



Commercial Air Conditioners **2016**



VRF 50/60Hz
V5 X Series

 GD Midea Heating & Ventilating Equipment Co., Ltd.
Is certified under the ISO 14001 International standard
for environmental management.
Certificate No.15912E10020R0L

 GD Midea Heating & Ventilating Equipment Co., Ltd.
Certificate of Occupational Health and Safety Management System
Certificate No. 15912S20006R0L-1.

 GD Midea Heating & Ventilating Equipment Co., Ltd.
Is certified under the ISO 9001 International standard
for quality assurance.
NO.01 100 019209

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Note: The data in this book may be changed without notice for further improvement
on quality and performance.

Midea CAC After-service Application



iOS Version



Android Version

Midea CAC News Application



iOS Version

Midea CAC

Midea CAC is a key division of the Midea Group, a leading producer of consumer appliances and provider of heating, ventilation and air conditioning solutions. Midea CAC has continued with the tradition of innovation upon which it was founded, and emerged as a global leader in the HVAC industry. A strong drive for advancement has created a groundbreaking R&D department that has placed Midea CAC at the forefront of a competitive field. Through these independent efforts and joint cooperation with other global enterprises, Midea has supplied thousands of innovative solutions to customers worldwide.

There are three production bases: Shunde, Chongqing and Hefei.
MCAC Shunde: 38 product lines focusing on VRF, Split Products, Heat Pump Water Heaters, and AHU/FCU.
MCAC Chongqing: 14 product lines focusing on Water Cooled Centrifugal/Screw/Scroll Chillers, Air Cooled Screw/Scroll Chillers, and AHU/FCU.
MCAC Hefei: 11 product lines focusing on VRF, Chillers, and Heat Pump Water Heaters.



- 2014-2015 >> Win 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
- 2014 >> Launched the All DC Inverter V5X globally, outstanding product performance helps Midea leading VRF market
- 2011-2014 >> Launched the DC Inverter V4 Plus Series successively, complete product lines help Midea successfully enter the mainstream VRF market
- 2011-2012 >> J.V. with Carrier LA and Carrier India successively
- 2009 >> Launched the DC Inverter V4 globally
- 2008 >> Developed DC inverter technology with Toshiba
- 2000-2001 >> Cooperated with Toshiba and Copeland, enter VRF field
- 1999 >> Entered the CAC field

Midea Company Introduction



Midea CAC Introduction



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OUTDOOR UNIT LINEUP

Midea is proud to introduce V5 X Series VRF, which is designed to optimize the system and better meet market needs.

V5 X Series VRF offers a large capacity from 8HP to 88HP in 2HP increments by combining maximum 4 outdoor units. It incorporates a range of outstanding features, a wide range of outdoor and indoor units, high efficiency, and high reliable etc. it supports an extensive piping length of up to 1000m and a level difference of up to 110, making it perfect for large high-rise buildings.



Single Unit

8/10/12HP



14/16/18/20/22HP



Multi Combination

24-44HP



46-66HP



68-88HP



INDOOR UNIT LINEUP

kW			1.8	2.2	2.8	3.6	4.5	5.6	7.1	8.0											9.0	10.0	11.2	12.5	14.0	16.0	20.0	25.0	28.0	40.0	45.0	56.0
Btu/h			6k	7k	9k	12k	15k	19k	24k	27k											30k	34k	38k	42k	48k	55k	68k	85k	96k	136k	154k	191k
Cassette	One-way cassette		■	■	■	■	■	■	■																							
	Two-way cassette			■	■	■	■	■	■																							
	Four-way cassette				■	■	■	■	■	■	■	■	■	■	■									■								
	Compact four-way cassette			■	■	■	■	■																								
Duct	Low static pressure		■	■	■	■	■	■	■																							
	Medium static pressure			■	■	■	■	■	■	■	■	■	■		■		■															
	High static pressure								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Fresh air processing unit														■	■	■	■	■	■				■	■	■	■	■	■			
Wall mounted				■	■	■	■	■	■	■	■	■	■	■																		
Ceiling & floor						■	■	■	■	■	■	■	■	■		■		■	■	■												
Floor standing				■	■	■	■	■	■	■	■	■	■	■																		
Console				■	■	■	■																									



» OUTDOOR UNITS

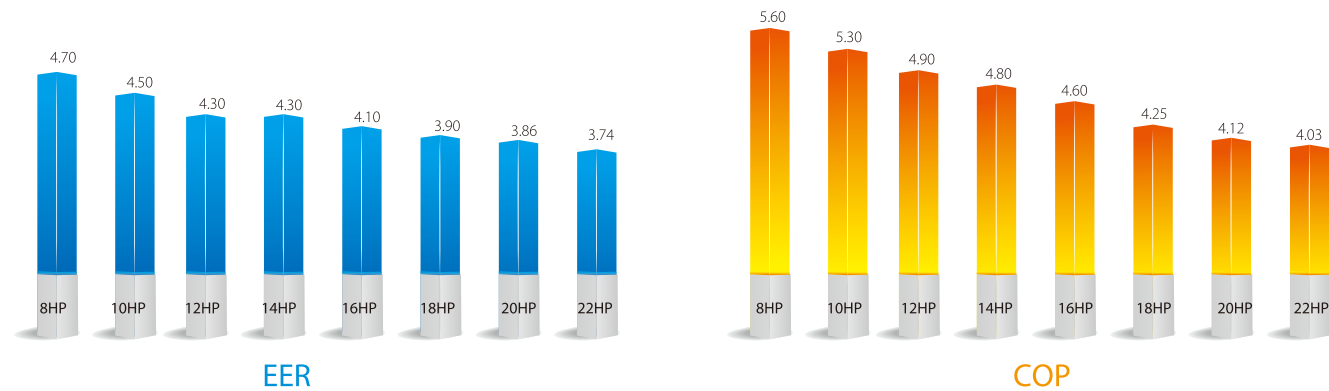
VRF V5 X SYSTEM

- ❖ High Efficiency
- ❖ Wide Application Range
- ❖ High Reliability
- ❖ Enhanced Comfort
- ❖ Easy Installation and Service

High Efficiency

High EER and COP Values >>

V5 X Series achieves the industry's top class energy efficiency in cooling and heating by utilizing all DC inverter compressors, all DC fan motors, and high efficiency heat exchanger. The cooling EER is up to 4.7 and the heating COP is up to 5.6 in the 8HP category.



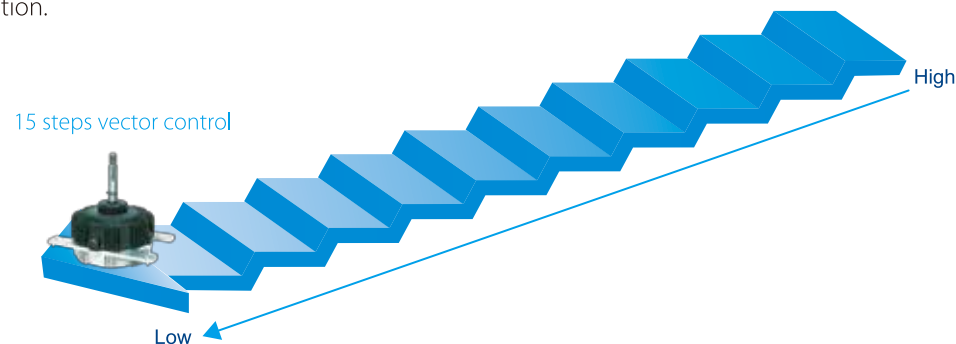
All DC Inverter Compressors >>

The DC inverter compressor adopts innovative design and numerous high performance key parts which can reduce power consumption by 25%.



All DC Fan Motors >>

The system controls the speed of the fan motor according to the system pressure and system load achieving the minimum power consumption.

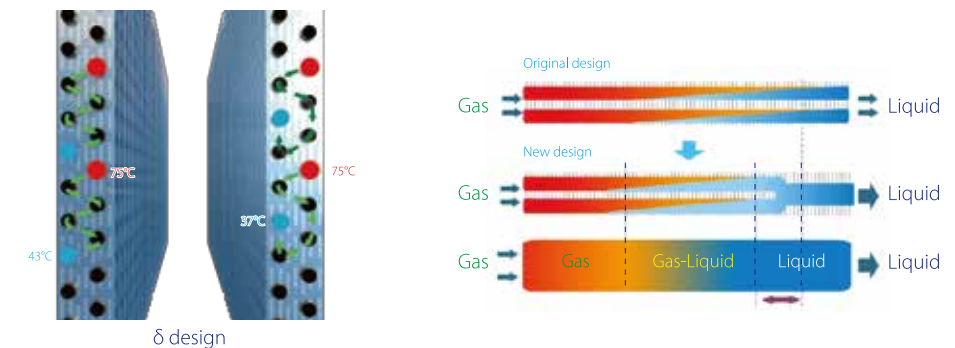


High Efficiency Heat Exchanger >>

Newly designed window type fins enlarge the heat exchange area and decrease air resistance, enhance heat exchange performance and save more energy.

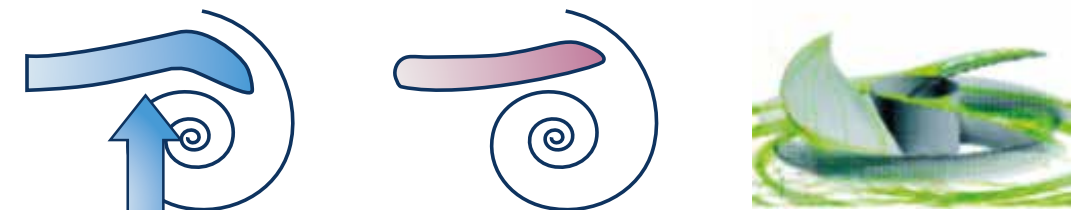
Hydrophilic fins and internally threaded copper pipes optimize heat exchange efficiency.

δ design increases the hot liquid rate in the condenser and improves the heat-exchange efficiency.



Newly Designed Fan >>

A new blade with sharp edges and a slight curve increases the airflow rate and lowers vibration and airflow resistance.

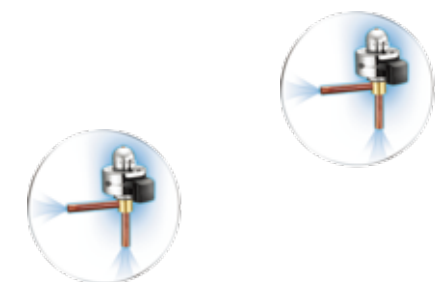


Multi Solenoid Valves Control >>

Multi solenoid valves control technology in one system. All the solenoid valves equipped in the unit ensure precise temperature control, stable and efficient running conditions and improved comfort.

Double EXVs Control >>

Double EXVs in one system, each EXV part achieves 480 Pulse rate to precisely adjust refrigerant flow.



Wide Application Range

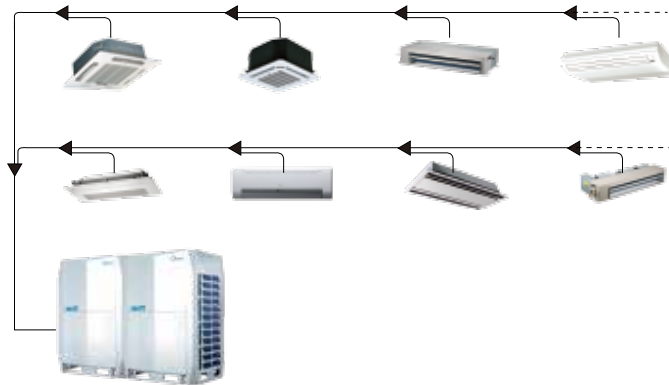
Wide Capacity Range >>

V5X Series has extensive capacity ranging from 8HP to 88HP, meets all customer requirement concerning small to large buildings.



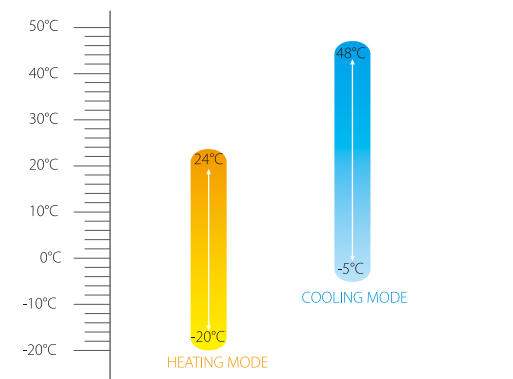
Wide Range of Indoor Units >>

Midea provides 12 types and more than 100 models of VRF indoor units maximum meeting varied customer requirements. It widely applied in market, hospital, office building, hotel, airport, etc..



Wide Operation Range >>

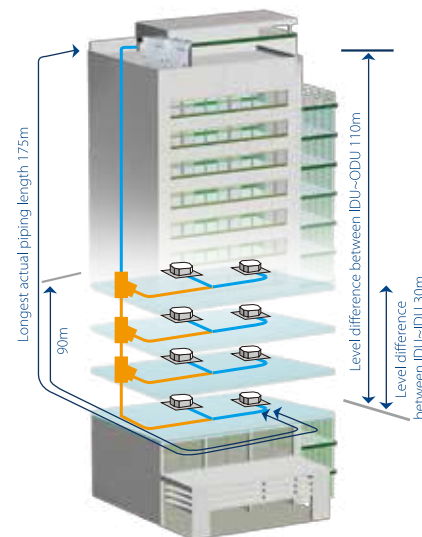
V5X Series operates stably under extreme conditions, ranging from minus 20°C to 48°C.



Long Piping Length >>

Total piping length	1000m
Longest length actual (Equivalent)	175(200)m
Longest length after first branch	90*m
Level difference between indoor and outdoor units - ODU up (down)	90(110)m
Level difference between indoor units	30m

*The longest piping length is 40m standard. It can be extended to 90m. When the length is over 40m, please contact your local Midea dealer for more information and restrictions.



High Reliability

Cycle Duty Operation >>

The cyclical start-up sequence of outdoor units and DC inverter compressors equalized compressor duty and extends operating life.



Backup Operation >>

In a multiple system, if one module is failed, other modules can be backup instead of the failed one for continuing operation.



Precise Oil Control Technology >>

5 stages oil control technology ensures all outdoor unit and compressor oil is always kept at a safe level, completely solving any compressor oil shortage problems.

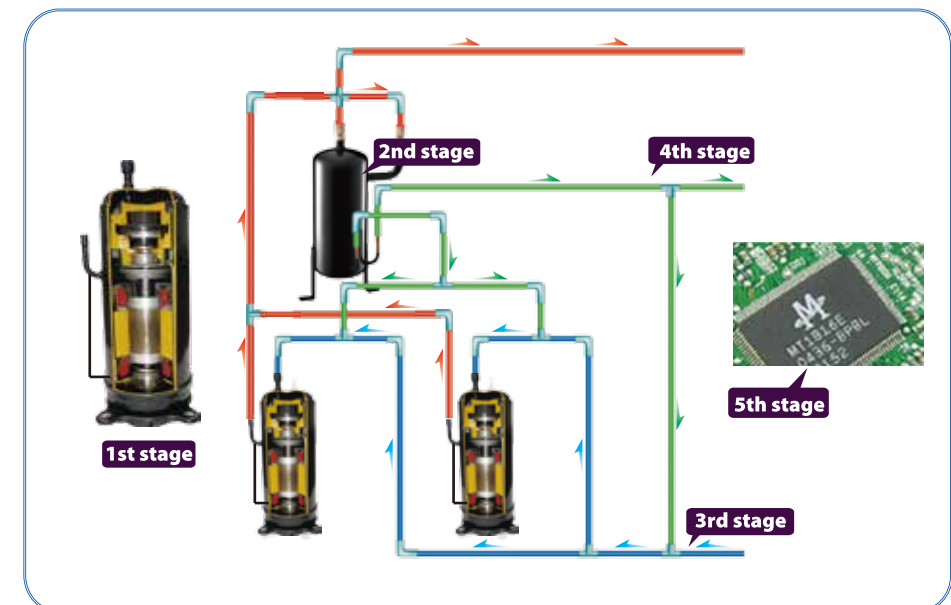
1st stage: Compressor internal oil separation.

2nd stage: High efficiency centrifugal oil separator (separation efficiency up to 99%) ensures oil separated from the discharge gas is returned to the compressors.

3rd stage: Oil balance pipes between compressors ensure even oil distribution to keep compressors running normally.

4th stage: Oil balance pipes among modules ensure even oil distribution among modules.

5th stage: Auto oil return program by monitoring the running time and system status ensures reliable oil return.



Enhanced Comfort

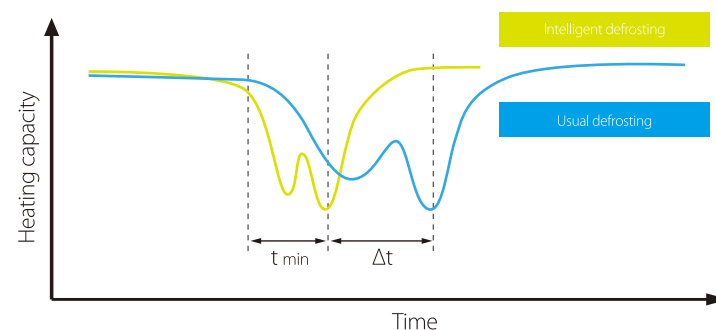
Night Silent Operation Mode >>

Night Silent Mode feature which is easily set on the PCB board allows the unit to be set to various time options during Non-peak and Peak operation time minimizing the units noise output.



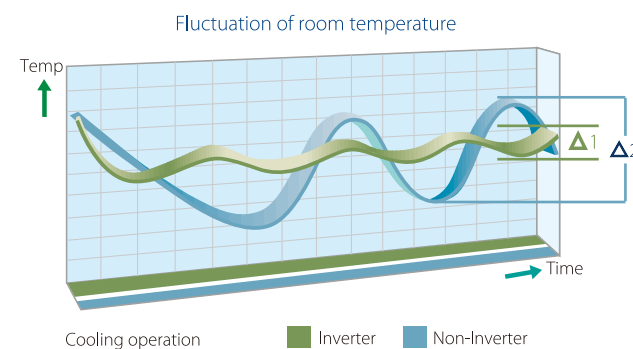
Intelligent Defrosting Technology >>

Intelligent defrosting program will judge the defrosting time according to the system real requirement, reduce heating loss caused by unnecessary defrosting and create more comfort. Defrosting time can be shortened to 4 min. due to the specialized defrosting valve.



Rapid Warm Up And Cool Down Function >>

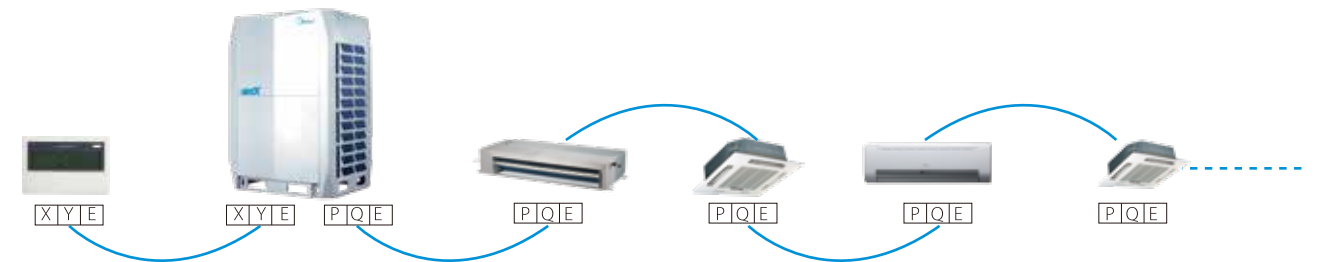
The DC Inverter Compressor system reaches full load rapidly providing less temperature fluctuation and an improved living environment.



Easy Installation and Service

Simple Communication Wiring >>

Centralized controller (CCM03 or CCM30) can be connected from indoor side or outdoor side (XYE terminals) at will. With one set of wires, we can achieve the network communication and system communication, making installation at site more convenient.



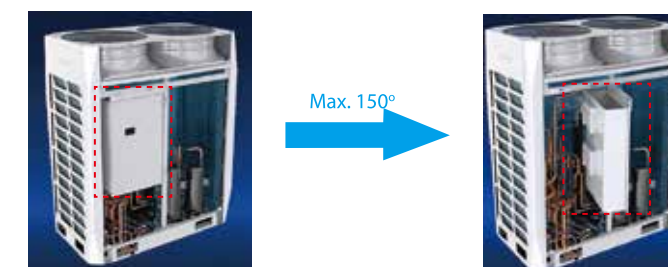
Auto Addressing >>

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



Rotatable Electric Control Box >>

The newly designed rotating control box can rotate on a maximum of 150 degree. It is convenient for the inspection and maintenance of the pipeline system and greatly reduces the dismount time of the electric control box.



Easy Maintenance >>

Inspection window for checking the systems status.

Self-diagnosis function helps service engineers locate faults quickly and easily.

Compressor is located near the door, which simplifies checks and enables valve or compressor parts to be replaced easily.



VRF V5X Series - Heat Pump

380~415V-50(60)Hz / 220V-60Hz



HP			8	10	12	14	
Model	380~415V		MV5-X252W/V2GN1	MV5-X280W/V2GN1	MV5-X335W/V2GN1	MV5-X400W/V2GN1	
Model	220V		MV5-X252W/V2DN1	MV5-X280W/V2DN1	MV5-X335W/V2DN1	MV5-X400W/V2DN1	
Power supply	V/Ph/Hz		380-415/3/50(60) & 220/3/60				
Cooling	Capacity	kW	25.2	28.0	33.5	40.0	
		kBtu/h	86.0	95.5	114.3	136.5	
		Power input	kW	5.36	6.22	7.79	9.30
		EER		4.70	4.50	4.30	4.30
Heating	Capacity	kW	27.0	31.5	37.5	45.0	
		kBtu/h	92.1	107.5	128.0	153.5	
		Power input	kW	4.82	5.94	7.65	9.38
		COP		5.60	5.30	4.90	4.80
Connectable indoor unit	Total capacity		50~130% of outdoor unit capacity				
Compressor	Max. quantity		13	16	20	23	
	Type		DC inverter				
Fan motor	Quantity		1	1	1	2	
	Type		DC motor				
	Quantity		1	1	1	2	
	Static pressure		Pa(in. W.G.)	0-20(0-0.08) (default)			
Refrigerant			20-60(0.08-0.24) (customized)				
	Type		R410A				
	Factory charging		kg(lbs.)	9(20)	11(24)	13(29)	
	Pipe connections	Liquid pipe		mm(in.)	Φ12.7(Φ1/2)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)
Gas pipe		mm(in.)	Φ25.4(Φ1)	Φ28.6(Φ1-1/8)	Φ31.8(Φ1-1/4)		
Oil balance pipe		mm(in.)	Φ8(Φ5/16)				
Air flow rate		m³/h	12000	12000	14000		
Sound pressure level	dB(A)		58	59	60	62	
Net dimension (W×H×D)	mm		990×1635×790				
	inch		39×64-3/8×31-1/8				
Packing size (W×H×D)	mm		1055×1805×855				
	inch		41-1/2×71-1/16×33-5/8				
Net weight	kg(lbs.)		219(483)	219(483)	237(523)	297(655)	
Gross weight	kg(lbs.)		234(516)	234(516)	252(556)	315(695)	
Operating temperature range	°C(°F)		Cooling: -5-48(23~118.4); Heating: -20-24(-4~75.2)				



HP			16	18	20	22
Model	380~415V		MV5-X450W/V2GN1	MV5-X500W/V2GN1	MV5-X560W/V2GN1	MV5-X615W/V2GN1
Model	220V		MV5-X450W/V2DN1	MV5-X500W/V2DN1	MV5-X560W/V2DN1	MV5-X615W/V2DN1
Power supply		V/Ph/Hz	380-415/3/50(60) & 220/3/60			
Cooling	Capacity	kW	45.0	50.0	56.0	61.5
		kBtu/h	153.5	170.6	191.1	209.8
	Power input	kW	10.98	12.82	14.51	16.44
	EER		4.10	3.90	3.86	3.74
Heating	Capacity	kW	50.0	56.0	63.0	69.0
		kBtu/h	170.6	191.1	214.9	235.4
	Power input	kW	10.87	13.18	15.29	17.12
	COP		4.60	4.25	4.12	4.03
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	26	29	33	36	
Compressor	Type	DC inverter				
	Quantity	2				
Fan motor	Type	DC motor				
	Quantity	2				
	Static pressure	Pa(in. W.G.)	0-20(0-0.08) (default)			
		Pa(in. W.G.)	20-60(0.08-0.24) (customized)			
Refrigerant	Type	R410A				
	Factory charging	kg(lbs.)	13(29)	13(29)	16(35)	16(35)
Pipe connections	Liquid pipe	mm(in.)	Φ15.9(Φ5/8)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)
	Gas pipe	mm(in.)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)
	Oil balance pipe	mm(in.)	Φ8(Φ5/16)			
Air flow rate	m³/h		14000	16000	16000	16000
Sound pressure level	dB(A)		62	63	63	63
Net dimension (W×H×D)		mm	1340×1635×790			
		inch	52-3/4×64-3/8×31-1/8			
Packing size (W×H×D)		mm	1405×1805×855			
		inch	55-3/8×71-1/16×33-5/8			
Net weight	kg(lbs.)		297(655)	305(673)	340(750)	340(750)
Gross weight	kg(lbs.)		315(695)	323(712)	358(790)	358(790)
Operating temperature range		°C(°F)	Cooling: -5-48(23~118.4); Heating: -20-24(-4~75.2)			

Notes:

Capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.

Piping length: Interconnecting piping length is 7.5m, level difference is zero.

Connection piping diameter of single-unit is the stop valve diameter of the unit.

Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, is case of the total equivalent liquid length is less than 90m. If the total

equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

VRF V5X Series - Heat Pump

380~415V-50(60)Hz / 220V-60Hz



HP			24	26	28	30	32	34
Model	380~415V		MV5-X670W/V2GN1	MV5-X730W/V2GN1	MV5-X780W/V2GN1	MV5-X840W/V2GN1	MV5-X895W/V2GN1	MV5-X950W/V2GN1
Model	220V		MV5-X670W/V2DN1	MV5-X730W/V2DN1	MV5-X780W/V2DN1	MV5-X840W/V2DN1	MV5-X895W/V2DN1	MV5-X950W/V2DN1
Combined type			12HPx2	10HP+16HP	10HP+18HP	10HP+20HP	10HP+22HP	12HP+22HP
Power supply		V/Ph/Hz	380-415/3/50(60) & 220/3/60					
Cooling	Capacity	kW	67.0	73.0	78.0	84.0	89.5	95.0
		kBtu/h	228.6	249.0	266.1	286.6	305.3	324.1
	Power input	kW	15.58	17.20	19.04	20.73	22.67	24.23
	EER		4.30	4.24	4.10	4.05	3.95	3.92
Heating	Capacity	kW	75.0	81.5	87.5	94.5	100.5	106.5
		kBtu/h	256.0	278.1	298.6	322.4	342.9	363.4
	Power input	kW	15.31	16.81	19.12	21.23	23.06	24.77
	COP		4.90	4.85	4.58	4.45	4.36	4.30
Connectable indoor unit	Total capacity		50~130% of outdoor unit capacity					
Compressor	Max. quantity		39	43	46	50	53	56
	Type		DC inverter					
Fan motor	Quantity		2	3	3	3	3	3
	Type		DC motor					
Refrigerant	Quantity		2	3	3	3	3	3
	Type		R410A					
Pipe connections	Factory charging	kg(lbs.)	11x2(24x2)	9+13(20+29)	9+13(20+29)	9+16(20+35)	9+16(20+35)	11+16(24+35)
	Liquid pipe	mm(in.)	Φ15.9(Φ5/8)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)
	Gas pipe	mm(in.)	Φ28.6(Φ1-1/8)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)
	Oil balance pipe	mm(in.)	Φ8(Φ5/16)					
Air flow rate	m³/h		24000	26000	28000	28000	28000	28000
Sound pressure level	dB(A)		64	65	65	65	65	65
Net dimension (WxHxD)		mm	990x1635x790x1340x1635x790					
Packing size (WxHxD)		inch	39x64-3/8x31-1/8+52-3/4x64-3/8x31-1/8					
		mm	1055x1805x855x1405x1805x855					
		inch	41-1/2x71-1/16x33-5/8+55-3/8x71-1/16x33-5/8					
Net weight	kg(lbs.)		237(523)x2	219+297(483+655)	219+305(483+673)	219+340(483+750)	219+340(483+750)	237+340(523+750)
Gross weight	kg(lbs.)		252(556)x2	234+315(516+695)	234+323(516+712)	234+358(516+790)	234+358(516+790)	252+358(556+790)
Operating temperature range		°C(°F)	Cooling: -5-48(23~118.4); Heating: -20-24(-4~75.2)					



HP			36	38	40	42	44	46
Model	380~415V		MV5-X1000W/V2GN1	MV5-X1065W/V2GN1	MV5-X1115W/V2GN1	MV5-X1175W/V2GN1	MV5-X1230W/V2GN1	MV5-X1285W/V2GN1
Model	220V		MV5-X1000W/V2DN1	MV5-X1065W/V2DN1	MV5-X1115W/V2DN1	MV5-X1175W/V2DN1	MV5-X1230W/V2DN1	MV5-X1285W/V2DN1
Combined type			18HP×2	16HP+22HP	18HP+22HP	20HP+22HP	22HP×2	12HP×2+22HP
Power supply			V/Ph/Hz					
Cooling	Capacity	kW	100.0	106.5	111.5		123.0	128.5
		kBtu/h	341.2	363.3	380.4		419.6	438.4
	Power input	kW	25.64	27.42	29.26		32.89	32.03
		EER		3.90	3.88	3.81		3.74
Heating	Capacity	kW	112.0	119.0	125.0	132.0	138.0	144.0
		kBtu/h	382.2	406.0	426.5	450.3	470.8	491.4
	Power input	kW	26.35	27.99	30.30	32.41	34.24	32.43
		COP		4.25	4.25	4.13	4.07	4.03
Total capacity			50~130% of outdoor unit capacity					
Connectable indoor unit	Max. quantity		59	63	64	64	64	64
Compressor	Type		DC inverter					
	Quantity		4	4	4	4	4	4
Fan motor	Type		DC motor					
	Quantity		4	4	4	4	4	4
Refrigerant	Type		R410A					
	Factory charging	kg(lbs.)	13×2(29×2)	13+16(29+35)	13+16(29+35)	16×2(35×2)	16×2(35×2)	11×2+16(24×2+35)
	Liquid pipe	mm(in.)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)
	Gas pipe	mm(in.)	Φ38.1(Φ1-1/2)	Φ38.1(Φ1-1/2)	Φ38.1(Φ1-1/2)	Φ38.1(Φ1-1/2)	Φ38.1(Φ1-1/2)	Φ38.1(Φ1-1/2)
Pipe connections	Oil balance pipe	mm(in.)	Φ8(Φ5/16)					
			32000	30000	32000	32000	32000	40000
Air flow rate	m³/h		32000	30000	32000	32000	32000	40000
Sound pressure level	dB(A)		66	66	66	66	66	66
Net dimension (W×H×D)	mm		(1340×1635×790)×2					
	inch		(52-3/4×64-3/8×31-1/8)×2					
Packing size (W×H×D)	mm		(1405×1805×855)×2					
	inch		(55-3/8×71-1/16×33-5/8)×2					
Net weight	kg(lbs.)		305×2(673×2)	297+340(655+750)	305+340(673+750)	340×2(750×2)	340×2(750×2)	237×2+340(523×2+750)
Gross weight	kg(lbs.)		323×2(712×2)	315+358(695+790)	323+358(712+790)	358×2(790×2)	358×2(790×2)	252×2+358(556×2+790)
Operating temperature range			Cooling: -5-48(23~118.4); Heating: -20-24(-4~75.2)					

Notes:

Capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.

