

C-V8MEU202312



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

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



2024





OUTDOOR UNITS

V8 Mini VRF

The V8 Mini Series VRF uses algorithms and self-learning technology to monitor the operation of the equipment, so that the equipment can run stably and be maintained in time to ensure that the equipment always runs in optimal condition throughout its life cycle.

8-16kW



220-240V- 50Hz

12-16kW



380-415V 3N- 50Hz

HyperLink

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



Benefits

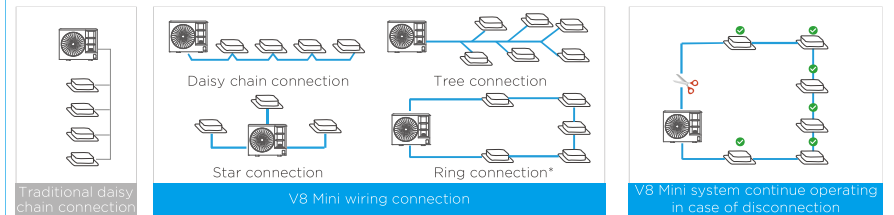
- Flexible installation
- Low installation cost
- High reliability
- Stable operation

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 wiring 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).

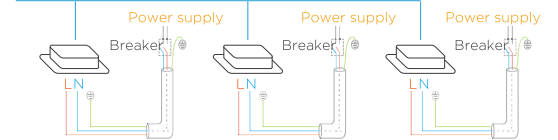
Super Anti-interference Capability

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



Flexible Power Supply for Indoor Units

HyperLink'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.



INNOVATIVE

TECHNOLOGIES

HyperLink New & Unique

SuperSense New & Unique

ETA 2.0

ENair 2.0

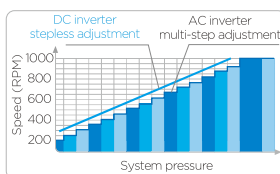
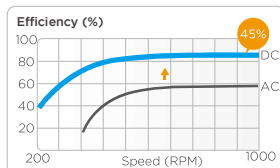
DOCTOR m. 2.0

High Efficiency

Full DC Inverter Technology

Full DC Inverter for Outdoor Components

The V8 Mini 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.



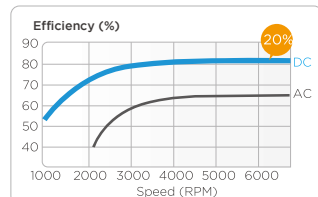
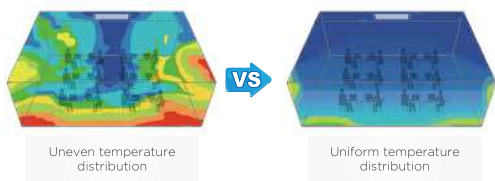
- Wider frequency adjustment range
- Faster cooling and heating
- Higher energy efficiency

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.

Full DC Inverter for Indoor Components

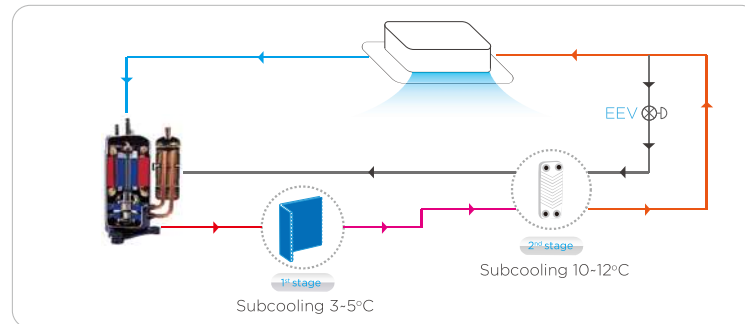


20% Efficiency improvements



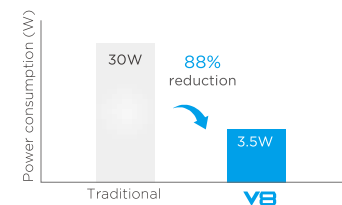
Advanced Subcooling Technology

The V8 Mini VRF uses a plate 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.



