C-V8MNEU202305

Midea Building Technologies Division

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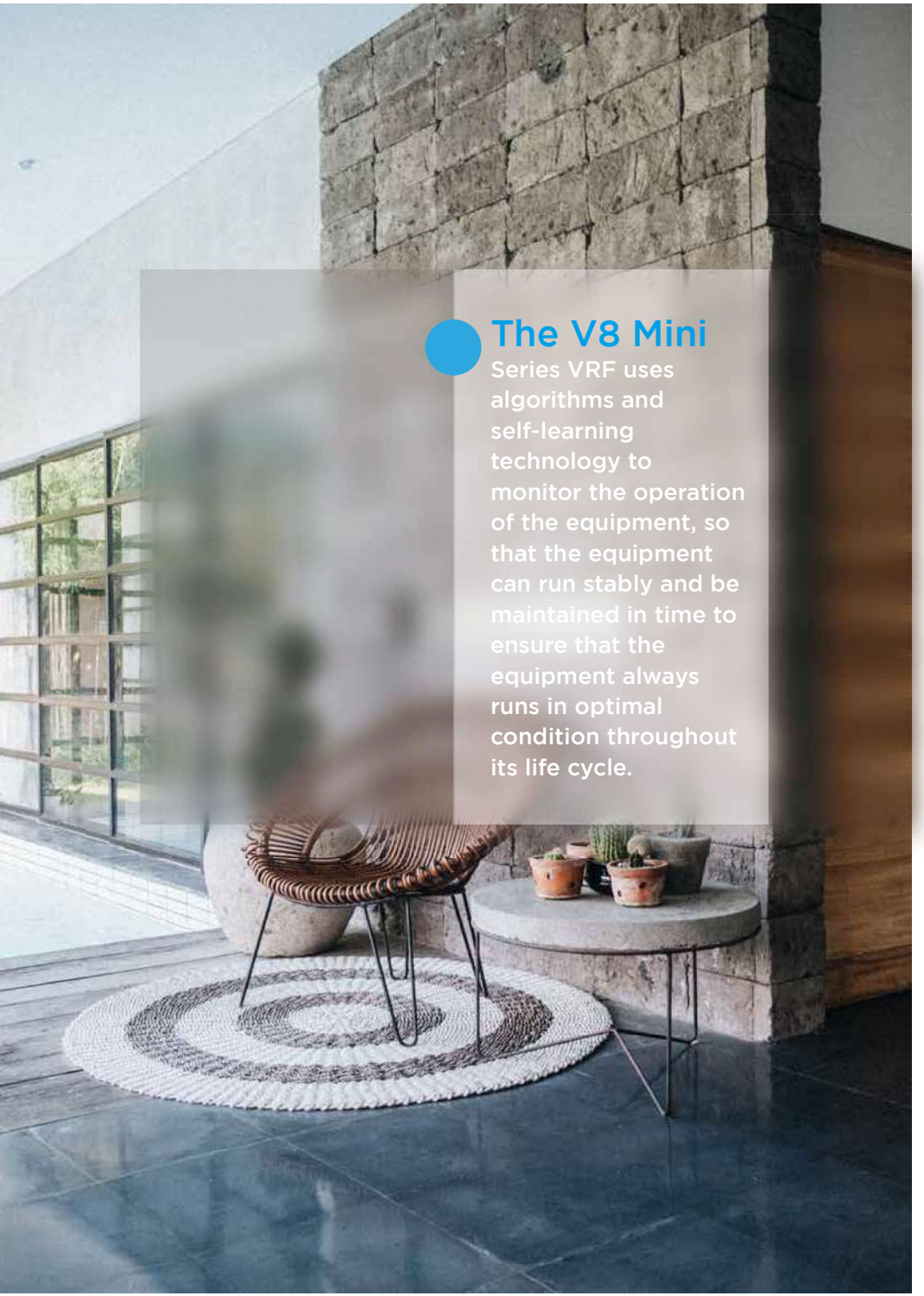
ISO 9001 (Quality Assurance) ISO 14001 (Environmental Management) ISO 45001 (Occupational Health and Safety Management)

R32 Eco Friendly
Lower GWP 675
Zero impact on ozone layer
Less carb on emission

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com



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.

V8 Mini VRF Lineup

Outdoor Unit

8-18kW	12-18kW
	
220-240V~ 50Hz	380-415V 3N~ 50Hz

Indoor Unit

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	Ceiling & Floor
		 Note: It should be ceiling installation to meet regulatory requirements.

