SMART IN ONE

V8 VRF Master Series

8-96HP (Combinable series)



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Quality Assurance ISO 9001

Environmental Management ISO 14001

Occupational Health and Safety Management ISO 45001

HYPERLINK

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



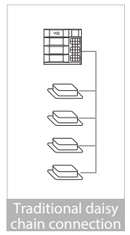
Benefits

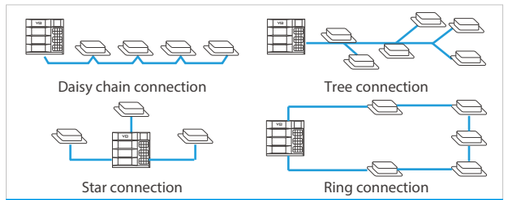
- Flexible installation
- Low installation cost
- High reliability
- Stable operation

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.

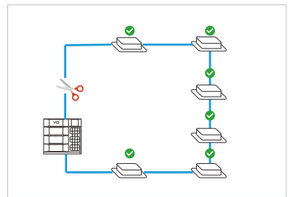
Support Any Topology Communication

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

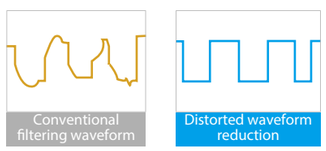


V8 wiring connection

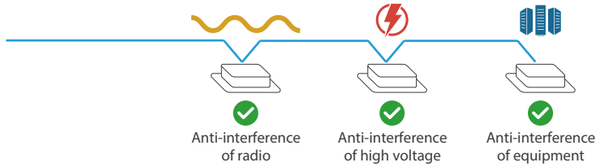

V8 system continue operating in case of disconnection

Super Anti-interference Capability

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

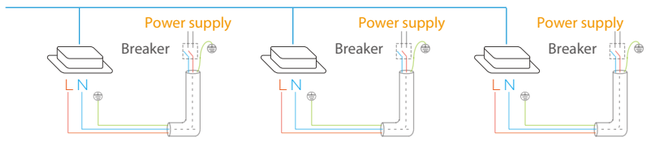

Conventional filtering waveform

Distorted waveform reduction



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

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


Anti-corrosion


Dustproof


Rain & snow proof


Insect proof

Benefits

- High reliability
- Stable operation

■ IP (INGRESS PROTECTION)

IP 55

Dustproof grade code
Prevent entry foreign objects and dust

Waterproof grade code
Prevent water spray in all directions

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.



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.



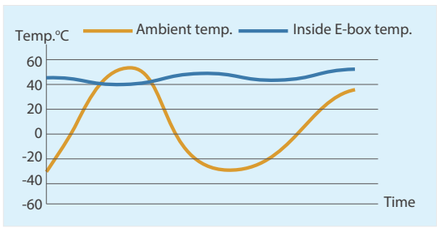
Built-in Circulating Fan

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 controlled at 40-50°C.



SUPERSENSE

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



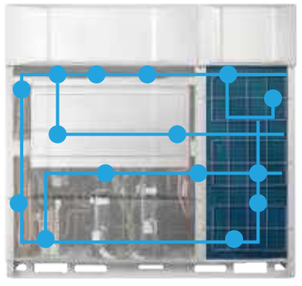
Benefits

- High reliability
- Stable operation
- Enhanced comfort

Up to 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.

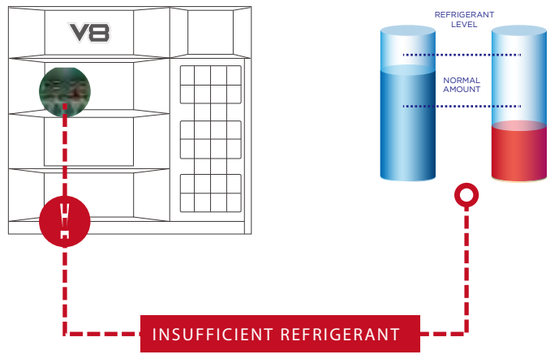
Complete Sensors

The V8 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*

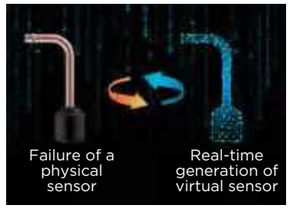
Thanks to the complete sensors, the refrigerant running state is clearly visible, so as to accurately diagnose the amount of refrigerant.



