

- Warning Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
  - Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
  - Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

#### Cautions on product corrosion

- 1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
- 2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.



# IN S SERIES



For residential and commercial use



# Engineered for Flexibility

First launched in Japan in 1982, the Daikin *VRV* system has been embraced by world markets for over 30 years. Now, Daikin proudly introduces the new *VRV* IV S series-the ideal air conditioning system for homes, shops and offices.

# IN S SERIES

VRV indoor units combine with residential indoor units, all in one system.



#### Contents

Main Features
Indoor Unit Lineup
Specifications
Option List
Control Systems
Air Treatment Equipment Lineup
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Control Systems
P49









# **Main Features**

1,657 mm

# **Compact & lightweight design**

The new design has been optimised for the VRV IV S series, with the height of 3 HP to 5 HP models reduced to only 990 mm. This design gives the building a sleek look externally and provides the occupants with a clear, unobstructed view of the scenery. The VRV IV S series is now slim and compact, with outdoor units that require minimal installation space.



**Product Weight** 

185 kg

**Footprint** 

**Product Weight** 

138 kg

**Footprint** 

25%



# **Enhanced lineup**

To suit a variety of room sizes, VRV IV S series expands our range to include 3 HP, 8 HP and 9 HP.



Lineup	6 models
	o model

Model Name	RXYMQ3AVE	RXYMQ4AVE	RXYMQ5AVE	RXYMQ6AVE	RXYMQ8AY1	RXYMQ9AY1
Power Supply		1-phase, 220-230	3-phase, 380	-415 V, 50 Hz		
Capacity Range	3 HP (9.0 kW)	4 HP (11.2 kW)	5 HP (14.0 kW)	6 HP (16.0 kW)	8 HP (22.4 kW)	9 HP (24.0 kW)
Capacity Index	80	100	125	150	200	215

# Wide variety of indoor units

Indoor units can be selected from 2 lineups, both VRV and residential indoor units, to match rooms and preferences. A mixed combination of VRV indoor units and residential indoor units can be included into one system, opening the door to stylish and quiet indoor units.

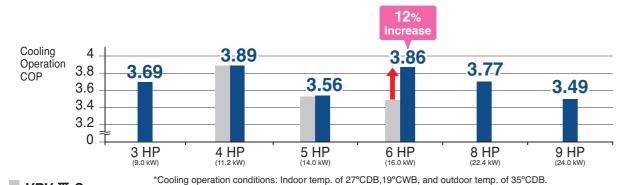


# **Main Features**

### **Energy saving**

#### **Higher Coefficient of Performance (COP)**

VRV IV S series provides greater energy saving as compared to VRV III S series, especially for 6 HP.



VRV II S

IN S SERIES

### **Quiet operation**

#### Nighttime quiet operation function

Operation sound level selectable from 3 steps for the night mode

#### Mode 1. Automatic mode

Set on the outdoor PCB. Time of maximum temperature is memorised. The low operating mode will initiate 8 hours\*1 after the peak temperature in the daytime, and normal operation will resume 10 hours\*2 after that. The operation sound level for the night mode can be selected from 49 dB(A) (Step 1), 46 dB(A) (Step 2) and 43 dB(A) (Step 3).\*3

#### Mode 2. Manual mode

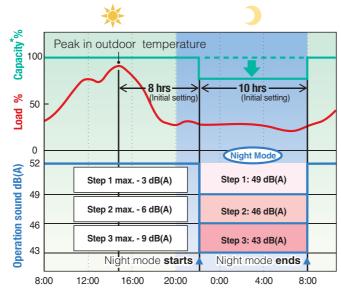
Starting time and ending time can be input. (An external control adaptor for outdoor unit, DTA104A53/61/62, and a locally obtained timer are necessary.)

#### Mode 3. Combined mode

Combinations of modes 1 and 2 can be used depending on your needs.

- \*1. Initial setting. Can be selected from 6, 8 and 10 hours.
- \*2. Initial setting. Can be selected from 8, 9 and 10 hours.
- \*3. In case of 4 HP outdoor unit during cooling operation

#### Mode 1. Automatic mode



Note: • This function is available in setting at site.

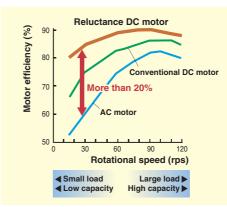
- The relationship of outdoor temperature (load) and time shown in the graph is just an example.
- \*The capacity reduction rate differs depending on the operation sound level step selected.

#### Collection of cutting-edge technologies realises efficient and quiet operation

The high efficiency compressor to achieve a higher COP

1 Compressor equipped with Reluctance DC motor

Daikin DC inverter models are equipped with the Reluctance DC motor for compressor. The Reluctance DC motor uses 2 different types of torque, neodymium magnet\*1 and reluctance torque\*2. This motor can save energy because it generates more power with a smaller electric power than an AC or conventional DC motor.







Note: Data are based on studies conducted under controlled conditions at a Daikin laboratory using Daikin products.

- \*1 A neodymium magnet is approximately 10 times stronger than a standard ferrite magnet.
- \*2 The torque created by the change in power between the iron and magnet parts.

#### >> Smooth sine wave DC inverter

Use of an optimised sine wave smoothes motor rotation, further improving operating efficiency.



#### >> Swing compressor

Daikin swing compressor has integrated the rotor with the blade, completely solving the refrigerant leakage and the wear problem caused by the mechanical friction between the rotor and the blade, which enhances the compressor efficiency and makes the compressor more quiet and durable.



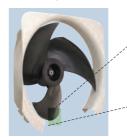
3, 4, 5 HP

# >>> Scroll compressor Sucked gas is compressed in the scrolling part before the heated motor, so that the machine compress the non-expanded gas,

resulting in high efficiency compression.

#### 2 Smooth Air Inlet Bell Mouth and Aero Spiral Fan

These two features work to reduce sound. Guides are added to the bell mouth intake to reduce turbulence in the airflow generated by fan suction. The Aero Spiral Fan features fan blades with the bent blade edges, further reducing turbulence.





With the bent



Escaping eddies are sucked in by the bent blade edges, reducing overall turbulence.

### 3 DC fan motor

Efficiency improved in all areas compared to conventional AC motors, especially at low speeds.

DC fan motor structure





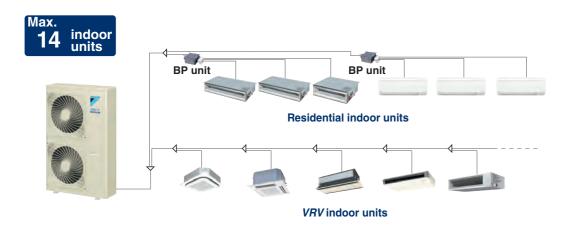
# **Main Features**

### Design flexibility and simplified installation

#### Connectable up to 14 indoor units

As many as 14 indoor units can be connected to a single outdoor unit, making the *VRV* IV S series a remarkably versatile system.

Note: Refer to page 42 for the maximum number of connectable indoor unit and outdoor unit combination details.



#### **Automatic test operation**

Simply press the test operation button and the unit performs an automatic system check, including wiring, stop valves, piping, and refrigerant charging amount. The results are returned automatically after the check finishes.

#### Simple wiring and piping connection

Unique piping and wiring systems make it possible to install a VRV IV S series quickly and easily.

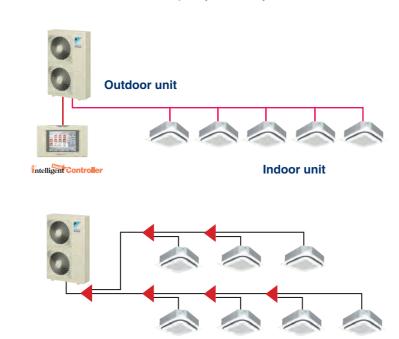
#### >> Super wiring system

A super wiring system is used to enable shared use of the wiring between indoor and outdoor units and the central control wiring, with a relatively simple wiring operation.

The DIII-NET communication system is employed to enable the use of advanced control systems.

#### >> REFNET piping system

Daikin's advanced REFNET piping system makes installation easy. Only two main refrigerant lines are required in any one system. REFNET greatly reduces the imbalances in refrigerant flow between units, while using small-diameter piping.



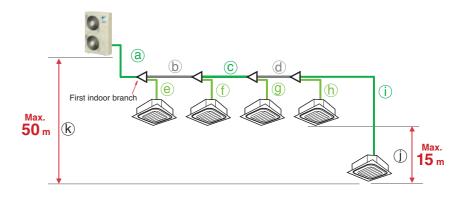
### Long piping design possible

Long piping length offers flexibility in the choice of installation positions, and simplifies system planning.

#### When only VRV indoor units are connected



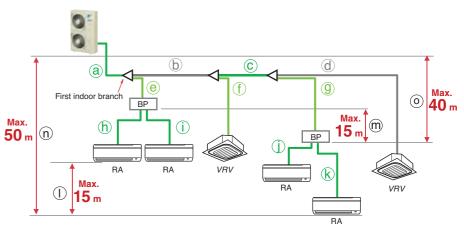
Total piping length Max. 300 m



				3, 4 HP	5 HP	6 HP	8,9 HP
	Refrigerant piping length		a+b+c+d+i	<b>50</b> m	<b>70</b> m	<b>120</b> m	<b>100</b> m
Max. allowable piping length	Total piping length	a+b+c+d+e+f+g+h+i	<b>250</b> m	<b>300</b> m	<b>300</b> m	<b>300</b> m	
	Between the first indoor br	b+c+d+i	<b>40</b> m	<b>40</b> m	<b>40</b> m	<b>40</b> m	
	Between the indoor units		j	<b>10</b> m	<b>15</b> m	<b>15</b> m	<b>15</b> m
Max. allowable level difference	Between the outdoor unit	If the outdoor unit is above	k	<b>30</b> m	<b>30</b> m	<b>50</b> m	<b>50</b> m
	and the indoor unit	k	<b>30</b> m	<b>30</b> m	<b>40</b> m	<b>40</b> m	

When a mixed combination of *VRV* and residential indoor units is connected or when only residential indoor units are connected





				3, 4111	JIIF	0-9111
	Refrigerant piping length	a+b+c+g+k, a+b+c+d	<b>50</b> m	<b>70</b> m	<b>100</b> m	
Max. allowable piping length	Total piping length	a+b+c+d+e+f+g+h+i+j+k	<b>250</b> m	<b>250</b> m	<b>250</b> m	
leligui	The first indoor branch - th	ne farthest BP or VRV indoor unit	b+c+g, b+c+d	<b>40</b> m	<b>40</b> m	<b>40</b> m
Max. & min.		If indoor unit capacity index < 60		2 m-15 m	2 m-15 m	2 m-15 m
allowable piping	BP unit - indoor unit	If indoor unit capacity index is 60	h, i, j, k	2 m-12 m	2 m-12 m	2 m-12 m
length		If indoor unit capacity index is 71		2 m-8 m	2 m-8 m	2 m-8 m
Min. allowable piping length	Outdoor unit - the first indo	oor branch	a	5 m	<b>5</b> m	<b>5</b> m
	Between the indoor units		1	<b>10</b> m	<b>15</b> m	<b>15</b> m
	Between BP units	m	<b>10</b> m	<b>15</b> m	<b>15</b> m	
Max. allowable level difference	Outdoor unit - the indoor	If the outdoor unit is above	n	<b>30</b> m	<b>30</b> m	<b>50</b> m
	unit	If the outdoor unit is below	n	<b>30</b> m	<b>30</b> m	<b>40</b> m
	Outdoor unit - the BP unit		0	<b>30</b> m	<b>30</b> m	<b>40</b> m

# **Enhanced range of choices**

A mixed combination of *VRV* indoor units and residential indoor units can be included into one system, opening the door to stylish and quiet indoor units.