Fresh Air Processing Unit


Note: R32 V8 Mini can only available with V8 indoor units. The indoor unit must be installed at a height of 1.8m or more.

INNOVATIVE

TECHNOLOGIES

HyperLink New & Unique

SuperSense New & Unique

M-Holmes New & Unique

ETA 2.0

ENair 2.0

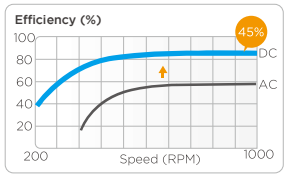
DOCTOR m. 2.0

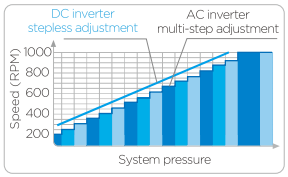
High Efficiency

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.





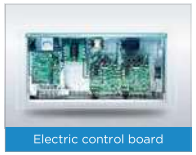
- Wider frequency adjustment range
- Faster cooling and heating
- Higher energy efficiency

Full DC Inverter for Indoor Components

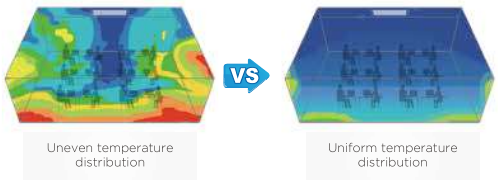
All power devices such as indoor fan motor, drain pump and electric control board are fully DC, which increases electrical efficiency by 20% and results in more accurate temperature control, a more constant indoor temperature and higher energy efficiency.


Fan motor


Drain pump

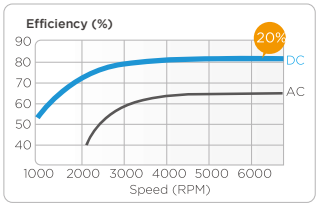

Electric control board

20%
Efficiency improvements



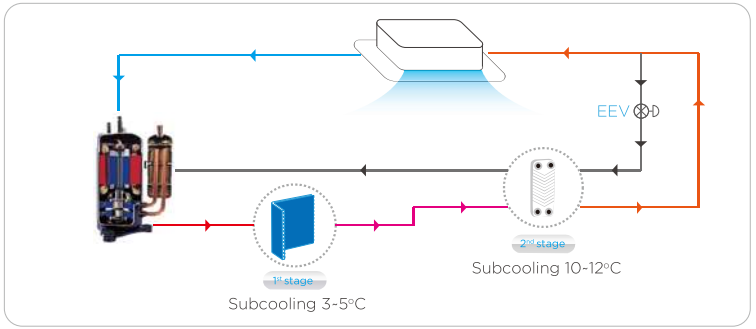
Uneven temperature distribution

Uniform temperature distribution



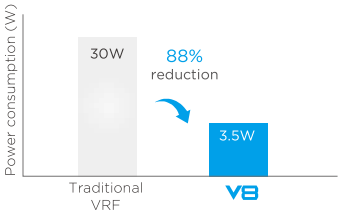
Advanced Subcooling Technology

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.



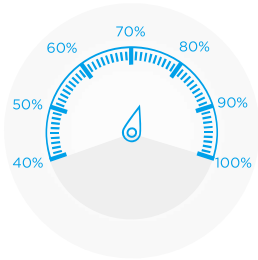
Low Standby Power Consumption

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.

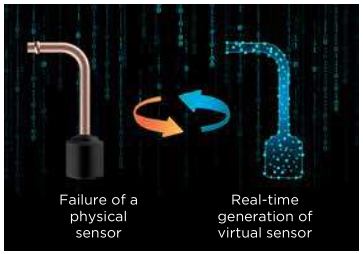


High Reliability

Sensor Backup

New & Unique

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.



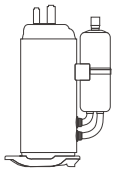
SuperSense

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.

1



Compressor internal oil separation.

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.

3

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.

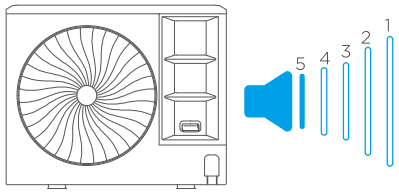
Outdoor Unit can resist 27 years of simulated severe corrosion under a salt contaminated traffic environment

A926834

Enhanced Comfort

Advanced Silent Technology

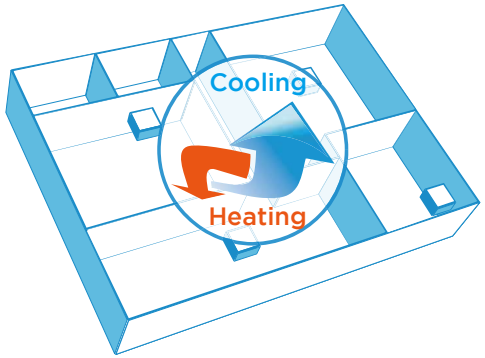
5-step silent mode provide more freedom and convenience to match the customer needs.



