

**Fujiair**

AIR - CONDITIONERS



**FMV Series**  
**VRF Air-Conditioners**  
**50Hz/60Hz R410a**



## CONTENT

### OUTDOOR UNITS

#### VRF **M**ini Series 07-10

Heat pump, cannot be combined 3~6.5HP  
DC inverter compressor All DC fan motors

#### VRF **S**eries 11-12

Heat pump Max. 4 modules can be combined  
8~72HP All DC inverter compressors All DC fan motors

#### VRF **K** Series 13-14

Heat pump/Cooling only Max. 4 modules can be combined  
8~72HP DC inverter compressor + fixed compressors  
Heat pump series: All DC fan motors  
Cooling only series: DC fan motor + AC fan motor

#### VRF **I** Series 15-16

Heat pump, cannot be combined 7~32HP  
DC inverter compressor + fixed compressors  
DC fan motor + AC fan motor

#### VRF **R** Series 17-18

Heat recovery Simultaneous cooling and heating  
operation in one system Max. 4 modules can be combined  
8~64HP All DC inverter compressors All DC fan motors

## INDOOR UNITS

Two-way Cassette  
Cooling Capacity: 2.2kW-7.1kW

19

Four-way Cassette  
Compact Four Way Cassette 1.5kW-4.5kW; Four Way Cassette & Silent Type: 2.8kW-14kW

21

Low Static Pressure Duct  
Cooling Capacity: 1.8kW-7.1kW

24

Medium Static Pressure Duct  
Cooling Capacity: 1.5kW-14kW

25

High Static Pressure Duct  
Cooling Capacity: 7.1kW-56kW

26

Fresh Air Processing Unit  
Cooling Capacity: 12.5kW-28kW

28

Wall-mounted

Cooling Capacity(K): 2.2kW-9kW & Cooling Capacity(S) 1.5kW-5.6kW

29

Ceiling & Floor

Cooling Capacity: 3.6kW-16kW

31

# Features



## Advanced Technologies

### High Efficiency DC Inverter Compressor

Fujiair VRF Air Conditioner achieves the industry's top class energy efficiency in cooling and heating by utilizing DC inverter compressor, DC fan motor, and high efficiency heat exchanger.

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



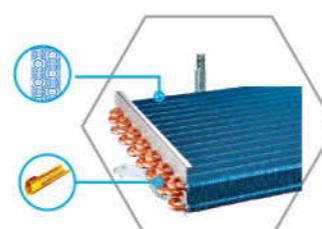
### High Efficiency DC Fan Motor

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



### High Efficiency Heat Exchanger

Newly designed window type fins enlarge the heat exchange area and decrease air resistance, enhance heat exchange performance and save more energy. Hydrophilic fins and internally threaded copper pipes optimize heat exchange efficiency.



### Double EXVs Control

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



### Newly Designed Fan

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

### Multi Solenoid Valves Control

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

## Wide Application Range

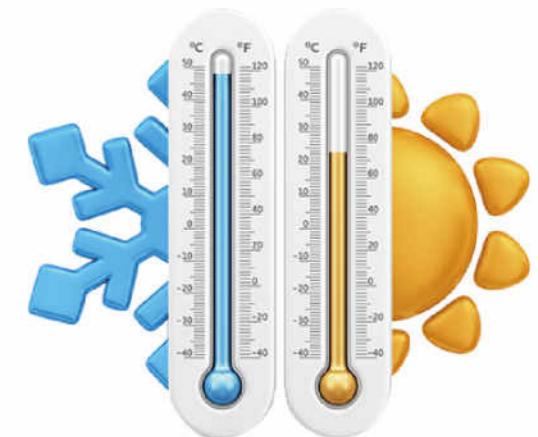
### Wide Capacity Range

Fujiair VRF has extensive capacity ranging from 3HP to 72HP, meets all customer requirement concerning small to large buildings.



### Wide Range of Indoor Units

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



### Wide Operation Range

The VRF system operates stably under extreme conditions, ranging from minus 20°C to 48°C.

#### COOLING MODE

Ranging from minus 5°C to 48°C.

#### HEATING MODE\*

Ranging from minus 20°C to 24°C.

\*HEATING MODE is only available for heat pump series.

## High Reliability

### Cycle Duty Operation

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

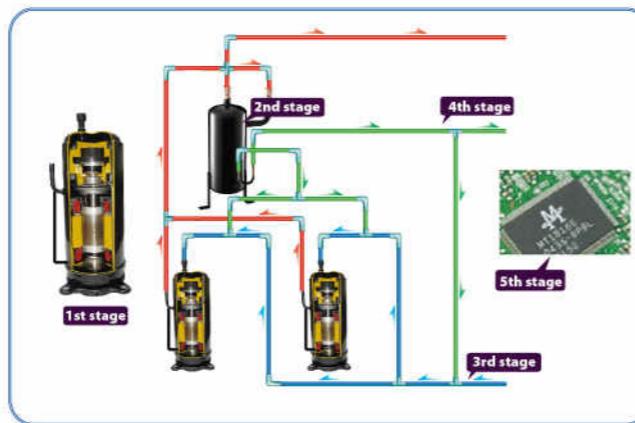
### Backup Operation

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

## Precise Oil Control Technology

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

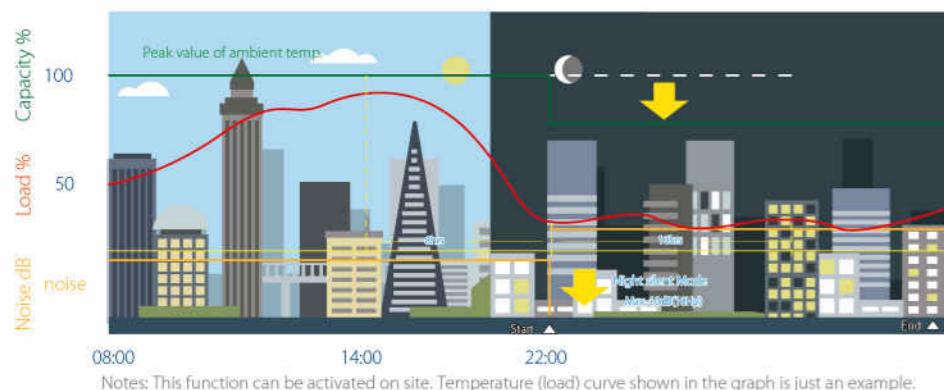
- 1st stage:** Compressor internal oil separation.
- 2nd stage:** High efficiency centrifugal oil separator (separation efficiency up to 99%) ensures oil separated from the discharge gas is returned to the compressors.
- 3rd stage:** Oil balance pipes between compressors ensure even oil distribution to keep compressors running normally.
- 4th stage:** Oil balance pipes among modules ensure even oil distribution among modules.
- 5th stage:** Auto oil return program by monitoring the running time and system status ensures reliable oil return.



## Enhanced Comfort

### Night Silent Operation Mode

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



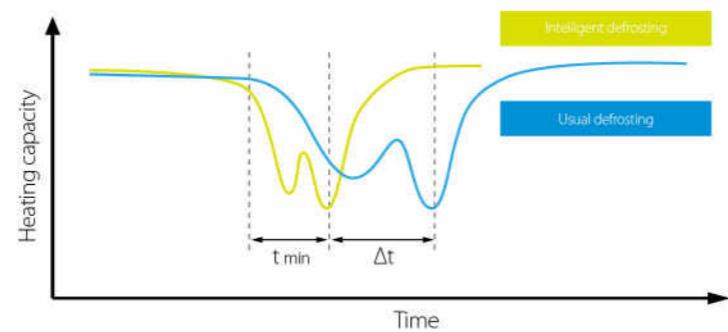
Night Silent operation will be activated X hours after the peak daytime temperature, and it will go back to normal operation after Y hours.

- Mode 1→X: 6 hours, Y: 10 hours
- Mode 2→X: 8 hours, Y: 10 hours
- Mode 3→X: 6 hours, Y: 12 hours
- Mode 4→X: 8 hours, Y: 8 hours

### Intelligent Defrosting Technology

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

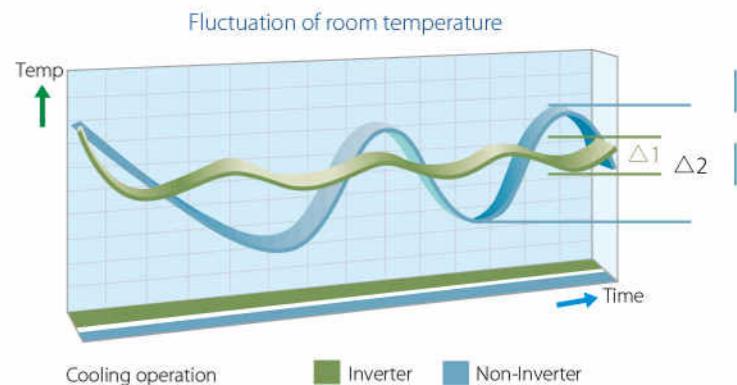
\*This function is only available for heat pump series.



## Rapid Warm Up and Cool Down Function

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

No matter when it is as high as 48 °C hot summer or -20°C in the cold winter, the unit could operate perfectly, making you feel like spring all year around.



## Easy Installation and Service

### Auto Addressing

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

### Simple Communication Wiring

Centralized controller can be connected from indoor side or outdoor side (XYE terminals) at will.

With one set of wires, we can achieve the network communication and system communication, making installation at site more convenient.



### Easy Maintenance

Inspection window for checking the systems status.

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

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



## Fujair Unified Branch Piping

The unified Fujair branch piping system is especially designed for simple installation and it also has specifically been designed to optimize refrigerant flow.



