



## Commercial Air Conditioners 2017



### VRF 50/60Hz V5 X Series



Midea CAC After-service Application



iOS Version



Midea CAC News Application



iOS Version

#### Commercial Air Conditioner Division

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

# 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

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## » OUTDOOR UNIT LINEUP

The Midea V5 X Series is a range of high performance VRF outdoor units. With capacities ranging from 8HP to 88HP in 2HP increments, the V5 X brings high efficiency, high reliability cooling and heating to projects large and small.

The V5 X offers a variety of outstanding capabilities. Able to support piping lengths of up to 1000m and height differences of up to 110m, the V5 X rises to the challenge of today's tall buildings. Compatibility with a wide selection of indoor units provides the flexibility to produce tailored climate control solutions for a wide range of interior spaces.

#### Single Unit

8/10/12HP



14/16/18/20/22HP



#### Multi Combination

24-44HP



46-66HP



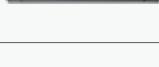
68-88HP



V5X  
Introduction



# >> 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																					

AC Series  
DC Series



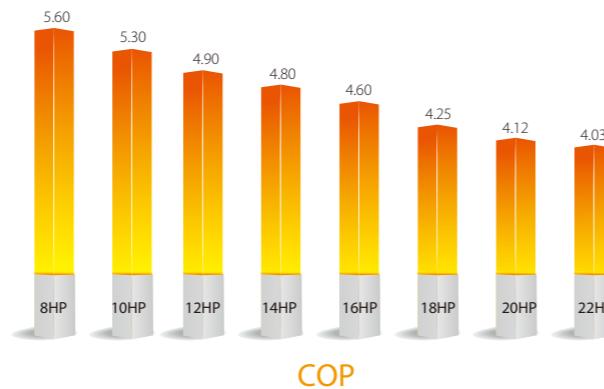
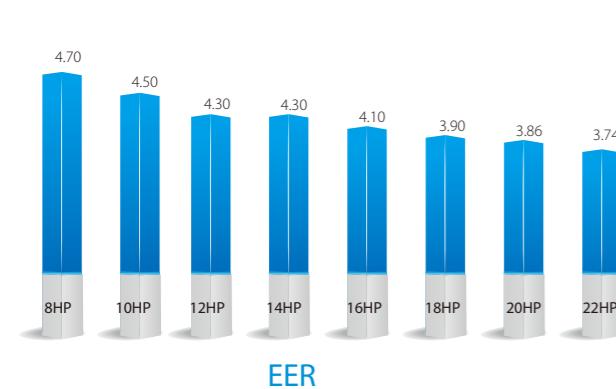
## » OUTDOOR UNITS V5 X SERIES VRF

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

# High Efficiency

## High EER and COP »

DC compressors and fan motors together with a high-efficiency heat exchanger combine to give the V5 X Series top-class energy efficiency in cooling and heating.



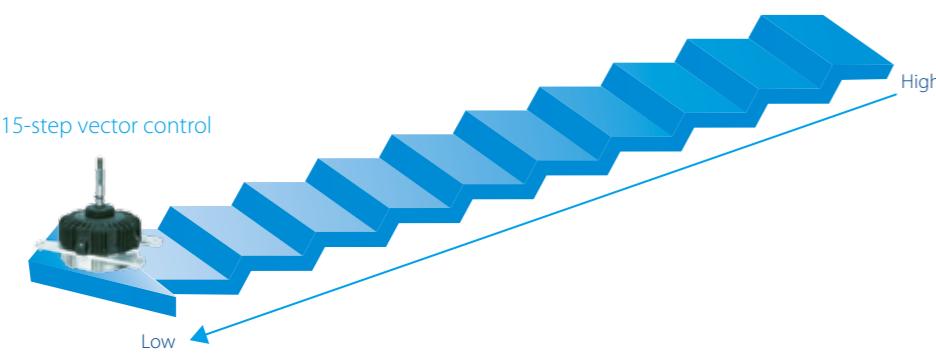
## All DC Inverter Compressors »

At the heart of the V5 X Series outdoor unit lies a world-leading DC inverter scroll compressor. The compressor's innovative design and numerous high performance features reduce power consumption by 25%.



## All DC Fan Motors »

Fan speed is controlled according to the system pressure and system load, minimizing energy consumption.

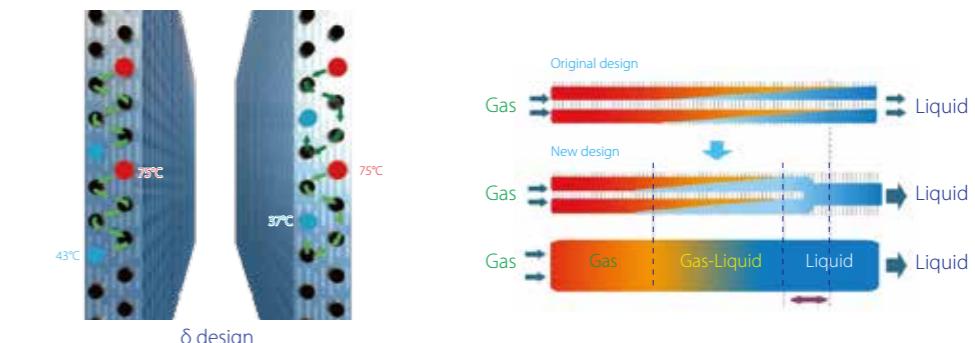


## High Efficiency Heat Exchanger »

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

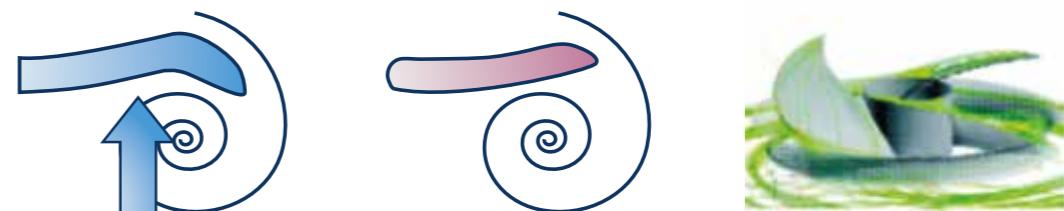
Hydrophilic fins and internally threaded copper pipes optimize heat exchange efficiency.

δ design increases the degree of liquefaction in the condenser and improves 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.

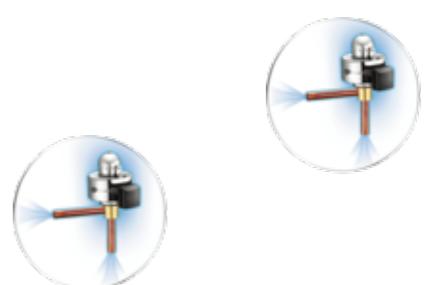


## Precise Control »

Multiple solenoid valves ensure precise temperature control, stable and efficient operation, and improved comfort.

## Dual EXVs Control »

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



# Wide Application Range

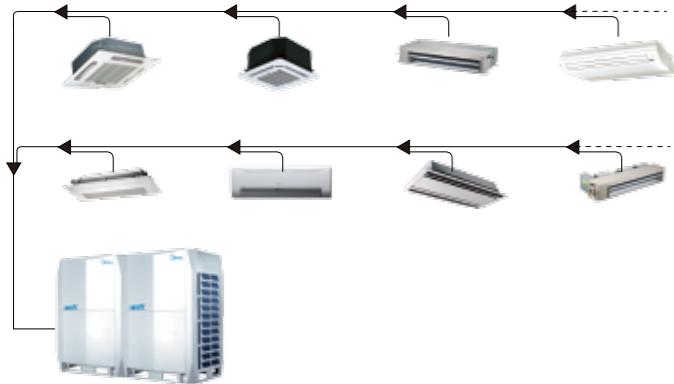
## Wide Capacity Range »

The V5 X series has an extensive range of capacities, from 8HP to 88HP, meeting all customer requirements from small to large buildings.



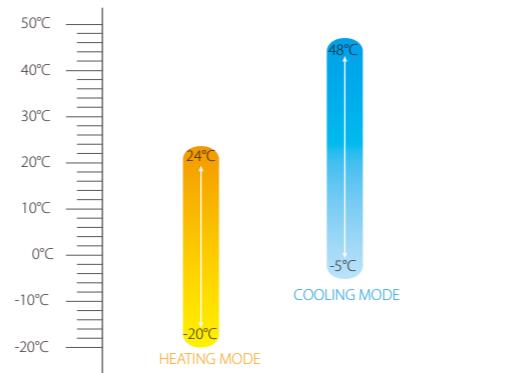
## Wide Range of Indoor Units »

Midea provides 12 types and more than 100 models of VRF indoor units to meet varied customer requirements in a wide range of locations including shopping malls, hospitals, office buildings, hotels and airports.



## Wide Operation Range »

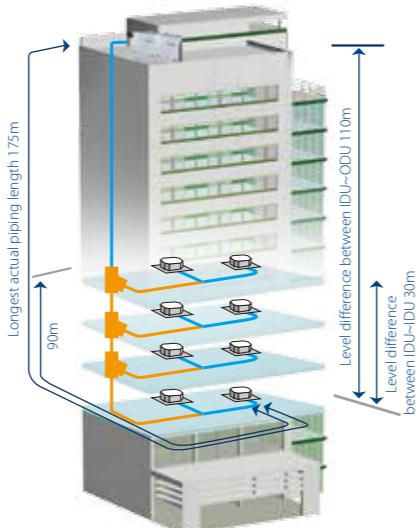
V5X Series operates stably under extreme conditions, ranging from minus 20°C to 48°C.



## Long Piping Capability »

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

\*The longest length after first branch is 40m as standard but can be extended to up to 90m under certain conditions. Please contact your local Midea dealer for further information.



# High Reliability

## Duty Cycling »

Duty cycling equalizes the running time of the outdoor units in a multiple-unit system and of the compressors in each unit, significantly extending compressor lifespan.



## Backup »

In a multi-unit system, if one module fails, the other modules provide backup so that the system can continue operating.



## Precise Oil Control Technology »

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

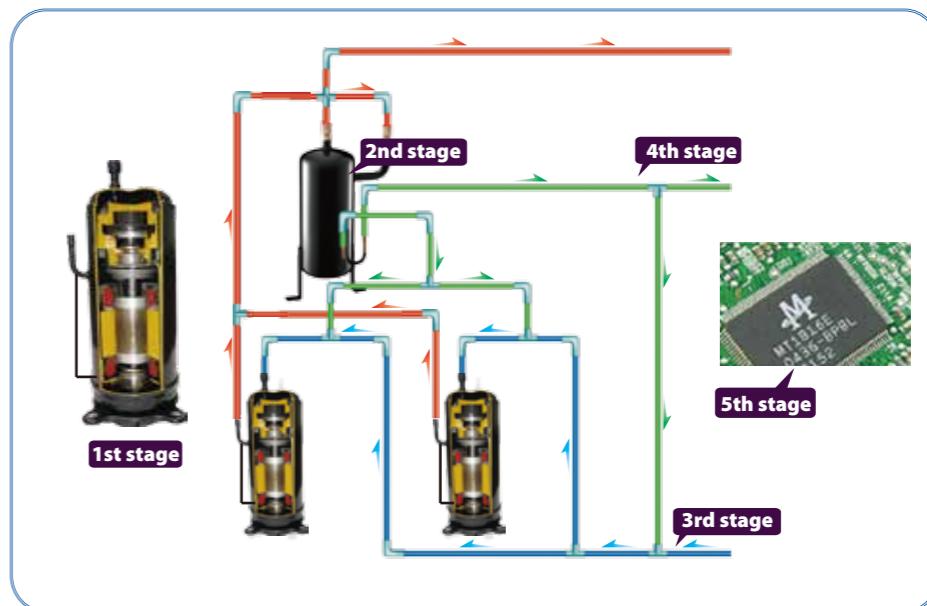
**The 1st stage:** Compressor internal oil separation.

