Midea

V8S VRF
8-22HP (Single Unit)
24-88HP (Combined Unit)

SMART IN ONE

Midea Building Technologies Division

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Quality Assurance
ISO 9001

Environmental Management
ISO 14001

Occupational Health and Safety Management
ISO 45001

DISCOVER
RELIABLE COMFORT

EU

HYPERLINK

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

**Benefits**

Flexible installation

Low installation cost

High reliability

Stable operation

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.
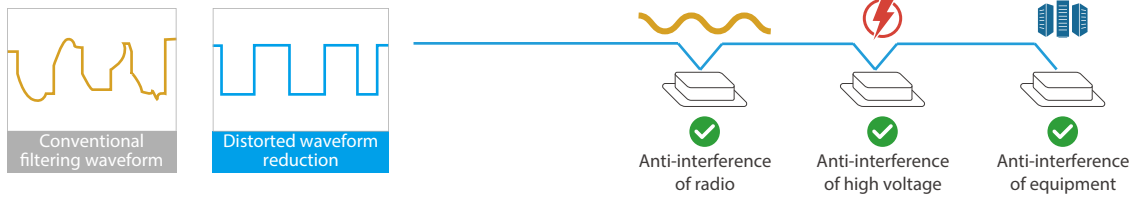
Support Any Topology Communication

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.

Traditional daisy chain connection

Daisy chain connection

Tree connection

Star connection

Ring connection*

V8S wiring connection

V8S system continue operating in case of disconnection
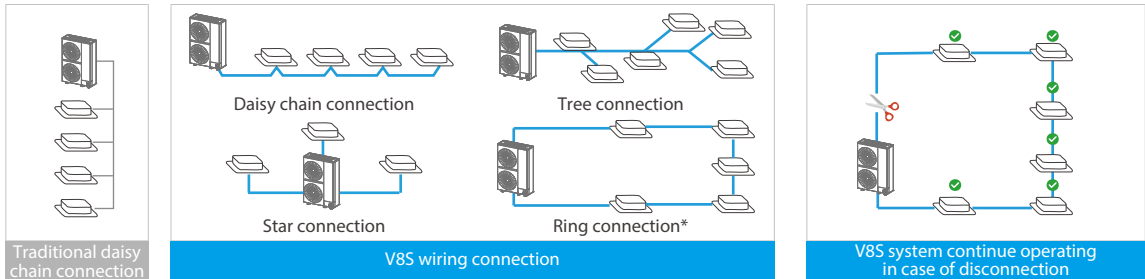
*In ring connection, the communication wire must be connected polarized (M1 port to M1 port and M2 port to M2 port).

Super Anti-interference Capability

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

Conventional filtering waveform

Distorted waveform reduction

Anti-interference of radio

Anti-interference of high voltage

Anti-interference of equipment

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.

Power supply — Breaker — L N

Power supply — Breaker — L N

Power supply — Breaker — L N
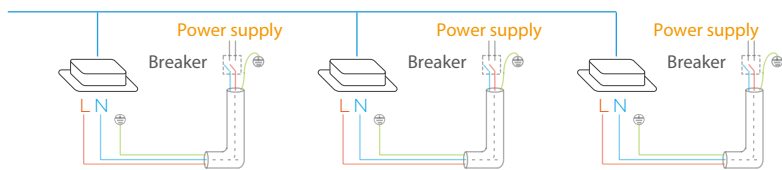
FELXIBLE INSTALLATION

V8S is highly space saving, slim and compact designed outdoor units, this ensusres FLEXIBLE INSTALLATION.

Footprint Approx.**50%** reduction

Footprint: 1.11m²   Footprint: 0.56m²

Benefits

Space saving

Flexible installation

Low installation cost

Maximum 4 outdoor units can be combined in one refrigerant system and the maximum capacity ups to 88HP. 80Pa static pressure can be customized for longer air duct connecting. V8S is an optimize choice for small to large buildings especially those installation space is limited.