Outdoor branch joint



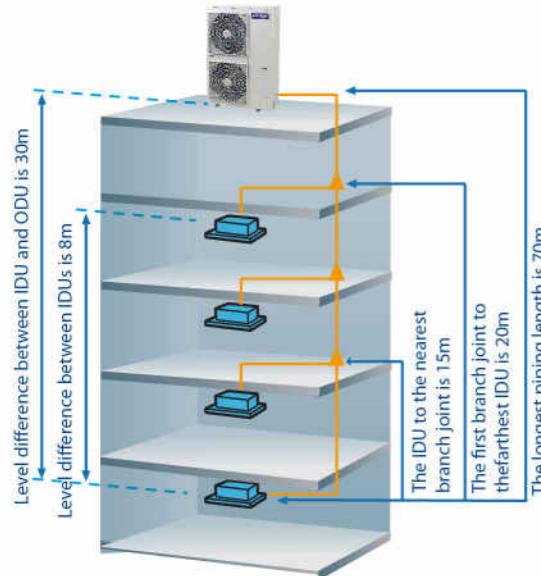
Indoor branch joint



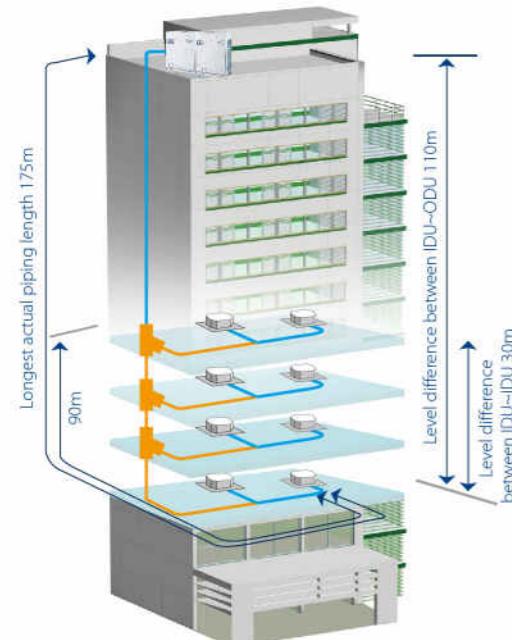
Indoor branch box

\*Indoor branch box is only available for Mini VRF Series.

## Long Piping Length



	8-10.5kW	12-18kW
Total piping length	100m	100m
Longest length actual (Equivalent)	45(50)m	60(70)m
Longest length after first branch	20m	20m
Level difference between indoor and outdoor units - ODU up (down)	30(20)m	30(20)m
Level difference between indoor units	8m	8m

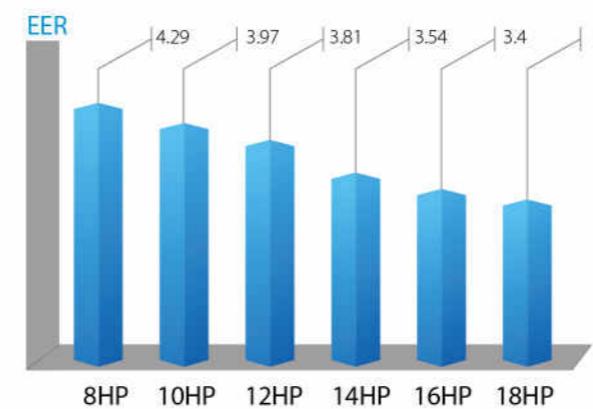


Total piping length	1000m
Longest length actual (Equivalent)	175(200)m
Longest length after first branch	90*m
Longest length from MS to its downstream indoor unit	40m
Level difference between indoor and outdoor units - ODU up (down)	70(110)m
Level difference between indoor units	30m

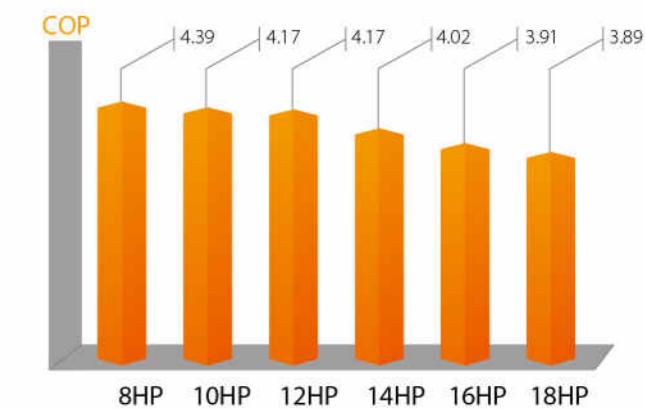
\*The longest piping length is 40m standard. It can be extended to 90m. When the length is over 40m, please contact your local Fujair dealer for more information and restrictions.

## High EER and COP Values

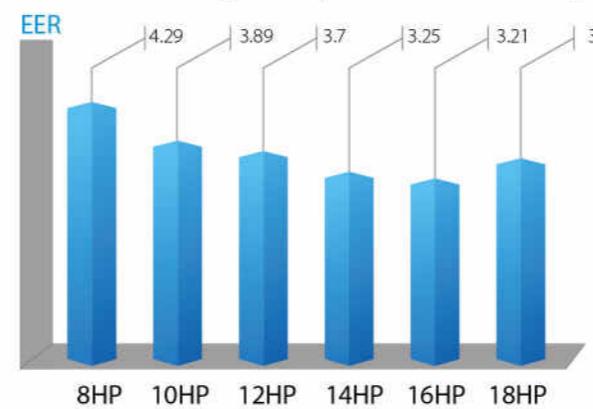
S Series equipped with all DC compressors, all DC fan motors and high efficient heat exchanger. The cooling EER is up to 4.29 and the heating COP is up to 4.39 in the 8HP category.



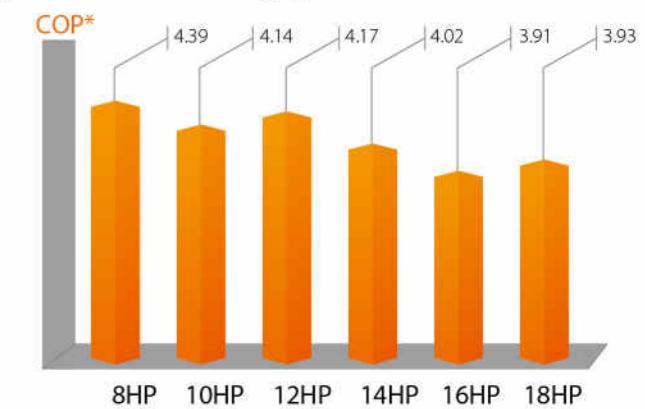
\*50Hz/60Hz heat pump



K Series: the cooling EER is up to 4.29 and the heating COP is up to 4.39 in the 8HP category.

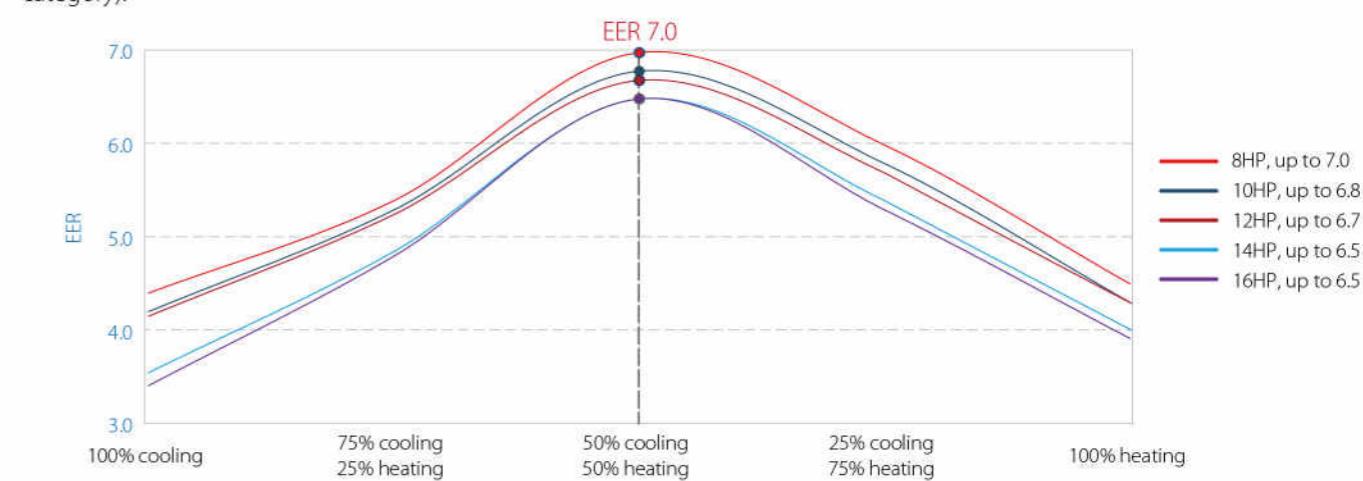


\*50Hz cooling only or heat pump



## Heat Recovery, EER up to 7.0

Heat recovery R series is achieved by diverting exhaust heat from indoor units in cooling mode to areas requiring heating, maximizing energy efficiency, reducing electricity costs and leading to high partload efficiencies (up to 7.0 in the 8HP category).



EER in simultaneous cooling and heating mode are based on the following condition:  
Outdoor temperature 7°CDB/6°CWB, indoor temperature 27°CDB/19°CWB for cooling, indoor temperature 20°CDB for heating.