5 silent options

Auto Cooling-heating Changeover

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



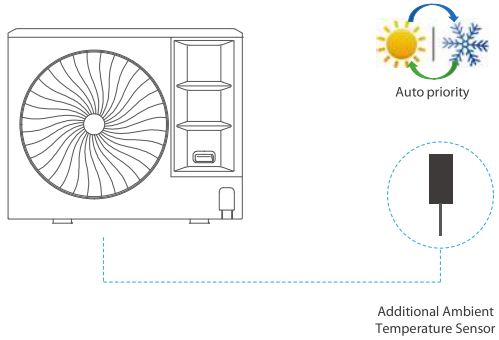
10 Priority Modes

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

Additional Ambient Temperature Sensor*

The V8 Mini 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, and correctly judge whether the system is running in cooling or heating mode, ensuring indoor comfort.

*This function is available as a customization option.



Wide Application Range

Wide Capacity Range

The capacity of V8 Mini VRF is from 8kW to 18kW with two power supply options, which are perfectly suitable for all kinds of small and medium-sized buildings.

8-18kW	12-18kW
	
220-240V~ 50Hz	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.

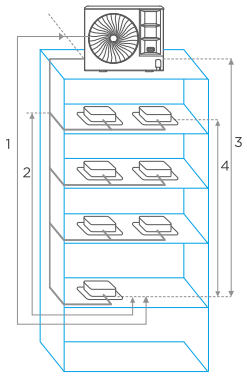
Wide Operation Range

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	12-18kW
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



Specifications

V8 Mini 220-240V~ 50Hz

Model			MV8M-80WV2N8	MV8M-100WV2N8	MV8M-120WV2N8
Power supply		V/N/Hz	220-240/1/50		
Cooling[1]	Capacity	kW	7.2	9.0	12.3
		kBtu/h	24	30	41
	Power input	kW	1.95	2.77	3.73
	EER		3.70	3.25	3.30
	SEER		5.80	5.70	7.80
Heating (Rated)[2]	Capacity	kW	7.2	9.0	12.3
		kBtu/h	24	30	41
	Power input	kW	1.80	2.31	2.86
	COP		4.00	3.90	4.30
	SCOP		3.80	3.80	4.90
Heating (Max)[2]	Capacity	kW	9.0	10.8	14.0
		kBtu/h	30	36	47
	Power input	kW	2.50	3.18	3.59
	COP		3.60	3.40	3.90
Connected indoor unit	Total capacity		50%-160% of ODU capacity		
	Maximum quantity		5	6	8
Compressor	Type		DC inverter		
	Quantity		1		
Fan motor	Type		DC		
	Quantity		1		
	Airflow rate	m^3/h	5200	5200	5000
	Static pressure	Pa	0-35 (standard)		
Refrigerant	Type		R32		
	Factory charge	kg	2	2	2.85
Pipe connections[3]	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)	68	69	70
Net dimensions (W×H×D)		mm	1038×864×409	1038×864×409	1038×864×409
Packed dimensions (W×H×D)		mm	1120×980×560	1120×980×560	1120×980×560
Net weight		kg	77	77	94
Gross weight		kg	88	88	105
Ambient temp. operation range	Cooling	°C(DB)	-15-52	-15-52	-15-52
	Heating	°C(DB)	-20-30	-20-30	-20-30