Easy Transportation

V8S can be transported by elevator which makes installation dramatically easy, and effectively reduces time and labor thanks to the small size.
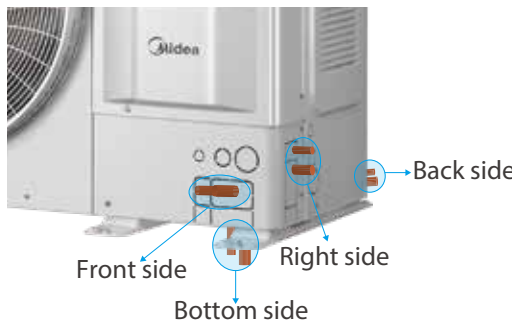
Space Saving

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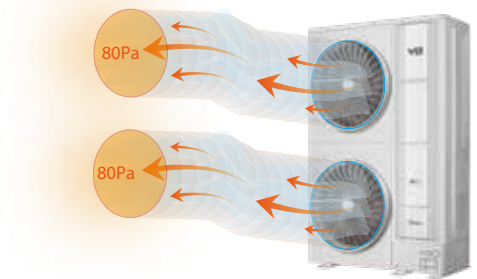

Four-way Piping Connection

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

High External Static Pressure

80Pa static pressure can be customized, which facilitates installation of the unit on balconies with ducting.

Back side

Front side   Right side

Bottom side

80Pa

80Pa

SUPERSENSE

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

Benefits

- High reliability
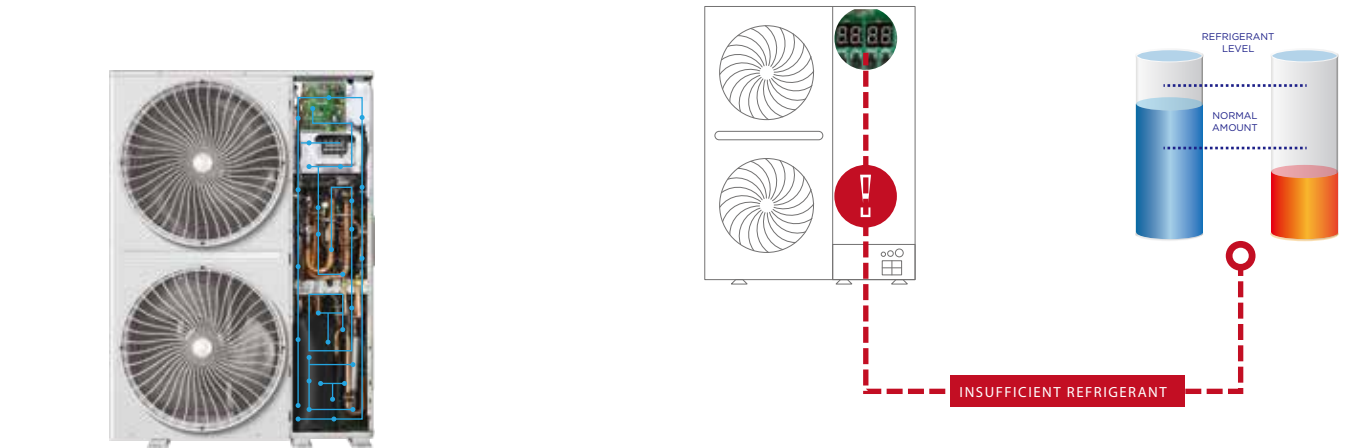- Stable operation
- Enhanced comfort

Up to 18 sensors are distributed throughout the refrigerant system, and the status of the refrigerant 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 Series 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.

Refrigerant Amount Diagnosis

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

REFRIGERANT LEVEL

NORMAL AMOUNT

INSUFFICIENT REFRIGERANT

Vitual 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.

