



V8

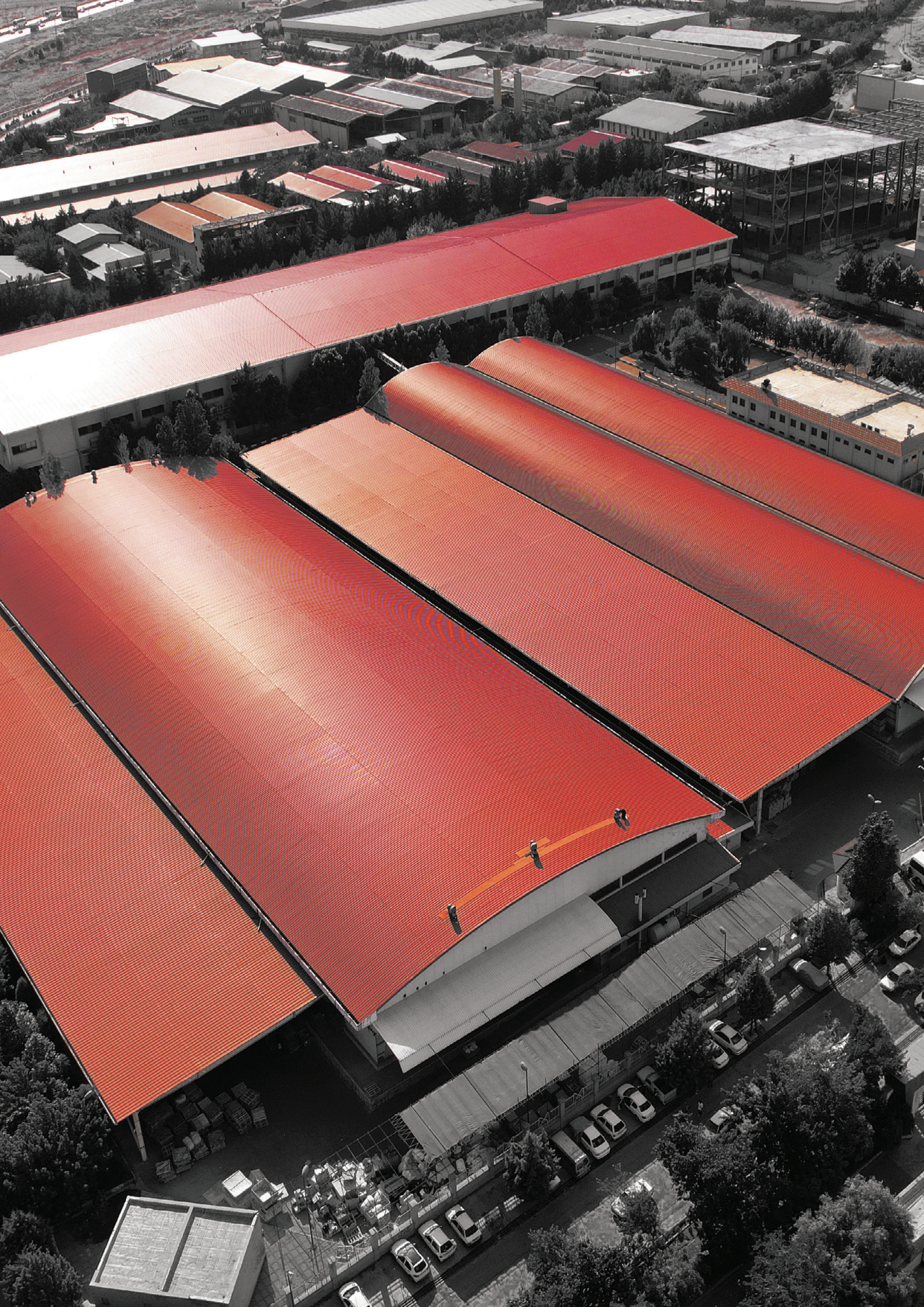
V8 DISCOVER
RELIABLE




midea.com



goldiranac.ir





Goldiran Motbakran Industries Engineering and Consulting Company is a distinguished and reputable brand in the HVAC (Heating, Ventilation, and Air Conditioning) industry within the country. With over two decades of experience, we leverage cutting-edge knowledge and collaborate with top engineers and specialists in the field. This enables us to deliver superior quality air conditioning systems, from design to implementation, tailored to meet the specific needs of any project.

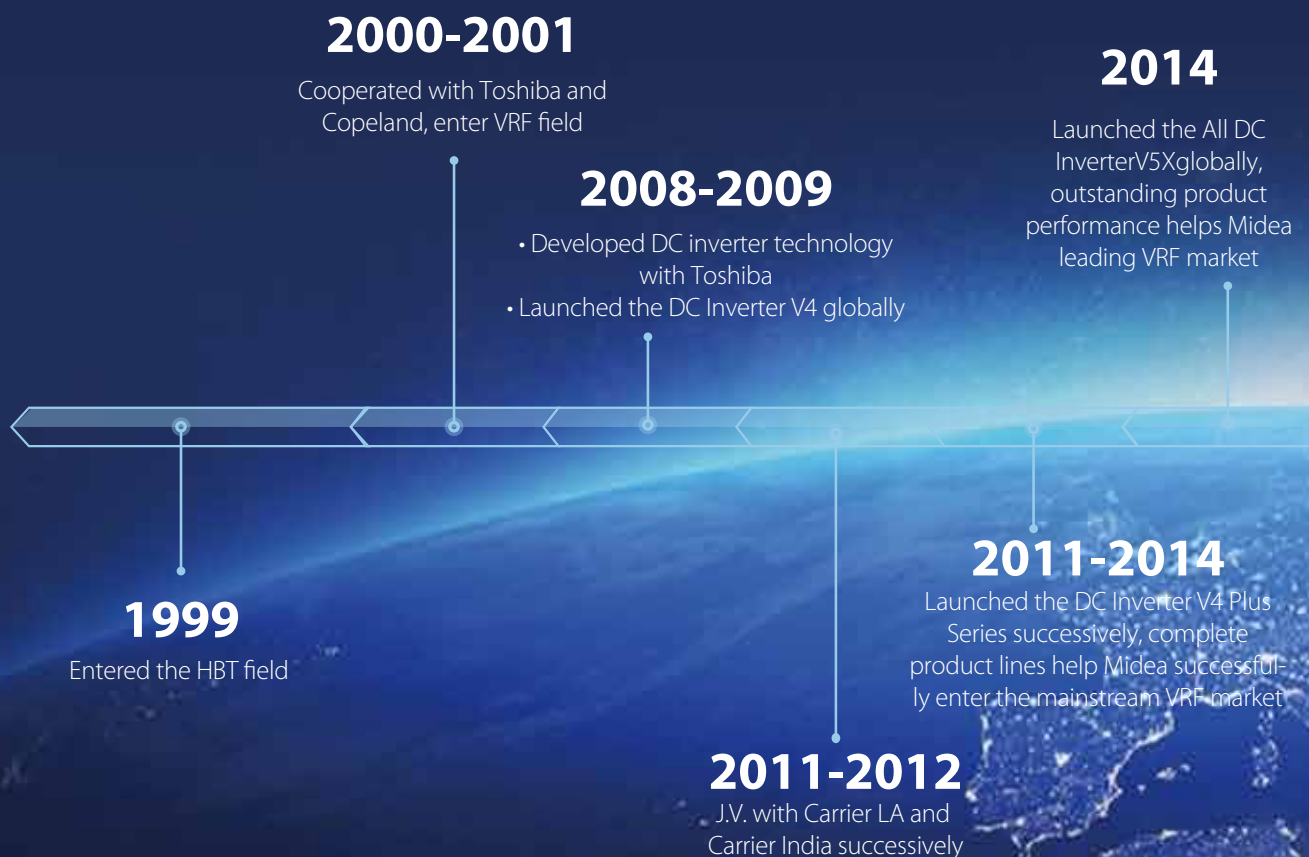
Our commitment to excellence allows us to compete with the most well-known and respected brands in the industry, while simultaneously empowering our business partners by generating professional and commercial value.

Customer orientation has been a cornerstone of our operations throughout our history, ensuring that our clients and end-users of our products are provided with unparalleled confidence and satisfaction. In pursuit of our key objectives, we are committed to sustainable development, adopting a forward-thinking approach to growth.

To reinforce the strength, influence, and leadership of Goldiran Motbakran Industries Engineering and Consulting Company, we are actively considering expanding our production capabilities and diversifying our product portfolio within the air conditioning market.

Midea MBT

Midea MBT (Midea Building Technologies) is a key division of the Midea Group, a leading provider of comprehensive solutions of intelligent building, involving energy sources, elevators, control systems, and heating, ventilation & air conditioning. Midea MBT has continued with the tradition of innovation upon which it was founded and emerged as a global leader in the HVAC and building management industry. A strong drive for advancement



- 3 businesses constitute the significant components of Midea intelligent building solutions
- 4 production bases can achieve fast delivery
- Over 100 testing labs cover all different real application sceneries
- All products can be visualized and digitalized throughout entire process



2014-2015

- Won FIFA World Cup Stadiums project in Brazil Beira Rio, Olympic Games Stadiums project in Brazil
- Rio de Janeiro and Africa games Stadiums project in Congo Brazzaville successively

2018-2019

Launched the All DC Inverter Cooling Only VC Pro VRF, ultra cool for hot regions

2020

Launched the new generation heat recovery VRF V6R Series globally, providing complete HVAC solutions and satisfying all building needs from one manufacturer

2022

Launching the 8th generation V8 Series VRF

2017-2018

Launched the new generation heat pump VRF globally, leading in VRF market

2016

Acquired 80% stake in Clivet





Midea Headquarter

V3

2005



- Launched **V3** Series VRF AC inverter + fixed compressor
- Maximum capacity of single unit is 16HP



1968

Established

- Cooperated with Toshiba in inverter technologies

1999



- Launched **V4, D4** Series VRF
- Complete product line with heat pump series, heat recovery series and water - cooled series.
- Maximum capacity of single unit is 16HP

2014-2008

V4

V5X

2014



- Launched **V5X** Series VRF
- Full DC inverter technology
- Maximum capacity of single unit is 22HP



V8

2022

- Launching the 8th generation
- **V8** Series VRF Full DC inverter technology
- Maximum capacity of single unit is 36HP



- Launched heat pump **V6** Series VRF, cooling only
- **VC Pro** Series VRF and heat recovery **V6R** Series VRF
- Full DC inverter technology
- Maximum capacity of single unit is 32HP

2020-2017





V8 DISCOVER
RELIABLE

Extreme Conditions, Supreme Performance

Thanks to **innovation solutions**,
humidity & insects are no longer problem.



VB

Midea

/// VRF V8 Series Heat Pump

- META 2 Technology
- Zen Air 2 Technology
- Doctor M 2 Technology
- Enhanced Vapor Injection (EVI) Compressor
- Triple Configurations
- High Efficiency G-Shape Heat Exchanger
- ESP up to 120Pa
- Precise Oil Control Technology
- Multi Silent Modes
- Duty Cycling
- Backup Operation
- UL Anti-Corrosion Certificate
- Refrigerant Cooling PCB
- Auto Snow-blowing Function
- Dust-clean Function
- Multi-Functional Diagnosis Box
- Automatic Refrigerant Detecting/Charging/Recycling
- Hyperlink
- Shieldbox IP55

/// Optimized design for small to large buildings



Indoor Units

VRF indoor units

Fresh Air Processing Unit

%100 fresh air supply

Control Systems

Smart control systems

AHU Connection Kit

Connect to Midea
or third party DX AHU

Ventilation

Heat recovery
ventilator (HRV)

Midea V8 Series VRF

Intelligent Building Energy Solution



V8 DISCOVER
RELIABLE

DISCOVER
easyCOMFORT

Extreme Conditions, Supreme Performance

META 2.0

META is the abbreviation 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.



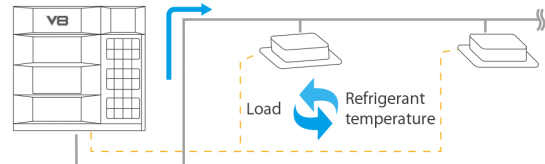
Automatic calculation of the building load and the required refrigerant quantity based on the sensor parameters.



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.



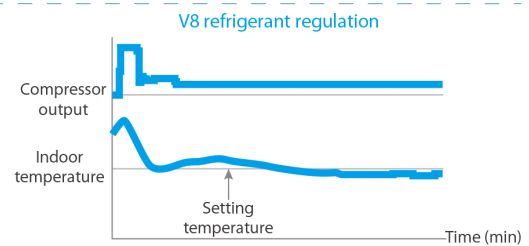
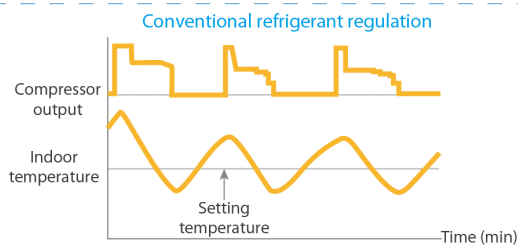
Variable Indoor Airflow

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

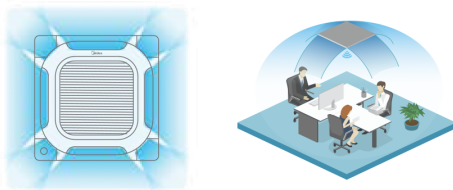


Healthy

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.

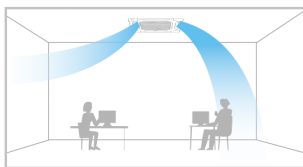
360° Airflow

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



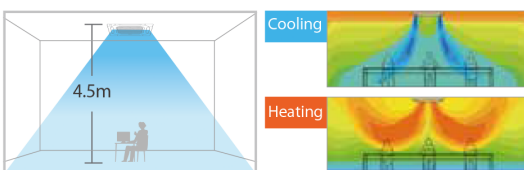
Individual Louver Control

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.



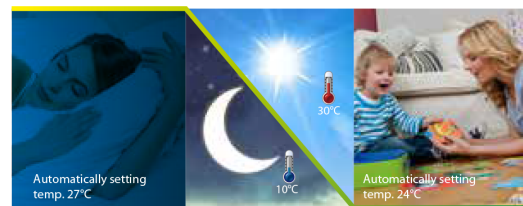
7 Fan Speeds

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



1stThe 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.

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

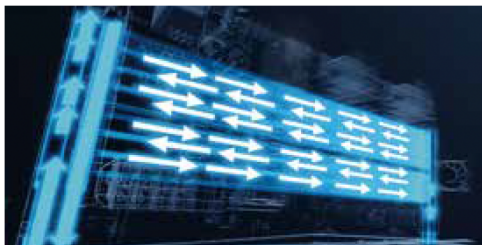
Waterproof grade code

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.



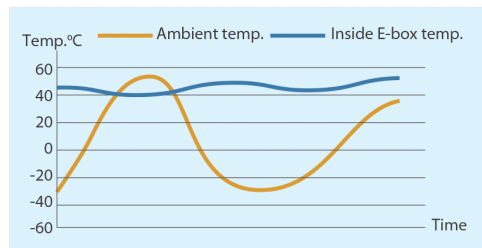
Built-in Circulating Fan

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.



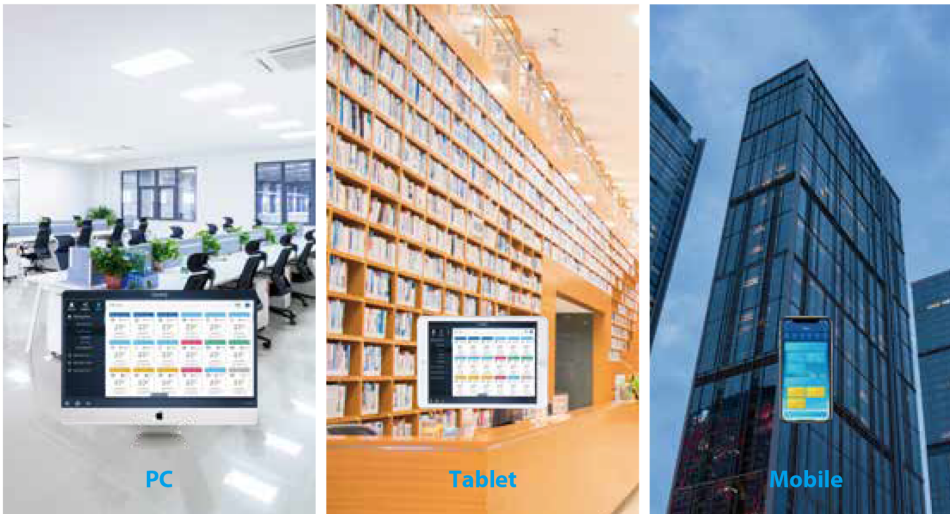
5 High Precision Temperature Sensors

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.



FREE CONTROL

Intelligent control brings a new experience.



Benefits



Individual control

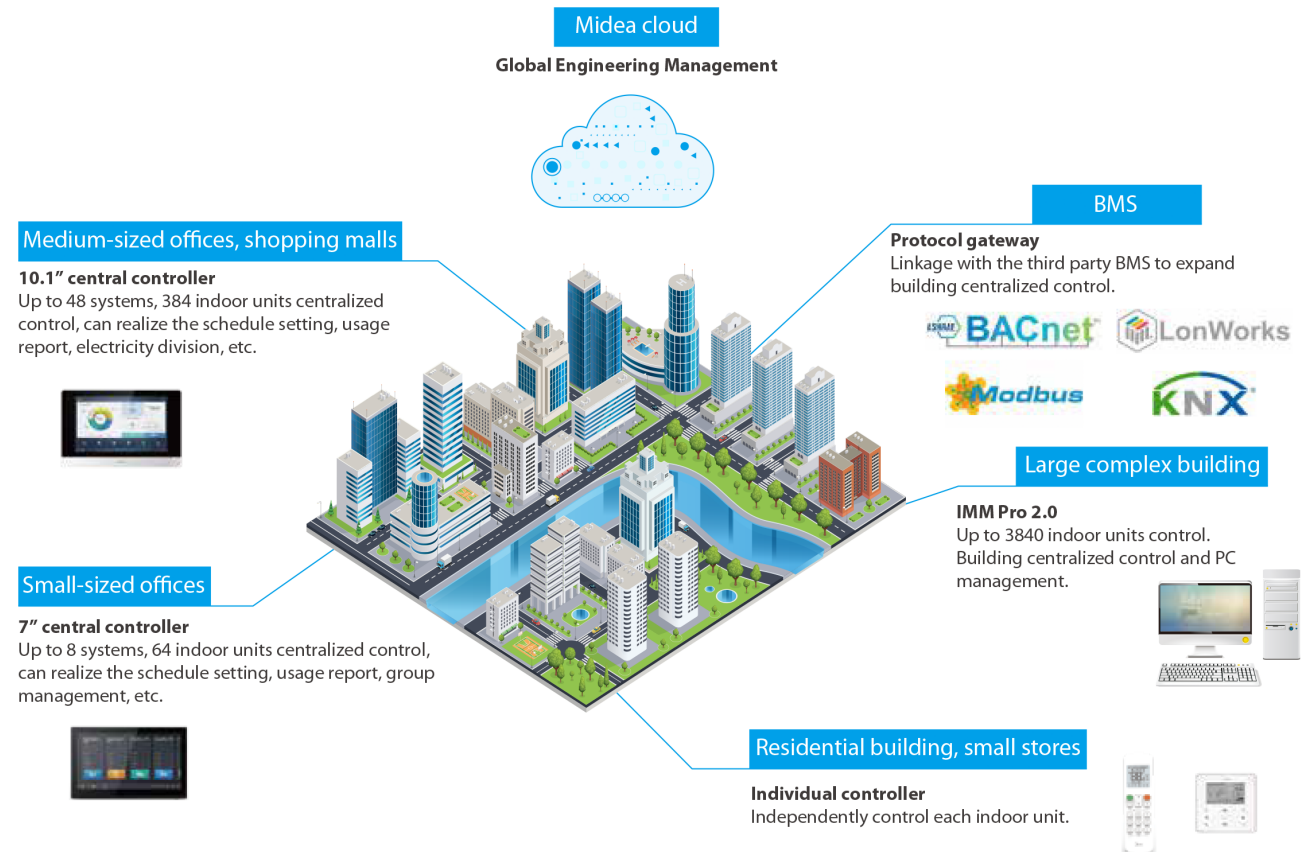


Central control



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.



DOCTOR M 2.0

Further upgraded DOCTOR M technology to maximize EASY SERVICE.



Benefits



Easy maintenance



Fast maintenance



Low maintenance cost

As many as 19 sensors are distributed throughout the refrigerant system, the state of each part of the refrigerant pipeline can be known in the whole process, which can realize the real-time detection of the system state, 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

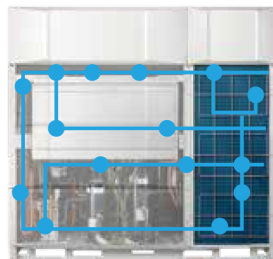
With intelligent Bluetooth module or special Bluetooth after-sales kit, the data of the outdoor unit can be directly read and written on your smart phone without the needs of connecting PC or opening cabinet.



Bluetooth after-sales kit

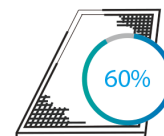
Refrigerant Amount Diagnosis

V8 Series VRF uses 19 sensors for each outdoor unit, 4 sensors for each indoor unit, the refrigerant running state is clearly visible, so as to accurately diagnose the amount of refrigerant.



Visualization of Dirty Blockage Rate*

10 levels (10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 99%) blockage rate can be accurately identified and displayed on the controller, reminding the user to clean the filter in time, so as to avoid poor cooling/heating effect and serious malfunction.



Note: This function is available for V8 Low Static Pressure Duct IDU and V8 Medium Static Pressure Duct IDU.

HYPERLINK

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



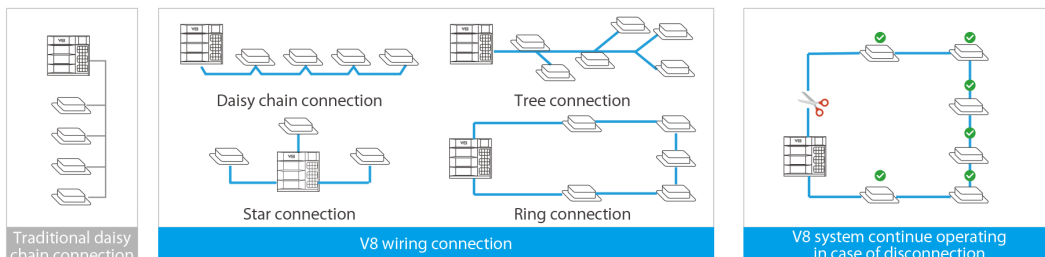
Benefits

- 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.

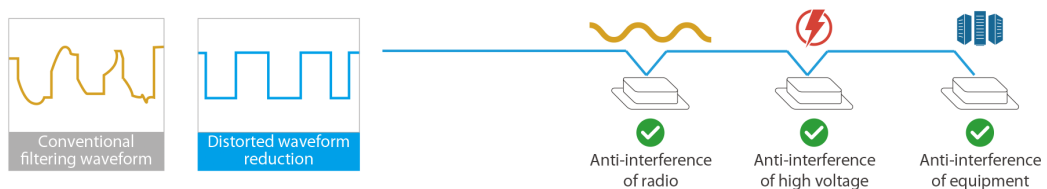
Support Any Topology Communication

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



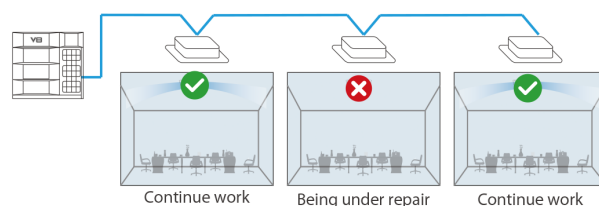
Super Anti-interference Capability

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



Enhanced Comfort

Power supply and communication time-sharing control technology can realize the communication wires to provide power to close or open the EXV for the power failure indoor units, this feature allows the shutdown of indoor unit without shutting down the whole VRF system.





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Extreme Conditions, Supreme Performance

Thanks to **innovation solutions**,
blizzard is no longer problem.



V8




Midea

Wide Capacity Range

Starting at 8HP, capacity increases in 2HP increments up to 96HP, which is the world's largest single-system VRF capacity.




Outdoor Unit Lineup

V8 (Combinable series)

HP	8-18	20-26	28-36
Single Unit			

HP	38-72	74-108
Combined Unit		

V8i (Individual series)

HP	8-18	20-26	28-36
Single Unit			

Advanced
Silent
Technology



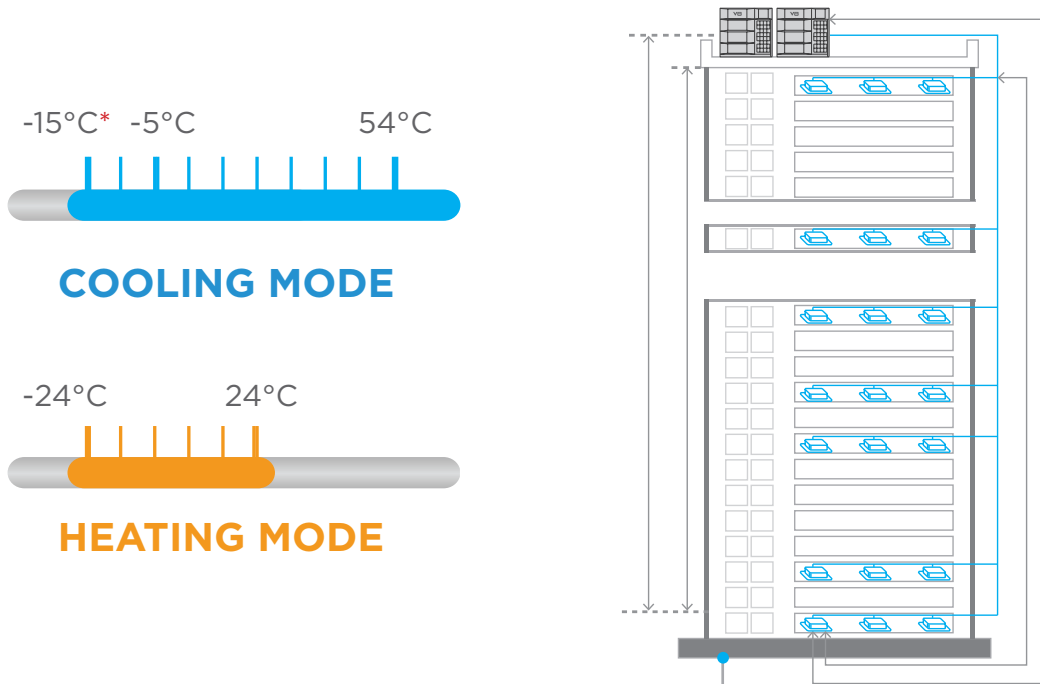

15 silent
options


Night
silent mode

Wide Operating Temperature Range

The V6 VRF can operate stably in a wide ambient temperature range: from -5 °C (-15 °C*) to 54 °C in cooling mode and from -25 °C to 24 °C in heating mode.

* Cooling operation at -15 °C is available as a customization option.



Long Piping Capability

Piping Length	Capability (m)
Total Piping Length	1000
Longest Piping Length-actual (equivalent)	175 (200)
Longest Piping Length After First Branch	40/90*
Largest Level Difference Between IDUs & ODU-ODU Up (Down)	90 (110)
Largest Level Difference Between IDUs	30

*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.



Dust-Free Defense



SHIELD BOX
Protection



META 2.0
Technology





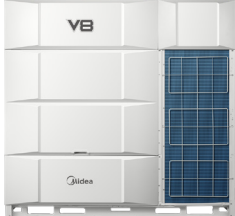
Zen Air 2.0
Technology

V8 VRF 50/60Hz

2.3 Outdoor Units




2.3.1 Single units



Table 1-2.4: Single outdoor unit appearance

HP	8/10/12/14/16/18HP (with single fan)	20/22/24/26HP (with dual fans)	28/30/32/34/36HP (with dual fans)
Single Unit			

2.3.2 Combinations of units

Table 1-2.5: Combination outdoor unit appearance



HP	38/40/42HP	44HP	46/48/50/52HP
Combined Unit			



HP	54HP	56/58/60/62HP	64/66/68/70/72HP
Combined Unit			


V8 VRF 50/60Hz

2.3.2 Combinations of units

Table 1-2.5: Combination outdoor unit appearance

HP	74/76/78HP	82/84/86/88HP
Combined Unit	 <p>Three outdoor units are shown side-by-side. Each unit is a white cabinet with a blue condenser coil on the right side. The top of each unit is labeled 'V8' and the bottom is labeled 'Gree'. The units are mounted on a common base.</p>	 <p>Three outdoor units are shown side-by-side. Each unit is a white cabinet with a blue condenser coil on the right side. The top of each unit is labeled 'V8' and the bottom is labeled 'Gree'. The units are mounted on a common base.</p>

HP	80/90HP	92/94/96/98HP
Combined Unit	 <p>Three outdoor units are shown side-by-side. Each unit is a white cabinet with a blue condenser coil on the right side. The top of each unit is labeled 'V8' and the bottom is labeled 'Gree'. The units are mounted on a common base.</p>	 <p>Three outdoor units are shown side-by-side. Each unit is a white cabinet with a blue condenser coil on the right side. The top of each unit is labeled 'V8' and the bottom is labeled 'Gree'. The units are mounted on a common base.</p>

HP	100/102/104/106/108HP		
Combined Unit	 <p>Three outdoor units are shown side-by-side. Each unit is a white cabinet with a blue condenser coil on the right side. The top of each unit is labeled 'V8' and the bottom is labeled 'Gree'. The units are mounted on a common base.</p>		

3 Outdoor Unit Combinations | V8 VRF 50/60Hz

Table 1-3.1: Outdoor unit combinations

General Information

System capacity		No. of units	Modules ¹														Outdoor branch joint kit ²	
kW	HP		8	10	12	14	16	18	20	22	24	26	28	30	32	34		36
25.2	8	1	•															—
28.0	10	1		•														
33.5	12	1			•													
40.0	14	1				•												
45.0	16	1					•											
50.0	18	1						•										
56.0	20	1							•									
61.5	22	1								•								
67.0	24	1									•							
73.0	26	1										•						
78.5	28	1											•					
85.0	30	1												•				
90.0	32	1													•			
95.2	34	1														•		
101.5	36	1															•	
106.5	38	2								•								FQZHW-02N1E
112.0	40	2									•							
118.0	42	2										•						
123.5	44	2											•					
128.5	46	2								•	•							
134.5	48	2								•		•						
140.0	50	2									•	•						
146.0	52	2										••						
151.0	54	2							•								•	
157.0	56	2								•							•	
162.5	58	2									•						•	
168.0	60	2										•					•	
174.0	62	2											•				•	
179.5	64	2												•			•	
186.0	66	2													•		•	
191.0	68	2														•	•	
196.2	70	2															••	
202.0	72	2															••	
208.0	74	3				•					•						•	
214.0	76	3				•						•					•	
219.0	78	3					•						•				•	
224.5	80	3						•						•			•	
230.0	82	3							•								•	
235.5	84	3								•							•	
241.0	86	3									•						•	
247.0	88	3										••					•	
252.0	90	3							•								••	
258.0	92	3								•							••	
263.5	94	3									•						••	
269.0	96	3										•					••	
275.0	98	3											•				••	
280.5	100	3												•			••	
286.2	102	3													•	•	•	
292.0	104	3														•	••	
297.2	106	3															••	
303.0	108	3															•••	
																		FQZHW-03N1G

Notes:

The combinations of units shown in the table are factory-recommended. Four units combination are possible for the 8-24 HP models. For other combinations of units please contact your local distributor or technical support engineer. For systems with two or more outdoor units, outdoor branch joints (sold separately) are required.