# Technical Specification



## Mini Series - Heat Pump

**220-240/1/50**  
Power Supply



HP	3	4	4.5	5	6	
Model FMV-	80WHM	105WHM	120WHM	140WHM	160WHM	
Power supply	V/Ph/Hz	220-240/1/50				
Cooling:	Capacity	kW	8.0	10.5	12.3	
	Power input	kW	2.05	2.68	3.25	
	EER		3.90	3.92	3.78	
Heating:	Capacity	kW	9.0	11.5	13.2	
	Power input	kW	2.24	2.90	3.47	
	COP		4.02	3.97	3.8	
Connectable	Total capacity	45~130% of outdoor unit capacity				
indoor unit	Max. quantity	4	5	6	6	
Compressor	Type	Rotary				
	Quantity	1	1	1	1	
Fan motor	Type	DC Motor				
	Quantity	1	1	2	2	
Refrigerant	Type	R410A				
	Factory charging	kg	2.8	2.95	3.3	
Pipe	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	
	Gas pipe	mm	Φ15.9	Φ15.9	Φ15.9	
Air flow rate	m³/h	5500	5500	6000	6000	
Sound pressure level	dB(A)	56	57	57	57	
Net dimension (WxHxD)	mm	1075x966x396		900x1327x400		
Packing size (WxHxD)	mm	1120x1100x435		1030x1456x435		
Net weight	kg	62	74	95	100	
Gross weight	kg	67	81	106	111	
Operating temperature range	°C	Cooling: -15~43; Heating: -15~27				

Notes:

Capacities are based on the following conditions:

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

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

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

## Mini Series - Heat Pump

**380-415/3/50**  
Power Supply



HP	4.5	5	6	6.5		
Model FMV-	120WHM2	140WHM2	160WHM2	180WHM2		
Power supply	380-415/3/50					
Cooling	Capacity	kW	12.3	14	15.5	
	Power input	kW	3.25	3.95	4.52	
	EER		3.78	3.54	3.43	
Heating	Capacity	kW	13.2	15.4	17	
	Power input	kW	3.47	4.16	4.78	
	COP		3.8	3.7	3.56	
Connectable	Total capacity	45~130% of outdoor unit capacity				
indoor unit	Max. quantity		6	6	7	9
Compressor	Type	Rotary				
	Quantity		1	1	1	1
Fan motor	Type	DC motor				
	Quantity		2	2	2	2
Refrigerant	Type	R410A				
	Factory charging	kg	3.3	3.9	3.9	4.5
Pipe	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53	Φ9.53
connections	Gas pipe	mm	Φ15.9	Φ15.9	Φ19.1	Φ19.1
Air flow rate	m³/h	6000	6000	6000	6800	
Sound pressure level	dB(A)	57	57	57	59	
Net dimension (WxHxD)	mm	900x1327x400				
Packing size (WxHxD)	mm	1030x1456x435				
Net weight	kg	95	102	102	107	
Gross weight	kg	106	113	113	118	
Operating temperature range	°C	Cooling: -15~43; Heating: -15~27				

Notes:

Capacities are based on the following conditions:

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

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

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

## Mini Series - Heat Pump

**208-230/1/60**  
Power Supply



HP	4	4.5	5	6		
Model FMV-	105WHM3	120WHM3	140WHM3	160WHM3		
Power supply						
Cooling	Capacity	kW	10.5	12.0	14.0	15.5
		kBtu/h	35.8	40.9	47.8	52.9
	Power input	kW	2.68	3.25	3.95	4.52
		EER	3.92	3.69	3.54	3.43
Heating	Capacity	kW	11.5	13.2	15.4	17.0
		kBtu/h	39.2	45.0	52.5	58.0
	Power input	kW	2.90	3.47	4.16	4.77
		COP	3.97	3.80	3.70	3.56
Connectable	Total capacity	45~130% of outdoor unit capacity				
indoor unit	Max. quantity	5	6	6	7	
Compressor	Type	Rotary				
	Quantity	1	1	1	1	
Fan motor	Type	DC motor				
	Quantity	1	2	2	2	
Refrigerant	Type	R410A				
	Factory charging	kg(lbs.)	3(6.6)	3.3(7.3)	3.9(8.6)	3.9(8.6)
Pipe connections	Liquid pipe	mm(in.)	Φ9.53(Φ3/8)	Φ9.53(Φ3/8)	Φ9.53(Φ3/8)	Φ9.53(Φ3/8)
	Gas pipe	mm(in.)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ19.1(Φ3/4)
Air flow rate	m³/h	5100	6000	6000	6000	
Sound pressure level	dB(A)	57	57	57	57	
Net dimension (WxHxD)	mm	1075x966x396	900x1327x400	900x1327x400	900x1327x400	
	inch	42-21/64 x38-1/32 x15-19/32	35-7/14x52-1/4x15-3/4	35-7/14x52-1/4x15-3/4	35-7/14x52-1/4x15-3/4	
Packing size (WxHxD)	mm	1120x1100x435	1030x1456x435	1030x1456x435	1030x1456x435	
	inch	44-3/32 x43-5/16 x17-1/8	40-9/16x57-5/16x17-1/8	40-9/16x57-5/16x17-1/8	40-9/16x57-5/16x17-1/8	
Net weight	kg(lbs.)	78(171.9)	95(209.4)	95(209.4)	102(224.9)	
Gross weight	kg(lbs.)	85(187.3)	106(233.7)	106(233.7)	113(249.1)	
Operating temperature range	°C(°F)	Cooling -15~43°C (5~109.4°F) Heating -15~27°C(5~80.6°F)				

Notes:

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°F) DB/24°C(75.2°F) WB.  
 Heating: Indoor temperature 20°C(68°F) DB/15°C(59°F) WB; Outdoor temperature 7°C(44.6°F) DB/6°C(42.8°F) WB.  
 Piping length: Interconnecting piping length is 7.5m(24.6ft.), level difference is zero.  
 Sound values are measured in a semi-anechoic room, at a position of 1m(3.28ft.) in front of the unit and 1m(3.28ft.) above the floor.

## Mini Series - Heat Pump

**308-415/3/60**  
Power Supply



HP	4.5	5	6		
Model FMV-	120WHM4	140WHM4	160WHM4		
Power supply					
Cooling	Capacity	kW	12.0	14.0	15.5
		kBtu/h	40.9	47.8	52.9
	Power input	kW	3.25	3.95	4.52
		EER	3.69	3.54	3.43
Heating	Capacity	kW	13.2	15.4	17.0
		kBtu/h	45.0	52.5	58.0
	Power input	kW	3.47	4.16	4.77
		COP	3.8	3.7	3.56
Connectable	Total capacity	45~130% of outdoor unit capacity			
indoor unit	Max. quantity	6	6	7	
Compressor	Type	Rotary			
	Quantity	1	1	1	
Fan motor	Type	DC motor			
	Quantity	2	2	2	
Refrigerant	Type	R410A			
	Factory charging	kg(lbs.)	3.3(7.3)	3.9(8.6)	3.9(8.6)
Pipe connections	Liquid pipe	mm(in.)	Φ9.53(Φ3/8)	Φ9.53(Φ3/8)	Φ9.53(Φ3/8)
	Gas pipe	mm(in.)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ19.1(Φ3/4)
Air flow rate	m³/h	6963	6500	6000	
Sound pressure level	dB(A)	57	57	57	
Net dimension (WxHxD)	mm	900x1327x400			
	inch	35-7/14x52-1/4x15-3/4			
Packing size (WxHxD)	mm	1030x1456x435			
	inch	40-9/16x57-5/16x17-1/8			
Net weight	kg(lbs.)	92(203)	95(209.4)	102(224.9)	
Gross weight	kg(lbs.)	106(234)	106(233.7)	113(249.1)	
Operating temperature range	°C(°F)	Cooling -15~43°C (5~109.4°F) Heating -15~27°C(5~80.6°F)			

Notes:

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°F) DB/24°C(75.2°F) WB.  
 Heating: Indoor temperature 20°C(68°F) DB/15°C(59°F) WB; Outdoor temperature 7°C(44.6°F) DB/6°C(42.8°F) WB.  
 Piping length: Interconnecting piping length is 7.5m(24.6ft.), level difference is zero.  
 Sound values are measured in a semi-anechoic room, at a position of 1m(3.28ft.) in front of the unit and 1m(3.28ft.) above the floor.

## VRF S Series - Heat Pump

**380-415/3/50**  
Power Supply

**380-415/3/60**  
Power Supply

**220/3/60**  
Power Supply

HP	8	10	12	14	16	18	
Model FMV-	252(8)WHS	280(10)WHS	335(12)WHS	400(14)WHS	450(16)WHS	500(18)WHS	
Power supply V/Ph/Hz 380-415/3/50&380-415/3/60&220/3/60							
Cooling Capacity	kW 25.2	kW 28.0	kW 33.5	kW 40.0	kW 45.0	kW 50.0	
Cooling Power input	kW 5.88	kW 7.05	kW 8.79	kW 11.30	kW 13.25	kW 14.79	
Cooling EER	4.29	3.97	3.81	3.54	3.40	3.38	
Heating Capacity	kW 27.0	kW 31.5	kW 37.5	kW 45.0	kW 50.0	kW 56.0	
Heating Power Input	kW 6.15	kW 7.55	kW 8.99	kW 11.19	kW 12.79	kW 14.40	
Heating COP	4.39	4.17	4.17	4.02	3.91	3.89	
Connectable Total capacity	50~130% of outdoor unit capacity						
Indoor unit Max. quantity	13	16	20	23	26	29	
Compressor Type	DC inverter						
Fan motor Quantity	1	1	2	2	2	2	
Fan motor Type	DC motor						
Fan motor Quantity	1	1	2	2	2	2	
Fan motor Static pressure Pa	Pa	0~20 (default)					
Refrigerant Type	R410A						
Pipe connections Factory charging	kg 10	kg 10	kg 12	kg 15	kg 15	kg 16	
Pipe connections Liquid pipe	mm Ø12.7	mm Ø12.7	mm Ø15.9	mm Ø15.9	mm Ø15.9	mm Ø19.1	
Pipe connections Gas pipe	mm Ø25.4	mm Ø25.4	mm Ø31.8	mm Ø31.8	mm Ø31.8	mm Ø31.8	
Pipe connections Oil balance pipe	mm Ø6	mm Ø6	mm Ø6	mm Ø6	mm Ø6	mm Ø6	
Air flow rate	m³/h 11242	m³/h 11242	m³/h 13000	m³/h 15620	m³/h 15620	m³/h 15620	
Sound pressure level	dB(A) 57	dB(A) 57	dB(A) 59	dB(A) 61	dB(A) 62	dB(A) 62	
Net dimension (WxHxD)	mm 960x1615x765	mm 1250x1615x765	mm 1025x1790x830	mm 1305x1790x820	mm	mm	
Packing size (WxHxD)	mm	mm	mm	mm	mm	mm	
Net weight	kg 212	kg 212	kg 288	kg 288	kg 288	kg 310	
Gross weight	kg 227	kg 227	kg 308	kg 308	kg 308	kg 330	
Operating temperature range	°C	Cooling: -5~48; Heating: -20~24					