Failure of a physical sensor

Real-time generation of virtual sensor

Midea ETA (META) 2.0

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

Cooling Mode

Cooling Mode

Benefits

- Energy saving
- Enhanced comfort
- Fast cooling/heating

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

Variable Refrigerant Flow

STEP 1: Architectural space feature recognition

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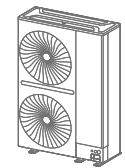
Refrigerant flow coordination

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

Variable Refrigerant Temperature

STEP 2: System refrigerant temperature determination

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

Load / Refrigerant temperature
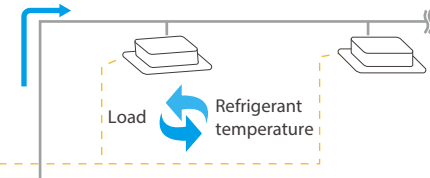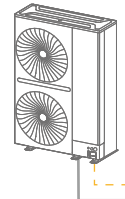
Automatic matching of the corresponding refrigerant temperature to the load.

Variable Indoor Airflow

STEP 3: Adaptive indoor airflow and refrigerant flow

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

7 fan speeds

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

Conventional refrigerant regulation

Compressor output

Indoor temperature

Setting temperature

Time (min)

V8S refrigerant regulation

Compressor output

Indoor temperature

Setting temperature
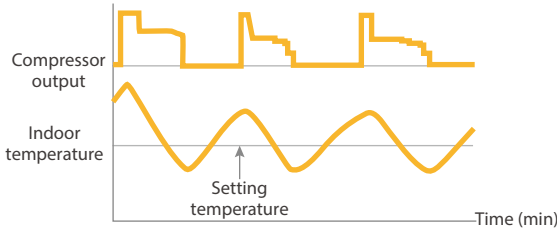
Time (min)

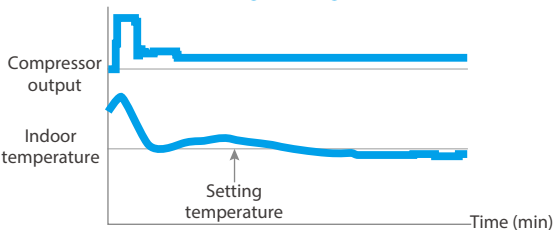# ZEN AIR 2.0

Further upgraded ZEN AIR technology to maximize COMFORT.

Sleep mode

Soft wind mode

Benefits

Quiet

Enhanced comfort

Healthy

0.5°C temperature adjustment, 7 fan speeds selection, sleep mode, silent mode, windless technology, high efficiency filter, a variety of sterilization device and other advanced technologies used in V8S Series VRF are dedicated to creating a quiet, comfortable and healthy indoor environment.
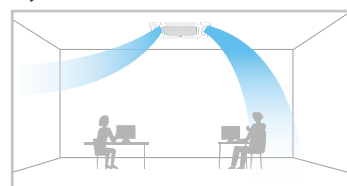
360° Airflow

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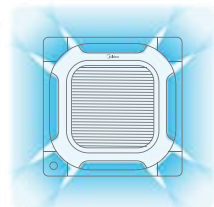
Individual Louver Control

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.
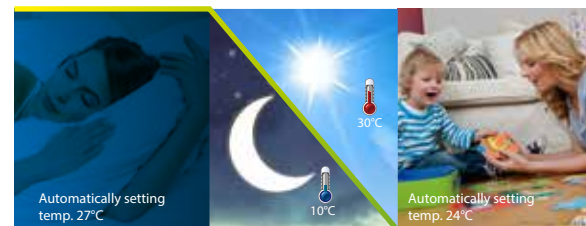
4.5m

Cooling

Heating
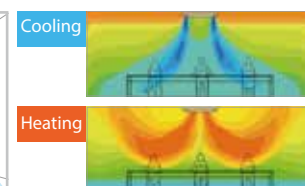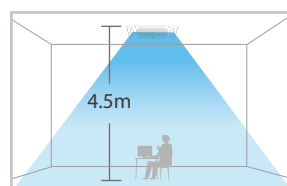
7 Fan Speeds

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.