**The 2nd stage:** High-efficiency centrifugal oil separator (with separation efficiency of up to 99%) ensures that oil is separated from the discharge gas and returned to the compressors in a timely fashion.

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

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

**The 5th stage:** Auto oil return program monitors the running time and system status to ensure reliable oil return.



## Enhanced Comfort

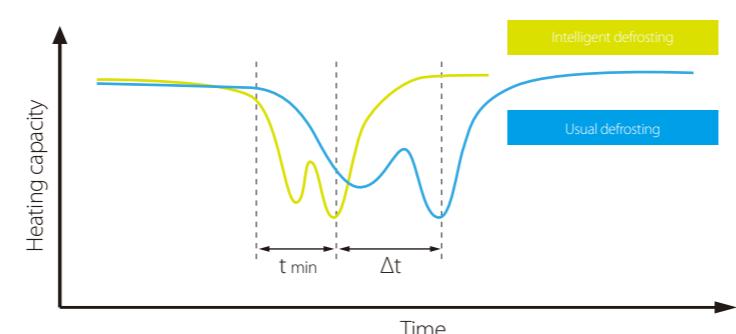
### Night Silent Mode ➤

The night silent mode feature, which is easily configured on the outdoor unit's PBC, includes various scheduling options that can be used to reduce noise levels at times when low noise operation is required.



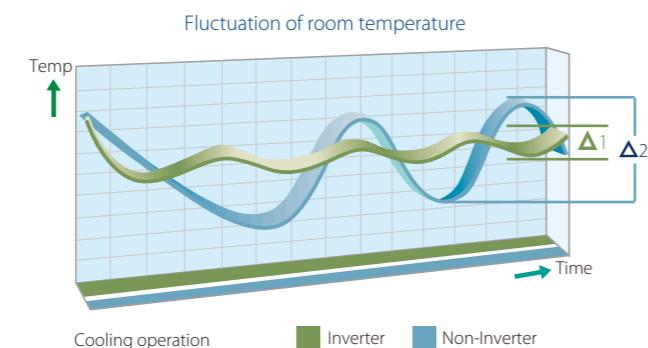
### Intelligent Defrosting Technology ➤

The intelligent defrosting program calculates the time required for defrosting according to the actual system status, eliminating heat losses from unnecessary defrosting. A specialized defrosting valve reduces time required for defrosting to as little as four minutes.



### Rapid Cooling or Heating ➤

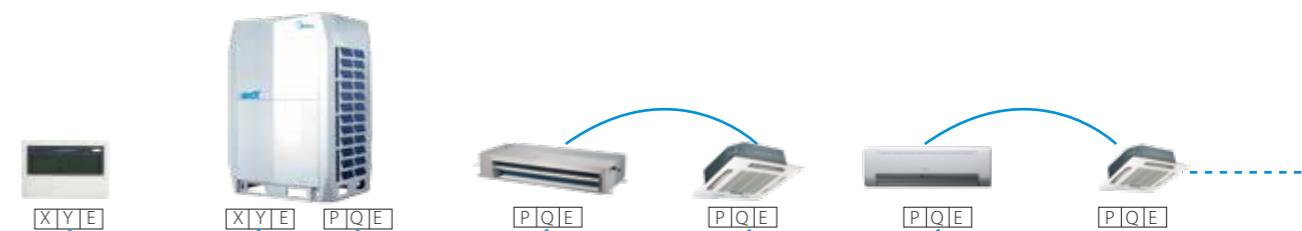
The DC inverter compressor reaches full capacity rapidly, providing quicker cooling or heating with lower levels of temperature fluctuation during the cooling/heating operation.



## Easy Installation and Service

### Simple Communication Wiring ➤

Indoor centralized controller can be connected to either the indoor or the outdoor units. A single set of wiring can be used for system and network communication, making installation quicker and easier.



### Auto Addressing ➤

Outdoor unit can distribute addresses to indoor units automatically. Remote and wired controllers can be used to query or modify each indoor unit's address.



### Rotatable Electric Control Box ➤

The newly designed rotating control box can be rotated up to 150 degrees to provide access to the pipeline system for inspection and maintenance without the need to remove the control box.



### Easy Maintenance ➤

Special features that increase ease of maintenance include a control box inspection window for viewing the system status, a self-diagnosis function that speeds fault analysis, and the positioning of the compressor adjacent to the casing, which simplifies inspection and enables valve or compressor parts to be replaced easily.



# Anti-corrosion Protection

Outdoor units are given anti-corrosion treatment for non-extreme conditions as standard and can also be customized with heavy anti-corrosion treatment on steel sheets, grills, coil fins, electric control box case and screws/bolts for surface protection against corrosive air, acid rain and saline air (for installations in coastal regions) to extend overall useful life.

The integrity of the anti-corrosion treatment is ensured by subjecting major components and parts to salt mist testing, moisture and heating testing and light aging testing.

## [Motor »](#)

Standard products:  
72h of neutral salt mist



Heavy anti-corrosion products:  
240h of neutral salt mist

## [Painted Sheet Metal »](#)

Standard products:  
500h of neutral salt mist  
1000h of moisture and heating test  
500h of light aging test

Heavy anti-corrosion products:  
1000h of neutral salt mist  
2000h of moisture and heating test  
720h of light aging test



## [Screws / Bolts / Gaskets »](#)

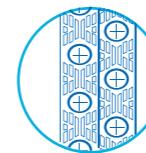
Standard products:  
300h of neutral salt mist

Heavy anti-corrosion products:  
720h of neutral salt mist



## [Heat Exchanger Aluminum Foil »](#)

Standard products:  
72h of neutral salt mist



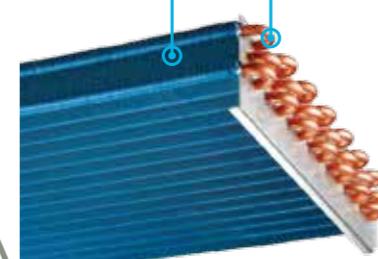
Heavy anti-corrosion products:  
1000h of neutral salt mist  
140h of acid salt mist



## [Copper »](#)

Standard products:  
24h of neutral salt mist

Heavy anti-corrosion products:  
120h of neutral salt mist



## [Electric Control Box Case »](#)

Standard products:  
96h of neutral salt mist



Heavy anti-corrosion products:  
240h of neutral salt mist

## [Compressor / Motor Bolts »](#)

Standard products:  
72h of neutral salt mist

Heavy anti-corrosion products:  
168h of neutral salt mist

## Specifications

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


Capacity	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						
Cooling <sup>1</sup>	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 <sup>2</sup>	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
Connected indoor units	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		13	16	20	23
Compressors	Type		DC inverter			
	Quantity		1	1	1	2
Fan motors	Type		DC			
	Quantity		1	1	1	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 charge	kg (lbs.)	9 (20)	9 (20)	11 (24)	13 (29)
Pipe connections <sup>3</sup>	Liquid pipe	mm (in.)	Φ12.7 (Φ1/2)	Φ12.7 (Φ1/2)	Φ15.9 (Φ5/8)	Φ15.9 (Φ5/8)
	Gas pipe	mm (in.)	Φ25.4 (Φ1)	Φ25.4 (Φ1)	Φ28.6 (Φ1-1/8)	Φ31.8 (Φ1-1/4)
	Oil balance pipe	mm (in.)		Φ8 (Φ5/16)		
Air flow rate	m <sup>3</sup> /h	12000	12000	12000	14000	
Sound pressure level <sup>4</sup>	dB(A)	58	59	60	62	
Net dimensions (WxHxD)	mm	990x1635x790				
	in.	39x64-3/8x31-1/8				
Packed dimensions (WxHxD)	mm	1055x1805x855				
	in.	41-1/2x71-1/16x33-5/8				
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 to 48 (23 to 118.4); Heating: -20 to 24 (-4 to 75.2)				



Capacity	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						
Cooling <sup>1</sup>	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 <sup>2</sup>	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
Connected indoor units	Total capacity		50-130% of outdoor unit capacity			
	Maximum quantity		26	29	33	36
Compressors	Type		DC inverter			
	Quantity		2			
Fan motors	Type		DC			
	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 charge	kg (lbs.)	13 (29)	13 (29)	16 (35)	16 (35)
Pipe connections <sup>3</sup>	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	m <sup>3</sup> /h	14000	16000	16000	16000	
Sound pressure level <sup>4</sup>	dB(A)	62	63	63	63	
Net dimensions (WxHxD)	mm	1340x1635x790				
	in.	52-3/4x64-3/8x31-1/8				
Packed dimensions (WxHxD)	mm	1405x1805x855				
	in.	55-3/8x71-1/16x33-5/8				
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 to 48 (23 to 118.4); Heating: -20 to 24 (-4 to 75.2)				

Notes:

1. Indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

2. Indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

3. Diameters given are those of the unit's stop valve.

4. Sound pressure level is measured at a position 1m (3.28ft) in front of the unit and 1.3m (4.3ft) above the floor in a semi-anechoic chamber.

## Specifications

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


Capacity	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
Combination							
Power supply		12HPx2	10HP+16HP	10HP+18HP	10HP+20HP	10HP+22HP	12HP+22HP
Cooling <sup>1</sup>	Capacity	kW	67.0	73.0	78.0	84.0	89.5
		kBtu/h	228.6	249.0	266.1	286.6	305.3
	Power input	kW	15.58	17.20	19.04	20.73	22.67
	EER		4.30	4.24	4.10	4.05	3.95
Heating <sup>2</sup>	Capacity	kW	75.0	81.5	87.5	94.5	100.5
		kBtu/h	256.0	278.1	298.6	322.4	342.9
	Power input	kW	15.31	16.81	19.12	21.23	23.06
	COP		4.90	4.85	4.58	4.	