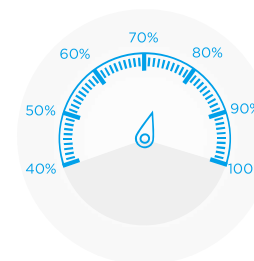
Low Standby Power Consumption

Compared to the standby power consumption of traditional VRF of about 30W, the V8 Mini VRF uses optimized control scheme to further reduce standby power consumption to as low as 3.5W.



60-step Energy Management

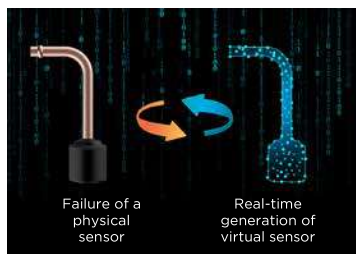
For projects with temporary electricity supply restrictions, the outdoor unit supports 60-step energy management which can be set to output 40-100% capacity in 1% increments. It prevents tripping during conditions of restricted electricity supply and allows the system to continue to operate.



High Reliability

Sensor Backup

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.



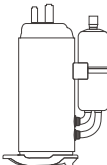
SuperSense


V8 Mini VRF uses up to 13 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

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

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

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.

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.

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



Enhanced Comfort

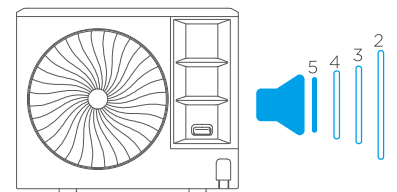
10 Priority Modes

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



Advanced Silent Technology

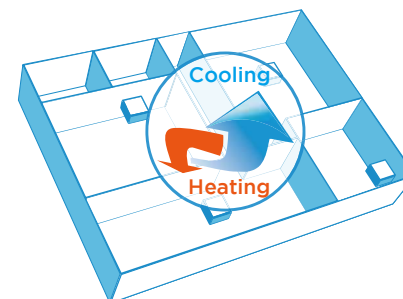
5-step silent mode provide more freedom and convenience to match the customer needs.



5 silent options

Auto Cooling-heating Changeover

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



Wide Application Range

Wide Capacity Range

The capacity of V8 Mini VRF is from 8kW to 16kW with two power supply options, which are perfectly suitable for all kinds of small and medium-sized buildings.

8-16kW



220-240V- 50Hz

12-16kW



380-415V 3N- 50Hz

Wide Range of Indoor Units

The V8 Mini VRF offers a variety of types of indoor units to meet different scenarios of applications such as offices, villas, restaurants, etc.



Wide Operation Range

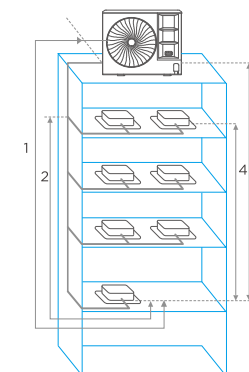
Thanks to the refrigerant cooling technology, the electronic components are always working in a safe temperature range. The system can operate stably at extreme temperature range from -20°C to 52°C.



Long Piping Capability

The V8 Mini VRF can support a total piping length of up to 300m, an installation height difference of up to 50m between indoor and outdoor units, and up to 15m between indoor units, making the V8 Mini VRF perfectly suitable for small and medium-sized buildings.

Piping length / Height difference		Capability (m)	
		8-10kW	12-16kW
Total piping length		150	300
1. Longest piping length	Actual	50	100
	Equivalent	60	120
2. Longest piping length after first branch		30	40
3. Largest level difference between IDUs and ODU	ODU up	30	50
	ODU down	20	40
4. Largest level difference between IDUs		15	15



Easy Installation and Service

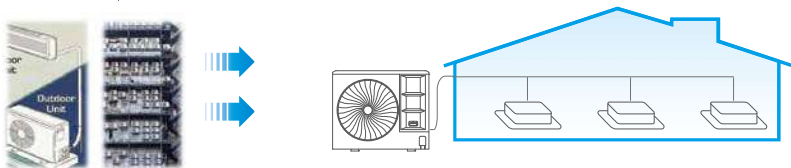
Free Wiring

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.