*Refrigerant Amount Diagnosis function will be available at the end of July.

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.



META 2.0

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









Benefits

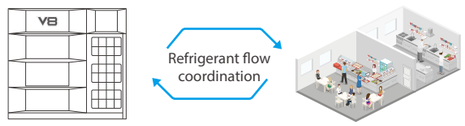
- Energy saving
- Enhanced comfort
- Fast cooling/heating

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

Variable Refrigerant Flow

STEP 1: Architectural space feature recognition

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

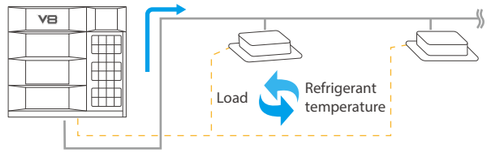


Automatic calculation of the building load and the required refrigerant quantity based on the sensor parameters.

Variable Refrigerant Temperature

STEP 2: System refrigerant temperature determination

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



Automatic matching of the corresponding refrigerant temperature to the load.

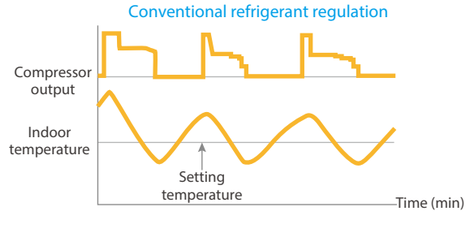
Variable Indoor Airflow

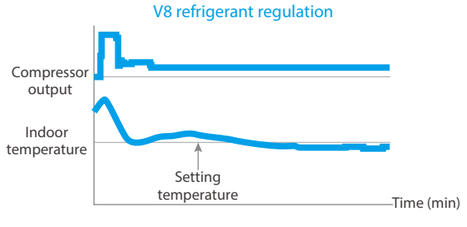
STEP 3: Adaptive indoor airflow and refrigerant flow

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



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





ZEN AIR 2.0

Further upgraded ZEN AIR technology to maximize COMFORT.





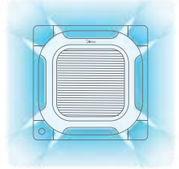
Benefits

- Quiet
- Enhanced comfort
- Healthy

0.5°C temperature adjustment, 7 fan speeds selection, sleep mode, silent mode, windless technology, high efficiency filter, a variety of sterilization device and other advanced technologies used in V8 Series VRF are dedicated to creating a quiet, comfortable and healthy indoor environment.

360° Airflow

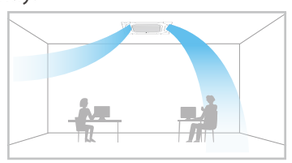
New design, round air flow path ensures uniform air flow and temperature distribution.





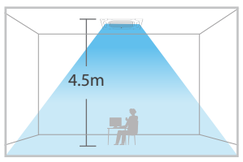
Individual Louver Control

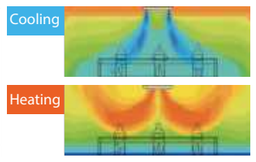
The Individual louver control can control the motors separately, making it possible to control all four louvers independently.



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.





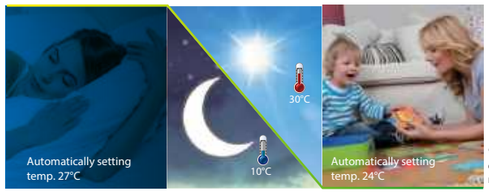
7 Fan Speeds

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.



*Temperature on left is for reference.

Innovative Puro-air Kit

Protectors of health and safety



OSRAM From Germany - OSRAM quality UV light source

1st 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.

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 V8 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 after-sales kit

Real-time Monitoring of Operating Parameters

The V8 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 V8 VR 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.



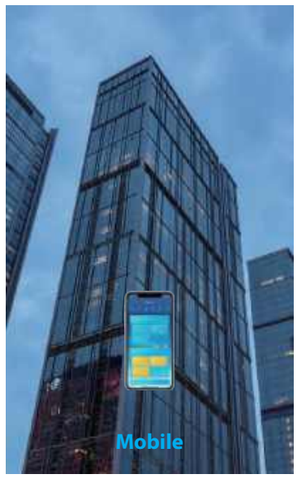
*The data cloud gateway is still under development and needs to be purchased separately.

FREE CONTROL

Intelligent control brings a new experience.