Piping length: Interconnecting piping length is 7.5m, level difference is zero.

Connection piping diameter of single-unit is the stop valve diameter of the unit.

Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, is case of the total equivalent liquid length is less than 90m. If the total

VRF V5X Series - Heat Pump

380~415V-50(60)Hz / 220V-60Hz



HP			48	50	52	54	56
Model	380~415V		MV5-X1345W/V2GN1	MV5-X1395W/V2GN1	MV5-X1455W/V2GN1	MV5-X1510W/V2GN1	MV5-X1565W/V2GN1
Model	220V		MV5-X1345W/V2DN1	MV5-X1395W/V2DN1	MV5-X1455W/V2DN1	MV5-X1510W/V2DN1	MV5-X1565W/V2DN1
Combined type			10HP+16HP+22HP	10HP+18HP+22HP	10HP+20HP+22HP	10HP+22HPx2	12HP+22HPx2
Power supply	V/Ph/Hz		380-415/3/50(60) & 220/3/60				
Cooling	Capacity	kW	134.5	139.5	145.5	151.0	156.5
		kBtu/h	458.8	475.9	496.4	515.1	533.9
	Power input	kW	33.64	35.49	37.17	39.11	40.68
	EER		4.00	3.93	3.91	3.86	3.82
Heating	Capacity	kW	150.5	156.5	163.5	169.5	175.5
		kBtu/h	513.5	534.0	557.8	578.3	598.8
	Power input	kW	33.93	36.24	38.36	40.19	41.90
	COP		4.44	4.32	4.26	4.22	4.19
Connectable indoor unit	Total capacity		50~130% of outdoor unit capacity				
Compressor	Max. quantity		64	64	64	64	64
	Type		DC inverter				
Fan motor	Quantity		5	5	5	5	5
	Type		DC motor				
Refrigerant	Quantity		5	5	5	5	5
	Type		R410A				
Pipe connections	Factory charging	kg(lbs.)	9+13+16(20+29+35)	9+13+16(20+29+35)	9+16x2(20+35x2)	9+16x2(20+35x2)	11+16x2(24+35x2)
	Liquid pipe	mm(in.)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)	Φ22.2(Φ7/8)	Φ22.2(Φ7/8)	Φ22.2(Φ7/8)
	Gas pipe	mm(in.)	Φ38.1(Φ1-1/2)	Φ38.1(Φ1-1/2)	Φ41.3(Φ1-5/8)	Φ41.3(Φ1-5/8)	Φ41.3(Φ1-5/8)
	Oil balance pipe	mm(in.)			Φ8(Φ5/16)		
Air flow rate	m³/h		42000	44000	44000	44000	44000
Sound pressure level	dB(A)		67	67	67	67	67
Net dimension (WxHxD)	mm		990×1635×790+(1340×1635×790)×2				
	inch		39×64-3/8×31-1/8+(52-3/4×64-3/8×31-1/8)×2				
	mm		1055×1805×855+(1405×1805×855)×2				
	inch		41-1/2×71-1/16×33-5/8+(55-3/8×71-1/16×33-5/8)×2				
Packing size (WxHxD)							
Net weight	kg(lbs.)		219+297+340(483+655+750)	219+305+340(483+673+750)	219+340x2(483+750x2)	219+340x2(483+750x2)	237+340x2(523+750x2)
Gross weight	kg(lbs.)		234+315+358(516+695+790)	234+323+358(516+712+790)	234+358x2(516+790x2)	234+358x2(516+790x2)	252+358x2(556+790x2)
Operating temperature range	°C(°F)		Cooling: -5~48(23~118.4); Heating: -20~24(-4~75.2)				



HP			58	60	62	64	66	68
Model	380~415V		MV5-X1615W/V2GN1	MV5-X1680W/V2GN1	MV5-X1730W/V2GN1	MV5-X1790W/V2GN1	MV5-X1845W/V2GN1	MV5-X1900W/V2GN1
Model	220V		MV5-X1615W/V2DN1	MV5-X1680W/V2DN1	MV5-X1730W/V2DN1	MV5-X1790W/V2DN1	MV5-X1845W/V2DN1	MV5-X1900W/V2DN1
Combined type			18HPx2+22HP	16HP+22HPx2	18HP+22HPx2	20HP+22HPx2	22HPx3	12HPx2+22HPx2
Power supply	V/Ph/Hz		380-415/3/50(60) & 220/3/60					
Cooling	Capacity	kW	161.5	168.0	173.0	179.0	184.5	190.0
		kBtu/h	551.0	573.1	590.2	610.7	629.4	648.2
	Power input	kW	42.08	43.86	45.71	47.40	49.33	48.47
	EER		3.84	3.83	3.78	3.74	3.74	3.92
Heating	Capacity	kW	181.0	188.0	194.0	201.0	207.0	213.0
		kBtu/h	617.6	641.4	661.9	685.7	706.2	726.8
	Power input	kW	43.47	45.11	47.42	49.53	51.36	46.13
	COP		4.16	4.17	4.09	4.06	4.03	4.62
Connectable indoor unit	Total capacity		50~130% of outdoor unit capacity					
Compressor	Max. quantity		64	64	64	64	64	64
	Type		DC inverter					
Fan motor	Quantity		6	6	6	6	6	6
	Type		DC motor					
Refrigerant	Quantity		6	6	6	6	6	6
	Type		R410A					
Pipe connections	Factory charging	kg(lbs.)	13x2+16(29x2+35)	13+16x2(29+35x2)	13+16x2(29+35x2)	16x3(35x3)	16x3(35x3)	11x2+16x2(24x2+35x2)
	Liquid pipe	mm(in.)	Φ22.2(Φ7/8)	Φ22.2(Φ7/8)	Φ22.2(Φ7/8)	Φ22.2(Φ7/8)	Φ22.2(Φ7/8)	Φ25.4(Φ1)
	Gas pipe	mm(in.)	Φ41.3(Φ1-5/8)	Φ41.3(Φ1-5/8)	Φ41.3(Φ1-5/8)	Φ41.3(Φ1-5/8)	Φ41.3(Φ1-5/8)	Φ44.5(Φ1-3/4)
	Oil balance pipe	mm(in.)			Φ8(Φ5/16)			
Air flow rate	m³/h		48000	46000	48000	48000	48000	56000
Sound pressure level	dB(A)		68	68	68	68	68	68
Net dimension (WxHxD)	mm		(1340×1635×790)×3					
	inch		(52-3/4×64-3/8×31-1/8)×3					
	mm		(1405×1805×855)×3					
	inch		(55-3/8×71-1/16×33-5/8)×3					
Packing size (WxHxD)								
Net weight	kg(lbs.)		305x2+340(673x2+750)	297+340x2(655+750x2)	305+340x2(673+750x2)	340x3(750x3)	340x3(750x3)	237x2+340x2(523x2+750x2)
Gross weight	kg(lbs.)		323x2+358(712x2+323)	315+358x2(695+790x2)	323+358x2(712+790x2)	358x3(790x3)	358x3(790x3)	252x2+358x2(556x2+790x2)
Operating temperature range	°C(°F)		Cooling: -5~48(23~118.4); Heating: -20~24(-4~75.2)					

Notes:

Capacities are based on the following conditions:

Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.

Piping length: Interconnecting piping length is 7.5m, level difference is zero.

Connection piping diameter of single-unit is the stop valve diameter of the unit.

Connection piping diameter of multi-unit is the main pipe connecting to the first indoor branch joint, is case of the total equivalent liquid length is less than 90m. If the total equivalent liquid length is more than 90m, please refer to technical manual to choose the connection piping diameter.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

VRF V5X Series - Heat Pump

380~415V-50(60)Hz / 220V-60Hz



HP			70	72	74	76	78
Model	380~415V		MV5-X1960W/V2GN1	MV5-X2010W/V2GN1	MV5-X2070W/V2GN1	MV5-X2125W/V2GN1	MV5-X2180W/V2GN1
Model	220V		MV5-X1960W/V2DN1	MV5-X2010W/V2DN1	MV5-X2070W/V2DN1	MV5-X2125W/V2DN1	MV5-X2180W/V2DN1
Combined type			10HP+16HP+22HPx2	10HP+18HP+22HPx2	10HP+20HP+22HPx2	10HP+22HPx3	12HP+22HPx3
Power supply	V/Ph/Hz		380-415/3/50(60) & 220/3/60				
Cooling	Capacity	kW	196.0	201.0	207.0	212.5	218.0
		kBtu/h	668.6	685.7	706.2	724.9	743.7
	Power input	kW	50.09	51.93	53.62	55.55	57.12
	EER		3.91	3.87	3.86	3.83	3.82
Heating	Capacity	kW	219.5	225.5	232.5	238.5	244.5
		kBtu/h	748.9	769.4	793.2	813.7	834.2
	Power input	kW	51.06	53.36	55.48	57.31	59.02
	COP		4.30	4.23	4.19	4.16	4.14
Connectable indoor unit	Total capacity		50~130% of outdoor unit capacity				
Compressor	Max. quantity		64	64	64	64	64
	Type		DC inverter				
Fan motor	Quantity		7	7	7	7	7
	Type		DC motor				
Refrigerant	Quantity		7	7	7	7	7
	Type		R410A				
Pipe connections	Factory charging	kg(lbs.)	9+13+16(20+29+35)	9+13+16x2(20+29+35x2)	9+16x3(20+35x3)	9+16x3(20+35x3)	11+16x3(24+35x3)
	Liquid pipe	mm(in.)	Φ25.4(Φ1)	Φ25.4(Φ1)	Φ25.4(Φ1)	Φ25.4(Φ1)	Φ25.4(Φ1)
	Gas pipe	mm(in.)	Φ44.5(Φ1-3/4)	Φ44.5(Φ1-3/4)	Φ44.5(Φ1-3/4)	Φ44.5(Φ1-3/4)	Φ44.5(Φ1-3/4)
	Oil balance pipe	mm(in.)			Φ8(Φ5/16)		
Air flow rate	m³/h		58000	60000	60000	60000	60000
Sound pressure level	dB(A)		69	69	69	69	69
Net dimension (WxHxD)	mm		(990×1635×790)+(1340×1635×790)×3				
	inch		(39×64-3/8×31-1/8)+(52-3/4×64-3/8×31-1/8)×3				
	mm		(1055×1805×855)+(1405×1805×855)×3				
	inch		(41-1/2×71-1/16×33-5/8)+(55-3/8×71-1/16×33-5/8)×3				
Packing size (WxHxD)							
Net weight	kg(lbs.)		219+297+340(483+655+750)	219+305+340x2(483+673+750x2)	219+340x3(483+750x3)	219+340x3(483+750x3)	237+340x3(523+750x3)
Gross weight	kg(lbs.)		234+315+358(516+695+790)	234+323+358(516+712+790)	234+358x3(516+790x3)	234+358x3(516+790x3)	252+358x3(556+790x3)
Operating temperature range	°C(°F)		Cooling: -5~48(23~118.4); Heating: -20~24(-4~75.2)				



HP			80	82	84	86	88	
Model	380~415V		MV5-X2230W/V2GN1	MV5-X2295W/V2GN1	MV5-X2345W/V2GN1	MV5-X2405W/V2GN1	MV5-X2460W/V2GN1	
Model	220V		MV5-X2230W/V2DN1	MV5-X2295W/V2DN1	MV5-X2345W/V2DN1	MV5-X2405W/V2DN1	MV5-X2460W/V2DN1	
Combined type			18HPx2+22HPx2	16HP+22HPx3	18HP+22HPx3	20HP+22HPx3	22HPx4	
Power supply		V/Ph/Hz	380-415/3/50(60) & 220/3/60					
Cooling	Capacity	kW	223.0	229.5	234.5	240.5	246.0	
		kBtu/h	760.8	782.9	800.0	820.5	839.2	
	Power input	kW	58.53	60.31	62.15	63.84	65.78	
	EER		3.81	3.81	3.77	3.77	3.74	
Heating	Capacity	kW	250.0	257.0	263.0	270.0	276.0	
		kBtu/h	853.0	876.8	897.3	921.1	941.6	
	Power input	kW	60.60	62.23	64.54	66.66	68.49	
	COP		4.13	4.13	4.07	4.05	4.03	
Connectable indoor unit	Total capacity		50~130% of outdoor unit capacity					
	Max. quantity		64	64	64	64	64	
Compressor	Type		DC inverter					
	Quantity		8	8	8	8	8	
Fan motor	Type		DC motor					
	Quantity		8	8	8	8	8	
Refrigerant	Type		R410A					
	Factory charging		kg(lbs.)	13x2+16x2(29x2+35x2)	13+16x3(29+35x3)	13+16x3(29+35x3)	16x4(35x4)	16x4(35x4)
Pipe connections	Liquid pipe	mm(in.)	Φ25.4(Φ1)	Φ25.4(Φ1)	Φ25.4(Φ1)	Φ25.4(Φ1)	Φ25.4(Φ1)	
	Gas pipe	mm(in.)	Φ44.5(Φ1-3/4)	Φ44.5(Φ1-3/4)	Φ44.5(Φ1-3/4)	Φ44.5(Φ1-3/4)	Φ44.5(Φ1-3/4)	
	Oil balance pipe		mm(in.)	Φ8(Φ5/16)				
Air flow rate	m³/h		64000	62000	64000	64000	64000	
Sound pressure level	dB(A)		70	70	70	70	70	
Net dimension (WxHxD)	mm		(1340x1635x790)x4					
	inch		(52-3/4x64-3/8x31-1/8)x4					
	mm		(1405x1805x855)x4					
Packing size (WxHxD)	inch		(55-3/8x71-1/16x33-5/8)x4					
Net weight	kg(lbs.)		305x2+340x2(673x2+750x2)	297+340x3(655+750x3)	305+340x3(673+750x3)	340x4(750x4)	340x4(750x4)	
Gross weight	kg(lbs.)		323x2+358x2(712x2+323x2)	315+358x3(695+790x3)	323+358x3(712+790x3)	358x4(790x4)	358x4(790x4)	
Operating temperature range			Cooling: -5~48(23~118.4); Heating: -20~24(-4~75.2)					



» INDOOR UNITS

One-way Cassette
Two-way Cassette
Compact Four-way Cassette
Four-way Cassette
Low Static Pressure Duct
Medium Static Pressure Duct (A5 type)

High Static Pressure Duct
Fresh Air Processing Unit
Wall-mounted
Ceiling & Floor
Floor Standing
Console

Cassette Series



One-way Cassette



Two-way Cassette



Compact Four-way Cassette



Four-way Cassette



One-way Cassette

Min. 153mm Thickness >>

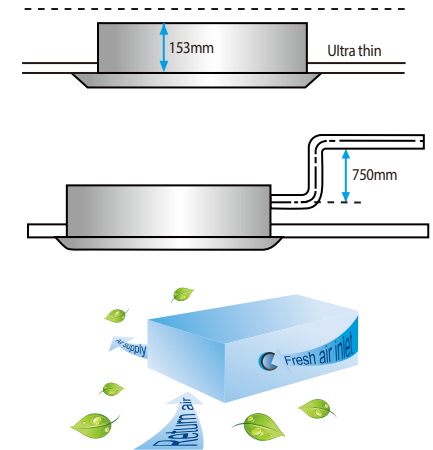
Compact design, ultra slim body with a minimum thickness of 153mm for models 18-36 and 189mm for models 45-71, especially suitable for narrow ceiling, such as in lobbies and small meeting rooms.

High-lift Pump >>

Standard built-in drain pump with 750mm pumphead.

Fresh Air, Improved Air Quality >>

Reserved fresh air intake port for high quality air creates a comfortable and healthy environment (for models 45-71).



50Hz Specification >>

Model			MDV-D18Q1/N1-D	MDV-D22Q1/N1-D	MDV-D28Q1/N1-D	MDV-D36Q1/N1-D	MDV-D45Q1/N1-D	MDV-D56Q1/N1-D	MDV-D71Q1/N1-D
Power supply			1-phase,220-240V,50Hz						
Capacity	Cooling	kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.2	2.6	3.2	4.0	5.0	6.3	8.0
Power input	Cooling	W	41	41	41	41	48	48	60
	Heating	W	41	41	41	41	43	44	55
Airflow rate(H/M/L)		m³/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)		dB(A)	37/34/30	38/34/30	39/37/34	40/38/34	41/39/35	42/40/36	44/41/37
Main body	Net dim.(WxHxD)	mm	1054x153x425	1054x153x425	1054x153x425	1054x153x425	1275x189x450	1275x189x450	1275x189x450
	Packing dim.(WxHxD)	mm	1155x245x490	1155x245x490	1155x245x490	1155x245x490	1370x295x505	1370x295x505	1370x295x505
	Net/gross weight	kg	12.5/16	12.5/16	13/16.5	13/16.5	18.5/22.8	18.8/23.1	19.5/23.8
Panel	Net dim.(WxHxD)	mm	1180x25x465	1180x25x465	1180x25x465	1180x25x465	1350x25x505	1350x25x505	1350x25x505
	Packing dim.(WxHxD)	mm	1232x107x517	1232x107x517	1232x107x517	1232x107x517	1410x95x560	1410x95x560	1410x95x560
	Net/gross weight	kg	3.5/5.2	3.5/5.2	3.5/5.2	3.5/5.2	4/5.4	4/5.4	4/5.4
Piping connections	Liquid/gas pipe	mm	Φ6.35/Ø12.7	Φ6.35/Ø12.7	Φ6.35/Ø12.7	Φ6.35/Ø12.7	Φ6.35/Ø12.7	Φ9.53/Ø15.9	Φ9.53/Ø15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wireless remote controller RM05/BG(T)E-A						

60Hz Specification >>

Model			MDV-D18Q1/AN1-D	MDV-D22Q1/AN1-D	MDV-D28Q1/AN1-D	MDV-D36Q1/AN1-D	MDV-D45Q1/AN1-D	MDV-D56Q1/AN1-D	MDV-D71Q1/AN1-D
Power supply			1-phase,208-230V,60Hz						
Cooling capacity		kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	6100	7500	9600	12300	15400	19100	24200
Heating capacity		kW	2.2	2.6	3.2	4.0	5.0	6.3	8.0
		Btu/h	7500	8900	10900	13600	17100	21500	27300
Power input	Cooling	W	41	41	41	41	54	60	75
	Heating	W	41	41	41	41	44	50	65
Airflow rate(H/M/L)		m³/h	523/404/275	523/404/275	573/456/315	573/456/315	693/600/476	792/688/549	933/749/592
		CFM	308/238/162	308/238/162	337/268/185	337/268/185	408/353/280	466/405/323	549/441/349
Sound pressure level(H/M/L)		dB(A)	37/34/30	38/34/30	39/37/34	40/38/34	41/39/35	42/40/36	44/41/37
Main body	Net dim.(W×H×D)	mm(in.)	1054×153×425(41-1/2×6-1/32×16-47/64)				1275×189×450(50-13/64×7-7/16×17-23/32)		
	Packing dim.(W×H×D)	mm(in.)	1155×245×490(45-15/32×9-9/16×19-19/64)				1370×295×505(53-15/16×11-39/64×19-7/8)		
	Net/gross weight	kg(lbs.)	12.5/16(27.8/35.3)				18.5/22.8(40.8/50.3)		
Panel	Net dim.(W×H×D)	mm(in.)	1180×25×465(46-29/64×63/64×18-5/16)				1350×25×505(53-5/32×63/64×19-7/8)		
	Packing dim.(W×H×D)	mm(in.)	1232×107×517(48-1/2×4-7/32×20-23/64)				1410×95×560(55-33/64×3-47/64×22-3/64)		
	Net/gross weight	kg(lbs.)	3.5/5.2(7.7/11.5)				4/5.4(8.8/11.9)		
Piping connections	Liquid/gas pipe	mm(in.)	Φ6.35/Φ12.7(Φ1/4/Φ1/2)					Φ9.53/Φ15.9(Φ3/8/Φ5/8)	
	Drain pipe	mm(in.)	Φ25(OD 63/64)						
Standard controller			Wireless remote controller RM05/BG(T)E-A						

Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C(44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Sound Level is measured 1.4m(4.59ft.) below the unit.

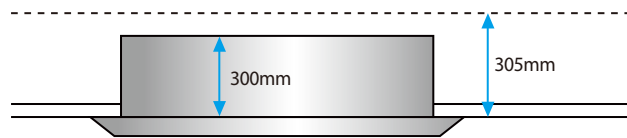
Two-way Cassette

Quiet Operation >>

Optimized airflow duct with low resistance greatly reduces noise, down to a minimum of 24dB(A).

Stylish Design and Slim Body >>

Thanks to the stylish appearance and slim body, the unit suits any room's decor and ambience. At only 300mm high, the unit requires only a small space in suspended ceilings. Installation has no height limitations, which means overall design features much more flexibility.



50Hz Specification

Model			MDV-D22Q2/N1	MDV-D28Q2/N1	MDV-D36Q2/N1	MDV-D45Q2/N1	MDV-D56Q2/N1	MDV-D71Q2/N1
Power supply			1-phase,220-240V,50Hz					
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.6	3.2	4.0	5.0	6.3	8.0
Power input	Cooling	W	57	57	60	92	108	154
	Heating	W	57	57	60	92	108	154
Airflow rate(H/M/L)		m³/h	654/530/410	654/530/410	725/591/458	850/670/550	980/800/670	1,200/1,000/770
Sound pressure level(H/M/L)		dB(A)	33/29/24	36/32/29	36/32/29	39/35/30	39/35/30	44/40/34
Main body	Net dim.(WxHxD)	mm	1172x299x591	1172x299x591	1172x299x591	1172x299x591	1172x299x591	1172x299x591
	Packing dim.(WxHxD)	mm	1355x400x675	1355x400x675	1355x400x675	1355x400x675	1355x400x675	1355x400x675
	Net/gross weight	kg	34/42.5	34/42.5	34/42.5	36/44.5	36/44.5	36/44.5
Panel	Net dim.(WxHxD)	mm	1430x53x680	1430x53x680	1430x53x680	1430x53x680	1430x53x680	1430x53x680
	Packing dim.(WxHxD)	mm	1525x130x765	1525x130x765	1525x130x765	1525x130x765	1525x130x765	1525x130x765
	Net/gross weight	kg	10.5/15	10.5/15	10.5/15	10.5/15	10.5/15	10.5/15
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32
Standard controller			Wireless remote controller RM05/BG(T)E-A					

60Hz Specification

Model			MDV-D22Q2/VN1	MDV-D28Q2/VN1	MDV-D36Q2/VN1	MDV-D45Q2/VN1	MDV-D56Q2/VN1	MDV-D71Q2/VN1
Power supply			1-phase,208-230V,60Hz					
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	7500	9600	12300	15400	19100	24200
Heating capacity		kW	2.6	3.2	4.0	5.0	6.3	8.0
		Btu/h	8900	10900	13600	17100	21500	27300
Power input	Cooling	W	78	78	83	115	133	205
	Heating	W	78	78	83	115	133	205
Airflow rate(H/M/L)		m³/h	674/509/381	674/509/381	740/577/435	878/689/561	941/776/654	1236/1110/864
		CFM	397/300/224	397/300/224	436/340/256	517/406/330	554/457/385	727/653/509
Sound pressure level(H/M/L)		dB(A)	33/29/24	36/32/29	36/32/29	39/35/30	39/35/30	44/40/34
Main body	Net dim.(W×H×D)	mm(in.)	1172×299×591(46-9/32×11-49/64×23-17/64)					
	Packing dim.(W×H×D)	mm(in.)	1355×400×675(53-11/32×15-3/4×26-37/64)					
	Net/gross weight	kg(lbs.)	34/42.5(75/94)					
Panel	Net dim.(W×H×D)	mm(in.)	1430×53×680(56-19/64×2-3/32×26-49/64)					
	Packing dim.(W×H×D)	mm(in.)	1525×130×765(60-3/64×5-1/8×30-1/8)					
	Net/gross weight	kg(lbs.)	10.5/15(23/33)					
Piping connections	Liquid/gas pipe	mm(in.)	Φ6.35/Φ12.7(Φ1/4/Φ1/2)				Φ9.53/Φ15.9(Φ3/8/Φ5/8)	
	Drain pipe	mm(in.)	Φ32(OD 1-17/64)					
Standard controller			Wireless remote controller RM05/BG(T)E-A					

Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C(44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Sound Level is measured 1.4m(4.59ft.) below the unit.

High-lift Pump >>

Standard built-in drain pump with 750mm pump head (higher pump head can be customized).

High Airflow >>

High airflow for high ceiling application guarantees comfort in large spaces. Guarantees even airflow and temperature throughout the room.



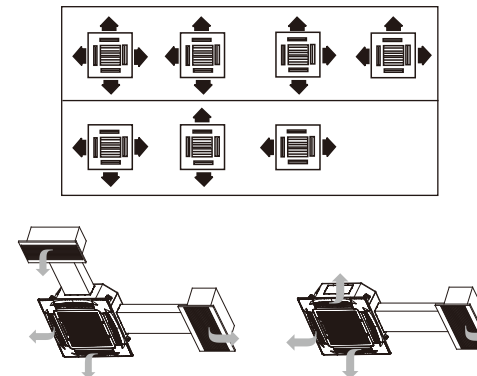
Four-way Cassette

Various Selections >>

Three selections: Compact Four-way Cassette, Four-way Cassette& Four-way Cassette Silent Type.

Flexible Air Distribution Type >>

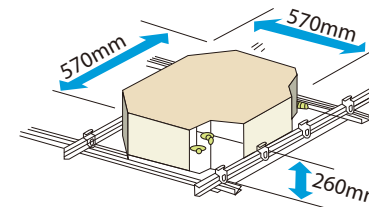
7 discharge patterns in 2 to 4 directions can be selected to suit the requirements of the installation site or the shape of the room.



Duct connection is possible

Compact Design, Easy Installation >>

For Compact Four-way Cassette: Extremely compact casing suits any room's decor and requires little space for installation on a low ceiling. Due to compact body and light weight, all models can be installed without a hoist.



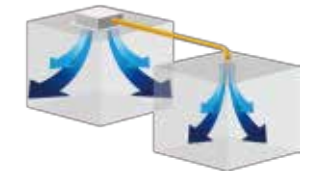
360° Airflow Outlet >>

For Compact Four-way Cassette: 360° air outlet provides strong air flow circulation to cool or heat every corner of a room and evenly control temperatures.



Sub Duct >>

Sub duct enables you to use the same air conditioner unit to cool an additional smaller space nearby.



Fresh Air Intake >>

Fresh air can enter through the cassette unit so you can enjoy even fresher air in a room.



Easy Troubleshooting >>

For Four-way Cassette& Four-way Cassette Silent Type: By adding digital tube on the display board, Error Codes can be displayed directly for troubleshooting.



Lower Operating Noise >>

For Four-way Cassette Silent Type: The newly designed fan blade, air deflector and the built-in throttling part reduce noise greatly.



High-lift Drain Pump >>

For Compact Four-way Cassette: Drain pump with a 500mm pump head is fitted as standard; maximum 600mm pump head is available.