#### **VRV** indoor units

#### 17 types 90 models

VRV indoor units 17 types								90 models							
			20	25	32	40	50	63	71	80	100	125	140	200	250
Туре	Model Name	Capacity Range	0.8 HP	1 HP	1.25 HP	1.6 HP	2 HP	2.5 HP	3 HP	3.2 HP	4 HP	5 HP	6 HP	8 HP	10 H
		Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	200	250
Ceiling Mounted Cassette(Round Flow with Sensing)	FXFQ-SVM				•	•		•		•			 		
Ceiling Mounted Cassette (Round Flow)	FXFQ-LUV1					•				•	•		 		
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE					•			 			1 1 1 1 1 1 1	1 1 1 1 1 1 1	 	
4-Way Flow Ceiling Suspended	FXUQ-AVEB								•			1	1		
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE				•			•		•					
Ceiling Mounted Cassette Corner	FXKQ-MAVE				•				1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1	
	FXDQ-PBVE (with drain pump)								1 1 1 1 1 1				1 1 1 1 1 1 1	1 1 1 1 1 1	
Slim Ceiling	FXDQ-PBVET (without drain pump)	(700 mm width type)			•				 			1 1 1 1 1 1	1 1 1 1 1 1	 	
Mounted Duct	FXDQ-NBVE (with drain pump)					•		•					 		
	FXDQ-NBVET (without drain pump)	(900/1,100 mm width type)				•		•					 		
Middle Static Pressure Ceiling Mounted Duct	ew FXSQ-PVE		New	New	New	New	New	New		New	New	New	New		
Ceiling Mounted	FXMQ-PVE				•	•		•	1 1 1 1 1 1	•				1 1 1 1 1 1	
Duct	FXMQ-MAVE								1 1 1 1 1 1			1 1 1 1 1 1	1 1 1 1 1 1		•
Ceiling Suspended	FXHQ-MAVE											1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1		
Wall Mounted	FXAQ-PVE				•								1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Floor Standing	FXLQ-MAVE				•							1	1		
Concealed Floor Standing	FXNQ-MAVE		•												

#### Residential indoor units with connection to BP units

#### 4 types 12 models

			20	25	35	50	60	71
Туре	Model Name	Rated Capacity	2.0 kW	2.5 kW	3.5 kW	5.0 kW	6.0 kW	7.1 kW
		Capacity Index	20	25	35	50	60	71
Slim Ceiling	CDXS-EAVMA	(700 mm width type)				1 1 1 1 1		
Mounted Duct	FDXS-CVMA	(900/1,100 mm width type)					•	 
	FTXS-DVMA			1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 
Wall Mounted	FTXS-EVMA					 	 	 
	FTXS-FVMA			 	1 1 1 1 1			

Note: BP units are necessary for residential indoor units.

#### VRV indoor units combine with indoor units, all in one system.











\*Refer to page 42 for the maximum number of connectable indoor units.

Daikin offers a wide range of indoor units includes both VRV and residential models responding to variety of needs of our customers that require air-conditioning solutions.

#### **VRV** indoor units

Ceiling Mounted Cassette (Round Flow with Sensing) Type





Presence of people and floor temperature can be detected to provide comfort and energy savings



Ceiling Mounted Cassette (Round Flow) Type

FXFQ-LUV1



360° airflow improves temperature distribution and offers a comfortable living environment.



Ceiling Mounted Cassette (Compact Multi Flow) Type

FXZQ-MVE



Quiet, compact, and designed for user comfort



4-Way Flow Ceiling Suspended Type



This slim and stylish indoor unit achieves optimum air distribution, and can be installed without the need for ceiling cavity



Ceiling Mounted Cassette (Double Flow) Type





Thin, lightweight, and easy to install in narrow ceiling spaces



Ceiling Mounted Cassette Corner Type

FXKQ-MAVE



Slim design for flexible installation



Slim Ceiling Mounted Duct Type (Standard Series)





FXDQ-NBVE(T



Slim design, quietness and static pressure switching



Middle Static Pressure Ceiling Mounted Duct Type



Middle external static pressure and slim design allow flexible installation



Ceiling Mounted Duct Type







High external static pressure allows flexible installations



Ceiling Suspended Type

FXHQ-MAVE



Slim body with quiet and wide airflow



Wall Mounted Type

FXAQ-PVE



Stylish flat panel design harmonised with your interior décor



Floor Standing Type

FXLQ-MAVE



Suitable for perimeter zone air conditioning



Concealed Floor Standing Type

FXNQ-MAVE



Designed to be concealed in the perimeter skirting-wall



#### Residential indoor units with connection to BP units

Slim Ceiling Mounted Duct Type

CDXS-EAVMA

FDXS-CVMA



Slim and smooth design suits your shallow ceiling



Wall Mounted Type

FTXS-DVMA FTXS-EVMA



FTXS-FVMA





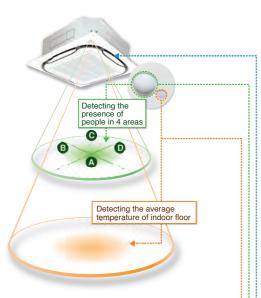
**VRV** Indoor Units

### **Ceiling Mounted Cassette (Round Flow with Sensing) Type**

FXFQ25S / FXFQ32S / FXFQ40S FXFQ50S / FXFQ63S / FXFQ80S FXFQ100S / FXFQ125S



### Presence of people and floor temperature can be detected to provide comfort and energy savings





#### Individual airflow direction control

Thanks to the individual airflow direction control function, airflow direction can be individually adjusted for each air discharge outlet to prevent uncomfortable drafts and to deliver optimal air distribution.



#### Infrared presence sensor

The sensor detects human presence and adjusts the airflow direction automatically to prevent drafts.

ĺ	Ceiling height	2.7m	3.5m	4.0m
	Detection range (diameter)*1	approx. 8.5m	approx. 11.5m	approx. 13.5m

\*1. The infrared presence sensor detects 80 cm above the floor.

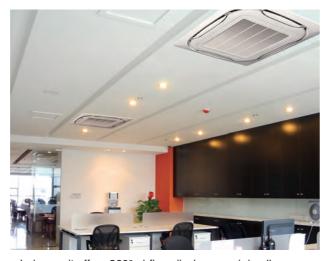


#### Infrared floor sensor

The sensor detects the floor temperature and automatically adjusts operation of the indoor unit to reduce the temperature difference between the ceiling and the floor.

1	Ceiling height	2.7m	3.5m	4.0m
	Detection range (diameter)*2	approx. 11m	approx. 14m	approx. 16m

\*2. The infrared floor sensor detects at the floor surface.



• Indoor unit offers 360° airflow discharges air in all directions with more uniform temperature distribution.

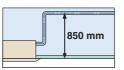


• Improved energy efficiency thanks to a new heat exchanger with smaller tubes, DC fan motor, and DC drain pump motor.

•Low operation sound level

FXFQ-S	25/32	40	50	63	80	100	125
Sound level (H/M/L)	30/28.5/27	31/29/27	36/32/28	38/33/28	38/35/31	44/38/32	45/40/35

Drain pump is equipped as standard accessory with 850 mm lift.

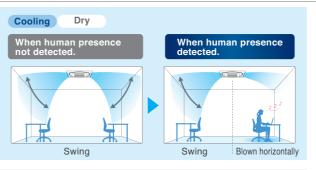


 Selectable airflow rate: 3 steps and Auto. (Auto airflow rate is available when BRC1E62 is used.)

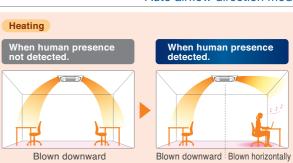
#### **Sensing function**

Draft prevention function (default: OFF) \*1.2

Auto airflow direction mode



• With the Auto airflow direction mode, flaps are controlled to deliver optimal air distribution for both cooling and heating operations when there are no people.

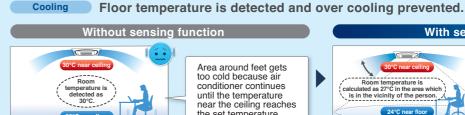


• When a person is detected, drafts are prevented by making the flap horizontal.

• When a person is not detected for 5 minutes, the unit automatically returns to controlling the flaps for an unoccupied room. \*1.Airflow direction shoud be set to Auto. 
\*2.Draft prevention function is OFF in the initial setting. It can be set ON using the remote controller.

Comfort and Energy saving preventing over Cooling / Heating \*1.2

Auto airflow direction mode + Auto airflow rate mode





Automatic control using the

The temperature near the person is automatically calculated by detecting the temperature of the floor. Energy is saved, because the area around the feet does not get too cold.







The tendency of people to raise the temperature too much is prevented, because you are warmed up

To increase comfort, Auto airflow rate mode controls the airflow in accordance with the difference between floor and ceiling temperatures.

When there is a large difference between the ceiling and floor temperatures, the airflow rate is automatically increased. When the difference becomes small, the airflow rate is automatically reduced.

\*1.Both airflow direction and airflow rate shoud be set to Auto. \*2.Draft prevention function is set OFF in the initial setting.