Automatically setting temp. 27°C

30°C

10°C

Automatically setting temp. 24°C

*Temperature on left is for reference.

Innovative Puro-air Kit

Protectors of health and safety

OSRAM From Germany - OSRAM quality UV light source

CE Ozone –Free UV leakage-Free

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

DOCTOR M 2.0

Further upgraded DOCTOR M technology to maximize EASY SERVICE.

Benefits

Easy maintenance

Fast maintenance

Low maintenance cost

Based on a cloud-based platform of big data and artificial intelligence, the 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. The 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 customization option. Bluetooth after-sales kit needs to be purchased separately

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.

FREE CONTROL

Intelligent control brings a new experience.

PC **Tablet** **Mobile**
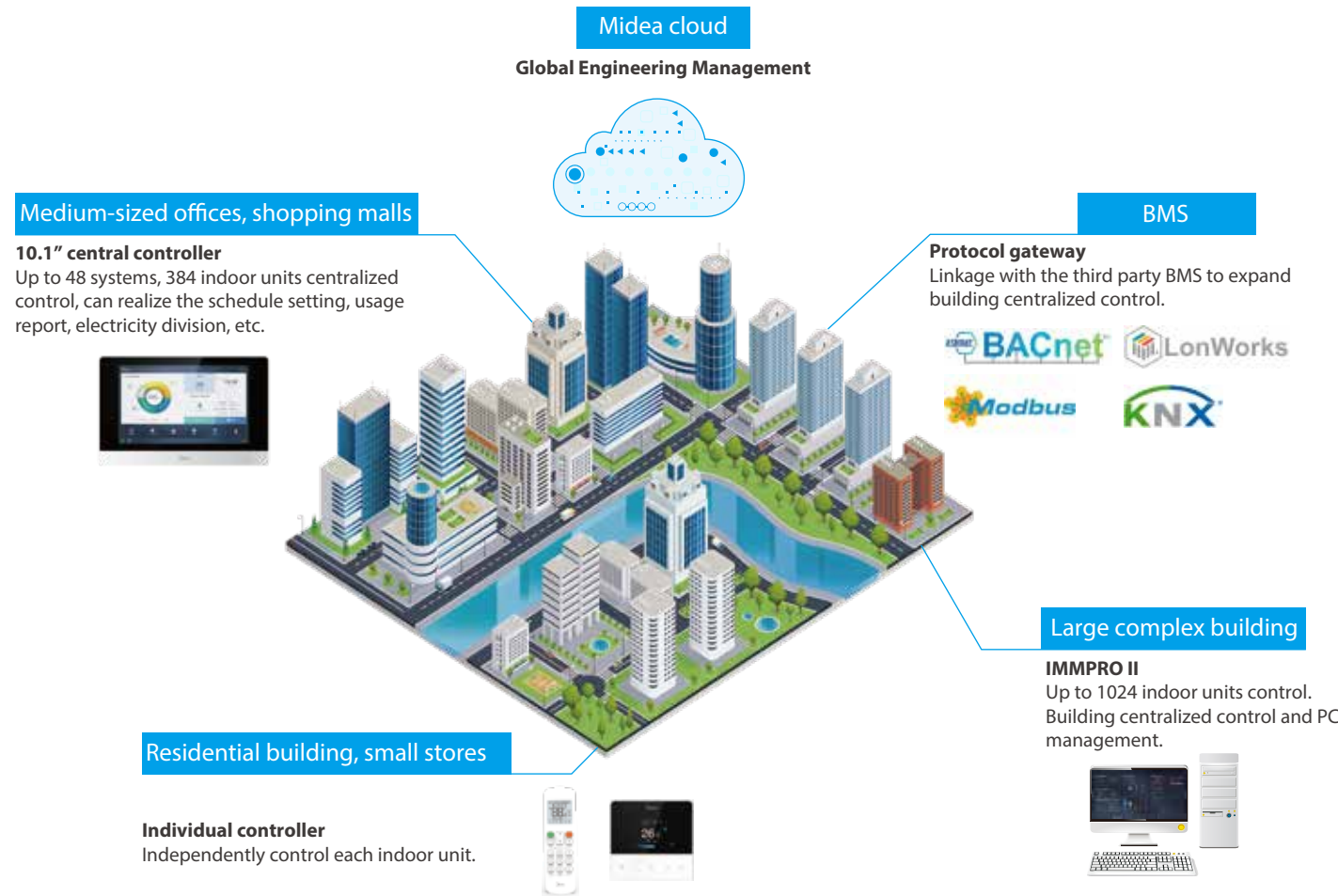
Benefits

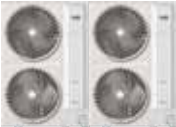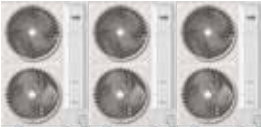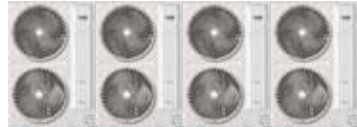Individual control

Central control

Cloud control

V8S Series VRF can provide different control solutions for different application scenarios. From small homes and convenience stores to large shopping malls and complex buildings, V8S Series VRF can provide the most appropriate control solutions to achieve centralized and customized management.

Midea cloud

Global Engineering Management

Medium-sized offices, shopping malls

10.1" central controller
Up to 48 systems, 384 indoor units centralized control, can realize the schedule setting, usage report, electricity division, etc.

Residential building, small stores