For Four-way Cassette& Four-way Cassette Silent Type: Drain pump can pump condenser water up to 750mm high, which simplifies installation of the drain piping system.

Compact Four-way Cassette

50Hz Specification

Model			MDV-D22Q4/N1-A3	MDV-D28Q4/N1-A3	MDV-D36Q4/N1-A3	MDV-D45Q4/N1-A3
Power supply			1-phase,220-240V,50Hz			
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
	Heating	kW	2.4	3.2	4.0	5.0
Power input	Cooling	W	50	50	56	56
	Heating	W	50	50	56	56
Airflow rate(H/M/L)		m³/h	414/313/238	414/313/238	521/409/314	521/409/314
Sound pressure level(H/M/L)		dB(A)	35.8/33.4/23.4	35.8/33.4/23.4	41.5/35.6/28.8	41.5/35.6/28.8
Main body	Net dim.(W×H×D)	mm	570×260×570	570×260×570	570×260×570	570×260×570
	Packing dim.(W×H×D)	mm	675×285×675	675×285×675	675×285×675	675×285×675
	Net/gross weight	kg	16/20	16/20	18/22	18/22
Panel	Net dim.(W×H×D)	mm	647×50×647	647×50×647	647×50×647	647×50×647
	Packing dim.(W×H×D)	mm	715×123×715	715×123×715	715×123×715	715×123×715
	Net/gross weight	kg	2.4/4.5	2.4/4.5	2.4/4.5	2.4/4.5
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wireless remote controller RM05/BG(T)E-A			

60Hz Specification

Model			MDV-D22Q4/VN1-A3	MDV-D28Q4/VN1-A3	MDV-D36Q4/VN1-A3	MDV-D45Q4/VN1-A3
Power supply			1-phase,208-230V,60Hz			
Cooling capacity		kW	2.2	2.8	3.6	4.5
		Btu/h	7500	9600	12300	15400
Heating capacity		kW	2.4	3.2	4.0	5.0
		Btu/h	8200	10900	13600	17100
Power input	Cooling	W	51	52	58	58
	Heating	W	43	44	50	51
Airflow rate(H/M/L)		m³/h	397/292/215	408/310/231	496/359/263	496/359/263
		CFM	234/172/127	240/182/136	292/211/155	292/211/155
Sound pressure level(H/M/L)		dB(A)	35.8/33.4/23.4	35.8/33.4/23.4	41.5/35.6/28.8	41.5/35.6/28.8
Main body	Net dim.(W×H×D)	mm(in.)	570×260×570(22-7/16×10-1/5/64×22-7/16)			
	Packing dim.(W×H×D)	mm(in.)	675×285×675(26-9/16×11-7/32×26-9/16)			
	Net/gross weight	kg(lbs.)	16/20(35.3/44.1)		18/22(39.7/48.5)	
Panel	Net dim.(W×H×D)	mm(in.)	647×50×647(25-15/32×1-31/32×25-15/2)			
	Packing dim.(W×H×D)	mm(in.)	715×123×715(28-5/32×4-27/32×28-5/32)			
	Net/gross weight	kg(lbs.)	3/5(6.6/11)			
Piping connections	Liquid/gas pipe	mm(in.)	Φ6.35/Φ12.7(Φ1/4/Φ1/2)			
	Drain pipe	mm(in.)	Φ25(OD 63/64)			
Standard controller			Wireless remote controller RM05/BG(T)E-A			

Four-way Cassette

50Hz Specification

Model			MDV-D28Q4/N1-D	MDV-D36Q4/N1-D	MDV-D45Q4/N1-D	MDV-D56Q4/N1-D	MDV-D71Q4/N1-D
Power supply			1-phase,220-240V,50Hz				
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1
	Heating	kW	3.2	4.0	5.0	6.3	8.0
Power input	Cooling	W	65	65	75	75	82
	Heating	W	65	65	75	75	82
Airflow rate(H/M/L)		m³/h	847/766/640	847/766/640	864/755/658	864/755/658	1,157/955/749
Sound pressure level(H/M/L)		dB(A)	42/38/35	42/38/35	42/38/35	42/38/35	45/42/39
Main body	Net dim.(W×H×D)	mm	904×230×840	904×230×840	904×230×840	904×230×840	904×230×840
	Packing dim.(W×H×D)	mm	955×260×955	955×260×955	955×260×955	955×260×955	955×260×955
	Net/gross weight	kg	24/28	24/28	26/30	26/30	26/30
Panel	Net dim.(W×H×D)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950
	Packing dim.(W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035
	Net/gross weight	kg	6/9	6/9	6/9	6/9	6/9
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32
Standard controller			Wireless remote controller RM05/BG(T)E-A				

Model			MDV-D80Q4/N1-D	MDV-D90Q4/N1-D	MDV-D100Q4/N1-D	MDV-D112Q4/N1-D	MDV-D140Q4/N1-D
Power supply			1-phase,220-240V,50Hz				
Capacity	Cooling	kW	8.0	9.0	10.0	11.2	14.0
	Heating	kW	9.0	10.0	11.1	12.5	15.0
Power input	Cooling	W	97	160	160	160	170
	Heating	W	97	160	160	160	170
Airflow rate(H/M/L)		m³/h	1236/973/729	1540/1300/1120	1540/1300/1120	1540/1300/1120	1800/1500/1280
Sound pressure level(H/M/L)		dB(A)	45/42/39	48/45/43	48/45/43	48/45/43	50/47/44
Main body	Net dim.(W×H×D)	mm	904×230×840	904×300×840	904×300×840	904×300×840	904×300×840
	Packing dim.(W×H×D)	mm	955×260×955	955×330×955	955×330×955	955×330×955	955×330×955
	Net/gross weight	kg	26/30	32/37	32/37	32/37	32/37
Panel	Net dim.(W×H×D)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950
	Packing dim.(W×H×D)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035
	Net/gross weight	kg	6/9	6/9	6/9	6/9	6/9
Piping connections	Liquid/gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32
Standard controller			Wireless remote controller RM05/BG(T)E-A				

60Hz Specification

Model			MDV-D28Q4/N1-D	MDV-D36Q4/N1-D	MDV-D45Q4/N1-D	MDV-D56Q4/N1-D	MDV-D71Q4/N1-D
Power supply			1-phase, 220-240V, 60Hz				
Cooling capacity		kW	2.8	3.6	4.5	5.6	7.1
		Btu/h	9600	12300	15400	19100	24200
Heating capacity		kW	3.2	4.0	5.0	6.3	8.0
		Btu/h	10900	13600	17100	21500	27300
Power input	Cooling	W	90	90	90	90	115
	Heating	W	90	90	90	90	115
Airflow rate(H/M/L)		m³/h	847/766/640	847/766/640	864/755/658	864/755/658	1157/955/749
		CFM	499/451/377	499/451/377	509/444/387	509/444/387	681/562/441
Sound pressure level(H/M/L)		dB(A)	42/38/35	42/38/35	42/38/35	42/38/35	45/42/39
Main body	Net dim.(W×H×D)	mm(in.)	904×230×840(35-19/32×9-1/16×33-5/64)				
	Packing dim.(W×H×D)	mm(in.)	955×260×955(37-19/32×10-15/64×37-19/32)				
	Net/gross weight	kg(lbs.)	53 /61.7(24/28)		57.3 /66.2(26/30)		
Panel	Net dim.(W×H×D)	mm(in.)	950×54.5×950(37-13/32×2-9/64×37-13/32)				
	Packing dim.(W×H×D)	mm(in.)	1035×90×1035(40-3/4×3-35/64×40-3/4)				
	Net/gross weight	kg(lbs.)	11.0/19.9(5/9)				
Piping connections	Liquid/gas pipe	mm(in.)	Φ6.35/Φ12.7(Φ1/4/Φ1/2)			Φ9.53/Φ15.9(Φ3/8/Φ5/8)	
	Drain pipe	mm(in.)	Φ32(OD 1-17/64)				
Standard controller			Wireless remote controller RM05/BG(T)E-A				

Model			MDV-D80Q4/N1-D	MDV-D90Q4/N1-D	MDV-D100Q4/N1-D	MDV-D112Q4/N1-D	MDV-D140Q4/N1-D
Power supply			1-phase, 220-240V, 60Hz				
Cooling capacity		kW	8.0	9.0	10.0	11.2	14.0
		Btu/h	27300	30700	34100	38200	47800
Heating capacity		kW	9.0	10.0	11.1	12.5	15.0
		Btu/h	30700	34100	37900	42700	51200
Power input	Cooling	W	115	160	160	160	180
	Heating	W	115	160	160	160	180
Airflow rate(H/M/L)		m³/h	1236/973/729	1590/1300/1090	1590/1300/1090	1590/1300/1090	1881/1678/1358/1115
		CFM	727/573/429	936/765/642	936/765/642	936/765/642	988/799/656
Sound pressure level(H/M/L)		dB(A)	45/42/39	48/45/43	48/45/43	48/45/43	50/47/44
Main body	Net dim.(W×H×D)	mm(in.)	904×230×840(35-19/32×9-1/16×33-5/64)904×300×840(35-19/32×11-13/16×33-5/64)				
	Packing dim.(W×H×D)	mm(in.)	955×260×955(37-19/32×10-15/64×37-19/32)955×330×955(37-19/32×11-13/16×37-19/32)				
	Net/gross weight	kg(lbs.)	26/30(57.3/66)32/37(70.5/81.6)				
Panel	Net dim.(W×H×D)	mm(in.)	950×54.5×950(37-13/32×2-9/64×37-13/32)				
	Packing dim.(W×H×D)	mm(in.)	1035×90×1035(40-3/4×3-35/64×40-3/4)				
	Net/gross weight	kg(lbs.)	5/8(11.0/17.6)				
Piping connections	Liquid/gas pipe	mm(in.)	Φ9.53/Φ15.9(Φ3/8/Φ5/8)				
	Drain pipe	mm(in.)	Φ32(OD 1-17/64)				
Standard controller			Wireless remote controller RM05/BG(T)E-A				

Four-way Cassette Silent Type

50Hz Specification

Model			MDV-D28Q4/N1-E	MDV-D36Q4/N1-E	MDV-D45Q4/N1-E	MDV-D56Q4/N1-E	MDV-D71Q4/N1-E
Power supply			1-phase,220-240V,50Hz				
Capacity	Cooling	kW	2.8	3.6	4.5	5.6	7.1
	Heating	kW	3.2	4.0	5.0	6.3	8.0
Power input	Cooling	W	80	80	88	88	88
	Heating	W	80	80	88	88	88
Airflow rate(H/M/L)		m³/h	764/638//554	764/638//554	905/740//651	905/740//651	950/767//663
Sound pressure level(H/M/L)		dB(A)	32/31/30	32/31/30	36/34/33	36/34/33	38/36/35
Main body	Net dim.(WxHxD)	mm	840x230x840	840x230x840	840x230x840	840x230x840	840x230x840
	Packing dim.(WxHxD)	mm	955x260x955	955x260x955	955x260x955	955x260x955	955x260x955
	Net/gross weight	kg	21.5/26.7	21.5/26.7	23.7/28.9	23.7/28.9	23.7/28.9
Panel	Net dim.(WxHxD)	mm	950x54.5x950	950x54.5x950	950x54.5x950	950x54.5x950	950x54.5x950
	Packing dim.(WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035
	Net/gross weight	kg	6/9	6/9	6/9	6/9	6/9
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32
Standard controller			Wireless remote controller RM05/BG(T)E-A				

Model			MDV-D80Q4/N1-E	MDV-D90Q4/N1-E	MDV-D100Q4/N1-E	MDV-D112Q4/N1-E	MDV-D140Q4/N1-E
Power supply			1-phase,220-240V,50Hz				
Capacity	Cooling	kW	8.0	9.0	10.0	11.2	14.0
	Heating	kW	9.0	10.0	11.1	12.5	15.0
Power input	Cooling	W	110	140	165	165	176
	Heating	W	110	140	165	165	176
Airflow rate(H/M/L)		m³/h	1200/1021/789	1332/1129/908	1651/1304/1127	1651/1304/1127	1658/1335/1130
Sound pressure level(H/M/L)		dB(A)	42/39/37	43/39/38	45/42/40	45/42/40	46/41/39
Main body	Net dim.(WxHxD)	mm	840x230x840	840x300x840	840x300x840	840x300x840	840x300x840
	Packing dim.(WxHxD)	mm	955x260x955	955x330x955	955x330x955	955x330x955	955x330x955
	Net/gross weight	kg	23.7/28.9	28.7/34.1	28.7/34.1	28.7/34.1	30.9/36.3
Panel	Net dim.(WxHxD)	mm	950x54.5x950	950x54.5x950	950x54.5x950	950x54.5x950	950x54.5x950
	Packing dim.(WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035
	Net/gross weight	kg	6/9	6/9	6/9	6/9	6/9
Piping connections	Liquid/gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32
Standard controller			Wireless remote controller RM05/BG(T)E-A				

- Notes:
- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C (44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Sound Level is measured 1.4m(4.59ft.) below the unit.

60Hz Specification

Model			MDV-D28Q4/VN1-E	MDV-D36Q4/VN1-E	MDV-D45Q4/VN1-E	MDV-D56Q4/VN1-E	MDV-D71Q4/VN1-E
Power supply			1-phase,208-230V,60Hz				
Cooling capacity		kW	2.8	3.6	4.5	5.6	7.1
		Btu/h	9600	12300	15400	19100	24200
Heating capacity		kW	3.2	4.0	5.0	6.3	8.0
		Btu/h	10900	13600	17100	21500	27300
Power input	Cooling	W	80	80	88	88	105
	Heating	W	80	80	88	88	105
Airflow rate(H/M/L)		m³/h	791/674/596	791/674/596	942/777/662	942/777/662	1235/1013/805
		CFM	465/396/351	465/396/351	554/457/389	554/457/389	726/596/474
Sound pressure level(H/M/L)		dB(A)	30/25/22	30/25/22	35/31/27	35/31/27	43/37/31
Main body	Net dim.(WxHxD)	mm(in.)	840x230x840(33-1/16x9-1/16x33-1/16)				
	Packing dim.(WxHxD)	mm(in.)	955x260x955(37-19/32x10-1/4x37-19/32)				
	Net/gross weight	kg(lbs.)	21.5/26.7(47.3/58.7)		23.7/28.9(52.1/63.6)		
Panel	Net dim.(WxHxD)	mm(in.)	950x54.5x950(37-13/32x2-9/64x37-13/32)				
	Packing dim.(WxHxD)	mm(in.)	1035x90x1035(40-3/4x3-9/16x40-3/4)				
	Net/gross weight	kg(lbs.)	6/9(13.2/19.8)				
Piping connections	Liquid/gas pipe	mm(in.)	Φ6.35/Φ12.7(Φ1/4/Φ1/2)			Φ9.53/Φ15.9(Φ3/8/Φ5/8)	
	Drain pipe	mm(in.)	Φ32(OD 1-17/64)				
Standard controller			Wireless remote controller RM05/BG(T)E-A				

Model			MDV-D80Q4/VN1-E	MDV-D90Q4/VN1-E	MDV-D100Q4/VN1-E	MDV-D112Q4/VN1-E	MDV-D140Q4/VN1-E
Power supply			1-phase,208-230V,60Hz				
Cooling capacity		kW	8.0	9.0	10.0	11.2	14.0
		Btu/h	27300	30700	34100	38200	47800
Heating capacity		kW	9.0	10.0	11.1	12.5	15.0
		Btu/h	30700	34100	37900	42700	51200
Power input	Cooling	W	120	187	200	200	220
	Heating	W	120	187	200	200	220
Airflow rate(H/M/L)		m³/h	1235/1013/805	1333/1158/957	1634/1219/1139	1634/1219/1139	1634/1219/1139
		CFM	726/596/474	784/681/563	961/717/670	961/717/670	995/731/681
Sound pressure level(H/M/L)		dB(A)	43/37/31	43/38/32	45/37/35	45/37/35	46/38/37
Main body	Net dim.(WxHxD)	mm(in.)	840x230x840(33-1/16x9-1/16x33-1/16)	840x300x840(33-1/16x11-13/16x33-1/16)			
	Packing dim.(WxHxD)	mm(in.)	955x260x955(37-19/32x10-15/64x37-19/32)	955x330x955(37-19/32x11-13/16x37-19/32)			
	Net/gross weight	kg(lbs.)	23.7/28.9(52.1/63.6)	28.7/34.1(63.1/75)			30.9/36.3(68/79.9)
Panel	Net dim.(WxHxD)	mm(in.)	950x54.5x950(37-13/32x2-9/64x37-13/32)				
	Packing dim.(WxHxD)	mm(in.)	1035x90x1035(40-3/4x3-35/64x40-3/4)				
	Net/gross weight	kg(lbs.)	6/9(13.2/19.8)				
Piping connections	Liquid/gas pipe	mm(in.)	Φ9.53/Φ15.9(Φ3/8/Φ5/8)				
	Drain pipe	mm(in.)	Φ32(OD 1-17/64)				
Standard controller			Wireless remote controller RM05/BG(T)E-A				

- Notes:
- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C (44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Sound Level is measured 1.4m(4.59ft.) below the unit.

Duct series



Low Static Pressure Duct

Low Sound Level >>

Utilizes the centrifugal type blower, provides a minimum noise level of 24dB (A), an excellent choice for hotels and other sound-sensitive locations.

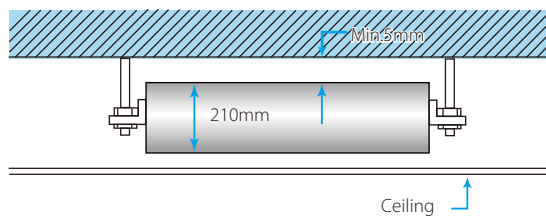


V Shape Evaporator >>

V shape evaporator design enhances heat exchanging efficiency by around 22%.

Compact Design >>

Uniformed height of 210mm, compact design for easy locate where ceiling space is limited.
Entire body adopts fireproof plastic material, the minimum weight is 14kg.

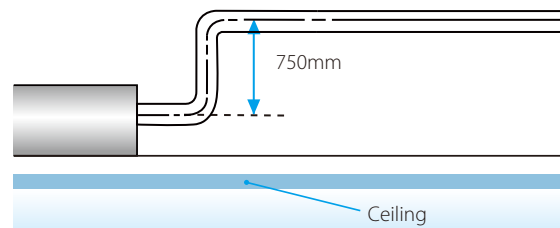


Easy Installation and Maintenance >>

The EXV is fixed inside the indoor unit.

Options >>

Drain pump with a 750mm pumphead is an optional accessory.



50Hz Specifications

Model			MDV-D18T3/N1-C	MDV-D22T3/N1-C	MDV-D28T3/N1-C	MDV-D36T3/N1-C	MDV-D45T3/N1-C	MDV-D56T3/N1-C	MDV-D71T3/N1-C
Power supply			1-phase,220-240V,50Hz						
Capacity	Cooling	kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW	2.2	2.6	3.2	4.0	5.0	6.3	8.0
Power input	Cooling	W	59	59	59	65	105	105	130
	Heating	W	59	59	59	65	105	105	130
Airflow rate(H/M/L)		m³/h	578/512/409	578/512/409	578/512/409	617/551/441	824/690/609	824/690/609	1060/970/811
External static pressure(Min/Std/Max)		Pa	0/10/30	0/10/30	0/10/30	0/10/30	0/10/30	0/10/30	0/10/30
Sound pressure level(H/M/L)		dB(A)	35/27/24	35/27/24	35/27/24	38/32/28	39/32/29	39/32/29	41/33/30
Net dimension(W×H×D)		mm	740×210×470	740×210×470	740×210×470	740×210×470	960×210×470	960×210×470	960×210×470
Packing dimension(W×H×D)		mm	910×230×510	910×230×510	910×230×510	910×230×510	1130×230×510	1130×230×510	1130×230×510
Net/gross weight		kg	14/17.5	14/17.5	14/17.5	14/17.5	17.5/22	17.5/22	21/26.5
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wireless remote controller RM05/BG(T)E-A						

60Hz Specifications

Model			MDV-D18T3/VN1-C	MDV-D22T3/VN1-C	MDV-D28T3/VN1-C	MDV-D36T3/VN1-C	MDV-D45T3/VN1-C	MDV-D56T3/VN1-C	MDV-D71T3/VN1-C
Power supply			1-phase,208-230V,60Hz						
Cooling capacity		kW	1.8	2.2	2.8	3.6	4.5	5.6	7.1
		Btu/h	6100	7500	9600	12300	15400	19100	24200
Heating capacity		kW	2.2	2.6	3.2	4.0	5.0	6.3	8.0
		Btu/h	7500	8900	10900	13600	17100	21500	27300
Power input	Cooling	W	59	59	59	65	105	105	130
	Heating	W	59	59	59	65	105	105	130
Airflow rate(H/M/L)		m³/h	578/512/409	578/512/409	578/512/409	617/551/441	824/690/609	824/690/609	1060/970/811
		CFM	340/301/241	340/301/241	340/301/241	363/324/260	485/406/358	485/406/358	624/571/477
External static pressure(Min/Std/Max)		Pa	0/10/30	0/10/30	0/10/30	0/10/30	0/10/30	0/10/30	0/10/30
Sound pressure level(H/M/L)		dB(A)	35/27/24	35/27/24	35/27/24	38/32/28	39/32/29	39/32/29	41/33/30
Net dimension(WxHxD)		mm(in.)	740x210x470(29-9/64x8-17/64x18-1/2)				960x210x470(37-51/64x8-17/64x18-1/2)		1180x210x470(46-29/64x8-17/64x18-1/2)
Packing dimension(WxHxD)		mm(in.)	910x230x510(35-53/64x9-1/16x20-5/64)				1130x230x510(44-31/64x9-1/16x20-5/64)		1350x230x510(53-5/32x9-1/16x20-5/64)
Net/gross weight		kg(lbs.)	14.5/18(32.0/39.7)				18/22.5(39.7/49.6)		22.5/26.5(49.6/58.5)
Piping connections	Liquid/gas pipe	mm(in.)	Φ6.35/Φ12.7(Φ1/4/Φ1/2)					Φ9.53/Φ15.9(Φ3/8/Φ5/8)	
	Drain piping	mm(in.)	Φ25(OD 63/64)						
Standard controller			Wireless remote controller RM05/BG(T)E-A						

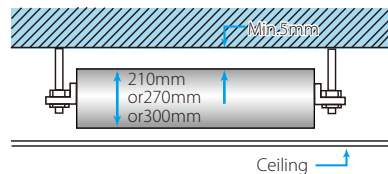
Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C(44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Sound Level is measured 1.4m(4.59ft.) below the unit.
- * External static pressure is based on high speed indoor air flow.

Medium Static Pressure Duct (A5 type)

Compact Size >>

Only 210mm (models 22~71) or 270mm (models 80~112) or 300mm (model 140) in height.



Flexible Control and Easy Maintenance >>

The electrical control box can be removed 1m away from the unit for easy maintenance access. Customers need to request this service in advance for it is done at Midea CAC factory.

Standard functional ports are included such as Remote On/Off Dry contact switch and Alarm signal output (220V).



50Hz Specifications

Model			MDV-D22T2/N1-DA5	MDV-D28T2/N1-DA5	MDV-D36T2/N1-DA5	MDV-D45T2/N1-DA5	MDV-D56T2/N1-DA5
Power supply			1-phase,220-240V,50Hz				
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
	Heating	kW	2.6	3.2	4.0	5.0	6.3
Power input	Cooling	W	57	57	61	98	103
	Heating	W	57	57	61	98	103
Airflow rate(H/M/L)			m³/h 538/456/375	538/456/375	597/514/429	811/684/575	811/684/575
External static pressure(Min/Std/Max)			Pa 0/10/30	0/10/30	0/10/30	0/10/30	0/10/30
Sound pressure level(H/M/L)			dB(A) 36/35/32	37/35/32	38.6/37.5/33.8	39/37.9/34	39/37.9/34
Net dimension(WxHxD)			mm 740x210x500	740x210x500	740x210x500	960x210x500	960x210x500
Packing dimension(WxHxD)			mm 870x285x525	870x285x525	870x285x525	1115x285x525	1115x285x525
Net/gross weight			kg 17.5/20	17.5/20	17.5/20	22.5/26	22.5/26
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wired controller KJR-29B1/BK-E (6 meters connection wire)				

Model			MDV-D71T2/N1-DA5	MDV-D80T2/N1-BA5	MDV-D90T2/N1-BA5	MDV-D112T2/N1-BA5	MDV-D140T2/N1-BA5
Power supply			1-phase,220-240V,50Hz				
Capacity	Cooling	kW	7.1	8.0	9.0	11.2	14.0
	Heating	kW	8.0	9.0	10.0	12.5	15.5
Power input	Cooling	W	140	198	200	313	274
	Heating	W	140	198	200	313	274
Airflow rate(H/M/L)			m³/h 1029/934/781	1345/1165/1013	1345/1165/1013	1800/1556/1400	1905/1636/1400
External static pressure(Min/Std/Max)			Pa 0/10/30	10/20/50	10/20/50	10/40/80	10/40/100
Sound pressure level(H/M/L)			dB(A) 41.4/39/35	45.4/39.8/37	45.4/39.8/37	48.0/41.9/38	47.7/43.2/39.0
Net dimension(WxHxD)			mm 1180x210x500	1180x270x775	1230x270x775	1230x270x775	1290x300x865
Packing dimension(WxHxD)			mm 1335x285x525	1355x350x795	1355x350x795	1355x350x795	1400x375x925
Net/gross weight			kg 28/31.5	38/46.5	40/48	40/48	49/58
Piping connections	Liquid/gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wired controller KJR-29B1/BK-E (6 meters connection wire)				

Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C (44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Sound Level is measured 1.4m(4.59ft.) below the unit.
- * External static pressure is based on high speed indoor air flow.

60Hz Specifications

Model		MDV-D22T2/VN1-DA5	MDV-D28T2/VN1-DA5	MDV-D36T2/VN1-DA5	MDV-D45T2/VN1-DA5	MDV-D56T2/VN1-DA5
Power supply		1-phase,208-230V,60Hz				
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6
	Btu/h	7500	9600	12300	15400	19100
Heating capacity	kW	2.6	3.2	4.0	5.0	6.3
	Btu/h	8200	10900	13600	17100	21500
Power input	Cooling	W	66	72	77	100
	Heating	W	66	72	77	100
Airflow rate(H/M/L)	m³/h	538/456/375	538/456/375	597/514/429	811/684/575	811/684/575
	CFM	317/268/221	317/268/221	351/303/253	477/403/338	477/403/338
External static pressure(Min/Std/Max)		Pa 0/10/30	0/10/30	0/10/30	0/10/30	0/10/30
Sound pressure level(H/M/L)		dB(A) 36/35/32	36/35/32	38.6/37.5/33.8	39/37.9/34	39/37.9/34
Net dimension(WxHxD)		mm(in.) 740x210x500(29-9/64x8-17/64x19-11/16)			960x210x500(37-51/64x8-17/64x19-11/16)	
Packing dimension(WxHxD)		mm(in.) 870x285x525(34-1/4x11-7/32x20-43/64)			1115x285x525(43-57/64x11-7/32x20-43/64)	
Net/gross weight		kg(lbs.) 17.5/20(38.6/44.1)			22.5/26(49.6/57.3)	
Piping connections	Liquid/gas pipe	mm(in.) Φ6.35/Φ12.7(Φ1/4/Φ1/2)				Φ9.53/Φ15.9(Φ3/8/Φ5/8)
	Drain piping	mm(in.) Φ25(OD 63/64)				
Standard controller		Wired controller KJR-29B1/BK-E (6 meters connection wire)				

Model		MDV-D71T2/VN1-DA5	MDV-D80T2/VN1-BA5	MDV-D90T2/VN1-BA5	MDV-D112T2/VN1-BA5	MDV-D140T2/VN1-BA5	
Power supply		1-phase,208-230V,60Hz					
Cooling capacity		kW	7.1	8.0	9.0	11.2	14.0
		Btu/h	24200	27300	30700	38200	47800
Heating capacity		kW	8.0	9.0	10.0	12.5	15.5
		Btu/h	27300	30700	34100	42700	52900
Power input	Cooling	W	125	133	134	378	352
	Heating	W	125	133	134	378	352
Airflow rate(H/M/L)		m³/h	1029/934/781	1345/1165/1013	1345/1165/1013	1800/1556/1400	1905/1636/1400
		CFM	606/550/460	792/686/596	792/686/596	1059/916/824	1121/963/824
External static pressure(Min/Std/Max)		Pa	0/10/30	10/20/50	10/20/50	10/40/80	10/40/100
Sound pressure level(H/M/L)		dB(A)	41.4/39/35	45.4/39.8/37	45.4/39.8/37	48.0/41.9/38	47.7/43.2/39
Net dimension(W×H×D)		mm(in.)	1180×210×500(46-29/64×8-17/64×19-11/16)	1230×270×775(48-27/64×10-5/8×30-33/64)			1290×300×865(50-25/32×11-13/16×34-1/16)
Packing dimension(W×H×D)		mm(in.)	1335×285×525(52-9/16×11-7/32×20-43/64)	1355×350×795(53-11/32×13-25/31×31-19/64)			1400×375×925(55-1/8×14-49/64×36-27/64)
Net/gross weight		kg(lbs.)	28/31.5(61.8/69.5)	38/46.5(84/102.5)	40/48(88.2/105.8)		49/58(108.0/127.9)
Piping connections	Liquid/gas pipe	mm(in.)	Φ9.53/Φ15.9(Φ3/8/Φ5/8)				
	Drain piping	mm(in.)	Φ25(OD 63/64)				
Standard controller			Wired controller KJR-29B1/BK-E (6 meters connection wire)				

Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C (44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Sound Level is measured 1.4m(4.59ft.) below the unit.

