000
Pofrigorant	Туре		R410A	R410A	R410A
Reingerant	Factory charge	kg	15.4×2	15.4×2	15.4×2
Pipe	Liquid pipe	mm	Φ19.1	Φ19.1	Ф19.1
connections <sup>2</sup>	Gas pipe	mm	Ф41.3	Ф41.3	Ф41.3
Sound pressu	re level <sup>3</sup>	dB(A)	67	67	67
Net dimensions (W×H×D)		mm	(1340×1760×825)×2	(1340×1760×825)×2	(1340×1760×825)×2
Packed dimensions (W×H×D)		mm	(1410×1945×890)×2	(1410×1945×890)×2	(1410×1945×890)×2
Net weight		kg	325×2	325×2	325×2
Gross weight		kg	350×2	350×2	350×2
Ambient temp range (Cooling	p. operation g)	°C	-15 to 55	-15 to 55	-15 to 55

HP			62	64	66
Model name (	Combination unit		MVC-M1750WV2GN1	MVC-M1810WV2GN1	MVC-M1860WV2GN1
Combination type			16HP+16HP+30HP	14HP+20HP+30HP	16HP+20HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	175.0	181.0	186.0
Cooling <sup>1</sup>		kBtu/h	596.9	617.3	634.4
Cooling	Power input	kW	51.0	53.5	56.1
	EER		3.43	3.38	3.32
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
indoor unit	Maximum quant	ity	64	64	64
Comprossor	Type		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		4	4	4
	Туре		DC	DC	DC
	Quantity		4	4	4
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m <sup>3</sup> /h	53200	54100	54100
Pofrigorant	Туре		R410A	R410A	R410A
Reingerant	Factory charge	kg	8.4×2+15.4	8.4+10+15.4	8.4+10+15.4
Pipe	Liquid pipe	mm	Φ19.1	Φ19.1	Ф19.1
connections <sup>2</sup>	Gas pipe	mm	Ф41.3	Ф41.3	Ф41.3
Sound pressu	re level <sup>3</sup>	dB(A)	67	67	68
Net dimensior	ns (W×H×D)	mm	(940×1760×825)×2+(1340 ×1760×825)	(940×1760×825)×2+(1340 ×1760×825)	(940×1760×825)×2+(1340 ×1760×825)
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2+(1410 ×1945×890)	(1010×1945×890)×2+(1410 ×1945×890)	(1010×1945×890)×2+(1410 ×1945×890)
Net weight		kg	200×2+325	200+225+325	200+225+325
Gross weight		kg	215×2+350	215+245+350	215+245+350
Ambient temp range (Cooling	p. operation g)	°C	-15 to 55	-15 to 55	-15 to 55

Notes:

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

3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

#### **Specifications**

#### VC MAX Series VRF

HP			68	70	72
Model name (	Combination unit	)	MVC-M1910WV2GN1	MVC-M1970WV2GN1	MVC-M2020WV2GN1
Combination	type		18HP+20HP+30HP	16HP+24HP+30HP	18HP+24HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	191.0	197.0	202.0
Capling <sup>1</sup>	Capacity	kBtu/h	651.4	671.9	688.9
Cooling'	Power input	kW	57.2	57.7	58.8
	EER		3.34	3.41	3.44
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
indoor unit	Maximum quant	ity	64	68         70         72           MVC-MI9IOWV2GNI         MVC-MI97OWV2GNI         MVC-M2020WV2GNI           18HP+20HP+30HP         16HP+24HP+30HP         18HP+24HP+30HP           380-415/3/50(60)         380-415/3/50(60)         380-415/3/50(60)           191.0         197.0         202.0           651.4         671.9         688.9           57.2         57.7         58.8           3.34         3.41         3.44           0-130% of outdoor unit         50-130% of outdoor unit         capacity           64         64         64         64           Scroll DC inverter         Scroll DC inverter         Scroll DC inverter           4         4         4         4           DC         DC         DC         DC           4         5         5         5           0-20 (default); 20-120         (customized)         (customized)           (customized)         (customized)         (customized)           5000         59100         60000           R410A         R410A         R410A           10×2+15.4         8.4+12.8+15.4         10+12.8+15.4           022.2         022.2         022.2           044.5	
Campragar	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		4	4	4
	Туре		DC	DC	DC
	Quantity		4	5	5
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m <sup>3</sup> /h	55000	59100	60000
Defrigerant	Туре		R410A	R410A	R410A
Reingerant	Factory charge	kg	10×2+15.4	8.4+12.8+15.4	10+12.8+15.4
Pipe	Liquid pipe	mm	Φ22.2	Ф22.2	Ф22.2
connections <sup>2</sup>	Gas pipe	mm	Ф44.5	Ф44.5	Ф44.5
Sound pressu	re level <sup>3</sup>	dB(A)	68	68	68
Net dimension	Net dimensions (W×H×D)		(940×1760×825)×2+(1340 ×1760×825)	(940×1760×825)+(1340× 1760×825)×2	(940×1760×825)+(1340× 1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)×2+(1410 ×1945×890)	(1010×1945×890)+(1410× 1945×890)×2	(1010×1945×890)+(1410× 1945×890)×2
Net weight		kg	212+225+325	200+260+325	212+260+325
Gross weight		kg	232+245+350	215+285+350	232+285+350
Ambient temp range (Cooling	o. operation g)	°C	-15 to 55	-15 to 55	-15 to 55

HP			74	76	78
Model name (	Combination unit	)	MVC-M2080WV2GN1	MVC-M2150WV2GN1	MVC-M2200WV2GN1
Combination	Combination type		20HP+24HP+30HP	16HP+30HP+30HP	18HP+30HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
Cooling <sup>1</sup>	Capacity	kW	208.0	215.0	220.0
	Capacity	kBtu/h	709.4	733.3	750.3
	Power input	kW	62.8	65.1	66.2
	EER		3.31	3.30	3.32
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
indoor unit M	Maximum quant	ity	64	64	64
Comprossor	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		4	5	5
	Туре		DC	DC	DC
	Quantity		5	5	5
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m <sup>3</sup> /h	60000	59600	60500
Defrigerant	Туре		R410A	R410A	R410A
Reingerani	Factory charge	kg	10+12.8+15.4	8.4+15.4×2	10+15.4×2
Pipe	Liquid pipe	mm	Φ22.2	Φ22.2	Φ22.2
connections <sup>2</sup>	Gas pipe	mm	Ф44.5	Ф44.5	Ф44.5
Sound pressu	re level <sup>3</sup>	dB(A)	69	68	68
Net dimensior	ns (W×H×D)	mm	(940×1760×825)+(1340× 1760×825)×2	(940×1760×825)+(1340× 1760×825)×2	(940×1760×825)+(1340× 1760×825)×2
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410× 1945×890)×2	(1010×1945×890)+(1410× 1945×890)×2	(1010×1945×890)+(1410× 1945×890)×2
Net weight		kg	225+260+325	200+325×2	212+325×2
Gross weight		kg	245+285+350	215+350×2	232+350×2
Ambient temp range (Cooling	o. operation g)	°C	-15 to 55	-15 to 55	-15 to 55

Notes:

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

3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

#### **VC MAX Series VRF**

HP			80	82	84
Model name (	Combination unit;	)	MVC-M2260WV2GN1	MVC-M2315WV2GN1	MVC-M2370WV2GN1
Combination type		20HP+30HP+30HP	22HP+30HP+30HP	24HP+30HP+30HP	
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Capacity	kW	226.0	231.5	237.0
		kBtu/h	770.8	789.5	808.3
Cooling <sup>1</sup>	Power input	kW	70.2	70.1	71.8
	EER		3.22	3.30	3.30
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quant	ity	64	64	64
-	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		5	5	5
	Туре		DC	DC	DC
	Quantity		5	6	6
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m³/h	60500	65500	65500
	Туре		R410A	R410A	R410A
Refrigerant	Factory charge kg		10+15.4×2	12.8+15.4×2	12.8+15.4×2
Pipe	Liquid pipe	mm	Φ22.2	Φ22.2	Ф25.4
connections <sup>2</sup>	Gas pipe	mm	Ф44.5	Ф44.5	Φ50.8
Sound pressu	re level³	dB(A)	69	69	69
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340× 1760×825)×2	(1340×1760×825)×3	(1340×1760×825)×3
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410× 1945×890)×2	(1410×1945×890)×3	(1410×1945×890)×3
Net weight		kg	225+325×2	260+325×2	260+325×2
Gross weight		kg	245+350×2	285+350×2	285+350×2
Ambient temp range (Cooling	). operation g)	°C	-15 to 55	-15 to 55	-15 to 55

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

HP			86	88	90
Model name (	Combination unit	)	MVC-M2430WV2GN1	MVC-M2485WV2GN1	MVC-M2550WV2GN1
Combination t	type		26HP+30HP+30HP	28HP+30HP+30HP	30HP+30HP+30HP
Power supply		V/N/Hz	380-415/3/50(60)	380-415/3/50(60)	380-415/3/50(60)
	Connection	kW	243.0	248.5	255.0
	Capacity	kBtu/h	828.7	847.5	869.7
Cooling <sup>1</sup>	Power input	kW	72.2	75.1	79.2
	EER		3.37	3.31	3.22
Connected	Total capacity		50-130% of outdoor unit capacity	50-130% of outdoor unit capacity	50-130% of outdoor unit capacity
	Maximum quant	ity	64	64	64
	Туре		Scroll DC inverter	Scroll DC inverter	Scroll DC inverter
Compressor	Quantity		6	6	6
	Туре		DC	DC	DC
	Quantity		6	6	6
Fan	Static pressure	Pa	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)	0-20 (default); 20-120 (customized)
	Airflow rate	m³/h	66000	66000	66000
	Туре		R410A	R410A	R410A
Reirigerant	Factory charge	kg	15.4×3	15.4×3	15.4×3
Pipe	Liquid pipe	mm	Ф25.4	Φ25.4	Ф25.4
connections <sup>2</sup>	Gas pipe	mm	Ф50.8	Φ50.8	Ф50.8
Sound pressu	re level <sup>3</sup>	dB(A)	69	69	69
Net dimensions (W×H×D)		mm	(1340×1760×825)×3	(1340×1760×825)×3	(1340×1760×825)×3
Packed dimensions (W×H×D)		mm	(1410×1945×890)×3	(1410×1945×890)×3	(1410×1945×890)×3
Net weight		kg	325×3	325×3	325×3
Gross weight		kg	350×3	350×3	350×3
Ambient temp range (Cooling	o. operation g)	°C	-15 to 55	-15 to 55	-15 to 55

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

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## SMART IN ONE

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Note: Product specifications change from time to time as product improvements and developr from those in this document.

ISO

9001

ISO

14001

ISO

45001

**Compact size with modular design** perfectly suitable for limited installation spaces



### **OUTDO**OR UNITS

V8S VRF





#### **V8S VRF Lineup**

Outdoor Unit

#### 8-14HP



#### 26-48HP



#### 74-96







#### 16-24HP



#### 50-72HP



#### ΗP

#### **Outdoor Unit Functions**

		Vac	
	•: equipped as	standard; O: customization option;	V05
	HyperLink	Midea original communication bus chip greatly simplifies installation and saves installation cost	•
Key Technologies	SuperSense	18 sensors achieves the state of each part of the refrigerant pipeline can be known in the whole process	•
	Meta 2.0	Triple variable control to maximize the comfort and energy efficiency	•
	Zen air 2.0	Provides comfort and healthy air supply	•
	Doctor M 2.0	Intelligent diagnostic technology makes maintenance easier and more efficient	•
	Full DC inverter technology	All electrical components of outdoor and indoor units are DC power supply, improving electrical efficiency and achieving energy saving	•
'n	Enhanced Vapor Injection (EVI) compressor	Increases refrigerant circulation and improves both cooling and heating capacity	•
High Efficienc	Micro-channel refrigerant subcooling	The refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing the sound	•
	Low standby power consumption	The standby power consumption is as low as 3.5W	•
	60-step energy manage- ment	The system can be set 40% to 100% capacity output in 1% increments	•

		Vac	
	•: equipped a	V85	
h Reliability	Duty cycling	Equalizes the running time of the outdoor units in a multiple-unit system,significantly extending unit lifespan (available for combined unit)	•
	Backup operation (unit)	If one unit fails, the other units provide backup so that the system can continue operating (available for combined unit)	•
	Backup operation (fan motor)	If one fan motor fails, the other fan motor provide backup so that the system can continue operating	•
	Backup operation (sensor)	If one sensor fails, the virtual sensor provide backup so that the system can continue operating	•
	Precise oil control	Ensures all outdoor compressor oil is at a safe level, eliminating any compressor oil shortage problems.	•
	Heavy anti-corrosion protection	Can be customized with heavy anti-corrosion treatment for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life	Ο
Ï	UL anti-corrosion certificate	It has been certified by UL that our VRF outdoor unit can withstand 27 years of simulated severe corrosion under a salt contaminated traffic environment	0
	Micro-channel refrigerant cooling PCB	10 times higher than ordinary refrigerant pipe cooling efficiency	•
	Auto dust-clean function	Blows away accumulated dust on the outdoor unit, guaranteeing the unit operating stable in dusty environment	•
	Alarm output	In case of system malfunction, remote output error information, remind maintenance personnel timely maintenance	•
	Fire alarm input	In case of fire, receive fire information in time and stop the system immediately to avoid serious problems	•



#### **Outdoor Unit Functions**

	•: equipped a	V85	
	Silent mode	15-step silent mode selections provide more freedom and convenience to match the customer needs	•
	Humidity control	Combined with the optional humidity sensor, the room humidity can be controlled by 35% to 75%	0
ort	Intelligent defrosting technology	Calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting	•
Enhanced Comf	Auto cooling-heating changeover	Automatically selects cooling or heating mode to achieve the set temperature (available in changeover priority mode)	•
	Additional ambient temperature sensor temperature sensor the system is running in cooling or heating in auto priority mod ensuring indoor comfort		0
	0.1 °C control precision	Control precision of the sensor can reach 0.1°C, ensuring less room temperature fluctuation	•
	Multiple priority modes	10 priority modes meet the requirements of all scenarios	•
	Wide capacity range	Meets all customer requirements from small to large buildings	8-24HP (single) 26-96HP (combined)
on Range	Wide range of indoor units	Provides 12 types and more than 100 models of VRF indoor units to meet different application scenarios	•
Applicati	Wide operation range	Operates stably under extreme conditions	-15-55°C (C) -30-30°C (H)
Wide /	Long piping capability	Benefits for the system design, installation flexibility, as well as the less installation cost	•
	Auto addressing (ODU-IDU)	Distributes addresses to indoor units automatically, simplifying the installation	•
	Auto addressing (ODU-ODU)	Distributes addresses to slave outdoor units automatically, further simplifying the installation (available for combined unit)	•

		Voc	
	•: equipped a	as standard; O: customization option;	V85
	Automatic refrigerant charging	Makes installation and service easier and more efficient	0
	Automatic refrigerant recycling	Refrigerant can recycle to ODUs or IDUs and normal ODUs, making the maintenance easier and more efficient	•
	Bluetooth module	It can be used for fault information storage, operation parameter enquiry, system parameter setting, quick after-sales PCB replacement, indoor and outdoor units programme upgrade, etc., simplifying installation and maintenance.	0
	Digit display	4 digit 7-segment display can be intuitive for parameter setting, parameter check and error check	•
	High external static pressure	Up to 80Pa ESP allows easy handling in a variety of installation environments	0-35Pa ● 35-80Pa ○
n And Service	Arbitrary topology of communication wire	Supports any communication topology, greatly simplifies installation and reduces installation cost	•
	2-core non-polarity communication wiring between the indoor and outdoor units	Simplifies installation and reduces wiring failures	•
	Long communication wiring	Communication wiring up to 2000m makes installation more flexible	•
stallatic	Wide combination ratio	Combination ration can be extended to 50%-200% under certain conditions which can meet different project requirements	50-130%● 50-200% (for single unit system)○
Edsy III	Supports manual and automatic defrosting	Improves maintenance efficiency	•
	Supports manual and automatic oil return	Improves maintenance efficiency	•
	Easy software program upgrade	The software program can be upgraded via on-site USB and burning, or remotely via the web	•
	Flexible controller connection	Central controller and BMS gateway can connect to ODU at the same time, central controller can connect to ODU or IDU	•
	Refrigerant amount diagnosis	The unit can diagnose excessive or insufficient amounts of refrigerant, prompt maintenance personnel to check the system in time to avoid serious malfunction	•
	Easy system commissioning and checking	System commissioning and checking can easily be done on-site or remotely via the web	•
	Intelligent maintenance tool	Intelligent bluetooth after-sales kit can simplify maintenance and improve maintenance efficiency	Ο

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



## **NNOVATIVE TECHNOLOGIES**



# HyperLink New & Unique

SUperSonse New & Unique

**ETA 2.0** 



**D**හCTOR m. 2.0









#### W HyperLink New & Unique

Midea original communication bus chip greatly simplifies installation and saves installation cost.