## Specifications

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

Capacity	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	
Combination		10HP+16HP+22HP	10HP+18HP+22HP	10HP+20HP+22HP	10HP+22HPx2	12HP+22HPx2	
Power supply							
3 phase, 380-415V, 50/60Hz or 3 phase, 220V, 60Hz							
Cooling <sup>1</sup>	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
Heating <sup>2</sup>	EER		4.00	3.93	3.91	3.86	3.85
	Capacity	kW	150.5	156.5	163.5	169.5	175.5
		kBtu/h	513.5	534.0	557.8	578.3	598.8
Fan motors	Power input	kW	33.93	36.24	38.36	40.19	41.90
	COP		4.44	4.32	4.26	4.22	4.19
	Total capacity		50-130% of outdoor unit capacity				
Compressors	Maximum quantity		64	64	64	64	64
	Type		DC inverter				
Fan motors	Quantity		5	5	5	5	5
	Type		DC				
Refrigerant	Quantity		5	5	5	5	5
	Type		R410A				
Piping	Factory charge	kg (lbs.)	9+13+16 (20+29+35)	9+13+16 (20+29+35)	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)	
	Gas pipe	mm (in.)	Φ38.1 (Φ1-1/2)	Φ38.1 (Φ1-1/2)	Φ41.3 (Φ1-5/8)	Φ41.3 (Φ1-5/8)	
Connections <sup>3</sup>	Oil balance pipe	mm (in.)	Φ8 (Φ5/16)				
	Air flow rate	m <sup>3</sup> /h	42000	44000	44000	44000	44000
Sound pressure level <sup>4</sup>	dB(A)		67	67	67	67	67
	Net dimensions (WxHxD)	mm	990x1635x790+(1340x1635x790)x2				
Packed dimensions (WxHxD)	in.		39x64-3/8x31-1/8+(52-3/4x64-3/8x31-1/8)x2				
	mm		1055x1805x855+(1405x1805x855)x2				
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)	252+358x2 (556+790x2)	
Operating temperature range	°C (°F)	Cooling: -5 to 48 (23 to 118.4); Heating: -20 to 24 (-4 to 75.2)					



## Specifications

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

Capacity	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	
Combination		10HP+16HP+22HPx2	10HP+18HP+22HPx2	10HP+20HP+22HPx2	10HP+22HPx3	12HP+22HPx3	
Power supply							
3 phase, 380-415V, 50/60Hz or 3 phase, 220V, 60Hz							
Cooling <sup>1</sup>	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
Heating <sup>2</sup>	EER		3.91	3.87	3.86	3.83	3.82
	Capacity	kW	219.5	225.5	232.5	238.5	244.5
		kBtu/h	748.9	769.4	793.2	813.7	834.2
Fan motors	Power input	kW	51.06	53.36	55.48	57.31	59.02
	COP		4.30	4.23	4.19	4.16	4.14
	Total capacity		50-130% of outdoor unit capacity				
Compressors	Maximum quantity		64	64	64	64	64
	Type		DC inverter				
Fan motors	Quantity		7	7	7	7	7
	Type		DC				
Refrigerant	Quantity		7	7	7	7	7
	Type		R410A				
Piping	Factory charge	kg (lbs.)	9+13+16x2 (20+29+35x2)	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)
Connections <sup>3</sup>	Oil balance pipe	mm (in.)	Φ8 (Φ5/16)				
	Air flow rate	m <sup>3</sup> /h	58000	60000	60000	60000	60000
Sound pressure level <sup>4</sup>	dB(A)		69	69	69	69	69
	Net dimensions (WxHxD)	mm	(990x1635x790)+(1340x1635x790)x3				
Packed dimensions (WxHxD)	in.		(39x64-3/8x31-1/8)+(52-3/4x64-3/8x31-1/8)x3				
	mm		(1055x1805x855)+(1405x1805x855)x3				
Net weight	kg (lbs.)	219+297+340 (483+655+750)	219+305+340 (483+673+750)	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 to 48 (23 to 118.4); Heating: -20 to 24 (-4 to 75.2)					



Capacity	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





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## » INDOOR UNITS

One-way Cassette

Two-way Cassette

Four-way Cassette

Low Static Pressure Duct

Medium Static Pressure Duct (A5 Duct)

High Static Pressure Duct

Fresh Air Processing Unit

Wall-mounted

Ceiling & Floor

Floor Standing

Console

# Cassette Units



One-way Cassette



Two-way Cassette



Compact Four-way Cassette



Four-way Cassette



Auto Restart Function



Auto Addressing



Fresh Air



Auto Defrosting



Easy-cleaning Panel



Follow Me



Anti-cold Air Function



Built-in Drain Pump



LED Display



Built-in Filter



Independent Dehumidification



Timer



Auto Swing

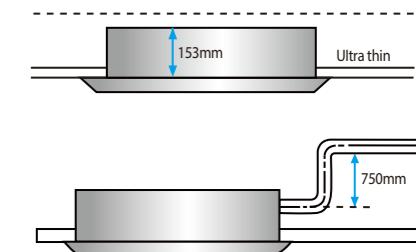


Wired Controller

## One-way Cassette

### Only 153mm high >>

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



### High-lift Drain Pump >>

A drain pump with a 750mm pump head is fitted as standard.

### Fresh Air Intake >>

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

## Specifications

### 50Hz AC fan motors

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	8.0
Power input	Cooling W	41	41	41	41	48	48	60
	Heating W		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/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						

### 60Hz AC fan motors

Model	MDV-D18Q1/VN1-D	MDV-D22Q1/VN1-D	MDV-D28Q1/VN1-D	MDV-D36Q1/VN1-D	MDV-D45Q1/VN1-D	MDV-D56Q1/VN1-D	MDV-D71Q1/VN1-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	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
Sound pressure level(H/M/L)	CFM	308/238/162	308/238/162	337/268/185	337/268/185	408/353/280	466/405/323	549/441/349
	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(in)	1054x153x425(41-1/2x6-1/32x16-47/64)					1275x189x450(50-13/64x7-7/16x17-23/32)	
	Packing dim.(WxHxD) mm(in)	1155x245x490(45-15/32x9-41/64x19-19/64)					1370x295x505(53-15/16x11-39/64x19-7/8)	
	Net/gross weight kg(lbs)	12.5/16(27.8/35.3)					185/228(408/503) 188/23.1(41.4/50.9) 195/238(43.0/52.5)	
Panel	Net dim.(WxHxD) mm(in)	1180x25x465(46-29/64x63/64x18-5/16)					1350x25x505(53-5/32x63/64x19-7/8)	
	Packing dim.(WxHxD) mm(in)	1232x107x517(48-1/2x4-7/32x20-23/64)					1410x95x560(55-33/64x3-47/64x22-3/64)	
	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)					Φ25(OD 63/64)	
Standard controller		Wireless remote controller						

Notes:

- Nominal capacities are based on the following conditions:
  - Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
  - Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.

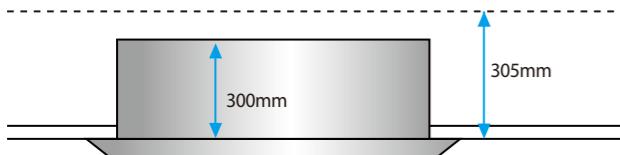
## Two-way Cassette

### Low Sound Level »

The Two-way Cassette's optimized, low resistance air outlets reduce noise levels to as low as 24dB(A).

### Stylish Design and Slim Body »

A stylish design and slim body make the Two-way Cassette suited to any room's decor and ambience. At only 300mm high, it can be installed in most ceiling spaces.



### Specifications

#### 50Hz AC fan motors

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
	Heating kW	2.6	3.2	4.0	5.0	6.3
Power input	Cooling W	57	57	60	92	108
	Heating W	57	57	60	92	108
Airflow rate(H/M/L)	m³/h	654/530/410	654/530/410	725/591/458	850/670/550	980/800/670
Sound pressure level(H/M/L)	dB(A)	33/29/24	36/32/29	36/32/29	39/35/30	39/35/30
Main body	Net dim.(WxHxD) mm	1172x299x591	1172x299x591	1172x299x591	1172x299x591	1172x299x591
	Packing dim.(WxHxD) mm	1355x400x675	1355x400x675	1355x400x675	1355x400x675	1355x400x675
	Net/gross weight kg	34/42.5	34/42.5	34/42.5	36/44.5	36/44.5
Panel	Net dim.(WxHxD) mm	1430x53x680	1430x53x680	1430x53x680	1430x53x680	1430x53x680
	Packing dim.(WxHxD) mm	1525x130x765	1525x130x765	1525x130x765	1525x130x765	1525x130x765
	Net/gross weight kg	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
	Drain pipe mm	OD Φ32				
Standard controller	Wireless remote controller					

#### 60Hz AC fan motors

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			
	Btu/h	7500	9600	12300	15400	19100			
Heating capacity	kW	2.6	3.2	4.0	5.0	6.3			
	Btu/h	8900	10900	13600	17100	21500			
Power input	Cooling W	78	78	83	115	133			
	Heating W	78	78	83	115	133			
Airflow rate(H/M/L)	m³/h	674/509/381	674/509/381	740/577/435	878/689/561	941/776/654			
	CFM	397/300/224	397/300/224	436/340/256	517/406/330	554/457/385			
Sound pressure level(H/M/L)	dB(A)	33/29/24	36/32/29	36/32/29	39/35/30	39/35/30			
Main body	Net dim.(WxHxD) mm(in)	1172x299x591(46-9/32x11-49/64x23-17/64)							
	Packing dim.(WxHxD) mm(in)	1355x400x675(53-11/32x15-3/4x26-37/64)							
	Net/gross weight kg(lbs.)	34/42.5(75/94)							
		36.5/45(80.5/99)							
Panel	Net dim.(WxHxD) mm(in)	1430x53x680(56-19/64x2-3/32x26-49/64)							
	Packing dim.(WxHxD) mm(in)	1525x130x765(60-3/64x5-1/8x30-1/8)							
	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								

- Notes:
- Nominal capacities are based on the following conditions:
    - Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
    - Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
  - Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.

### High-lift Drain Pump »

A drain pump with a 750mm pump head is fitted as standard, simplifying installation of the drain piping. Higher pump heads are available as a customization option.

### High Airflow »

A high airflow rate ensures even airflow and temperature throughout the room, even in high ceiling installations.



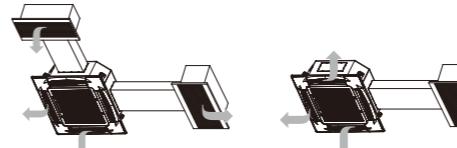
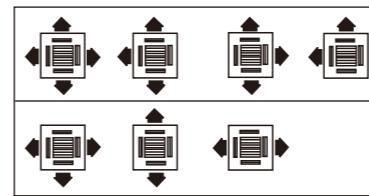
## Four-way Cassette

### Multiple Options »

Three different versions of Four-way Cassette can be selected based on ceiling arrangements and user preference: Compact Four-way Cassette, Four-way Cassette and Silent Four-way Cassette

### Multiple Airflow Patterns »

Seven airflow patterns with up to four flow directions can be selected to suit the requirements of the installation site or the shape of the room. Sub-ducts may also be connected.



### High-lift Drain Pump »

A drain pump with a 500mm pump head is fitted as standard to the Compact Four-way Cassette. Higher pump heads (of up to 600mm) are available as a customization option. On the Four-way Cassette and Silent Four-way Cassette a drain pump with a 750mm pump head is fitted as standard, simplifying installation of the drain piping.