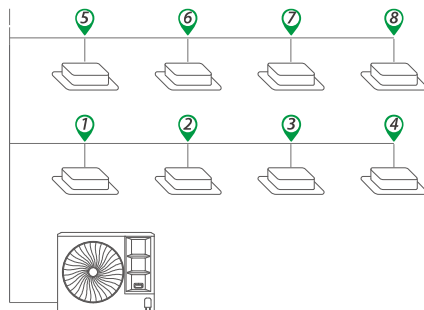
Space Saving

One Mini VRF outdoor unit can connect 1 to 11 indoor units, which greatly saves the installation space of outdoor units and retains buildings' original aesthetics, compared to the traditional split AC. It is very suitable for use in residential and light commercial scenarios, such as villas, restaurants, small and medium-sized supermarkets, etc.



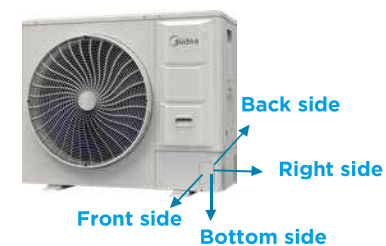
Auto Addressing

Addresses for all indoor units can be assigned automatically by the V8 Mini system, further simplifying installation.



Flexible Pipe Connection

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



35Pa External Static Pressure

The 35Pa static pressure increases flexibility in the choice of the unit's installation point. Strong heat dissipation can be maintained even when the outdoor unit is covered.



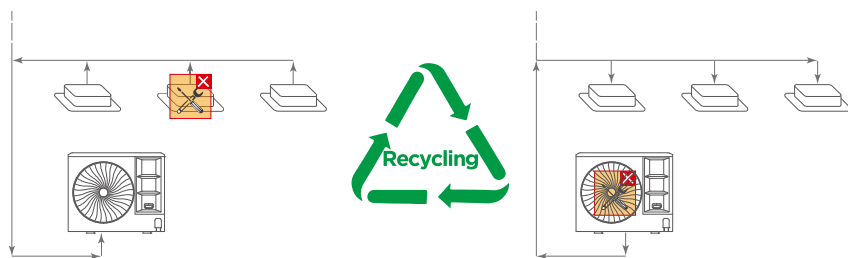
Easy Transportation

V8 Mini can be transported by elevator which makes installation dramatically easy, and effectively reduces time and labor thanks to the small size.



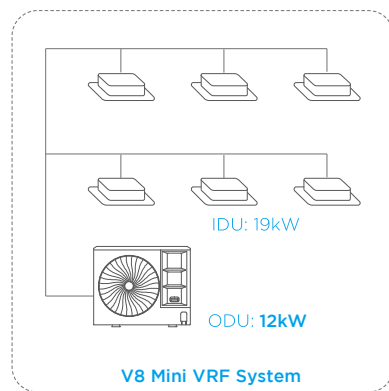
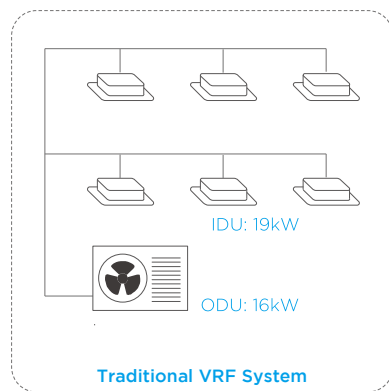
Automatic Refrigerant Recycling

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



Wide Combination Ratio

Compared to traditional Mini VRF with combination ratio of 50-130%, the V8 Mini VRF can be extended to 50-160%, 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.



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.

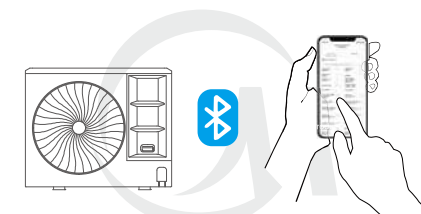


Smart Commissioning/Maintenance Tool

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.