* External static pressure is based on high speed indoor air flow.

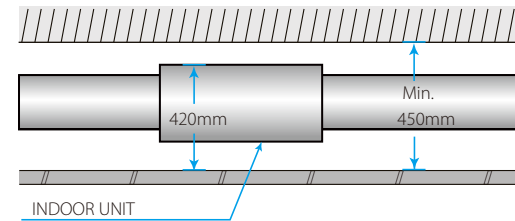
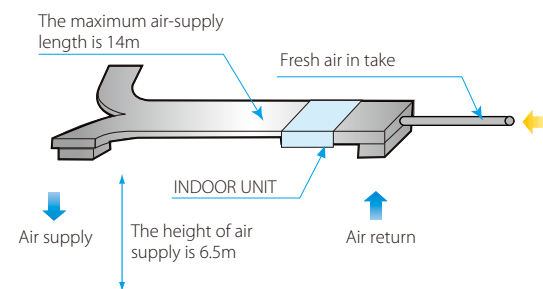
High Static Pressure Duct

Flexible Duct Design >>

External static pressure can be up to 196Pa (models 71 to 160) or 280Pa (models 200 to 560).

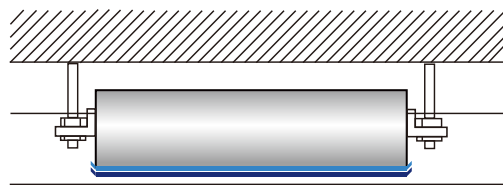
The maximum length for air supply is about 14m at a height of 6.5m.

With a 420mm (models 71 to 160) thick body, the minimum distance required above the ceiling is 450mm.



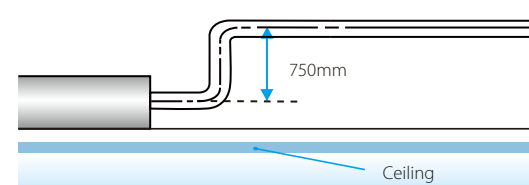
Double-skin Drainage Pan >>

Double-skin drainage pan provides double protection for ceilings (models 71 to 160 and models 400 to 560).



Option >>

Drain pump with 750mm pump head is optional (models 71 to 160).



Convenient Installation >>

The EXV is fixed inside the indoor unit (models 70-160), requires no extra connection.

Standard filter is housed in an aluminum frame, which is removable from the bottom in a downward direction.

Flange for air inlet/outlet duct connection is standard.

Flexible Control and Convenient for Maintenance >>

Wired remote controller KJR-29B1/BK-E comes standard, and wireless remote controller RM05/BG(T)E-A comes as an option.

The display board is connected to the E-box in factory, easier troubleshooting with LED display.

Easy access filters both at the rear & bottom.

Standard functional port such as remote on/off dry contact.

50Hz Specification

Model	MDV-D71T1/N1-B		MDV-D80T1/N1-B	MDV-D90T1/N1-B	MDV-D112T1/N1-B	MDV-D140T1/N1-B	MDV-D160T1/N1-B
Power supply		1-phase, 220-240V, 50Hz					
Capacity	Cooling	kW	7.1	8.0	9.0	11.2	14.0
	Heating	kW	8.0	9.0	10.0	12.5	17.0
Power input	Cooling	W	263	263	423	524	724
	Heating	W	263	263	423	524	724
Airflow rate(H/M/L)	m³/h		1443/1361/1218	1416/1338/1220	1951/1741/1518	2116/1936/1520	3000/2618/2226
External static pressure(Min/Std/Max)	Pa		25/25/196	37/37/196	37/37/196	50/50/196	50/50/196
Sound pressure level(H/M/L)	dB(A)		48/46/44	48/46/44.5	52/49/47	52/49/47	53/50/48
Net dimension(WxHxD)	mm		952x420x690	952x420x690	952x420x690	952x420x690	1300x420x690
Packing dimension(WxHxD)	mm		1090x440x768	1090x440x768	1090x440x768	1090x440x768	1436x450x768
Net/gross weight	kg		45/50	45/50	46.5/52.4	50.6/56	68/70
Piping connections	Liquid/gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller		Wired controller KJR-29B1/BK-E (6 meters connection wire)					

Model	MDV-D200T1/N1-B		MDV-D250T1/N1-B	MDV-D280T1/N1-B	MDV-D400T1/N1-B	MDV-D450T1/N1-B	MDV-D560T1/N1-B
Power supply		1-phase, 220-240V, 50Hz					
Capacity	Cooling	kW	20.0	25.0	28.0	40.0	45.0
	Heating	kW	22.5	26.0	31.5	45.0	50.0
Power input	Cooling	W	1516	1516	1516	2700	2700
	Heating	W	1516	1516	1516	2700	2700
Airflow rate(H/M/L)	m³/h		4700/4100/3599	4700/4100/3599	4700/4100/3599	7472/6072/4995	7472/6072/4995
External static pressure(Min/Std/Max)	Pa		50/200/280	50/200/280	50/200/280	50/200/280	50/200/280
Sound pressure level(H/M/L)	dB(A)		59/55/52	59/55/52	59/55/52	61/59/56	61/59/56
Net dimension(WxHxD)	mm		1443x470x810	1443x470x810	1443x470x810	1970x668x902.5	1970x668x902.5
Packing dimension(WxHxD)	mm		1509x550x990	1509x550x990	1509x550x990	2095x800x964	2095x800x964
Net/gross weight	kg		115/129	115/129	115/129	232/245	232/245
Piping connections	Liquid/gas pipe	mm	Φ9.53x2/Φ15.9x2	Φ9.53x2/Φ15.9x2	Φ9.53x2/Φ15.9x2	Φ9.53x2/Φ22.2x2	Φ9.53x2/Φ22.2x2
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32
Standard controller		Wired controller KJR-29B1/BK-E (6 meters connection wire)					

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).

2. Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C(44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).

3. Sound Level is measured 1.4m(4.59ft.) below the unit.

* External static pressure is based on high speed indoor air flow.



60Hz Specification

Model			MDV-D71T1/VN1-B	MDV-D80T1/VN1-B	MDV-D90T1/VN1-B	MDV-D112T1/VN1-B	MDV-D140T1/VN1-B	MDV-D160T1/VN1-B
Power supply			1-phase,208-230V,60Hz					
Cooling capacity		kW	7.1	8	9	11.2	14	16
		Btu/h	24200	27300	30700	38200	47800	54600
Heating capacity		kW	8	9	10	12.5	16	16.5
		Btu/h	27300	30700	34100	42700	54600	56300
Power input	Cooling	W	414	402	409	409	527	532
	Heating	W	414	402	409	409	527	532
Airflow rate(H/M/L)		m³/h	1683/1550/1317	1683/1550/1317	2240/2020/1590	2186/1975/1560	2969/2694/2469	2969/2694/2469
		CFM	990/912/775	990/912/775	1318/1188/935	1286/1162/918	1746/1586/1453	1746/1586/1453
External static pressure(Min/Std/Max)		Pa	30/40/196	30/40/196	30/40/196	30/50/196	30/50/196	30/50/196
Sound pressure level(H/M/L)		dB(A)	48/46/44.5	48/46/44.5	52/49/47	52/49/47	53/50/48	54/52/50
Net dimension(WxHxD)		mm(in.)	952x420x690(37-31/64x16-17/32x27-11/64)				1300x420x691(51-3/16x15-3/4x27-13/64)	
Packing dimension(WxHxD)		mm(in.)	1090x440x768(42-29/32x17-21/64x30-15/64)				1436x450x768(56-17/32x17-23/32x30-15/64)	
Net/gross weight		kg(lbs.)	46.5/52(102.6/114.7)		50/56.5(110.3/124.6)		68/70(149.9/154.3)	69.5/76(153.3/167.6)
Piping connections	Liquid/gas pipe	mm(in.)	Φ9.53/Φ15.9(Φ3/8/Φ5/8)					
	Drain piping	mm(in.)	Φ25(OD 63/64)					
Standard controller			Wired controller KJR-29B1/BK-E (6 meters connection wire)					

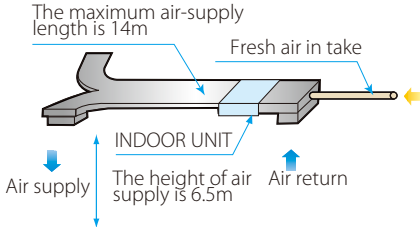
Model			MDV-D200T1/N1-B	MDV-D250T1/N1-B	MDV-D280T1/N1-B	MDV-D400T1/N1	MDV-D450T1/N1
Power supply			1-phase,208-230V,60Hz				
Cooling capacity		kW	20.0	25.0	28.0	40.0	45.0
		Btu/h	68200	85300	95500	136500	153500
Heating capacity		kW	22.5	26.0	31.5	45.0	50.0
		Btu/h	76800	88700	107500	153500	170600
Power input	Cooling	W	1516	1516	1516	1600	1600
	Heating	W	1516	1516	1516	1600	1600
Airflow rate(H/M/L)		m³/h	4700/4100/3599	4700/4100/3599	4700/4100/3599	7180/6150/4600	7180/6150/4600
		CFM	2766/2413/2118	2766/2413/2118	2766/2413/2118	4226/3620/2708	4226/3620/2708
External static pressure(Min/Std/Max)		Pa	50/200/280	50/200/280	50/200/280	50/200/280	50/200/280
Sound pressure level(H/M/L)		dB(A)	59/55/52	59/55/52	59/55/52	61/59/56	61/59/56
Net dimension(WxHxD)		mm(in.)	56-13/16x18-1/2x31-57/64(1443x470x810)			77-9/16x15-3/4x35-17/32(1970x668x902.5)	
Packing dimension(WxHxD)		mm(in.)	59-13/32x21-21/32x38-31/32(1509x550x990)			82-31/64x31-1/2x37-61/64(2095x800x964)	
Net/gross weight		kg(lbs.)	254/284(115/129)			518/551(235/250)	
Piping connections	Liquid/gas pipe	mm(in.)	Φ9.53/Φ15.9x2/(Φ3/8/Φ5/8)x2			Φ9.53/Φ22.2x2/(Φ3/8/Φ7/8)x2	
	Drain piping	mm(in.)	Φ32(OD 1-17/64)				
Standard controller			Wired controller KJR-29B1/BK-E (6 meters connection wire)				

- Notes:
1. Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 2. Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C (44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 3. Sound Level is measured 1.4m(4.59ft.) below the unit.
- * External static pressure is based on high speed indoor air flow.

Fresh Air Processing Unit

100% Fresh Air Processing Unit >>

Both fresh air filtration and heating/cooling can be achieved in a single system. Indoor units and fresh air processing unit can be connected to the same refrigerant system, increasing design flexibility and greatly reducing total system costs.



High External Static Pressure >>

External static pressure can be up to 196Pa(models 125 to 140) and 280Pa(models 200 to 280) for more flexible duct applications. The maximum length of air supply is around 14m and the maximum height of air supply is about 6.5m.

Healthy and Comfortable >>

Fresh air is imported, providing a healthy and comfortable living environment. Four speed fan motor(model 125&140).

50Hz Specification

Model			MDV-D125T1/N1-FA	MDV-D140T1/N1-FA	MDV-D200T1/N1-FA	MDV-D250T1/N1-FA	MDV-D280T1/N1-FA
Power supply			1-phase,220-240V,50Hz				
Capacity	Cooling	kW	12.5	14.0	20.0	25.0	28.0
	Heating	kW	10.5	12.0	18.0	20.0	22.0
Power input	Cooling	W	430	430	1063	1063	1063
	Heating	W	461	430	1063	1063	1063
Airflow rate(H/M/L)		m³/h	2142/1870/1611	2142/1870/1611	2870/2620/2150	3005/2700/2250	3005/2700/2250
External static pressure(Min/Std/Max)		Pa	30/50/196	30/50/196	50/200/280	50/200/280	50/200/280
Sound pressure level(H/M/L)		dB(A)	54/52/50	54/52/50	54/53/51	55/54/52	55/54/52
Net dimension(WxHxD)		mm	1300x420x690	1300x420x690	1443x470x810	1443x470x810	1443x470x810
Packing dimension(WxHxD)		mm	1436x450x768	1436x450x768	1509x550x990	1509x550x990	1509x550x990
Net/gross weight		kg	69.5/76	69.5/76	115/125	115/125	115/125
Piping connections	Liquid/gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ32	OD Φ32	OD Φ32
Operation temperature range		°C	Heating: -5~16; Fan only: 16~20; Cooling: 20~43				
Standard controller			Wired controller KJR-29B1/BK-E (6 meters connection wire)				

60Hz Specification

Model			MDV-D125T1/VN1-FA	MDV-D140T1/VN1-FA	MDV-D200T1/VN1-FA	MDV-D250T1/VN1-FA	MDV-D280T1/VN1-FA
Power supply			1-phase,208-230V,60Hz				
Cooling capacity		kW	12.5	14.0	20.0	25.0	28.0
		Btu/h	42600	47800	68200	85300	95500
Heating capacity		kW	10.5	12.0	18.0	20.0	22.0
		Btu/h	36000	41000	61400	68200	75000
Power input	Cooling	W	468	468	616	616	616
	Heating	W	468	468	616	616	616
Airflow rate(H/M/L)		m³/h	2142/1870/1611	2142/1870/1611	2870/2620/2150	3005/2700/2250	3005/2700/2250
		CFM	1261/1101/948	1261/1101/948	1689/1542/1265	1766/1589/1324	1766/1589/1324
External static pressure(Min/Std/Max)		Pa	30/50/196	30/50/196	50/200/280	50/200/280	50/200/280
Sound pressure level(H/M/L)		dB(A)	54/52/50	53/50/48	54/53/51	55/54/52	55/54/52
Net dimension(WxHxD)		mm(in.)	1300x420x690(51-3/16x16-17/32x27-11/64)		1443x470x810(56-13/16x18-1/2x31-57/64)		
Packing dimension(WxHxD)		mm(in.)	1436x450x768(56-17/32x17-23/32x30-1/4)		1509x550x990(59-13/32x21-21/32x38-31/32)		
Net/gross weight		kg(lbs.)	69.5/76(153.2/167.5)		114/124(251/274)		
Piping connections	Liquid/gas pipe	mm(in.)	Φ9.53/Φ15.9/(Φ3/8/Φ5/8)				
	Drain piping	mm(in.)	Φ25(OD 63/64)		Φ32(OD 1-17/64)		
Standard controller			Wired controller KJR-29B1/BK-E (6 meters connection wire)				

- Notes:
1. Nominal cooling capacities are based on the following conditions: outdoor air temp.:33°C(91.4°F)DB, 24°C(75.2°F)WB, equivalent ref. piping: 8m(26.25ft.)(horizontal).
 2. Nominal heating capacities are based on the following conditions: outdoor air temp.0°C(32°F)DB, -1°C(30.2°F)WB, equivalent ref. piping: 8m(26.25ft.)(horizontal).
 3. Sound level is measured 1.4m(4.59ft.) from the air out-let.
- * External static pressure is based on high speed indoor air flow.
- * When outdoor-air processing units are connected, the total connection capacity must be within 50% to 100% of that of the outdoor units.
- * When outdoor-air processing units and standard indoor units are connected, the total connection capacity of the outdoor-air processing units must not exceed 30% that of the outdoor units.
- * Outdoor-air processing units can be used without indoor units.
- * The fresh air processing unit is not available for V4+R system. Connection Conditions: The above restrictions must be observed in order to maintain the indoor units connection to the same system.

Wall-mounted

S type panel



C type panel



R type panel

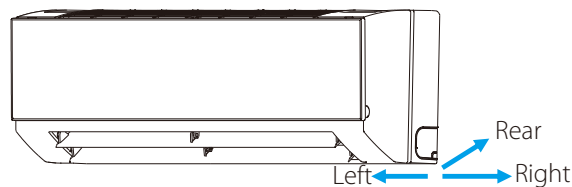


Convenient Installation >>

Multi-directional refrigerant outlet pipe: left/right/rear, more flexible for installation.

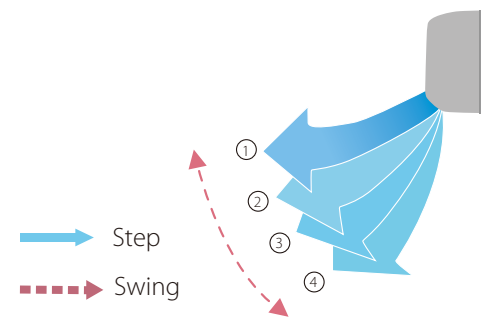
EXV is built-in the indoor unit, compact size, lengthened the connection pipe; gas pipe: 468mm; liquid pipe: 550mm, more flexible for installation.

Adopts new type fixing plate, stable and easy to install.



Auto Swing Louver >>

The Auto Swing Louver function ensures that the air direction corresponds to the mode selected.



Optimal Comfort Through Better Flow Control and Quiet Operations >>

The mechanical expansion valve offers 2,000-stage element positioning to ensure precise flow control and less modulation noise when the EXV is operating for a quiet and comfortable environment. Three air flow speeds: low, medium and high; double air guides. Smoother airflow and less turbulence is ensured by the multi-blade fan and the air guide design.



50Hz Specification

Model	S panel		MDV-D22G/N1-S	MDV-D28G/N1-S	MDV-D36G/N1-S	MDV-D45G/N1-S	MDV-D56G/N1-S
	C panel		MDV-D22G/N1YB	MDV-D28G/N1YB	MDV-D36G/N1YB	MDV-D45G/N1YB	MDV-D56G/N1YB
Power supply			1-phase, 220-240V, 50Hz				
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
	Heating	kW	2.4	3.2	4	5	6.3
Power input	Cooling	W	28	28	28	45	45
	Heating	W	28	28	28	45	45
Airflow rate(H/M/L)	S panel	m³/h	525/480/430	525/480/430	590/520/480	860/755/630	925/860/755
	C panel	m³/h	520/480/430	520/480/430	520/480/430	860/755/630	925/860/755
Sound pressure level(H/M/L)		dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Net dimension(WxHxD)	S panel	mm	915×290×230	915×290×230	915×290×230	1072×315×230	1072×315×230
	C panel	mm	915×290×210	915×290×210	915×290×210	1070×315×210	1070×315×210
Packing dimension(WxHxD)	S panel	mm	1020×390×315	1020×390×315	1020×390×315	1180×415×315	1180×415×315
	C panel	mm	1020×385×300	1020×385×300	1020×385×300	1180×410×300	1180×410×300
Net/gross weight	S panel	kg	13/16.8	13/16.8	13/16.8	15.1/19.5	15.1/19.5
	C panel	kg	12/17.5	12/17.5	12/17.5	15/19	15/18
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ16.5	OD Φ16.5	OD Φ16.5	OD Φ16.5	OD Φ16.5
Standard controller			Wireless remote controller RM05/BG(T)E-A				

Model			MDV-D71G-R3/N1Y	MDV-D80G-R3/N1Y	MDV-D90G-R3/N1Y
Power supply			1-phase, 220-240V, 50Hz		
Capacity	Cooling	kW	7.1	8.0	9.0
	Heating	kW	8.0	9.0	10.0
Power input	Cooling	W	75	86	86
	Heating	W	75	86	86
Airflow rate(H/M/L)		m³/h	1190/780/580	1,320/840/640	1,320/840/640
Sound pressure level(H/M/L)		dB(A)	47/43/42	48/43/38	49/43/38
Net dimension(WxHxD)		mm	1,250×325×245	1,250×325×245	1,250×325×245
Packing dimension(WxHxD)		mm	1,345×430×335	1,345×430×335	1,345×430×335
Net/gross weight		kg	19.9/25	19.9/25	19.9/25
Piping connections	Liquid/gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ16.5	OD Φ16.5	OD Φ16.5
Standard controller			Wireless remote controller RM05/BG(T)E-A		

Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C(44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Sound level is measured 1m(3.28ft.) below the air out-let both horizontally and vertically.

60Hz Specification

Model			MDV-D71G-R3/QN1Y	MDV-D80G-R3/QN1Y	MDV-D90G-R3/QN1Y
Power supply			1-phase, 220-240V, 60Hz		
Cooling capacity	kW		7.1	8.0	9.0
	Btu/h		24200	27300	30700
Heating capacity	kW		8.0	9.0	10.0
	Btu/h		27300	30700	34100
Power input	Cooling	W	79	95	95
	Heating	W	79	95	95
Airflow rate(H/M/L)	m³/h		1190/780/580	1320/840/640	1320/840/640
	CFM		700/459/341	776/494/376	776/494/376
Sound pressure level(H/M/L)		dB(A)	45/42/39	48/43/38	49/43/38
Net dimension(WxHxD)		mm(in.)	1250x325x245(49-7/32x12-5/16x9-41/64)		
Packing dimension(WxHxD)		mm(in.)	1345x430x335(52-61/64x16-59/64x13-3/16)		
Net/gross weight		kg(lbs.)	19.9/25(43.8/55.1)		
Piping connections	Liquid/gas pipe	mm(in.)	Φ9.53/Φ15.9/(Φ3/8/Φ5/8)		
	Drain piping	mm(in.)	Φ16.5(OD 21/32)		
Standard controller			Wireless remote controller RM05/BG(T)E-A		

Model			MDV-D22G/N1-S	MDV-D28G/N1-S	MDV-D36G/N1-S	MDV-D45G/N1-S	MDV-D56G/N1-S
Power supply			1-phase, 220-240V, 60Hz				
Cooling capacity	kW		2.2	2.8	3.6	4.5	5.6
	Btu/h		7500	9600	12300	15400	19100
Heating capacity	kW		2.4	3.2	4.0	5.0	6.3
	Btu/h		8200	10900	13600	17100	21500
Power input	Cooling	W	28	28	28	51	51
	Heating	W	28	28	28	51	51
Airflow rate(H/M/L)	m³/h		525/480/430	525/480/430	590/520/480	860/755/630	925/860/755
	CFM		309/283/253	309/283/253	347/306/283	506/444/371	544/506/444
Sound pressure level(H/M/L)		dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Net dimension(WxHxD)		mm(in.)	915x290x230(36-1/32x11-13/32x9-1/16)			1072x315x230(42-7/32x12-13/32x9-1/16)	
Packing dimension(WxHxD)		mm(in.)	1020x390x315(40-5/32x15-11/32x12-13/32)			1180x415x315(46-15/32x16-11/32x12-13/32)	
Net/gross weight		kg(lbs.)	13/16.8(28.7/37.1)			15.1/19.5(33.4/43)	
Piping connections	Liquid/gas pipe	mm(in.)	Φ6.35/Φ12.7(Φ1/4/Φ1/2)				Φ9.53/Φ15.9/(Φ3/8/Φ5/8)
	Drain piping	mm(in.)	Φ16.5(OD 21/32)				
Standard controller			Wireless remote controller RM05/BG(T)E-A				

Model			MDV-D22G/N1YB	MDV-D28G/N1YB	MDV-D36G/N1YB	MDV-D45G/N1YB	MDV-D56G/N1YB
Power supply			1-phase, 220-240V, 60Hz				
Cooling capacity	kW		2.2	2.8	3.6	4.5	5.6
	Btu/h		7500	9600	12300	15400	19100
Heating capacity	kW		2.4	3.2	4.0	5.0	6.3
	Btu/h		8200	10900	13600	17100	21500
Power input	Cooling	W	28	28	28	45	45
	Heating	W	28	28	28	45	45
Airflow rate(H/M/L)	m³/h		557/520/467	557/520/467	557/520/467	842/722/597	842/722/597
	CFM		328/306/275	328/306/275	328/306/275	496/425/351	496/425/351
Sound pressure level(H/M/L)		dB(A)	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34
Net dimension(WxHxD)		mm(in.)	915x290x210(36-1/32x11-13/32x8-9/32)			1070x315x210(42-7/32x12-13/32x8-9/32)	
Packing dimension(WxHxD)		mm(in.)	1020x385x300(40-5/32x15-5/32x11-13/16)			1165x395x285(45-7/8x15-9/16x11-7/32)	
Net/gross weight		kg(lbs.)	12/17.5(26.5/38.6)			15/19(33.1/41.9)	
Piping connections	Liquid/gas pipe	mm(in.)	Φ6.35/Φ12.7(Φ1/4/Φ1/2)				Φ9.53/Φ15.9/(Φ3/8/Φ5/8)
	Drain piping	mm(in.)	Φ16.5(OD 21/32)				
Standard controller			Wireless remote controller RM05/BG(T)E-A				

Notes:

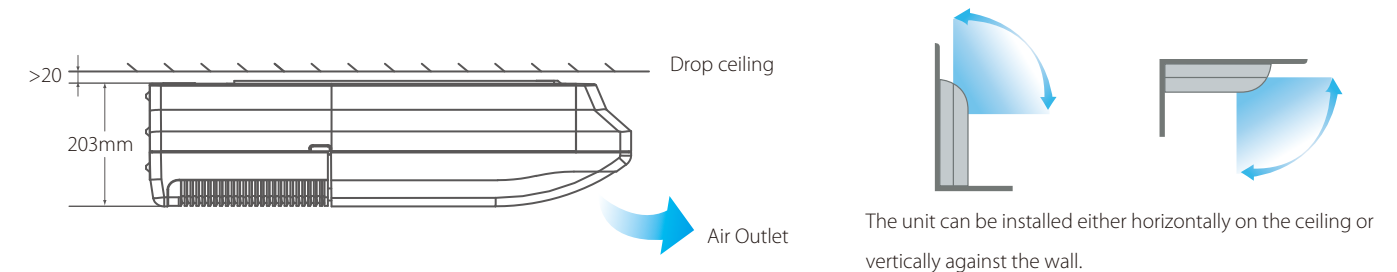
- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C (44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
- Sound level is measured 1m(3.28ft.) below the air out-let both horizontally and vertically.

Ceiling & Floor



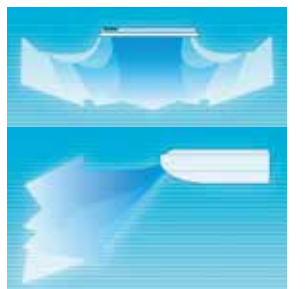
Convenient Installation >>

The slim and sleek structure design ensures easy installation.
It can be installed into a corner of the ceiling even if the ceiling is very narrow.



Auto Swing and Wide Angle Air Flow >>

Two direction auto swing - vertical and horizontal.
The range of horizontal air discharge is widened which secures wider air flow distribution to provide more comfortable air circulation no matter where the unit is set up.
Three air flow speeds: low, medium and high; double air guides.



Auto Swing & Wide-angle Airflow

More Comfortable >>

Adopts electrical expansion valve, ensuring precise flow control, lower modulation noise when EXV is operating.
Low noise operations; minimum 36 dB(A).
Smoother airflow and less turbulence due to the multi-blade fan and the air guide design.

50Hz Specification

Model			MDV-D36DL/N1-C	MDV-D45DL/N1-C	MDV-D56DL/N1-C	MDV-D71DL/N1-C	MDV-D80DL/N1-C
Power supply			1-phase,220-240V,50Hz				
Capacity	Cooling	kW	3.6	4.5	5.6	7.1	8.0
	Heating	kW	4.0	5.0	6.3	8.0	9.0
Power input	Cooling	W	49	120	122	125	130
	Heating	W	49	120	122	125	130
Airflow rate(H/M/L)		m³/h	650/570/500	800/600/500	800/600/500	800/600/500	1,200/900/700
Sound pressure level(H/M/L)		dB(A)	40/38/36	43/41/38	43/41/38	43/41/38	45/43/40
Net dimension(WxHxD)		mm	990×203×660	990×203×660	990×203×660	990×203×660	1280×203×660
Packing dimension(WxHxD)		mm	1089×296×744	1089×296×744	1089×296×744	1089×296×744	1379×296×744
Net/gross weight		kg	26/32	28/34	28/34	28/34	34.5/41
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wireless remote controller RM05/BG(T)E-A				

Model			MDV-D90DL/N1-C	MDV-D112DL/N1-C	MDV-D140DL/N1-C	MDV-D160DL/N1-C
Power supply			1-phase,220-240V,50Hz			
Capacity	Cooling	kW	9.0	11.2	14.0	16.0
	Heating	kW	10.0	12.5	15.0	18.0
Power input	Cooling	W	130	182	182	300
	Heating	W	130	182	182	300
Airflow rate(H/M/L)		m³/h	1200/900/700	1980/1860/1730	1980/1860/1730	1980/1860/1730
Sound pressure level(H/M/L)		dB(A)	45/43/40	47/45/42	47/45/42	47/45/42
Net dimension(WxHxD)		mm	1280×203×660	1670×244×680	1670×244×680	1670×244×680
Packing dimension(WxHxD)		mm	1379×296×744	1764×329×760	1764×329×760	1764×329×760
Net/gross weight		kg	34.5/41	54/59	54/59	57.5/63.5
Piping connections	Liquid/gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wireless remote controller RM05/BG(T)E-A			

- Notes:
- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C (44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Floor standing : Sound level is measured 1m(3.28ft.) horizontally and 1m(3.28ft.) vertically from the air-outlet.
Ceiling mounted: Sound level is measured 1m(3.28ft.) horizontally and 1m(3.28ft.) vertically from the air-outlet.