Individual controller
Independently control each indoor unit.

BMS

Protocol gateway
Linkage with the third party BMS to expand building centralized control.

BACnet LonWorks
Modbus KNX

Large complex building

IMMPRO II
Up to 1024 indoor units control.
Building centralized control and PC management.

V8S UNIT LINEUP

Outdoor Unit

HP	8-14	16-22
Single Unit		

HP	24-44	46-66	68-88
Combined Unit			

V8 Indoor Unit

Type	One-way Cassette	Two-way Cassette	Compact Four-way Cassette	Four-way Cassette	Arc Duct	Medium Static Pressure Duct
Indoor Unit	1.8-7.1kW, 7 models	2.2-7.1kW, 6 models	1.5-6.3kW, 7 models	2.8-18kW, 12 models	1.5-11.2kW, 10 models	1.5-16kW, 13 models

Type	High Static Pressure Duct	Wall Mounted	Ceiling & Floor	Floor Standing	Fresh Air Processing Unit	Small Airflow Rate Fresh Air Processing
Indoor Unit	5.6-56kW, 16 models	1.5-8kW, 8 models	3.6-14kW, 10 models	2.2-8kW, 7 models	22.4/56kW, 7 models	9-28kW, 5 models

Note: The different series of indoor units are available in stages.
Pictures are for reference only, please refer to the actual product.

2nd Generation DC/AC Indoor Unit

Type	One-way Cassette	Two-way Cassette	Compact Four-way Cassette	Four-way Cassette	Medium Static Pressure Duct
Indoor Unit	1.8-7.1kW, 7 models	2.2-7.1kW, 6 models	2.2-4.5kW, 5 models (DC) 1.8-4.5kW, 5 models (AC)	2.8-16kW, 11 models (DC) 2.8-14kW, 10 models (AC)	2.2-16kW, 11 models (DC) 2.2-14kW, 10 models (AC)

Type	High Static Pressure Duct	Wall Mounted	Ceiling & Floor	Floor Standing	Fresh Air Processing Unit
Indoor Unit	7.1-56kW, 12models	2.2-9kW, 8 models	3.6-16kW, 9 models (DC) 3.6-14kW, 8 models (AC)	2.2-8kW, 7 models (DC)	12.5-56kW, 7 models (DC)