#### **VRV** Indoor Units

### **Ceiling Mounted Cassette (Round Flow with Sensing) Type**

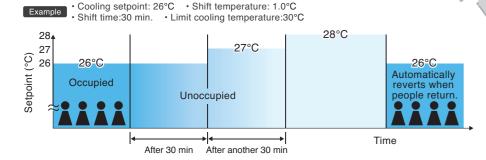
#### Sensing sensor mode\*1.2

Sensing sensor low mode (default: OFF)

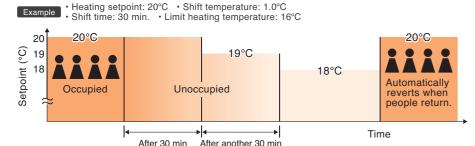
When there are no people in a room, the set temperature is shifted automatically.

The system automatically saves energy by detecting whether or not the room is occupied. The set temperature is shifted automatically if the room is unoccupied.

Operation is reduced in places where there are no people.



If people do not return, the air conditioner will raise the temperature 1°C every 30 minutes and then operate at 30°C.



If people do not return, the air conditioner will lower the temperature 1°C every 30 minutes and then operate at 16°C.

Shift temperature and time can be selected from 0.5 to 4°C in 0.5°C increments and 15, 30, 45, 60, 90 or 120 minutes respectively with remote controller.

#### Sensing sensor stop mode (default: OFF)

#### When there are no people in a room, the system stops automatically.\*3

The system automatically saves energy by detecting whether or not the room is occupied.

Based on preset user conditions, the system automatically stops operation if the room is unoccupied.

Absent stop time can be selected from 1 to 24 hrs in 1 hr increments with remote controller

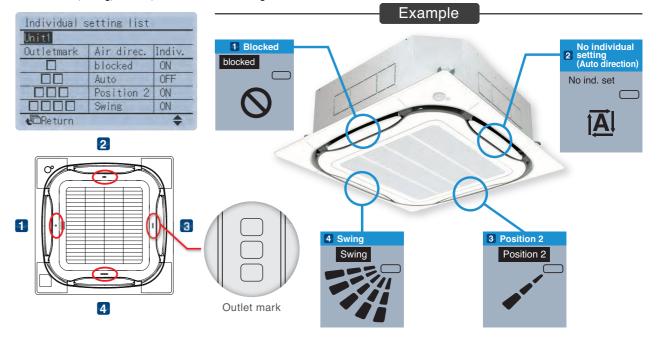


#### Individual airflow direction control

#### Individual airflow setting

Airflow direction of each of the four air outlets can be controlled individually.

(Positions 0 to 4, Swing, Blocked, and No individual setting are selectable.)



#### Airflow block function\*1

#### Total comfort by individual airflow direction control and "airflow block function"

 Airflow block function prevents uncomfortable drafts by reducing air velocity.

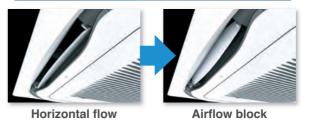
It can be set using the BRC1E62 remote controller. There is no need for sealing material of air discharge outlet (option).

 This function only works when all-round flow is used. It cannot be used when sealing material is used in the air discharge outlet (option).



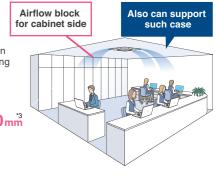
Airflow block function prevents uncomfortable drafts by reducing air velocity to approx. 0.3m/s.\*2

#### Easy setup with remote controller



The airflow block function is useful when rearranging the room layout.

500 mm



- \*1. Works in one direction only
- \*2. In case of FXFQ63S type (Data is based on Daikin research.) When using FXFQ80S type or higher, if the airflow rate is set to High, airflow will be on the high side.

  Under actual conditions, however, the airflow value may differ depending on the effect of surrounding conditions and the way in which the temperature was adjusted
- \*3. A gap of 1500 mm is required if the air block function is not used.

<sup>\*1.</sup>These functions are not available when using the group control system.

<sup>\*2.</sup>User can set these functions with remote control

<sup>\*3.</sup>Please note that upon re-entering the room, air conditioner will not switch on automatically

**VRV** Indoor Units

# **Ceiling Mounted Cassette (Round Flow) Type**

FXFQ25LU / FXFQ32LU / FXFQ40LU FXFQ50LU / FXFQ63LU / FXFQ80LU FXFQ100LU / FXFQ125LU



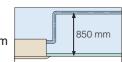
### 360° airflow improves temperature distribution and offers a comfortable living environment.

●The industry's first\* Round Flow Ceiling Mounted Cassette type offers 360° airflow with improved temperature distribution.





- ●The light weight unit at 19.5 kg for FXFQ25-50LU models makes installation easy.
- •Drain pump is equipped as a standard accessory with a 850 mm



•A modern sophisticated decoration panel has been applied, with a panel surface that has been treated with a dirt-repellant coating.



- •Control of the airflow rate can be selected from 3-step control.
- •Low operation sound level (dB(A)) FXFQ-LU 25/32 40 50 63 80 100 125 30/28.5/27 31/29/27 32/29.5/27 34/31/28 36/33.5/31 43/37.5/32 44/39/34

- •An antibacterial treatment that uses silver ions has been applied to the drain pan, preventing the growth of slime, mould and bacteria that cause blockages and odours.
- •The horizontal louvres prevent dew condensation. Their non-flocking surfaces, which repel dirt, are easy to clean.
- •The air filter has an anti-mould and antibacterial treatment that prevents the growth of mould generated from dust or moisture that may adhere to the filter.









Note: Whatever the discharge direction, the same type of panel is used. If installing for other than all-round flow, an air discharge outlet sealing material (option) must be used to close each unused outlet.

### Ceiling Mounted Cassette (Compact Multi Flow) Type

FXZQ20M / FXZQ25M / FXZQ32M FXZQ40M / FXZQ50M

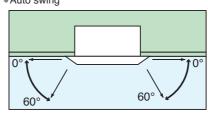


### Quiet, compact, and designed for user comfort

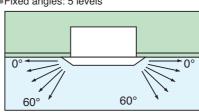
- Dimensions correspond with 600 mm x 600 mm architectural module ceiling design specifications.
- Low operation sound level

Low operation 3	ouria icvei			
			(2	30 V)(dB(A))
FXZQ-M	20/25	32	40	50
Sound level (H/L)	30/25	32/26	36/28	41/33

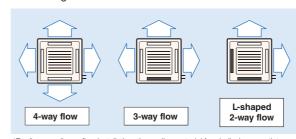
- Comfortable airflow
- 1 Wide discharge angle: 0° to 60°
- Auto swing



•Fixed angles: 5 levels



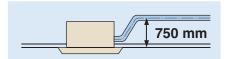
- \*Angles can be also set on site to prevent drafts (0°-35°) or soiling of the ceiling (25°-60°), other than standard setting (0°-60°).
- 2 2-, 3-, and 4-way airflow patterns are available, enabling installation in the corner of a room.



\*For 3-way or 2-way flow installation, the sealing material for air discharge outlet



• Drain pump is equipped as standard accessory with 750 mm lift.



**VRV** Indoor Units

# 4-Way Flow Ceiling Suspended Type

FXUQ71A / FXUQ100A



This slim and stylish indoor unit achieves optimum air distribution, and can be installed without the need for ceiling cavity.

- Unit body and suction panel adopted round shapes and realised a slim appearance design. The unit can be used for various locations such as the ceilings with no cavity and bare ceilings.
- Flaps close automatically when the unit stops, which gives a simple appearance.
- Unified slim height of 198 mm for all models that gives the unified impression even when models with different capacities are installed in the same area.

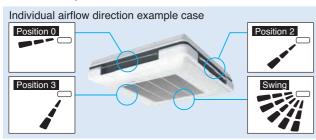




• Built-in electronic expansion valve eliminates the need for a BEV unit, which improves flexibility of installation.

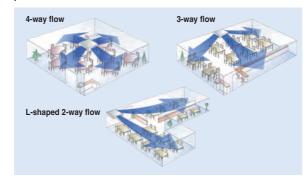


• With adoption of the individual flap control, airflow direction adjustment can be individually set for each air outlet. 5 directions of airflow and auto-swing can be selected with wired remote controller BRC1E62, which realises the optimum air distribution.





- Control of the airflow rate has been improved from 2-step to 3-step control. Auto airflow rate control can be selected with wired remote controller BRC1E62.
- Energy efficiency has been improved thanks to the adoption of a new heat exchanger with smaller tubes, DC fan motor and DC drain pump motor.
- Drain pump is equipped as a standard accessory, and the lift height has been improved from 500 mm to 600 mm.
- Depending on installation site requirements or room conditions, 2-way, 3-way and 4-way discharge patterns are available



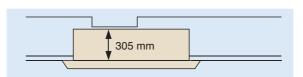
### Ceiling Mounted Cassette (Double Flow) Type

FXCQ20M / FXCQ25M / FXCQ32M FXCQ40M / FXCQ50M / FXCQ63M FXCQ80M / FXCQ125M



### Thin, lightweight, and easy to install in narrow ceiling spaces

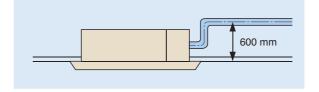
•The thin unit (only 305 mm high) can be installed in a ceiling space as narrow as 350 mm. All models feature a compact design with a depth of only 600 mm.

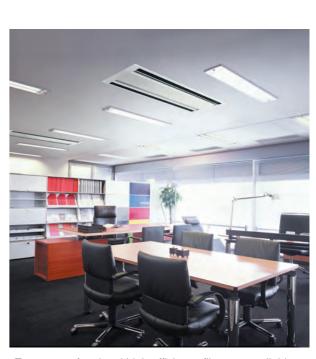


(When a high-efficiency filter is attached, the unit's height is

Low operatio	n sound	i level			(22)	0 V)(dB(A))
FXCQ-M	20	25/32	40/50	63	80	125
Sound level (H/L)	32/27	34/28	34/29	37/32	39/34	44/38

- •Designed with higher airflow suitable for high ceiling application up to 3 metres.
- Providing 2 different settings of standard and ceiling soiling prevention, the auto swing mechanism realises even distribution of airflow and room temperature.
- •Drain pump is equipped as standard accessory with 600 mm lift.





- •Two types of optional high-efficiency filter are available (65% and 95%, colourimetric method).
- •A long-life filter (maintenance free up to one year\*) is equipped as standard accessory.
- \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>
- Major maintenance work can be performed by removing the panel. A flat-type suction grille and a detachable blade make cleaning easy.