### Specifications

#### Compact Four-way Cassette (DC fan motors)

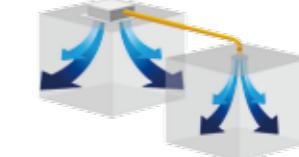
Model	MI-22Q4/DHN1-A3	MI-28Q4/DHN1-A3	MI-36Q4/DHN1-A3	MI-45Q4/DHN1-A3
Power supply	1-phase,220-240V,50/60Hz			
Capacity	Cooling kW	2.2	2.8	3.6
	Heating kW	2.4	3.2	4.0
Power input	Cooling W	15	16	21
	Heating W	13	13	18
Airflow rate(H/M/L)	m³/h	526/449/364	576/503/405	604/516/400
Sound pressure level(H/M/L)	dB(A)	34.8/32.4/22.4	34.8/32.4/22.4	40.5/34.6/27.8
Sound power level(H/M/L)	dB(A)	46/44/35	46/44/35	52/47/41
Main body	Net dim.(WxHxD) mm	570x260x570	570x260x570	570x260x570
	Packing dim.(WxHxD) mm	675x285x675	675x285x675	675x285x675
	Net/gross weight kg	16/22	16/22	17.5/23.5
Panel	Net dim.(WxHxD) mm	647x50x647	647x50x647	647x50x647
	Packing dim.(WxHxD) mm	715x123x715	715x123x715	715x123x715
	Net/gross weight kg	2.5/4.5	2.5/4.5	2.5/4.5
Piping connections	Liquid/gas pipe mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7
	Drain pipe mm	OD Φ25	OD Φ25	OD Φ25
Standard controller	Wireless remote controller			

### Fan Motor Options »

Choose either AC or DC fan motors.

### Sub Duct »

Connecting a sub-duct enables an indoor unit to be used to also cool a smaller nearby space.



### 360° Airflow »

The Compact Four-way Cassette's 360 ° air outlets provide strong airflow circulation to cool or heat every corner of a room and evenly control temperature.



## Compact Four-way Cassette (50Hz AC fan motors)

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
	Heating kW	2.4	3.2	4.0
Power input	Cooling W	50	50	56
	Heating W	50	50	56
Airflow rate(H/M/L)	m³/h	414/313/238	414/313/238	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
Main body	Net dim.(WxHxD) mm	570x260x570	570x260x570	570x260x570
	Packing dim.(WxHxD) mm	675x285x675	675x285x675	675x285x675
	Net/gross weight kg	16/20	16/20	18/22
Panel	Net dim.(WxHxD) mm	647x50x647	647x50x647	647x50x647
	Packing dim.(WxHxD) mm	715x123x715	715x123x715	715x123x715
	Net/gross weight kg	2.5/4.5	2.5/4.5	2.5/4.5
Piping connections	Liquid/gas pipe mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7
	Drain pipe mm	OD Φ25	OD Φ25	OD Φ25
Standard controller	Wireless remote controller			

## Compact Four-way Cassette (60Hz AC fan motors)

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		
	Btu/h	7500	9600	12300		
Heating capacity	kW	2.4	3.2	4.0		
	Btu/h	8200	10900	13600		
Power input	Cooling W	51	52	58		
	Heating W	43	44	50		
Airflow rate(H/M/L)	m³/h	397/292/215	408/310/231	496/359/263		
	CFM	234/172/127	240/182/136	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		
Main body	Net dim.(WxHxD) mm(in.)	570x260x570(22-7/16x10-15/64x22-7/16)				
	Packing dim.(WxHxD) mm(in.)	675x285x675(26-9/16x11-7/32x26-9/16)				
	Net/gross weight kg(lbs.)	16/20(35.3/44.1)	18/22(39.7/48.5)			
Panel	Net dim.(WxHxD) mm(in.)	647x50x647(25-15/32x1-31/32x25-15/2)				
	Packing dim.(WxHxD) mm(in.)	715x123x715(28-5/32x4-27/32x28-5/32)				
	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					

## Four-way Cassette (50Hz AC fan motors)

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
	Heating kW	3.2	4.0	5.0	8.0
Power input	Cooling W	65	65	75	82
	Heating W	65	65	75	82
Airflow rate(H/M/L)	m³/h	847/766/640	847/766/640	864/755/658	864/755/749
Sound pressure level(H/M/L)	dB(A)	42/38/35	42/38/35	42/38/35	45/42/39
Main body	Net dim.(WxHxD) mm	904x230x840	904x230x840	904x230x840	904x230x840
	Packing dim.(WxHxD) mm	955x260x955	955x260x955	955x260x955	955x260x955
	Net/gross weight kg	24/28	24/28	26/30	26/30
Panel	Net dim.(WxHxD) mm	950x54.5x950	950x54.5x950	950x54.5x950	950x54.5x950
	Packing dim.(WxHxD) mm	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035
	Net/gross weight kg	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
	Drain pipe mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32
Standard controller	Wireless remote controller				

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
	Heating kW	9.0	10.0	11.1	12.5
Power input	Cooling W	97	160	160	170
	Heating W	97	160	160	170
Airflow rate(H/M/L)	m³/h	1236/973/729	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	50/47/44
Main body	Net dim.(WxHxD) mm	904x230x840	904x300x840	904x300x840	904x300x840
	Packing dim.(WxHxD) mm	955x260x955	955x330x955	955x330x955	955x330x955
	Net/gross weight kg	26/30	32/37	32/37	32/37
Panel	Net dim.(WxHxD) mm	950x54.5x950	950x54.5x950	950x54.5x950	950x54.5x950
	Packing dim.(WxHxD) mm	1035x90x1035	1035x90x1035	1035x90x1035	1035x90x1035
	Net/gross weight kg	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
	Drain pipe mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32
Standard controller	Wireless remote controller				

## Four-way Cassette (60Hz AC fan motors)

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
	Btu/h	9600	12300	15400	19100
Heating capacity	kW	3.2	4.0	5.0	6.3
	Btu/h	10900	13600	17100	21500
Power input	Cooling W	90	90	90	115
	Heating W	90	90	90	115
Airflow rate(H/M/L)	m³/h	847/766/640	847/766/640	864/755/658	864/755/749
Sound pressure level(H/M/L)	dB(A)	42/38/35	42/38/35	42/38/35	45/42/39
Main body	Net dim.(WxHxD) mm(in.)	904x230x840(35-19/32x9-1/16x33-5/64)			
	Packing dim.(WxHxD) mm(in.)	955x260x955(37-19/32x10-15/64x37-19/32)			
	Net/gross weight kg(lbs.)	24/28(53/61.7)		26/30(57.3/66.2)	

## Four-way Cassette (DC fan motors)

Model	MI-28Q4/DHN1-D	MI-36Q4/DHN1-D	MI-45Q4/DHN1-D	MI-56Q4/DHN1-D	MI-71Q4/DHN1-D	
Power supply						
Capacity	Cooling	kW	2.8	3.6	4.5	
	Heating	kW	3.2	4.0	5.0	
Power input	Cooling	W	25	25	31	
	Heating	W	25	25	31	
Airflow rate(H/M/L)		m³/h	982/832/677	982/832/677	1029/857/704	
Sound pressure level(H/M/L)		dB(A)	42/37/32	42/37/32	43/38/34	
Sound power level(H/M/L)		dB(A)	53/49/45	53/49/45	54/50/47	
Main body	Net dim.(WxHxD)	mm	904x230x840	904x230x840	904x230x840	
	Packing dim.(WxHxD)	mm	955x260x955	955x260x955	955x260x955	
	Net/gross weight	kg	21.8/27.6	21.8/27.6	24/29.5	
Panel	Net dim.(WxHxD)	mm	950x54.5x950	950x54.5x950	950x54.5x950	
	Packing dim.(WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035	
	Net/gross weight	kg	5/8	5/8	5/8	
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	
Standard controller			Wireless remote controller			

Model	MDV-D80Q4/N1-E	MDV-D90Q4/N1-E	MDV-D100Q4/N1-E	MDV-D112Q4/N1-E	MDV-D140Q4/N1-E	
Power supply						
Capacity	Cooling	kW	8.0	9.0	10.0	
	Heating	kW	9.0	10.0	11.1	
Power input	Cooling	W	110	140	165	
	Heating	W	110	140	165	
Airflow rate(H/M/L)		m³/h	1200/1021/789	1332/1129/908	1651/1304/1127	
Sound pressure level(H/M/L)		dB(A)	42/39/37	43/39/38	45/42/40	
Sound power level(H/M/L)		dB(A)	53/49/45	53/49/45	54/50/47	
Main body	Net dim.(WxHxD)	mm	904x230x840	904x230x840	904x230x840	
	Packing dim.(WxHxD)	mm	955x260x955	955x260x955	955x260x955	
	Net/gross weight	kg	23.7/28.9	28.7/34.1	28.7/34.1	
Panel	Net dim.(WxHxD)	mm	950x54.5x950	950x54.5x950	950x54.5x950	
	Packing dim.(WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035	
	Net/gross weight	kg	6/9	6/9	6/9	
Piping connections	Liquid/gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	
Standard controller			Wireless remote controller			

Model	MI-80Q4/DHN1-D	MI-90Q4/DHN1-D	MI-100Q4/DHN1-D	MI-112Q4/DHN1-D	MI-140Q4/DHN1-D	
Power supply						
Capacity	Cooling	kW	8.0	9.0	10.0	
	Heating	kW	9.0	10.0	11.1	
Power input	Cooling	W	48	75	75	
	Heating	W	48	75	94	
Airflow rate(H/M/L)		m³/h	1264/1055/811	1596/1239/1034	1596/1239/1034	
Sound pressure level(H/M/L)		dB(A)	46/40/35	47/41/36	47/41/36	
Sound power level(H/M/L)		dB(A)	57/52/48	58/53/49	58/53/49	
Main body	Net dim.(WxHxD)	mm	904x230x840	904x300x840	904x300x840	
	Packing dim.(WxHxD)	mm	955x260x955	955x330x955	955x330x955	
	Net/gross weight	kg	24/29.5	27.4/33.2	27.4/33.2	
Panel	Net dim.(WxHxD)	mm	950x54.5x950	950x54.5x950	950x54.5x950	
	Packing dim.(WxHxD)	mm	1035x90x1035	1035x90x1035	1035x90x1035	
	Net/gross weight	kg	5/8	5/8	5/8	
Piping connections	Liquid/gas pipe	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	
Standard controller			Wireless remote controller			

## Silent Four-way Cassette (50Hz AC fan motors)

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

Model	MDV-D80Q4/VN1-E	MDV-D90Q4/VN1-E	MDV-D100Q4/VN1-E	MDV-D112Q4/VN1-E	MDV-D140Q4/VN1-E
Power supply					
Cooling capacity	kW	2.8	3.6	4.5	5.6
	Btu/h	9600	12300	15400	19100
Heating capacity	kW	3.2	4.0	5.0	6.3
	Btu/h	10900	13600	17100	21500
Power input	Cooling	W	80	88	88
	Heating	W	80	88	88
Airflow rate(H/M/L)		m³/h	791/674/596	791/674/596	942/777/662
Sound pressure level(H/M/L)		CFM	465/396/351	465/396/351	554/457/389
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)		
Panel	Net dim.(WxHxD)	mm(in.)	950x		

# Duct Units

INDOOR UNITS

INDOOR UNITS



## Low Static Pressure Duct

### Low Sound Level >>

The Low Static Pressure Duct indoor unit utilizes centrifugal blowers, reducing noise levels to as low as 24dB(A), and is an excellent choice for hotels and other noise-sensitive locations.