V8 VRF 50/60Hz

Table 1-5.2: Combinations of indoor and outdoor units

General Information

Outdoor unit capacity			Sum of capacity indexes of connected indoor units (standard indoor units only)	Sum of capacity indexes of connected indoor units (fresh air processing units and standard indoor units together)	Maximum number of connected indoor units
kW	HP	Capacity index			
25.2	8	252	126 to 327.6	126 to 252	13
28	10	280	140 to 364	140 to 280	16
33.5	12	335	167.5 to 435.5	167.5 to 335	20
40	14	400	200 to 520	200 to 400	23
45	16	450	225 to 585	225 to 450	26
50	18	500	250 to 650	250 to 500	29
56	20	560	280 to 728	280 to 560	33
61.5	22	615	307.5 to 799.5	307.5 to 615	36
67	24	670	335 to 871	335 to 670	39
73	26	730	365 to 949	365 to 730	43
78.5	28	785	392.5 to 1020.5	392.5 to 785	46
85	30	850	425 to 1105	425 to 850	50
90	32	900	450 to 1170	450 to 900	53
95.2	34	952	476 to 1237.6	476 to 952	56
101	36	1010	505 to 1313	505 to 1010	59
106.5	38	1065	532.5 to 1384.5	532.5 to 1065	63
112.0	40	1120	560 to 1456	565 to 1120	64
118.0	42	1180	590 to 1534	590 to 1180	
123.5	44	1235	617.5 to 1605.5	615 to 1235	
128.5	46	1285	642.5 to 1670.5	642.5 to 1285	
134.5	48	1345	672.5 to 1748.5	672.5 to 1345	
140.0	50	1400	700 to 1820	700 to 1400	
146.0	52	1460	730 to 1898	730 to 1460	
151.0	54	1510	755 to 1963	755 to 1510	
157.0	56	1570	785 to 2041	785 to 1570	
162.5	58	1625	812.5 to 2112.5	812.5 to 1625	
168.0	60	1680	840 to 2184	840 to 1680	
174.0	62	1740	870 to 2262	870 to 1740	
179.5	64	1795	897.5 to 2333.5	897.5 to 1795	
186.0	66	1860	930 to 2418	930 to 1860	
191.0	68	1910	955 to 2483	955 to 1910	
196.2	70	1962	981 to 2550.6	981 to 1962	
202.0	72	2020	1010 to 2626	1010 to 2020	
208.0	74	2080	1040 to 2704	1040 to 2080	
214.0	76	2140	1070 to 2782	1070 to 2140	
219.0	78	2190	1095 to 2847	1095 to 2190	
224.5	80	2245	1122.5 to 2918.5	1122.5 to 2245	
230.0	82	2300	1150 to 2990	1150 to 2300	
235.5	84	2355	1177.5 to 3061.5	1177.5 to 2355	
241.0	86	2410	1205 to 3133	1205 to 2410	
247.0	88	2470	1235 to 3211	1235 to 2470	
252.0	90	2520	1260 to 3276	1260 to 2520	
258.0	92	2580	1290 to 3354	1290 to 2580	
263.5	94	2635	1317.5 to 3425.5	1317.5 to 2635	
269.0	96	2690	1345 to 3497	1345 to 2690	
275.0	98	2750	1375 to 3575	1375 to 2750	
280.5	100	2805	1402.5 to 3646.5	1402.5 to 280.5	
286.2	102	2862	1431 to 3720.6	1431 to 2862	
292.0	104	2920	1460 to 3796	1460 to 2920	
297.2	106	2972	1486 to 3863.6	1486 to 2972	
303.0	108	3030	1515 to 3939	1515 to 3030	

1 Specifications | V8 VRF 50/60Hz

Table 2-1.1: 8-14HP specifications

General Information, 14-8HP

HP			8	10	12	14
Model name			MV8-252WV2GN1(PRO)	MV8-280WV2GN1(PRO)	MV8-335WV2GN1(PRO)	MV8-400WV2GN1(PRO)
Power supply		V/N/Hz	380-415/3/50(60)			
Cooling ¹	Capacity	kW	25.2	28.0	33.5	40.0
		kBtu/h	86.0	95.5	114.3	136.5
	Power input	kW	5.3	6.8	8.3	9.9
	EER			4.76	4.14	4.06
Heating ²	Capacity	kW	27.0	31.5	37.5	45.0
		kBtu/h	92.1	107.5	128.0	153.5
	Power input	kW	5.4	6.6	8.5	10.2
	COP			5.03	4.76	4.43
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		13	16	19	22
Compressor	Type		DC inverter			
	Quantity		1			
	Oil type		FVC68D			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		1			
	Motor output	kW	0.56			0.92
	Static pressure	Pa	0-20 (standard)20-80 (customized)			
	Airflow rate	m ³ /h	12600	12600	13500	15600
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	7	7	7	8
Pipe connections ³	Liquid pipe	mm	Φ12.7			Φ15.9
	Gas pipe	mm	Φ25.4			Φ28.6
Sound pressure level ⁴		dB(A)	56	57	59	
Net dimensions (W×H×D)		mm	940×1760×825			
Packed dimensions (W×H×D)		mm	1010×1945×890			
Net weight		kg	195			213
Gross weight		kg	213			230
Ambient temp.	Cooling	°C	-15 to 55			
operation range	Heating	°C	-30 to 30			

Notes:

- Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor air temperature 20°C DB; outdoor air temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those of the unit's stop valve.
- 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.

1 Specifications | V8 VRF 50/60Hz

Table 2-1.2: 16-22HP specifications

General Information, 22-16HP

HP			16	18	20	22
Model name			MV8-450WV2GN1(PRO)	MV8-500WV2GN1(PRO)	MV8-560WV2GN1(PRO)	MV8-615WV2GN1(PRO)
Power supply		V/N/Hz	380-415/3/50(60)			
Cooling ¹	Capacity	kW	45.0	50.0	56.0	61.5
		kBtu/h	153.5	170.6	191.1	209.8
	Power input	kW	11.7	12.8	15.1	17.9
	EER			3.83	3.91	3.71
Heating ²	Capacity	kW	50.0	56.0	63.0	69.0
		kBtu/h	170.6	191.1	215.0	235.4
	Power input	kW	11.7	13.5	15.3	17.6
	COP			4.27	4.15	4.13
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		26	29	32	35
Compressor	Type		DC inverter			
	Quantity		1		2	
	Oil type		FVC68D			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		1		2	
	Motor output	kW	0.92		0.56×2	
	Static pressure	Pa	0-20 (standard)20-80 (customized)			
	Airflow rate	m ³ /h	15600	16500	22000	22000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	8	8.4	9.3	9.3
Pipe connections ³	Liquid pipe	mm	Φ15.9			
	Gas pipe	mm	Φ28.6			
Sound pressure level ⁴		dB(A)	60	61	62	
Net dimensions (W×H×D)		mm	940×1760×825		1340×1760×825	
Packed dimensions (W×H×D)		mm	1010×1945×890		1410×1945×890	
Net weight		kg	213	215	295	
Gross weight		kg	230	232	315	
Ambient temp.	Cooling	°C	-15 to 55			
operation range	Heating	°C	-30 to 30			

Notes:

- Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor air temperature 20°C DB; outdoor air temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those of the unit's stop valve.
- 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.

V8 VRF 50/60Hz

Table 2-1.3: 24-30HP specifications

General Information, 30-24HP

HP			24	26	28	30
Model name			MV8-670WV2GN1(PRO)	MV8-730WV2GN1(PRO)	MV8-785WV2GN1(PRO)	MV8-850WV2GN1(PRO)
Power supply		V/N/Hz	380-415/3/50(60)			
Cooling ¹	Capacity	kW	67.0	73.0	78.5	85.0
		kBtu/h	228.6	249.1	267.9	290.0
	Power input	kW	19.0	21.0	24.0	27.2
	EER			3.52	3.47	3.27
Heating ²	Capacity	kW	75.0	81.5	87.5	95.0
		kBtu/h	255.9	278.1	298.6	324.2
	Power input	kW	19.0	21.0	24.2	27.6
	COP			3.95	3.88	3.62
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		39	42	45	48
Compressor	Type		DC inverter			
	Quantity		2			
	Oil type		FVC68D			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		2			
	Motor output	kW	0.56×2		0.92×2	
	Static pressure	Pa	0-20 (standard)20-80 (customized)			
	Airflow rate	m ³ /h	21500	21500	29000	28000
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	12	12	19	21
Pipe connections ³	Liquid pipe	mm	Φ15.9		Φ22.2	
	Gas pipe	mm	Φ28.6		Φ31.8	Φ34.9
Sound pressure level ⁴		dB(A)	62		63	64
Net dimensions (W×H×D)		mm	1340×1760×825		1880×1760×825	
Packed dimensions (W×H×D)		mm	1410×1945×890		1935×1945×890	
Net weight		kg	315		373	405
Gross weight		kg	335		403	435
Ambient temp.	Cooling	°C	-15 to 55			
operation range	Heating	°C	-30 to 30			

Notes:

- Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor air temperature 20°C DB; outdoor air temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those of the unit's stop valve.
- 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.

V8 VRF 50/60Hz

Table 2-1.4: 32-36HP specifications

General Information, 36-32HP

HP			32	34	36
Model name			MV8-900WV2GN1(PRO)	MV8-950WV2GN1(PRO)	MV8-1010WV2GN1(PRO)
Power supply		V/N/Hz	380-415/3/50(60)		
Cooling ¹	Capacity	kW	90.0	95.2	101.0
		kBtu/h	307.1	324.2	344.6
	Power input	kW	30.2	32.5	35.4
	EER			2.98	2.93
Heating ²	Capacity	kW	100.0	106.0	112.0
		kBtu/h	341.2	361.7	382.2
	Power input	kW	30.2	32.2	34.7
	COP			3.31	3.29
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity		
	Maximum quantity		52	55	58
Compressor	Type		DC inverter		
	Quantity		2		
	Oil type		FVC68D		
	Start-up method		Soft start		
Fan	Type		Propeller		
	Motor type		DC		
	Quantity		2		
	Motor output	kW	0.92×2		
	Static pressure	Pa	0-20 (standard)20-80 (customized)		
	Airflow rate	m ³ /h	28000	29000	29000
	Drive type		Direct		
Refrigerant	Type		R410A		
	Factory charge	kg	21	21	21
Pipe connections ³	Liquid pipe	mm	Φ22.2		
	Gas pipe	mm	Φ34.9		
Sound pressure level ⁴		dB(A)	64	66	
Net dimensions (W×H×D)		mm	1880×1760×825		
Packed dimensions (W×H×D)		mm	1935×1945×890		
Net weight		kg	405	406	
Gross weight		kg	435	436	
Ambient temp.	Cooling	°C	-15 to 55		
operation range	Heating	°C	-30 to 30		

 Notes:

- Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor air temperature 20°C DB; outdoor air temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those of the unit's stop valve.
- 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.

V8 VRF 50/60Hz

Table 2-1.5: 38-44HP specifications

General Information, 44-38HP

HP			38	40	42	44
Model name (Combination unit)			MV8-1065WV2GN1(PRO)	MV8-1120WV2GN1(PRO)	MV8-1180WV2GN1(PRO)	MV8-1235WV2GN1(PRO)
Combination type			16HP+22HP	16HP+24HP	16HP+26HP	16HP+28HP
Power supply		V/N/Hz	380-415/3/50(60)			
Cooling ¹	Capacity	kW	106.5	112.0	118.0	123.5
		kBtu/h	363.3	382.1	402.6	421.4
	Power input	kW	29.6	30.7	32.7	35.7
	EER			3.60	3.65	3.61
Heating ²	Capacity	kW	119.0	125.0	131.5	137.5
		kBtu/h	406.0	426.5	448.7	469.2
	Power input	kW	29.3	30.7	32.7	35.9
	COP			4.06	4.07	4.02
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		62	64	64	64
Compressor	Type		DC inverter			
	Quantity		3			
	Oil type		FVC68D			
	Start-up method		Soft start			
Fan	Type		Propeller			
	Motor type		DC			
	Quantity		3			
	Motor output	kW	0.56×2+0.92			0.92×3
	Static pressure	Pa	0-20 (standard)20-80 (customized)			
	Airflow rate	m ³ /h	37600	37100	37100	44600
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	8+9.3	8+12	8+12	8+19
Pipe connections ³	Liquid pipe	mm	Φ19.1			
	Gas pipe	mm	Φ38.1			
Sound pressure level ⁴		dB(A)	64			65
Net dimensions (W×H×D)		mm	(940×1760×825)+(1340×1760×825)			(940×1760×825)+(1880×1760×825)
Packed dimensions (W×H×D)		mm	(1010×1945×890)+(1410×1945×890)			(1010×1945×890)+(1935×1945×890)
Net weight		kg	213+295	213+315		213+373
Gross weight		kg	230+315	230+335		230+403
Ambient temp.	Cooling	°C	-15 to 55			
operation range	Heating	°C	-30 to 30			

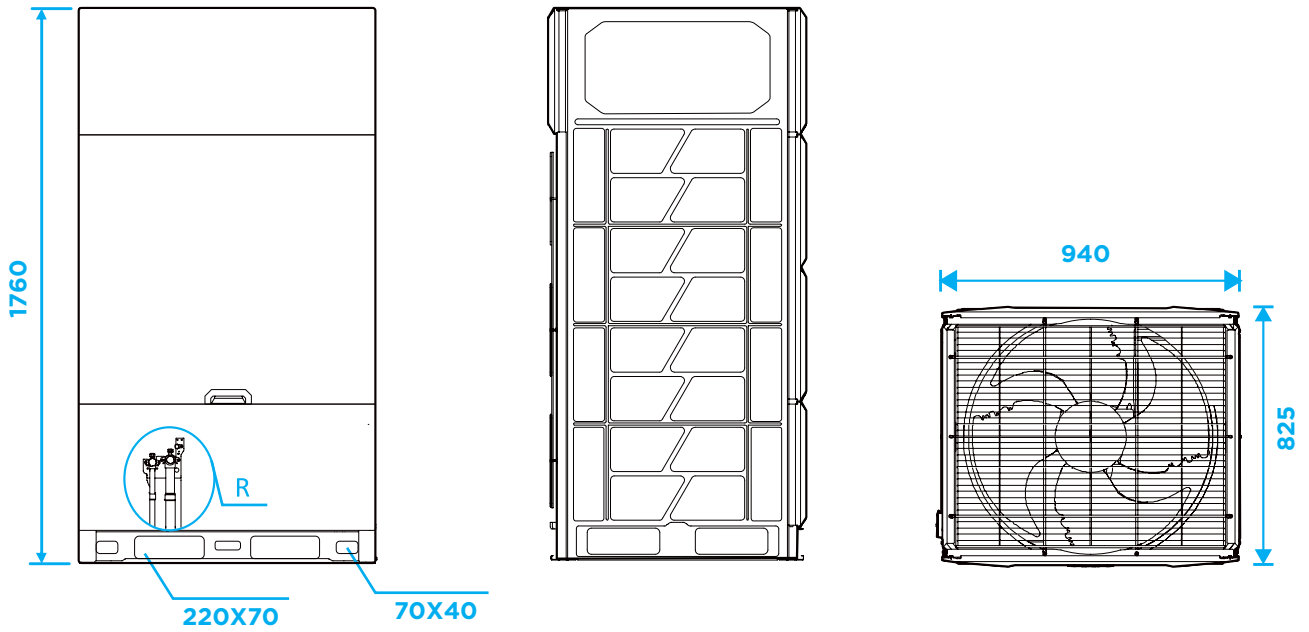
Notes:

- Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5mm with zero level difference.
- Indoor air temperature 20°C DB; outdoor air temperature 7°C DB, 6°C WB; 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 Part 3 "System Design and Installation" 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.

/// V8 VRF 50/60Hz | 2 Dimensions

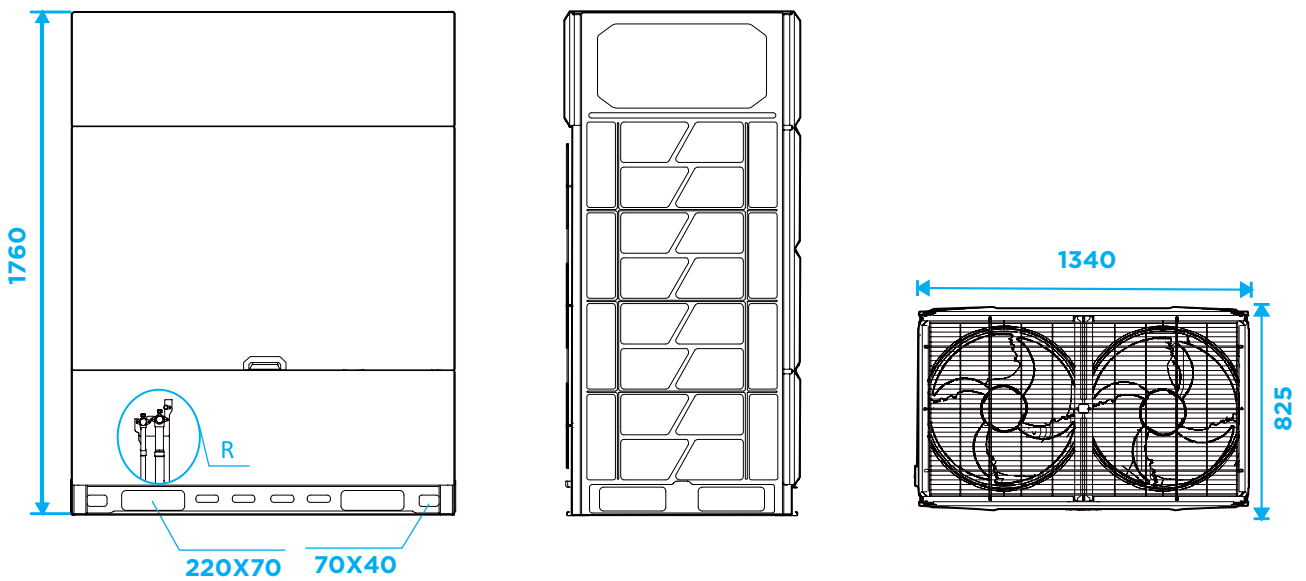
2.1 Single Units - 18/16/14/12/10/8HP

Figure 2-2.1: 8/10/12/14/16/18HP dimensions (unit: mm)



2.1 Single Units - 26/24/22/20HP

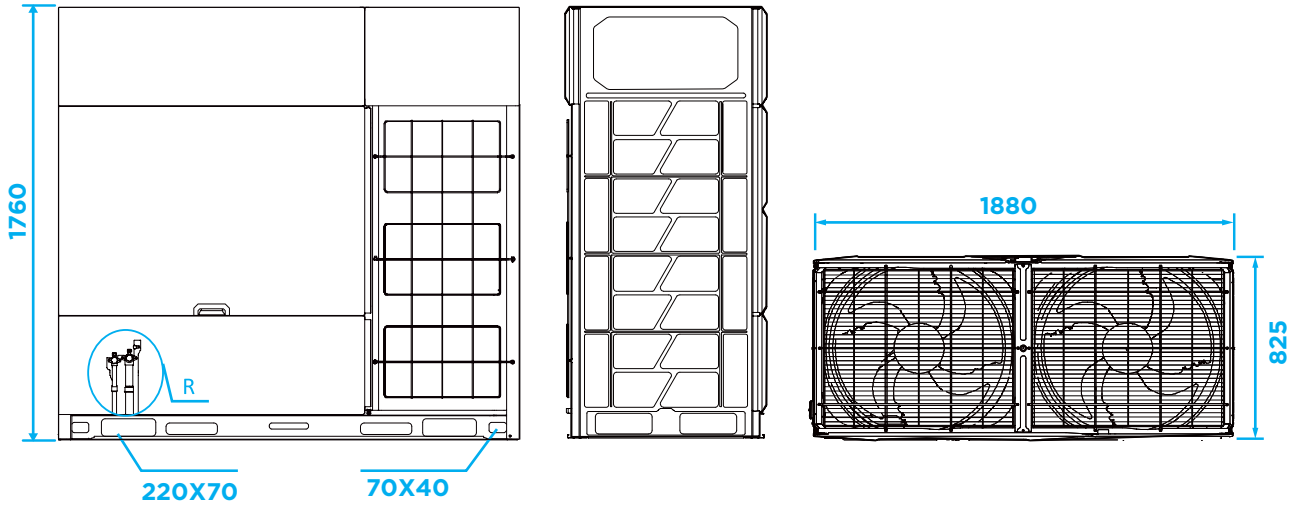
Figure 2-2.2: 20/22/24/26HP dimensions (unit: mm)



V8 VRF 50/60Hz | 28/30/32/34/36HP

36/34/32/30/28HP

Figure 2-2.3: 28/30/32/34/36HP dimensions (unit: mm)

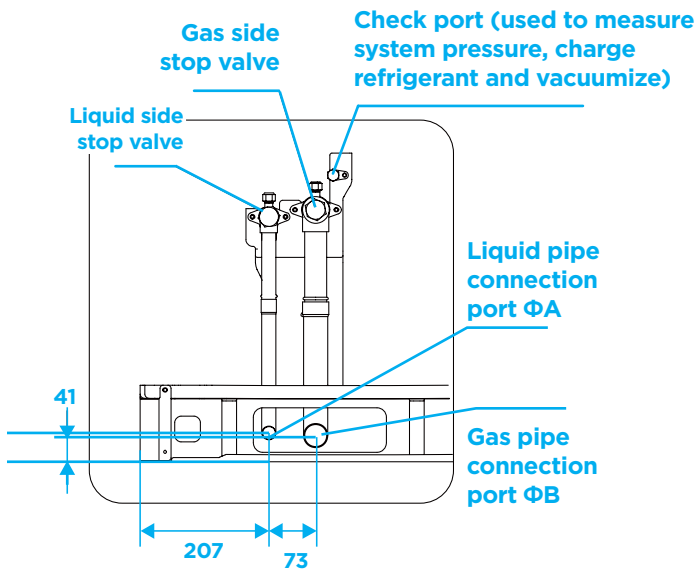


Detail R

Figure 2-2.4: Detail R (unit: mm)

Table 2.1-2

Connection piping diameter (unit: mm)

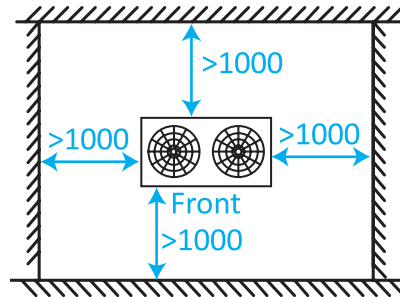


Detail R

Size	ΦA	ΦB
8HP	$\Phi 12.7$	$\Phi 25.4$
10HP	$\Phi 12.7$	$\Phi 25.4$
12HP	$\Phi 12.7$	$\Phi 25.4$
14HP	$\Phi 15.9$	$\Phi 28.6$
16HP	$\Phi 15.9$	$\Phi 28.6$
18HP	$\Phi 15.9$	$\Phi 28.6$
20HP	$\Phi 19.1$	$\Phi 31.8$
22HP	$\Phi 19.1$	$\Phi 31.8$
24HP	$\Phi 19.1$	$\Phi 31.8$
26HP	$\Phi 19.1$	$\Phi 31.8$
28HP	$\Phi 22.2$	$\Phi 31.8$
30HP	$\Phi 22.2$	$\Phi 38.1$
32HP	$\Phi 22.2$	$\Phi 38.1$
34HP	$\Phi 22.2$	$\Phi 38.1$
36HP	$\Phi 22.2$	$\Phi 38.1$

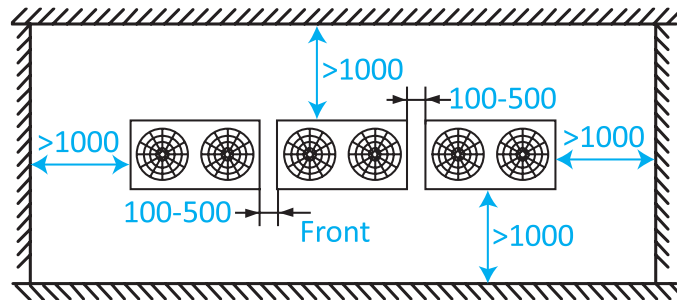
/// V8 VRF 50/60Hz | 3 Installation Space Requirements

For single unit installation



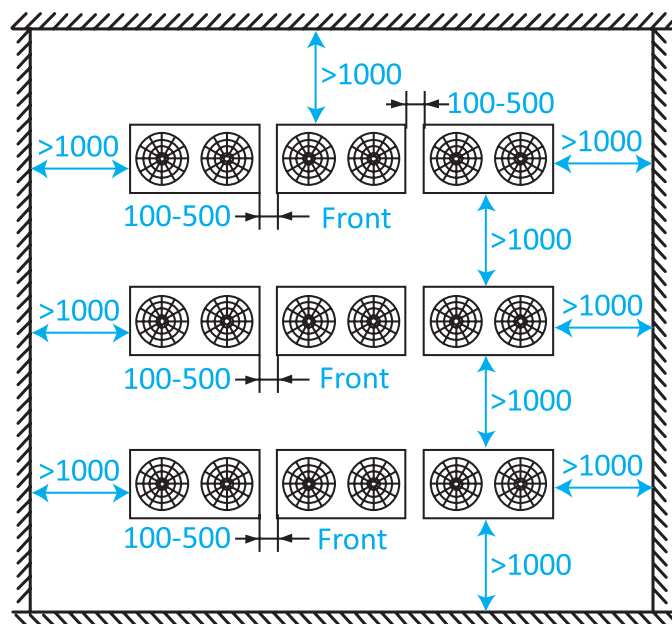
For single row installation

Figure 2-3.2: Single row installation (unit: mm)



For multi-row installation

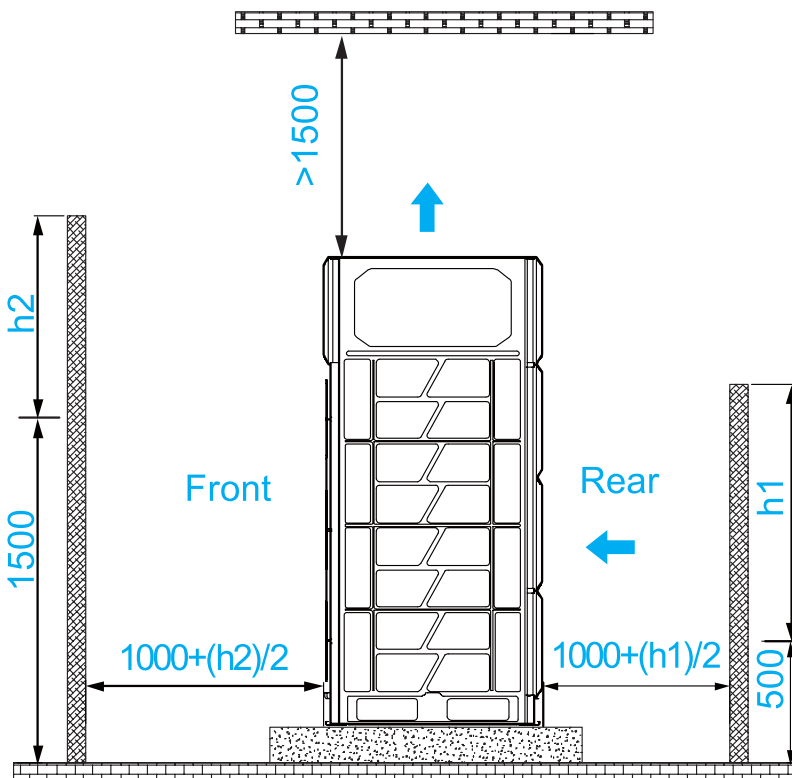
Figure 2-3.3: Multi-row installation (unit: mm)



/// V8 VRF 50/60Hz | Figure 2-3.4

Top of unit below top of adjacent wall unit (mm)

In the situation depicted in Figure 2-3.4, if the front wall is higher than 1500mm, a space of at least $(1000 + (h_2)/2)$ mm is required at the front. If the rear wall is higher than 500mm, a space of at least $(1000 + (h_1)/2)$ mm is required at the rear. When the space over the unit is less than 1500mm, ducting is required to ensure proper air discharge. When the space over the unit is greater than 1500mm, ducting may be required if the air discharge is not smooth.



1200-1400CFM
2-Pipe 3-Row A4 Duct




Fresh air
intake



V8 DISCOVER RELIABLE

Extreme Conditions, Supreme Performance

Thanks to **innovation solutions**,
blizzard is no longer problem.



V8

Midea

/// Heat Pump V6-i Side Discharge Series VRF

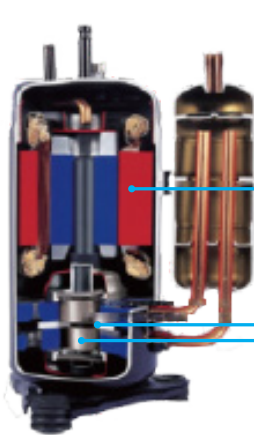
Features

- High efficiency DC inverter compressor and DC fan motors
- Wide operating range: cooling from °5-C to °55C; heating from °20-C to °24C
- Refrigerant cooling PCB, guaranteeing reliable operation at high temperature
- Smaller foot print by side air-discharge
- Connect up to 20 indoor units
- Flexible piping design
- Precise oil control technology
- Auto addressing



/// DC Inverter Compressor

DC inverter compressors make the output of the outdoor unit to be modulated by the cooling or heating demands of the zone that it controls. This advanced system ensures precise temperature regulation and highly efficient energy usage, making a significant contribution to the environment.



DC Compressor
(Twin Rotary)

Highly Efficient DC Motor:

- Creative motor core design
- High density neodymium magnet
- Concentrated type stator
- Wider operating frequency range

Better Balance and Extremely Low Vibration:

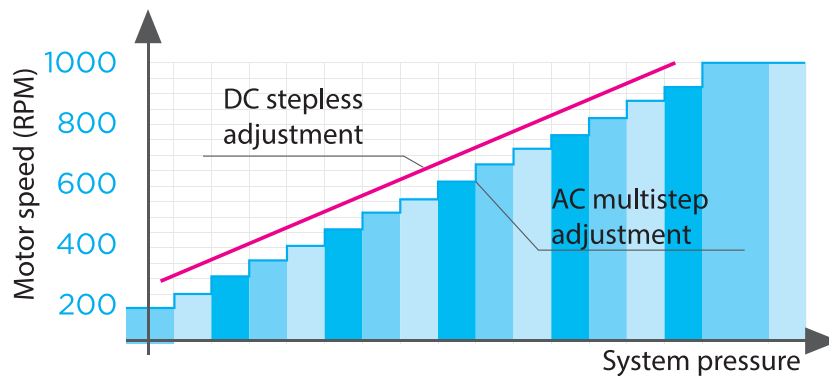
- Twin eccentric cams
- 2 balance weights

Highly Stable Moving Parts:

- Optimal material matching rollers and vanes
- Optimize compressor drive technology
- Highly robust bearings
- Compact structure

DC Fan Motor

According to the running load and pressure, the outdoor unit controls the speed of DC fan to achieve the minimum power consumption.



Flexible Indoor Units Connection

A single outdoor unit supports up to 20 indoor units, freeing up considerable space outside. Use your backyard more wisely with much more space available created by less number of outdoor units.