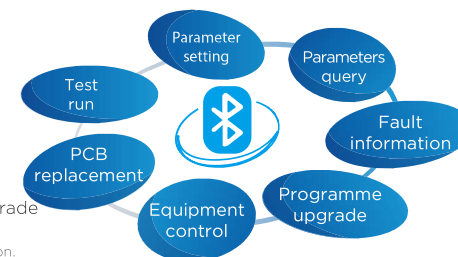
Useful in the following situations:

- 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



*Bluetooth module is available as a customization option.

Specifications

V8 Mini 220-240V~ 50Hz

Model			MV8M-80WV2N1	MV8M-100WV2N1	MV8M-120WV2N1
Power supply	V/N/Hz		220-240/1/50	220-240/1/50	220-240/1/50
	Capacity	kW	7.2	9.0	12.3
Cooling ¹	Capacity	kBtu/h	24	30	41
	Power input	kW	2.21	2.90	3.97
	EER		3.26	3.10	3.10
	SEER		5.40	5.40	7.20
	Capacity	kW	7.2	9.0	12.3
Heating (Rated) ²	Capacity	kBtu/h	24	30	41
	Power input	kW	1.80	2.37	3.00
	COP		4.00	3.80	4.10
	SCOP		3.80	3.80	4.90
	Capacity	kW	9.0	10.8	14.0
Heating (Max) ³	Capacity	kBtu/h	30	36	47
	Power input	kW	2.50	3.18	3.78
	COP		3.60	3.40	3.70
Connected indoor unit	Total capacity		50%-160% of ODU capacity		
	Maximum quantity		5	6	8
Compressor	Type		DC inverter	DC inverter	DC inverter
	Quantity		1	1	1
	Type		DC	DC	DC
Fan motor	Quantity		1	1	1
	Airflow rate	m ³ /h	5200	5200	5000
	Static pressure	Pa	0-35 (standard)	0-35 (standard)	0-35 (standard)
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	kg	3.1	3.1	4.1
Pipe connections ⁴	Gas pipe	mm	15.9	15.9	15.9
	Liquid pipe	mm	9.52	9.52	9.52
Sound pressure level ⁴		dB(A)	53	53	55
Sound power level ⁴		dB(A)	70	72	72
Net dimensions (W×H×D)		mm	1073×864×523	1073×864×523	1073×864×523
Packed dimensions (W×H×D)		mm	1120×980×560	1120×980×560	1120×980×560
Net weight		kg	80	80	94
Gross weight		kg	90	90	104
Ambient temp. operation range	Cooling	°C (DB)	-15-52	-15-52	-15-52
	Heating	°C (DB)	-20-30	-20-30	-20-30

Model			MV8M-140WV2N1	MV8M-160WV2N1
Power supply	V/N/Hz		220-240/1/50	220-240/1/50
	Capacity	kW	14.0	15.5
Cooling ¹	Capacity	kBtu/h	47	52
	Power input	kW	5.19	5.96
	EER		2.70	2.60
	SEER		7.00	6.80
	Capacity	kW	14.0	15.5
Heating (Rated) ²	Capacity	kBtu/h	47	52
	Power input	kW	3.68	4.19
	COP		3.80	3.70
	SCOP		4.80	4.80
	Capacity	kW	16.0	17.5
Heating (Max) ³	Capacity	kBtu/h	54	59
	Power input	kW	4.71	5.30
	COP		3.40	3.30
Connected indoor unit	Total capacity		50%-160% of ODU capacity	
	Maximum quantity		10	11
Compressor	Type		DC inverter	DC inverter
	Quantity		1	1
	Type		DC	DC
Fan motor	Quantity		1	1
	Airflow rate	m ³ /h	5000	5000
	Static pressure	Pa	0-35 (standard)	0-35 (standard)
Refrigerant	Type		R410A	R410A
	Factory charge	kg	4.1	4.1
Pipe connections ⁴	Gas pipe	mm	15.9	15.9
	Liquid pipe	mm	9.52	9.52
Sound pressure level ⁴		dB(A)	56	56
Sound power level ⁴		dB(A)	73	74
Net dimensions (W×H×D)		mm	1073×864×523	1073×864×523
Packed dimensions (W×H×D)		mm	1120×980×560	1120×980×560
Net weight		kg	94	94
Gross weight		kg	104	104
Ambient temp. operation range	Cooling	°C (DB)	-15-52	-15-52
	Heating	°C (DB)	-20-30	-20-30

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference, connect to Medium Static Pressure Duct indoor units.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference, connect to Medium Static Pressure Duct indoor units.
- 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 1m above the floor in a semi-anechoic chamber.