Notes:

Capacities are based on the following conditions:

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

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

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

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

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



## Outdoor Unit Combination

Capacity (HP)	Model	Combination	Photo
20	FMV-560(20)WHS	10HPx2	
22	FMV-615(22)WHS	10HP+12HP	
24	FMV-680(24)WHS	10HP+14HP	
26	FMV-730(26)WHS	10HP+16HP	
28	FMV-780(28)WHS	10HP+18HP	
30	FMV-850(30)WHS	14HP+16HP	
32	FMV-900(32)WHS	14HP+18HP	
34	FMV-950(34)WHS	16HP+18HP	
36	FMV-1000(36)WHS	18HPx2	
38	FMV-1060(38)WHS	10HPx2+18HP	
40	FMV-1130(40)WHS	10HP+14HP+16HP	
42	FMV-1180(42)WHS	10HP+16HPx2	
44	FMV-1230(44)WHS	10HP+16HP+18HP	
46	FMV-1280(46)WHS	10HP+18HPx2	
48	FMV-1350(48)WHS	14HP+16HP+18HP	
50	FMV-1400(50)WHS	14HP+18HPx2	
52	FMV-1450(52)WHS	16HP+18HPx2	
54	FMV-1500(54)WHS	18HPx3	
56	FMV-1560(56)WHS	10HPx2+18HPx2	
58	FMV-1630(58)WHS	10HP+14HP+16HP+18HP	
60	FMV-1680(60)WHS	10HP+14HP+18HPx2	
62	FMV-1730(62)WHS	10HP+16HP+18HPx2	
64	FMV-1780(64)WHS	10HP+18HPx3	
66	FMV-1850(66)WHS	14HP+16HP+18HPx2	
68	FMV-1900(68)WHS	14HP+18HPx3	
70	FMV-1950(70)WHS	16HP+18HPx3	
72	FMV-2000(72)WHS	18HPx4	



# VRF K Series - Heat Pump/Cooling Only

**380-415/3/50**  
Power Supply

Model (Heat pump series) FMV-	8 252(8)WHK 252(8)WCK	10 280(10)WHK 280(10)WCK	12 335(12)WHK 335(12)WCK	14 400(14)WHK 400(14)WCK	16 450(16)WHK 450(16)WCK	18 500(18)WHK 500(18)WCK
380-415/3/50						
Power supply	V/Ph/Hz					
Capacity	kW	25.2	28.0	33.5	40.0	45.0
Power input	kW	5.88	7.20	9.05	12.31	14.02
EER		4.29	3.89	3.70	3.25	3.21
Capacity	kW	27.0	31.5	37.5	45.0	50.0
Power input	kW	6.15	7.61	8.99	11.19	12.79
COP		4.39	4.14	4.17	4.02	3.91
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
Max. quantity	13	16	20	23	26	29
Compressor	Type	DC inverter+Fixed				
Quantity	1	1	1+1	1+1	1+1	1+1
Type	All DC motors for Heat pump series; DC+AC for Cooling only series					
Quantity	1	1	1+1	1+1	1+1	1+1
Static pressure	Pa	0-20 (default)				
Factory charging	kg	9	9	11	13	13
Pipe connections	Liquid pipe	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ19.1
	Gas pipe	Φ25.4	Φ25.4	Φ31.8	Φ31.8	Φ31.8
	Oil balance pipe	mm	Φ6			
Air flow rate	m³/h	11500	11500	15100	15100	15250
Sound pressure level	dB(A)	57	57	59	60	60
Net dimension (WxHxD)	mm	960x1615x765		1250x1615x765		
Packing size (WxHxD)	mm	1025x1790x830		1305x1790x820		
Net weight (Heat pump series)	kg	200	200	268	280	300
Gross weight (heat pump series)	kg	215	215	288	300	320
Net weight (Cooling only series)	kg	198	198	268	280	300
Gross weight (Cooling only series)	kg	213	213	288	300	320
Operating temperature range	°C	Cooling: -5~48; Heating*: -20~24				

Notes:

Capacities are based on the following conditions:  
Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.

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

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

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

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

\*heating is only available for heat pump series.



## Outdoor Unit Combination

Capacity (HP)	Model	Combination	Photo
20	FMV-560(20)W(C)HK	10HPx2	
22	FMV-615(22)W(C)HK	10HP+12HP	
24	FMV-680(24)W(C)HK	10HP+14HP	
26	FMV-730(26)W(C)HK	10HP+16HP	
28	FMV-780(28)W(C)HK	10HP+18HP	
30	FMV-850(30)W(C)HK	14HP+16HP	
32	FMV-900(32)W(C)HK	14HP+18HP	
34	FMV-950(34)W(C)HK	16HP+18HP	
36	FMV-1000(36)W(C)HK	18HPx2	
38	FMV-1060(38)W(C)HK	10HPx2+18HP	
40	FMV-1130(40)W(C)HK	10HP+14HP+16HP	
42	FMV-1180(42)W(C)HK	10HP+16HPx2	
44	FMV-1230(44)W(C)HK	10HP+16HP+18HP	
46	FMV-1280(46)W(C)HK	10HP+18HPx2	
48	FMV-1350(48)W(C)HK	14HP+16HP+18HP	
50	FMV-1400(50)W(C)HK	14HP+18HPx2	
52	FMV-1450(52)W(C)HK	16HP+18HPx2	
54	FMV-1500(54)W(C)HK	18HPx3	
56	FMV-1560(56)W(C)HK	10HPx2+18HPx2	
58	FMV-1630(58)W(C)HK	10HP+14HP+16HP+18HP	
60	FMV-1680(60)W(C)HK	10HP+14HP+18HPx2	
62	FMV-1730(62)W(C)HK	10HP+16HP+18HPx2	
64	FMV-1780(64)W(C)HK	10HP+18HPx3	
66	FMV-1850(66)W(C)HK	14HP+16HP+18HPx2	
68	FMV-1900(68)W(C)HK	14HP+18HPx3	
70	FMV-1950(70)W(C)HK	16HP+18HPx3	
72	FMV-2000(72)W(C)HK	18HPx4	

## VRF Individual Series - Heat Pump

**380-415/3/50**  
Power Supply

HP Model FMV-		7 200(7)WHI	8 224(8)WHI	10 260(10)WHI	14 400(14)WHI	16 450(16)WHI
Power supply	V/Ph/Hz			380-415/3/50		
Cooling	Capacity kW	20.0	22.4	26.0	40.0	45.0
	Power input kW	6.1	6.8	7.6	11.9	13.6
	EER	3.28	3.29	3.42	3.35	3.32
Heating	Capacity kW	22.0	24.5	28.5	45.0	50.0
	Power input kW	6.1	5.9	6.8	11.1	12.7
	COP	3.61	4.15	4.19	4.05	3.93
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	10	11	12	14	15
Compressor	Type	DC Inverter				
	Quantity	1	1	2	2	2
Fan motor	Type	DC motor				
	Quantity	2	2	2	2	2
Refrigerant	Type	R410A				
	Factory charging kg	4.8	6.2	6.2	9	12
Pipe connections	Liquid pipe mm	Φ9.53	Φ9.53	Φ9.53	Φ12.7	Φ12.7
	Gas pipe mm	Φ19.1	Φ19.1	Φ22.2	Φ22.2	Φ25.4
Air flow rate	m³/h	10999	10494	10494	16575	16575
Sound pressure level	dB(A)	59	59	60	62	62
Net dimension (WxHxD)	mm	1120x1558x528		1360x1650x540	1460x1650x540	
Packing size (WxHxD)	mm	1270x1720x565		1450x1785x560	1550x1785x560	
Net weight	kg	137	146.5	147	240	275
Gross weight	kg	153	162.5	163	260	290
Operating temperature range	°C	Cooling: -15~46; Heating: -15~24				
		Cooling: -5~48; Heating: -15~24				