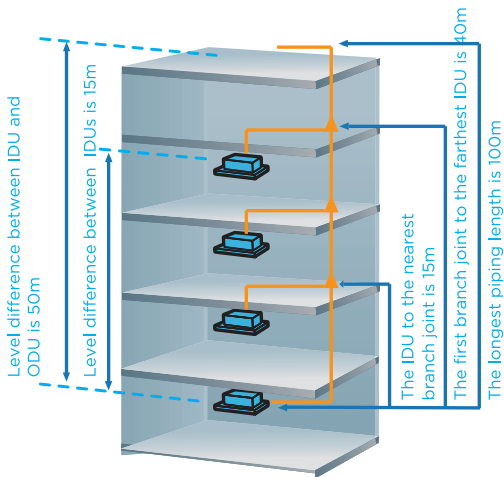
- Max. 11 indoor units for a 20.0kW outdoor unit installation
- Max. 13 indoor units for a 22.4kW outdoor unit installation
- Max. 15 indoor units for a 26kW outdoor unit installation
- Max. 16 indoor units for a 28kW outdoor unit installation
- Max. 20 indoor units for a 33.5kW outdoor unit installation



Heat Pump V6-i Side Discharge Series VRF

Flexible Piping Design

It provides a total piping length possibility of 150m, a maximum height difference between outdoor and indoor units of 50m. The height difference between indoor units can be up to 15m.



- Total piping length: 150m
- Longest length - actual (equivalent): 100m (120m)
- Longest length after first branch: 40m
- Longest length after nearest branch: 15m
- Largest height difference between indoor and outdoor units ODU up (down): 50m (40m)
- Largest height difference between indoor units: 15m

Refrigerant Cooling PCB

It uses refrigerant cooling technology to cool the electric control box which can decrease the average temperature of electrical control components by about 8 degrees, guaranteeing the stable and safe running of the control system even at 55°C.

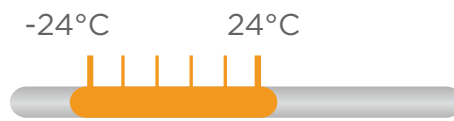


Wide Operation Range

It can operate cooling mode from -5oC to as high as 55oC and heating mode from -20oC to 24oC.



COOLING MODE



HEATING MODE

Auto Addressing

Outdoor unit can distribute addresses for indoor unit automatically. Wireless and wired controllers can query and modify each indoor unit's address.

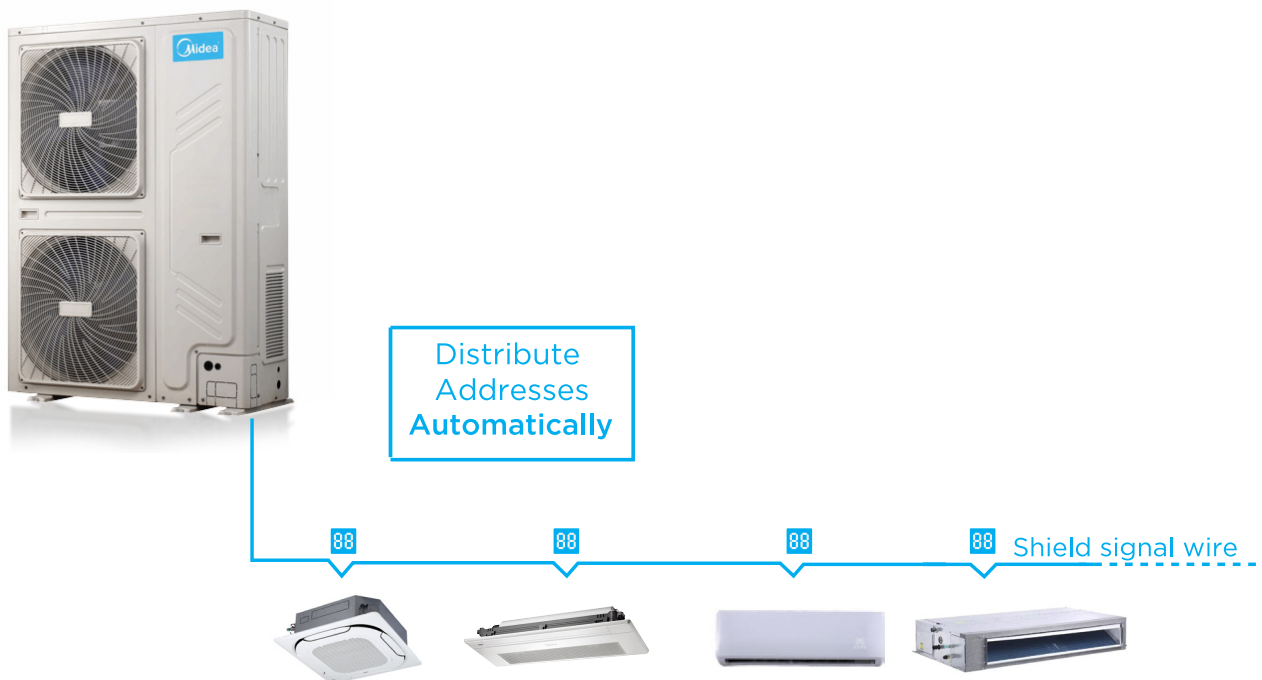


Table 2-1.1: 7/8/9HP specifications

HP			7	8	9
Model name			MVi-200WV2GN1(A)	MVi-224WV2GN1(A)	MVi-260WV2GN1(A)
Power supply		V/Ph/Hz	380-415/3/50(60)		
Cooling ¹	Capacity	kW	20	22.4	26.0
	Power input	kW	5.6	6.3	7.6
	EER		3.57	3.56	3.42
Heating ² (Rated)	Capacity	kW	20	22.4	26.0
	Power input	kW	4.7	5.3	6.6
	COP		4.26	4.23	3.94
Heating ³ (Max.)	Capacity	kW	22.5	25.0	28.5
	Power input	kW	5.4	6.0	7.3
	COP		4.17	4.17	3.90
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity		
	Maximum quantity		11	13	15
Compressor	Type		DC inverter rotary		
	Quantity		1		
	Oil type		RB75EA		
	Start-up method		Soft start		
Fan	Type		Propeller		
	Motor type		DC		
	Quantity		2		
	Motor output	kW	0.17×2	0.17×2	0.17×2
	Air flow rate	m ³ /h	9000	9000	10000
	Drive type		Direct		
Refrigerant	Type		R410A		
	Factory charge	kg	6.5	6.5	6.5
Pipe connections ⁴	Liquid pipe	mm	Φ12.7	Φ12.7	Φ12.7
	Gas pipe	mm	Φ19.1	Φ19.1	Φ22.2
Sound pressure level ⁵		dB(A)	58	58	59
Net dimensions (W×H×D)		mm	1120×1558×528		
Packed dimensions (W×H×D)		mm	1270×1720×565		
Net weight		kg	143	143	144
Gross weight		kg	159	159	160
Ambient Temp. operation range	Cooling	°C	-5~55		
	Heating	°C	-20~24		

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

Table 2-1.2: 10/12HP specifications

HP			10	12
Model name			MVi-280WV2GN1(A)	MVi-335WV2GN1(A)
Power supply		V/Ph/Hz	380-415/3/50(60)	
Cooling ¹	Capacity	kW	28.5	33.5
	Power input	kW	8.4	9.2
	EER		3.39	3.64
Heating ² (Rated)	Capacity	kW	28.5	33.5
	Power input	kW	7.3	8.1
	COP		3.90	4.14
Heating ³ (Max.)	Capacity	kW	31.5	37.5
	Power input	kW	8.1	9.2
	COP		3.89	4.08
Connected indoor unit	Total capacity		50-130% of outdoor unit capacity	
	Maximum quantity		16	20
Compressor	Type		DC inverter rotary	DC inverter rotary
	Quantity		1	1
	Oil type		RB75EA	FV50S
	Start-up method		Soft start	Soft start
Fan	Type		Propeller	
	Motor type		DC	
	Quantity		2	
	Motor output	kW	0.17×2	0.17×2
	Air flow rate	m ³ /h	11000	11300
	Drive type		Direct	
Refrigerant	Type		R410A	
	Factory charge	kg	6.5	8
Pipe connections ⁴	Liquid pipe	mm	Φ12.7	Φ12.7
	Gas pipe	mm	Φ22.2	Φ22.2
Sound pressure level ⁵		dB(A)	60	61
Net dimensions (W×H×D)		mm	1120×1558×528	
Packed dimensions (W×H×D)		mm	1270×1720×565	
Net weight		kg	144	157
Gross weight		kg	160	173
Ambient Temp. operation range	Cooling	°C	-5~55	
	Heating	°C	-20~24	

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.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m 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 1m above the floor in a semi-anechoic chamber.

ATOM SERIES MINI VRF

EFFECTIVE CONTROL IN HIGH-EFFICIENT OFFICE



Group Control for
Maximum 9 IDUs



Centralized Control with
Other VRF Systems



Cloud Control



Long Piping Capability for
Flexible Installation



DISCOVER
easyCOMFORT



AC-35

Indoor temperature 25°C

26



AUTO

COOL

HEAT

FAN

DRY

MODE

COOL Ts

HEAT Ts

FAN SP

REMOTE

MED



COOL



LOCK

/// All Flare Connections, The Easiest VRF to Install

The ATOM B series VRF system uses all flare connection which can greatly simplify installation. The multiple branch header with 1 to 2, 3, 4, 5 or 6 options further simplify installation.



/// 1 to 9 Indoor Units Connection

A single outdoor unit supports 1 to 9 indoor units, freeing up considerable space outside. Use your backyard more wisely with much more space available created by less number of outdoor units.



Mini VRF

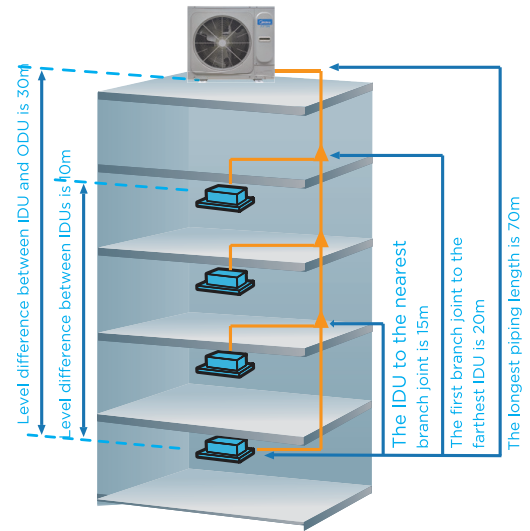
DISCOVER
easyCOMFORT

Perfect for commercial & residential applications: small offices, villas, apartments, shops, etc.



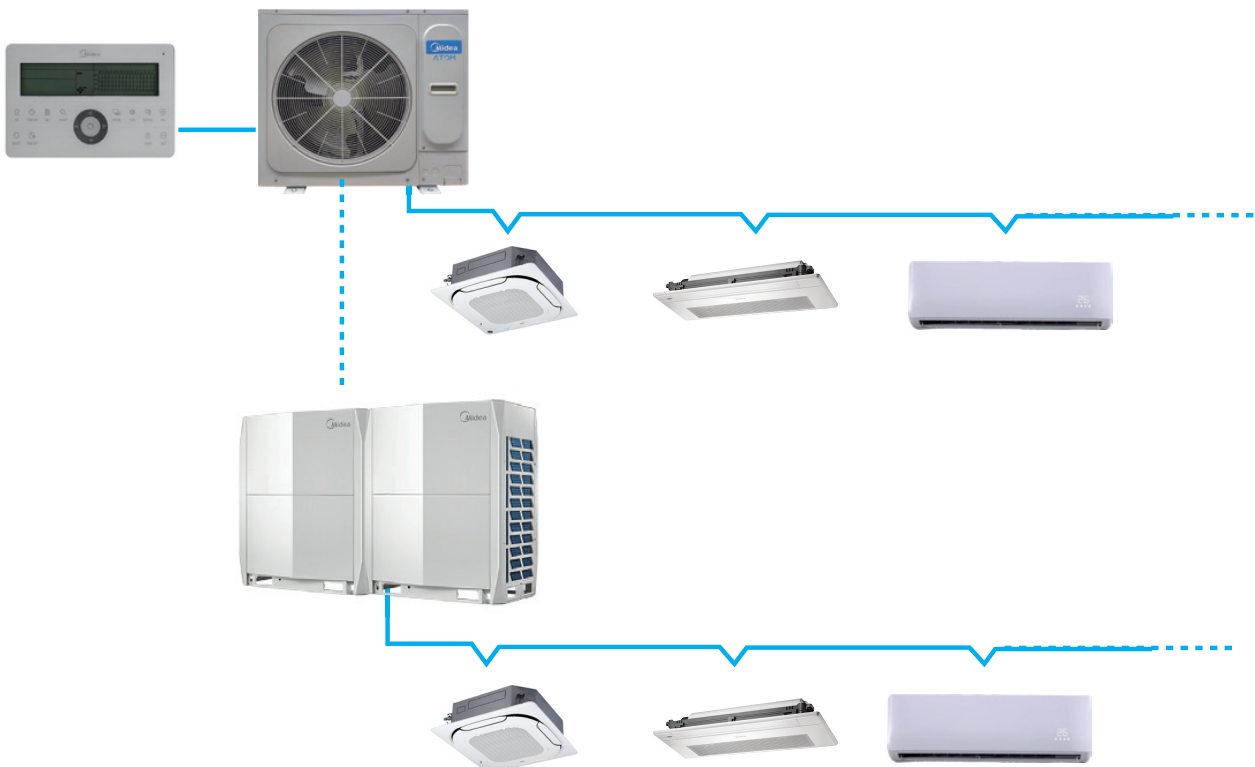
/// Long Piping Length

The ATOM B series system and other VRF system with up to 64 indoor units and 8 systems can be controlled in one centralized control system, it is very convenient for administrators to manage equipment uniformly.



/// Centralized Control with Other VRF System, Convenient for Unified Management

The ATOM B series system and other VRF system with up to 64 indoor units and 8 systems can be controlled in one centralized control system, it is very convenient for administrators to manage equipment uniformly.



Atom B Series VRF 50/60Hz | 1 Specifications

MDV-V28WDHN1(AtB) / MDV-V36WDHN1(AtB) / MDV-V42WDHN1(AtB)

Table 2-1.1: 28/36/42 model specifications

Model			MDV-V28WDHN1(AtB)	MDV-V36WDHN1(AtB)	MDV-V42WDHN1(AtB)
Power supply		V-Ph-Hz	220-240/1/ 50(60)		
Cooling ¹	Capacity	kBtu/h	27	34	41
		kW	8	10	12
	Input	kW	2.1	2.66	3.31
	EER	kW/ KW	3.81	3.76	3.63
Heating ²	Capacity	kBtu/h	30	41	47
		kW	9	12	14
	Input	kW	2.04	3.15	3.64
	COP	kW/ kW	4.41	3.81	3.85
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity		
	Quantity		1~4	1~6	1~7
Compressor	Type		DC inverter	DC inverter	DC inverter
	Quantity		1	1	1
	Oil type		RB74AF	RB74AF	RB74AF
Fan	Motor type		DC motor	DC motor	DC motor
	Quantity		1	1	1
	Output	W	80	170	170
Outdoor air flow		m3/h	3700	5200	5000
Sound pressure level ³		dB(A)	54	54	56
Net dimensions (W×H×D) ⁴		mm	910 x 712 x 426	950 x 840 x 440	950 x 840 x 440
Packed dimensions (W×H×D)		mm	1045 x 810 x 485	1025 x 950 x 510	1025 x 950 x 510
Net weight		kg	49	59.5	63
Gross weight		kg	53	66.5	70
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	g	1700	2300	2400
	Throttle type		Electronic expansion valve		
Pipe connections	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53
	Gas pipe	mm	Φ15.9	Φ15.9	Φ15.9
Ambient Temp. operation range	Cooling	°C	-5~55		
	Heating	°C	-15~27		

Notes:

1. The cooling conditions: indoor temp: 27 oC DB (80.6 oF), 19 oC WB (66.2 oF) outdoor temp: 35 oC DB (95 oF) equivalent pipe length: 5m drop length: 0m.
2. The heating conditions: indoor temp: 20 oC DB (68 oF), 15 oC WB (44.6 oF) outdoor temp.: 7 oC DB (42.8 oF) equivalent pipe length: 5m drop length: 0m.
3. Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1m for 28/26 model, 1.2m for 42 model. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
4. Diameters given are those of the unit's stop valves.
5. The above data may be changed without notice for future improvement on quality and performance.

Atom B Series VRF 50/60Hz

MDV-V48WDHN1(AtB) / MDV-V56WDHN1(AtB) / MDV-V60WDHN1(AtB)

Table 2-1.2: 48/52/60 model specifications

Model			MDV-V48WDHN1(AtB)	MDV-V56WDHN1(AtB)	MDV-V60WDHN1(AtB)
Power supply		V-Ph-Hz	220-240/1/ 50(60)		
Cooling ¹	Capacity	kBtu/h	47	52	59
		kW	14	15.5	17.5
	Input	kW	3.97	4.87	6.12
	EER	kW/ KW	3.53	3.18	2.86
Heating ²	Capacity	kBtu/h	54	61	66
		kW	16	18	19.5
	Input	kW	3.98	4.82	5.57
	COP	kW/ kW	4.02	3.73	3.50
Connectable indoor unit	Total capacity		45~130% of outdoor unit capacity		
	Quantity		1~8	1~9	1~9
Compressor	Type		DC inverter	DC inverter	DC inverter
	Quantity		1	1	1
	Oil type		RB74AF	RB74AF	RB74AF
Fan	Motor type		DC motor	DC motor	DC motor
	Quantity		1	1	1
	Output	W	170	170	170
Outdoor air flow		m ³ /h	5200	5000	5300
Sound pressure level ³		dB(A)	56	56	57
Net dimensions (W×H×D) ⁴		mm	950 x 840 x 440	950 x 840 x 440	1040 x 410 x 865
Packed dimensions (W×H×D)		mm	1025 x950 x 510	1025 x950 x 510	1120 x 865 x 560
Net weight		kg	75	77.5	90.5
Gross weight		kg	82	84.5	99
Refrigerant	Type		R410A	R410A	R410A
	Factory charge	g	3100	3600	4600
	Throttle type		Electronic expansion valve		
Pipe connections	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53
	Gas pipe	mm	Φ15.9	Φ19.1	Φ19.1
Ambient Temp. operation range	Cooling	°C	-5~55		
	Heating	°C	-15~27		

Notes:

1. The cooling conditions: indoor temp: 27 °C DB (80.6 °F), 19 °C WB (66.2 °F) outdoor temp: 35 °C DB (95 °F) equivalent pipe length: 5m drop length: 0m.
2. The heating conditions: indoor temp: 20 °C DB (68 °F), 15 °C WB (44.6 °F) outdoor temp.: 7 °C DB (42.8 °F) equivalent pipe length: 5m drop length: 0m.
3. Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1m for 28/26 model, 1.2m for 42 model. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
4. Diameters given are those of the unit's stop valves.
5. The above data may be changed without notice for future improvement on quality and performance.

Atom B Series VRF 50/60Hz

2 Dimensions (unit: mm)

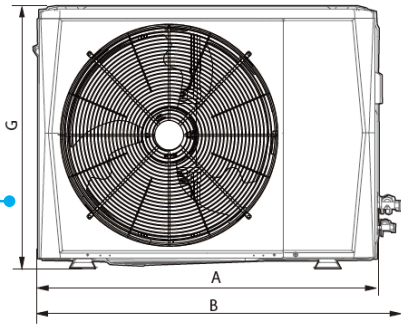


Figure 2-2.1: Model 28 Front view dimensions

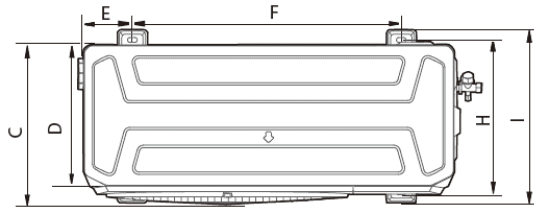


Figure 2-2.2: Model 28 Top view dimensions

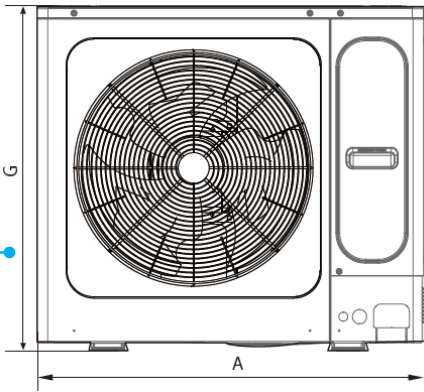


Figure 2-2.3: Model 36-56 Front view dimensions

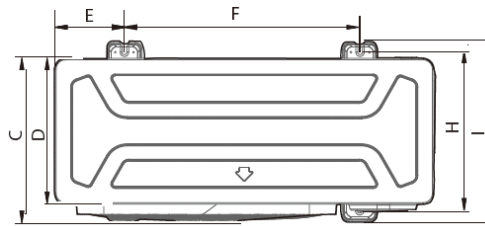


Figure 2-2.4: Model 36-56 Top view dimensions

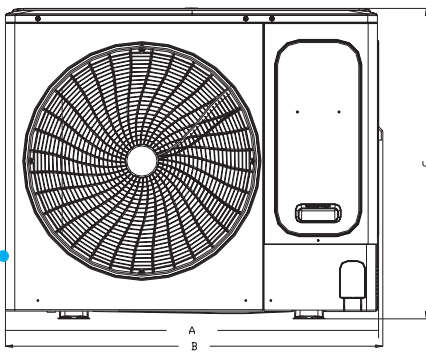


Figure 2-2.5: Model 60 Front view dimensions

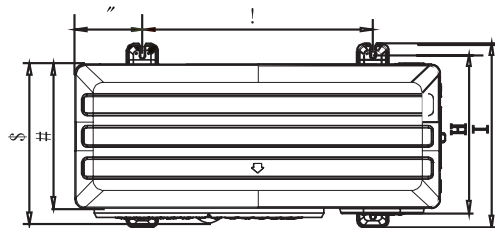


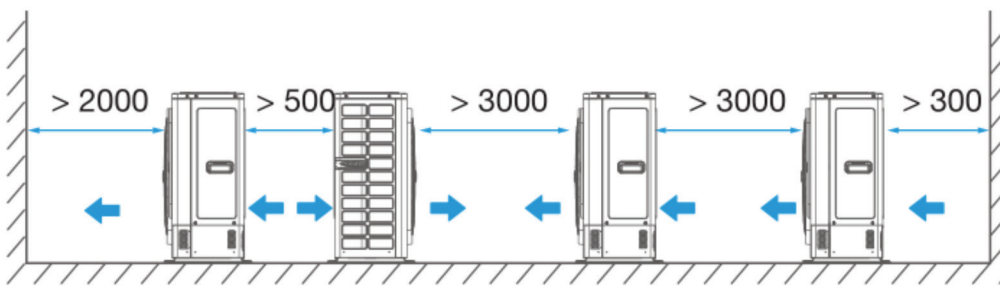
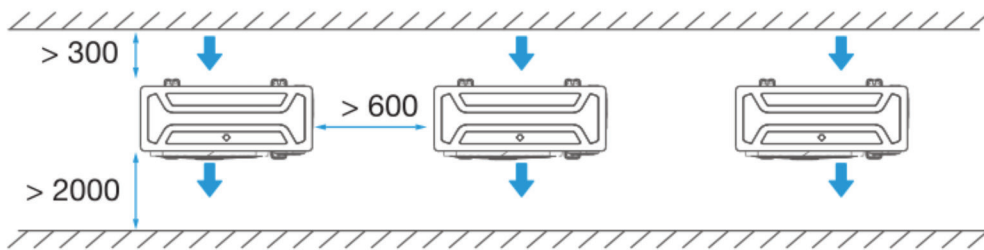
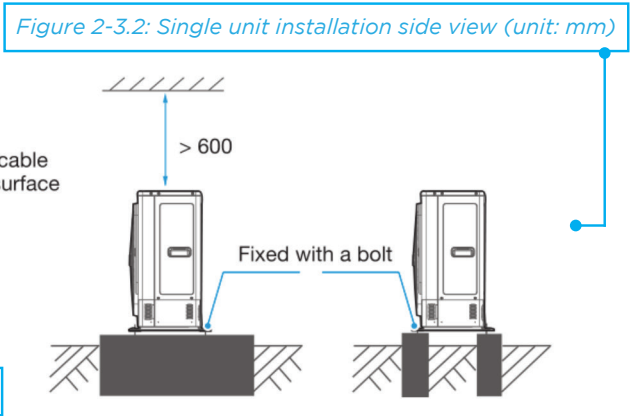
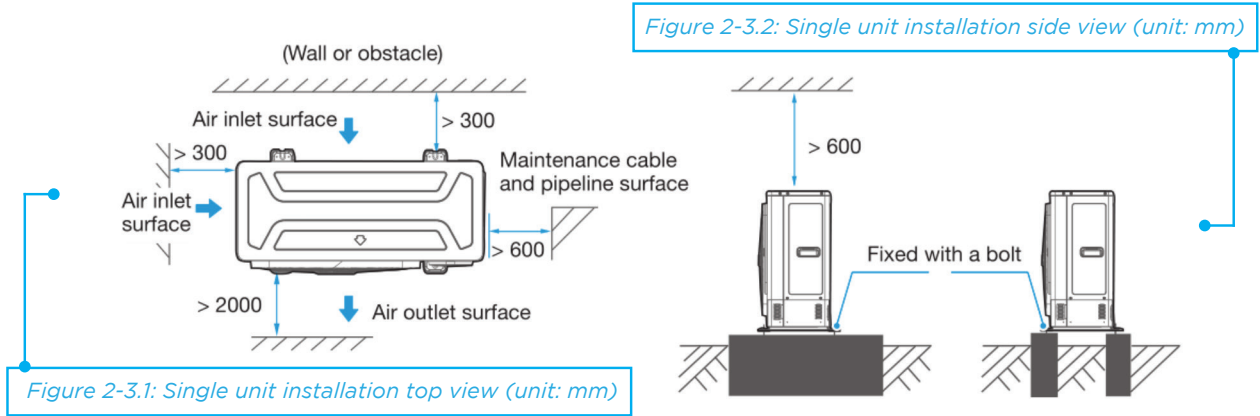
Figure 2-2.6: Model 60 Top view dimensions

Model	A	B	C	D	E	F	G	H	I
28	910	982	390	345	120	663	712	375	426
36/42/48/56	950	/	406	360	175	590	840	390	440
60	1040	1053	452	410	191	656	865	463	523

Atom B Series VRF 50/60Hz

3 Installation Space Requirements

Table 2-1.2: 48/52/60 model specifications



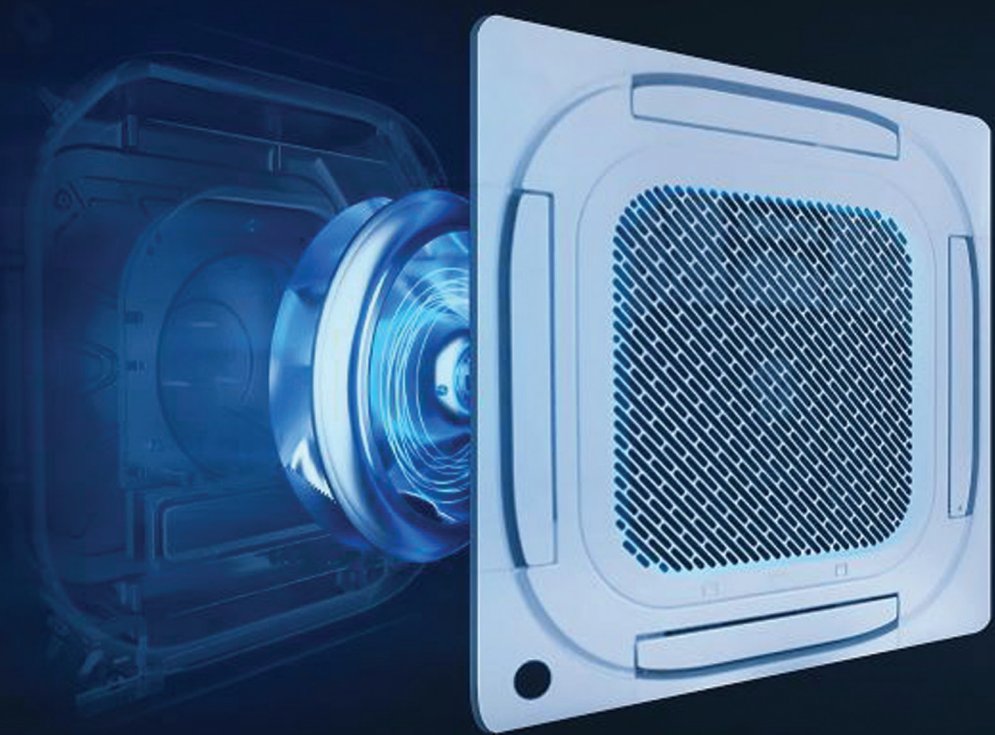


Two Way
AIRFLOW

 Lower running noise

 Two direction auto swind

THE SUPER SLIM CASSETTE



Wind Track



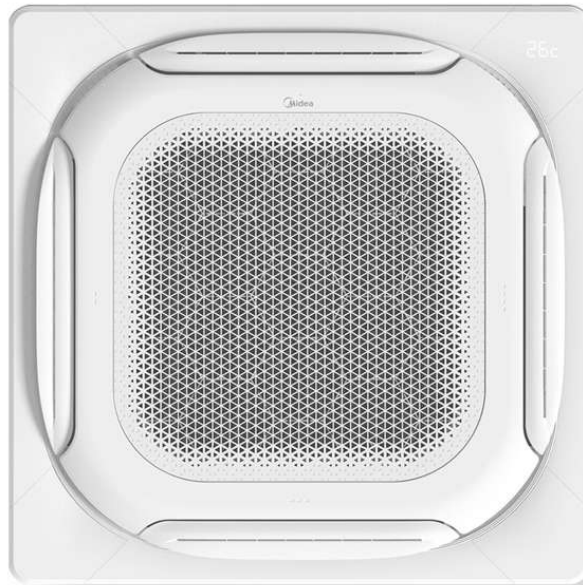
Nite-Owl wing

Indoor Unit

Type	One-way Cassette	Four-way Cassette	Medium Static Pressure Duct
Indoor Unit	 <p>1.8-7.1kW, 7 models</p>	 <p>2.8-16kW, 11 models</p>	 <p>1.5-16kW, 12 models</p>
Type	High Static Pressure Duct	Fresh Air Processing Unit	Wall Mounted
Indoor Unit	 <p>7.1-56kW, 11 models</p>	 <p>11.2-56kW, 8 models</p>	

Four-way Cassette VRF Indoor Units

Super Slim Cassette



Optional wireless
remote controller

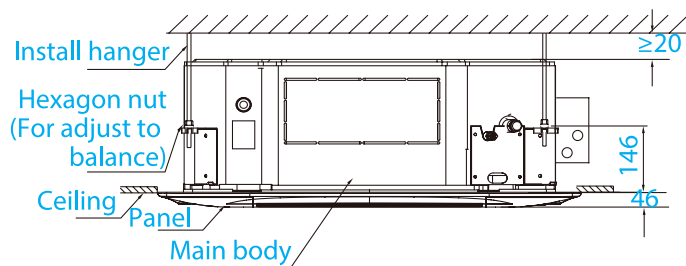
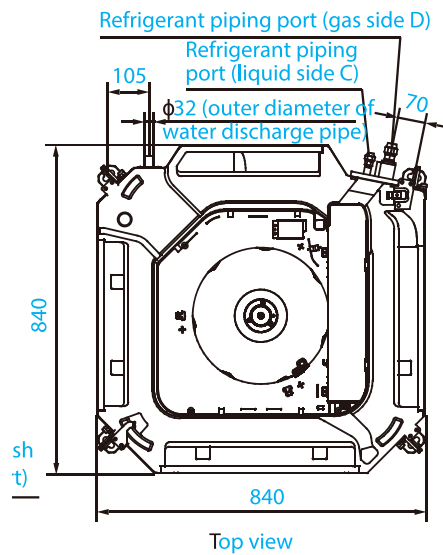
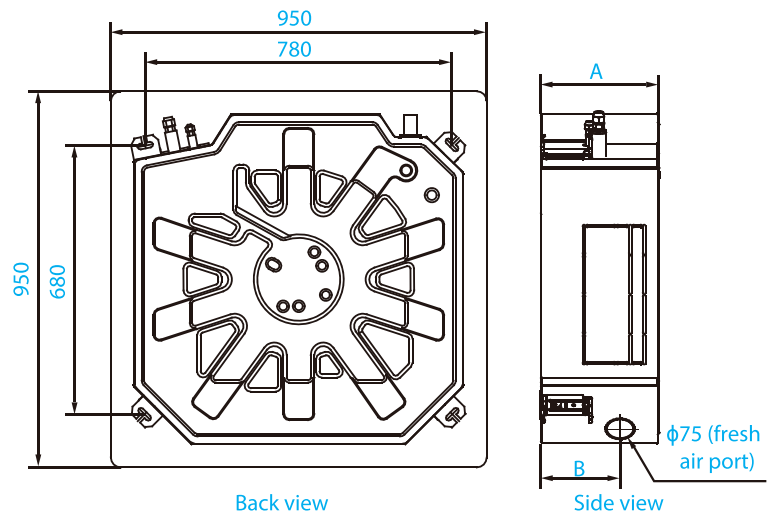