60Hz Specification

Model			MDV-D36DL/N1-C	MDV-D45DL/N1-C	MDV-D56DL/N1-C	MDV-D71DL/N1-C
Power supply			1-phase, 220-240V, 60Hz			
Cooling capacity		kW	3.6	4.5	5.6	7.1
		Btu/h	12300	15400	19100	24200
Heating capacity		kW	4.0	5.0	6.3	8.0
		Btu/h	13600	17100	21500	27300
Power input	Cooling	W	50	148	148	148
	Heating	W	50	148	148	148
Airflow rate(H/M/L)		m³/h	600/480/400	750/650/550	750/650/550	750/650/550
		CFM	353/283/235	441/383/324	441/383/324	441/383/324
Sound pressure level(H/M/L)		dB(A)	40/38/36	43/41/38	43/41/38	43/41/38
Net dimension(W×H×D)		mm(in.)	990×203×660(38-31/32×7-63/64×25-63/64)			
Packing dimension(W×H×D)		mm(in.)	1089×296×744(42-7/8×11-21/32×29-9/32)			
Net/gross weight		kg(lbs.)	26/32(57.3/70.6)	28/34(61.7/75.0)	28/34(61.7/75.0)	28/34(61.7/75.0)
Piping connections	Liquid/gas pipe	mm(in.)	Φ6.35/Φ12.7(Φ1/4/Φ1/2)		Φ9.53/Φ15.9(Φ3/8/Φ5/8)	
	Drain piping	mm(in.)	Φ16(OD 5/8)			
Standard controller			Wireless remote controller RM05/BG(T)E-A			

Model			MDV-D80DL/N1-C	MDV-D90DL/N1-C	MDV-D112DL/N1-C	MDV-D140DL/N1-C	MDV-D160DL/N1-C	
Power supply			1-phase, 220-240V, 60Hz					
Cooling capacity		kW	8.0	9.0	11.2	14.0	16.0	
		Btu/h	27300	30700	38200	47800	54600	
Heating capacity		kW	9.0	10.0	12.5	15.0	18.0	
		Btu/h	30700	34100	42700	51200	61400	
Power input	Cooling	W	183	183	245	245	378	
	Heating	W	183	183	245	245	378	
Airflow rate(H/M/L)		m³/h	1,200/900/700	1,200/900/700	1,980/1,860/1,730	1,980/1,860/1,730	2,300/2,100/1,800	
		CFM	706/530/412	706/530/412	1,165/1,095/1,018	1,165/1,095/1,018	1,354/1,236/1,060	
Sound pressure level(H/M/L)		dB(A)	45/43/40	45/43/40	47/45/42	47/45/42	47/45/42	
Net dimension(WxHxD)		mm(in.)	1280×203×660(50-25/64×7-63/64×25-63/64)		1670×244×680(65-3/4×9-39/64×26-49/64)		1670×285×680(65-3/4×11-7/32×26-49/64)	
Packing dimension(WxHxD)		mm(in.)	1379×296×744(54-19/64×11-21/32×29-19/64)		1764×329×760(69-29/64×12-61/64×29-59/64)		1775×377×760(69-7/8×14-27/32×29-59/64)	
Net/gross weight		kg(lbs.)	34.5/41(76.1/90.4)			54/59(119.0/130.1)		57.5/63.5(126.5/139.7)
Piping connections	Liquid/gas pipe	mm(in.)	Φ9.53/Φ15.9(Φ3/8/Φ5/8)					
	Drain piping	mm(in.)	Φ16(OD 5/8)					
Standard controller			Wireless remote controller RM05/BG(T)E-A					

- Notes:
- Nominal cooling capacities are based on the following conditions: return air temp.: 27°C(80.6°F)DB, 19°C(66.2°F)WB, outdoor temp.: 35°C(95°F)DB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Nominal heating capacities are based on the following conditions: return air temp.: 20°C(68°F)DB, outdoor temp.: 7°C (44.6°F)DB, 6°C(42.8°F)WB, equivalent ref. piping: 8m(26.25ft.) (horizontal).
 - Floor standing : Sound level is measured 1m(3.28ft.) horizontally and 1m(3.28ft.) vertically from the air-outlet.
Ceiling mounted: Sound level is measured 1m(3.28ft.) horizontally and 1m(3.28ft.) vertically from the air-outlet.

Floor Standing



Easy Installation >>

Floor standing types can be hung on the wall or installed on the floor. The floor type unit can make cleaning and maintenance much easier. Running piping from the rear allows the unit to be hung on walls. Cleaning under the unit, where dust tends to accumulate, is considerably easier.

Optional Panel Styles >>

Concealed type's body is concealed in the skirting board to improve aesthetics. The body is just 212mm deep, and can be installed at the room's perimeter. Special installation methods eliminate noise in the room area. Both air intake from front and air intake from below are optional for exposed floor standing type.

Concealed floor standing type



F3B series concealed type



Air intake from front(F4 series)



Air intake from below(F5 series)

Specification

Model			MDV-D22Z/N1-F3B	MDV-D28Z/N1-F3B	MDV-D36Z/N1-F3B	MDV-D45Z/N1-F3B	MDV-D56Z/N1-F3B	MDV-D71Z/N1-F3B	MDV-D80Z/N1-F3B
Power supply			1-phase,220-240V,50Hz						
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0
	Heating	kW	2.4	3.2	4.0	5.0	6.3	8.0	9.0
Power input	Cooling	W	40	46	46	49	88	130	130
	Heating	W	40	46	46	49	88	130	130
Airflow rate(H/M/L)			m³/h	530/456/400	569/485/421	624/522/375	660/542/440	1,150/970/830	1,380/1,100/870
Sound pressure level(H/M/L)			dB(A)	36/33/29	36/33/29	37/34/30	37/34/30	41/35/31	44/39/33
Net dimension(WxHxD)			mm	840x545x212	840x545x212	1040x545x212	1040x545x212	1340x545x212	1340x545x212
Packing dimension(WxHxD)			mm	939x639x305	939x639x305	1139x639x305	1139x639x305	1425x639x305	1425x639x305
Net/gross weight			kg	25/27	25/27	29.5/34	29.5/34	33/39	33/39
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wireless remote controller RM05/BG(T)E-A						

Model			MDV-D22Z/N1-F4	MDV-D28Z/N1-F4	MDV-D36Z/N1-F4	MDV-D45Z/N1-F4	MDV-D56Z/N1-F4	MDV-D71Z/N1-F4	MDV-D80Z/N1-F4
			MDV-D22Z/N1-F5	MDV-D28Z/N1-F5	MDV-D36Z/N1-F5	MDV-D45Z/N1-F5	MDV-D56Z/N1-F5	MDV-D71Z/N1-F5	MDV-D80Z/N1-F5
Power supply			1-phase,220-240V,50Hz						
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0
	Heating	kW	2.4	3.2	4.0	5.0	6.3	8.0	9.0
Power input	Cooling	W	40	46	46	49	88	130	130
	Heating	W	40	46	46	49	88	130	130
Airflow rate(H/M/L)			m³/h	530/456/400	569/485/421	624/522/375	660/542/440	1,150/970/830	1,380/1,100/870
Sound pressure level(H/M/L)	F4	dB(A)	36/33/29	36/33/29	37/34/30	37/34/30	41/35/31	44/39/33	44/39/33
	F5	dB(A)	36/33/29	36/33/29	37/34/30	37/34/30	41/35/31	44/39/33	44/39/33
Net dimension(WxHxD)	F4	mm	1000x596x225	1000x596x225	1200x596x225	1200x596x225	1500x596x225	1500x596x225	1500x596x225
	F5	mm	1000x677x220	1000x677x220	1200x677x220	1200x677x220	1500x677x220	1500x677x220	1500x677x220
Packing dimension(WxHxD)	F4	mm	1089x683x312	1089x683x312	1289x683x312	1289x683x312	1589x683x312	1589x683x312	1589x683x312
	F5	mm	1182x683x312	1182x683x312	1382x683x312	1382x683x312	1682x683x312	1682x683x312	1682x683x312
Net/gross weight	F4	kg	30/35	30/35	36/44	36/44	41/46.5	41/46.5	42.5/48.5
	F5	kg	30/38	30/38	35.5/41	35.5/41	42/51	42/51	44/53
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wireless remote controller RM05/BG(T)E-A						

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent ref. piping: 8m(horizontal).
2. Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. piping: 8m(horizontal).
3. Specifications of F3B series are measured at 10Pa external static pressure and F4/F5 series at 0Pa.
4. Sound level is measured 1m horizontally from the air-outlet and 1m vertically above the floor.

Console



Compact Size and Stylish Design >>

The elegant and thin body complements the existing decor and saves space.
The EXV is installed inside the indoor unit for added compactness.

High Efficiency Filter >>

Built in formaldehyde nemesis filter.
Active-carbon and biological anti-virus filter are optional.

High Comfort >>

Flexible air flow: vertical auto swing and wide angle louvers ensure that warm air reaches every corner of the room and increases the air flow coverage.

Indoor unit adopts DC motor with five fan speeds to meet different requirements.

Applies the Fujikoki mechanical expansion valve which offers 2,000-stage element positioning to ensure precise flow control and lower modulation noise when the EXV is operating.

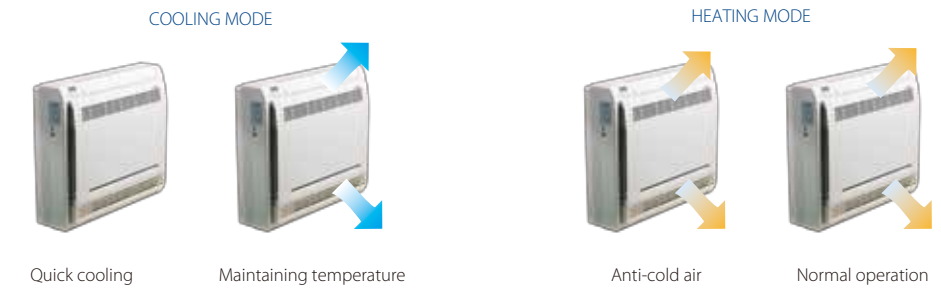
Flexible Installation >>

Can be installed on the floor or lower wall.

As a floor standing type, air flow can be semi or fully accessed without losing capacity.



Powerful Mode Can Be Selected for Rapid Cooling or Heating >>



Two Air Outlets and Four Air Inlets >>

Four directional of air inlet.
two options of air outlet: Up and Down, or Up only.



Low-noise Design >>

Five-speed indoor unit; low noise; low power consumption.



Low noise operation, lowest 26dB(A)

Specification

Model			MDV-D22Z/DN1-B	MDV-D28Z/DN1-B	MDV-D36Z/DN1-B	MDV-D45Z/DN1-B
Power supply			1-phase, 220-240V, 50Hz			
Capacity	Cooling	kW	2.2	2.8	3.6	4.5
	Heating	kW	2.6	3.2	4.0	5.0
Power input	Cooling	W	20	25	25	45
	Heating	W	20	25	25	45
Airflow rate(H/M/L)		m³/h	430/345/229	510/430/229	510/430/229	660/512/400
Sound pressure level(H/M/L)		dB(A)	38/32/26	39/33/27	39/33/27	42/39/36
Net dimension(W×H×D)		mm	700×210×600	700×210×600	700×210×600	700×210×600
Packing dimension(W×H×D)		mm	810×305×710	810×305×710	810×305×710	810×305×710
Net/gross weight		kg	14/19	15/20	15/20	15/20
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7
	Drain pipe	mm	OD Φ16	OD Φ16	OD Φ16	OD Φ16
Standard controller			Wireless remote controller RM05/BG(T)E-A			

Notes:

- Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent ref. piping: 8m(horizontal).
- Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. piping: 8m(horizontal).
- Sound level is measured 1m horizontally from the air-outlet and 1m vertically above the floor.

Control Systems



Wireless Remote Controller

RM02
RM05

Wired Controller

KJR-29B
KJR-90C
KJR-86C
KJR-10B
KJR-12B
KJR-120B
KJR-120C
KJR-27B

Centralized Controller & Monitor

CCM30
MD-CCM03
MD-CCM09
KJR-90B
MD-CCM02

Network Control Software & Gateways

IMM Software & M-Interface
Data Converter CCM15
KNX Gateway MD-KNX
BACnet Gateway CCM08
LonWorks Gateway LonGW64
Modbus Gateway CCM-18A

Accessories

Hotel Key Card Interface Module MD-NIM05
Infrared Sensor Controller MD-NIM09
3-Phase Protector
Digital Power Ammeter
Indoor Unit Group Controller-KJR-150A
Remote Alarm Controller KJR-32B
Network Electricity Distribution Module MD-NIM10
AHU Control Box
Midea Outdoor Unit Diagnosis

Wireless Remote Controller



Auto Mode >>

Auto mode is specially designed for V4+R system.

Can automatically switch the cooling and heating mode through the temperature difference between the indoor temperature and the setting temperature.

* For the 2-pie system, it runs cooling mode only.

Background Light >>

The background light allows users to operate the device in a dark room. The device lights up when a button is pressed, and turns off when a given operation is completed.

Address Setting >>

Besides the machine's auto addressing function, users can set the indoor unit's address on the wireless remote controller RM05/RM02.



Follow Me >>

With the follow me function, temperature sensor built-in the remote controller will automatically adjust temperature and send it to the indoor unit to make the room more comfortable.

*Follow me function is available for RM02.



Benefits

Model name	RM02	RM05
Mode change	●	●
Temp. setting	●	●
Fan speed control	●	●
Keyboard lock	●	●
Eco operation	●	●
Swing function	●	●
Air direction	●	●
24h timer	●	●
Clock display	—	●
Address setting	●	●
Follow me function	●	—
26°C shortcut setting	●	—
Background light	●	●

Notes:

1. ECO function needs to match with the corresponding indoor units.
2. ● : available controller functions; — : not available controller functions

Specifications

Model	RM02	RM05
Dimensions (HxWxD)(mm)	150x60x15	150x65x20
Power (V)	1.5V(LR03/AAA)×2	

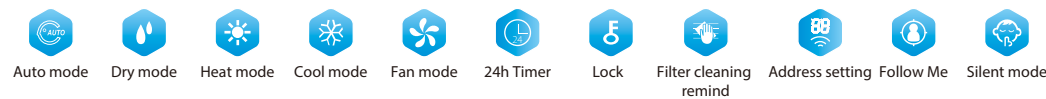
Wired Controller



KJR-86C

KJR-29B

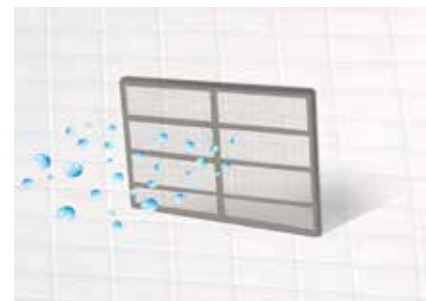
KJR-90C



Air Filter Cleaning Reminding »

The wired controller records the total running time of the indoor unit. When the accumulated running time reaches the pre-set value, it will remind users need to clean the air filter of the indoor unit.

Clean the filter regularly can keep indoor air fresh and clean, good for your health.



Silent Mode »

Under the cooling, heating and auto mode, when operate the silent mode, it can reduce the running noise through setting the fan speed to low. This will help you bring a quieter environment.

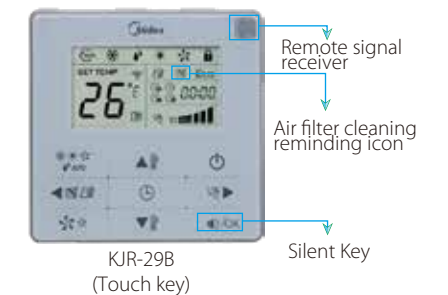


Keyboard Locking »

The locking function can be used to prevent other people from using the controller.

Remote Signal Receiving Function »

KJR-29B and KJR-90C provide a signal receiver for remote controller. Signal from remote controller can be received by a wired controller, then sent to the indoor unit and it conveniences to control.

KJR-29B
(Touch key)

Address Setting »

KJR-29 and KJR-90C have the address setting function. The service person can set the address for indoor unit, easy for the installation and future service.



Follow Me »

Temperature sensor built-in wired controller will sense its surrounding temperature. So the unit can adjust room temperature more accurately to give you more comfort.

*Follow me function is available for KJR-29B and KJR-90C models.



One-key 26°C »

KJR-86C has one-key 26°C function, and considering about the comfort and energy saving, 26°C is the best setting temperature.

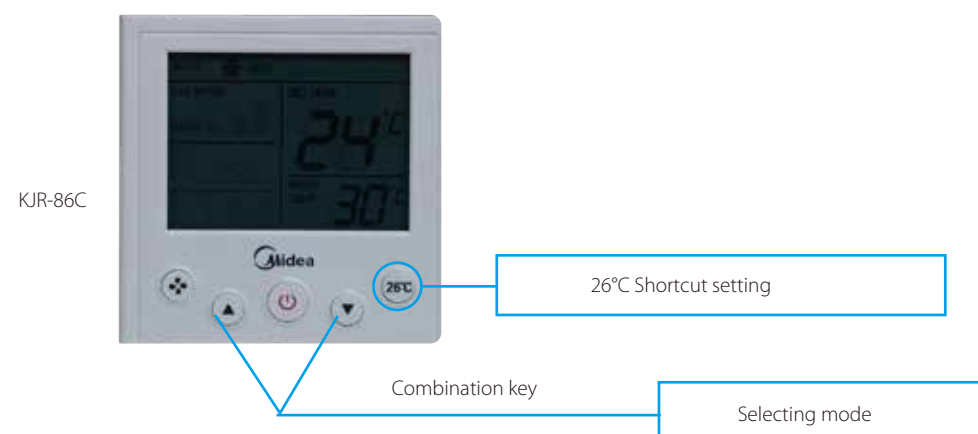


User Friendly Design >>

KJR-86C is a mode hidden controller, specially designed for the hotel, hospital, schools and other similar types of buildings.

Mode key hidden controller:

Press the temperature buttons "▲" and "▼" simultaneously for 3 seconds to select the operation mode: COOL or HEAT.



User Friendly Installation >>

With background light function, easy to operate in a dark room.

Small size as electric switch can make the installation more dignified.

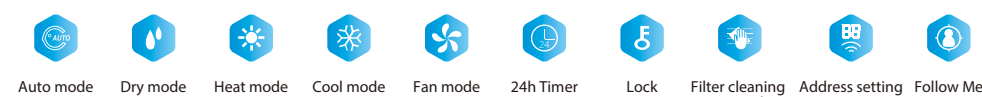


Auto Restart Function >>

When power fails, it can record the running parameters, such as:

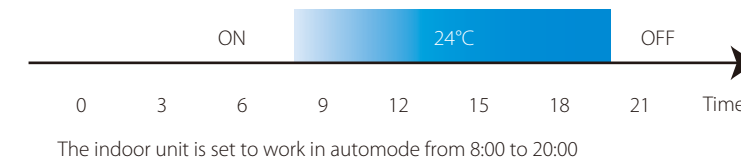
ON/OFF state, mode, Fan speed, Temperature, Swing and Locking status.

When power resumes, it will be automatically read power fails before the set condition.



Built-in Timer >>

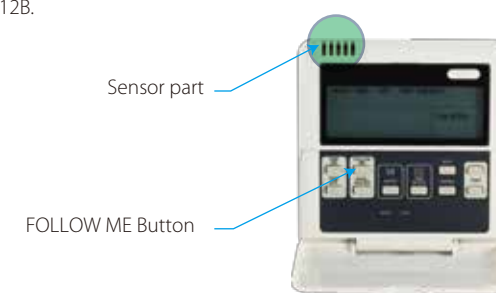
Built-in daily timer offers the convenience of automatically starting and stopping the system at set times.



Follow Me >>

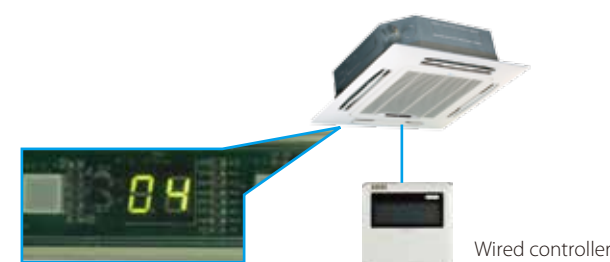
With the FOLLOW ME function, the wired controller can detect the air temperature at the user's altitude instead that of the ceiling or floor. This helps making the room environment comfortable and the temperature accurate.

*Follow me function is available for KJR-12B.



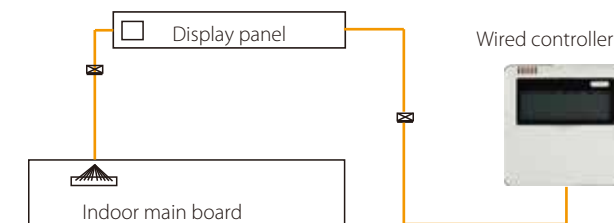
Addresses Setting >>

With the address setting function, and easy for the installation and future service. The service person can set the address for indoor unit by KJR-10B, KJR-29B and KJR-90C.



Easy Connection >>

The wired controller conveniently connects to the indoor unit's display panel via connecting wire.



V4 Plus R Wired Controller

KJR-120B



Auto Mode >>

Auto mode is specially designed for V4 plus R series only.

Under the auto mode, the V4 plus R system can automatically switch to COOL or HEAT mode according to the temperature difference value between Tf (indoor temperature) and Ts (setting temperature).

* KJR-120B can compatible with the 2-pie system and under the auto mode, it only can run cooling mode.

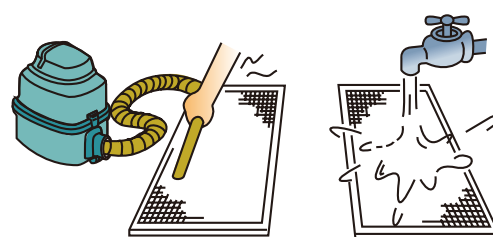
Error Display >>

When the malfunction occurs during the operation, the setting temperature display area will show the error code.

Error status can be checked easily via the indoor unit wired controller.

Filter Cleaning Reminder >>

The wired controller records the total running time of the indoor unit. When the accumulated running time reaches the pre-set value, it will remind users need to clean the air filter of the indoor unit. Clean the filter regularly can keep indoor air fresh and clean, good for your health..



Silent Mode >>

Under the cooling, heating and auto mode, when operate the silent mode, it can reduce the running noise through setting the fan speed to low. With less noise, you can always have quiet, peaceful life while staying comfortably.



Weekly Schedule Timer Wired Controller

KJR-120C



Simple Design >>

Weekly schedule wired controller can query the indoor temperature and the setting parameters of the weekly schedule. It can show the error codes and running state of the indoor unit. With the LCD backlight, and enables users to operate the device in a dark room.

Weekly Schedule Timer >>

With the weekly schedule timer function; users can set up 4 scheduled periods per day to frequent adjustments.

The Schedule feature allows you to program the behavior of the devices. If a device must adhere to a certain schedule, you can program the device to operate only at scheduled times. Scheduled devices do not activate unless programmed to do so and are managed centrally. This can significantly reduce energy consumption.

Delay Function >>

This function is specifically designed for personnel who are working overtime. Pressing the Delay button will postpone system shutdown by 1 or 2 hours.

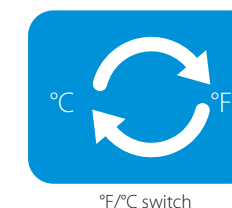
Error Display >>

When the malfunction occurs during the operation, the setting temperature display area will show the error code. Error status can be checked easily via the indoor unit wired controller.



°F/°C Switch >>

Press the Left-right swing and Up-down swing buttons simultaneously for 3 seconds to switch °F/°C.



°F/°C switch

HRV Wired Controller



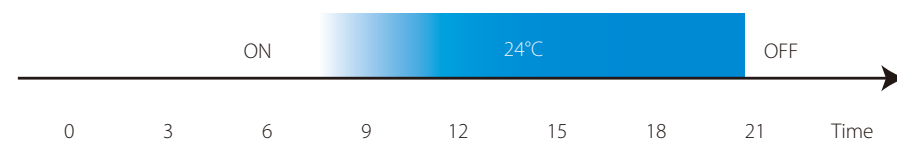
KJR-27B is individually designed for HRV—Heat Recovery Ventilator. The HRV can work in the following modes: exhaust, air supply, bypass, heat exchange, and auto.

AUTO->HEAT EXCHANGE->
EXHAUST->BYPASS->AIR SUPPLY

Built-in Timer >>

Built-in daily timer offers the convenience of automatically starting and stopping the HRV at the set times.

Setup screen example
Set to wednesday: 8:00 to 20:00



Specifications

Model	KJR-29B	KJR-90C	KJR-86C	KJR-10B	KJR-12B	KJR-27B	KJR-120B	KJR-120C
Dimensions (HxWxD)(mm)	120x120x20	86x86x16.5	86x86x18	120x120x15	120x120x15	120x120x15	120x120x20	120x120x20
Power (V)	DC 5V (Supplied by indoor unit)						DC 12V by IDU	

Benefits

Model name							
	KJR-10B	KJR-12B	KJR-29B	KJR-90C	KJR-86C	KJR-120B	KJR-120C
Fan speed control	●	●	●	●	●	●	●
Mode change	●	●	●	●	●	●	●
Auto mode for V4+R	—	—	—	—	—	●	—
Eco mode	●	●	—	—	—	—	—
Keyboard lock	●	●	●	●	—	●	●
Swing function	●	●	●	●	—	●	●
Background-light	—	●	●	●	●	●	●
24h timer	●	●	●	●	—	●	●
Clock display	●	—	●	●	—	●	●
Address setting	●	—	●	●	—	—	—
Remote signal receiving	—	—	●	●	—	—	—
Air filter cleaning reminder	—	—	●	●	—	●	—
Follow me function	—	●	●	●	—	—	—
Silent mode	—	—	●	●	●	●	—
26°C shortcut setting	—	—	—	—	●	—	—
Display indoor temp.	—	—	—	—	●	—	—
°F/°C initial setting	●	—	●	●	—	●	●
Weekly schedule timer	—	—	—	—	—	—	●
Delay function	—	—	—	—	—	—	●
Auto restart	●	●	●	●	●	●	●
Error code display	—	—	—	—	—	●	●

Notes:

- ECO function needs to match with the corresponding indoor units.
- : available controller functions; — : not available controller functions

Centralized Controller & Monitor



Indoor Centralized Controller

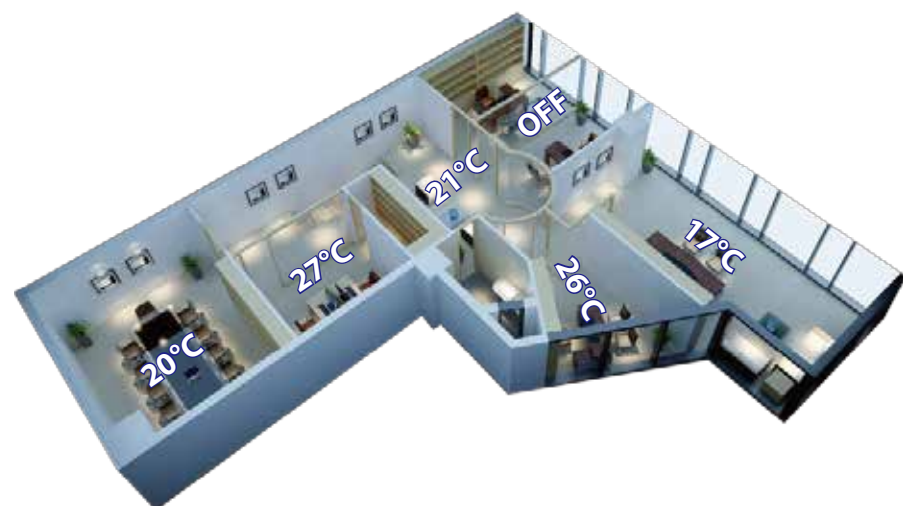


CCM30
MD-CCM03
MD-CCM09



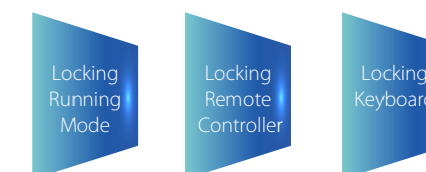
Centralized Control >>

The centralized controller is a multifunctional device that can control up to 64 indoor units within a maximum connection length of 1,200m. User can group control or individual control and the set temperature of each unit can also be different.



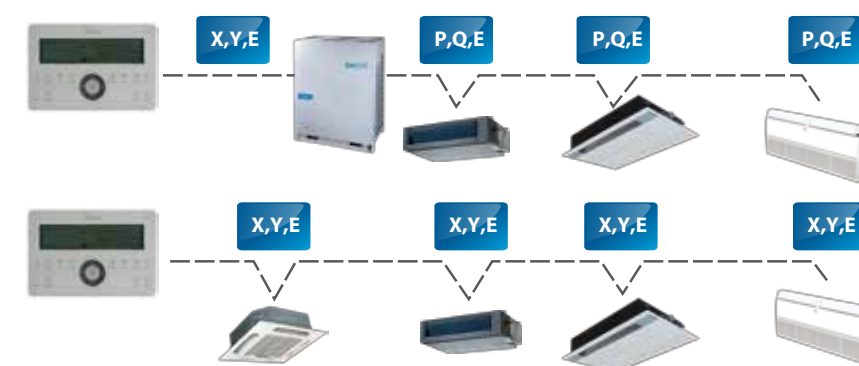
Three Lock Modes >>

Centralized controller provides a superior way to manage the indoor units. Users are able to make their own choice from locking the wireless controller, locking the running mode or locking the centralized controller's keyboard as they wish.



Wiring Example >>

The device connects to the master outdoor units of Midea's newly designed products to simplify and centralize the wiring configuration. The 2 connecting methods are as follow:



- *1. If it connects to XYE ports of master ODU, ODU must be set to auto addressing mode.
- *2. Some products only can be connected with MD-CCM09 from indoor side XYE ports.

Application Example >>

Just make sure the address is not repeated and the units can be from different systems, up to 64 indoor units, greatly reducing system limitation.

- *1. For 2-pipe system, the running mode should be in the same mode;
- *2. For 3-pipe system, the running mode can be set at will.



Benefits

Model	 CCM30	 MD-CCM03	 MD-CCM09
Max. number of indoor units	64	64	64
Group control	●	●	●
Individual control	●	●	●
Fan speed control	●	●	●
Mode selection	●	●	●
Mode locking	●	●	●
Remote controller locking	●	●	●
Keyboard locking	●	●	●
Weekly schedule timer	—	—	●
24h timer	●	●	●
Error check	●	●	●
Emergent start	●	●	●
Emergent stop	●	●	●
Background-light	●	●	●
Swing function	●	●	●
Air filter cleaning reminder	●	—	—
Parameter query	●	●	●
BMS access	●	●	—

Notes:
● : available controller functions; — : not available controller functions

Specifications

Model	MD-CCM03	CCM30	MD-CCM09
Dimensions (H*W*D)(mm)	179×119×74	180×122×78 and 180×122×68	179×119×74
Power (V)	198-242V(50/60Hz)		

Unified On/Off Controller

Unified controller design with graceful appearance and explicit panel.
Can control single or group indoor units.



KJR-90B

Unified Control »

KJR-90B offers on/off and heating/cooling functionality for indoor units based on preset temperatures to ensure easy management.



Centralized Control »

KJR-90B can be used to centrally control up to 16 indoor units.



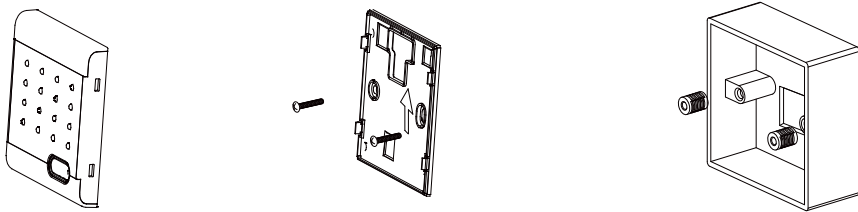
Light Indicator »

The LEDs on KJR-90B indicate the indoor units' running status for easy fault detection. The lights switch off automatically to save energy once a given operation is complete. The indicators are as follows:

Light	Blue	Red	Flash
Single On/Off key	Cooling/Fan	Heating	IDU Error
Unified On/Off key			EEPROM Error

Easy Installation »

KJR-90B can be easily mounted on the built-in cabinet:

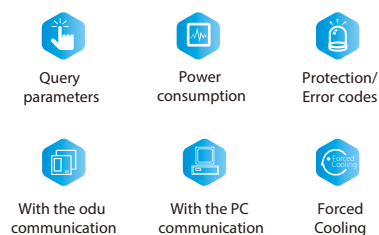


Specifications

Model	KJR-90B
Dimensions (H*W*D)(mm)	90×86×8
Power (V)	DC 5V(Supplied by indoor unit)

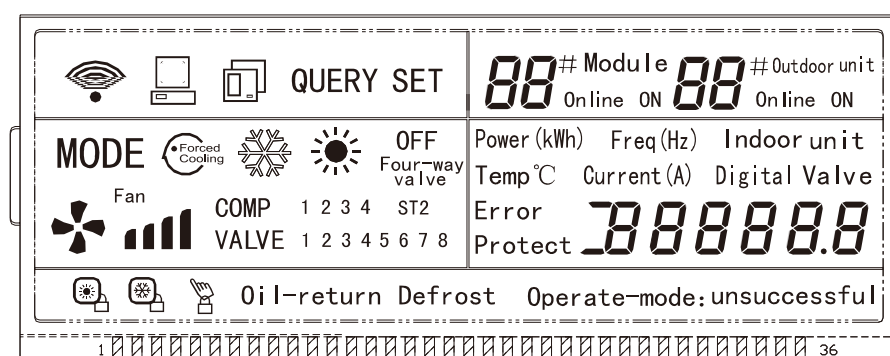
Outdoor Centralized Monitor

MD-CCM02



ODU Parameters Display >>

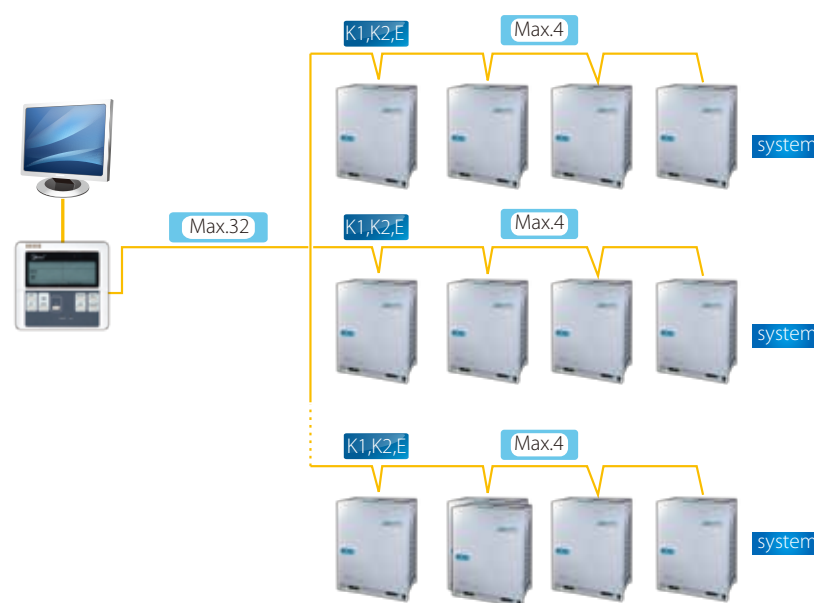
MD-CCM02 enables users to easily check outdoor units' running status, including frequency, temperature, current, pressure, protection codes and error codes.



Graph 2 LCD Screen

Access to Network Monitoring >>

MD-CCM02 can connect up to 8 refrigerant systems and 32 outdoor units to the network system.



Specifications

Model	MD-CCM02
Dimensions(HxWxD)(mm)	120x120x15
Power (V)	198-242V(50/60Hz)

Network Control Software & Gateways



Network Control Software & Gateways



IMM(Intelligent Manager of Midea) 4th Generation Network Control System



IMM software



M-interface Gateway

Intelligent Manager of Midea, designed specifically to control VRF systems, is based on a centralized format and dedicated to the complete control and monitoring of all the system's functions. It can be used as a flexible multi-purpose system and applied to a variety of needs, according to the scale, purpose and control method of each building.

Key Features >>

- ❖ Up to 4 M-interface gateways, 64 refrigerant systems, 1,024 indoor units, and 256 outdoor units can be controlled by one PC.
- ❖ User friendly operation
- ❖ Web access for M-interface gateway
- ❖ Central building monitoring and control
- ❖ Energy saving management
- ❖ Zone management
- ❖ Warning message
- ❖ *SMS modem(optional)
- ❖ Electricity charge distribution
- ❖ Annual schedule management
- ❖ Low-load operation indicate
- ❖ Generate operational history reports (daily, weekly)
- ❖ Fault display & Warning message
- ❖ Air filter cleaning reminding function
- ❖ Emergency stop and Alarm signal output
- ❖ Multiple languages



Web Access function



Energy Saving Management



Schedule management



Visual Navigation



Warning Message



Data Backup

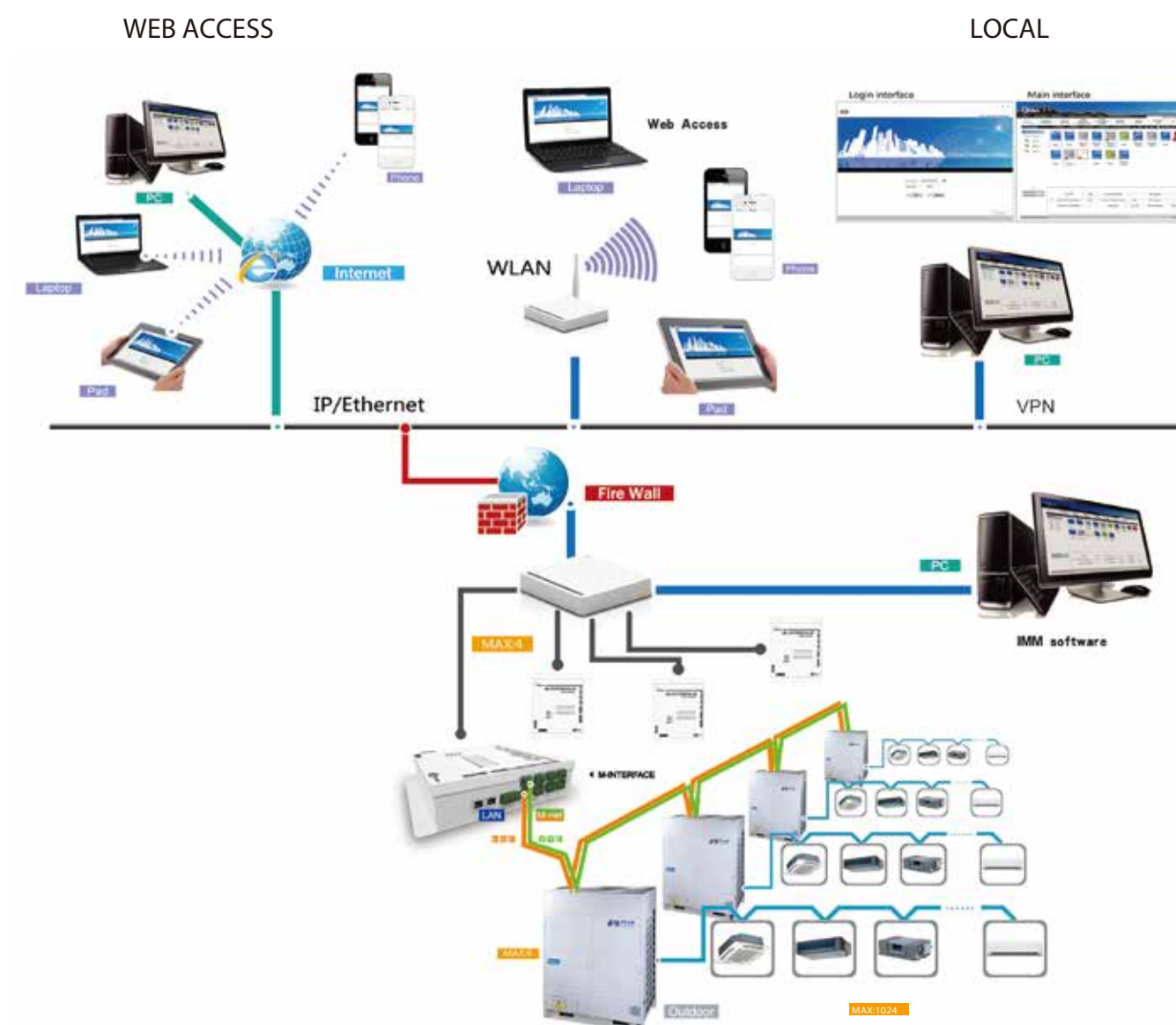


Multiple Languages



Electricity Charge Distribution

Network Control Application >>

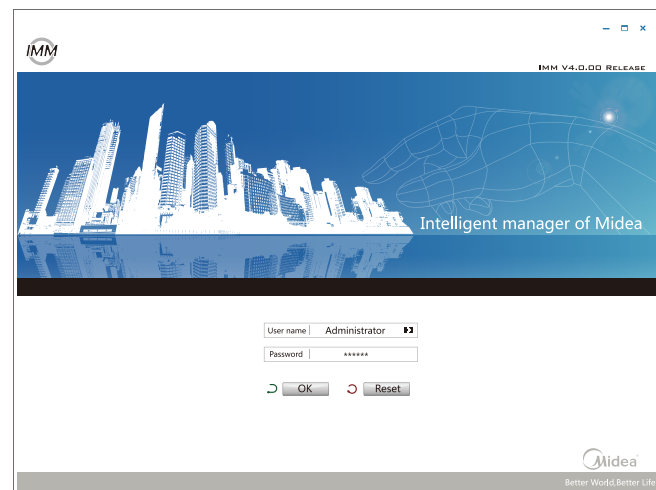


- ❖ Can run on Window 7_32/64 bit, Window XP_32 bit and Window 8.
- ❖ Can monitor and control A/C anytime, anywhere by PC, iPhone, iPad and notebook computer.
- ❖ Support WEB access: IE, Firefox, Safari and Chrome.
- ❖ Enables remote access through DSL, VPNs and so on.

Simple Operation & Management »

- ❖ Click & Operate, a user-friendly interface allows even non-experts to perform the building management system easily.
- ❖ IMM offers massive centralized management program, meets with flexibility and high efficiency.

Login interface



Main interface



Visual Navigation »

Allows to import floor plan, dragging the A/C device to anywhere can locate the A/C quickly, and view to specify the physical location of the A/C.
With the visual navigation function, the layout of A/C is showed on the floor plan directly, and the running solution is clear.



Web Access Function »

With the web access function, a PC, laptop computer or a smart phone can be used as a remote controller. Supports up to 4 users online at the same time. Connects with the LAN and WAN, user can monitor and manage A/C device at distance.

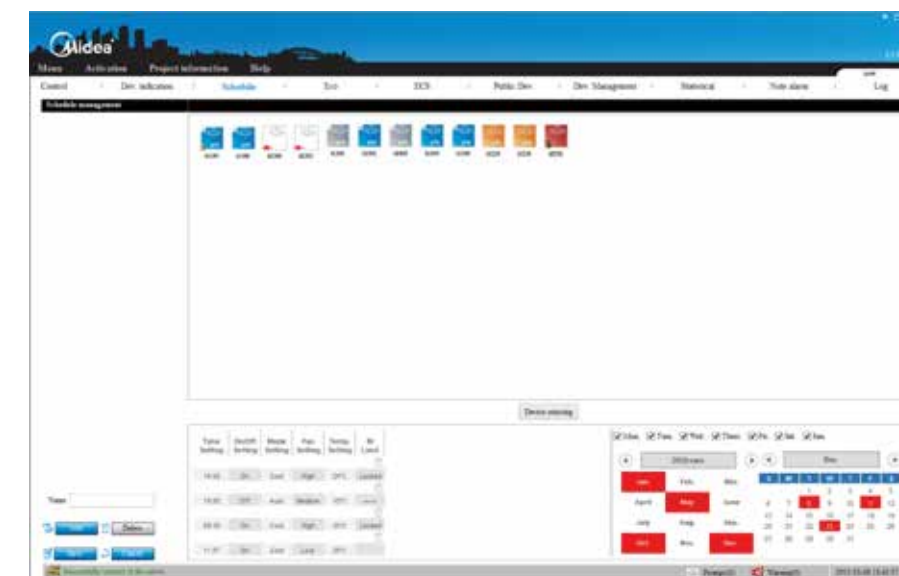
*WAN access needs to set up the VPN.



Schedule Management »

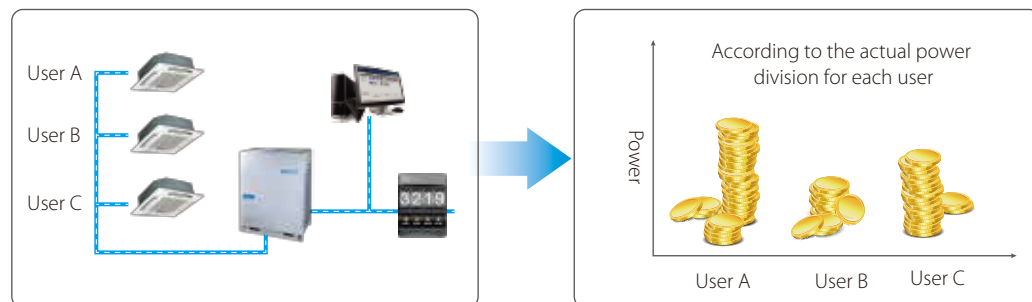
Automatically performs facility start/stop control, switches the operating mode, sets temperatures and enables/disables the remote control according to the present time schedule.

- ◆ User can set up day/week task for running recurrently.
- ◆ User can choose indoor units freely, and assign task time freely.
- ◆ Except for the conventional setup, system offer all kinds of energy conservation options.



Electricity Charge Distribution (Patented) >>

- ❖ Provides information on proportional electrical power distribution to optimize electricity consumption management.
- ❖ Uses software to calculate electric power proportional distribution, output and save electricity consumption data for each indoor unit (or group) which is connected to the intelligent manager.
- ❖ Applies the patented Midea Calculation Method to calculate consumption rates according to capacity demand which is based on various parameters: setting temperature, room temperature, running mode, rated HP, public areas, unused rooms, and nighttime use; outputs this information on a charge calculation sheet to evenly divide power consumption charges among tenants.
- ❖ Electricity charges can be easily divided when billing users for air conditioning power charges; for example, for tenants in a commercial building, offices in a rented building, or rooms in a hotel.



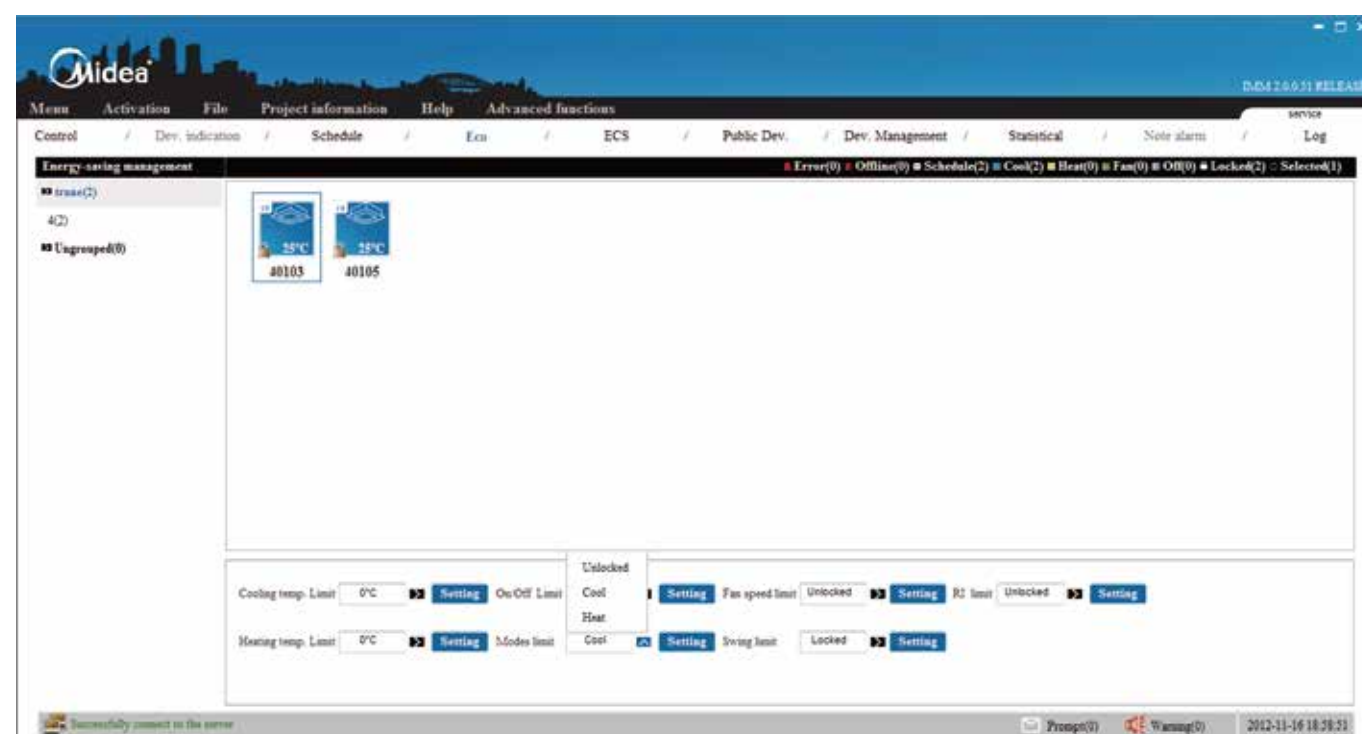
According to the running time, setting temp, returning air temp, refrigerant flow and so factor, the energy consumption can be divided.

Energy Saving Management >>

Based on a predetermined schedule, the Intelligent Manager executes capacity control and intermittent operations on all air conditioning units to maintain a high comfort index.

User can set limit to any running unit, any parameter, such as cooling temp., heating temp., fan speed, operation mode and so on.

- * 1. Meet with the <Public building energy efficiency management regulations>.
- 2. Matches with the corresponding indoor units.



Automatic & Manual Topology >>

With automatic topology mode and manual topology mode.



Can topologize automatically between the indoor and outdoor units in the refrigerant system.
For one M-interface gateway, up to 4 refrigerant systems, 256 indoor units and 16 outdoor units.



Need to manually set the topologize method between the indoor and outdoor units in the refrigerant system.
For one M-interface gateway, up to 16 refrigerant systems, 256 indoor units and 64 outdoor units.

Warning Message >>

The system can receive error messages from air conditioning units in more than one buildings or structures via public phone lines. If something influence normal operation, system will send message to operation staff for early warning.

*Requires the Midea "SMS Modem" to send automatic warning messages to designated phone numbers.

Data Management >>

Operational information of individual indoor units are monitored, allowing for distribution of power consumption at outdoor units.

Stores operation data on multiple systems and reports it in excel format for visual management.

Uses IMM software to generate tenant reports and help building owners bill for energy use.

Zone Management >>

Easier to control and manage the air conditioner.

Also convenient to manage the energy charge of the public devices.

Data Backup >>

Double data backup, stores on M-interface and IMM database;

The M-interface gateway will automatically back up power data for 1 or 2 months in case system failure occurs.

Such as: PC power failure or system crash, M-interface will automatically backup the data to the gateway.

IMM software also stores the operational data on the software database.

Colorful Language Obtained >>

Supporte multiple languages, customers can switch freely according to their own needs.

9 different languages:

English

French

Italian

Russian

German

Spanish

Simple Chinese

Polish

Korean

Data Converter

Cloud server controller, to enable the long-distance control for VRF system through internet.

As well the smart phone, tablet PC, laptop or desktop PC can be as a web controller, max. 64 indoor units.

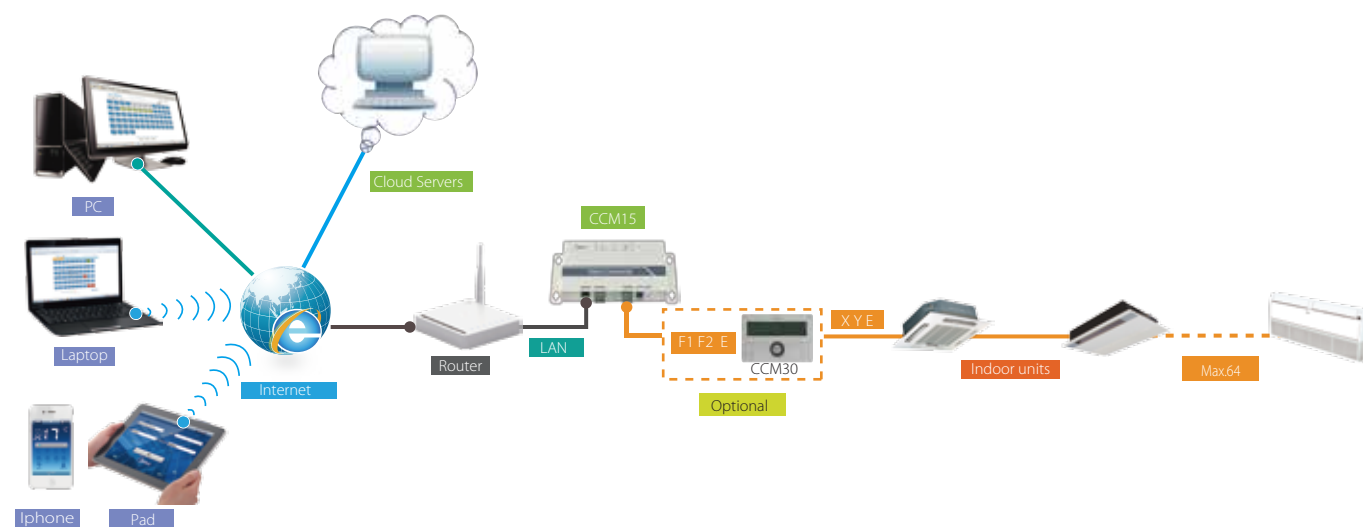
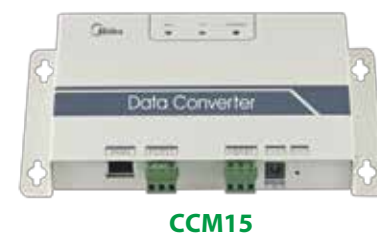
Network Example >>

Can be directly connected with XYE port of the indoor/outdoor units.

Up to connect 64 indoor units.

CCM03/CCM30 is optional and can be connected with CCM15 through F1F2E ports.

The system consisting A/C system, data converter CCM15, router, cloud server and control terminal.



*If it connects to XYE ports of master ODU, ODU must be set to auto addressing mode.

Simply Control Interface >>

Software control/ Cloud server control (WEB access).

Click & operate, a user-friendly interface.

Allows single and group control.

Simplified user control interface.

Colour indication and icon makes it easy to recognize unit state.

Can full screen display and temperature can be adjusted by fingers' sliding.



Weekly Schedule Control >>

With weekly schedule function for iPad and Web function.

Multiple sections in each day for single unit or group.

Automatically performs facility start/stop control, operating mode, setting temperatures and according to the present time schedule.



Cloud Server Web >>

Query and control single unit or group.

Weekly schedule setting: can set multiple sections in each day for single unit or group.

Group user control : a user can use the same ID to manage hundreds of CCM15, when selecting the "As group user" button on the login page.

History error: easy service and management with history error function.

Intelligent Control >>

The air conditioner remote control can be realized by mobile phone or tablet computer.

Can query and control the running state of the A/C any time and any where, and even make an appointment in advance.

Can remotely turn off the air conditioner to avoid the power waste, when you are in a hurry to leave.



Modbus® Gateway

LonWorks® Gateway

BMS

BACnet® Gateway

KNX Gateway

What Is The BMS ? >>

BMS is the shorted name for Building Management System or a (more recent terminology) Building Automation System (BAS), is a computer-based control system installed in buildings that controls and monitors the building' s mechanical and electrical equipment such as Ventilation, Lighting, Power systems, Fire systems, and Security systems.

There are four types BMS protocols we can see common: BACnet, LonWorks, Modbus and KNX.



MD-KNX

KNX Gateway

Specially designed to allow monitoring and bidirectional control of the parameters and functionality of Midea air conditioner from KNX installations

What Is The KNX? >>

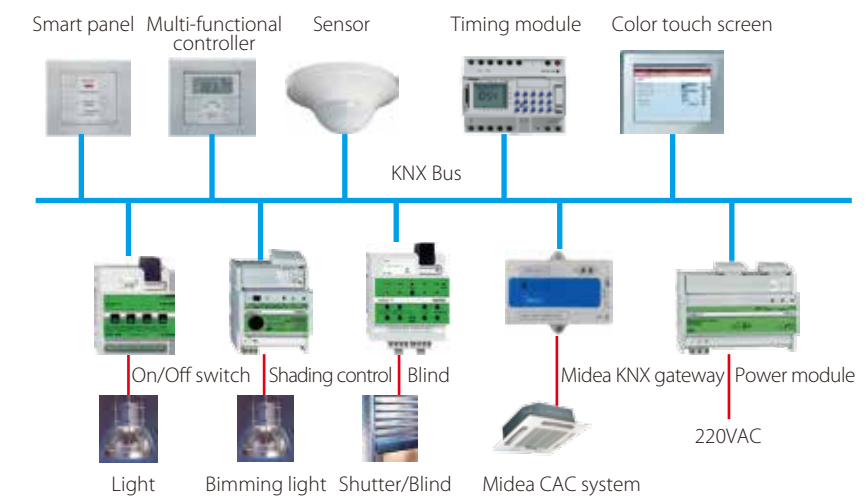
KNX is the short name for Konnex and starts from 1999. KNX standard is the only global standard for housing and building control which occupies the 70% of the Europe smart home market.