## VRF Individual Series - Heat Pump

HP Model FMV-		16 450(16)WHI	20 560(20)WHI	22 615(22)WHI	24 670(24)WHI	
Power supply	V/Ph/Hz		380-415/3/50			
Cooling	Capacity kW	45.0	56.0	61.5	67.0	
	Power input kW	14	17	18.8	20.8	
	EER	3.21	3.3	3.27	3.22	
Heating	Capacity kW	50.0	63.0	69.0	75.0	
	Power input kW	12.8	16	17.9	19.8	
	COP	3.91	3.94	3.86	3.79	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	20	33	36	39	
Compressor	Type	DC inverter+Fixed				
	Quantity	3	3	3	3	
Fan motor	Type	DC motor	DC motor+AC motor			
	Quantity	2	2	2	2	
	Max Static Pressure Pa		20 (default)			
	Pa		40 (customized)			
Refrigerant	Type	R410A				
	Factory charging kg	15	17	18.5	18.5	
Pipe connections	Liquid pipe mm	Φ15.9	Φ19.1	Φ19.1	Φ19.1	
	Gas pipe mm	Φ31.8	Φ31.8	Φ31.8	Φ31.8	
Air flow rate	m³/h	15000	20000	23000	23000	
Sound pressure level	dB(A)	60	62	63	63	
Net dimension (WxHxD)	mm	1250x1615x765	1390x1615x765	1585x1615x765		
Packing size (WxHxD)	mm	1305x1790x820	1455x1790x830	1650x1810x840		
Net weight	kg	325	360	385	390	
Gross weight	kg	345	375	400	405	
Operating temperature range	°C	Cooling: -5~48; Heating: -15~24				

HP Model FMV-		8 252(8)WHI	10 280(10)WHI	12 335(12)WHI	14 400(14)WHI	
Power supply	V/Ph/Hz		380-415/3/50			
Cooling	Capacity kW	25.2	28.0	33.5	40.0	
	Power input kW	5.9	7.2	9.1	12.3	
	EER	4.29	3.89	3.7	3.25	
Heating	Capacity kW	27.0	31.5	37.5	45.0	
	Power input kW	6.2	7.6	9.0	11.2	
	COP	4.39	4.14	4.17	4.02	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	13	16	16	16	
Compressor	Type	DC inverter				
	Quantity	1	1	2	3	
Fan motor	Type	DC motor	DC inverter+Fixed			
	Quantity	1	1	2	2	
	Max Static Pressure Pa		20 (default)			
	Pa		40 (customized)			
Refrigerant	Type	R410A				
	Factory charging kg	10	10	12	15	
Pipe connections	Liquid pipe mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	
	Gas pipe mm	Φ25.4	Φ25.4	Φ31.8	Φ31.8	
Air flow rate	m³/h	11000	11000	15000	15000	
Sound pressure level	dB(A)	57	57	58	60	
Net dimension (WxHxD)	mm	960x1615x765		1250x1615x765		
Packing size (WxHxD)	mm	1025x1790x830		1305x1790x820		
Net weight	kg	205	275	325		
Gross weight	kg	220	295	345		
Operating temperature range	°C	Cooling: -5~48; Heating: -15~24				
		Cooling: -5~48; Heating: -15~24				

HP Model FMV-		26 730(26)WHI	28 785(28)WHI	30 850(30)WHI	32 900(32)WHI	
Power supply	V/Ph/Hz		380-415/3/50			
Cooling	Capacity kW	73.0	78.5	85.0	90.0	
	Power input kW	22.3	24.2	28.3	28.5	
	EER	3.27	3.24	3	3.16	
Heating	Capacity kW	81.5	87.5	95.0	100.0	
	Power input kW	20.6	22.4	26.0	26.5	
	COP	3.96	3.91	3.65	3.77	
Connectable indoor unit	Total capacity	50~130% of outdoor unit capacity				
	Max. quantity	43	46	50	53	
Compressor	Type	DC inverter+Fixed				
	Quantity	4	4	5	5	
Fan motor	Type	AC motor				
	Quantity	4	4	4	4	
	Max Static Pressure Pa		20 (default)			
	Pa		40 (customized)			
Refrigerant	Type	R410A				
	Factory charging kg	27	27	27	27	
Pipe connections	Liquid pipe mm	Φ22.2	Φ22.2	Φ22.2	Φ22.2	
	Gas pipe mm	Φ38.1	Φ38.1	Φ38.1	Φ38.1	
Air flow rate	m³/h	33100	33100	33100	33100	
Sound pressure level	dB(A)	64	64	65	65	
Net dimension (WxHxD)	mm	2540x1615x765				
Packing size (WxHxD)	mm	2600x1800x825				
Net weight	kg	555		600		
Gross weight	kg	590		635		
Operating temperature range	°C	Cooling: -5~48; Heating: -15~24				

## VRF R Series - Heat Recovery

**380-415/3/50**  
Power Supply

**380-415/3/60**  
Power Supply

Model FMV-	8	10	12	14	16
Power supply	252(8)W/D2RN1T(C)	280(10)W/D2RN1T(C)	335(12)W/D2RN1T(C)	400(14)W/D2RN1T(C)	450(16)W/D2RN1T(C)
Cooling	V/Ph/Hz		380-415/3/50(60)		
Capacity	kW	25.2	28	33.5	40
Power input	kW	5.73	6.67	8.07	11.3
EER		4.4	4.2	4.15	3.54
Heating	Capacity	kW	27	31.5	37.5
	Power input	kW	6	7.33	8.72
	COP		4.5	4.3	4.02
Connectable indoor unit	Total capacity		50~130% of outdoor unit capacity		
Max. quantity	13	16	20	23	26
Compressor	Type		DC inverter		
Quantity	1	1	1	2	2
Fan motor	Type		DC motor		
Quantity	2	2	2	2	2
Static pressure	Pa		0~20 (default)		
	Pa		20~40 (customized)	20~60 (customized)	20~40 (customized)
Refrigerant	Type		R410A		
Factory charging	kg	10	10	10	13
Pipe connections	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.9
	Low pressure gas pipe	mm	Φ22.2	Φ22.2	Φ25.4
	High pressure gas pipe	mm	Φ19.1	Φ19.1	Φ22.2
	High pressure gas balance pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Oil balance pipe	mm	Φ6	Φ6	Φ6
Air flow rate	m³/h	12000	12000	13000	15000
Sound pressure level	dB(A)	57	57	58	60
Net dimension (W×H×D)	mm	1250x1615x765			
Packing size (W×H×D)	mm	1305x1790x820			
Net weight	kg	255	255	255	303
Gross weight	kg	273	273	273	322
Operating temperature range	°C	Cooling: -5~48; Heating: -20~24; Simultaneous Cooling and Heating: -5~24			

Notes:

Capacities are based on the following conditions:

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

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

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

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

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



## VRF R Series - Mode Switch Box

Model	MS01/N1-C	MS02/N1-C	M504/N1-C	MS06/N1-C	MS02E/N1-C	MS04E/N1-C
Applicable indoor units	All VRF indoor units except high static pressure duct				Only high static pressure duct	
Max. indoor unit groups	1	2	4	6	1	1
Max. number of each group of indoor units	4	4	4	4	1	1
Max. number of downstream indoor units	4	8	16	24	1	1
Max. capacity of each group of indoor units	kW	16	16	16	20/25/28	40/45/56
Max. total capacity of all downstream indoor units	kW	16	28	45	45	20-28
Piping connections	Connected to outdoor unit	Liquid pipe	mm	Φ9.53	Φ12.7	Φ15.9
		High pressure gas pipe	mm	Φ15.9	Φ19.1	Φ22.2
		Low pressure gas pipe	mm	Φ19.1	Φ25.4	Φ31.8
	Connected to indoor unit	Liquid pipe	mm	Φ9.53	Φ9.53	Φ9.53
		Gas pipe	mm	Φ15.9	Φ15.9	Φ15.9
Sound pressure level	dB(A)	33	33	33	40	33
Net dimension (W×H×D)	mm	630x225x600	630x225x600	960x225x600	960x225x600	960x225x600
Packing size (W×H×D)	mm	725x325x685	725x325x685	1055x325x685	1055x325x685	1055x325x685
Net weight	kg	18	19.5	31	35	19.5
Gross weight	kg	25	27	40	44.5	27

Note:

Sound values are measured in a semi-anechoic room, at a position 1m below the MS equipment in mode switch condition.

It is not recommended to install in a place where low noise performance is required.

## Outdoor Unit Combination

Capacity (HP)	Model	Combination	Photo
18	FMV-532(18)WHR	8HP+10HP	
20	FMV-560(20)WHR	10HPx2	
22	FMV-615(22)WHR	10HP+12HP	
24	FMV-680(24)WHR	10HP+14HP	
26	FMV-730(26)WHR	10HP+16HP	
28	FMV-800(28)WHR	14HPx2	
30	FMV-850(30)WHR	14HP+16HP	
32	FMV-900(32)WHR	16HPx2	
34	FMV-960(34)WHR	10HPx2+14HP	
36	FMV-1010(36)WHR	10HPx2+16HP	
38	FMV-1065(38)WHR	10HP+12HP+16HP	
40	FMV-1130(40)WHR	10HP+14HP+16HP	
42	FMV-1200(42)WHR	14HPx3	
44	FMV-1250(44)WHR	14HPx2+16HP	
46	FMV-1300(46)WHR	14HP+16HPx2	
48	FMV-1350(48)WHR	16HPx3	
50	FMV-1432(50)WHR	8HP+10HP+16HPx2	
52	FMV-1460(52)WHR	10HPx2+16HPx2	
54	FMV-1515(54)WHR	10HP+12HP+16HPx2	
56	FMV-1580(56)WHR	10HP+14HP+16HPx2	
58	FMV-1650(58)WHR	14HPx3+16HP	
60	FMV-1700(60)WHR	14HPx2+16HPx2	
62	FMV-1750(62)WHR	14HP+16HPx3	
64	FMV-1800(64)WHR	16HPx4	





# INDOOR UNITS

Two-way Cassette

Four-way Cassette

Low Static Pressure Duct

Medium Static Pressure Duct

High Static Pressure Duct

Fresh Air Processing Unit

Wall-mounted

Ceiling & Floor

## Two-way Cassette

**Quiet Operation**

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

**High-lift Pump**

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

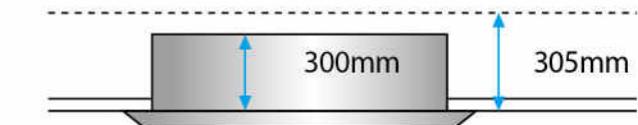
**High Airflow**

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

**Stylish Design**

And Slim Body

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



## Specifications

Model	FMV-22NQ2	FMV-28NQ2	FMV-36NQ2	FMV-45NQ2	FMV-56NQ2	FMV-71NQ2
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					

Model	FMV-22NQ2(60Hz)	FMV-28NQ2(60Hz)	FMV-36NQ2(60Hz)	FMV-45NQ2(60Hz)	FMV-56NQ2(60Hz)	FMV-71NQ2(60Hz)
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
Sound pressure level(H/M/L)	CFM	397/300/224	397/300/224	436/340/256	517/406/330	554/457/385
	dB(A)	33/29/24	36/32/29	36/32/29	39/35/30	44/40/34
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)				
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)				
	Drain pipe mm(in.)	Φ32(OD 1-17/64)				
Standard controller	Wireless remote controller					

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB,outdoor temperature: 35°CDB, equivalent ref. piping: 7.5m(horizontal).

2. Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. piping: 7.5m(horizontal).

3. Sound level is measured at 1.4m below the unit.

4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Four-way Cassette

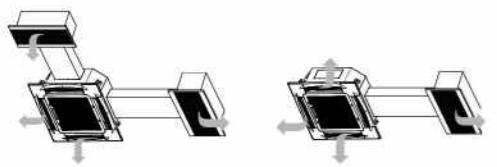
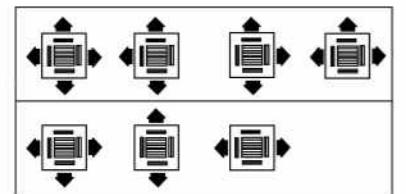


### Various Selections

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

### Flexible Air Distribution Type

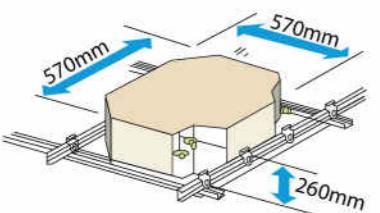
7 discharge patterns in 2 to 4 directions can be selected to suit the requirements of the installation site or the shape of the room.



Duct connection is possible

### Compact Design, Easy Installation

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



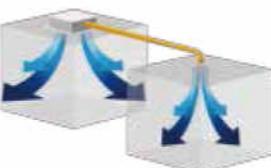
### 360°Airflow Outlet

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



### Sub Duct

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



### Fresh Air Intake

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



### Easy Troubleshooting

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



### Lower Operating Noise

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



### High-lift Drain Pump

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

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

## Compact Four-way Cassette

Model	FMV-15NQ4C	FMV-22NQ4C	FMV-28NQ4C	FMV-36NQ4C	FMV-45NQ4C
Power supply	1-phase,220-240V,50Hz			1-phase,220-240V,50Hz(60Hz)	
Capacity	Cooling kW Heating kW	1.5 1.7	2.2 2.4	2.8 3.2	3.6 4.0
Power input	Cooling W Heating W	36 36	50(51) 50(43)	50(52) 50(44)	56(58) 56(51)
Airflow rate(H/M/L)	m³/h	435/283/208	414/313/238	414/313/238	521/409/314
Sound pressure level(H/M/L)	dB(A)	34.9/32.5/22.5	35.8/33.4/23.4	35.8/33.4/23.4	41.5/35.6/28.8
Main body	Net dim.(W×H×D) mm Packing dim.(W×H×D) mm Net/gross weight kg	570×260×570 675×285×675 16/19.5	570×260×570 675×285×675 16/20	570×260×570 675×285×675 16/20	570×260×570 675×285×675 18/22
Panel	Net dim.(W×H×D) mm Packing dim.(W×H×D) mm Net/gross weight kg	647×50×647 715×123×715 2.5/4.5	647×50×647 715×123×715 2.5/4.5	647×50×647 715×123×715 2.5/4.5	647×50×647 715×123×715 2.5/4.5
Piping connections	Liquid/gas pipe mm Drain pipe mm	Φ6.35/Φ12.7 OD Φ25	Φ6.35/Φ12.7 OD Φ25	Φ6.35/Φ12.7 OD Φ25	Φ6.35/Φ12.7 OD Φ25
Standard controller				Wireless remote controller	

## Four-way Cassette

Model	FMV-28NQ4	FMV-36NQ4	FMV-45NQ4	FMV-56NQ4	FMV-71NQ4
Power supply				1-phase,220-240V,50Hz(60Hz)	
Capacity	Cooling kW Heating kW	2.8 3.2	3.6 4.0	4.5 5.0	5.6 6.3
Power input	Cooling W Heating W	65(90) 65(90)	65(90) 65(90)	75(90) 75(90)	82(115) 82(115)
Airflow rate(H/M/L)	m³/h	847/766/640	847/766/640	864/755/658	864/755/658
Sound pressure level(H/M/L)	dB(A)	42/38/35	42/38/35	42/38/35	42/38/35
Main body	Net dim.(W×H×D) mm Packing dim.(W×H×D) mm Net/gross weight kg	904×230×840 955×260×955 24/28	904×230×840 955×260×955 24/28	904×230×840 955×260×955 26/30	904×230×840 955×260×955 26/30
Panel	Net dim.(W×H×D) mm Packing dim.(W×H×D) mm Net/gross weight kg	950×54.5×950 1035×90×1035 6/9	950×54.5×950 1035×90×1035 6/9	950×54.5×950 1035×90×1035 6/9	950×54.5×950 1035×90×1035 6/9
Piping connections	Liquid/gas pipe mm Drain pipe mm	Φ6.35/Φ12.7 OD Φ32	Φ6.35/Φ12.7 OD Φ32	Φ6.35/Φ12.7 OD Φ32	Φ6.35/Φ12.7 OD Φ32
Standard controller				Wireless remote controller	

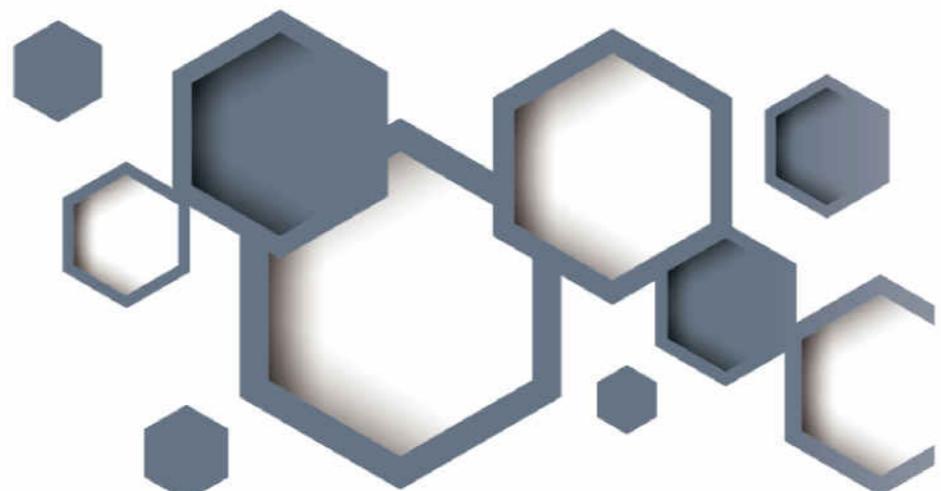
Model	FMV-80NQ4	FMV-96NQ4	FMV-100NQ4	FMV-112NQ4	FMV-140NQ4
Power supply				1-phase,220-240V,50Hz(60Hz)	
Capacity	Cooling kW Heating kW	8.0 9.0	9.0 10.0	10.0 11.1	11.2 12.5
Power input	Cooling W Heating W	97(115) 97(115)	160(160) 160(160)	160(160) 160(160)	160(160) 170(180)
Airflow rate(H/M/L)	m³/h	1236/973/729	1540/1300/1120	1540/1300/1120	1540/1300/1120
Sound pressure level(H/M/L)	dB(A)	45/42/39	48/45/43	48/45/43	48/45/43
Main body	Net dim.(W×H×D) mm Packing dim.(W×H×D) mm Net/gross weight kg	904×230×840 955×260×955 26/30	904×300×840 955×330×955 32/37	904×300×840 955×330×955 32/37	904×300×840 955×330×955 32/37
Panel	Net dim.(W×H×D) mm Packing dim.(W×H×D) mm Net/gross weight kg	950×54.5×950 1035×90×1035 6/9	950×54.5×950 1035×90×1035 6/9	950×54.5×950 1035×90×1035 6/9	950×54.5×950 1035×90×1035 6/9
Piping connections	Liquid/gas pipe mm Drain pipe mm	Φ9.53/Φ15.9 OD Φ32	Φ9.53/Φ15.9 OD Φ32	Φ9.53/Φ15.9 OD Φ32	Φ9.53/Φ15.9 OD Φ32
Standard controller				Wireless remote controller	

## Four-way Cassette Silent Type

Model		FMV-28NQ4S	FMV-36NQ4S	FMV-45NQ4S	FMV-56NQ4S	FMV-71NQ4S
Power supply						
Capacity	Cooling	kW	2.8	3.6	4.5	5.6
	Heating	kW	3.2	4.0	5.0	6.3
Power input	Cooling	W	80(80)	80(80)	88(88)	88(105)
	Heating	W	80(80)	80(80)	88(88)	88(105)
Airflow rate(H/M/L)		m³/h	764/638//554	764/638//554	905/740//651	905/740//663
Sound pressure level(H/M/L)		dB(A)	32/31/30	32/31/30	36/34/33	36/34/33
Main body	Net dim.(WxHxD)	mm	840x230x840	840x230x840	840x230x840	840x230x840
	Packing dim.(WxHxD)	mm	955x260x955	955x260x955	955x260x955	955x260x955
	Net/gross weight	kg	21.5/26.7	21.5/26.7	23.7/28.9	23.7/28.9
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		FMV-80NQ4S	FMV-90NQ4S	FMV-100NQ4S	FMV-112NQ4S	FMV-140NQ4S
Power supply						
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	110(120)	140(187)	165(200)	165(200)
	Heating	W	110(120)	140(187)	165(200)	176(220)
Airflow rate(H/M/L)		m³/h	1200/1021/789	1332/1129/908	1651/1304/1127	1651/1304/1127
Sound pressure level(H/M/L)		dB(A)	42/39/37	43/39/38	45/42/40	45/42/40
Main body	Net dim.(WxHxD)	mm	840x230x840	840x300x840	840x300x840	840x300x840
	Packing dim.(WxHxD)	mm	955x260x955	955x330x955	955x330x955	955x330x955
	Net/gross weight	kg	23.7/28.9	28.7/34.1	28.7/34.1	30.9/36.3
Panel	Net dim.(WxHxD)	mm	950x54.5x950	950x54.5x950	950x54.5x950	950x54.5x950
	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						

Notes:  
1. Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent ref. piping: 7.5m(horizontal).  
2. Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. piping: 7.5m(horizontal).  
3. Sound level is measured at 1.4m below the unit.  
4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.