Optional
wired controller



- 10 models from 2.8~14kW
- 360° air discharge ensures uniform air flow and temperature distribution
- Individual louver control to maximally satisfy customer requirement (optional function)
- In comfort mode, supply air against the ceiling to create windless environment, more comfort
- 5-step swing louver, making the air flow direction control more precisely
- Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control
- Indoor unit displays can be shut off at night, creating a better environment for rest
- The buzzer sound of the indoor unit can be turned off to create a quieter environment
- Auto restart function is standard, which can also be canceled through the controller
- Bi-directional communication wired controller can query the indoor and outdoor units' parameters, and also can set the indoor units' parameters
- High-lift drain pump with 750mm pump head

Installation dimensions (unit: mm)



Model	A (mm)	B (mm)	C (mm)	D (mm)
2.8-4.5kW	230	126	$\phi 6.35$	$\phi 12.7$
5.6-8.0kW	230	126	$\phi 9.53$	$\phi 15.9$
9.0-14.0kW	300	197	$\phi 9.53$	$\phi 15.9$

Four-way Cassette Specification

Super Slim Cassette

Model			MDV-D28Q4/N1-E(B)	MDV-D36Q4/N1-E(B)	MDV-D45Q4/N1-E(B)	MDV-D15Q4/N1-A3(B)
Power supply			1 phase, 220-240V, 50Hz			
Cooling	Capacity	kW	2.8	3.6	4.5	1.5
	Power input	W	80	80	88	36
Heating	Capacity	kW	3.2	4	5	1.7
	Power input	W	80	80	88	36
Indoor fan motor	Type		AC			AC
	Quantity		1			1
Refrigerant type			R410A			R410A
Indoor air flow (H/M/L)		m ³ /h	764/638/554	764/638/554	905/740/651	400/283/208
Sound pressure level (H/M/L)		dB(A)	32/31/30	32/31/30	36/34/33	35/33/23
Indoor unit	Dimension (WxHxD)	mm	840x230x840			570x260x630
	Packing (WxHxD)	mm	955x260x955			675x285x675
	Net/Gross weight	kg	21.5/26.7			17/20
Panel	Dimension (WxHxD)	mm	950x50x950			647x50x647
	Packing (WxHxD)	mm	1035x89x1035			715x123x715
	Net/Gross weight	kg	5.8/7.9			2.5/4.5
Pipe connections	Liquid pipe	mm	Φ6.35			Φ6.35
	Gas pipe	mm	Φ12.7			Φ12.7
	Drain pipe	mm	ODΦ32			ODΦ25

Model			MDV-D90Q4/N1-E(B)	MDV-D100Q4/N1-E(B)	MDV-D140Q4/N1-E(B)	MDV-D22Q4/N1-A3(B)
Power supply			1 phase, 220-240V, 50Hz			
Cooling	Capacity	kW	9	10	14	2.2
	Power input	W	140	165	176	50
Heating	Capacity	kW	10	11.1	16	2.4
	Power input	W	140	165	176	50
Indoor fan motor	Type		AC			AC
	Quantity		1			1
Refrigerant type			R410A			R410A
Indoor air flow (H/M/L)		m ³ /h	1332/1129/908	1651/1304/1127	1658/1335/1130	414/313/238
Sound pressure level (H/M/L)		dB(A)	43/39/38	45/42/40	46/41/39	36/33/23
Indoor unit	Dimension (WxHxD)	mm	840x300x840			570x260x630
	Packing (WxHxD)	mm	955x330x955			675x285x675
	Net/Gross weight	kg	28.7/34.1	28.7/34.1	30.9/36.3	17/20
Panel	Dimension (WxHxD)	mm	950x50x950			647x50x647
	Packing (WxHxD)	mm	1035x89x1035			715x123x715
	Net/Gross weight	kg	5.8/7.9			2.5/4.5
Pipe connections	Liquid pipe	mm	Φ9.53			Φ6.35
	Gas pipe	mm	Φ15.9			Φ12.7
	Drain pipe	mm	ODΦ32			ODΦ25

Notes:

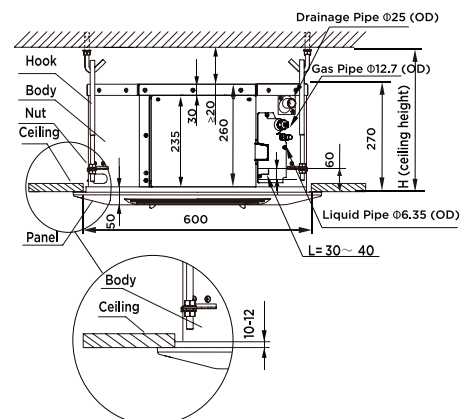
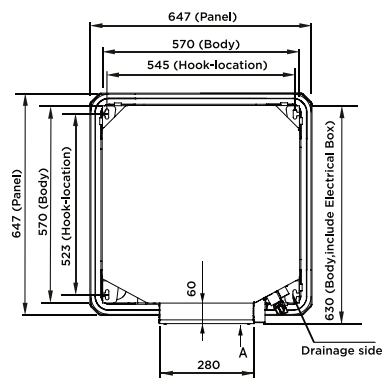
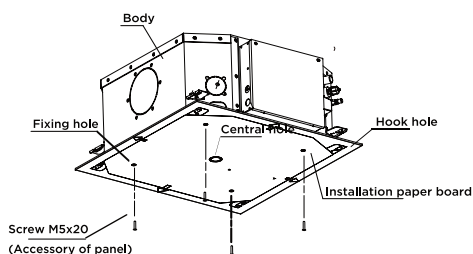
1 Nominal capacity are based on the following conditions:

- Cooling: indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.

- Heating: indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.

2 Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

Product specifications change from time to time as product improvements and developments are released and may vary from those in this document.



One-way Cassette

Key Features

Compact and lightweight two-way airflow, perfect for limited ceiling space applications.



Optional wireless remote controller



Optional wired controller



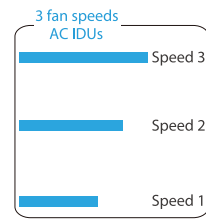
Two-way Cassette		DC Series	AC Series
Comfort	Quiet operation	●	●
	0.5°C/1°C setting temperature adjustment	●	●
	Digital display on/off	●	●
	Buzzer sound on/off	●	●
Health	Fresh air intake	●	●
	Dirty filters indicator signal	●	●
Air flow	Multiple fan speeds	7+auto	3+auto
	Multiple steps vertical swing	5+auto	5+auto
Easy installation	Minimized height	●	●
	High-lift drain pump	Rated head: 1200mm Raise height: 750mm	Rated head : 1200mm Raise height : 750mm

Notes:
Equipped as standard

AIR FLOW

Multiple Fan Speeds

Comes with 3 indoor fan speed options to meet the needs of different indoor conditions.



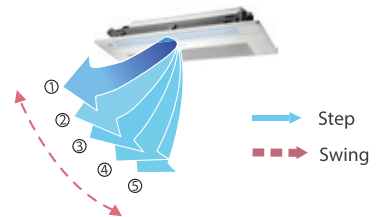
Exercise time
strong airflow

Leisure time
gentle airflow

Rest time
soft airflow

Multiple Steps Vertical Swing

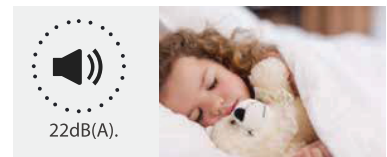
There are 5-steps louver control makes the air flow direction more precisely. In addition, the auto swing mode can better meet different customer needs.



COMFORT

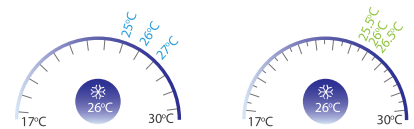
Quiet Operation

The One-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 22dB(A).



°0.5C/°1C Setting Temperature Adjustment

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



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.



HEALTH

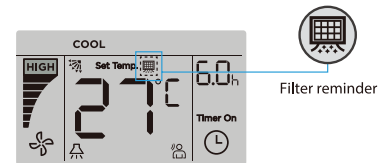
Fresh Air Intake

A reserved outside air intake port allows outdoor fresh air to be introduced directly into the unit, negating the need for a separate ventilation system.



Dirty Filters Indicator Signal

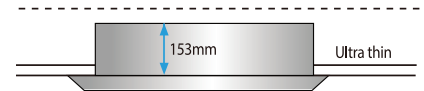
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



EASY INSTALLATION

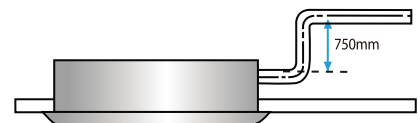
Easy Installation

The slim, compact design make the One-way Cassette ideal for interiors with limited ceiling space. Models 18 to 36 are just 153mm high whilst models 45 to 71 are 189mm high.



High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.



One-way Cassette | 2 Dimensions

2.1 Unit Dimensions

Figure 2.1: MDV-D06(07,09,12)Q1/N1-D(At) dimensions (unit: mm)

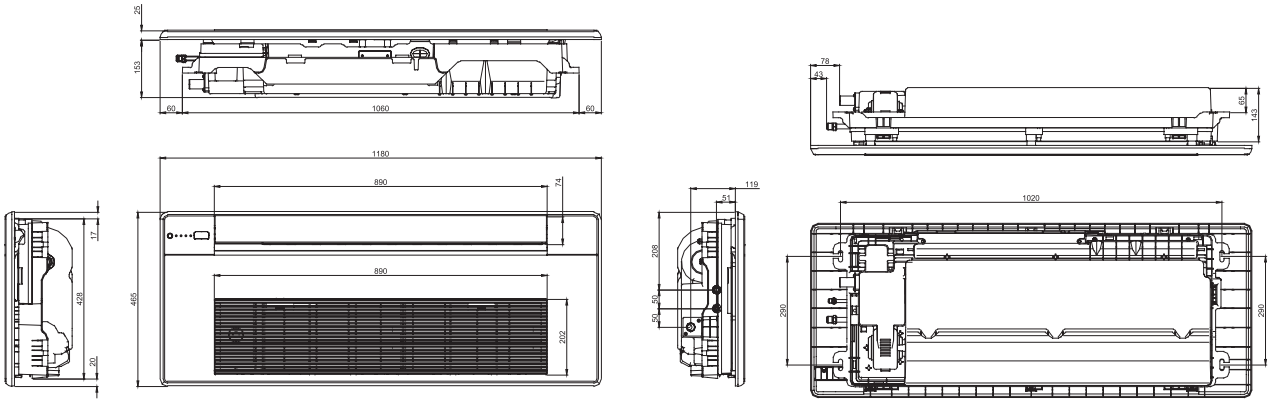
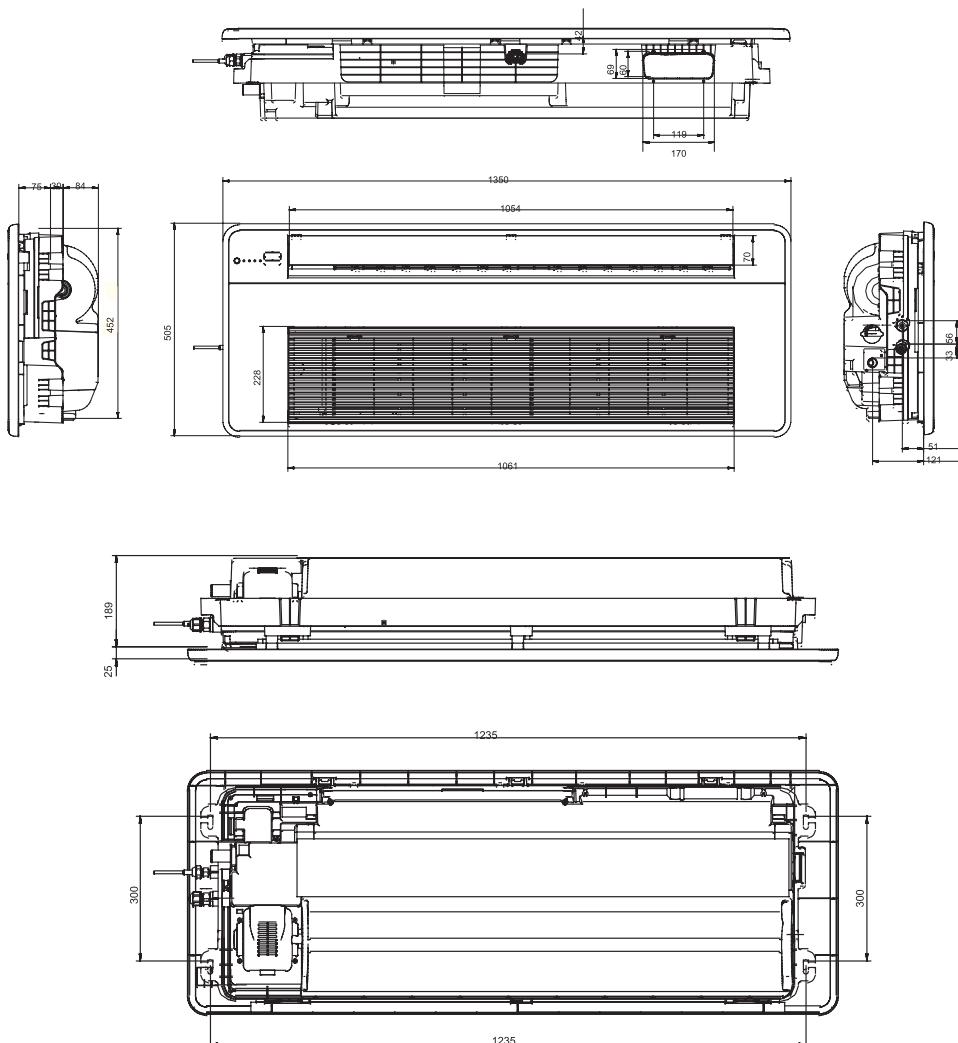


Figure 2.2: MDV-D15(18,24)Q1/N1-D(At) dimensions (unit: mm)



One-way Cassette | 1 Specifications

MDV-D06Q1/N1-D(At) / MDV-D07Q1/N1-D(At) / MDV-D09Q1/N1-D(At) / MDV-D12Q1/N1-D(At)

Table 1.2: MDV-D09(12)Q1/N1-D(At) specifications

Model			MDV-D18Q1/N1-D(B)	MDV-D22Q1/N1-D(B)	MDV-D28Q1/N1-D(B)	MDV-D36Q1/N1-D(B)	MDV-D45Q1/N1-D(B)	MDV-D56Q1/N1-D(B)	MDV-D71Q1/N1-D(B)	
Power supply			1 phase, 220-240V, 50Hz							
Cooling ¹	Capacity	kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1	
	Input	W	41	41	41	41	48	48	60	
Heating ²	Capacity	kW	2.2	2.6	3.2	4	5	6.3	8	
	Input	W	41	41	41	41	48	48	60	
Indoor fan motor	Type		AC							
	Quantity		1							
Airflow rate(H/M/L)	m ³ /h		523/404/275	523/404/275	573/456/315	573/456/315	693/600/476	792/688/549	933/749/592	
Sound pressure level (H/M/L) ³	dB(A)		37/34/30	37/34/30	39/37/34	39/37/34	41/39/35	42/40/36	44/41/37	
Refrigerant type			R410A							
Indoor unit	Dimension ⁴ (WxHxD)	mm	1054×153×425				1275×189×450			
	Packing (WxHxD)	mm	1155×245×490				1370×295×505			
	Net/Gross weight	kg	12.5/16		13/16.5		18.5/22.8		19.5/23.8	
Panel	Dimension (WxHxD)	mm	1180×25×465				1350×25×505			
	Packing (WxHxD)	mm	1232×107×517				1410×95×560			
	Net/Gross weight	kg	3.5/5.2				4/5.4			
Pipe connections	Liquid pipe	mm	Φ6.35				Φ9.53			
	Gas pipe	mm	Φ12.7				Φ15.9			
	Drain pipe	mm	OD Φ25							

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. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



One-way Cassette | 1 Specifications

MDV-D15Q1/N1-D(At) / MDV-D18Q1/N1-D(At) / MDV-D24Q1/N1-D(At)

Table 1.2: MDV-D15(18,24)Q1/N1-D(At) specifications

Model			MDV-D15Q1/N1-D(At)	MDV-D18Q1/N1-D(At)	MDV-D24Q1/N1-D(At)
Power supply			1-phase, 220-240V, 50Hz		
Cooling ¹	Capacity	kBtu/h	15	19	24
	Input	W	48	48	60
Heating ²	Capacity	kBtu/h	17	21	27
	Input	W	48	48	60
Indoor fan motor	Type		AC		
	Quantity		1		
Indoor coil	Number of rows		2	2	2
	Tube pitch × row pitch	mm	21×13.37	21×13.37	21×13.37
	Fin spacing	mm	1.5	1.5	1.5
	Fin type		Hydrophilic aluminum		
	Diameter & type	mm	Φ7, inner-groove		
	Dimensions (L×H×W)	mm	955×231×26.74		
	Number of circuits		3	3	5
Indoor air flow (H/M/L)		m ³ /h	693/600/476	792/688/549	933/749/592
Sound pressure level ³		dB(A)	41/39/35	42/40/36	44/41/37
Indoor unit	Net dimensions ⁴ (W×H×D)	mm	1275×189×450		
	Packed dimensions (W×H×D)	mm	1370×295×505		
	Net/Gross weight	kg	18.5/22.8	18.8/23.1	19.5/23.8
Panel	Net dimensions (W×H×D)	mm	1350×25×505		
	Packed dimensions (W×H×D)	mm	1410×95×560		
	Net/Gross weight	kg	4/5.4		
Refrigerant type			R410A		
Pipe connections	Liquid pipe	mm	Φ6.35	Φ9.53	Φ9.53
	Gas pipe	mm	Φ12.7	Φ15.9	Φ15.9
	Drain pipe	mm	OD Φ25		

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.
- Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



**Medium Static
Pressure Duct**
VRF Indoor Units

DISCOVER
easyCOMFORT

Medium Static Pressure Duct VRF Indoor Units

Key Features

Slim, compact design for limited space with duct distribution to the indoor space.



Optional wireless remote controller



Optional wired controller



Medium Static Pressure Duct		DC Series	AC Series
Comfort	Quiet operation	●	●
	0.5°C/1°C setting temperature adjustment	●	●
	Digital display on/off	●	●
	Buzzer sound on/off	●	●
Health	Air filter	○ (G3-class)	○ (G3-class)
	Innovative puro-air kit	●	●
	Fresh air intake	●	●
	Dirty filters indicator signal	●	●
Air flow	Adjustable ESP	10-steps	×
	Multiple fan speeds	7+auto	3+auto
Easy installation	Compact size	●	●
	Stylish air discharge panel	○ (17 to 71)	○ (17 to 71)
	Flexible air inlet port installation	●	●
	High-lift drain pump	Rated head: 1200mm Raise height: 750mm	Rated head: 1200mm Raise height: 750mm

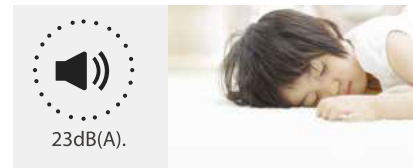
Notes:

● equipped as standard; ○ customization option; × without this function

COMFORT

Quiet Operation

The Medium Static Pressure Duct indoor unit utilizes centrifugal blowers, reducing noise levels to as low as 23dB(A), and is an excellent choice for hotels and other noise-sensitive locations.



Innovative Puro-air Kit

Puro-Air kit, powered by OSRAM's UVC lamps, can effectively kill bacteria, viruses and odors of indoor air to provide a healthy and safe indoor environment. It is also innovatively designed so that it could prevent UV damage to the eyes, skin, and respiratory tract.

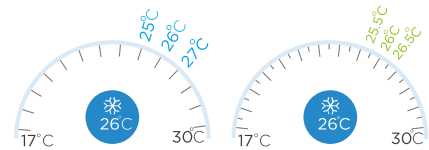
Puro-Air Kit
Protectors of health and safety

- 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.

°0.5C/°1C Setting Temperature Adjustment

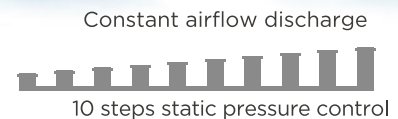
Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.



AIR FLOW

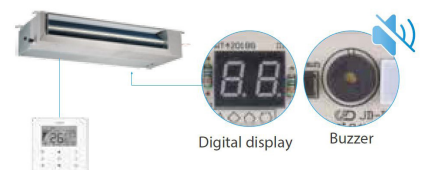
Static Pressure 10 Steps Control

Depending on the installation environment, Medium Static Pressure Duct is controlled the static pressure up to 10 steps via wired remote controller, for providing comfortable



Digital Display and Buzzer Sound On/Off

Indoor unit displays can be shut off at night and buzzer sound can be set off to not disturb the user, creating a better environment for rest.



HEALTH

Optional G-3class Air Filter

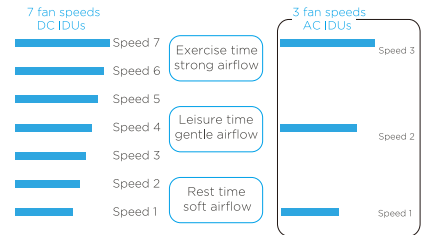
G3-class filter is optional for Medium Static Pressure Duct installation. Filtering effect of the G3-class filter reaches up to 80%-90% against coarse dust (particle size > 10 µm), creating a cleaner living environment



The optional filter comply with EN779:2012

Multiple Fan Speeds

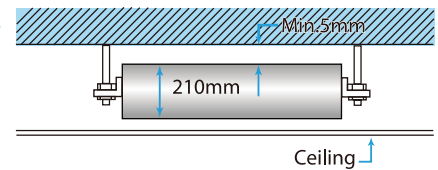
The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.



EASY INSTALLATION

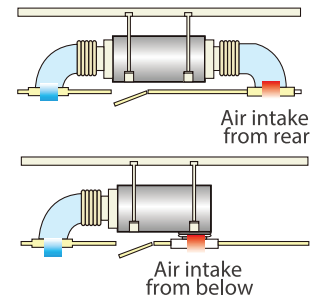
Compact Size

Models 22 to 71 are just 210mm high whilst models 80 to 112 are 270mm high and model 140 to 160 are 300mm high.



Flexible Air Inlet Port Installation

The DC Series comes with 7 indoor fan speed options and AC Series with 3 indoor fan speed options to meet the needs of different indoor conditions.



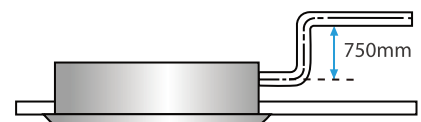
Stylish Air Discharge Panel

Stylish air discharge panel can be integrated with any decoration style (optional for models 17 to 71).



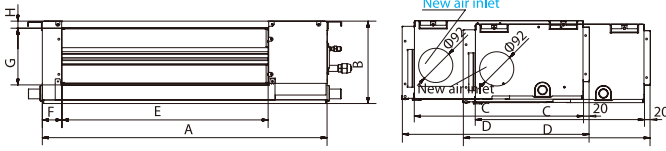
High-lift Drain Pump

A drain pump with a 750mm raise height is fitted as standard, simplifying installation of the drain piping.

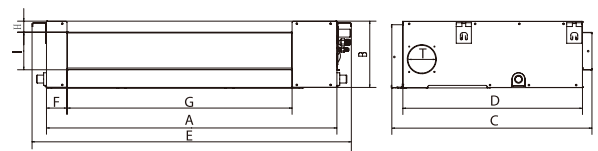


Medium Static Pressure | Installation dimensions

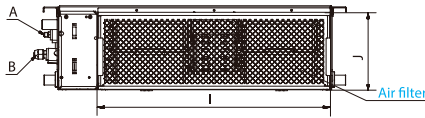
Outline dimension and air outlet opening size



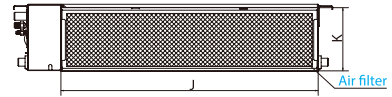
Outline dimension and air outlet opening size



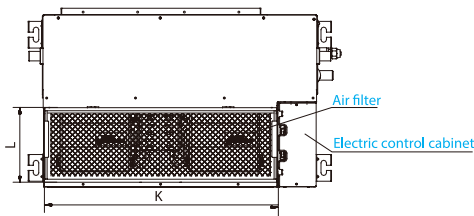
Air return opening size



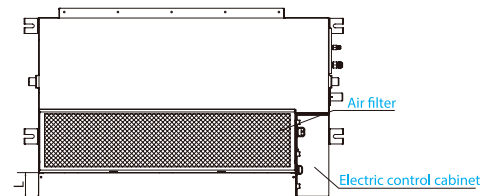
Air return opening size



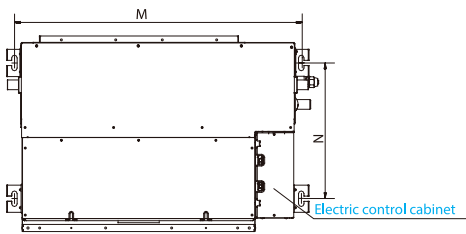
Position size of descensional ventilation opening



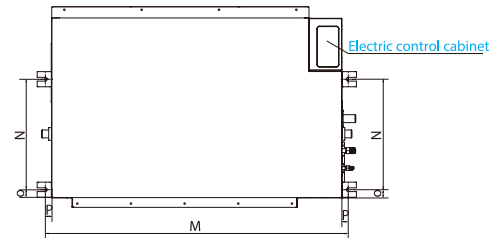
Position size of descensional ventilation opening



Size of mounted lug



Size of mounted lug



Mode	A	B	C	D	E	F	G	H	I	J	K	L	M	N
15~36	700	210	450	500	512	45	145	17	600	196	600	196	740	350
45~56	920	210	450	500	732	45	145	17	820	200	820	200	960	350
71	1140	210	450	500	950	45	145	17	1040	200	1040	200	1180	350

Mode	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
80~112	1140	270	775	710	1230	65	933	35	179	1035	260	20	1180	490	26	20
140	1200	300	865	800	1290	80	968	40	204	1094	288	45	1240	500	26	20
160	1400	300	865	800	1490	85	1169	40	204	1294	288	-	1240	500	26	20

Specifications - AC Series

50Hz Series

Model			MDV-D22T2/N1-DA5(B)	MDV-D28T2/N1-DA5(B)	MDV-D36T2/N1-DA5(B)	MDV-D45T2/N1-DA5(B)	MDV-D56T2/N1-DA5(B)
Power supply			1 phase, 220-240V,50Hz				
Cooling ¹	Capacity	kW	2.2	2.8	3.6	4.5	5.6
	Input	W	57	57	61	98	103
Heating ²	Capacity	kW	2.6	3.2	4	5	6.3
	Input	W	57	57	61	98	103
Indoor fan motor	Type		AC				
	Quantity		1				
Refrigerant type			R410A				
Airflow rate(H/M/L)	m ³ /h		550/397/309	550/397/309	605/442/351	800/573/479	800/573/479
External static pressure (Std(Min~Max))	Pa		10(0~30)	10(0~30)	10(0~30)	10(0~30)	10(0~30)
Sound pressure level (H/M/L)	dB(A)		31/24/21	31/24/21	35/28/24	36/29/26	36/29/27
Indoor unit	Dimension ³ (WxHxD)	mm	778x210x500			997x210x500	
	Packing (WxHxD)	mm	870x285x525			1115x285x525	
	Net/Gross weight	kg	17.5/20			22/25	
Piping connections	Liquid pipe	mm	Φ6.35				Φ9.53
	Gas pipe	mm	Φ12.7				Φ15.9
	Drain pipe	mm	OD Φ25				

Model			MDV-D71T2/N1-DA5(B)	MDV-D80T2/N1-BA5(B)	MDV-D90T2/N1-BA5(B)	MDV-D112T2/N1-BA5(B)	MDV-D140T2/N1-BA5(B)
Power supply			1 phase, 220-240V,50Hz				
Cooling ¹	Capacity	kW	7.1	8	9	11.2	14
	Input	W	140	198	200	313	274
Heating ²	Capacity	kW	8	9	10	12.5	15.5
	Input	W	140	198	200	313	274
Indoor fan motor	Type		AC				
	Quantity		1				
Refrigerant type			R410A				
Airflow rate(H/M/L)	m ³ /h		985/738/630	1345/1165/1013	1345/1165/1013	1800/1556/1400	1905/1636/1400
External static pressure (Std(Min~Max))	Pa		10(0~30)	20(10~50)	20(10~50)	40(10~80)	40(10~100)
Sound pressure level (H/M/L)	dB(A)		36/30/27	45/40/37	45/40/37	48/42/38	48/43/39
Indoor unit	Dimension ³ (WxHxD)	mm	1218x210x500	1230x270x775			1290x300x865
	Packing (WxHxD)	mm	1335x285x525	1355x350x795			1400x375x925
	Net/Gross weight	kg	27.5/31	37.5/43	37.5/43	37.5/43	46.5/55.5
Piping connections	Liquid pipe	mm	Φ9.53				
	Gas pipe	mm	Φ15.9				
	Drain pipe	mm	OD Φ25				

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. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
 4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.
- All specifications are measured at standard external static pressure.

Specifications - AC Series

60Hz Series

Model			MDV-D22T2/VN1-DA5(B)	MDV-D28T2/VN1-DA5(B)	MDV-D36T2/VN1-DA5(B)	MDV-D45T2/VN1-DA5(B)	MDV-D56T2/VN1-DA5(B)
Power supply			1 phase, 220-240V,60Hz				
Cooling ¹	Capacity	kW	2.2	2.8	3.6	4.5	5.6
	Input	W	66	72	77	100	100
Heating ²	Capacity	kW	2.6	3.2	4	5	6.3
	Input	W	66	72	77	100	100
Indoor fan motor	Type		AC				
	Quantity		1				
Refrigerant type			R410A				
Airflow rate(SH/H/M/L)	m ³ /h		538/456/375	538/456/375	597/514/429	811/684/575	811/684/575
External static pressure (Std(Min~Max))	Pa		10(10~30)				
Sound pressure level (H/M/L) ³	dB(A)		36/35/32	36/35/32	39/38/34	39/38/34	39/38/34
Indoor unit	Dimension ⁴ (WxHxD)	mm	780x210x500			1000x210x500	
	Packing (WxHxD)	mm	870x285x525			1115x285x525	
	Net/Gross weight	kg	17.5/20			22/25	
Pipe connections	Liquid pipe	mm	Φ6.35				Φ9.53
	Gas pipe	mm	Φ12.7				Φ15.9
	Drain pipe	mm	OD Φ25				

Model			MDV-D71T2/VN1-DA5(B)	MDV-D80T2/VN1-BA5(B)	MDV-D90T2/VN1-BA5(B)	MDV-D112T2/VN1-BA5(B)	MDV-D140T2/VN1-BA5(B)
Power supply			1 phase, 220-240V,60Hz				
Cooling ¹	Capacity	kW	7.1	8	9	11.2	14
	Input	W	125	133	134	378	352
Heating ²	Capacity	kW	8	9	10	12.5	15.5
	Input	W	125	133	134	378	352
Indoor fan motor	Type		AC				
	Quantity		1				
Refrigerant type			R410A				
Airflow rate(SH/H/M/L)	m ³ /h		1029/934/781	1345/1165/1013	1345/1165/1013	1800/1556/1400	1905/1636/1400
External static pressure (Std(Min~Max))	Pa		10(10~30)	20(10~50)	20(10~50)	40(10~80)	40(10~100)
Sound pressure level (H/M/L) ³	dB(A)		41/39/35	45/40/37	45/40/37	48/42/38	48/43/39
Indoor unit	Dimension ⁴ (WxHxD)	mm	1220x210x500	1230x270x775			1290x300x865
	Packing (WxHxD)	mm	1335x285x525	1355x350x795			1400x375x925
	Net/Gross weight	kg	27.5/31	37.5/43			46.5/55.5
Pipe connections	Liquid pipe	mm	Φ9.53				
	Gas pipe	mm	Φ15.9				
	Drain pipe	mm	OD Φ25				

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. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
 4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.
- All specifications are measured at standard external static pressure.