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

#### Arbitrary Topology Communication

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



#### Super Anti-interference Capability

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



#### Flexible Power Supply for Indoor Units

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





The status of the refrigerant is known anywhere throughout the process, ensuring high **RELIABILITY** and **COMFORT**.



Up to 18 sensors are distributed throughout the refrigerant system, and the status of the refrigerant is known anywhere throughout the process, ensuring stable operation. At the same time, combined with the digital twin technology of the refrigerant system, a virtual sensor can be created in the event of a physical sensor failure, so that the system does not shut down in the event of a sensor failure, ensuring comfort.

#### Complete Sensors

The V8S VRF has the industry's most comprehensive range of 18 condition sensors with built-in data models for compressors, heat exchangers, throttling components and more. By analyzing sensor data in real time, it can sense the status of the refrigerant anywhere in the system. Thanks to the complete sensors, the refrigerant running state is clearly visible, so as to accurately diagnose the amount of refrigerant.



\*Thi

#### Virtual Sensor Backup

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

#### Refrigerant Amount Diagnosis\*



\*This function is available at the end of July 2022.



#### Midea ETA (META) 2.0

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



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



Refrigerant

Flow

#### **STEP 1:** Architectural space feature recognition

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



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



#### **STEP 2:** System refrigerant temperature determination

Variable Refrigerant Temperature

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



Automatic matching of the corresponding refrigerant temperature to the load.



#### **STEP 3:** Adaptive indoor airflow and refrigerant flow

Variable Indoor Airflow

Each indoor unit automatically adjusts the

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





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



#### 🖉 Zen Air 2.0

Further upgraded ZEN AIR technology to maximize COMFORT



0.5°C temperature adjustment, 7 fan speeds selection, sleep mode, silent mode, windless technology, high efficiency filter, a variety of sterilization device and other advanced technologies used in V8S Series VRF are dedicated to creating a quiet, comfortable and healthy indoor environment.

#### 360° Airflow

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



#### Individual Louver Control

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



#### Long Distance Air Delivery\*

The Four-way Cassette has an additional 50Pa static pressure for long airflow delivery and is capable of being used in spaces up to 4.5m in floor height.



\*This function is available as a customization option.

**Benefits** Quiet ≓€ Enhanced comfort Ø Healthy

#### 7 Fan Speeds

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



#### Sleep Mode

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



#### Innovative Puro-air Kit

Protectors of health and safety -rom Germany







st The world's first air conditioning sterilization product certification 99.9% Effective killing rate of white grape fungus 99.9% Effective killing rate of H1N1 98% Effective killing rate of natural bacteria



Ozone – Free UV leakage-Free

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

#### **Z** Doctor M 2.0

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



Based on a cloud-based platform of big data and artificial intelligence, the V8S Series VRF can monitor the operation status of each unit in real time, predict system faults in advance and provide data analysis for system maintenance. Intelligent Bluetooth module and special Bluetooth after-sales kit can further simplify maintenance and improve maintenance efficiency.

#### Intelligent Maintenance Tool

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



\* Bluetooth module is available as a customization option.

#### Real-time Monitoring of Operating Parameters

The V8S Series VRF synchronizes and stores all the unit parameters to the cloud through the data cloud gateway, including the running status, locking status, dirty blocking rate, all spot inspection parameters and so on. Users can query real-time and historical parameters on computers, tablets and mobile phones at any time.



#### Cloud-based Big Data Analytics

Midea V8S Series VRF transmits the system operation data to the cloud in real time through the data cloud gateway, and timely reminds the system of abnormal conditions through big data analysis, helping users to proactively avoid the risk of failure that has not yet occurred and minimize hidden problems.



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





## **High Efficiency**

#### **Z Full DC Inverter Technology**

#### Full DC Inverter for Outdoor Components

Wider frequency

adjustment range

(0)

Faster cooling and

heating

4

Higher energy efficiency

Full DC Inverter for Indoor Components

The V8S Series VRF uses full DC inverter compressor and fan motor to achieve high precision stepless speed adjustment according to system operation, and ensures that the system is always in optimum condition, operating more efficiently, more consistently and with less noise.





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

accurate temperature control, a more constant indoor temperature and higher energy efficiency.





#### **Z** Enhanced Vapor Injection (EVI) Compressor

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



Heating capacity

#### **Markowski Advanced Subcooling Technology**

The V8S Series VRF uses a micro-channel heat exchanger to further cool the refrigerant and the refrigerant system can achieve 15°C refrigerant subcooling, which can further improve the refrigerant heat transfer efficiency while reducing the sound of refrigerant flow.



#### **Z Low Standby Power Consumption**

Compared to the standby power consumption of traditional VRF of about 30W, the V8S Series VRF uses optimized control scheme to further reduce standby power consumption to as low as 3.5W.



29/30



#### **% 60-step Energy Management**

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



## **High Reliability**

#### **Z** Triple Backup

The V8S supports unit backup, fan backup and sensor backup. The triple backup ensures no shutdown in the event of a failure, further guaranteeing comfort.

#### Unit Backup 1

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



Intelligent load-bearing between units during normal operation



Standby unit backup operating with no system shutdown

#### Fan Backup 2

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



In normal operation, each fan runs on demand



another fan in case of failure of one fan

Failed fan Automatic backup operation of



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



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

#### **Duty Cycling**

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







2<sup>nd</sup> cycle



3<sup>rd</sup> cycle



4<sup>th</sup> cycle

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

#### **SuperSense**

V8S Series VRF uses up to 18 sensors for each outdoor unit and 4 sensors for each indoor unit. The operating status of the system refrigerant is clearly visible, which can realize intelligent analysis of operation parameters, intelligent error diagnosis and forecasting, and visualized energy saving.







#### **Precise Oil Control**

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



Compressor internal oil 2



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



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

#### **Markov 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.

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



#### **W UL Anti-Corrosion Certificate\***

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

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

#### **Z** Auto Dust-clean Function

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





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



## **Enhanced Comfort**

#### **M** Advanced Silent Technology

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



\*The entry and exit time of the night silent mode can be set in the wired controller.

#### **W Humidity Control, More Comfortable\***

The optional humidity control function can accurately control the indoor humidity. The default dehumidification mode ensures that the indoor humidity is always in the most comfortable range of 35~75%.



#### **M** Auto Cooling-heating Changeover

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



#### **10** Priority Modes

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



#### Additional Ambient Temperature Sensor\*

The V8S Series VRF can be equipped with an additional external ambient temperature sensor to determine whether the system is operating in cooling or heating in auto priority mode. For some installations, the ambient temperature sensor fixed on the unit cannot detect the true ambient temperature, resulting in the system operating in an inappropriate mode and affecting indoor comfort. The external ambient temperature sensor can detect the true outdoor ambient temperature, correctly judge whether the system is running in cooling or heating, ensuring indoor comfort.

\*This function is available as a customization option.





Temperature Sensor

## Wide Application Range

#### **Wide Capacity Range**

The capacity of one V8S Series VRF system is from 8HP to 96HP with up to 4 units combined, perfectly suited for small to large buildings.



#### **Wide Range of Indoor Units**

The V8S Series VRF offers 12 types of over 100 models of indoor units to meet different scenarios of applications such as offices, shopping malls, hotels, airports, schools, hospitals, etc.



#### **Wide Operation Range**



#### **M** Long Piping Capability

The total piping length of the V8S system can be up to 560m, the level difference between indoor and outdoor units can be up to 50m and the level difference between indoor units can be up to 30m, making the V8S Series VRF perfectly suitable for all buildings.

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

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

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

4 Level difference between IDUs: 30m

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



## **Easy Installation and** Service

#### **W** Free Wiring

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



#### **Space Saving**

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



#### External Static Pressure up to 80Pa\*

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



\*External static pressure above 35Pa is available as a

#### **Four-way Piping Connection**

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



#### **M** Auto Addressing

Addresses for all indoor units and combined outdoor units can be assigned automatically by the V8S system, further simplifying installation.



#### Matter Automatic Refrigerant Charging\*

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



#### **M** Automatic Refrigerant Recycling

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







#### **Maintenance Mode**

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



#### **Wide Combination Ratio**\*

Compared to traditional VRF with combination ratio of 50-130%, the V8S Series VRF can be extended to 50-200%, and the wider combination ratio allows for more flexible system configuration. The larger combination ratio can be applied to long-term part-load operation scenarios, allowing for further reduction in installation costs.





#### **Z** Easy Software Program Upgrade

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

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

#### **Smart Commissioning/Maintenance Tool**

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

#### Useful in the following situations:

- Installation
- Service maintenance

#### Main functions:

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

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





#### V8S (380-415V/3N/50(60)Hz)

НР				10	12	14		
Model			MV8S-252WV2GN1	MV8S-280WV2GN1	MV8S-335WV2GN1	MV8S-400WV2GN1		
Power supply		V/N/Hz		380-415/	380-415/3/50(60)			
	Consolita	kW	25.2	28	33.5	40		
	Capacity	kBtu/h	86.0	95.5	114.3	136.5		
Cooling	Power input	kW	5.8	7.5	8.0	11.2		
	EER		4.38	3.73	4.21	3.57		
		kW	27	31.5	37.5	45		
	Capacity	kBtu/h	92.1	107.5	128.0	153.5		
Heating <sup>2</sup>	Power input	kW	5.7	6.8	7.9	10.5		
	COP		4.78	4.67	4.78	4.29		
Connected	Total capacity		!	50-130% of out	door unit capacity			
indoor unit	Maximum quant	ity	13 16 20		20	23		
-	Туре		DC inverter					
Compressors	Quantity		1					
	Туре		DC					
	Quantity		2					
Fan motors	Airflow rate	m³/h	11800	12500	12500	12500		
	Static pressure	Pa	0-35 (standard); 35-80 (customized)					
	Туре			R41	0A			
Refrigerant	Factory charge	kg	6.1	6.1	6.4	7.4		
	Liquid pipe	mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7		
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø25.4	Ø25.4	Ø25.4	Ø25.4		
Sound pressure lev	el <sup>4</sup>	dB(A)	56	57	58	59		
Net dimensions (W	XHXD)	mm	1130×1760×445	1130×1760×445	1130×1760×445	1130×1760×445		
Packed dimensions	(W×H×D)	mm	1210×1916×597	1210×1916×597	1210×1916×597	1210×1916×597		
Net weight		kg	177	177	180	182		
Gross weight		kg	191	191	194	196		
Ambient temp	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55		
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30		

НР					20	22	24
Model							
Power supply		V/N/Hz			380-415/3/50(60)		
	Capacity	kW	45	50	56	61.5	67
Cooling	Capacity	kBtu/h	153.5	170.6	191.1	209.8	228.6
Cooling	Power input	kW	11.6	12.8	15.6	18.1	19.7
	EER		3.88	3.91	3.59	3.40	3.41
	Capacity	kW	50	56.5	63	69	75
Lipsting?	Capacity	kBtu/h	170.6	192.8	215.0	235.4	255.9
Heating	Power input	kW	11.9	13.5	14.2	16.9	17.5
	COP		4.20	4.19	4.44	4.08	4.29
Connected	Total capacity			50-130	)% of outdoor unit c	apacity	
indoor unit	Maximum quant	ity	26	29	33	36	39
C	Туре				DC inverter	,	
Compressors	Quantity		1		1		1
	Туре		DC				
	Quantity		2		2		2
Fan motors	Airflow rate	m³/h	18500	20000	18500	19000	19000
	Static pressure	Pa	0-35 (standard); 35-80 (customized)				
Defrigerent	Туре		R410A				
Reingerant	Factory charge	kg	8	8	8.5	8.5	9.7
Dipo connectione3	Liquid pipe	mm	Ø15.9	Ø15.9	Ø15.9	Ø15.9	Ø15.9
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø28.6	Ø28.6	Ø28.6	Ø28.6	Ø28.6
Sound pressure leve	el <sup>4</sup>	dB(A)	60	61	61	62	64
Net dimensions (W	×H×D)	mm	1250×1760×445	1250×1760×445	1250×1760×445	1250×1760×445	1250×1760×445
Packed dimensions (W×H×D) mm		mm	1330×1916×597	1330×1916×597	1330×1916×597	1330×1916×597	1330×1916×597
Net weight		kg	208	208	228	228	233
Gross weight		kg	223	223	243	243	248
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	-30 to 30	-30 to 30

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 5m with zero level difference. 3. Diameters given are those of the unit's stop valves. 4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

#### **Specifications** V8S (380-415V/3N/50(60)Hz)

HP			26	28	30	
Model (Combination unit)		MV8S-735WV2GN1	MV8S-800WV2GN1	MV8S-850WV2GN1		
Combination type			12HP+14HP 14HP+14HP 14HP+16HP			
Power supply		V/N/Hz		380-415/3/50(60)		
	Capacity	kW	73.5	80.0	85.0	
Cooling		kBtu/h	250.8	273.0	290.0	
Cooling	Power input	kW	19.2	22.4	22.8	
	EER		3.83	3.57	3.73	
	Capacity	kW	82.5	90.0	95.0	
Lloating?	Capacity	kBtu/h	281.5	307.1	324.1	
Heating-	Power input	kW	18.4	21.0	22.4	
	COP		4.48	4.29	4.24	
Connected	Total capacity			50-130% of outdoor unit capac	sity	
indoor unit	Maximum quantit	У	43	46	50	
<u></u>	Туре			DC inverter		
Compressor	Quantity		2	2	2	
Fan	Туре		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		4	4	4	
Fan motors	Airflow rate	m³h	25000	25000	31000	
	Static pressure Pa		0-35 (standard); 35-80 (customized)			
	Туре			R410A		
Refrigerant	Factory charge	kg	6.4+7.4	7.4×2	7.4+8	
	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1	
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø31.8	Ø31.8	Ø31.8	
Sound pressure lev	vel <sup>4</sup>	dB(A)	62	62	63	
Net dimensions (W	V×H×D)	mm	(1130×1760×445)×2	(1130×1760×445)×2	(1130×1760×445)+(1250×1760×445	
Packed dimension	s (W×H×D)	mm	(1210×1916×597)×2	(1210×1916×597)×2	(1210×1916×597)+(1330×1916×597	
Net weight		ka	180+182	182×2	182+208	
Gross weight		ka	194+196	196×2	196+223	
Ambient temp	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	
	1	0(88)				
НР			32	34	36	
Model (Combination			MV8S-900WV2GN1			
Combination type			14HP+18HP	16HP+18HP	18HP+18HP	
Power supply		V/N/Hz		380-415/3/50(60)		
		kW	90.0	95.0	100.0	
	Capacity	kBtu/h	3071	.3241	3412	
Cooling	Power input	kW	24.0	24.4	25.6	
	FFR		3 75	3.89	3.91	
		kW	101.5	106.5	113.0	
	Capacity	kBtu/h	346.3	363.4	385.6	
Heating <sup>2</sup>	Power input	kW	24.0	25.4	27.0	
		1.1.1.1	2.00	20.1	27.0	