**VRV** Indoor Units

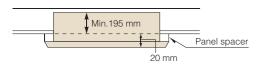
# **Ceiling Mounted Cassette Corner Type**

FXKQ25MA / FXKQ32MA FXKQ40MA / FXKQ63MA

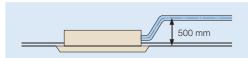


#### Slim design for flexible installation

 Slim body needs only 220 mm space above the ceiling. If you use a panel spacer (option), the unit can be installed in the minimum space of 195 mm.

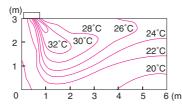


- Single-flow type allows effective air discharge from corner or from drop-ceiling.
- Drain pump is equipped as standard accessory with 500 mm lift.

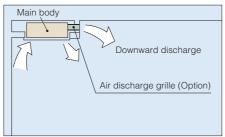




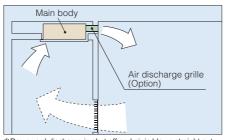
 Providing 3 different settings of standard, draft prevention and ceiling soiling prevention, the auto swing mechanism realises even distribution of airflow and room temperature.



•Front discharge is possible with an air discharge unit (option), which allows the installation in the drop-ceiling or sagging wall.



\*Set for front discharge using a suspended ceiling.



\*Downward discharge is shut off and air is blown straight out

- A long-life filter (maintenance free up to one year\*) is equipped as standard accessory.
- \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>

# Slim Ceiling Mounted Duct Type

# Slim design, quietness and static pressure switching



#### Suited to use in drop-ceilings!

#### FXDQ20PB / FXDQ25PB / FXDQ32PB

 Only 700 mm in width and 23 kg in weight, this model is suitable to install in limited spaces like drop-ceilings in hotels.





 Control of the airflow rate has been improved from 2-step to 3-step control.

•	Low operation sound level (dB (A))										
	FXDQ-PB/NB	20/25	32	40	50	63					
	Sound level (HH/H/L)	28/26/23	28/26/24	30/28/26	33/30/27	33/31/29					

- \* The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB(A)
- \* Values are based on the following conditions:

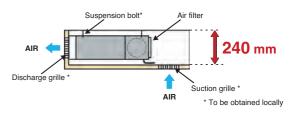
FXDQ-PB: external static pressure of 10 Pa; FXDQ-NB: external static pressure of 15 Pa

#### FXDQ40NB / FXDQ50NB / FXDQ63NB

 Only 200 mm in height, this model can be installed in rooms with as little as 240 mm in height for the ceiling space between the drop-ceiling and ceiling slab.



\* 1,100 mm in width for the FXDQ63NB model.



 External static pressure selectable by remote controller switching make this indoor unit a very comfortable and flexible model

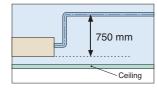
10 Pa-30 Pa/factory set: 10 Pa for FXDQ-PB models. 15 Pa-44 Pa/factory set: 15 Pa for FXDQ-NB models.

• FXDQ-PB and FXDQ-NB models are available in two types to suit different installation conditions.

FXDQ-PB/NBVE: with a drain pump (750 mm lift)

as a standard accessory

FXDQ-PB/NBVET: without a drain pump



**VRV** Indoor Units

# Middle Static Pressure Ceiling Mounted Duct Type





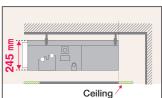
### Middle external static pressure and slim design allow flexible installations

#### Installation flexibility

#### Slim design

• With a height of only 245 mm, installation is possible even in buildings with narrow ceiling spaces.





# Air suction

• Bottom suction is possible which facilitates installation

maintenance of control box can be done from under

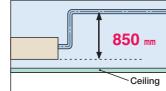
the unit with an optional shield plate for side plate\*,

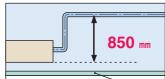
extending the degree of freedom for installation in the

and maintenance. Wiring connections and

#### Standard DC drain pump

• DC drain pump is equipped as standard accessory with 850 mm lift.



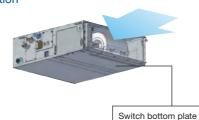




#### • Air suction direction can be altered from rear to bottom suction.

#### Rear suction

Bottom suction possible



■Bottom suction

\*An optional shield plate for side plate is required if wiring connections and maintenance of control box are needed from under the unit. This option is only vailable for FXSQ20-125P models.

#### **Design flexibility**

#### Adjustable external static pressure

• Using a DC fan motor, the external static pressure can be controlled within a range of 30 Pa\* to 150 Pa.



Set to low static pressure when ducts are short.

Set to high static pressure for advanced needs such as when using dampers and long ducts.

Comfortable airflow is achieved in accordance with conditions such as duct length.

\*30 Pa-150 Pa for FXSQ20-40PVE 50 Pa-150 Pa for FXSQ50-125PVE 50 Pa-140 Pa for FXSQ140PVE

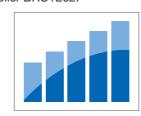
#### **Comfort**

#### Switchable airflow rate

• Control of the airflow rate can be selected from 3-step control.

#### Auto airflow rate

• 5-step airflow rate is automatically controlled in accordance with the difference between room temperature and set temperature. Auto airflow rate control can be selected with wired remote controller BRC1E62.



#### Low operation sound level

FXSQ-PVE	20/25 3		32	40		0 50		63
Sound level (H/M/L)	33/30/28	34	1/32/30	32/30 36/33/		3/30 34/32/29		36/32/29
FXSQ-PVE	80		100		125			140

FXSQ-PVE	80	100	125	140
Sound level (H/M/L)	37.5/34/30	39/35/32	42/38.5/35	43/40/36



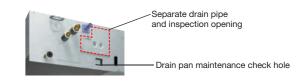
#### **Easy installation**

#### Airflow rate auto adjustment function

- During installation, even if the external static pressure changes due to a change in the duct route, the airflow can be automatically adjusted to within the unit's external static pressure range.
- Airflow rate can be controlled using a remote controller during test operation. It is automatically adjusted to the range between approximately ±10% of the rated H tap airflow.

#### **Easy maintenance**

• Inspection and cleaning is facilitated by separating the drain pipe and inspection opening and by the drain pan maintenance check hole.



• The drain pan can be detached for easy cleaning. An antibacterial treatment that uses silver ions has been applied to the drain pan, preventing the growth of slime, mould and bacteria that cause blockages and odours.

**VRV** Indoor Units

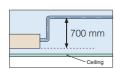
# **Ceiling Mounted Duct Type**

FXMQ20P / FXMQ25P / FXMQ32P FXMQ40P / FXMQ50P / FXMQ63P FXMQ80P / FXMQ100P / FXMQ125P FXMQ140P



# Middle and high static pressure allows for flexible duct design

- •A DC fan motor increases the external static pressure capacity range to include middle to high static pressures, increasing design flexibility.
- 30 Pa-100 Pa for FXMQ20P-32P 30 Pa-160 Pa for FXMQ40P
- 50 Pa-200 Pa for FXMQ50P-125P
- 50 Pa-140 Pa for FXMQ140P
- All models are only 300 mm in height, an improvement over the 390 mm height of conventional models. The weight of the FXMQ40P has been reduced from 44 kg to 28 kg.
- Drain pump is equipped as standard accessory with 700 mm lift.



- •Control of the airflow rate has been improved from 2-step to 3-step control.
- Low operation sound level

LOW O	_OW Operation Sound level (dB (A))												
XMQ-P	20/25	32	40	50	63	80/100	125	140					
Sound level (HH/H/L)	33/31/29	34/32/30	39/37/35	41/39/37	42/40/38	43/41/39	44/42/40	46/45/43					

- Energy-efficient
- The adopted DC fan motor is much more efficient than the conventional AC motor, yielding an approximate 20% decrease in energy consumption (FXMQ125P).



- Improved ease of installation
- Airflow rate can be controlled using a remote controller during test operation. With the conventional model, the airflow rate was controlled from the PC board. It is automatically adjusted to the range between approximately ±10% of the rated HH tap airflow for FXMQ20P-125P.
- •Improved ease of maintenance
- •The drain pan can be detached for easy cleaning. An antibacterial treatment that uses silver ions has been applied to the drain pan, preventing the growth of slime, mould and bacteria that cause blockages and odours.

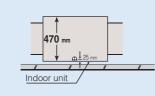
#### FXMQ200MA/FXMQ250MA

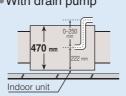


Simplified Static Pressure Control
 External static pressure can be easily adjusted using a change-over switch inside the electrical box to meet the resistance in the duct system.

- •Built-in Drain Pump (Option)

  Housing the drain pump inside the unit reduces the
- Without drain pump
- With drain pump





# Ceiling Suspended Type

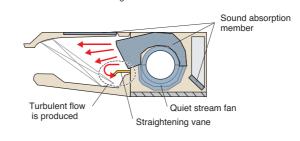
FXHQ32MA / FXHQ63MA FXHQ100MA



### Slim body with quiet and wide airflow

●Adoption of QUIET STREAM FAN

Uses the quiet stream fan and many

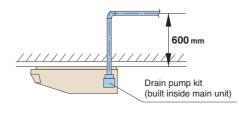


Low operation sound level

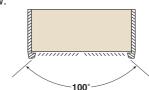
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FXHQ-MA	32	63	100
Sound level (H/L)	36/31	39/34	45/37

- Installation is easy
- Drain pump kit (option) can be easily incorporated.



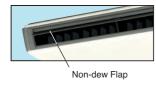
 Wide air discharge openings produce a spreading 100° airflow.





- Maintenance is easy
- •Non-dew Flap with no implanted bristles

Bristle-free Flap minimises contamination and makes cleaning simpler.



- Easy-to-clean flat design
- Maintenance is easier because everything can be performed from below the unit.
- A long-life filter (maintenance free up to one year\*) is equipped as standard accessory.
- \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>

**VRV** Indoor Units

### **Wall Mounted Type**

FXAQ20P / FXAQ25P FXAQ32P / FXAQ40P **FXAQ50P / FXAQ63P** 



### Stylish flat panel design harmonised with your interior décor

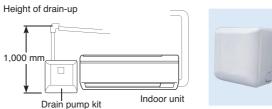
- •Stylish flat panel design creates a graceful harmony that enhances any interior space.
- Flat panel can be cleaned with only the single pass of a cloth across their smooth surface. Flat panel can also be easily removed and washed for more thorough cleaning.
- •L

ow opera	ow operation sound level (dB(A))										
FXAQ-P 20 25 32 40 50											
Sound level (H/L)	35/31	36/31	38/31	39/34	42/37	47/41					

- Drain pan and air filter can be kept clean by mould-proof polystyrene.
- Vertical auto-swing realises efficiency of air distribution. The louvre closes automatically when the unit stops.
- •5 steps of discharge angle can be set by remote controller.
- •Discharge angle is automatically set at the same angle as the previous operation when restarting. (Initial setting: 10° for cooling and 70° for heating)
- •Flexible installation
- Drain pipe can be fitted to from either left or right sides.



• Drain pump kit is available as optional accessory, which lifts the drain 1,000 mm from the bottom of the unit.



# Floor Standing Type

FXLQ20MA / FXLQ25MA FXLQ32MA / FXLQ40MA FXLQ50MA / FXLQ63MA



### Suitable for perimeter zone air conditioning

- •Floor Standing types can be hung on the wall for easier cleaning. Running the piping from the back allows the unit to be hung on walls. Cleaning under the unit, where dust tends to accumulate, is considerably easier.
- •The adoption of a fibre-less discharge grille featuring an original design to prevent condensation also helps prevent staining and makes cleaning easier.
- •A long-life filter (maintenance free up to one year\*) is equipped as standard accessory.
- \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>





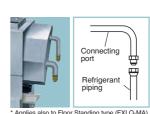
### **Concealed Floor Standing Type**

FXNQ20MA / FXNQ25MA FXNQ32MA / FXNQ40MA FXNQ50MA / FXNQ63MA



### Designed to be concealed in the perimeter skirting-wall

- •The unit is concealed in skirting-wall of perimeter, that enables to create high class interior design.
- •The connecting port faces downward, greatly facilitating on-site piping work.
- A long-life filter (maintenance free up to one year\*) is equipped as standard accessory.
- \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>





**Residential Indoor Units with Connection to BP Units** 

# Slim Ceiling Mounted Duct Type

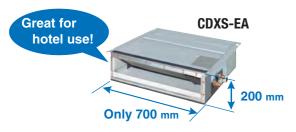


CDXS25EA / CDXS35EA FDXS25C / FDXS35C FDXS50C / FDXS60C



### Slim and smooth design suits your shallow ceiling

◆Models in the CDXS-EA series are only 700 mm in width and 21 kg in weight, so are easily installed in limited spaces. Just 200 mm in height, all models can be installed in rooms with as little as 240 mm depth between the drop ceiling and ceiling slab, making them ideal for even shallow ceilings.

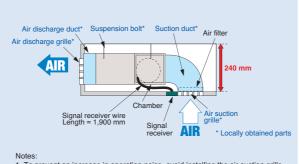


	CDXS25EA	CDXS35EA	FDXS25C	FDXS35C	
Dimensions (H x W x D)	200 x 700	x 620 mm	200 x 900 x 620 mm		
Weight	21	kg	25 kg		
Airflow rate (H)	8.7 m	³/min	9.5 m³/min	10 m <sup>3</sup> /min	
External static pressure	30	Pa	40 Pa		



Signals from the wireless remote controller are transmitted to the signal receiver

- •Low operation sound level
- (H/L/SL) C(F)DXS25 C(F)DXS35 FDXS50 FDXS60 35/31/29 dB (A) 35/31/29 dB (A) 37/33/31 dB (A) 38/34/32 dB (A)
- Home Leave Operation prevents large rises or falls in the indoor temperature by continuing operation\* while you are sleeping or out of your home. This means that an air-conditioned welcome awaits when you wake or return. It also means that the indoor temperature can quickly return to your favourite comfort setting.
- \* Home Leave Operation can be selected for any temperature from 18 to
- 32°C for cooling operation and 10 to 30°C for heating operation. \* Home Leave Operation function must be set using the remote controller
- when going to sleep or leaving the house, and after waking up or returning



- To prevent an increase in operation noise, avoid installing the air suction grille directly below the suction chamber.
- Grilles, piping connections, ducts, and installation parts should be obtained locally. Slim Ceiling Mounted Duct type models do not have drain-up pumps.
- 3. The signal receiver unit must be located near the air suction inlet, because the

# **Wall Mounted Type**







\* Remote controllers other than the standard accessory wireless remote controller cannot be used.

### Stylish flat panel harmonises with your interior décor

•Wall Mounted indoor units achieve quiet sound levels of 22 dB (A) during cooling operation.

			(H/L/SL)
FTXS20/25 FTXS35	FTXS50	FTXS60	FTXS71
37/25/22 dB (A) 39/26/23 dB (A)	43/34/31 dB (A)	45/36/33 dB (A)	46/37/34 dB (A)

•Intelligent Eye with its infrared sensor automatically controls air conditioner operation according to human movement in a room. When there is no movement, it adjusts the temperature by 2°C for energy savings.





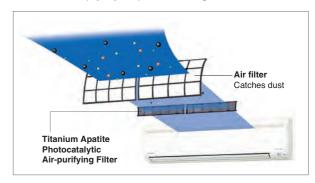
 Comfort Airflow Mode prevents uncomfortable drafts from blowing directly on to your body. With this function, when you press the COMFORT button during cooling operation, the flap moves upward to prevent direct cold drafts. During heating operation, it also moves downward to prevent direct drafts and deliver warm air to the floor.



Cooling operation



•Titanium apatite is a photocatalytic material with high adsorption power. Titanium apatite also effectively adsorbs and decomposes bacteria across its entire surface. The photocatalyst is activated simply by exposure to light.



These filters are not medical devices. Benefits such as the adsorption and decomposition of bacteria are only effective for substances that are collected on and in direct contact with the Titanium Apatite Photocatalytic Air-Purifying Filter.

Bacteria Removal Test

- Testing method: dropping method
- Result certificate: No. 012553-1 and 012553-2
- Testing organisation: Japan Spinners Inspecting Foundation



# **VRV** Indoor Units

#### **Ceiling Mounted Cassette (Round Flow with Sensing) Type**



	MO	DEL		FXFQ25SVM	FXFQ32SVM	FXFQ40SVM	FXFQ50SVM	FXFQ63SVM	FXFQ80SVM	FXFQ100SVM	FXFQ125SVM
Power supply						1-phase, 2	20-240 V/	220-230 V	, 50/60 Hz		
			kcal/h	2,400	3,100	3,900	4,800	6,100	7,700	9,600	12,000
Cooling capaci	ty		Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800
			kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0
			kcal/h	2,800	3,400	4,300	5,400	6,900	8,600	10,800	13,800
Heating capaci	Heating capacity Btu/h				13,600	17,100	21,500	27,300	34,100	42,700	54,600
kW			kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0
Power consump	otion	Cooling	kW	0.031	0.031	0.041	0.080	0.095	0.095	0.194	0.219
i ower consump	Juon	Heating	kW	0.027	0.027	0.037	0.075	0.090	0.090	0.180	0.199
Casing						(	Galvanised	steel plate	)		
Airflow roto (II	1/8/1/1		m³/min	12.5/11.5/10.0	12.5/11.5/10.0	14.5/13.0/11.0	22.0/17.5/13.5	23.5/18.5/13.5	23.5/19.5/15.0	33.0/26.0/19.0	34.5/27.5/21.0
Airflow rate (H	1/IVI/L)		cfm	441/406/353	441/406/353	512/459/388	777/618/477	830/653/477	830/688/530	1,165/918/671	1,218/971/741
Sound level (H.	/M/L)		dB(A)	30/28.5/27	30/28.5/27	31/29/27	36/32/28	38/33/28	38/35/31	44/38/32	45/40/35
Dimensions (H	×W×[	D)	mm			246×84	10×840	288×840×840			
Machine weigh	nt		kg		19			23		2	6
	Liqui	d (Flare)			\$6	6.4			<b>φ</b> 9	.5	
Piping connections	Gas	(Flare)	mm		<b>≠</b> 1:	2.7			<i>∲</i> 15	5.9	
COMMECTIONS	Drair	า				VP25 (E:	xternal Dia	, 32/Interna	al Dia, 25)		
	Mode	el					BYCQ1:	25B-W1			
Panel	Colo	ur					Fresh	white			
(Option)	Dimens	sions(H×W×D)	mm				50×95	0×950			
	Weig	jht	kg				5.	.5			

### **Ceiling Mounted Cassette (Round Flow) Type**



M	IODI	EL		FXFQ25LUV1	FXFQ32LUV1	FXFQ40LUV1	FXFQ50LUV1	FXFQ63LUV1	FXFQ80LUV1	FXFQ100LUV1	FXFQ125LUV1
Power supply						1-ph	ase, 220-2	40 V, 50 H	Z		
			kcal/h	2,400	3,100	3,900	4,800	6,100	7,700	9,600	12,000
Cooling capacity	/		Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800
			kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0
			kcal/h	2,800	3,400	4,300	5,400	6,900	8,600	10,800	13,800
Heating capacity	Heating capacity Btu/h					17,100	21,500	27,300	34,100	42,700	54,600
kW				3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0
Power consumption Cooling kV			kW	0.033	0.033	0.047	0.052	0.066	0.093	0.187	0.209
1 ower consump	tion	Heating	kW	0.027	0.027	0.034	0.038	0.053	0.075	0.174	0.200
Casing						Ga	lvanised s	teel plate			
Airflow rate (HF	1/11/1	`	m³/min	13/11.5/10	13/11.5/10	15/13/11	16/13.5/11	19/16.5/13.5	21/18/15	32/26/20	33/28/22.5
Allilow rate (III	1/11/-	,	cfm	459/406/353	459/406/353	530/459/388	565/477/388	671/583/477	742/636/530	1,130/918/706	1,165/989/794
Sound level (HH	1/H/L)		dB(A)	30/28.5/27	30/28.5/27	31/29/27	32/29.5/27	34/31/28	36/33.5/31	43/37.5/32	44/39/34
Dimensions (Hx	W×D	)	mm		246x840x840 288x840x84						40×840
Machine weight			kg		19	9.5		2	2	2	5
L	Liqui	d (Flare)			<i>ф</i> 6	.4			$\phi$ 9	).5	
Piping connections -	Gas	(Flare)	mm		φ12	2.7			<i>φ</i> 1:	5.9	
	Drair	1			١	/P25 (Exte	rnal Dia, 3	2/Internal I	Dia, 25)		
	Mode	el		BYCP125K-W1							
	Colo	ur					Fresh w	hite			
(Option)	Dimens	sions(H×W×D)	mm				50×950×	<950			
	Weig	ht	kg				5.5				

Note: Specifications are based on the following conditions;

-Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.

-Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.

-Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.

(See Engineering Data Book for details.)

-Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.

During actual operation, these values are normally somewhat higher as a result of ambient conditions.

#### **Ceiling Mounted Cassette (Compact Multi Flow) Type**



	MOD	EL		FXZQ20MVE	FXZQ25MVE	FXZQ32MVE	FXZQ40MVE	FXZQ50MVE			
Power supp				. ,		220-240 V/220 V,					
			kcal/h	1,900	2,400	3,100	3,900	4,800			
Cooling cap	acity		Btu/h	7,500	9,600	12,300	15,400	19,100			
			kW	2.2 2.8		3.6	4.5	5.6			
			kcal/h	2,200 2,800		3,400	4,300	5,400			
Heating cap	acity		Btu/h	8,500	10,900	13,600	17,100	21,500			
			kW	2.5	3.2	4.0	5.0	6.3			
Power consumption Cooling		Cooling	kW	0.0	73	0.076	0.089	0.115			
i owei consui	приоп	Heating	kW	0.0	064	0.068	0.080	0.107			
Casing					G	alvanised steel pla	ate				
Airflow rate	(H/I)		m³/min	9/	/7	9.5/7.5	11/8	14/10			
Allilow rate	(11/2)		cfm	318/247		335/265	388/282	493/353			
Sound level	(H/L)	230 V	dB(A)	30/25 32/26		32/26	36/28	41/33			
Oodiid icvci	(11/2)	240 V	UD(/1)			34/28	37/29	42/35			
Dimensions	(H×W	×D)	mm	286×575×575							
Machine we	eight		kg	18							
D: :	Liquid	l (Flare)		\$\phi 6.4							
Piping connections	Gas (	Flare)	mm			<i>ф</i> 12.7					
	Drain				VP20 (Ext	ernal Dia, 26/Interr	nal Dia, 20)				
	Mode	I				BYFQ60B3W1					
Panel	Colou	r				White (6.5Y9.5/0.5	)				
(Option)	Dimensio	ons(H×W×D)	mm			55×700×700					
	Weigh	nt	kg			2.7					

#### 4-Way Flow Ceiling Suspended Type



	MODEL		FXUQ71AVEB	FXUQ100AVEB			
Power supply	у		1-phase, 220-240 V	/220-230 V, 50/60 Hz			
		kcal/h	6,900	9,600			
Cooling capa	acity	Btu/h	27,300	38,200			
		kW	8.0	11.2			
		kcal/h	7,700	10,800			
Heating capa	acity	Btu/h	30,700	42,700			
		kW	9.0	12.5			
Power consump	Cooling	kW	0.090	0.200			
rower consum	Heating	kW	0.073	0.179			
Casing			Fresh white				
Airflow rate	/ LL / N. / / L \	m³/min	22.5/19.5/16	31/26/21			
Allilow rate	(11/1VI/L)	cfm	794/688/565	1,094/918/741			
Sound level	(H/M/L)	dB(A)	40/38/36	47/44/40			
Dimensions	(H×W×D)	mm	198×9	50×950			
Machine wei	ght	kg	26	27			
	Liquid (Flare)		φ\$	9.5			
Piping connections	Gas (Flare)	mm	φ1	15.9			
	Drain		VP20 (External Dia	, 26/Internal Dia, 20)			

- Note: Specifications are based on the following conditions;

  Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.

  Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.

  Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.

  - (See Engineering Data Book for details.)
  - Sound level: (FXZQ-M) Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.

    (FXUQ-A) Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward.

    During actual operation, these values are normally somewhat higher as a result of ambient conditions.

# **VRV** Indoor Units

#### **Ceiling Mounted Cassette (Double Flow) Type**



	MOI	DEL		FXCQ20MVE	FXCQ25MVE	FXCQ32MVE	FXCQ40MVE	FXCQ50MVE	FXCQ63MVE	FXCQ80MVE	FXCQ125MVE		
Power supp	oly				1	1-phas	e, 220-240	V/220 V, 50	)/60 Hz				
			kcal/h	1,900	2,400	3,100	3,900	4,800	6,100	7,700	12,000		
Cooling cap	acity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	30,700	47,800		
			kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	14.0		
			kcal/h	2,200	2,800	3,400	4,300	5,400	6,900	8,600	13,800		
Heating cap	acity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300	34,100	54,600		
			kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	16.0		
Power consur	nntion	Cooling	kW	0.077	0.092	0.092	0.130	0.130	0.161	0.209	0.256		
rower consui	приоп	Heating	kW	0.044	0.059	0.059	0.097	0.097	0.126	0.176	0.223		
Casing					Galvanised steel plate								
Airflow rate	, /UU/	M/L)	m³/min	7/5	9/6.5	9/6.5	12/9	12/9	16.5/13	26/21	33/25		
Allilow rate	(ПП/	IVI/L)	cfm	247/177	318/230	318/230	424/318	424/318	582/459	918/741	1,165/883		
Sound level	/LI /I \	220 V	dB(A)	32/27	34/28	34/28	34/29	34/29	37/32	39/34	44/38		
Souria level	(II/L)	240 V	UD(A)	34/29	36/30	36/30	37/32	37/32	39/34	41/36	46/40		
Dimensions	(H×V	/×D)	mm	305×775×600	305×775×600	305×775×600	305×990×600	305×990×600	305×1,175×600	305×1,665×600	305×1,665×600		
Machine we	eight		kg	26.0	26.0	26.0	31.0	32.0	35.0	47.0	48.0		
	Liquid	d (Flare)		<i>ϕ</i> 6.4	<i>ϕ</i> 6.4	φ6.4	φ6.4	φ6.4	φ9.5	φ9.5	φ9.5		
Piping connections	Gas	(Flare)	mm	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>\$</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 15.9	<i>∲</i> 15.9	<i>∲</i> 15.9		
COMMODITORIO	Drain	ı				VP25 (E	xternal Dia,	32/Internal	Dia, 25)				
Model			В	YBC32G-W	/1	BYBC5	0G-W1	BYBC63G-W1	BYBC125G-W1				
Panel Colour						White (1	0Y9/0.5)						
(Option)	Dimens	ions(H×W×D)	mm	53×1,030×680	53×1,030×680	53×1,030×680	53×1,245×680	53×1,245×680	53×1,430×680	53×1,920×680	53×1,920×680		
	Weig	ht	kg	8.0	8.0	8.0	8.5	8.5	9.5	12.0	12.0		

#### **Ceiling Mounted Cassette Corner Type**



	MOI	DEL		FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE
Power supp	oly				1-phase, 220-240	V/220 V, 50/60 Hz	
			kcal/h	2,400	3,100	3,900	6,100
Cooling cap	Cooling capacity		Btu/h	9,600	12,300	15,400	24,200
		kW	2.8	3.6	4.5	7.1	
			kcal/h	2,800	3,400	4,300	6,900
Heating cap	oacity		Btu/h	10,900	13,600	17,100	27,300
			kW	3.2	4.0	5.0	8.0
Power consu	motion	Cooling	kW	0.066	0.066	0.076	0.105
rower consu	приоп	Heating	kW	0.046	0.046	0.056	0.085
Casing					Galvanise	d steel plate	
Airflow rate	, (U/L)		m³/min	11/9	11/9	13/10	18/15
Alfilow rate	∌ (⊓/L)		cfm	388/318	388/318	459/353	635/530
0	/11/13	220 V	-ID(A)	38/33	38/33	40/34	42/37
Sound level	(H/L)	240 V	dB(A)	40/35	40/35	42/36	44/39
Dimensions	s (H×V	V×D)	mm	215×1,110×710	215×1,110×710	215×1,110×710	215×1,310×710
Machine we	eight		kg	31	31	31	34
	Liquid	d (Flare)		φ 6.4	φ 6.4	φ 6.4	φ 9.5
Piping connections	Gas (	(Flare)	mm	φ 12.7	φ 12.7	φ 12.7	φ 15.9
COMPCCHORS	Drain				VP25 (External Dia	32/Internal Dia, 25)	
Model				BYK4	5FJW1	BYK71FJW1	
Panel	Colou	ır			White (1	0Y9/0.5)	
(Option)	Dimensi	ions(H×W×D)	mm	70×1,240×800	70×1,240×800	70×1,240×800	70×1,440×800
	Weig	ht	kg	8.5	8.5	8.5	9.5

Note: Specifications are based on the following conditions;

\*Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.

\*Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.

\*Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.

(See Engineering Data Book for details.)

\*Sound level: (FXCQ-M) Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.

(FXKQ-MA) Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward.

During actual operation, these values are normally somewhat higher as a result of ambient conditions.

#### Slim Ceiling Mounted Duct Type (700 mm width type)



MODE	wit	th drain	pump	FXDQ20PBVE	FXDQ25PBVE	FXDQ32PBVE			
MODE		thout dra	ain pump	FXDQ20PBVET	FXDQ25PBVET	FXDQ32PBVET			
Power supp	oly			1-p	hase, 220-240 V/220 V, 50/60	Hz			
			kcal/h	1,900	2,400	3,100			
Cooling cap	Cooling capacity		Btu/h	7,500	9,600	12,300			
			kW	2.2	2.8	3.6			
			kcal/h	2,200	2,800	3,400			
Heating cap	acity		Btu/h	8,500	10,900	13,600			
			kW	2.5	3.2	4.0			
Power consum	ipuon	ooling	kW	0.086	0.086	0.089			
(FXDQ-PBVE)	*1 He	eating	kW	0.067	0.067	0.070			
Power consum	ipuon	ooling	kW	0.067	0.067	0.070			
(FXDQ-PBVE)	「)*¹ H∈	eating	kW	0.067	0.070				
Casing				Galvanised steel plate					
Airflow rate	· /⊔⊔/⊔/I	\	m³/min	8.0/7.2/6.4	8.0/7.2/6.4	8.0/7.2/6.4			
All llow rate	; (I II I/I I/L	-)	cfm	282/254/226	282/254/226	282/254/226			
External sta	tic pressi	ure	Pa		30-10 <sup>*2</sup>				
Sound level	(HH/H/L)	<b>*</b> 1 <b>*</b> 3	dB(A)	28/26/23	28/26/23	28/26/24			
Dimensions	(H×W×E	D)	mm	200×700×620	200×700×620	200×700×620			
Machine we	eight		kg	23.0	23.0	23.0			
5	Liquid (F	Flare)		<i>ϕ</i> 6.4	<i>ϕ</i> 6.4	<i>ϕ</i> 6.4			
Piping connections	Gas (Fla	are)	mm	<i>ϕ</i> 12.7	<i>∲</i> 12.7	<i>ϕ</i> 12.7			
	Drain			VP20	0 (External Dia, 26/Internal Dia	, 20)			