Key Features >>

- ❖ Compatible with all Midea VRF products;
- ❖ External power is not required and direct connect to the KNX EIB bus;
- ❖ Fully KNX interoperable, configuration from ETS;
- ❖ Multiple objects for control (different types: bit, byte, characters...).
- ❖ Easy installation, direct connects with one indoor unit through RS485 bus
- ❖ Direct connection to KNX bus.
- ❖ KNX certification

Widely Application >>

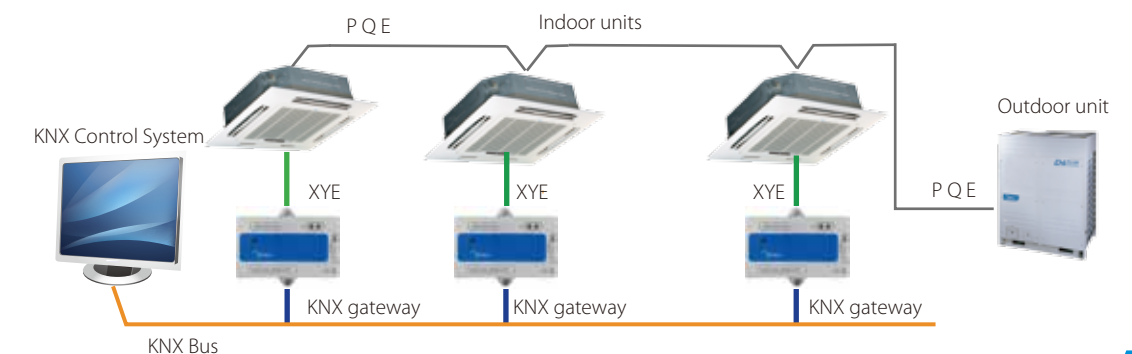
Midea KNX protocol gateway can be combined with other hundreds of KNX certified products labeled with the KNX trademark in a same working system.



Electrical Wiring >>

One gateway only can be connected to one indoor unit.

Only can connect to XYE port of the indoor unit.





MD-CCM08

BACnet® Gateway

Integrated Control System for Seamless Connection between VRF and BMS Systems

What Is The BACnet? »

BACnet is a communications protocol for building automation and control networks. BACnet was designed to allow communication of building automation and control systems for applications, such as heating, ventilating, and air conditioning control, lighting control, access control, and fire detection systems and their associated equipment.

Key Features »

- ❖ Precise and efficient monitoring and control of Midea VRF system
- ❖ Connect up to 256 indoor units or 128 outdoor units to the BMS.
- ❖ Be free to connect to the BMS or not.
- ❖ Built-in WEB function
- ❖ BTL certification

● Controlling

- Operation mode setting
- Set temperature setting
- Fan speed setting
- Swing running for web
- Lock remote controller

● Monitoring

- Operation mode status report
- Set temperature status report
- Fan speed status report
- RC locking status
- Online quantity
- Timer status
- Error status
- Room temperature display

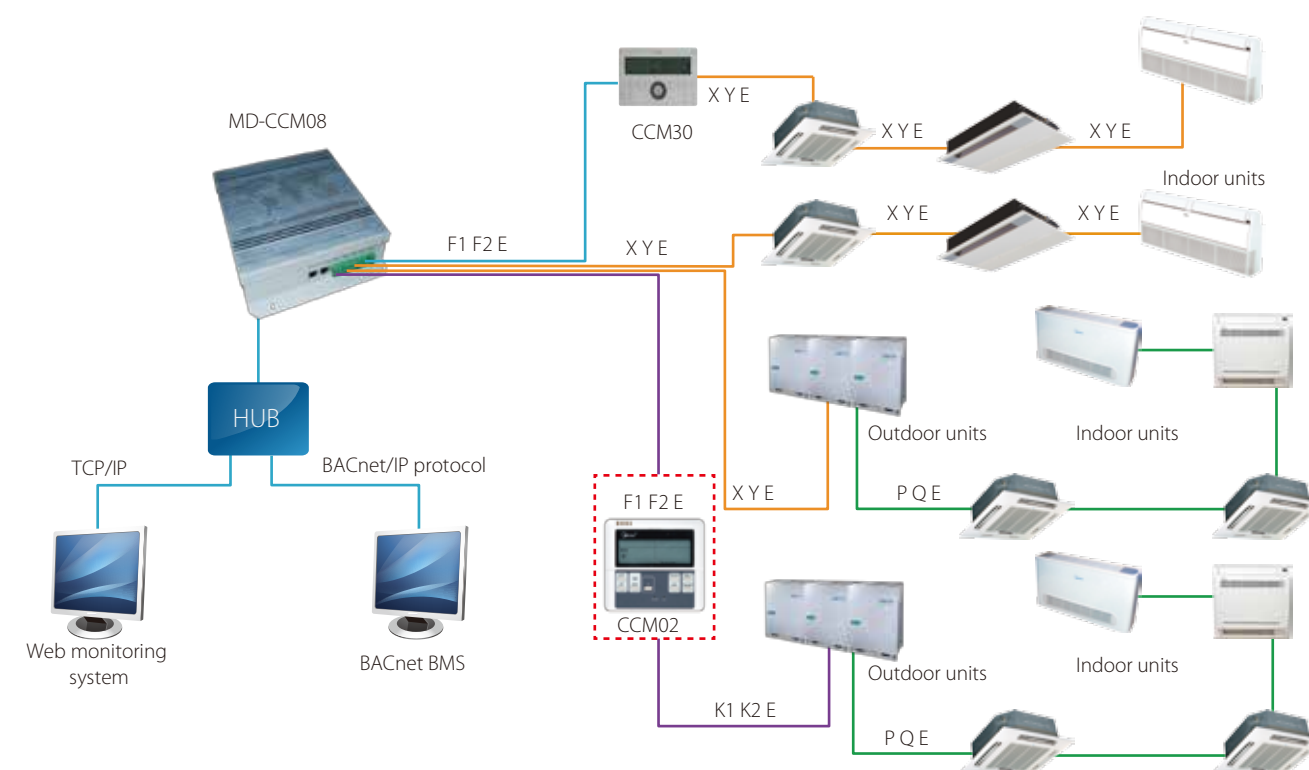
*For more information, refer to product object table.

Monitoring Units Online »

MD-CCM08 allows users to track units' operational status and change their running parameters on Internet Explorer for maximum control convenience.

Quick & Easy Installation »

Each port can connect to XYE ports of IDU/ODU or the K1K2E ports of the outdoor units.
Each port can also connect to one CCM03 or one CCM02 through F1F2E ports.



*If it connects to XYE ports of master ODU, ODU must be set to auto addressing mode.

Wide Compatibility »

CCM08 has a wonderful adaptability to the BMS

	Company	BMS software	Brand
1	SIMENS	APOGEE	APOGEE
2	TRANE	Tracer Summit	TRACER SUMMIT
3	Honeywell	Alerton	ALERTON®
4	Schneider	Andover	AndoverControls A Balfour Beatty Company
5	Johnson	METASYS	METASYS

Specifications

Model	MD-CCM08
Power supply	AC 220V~50/60Hz
Dimensions (HxWxD)(mm)	319x251x61



LonGW64

LonWorks® Gateway

Open network integration of VRF Monitoring and control functions into LonWorks networks

What Is The LonWorks? >>

LonWorks (local operating network) is a networking platform specifically created to address the needs of control applications. The platform is built on a protocol created by Echelon Corporation for networking devices over media such as twisted pair, powerlines, fiber optics, and RF.

LonWorks networks are recognised worldwide as the de facto standard within the building controls industry. It is used for the automation of various functions within buildings such as energy management, fire / life / safety lighting and HVAC.

Key Features >>

- ❖ Connect to use LonWorks® protocol and Midea air conditioner protocol
- ❖ Compliance with LonMark protocol enables the management and control of A/C system.
- ❖ Control various types of equipment from the customer's own PC.
- ❖ Connect up to 64 indoor units to the BMS
- ❖ Option for the large project
- ❖ Easy and fast installation

● Controlling

- On/Off command
- Operation mode setting
- Set temperature setting
- Fan speed setting

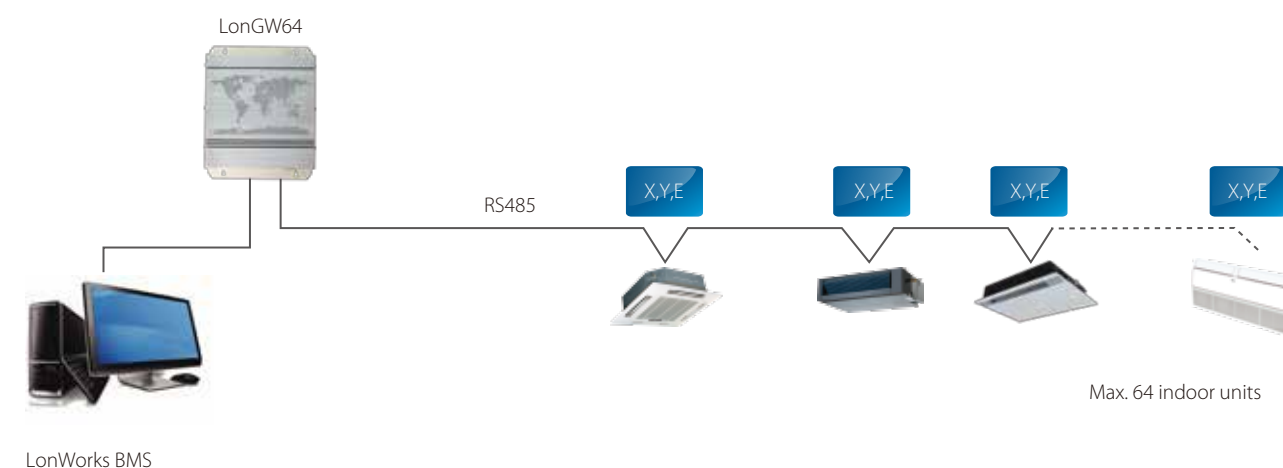
● Monitoring

- Operation mode status report
- Set temperature status report
- Fan speed status report
- Online/offline status
- Online quantity
- Error status
- Room temperature display

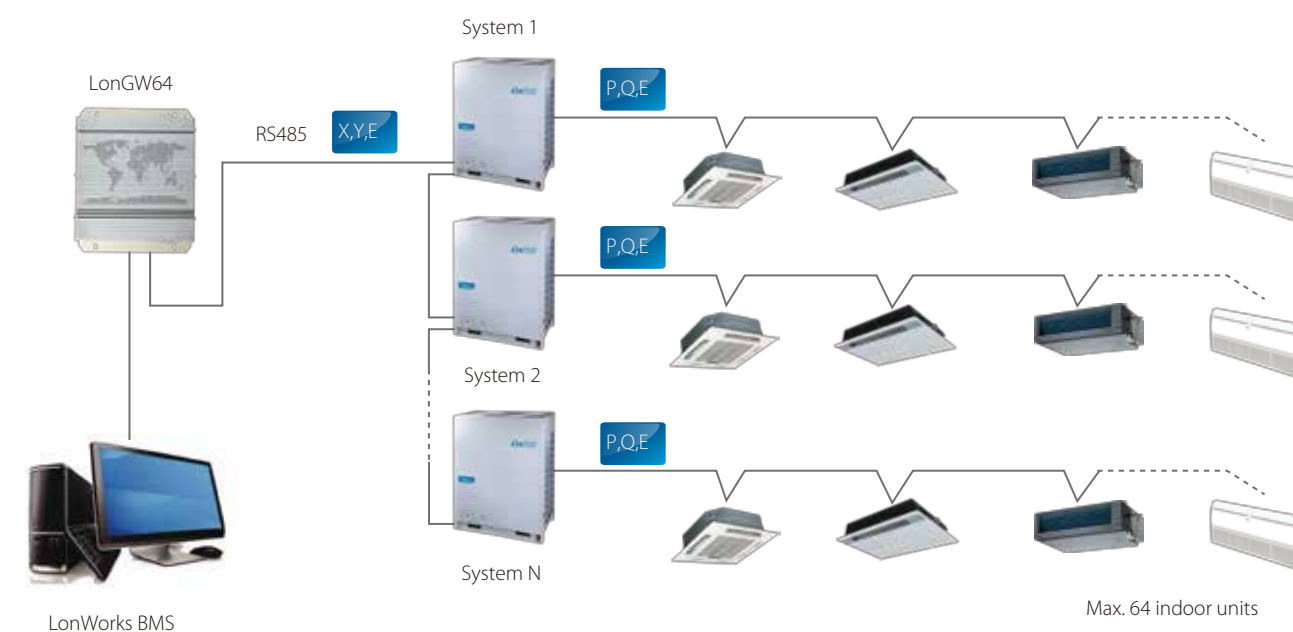
*For more information, refer to product network variable charts.

Network Example >>

- ❖ Connection method 1: Suitable for all of air conditioner systems and connect max.64 indoor units.



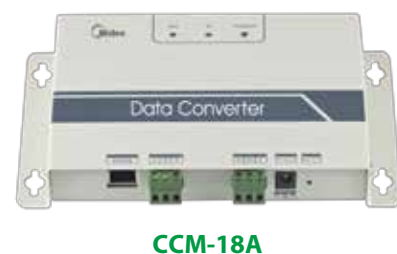
- ❖ Connection method 2: Only suitable for V4 plus system and connect max.64 indoor units.



*If it connects to XYE ports of master ODU, ODU must be set to auto addressing mode.

Specifications

Model	LonGW64/E
Power supply	AC 220V~50/60Hz
Dimensions (HxWxD)(mm)	319x251x61



Modbus® Gateway

Integrated Control System for Seamless Connection between VRF and BMS Systems

What Is The Modbus? »

Modbus is a serial communications protocol originally published by Modicon (now Schneider Electric) in 1979 for use with its programmable logic controllers (PLCs). Modbus is often used to connect a supervisory computer with a remote terminal unit (RTU) in supervisory control and data acquisition (SCADA) systems.

Key Features »

- ❖ Supports Modbus protocol networks
- ❖ Bridges the Midea central A/C system to BMS
- ❖ Built-in WEB server function
- ❖ Connect to the BMS system through TCP/IP or RTU.
- ❖ Connect up to 16 indoor or 64 indoor units and 4 outdoor units

*4 outdoor units must be in the same system

● Controlling

- Operation mode setting
- Set temperature setting
- Fan speed setting

● Monitoring

- Operation mode status report
- Set temperature status report
- Timer status
- Fan speed status report
- RC locking status
- Online/offline status
- Error status
- Room temperature display

*For more information, refer to Modbus product mapping table.

Config A/C System Via Web »

When the Modbus network is set, users can conveniently configure their A/C network system over the Internet using different TCP/IP browsers.

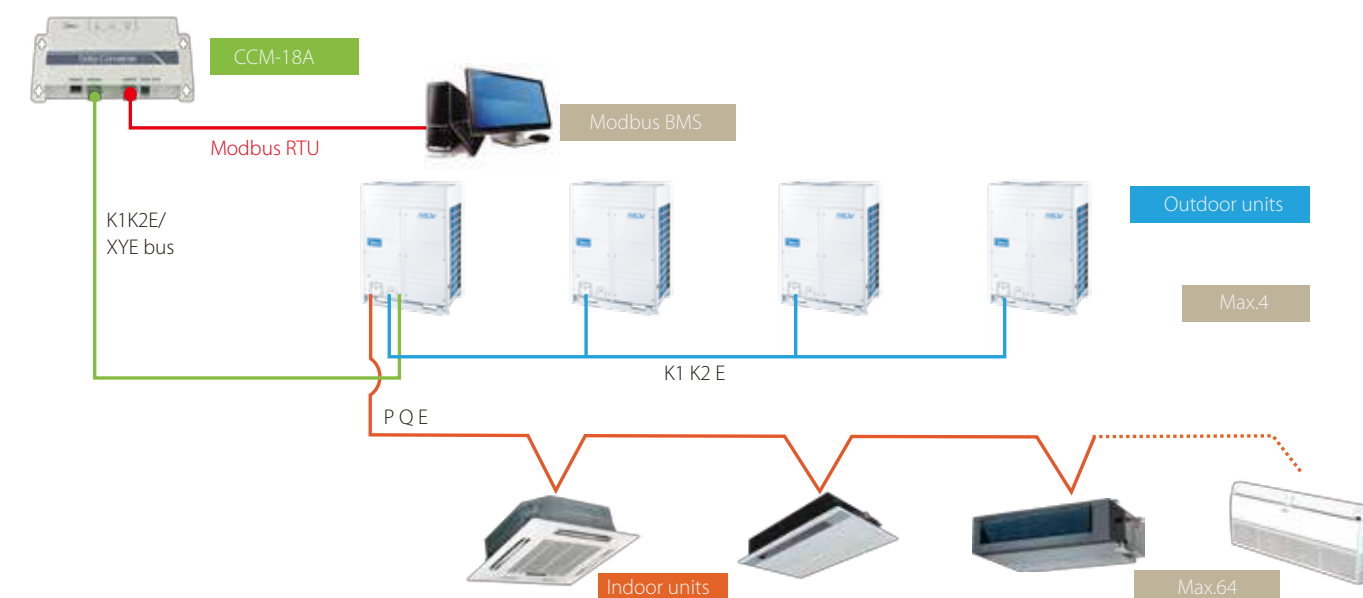


Network Example »

1) TCP connection method



2) RTU connection method



*1. If it connects to XYE ports of master ODU, ODU must be set to auto addressing mode.

2. XYE and K1K2E must be connected hand by hand.

Specifications

Model	CCM-18A
Dimensions (HxWxD)(mm)	319×251×61
Power supply	AC 220V~50/60Hz

Accessories

Hotel Key Card Interface Module



MD-NIM05/E



MD-NIM05B/E

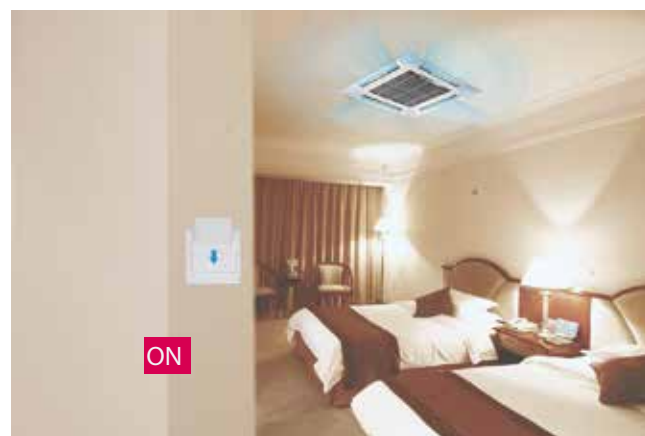
Key Features >>

- ❖ MD-NIM05 is special designed for hotel guest room, restaurant etc., working with hotel card system.
- ❖ Simple, compact and easy to operate unit, suitable for using in hotel bedrooms.
- ❖ Key card cooperates with wired controller to control A/C.
- ❖ Eliminates the need for high voltage power, making the device safe and reliable.
- ❖ Includes a build-in auto-restart function.
- ❖ Remote controller or wired controller can control indoor unit.
- ❖ Two types for choosing: MD-NIM05/E and MD-NIM05B/E.

Application Example >>

The unit can be turned on or off when inserting or removing the key card.

When the key card is in place, the air conditioner is activated. When the key card is removed, the system can remember all the last setting and stop operation. If the key card is inserted back, the unit will be under standby or operate at the state according to the latest setting before key card is inserted back. It can void cooling an unoccupied room and save energy.



Installation Example >>

Easy installation and remote controller or wired controller can control indoor unit.



Electrical Wiring >>

For MD-NIM05/E, users need to buy a high voltage relay when installation.



For MD-NIM05B/E, it can be directly connected to the hotel card-insert system (AC 220V) without a high voltage relay.



Specifications

Model	MD-NIM05/E	MD-NIM05B/E
Dimensions (HxWxD) (mm)	15.5x86x72.8	87x150x70
Power (V)	DC 5V (Supplied by indoor unit)	AC 220V

Infrared Sensor Controller

Infrared sensors can induct human activities in certain area, the indoor unit will be automatically turned on or off by sensing if there is human in room or not. It is suitable to be used in hotel, office, conference room, residence, etc.

- ❖ Automatically adjust the room environment.
- ❖ Automatically extend the shutting down time, avoiding frequent ON/OFF.
- ❖ Graceful appearance accommodates itself to different buildings.



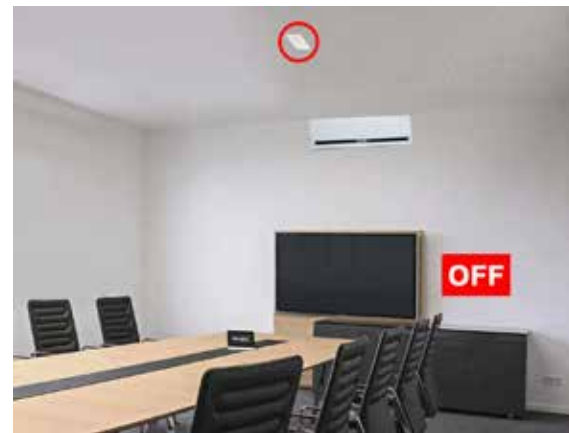
MD-NIM09

Accurate & Comfortable Sensor >>

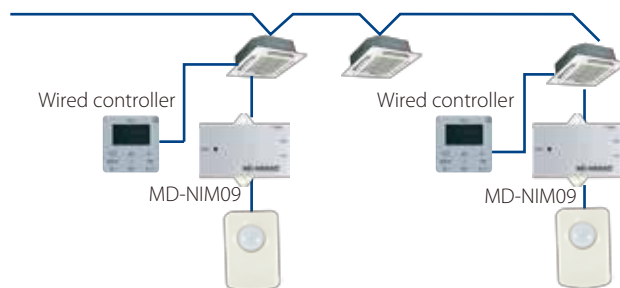
It detects the movement of people within the area and the air conditioning will automatic startup when someone is in the area. This function will save energy since it minimizes unnecessary energy usage by stopping operation when the area is empty. Infra-red sensor can install on the ceiling or wall with centralized human activities



Install on the ceiling

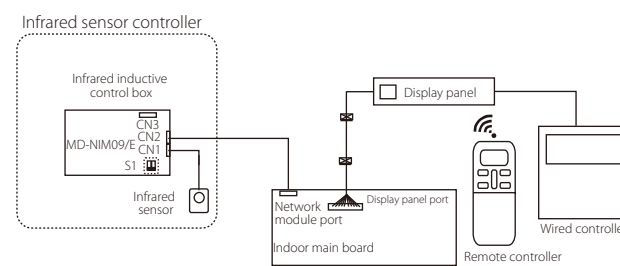


Installation Example >>



Remote controller or wired controller can control indoor unit.

Electrical Wiring >>



Specifications

Model	MD-NIM09
Dimensions (HxWxD)(mm)	Sensor part: 46x30x25.6, Control box: 86x72.8x15.5
Power	DC 5V (Supplied by indoor unit)

3-Phase Protector

HWUA/DPB71CM48

Detect the power condition and make the corresponding protecting action. Protect the compressor from being damaged. Automatically distinguish the abnormal power supply conditions and automatically recover.



HWUA DPB71CM48

Excellent Reliability >>

The protector protects the entire system from power supply problems, and auto restart after recovery.

Specifications

Model	With over/under voltage function				Without over/under voltage function
	HWUA	DPA53CM23	HWUA	DPB71CM48	DPA51CM44
Power supply	220~480V-3N 50/60Hz	208~480V-3N 50/60Hz	220~480V-3N 50/60Hz	380~480V-3N 50/60Hz	208~480V-3N 50/60Hz
Temp. range	-20°C~50°C	50Hz: -20°C~60°C 60Hz: -20°C~50°C	-20°C~50°C	-20°C~50°C	50Hz: -20°C~60°C 60Hz: -20°C~50°C
Rated operational power	2.9 VA	7 VA	2.9 VA	13 VA	13 VA
Over voltage	12%	12%	18%	18%	/
Under voltage	-12%	-12%	-12%	-12%	
Phase imbalance	8%	/	8%	8%	
Dimensions(WxHxD)(mm)	90x69x35	81x67.2x17.5	90x69x35	81x67x35	81x67.2x17.5

Digital Power Ammeter

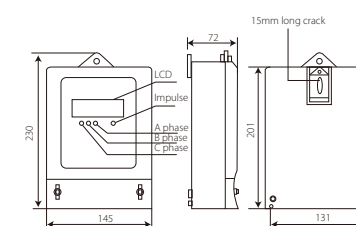
Calculates power consumption.
Does not need adjusting after long-term use.
Corresponds one outdoor unit to one digital power meter.

DTS634
DTS636

Low Power Consumption >>

The digital power meter consumes minimal energy.
Voltage circuit: less than 2W/10VA
Current circuit: less than 2.5VA

Indications & Installation >>



The digital power meter is tested after manufacture so it can be immediately deployment and used on-site. The LED indicators and installation schematic are shown in the figure on the left.

Specifications

Model	DTS634/DTS636
Dimensions (HxWxD)(mm)	230x145x72
Power (V)	200V-500V(50/60Hz)

Indoor Unit Group Controller



KJR-150A

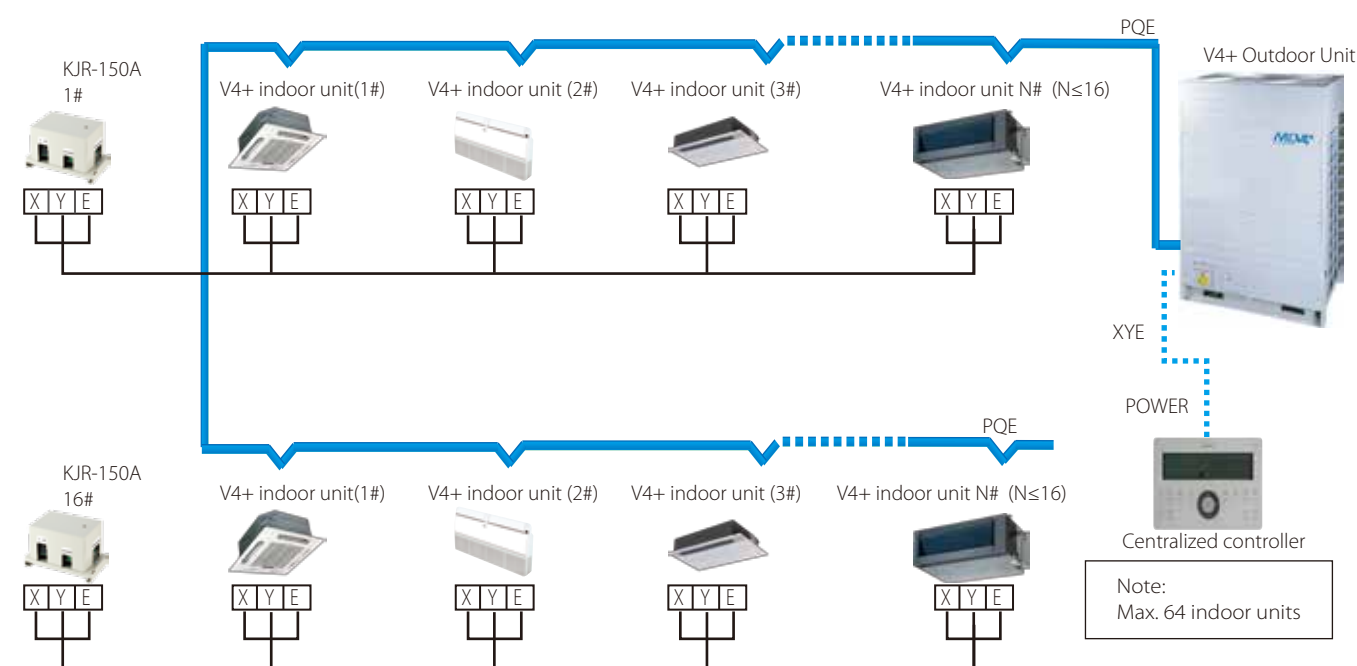
Simple Design >>

KJR-150A is a indoor group controller, designed specifically for V4 plus indoor units.

It can connect up to 16 indoor units through XYE ports.

With a display panel connected to KJR-150A, signal from wired controller and remote controller can control a group of indoor units simultaneously and all indoor units will run at the same setting parameters. You can also control the indoor units separately in each room by remote controller. The indoor unit will run at the state according to the latest setting.

System Wiring Diagram >>



* If you need to use a centralized controller, you can connect to the XYE from an outdoor unit.

Specifications

Model	KJR-150A
Dimensions (HxWxD)(mm)	85X150X70
Power (V)	198-242V(50/60Hz)

Remote Alarm Controller



KJR-32B

Simple Design >>

KJR-32B is specially designed for engineering applications. It does not display the ODU's working parameters, but it can connect to the alarm device when ODU is working abnormally, the RUN light will flash.

Specifications

Model	KJR-32B
Dimensions (HxWxD)(mm)	85X150X70
Power (V)	198-242V(50/60Hz)

Network Electricity Distribution Module



MD-NIM10

Simple Design >>

- ❖ External contact interface module
- ❖ Designed specifically for Mini VRF
- ❖ Provides the OAE ports for Mini VRF to connect with the IMM network control system and realizes the network electricity distribution.

Wiring Diagram >>

OAE ports: connected to OAE port of ammeter.

PQE ports: connected to PQE port of outdoor unit.

Each port of M-interface gateway only can be connected with one MD-NIM10 through K1K2E ports.