Combination type			14HP+18HP	16HP+18HP	18HP+18HP	
Power supply		V/N/Hz	380-415/3/50(60)			
	Connecitor	kW	90.0	95.0	100.0	
Cooling	Capacity	kBtu/h	307.1	324.1	341.2	
Cooling	Power input	kW	24.0	24.4	25.6	
	EER		3.75	3.89	3.91	
	Concesitor	kW	101.5	106.5	113.0	
Linetine?	Capacity	kBtu/h	346.3	363.4	385.6	
Heating-	Power input	kW	24.0	25.4	27.0	
	COP		4.23	4.19	4.19	
Connected	Total capacity		50-130% of outdoor unit capacity			
indoor unit	Maximum quantity		53	56	59	
-	Туре			DC inverter		
Compressor	Quantity		2	2	2	
Fan	Туре		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		4	4	4	
Fan motors	Airflow rate	m³h	32500	38500	40000	
	Static pressure Pa		0-35 (standard); 35-80 (customized)			
5.6.	Туре		R410A			
Retrigerant	Factory charge	kg	7.4+8	8×2	8×2	
Dina connections?	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1	
Pipe connections <sup>o</sup>	Gas pipe	mm	Ø31.8	Ø31.8	Ø38.1	
Sound pressure le	vel <sup>4</sup>	dB(A)	63	64	64	
Net dimensions (V	/×H×D)	mm	(1130×1760×445)+(1250×1760×445)	(1250×1760×445)×2	(1250×1760×445)×2	
Packed dimension	s (W×H×D)	mm	(1210×1916×597)+(1330×1916×597)	(1330×1916×597)×2	(1330×1916×597)×2	
Net weight		kg	182+208	208×2	208×2	
Gross weight		kg	196+223	223×2	223×2	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference.
 Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 5m with zero level difference.
 Diameters given are those for the pipe connecting the outdoor unit combination to the first indoor branch joint for systems with total equivalent lengths between the farthest IDU and the first outdoor branch joint of less than 90m. For systems with lengths of 90m or longer, please refer to the V8S Series Engineering Data Book for connection piping diameters.
 Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

#### V8S (380-415V/3N/50(60)Hz)

НР			38	40	42
Model (Combination					
Combination type			14HP+24HP	18HP+22HP	18HP+24HP
Power supply		V/N/Hz		380-415/3/50(60)	
	Canaaitu	kW	107.0	111.5	117.O
- H - 1	Capacity	kBtu/h	365.1	380.4	399.2
Cooling	Power input	kW	30.9	30.9	32.5
	EER		3.46	3.61	3.60
	Canaaitu	kW	120.0	125.5	131.5
	Capacity	kBtu/h	409.4	428.2	448.7
Heating <sup>2</sup>	Power input	kW	28.0	30.4	31.0
	COP		4.29	4.13	4.24
Connected	Total capacity		5	50-130% of outdoor unit capacity	ý
indoor unit	Maximum quantity	/	63	64	64
Сарариясани	Туре			DC inverter	
Compressor	Quantity		2	2	2
Fan	Туре		Propeller	Propeller	Propeller
	Туре		DC	DC	DC
_	Quantity		4	4	4
Fan motors	Airflow rate	m³/h	31500	39000	39000
	Static pressure Pa		0-35 (standard); 35-80 (customized)		
Defiinenst	Туре		R410A		
Retrigerant	Factory charge	kg	7.4+9.7	8+8.5	8+9.7
	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø38.1	Ø38.1	Ø38.1
Sound pressure lev	el <sup>4</sup>	dB(A)	65	65	66
Net dimensions (W	XHXD)	mm	(1130×1760×445)+(1250×1760×445)	(1250×1760×445)×2	(1250×1760×445)×2
Packed dimensions	(W×H×D)	mm	(1210×1916×597)+(1330×1916×597)	(1330×1916×597)×2	(1330×1916×597)×2
Net weight		kg	182+233	208+228	208+233
Gross weight		kg	196+248	223+243	223+248
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30

НР			44	46	48	
Model (Combination						
Combination type			22HP+22HP	22HP+24HP	24HP+24HP	
Power supply		V/N/Hz		380-415/3/50(60)		
	Capacity	kW	123.0	128.5	134.0	
	Capacity	kBtu/h	419.7	438.4	457.2	
Cooling	Power input	kW	36.2	37.8	39.4	
	EER		3.40	3.40	3.40	
	Capacity	kW	138.0	144.0	150.0	
	Capacity	kBtu/h	470.9	491.3	511.8	
Heating <sup>2</sup>	Power input	kW	33.8	34.4	35.0	
	COP		4.08	4.19	4.29	
Connected	Total capacity		50-130% of outdoor unit capacity			
indoor unit	Maximum quantity	/	64			
Comprossor	Туре			DC inverter		
Compressor	Quantity		2	2	2	
Fan	Туре		Propeller	Propeller	Propeller	
	Туре		DC	DC	DC	
	Quantity		4	4	4	
Fan motors	Airflow rate	m³/h	38000	38000	38000	
	Static pressure Pa		0-35 (standard); 35-80 (customized)			
Pofrigorant	Туре		R410A			
Reingerant	Factory charge	kg	8.5×2	8.5+9.7	9.7×2	
Dina connections <sup>3</sup>	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1	
Pipe connections	Gas pipe	mm	Ø38.1	Ø38.1	Ø38.1	
Sound pressure lev	el <sup>4</sup>	dB(A)	65	66	67	
Net dimensions (W	XHXD)	mm	(1250×1760×445)×2	(1250×1760×445)×2	(1250×1760×445)×2	
Packed dimensions (W×H×D) r		mm	(1330×1916×597)×2	(1330×1916×597)×2	(1330×1916×597)×2	
Net weight		kg	228×2	228+233	233×2	
Gross weight		kg	243×2	243+248	248×2	
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55	
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30	

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 lengths between the farthest IDU and the first outdoor branch joint of less than 90m. For systems with lengths of 90m or longer, please refer to the V8S Series Engineering Data Book for connection piping diameters. 4. Sound pressure level is measured at a position 1m in front of the unit and 13m above the floor in a semi-anechoic chamber.

#### **Specifications** V8S (380-415V/3N/50(60)Hz)

НР			50	52	54					
Combination type			14HP+18HP+18HP	14HP+14HP+24HP	18HP+18HP+18HP					
Power supply		V/N/Hz		380-415/3/50(60)						
	Canaaitu	kW	140.0	147.0	150.0					
Cooling	Capacity	kBtu/h	477.7	501.6	511.8					
Cooling	Power input	kW	36.8	42.1	38.4					
	EER		3.80	3.49	3.91					
	Conceitu	kW	158.0	165.0	169.5					
Lleating?	Capacity	kBtu/h	539.1	563.0	578.3					
Heating-	Power input	kW	37.5	38.5	40.5					
	COP		4.21	4.29	4.19					
Connected	nnected Total capacity			50-130% of outdoor unit capacity						
indoor unit	Maximum quantity	/		64						
Comprossor	Туре			DC inverter						
Compressor	Quantity		3	3	3					
Fan	Туре		Propeller	Propeller	Propeller					
	Туре		Propeller P DC	DC	DC					
	Quantity		6	6	6					
Fan motors	Airflow rate	m³/h	52500 44000 6000							
	Static pressure	Pa	0-35 (standard); 35-80 (customized)							
Defiinent	Туре			R410A						
Reingerant	Factory charge	kg	7.4+8×2	7.4×2+9.7	8×3					
Din	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1					
Pipe connections <sup>5</sup>	Gas pipe	mm	Ø38.1	Ø38.1	Ø38.1					
Sound pressure lev	/el <sup>4</sup>	dB(A)	65	66	66					
Net dimensions (W	/×H×D)	mm	(1130×1760×445)+(1250×1760×445)×2	(1130×1760×445)×2+(1250×1760×445)	(1250×1760×445)×3					
Packed dimensions	s (W×H×D)	mm	(1210×1916×597)+(1330×1916×597)×2	(1210×1916×597)×2+(1330×1916×597)	(1330×1916×597)×3					
Net weight		kg	182+208×2	182×2+233	208×3					
Gross weight		kg	196+223×2	196×2+248	223×3					
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55					
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30					

НР			56	58	60				
Model (Combination									
Combination type			14HP+18HP+24HP	18HP+18HP+22HP	18HP+18HP+24HP				
Power supply		V/N/Hz		380-415/3/50(60)					
	Canaaitu	kW	157.0	161.5	167.0				
Cooling <sup>1</sup>	Capacity	kBtu/h	535.7	551.0	569.8				
Cooling	Power input	kW	43.7	43.7	45.3				
	EER		3.59	3.70	3.69				
	Canaaitu	kW	176.5	182.0	188.0				
Heating <sup>2</sup>	Capacity	kBtu/h	602.2	621.0	641.5				
riedding	Power input	kW	41.5	43.9	44.5				
	COP		4.25	4.15	4.22				
Connected	Total capacity			50-130% of outdoor unit capacit	У				
indoor unit	Maximum quantity	У	64 64						
Comprossor	Туре			DC inverter					
Compressor	Quantity		3	3	3				
Fan	Туре		Propeller	Propeller	Propeller				
	Туре		DC	3     3       ller     Propeller       DC     DC       6     6	DC				
	Quantity		6	6	6				
Fan motors	Airflow rate	m³/h	51500	59000					
	Static pressure	Pa	0-35 (standard); 35-80 (customized)						
5.61	Туре			R410A					
Retrigerant	Factory charge	kg	7.4+8+9.7	8×2+8.5	8×2+9.7				
Dine connections3	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1				
Pipe connections	Gas pipe	mm	Ø41.2	Ø41.2	Ø41.2				
Sound pressure lev	/el <sup>4</sup>	dB(A)	67	66	67				
Net dimensions (W	/×H×D)	mm	(1130×1760×445)+(1250×1760×445)×2	(1250×1760×445)×3	(1250×1760×445)×3				
Packed dimensions	s (W×H×D)	mm	(1210×1916×597)+(1330×1916×597)×2	(1330×1916×597)×3	(1330×1916×597)×3				
Net weight		kg	182+208+233	208×2+228	208×2+233				
Gross weight	ght kg		196+223+248	223×2+243	223×2+248				
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55				
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30				

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 lengths between the farthest IDU and the first outdoor branch joint of less than 90m. For systems with lengths of 90m or longer, please refer to the V8S Series Engineering Data Book for connection piping diameters. 4. Sound pressure level is measured at a position 1m in front of the unit and 13m above the floor in a semi-anechoic chamber.

#### V8S (380-415V/3N/50(60)Hz)

НР			62	64	66				
Model (Combination									
Combination type			18HP+22HP+22HP	18HP+22HP+24HP	22HP+22HP+22HP				
Power supply		V/N/Hz		380-415/3/50(60)					
	Conscitu	kW	173.0	178.5	184.5				
Cooling <sup>1</sup>	Capacity	kBtu/h	590.3	609.0	629.5				
Heating <sup>2</sup>	Power input	kW	49.0	50.6	54.3				
	EER		3.53	3.53	3.40				
	Conscitu	kW	194.5	200.5	207.0				
Heating <sup>2</sup>	Capacity	kBtu/h	663.6	684.1	706.3				
Heating	Power input	kW	47.3	47.9	50.7				
	COP		4.11	4.19	4.08				
Connected	Total capacity			50-130% of outdoor unit capacity	·				
indoor unit	Maximum quantity	/	64						
Caracara	Туре			DC inverter					
Compressor Quantity			3	3	3				
Fan	Туре		Propeller	Propeller	Propeller				
	Туре		DC	3     3       Propeller     Propeller       DC     DC	DC				
Fan Fan motors	Quantity		6	6	6				
	Airflow rate	m³/h	58000	57000					
	Static pressure	Pa	0-35 (standard); 35-80 (customized)						
Deficiency	Туре			R410A					
Retrigerant	Factory charge	kg	8+8.5×2	8+8.5+9.7	8.5×3				
Dipo connections <sup>3</sup>	Liquid pipe	mm	Ø19.1	Ø19.1	Ø19.1				
Fipe connections	Gas pipe	mm	Ø41.2	Ø41.2	Ø41.2				
Sound pressure lev	/el <sup>4</sup>	dB(A)	66	67	67				
Net dimensions (W	/×H×D)	mm	(1250×1760×445)×3	(1250×1760×445)×3	(1250×1760×445)×3				
Packed dimensions	s (W×H×D)	mm	(1330×1916×597)×3	(1330×1916×597)×3	(1330×1916×597)×3				
Net weight		kg	208+228×2	208+228+233	228×3				
Gross weight	ight kg		223+243×2	223+243+248	243×3				
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55				
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30				

НР			68	70	72				
Model (Combination			MV/85-1900W/V/2GN1	MV85-1955W/V2GN1	MV85-2010W/V2GN1				
Combination type			22HP+22HP+24HP	22HP+2/HP+2/HP	2/HP+2/HP+2/HP				
Power supply		V/N/Hz		380-415/3/50(60)					
		kW	190.0	195.5	201.0				
	Capacity	kBtu/h	648.3	667.0	685.8				
Cooling <sup>1</sup>	Power input	kW	55.9	57.5	59.1				
	EER		3.40	3.40	3.40				
		kW	213.0	219.0	225.0				
	Capacity	kBtu/h	726.8	747.2	767.7				
Heating <sup>2</sup>	Power input	kW	51.3	51.9	52.5				
	COP		4.15	4.22	4.29				
Connected Total capacity				ý					
indoor unit	Maximum quantit	y		64					
Capacitacian	Туре			DC inverter					
Compressor	Compressor Quantity		3	3	3				
Fan	Туре		Propeller	Propeller	Propeller				
	Туре		DC	DC	DC				
-an Fan motors	Quantity		6	6	6				
Fan motors	Airflow rate	m³/h	57000	57000	57000				
	Static pressure	Pa	0-35 (standard); 35-80 (customized)						
Defining	Туре			R410A					
Retrigerant	Factory charge	kg	8.5×2+9.7	8.5+9.7×2	9.7×3				
Dipo consections <sup>3</sup>	Liquid pipe	mm	Ø22.2	Ø22.2	Ø22.2				
Pipe connections <sup>5</sup>	Gas pipe	mm	Ø44.5	Ø44.5	Ø44.5				
Sound pressure lev	vel <sup>4</sup>	dB(A)	68	68	69				
Net dimensions (W	(×H×D)	mm	(1250×1760×445)×3	(1250×1760×445)×3	(1250×1760×445)×3				
Packed dimensions	acked dimensions (W×H×D)		(1330×1916×597)×3	(1330×1916×597)×3	(1330×1916×597)×3				
Net weight		kg	228×2+233	228+233×2	233×3				
Gross weight kg		kg	243×2+248	243+248×2	248×3				
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55				
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30				

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 lengths between the farthest IDU and the first outdoor branch joint of less than 90m. For systems with lengths of 90m or longer, please refer to the V8S Series Engineering Data Book for connection piping diameters. 4. Sound pressure level is measured at a position 1m in front of the unit and 13m above the floor in a semi-anechoic chamber.

#### **Specifications**

#### V8S (380-415V/3N/50(60)Hz)

НР			74	76	78					
Model (Combination										
Combination type			14HP+18HP+18HP+24HP	18HP+18HP+18HP+22HP	18HP+18HP+18HP+24HP					
Power supply		V/N/Hz		380-415/3/50(60)						
	Conneity	kW	207.0	211.5	217.0					
Cooling <sup>1</sup>	Capacity	kBtu/h	706.3	721.6	740.4					
cooling	Power input	kW	56.5	56.5	58.1					
	EER		3.66	3.74	3.73					
	Conneity	kW	233.0	238.5	244.5					
Heating <sup>2</sup>	Capacity	kBtu/h	795.0	813.8	834.2					
riedting	Power input	kW	55.0	57.4	58.0					
	COP		4.24	4.16	4.22					
Connected	Total capacity		50	D-130% of outdoor unit capacity						
indoor unit	Maximum quantity	1		64						
Comprossor	Compressor Type			DC inverter						
Compressor	Quantity		4	4	4					
Fan	Туре		Propeller	Propeller	Propeller					
	Туре		DC	4     4       Propeller     Propeller       DC     DC       8     8	DC					
	Quantity		8	8	8					
Fan motors	Airflow rate	m³/h	71500 79000 79000							
	Static pressure	Pa	0-35 (standard); 35-80 (customized)							
Defrigerent	Туре			R410A						
Reingerant	Factory charge	kg	7.4+8×2+9.7	8×3+8.5	8×3+9.7					
Pipe connections <sup>3</sup>	Liquid pipe	mm	Ø22.2	Ø22.2	Ø22.2					
Fipe connections	Gas pipe	mm	Ø44.5	Ø44.5	Ø44.5					
Sound pressure lev	/el <sup>4</sup>	dB(A)	68	67	68					
Net dimensions (W	/×H×D)	mm	(1130×1760×445)+(1250×1760×445)×3	(1250×1760×445)×4	(1250×1760×445)×4					
Packed dimensions	$s(W \times H \times D)$	mm	(1210×1916×597)+(1330×1916×597)×3	(1330×1916×597)×4	(1330×1916×597)×4					
Net weight		kg	182+208×2+233	208×3+228	208×3+233					
Gross weight		kg	196+223×2+248	223×3+243	223×3+248					
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55					
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30					

НР			80	82	84				
Model (Combination									
Combination type			18HP+18HP+22HP+22HP	18HP+18HP+22HP+24HP	18HP+18HP+24HP+24HP				
Power supply		V/N/Hz		380-415/3/50(60)					
	Conscitu	kW	223.0	228.5	234.0				
Cooling	Capacity	kBtu/h	760.9	779.6	798.4				
Cooling	Power input	kW	61.8	63.4	65.0				
	EER		3.61	3.60	3.60         3.60           257.0         263.0           876.9         897.4           61.4         62.0           4.19         4.24				
	Conscitu	kW	251.0	257.0	263.0				
Lloating?	Capacity	kBtu/h	856.4	876.9	897.4				
Healing-	Power input	kW	60.8	61.4	62.0				
	COP		4.13	4.19	4.24				
Connected	Total capacity			50-130% of outdoor unit capacity	/				
indoor unit	Maximum quantity	<i>y</i>	64						
Comprossor	Туре			DC inverter					
Compressor	Quantity		4	4	4				
Fan	Туре		Propeller	Propeller	Propeller				
	Туре		DC	Propeller Propeller DC DC					
	Quantity		8	8	8				
Fan motors	Airflow rate	m³/h	78000	78000 78000					
	Static pressure	Pa	0-35 (standard); 35-80 (customized)						
D. (	Туре			R410A					
Retrigerant	Factory charge	kg	8×2+8.5×2	8×2+8.5+9.7	8×2+9.7×2				
Dia a construction of	Liquid pipe	mm	Ø22.2	Ø22.2	Ø22.2				
Pipe connections <sup>3</sup>	Gas pipe	mm	Ø44.5	Ø44.5	Ø50.8				
Sound pressure lev	/el <sup>4</sup>	dB(A)	68	68	69				
Net dimensions (W	(×H×D)	mm	(1250×1760×445)×4	(1250×1760×445)×4	(1250×1760×445)×4				
Packed dimensions	ensions (W×H×D) mm		(1330×1916×597)×4	(1330×1916×597)×4	(1330×1916×597)×4				
Net weight		kg	208×2+228×2	208×2+228+233	208×2+233×2				
Gross weight		kg 223×		223×2+243+248	223×2+248×2				
Ambient temp.	emp. Cooling °C(DB)		-15 to 55	-15 to 55	-15 to 55				
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30				

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 lengths between the farthest IDU and the first outdoor branch joint of less than 90m. For systems with lengths of 90m or longer, please refer to the V8S 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.

#### **Specifications** V8S (380-415V/3N/50(60)Hz)

HP Model (Combination	unit)		<b>86</b> MV8S-2400WV2GN1	<b>88</b> MV8S-2460WV2GN1	<b>90</b> MV8S-2515WV2GN1					
Combination type			18HP+22HP+22HP+24HP	22HP+22HP+22HP+22HP	22HP+22HP+22HP+24HP					
Power supply		V/N/Hz		380-415/3/50(60)						
		kW	240.0	246.0	251.5					
Cooling	Capacity	kBtu/h	818.9	839.4	B8         90           0WV2CNI         XV9S-2515WV2CNI           +22HP+22HP         22HP+22HP+22HP+24HP           /3/50(60)					
Cooling	Power input	kW	68.7	72.4						
	EER	1	3.49	3.40						
	Capacity	kW	269.5	276.0	282.0					
Heating <sup>2</sup>	Capacity	kBtu/h	919.5	941.7	962.2					
Tiedting	Power input	kW	64.8	67.6	68.2					
	COP	1	4.16	4.08	4.13					
Connected	Total capacity			50-130% of outdoor unit capacit	У					
indoor unit	Maximum quantity	/		64						
	Туре			DC inverter						
Compressor	Quantity		4	4	4					
Fan	Туре		Propeller	4 4 Propeller Propeller						
	Туре		DC	64       DC inverter       4     4       Propeller     Propeller       DC     DC       8     8       76000     76000						
	Quantity		8	8	8					
Fan motors	Airflow rate	m³/h	77000 76000 76000							
	Static pressure	Pa	0-	-35 (standard); 35-80 (customized)						
Defiinement	Туре	1		R410A						
Refrigerant	Factory charge	kg	8+8.5×2+9.7	8.5×4	8.5×3+9.7					
Dipe connections <sup>3</sup>	Liquid pipe	mm	Ø22.2	Ø22.2	Ø25.4					
ripe connections	Gas pipe	mm	Ø50.8	Ø50.8	Ø50.8					
Sound pressure lev	el4	dB(A)	68	68	69					
Net dimensions (W	(×H×D)	mm	(1250×1760×445)×4	(1250×1760×445)×4	(1250×1760×445)×4					
Packed dimensions	ensions (W×H×D) mm		(1330×1916×597)×4	(1330×1916×597)×4	(1330×1916×597)×4					
Net weight		kg	208+228×2+233	228×4	228×3+233					
Gross weight	ss weight kg 223+243×2+248 243×4		243×3+248							
Ambient temp.	Cooling	°C(DB)	-15 to 55	-15 to 55	-15 to 55					
operation range	Heating	°C(DB)	-30 to 30 -30 to 30		-30 to 30					

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 lengths between the farthest IDU and the first outdoor branch joint of less than 90m. For systems with lengths of 90m or longer, please refer to the V8S Series Engineering Data Book for connection piping diameters. 4. Sound pressure level is measured at a position 1m in front of the unit and 13m above the floor in a semi-anechoic chamber.

#### **Specifications** V8S (380-415V/3N/50(60)Hz)

HP Model (Combination (	unit)		<b>92</b> MV8S-2570WV2GN1	<b>94</b> MV8S-2625WV2GN1	<b>96</b> MV8S-2680WV2GN1				
Combination type			22HP+22HP+24HP+24HP	22HP+24HP+24HP+24HP	24HP+24HP+24HP+24HP				
Power supply		V/N/Hz		380-415/3/50(60)					
	Capacity kW kBtu/		257.0	262.5	268.0				
Cooling	Capacity	kBtu/h	876.9	895.7	914.4				
Cooling	Power input	kW	75.6	77.2	78.8				
	EER		3.40	3.40	3.40				
	<b>C</b> 1	kW	288.0	294.0	300.0				
Heating <sup>2</sup>	Capacity	kBtu/h	982.7	1003.1	1023.6				
Treating	Power input	kW	68.8	69.4	70.0				
	COP		4.19	4.24	4.29				
Connected	Total capacity			50-130% of outdoor unit capacit	У				
indoor unit	Maximum quantity	/		64					
Carrier	Туре								
Compressor	Quantity		4	4	4				
Fan	Туре		Propeller	Propeller	Propeller				
	Туре		DC	DC	DC inverter44PropellerPropellerDCDC887600076000				
	Quantity		8	8	8				
Fan motors	Airflow rate	m³/h	76000 76000 76000						
	Static pressure	Pa	0-35 (standard); 35-80 (customized)						
Defiinement	Туре	:		R410A					
Reingerant	Factory charge	kg	8.5×2+9.7×2	8.5+9.7×3	9.7×4				
Pipe connections <sup>3</sup>	Liquid pipe	mm	Ø25.4	Ø25.4	Ø25.4				
	Gas pipe	mm	Ø50.8	Ø50.8	Ø50.8				
Sound pressure lev	el <sup>4</sup>	dB(A)	69	70	70				
Net dimensions (W	×H×D)	mm	(1250×1760×445)×4	(1250×1760×445)×4	(1250×1760×445)×4				
Packed dimensions	(W×H×D)	mm	(1330×1916×597)×4	(1330×1916×597)×4	(1330×1916×597)×4				
Net weight		kg	228×2+233×2	228+233×3	233×4				
Gross weight	ross weight mbient temp. Cooling		243×2+248×2	243+248×3	248×4				
Ambient temp.			-15 to 55	-15 to 55	-15 to 55				
operation range	Heating	°C(DB)	-30 to 30	-30 to 30	-30 to 30				

Notes: 1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference. 2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 lengths between the farthest IDU and the first outdoor branch joint of less than 90m. For systems with lengths of 90m or longer, please refer to the V8S Series Engineering Data Book for connection piping diameters. 4. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

# **Indoor Unit**

## SMART IN ONE

#### Midea Building Technologies Division

#### Midea Group

Add.: Midea Headquarters Building, 6 Midea Avenue, Shunde, Foshan, Guangdong, China Postal code: 528311

mbt.midea.com www.midea-group.com tsp.midea.com

Midea reserves the right to change the specifications of the product, and to withdraw or replace products without prior notification or public announcement. Midea is constantly developing and improving its products.







#### **Midea MBT**

Midea MBT (Midea Building Technologies) is a key division of the Midea Group, a leading provider of com-



4 production bases can achieve fast delivery 



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







construction

Performance

#### All products can be visualized and digitalized throughout entire process

Noise



 ${\bf 3}$  businesses make up the core of Midea intelligent building solutions 





Environmenta Simulation



long-lasting operation



#### **APPLICATION SOLUTIONS**

#### **Office Complexes**

#### Enjoy comfort while working

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



#### **Hotels & Shopping Malls**

#### Increase your business, not your bills

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

#### **Residential Apartments**

#### One for every home

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

#### Hospitals/ Schools/ Airports

#### Meeting all expectations

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











## Indoor Unit

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One-Way Cassette Two-Way Cassette Compact Four-Way Cassette Four-Way Cassette Arc Duct Medium Static Pressure Duct High Static Pressure Duct Wall Mounted Floor Standing



#### **Indoor Unit Lineup**

#### One-Way Cassette





- Automatic anti-condensation
- Multiple Steps Vertical Swing
- Built-in 1200mm high-lift drain pump(Digital feedback DC water pump)

#### ■ Two-Way Cassette





- Multiple Steps Vertical Swing
- Built-in 1200mm high-lift drain pump(Digital feedback DC water pump)



#### Compact Four-Way Cassette



- 575mm compact body size • 360° airflow
- Individual louver control
- 3.5m high ceiling installation • Built-in 1200mm high-lift drain pump
- Optional medium efficiency filter
- Optional plasma sterilization module



#### **Four-Way Cassette**





- 360° airflow, uniform air flow and temperature distribution
- Individual louver control
- Built-in 1200mm high-lift drain pump
- Optional medium efficiency filter
- Optional plasma sterilization module

#### ■ Arc Duct



- 199mm ultra-thin height (all models) • 450mm ultra-narrow depth (all models)
- Static pressure adaption, constant air volume
- supply
- Built-in 1200mm high-lift drain pump
- Optional medium efficiency filter
- Optional plasma sterilization module



#### Medium Static Pressure Duct





#### **High Static Pressure Duct**

- 5.6kW-16kW ESP up to 250Pa • 20kW-56kW ESP up to 400Pa
- 299mm ultra-thin height (5.6kW-16kW)
- Static pressure adaption, constant air volume supply
- Built-in 1200mm high-lift drain pump
- Optional HEPA filter with H13 rating
- Optional medium to high efficiency filter

#### Wall Mounted

- Supports installation close to the ceiling to free
- up space Bi-directional Coanda airflow, enhanced comfort
- Quiet operation
- Optional built-in 1200mm high-lift drain pump
- Optional plasma sterilization module

#### Floor Standing





- ESP up to 160Pa (all models)
- 245mm ultra-thin height (all models)
- Static pressure adaption, constant air
- volume supply
- Built-in 1200mm high-lift drain pump
- Optional HEPA filter with H12 rating
- Optional medium to high efficiency filter
- Optional plasma sterilization module







- ESP up to 60Pa(F3 concealed model)
- Three appearance options to meet different • installation requirement
- DC fan creates a more quiet and comfortable environment
- 0.5°C/1°C Setting Temperature Adjustment

#### Indoor Unit Lineup

kW		1.5	1.8	2.2	2.8	3.6	4.5	5.6	6.3	7.1	8.0	9.0	10.0	11.2	12.5	14.0	16.0	18.0
Btu/h		5.1 k	6.1 k	75 k	9.6 k	123 k	15.4 k	19.1 k	21.5 k	24.2 k	27.3 k	30.7 k	34.1 k	382 k	42.7 k	47.8 k	54.6 k	61.4 k
	One-Way Cassette		•	•	•	•	•	•		•								
	Two-Way Cassette			•	•	•	•	•		•								
Cassette	Compact Four-Way Cassette	•		•	•	•	•	•	•									
	Four-Way Cassette				•	•	•	•		•	•	•	•	•		٠		
	Four-Way Cassette																•	•



0	10.0	11.2	12.5	14.0	16.0	18.0	20.0	22.4	25.2	28.0	33.5	40.0	45.0	56.0	
).7 K	34.1 k	38.2 k	42.7 k	47.8 k	54.6 k	61.4 k	68.3 K	76.5 K	86.0 K	95.6 K	114.3 K	136.5 K	153.6 K	191.1 K	
		•													
		•		•	•										
		•	•	•	•		•	•	•	•	•	•	•	•	