Wall Mounted

Key Features

Stylish panel, ideal for rooms with no or narrow ceilings.



Optional wireless remote controller



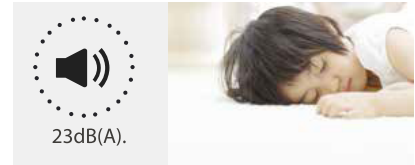
Wall Mounted		DC Series	AC Series
Comfort	Quiet operation	●	●
	0.5°C/1 °C setting temperature adjustment	●	●
	Digital display on/off	●	●
	Buzzer sound on/off	●	●
Health	Air filter	●	●
	Dirty filters indicator signal	●	●
Air flow	Multiple fan speeds	7+ auto	7+ auto
	Multiple steps vertical swing	5+ auto	5+ auto
Easy installation	Compact size	●	●
	Pure white stylish panel	4 options	4 options
	Exposed installation, no need ceilings	●	●
	Flexible pipe outlet direction	●	●

Notes:
equipped as standard

COMFORT

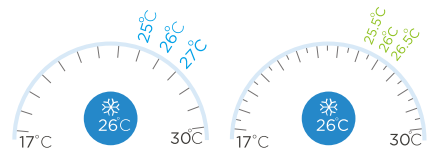
Quiet Operation

The minimum noise level of Wall Mounted is as low as 29dB(A), idea for hotels and other noise-sensitive locations.



°0.5C/°1C Setting Temperature Adjustment

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



Digital Display On/Off

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



Buzzer Sound On/Off

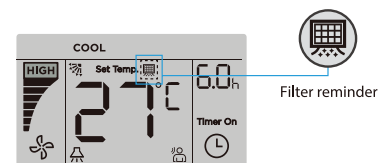
Indoor unit buzzer sound can be set off to not disturb the user, creating a quieter environment.



HEALTH

Dirty Filters Indicator Signal

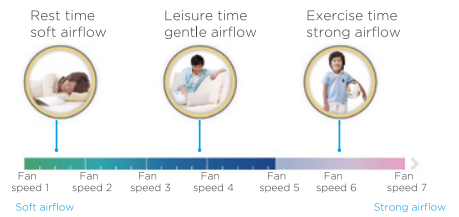
The filter indicator will be on when the running time reaches a certain time to remind user to clean the filter.



AIR FLOW

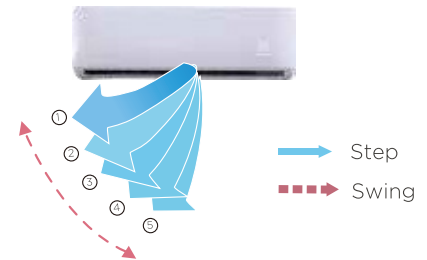
Multiple Fan Speeds

Both DC and AC Series come with 7 indoor fan speed options to meet the needs of different indoor conditions.



Multiple Fan Speeds

Both DC and AC Series come with 7 indoor fan speed options to meet the needs of different indoor conditions.



EASY INSTALLATION

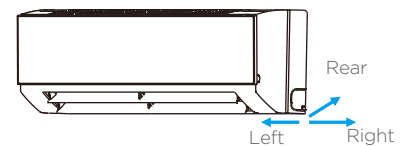
Pure White Stylish Panel

Pure white stylish panel with four options (M2, M9, M10 and M11), perfect fusion in all kinds of decoration.

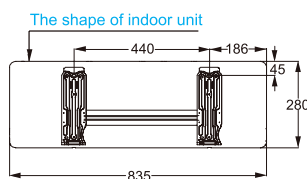


Flexible Pipe Outlet Direction

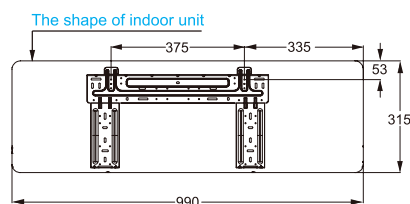
Multi-outlet pipe method for both refrigerant pipe and drain pipe: left/right/rear, more flexible for installation.



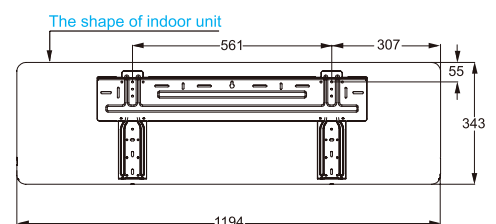
Wall Mounted | Installation dimensions



2.2/2.8/3.6kW



4.5/5.6kW



7.1/8.0/9.0kW

Wall Mounted - Specifications

50Hz Series

Model			MDV-D22G/N1-M	MDV-D28G/N1-M	MDV-D36G/N1-M	MDV-D45G/N1-M
Power supply			1 phase, 220-240V, 50Hz			
Cooling ¹	Capacity	kW	2.2	2.8	3.6	4.5
	Input	W	29	29	31	45
Heating ²	Capacity	kW	2.4	3.2	4	5
	Input	W	29	29	31	45
Indoor fan motor	Type		AC			
	Quantity		1			
Refrigerant type			R410A			
Airflow rate ³		m ³ /h	446/429/424/409/394/382/373	457/445/433/421/419/410/402	447/429/399/369/339/333/303	648/618/582/563/546/505/476
Sound pressure level ⁴		dB(A)	34/33/33/32/32/31/31	33/33/32/32/31/31/31	36/35/34/33/32/32/32	37/36/34/34/33/32/31
Indoor unit	Dimension ⁵ (WxHxD)	mm	835x280x203			990x315x223
	Packing (WxHxD)	mm	915x353x300			1075x395x300
	Net/Gross weight	kg	8.5/11.0	8.5/11.0	9.7/12.2	13.8/16.4
Pipe connections	Liquid pipe	mm	Ø6.35			
	Gas pipe	mm	Ø12.7			
	Drain pipe	mm	OD Ø16			

Model			MDV-D56G/N1-M	MDV-D71G/N1-M	MDV-D80G/N1-M	MDV-D90G/N1-M
Power supply			1 phase, 220-240V, 50Hz			
Cooling ¹	Capacity	kW	5.6	7.1	8	9
	Input	W	54	77	77	90
Heating ²	Capacity	kW	6.3	8	9	10
	Input	W	54	77	77	90
Indoor fan motor	Type		AC			
	Quantity		1			
Refrigerant type			R410A			
Airflow rate ³		m ³ /h	798/764/723/691/665/627/595	1240/1171/1107/1045/976/914/869	1248/1194/1119/1056/993/914/863	1427/1403/1303/1232/1186/1096/1043
Sound pressure level ⁴		dB(A)	42/41/40/39/38/37/36	48/47/45/44/42/39/38	48/47/45/43/42/39/38	52/51/50/49/47/45/43
Indoor unit	Dimension ⁵ (WxHxD)	mm	990x315x223	1194x343x262		
	Packing (WxHxD)	mm	1075x395x300	1265x420x345		
	Net/Gross weight	kg	13.8/16.4	17.4/20.8	17.6/21.0	17.6/21.0
Pipe connections	Liquid pipe	mm	Ø9.53			
	Gas pipe	mm	Ø15.9			
	Drain pipe	mm	OD Ø16			

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.
 - Each model's 7 airflow rate options are listed in order, from highest to lowest.
 - 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 1m in front and 1m below the unit in a semi-anechoic chamber.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Wall Mounted - Specifications

60Hz Series

Model			MDV-D22G/VN1-M	MDV-D28G/VN1-M	MDV-D36G/VN1-M	MDV-D45G/VN1-M
Power supply			1 phase, 220-240V, 60Hz			
Cooling ¹	Capacity	kW	2.2	2.8	3.6	4.5
	Input	W	29	29	31	45
Heating ²	Capacity	kW	2.4	3.2	4	5
	Input	W	29	29	31	45
Indoor fan motor	Type		AC			
	Quantity		1			
Refrigerant type			R410A			
Airflow rate ³		m ³ /h	446/429/424/409/394/382/373	457/445/433/421/419/410/402	447/429/399/369/339/333/303	648/618/582/563/546/505/476
Sound pressure level ⁴		dB(A)	34/33/33/32/32/31/31	33/33/32/32/31/31/31	36/35/34/33/32/32/32	37/36/34/34/33/32/31
Indoor unit	Dimension ⁵ (WxHxD)	mm	835x280x203			990x315x223
	Packing (WxHxD)	mm	915x353x300			1075x395x300
	Net/Gross weight	kg	8.5/11.0	8.5/11.0	9.7/12.2	13.8/16.4
Pipe connections	Liquid pipe	mm	Φ6.35			
	Gas pipe	mm	Φ12.7			
	Drain pipe	mm	OD Φ16			

Model			MDV-D56G/VN1-M	MDV-D71G/VN1-M	MDV-D80G/VN1-M	MDV-D90G/VN1-M
Power supply			1 phase, 220-240V, 60Hz			
Cooling ¹	Capacity	kW	5.6	7.1	8	9
	Input	W	54	77	77	90
Heating ²	Capacity	kW	6.3	8	9	10
	Input	W	54	77	77	90
Indoor fan motor	Type		AC			
	Quantity		1			
Refrigerant type			R410A			
Airflow rate ³		m ³ /h	798/764/723/691/665/627/595	1240/1171/1107/1045/976/914/869	1248/1194/1119/1056/993/914/863	1427/1403/1303/1232/1186/1096/1000
Sound pressure level ⁴		dB(A)	42/41/40/39/38/37/36	48/47/45/44/42/39/38	48/47/45/43/42/39/38	52/51/50/49/47/45/43
Indoor unit	Dimension ⁵ (WxHxD)	mm	990x315x223	1194x343x262		
	Packing (WxHxD)	mm	1075x395x300	1265x420x345		
	Net/Gross weight	kg	13.8/16.4	17.4/20.8	17.6/21.0	17.6/21.0
Pipe connections	Liquid pipe	mm	Φ9.53			
	Gas pipe	mm	Φ15.9			
	Drain pipe	mm	OD Φ16			

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.
 - Each model's 7 airflow rate options are listed in order, from highest to lowest.
 - 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 1m in front and 1m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

Wall Mounted - Specifications

Model			MI2-22GDHN1	MI2-28GDHN1
Power supply			1 phase, 220-240V, 50/60Hz	
Cooling ¹	Capacity	kW	2.2	2.8
		kBtu/h	7.5	9.6
Power input		W	28	28
Heating ²	Capacity	kW	2.4	3.2
		kBtu/h	8.2	10.9
Power input		W	28	28
Airflow rate ³	m ³ /h	422/411/402/393/380/368/356		417/402/386/370/353/338/316
Sound pressure level ⁴	dB(A)	31/30/30/30/29/29/29		31/30/30/30/29/29/29
Indoor unit	Net dimensions ⁵ (WxHxD)	mm	835x280x203	
	Packed dimensions (WxHxD)	mm	935x385x320	
	Net/Gross weight	kg	8.4/12.1	9.5/13.1
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7	
	Drain pipe	mm	OD Φ16	

Model			MI2-36GDHN1	MI2-45GDHN1	MI2-56GDHN1
Power supply			1 phase, 220-240V, 50/60Hz		
Cooling ¹	Capacity	kW	3.6	4.5	5.6
		kBtu/h	12.3	15.4	19.1
Power input		W	30	40	45
Heating ²	Capacity	kW	4.0	5.0	6.3
		kBtu/h	13.6	17.1	21.5
Power input		W	30	40	45
Airflow rate ³	m ³ /h	656/628/591/573/544/515/488	594/563/535/507/478/450/424	747/713/685/648/613/578/547	
Sound pressure level ⁴	dB(A)	33/32/32/31/31/30/30	35/34/33/33/32/31/31	38/37/36/36/35/34/34	
Indoor unit	Net dimensions ⁵ (WxHxD)	mm	990x315x223		
	Packed dimensions (WxHxD)	mm	1085x420x335		
	Net/Gross weight	kg	11.4/15.5	12.8/16.9	
Pipe connections	Liquid/Gas pipe	mm	Φ6.35/Φ12.7		Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ16		

Model			MI2-71GDHN1	MI2-80GDHN1	MI2-90GDHN1
Power supply			1 phase, 220-240V, 50/60Hz		
Cooling ¹	Capacity	kW	7.1	8.0	9.0
		kBtu/h	24.2	27.3	30.7
Power input		W	55	55	82
Heating ²	Capacity	kW	8.0	9.0	10.0
		kBtu/h	27.3	30.7	34.1
Power input		W	55	55	82
Airflow rate ³	m ³ /h	1195/1130/1065/1005/940/875/809	1195/1130/1065/1005/940/875/809	1421/1300/1125/1067/1005/934/867	
Sound pressure level ⁴	dB(A)	44/43/42/39/38/37/36	44/43/42/39/38/37/36	48/46/45/43/41/40/38	
Indoor unit	Net dimensions ⁵ (WxHxD)	mm	1194x343x262		
	Packed dimensions (WxHxD)	mm	1290x375x460		
	Net/Gross weight	kg	17.0/22.4		
Pipe connections	Liquid/Gas pipe	mm	Φ9.53/Φ15.9		
	Drain pipe	mm	OD Φ16		

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.
 - Each model's 7 airflow rate options are listed in order, from highest to lowest.
 - 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 1m in front and 1m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



Silent mode

Perform refrigeration & heating like whispering



Power

Mature inverter technology brings power surge



Energy saving

Significantly improve power utilization



Durable

The vitality of a sports sedan



Precise core components of the compressor

/// Inverter Concealed duct



/// Innovative DC inverter technology to revolutionize the quality of home life

Midea's technology has always innovated in pursuit of high efficiency and stability, and the high-quality DC inverter rare earth compressors have taken another big step in terms of innovation. It features a compact structural design and runs more smoothly. The use of permanent magnetic rotors that do not require an external supply current greatly improves power utilization, reduces losses, and is more energy-efficient.

/// High-quality core components are used to ensure better quality

The high-quality DC inverter compressor, the DC motor, the precision refrigerant control and other core components are integrated, which not only ensures the quality of the system, but also saves energy and electricity, and is comfortable, noiseless, and durable.



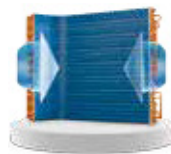
High quality brand compressor

It features a powerful, high-quality, brand high-efficiency DC inverter compressor, which is more energy-saving and stable during operation.



High efficiency DC motor

The high efficiency DC motor can effectively reduce energy loss and enhance the operating efficiency, thus significantly increasing the service life.



Efficient heat exchangers

With a cross-type multi-flow path design, it features a more uniform refrigerant distribution, more substantial heat exchange, and higher efficiency.



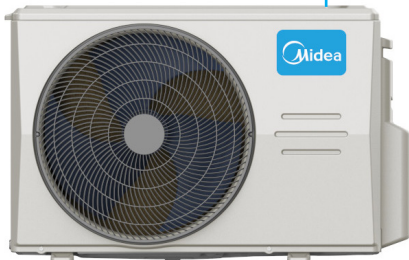
Silent fan blade

The fan blade with a CFD optimized structural design reduces motor energy consumption and operating noise.

High energy efficiency, provides an energy-saving, worry-free design

The high-efficiency, energy-saving compressors, motors, and heat exchangers use high-performance, high-quality core components to further increase energy efficiency levels, giving the duct type air conditioner a higher energy efficiency than the industry standard, and is efficient and energy-saving, beginning a new lifestyle of low carbon emissions and environmental protection.

The inverter module is cooled by means of refrigerant to cope with a greater variety of environments



This reduces the heat generated by inverter modules and components, improves the high temperature refrigeration operation frequency of the compressor, and improves the high temperature refrigeration capacity. It can perform strong refrigeration in a high temperature environment of **55°C*** and improve the high temperature refrigerating capacity by **15-20%***.

The inverter module utilizes **refrigerant heat dissipation** technology to better cope with various harsh high temperature environments than ordinary air conditioners, so that the electric control box is not impacted by high temperatures, maintains a cool state, and is more reliable.

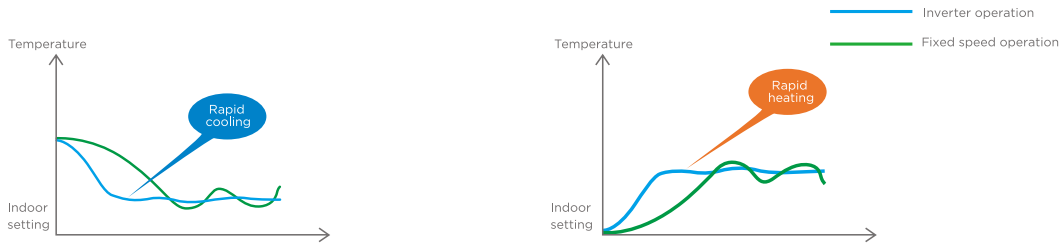
It performs refrigeration rapidly in a high temperature environment, and improves the indoor temperature drop speed by **5-10%*** compared with an ordinary air conditioner.

*Note: The above data was provided by our company's nationally recognized laboratory.

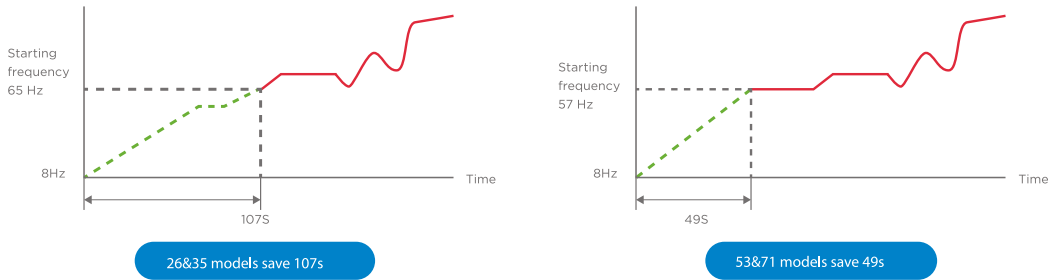
Full DC inverter operation allows it to rapidly reach a comfortable temperature

Midea is never too slow for a comfortable experience. The DC inverter technology features a high-frequency start-up function. After power-on and startup meet the set conditions, it will run at an instantaneous running frequency of 65 or 57 Hz. After rapidly reaching a set temperature, it switches to low-frequency operation to stably maintain comfort and achieve rapid cooling and heating, so that users do not need to wait to enjoy a comfortable temperature.

Cooling and heating time comparison diagram



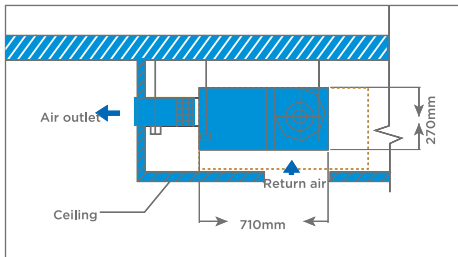
Schematic diagram of the high frequency start up function



Exquisite concealed installation shows refinement and leaves a small visual footprint

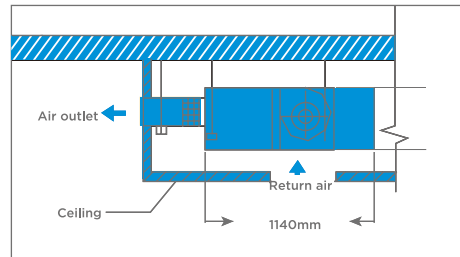
With embedded installation, the indoor unit is completely hidden in the ceiling, exposing only the air outlet and the air return port, making it appear more reserved and delicate than conventional air conditioners.

Thin duct type air conditioner

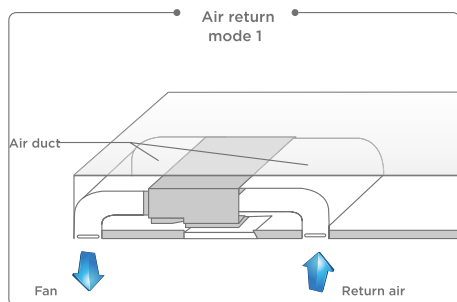


Compact body,
saving more installation space

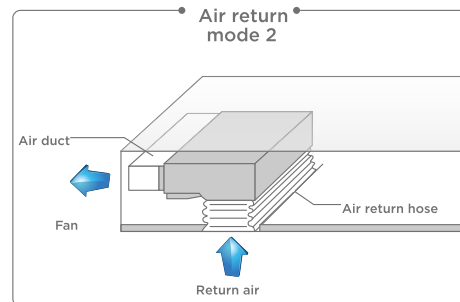
Duct type air conditioners of other brands



The body of the thin duct type air conditioner has a thickness of only 270 mm and a depth of only 710 mm, which frees up more living space and does not protrude from the wall, conserving ceiling space.



Return air design,
flexible layout



Multiple air return types can be achieved through simple adjustment, providing a greater degree of freedom in the installation process.

Inverter Concealed duct

General Information

Combination		IDR2-X71M	IDR2-X90M	IDR2-X105M	IDR3-X140M	IDR3-X160M
		MCR2-X71M	MCR2-X90M	MCR2-X105M	MCR3-X140M	MCR3-X160M
Cooling Capacity Rated	W	7200	9000	10500	14000	16000
	Btu/Hr	24570	30710	35830	47780	54600
Heating Capacity Rated	W	8400	10000	11600	16000	18000
	Btu/Hr	28670	34130	39590	54600	61420
Power Supply (V, Ø, Hz)		220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
Power Input (KW)	Cooling	2.25	3.06	3.40	4.65	5.50
	Heating	2.75	2.90	3.30	4.50	5.35
EER		3.20	2.94	3.09	3.01	2.91
COP		3.05	3.45	3.52	3.56	3.36
Refrigerant		R410a	R410a	R410a	R410a	R410a
Refrigerant pipe mm (in)	Liquid	Φ6.4 (1/4)	Φ9.5 (3/8)	Φ9.5 (3/8)	Φ9.5 (3/8)	Φ9.5 (3/8)
	Gas	Φ15.9 (5/8)	Φ15.9 (5/8)	Φ15.9 (5/8)	Φ15.9 (5/8)	Φ15.9 (5/8)
Max. pipe Length (m)	Total	25	30	30	50	50
	Height	15	20	20	25	25
Outdoor Unit		MCR2-X71M	MCR2-X90M	MCR2-X105M	MCR3-X140M	MCR3-X160M
Air Flow	m ³ /h	3715	3692	5086	5086	5395
Weight (Net/Gross)	kg	47/52	51/56	68/77	78/87	91/101
Noise	dB(A)	55	58	58	59	59
Dimensions (W x H x D)	Net	910x712x345	910x712x345	950x840x360	950 x 840 x 360	1040 x 865 x 410
	Packed	1045x800x485	1045x800x485	1025x860x510	1025x950x510	1120x980x560
Ambient temperature	Cooling	°C 10-55				
	Heating	°C -15-24				
Indoor Unit		IDR2-X71M	IDR2-X90M	IDR2-X105M	IDR3-X140M	IDR3-X160M
Circulating Air Flow (H / M / L)	m ³ /h	1000/750/660	1500/1200/1070	1500/1200/1070	2900/2100/1600	3300/2550/1880
	CFM	588/441/388	882/706/630	882/706/630	1706/1236/941	1942/1500/1106
External static pressure	pa	25 (0-60)	50 (0-100)	50 (0-100)	50 (0-200)	50 (0-200)
Sound Pressure Level (H / M / L)	dB(A)	41/32/29	45/39/36	45/39/36	49/46/45	52/49/47
Weight (Net/Gross)	kg	25/29.5	37/43	39/45	68/76	68/76
Dimensions (W x H x D)	Net	1140x210x450	1140x270x710	1140x270x710	1370x420x691	1370x420x691
	Packed	1335x285x530	1335x350x795	1335x350x795	1436x440x768	1436x440x768
Controller		WDC-86E/K				

Notes:

1. The cooling capacity of the air conditioner is measured under standard conditions with an indoor dry bulb/wet bulb temperature of 27°C/19°C and an outdoor dry bulb/wet bulb temperature of 35°C/24°C. The actual cooling capacity will vary with the indoor and outdoor ambient temperature and relative humidity.
2. The noise of the air conditioner is measured in a semi-anechoic noise laboratory according to international requirements. The actual cooling/heating capacity will vary with the indoor and outdoor ambient temperature and relative humidity.
3. The above parameters may change due to product improvement. Please refer to the nameplate parameters of the product.

Clean Air With
Stable Flow
2-Pipe 2-Row Duct Chiller



Highly efficient heat exchange
or complete contranant flow

Ceiling Concealed Duct

General Information

Indoor model		MTIT-18HWFN1-NC5W	MTIT-24HWFN1-NC5W	MTIT-36HWFN1-NC5W	
Outdoor model		MOTCA30U-18HFN1-NC5W	MOTD30U-24HFN1-NC5W	MOTD30-36HFN1-NC5W	
Power supply (Indoor)	V- Ph-Hz	220-230,1,60	220-230,1,60	220-230,1,60	
Power supply (Outdoor)	V- Ph-Hz	220-230,1,60	220-230,1,60	220-230,1,60	
Max. input consumption	W	2200	3200	4300	
Max. current	A	11	14.1	19.8	
Starting current	A	/	/	0	
Indoor fan motor	Model	ZKFN-160-8-1-2	ZKFN-160-8-1-2	ZKFN-300-8-1	
	Qty	1	1	1	
	Input	W	90.0	250.0	
	Capacitor	uF	/	/	
	Speed(Hi/Mi/Lo)	r/min	1370/1240/1090	940/870/760	930/840/770
Indoor coil	a.Number of rows	4.0	3.0	4.0	
	b.Tube pitch(a)x row pitch(b)	mm	21x13.37	21x13.37	
	c.Fin spacing	mm	1.4	1.4	
	d.Fin type (code)		Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum
	e.Tube outside dia.and type	mm	Φ7,Inner groove tube	Φ7,Inner groove tube	Φ7,Inner groove tube
	f.Coil length x height x width	mm	695x252x53.48	915x294x40.11	1030x378x53.48
	g.Number of circuits		6	7	8
Indoor air flow (Hi/Mi/Lo)	m ³ /h	1038/890/716	1361.6/1193.5/928.7	2261/1884/1366	
ESP	Rated	Pa	25	37	
	Range	Pa	0-60	0-80	
Indoor noise level (Hi/Mi/Lo)	dB(A)	46.8/43.6/39.8	42.9/41.1/36.7	50.3/48.4/43.4	
Throttle type	/	/	/	/	
Indoor unit	Dimension(W*D*H)	mm	880x674x210	1100x774x249	1200x874x300
	Packing (W*D*H)	mm	1070x725x270	1305x805x305	1405x915x355
	Net/Gross weight	Kg	25.2/30.9	30.2/37.4	42.8/51
Drainage water pipe dia	mm	ODΦ25mm	ODΦ25mm	ODΦ25mm	
Qty'per 20' /40' /40'HQ	Indoor unit	120/264/297	77/161/184	62/130/149	
Compressor	Model	ATM150D23TFZ	ATF235D22TMT	ATF310D43TMT	
	Type		ROTARY	ROTARY	
	Brand		GMCC	GMCC	
	Capacity	W	4525	7135	9480
	Input	W	1190	1970	2600
	Rated current(RLA)	A	8.2	9	5.1
	Locked rotor Amp(LRA)	A	/	/	/
	Thermal protector		/	/	/
	Thermal protector position		NA	NA	NA
	Capacitor	μF	/	/	/
Refrigerant oil/oil charge	ml	RB75EA /500	RB75EA /670	RB75EA /1000	
Outdoor fan motor	Model	ZKFN-50-8-2	ZKFN-120-8-2	ZKFN-120-8-2	
	Qty		1	1	
	Input	W	115.0	150.0	
	Capacitor	uF	/	/	
	Speed	r/min	800/650/550	810/700/450	950/750

/// Ceiling Concealed Duct

General Information

Outdoor coil	a.Number of rows		2.5	2.0	3.0
	b.Tube pitch(a)x row pitch(b)	mm	21x13.37	21x13.37	21x13.37
	c.Fin spacing	mm	1.4	1.4	1.4
	d.Fin type (code)		Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum
	e.Tube outside dia.and type	mm	Φ7,Inner groove tube	Φ7,Inner groove tube	Φ7,Inner groove tube
	f.Coil length x height x width	mm	760x651x13.37+740x651x13.37+395x65 1x13.37	1005x756x26.74	1000x756x40.11
	g.Number of circuits		6	6	6
Outdoor noise level		dB(A)	59.6	59.6	62.6
Throttle type		/	Throttle valve	Throttle valve	Throttle valve
Outdoor unit	Dimension(W*D*H)	mm	845x363x702	946x410x810	946x410x810
	Packing (W*D*H)	mm	965x395x765	1090x500x875	1090x500x875
	Net/Gross weight	Kg	41.2/44.7	55.3/61.7	66.5/71.9
Refrigerant type		Kg	R410A/1.75	R410A/2.12	R410A/3.2
Design pressure		MPa	4.8/1.5	4.8/1.5	4.8/1.5
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ6.35/Φ12.7(1/4"/1/2")	Φ9.52/Φ15.9(3/8"/5/8")	Φ9.52/Φ19(3/8"/3/4")
	Max. refrigerant pipe length	m	25	25	30
	Max. difference in level	m	15	15	20
Thermostat type			Wired Control	Wired Control	Wired Control
Operation temperature		C	17~31	17~30	17~30
Room temperature	Indoor(cooling/ heating)	C	17~32/0~30	17~32/0~30	17~32/0~30
	Outdoor(cooling/heating)	C	0~60/-7~24	0~60/-7~24	0 60/-7 24
Qty/per 20' /40' /40'HQ		Outdoor unit	102/215/216	44/96/142	44/96/142

/// Notes:

1) Capacities are based on the following conditions:

Cooling(T1):

- Indoor Temperature 27°C(80.6°F) DB /19 °C(66.2°F) WB
- Outdoor Temperature 35 °C(95°F) DB /24 °C(75.2°F) WB
- Interconnecting Piping Length 5m
- Level Difference of Zero.

Heating:

- Indoor Temperature 20°C(68°F) DB / 15°C(59°F) WB
- Outdoor Temperature 7°C(44.6°F) DB / 6°C(42.8°F) WB
- Interconnecting Piping Length 5 m
- Level Difference of Zero.

Cooling(T3):

- Indoor Temperature 29°C(84.2°F) DB /19 °C(66.2°F) WB
- Outdoor Temperature 46 °C(114.8°F) DB /24 °C(75.2°F) WB
- Interconnecting Piping Length 5m
- Level Difference of Zero

2) Capacities are Net Capacities.

3) Due to our policy of innovation some specifications may be changed without notification.