#### Slim Ceiling Mounted Duct Type (900/1,100 mm width type)



MODE	with dra	n pump	FXDQ40NBVE	FXDQ50NBVE	FXDQ63NBVE			
MODE		rain pump	FXDQ40NBVET	FXDQ50NBVET	FXDQ63NBVET			
Power supp	oly		1-	phase, 220-240 V/220 V, 50/60	Hz			
		kcal/h	3,900	4,800	6,100			
Cooling cap	acity	Btu/h	15,400	19,100	24,200			
		kW	4.5	5.6	7.1			
		kcal/h	4,300	5,400	6,900			
Heating cap	acity	Btu/h	17,100	21,500	27,300			
		kW	5.0	6.3	8.0			
Power consum		kW	0.160	0.165	0.181			
(FXDQ-PBVE)	*1 Heating	kW	0.147	0.152	0.168			
Power consum		kW	0.147	0.152	0.168			
(FXDQ-PBVE)	T)*1 Heating	kW	0.147	0.152	0.168			
Casing			Galvanised steel plate					
Airflow rate	(HH/H/L)	m³/min	10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0			
7 iiiiow rate	(1111/11/2)	cfm	371/335/300	441/388/353	583/512/459			
External sta	tic pressure	Pa		44-15 <sup>*2</sup>				
Sound level	(HH/H/L)*1*3	dB(A)	30/28/26	33/30/27	33/31/29			
Dimensions	(H×W×D)	mm	200×900×620	200×900×620	200×1,100×620			
Machine we	eight	kg	27.0	28.0	31.0			
D: :	Liquid (Flare)		φ6.4	φ6.4	<i>∲</i> 9.5			
Piping connections	Gas (Flare)	mm	<i>∲</i> 12.7	<i>ϕ</i> 12.7	<i>∲</i> 15.9			
33.1100110110	Drain		VP2	20 (External Dia, 26/Internal Dia	a, 20)			

Note: Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.

Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.

Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.

(See Engineering Data Book for details.)

Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.

During actual operation, these values are normally somewhat higher as a result of ambient conditions.

\*1: Values are based on the following conditions: FXDQ-PB: external static pressure of 10 Pa; FXDQ-NB: external static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard". (Factory setting is 10 Pa for FXDQ-NB and 15.)

\*3: The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB(A).

# **VRV** Indoor Units

#### **Middle Static Pressure Ceiling Mounted Duct Type**



	MODEL		FXSQ20PVE	FXSQ25PVE	FXSQ32PVE	FXSQ40PVE	FXSQ50PVE		
Power supp	ly		1-phase, 220-240 V/220 V, 50/60 Hz						
		kcal/h	1,900 2,400 3,100		3,900	4,800			
Cooling cap	acity	Btu/h	7,500	9,600	12,300	15,400	19,100		
		kW	2.2	2.8	3.6	4.5	5.6		
		kcal/h	2,200	2,800	3,400	4,300	5,400		
Heating cap	acity	Btu/h	8,500	10,900	13,600	17,100	21,500		
		kW	2.5	3.2	4.0	5.0	6.3		
Power	Cooling	kW	0.0	)58 *1	0.066 *1	0.101*1	0.075*1		
consumption	n Heating	kW	0.0	)53 <sup>*1</sup>	0.061 *1	0.096*1	0.070*1		
Casing			Galvanised steel plate						
Airflow rate	(H/M/L)	m³/min	9/7.5/6.5	9/7.5/6.5	9.5/8/7	15/12.5/10.5	17/14.5/11.5		
Allilow rate	(П/IVI/L)	cfm	318/265/230	318/265/230	335/282/247	530/441/371	600/512/406		
External sta	tic pressure	Pa		50-150 (50)*2					
Sound level	(H/M/L)	dB(A)	33/3	0/28	34/32/30	36/33/30	34/32/29		
Dimensions	(H×W×D)	mm		245×550×800		245×700×800	245×1,000×800		
Machine weight kg		kg		25	27	35			
Liquid (Flare)					φ 6.4				
Piping connections	Gas (Flare)	mm			φ 12.7				
22304.01.10	Drain			VP25 (Ext	ernal Dia, 32/Intern	nal Dia, 25)			

	MODEL		FXSQ63PVE	FXSQ80PVE	FXSQ100PVE	FXSQ125PVE	FXSQ140PVE		
Power supp	oly		1-phase, 220-240 V/220 V, 50/60 Hz						
		kcal/h	6,100	7,700	9,600	12,000	13,800		
Cooling capacity Btu/h		Btu/h	24,200	24,200 30,700 38,200 47,800		47,800	54,600		
		kW	7.1	9.0	11.2	14.0	16.0		
kcal/h			6,900	8,600	10,800	13,800	15,500		
Heating cap	acity	Btu/h	27,300	34,100	42,700	54,600	61,400		
		kW	8.0	10.0	12.5	16.0	18.0		
Power	Cooling	kW	0.106 *1	0.126 *1	0.151*1	0.206 *1	0.222*1		
consumptio	n Heating	kW	0.101 *1	0.121 *1	0.146*1	0.201 *1	0.217*1		
Casing			Galvanised steel plate						
Airflan rata	/ L L/N 4 / L \	m³/min	21/17.5/14.5	23/19.5/16	32/27/22.5	37/31.5/26	39/33.5/28		
Airflow rate	: (H/IVI/L)	cfm	741/618/512	812/688/565	1,130/953/794	1,306/1,112/918	1,377/1,183/988		
External sta	tic pressure	Pa		50-140 (50)*2					
Sound level	(H/M/L)	dB(A)	36/32/29	37.5/34/30	39/35/32	42/38.5/35	43/40/36		
Dimensions (H×W×D) mm		245×1,0	000×800	245×1,4	245×1,400×800				
Machine weight kg		kg	35	37	46	47	52		
Liquid (Flare)					φ 9.5				
Piping connections	Gas (Flare)	mm			φ 15.9				
	Drain			VP25 (Exte	ernal Dia, 32/Intern	al Dia, 25)			

- Note: Specifications are based on the following conditions;

  \*Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
  - •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
  - Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
  - •Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.

  - \*Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
     During actual operation, these values are normally somewhat higher as a result of ambient conditions.
     \*1: Power consumption values are based on conditions of rated external static pressure.
     \*2: External static pressure can be modified using a remote controller that offers thirteen (FXSQ20-40P), eleven (FXSQ50-125P) or ten (FXSQ140P) levels of control. These values indicate the lowest and highest possible static pressures. The rated static pressure is 50 Pa.

#### **Ceiling Mounted Duct Type**



	MOI	DEL		FXMQ20PVE	FXMQ25PVE	FXMQ32PVE	FXMQ40PVE	FXMQ50PVE			
Power supp	ly			1-phase, 220-240 V/220 V, 50/60 Hz							
			kcal/h	1,900	2,400	3,100	3,900	4,800			
Cooling cap	Cooling capacity Btu		Btu/h	7,500	9,600	12,300	15,400	19,100			
		kW	2.2	2.8	3.6	4.5	5.6				
			kcal/h	2,200	2,800	3,400	4,300	5,400			
Heating cap	acity		Btu/h	8,500	10,900	13,600	17,100	21,500			
			kW	2.5	3.2	4.0	5.0	6.3			
Power consum	ntion	Cooling	kW	0.056 *1	0.056 *1	0.060 *1	0.151*1	0.128*1			
rowel collsuli	iption	Heating	kW	0.044 *1	0.044 *1	0.048 *1	0.139 *1	0.116 *1			
Casing				Galvanised steel plate							
Airflow rate	/பப	ш/г)	m³/min	9/7.5/6.5	9/7.5/6.5	9.5/8/7	16/13/11	18/16.5/15			
Allilow fale	(ПП/	П/L)	cfm	318/265/230	318/265/230	335/282/247	565/459/388	635/582/530			
External stat	ic pre	essure	Pa	30-100 (50)*2	30-100 (50)*2	30-100 (50)*2	30-160 (100)*2	50-200 (100)* <sup>2</sup>			
Sound level (	HH/H	I/L)	dB(A)	33/31/29	33/31/29	34/32/30	39/37/35	41/39/37			
Dimensions (H×W×D)		mm	300×550×700	300×550×700	300×550×700	300×700×700	300×1,000×700				
Machine weight		kg	25	25	25	28	36				
Liquid (Flare)			φ 6.4	φ 6.4	φ 6.4	<i>ϕ</i> 6.4	φ 6.4				
Piping Gas (Flare)		(Flare)	mm	φ12.7	φ12.7	φ 12.7	φ 12.7	ø12.7			
Dra		1			VP25 (Exte	ernal Dia, 32/Intern	al Dia, 25)				

	MOI	DEL		FXMQ63PVE	FXMQ80PVE	FXMQ100PVE	FXMQ125PVE	FXMQ140PVE			
Power supp	oly				1-phase, 220-240 V/220 V, 50/60 Hz						
			kcal/h	6,100	7,700	9,600	12,000	13,800			
Cooling cap	acity		Btu/h	24,200	30,700	38,200	47,800	54,600			
			kW	7.1	9.0	11.2	14.0	16.0			
kcal/h			kcal/h	6,900	8,600	10,800	13,800	15,500			
Heating cap	acity		Btu/h	27,300	34,100	42,700	54,600	61,400			
			kW	8.0	10.0	12.5	16.0	18.0			
Power consur	nntion	Cooling	kW	0.138 *1	0.185 *1	0.215*1	0.284 *1	0.405 *1			
I OWEI COIISUI	Πρασιτ	Heating	kW	0.127 *1	0.173 *1	0.203*1	0.272 *1	0.380 *1			
Casing					G	alvanised steel pla	te				
Airflow rate	(HH/	Н/I )	m³/min	19.5/17.5/16	25/22.5/20	32/27/23	39/33/28	46/39/32			
Allilow rate	(1111/	11/L)	cfm	688/618/565	883/794/706	1,130/953/812	1,377/1,165/988	1,624/1,377/1,130			
External sta	tic pre	essure	Pa	50-200 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	50-140 (100)* <sup>2</sup>			
Sound level	(HH/H	I/L)	dB(A)	42/40/38	43/41/39	43/41/39	44/42/40	46/45/43			
Dimensions	(H×V	V×D)	mm	300×1,000×700	300×1,000×700	300×1,400×700	300×1,400×700	300×1,400×700			
Machine weight		kg	36	36	46	46	47				
		d (Flare)		φ9.5	<i>\$</i> 9.5	φ 9.5	<i>∲</i> 9.5	φ 9.5			
Piping connections	Gas	(Flare)	mm	φ15.9	φ 15.9	φ 15.9	φ 15.9	φ 15.9			
2211100110110	Drain	1			VP25 (Ext	ernal Dia, 32/Intern	al Dia, 25)				

Note: Specifications are based on the following conditions;

- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
   Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
   Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.