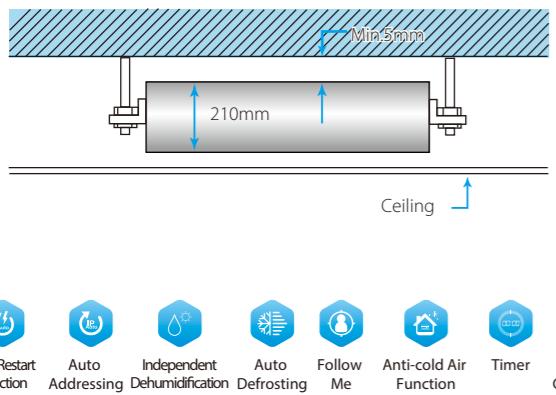


### V-shaped Evaporator >>

A V-shaped evaporator design enhances heat exchange efficiency by 22%.

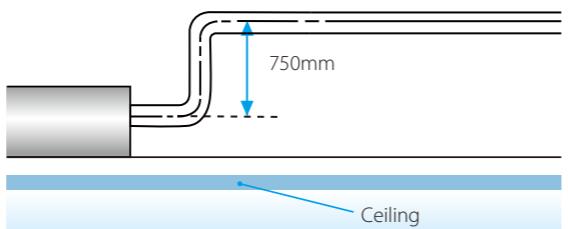
### Compact Design >>

A compact design, with a uniform height of 210mm, enables installation even where ceiling space is limited.



### Drain Pump >>

A drain pump with a 750mm pump head is available as a customization option.



### Fan Motor Options >>

Choose either AC or DC fan motors.

## Specifications

### DC fan motors

Model	MI-18T3/DHN1-C	MI-22T3/DHN1-C	MI-28T3/DHN1-C	MI-36T3/DHN1-C	MI-45T3/DHN1-C	MI-56T3/DHN1-C	MI-71T3/DHN1-C
Power supply	1-phase,220-240V,50/60Hz						
Capacity	Cooling kW	1.8	2.2	2.8	3.6	4.5	5.6
	Heating kW	2.2	2.6	3.2	4.0	5.0	8.0
Power input	Cooling W	23	23	23	30	46	53
	Heating W	23	23	23	30	46	53
Airflow rate(H/M/L)	m³/h	590/520/415	590/520/415	590/520/415	655/560/465	856/740/600	905/740/580
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
Sound pressure level(H/M/L)	dB(A)	34/26/24	34/26/24	34/26/24	37/31/28	38/31/28	38/31/28
Sound power level(H/M/L)	dB(A)	45/38/37	45/38/37	45/38/37	48/43/41	49/43/41	51/44/42
Net dimension(WxHxD)	mm	740x210x470	740x210x470	740x210x470	740x210x470	960x210x470	1180x210x470
Packing dimension(WxHxD)	mm	910x230x510	910x230x510	910x230x510	910x230x510	1130x230x510	1350x230x510
Net/gross weight	kg	13.5/17	13.5/17	13.5/17	13.5/17	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	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe mm	OD Φ25					
Standard controller	Wireless remote controller						

## 50Hz AC fan motors

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
	Heating kW	2.2	2.6	3.2	4.0	5.0	8.0
Power input	Cooling W	83	83	83	87	97	102
	Heating W	83	83	83	87	97	102
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
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
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
Net dimension(WxHxD)	mm	740x210x470	740x210x470	740x210x470	740x210x470	960x210x470	960x210x470
Packing dimension(WxHxD)	mm	910x230x510	910x230x510	910x230x510	910x230x510	1130x230x510	1350x230x510
Net/gross weight	kg	14/17.5	14/17.5	14/17.5	14/17.5	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	Φ6.35/Φ12.7
	Drain pipe mm	OD Φ25					
Standard controller	Wireless remote controller						

## 60Hz AC fan motors

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
	Btu/h	6100	7500	9600	12300	15400	19100
Heating capacity	kW	2.2	2.6	3.2	4.0	5.0	6.3
	Btu/h	7500	8900	10900	13600	17100	21500
Power input	Cooling W	62	62	62	65	105	105
	Heating W	62	62	62	65	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
	CFM	340/301/241	340/301/241	340/301/241	363/324/260	485/406/358	485/406/358
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
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
Net dimension(WxHxD)	mm(in)	740x210x470(29-9/64x8-17/64x18-1/2)					960x210x470(37-51/64x8-17/64x18-1/2)
Packing dimension(WxHxD)	mm(in)	910x230x510(35-53/64x9-1/16x20-5/64)					1180x210x470(46-29/64x8-17/64x18-1/2)
Net/gross weight	kg(lbs)	14.5/18(32.0/39.7)					18/22.5(39.7/49.6)
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						

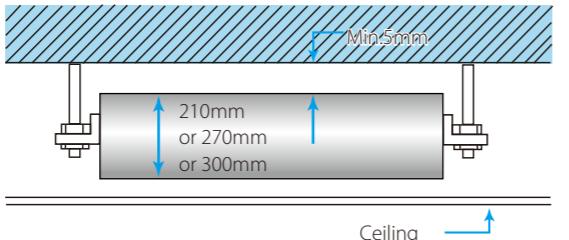
### Notes:

- Nominal capacities are based on the following conditions:  
- Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.
- External static pressure is based on high speed indoor airflow.
- No standard filter and air plenum box.

## Medium Static Pressure Duct (A5 Duct)

### Compact Design >>

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



### Fan Motor Options >>

Choose either AC or DC fan motors.

### High-lift Drain Pump >>

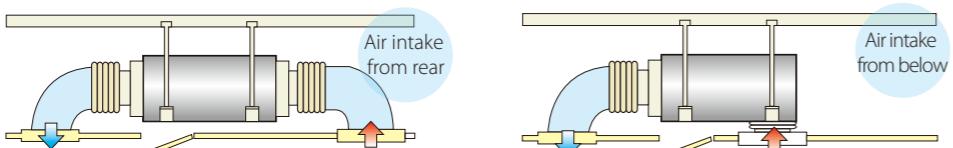
A drain pump with a 750mm pump head is fitted as standard, simplifying installation of the drain piping.

### Easy Maintenance Access, Flexible Control >>

As a customization option, for ease of access the electric control box can be separated from the unit by up to 1m. Functional ports including remote on/off dry contact and 220V alarm signal output are included as standard, providing control flexibility.

### Flexibility >>

To provide the flexibility to adapt to differing installation situations, the air inlet may be positioned either on the underside or the rear of the unit.



### Specifications

#### 50Hz AC fan motors

Model	MDV-D22T2/N1-DA5	MDV-D28T2/N1-DA5	MDV-D36T2/N1-DA5	MDV-D45T2/N1-DA5	MDV-D56T2/N1-DA5
Power supply					
Capacity	Cooling kW	2.2	2.8	3.6	4.5
	Heating kW	2.6	3.2	4.0	5.6
Power input	Cooling W	57	57	61	98
	Heating W	57	57	61	98
Airflow rate(H/M/L)	m³/h	538/456/375	538/456/375	597/514/429	811/684/575
External static pressure(Min/Std/Max)	Pa	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
Net dimension(WxHxD)	mm	780x210x500	780x210x500	780x210x500	1000x210x500
Packing dimension(WxHxD)	mm	870x285x525	870x285x525	870x285x525	1115x285x525
Net/gross weight	kg	17.5/20	17.5/20	17.5/20	22.5/26
Piping connections	Liquid/gas pipe mm	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
Standard controller	Wired controller				

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
	Heating kW	8.0	9.0	10.0	12.5
Power input	Cooling W	140	198	200	313
	Heating W	140	198	200	313
Airflow rate(H/M/L)	m³/h	1029/934/781	1345/1165/1013	1345/1165/1013	1800/1556/1400
External static pressure(Min/Std/Max)	Pa	0/10/30	10/20/50	10/20/50	10/40/80
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
Net dimension(WxHxD)	mm	1220x210x500	1230x270x775	1230x270x775	1290x300x865
Packing dimension(WxHxD)	mm	1335x285x525	1355x350x795	1355x350x795	1400x375x925
Net/gross weight	kg	28/31.5	38/46.5	40/48	40/48
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	Wired controller				

### 60Hz AC fan motors

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
	Btu/h	7500	9600	12300	15400
Heating capacity	kW	2.6	3.2	4.0	5.0
	Btu/h	8200	10900	13600	17100
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
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
Sound pressure level(H/M/L)	dB(A)	36/35/32	36/35/32	38.6/37.5/33.8	39/37.9/34
Net dimension(WxHxD)	mm(in.)	780x210x500(30-45/64x8-17/64x19-11/16)			1000x210x500(39-3/8x8-17/64x19-11/16)
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				

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
	Btu/h	24200	27300	30700	38200
Heating capacity	kW	8.0	9.0	10.0	12.5
	Btu/h	27300	30700	34100	42700
Power input	Cooling W	125	133	134	378
	Heating W	125	133	134	378
Airflow rate(H/M/L)	m³/h	1029/934/781	1345/1165/1013	1345/1165/1013	1800/1556/1400
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	10/40/100
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
Net dimension(WxHxD)	mm(in.)	1220x210x500 (48-1/32x8-17/64x19-11/16)	1230x270x775 (48-27/64x20-10-5/8x30-33/64)		1290x300x865(50-25/32x11-13/16x34-1/16)
Packing dimension(WxHxD)	mm(in.)	1335x285x525 (52-9/16x11-7/32x20-43/64)	1355x350x795 (53-11/32x13-25/31x19-64/64)		1400x375x925(55-1/8x14-49/64x36-27/64)
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				

#### Notes:

- Nominal capacities are based on the following conditions:  
- Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft) with zero level difference.
- Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft) with zero level difference.
- Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.
- External static pressure is based on high speed indoor airflow.

## DC fan motors

Model	MI-22T2/DHN1-DA5	MI-28T2/DHN1-DA5	MI-36T2/DHN1-DA5	MI-45T2/DHN1-DA5	MI-56T2/DHN1-DA5
Power supply	1-phase,220-240V,50/60Hz				
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	39	39	45	58
	Heating W	39	39	45	58
Airflow rate(H/M/L)	m³/h	521/450/380	521/450/380	592/541/426	748/640/550
External static pressure(Min/Std/Max)	Pa	0/10/30	0/10/30	0/10/30	0/10/30
Sound pressure level(H/M/L)	dB(A)	35/34/31	36/34/31	37/36/33	38/37/33
Sound power level(H/M/L)	dB(A)	46/45/44	47/46/44	48/47/46	49/48/46
Net dimension(WxHxD)	mm	780x210x500	780x210x500	780x210x500	1000x210x500
Packing dimension(WxHxD)	mm	870x285x525	870x285x525	870x285x525	1115x285x525
Net/gross weight	kg	17.5/20	17.5/20	17.5/20	22.5/26
Piping connections	Liquid/gas pipe mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ15.9
	Drain pipe mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller	Wired controller				

Model	MI-71T2/DHN1-DA5	MI-80T2/DHN1-BA5	MI-90T2/DHN1-BA5	MI-112T2/DHN1-BA5	MI-140T2/DHN1-BA5
Power supply	1-phase,220-240V,50/60Hz				
Capacity	Cooling kW	7.1	8.0	9.0	11.2
	Heating kW	8.0	9.0	10.0	12.5
Power input	Cooling W	68	98	108	178
	Heating W	68	98	108	178
Airflow rate(H/M/L)	m³/h	1021/940/778	1290/1090/940	1290/1090/940	1780/1550/1352
External static pressure(Min/Std/Max)	Pa	0/10/30	10/20/50	10/20/50	10/40/80
Sound pressure level(H/M/L)	dB(A)	40/38/34	44/38/37	44/38/37	47/41/37
Sound power level(H/M/L)	dB(A)	51/50/47	55/50/48	55/50/48	58/53/50
Net dimension(WxHxD)	mm	1220x210x500	1230x270x775	1230x270x775	1290x300x865
Packing dimension(WxHxD)	mm	1335x285x525	1355x350x795	1355x350x795	1400x375x925
Net/gross weight	kg	28/31.5	38/46.5	40/48	40/48
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	Wired controller				

Notes:  
1. Nominal capacities are based on the following conditions:

- Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

- Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

2. Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.