## Low Static Pressure Duct

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



### Low Sound Level

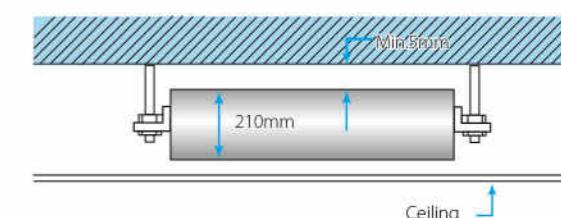
Utilizes the centrifugal type blower, provides a minimum noise level of 24dB (A), an excellent choice for hotels and other sound-sensitive locations.



### Compact Design

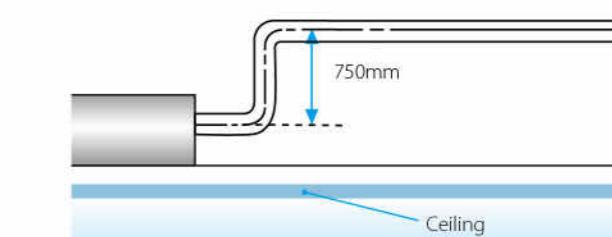
Uniformed height of 210mm, compact design for easy locate where ceiling space is limited.

Entire body adopts fireproof plastic material, the minimum weight is 14kg.



### Options

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



### Specifications

Model	FMV-18NT3	FMV-22NT3	FMV-28NT3	FMV-36NT3	FMV-45NT3	FMV-56NT3	FMV-71NT3
Power supply							
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	6.3
Power input	Cooling W	62(59)	62(59)	62(59)	65(65)	105(105)	105(105)
	Heating W	62(59)	62(59)	62(59)	65(65)	105(105)	130(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
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	1130x230x510	1130x230x510	1350x230x510
Net/gross weight	kg	14/17.5	14/17.5	14/17.5	14/17.5	17.5/22	17.5/22
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	OD Φ25	OD Φ25
Standard controller	Wireless remote controller						

#### Notes:

- Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent ref. piping: 7.5m(horizontal).
- Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. piping: 7.5m(horizontal).
- Sound level is measured at 1.4m below the unit.
- External static pressure is based on high speed indoor air flow.
- No standard filter and air plenum box.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Medium Static Pressure Duct



### Compact Size

Only 210mm (models 15~71) or 270mm (models 80~112) or 300mm (model 140) in height.

### Convenient Installation

EXV is fixed inside the indoor unit.

Standard filter is housed in an aluminum frame.

A rear air inlet is standard and an inlet at the bottom is optional. Both use the same connectable duct.



### High-lift Drain Pump

Drain pump with a 750mm pump head is fitted as standard.

## Specifications

Model	FMV-15NT2	FMV-22NT2	FMV-28NT2	FMV-36NT2	FMV-45NT2	FMV-56NT2
Power supply	I-phase,220-240V,50Hz			1-phase,220-240V,50Hz(1-phase,208-230V,60Hz)		
Capacity	Cooling kW Heating kW	1.5 1.7	2.2 2.6	2.8 3.2	3.6 4.0	4.5 5.0
Power input	Cooling W Heating W	56 56	57(66) 57(66)	57(72) 61(77)	61(77) 98(100)	103(100) 103(100)
Airflow rate(H/M/L)	m³/h	538/456/375	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	0/10/30
Sound pressure level(H/M/L)	dB(A)	35.8/34.6/31.4	36/35/32	37/35/32	38.6/37.5/33.8	39/37.9/34
Net dimension(WxHxD)	mm	780x210x500	780x210x500	780x210x500	1000x210x500	1000x210x500
Packing dimension(WxHxD)	mm	870x285x525	870x285x525	870x285x525	1115x285x525	1115x285x525
Net/gross weight	kg	17.5/20.5	17.5/20	17.5/20	22.5/26	22.5/26
Piping connections	Liquid/gas pipe mm Drain pipe mm	Φ6.35/Φ12.7 OD Φ25	Φ6.35/Φ12.7 OD Φ25	Φ6.35/Φ12.7 OD Φ25	Φ6.35/Φ12.7 OD Φ25	Φ9.53/Φ15.9 OD Φ25
Standard controller						Wired controller

Model	FMV-71NT2	FMV-80NT2	FMV-90NT2	FMV-112NT2	FMV-140NT2
Power supply			1-phase,220-240V,50Hz(1-phase,208-230V,60Hz)		
Capacity	Cooling kW Heating kW	7.1 8.0	8.0 9.0	9.0 10.0	11.2 12.5
Power input	Cooling W Heating W	140(125) 140(125)	198(133) 198(133)	200(134) 200(134)	313(378) 313(378)
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	49/58
Piping connections	Liquid/gas pipe mm Drain pipe mm	Φ9.53/Φ15.9 OD Φ25	Φ9.53/Φ15.9 OD Φ25	Φ9.53/Φ15.9 OD Φ25	Φ9.53/Φ15.9 OD Φ25
Standard controller					Wired controller

Notes:

1. Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent ref. piping: 7.5m(horizontal).

2. Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. piping: 7.5m(horizontal).

3. Sound level is measured at 1.4m below the air outlet.

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

4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## High Static Pressure Duct

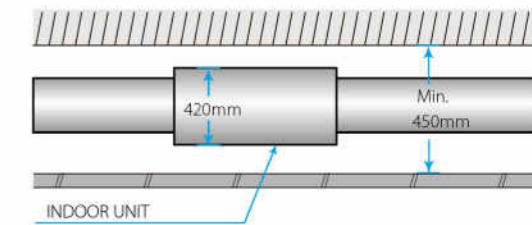
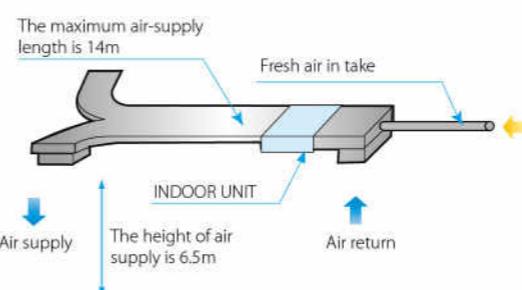


### Flexible Duct Design

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

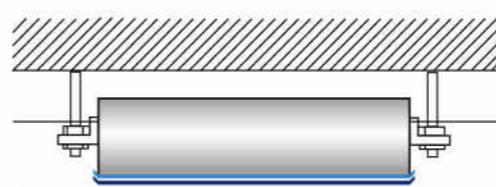
The maximum length for air supply is about 14m at a height of 6.5m.

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



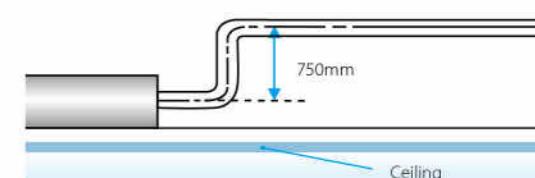
### Double-skin Drainage Pan

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



### Option

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



### Convenient Installation

The EXV is fixed inside the indoor unit (models 71 to 160), requires no extra connection.

Standard filter is housed in an aluminum frame (models 71 to 280), which is removable from the bottom in a downward direction.

Flange for air inlet/outlet duct connection is standard.

### Flexible Control and Convenient for Maintenance

Wired remote controller KJR-29B1/BK-E comes standard.

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

Easy access filters both at the rear & bottom.

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

## Specification

Model	FMV-71NT1	FMV-80NT1	FMV-90NT1	FMV-112NT1	FMV-140NT1	FMV-160NT1		
Power supply	1-phase,220-240V,50Hz(1-phase,208-230V,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	263(414)	263(402)	423(409)	524(409)	724(527)	940(532)
	Heating	W	263(414)	263(402)	423(409)	524(409)	724(527)	940(532)
Airflow rate(H/M/L)	m³/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	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	1436×450×768	1436×450×768		
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	
	Drain pipe	mm	OD Φ25					
Standard controller	Wired controller							
Model	FMV-200NT1	FMV-250NT1	FMV-280NT1	FMV-400NT1	FMV-450NT1	FMV-560NT1		
Power supply	1-phase,220-240V,50Hz(1-phase,208-230V,60Hz)							
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(1516)	1516(1516)	2700(1600)	2700(1600)	3400
	Heating	W	1516(1516)	1516(1516)	1516(1516)	2700(1600)	2700(1600)	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	
	Drain pipe	mm	OD Φ32					
Standard controller	Wired controller							

Notes:

- Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB,outdoor temperature: 35°CDB, equivalent ref. piping: 7.5m(horizontal).
- Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. piping: 7.5m(horizontal).
- Sound level is measured at 1.4m below the air outlet.
- External static pressure is based on high speed indoor air flow.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Fresh Air Processing Unit

### 100% Fresh Air Processing Unit

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

Indoor units and fresh air processing unit can be connected to the same refrigerant system, increasing design flexibility and greatly reducing total system costs.