Benefits

Individual control

Central control

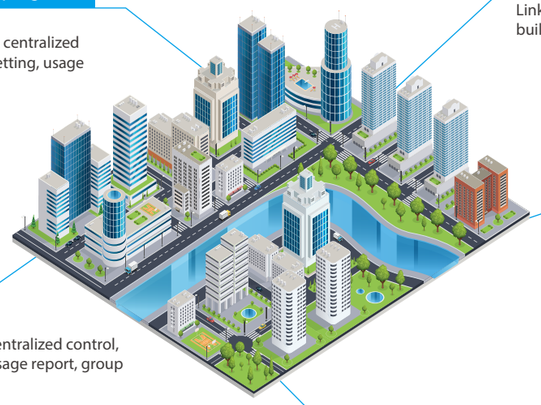
Cloud control

V8 Series VRF can provide different control solutions for different application scenarios. From small homes and convenience stores to large shopping malls and complex buildings, V8 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.



Small-sized offices

7" central controller
Up to 8 systems, 64 indoor units centralized control, can realize the schedule setting, usage report, group management, etc.



BMS

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

BACnet LonWorks Modbus KNX

Large complex building

IMM Pro 2.0
Up to 3840 indoor units control.
Building centralized control and PC management.



Residential building, small stores

Individual controller
Independently control each indoor unit.



V8 UNIT LINEUP

Outdoor Unit - Combinable Series

HP	8-16	18-24	26-32
Single Unit			

HP	34-64	66-96
Combined Unit		

V8 Indoor Unit

Type	One-way Cassette	Two-way Cassette	Compact Four-way Cassette	Four-way Cassette	Arc Duct	Medium Stat
Indoor Unit						
	1.8-7.1kW, 7 models	2.2-7.1kW, 6 models	1.5-6.3kW, 7 models	2.8-16kW, 11 models	1.5-11.2kW, 10 models	1.5-16kW, 13 models

Type	High Static Pressure Duct	Wall Mounted	Ceiling & Floor	Fresh Air Processing Unit
Indoor Unit				
	7.1-56kW, 12 models	1.5-9kW, 9 models	3.6-14kW, 8 models	11.2-56kW, 8 models

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

Specification

Combinable Series

HP			8	10	12
Model name			MV8-252WV2RN1E(MA)	MV8-280WV2RN1E(MA)	MV8-335WV2RN1E(MA)
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	25.2	28.0	33.5
		kBtu/h	85.9	95.5	114.2
Heating[2](Rated)	Capacity	kW	25.2	28.0	33.5
		kBtu/h	85.9	95.5	114.2
Heating[2](Max)	Capacity	kW	27.0	31.5	37.5
		kBtu/h	92.1	107.4	127.9
SEER			7.21	6.82	6.32
ηs.c		%	285.4	269.8	249.8
SCOP			4.08	4.07	4.09
ηs.h		%	160.2	159.8	160.6
Connected indoor unit	Total capacity		50%-130%	50%-130%	50%-130%
	Maximum quantity		13	16	19
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	7	7	7
Pipe connections[3]	Liquid pipe	mm	Ø12.7	Ø12.7	Ø12.7
	Gas pipe	mm	Ø25.4	Ø25.4	Ø25.4
Sound pressure level[4]		dB(A)	58	58	61
Sound power level[4]		dB(A)	83	84	85
Net dimensions (W×H×D)		mm	940×1760×825		
Packed dimensions (W×H×D)		mm	1005×1945×890		
Net weight		kg	195	195	195
Gross weight		kg	213	213	213
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30

HP			14	16	18
Model name			MV8-400WV2RN1E(MA)	MV8-450WV2RN1E(MA)	MV8-500WV2RN1E(MA)
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	40.0	45.0	50.0
		kBtu/h	136.4	153.5	170.5
Heating[2](Rated)	Capacity	kW	40.0	45.0	50.0
		kBtu/h	136.4	153.5	170.5
Heating[2](Max)	Capacity	kW	45.0	50.0	56.0
		kBtu/h	153.5	170.5	191.0
SEER			6.25	6.02	6.11
ηs.c		%	247.0	237.8	241.4
SCOP			4.12	4.02	4.14
ηs.h		%	161.8	157.8	162.6
Connected indoor unit	Total capacity		50%-130%	50%-130%	50%-130%
	Maximum quantity		23	26	29
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	8.4	8.4	9.3
Pipe connections[3]	Liquid pipe	mm	Ø15.9	Ø15.9	Ø15.9
	Gas pipe	mm	Ø28.6	Ø28.6	Ø28.6
Sound pressure level[4]		dB(A)	63	65	65
Sound power level[4]		dB(A)	86	86	88
Net dimensions (W×H×D)		mm	940×1760×825		1340×1760×825
Packed dimensions (W×H×D)		mm	1005×1945×890		1405×1945×890
Net weight		kg	215	215	295
Gross weight		kg	232	232	315
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30