3. External static pressure is based on high speed indoor airflow.

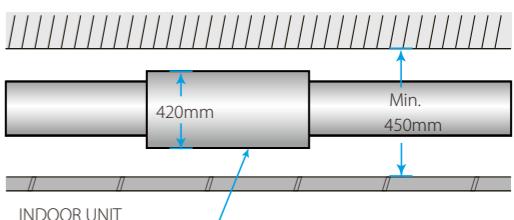
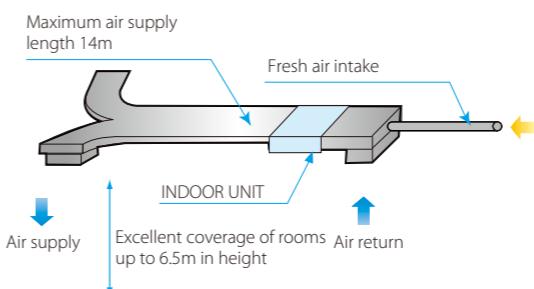
## High Static Pressure Duct

### Fan Motor Options »

Choose either AC or DC fan motors.

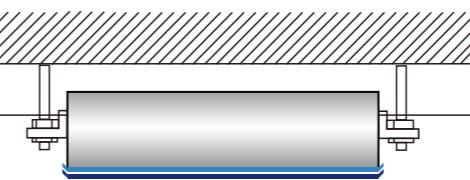
### Flexible Duct Design »

The High Static Pressure Duct indoor unit offers external static pressures of up to 196Pa (models 71 to 160) or 280Pa (models 200 to 560), allowing air supply duct lengths of up to 14m at a height of 6.5m. With a height of just 420mm (models 71 to 160), only 450mm of ceiling space is required.



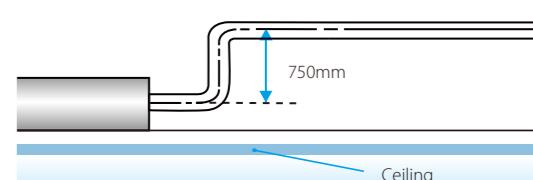
### Double-skin Drainage Pan »

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



### Drain Pumpn »

A drain pump with a 750mm pump head is available as a customization option (models 71 to 160).



### Easy Installation »

Flanges for air inlet/outlet ducts are fitted as standard on the High Static Pressure Duct. On models 70 to 160, the expansion valve is fitted inside the unit, requiring no extra connection.

### Easy Maintenance Access, Flexible Control »

The wired remote controller is provided as standard and the wireless remote controller is available as a customization option. Functional ports including remote on/off dry contact are included as standard, providing additional control flexibility. For ease of installation, the electric control box's display board is factory-fitted and the filter can be accessed either from the rear or from below.



## Specifications

## 50Hz AC fan motors

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	16.0
	Heating	kW	8.0	9.0	10.0	12.5	16.0	17.0
Power input	Cooling	W	263	263	423	524	724	940
	Heating	W	263	263	423	524	724	940
Airflow rate(H/M/L)		m <sup>3</sup> /h	1443/1361/1218	1416/1338/1220	1951/1741/1518	2116/1936/1520	3000/2618/2226	3620/3044/2744
External static pressure(Min/Std/Max)		Pa	25/25/196	37/37/196	37/37/196	50/50/196	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	54/52/50
Net dimension(WxHxD)		mm	952x420x690	952x420x690	952x420x690	952x420x690	1300x420x690	1300x420x690
Packing dimension(WxHxD)		mm	1090x440x768	1090x440x768	1090x440x768	1090x440x768	1436x450x768	1436x450x768
Net/gross weight		kg	45/50	45/50	46.5/52.4	50.6/56	68/70	70/77.5
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	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wired controller					

Model			MDV-D200T1/N1-B	MDV-D250T1/N1-B	MDV-D280T1/N1-B	MDV-D400T1/N1	MDV-D450T1/N1	MDV-D560T1/N1
Power supply			1-phase,220-240V,50Hz					
Capacity	Cooling	kW	20.0	25.0	28.0	40.0	45.0	56.0
	Heating	kW	22.5	26.0	31.5	45.0	50.0	63.0
Power input	Cooling	W	1516	1516	1516	2700	2700	3400
	Heating	W	1516	1516	1516	2700	2700	3400
Airflow rate(H/M/L)		m³/h	4700/4100/3599	4700/4100/3599	4700/4100/3599	7472/6072/4995	7472/6072/4995	9550/7950/6600
External static pressure(Min/Std/Max)		Pa	50/200/280	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	63/60/57
Net dimension(WxHxD)		mm	1440×505×925	1440×505×925	1440×505×925	1970×668×902.5	1970×668×902.5	1970×668×902.5
Packing dimension(WxHxD)		mm	1509×550×990	1509×550×990	1509×550×990	2095×800×964	2095×800×964	2095×800×964
Net/gross weight		kg	115/129	115/129	115/129	232/245	232/245	235/250
Piping connections	Liquid/gas pipe	mm	Φ9.53×2/Φ15.9×2	Φ9.53×2/Φ15.9×2	Φ9.53×2/Φ15.9×2	Φ9.53×2/Φ22.2×2	Φ9.53×2/Φ22.2×2	Φ9.53×2/Φ22.2×2
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32
Standard controller			Wired controller					

## 60Hz AC fan motors

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		
	Heating	W	414	402	409	409	527		
Airflow rate(H/M/L)	m³/h	1720/1532/1338	1690/1560/1320	2252/2030/1610	2198/1978/1570	2969/2694/2469	2969/2694/2469		
	CFM	1012/902/788	994/918/777	1326/1195/948	1294/1164/924	1746/1586/1453	1746/1586/1453		
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)	48/46/44.5	48/46/44.5	52/49/47	52/49/47	53/50/48		
Net dimension(WxHxD)		mm(in.)	952×420×690(37-31/64×16-17/32×27-11/64)			1300×420×691(51-3/16×15-3/4×27-13/64)			
Packing dimension(WxHxD)		mm(in.)	1090×440×768(42-29/32×17-21/64×30-15/64)			1436×450×768(56-17/32×17-23/32×30-15/64)			
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)		
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						

## Notes:

1. Nominal capacities are based on the following conditions:
    - Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
    - Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
  2. Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.
  3. External static pressure is based on high speed indoor airflow.

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	
	Heating	W	1516	1516	1516	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	
Sound pressure level(H/M/L)		dB(A)	59/55/52	59/55/52	59/55/52	61/59/56	
Net dimension(WxHxD)		mm(in.)	1440x505x925(56-11/16x19-7/8x36-27/6)		1970x668x902.5(77-9/16x15-3/4x35-17/32)		
Packing dimension(WxHxD)		mm(in.)	1509x550x990(59-13/32x21-21/32x38-31/32)		2095x800x964(82-31/64x31-1/2x37-61/64)		
Net/gross weight		kg(lbs.)	115/129(254/284)		235/250(518/551)		
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				

## DC fan motors

Model			MI-71T1/DHN1-B	MI-80T1/DHN1-B	MI-90T1/DHN1-B	MI-112T1/DHN1-B	MI-140T1/DHN1-B	MI-160T1/DHN1-B
Power supply			1-phase,220-240V/50/60Hz					
Capacity	Cooling	kW	7.1	8.0	9.0	11.2	14.0	16.0
	Heating	kW	8.0	9.0	10.0	12.5	16.0	17.0
Power input	Cooling	W	180	180	220	380	420	700
	Heating	W	180	180	220	380	420	700
Airflow rate(H/M/L)		m³/h	1500/1390/1250	1450/1340/1190	1780/1650/1530	2080/1930/1710	2860/2440/2010	3400/2660/2400
External static pressure(Min/Std/Max)		Pa	0/25/196	0/37/196	0/37/196	0/37/196	0/50/196	0/50/196
Sound pressure level(H/M/L)		dB(A)	46/44/42	46/44/42	50/47/45	50/47/45	53/50/48	54/52/50
Sound power level(H/M/L)		dB(A)	57/56/55	57/56/55	61/59/58	61/59/58	64/62/61	65/64/63
Net dimension(WxHxD)		mm	952×420×690	952×420×690	952×420×690	952×420×690	1300×420×690	1300×420×690
Packing dimension(WxHxD)		mm	1090×440×768	1090×440×768	1090×440×768	1090×440×768	1436×450×768	1436×450×768
Net/gross weight		kg	41/47	41/47	47/53	47/53	68/70	70/77.5
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	Φ9.53/Φ15.9
	Drain pipe	mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25
Standard controller			Wired controller					

Model		MI-200T1/DHN1-B		MI-250T1/DHN1-B		MI-280T1/DHN1-B	
Power supply		1-phase,220-240V,50/60Hz					
Capacity	Cooling	kW	20.0	25.0	28.0		
	Heating	kW	22.5	26.0	31.5		
Power input	Cooling	W	800	800	800		
	Heating	W	800	800	800		
Airflow rate(H/M/L)		m³/h	4820/4660/4620	4870/4760/4690	4870/4760/4690		
External static pressure(Min/Std/Max)		Pa	40/62/200	40/62/200	40/62/200		
Sound pressure level(H/M/L)		dB(A)	57/53/50	57/53/50	57/53/50		
Sound power level(H/M/L)		dB(A)	68/65/63	68/65/63	68/65/63		
Net dimension(WxHxD)		mm	1440×505×925	1440×505×925	1440×505×925		
Packing dimension(WxHxD)		mm	1509×550×990	1509×550×990	1509×550×990		
Net/gross weight		kg	108/120	108/120	108/120		
Piping connections	Liquid/gas pipe	mm	Φ9.53×2/Φ15.9×2	Φ9.53×2/Φ15.9×2	Φ9.53×2/Φ15.9×2		
	Drain pipe	mm	OD Φ32	OD Φ32	OD Φ32		
Standard controller			Wired controller				

## Notes:

- Nominal capacities are based on the following conditions:
    - Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
    - Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
  - Sound pressure level is measured 1.4m (4.59ft) below the unit in a semi-anechoic chamber.
  - External static pressure is based on high speed indoor airflow.