#### **Indoor Unit Functions**

	•: equipped as st	Functions tandard; O: customization option; $\times$ : without this function	One-Way Cassette	Two-Way Cassette	Compact Four-Way Cassette	Four-Way Cassette	Arc Duct	Medium Static Pressure Duct	High Static Pressure Duct	Wall Mounted	Floor Standing
	Quiet operation	All indoor units are quiet operation	•	•	•	•	•	•	•	•	•
	Auto cooling-heating changeover	Automatically selects cooling or heating mode to achieve the set temperature	•	•	•	•	•	•	٠	٠	•
	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	•	•	•	•	•	•	٠	٠	•
	Digital display on/off	Indoor unit displays can be shut off at night, creating a better environment for rest	•	•	•	٠	•	•	•	•	•
	Buzzer sound on/off	The buzzer sound of the indoor unit can be turned off to create a quieter environment	•	•	•	•	•	•	٠	٠	•
	EEV automatic adjustment	When in heating standby mode, the indoor unit automatically adjusts the EEV opening according to the load to eliminate noise of refrigerant flowing.	•	•	•	•	•	•	•	•	•
	Indoor temperature detection control	The indoor temperature of multiple indoorl units is obtained from a designated indoor unit, and multiple indoor units in a large space are controlled uniformly through this designated 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	•	•	•	•	•	•	٠	٠	٠
	Home leave mode	During absence, the indoor temperature can be maintained at a certain level	٠	•	•	•	•	•	٠	•	٠
COMFOR	Independent power supply	This feature allows the shutdown of some indoor units without shutting down the whole VR Fsystem	•	•	•	•	•	•	•	•	•
t & HEAL	Sleep mode	The smart sleep mode can realize sleep is not easy to catch a cold and wake up refreshing	•	•	•	•	•	•	٠	٠	•
Ŧ	Mildew proof of heat exchanger	After the unit is shutdown, the fan is delayed shutdown to dry the heat	•	•	•	•	•	•	•	•	•
	Air filter	Removes airborne dust particles to ensure a steady supply of clean air exchanger and prevent the heat exchanger from mildew	pre-filter	pre-filter	G1 ● G3 ○ F6 ○	G1 ●	G1 ● F6 O	G1 ● G3 ○ F7 ○ H12 ○	pre-filter ● F7 O H13 O	pre-filter	G1 ●
	Fresh air intake	A reserved outside air intake port allows outdoor air to be introduced directly	•	4.5-7.1kW●	•	•	•	•	×	٠	×
	Visualization of dirty blockage rate	Dirty blockage rate can be accurately identified and displayed on the controller into the unit	×	×	×	×	•	•	•	×	×
	Silver lons drain pan	Slow-released nano-silver ions can keep the drain pan free of mold for a long time.	×	×	0	0	0	0	×	×	×
	Heat exchanger self- cleaning*	Wash the dirt on the heat exchanger through freezing frost, and then high temperature sterilization.	•	•	•	•	•	•	٠	٠	•
	Humidity control	Additional humidity sensor can achieve humidity control in 35~75%	×	×	0	0	0	0	×	0	×
	Puro-air kit	Powered by OSRAM's UVC lamps, can effectively kill bacteria, viruses and odors of indoor air	×	×	×	×	×	0	0	×	×
	Sterilization device	Positive and Negative Ion Sterilization Module can effectively kill bacteria, viruses and odors of indoor air	×	×	x	×	0	0	×	×	×
	Vertical swing	Possibility to select automatic vertical moving of the air discharge louvre, for uniform air flow and temperature distribution	5 steps + auto	5 steps + auto	5 steps + auto	5 steps + auto	×	×	×	5 steps + auto	×
	Horizontal swing	Possibility to select automatic horizontal moving of the air discharge louvre, for uniform air flow and temperature distribution	×	×	×	×	×	×	×	0	×
AIR FLO	Fan speed steps	Multiple fan speeds can be selected to optimize comfort levels	7 steps	7 steps	7 steps	7 steps	7 steps	7 steps	7 steps	7 steps	7 steps
WC	Auto fan speed	Automatically controls rotation speed of fan depending on indoor load to achieve efficiency and comfort simultaneously	٠	•	•	٠	•	•	٠	٠	•
	Individual louver control	Individual louver control via the wired remote controller makes it simple to fix the position of each flap individually	×	×	•	٠	×	×	×	×	×
	Soft wind mode	Supplies air against the ceiling to create windless environment	•	•	•	•	•	•	×	•	•
	Adaptive ESP	ESP adapts to duct resistance to ensure constant airflow	×	×	×	×	•	•	•	×	×
# **Indoor Unit Functions**

	• : equipped as si	Functions           tandard;         O: customization option         ; ×: without this function	One-Way Cassette	Two-Way Cassette	Compact Four-Way Cassette	Four-Way Cassette	Arc Duct	Medium Static Pressure Duct	High Static Pressure Duct	Wall Mounted	Floor Standing
	META mode	Triple variable control maximizes energy saving operation	•	•	•	•	•	٠	٠	•	٠
VERGY S	ECO mode	The setting temperature rises automatically by 1°C per hour, up to 3°C	•	•	•	•	•	•	•	•	•
AVING	Full DC electronic components	The fan motor and water pump are DC power supply	•	•	•	•	•	•	٠	•	٠
	Human Detect Sensor	Using millimeter-wave radar sensor controller automatically turns indoor units on or off upon detecting that the room is occupied or unoccupied, ensuringclimate control whilst minimizing energy consumption.	×	×	0	0	×	×	×	0	×
	Program upgrade*	All indoor units can be upgraded on outdoor unit of the same system, more easy program upgrade.	•	•	•	•	•	•	٠	•	٠
	Long distance air delivery	Provides adequate airflow and capacity under high ceiling conditions	×	×	3.5m	● 3m () 4.5m	×	×	×	×	×
	High-lift drain pump	Facilitates condensation draining from the indoor unit	•	•	•	•	•	•	•	0	×
EASY In	Water level switch	When the drain pipe is blocked or the drain pipe is poor, the water level switch is turned off, and there is no need to worry about overflowing the ceiling.	•	•	•	•	•	•	•	0	×
stallatio	Ceiling anti-dirt setting	The air discharge is specially designed to prevent air blowing against the ceiling to prevent ceiling dirty	•	•	•	•	×	×	x	×	×
n & Serv	Air baffle fittings for irregular rooms	Some air discharge ports can be blocked with air baffle to optimize air distribution in irregular shaped rooms	×	×	•	•	×	×	x	×	×
ice	2-core non-polarity communication wiring	Simplifies installation and reduces wiring failures	•	•	•	•	•	٠	٠	٠	٠
	Long communication wiring	Communication wiring up to 1200m makes installation more flexible	•	•	•	•	•	•	٠	•	٠
	3 digit 7-segment display	3 digit 7-segment display can display more parameters and error information	•	•	•	•	•	•	٠	•	•
	Error codes are further refined	Simplifies maintenance by refined error code	•	•	•	•	•	٠	٠	•	٠
	Timer	Timer can be set to start and stop operation anytime on a daily or weekly basis	•	•	•	•	•	٠	•	•	•
	Infrared remote control	Infrared remote control with LCD to remotely control your indoor unit	•	•	•	•	•	٠	٠	•	٠
	Wired remote control	Wired remote control to remotely control your indoor unit	•	•	•	•	•	٠	٠	•	٠
EASY CC	Group control	Up to 16 indoor units can be in a group control system	•	•	•	•	•	٠	•	•	•
NTROL	Centralized control	Centralized control to control several indoor units from one single point	•	•	•	•	•	•	٠	•	٠
	Auto-restart	The unit restarts automatically at the original settings after power failure	•	•	•	•	•	•	٠	٠	٠
	°C/°F setting	Temperature unit °C or °F can be set according to your usage habits	•	•	•	•	•	•	•	•	•
	Long-distance on/off function	Long-distance startup or shutoff the system by weak electricity external devices	•	•	•	•	•	•	٠	•	٠
	Humidifier connection	Additional expansion board can achieve third-party humidifier connection	×	×	0	0	0	0	0	0	0
	Dehumidifier connection	Additional expansion board can achieve third-party dehumidifier connection	×	×	0	0	0	0	0	0	0
EXTEN	Electric heater connection	Additional expansion board can achieve third-party electric heater connection	×	×	0	0	0	0	0	0	0
IDED FU	Refrigerant leak sensor connection	Additional expansion board can achieve refrigerant leak sensor connection	×	×	0	0	0	0	0	0	0
NCTION	CO2 sensor connection	Additional expansion board can achieve CO2 sensor connection	×	×	0	0	0	0	0	0	0
S	PM2.5 sensor connection	Additional expansion board can achieve PM2.5 sensor connection	×	×	0	0	0	0	0	0	0
	Third-party controller connection	Third party controller can realize mode, fan speed and temperature control	×	×	0	0	0	0	0	0	0
	Long-distance on/off function	Long-distance startup or shutoff the system by strong electricity external devices	×	×	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
	Multiple protections	Multiple protections make the unit run more reliably	•	•	•	•	•	•	•	•	•

\*The program upgrade function needs to be implemented through Bluetooth Module or Data Cloud Gateway. The Bluetooth Module and Data Cloud Gateway needs to be purchased separately.

# HyperLink



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# **Independent Power Supply**



The communication wire supports tree connection,



**Super Anti-interference Capability** 



**Communication distance up to** 

2000M



Some indoor units shut down without shutting down the whole VRF system.

## **Any Topology Communication**







# HEAT EXCHANGER SELF-CLEANING\*

\* Heat exchanger self-cleaning function can be available only when V8 Mini is connected.



# Full DC Electronic Components

The fan motor and water pump are DC power supply,

making the temperature control more precise and the indoor temperature more uniform.





# Optional Multi-Functional Expansion Board



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Humidity control





Long-distance on/off function



Long-distance alarm functior





d-party con connection





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ensor conne

PM2.5

### **Switch Module**

8

(Optional)

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# **Expansion Board**

(Optional)





# **One-Way Cassette**



# **COMFORT**

### Digital Display On/Off

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



### **Quiet Operation**

By optimizing the design of fan motor, air duct and heat exchanger, the new duct operates with noise as low as 22dB(A), creating a quieter and more comfortable environment





# HEALTH

### Automatic anti-condensation

The One-way Cassette can automatically enter and exit the anti-condensation mode by detecting its own operation data; In the anti-condensation mode, the machine can change the outlet angle of the guide vane intermittently to prevent the local temperature difference of the guide panel from being too large and avoid the occurrence of condensation.



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.



### Buzzer Sound On/Off

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







# **WIDER APPLICATION**

### Auto Cooling-heating Changeover

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

### Digital feedback DC water pump

Digital feedback DC water pump: actively sense the pump speed and water flow to determine whether there is jamming attenuation or damage, and give early warning to avoid water leakage.





### 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. Air supply angle 25-80°.

### High-lift drain pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.











# **COMFORT**

### **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.



### **Quiet Operation**

The fan motor and water pump are DC power supply, which is more energy-saving and silent than AC power supply, creating a more quiet and comfortable environment





# HEALTH

### Automatic anti-condensation

The Two-way Cassette can automatically enter and exit the anti-condensation mode by detecting its own operation data; In the anti-condensation mode, the machine can change the outlet angle of the guide vane intermittently to prevent the local temperature difference of the guide panel from being too large and avoid the occurrence of condensation.





### 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.



# WIDER APPLICATION

### **Auto Cooling-heating Changeover**

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



### Digital feedback DC water pump

Digital feedback DC water pump: actively sense the pump speed and water flow to determine whether there is jamming attenuation or damage, and give early warning to avoid water leakage.





### **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. Air supply angle 35-65 °.



### High-lift drain pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.





# **COMFORT**

### EEV automatic adjustment

When in heating standby mode, the indoor unit automatically adjusts the EEV opening according to the load to eliminate noise of refrigerant flowing.



### Human Detect Sensor\*

Using millimeter-wave radar sensor controller automatically turns indoor units on or off upon detecting that the room is occupied or unoccupied, ensuring climate control whilst minimizing energy consumption.



\*This function is available as a customization option for V8 Compact Four Way Cassette

# **AIR FLOW**

360° Airflow

New design, round airflow path ensures uniform airflow and temperature distribution.



The continuous air supply port air supply area increases by  $\mathbf{20\%}$ 

### Multiple Steps Vertical Swing

The Compact Four-way Cassette unit has a wide range of airflow angles from 40° to 70° and is equipped with a 5-step louver control and auto swing mode to better meet the needs of different customers

### Two thermistors control

The indoor temperature can be checked using the thermistor in the wried controller as well as from the indoor unit



### Auto Cooling-heating Changeover

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





### 7 Fan Speeds

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



### Long Distance Air Delivery

The Compact Four-way Cassette has an additional 30Pa static pressure for long airflow delivery and is capable of being used in spaces up to 3.5m in floor height.



### Individual Louver Control

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



### Soft Wind Mode

Supplies air against the ceiling to create windless environment.



# **EASY INSTALLATION**

Compact and stylish design

New Compact Four-way Cassette panel size is fit into the ceiling tile(620mm × 620mm), making installation easier.





200mr

### High-lift drain pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.

# HEALTH

**Optional F6-class Air Filter** 

The Compact Four-way Cassette supports 30Pa external static pressure for the F6-class filter installation. Filtering effect of the F6-class filter reaches up to 80% against particles (particle size > 1µm), creating a cleaner living environment.



### Mildew proof of heat exchanger

When the indoor unit is turned off in cooling mode, the fan is still on, and dry the heat exchanger to avoid mold on the heat exchanger.





Slow-released nano-silver ions can keep the drain pan free of mold for a long time.





Some air discharge ports can be blocked with air baffle to optimize air distribution in irregular shaped rooms. Air outlets can be blocked with accessories, which can be found in the packing material.



At the corner



### Water level switch

When the drain pipe is blocked or the drain pipe is poor, the water level switch is turned off, and there is no need to worry about overflowing the ceiling.



In the narrow room



# Four-Way Cassette



# COMFORT

### EEV automatic adjustment

When in heating standby mode, the indoor unit automatically adjusts the EEV opening according to the load to eliminate noise of refrigerant flowing.



### Human Detect Sensor\*

Using millimeter-wave radar sensor controller automatically turns indoor units on or off upon detecting that the room is occupied or unoccupied, ensuring climate control whilst minimizing energy consumption.



when detecting human body when detecting absence \*This function is available as a customization option for V8 Four Way Cassette.

# **AIR FLOW**

360° Airflow

New design, round airflow path ensures uniform airflow and temperature distribution.



The continuous air supply port air supply area increases by 20%

### 7 Fan Speeds

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

7 fan speeds

### Two thermistors control

The indoor temperature can be checked using the thermistor in the wried controller as well as from the indoor unit



### Auto Cooling-heating Changeover

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



### Multiple Steps Vertical Swing

The Four-way Cassette unit has a wide range of airflow angles from 30° to 65° and is equipped with a 5-step louver control and auto swing mode to better meet the needs of different customers



### Individual Louver Control

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



# HEALTH

### Mildew proof of heat exchanger

When the indoor unit is turned off in cooling mode, the fan is still on, and dry the heat exchanger to avoid mold on the heat exchanger.



### Soft Wind Mode

Supplies air against the ceiling to create windless environment.



### Silver lons drain pan (optional)

Slow-released nano-silver ions can keep the drain pan free of mold for a long time.



# **EASY INSTALLATION**

### Air baffle fittings for irregular rooms

At the corner

Some air discharge ports can be blocked with air baffle to optimize air distribution in irregular shaped rooms. Air outlets can be blocked with accessories, which can be found in the packing material.

In the narrow room

### High-lift drain pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



### Water level switch

When the drain pipe is blocked or the drain pipe is poor, the water level switch is turned off, and there is no need to worry about overflowing the ceiling.







# COMFORT

### **Quiet Operation**

By optimizing the design of fan motor, air duct and heat exchanger, the new duct operates with noise as low as 22dB(A), creating a quieter and more comfortable environment.



- > Fan motor noise reduction
- > Air duct noise reduction
- > Heat exchanger noise reduction

### Auto Cooling-heating Changeover

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



Two thermistors control

Wried Controlle

indoor unit

The indoor temperature can be checked using the

thermistor in the wried controller as well as from the

# **AIR FLOW**

### **Constant Airflow**

Constant airflow technology can realize the airflow output is not affected by installation conditions and use conditions, ensuring the constant airflow supply.



\*Data measured in the UX lab of Midea





### Healthy Air Supply

The Arc Duct unit adopts an integrated C-shaped heat exchanger that allows for fast drainage and no dust or ash accumulation. The optional long-life filter, medium-life filter and plasma sterilization module further enhance the air quality of the air supply and create a healthy environment.



(standard) Quick discharge of dirt, no accumulation of dust or ash.

### Silver lons drain pan (optional)

Slow-released nano-silver ions can keep the drain pan free of mold for a long time.



# **EASY INSTALLATION**

Ultra-thin Body Ultra-thin body design, the body height of the whole series is only 199mm, greatly saving space and more flexible installation.



### High-lift drain pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.







Fault Feedback Early warning of drain pump fault.







# **Medium Static Pressure Duct**



# **COMFORT**

### **Quiet Operation**

By optimizing the design of fan motor, air duct and heat exchanger, the new duct operates with noise as low as 22dB(A), creating a quieter and more comfortable environment.



### 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 FLOW**

### Adaptive Duct Length and Filter Resistance

By digital fan motor and a specially designed independent drive chip enables precise control and output on demand. It can automatically adapt to duct lengths from 10 to 160 Pa equivalent static pressure without intervention from the installer.



HEALTH Optional High Efficiency HEPA Filter\*

A static pressure of up to 160 Pa enables the application of medical-grade HEPA filters, and even small capacity models can be equipped with high-efficiency filters, efficiently filtering fine particles of 0.5 microns with an efficiency of over 99%.



\* This function is available as a customization option.



### Auto Cooling-heating Changeover

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



# **EASY INSTALLATION**

### Thin Body with High ESP

All models have a static pressure of 160 Pa and a thickness of only 245 mm. The high static pressure allows air to be delivered over longer distances without loss of cooling and heating effect. Especially suitable for long and narrow spaces.