Specification

Combinable Series

HP Model name			8 MV8S-252WV2RN1	10 MV8S-280WV2RN1	12 MV8S-335WV2RN1	14 MV8S-400WV2RN1
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	25.2	28	33.5	40
		kBtu/h	86.0	95.5	114.3	136.5
Heating[2](Rated)	Capacity	kW	25.2	28	33.5	40
		kBtu/h	86.0	95.5	114.3	136.5
Heating[2](Max)	Capacity	kW	27	31.5	37.5	45
		kBtu/h	92.1	107.5	128.0	153.5
SEER			7.25	7.05	6.91	6.65
ηs,c		%	287.0	279.0	273.4	263.0
SCOP			4.15	4.11	4.11	4.15
ηs,h		%	163.0	161.4	161.4	163.0
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		13	16	19	23
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	6.1	6.1	6.4	7.4
Pipe connections[3]	Liquid pipe	mm	Ø12.7	Ø12.7	Ø12.7	Ø12.7
	Gas pipe	mm	Ø25.4	Ø25.4	Ø25.4	Ø25.4
Sound pressure level[4]		dB(A)	56	57	58	59
Sound power level[4]		dB(A)	76	79	81	82
Net dimensions (W×H×D)		mm	1130×1760×580	1130×1760×580	1130×1760×580	1130×1760×580
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	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

Notes:
1. Indoor air temperature 27℃ DB, 19℃ WB;outdoor air temperature 35℃ DB; equivalent refrigerant piping length 7.5m with zero level difference; connect to Cassette type indoor unit.
2. Indoor air temperature 20℃ DB; outdoorair temperature 7℃ DB, 6℃ WB; equivalent refrigerant piping length 7.5m with zero level difference; connect to Cassette type indoor unit.
3. Diameters given are those of the unit's stop valve.
4. Sound pressure level is measured at aposition 1m in front of the unit and 1.3m above the oor in a semi-anechoicchamber.

Specification

Combinable Series

HP Model name			16 MV8S-450WV2RN1	18 MV8S-500WV2RN1	20 MV8S-560WV2RN1	22 MV8S-615WV2RN1
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	45	50	56	61.5
		kBtu/h	153.5	170.6	191.1	209.8
Heating[2](Rated)	Capacity	kW	45	50	56	61.5
		kBtu/h	153.5	170.6	191.1	209.8
Heating[2](Max)	Capacity	kW	50	56.5	63	69
		kBtu/h	170.6	192.8	215.0	235.4
SEER			6.77	6.47	6.30	6.15
ηs,c		%	267.8	255.8	249.0	243.0
SCOP			4.23	4.17	4.07	4.00
ηs,h		%	166.2	163.8	159.8	157.0
Connected indoor unit	Total capacity		50-130%	50-130%	50-130%	50-130%
	Maximum quantity		26	29	33	36
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	8	8	8.5	8.5
Pipe connections[3]	Liquid pipe	mm	Ø15.9	Ø15.9	Ø15.9	Ø15.9
	Gas pipe	mm	Ø28.6	Ø28.6	Ø28.6	Ø28.6
Sound pressure level[4]		dB(A)	60	61	61	62
Sound power level[4]		dB(A)	86	88	89	89
Net dimensions (W×H×D)		mm	1250×1760×580	1250×1760×580	1250×1760×580	1250×1760×580
Packed dimensions (W×H×D)		mm	1330×1916×597	1330×1916×597	1330×1916×597	1330×1916×597
Net weight		kg	208	208	228	228
Gross weight		kg	223	223	243	243
Ambient temp.	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
operation range	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

Notes:
1. Indoor air temperature 27℃ DB, 19℃ WB;outdoor air temperature 35℃ DB; equivalent refrigerant piping length 7.5m with zero level difference; connect to Cassette type indoor unit.
2. Indoor air temperature 20℃ DB; outdoorair temperature 7℃ DB, 6℃ WB; equivalent refrigerant piping length 7.5m with zero level difference; connect to Cassette type indoor unit.
3. Diameters given are those of the unit's stop valve.
4. Sound pressure level is measured at aposition 1m in front of the unit and 1.3m above the oor in a semi-anechoicchamber.