Model			MV8M-140WV2N8	MV8M-160WV2N8	MV8M-180WV2N8
Power supply		V/N/Hz	220-240/1/50		
Cooling[1]	Capacity	kW	14.0	15.5	17.5
		kBtu/h	47	52	59
	Power input	kW	4.67	5.34	6.46
	EER		3.00	2.90	2.71
	SEER		7.40	7.35	7.10
Heating (Rated)[2]	Capacity	kW	14.0	15.5	17.5
		kBtu/h	47	52	59
	Power input	kW	3.29	3.73	4.49
	COP		4.25	4.15	3.90
	SCOP		4.80	4.80	4.80
Heating (Max)[2]	Capacity	kW	16.0	17.5	19.5
		kBtu/h	54	59	66
	Power input	kW	4.21	4.73	5.57
	COP		3.80	3.70	3.50
Connected indoor unit	Total capacity		50%-160% of ODU capacity		
	Maximum quantity		10	11	12
Compressor	Type		DC inverter		
	Quantity		1		
Fan motor	Type		DC		
	Quantity		1		
	Airflow rate	m^3/h	5000	5000	5500
	Static pressure	Pa	0-35 (standard)		
Refrigerant	Type		R32		
	Factory charge	kg	2.85	2.85	2.85
Pipe connections[3]	Gas pipe	mm	15.9	15.9	19.1
	Liquid pipe	mm	9.52	9.52	9.52
Sound pressure level[4]		dB(A)	56	56	58
Sound power level[4]		dB(A)	71	72	73
Net dimensions (W×H×D)		mm	1038×864×409	1038×864×409	1038×864×409
Packed dimensions (W×H×D)		mm	1120×980×560	1120×980×560	1120×980×560
Net weight		kg	94	94	94
Gross weight		kg	105	105	105
Ambient temp. operation range	Cooling	°C(DB)	-15-52	-15-52	-15-52
	Heating	°C(DB)	-20-30	-20-30	-20-30

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.

V8 Mini 380-415V 3N~ 50Hz

Model			MV8M-120WV2RN8	MV8M-140WV2RN8
Power supply		V/N/Hz	380-415/3/50	
Cooling[1]	Capacity	kW	12.3	14.0
		kBtu/h	41	47
	Power input	kW	3.73	4.67
	EER		3.30	3.00
	SEER		7.80	7.40
Heating (Rated)[2]	Capacity	kW	12.3	14.0
		kBtu/h	41	47
	Power input	kW	2.86	3.29
	COP		4.30	4.25
	SCOP		4.90	4.80
Heating (Max)[2]	Capacity	kW	14.0	16.0
		kBtu/h	47	54
	Power input	kW	3.59	4.21
	COP		3.90	3.80
Connected indoor unit	Total capacity		50%-160% of ODU capacity	
	Maximum quantity		8	10
Compressor	Type		DC inverter	
	Quantity		1	
Fan motor	Type		DC	
	Quantity		1	
	Airflow rate	m^3/h	5000	5000
	Static pressure	Pa	0-35 (standard)	
Refrigerant	Type		R32	
	Factory charge	kg	2.85	2.85
Pipe connections[3]	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)	70	71
Net dimensions (W×H×D)		mm	1038×864×409	1038×864×409
Packed dimensions (W×H×D)		mm	1120×980×560	1120×980×560
Net weight		kg	110	110
Gross weight		kg	121	121
Ambient temp. operation range	Cooling	°C(DB)	-15-52	-15-52
	Heating	°C(DB)	-20-30	-20-30

Model			MV8M-160WV2RN8	MV8M-180WV2RN8
Power supply		V/N/Hz	380-415/3/50	
Cooling[1]	Capacity	kW	15.5	17.5
		kBtu/h	52	59
	Power input	kW	5.34	6.46
	EER		2.90	2.71
	SEER		7.35	7.10
Heating (Rated)[2]	Capacity	kW	15.5	17.5
		kBtu/h	52	59
	Power input	kW	3.73	4.49
	COP		4.15	3.90
	SCOP		4.80	4.80
Heating (Max)[2]	Capacity	kW	17.5	19.5
		kBtu/h	59	66
	Power input	kW	4.73	5.57
	COP		3.70	3.50
Connected indoor unit	Total capacity		50%-160% of ODU capacity	
	Maximum quantity		11	12
Compressor	Type		DC inverter	
	Quantity		1	
Fan motor	Type		DC	
	Quantity		1	
	Airflow rate	m^3/h	5000	5500
	Static pressure	Pa	0-35 (standard)	
Refrigerant	Type		R32	
	Factory charge	kg	2.85	2.85
Pipe connections[3]	Gas pipe	mm	15.9	19.1
	Liquid pipe	mm	9.52	9.52
Sound pressure level[4]		dB(A)	56	58
Sound power level[4]		dB(A)	72	73
Net dimensions (W×H×D)		mm	1038×864×409	1038×864×409
Packed dimensions (W×H×D)		mm	1120×980×560	1120×980×560
Net weight		kg	110	110
Gross weight		kg	121	121
Ambient temp. operation range	Cooling	°C(DB)	-15-52	-15-52
	Heating	°C(DB)	-20-30	-20-30

Notes:
1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Diameters given are those of the unit's stop valves.
4. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber.