

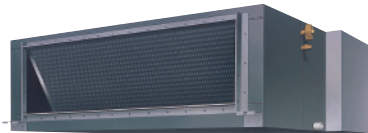
# Air Treatment Equipment

## Outdoor-air processing unit

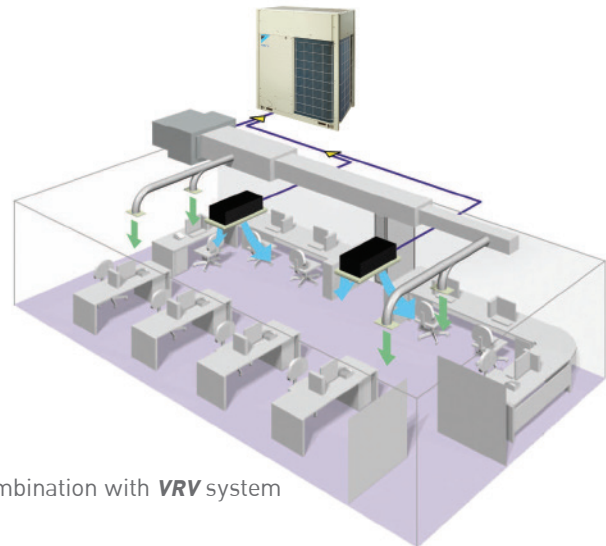
Combine fresh air treatment and air conditioning, supplied from a single system.

### Lineup

Model Name	FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
Capacity Index	125	200	250

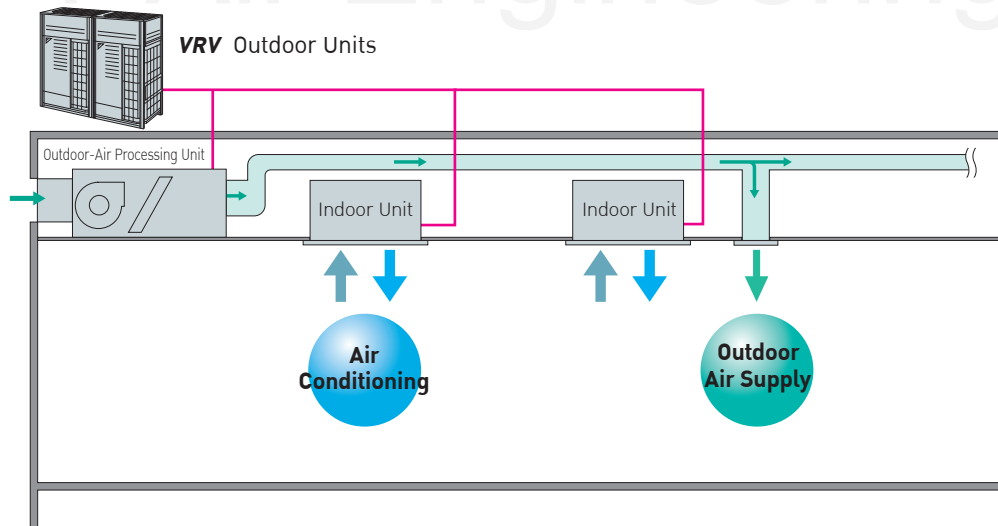


Fresh air treatment and air conditioning can be achieved with a single system by using heat pump technology — without the usual troublesome air supply and air discharge balance design. Fan coil units for air conditioning and an outdoor-air processing unit can be connected to the same refrigerant line. This results in enhanced design flexibility and significant reduction in total system costs.



Combination with **VRV** system

Air conditioning and outdoor air processing can be accomplished using a single system.



### Connection Conditions

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

- When outdoor-air processing units are connected, the total connection capacity index must be 50% to 100% of the capacity index of the outdoor units.
- When outdoor-air processing units and standard indoor units are connected, the total connection capacity index of the outdoor-air processing units must not exceed 30% of the capacity index of the outdoor units.

Because connection is possible depending on conditions even when the capacity index of outdoor-air processing units exceeds 30% of the capacity index of the outdoor units, contact your local distributor.

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

- The unit introduces outdoor air and adjusts the outdoor air temperature via fixed discharge temperature control, thereby reducing the air conditioning load.

\* The system can operate with outdoor-air temperatures ranging from -5 to 43°C. Heating performance is somewhat adversely affected when the outdoor-air temperature is 0°C or below.

\* When shipped from the factory, the thermostat is set at 18°C for cooling. The set temperature can be varied within the range of 13–25°C during cooling operation, in the local setting mode using the wired remote controller. The temperature, however, is not displayed on the remote controller.

\* While in machine protection mode and depending on outdoor air conditions, discharge air temperature may not be at the set temperature.

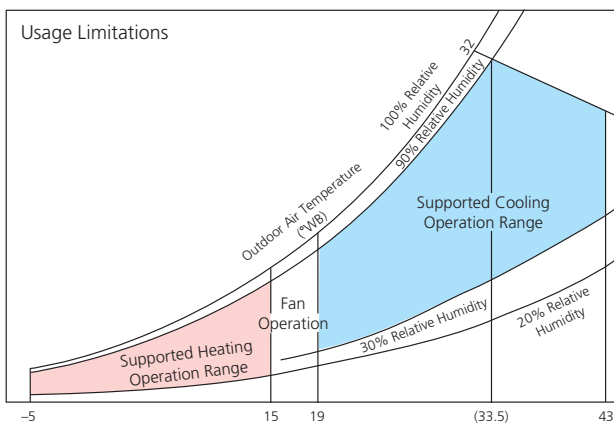
\* The fan stops when operating in defrosting, oil returning and hot start operations. The fan may stop due to mechanical protection control.

- Ceiling mounted duct units with three different capacities are available. These can be connected to VRV series outdoor units to meet a variety of different requirements.

### Airflow rate

FXMQ125MFV1	1,080 m <sup>3</sup> /h
FXMQ200MFV1	1,680 m <sup>3</sup> /h
FXMQ250MFV1	2,100 m <sup>3</sup> /h

- Optional equipment includes long-life filters.
- Compatible with outdoor temperatures from -5°C to 43°C.



Notes: 1. The data shown in the graph illustrates the supported operation ranges under the following conditions.  
Indoor and Outdoor Unit  
Effective piping length: 7.5 m  
Height differential: 0 m

2. The discharge temperature can be set using the remote controller. However, the actual temperature may not match the temperature setting under some circumstances due to the outdoor-air processing load or mechanical protection controls.

3. The system will not operate in fan mode when the outdoor air temperature is 5°C or below.

- High-performance filters with dust collection efficiencies (JIS calorimetry) of 90% and 65% are also available as options.

- For the VRV system, a variety of control systems can be deployed, including remote control from distances of up to 500 m.

\* Group control is not possible between this unit and standard type indoor units. Remote controllers connect to each unit separately.



**BRC1E63**  
Navigation Remote Controller  
(Wired remote controller) (option)

- The “self-diagnosis function” indicates the occurrence and nature of abnormalities in the system by displaying codes on the remote controller.

- A central control system compatible with the VRV system can be installed.

\* It is not possible to change the discharge air temperature settings from the central control system.

\* Do not associate this equipment in areas which standard indoor units are installed, as central control cannot be used with them.



**DCS302CA61**  
Central remote controller (option)

- With the VRV system, the equipment employs the “super wiring system” so that the wiring linking the indoor and outdoor units can also be utilised for central control.

Notes: \* Linked control of the product and the Heat Reclaim Ventilator is not supported.

\* This equipment is intended for the treatment of outdoor air only. It is not to be used for maintaining indoor air temperature, installing or use with standard indoor units. Be sure to position the air discharge openings of the product in positions where the airflow will not blow on people directly. When outdoor-air processing is in excess, the unit switches to thermo-off mode, and outdoor air flows into the room directly.

\* For outdoor ducts, be sure to provide heat insulation to prevent condensation.

\* Group control of the product and standard indoor units is not supported. A separate remote controller should be connected to individual unit.

\* The system will not operate in fan mode when the outdoor air temperature is 5°C or below.

\* If the product is utilised to operate 24 hours a day, maintenance (part replacement, etc.) must be performed periodically.

\* Temperature setting and Power Proportional Distribution (PPD) are not possible even if the intelligent Touch Controller or the intelligent Touch Manager is installed.

\* The remote controller wired to the outdoor-air processing unit must not be set as the master remote controller. Otherwise, when set to “Auto,” the operation mode will switch according to the outdoor air conditions, regardless of the indoor temperature.

# Air Treatment Equipment

## Standard specifications

### Indoor unit

Type		Ceiling Mounted Duct Type			
MODEL		FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1	
Power supply		1-phase 220-240 V (also required for indoor units), 50 Hz			
Cooling capacity *1	Btu/h	47,800	76,400	95,500	
	kW	14.0	22.4	28.0	
Power consumption		kW	0.359	0.548	0.638
Casing		Galvanised steel plate			
Dimensions (H × W × D)		mm	470 × 744 × 1,100	470 × 1,380 × 1,100	
Fan	Motor output	kW	0.380		
	Airflow rate	m <sup>3</sup> /min	18	28	35
		cfm	635	988	1,236
External static pressure	220 V/240 V	Pa	185/225	225/275	205/255
Air filter		*2			
Refrigerant piping	Liquid	mm	φ 9.5 (flare)		
	Gas	mm	φ 15.9 (flare)	φ 19.1 (brazing)	φ 22.2 (brazing)
	Drain	mm	PS1B female thread		
Machine weight		kg	86	123	
Sound level *3	220 V/240 V	dB(A)	42/43	47/48	
Connectable outdoor units *4			6 HP and above	8 HP and above	10 HP and above
Operation range (Fan mode operation between 15 and 19°C)			19 to 43°C		
Range of the discharge temperature *5			13 to 25°C		

Notes: \*1. Specifications are based on the following conditions:

- Cooling: Outdoor temp. of 33°CDB, 28°CWB (68% RH), and discharge temp. of 18°CDB.
- Equivalent reference piping length: 7.5 m (0 m horizontal)

\*2. An intake filter is not supplied, so be sure to install the optional long-life filter or high-efficiency filter. Please mount it in the duct system of the suction side. Select a dust collection efficiency (gravity method) of 50% or more.

\*3. Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. These values are normally somewhat higher during actual operation as a result of ambient conditions.

\*4. It is possible to connect to the outdoor unit if the total capacity of the indoor units is 50% to 100% of the capacity index of the outdoor unit.

\*5. Local setting mode is not displayed on the remote controller.

- This equipment cannot be incorporated into the remote group control of the VRV system.

## Options

### Indoor unit

MODEL		FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
Operation/control	Operation remote controller	BRC1E63 / BRC2E61		
	Central remote controller	DCS302CA61		
	Unified ON/OFF controller	DCS301BA61		
	Schedule timer	DST301BA61		
	Wiring adaptor for electrical appendices (1)	KRP2A61		
	Wiring adaptor for electrical appendices (2)	KRP4AA51		
Filters	Long-life replacement filter	KAFJ371L140	KAFJ371L280	
	High-efficiency filter	Colourimetric method 65%	KAFJ372L140	KAFJ372L280
		Colourimetric method 90%	KAFJ373L140	KAFJ373L280
	Filter chamber *1	KDJ3705L140	KDJ3705L280	
PM2.5 filtration unit *2		BAF429A20A		
PM2.5 with activated carbon filtration unit *2		BAF429A20AC		
Drain pump kit		KDU30L250VE		
Adaptor for wiring		KRP1B61		

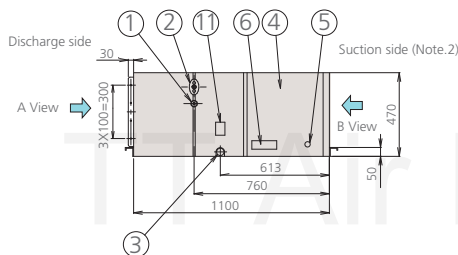
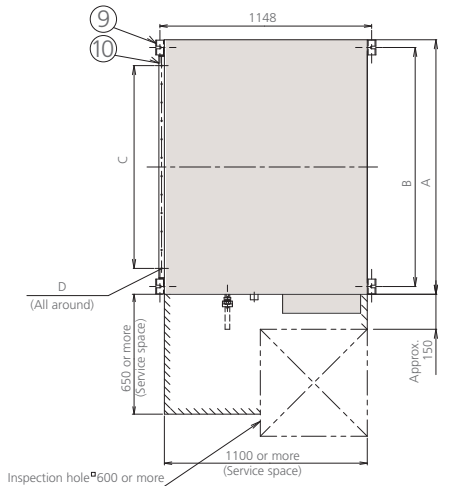
Notes: \*1. Filter chamber has a suction-type flange. (Main unit does not.)

- Dimensions and weight of the equipment may vary depending on the options used.
- Some options may not be usable due to the equipment installation conditions, so please confirm prior to ordering.
- Some options may not be used in combination.
- Operating sound may increase somewhat depending on the options used.

\*2. Refer to pages 181 - 182 for details.

## ■ Dimensions

### FXMQ125/200/250MFV1



\*These diagrams are based on FXMQ200 and FXMQ250MFV1.

### Local connection piping size

Model	Gas piping diameter	Liquid piping diameter
FXMQ125MFV1	φ 15.9	φ 9.5
FXMQ200MFV1	φ 19.1 attached piping	φ 9.5
FXMQ250MFV1	φ 22.2 attached piping	φ 9.5

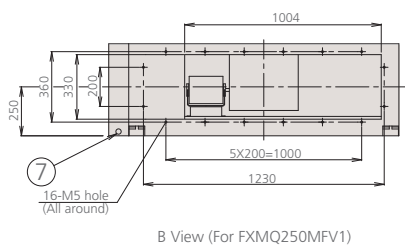
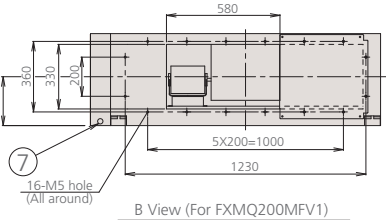
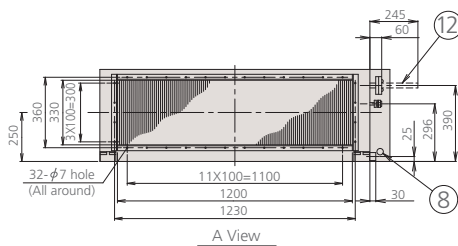
### Table of dimensions

Model	A	B	C	D
FXMQ125MFV1	744	685	5X100=500	20-φ 4.7 hole
FXMQ200MFV1	1380	1296	11X100=1100	32-φ 4.7 hole
FXMQ250MFV1	1380	1296	11X100=1100	32-φ 4.7 hole

- Notes:
1. The attached piping in the diagram is for FXMQ200MFV1 and FXMQ250MFV1 only. The gas piping connection port (2) in the diagram has a different bore form with FXMQ125MFV1.
  2. An air filter is not supplied with this unit. Be sure to mount an air filter in the suction side. [Use a filter with dust collection efficiency of at least 50% (gravimetric method). This is available as an option.]
  3. For outdoor ducts, be sure to provide heat insulation to prevent condensation.

- ① Liquid pipe connection
- ② Gas pipe connection
- ③ Drain piping connection
- ④ Electric parts box
- ⑤ Ground terminal
- ⑥ Name plate
- ⑦ Power supply wiring connection
- ⑧ Transmission wiring connection
- ⑨ Hanger bracket
- ⑩ Discharge companion flange
- ⑪ Water supply port
- ⑫ Attached piping (Note. 1)

### FXMQ200/250MFV1



### FXMQ125MFV1