Notes:
1. Indoor air temperature 27°C DB, 19°C WB;outdoor air temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference; connect to Cassette type indoor unit.
2. Indoor air temperature 20°C DB; outdoorair temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 floor in a semi-anechoicchamber.

Specification

Combinable Series

HP			20	22	24
Model name			MV8-560WV2RN1E(MA)	MV8-615WV2RN1E(MA)	MV8-670WV2RN1E(MA)
Power supply		V/N/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling[1]	Capacity	kW	56.0	61.5	67.0
		kBtu/h	191.0	209.7	228.5
Heating[2](Rated)	Capacity	kW	56.0	61.5	67.0
		kBtu/h	191.0	209.7	228.5
Heating[2](Max)	Capacity	kW	63.0	69.0	75.0
		kBtu/h	214.8	235.3	255.8
SEER			6.00	5.93	5.98
ηs.c		%	237.0	234.2	236.2
SCOP			4.03	4.21	4.08
ηs.h		%	158.2	165.4	160.2
Connected indoor unit	Total capacity		50%-130%	50%-130%	50%-130%
	Maximum quantity		33	36	39
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	9.3	11.96	11.96
Pipe connections[3]	Liquid pipe	mm	Ø15.9	Ø15.9	Ø15.9
	Gas pipe	mm	Ø28.6	Ø28.6	Ø28.6
Sound pressure level[4]		dB(A)	66	66	67
Sound power level[4]		dB(A)	89	89	92
Net dimensions (W×H×D)		mm	1340×1760×825		
Packed dimensions (W×H×D)		mm	1405×1945×890		
Net weight		kg	295	315	315
Gross weight		kg	315	335	335
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30

HP			26	28	30	32
Model name			MV8-730WV2RN1E(MA)	MV8-785WV2RN1E(MA)	MV8-850WV2RN1E(MA)	MV8-900WV2RN1E(MA)
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	73.0	78.5	85.0	90.0
		kBtu/h	248.9	267.7	289.9	306.9
Heating[2](Rated)	Capacity	kW	73.0	78.5	85.0	90.0
		kBtu/h	248.9	267.7	289.9	306.9
Heating[2](Max)	Capacity	kW	81.5	87.5	95.0	100.0
		kBtu/h	277.9	298.4	324.0	341.0
SEER			5.77	5.93	5.81	5.75
ηs.c		%	227.8	234.2	229.4	227.0
SCOP			4.15	4.12	4.00	3.95
ηs.h		%	163.0	161.8	157.0	155.0
Connected indoor unit	Total capacity		50%-130%	50%-130%	50%-130%	50%-130%
	Maximum quantity		43	46	50	53
Refrigerant	Type		R410A	R410A	R410A	R410A
	Factory charge	kg	11.96	11.96	11.96	11.96
Pipe connections[3]	Liquid pipe	mm	Ø22.2	Ø22.2	Ø22.2	Ø22.2
	Gas pipe	mm	Ø31.8	Ø34.9	Ø34.9	Ø34.9
Sound pressure level[4]		dB(A)	68	68	68	68
Sound power level[4]		dB(A)	93	93	93	93
Net dimensions (W×H×D)		mm	1880×1760×825			
Packed dimensions (W×H×D)		mm	1945×1945×890			
Net weight		kg	366	396	396	396
Gross weight		kg	396	426	426	426
Ambient temp. operation range	Cooling	℃	-15 to 55	-15 to 55	-15 to 55	-15 to 55
	Heating	℃	-30 to 30	-30 to 30	-30 to 30	-30 to 30

Notes:
1. Indoor air temperature 27°C DB, 19°C WB;outdoor air temperature 35°C DB; equivalent refrigerant piping length 5m with zero level difference; connect to Cassette type indoor unit.
2. Indoor air temperature 20°C DB; outdoorair temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 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 floor in a semi-anechoicchamber.