## Fresh Air Processing Unit

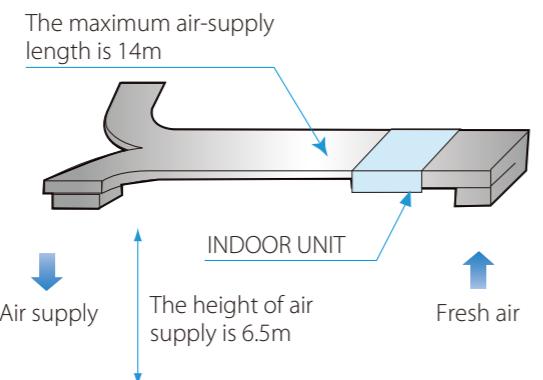
### Fan Motor Options >>

Choose either AC or DC fan motors.

### 100% Fresh Air Processing Unit >>

Both fresh air filtration and heating/cooling can be achieved in a single system.

Indoor units and the Fresh Air Processing Unit can be connected to the same refrigerant system, increasing design flexibility and greatly reducing total system costs.



### Flexible Duct Design >>

The Fresh Air Processing unit offers external static pressures of up to 196Pa (models 125 to 140) or 280Pa (models 200 to 280), allowing air supply duct lengths of up to 14m at a height of 6.5m.

### The Comfort of Fresh Air >>

Enjoy the comfort and health benefits of fresh air being drawn into your working or living environment.



### Specifications

#### 50Hz AC fan motors

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	
	Heating kW	10.5	12.0	18.0	20.0	
Power input	Cooling W	430	430	1000x2	1063x2	
	Heating W	430	430	1000x2	1063x2	
Airflow rate(H/M/L)	m³/h	2142/1870/1611	2142/1870/1611	2870/2620/2150	3005/2700/2250	
External static pressure(Min/Std/Max)	Pa	30/50/196	30/50/196	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	
Net dimension(WxHxD)	mm	1300x420x690	1300x420x690	1440x505x925	1440x505x925	
Packing dimension(WxHxD)	mm	1436x450x768	1436x450x768	1509x550x990	1509x550x990	
Net/gross weight	kg	69.5/76	69.5/76	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	
	Drain pipe mm	OD Φ25	OD Φ25	OD Φ32	OD Φ32	
Operation temperature range	°C	Heating: -5~16; Fan only: 16~20; Cooling: 20~43				
Standard controller		Wired controller				

#### 60Hz AC fan motors

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	
	Btu/h	42600	47800	68200	85300	
Heating capacity	kW	10.5	12.0	18.0	20.0	
	Btu/h	36000	41000	61400	75000	
Power input	Cooling W	430	430	1000x2	1063x2	
	Heating W	430	430	1000x2	1063x2	
Airflow rate(H/M/L)	m³/h	2142/1870/1611	2142/1870/1611	2870/2620/2150	3005/2700/2250	
	CFM	1261/1101/948	1261/1101/948	1689/1542/1265	1766/1589/1324	
External static pressure(Min/Std/Max)	Pa	30/50/196	30/50/196	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	
Net dimension(WxHxD)	mm(in.)	1300x420x690(51-3/16x16-17/32x27-11/64)		1440x505x925(56-11/16x19-7/8x36-27/6)		
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				

#### DC fan motors

Model	MI-125T1/DHN1-FA	MI-140T1/DHN1-FA	MI-200T1/DHN1-FA	MI-250T1/DHN1-FA	MI-280T1/DHN1-FA	
Power supply	1-phase,220-240V,50/60Hz					
Capacity	Cooling kW	12.5	14.0	20.0	25.0	
	Heating kW	10.5	12.0	18.0	20.0	
Power input	Cooling W	370	370	615	670	
	Heating W	370	370	615	670	
Airflow rate(H/M/L)	m³/h	2440/2000/1470	2440/2000/1470	3860/3430/2890	3860/3430/2890	
External static pressure(Min/Std/Max)	Pa	0/50/200	0/50/200	0/62/200	0/62/200	
Sound pressure level(H/M/L)	dB(A)	52/50/48	52/50/48	52/51/49	53/52/50	
Sound power level(H/M/L)	dB(A)	63/62/61	63/62/61	63/62/61	64/63/62	
Net dimension(WxHxD)	mm	1300x420x690	1300x420x690	1440x505x925	1440x505x925	
Packing dimension(WxHxD)	mm	1436x450x768	1436x450x768	1509x550x990	1509x550x990	
Net/gross weight	kg	63/71	63/71	108/120	108/120	
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 Φ32	OD Φ32	
Operation temperature range	°C	Heating: -5~16; Fan only: 16~20; Cooling: 20~43				
Standard controller		Wired controller				

Notes:

- Nominal capacities are based on the following conditions:  
- Cooling: outdoor temperature 33°C (91.4°F) DB, 24°C (75.2°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- Heating: outdoor temperature 0°C (32°F) DB, -1°C (30.2°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

2. Sound pressure level is measured 1.4m (4.5ft) below the unit in a semi-anechoic chamber.

3. External static pressure is based on high speed indoor airflow.

4. The Fresh Air Processing Unit can be used either independently or in conjunction with other types of indoor unit. If used independently, the total capacity of the Fresh Air Processing Units must be between 50% and 100% of that of the outdoor units. If used in conjunction with other types of indoor unit, the total capacity of the Fresh Air Processing Units must not exceed 30% of that of the outdoor units.

# Wall-mounted

## M Series



## S Series



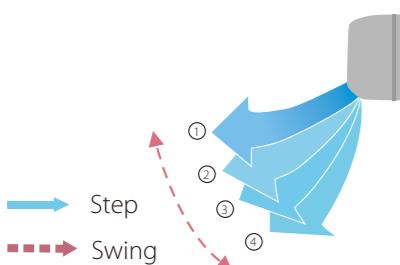
- Auto Restart Function
- Auto Addressing
- Timer
- Auto Defrosting
- Easy-cleaning Panel
- Follow Me
- Anti-cold Air Function
- Auto Swing
- LED Display
- Built-in Filter
- Independent Dehumidification
- Wired Controller

## Multiple Options ➤

Three different series of Wall-mounted indoor units can be selected based on room decor requirements and user preference: M Series, S Series and R Series. The elegant new M Series units enhance the aesthetics of any room and are suitable for a wide variety of installation space situations. Interchangeable panels (M3, M9 and M10) add extra flexibility to a universal body design.

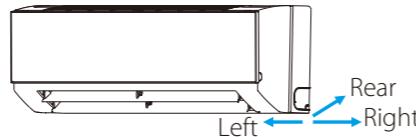
## Auto Swing Louver ➤

Multiple louver positions and the auto swing ensure precise and flexible airflow control.



## Optimal Comfort Through Better Flow Control ➤

A 2000-stage element mechanical expansion valve ensures precise flow control whilst generating little modulation noise. A multi-blade fan coupled with a dual-blade air guide smooth output airflow and three fan speeds provide flexibility to respond to users' particular comfort requirements.



## Specifications

### M Series (DC fan motors)

Model	MI-22G/DHN1-M		MI-28G/DHN1-M		MI-36G/DHN1-M		MI-45G/DHN1-M	
Power supply	1-phase,220-240V,50/60Hz							
Capacity	Cooling	kW	2.2	2.8	3.6	4.5		
	Heating	kW	2.4	3.2	4	5		
Power input	Cooling	W	8	9	19	19		
	Heating	W	8	9	19	19		
Airflow rate (H/M/L)	m³/h		422/393/356	417/370/316	656/573/488	594/507/424		
Sound pressure level (H/M/L)	dB(A)		31/30/29	31/30/29	33/32/30	35/33/31		
Net dimension (WxHxD)	mm		835x280x203	835x280x203	990x315x223	990x315x223		
Packing dimension (WxHxD)	mm		935x385x320	935x385x320	1085x420x335	1085x420x335		
Net/ Gross weight	kg		8.4/12.1	9.5/13.1	11.4/15.5	12.8/16.9		
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7					
	Drain pipe	mm	OD Φ16.5					
Standard controller	Wireless remote controller							

Model	MI-56G/DHN1-M		MI-71G/DHN1-M		MI-80G/DHN1-M		MI-90G/DHN1-M	
Power supply	1-phase,220-240V,50/60Hz							
Capacity	Cooling	kW	5.6	7.1	8	9		
	Heating	kW	6.3	8	9	10		
Power input	Cooling	W	27	49	53	82		
	Heating	W	27	49	53	80		
Airflow rate (H/M/L)	m³/h		747/648/547	1195/1005/809	1195/1005/809	1421/1067/867		
Sound pressure level (H/M/L)	dB(A)		38/36/34	44/39/36	44/39/36	48/43/38		
Dimension (WxHxD)	mm		990x315x223	1194x343x262	1194x343x262	1194x343x262		
Packing (WxHxD)	mm		1085x420x335	1290x375x460	1290x375x460	1290x375x460		
Net/ Gross weight	kg		12.8/16.9	17/22.4	17/22.4	17/22.4		
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 Φ16.5					
Standard controller	Wireless remote controller							

### S Series (50Hz AC fan motors)

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,50/60Hz									
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)	m³/h		525/480/430	525/480/430	590/520/480	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)	mm		915x290x230	915x290x230	915x290x230	1072x315x230	1072x315x230			
Packing dimension(WxHxD)	mm		1020x390x315	1020x390x315	1020x390x315	1180x415x315	1180x415x315			
Net/gross weight	kg		13/16.8	13/16.8	13/16.8	15.1/19.5	15.1/19.5			
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			
	Drain pipe	mm	OD Φ16.5	OD Φ16.5	OD Φ16.5	OD Φ16.5	OD Φ16.5			
Standard controller	Wireless remote controller									

## S Series (60Hz AC fan motors)

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
	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	28	28	51
	Heating	W	28	28	51
Airflow rate(H/M/L)	m³/h	525/480/430	525/480/430	590/520/480	860/755/630
	CFM	309/283/253	309/283/253	347/306/283	506/444/371
Sound pressure level(H/M/L)	dB(A)	35/32/29	35/32/29	35/32/29	40/38/34
	mm(in.)	915x290x230(36-1/32x11-13/32x9-1/16)		1072x315x230(42-7/32x12-13/32x9-1/16)	
Net dimension(WxHxD)	mm(in.)	1020x390x315(40-5/32x15-11/32x12-13/32)		1180x415x315(46-15/32x16-11/32x12-13/32)	
	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			

## S Series (DC fan motors)

Model	MI-22G/DHN1-S	MI-28G/DHN1-S	MI-36G/DHN1-S	MI-45G/DHN1-S	MI-56G/DHN1-S
Power supply	1-phase, 220-240V, 50/60Hz				
Capacity	Cooling	kW	2.2	2.8	3.6
	Heating	kW	2.4	3.2	4
Power input	Cooling	W	19	19	22
	Heating	W	19	19	22
Airflow rate(H/M/L)	m³/h	505/462/417	505/462/417	564/499/460	841/705/577
Sound pressure level(H/M/L)	dB(A)	31/30/29	31/30/29	31/30/29	38/36/34
Sound power level(H/M/L)	dB(A)	42/41/40	42/41/40	42/41/40	49/48/47
Net dimension(WxHxD)	mm	915x290x230	915x290x230	915x290x230	1072x315x230
Packing dimension(WxHxD)	mm	1020x390x315	1020x390x315	1020x390x315	1180x415x315
Net/gross weight	kg	12.0/15.6	12.0/15.6	12.0/15.6	14.4/18.4
Piping connections	Liquid/gas pipe	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7
	Drain pipe	mm	OD Φ16.5	OD Φ16.5	OD Φ16.5
Standard controller		Wireless remote controller			

Notes:

- Nominal capacities are based on the following conditions:
  - Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
  - Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.
- Sound pressure level is measured at a position 1m (3.28ft) in front and 1m (3.28ft) below the unit in a semi-anechoic chamber.

## Ceiling & Floor

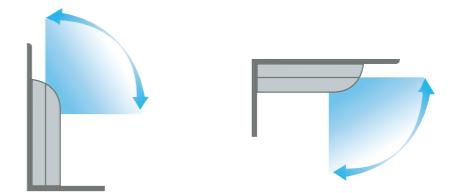
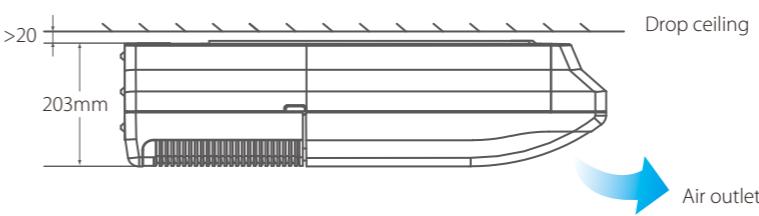


### Fan Motor Options »

Choose either AC or DC fan motors.

### Flexibility »

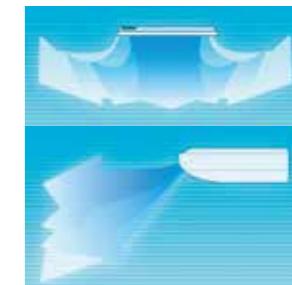
A sleek design suits installation either on the ceiling or floor, providing flexibility to accommodate a wide range of room designs.



The unit can be installed either horizontally on the ceiling or vertically against the wall.

### Wide-Angle Swing »

A wide-angle swing together with bi-directional louver swing allows the positioning of the unit to be selected to suit the room's decor, whilst ensuring that full-room cooling and heating coverage is achieved.



Wide-angle swing

### Increased Comfort »

Sound levels as low as 36dB(A) are achieved using electronic expansion valves which ensure precise flow control whilst generating little modulation noise. A multi-blade fan coupled with a dual-louver air guide smooth output airflow.

## Specifications

### 50Hz AC fan motors

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						

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	1670×285×680	
Packing dimension(WxHxD)	mm	1379×296×744	1764×329×760	1764×329×760	1775×377×760	
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					

### 60Hz AC fan motors

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(WxHxD)	mm(in.)	990×203×660(38-31/32×7-63/64×25-63/64)				
Packing dimension(WxHxD)	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.)	Φ25(OD 63/64)			
Standard controller	Wireless remote controller					

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	Cooling	kW	8.0	9.0	11.2
	Heating	Btu/h	27300	30700	38200
Heating capacity	Cooling	kW	9.0	10.0	12.5
	Heating	Btu/h	30700	34100	42700
Power input	Cooling	W	183	183	245
	Heating	W	183	183	245
Airflow rate(H/M/L)	Cooling	m³/h	1,200/900/700	1,200/900/700	1,980/1,860/1,730
	Heating	CFM	706/530/412	706/530/412	1,165/1,095/1,018
Sound pressure level(H/M/L)	Cooling	dB(A)	45/43/40	45/43/40	47/45/42
	Heating	dB(A)	45/43/40	45/43/40	47/45/42
Net dimension(WxHxD)	Cooling	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(65-3/4×9-39/64×26-49/64)
	Heating	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)
Packing dimension(WxHxD)	Cooling	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)
	Heating	mm(in.)	1089×296×744(42-7/8×11-21/32×29-9/32)	1089×296×744(42-7/8×11-21/32×29-9/32)	1089×296×744(42-7/8×11-21/32×29-9/32)
Net/gross weight	Cooling	kg(lbs.)	34.5/41(76.1/90.4)	54/59(119.0/130.1)	57.5/63.5(126.5/139.7)
	Heating	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.)	Φ25(OD 63/64)		
Standard controller	Wireless remote controller				

### DC fan motors

Model	MI-36DL/DHN1-C	MI-45DL/DHN1-C	MI-56DL/DHN1-C	MI-71DL/DHN1-C	
Power supply	1-phase,220-240V,50/60Hz				
Capacity	Cooling	kW	3.6	4.5	5.6
	Heating	kW	4.0	5.0	6.3
Power input	Cooling	W	23	94	94
	Heating	W	23	94	94
Airflow rate(H/M/L)	m³/h	550/480/420	930/830/720	930/830/720	930/830/720
Sound pressure level(H/M/L)	dB(A)	40/38/36	43/41/38	43/41/38	43/41/38
Sound power level(H/M/L)	dB(A)	51/50/49	54/53/51	54/53/51	5

## Floor Standing



- Auto Restart Function
- Follow Me
- Anti-cold Air Function
- Auto Addressing
- Auto Defrosting
- Independent Dehumidification
- Timer
- Wired Controller

### Fan Motor Options >>

Choose either AC or DC fan motors.

### Flexibility >>

The Floor Standing indoor unit can be installed on the floor or, for easier floor cleaning, hung on the wall with piping running from the rear. The streamlined appearance complements any room's decor.

### Casing Options >>

At just 212mm deep, the F3B concealed floor standing unit can be installed around the perimeter of a room, hidden behind the skirting board, and special installation methods can be used to eliminate noise from the room space. The F4 (front air intake) and F5 (underside air intake) offer a choice of air intake options.



F3B (concealed)



F4 (front air intake)



F5 (underside air intake)

### Specifications

#### 50Hz AC fan motors

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							
Capacity	Cooling kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating kW	2.4	3.2	4.0	5.0	6.3	8.0
Power input	Cooling W	40	46	49	88	130	130
	Heating W	40	46	49	46	49	46
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	1000×596×225	1000×596×225	1200×596×225	1200×596×225	1500×596×225	1500×596×225
Packing dimension(WxHxD)	mm	1000×677×220	1000×677×220	1200×677×220	1200×677×220	1500×677×220	1500×677×220
Net/gross weight	kg	30/35	30/35	36/44	36/44	41/46.5	41/46.5
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
Standard controller	Wireless remote controller						

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							
Capacity	Cooling kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating kW	2.4	3.2	4.0	5.0	6.3	8.0
Power input	Cooling W	40	46	49	88	130	130
	Heating W	40	46	49	46	49	46
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	1000×596×225	1000×596×225	1200×596×225	1200×596×225	1500×596×225	1500×596×225
Packing dimension(WxHxD)	mm	1000×677×220	1000×677×220	1200×677×220	1200×677×220	1500×677×220	1500×677×220
Net/gross weight	kg	30/35	30/35	36/44	36/44	41/46.5	41/46.5
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
Standard controller	Wireless remote controller						

### DC fan motors

Model	MI-22Z/DHN1-F3B	MI-28Z/DHN1-F3B	MI-36Z/DHN1-F3B	MI-45Z/DHN1-F3B	MI-56Z/DHN1-F3B	MI-71Z/DHN1-F3B	MI-80Z/DHN1-F3B
Power supply							
Capacity	Cooling kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating kW	2.4	3.2	4.0	5.0	6.3	8.0
Power input	Cooling W	24	24	21	24	38	62
	Heating W	23	24	19	24	41	65
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
Sound power level(H/M/L)	dB(A)	47/45/42	47/45/42	48/46/43	48/46/43	52/47/44	55/51/46
Net dimension(WxHxD)	mm	840×545×212	840×545×212	1040×545×212	1040×545×212	1340×545×212	1340×545×212
Packing dimension(WxHxD)	mm	939×639×305	939×639×305	1139×639×305	1139×639×305	1425×639×305	1425×639×305
Net/gross weight	kg	21/25	21/25	28/33	28/33	32/38	32/38
Piping connections	Liquid/gas pipe m³/h	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					
Standard controller	Wireless remote controller						

Model	MI-22Z/DHN1-F4	MI-28Z/DHN1-F4	MI-36Z/DHN1-F4	MI-45Z/DHN1-F4	MI-56Z/DHN1-F4	MI-71Z/DHN1-F4	MI-80Z/DHN1-F4
	MI-22Z/DHN1-F5	MI-28Z/DHN1-F5	MI-36Z/DHN1-F5	MI-45Z/DHN1-F5	MI-56Z/DHN1-F5	MI-71Z/DHN1-F5	MI-80Z/DHN1-F5
Power supply							
Capacity	Cooling kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating kW	2.4	3.2	4.0	5.0	6.3	8.0
Power input	Cooling W	24	24	21	24	38	62
	Heating W	23	24	19	24	41	65
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
Sound power level(H/M/L)	dB(A)	47/45/42	47/45/42	48/46/43	48/46/43	52/47/44	55/51/46
Net dimension(WxHxD)	mm	1000×596×225	1000×596×225	1200×596×225	1200×596×225	1500×596×225	1500×596×225
Packing dimension(WxHxD)	mm	1000×677×220	1000×677×220	1200×677×220	1200×677×220	1500×677×220	1500×677×220
Net/gross weight	kg	29/34	29/34	35/43	35/43	40/45.5	40/45.5
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 Φ25	OD Φ25	OD Φ25	OD Φ25		

## Console



- Auto Restart Function
- Auto Addressing
- Timer
- Auto Defrosting
- Easy-cleaning Panel
- Follow Me
- Anti-cold Air Function
- Auto Swing
- LED Display
- Built-in Filter
- Independent Dehumidification
- Wired Controller

### Compact and Stylish »

The elegant, space-saving design of the Console unit complements any room's decor. The expansion valve is installed inside the indoor unit for added compactness.

### High Comfort »

A wide-angle swing together with auto swing louvers and five fan speed options ensure that airflow reaches every corner of the room. A 2000-stage element mechanical expansion valve ensures precise flow control whilst generating little modulation noise.

### Flexibility »

The Console unit can be installed on the floor or lower part of the wall. Full capacity is still achieved even when the underside air inlet is unavailable.



### Two Air Outlets and Four Air Inlets »

The Console unit's combination of four air inlets and two air outlets ensure that cooling and heating is distributed in all directions.



### Low-noise Design »

A five-speed fan allows airflow customization whilst maintaining low-noise, low power consumption operation.



Sound levels as low as 26dB(A)

### Specifications

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(WxHxD)		mm	700x210x600	700x210x600	700x210x600	700x210x600
Packing dimension(WxHxD)		mm	810x305x710	810x305x710	810x305x710	810x305x710
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			

1. Nominal capacities are based on the following conditions:

- Cooling: indoor temperature 27°C (80.6°F) DB, 19°C (66.2°F) WB; outdoor temperature 35°C (95.0°F) DB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

- Heating: indoor temperature 20°C (68.0°F) DB; outdoor temperature 7°C (44.6°F) DB, 6°C (42.8°F) WB; equivalent refrigerant piping length 7.5m (24.6ft.) with zero level difference.

2. Sound pressure level is measured at a position 1m (3.28ft) in front the unit and 1m (3.28ft) above the floor in a semi-anechoic chamber.