### 3 Way flexible installation

It is possible to install and connect the outdoor unit in 3 different ways for Duct, providing flexibility to accommodate a wide range of room designs.



### High-lift drain pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



### Fault Feedback

Early warning of drain pump fault.







# **AIR FLOW**

### **Constant Airflow Technology**

Through the independent constant air volume digital fan technology, the air volume is independently detected and adjusted to realize constant air volume and no attenuation in the whole life.



# HEALTH

### Visualization of dirty blockage rate

Built-in self-learning model can detect the real-time resistance of the filter screen and restore the true state of the filter screen. 10 levels blockage rates can be accurately identified and displayed on the controller, reminding the user to clean the filter in time.



### **Innovative Puro-air Kit**

Protectors of health and safety



### Ozone – Free UV leakage-Free

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



### Ultra-high static pressure

The static pressure can reach 250Pa(5.6-16kW) or 400Pa(20-56kW), so the air supply distance is longer. Especially in long and narrow spaces such as corridors, it can reduce the number of units used and save investment costs..



# **WIDER APPLICATION**

### Intelligent leak feedback

Digital feedback DC water pump, Take the initiative to sense the pump speed and water flow, judge whether there is jamming attenuation or damage, and give early warning to avoid water leakage Integrated drainage pipe design reduces the sealing points of traditional design from 6 to 2, reduces breakpoints and reduces leakage risks



### Ultra-thin fuselage

For High static pressure duct, the fuselage thickness is only 299mm, the height required for ceiling installation is greatly reduced which leads to be able to cope with more installation situations.



### High-lift drain pump

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



Optional F7 or H13-class air filter, Equipped with H13 HEPA high-efficiency filter screen, it can filter 0.5

micron extremely fine particles, and the primary

filtration efficiency is more than 99.95%.

**Efficiency filter screen** 







# **COMFORT**

### **Quiet Operation**

The minimum noise level of Wall Mounted is as low as 27dB(A), idea for hotels and other noise-sensitive locations.



### Human Detect Sensor\*

Using millimeter-wave radar sensor controller automatically turns indoor units on or off upon detecting that the room is occupied or unoccupied, ensuring climate control whilst minimizing energy consumption.



The indoor unit automatically runs when detecting human body

\*This function is available as a customization option for V8 Wall Mounted.

### Auto Cooling-heating Changeover

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



# **AIR FLOW**

3D Air Flow\*

Possibility to select automatic vertical and horizontal moving of the air discharge louvre, for uniform air flow and temperature distribution.



Up & Down \*Horizontal Swing function is available as a customization option for Wall Mounted.

For Wall Mounted throttling parts and drain pumps adopt closed design, reducing noise.





### Sleep Mode

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





### **Bi-directional Coanda Airflow**

With bi-directional Coanda airflow delivery technology, the cold air does not blow directly on people and the hot air warms up evenly from the feet for better comfort.



# **EASY INSTALLATION**

### Ceiling Mounting

The Wall Mounted new heat exchanger is designed to meet the installation requirements close to the ceiling, and the minimum distance from the ceiling is 3cm.



### Free Drainage without Space Restrictions

The Wall Mounted can realize horizontal drainage, downward drainage, upward drainage, making installation more flexible.





When the condensate pipe is blocked, condensate can drip down onto the floor and damage it



### High-lift drain pump\*

A drain pump with a 1200mm raise height is fitted as standard, simplifying installation of the drain piping.



\*The drain pump is available as a customization option.

### Fault Feedback

Early warning of drain pump fault.









### Digital Display On/Off

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

### **Quiet Operation**

The fan motor is DC power supply, which is more energy-saving and silent than AC power supply, creating a more quiet and comfortable 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.







# 0.5°C/1°C Setting Temperature Adjustment

Digital Display On/Off

environment for rest.

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

### Buzzer Sound On/Off

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

### **Multiple Fan Speeds**

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





# WIDER APPLICATION

### 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.





F4 (front air intake)

### F3B (concealed)







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





F5 (underside air intake)



**One-Way Cassette** Two-Way Cassette **Compact Four-Way Cassette Four-Way Cassette Arc Duct Medium Static Pressure Duct High Static Pressure Duct** Wall Mounted **Floor Standing** 

200-0

### **One-Way Cassette**

Model name	e		MIH18Q1HN18	MIH22Q1HN18	MIH28Q1HN18	MIH36Q1HN18	MIH45Q1HN18	MIH56Q1HN18	MIH71Q1HN18	
Power supply				1-phase, 220-240V, 50/60Hz						
		kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1	
Cooling <sup>1</sup>	Capacity	kBut/h	6.1	7.5	9.6	12.3	15.4	19.1	24.2	
	Input	W	25	25	30	30	40	48	60	
		kW	2.2	2.6	3.2	4.0	5.0	6.3	8.0	
Heating <sup>2</sup>	Capacity	kBut/h	7.5	8.9	10.9	13.6	17.1	21.5	27.3	
	Input	W	25	25	30	30	40	48	60	
Airflow rate <sup>3</sup> m <sup>3</sup> /h		m³/h	380/355/330/300/286/263/240		460/440/410/380/355/330/300		693/662/638/600/ 556/510/476	792/763/728/688/ 643/589/549	933/873/815/749/ 689/637/592	
Sound pressu	ure level <sup>4</sup>	dB(A)	30/28/27/26/25/24/22		37/36/35/34/32/ 31/30	38/37/35/34/32/ 31/30	39/37/36/35/34/ 32/31	41/39/38/37/36/ 35/33	43/41/40/39/37/ 36/35	
	Net dimensions <sup>5</sup> (W×H×D)	mm		1054×153×428				1275×189×452		
indoor unit	Net dimensions( no water tray) (W×H×D)	mm		1054×1	41×428		1275×176×452			
	Packed dimensions (W×H×D)	mm		1155×2	245×490			1370×295×505		
	Net/Gross weight	kg	11.5/	14.5	11.8/1	4.8	15.8/2	20.2	16.9/21.4	
	Net dimensions (W×H×D)	mm		1180×	25×465			1350×25×505		
Panel	Packed dimensions (W×H×D)	mm		1232×1	07×517			1410×95×560		
	Net/Gross weight	kg		3.5	/4.7			4/5.6		
Refrigerant ty	ype		R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32	
Pipe	Liquid/Gas pipe	mm			Φ6.35	/Φ12.7			Φ9.52/Φ15.9	
connections	Drain pipe	mm								

Notes

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. Each model's 7 airflow rate options are listed in order, from highest to lowest. 4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3). Sound pressure level is measured 1.4m below the unit in a nechoic chamber. 5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments. 6. These products are under development and the specifications are always subject to change.

### Two-Way Cassette

Model name			MIH22Q2HN18	MIH28Q2HN18	MIH36Q2HN18	MIH45Q2HN18	MIH56Q2HN18	MIH71Q2HN18	
Power supply			1-phase, 220-240V, 50/60Hz						
	5 h	kW	2.2	2.8	3.6	4.5	5.6	7.1	
Cooling <sup>1</sup>	Capacity	kBut/h	7.5	9.6	12.3	15.4	19.1	24.2	
	Input	W	35	40	40	50	69	98	
		kW	2.6	3.2	4	5	6.3	8	
Heating <sup>2</sup>	Capacity	kBut/h	8.9	10.9	13.6	17.1	21.5	27.3	
	Input	W	35	40	40	50	69	98	
Airflow rate <sup>3</sup> m <sup>3</sup> /h			654/612/571/530/ 488/449/410	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/ 000/921/808/770	
Sound pressu	re level <sup>4</sup>	dB(A)	33/31/30/29/27/2 5/24	33/31/30/29/27/2 5/24	35/33/32/30/29/2 7/25	37/36/35/34/32/3 1/30	39/37/36/35/33/3 1/30	44/42/41/40/38/3 6/34	
	Net dimensions <sup>5</sup> (W×H×D)	mm	1172×299×591						
indoor unit	Packed dimensions (W×H×D)	mm			1355×4	00×675			
	Net/Gross weight	kg		29.7/36.3			31.6/38.2		
	Net dimensions (W×H×D)	mm			1430×5	53×680			
Panel	Packed dimensions (W×H×D)	mm			1525×1	30×765			
	Net/Gross weight	kg		11/15			11/15		
Refrigerant ty	pe		R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32	
Pipe	Liquid/Gas pipe	mm			Φ6.35/Φ12.7	·		Φ9.52/Φ15.9	
connections	Drain pipe	mm	OD Φ32						

### Notes:

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. Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model. 4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. 5. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

# **Specifications**

### **Compact Four-Way Cassette**

Model			MIH15Q4CHN18		
Power supply					
	Capacity	kW	1.5		
Cooling <sup>1</sup>	Capacity	kBtu/h	5.1		
	Power input	W	14		
	Garanita	kW	1.8		
Heating <sup>2</sup>	Capacity	kBtu/h	6.1		
	Power input	W	14		
Air flow rate <sup>3</sup>		m³/h	450/425/400/3		
Sound pressure	level <sup>4</sup>	dB(A)	29/28/27/		
Sound power le	vel	dB(A)	40/39/39/		
	Net dimensions⁵ (W×H×D)	mm			
Main body	Packed dimensions $(W \times H \times D)$	mm			
	Net/Gross weight	kg			
	Net dimensions <sup>6</sup> (W×H×D)	mm			
Panel	Packed dimensions $(W \times H \times D)$	mm			
	Net/Gross weight	kg			
Refrigerant type					
Pipe	Liquid/Gas pipe	mm			
connections	Drain pipe	mm			

Model			MIH45Q4CHN18	MIH56Q4CHN18	MIH63Q4CHN18		
Power supply			1-phase, 220-240V, 50/60Hz				
	Capacity	kW	4.5	5.6	6.3		
Cooling <sup>1</sup>	Capacity	kBtu/h	15.4	19.1	21.5		
	Power input	W	25	35	50		
	Capacity	kW	5.0	6.3	7.1		
Heating <sup>2</sup>	Capacity	kBtu/h	17.1	21.5	24.2		
	Power input	W	25	35	50		
Air flow rate <sup>3</sup>		m³/h	640/605/570/530/495/460/425	810/765/720/670/625/580/535	905/855/805/755/705/655/605		
Sound pressure level <sup>4</sup> dB(A)		dB(A)	36.5/35/33/31/29/28/26.5	39/38/37/36/35/34/32	43/42/40/38/36/35/33.5		
Sound power leve	1	dB(A)	44/44/43/42/41/41/41	48/46/45/43/42/42/41	51/50/48/46/45/44/42		
	Net dimensions⁵ (W×H×D)	mm					
Main body	Packed dimensions (W×H×D)	mm		690×285×690			
	Net/Gross weight	kg	14.0/16.0	15.0	/17.0		
	Net dimensions <sup>6</sup> (W×H×D)	mm		620×65×620			
Panel	Packed dimensions (W×H×D)	mm		680×80×665			
	Net/Gross weight	kg		2.3/3.0			
Refrigerant type		R410A/R32					
Pipe	Liquid/Gas pipe	mm	Ø6.35/	Ø12.7	Ø9.52/Ø15.9		
connections	Drain pipe	mm					

### 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. Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in an anechoic chamber.

5. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

6. Exposed height of the panel after being installed on the ceiling.

MIH22Q4CHN18	MIH28Q4CHN18	MIH36Q4CHN18
1-phase, 220	)-240V, 50/60Hz	
2.2	2.8	3.6
7.5	9.6	12.3
14	16	18
2.4	3.2	4.0
8.2	10.9	13.7
14	16	18
0/345/320/295	510/480/455/425/395/370/340	530/500/470/440/405/375/345
7/26/26/25	30/29/28/27/26/26/25	31/30/29/28/27/26/25.5
9/38/38/38	42/41/40/39/39/38/38	42/40/39/38/38/38/38
575×	235×638	
690×	285×690	
13.0/15.0		14.0/16.0
620×	65×620	•
680×	80×665	
2	3/3.0	
R41	0A/R32	
Ø6.3	5/Ø12.7	
0	D Ø25	

Four-Way Cassette

Model			MIH28Q4HN18	MIH36Q4HN18			
Power supply			1-phase, 220-240V, 50/60Hz				
	Capacity	kW	2.8	3.6			
Cooling <sup>1</sup>		kBtu/h	9.6	12.3			
	Power input	W	17.0	17.0			
	Capacity	kW	3.2	4.0			
Heating <sup>2</sup>	Capacity Ig <sup>2</sup>		10.9	13.7			
	Power input	W	17.0	17.0			
Air flow rate <sup>3</sup>		m³/h	790/740/691/641/591/542/492	790/740/691/641/591/542/492			
Sound pressure I	evel <sup>4</sup>	dB(A)	30/29/28/27.5/27/26/25	30/29/28/27.5/27/26/25			
	Net dimensions⁵ (W×H×D)	mm	840×204×840	840×204×840			
Main body	Packed dimensions $(W \times H \times D)$	mm	940×250×940	940×250×940			
	Net/Gross weight	kg	18/20.5	18/20.5			
	Net dimensions <sup>6</sup> (W×H×D)	mm	950×53×950	950×53×950			
Panel	Packed dimensions $(W \times H \times D)$	mm	1020×90×1020	1020×90×1020			
	Net/Gross weight	kg	5.6/7.3	5.6/7.3			
Refrigerant type			R410/	A/R32			
Pipe	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø6.35/Ø12.7			
connections	Drain pipe	mm	OD	Ø25			

Model			MIH45Q4HN18	MIH56Q4HN18	MIH71Q4HN18		
Power supply			1-phase, 220-240V, 50/60Hz				
	<b>C</b> 1	kW	4.5	5.6	7.1		
Cooling <sup>1</sup>	Capacity	kBtu/h	15.4	19.1	24.2		
	Power input	W	36.0	23.0	32.0		
	Capacity	kW	5.0	6.3	8.0		
Heating <sup>2</sup>	Capacity	kBtu/h	17.1	21.5	27.3		
	Power input	W	36.0	23.0	32.0		
Air flow rate <sup>3</sup>	m³/h		910/840/770/701/631/561/491	840/791/741/692/642/593/543	1000/943/886/829/772/715/658		
Sound pressure l	evel <sup>4</sup>	dB(A)	37/35/34/32/30/29/27	33/32/31/30/29/28/27	37/36/34/33/31/30/28		
	Net dimensions⁵ (W×H×D)	mm	840×204×840	840×204×840	840×204×840		
Main body	Packed dimensions (W×H×D)	mm	940×250×940	940×250×940	940×250×940		
	Net/Gross weight	kg	18/20.5	19.5/22	19.5/22		
	Net dimensions <sup>6</sup> (W×H×D)	mm	950×53×950	950×53×950	950×53×950		
Panel	Packed dimensions (W×H×D)	mm	1020×90×1020	1020×90×1020	1020×90×1020		
	Net/Gross weight	kg	5.6/7.3	5.6/7.3	5.6/7.3		
Refrigerant type			R410A/R32	·			
Pipe	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø6.35/Ø12.7	Ø9.52/Ø15.9		
connections	Drain pipe	mm		OD Ø25			

### Notes:

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. Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

5. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

6. Exposed height of the panel after being installed on the ceiling.

# **Specifications**

Four-Way Cassette

Model			MIH80Q4HN18	MIH90Q4HN18	MIH100Q4HN18		
Power supply			1-phase, 220-240V, 50/60Hz				
	6 N	kW	8.0	9.0	10.0		
Cooling <sup>1</sup>	Capacity	kBtu/h	27.3	30.7	34.1		
	Power input	W	41.0	43.0	74.0		
	Garacita	kW	9.0	10.0	11.2		
Heating <sup>2</sup>	Capacity	kBtu/h	30.7	34.1	38.2		
	Power input	W	41.0	43.0	74.0		
Air flow rate <sup>3</sup> m <sup>3</sup> /h		m³/h	1100/1019/939/858/777/697/616	1100/1019/939/858/777/697/616 1330/1239/1148/1057/965/874/783			
Sound pressure	level <sup>4</sup>	dB(A)	42.5/40/38/36/34/32/30	38/37/35/34/32/31/29	43/41/40/38/36/35/33		
	Net dimensions⁵ (W×H×D)	mm	840×204×840	840×246×840	840×246×840		
Main body	Packed dimensions (W×H×D)	mm	940×250×940	940×295×940	940×295×940		
	Net/Gross weight	kg	19.5/22	21.5/24	21.5/24		
	Net dimensions <sup>6</sup> (W $\times$ H $\times$ D)	mm	950×53×950	950×53×950	950×53×950		
Panel	Packed dimensions (W $\times$ H $\times$ D)	mm	1020×90×1020	1020×90×1020	1020×90×1020		
	Net/Gross weight	kg	5.6/7.3	5.6/7.3	5.6/7.3		
Refrigerant type				R410A/R32			
Pipe	Liquid/Gas pipe	mm	Ø9.52/Ø15.9	Ø9.52/Ø15.9	Ø9.52/Ø15.9		
onnections	Drain pipe	mm		OD Ø25			