Ceiling Concealed Duct

General Information

Indoor model		MHGT-48HWFN1-CC5W	MHGT-55HWFN1-CC5W	
Outdoor model		MOTE30U-48HFN1-CC5W	MOTE30U-55HFN1-CC5W	
Power supply(Indoor)	V- Ph-Hz	380-415,3,60	380-415,3,60	
Power supply (Outdoor)	V- Ph-Hz	380-415,3,60	380-415,3,60	
Max. input consumption	W	6200	7000	
Max. current	A	11	12.5	
Starting current	A	/	/	
Indoor fan motor	Model	ZKFN-560-8-1-1	ZKFN-560-8-1-1	
	Qty	1	1	
	Input	W	560.0	
	Capacitor	uF	/	
	Speed(Hi/Mi/Lo)	r/min	1020/920/840	970/890/800
Indoor coil	a.Number of rows	4.0	4.0	
	b.Tube pitch(a)x row pitch(b)	mm	25.4x22	25.4x22
	c.Fin spacing	mm	1.5	1.5
	d.Fin type (code)		Hydrophilic aluminum	Hydrophilic aluminum
	e.Tube outside dia.and type	mm	Φ9.52,Inner groove tube	Φ9.52,Inner groove tube
	f.Coil length x height x width	mm	1055x356x88	1195x457x88
	g.Number of circuits		7	9
Indoor air flow (Hi/Mi/Lo)	m3/h	2835/2424/1986	3365/2945/2470	
ESP	Rated	Pa	50	50
	Range	Pa	0-200	0-200
Indoor noise level (Hi/Mi/Lo)		dB(A)	49.5/47/44.9	51.5/48.8/45.9
Throttle type		/	/	/
Indoor unit	Dimension(W*D*H)	mm	1200x625x380	1400x858x440
	Packing (W*D*H)	mm	1485x675x450	1605x910x505
	Net/Gross weight	Kg	55.9/63.7	72.7/84.3
Drainage water pipe dia		mm	ODΦ25mm	ODΦ25mm
Qty'per 20' /40' /40'HQ		Indoor unit	59/124/125	35/72/86
Compressor	Model		ATQ420D1TMU	ATQ420D1TMU
	Type		ROTARY	ROTARY
	Brand		GMCC	GMCC
	Capacity	W	12960	12960
	Input	W	3485	3485
	Rated current(RLA)	A	7	7
	Locked rotor Amp(LRA)	A	/	/
	Thermal protector		/	/
	Thermal protector position		NA	NA
	Capacitor	μF	0.0	0.0
Refrigerant oil/oil charge	ml	VG74/1400	VG74/1400	
Outdoor fan motor	Model		ZKFN-85-8-22-2	ZKFN-85-8-22-2
	Qty		2	2
	Input	W	126.0	126.0
	Capacitor	uF	/	/
	Speed	r/min	850/750/650	850/750/650
Outdoor coil	a.Number of rows		2.6	3.0
	b.Tube pitch(a)x row pitch(b)	mm	21x13.37	21x13.37
	c.Fin spacing	mm	1.4	1.4
	d.Fin type (code)		Hydrophilic aluminum	Hydrophilic aluminum
	e.Tube outside dia.and type	mm	Φ7,Inner groove tube	Φ7,Inner groove tube
	f.Coil length x height x width	mm	990x1260x26.74+580x1260x13.37	985x1260x40.11
	g.Number of circuits		7	14

Ceiling Concealed Duct

General Information

Outdoor noise level		dB(A)	66.5	66
Throttle type		/	Throttle valve	Throttle valve
Outdoor unit	Dimension(W*D*H)	mm	952x415x1333	952x415x1333
	Packing (W*D*H)	mm	1095x495x1480	1095x495x1480
	Net/Gross weight	Kg	94/107.2	97.3/110.3
Refrigerant type		Kg	R410A/4.2	R410A/4.4
Design pressure		MPa	4.8/1.5	4.8/1.5
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ9.52/Φ19(3/8"/13/4")	Φ9.52/Φ22(3/8"/17/8")
	Max. refrigerant pipe length	m	50	50
	Max. difference in level	m	30	30
Thermostat type			Wired Control	Wired Control
Operation temperature		C	17~30	17~30
Room temperature	Indoor(cooling/ heating)	C	17~32/0~30	17~32/0~30
	Outdoor(cooling/heating)	C	0~60/-7~24	0~60/-7~24
Qty'per 20' /40' /40'HQ		Outdoor unit	22/48/48	22/48/48

Notes:

1) Capacities are based on the following conditions:

Cooling(T1):

- Indoor Temperature 27°C(80.6°F) DB /19 °C(66.2°F) WB
- Outdoor Temperature 35 °C(95°F) DB /24 °C(75.2°F) WB
- Interconnecting Piping Length 5m
- Level Difference of Zero.

Heating:

- Indoor Temperature 20°C(68°F) DB / 15°C(59°F) WB
- Outdoor Temperature 7°C(44.6°F) DB / 6°C(42.8°F) WB
- Interconnecting Piping Length 5 m
- Level Difference of Zero.

Cooling(T3):

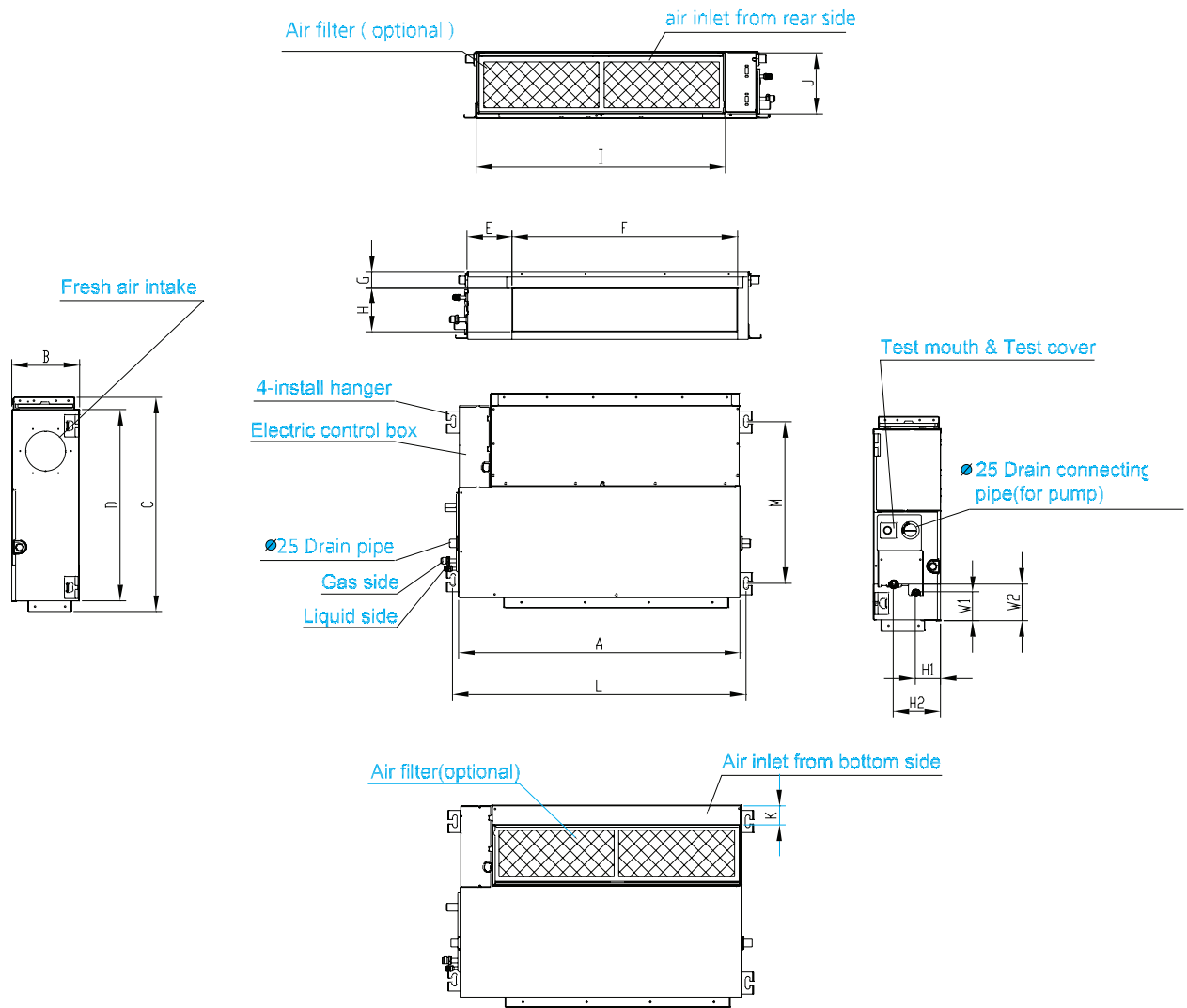
- Indoor Temperature 29°C(84.2°F) DB /19 °C(66.2°F) WB
- Outdoor Temperature 46 °C(114.8°F) DB /24 °C(75.2°F) WB
- Interconnecting Piping Length 5m
- Level Difference of Zero

2) Capacities are Net Capacities.

3) Due to our policy of innovation some specifications may be changed without notification.

Dimensional Drawings

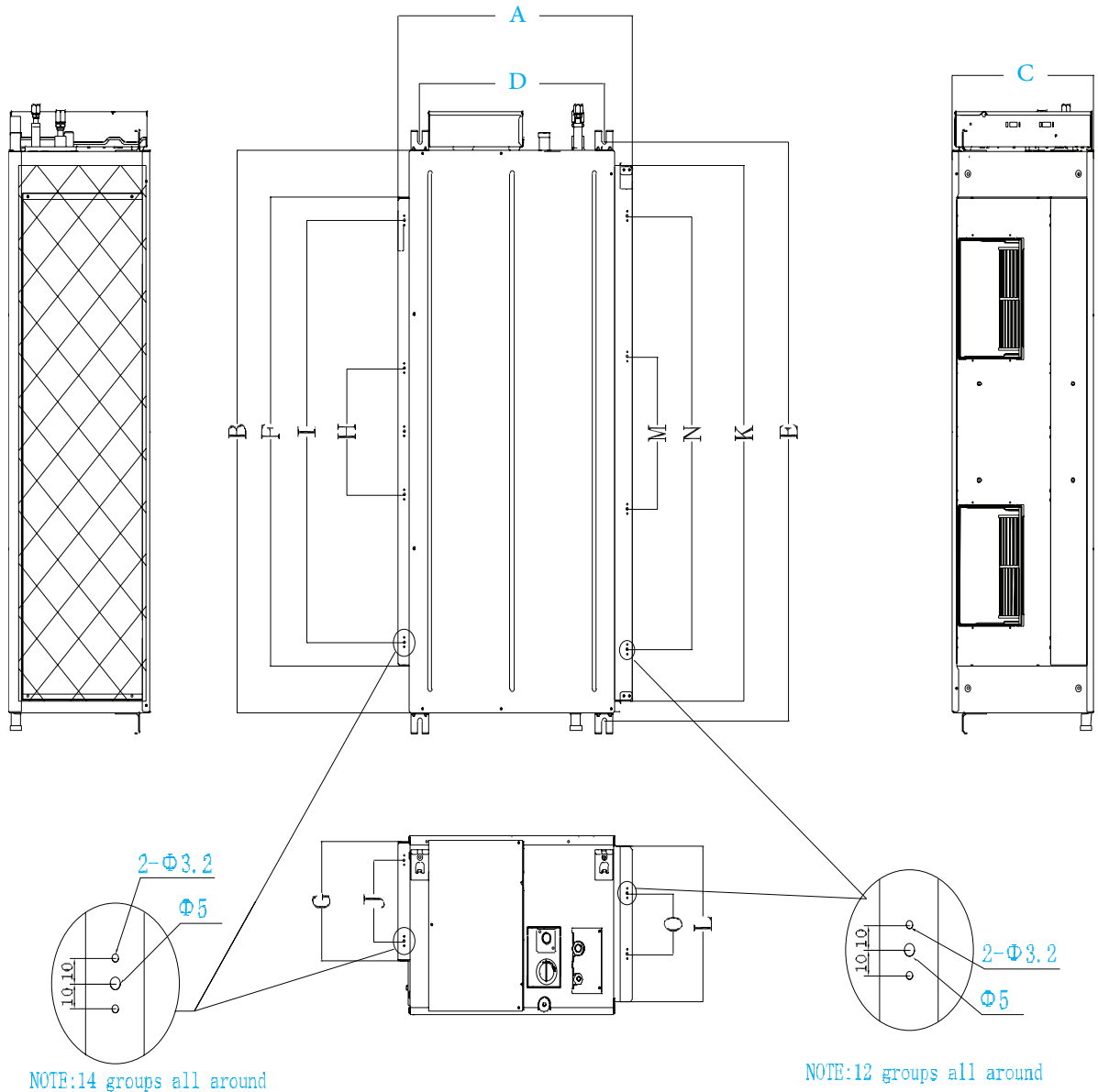
Indoor Unit



Model (KBtu/h)	unit	A	B	C	D	E	F	G	H	I	J	K	L	M	H1	H2	W1	W2
	24	mm	1100	249	774	700	140	926	50	175	1001	228	5	1140	598	80	150	130
	inch	43.31	9.80	30.47	27.56	5.51	36.46	1.97	6.89	39.41	8.98	0.2	44.88	23.54	3.15	5.91	5.12	6.10
36	mm	1200	300	874	800	123	1044	50	227	1101	280	5	1240	697	80	150	185	210
	inch	47.24	11.81	34.41	31.5	4.84	41.1	1.97	8.94	43.35	11.02	0.2	48.82	27.44	3.15	5.91	7.28	8.27

Dimensional Drawings

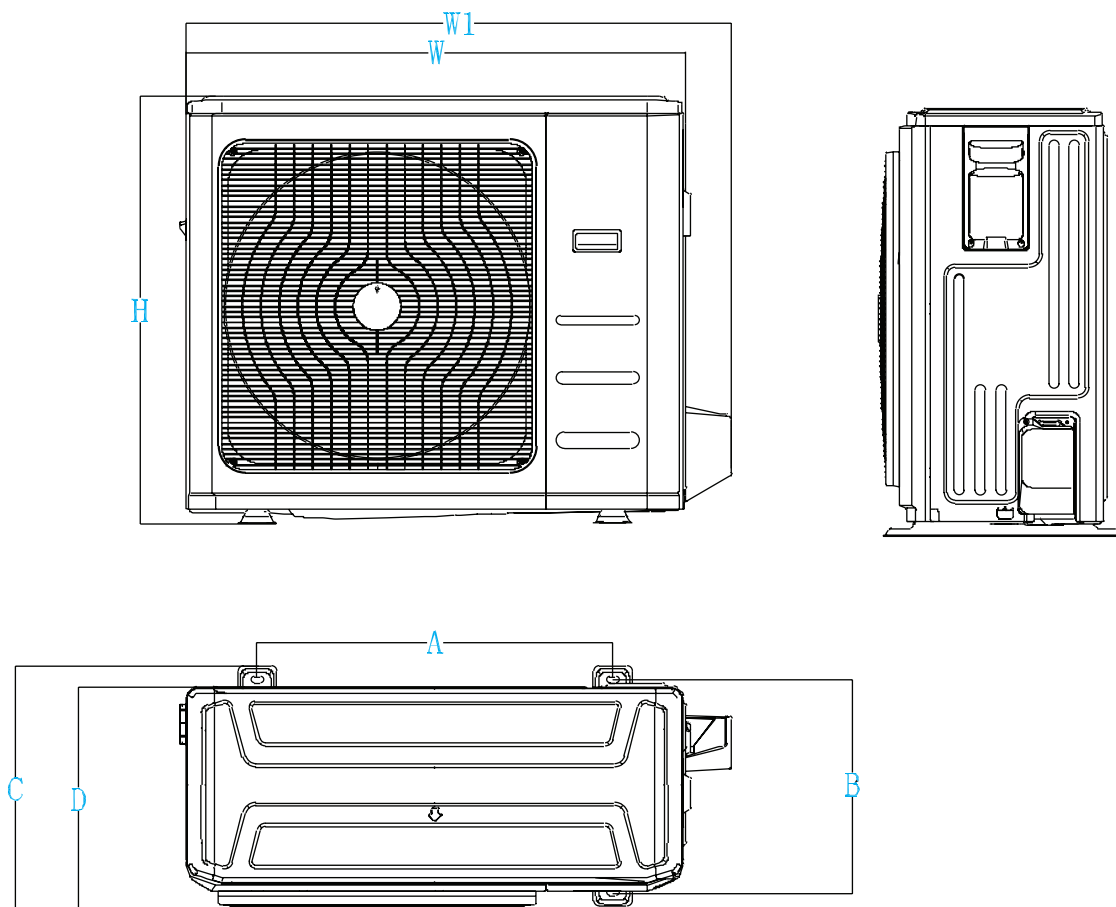
High Static Pressure Duct



Model (Kbtu/h)	unit	Outline dimension			Size of mounted lug		Air outlet opening size(symmetry of air outlet opening)					Air inlet opening size(symmetry of air inlet opening)				
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
48	mm	625	1200	380	495	1236	1000	253	270	900	170	1145	334	325	925	130
	inch	24.61	47.24	14.96	19.49	48.66	39.37	9.96	10.63	35.43	6.69	45.08	13.15	12.8	36.42	5.12
55	mm	858	1400	440	700	1436	1188	385	500	1000	280	1188	385	500	1000	280
	inch	33.78	55.12	17.32	27.56	56.54	46.77	15.16	19.69	39.37	11.02	46.77	15.16	19.69	39.37	11.02

Dimensional Drawings

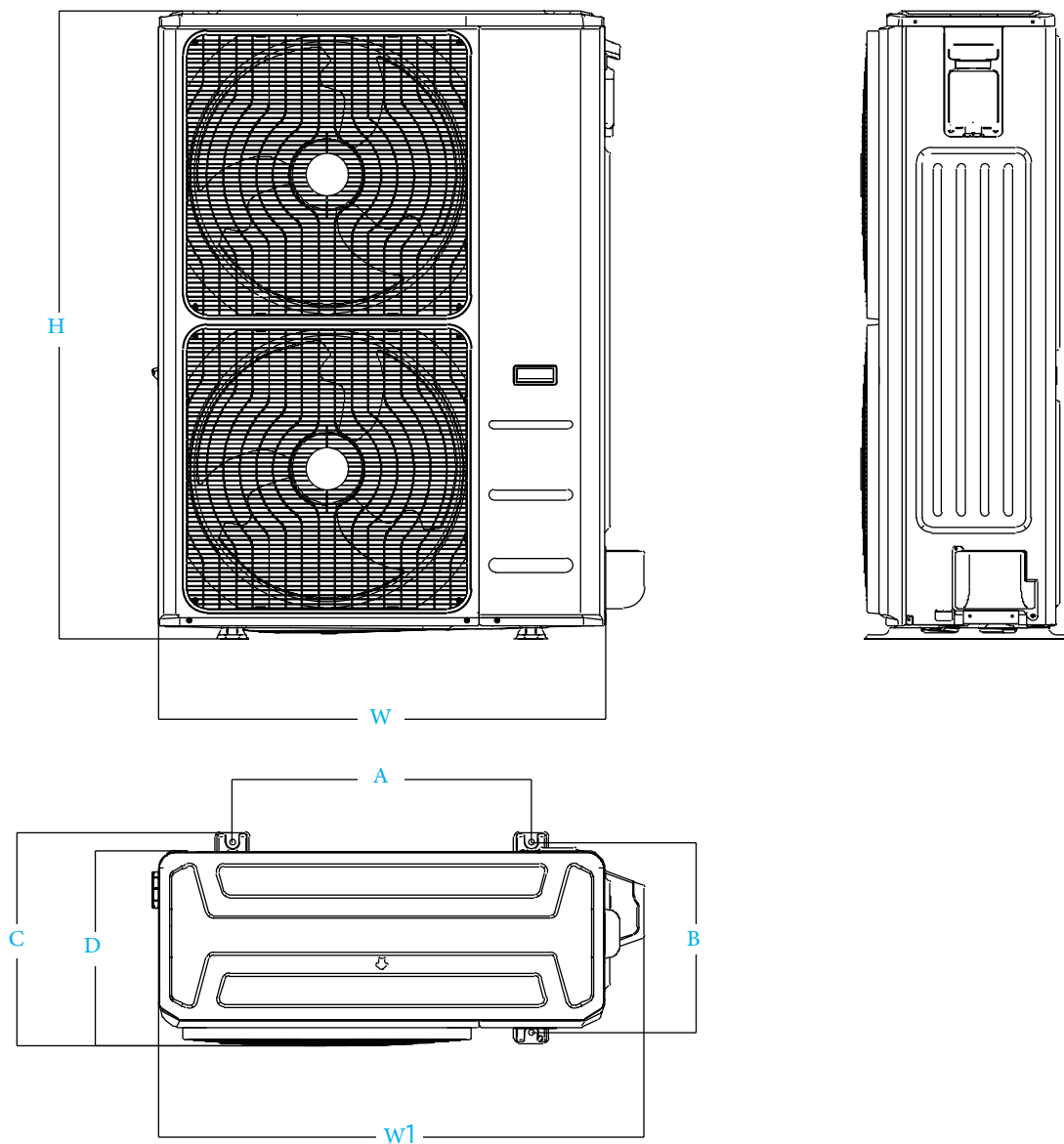
Outdoor Unit



Model	unit	W	D	H	W1	A	B	C
MOTCA30U-18HFN1-NC5W	mm	845	363	702	914	540	350	375
	inch	33.27	14.29	27.64	35.98	21.26	13.78	14.8
MOTD30U-24HFN1-NC5W	mm	946	410	810	1030	673	403	455
	inch	37.24	16.14	31.89	40.55	26.50	15.87	17.9
MOTD30-36HFN1-NC5W	mm	946	410	810	1030	673	403	455
	inch	37.24	16.14	31.89	40.55	26.50	15.87	17.9

/// Dimensional Drawings

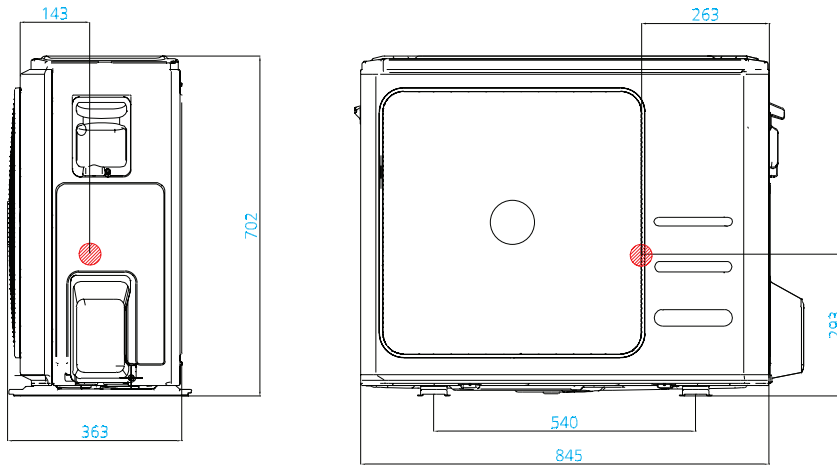
Double Fan Outdoor Unit



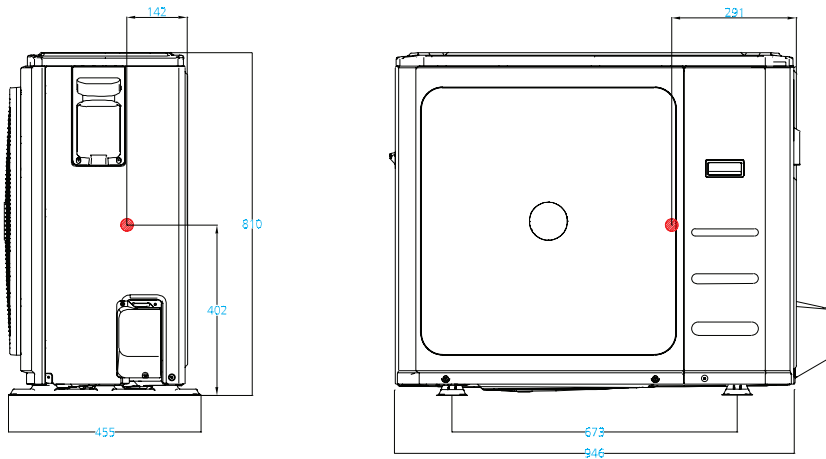
Model	unit	W	D	H	W1	A	B	C
MOTE30U-48HFN1-CC5W	mm	952	415	1333	1045	634	404	457
	inch	37.48	16.34	52.48	41.14	24.96	15.9	17.99
MOTE30U-55HFN1-CC5W	mm	952	415	1333	1045	634	404	457
	inch	37.48	16.34	52.48	41.14	24.96	15.9	17.99

Centre of gravity

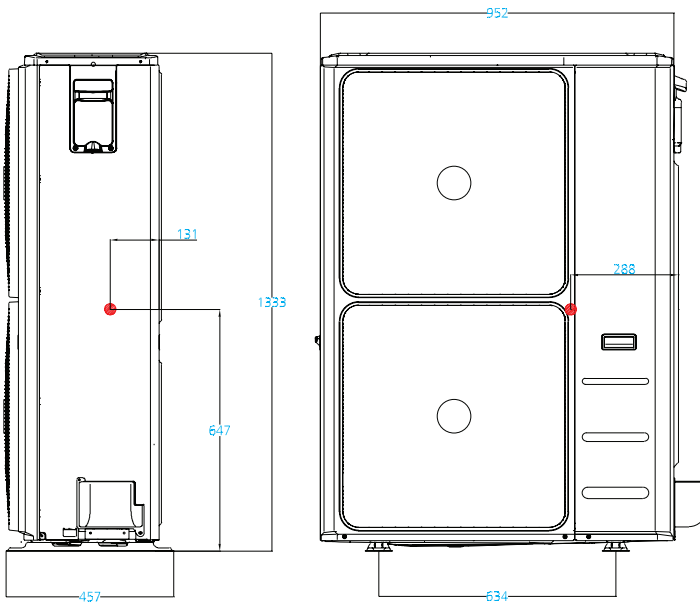
MOTCA30U18-HFN-1NC5W



MOTD30U24-HFN-1NC5W, MOTD36-30HFN-1NC5W



MOTE30U48-HFN-1CC5W, MOTE30U55-HFN-1CC5W



Ceiling Protection with Dual Skin



Flexible Duct Design and
Convenient Installation



Double-skin
Drainage Pan





Drain Pump with 750mm
Pump Head is Optional




PS, Standard Power Series

PS - LA -Power Series with low ambient temperature cooling function

Outdoor Unit Lineup

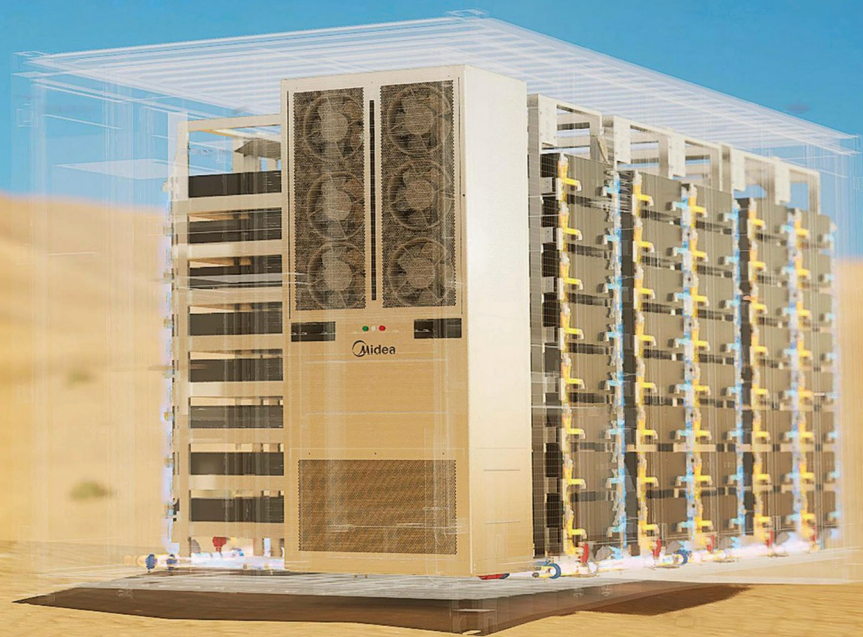
Series	Power Supply	60kW	120kW
•	•		
PS	380V/3N/50Hz	60kW	120kW
PS	220V/3N/60Hz	60kW	120kW
PS - LA	380V/3N/50Hz	/	/

Series	Power Supply	180kW	200kW
•	•		
PS	380V/3N/50Hz	180kW	/
PS	220V/3N/60Hz	180kW	/
PS - LA	380V/3N/50Hz	/	200kW

Series	Power Supply	250kW
•	•	
PS	380V/3N/50Hz	250kW
PS	220V/3N/60Hz	/
PS - LA	380V/3N/50Hz	250kW

Aqua Tempo Power Series

- /// *Wide application range*
- /// *Advanced technology*
- /// *Easy control*



Wide application range

Aqua Tempo Power Chillers with cooling capacity ranging from 60kW to 250kW, combination model's maximum capacity ups to 2000kW

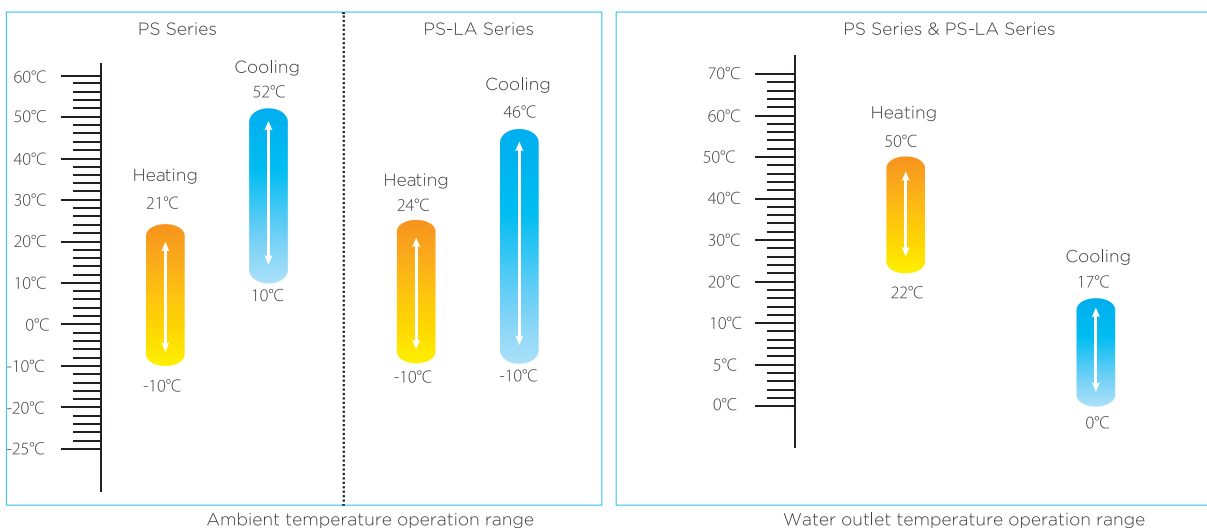


Wide application range

Freely combine with fan coil units and air handling units Project owners may choose the best types according to their design teste (for interior) or functional needs.

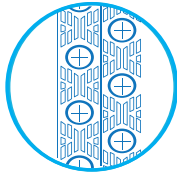


Wide ambient temperature and water outlet temperature operation ranges.



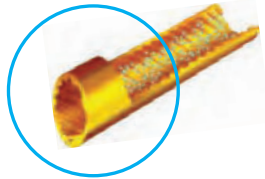
Advanced Technology

High performance heat exchanger



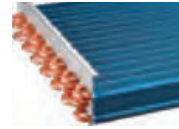
Fin

Enhance heat transfer



Inner-threaded pipe

High Efficiency



Inner-threaded pipe

heat exchange efficiency. The specially coated blue fins enhance durability and protect against corrosion from air, water and other corrosive agents, assures a longer coil service life.

Heat exchanger aluminum foil

> Standard products:
200h of neutral salt mist

>Heavy anti-corrosion product

1000h of neutral salt mist
140h of acid salt mis

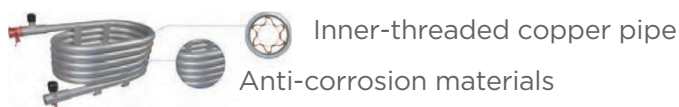
Heat exchanger copper pipe

> Standard products:
24h of neutral salt mist

>Heavy anti-corrosion product

150h of neutral salt mist

Tube-in-tube & shell-tube heat exchanger



Inner-threaded copper pipe

Anti-corrosion materials



Inner grooved copper pipe, increase area of heat exchanger, improve efficient. Anti-corrosion shell increases the useful life of heat exchanger.

Water dead zone

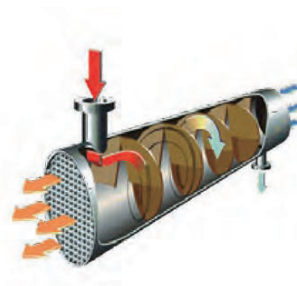


Flat baffle plate

Refrigerant outlet



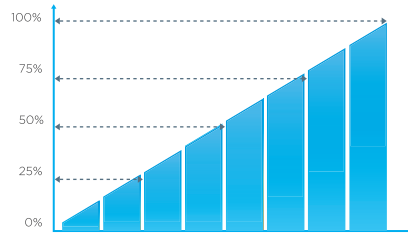
Helical baffle



For shell-tube heat exchanger, the module adopts the new helical baffle design to avoid the rectangular place of water dead zone, greatly improve the heat exchange efficiency.

EXV for more precise flow control

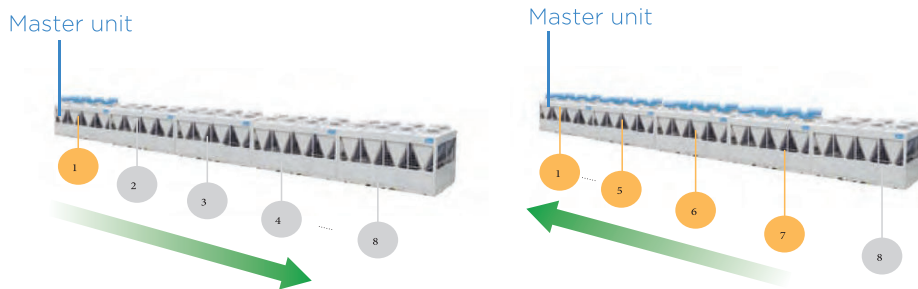
Patented liquid distribution components to maximize performance and minimize defrost impact. 500 steps EXV plus capillary for stable and accurate gas flow control. Fast response resulting in higher efficiency and improved reliability.



High reliability

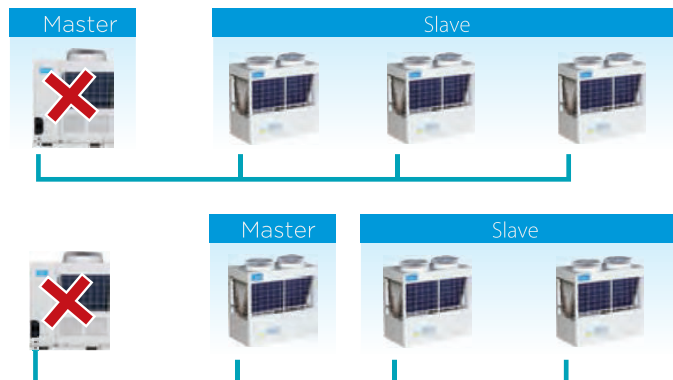
Alternative cycle duty operation

In one combination module, all slave units operate as alternative in cycle duty to keep equal running time, realize higher stability, better reliability and longer lifespan.



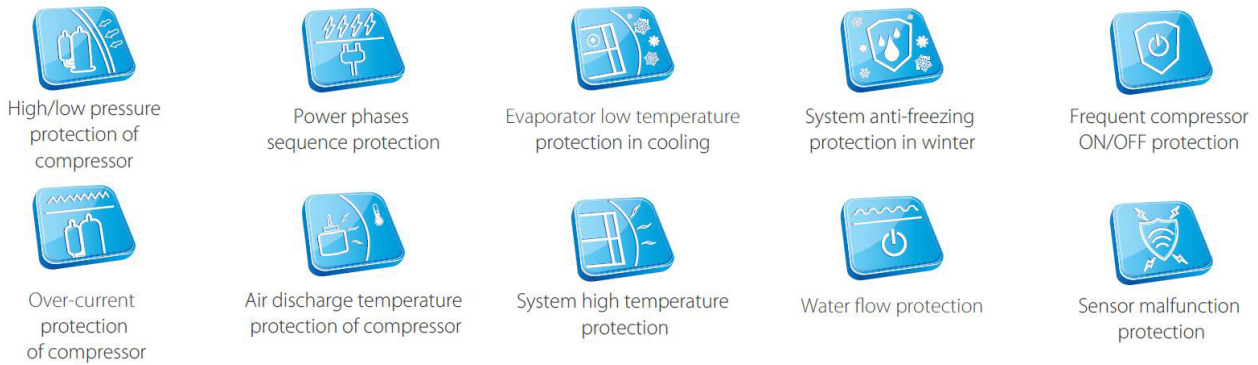
Back-up functions

In a combination system, if one module fails, other modules can be used as backup and continue the operation.



Reliable protections

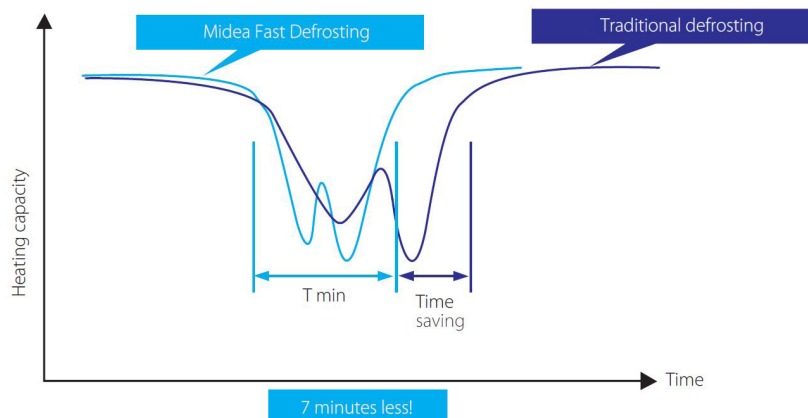
Multiple protections are adopted to ensure system stable running.





Intelligent defrosting technology

Model alternative defrosting technology ensures little fluctuation on water temperature.

Manual defrosting program is available for service purpose.



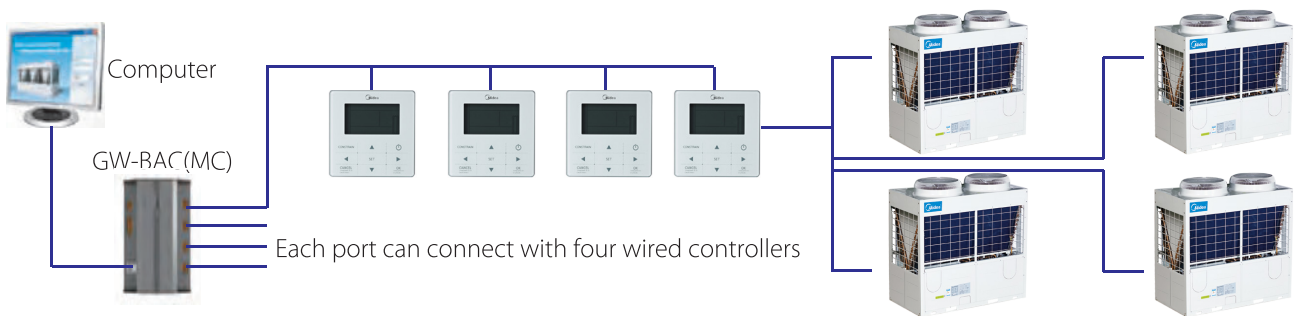
Easy control

Model	KJRM-120D/BMK-E(standard)	KJR-120A/MBTE(optional)
Appearance		
Main Functions	<ul style="list-style-type: none"> Touch key operation Parameter setting and LCD display Real time clock control. Multiple timer Power-off memory function Modbus(Customized) Address setting Parallel function 	<ul style="list-style-type: none"> Mechanical butoon Parameter setting and LCD display Real time clock control. Multiple timer Power-off memory function Address setting Parallel function Weekly timing function
Max. connection PCBs	16	16

Modbus function



Bacnet gateway



Convenient operation



Specifications

Model			MGBL-F200W/RN1	MGBL-F250W/RN1
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50
Cooling ¹	Capacity	kW	185	250
	Input	kW	63.0	78.3
	EER		2.94	3.19
Heating ²	Capacity	kW	200	270
	Input	kW	61.0	80.0
	COP		3.28	3.38
Compressor	Type		Fixed Scroll	Fixed Scroll
	Quantity	Pieces	6	8
Air side heat exchanger	Type		Fin-coil	Fin-coil
	Fan motor type		AC Motor	AC Motor
	Quantity of fan motor	Pieces	6	8
Water side heat exchanger	Type		Shell-tube	Shell-tube
Refrigerant	Type		R410A	R410A
	Charged volume	kg	42.0	60.0
Throttle type			EXV	EXV+Capillary
Sound pressure level ³		dB(A)	74	74
Unit net dimension(D×H×W)		mm	2,850×2,110×2,000	3800×2130×2000
Packing dimension(D×H×W)		mm	2,980×2,260×2,135	3900×2200×2100
Net/ Gross weight		kg	1730/1870	2,450/2,500
Water piping connection		mm	DN80	DN100
Maximum combinations			8	8
Ambient temperature range	Cooling	°C	-10~46	-10~46
	Heating	°C	-10~24	-10~24
LWT setting range	Cooling	°C	5~17	5~17
	Heating	°C	40~50	40~50
LWT setting range ⁴	Cooling	°C	0~17	0~17
	Heating	°C	22~50	22~50

Notes:

1. Water inlet/outlet temperature: 12/7°C; Outdoor ambient temperature 35°C DB.
2. Water inlet/outlet temperature: 40/45°C; Outdoor ambient temperature 7°C DB/6°C WB.
3. 1m away in open field.
4. The data is for low water outlet temperature function. Under the using condition of this function, the system must be added antifreeze agent.

50Hz PS series

Specifications

Model			MGBT-F60W/RN1	MGBT-F120W/RN1	MGBT-F180W/RN1	MGBT-F250W/RN1
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Cooling ¹	Capacity	kW	60	120	180	250
	Input	kW	19.3	38.5	57.9	78.3
	EER			3.11	3.12	3.11
Cooling ²	Capacity	kW	52	104	156	216
	Input	kW	22.1	43.0	64.5	86.3
	EER			2.35	2.42	2.42
Heating ³	Capacity	kW	64	128	195	270
	Input	kW	19.8	41.5	59.4	80.0
	COP			3.23	3.08	3.28
Compressor	Type		Fixed Scroll	Fixed Scroll	Fixed Scroll	Fixed Scroll
	Quantity	Pieces	2	4	6	8
Air side heat exchanger	Type		Finned tube	Finned tube	Finned tube	Finned tube
	Fan motor type		AC Motor	AC Motor	AC Motor	AC Motor
	Quality of fan motor	Pieces	2	4	6	8
Water side heat exchanger	Type		Shell-tube	Shell-tube	Shell-tube	Shell-tube
Refrigerant	Type		R410A	R410A	R410A	R410A
	Charged volume	kg	12.0	26.0	39.0	60.0
Throttle type			EXV	EXV	EXV	EXV
Sound pressure level ⁴		dB(A)	67	70	74	74
Unit net dimension(DxHxW)		mm	2,000x1,880x900	2,000x2,090x1,685	2,850x2,110x2,000	3,800x2,130x2,000
Packing dimension(DxHxW)		mm	2,090x2,095x985	2,080x2,240x1,755	2,980x2,260x2,135	3,900x2,200x2,100
Net/ Gross weight		kg	580/650	1,090/1,270	1,730/2,000	2,450/2,600
Water piping connection		mm	DN100	DN65	DN80	DN100
Maximum combinations			16	8	5	8
Ambient temperature range	Cooling	°C	10~52	10~52	10~52	10~52
	Heating	°C	-10~21	-10~21	-10~21	-10~21
LWT setting range	Cooling	°C	5~17	5~17	5~17	5~17
	Heating	°C	45~50	45~50	45~50	45~50
LWT setting range ⁵	Cooling	°C	0~17(customized)	0~17(customized)	0~17(customized)	0~17
	Heating	°C	22~50(customized)	22~50(customized)	22~50(customized)	22~50

Notes:

1. Water inlet/outlet: 12°C/ 7°C; Outdoor ambient temp. of 35°C DB.
2. Water inlet/outlet: 12°C / 7°C; Outdoor ambient temp. of 46°C DB.
3. Water inlet/outlet: 40°C °C DB/6°C B.
4. 1m away in open field.
5. The data is for low water outlet temperature function. Under the using condition of this function, the system must be added antifreeze agent.

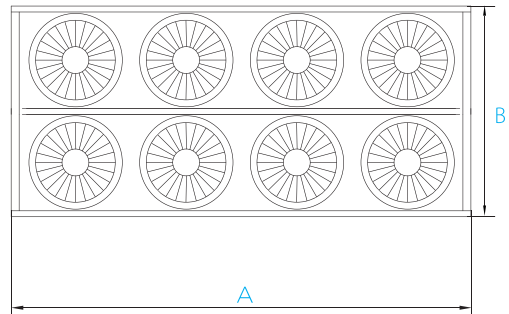
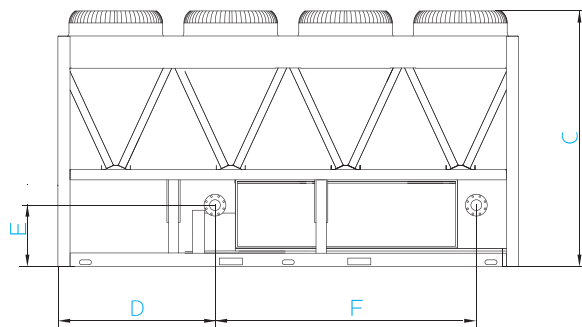
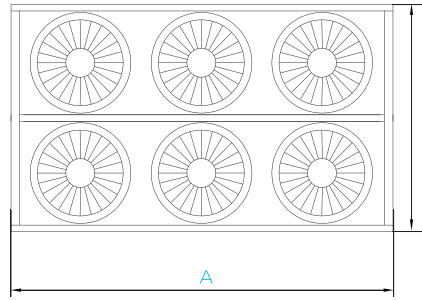
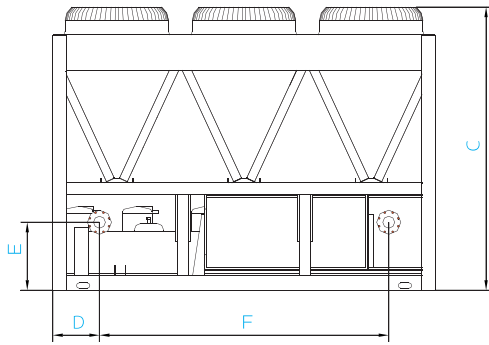
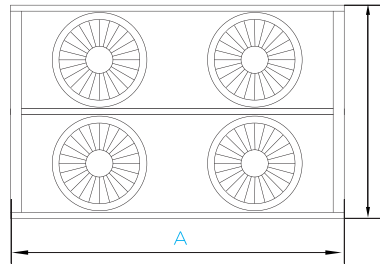
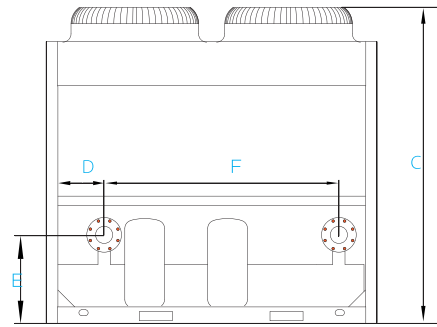
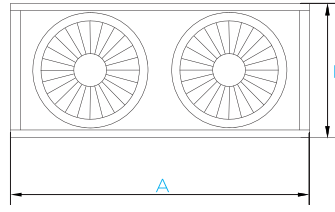
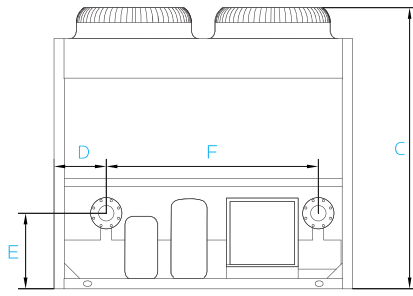
60Hz PS series

Specifications

Model			MGBT-F60W/DN1	MGBT-F120W/DN1	MGBT-F180W/DN1
Power supply		V/Ph/Hz	220/3/60	220/3/60	220/3/60
Cooling1	Capacity	kW	60	120	180
	Input	kW	19.5	39.0	58.5
	EER			3.08	3.08
Cooling2	Capacity	kW	52	104	156
	Input	kW	22.1	43.0	64.5
	EER			2.35	2.42
Heating3	Capacity	kW	65	130	195
	Input	kW	20.0	40.0	60.0
	COP			3.25	3.25
Compressor	Type		Fixed Scroll	Fixed Scroll	Fixed Scroll
	Quantity	Pieces	2	4	6
Air side heat exchanger	Type		Fin-coil	Fin-coil	Fin-coil
	Fan motor type		AC Motor	AC Motor	AC Motor
	Quality of fan motor	Pieces	2	4	6
Water side heat exchanger	Type		Shell-tube	Shell-tube	Shell-tube
Refrigerant	Type		R410A	R410A	R410A
	Charged volume	kg	13	26	42
Throttle type			EXV	EXV	EXV
Sound pressurer level ⁴		dB(A)	67	70	74
Unit net dimension(DxHxW)		mm	2,000x1,880x900	2,000x2,080x1,685	2,850x2,110x2,000
Packing dimension(DxHxW)		mm	2,090x2,055x985	2,080x2,240x1,755	2,980x2,260x2,135
Net/ Gross weight		kg	580/650	1,180/1,300	1730/2,000
Pipe connections		mm	DN100	DN65	DN80
Maximum combinations			16	8	5
Ambient temperature range	Cooling	°C	10~52	10~52	10~52
	Heating	°C	-10~21	-10~21	-10~21
LWT setting range	Cooling	°C	5~17	5~17	5~17
	Heating	°C	45~50	45~50	45~50
LWT setting range ⁵	Cooling	°C	0~17(customized)	0~17(customized)	0~17(customized)
	Heating	°C	22~50(customized)	22~50(customized)	22~50(customized)

Notes:

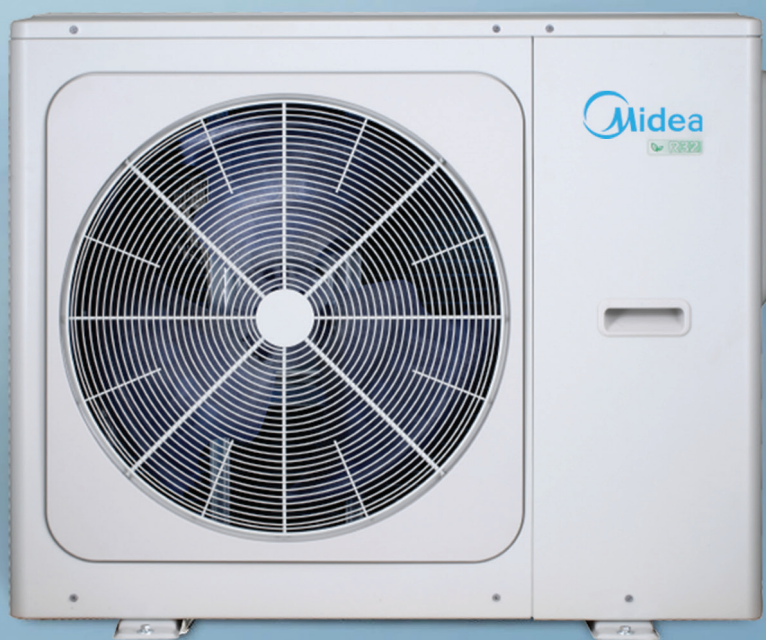
1. Water inlet/outlet: 12°C/ 7°C; Outdoor ambient temp. of 35°C DB.
2. Water inlet/outlet: 12°C / 7°C; Outdoor ambient temp. of 46°C DB.
3. Water inlet/outlet: 40°C °C DB/6°C B.
4. 1m away in open field.
5. The data is for low water outlet temperature function. Under the using condition of this function, the system must be added antifreeze agent.



Model	A	B	C	D	E	F
MGBT-F60W/RN1 MGBT-F60W/DN1	2000	900	1880	350	506	1420
MGBT-F120W/RN1 MGBT-F120W/DN1	2000	1685	2080	350	506	1420
MGBT-F180W/RN1 MGBT-F180W/DN1	2850	2000	2110	347	506	2156
MGBL-F200W/RN1	2850	2000	2110	347	506	2156
MGBT-F250W/RN1 MGBL-F250W/RN1	3800	2000	2130	1235	573	2156

Full Inverter Air-cooled Chiller (Heat Pump)

Integrated Heating & Cooling Solutions



Full Inverter Air-cooled Chiller (Heat Pump)

Integrated Heating & Cooling Solutions



Chiller

- ▣ DNL-V120/N8-5R0
- ▣ DNL-V140/N8-5R0
- ▣ DNL-V160/N8-5R0
- ▣ DNL-V180/N8-5R0

Integrated design attends to all your family members

Heating and air conditioning functions combined, this solution allows for customized configuration to meet your diversified needs for comfort, safety, and efficiency.



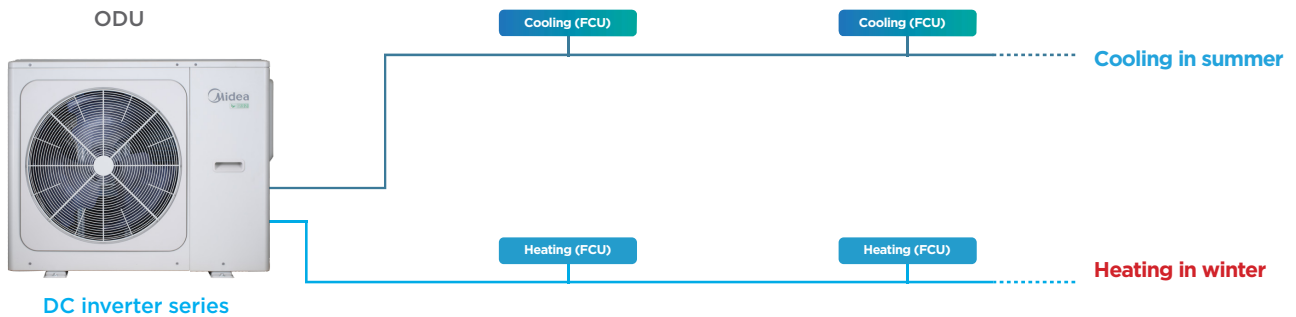
Make your home comfortable

Midea full inverter air-cooled chiller (heat pump) adopts the full DC inverter compressor technology and the air source heat pump technology for heating and air conditioning. This energy efficient product supports cooling in the summer and heating in the winter, making your home comfortable year round.



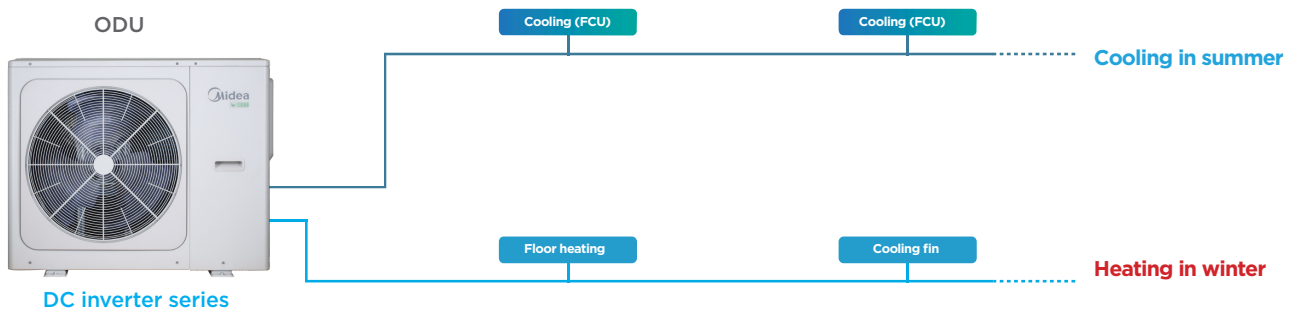
Varied combinations provide greater comfort

I. FCU (heating in winter and cooling in summer)



Varied combinations provide greater comfort

II. Floor heating (heating in winter) + FCU (cooling in summer)



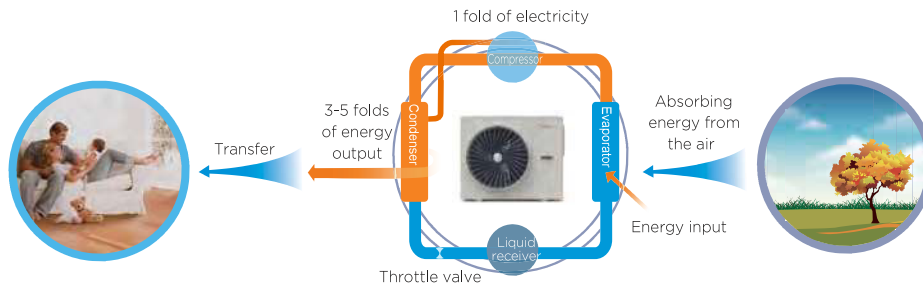
Product features

- Full DC inverter compressor, IPLV (C) level 1 energy efficiency, energy saving and durable
- Heating at a temperature as low as °20-C
- No burning or emission of waste gas; environment-friendly operation with R32 refrigerant
- Designed to integrate water-side components for easier installation
- Multiple safety protection measures covering anti-freezing, test run and water system
- Compatible with the MideaHome app for remote control

Live comfortably and safely

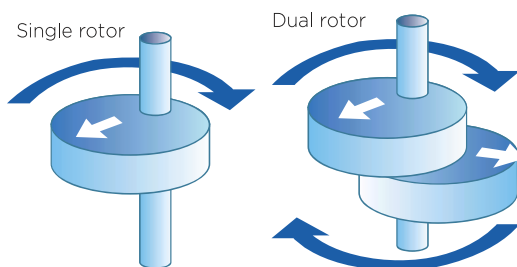
Air source heat pump technology guarantees comfort

The air source heat pump technology uses the free air energy, so it can drive the compressor with a small amount of electricity, significantly reducing the electricity cost. Even in cold seasons, a comfortable indoor temperature can be guaranteed with less electricity consumption. The heat pump can transfer heat outdoors for cooling, and can absorb the low-temperature heat outdoors for floor heating.



Full DC inverter compressor, energy efficient and durable

A dual-rotor inverter compressor features powerful and efficient performance with low noise generated and also a long life span, providing users with an excellent energy efficiency experience that is far beyond expectation.



Precise core components of the compressor



Compressor perspective drawing

Top four advantages of dual-rotor DC inverter compressor



Low noise

Steady operation with little vibration and low noise



Long life

Exquisite design of components ensuring stable performance and prolonged service life



High efficiency

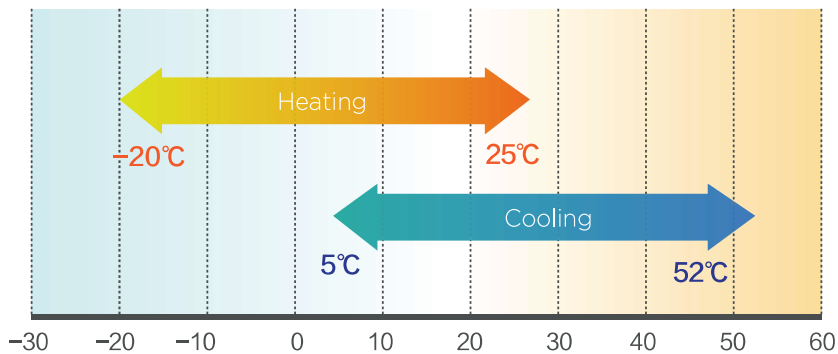
DC inverter double rotor compressor for higher efficiency



Ultra-wide frequency

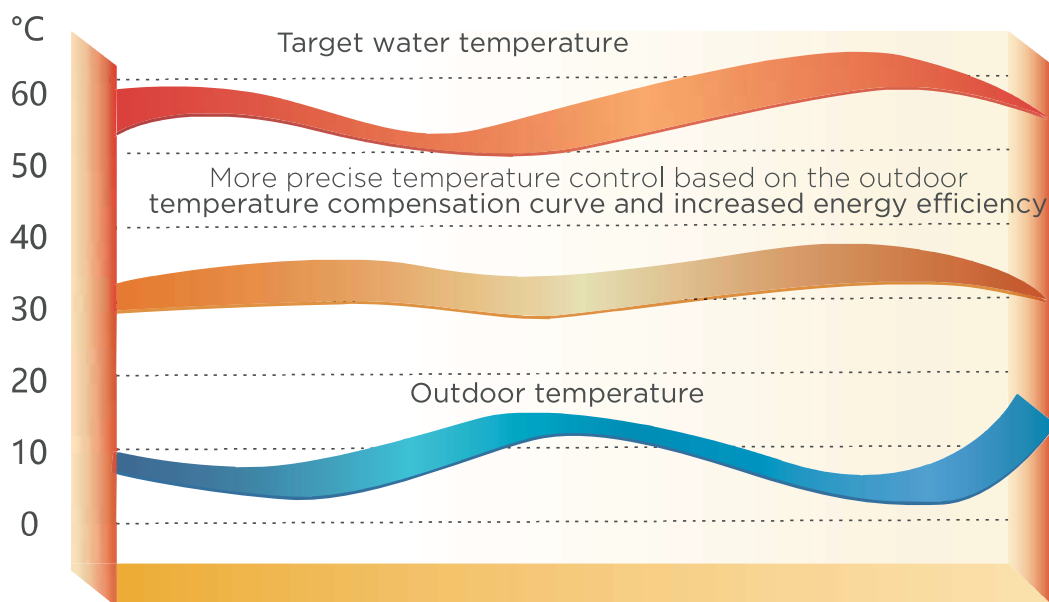
Compressor operating frequency 12-120Hz

Enjoy a warm and comfortable winter



- 20°C to +52°C wide range operation, comfortable and more energy efficient

In summer, 5-25°C chilled water is supplied for cooling. In winter, 25-60°C hot water is supplied for heating. Heating is realized through floor radiation while cooling and heating are realized through the FCU.



Intelligent control of water temperature

The advanced microcomputer control of Midea's air source heat pump unit eliminates water temperature fluctuations, ensuring a smooth and reliable heating system under adverse conditions.

Precise adjustment of ambient temperature

Based on a user-friendly design, the unit supports power settings by week to temperature control easier.

Quiet operation

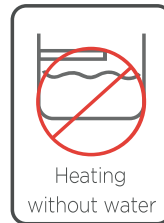
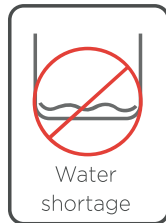
The quiet heating system ensures a pleasant living and sleeping environment.