AHU Control Box



AHUKZ-01A
AHUKZ-02A
AHUKZ-03A

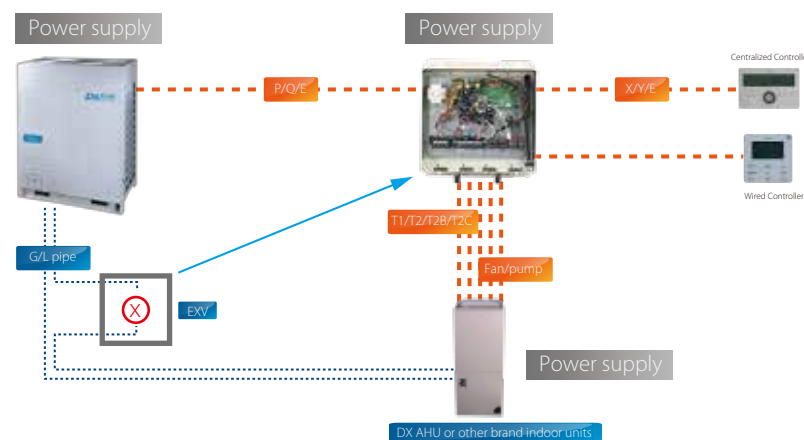
AHUKZ-01B
AHUKZ-02B
AHUKZ-03B

Introduction >>

AHU Kit can be used to connect VRF outdoor units with DX AHU or other brand indoor units with AC fan motor.

A Series and B Series are supplied which can connect with Midea VRF System (except V4+R& V5 Series). A Series is an independent control box. For B Series, max. 4 control boxes can be combined, capacity reaches up to 224kW (80HP), easy to make solution for large projects.

Wiring Example >>



Specifications

Model	AHUKZ-01A/AHUKZ-02A/AHUKZ-03A AHUKZ-01B/AHUKZ-02B/AHUKZ-03B
Dimensions(HxWxD)(mm)	335x375x150
Power (V)	220-240V~ 50Hz 208-230V~ 60Hz

Midea Outdoor Unit Diagnosis Software

Display the outdoor units' real-time running conditions.

Automatically outputs running status charts.

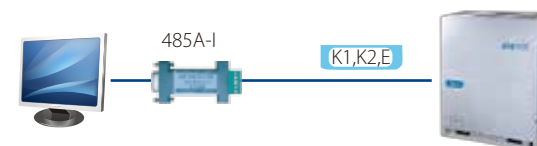
Supports V3, V4, V4+, D3, D4, V4+S and V4+R outdoor units.



MCAC-DIAG/E

Wiring Diagram >>

The diagnostic software applies to K1, K2, E of the outdoor units. The corresponding wiring diagram is shown in the figure on the right.



Recommended Config

Operating system	WIN XP SP4/WIN 7
CPU	Pentium 4 2G or above
HDD	30G free space
Interface port	RS-232 terminal

Selection Software

To meet consultants' and distributors' requirements, Midea has developed an advanced design automation tool that can be used in AutoCAD-based CAD version or Windows-based Sales version. The software provides quick and convenient selectable options for users, supports multiple languages, and greatly improves the selection process.

Windows Version >>

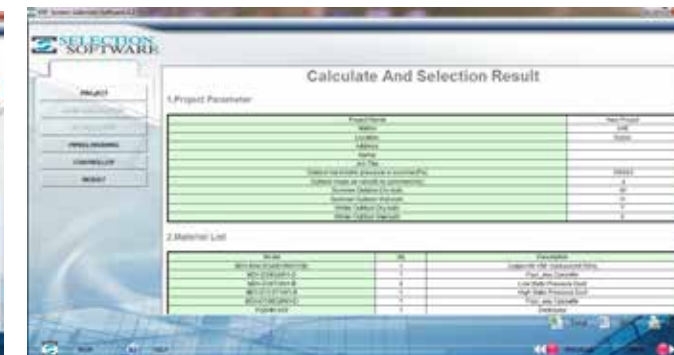
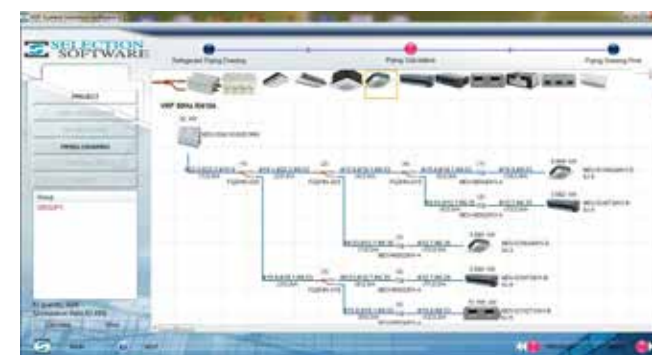
Load calculation: Provides two calculation methods (detailed room load calculation and rough load calculation).

Indoor & outdoor units selection: There are versatile indoor units and different outdoor units for choosing.

Piping drawing: Displays the detailed layout of an A/C system and the parameters for piping and branch distributors.

Controller selection: Provides a selection of controllers for indoor units and outdoor units, including wireless and remote controllers for indoor units.

Report output: Outputs a comprehensive selection report as a Word or PDF document.



CAD Version >>

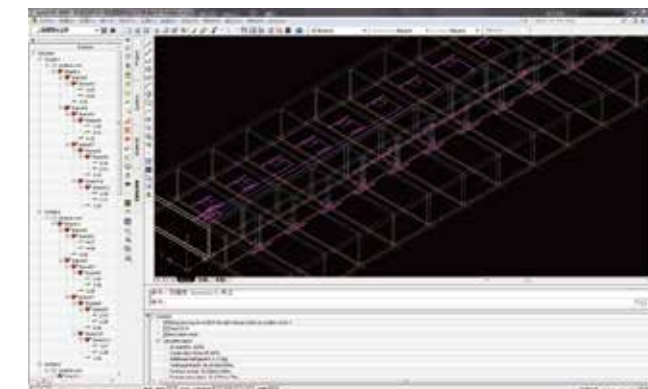
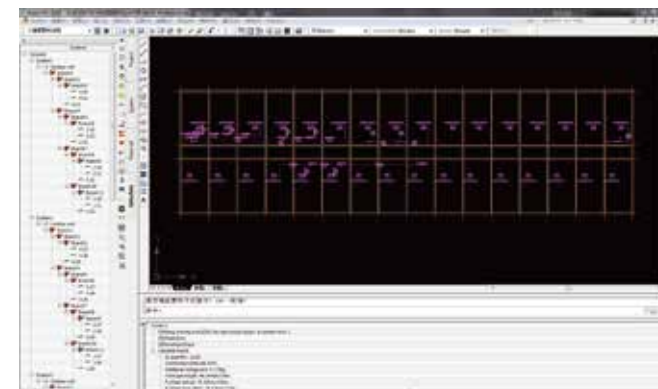
AutoCAD add-on software

Automatic Calculation: Refrigerant & drain pipe size

Automatic Selection: Distributor kit & branch joint

System Check: Installation regulation & refrigerant addition

Automatic Report: Piping installation diagram, equipment list & quotation



APP Application

Midea CAC News APP >>

Midea CAC News APP has been developed to share E-news, new product information, training information and product catalogs.



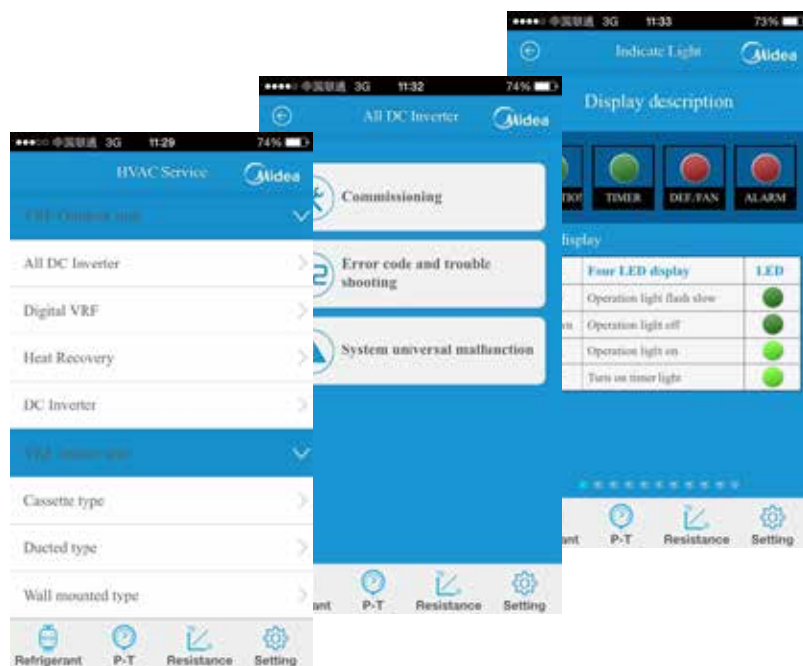
Midea CAC News Application



iOS Version

Midea CAC After-service APP >>

Midea CAC After-service APP is very useful for engineers who serve for Midea commercial air conditioner. It will be very convenient to do the commissioning, refrigerant charge and troubleshooting.



Midea CAC After-service Application



Android Version



iOS Version

HRV-Heat recovery ventilator

Larger air supply rate
enhanced heat exchange efficiency
enhanced energy saving property >>

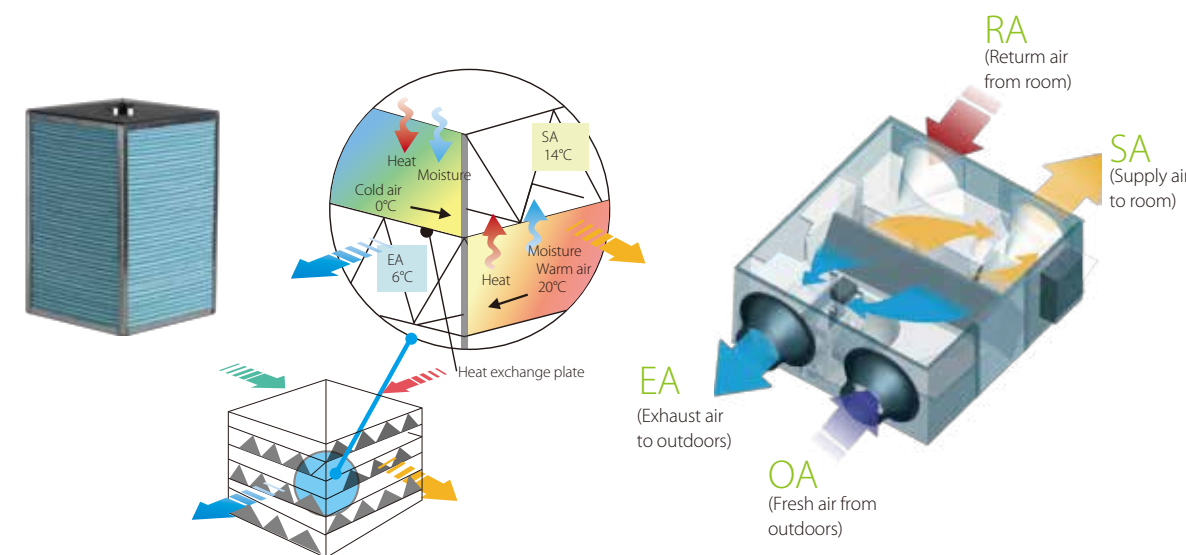
The heat recovery ventilator (HRV) can reclaim heat energy lost through ventilation and reduce the room temperature fluctuation caused by ventilation process. By utilizing the most advanced technology and technics, Midea HRV has extremely good performance. The heat exchanged core is made of special paper processed with chemical treatment, which could realize better temperature and humidity control of the room environment. Temperature exchange efficiency is above 65% and enthalpy exchange efficiency between 50-65%.

Model Names

HRV-200 HRV-500
HRV-300 HRV-800
HRV-400 HRV-1000



HRV-1500
HRV-2000

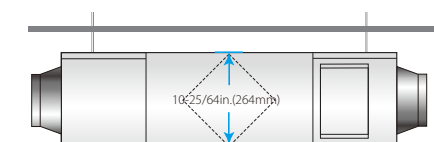


Low noise >>

Sound proof material is used to guarantee quiet operation.

Compact design, flexible installation and easy maintenance >>

With a min. height of only 10-25/64in.(264mm) and 50lbs(23kg) weight, the unit provides best convenience and possibility for installation in limited spaces.



Multi-modes for different situations >>

Heat exchange mode

When air flow formed by the fans goes through the heat exchanged core in cross way, due to temperature difference between two channels of the core, thermal transmission happens naturally.

In summer days, high temperature outdoor air gets cooled by indoor exhaust air; in winter, low temperature outdoor air gets heated by indoor exhaust air. So the energy contained in exhaust air can be reclaimed and energy efficiency gets improved.

Bypass mode

In mild climate areas or seasons, when temperature and humidity level difference between indoor and outdoor is small, the unit works as conventional ventilation fan. Both supply fan and exhaust fan works at the same speed (Hi/mid/low/auto).

Air supply mode

It is one kind of bypass mode with air supply fan speed higher than exhaust fan speed. It can be used in mild climate area where large amount fresh air is needed.

Exhaust air mode

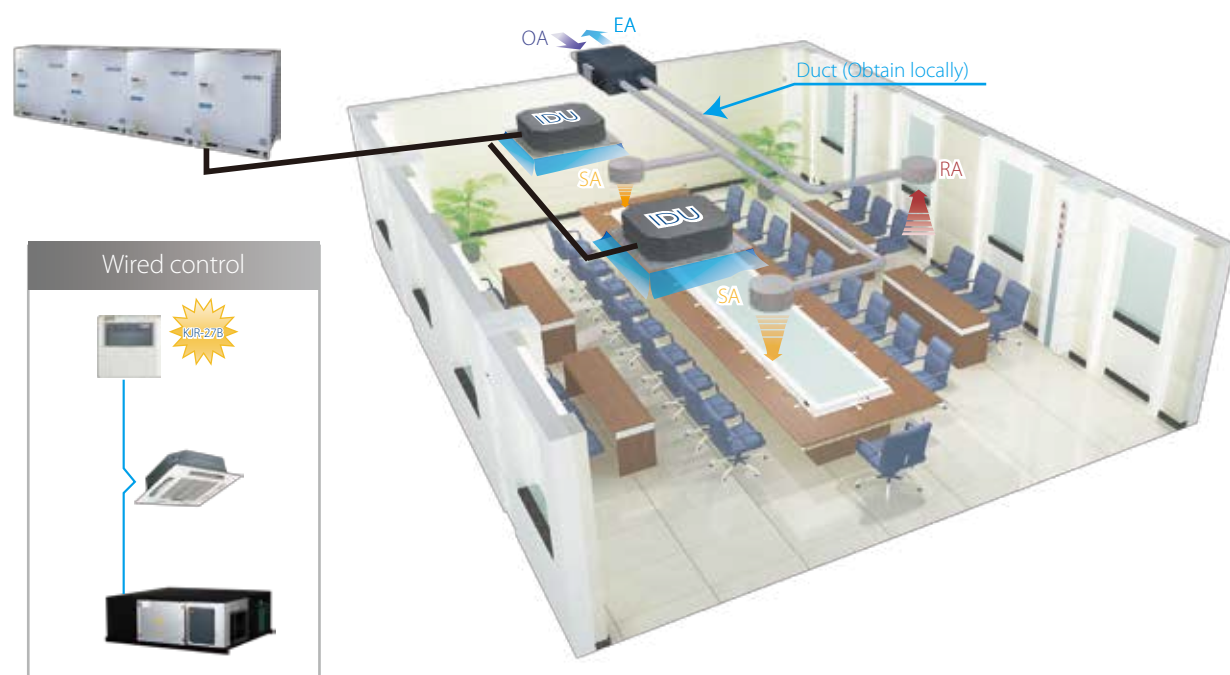
It is also one kind of bypass mode with exhaust fan speed higher than air supply fan speed. It can be used in mild climate area where large amount exhaust air needs to be expelled.

Auto mode

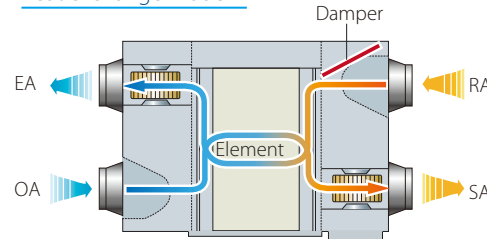
The controller chooses heat exchange mode or bypass mode according to the temperature difference between outdoor and indoor temperature. Both the two fans work at low speed.

Flexible control >>

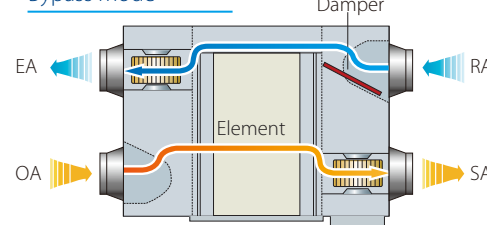
Interlocking control with other indoor units by controller is possible.



Heat exchange mode



Bypass mode



Specifications

Model				HRV-200	HRV-300	HRV-400	HRV-500
Power supply		V/Ph/Hz		220-240/1/50	220-240/1/50	220-240/1/50 (220/1/60)	220-240/1/50 (220/1/60)
Cooling	Temperature exchange efficiency	High	%	55	55	55	55
		Medium	%	55	55	55	55
		Low	%	60	60	60	60
Heating	Enthalpy exchange efficiency	High	%	50	50	50	50
		Medium	%	50	50	50	50
		Low	%	55	55	55	55
Sound pressure level	Temperature exchange efficiency	High	%	60	60	60	65
		Medium	%	60	60	60	65
		Low	%	65	65	65	70
Fan	Heat exchange mode	High	dB(A)	27	30	32	35
		Medium	dB(A)	26	29	31	34
		Low	dB(A)	20	23	25	28
Bypass mode	Heat exchange mode	High	dB(A)	28	31	33	36
		Medium	dB(A)	27	30	32	35
		Low	dB(A)	22	25	27	30
Net dimension (WxDxH)	mm			866x655x264	944x722x270	944x927x270	1038x1026x270
	inch			34-1/8x25-3/4x10-3/8	37-3/16x28-27/64x10-5/8	37-3/16x36-1/2x10-5/8	40-7/8x40-3/8x10-5/8
Packing size (WxDxH)	mm			930x730x445	1010x800x450	1010x1010x450	1120x1120x452
	inch			36-5/8x28-3/4x17-1/2	39-3/4x31-1/2x17-3/4	39-3/4x39-3/4x17-3/4	44-1/8x44-1/8x17-13/16
Net/gross weight	kg(lbs)			23/40	26/44	31/52(68.3/114.4)	41/64(90.4/140.8)
Casing						Galvanized steel plate	
Heat exchange system						Air to air cross flow total heat (sensible heat + latent heat) exchange	
Heat exchange element material						Centrifugal fan	
Fan	Type						
	Airflow rate	High	m³/h(CFM)	200	300	400(235.6)	500(294.5)
		Medium	m³/h(CFM)	200	300	400(235.6)	500(294.5)
ESP		Low	m³/h(CFM)	150	225	300(176.7)	375(220.8)
		High	Pa	75	75	80	80
		Medium	Pa	58	60	65	68
Motor output		Low	Pa	35	40	43	45
			W	20	40	80	120
Duct diameter	mm(in.)			Φ144	Φ144	Φ144(5-5/8)	Φ194(7-5/8)
Operating temperature range	°C					-7~43 DB, 80% RH or less	
	°F					19.4~109.4 DB, 80% RH or less	

Model				HRV-800	HRV-1000	HRV-1500	HRV-2000
Power supply		V/Ph/Hz		220-240/1/50 (220/1/60)	220-240/1/50 (220/1/60)	380-415/3/50 (280/3/60)	380-415/3/50 (280/3/60)
Cooling	Temperature exchange efficiency	High	%	55	55	55	55
		Medium	%	55	55	/	/
		Low	%	60	60	/	/
Heating	Enthalpy exchange efficiency	High	%	50	50	50	50
		Medium	%	50	50	/	/
		Low	%	55	55	/	/
Sound pressure level	Temperature exchange efficiency	High	%	65	65	65	65
		Medium	%	65	65	/	/
		Low	%	70	70	/	/
Fan	Heat exchange mode	High	dB(A)	39	40	51	53
		Medium	dB(A)	38	39	/	/
		Low	dB(A)	32	33	/	/
Bypass mode	Heat exchange mode	High	dB(A)	40	41	52	54
		Medium	dB(A)	39	40	/	/
		Low	dB(A)	34	35	/	/
Net dimension (WxDxH)	mm			1286x1006x388	1286x1256x388	1600x1270x540	1650x1470x540
	inch			50-5/8x39-5/8x15-1/4	50-5/8x49-7/16x15-1/4	63x50x21-1/4	65x57-7/8x21-1/4
Packing size (WxDxH)	mm			1380x1100x573	1390x1350x580	1680x1350x720	1760x1580x720
	inch			54-5/16x43-5/16x22-9/16	54-3/4x53-1/8x22-13/16	66-1/8x53-1/8x28-3/8	69-5/16x62-3/16x28-3/8
Net/gross weight	kg(lbs)			62/88(136.7/193.6)	79/110(173.8/242)	163/224(358.6/492.8)	182/247(400.4/543.4)
Casing						Galvanized steel plate	
Heat exchange system						Air to air cross flow total heat (sensible heat + latent heat) exchange	
Heat exchange element material						Centrifugal fan	
Fan	Type						
	Airflow rate	High	m³/h(CFM)	800(471.1)	1000(588.2)	1500(882.4)	2000(1176.5)
		Medium	m³/h(CFM)	800(471.1)	1000(588.2)	/	/
ESP		Low	m³/h(CFM)	600(353.4)	750(441.2)	/	/
		High	Pa	100	100	160	170
		Medium	Pa	82	85	/	/
Motor output		Low	Pa	54	58	/	/
			W	360	360	450	450
Duct diameter	mm(in.)			Φ242(9-1/2)	Φ242(9-1/2)	346x326(13-5/8x12-7/8)	346x326(13-5/8x12-7/8)
Operating temperature range	°C					-7~43 DB, 80% RH or less	
	°F					19.4~109.4 DB, 80% RH or less	

Note:

1. For the units model of HRV (400-1000), there are 3-speed adjustable air volume (Hi, Med, Low), but for the units model of HRV (1500-2000), there are only 1-speed which cannot be adjusted.

2. Sound level is measured at 1.4m below the center of the body in an anechoic chamber.

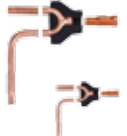
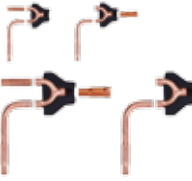
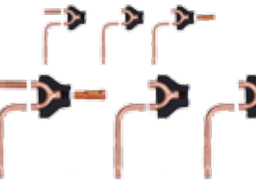
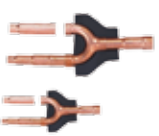
3. Efficiency is measured under the following conditions:

* Cooling Condition: Air Exhaust Temp. 27°C(80.6°F) DB, 19.5°C(67.1°F) WB., Fresh Air Temp. 35°C(95°F) DB, 28°C(82.4°F) WB.

* Heating Condition: Air Exhaust Temp. 21°C(69.8°F) DB, 13°C(55.4°F) WB., Fresh Air Temp. 5°C(41°F) DB, 2°C(35.6°F) WB.

Branch Pipe

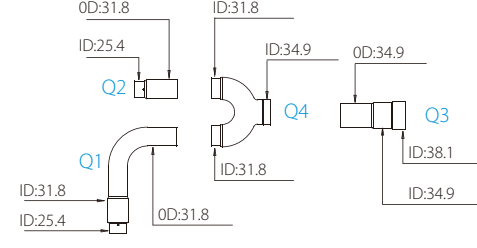
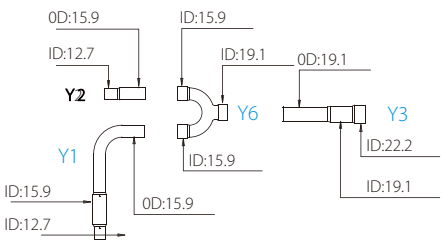
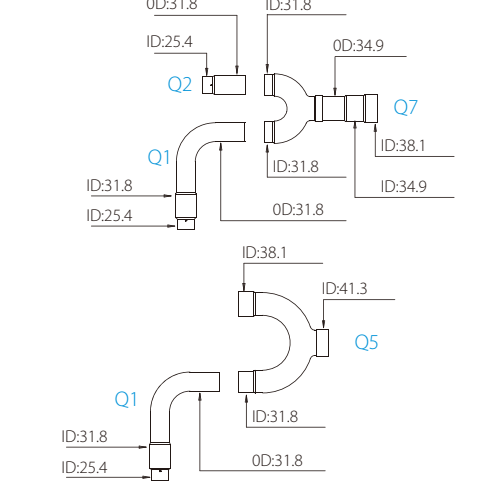
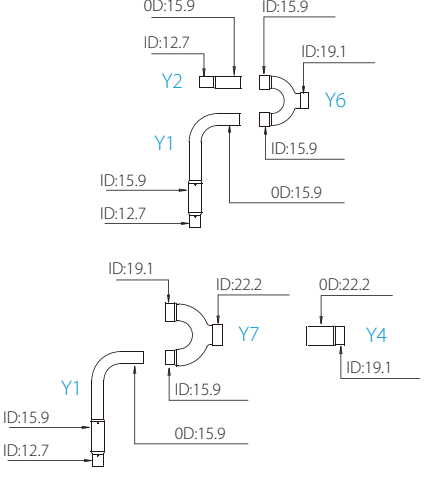
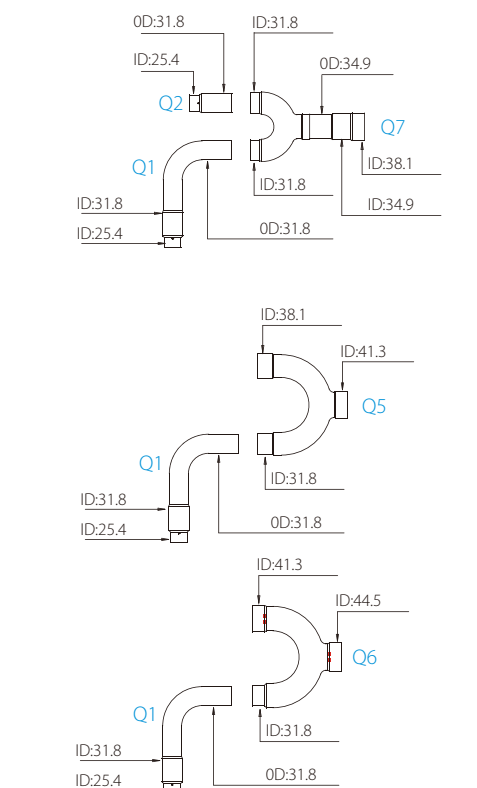
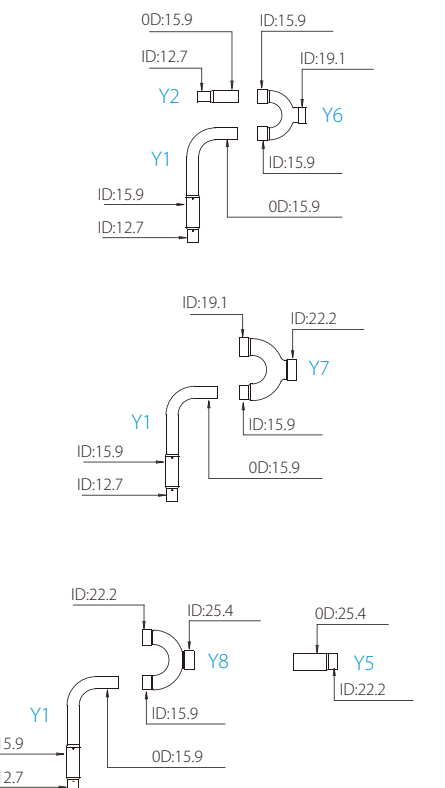
Branch joints of two-pipe refrigerant system

Model	Appearance	Model name	Packing Size in.(mm)	Gross Weight lbs.(kg)	Description
Branch joint for 410A outdoor unit		FQZHW-02N1D	10-1/16x5-7/8x7-1/4 (255x150x185)	3.3(1.5)	For two outdoor units connection
		FQZHW-03N1D	13-9/16x6-5/16x11-1/4 (345x160x285)	7.48(3.4)	For three outdoor units connection
		FQZHW-04N1D	18-3/4x6-1/2x11-3/4 (475x165x300)	10.56(4.8)	For four outdoor units connection
Branch joint for R410A indoor unit		FQZHN-01D	11-7/16x4-1/8x4 (290x105x100)	0.88(0.4)	$A^* < 16.6\text{kW}$
		FQZHN-02D	11-7/16x4-1/8x4 (290x105x100)	1.32(0.6)	$16.6 \leq A^* < 33\text{kW}$
		FQZHN-03D	12-3/16x5-1/8x4-15/16 (310x130x125)	1.98(0.9)	$33\text{kW} \leq A^* < 66\text{kW}$
		FQZHN-04D	13-25/32x7-3/32x6-11/16 (350x180x170)	3.3(1.5)	$66\text{kW} \leq A^* < 92\text{kW}$
		FQZHN-05D	14-3/8x7-11/16x8-15/32 (365x195x215)	4.18(1.9)	$92\text{kW} \leq A^*$

A*:The total capacity of indoor units which is connected to this branch joint

Dimensions

Outdoor branch joints

Branch model	Gas side joints	Liquid side joints
FQZHW-02N1D		
FQZHW-03N1D		
FQZHW-04N1D		

Memo

Branch model	Gas side joints	Liquid side joints
FQZHN-01D		
FQZHN-02D		
FQZHN-03D		
FQZHN-04D		
FQZHN-05D		

[illegible]