Model			MIH112Q4HN18	MIH140Q4HN18	MIH160Q4HN18	MIH180Q4HN18			
Power supply			1-phase, 220-240V, 50/60Hz						
	Constitu	kW	11.2	14.0	16.0	18.0			
Cooling <sup>1</sup>	Capacity	kBtu/h	38.2	47.8	54.6	61.4			
	Power input	W	61.0	118.0	110.0	145.0			
	Capacity	kW	12.5	16.0	18.0	20.0			
Heating <sup>2</sup>	Сарасну	kBtu/h	42.7	54.6	61.4	68.2			
	Power input	W	61.0	118.0	110.0	145.0			
Air flow rate <sup>3</sup>	ate <sup>3</sup> m <sup>3</sup> /h		1600/1497/1393/1290/ 1186/1083/979	1900/1787/1673/1560/ 1446/1333/1219	2100/1900/1760/1630/ 1500/1380/1270	2300/2140/1960/1770/ 1600/1430/1270			
Sound pressure I	evel <sup>4</sup>	dB(A)	41/40/38/37/36/34/33	47.5/46/44/42/40/38/36.5	48/46/44/43/41/39/37	52/49/47/45/42/39/38			
	Net dimensions <sup>5</sup> (W×H×D)	mm	840×288×840	840×288×840	950×300×950	950×300×950			
Main body	Packed dimensions $(W \times H \times D)$	mm	940×335×940	940×335×940	1050×350×1050	1050× 350×1050			
	Net/Gross weight	kg	24/26.5	24/26.5	32.6/37.2	32.7/37.3			
	Net dimensions <sup>6</sup> (W×H×D)	mm	950×53×950	950×53×950	1050×55×1050	1050×55×1050			
Panel	Packed dimensions (W×H×D)	mm	1020×90×1020	1020×90×1020	1115×100×1115	1115×100×1115			
	Net/Gross weight	kg	5.6/7.3	5.6/7.3	7.4/9.7	7.4/9.7			
Refrigerant type				R410A	VR32				
Pipe	Liquid/Gas pipe	mm	Ø9.52/Ø15.9	Ø9.52/Ø15.9	Ø9.52/Ø15.9	Ø9.52/Ø19.1			
connections	Drain pipe	mm	OD Ø25						

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.

Indoor temperature 20°C DB; 19°C WB; outdoor temperature 50°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 Indoor temperature 20°C DB; outdoor temperature 7°C DB; 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
 Sound pressure level is from highest level to lowest level, total 7 levels for each model.
 Sound pressure level is from highest level to lowest level, total 7 levels for each model.
 The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.
 Exposed height of the panel after being installed on the ceiling.

<sup>1.</sup> Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

<sup>4.</sup> Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in an anechoic chamber.

Arc Duct

Model			MIH15T3HN18	MIH22T3HN18			
Power supply			1-phase, 220-240V, 50/60Hz				
		kW	1.5	2.2			
Cooling <sup>1</sup>	Capacity	kBtu/h	5.1	7.5			
	Power input	W	21	22			
	<b>C</b> . 1	kW	1.8	2.5			
Heating <sup>2</sup>	Capacity	kBtu/h	6.1	8.5			
	Power input	W	21	22			
Air flow rate <sup>3</sup> m <sup>3</sup> /h		m³/h	340/335/329/320/307/298/290	370/347/339/322/314/ 306/295			
External static p	ressure <sup>4</sup>	Pa	10 (10-50)				
Sound pressure	level <sup>5</sup>	dB(A)	27/26/25.5/24.5/23.5/ 22.5/22	28/27.5/26.5/25.5/24.5/23.5/22.0			
Sound power le	vel	dB(A)	43.5/43/42.5/42/41.5/41/40	46/45/44/43/42/41/40			
	Net dimensions <sup>6</sup> (W×H×D)	mm	550×19	99×450			
Unit	Packed dimensions (W×H×D)	mm	715×25	55×525			
	Net/Gross weight	kg	11.5/	/13.5			
Refrigerant type	2		R410A/R32				
Pipe	Liquid/Gas pipe	mm		/Ø12.7			
connections	Drain pipe	mm	OD	Ø25			

Model			MIH28T3HN18	MIH36T3HN18	MIH45T3HN18			
Power supply			1-phase, 220-240V, 50/60Hz					
		kW	2.8	3.6	4.5			
Cooling <sup>1</sup>	Capacity	kBtu/h	9.6	12.3	15.4			
	Power input	W	28	31	43			
		kW	3.2	4	5			
Heating <sup>2</sup>	Capacity	kBtu/h	10.9	13.7	17.1			
	Power input	W	28	31	43			
Air flow rate <sup>3</sup> m <sup>3</sup> /h		460/431/413/380/351/ 323/300 605/557/508/453/414/ 365/320		800/770/701/629/557/ 506/435				
External static press	ure <sup>4</sup>	Pa	10 (10-50)					
Sound pressure leve	2  <sup>5</sup>	dB(A)	30/29.5/28.5/27.5/26/24.5/22 30/29.5/28.5/27.5/ 26.5/25.5/25		33/32.5/32/30.5/29/ 27.5/26			
Sound power level		dB(A)	50.5/49/47/45.5/43.5/42/40	50.5/49.5/48/47/45.5/42.5/43	52/50.5/49/47.5/46/44.5/43			
	Net dimensions <sup>6</sup> (W×H×D)	mm	550×199×450	700×199×450	900×199×450			
Unit	Packed dimensions (W×H×D)	mm	715×255×525	865×255×525	1065×255×525			
	Net/Gross weight	kg	11.5/13.5	13.0/15.5	16.5/19.5			
Refrigerant type		R410A/R32						
Pipe	Liquid/Gas pipe	mm	Ø6.35/Ø12.7					
connections	Drain pipe	mm		OD Ø25				

### Notes:

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
 Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4. Stable operation external static pressure range. Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external static pressure range refer to the unit's installation manual.)

5. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in an anechoic chamber.

6. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

# **Specifications**

### Arc Duct

Model			MIH56T3HN18	MIH71T3HN18	MIH80T3HN18			
Power supply			1-phase, 220-240V, 50/60Hz					
	<b>C</b>	kW	5.6	7.1	8			
Cooling <sup>1</sup>	Capacity	kBtu/h	19.1	24.2	27.3			
	Power input	W	58	65	108			
	<b>C</b>	kW	6.3	8	9			
Heating <sup>2</sup>	Capacity	kBtu/h	21.5	27.3	30.7			
	Power input	W	58 65		108			
Air flow rate <sup>3</sup> m <sup>3</sup> /h		m³/h	900/800/761/682/603/ 549/470 1145/1033/957/860/763/671/580		1400/1327/1249/1175/1095/1026/960			
External static pre	essure <sup>4</sup>	Pa	10 (10-50)	10 (10-50)	20(10-80)			
Sound pressure l	evel <sup>5</sup>	dB(A)	36/34.5/33.5/32.5/ 31/29/27 37/35/34/32.5/31/30/29		36.5/35.5/34.5/33/ 32/31.5/30.5			
Sound power lev	el	dB(A)	56/54/52/50/48/46/44 57/55.5/54/52/50.5/49/47		57/56/54.5/53.5/52/51/49.5			
	Net dimensions <sup>6</sup> (W×H×D)	mm	900×199×450	1100×199×450	1600×199×450			
Unit	Packed dimensions (W×H×D)	mm	1065×255×525	1300×255×525	1780×250×525			
	Net/Gross weight	kg	16.5/19.5	20/23.5	28/32.5			
Refrigerant type			R410A/R32					
Pipe	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø9.52/Ø15.9	Ø9.52/Ø15.9			
connections	Drain pipe	mm	OD Ø25					

Nodel			MIH90T3HN18	MIH112T3HN18			
ower supply			1-phase, 220-2	240V, 50/60Hz			
	Correction .		9	11.2			
Cooling <sup>1</sup>	Сарасцу	kBtu/h	30.7	38.2			
	Power input	W	108	128			
	Capacity	kW	10	12.5			
leating <sup>2</sup>	Сарасцу	kBtu/h	34.1	42.7			
	Power input	W	108	128			
ir flow rate <sup>3</sup>		m³/h	1400/1327/1249/1175/1095/1026/960	1620/1522/1433/1343/1254/1170/1080			
xternal static pre	essure <sup>4</sup>	Pa	20(10-80)				
ound pressure le	evel <sup>5</sup>	dB(A)	36.5/35.5/34.5/33/ 32/31.5/30.5	39.5/38/36.5/35/34/ 32.5/31.5			
ound power lev	el	dB(A)	57/56/54.5/53.5/52/51/49.5	60.5/59/57.5/55.5/54/52.5/50.5			
	Net dimensions <sup>6</sup> (W×H×D)	mm	1600×199×450	1600×199×450			
nit	Packed dimensions (W×H×D)	mm	1780×250×525	1780×250×525			
	Net/Gross weight	kg	28/32.5				
efrigerant type			R410/	VR32			
ipe	Liquid/Gas pipe	mm	Ø9.52/	Ø15.9			
onnections	Drain pipe	mm	OD Ø25				

### 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. Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model. 4. Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external static pressure range refer to the unit's installation manual.)
 5. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in an anechoic chamber.

6. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

### Medium Static Pressure Duct

Model			MIH15T2HN18	MIH22T2HN18	MIH28T2HN18			
Power supply			1-phase, 220-240V, 50/60Hz					
		kW	1.5	2.2	2.8			
Cooling <sup>1</sup>	Capacity	kBtu/h	5.1	7.5	9.6			
Pc	Power input	W	33	36	40			
	<b>C</b> 1	kW	1.8	2.5	3.2			
Heating <sup>2</sup>	Capacity	kBtu/h	6.1	8.5	10.9			
Power input		W	33	36	40			
Air flow rate <sup>3</sup> m <sup>3</sup> /h		m³/h	470/438/407/375/343/312/280	500/467/433/400/367/333/300	540/503/467/430/393/357/320			
External static p	ressure <sup>4</sup>	Pa	30 (10-160)					
Sound pressure	level <sup>5</sup>	dB(A)	26.5/26/25/24/23/22.5/22	26.5/26/25/24/23/22.5/22 26.5/26/25/24/23/22.5/22				
5ound power le	vel	dB(A)	46/44.5/43/41.5/40/38.5/37	47/45.5/44/42.5/41/39.5/38	47/45.5/44/42.5/41/39.5/38			
	Net dimensions <sup>6</sup> (W×H×D)	mm		600×245×750				
Unit	Packed dimensions (W×H×D)	mm		765 × 305 × 890				
	Net/Gross weight	kg	18.5/21	18.5/21	18.5/21			
Refrigerant type			R410A/R32					
Pipe	Liquid/Gas pipe	mm		Ø6.35/Ø12.7				
connections Drain pipe		mm	OD Ø25					

Model			MIH36T2HN18	MIH45T2HN18	MIH56T2HN18		
Power supply			1-phase, 220-240V, 50/60Hz				
	6 . I	kW	3.6	4.5	5.6		
Cooling <sup>1</sup>	Capacity	kBtu/h	12.3	15.4	19.1		
	Power input	W	50	70	70		
	C	kW	4	5	6.3		
Heating <sup>2</sup>	Capacity	kBtu/h	13.7	17.1	21.5		
	Power input	W	50	70	70		
Air flow rate <sup>3</sup> m <sup>3</sup> /h		m³/h	575/535/495/455/415/375/335 665/623/580/538/495/453/410		970/904/838/773/707/641/575		
External static pressure <sup>4</sup> Pa		Pa	30 (10-160)				
Sound pressure le	evel <sup>5</sup>	dB(A)	29/28/27/26/25/23/22 33/32/29.5/28/26.5/25/24		33/32/31/30/27.5/26/25		
Sound power lev	el	dB(A)	50/48.5/47/45/43/41/39 53/51/49/47/45/43/41		55/53/51/49/47/45/43		
	Net dimensions <sup>6</sup> (W×H×D)	mm	600×24	800×245×750			
Unit	Packed dimensions (W×H×D)	mm	765×30	05×890	965×305×890		
	Net/Gross weight	kg	18.5/21	19.5/22	24/27.5		
Refrigerant type			R410A/R32				
Pipe	Liquid/Gas pipe	mm		Ø6.35/Ø12.7			
connections Drain pipe mm		OD Ø25					

### Notes:

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
 Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4. Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external static pressure range refer to the unit's installation manual.)

5. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in a semi-anechoic chamber.

6. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual

# **Specifications**

Medium Static Pressure Duct

Model			MIH71T2HN18	MIH80T2HN18	MIH90T2HN18		
Power supply			1-phase, 220-240V, 50/60Hz				
	<b>C</b> . 1	kW	7.1	8	9		
Cooling <sup>1</sup>	Capacity	kBtu/h	24.2	27.3	30.7		
	Power input	W	96	102	110		
Heating <sup>2</sup>	Constitu	kW	8	9	10		
	Сарасну	kBtu/h	27.3	30.7	34.1		
	Power input	W	96	102	110		
Air flow rate <sup>3</sup> m <sup>3</sup> /h		m³/h	1150/1068/986/904/822/740/660	1355/1263/1172/1080/988/897/805	1420/1323/1225/1128/1030/933/835		
External static pre	essure <sup>4</sup>	Pa	30 (10-160)	40 (10-160)	40(10-160)		
Sound pressure le	evels	dB(A)	35/33.5/32/30.5/29/27.5/26	37/35.5/34/32.5/31/29.5/28	37/35.5/34/32.5/31/29.5/28		
Sound power lev	el	dB(A)	58/56/54/51.5/48/47/45	59/57/55/53/51/49/47	59/57/55/53/50.5/48/46		
	Net dimensions <sup>6</sup> (W×H×D)	mm	800×245×750	1050×24	5×750		
Unit	Packed dimensions (W×H×D)	mm	965×305×890	1215×30	)5 × 890		
	Net/Gross weight	kg	25/28.5	30/33.5	31/34.5		
Refrigerant type		R410A/R32					
Pipe	Liquid/Gas pipe	mm		Ø9.52/Ø15.9			
connections	Drain pipe	mm	OD Ø25				

Model			MIH112T2HN18	MIH140T2HN18	MIH160T2HN18		
Power supply			1-phase, 220-240V, 50/60Hz				
	Constitu	kW	11.2	14	16		
Cooling <sup>1</sup>	Capacity	kBtu/h	38.2	47.8	54.6		
	Power input	W	138	172	210		
Heating <sup>2</sup>	Capacity	kW	12.5	16	18		
	Capacity	kBtu/h	42.7	54.6	61.4		
	Power input	W	138 172		210		
Air flow rate <sup>3</sup>	Air flow rate <sup>3</sup> m <sup>3</sup> /h		1950/1817/1683/1550/1417/1283/1150	2105/1971/1837/1703/1568/1434/1300	2350/2160/2015/1871/1776/1533/1400		
External static pre	essure <sup>4</sup>	Pa	40 (10-160) 50 (10-160)				
Sound pressure l	evel <sup>s</sup>	dB(A)	39/37/35/33/31/29/28	40/38/36/34/32/30/29	42/40/38/36/34/33/31		
Sound power lev	rel	dB(A)	60/58/56.5/55/53.5/52/50 64/62/61.5/59.5/57.5/55/53		65/63/61/58.5/56.5/54/52		
	Net dimensions <sup>6</sup> (W×H×D)	mm		1400×245×750			
Unit	Packed dimensions (W×H×D)	mm		1565×305×890			
	Net/Gross weight	kg	37/41.5	39/43.5	39/43.5		
Refrigerant type				R410A/R32			
Pipe	Liquid/Gas pipe	mm		Ø9.52/Ø15.9			
connections	Drain pipe	mm	OD Ø25				

Notes:

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
 Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

static pressure range refer to the unit's installation manual.)

5. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in a semi-anechoic chamber. 6. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual

4. Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external

### High Static Pressure Duct

Model name			MIH56T1HN18	MIH71T1HN18	MIH80T1HN18	MIH90T1HN18	
Power supply							
		kW	5.6	7.1	8	9	
Cooling <sup>1</sup>	Capacity	kBut/h	19.1	24.2	27.3	30.7	
	Input	W	159	159	159	196	
		kW	6.3	8	9	10	
Heating <sup>2</sup>	Capacity	kBut/h	21.5	27.3	30.7	34.1	
Input		W	159	159	159	196	
Airflow rate <sup>3</sup> m <sup>3</sup> /h		1360/1281/1201/1122/ 1043/963/884	1360/1281/1201/1122/ 1043/963/884	1360/1281/1201/1122/ 1043/963/884	1500/1413/1325/1238/ 1150/1063/975		
External static p	Dressure <sup>4</sup>	Pa	80(0-250)				
Sound pressure	e level <sup>s</sup>	dB(A)	39/38/36/35/33/ 32/30	39/38/36/35/33/ 32/30	39/38/36/35/33/ 32/30	40/39/37/36/34/ 33/31	
	Net dimensions <sup>6</sup> (W×H×D)	mm		1050×29	99×750		
Unit	Packed dimensions (W×H×D)	mm		1215×3	59×890		
Net/Gross weight kg		35/38.5	35/38.5	35/38.5	35/38.5		
Refrigerant typ	e		R410A/R32	R410A/R32	R410A/R32	R410A/R32	
Pipe	Liquid/Gas pipe	mm	Φ6.35/Φ12.7		Φ9.52/Φ15.9		
connections	Drain pipe	mm	OD \$25				

Model name			MIH112T1HN18	MIH125T1HN18	MIH140T1HN18	MIH160T1HN18	
Power supply				1-phase, 220-240V, 50/60Hz			
		kW	11.2	12.5	14	16	
Cooling <sup>1</sup>	Capacity	kBut/h	38.2	42.7	47.8	54.6	
	Input	W	248	252	284	339	
		kW	12.5	14	16	18	
Heating <sup>2</sup>	Capacity	kBut/h	42.7	47.8	54.6	61.4	
	Input		248	252	284	339	
			2140/2015/1890/1766/	2150/2025/1899/1774/	2400/2260/2120/1980/	2600/2448/2297/2145/	
Airflow rate <sup>3</sup>		m³/h	1641/1516/1391	1649/1523/1398	1840/1700/1560	1993/1842/1690	
External static p	pressure <sup>4</sup>	Pa	80(0-250)		100(0-250)	100(0-250)	
Sound pressure	level <sup>5</sup>	dB(A)	41/40/38/37/35/ 34/32	41/40/39/37/36/	43/42/40/39/37/ 36/34	44/43/41/40/38/ 37/35	
	Net dimensions <sup>6</sup> (WxHxD)	mm		1400×2	99×750		
Unit	Packed dimensions (W×H×D)	mm		1565×3	59×890		
Net/Gross weight kg		kg	44.5/48.5	46.5/50.5	46.5/50.5	46.5/50.5	
Refrigerant type	2		R410A/R32	R410A/R32	R410A/R32	R410A/R32	
Pipe	Liquid/Gas pipe	mm		Φ9.52/	Φ15.9		
connections	Drain pipe	mm		OD	Ф25		

Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
 Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
 Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
 Astable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal static pressure range tere to the unit's installation manual.)
 Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a anechoic chamber.
 The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.
 All specifications are measured at standard external static pressure.

# **Specifications**

High Static Pressure Duct

Model name			MIH200T1HN18	MIH224T1HN18	MIH252T1HN18	MIH280T1HN18	
Power supply				1-phase, 220-240V, 50/60Hz			
		kW	20	22.4	25.2	28	
Cooling <sup>1</sup>	Capacity	kBut/h	68.3	76.5	86.0	95.6	
	Input	W	780	780	780	780	
		kW	22.5	25	26	31.5	
Heating <sup>2</sup>	Capacity	kBut/h	76.8	85.3	88.7	107.5	
	Input	W	780	780	780	780	
Airflow rate <sup>3</sup>		m³/h	4700/4387/4073/3760/ 3447/3133/2820	4700/4387/4073/3760/ 3447/3133/2820	4700/4387/4073/3760/ 3447/3133/2820	4700/4387/4073/3760/ 3447/3133/2820	
External static p	pressure <sup>4</sup>	Pa	200(0-400)				
Sound pressure	e level <sup>s</sup>	dB(A)	51/50/48/46/44/43/42	51/50/48/46/44/43/42	51/50/48/46/44/43/42	51/50/48/46/44/43/42	
	Net dimensions <sup>6</sup> (W×H×D)	mm		1300×5	580×900	1	
Unit	Packed dimensions (W×H×D)	mm		1530×7	30×1060		
Net/Gross weight		kg	125/150	125/150	125/150	125/150	
Refrigerant typ	e		R410A/R32	R410A/R32	R410A/R32	R410A/R32	
Pipe	Liquid/Gas pipe	mm	Φ9.52/	Φ19.1	Φ12.7/Φ		
connections	Drain pipe	mm	OD \$32				

Model name			MIH335T1HN18	MIH400T1HN18	MIH450T1HN18	MIH560T1HN18	
Power supply				1-phase, 220-240V, 50/60Hz			
		kW	33.5	40	45	56	
Cooling <sup>1</sup>	Capacity	kBut/h	114.3	136.5	153.6	191.1	
	Input	W	810	1850	1850	2030	
		kW	38	45	56	63	
Heating <sup>2</sup>	Capacity	kBut/h	129.7	153.6	191.1	215.0	
	Input	W	810	1850	1850	2030	
Airflow rate <sup>3</sup>		m³/h	4700/4387/4073/3760/ 3447/3133/2820	7500/7000/6500/6000/ 5500/5000/4500	7500/7000/6500/6000/ 5500/5000/4500	8400/7840/7280/6720/ 6160/5600/5040	
External static p	pressure <sup>4</sup>	Pa	200(0-400)	300(0-400)			
Sound pressure	e level <sup>s</sup>	dB(A)	52/51/49/48/46/44/43	58/56/54/52/50/49/48	58/56/54/52/50/49/48	59/58/56/54/53/51/49	
	Net dimensions <sup>6</sup> (W×H×D)	mm	1300×580×900		1850×580×900	1	
Unit	Packed dimensions (W×H×D)	mm	1530×730×1060		2080×730×1060		
Net/Gross weight kg		128/153	166/204	166/204	170/208		
Refrigerant type		R410A/R32	R410A/R32	R410A/R32	R410A/R32		
Pipe	Liquid/Gas pipe	mm	Φ12.7/Φ25.4	Φ12.7/Φ25.4	Φ15.9/Φ	28.6	
connections	Drain pipe	mm		OD ¢	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.Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
4.Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal static pressure range tevel is installation manual.)
5.Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a anechoic chamber.
6.The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.
7.All specifications are measured at standard external static pressure.

Wall Mounted

Model			MIH15GHN18	MIH22GHN18	MIH28GHN18	MIH36GHN18			
Power supply			1-phase, 220-240V, 50/60Hz						
	Capacity	kW	1.5	2.2	2.8	3.6			
Cooling <sup>1</sup>	Capacity	kBtu/h	5.1	7.5	9.6	12.3			
	Power input	W	18	21	24	27			
	Capacity	kW	1.7	2.4	3.2	4			
Heating <sup>2</sup>	Capacity	kBtu/h	5.8	8.2	10.9	13.6			
	Power input	W	18	21	24	27			
Air flow rate <sup>3</sup>		m³/h	460/440/420/400/380/360/340	500/470/440/410/390/370/340	540/510/470/430/400/370/340	580/540/500/460/420/380/34			
Sound pressure	level <sup>4</sup>	dB(A)	32/31/30/30/29/28/27	33/32/31/30/29/28/27	35/34/33/32/31/30/28	37/36/34/33/31/30/28			
ound power le	vel	dB(A)	45/44/43/43/42/41/40	46/45/44/43/42/41/40	50/49/48/47/46/44/42	54/53/51/50/48/46/44			
	Net dimensions (W×H×D)	mm	750 × 295 × 265	750×295×265	750×295×265	750×295×265			
Unit	Packed dimensions (W×H×D)	mm	875×385×360	875×385×360	875×385×360	875×385×360			
	Net/Gross weight	kg	9/11.5	9/11.5	10/12.5	10/12.5			
Refrigerant type			R410.	A/R32					
lipe	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø6.35/Ø12.7	Ø6.35/Ø12.7	Ø6.35/Ø12.7			
connections	Drain pipe	mm	OD Ø16	OD Ø16	OD Ø16	OD Ø16			

Model			MIH45GHN18	MIH45GHN18 MIH56GHN18 MIH7		MIH80GHN18
Power supply				1-phase, 220-	240V, 50/60Hz	
		kW	4.5	5.6	7.1	8
Cooling <sup>1</sup>	Capacity	kBtu/h	15.4	19.1	24.2	27.3
	Power input	W	30	40	50	65
	Conseite	kW	5	6.3	8	9
Heating <sup>2</sup>	Capacity	kBtu/h	17.1	21.5	27.3	30.7
	Power input	W	30	40	50	65
Air flow rate <sup>3</sup>		m³/h	720/670/620/560/510/460/410	860/780/700/620/550/480/410	1220/1120/1030/940/850/750/660	1380/1260/1140/1020/900/780/660
Sound pressure leve	el <sup>4</sup>	dB(A)	37/35/33/32/31/30/29	41/39/37/35/33/31/29	44/42/40/38/36/34/32	45/43/41/39/37/35/32
Sound power level		dB(A)	54/52/50/49/48/46/44	56/54/52/50/48/46/44	58/56/54/52/50/48/46	60/57/55/53/50/48/46
	Net dimensions $(W \times H \times D)$	mm	950 × 295 × 265	950 × 295 × 265	1200×295×265	1200×295×265
Unit	Packed dimensions (W×H×D)	mm	1075×385×360	1075×385×360	1315×385×360	1315×385×360
	Net/Gross weight	kg	11.5/14	11.5/14	15/18	15/18
Refrigerant type			R410	A/R32		
Pipe	Liquid/Gas pipe	mm	Ø6.35/Ø12.7	Ø6.35/Ø12.7	Φ9.52/Φ15.9	Φ9.52/Φ15.9
connections	Drain pipe	mm	OD Ø16	OD Ø16	OD Ø16	OD Ø16
1						

### Notes:

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

3. Air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.

4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 0.8m below the unit in an anechoic chamber. 5. The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

# **Specifications**

Floor Standing F3(concealed)

Model name			MIH22F3HN18	MIH28F3HN18	MIH36F3HN18	MIH45F3HN18	MIH56F3HN18	MIH71F3HN18	MIH80F3HN18	
Power supply			1-phase, 220-240V, 50/60Hz							
Cooling <sup>1</sup>	Capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8	
		kBut/h	7.5	9.6	12.3	15.4	19.1	24.2	27.3	
	Input	W	35	35	40	44	45	53	62	
Heating <sup>2</sup>	Capacity	kW	2.4	3.2	4.0	5.0	6.3	8.0	9.0	
		kBut/h	8.2	10.9	13.7	17.1	21.5	27.3	30.7	
	Input	W	35	35	41	46	47	57	64	
External static pressure <sup>4</sup> Pa		Pa	0-60							
Airflow rate <sup>3</sup>		m³/h	473/464/454/449/439/431/426		524/503/488/471/ 450/427/408	636/611/584/557/ 533/507/483	781/756/738/717/ 683/651/624	928/893/865/834/803/770/739		
Sound pressure level <sup>4</sup> df		dB(A)	34.5/34/33.5/32.5/32/31/30.5		36.5/35.5/34.5/34/ 33/32/31	37/36/35/34/33/ 32/30	36.5/36/35/34/ 33.5/32.5/31.5	40.5/39.5/38.5/37.5/36.5/36/34.5		
	Net dimensions <sup>5</sup> (W×H×D)	mm		915×470×200		1133×470×200	1253×566×200			
Unit	Packed dimensions (W×H×D)	mm		985×555×255		1205×555×255	1325×650×255			
	Net/Gross weight	kg	16.3/20.0		16.9/20.7	20.0/24.4	24.3/30.0	26.1/31.8		
Refrigerant typ	be					R410A/R32				
pipe connections	Liquid/Gas pipe	mm			Φ6.35/Φ12.7			Φ9.52/Φ15.9		
	Drain piping	mm				OD Φ18.5				

### Floor Standing F4/F5(Exposed)

Model name Model name			MIH22F4HN18	MIH28F4HN18	MIH36F4HN18	MIH45F4HN18	MIH56F4HN18	MIH71F4HN18	MIH80F4HN18
			MIH22F5HN18	MIH28F5HN18	MIH36F5HN18	MIH45F5HN18	MIH56F5HN18	MIH71F5HN18	MIH80F5HN18
Power supply		1-phase, 220-240V, 50/60Hz							
Cooling <sup>1</sup>	Capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	8
		kBut/h	7.5	9.6	12.3	15.4	19.1	24.2	27.3
	Input	W	35	35	40	44	45	53	62
Heating <sup>2</sup>	Capacity	kW	2.4	3.2	4	5	6.3	8	9
		kBut/h	8.2	10.9	13.7	17.1	21.5	27.3	30.7
	Input	W	35	35	41	46	47	57	64
External static pressure <sup>4</sup>		Pa(F4)	0-10						
		Pa(F5)	0-10						
Airflow rate <sup>3</sup>		m³/h(F4)	507/490/482/466/449/450/435		532/512/501/483/ 466/435/414	689/663/639/608/ 575/560/526	934/904/888/860/ 821/786/764	1054/1011/992/955/924/889/841	
		m³/h(F5)	498/486/475/464/453/441/430		508/491/474/458/ 441/424/407	692/665/637/610/ 582/555/528	811/785/759/732/ 706/680/653	930/895/860/825/790/755/721	
Sound pressure level <sup>4</sup>		dB(A)(F4)	36/35/34.5/34/33/32.5/32		38/37/36/35/34/3 3/32	43/42/41/40/39/3 8/37	41.5/41/40/39/38/ 37/36	46/45.5/45/44/43/42/41	
		dB(A)(F5)	32.5/32/31.5/31/30.5/30/29		35/34/33/32/31/3 0/29	38/37/36/35/34/3 2.5/31.5	35/34.5/34/33/32. 5/32/31	4/33/32. 39.5/39/38/37/36/35/34 /31	
		mm(F4)	1020×495×200		1020×495×200	1240×495×200	1360×591×200		
Unit	Net dimensions <sup>2</sup> (WXHXD)	mm(F5)	1020×495×200		1020×495×200	1240×495×200	1360×591×200		
	Packed dimensions (WXHXD)	mm(F4)	1125×595×285		1125×595×285	1345×595×285	1465×695×285		
		mm(F5)	1125×595×285		1125×595×285	1345×595×285	1465×695×285		
	Net/Gross weight	kg(F4)	21.1/27.9		21.9/28.6	26.3/32.9	32.1/41.0	33.3/41.1	33.3/42.1
	Net/Gloss weight	kg(F5)	21.1/26.8		21.9/27.6	26.3/32.4	32.1/39.4	33.3/41.1	33.3/41.1
Refrigerant type						R410A/R32			
Pipe connections	Liquid/Gas pipe	mm			Φ6.35/Φ12.7			Φ9.52/Φ15.9	
	Drain piping	mm			OD Φ18.5				

Notes:

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. Fan motor speed and air flow rate are from the highest to the lowest, total 7 rates for each model. 4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. 5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.