### Healthy and Comfortable

Fresh air is imported, providing a healthy and comfortable living environment.

Four speed fan motor(model 125&140).

### High External Static Pressure

## Specification

Model	FMV-125NF	FMV-140NF	FMV-200NF	FMV-250NF	FMV-280NF
Power supply	1-phase,220-240V,50Hz				
Capacity	Cooling	kW	12.5	14.0	20.0
	Heating	kW	10.5	12.0	18.0
Power input	Cooling	W	455	455	1060×2
	Heating	W	455	455	1060×2
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	1300×420×690	1300×420×690	1440×505×925	1440×505×925
Packing dimension(WxHxD)	mm	1436×450×768	1436×450×768	1509×550×990	1509×550×990
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
	Drain pipe	mm	OD Φ25	OD Φ32	OD Φ32
Operation temperature range	°C	Heating: -5~16; Fan only: 16~20; Cooling: 20~43			
Standard controller	Wired controller				
Model	FMV-125NF(60Hz)	FMV-140NF(60Hz)	FMV-200NF(60Hz)	FMV-250NF(60Hz)	FMV-280NF(60Hz)
Power supply	1-phase,208-230V,60Hz				
Cooling capacity	kW	12.5	14.0	20.0	28.0
	Btu/h	42600	47800	68200	85300
Heating capacity	kW	10.5	12.0	18.0	22.0
	Btu/h	36000	41000	61400	68200
Power input	Cooling	W	455	455	1060×2
	Heating	W	455	455	1060×2
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	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.)	1300×420×690(51-3/16×16-17/32×27-11/64)		1440×505×925(56-11/16×19-7/8×36-27/6)	
Packing dimension(WxHxD)	mm(in.)	1436×450×768(56-17/32×17-23/32×30-1/4)		1509×550×990(59-13/32×21-21/32×38-31/2)	
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				

Notes:

1. Nominal cooling capacities are based on the following conditions: outdoor air temperature: 33°CDB, 28°CWB, equivalent ref. piping: 7.5m(horizontal).

2. Nominal heating capacities are based on the following conditions: outdoor air temperature: 0°CDB, -2.9°CWB, equivalent ref. piping: 7.5m(horizontal).

3. Sound level is measured at 1.4m below the air outlet.

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

Connection Conditions:

The following restrictions must be observed in order to maintain the indoor units connection to the same system.

\* When outdoor-air processing units are connected, the total connection capacity must be within 50% to 100% of that of the outdoor units.

\* When outdoor-air processing units and standard indoor units are connected, the total connection capacity of the outdoor-air processing units must not exceed 30% that of the outdoor units.

\* Outdoor-air processing units can be used without indoor units.

\* The fresh air processing unit is not available for R system & 8~26kW side discharge outdoor units.

4. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

## Wall-mounted

K1 panel



K2 panel



K3 panel



S panel



- |                        |                 |             |                 |                              |                  |
|------------------------|-----------------|-------------|-----------------|------------------------------|------------------|
|                        |                 |             |                 |                              |                  |
| 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 |

### Various selections

K panel and S panel.

### High efficiency and low sound operation

K type products adopt DC brushless fan motor. The units operate in higher efficiency and lower sound level.

### Auto swing louver

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

### Convenient installation

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

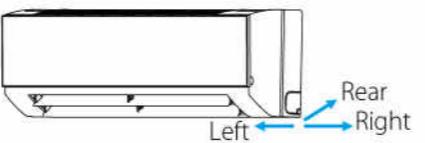
EXV is built-in the indoor unit, compact size.

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



### Precise flow control

A 2000-stage element mechanical expansion valve ensures precise flow control whilst generating little modulation noise.



## Specification

### K panel

Model	FMV-22NGK		FMV-28NGK		FMV-36NGK		FMV-45NGK	
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	FMV-56NGK		FMV-71NGK		FMV-80NGK		FMV-90NGK	
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	82		
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	Φ9.53/Φ15.9	
	Drain pipe	mm	OD Φ16.5					
Standard controller			Wireless remote controller					

### S panel

Model	FMV-15NGS		FMV-22NGS		FMV-28NGS		FMV-36NGS		FMV-45NGS		FMV-56NGS	
Power supply			1-phase,220-240V,50/60Hz							1-phase,220-240V,50/60Hz		
Capacity	Cooling	kW	1.5	2.2	2.8	3.6	4.5	5.6				
	Heating	kW	1.7	2.4	3.2	4	5	6.3				
Power input	Cooling	W	28	28	28	28	28	45				
	Heating	W	28	28	28	28	28	45				
Airflow rate(H/M/L)			m³/h	427/389/336	525/480/430	525/480/430	590/520/480	860/755/630	925/860/755			
Sound pressure level(H/M/L)			dB(A)	33/31/28	35/32/29	35/32/29	35/32/29	40/38/34	40/38/34			
Net dimension(WxHxD)			mm	915x290x230	915x290x230	915x290x230	915x290x230	1072x315x230	1072x315x230			
Packing dimension(WxHxD)			mm	1020x390x315	1020x390x315	1020x390x315	1020x390x315	1180x415x315	1180x415x315			
Net/gross weight			kg	12.4/15.9	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	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	OD Φ16.5	OD Φ16.5			
Standard controller			Wireless remote controller									

#### Notes:

- Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent ref. piping: 7.5m(horizontal).
- Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. piping: 7.5m(horizontal).
- Sound level is measured 1m below the air outlet horizontally and vertically.

## Ceiling & Floor



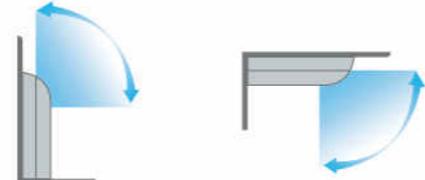
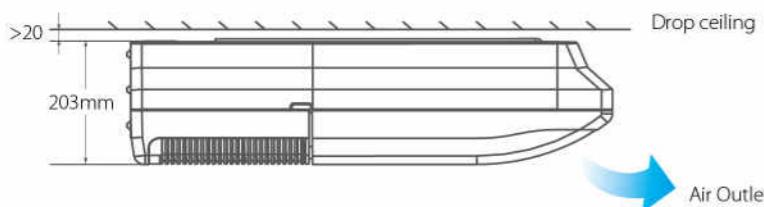
## Specification

Model	FMV-36NCF	FMV-45NCF	FMV-56NCF	FMV-71NCF	FMV-80NCF
Power supply	1-phase,220-240V,50Hz(60Hz)				
Capacity	Cooling kW	3.6	4.5	5.6	7.1
	Heating kW	4.0	5.0	6.3	8.0
Power input	Cooling W	49(50)	120(148)	122(148)	125(148)
	Heating W	49(50)	120(148)	122(148)	130(183)
Airflow rate(H/M/L)	m³/h	650/570/500	800/600/500	800/600/500	800/600/500
Sound pressure level(H/M/L)	dB(A)	40/38/36	43/41/38	43/41/38	43/41/38
Net dimension(WxHxD)	mm	990x203x660	990x203x660	990x203x660	990x203x660
Packing dimension(WxHxD)	mm	1089x296x744	1089x296x744	1089x296x744	1089x296x744
Net/gross weight	kg	26/32	28/34	28/34	28/34
Piping connections	Liquid/gas pipe mm	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
Standard controller	Wireless remote controller				

## Convenient Installation

The slim and sleek structure design ensures easy installation.

It can be installed into a corner of the ceiling even if the ceiling is very narrow.



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

## Auto Swing and Wide Angle Air Flow

Two direction auto swing - vertical and horizontal.

The range of horizontal air discharge is widened which secures wider air flow distribution to provide more comfortable air circulation no matter where the unit is set up.

Three air flow speeds: low, medium and high; double air guides.

## More Comfortable

Adopts electrical expansion valve, ensuring precise flow control, lower modulation noise when EXV is operating.

Low noise operations; minimum 36 dB(A).

Smoother airflow and less turbulence due to the multi-blade fan and the air guide design.

Model	FMV-90NCF	FMV-112NCF	FMV-140NCF	FMV-160NCF
Power supply	1-phase,220-240V,50Hz(60Hz)			
Capacity	Cooling kW	9.0	11.2	14.0
	Heating kW	10.0	12.5	15.0
Power input	Cooling W	130(183)	182(245)	182(245)
	Heating W	130(183)	182(245)	182(245)
Airflow rate(H/M/L)	m³/h	1200/900/700	1980/1860/1730	1980/1860/1730
Sound pressure level(H/M/L)	dB(A)	45/43/40	47/45/42	47/45/42
Net dimension(WxHxD)	mm	1280x203x660	1670x244x680	1670x244x680
Packing dimension(WxHxD)	mm	1379x296x744	1764x329x760	1764x329x760
Net/gross weight	kg	34.5/41	54/59	54/59
Piping connections	Liquid/gas pipe mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
	Drain pipe mm	OD Φ25	OD Φ25	OD Φ25
Standard controller	Wireless remote controller			

Notes:

- Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent ref. piping: 7.5m(horizontal).
- Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. piping: 7.5m(horizontal).
- Floor standing: Sound level is measured 1m horizontally and 1m vertically from the air-outlet.  
Ceiling mounted: Sound level is measured 1m horizontally and 1m vertically from the air-outlet.



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