V8 Mini 380-415V 3N~ 50Hz

Model			MV8M-120WV2RNI	MV8M-140WV2RNI
Power supply	V/N/Hz		380-415/3/50	380-415/3/50
	Capacity	kW	12.3	14.0
Cooling ¹	Capacity	kBtu/h	41	47
	Power input	kW	3.97	5.19
	EER		3.10	2.70
	SEER		7.20	7.00
	Capacity	kW	12.3	14.0
Heating (Rated) ²	Capacity	kBtu/h	41	47
	Power input	kW	3.00	3.68
	COP		4.10	3.80
	SCOP		4.90	4.80
	Capacity	kW	14.0	16.0
Heating (Max) ³	Capacity	kBtu/h	47	54
	Power input	kW	3.78	4.71
	COP		3.70	3.40
Connected indoor unit	Total capacity		50%-160% of ODU capacity	
	Maximum quantity		8	10
Compressor	Type		DC inverter	DC inverter
	Quantity		1	1
	Type		DC	DC
Fan motor	Quantity		1	1
	Airflow rate	m ³ /h	5000	5000
	Static pressure	Pa	0-35 (standard)	0-35 (standard)
Refrigerant	Type		R410A	R410A
	Factory charge	kg	4.1	4.1
Pipe connections ⁴	Gas pipe	mm	15.9	15.9
	Liquid pipe	mm	9.52	9.52
Sound pressure level ⁴		dB(A)	55	56
Sound power level ⁴		dB(A)	72	73
Net dimensions (W×H×D)		mm	1073×864×523	1073×864×523
Packed dimensions (W×H×D)		mm	1120×980×560	1120×980×560
Net weight		kg	109	109
Gross weight		kg	119	119
Ambient temp. operation range	Cooling	°C (DB)	-15-52	-15-52
	Heating	°C (DB)	-20-30	-20-30

Model			MV8M-160WV2RNI	
Power supply	V/N/Hz		380-415/3/50	
	Capacity	kW	15.5	
Cooling ¹	Capacity	kBtu/h	52	
	Power input	kW	5.96	
	EER		2.60	
	SEER		6.80	
	Capacity	kW	15.5	
Heating (Rated) ²	Capacity	kBtu/h	52	
	Power input	kW	4.19	
	COP		3.70	
	SCOP		4.80	
	Capacity	kW	17.5	
Heating (Max) ³	Capacity	kBtu/h	59	
	Power input	kW	5.30	
	COP		3.30	
Connected indoor unit	Total capacity		50%-160% of ODU capacity	
	Maximum quantity		11	11
Compressor	Type		DC inverter	DC inverter
	Quantity		1	1
	Type		DC	DC
Fan motor	Quantity		1	1
	Airflow rate	m ³ /h	5000	5000
	Static pressure	Pa	0-35 (standard)	0-35 (standard)
Refrigerant	Type		R410A	
	Factory charge	kg	4.1	
Pipe connections ⁴	Gas pipe	mm	15.9	
	Liquid pipe	mm	9.52	
Sound pressure level ⁴		dB(A)	56	
Sound power level ⁴		dB(A)	74	
Net dimensions (W×H×D)		mm	1073×864×523	
Packed dimensions (W×H×D)		mm	1120×980×560	
Net weight		kg	109	
Gross weight		kg	119	
Ambient temp. operation range	Cooling	°C (DB)	-15-52	
	Heating	°C (DB)	-20-30	

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference, connect to Medium Static Pressure Duct indoor units.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference, connect to Medium Static Pressure Duct indoor units.
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