Reliable water system

The enclosed water system has the automatic anti-adhesion control function, which can effectively prevent scale due to the fine impurity in water and after long-time operation. This ensures that the water pump, 3-way valve, and other water pipe components operate normally after long-term shutdown for system reliability.

Safe water system

The many built-in protection functions can diagnose and eliminate abnormalities possibly occurring to the water system in a timely manner, such as abnormal water flow, abnormal water temperature, abnormal temperature difference between inlet/outlet water, and abnormal range of temperature difference (too large or too small).



Anti-freezing protection

A special built-in program can intelligently detect a unit that is in standby status for a long time in a cold environment, and trigger the corresponding protection mechanism to prevent frost crack of the unit due to water freezing inside.

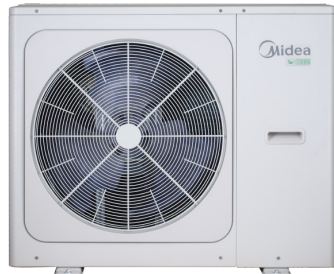
Heating through floor radiation to make your feet warm and head cool

Radiant floor heating is a more comfortable way, as the heat radiates up and warms the room evenly from the ground up. Your head can be bathed in warmth while your feet lie in the frozen zone. The heat can also depress the production of parasites such as mite and sterilize the floor. Therefore, the unit is both healthy and comfortable.



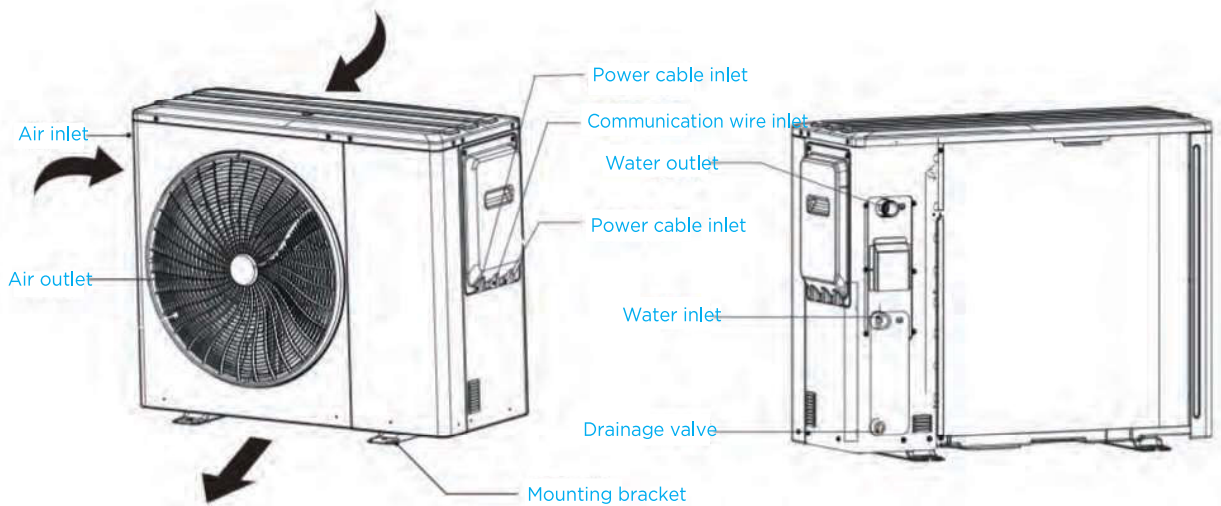
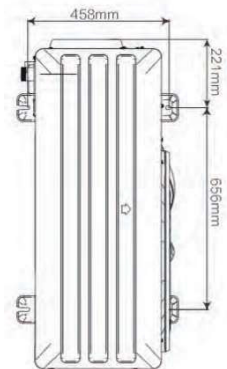
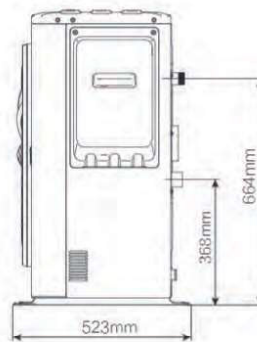
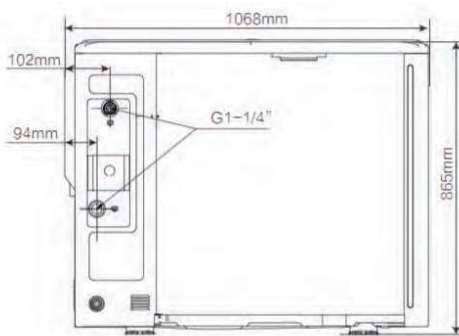
Wide product line and full quality assurance

The enclosed water system has the automatic anti-adhesion control function, which can effectively prevent scale due to the fine impurity in water and after long-time operation. This ensures that the water pump, 3-way valve, and other water pipe components operate normally after long-term shutdown for system reliability.



Chiller

- ▣ DNL-V120/N8-5R0
- ▣ DNL-V140/N8-5R0
- ▣ DNL-V160/N8-5R0
- ▣ DNL-V180/N8-5R0



Specifications

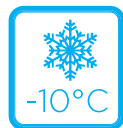
ODU model			DNL-V120/N8-5R0	DNL-V140/N8-5R0	DNL-V160/N8-5R0	DNL-V180/N8-5R0
Cooling	Rated cooling capacity ¹	kW	12.00	14.00	16.00	17.30
	Rated cooling power ¹	kW	3.69	4.52	5.61	6.65
	Rated cooling performance coefficient ¹	W/W	3.25	3.10	2.85	2.60
Heating	Rated heating capacity ²	kW	14.00	16.00	18.00	19.50
	Rated heating power ²	kW	4.12	4.85	5.63	6.19
	Rated heating performance coefficient ²	W/W	3.40	3.30	3.20	3.15
IPLV(C)			4.40	4.30	4.25	4.20
Max power input		kW	6.10	6.60	7.20	7.70
Max. input current		A	28.0	29.0	31.0	32.0
Power form			220V/50Hz/single phase	220V/50Hz/single phase	220V/50Hz/single phase	220V/50Hz/single phase
Compressor	Type		DC inverter rotor compressor	DC inverter rotor compressor	DC inverter rotor compressor	DC inverter rotor compressor
	Quantity	Set	1	1	1	1
Refrigerant	Type		R32	R32	R32	R32
	Charge amount	kg	1.90	1.90	1.90	1.90
Air system	Motor type		Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor
	Rated power of motor	W	170	170	170	170
	Quantity	Set	1	1	1	1
	Type of air-side heat exchanger		Copper pipe with aluminium fins	Copper pipe with aluminium fins	Copper pipe with aluminium fins	Copper pipe with aluminium fins
	Fan direction		Side discharge	Side discharge	Side discharge	Side discharge
Water System	Type of water-side heat exchanger		Plate heat exchanger	Plate heat exchanger	Plate heat exchanger	Plate heat exchanger
	Water-side resistance	kPa	26	35	45	52
	Maximum lift of water pump	m	15	15	15	15
Ambient temperature range	Cooling	℃	5-52	5-52	5-52	5-52
	Heating	℃	-20-25	-20-25	-20-25	-20-25
Water outlet temperature range	Heating	℃	25-60	25-60	25-60	25-60
	Cooling	℃	5-25	5-25	5-25	5-25
Noise		dB(A)	55	57	58	59
Dimensions (width x height x depth)		mm	1068*865*523	1068*865*523	1068*865*523	1068*865*523
Gross/net weight		kg	111/126	111/126	111/126	111/126
Waterproof grade			IPX4	IPX4	IPX4	IPX4
National standard No.			GB/T 18430.2-2016;			
Test conditions			1. Rated cooling: air-side dry-bulb temperature: 35°C; Use side water outlet temperature: 7°C. 2. Rated heating: air-side dry-bulb temperature: 7°C; Use side water outlet temperature: 45°C. 3. Water flow under use side nominal cooling capacity: 0.172m ³ /(h·kW).			

/// R410A Aqua Tempo

General Information

Capacity (kW)	30kW	60kW	90kW
Appearance			
380-415V/3Ph/50Hz	•	•	•

 DC Inverter



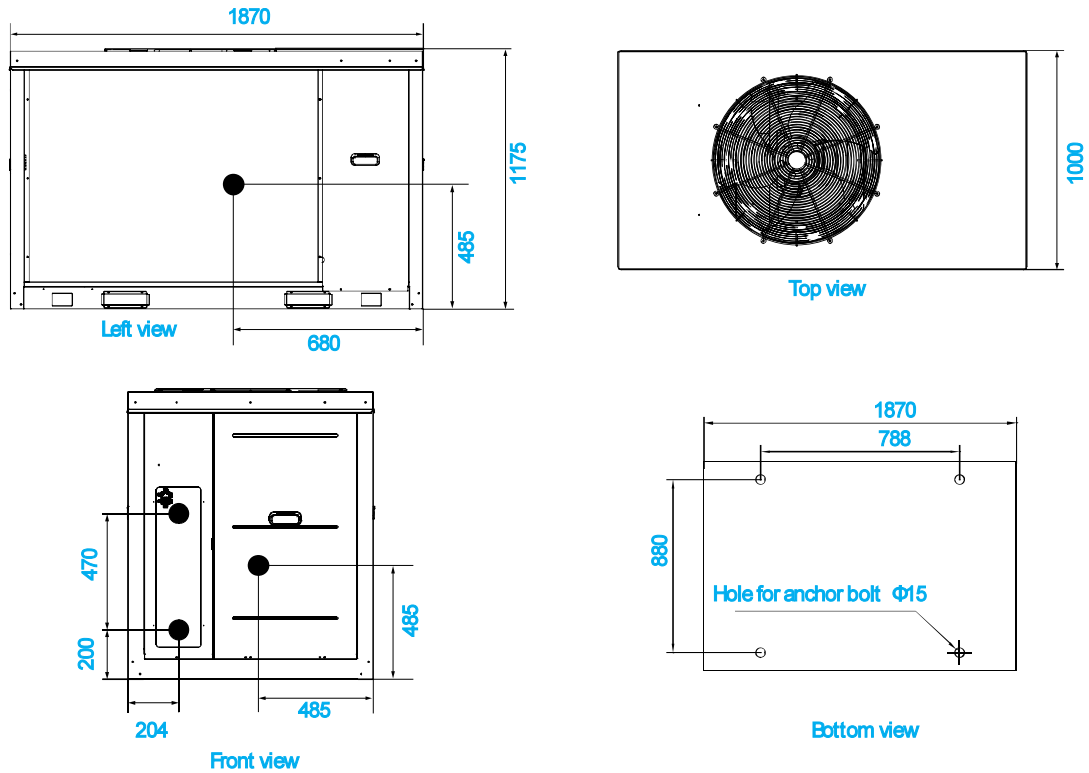
/// Overview

- R410A refrigerant zero impact on the ozone layer
- DC Inverter technology allows precise consumption on real load
- Minimum water temperature down to 0 (Anti-freeze liquid needed)
- Minimum operation ambient temperature down to -10 °C for cooling mode
- High energy efficiency level A++ for energy saving (Water outlet temperature at 35°C)
- Maximum 16 units combination and controlled by one controller
- Maximum 1440kW combination capacity
- Maximum 256 units controlled through Modbus
- Hydraulic model for customization

2 Dimensions and Center of Gravity

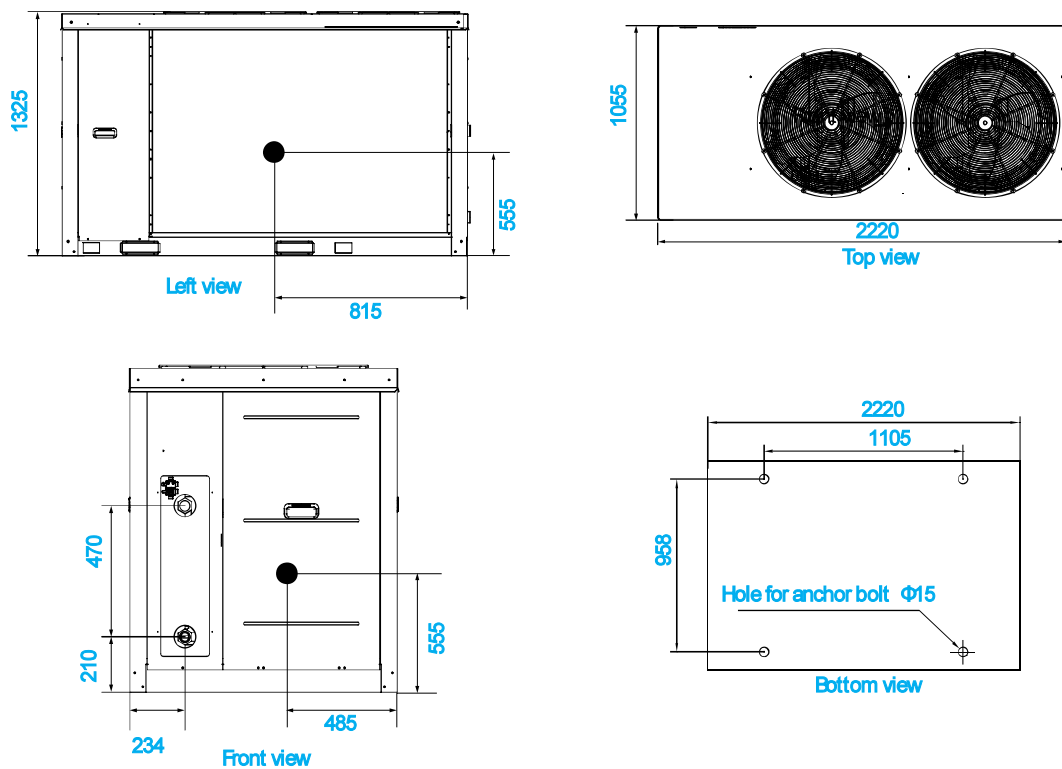
MC-SU30(M)-RN1L

Figure 2-2.1: MC-SU30{M)-RN1L dimensions and center of gravity (unit: mm)



MC-SU60 (M)-RN II

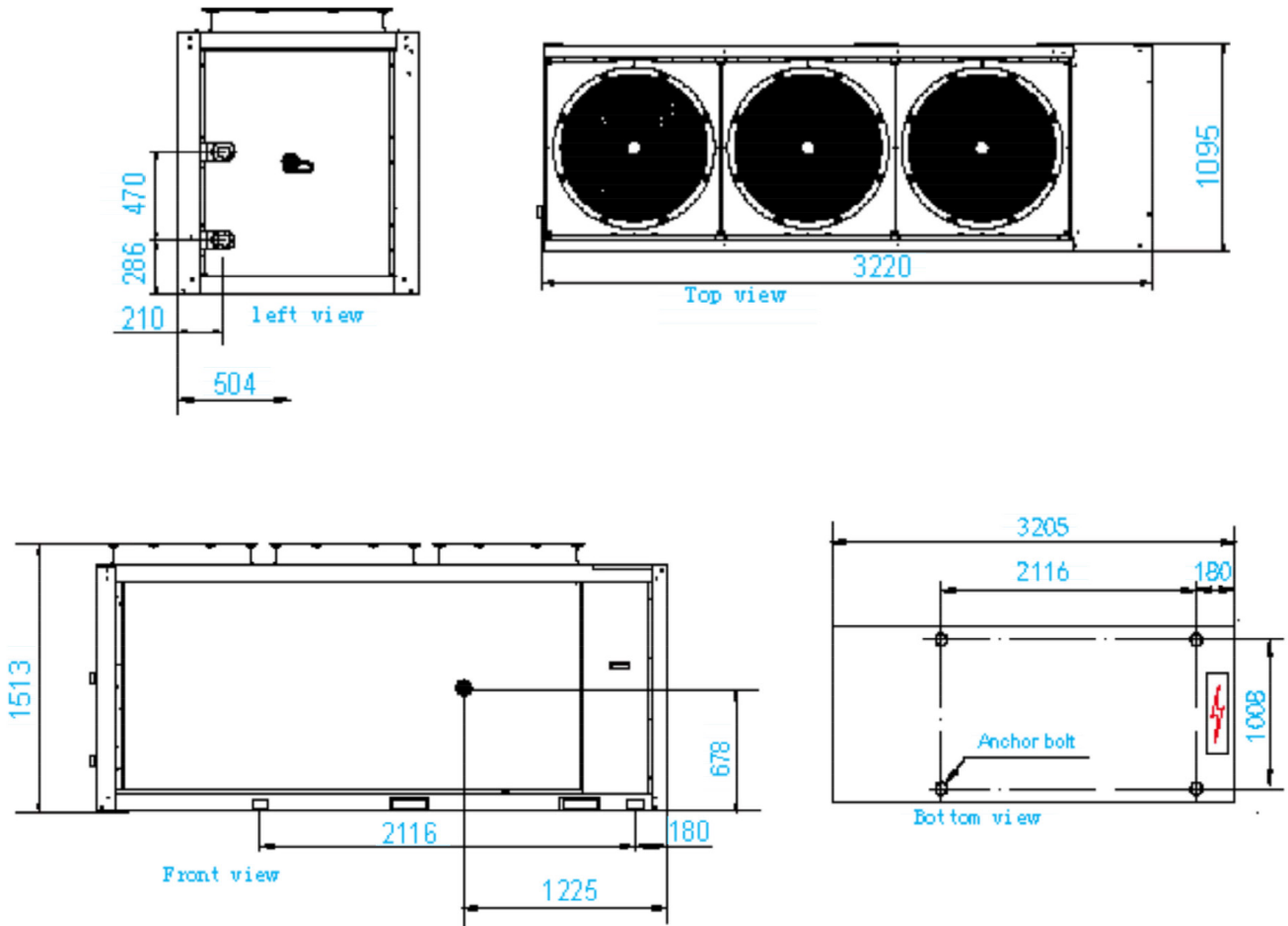
Figure 2-2.2: MC-SU60{M)-RN1L dimensions and center of gravity (unit: mm)



2 Dimensions and Center of Gravity

MC-SU-90RN1L

Figure 2-2.1: MC-SU90-RN1L dimensions and center of gravity (unit: mm)



Durable in Challenging
Conditions.



Durable
construction



Flexible
installation




External pressure
gauge ports

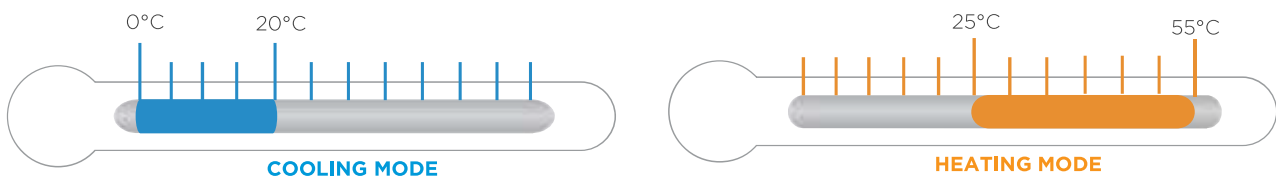
Specifications

Model			MC-SU30-RN1L	MC-SU60-RN1L	MC-SU90-RN1L
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling ¹	Capacity	kW	27	55	82
	Rated input	kW	10.8	22	36.8
	EER		2.5	2.5	2.23
Heating ²	Capacity	kW	31	61	90
	Rated input	kW	10.5	20.3	32.8
	COP		2.95	3.00	2.74
Seasonal space heating energy efficiency class			A++	A++	A++
Compressor		Type	Rotary	Rotary	Scroll
		Quantity	1	2	2
Air side heat exchanger		Type	Finned tube	Finned tube	Finned tube
Fan motor		Type	DC motor	DC motor	DC motor
		Quantity	1	2	3
Water side heat exchanger		Type	Plate	Plate	Plate
Pump head(For hydronic module)		m	/	/	/
Refrigerant system		Type	R410A	R410A	R410A
		Charged volume	kg	10.5	17.0
Throttle		Type	EXV	EXV + Capillary	EXV
Sound power level		dB	78	87	89
Net dimensions (WxHxD)		mm	1870x1175x1000	2220x1325x1055	3220x1513x1095
Packed dimensions (WxHxD)		mm	1910x1225x1035	2250x1370x1090	3275x1540x1130
Net/Gross weight		kg	300/310	480/490	710/739
Water pipe connections		mm	DN40	DN50	DN50
Ambient temperature range		Cooling	°C	-10 to 43	-10 to 43
		Heating	°C	-15 to 30	-15 to 30
LWT setting range		Cooling	°C	0 to 20	0 to 20
		Heating	°C	25 to 55	25 to 55

Easy control

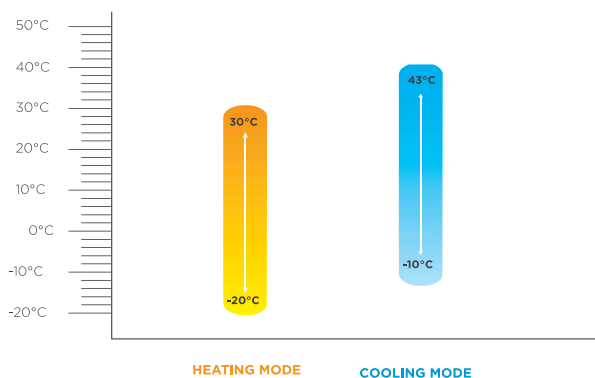
Model	KJRM-120D/BMK-E(standard)
Appearance	
Main Functions	<ul style="list-style-type: none"> Touch key operation Parameter setting and LCD display Real time clock control Multiple timer Power-off memory function Modbus(Customized) Address setting Parallel function
Max. connection PCBs	16

Outlet water temperature



Note: For cooling mode, if outlet water temperature is less than 5°C, anti-freeze liquid is needed. 0°C water temperature can be reached by changing DIP switch setting.

Stable operation even under extreme conditions: °20-C to °43C.



* It indicates the product lineup can cover the operation range. For specific operation range of different models, please refer to the specifications.

/// Aqua tempo super series

General Information

Capacity (kW)	35kW	65kW	80kW	130kW
Appearance / Series				
SS-LA	•	•	•	•

Aqua thermal Super Series R32 High Temp Heat Pump



Widely operation temperature range

Operating range:-25°C-48°C (ambient); 0°C-65°C (leaving water)



High efficiency EVI DC inverter compressor

Ensure the leaving water temperature up to 65°C at -10°C ambient temperature



Refrigerant cooling IPM technology

Ensure the stable and safe operation of the unit control system





Modular design

Maximum 16 units with total capacity of 1,760kw



Easy control

Model	KJRM-120D/BMK-E(standard)	KJR-120A/MBTE(optional)
Appearance		
Main Functions	<ul style="list-style-type: none"> Touch key operation Parameter setting and LCD display Real time clock control. Multiple timer Power-off memory function Modbus(Customized) Address setting Parallel function 	<ul style="list-style-type: none"> Mechanical button Parameter setting and LCD display Real time clock control. Multiple timer Power-off memory function Address setting Parallel function Weekly timing function
Max. connection PCBs	16	16

Aqua thermal Super Series R32 High Temp Heat Pump



Widely operation temperature range

Operating range:-25°C-48°C (ambient); 0°C-65°C (leaving water)



High efficiency EVI DC inverter compressor

Ensure the leaving water temperature up to 65°C at -10°C ambient temperature



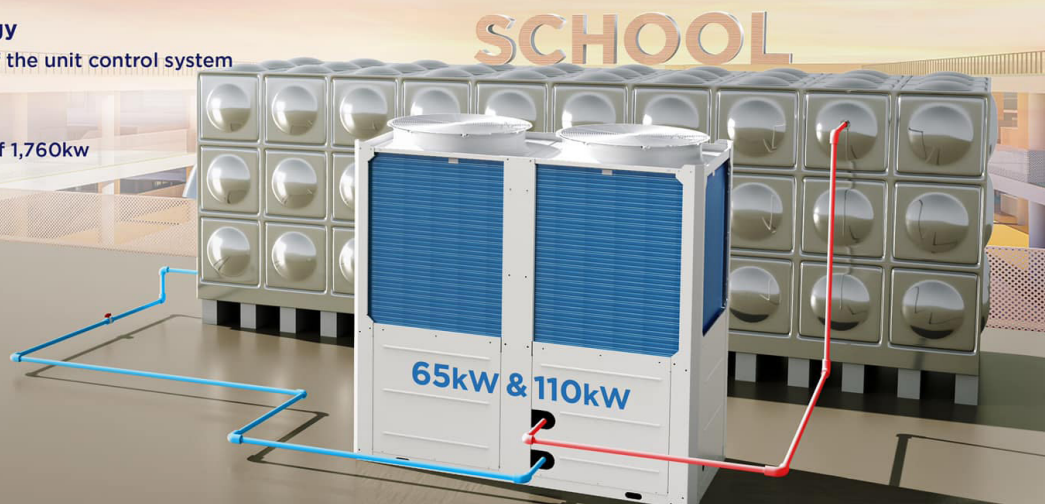
Refrigerant cooling IPM technology

Ensure the stable and safe operation of the unit control system



Modular design

Maximum 16 units with total capacity of 1,760kw



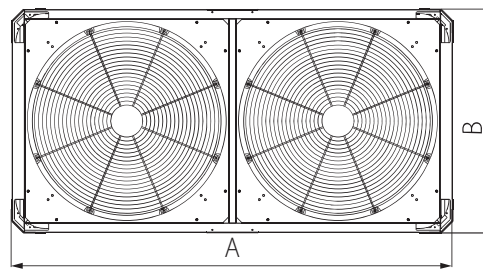
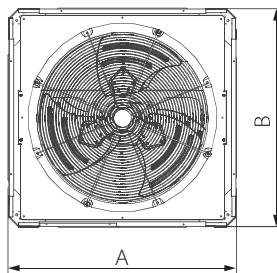
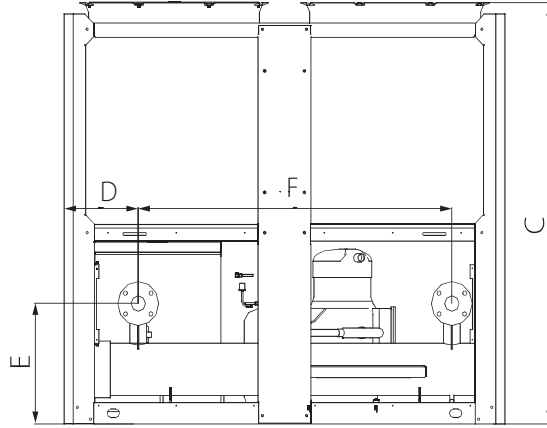
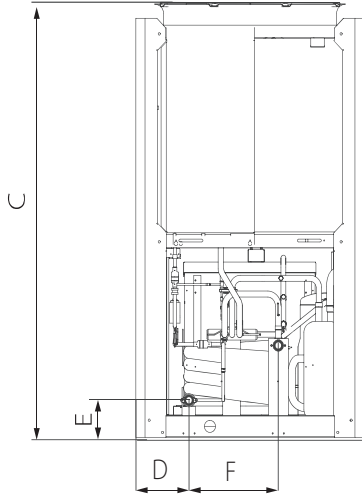
Specifications

Model			MC-SS35-RN1L-B	MC-SS65/RN1L	MC-SS80/RN1L	MC-SS130/RN1L
Series			SS-LA	SS-LA	SS-LA	SS-LA
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Cooling ¹	Capacity	kW	35	65	80	130
	Input	kW	11.5	20.4	25.8	42.3
	EER		3.04	3.19	3.10	3.07
Heating ²	Capacity	kW	37	69	85	138
	Input	kW	11.3	21.5	26.5	43
	COP		3.27	3.21	3.21	3.21
Compressor	Type		Fixed Scroll	Fixed Scroll	Fixed Scroll	Fixed Scroll
	Quantity	Pieces	1	1	2	2
Air side heat exchanger	Type		Finned tube	Finned tube	Finned tube	Finned tube
	Fan motor type		AC Motor	AC Motor	AC Motor	AC Motor
	Quality of fan motor	Pieces	1	2	2	2
Water side heat exchanger	Type		Tube-in-tube	Shell-tube	Shell-tube	Shell-tube
Refrigerant	Type		R410A	R410A	R410A	R410A
	Charged volume	kg	6	10.5	13	21
Throttle type			EXV	EXV	EXV	EXV
Sound pressure level ³		dB(A)	65	67	67	68
Unit net dimension(DxHxW)		mm	1,020×1,770×980	2,000×1,770×960	2,000×1,770×960	2,200×2,060×1,120
Packing dimension(DxHxW)		mm	1,070×1,900×1,030	2,090×1,890×1,030	2,090×1,890×1,030	2,250×2,200×1,180
Net/Gross weight		kg	300/310	530/590	645/710	965/1,035
Pipe connections		mm	DN40	DN65	DN65	DN65
Ambient temperature range	Cooling	°C	-10~52	-10~46	-10~46	-10~46
	Heating	°C	-15~24	-15~24	-15~24	-15~24
LWT setting range	Cooling	°C	5~17	5~17	5~17	5~17
	Heating	°C	40~50	40~50	40~50	40~50
LWT setting range	Cooling	°C	0~17	0~17	0~17	0~17
	Heating	°C	25~50	25~50	25~50	25~50

SS-LA Series Specifications

MC-SS35-RN1L-B

**MC-SS65/RN1L
MC-SS80/RN1L**



Aqua thermal Super Series R32 High Temp Heat Pump



Widely operation temperature range
Operating range:-25°C-48°C (ambient); 0°C-65°C (leaving water)



High efficiency EVI DC inverter compressor
Ensure the leaving water temperature up to 65°C at -10°C ambient temperature



Refrigerant cooling IPM technology
Ensure the stable and safe operation of the unit control system

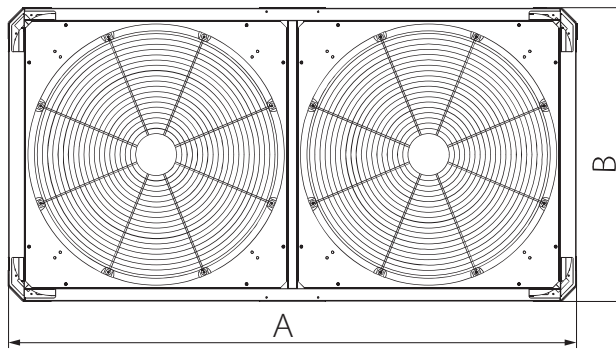
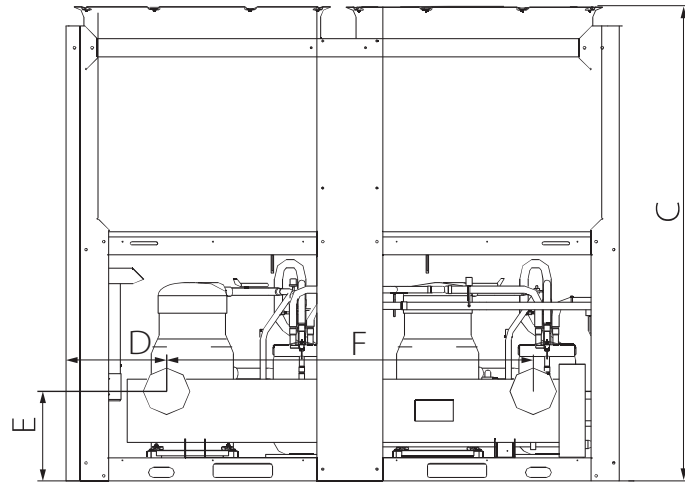


Modular design
Maximum 16 units with total capacity of 1,760kw

HOSPITAL



MC-SS130/RN1L



Model	A	B	C	D	E	F
MC-SS35-RN1L-B	1020	980	1770	237	152	400
MC-SS65/RN1L MC-SS80/RN1L	2000	960	1770	336	506	1420
MC-SS130/RN1L	2200	1120	2060	390	347	1420

Midea Liquid Chiller for Energy Storage System

For long-term energy storage and safe operation



Reliable



Effective





→ **103**
Sales &
AfterSales
Representative →

VER.01. SEP.

SMART IN ONE