- (See Engineering Data Book for details.)

  Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
- \*1: Power consumption values are based on conditions of rated external static pressure.

  \*2: External static pressure can be modified using a remote controller that offers seven (FXMQ20-32P), thirteen (FXMQ40P), fourteen (FXMQ50-125P) or ten (FXMQ140P) levels of control. These values indicate the lowest and highest possible static pressures. The standard static pressure is 50 Pa for FXMQ20-32P and 100 Pa for FXMQ40-140P.

# **VRV** Indoor Units

#### **Ceiling Mounted Duct Type**



	MODEL		FXMQ200MAVE	FXMQ250MAVE
Power supp	ly		1-phase, 220-240	V/220 V, 50/60 Hz
		kcal/h	19,300	24,100
Cooling capacity		Btu/h	76,400	95,500
		kW	22.4	28.0
		kcal/h	21,500	27,100
Heating capa	acity	Btu/h	85,300	107,500
		kW	25.0	31.5
Power consum	Cooling	kW	1.294 *1	1.465 * <sup>1</sup>
r ower consum	Heating	kW	1.294 *1	1.465 *1
Casing			Galvanised	steel plate
Airflow rate	(H/L)	m³/min	58/50	72/62
All llow rate	(11/2)	cfm	2,047/1,765	2,542/2,189
External stat	ic pressure	Pa	132-221 * <sup>2</sup>	191-270 * <sup>2</sup>
Sound level	(L/I) 220 V	-ID(A)	48/45	48/45
Souria level	240 V	dB(A)	49/46	49/46
Dimensions	(H×W×D)	mm	470×1,380×1,100	470×1,380×1,100
Machine weight		kg	137	137
Liquid (Flare)			φ 9.5	φ9.5
Piping connections	Gas (Brazing)	mm	φ19.1	φ 22.2
	Drain		PS	1B

#### **Ceiling Suspended Type**



	MODEL		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE			
Power supp	ly		1-ր	phase, 220-240 V/220 V, 50/60	Hz			
		kcal/h	3,100	6,100	9,600			
Cooling cap	acity	Btu/h	12,300	24,200	38,200			
		kW	3.6	7.1	11.2			
		kcal/h	3,400	6,900	10,800			
Heating cap	acity	Btu/h	13,600	27,300	42,700			
		kW	4.0	8.0	12.5			
Power consum	Cooling	kW	0.111	0.115	0.135			
i owei consun	Heating	kW	0.111 0.115		0.135			
Casing			White (10Y9/0.5)					
Airflow rate	(Ц/[)	m³/min	12/10	17.5/14	25/19.5			
Allilow rate	(11/L)	cfm	424/353	618/494	883/688			
Sound level (	(H/L)	dB(A)	36/31	39/34	45/37			
Dimensions	(H×W×D)	mm	195×960×680	195×1,160×680	195×1,400×680			
Machine weight		kg	24.0	28.0	33.0			
Liquid (Fla			φ6.4	<i>ϕ</i> 9.5	<i>ϕ</i> 9.5			
Piping connections	Gas (Flare)	mm	<i>ϕ</i> 12.7	<i>∲</i> 15.9	φ15.9			
	Drain		VP2	0 (External Dia, 26/Internal Dia	a, 20)			

Note: Specifications are based on the following conditions;

- Specifications are based on the following conditions;
   Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
   Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
   Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.
   (See Engineering Data Book for details.)

   Sound level: (FXMQ-MA) Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
   (FXHQ-MA) Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions

   ★1: Power consumption values are based on conditions of standard external static pressure.
   ★2: External static pressure is changeable to change over the connectors inside electrical box, this pressure means "Standard-High static pressure".

#### **Wall Mounted Type**



	МО	DEL		FXAQ20PVE	FXAQ25PVE	FXAQ32PVE	FXAQ40PVE	FXAQ50PVE	FXAQ63PVE	
Power suppl	ly			1-phase, 220-240 V/220 V, 50/60 Hz						
			kcal/h	1,900	2,400	3,100	3,900	4,800	6,100	
Cooling capa	acity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	
			kW	2.2	2.8	3.6	4.5	5.6	7.1	
			kcal/h	2,200	2,800	3,400	4,300	5,400	6,900	
Heating capa	acity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300	
			kW	2.5	3.2	4.0	5.0	6.3	8.0	
Power consum	ntion	Cooling	kW	0.019	0.028	0.030	0.020	0.033	0.050	
Fower consum	iption	Heating	kW	0.029	0.034	0.035	0.020	0.039	0.060	
Casing				White (3.0Y8.5/0.5)						
Airflow rate	/LI /I	\	m³/min	7.5/4.5	8/5	8.5/5.5	12/9	15/12	19/14	
Allilow fale	(П/Ц	)	cfm	265/159	282/177	300/194	424/318	530/424	671/494	
Sound level	(H/L)		dB(A)	35/31	36/31	38/31	39/34	42/37	47/41	
Dimensions	(H×V	V×D)	mm	290×795×238	290×795×238	290×795×238	290×1,050×238	290×1,050×238	290×1,050×238	
Machine weight		kg	11.0	11.0	11.0	14.0	14.0	14.0		
	Liqui	d (Flare)		φ6.4	φ6.4	φ6.4	φ6.4	φ6.4	φ9.5	
Piping connections	Gas	(Flare)	mm	φ12.7	<i>∲</i> 12.7	<i>\$</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 15.9	
	Drain	1			VP1	3 (External Dia,	18/Internal Dia	, 13)		

#### Floor Standing Type/Concealed Floor Standing Type





		.=.		FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE
	MOI	DEL		FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE
Power suppl	у				1-r	hase, 220-240	V/220 V, 50/60	Hz	
			kcal/h	1,900	2,400	3,100	3,900	4,800	6,100
Cooling capa	acity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
			kW	2.2	2.8	3.6	4.5	5.6	7.1
			kcal/h	2,200	2,800	3,400	4,300	5,400	6,900
Heating capa	acity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
			kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consum	ntion	Cooling	kW	0.049	0.049	0.090	0.090	0.110	0.110
r ower consum		Heating	kW	0.049	0.049	0.090	0.090	0.110	0.110
Casing					FXLQ: Ivory v	white (5Y7.5/1)/F	XNQ: Galvanis	sed steel plate	
Airflow rate	(H/L)		m³/min	7/6	7/6	8/6	11/8.5	14/11	16/12
Allilow rate	(11/1/		cfm	247/212	247/212	282/212	388/300	494/388	565/424
Sound level (	(H/I )	220 V	dB(A)	35/32	35/32	35/32	38/33	39/34	40/35
Souria lever	(11/1/	240 V	UD(A)	37/34	37/34	37/34	40/35	41/36	42/37
Dimensions		FXLQ	mm	600×1,000×222	600×1,000×222	600×1,140×222	600×1,140×222	600×1,420×222	600×1,420×222
(H×W×D)		FXNQ	111111	610×930×220	610×930×220	610×1,070×220	610×1,070×220	610×1,350×220	610×1,350×220
Machine wei	aht	FXLQ	kg	25.0	25.0	30.0	30.0	36.0	36.0
Wacillie wei	grit	FXNQ	, kg	19.0	19.0	23.0	23.0	27.0	27.0
Liquid (Fla		d (Flare)		<i>ϕ</i> 6.4	φ6.4	φ6.4	φ6.4	<i>ϕ</i> 6.4	<i>∲</i> 9.5
Piping connections	Gas	(Flare)	mm	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>ϕ</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 15.9
	Drair	า				210	D.D.		

Note: Specifications are based on the following conditions;

- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
   Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
   Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.

(See Engineering Data Book for details.)

Sound level: (FXAQ-P) Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward.

(FXLQ-MA, FXNQ-MA) Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m.

During actual operation, these values are normally somewhat higher as a result of ambient conditions.

# Residential Indoor Units with Connection to BP Units

### **Slim Ceiling Mounted Duct Type**





	MODEL		CDXS25EAVMA	CDXS35EAVMA	FDXS25CVMA	FDXS35CVMA	FDXS50CVMA	FDXS60CVMA	
Power su	pply		1-phase, 220-240 V/220-230 V, 50/				60 Hz		
Airflow rat	tes (H)	m³/min (cfm)	8.7 (	8.7 (307) 9.5 (335) 10.0 (353) 12.0 (424) 1					
Sound lev	rels (H/L/SL)*	dB (A)		35/31/29 37/33/31 38/34/3					
Fan spee	d		5 steps, quiet and automatic						
Temperat	ure control		Microcomputer control						
Dimension	ns (H×W×D)	mm	200×70	00×620		200×900×620		200×1,100×620	
Machine v	weight	kg	2	1	2	5	27	30	
	Liquid (Flare)				<i>φ</i> 6	.4			
Piping connections	Gas (Flare)	mm		$\phi$ 9	9.5		<i>\$</i> 1	2.7	
COTITICOLIOTIS	Drain			VP2	0 (External Dia.	26/Internal Dia	. 20)		
Heat insu	lation		Both liquid and gas pipes						
External s	al static pressure Pa 30 40								

Note: \* The operation sound level values represent those for rear-suction operation and an external static pressure of 30 Pa for CDXS-EA and 40 Pa for FDXS-C. Sound level values for bottom-suction operation can be obtained by adding 6 dB (A) for CDXS-EA and 5 dB (A) for FDXS-C.

#### **Wall Mounted Type**





	МО	DEL		FTXS20DVMA	FTXS25EVMA	FTXS35EVMA	FTXS50FVMA	FTXS60FVMA	FTXS71FVMA
Power su	pply				1-pha	ase, 220-240 V	/220-230 V, 50/	/60 Hz	
Front pan	el colou	ır				Wi	hite		
Airflow rat	tes	Cooling	m3/min (cfm)	8.7 (307)		8.9 (314)	14.7 (519)	16.2 (572)	17.4 (614)
(H)	F	Heating	1110/111111 (C1111)						21.5 (759)
Sound lev	els C	Cooling	dB (A)	37/25/22 39/26/23 43/34/31 45/36/33 46/3					46/37/34
(H/L/SL)	F	Heating	ub (A)	37/2	37/28/25 38/29/26 42/33/30 44/35/32 46/3				
Fan speed	d					5 steps, quiet	and automatic		
Temperat	ure con	trol				Microcomp	uter control		
Dimension	ns (H×V	V×D)	mm		283×800×195			290×1,050×238	3
Machine v	weight		kg		9			12	
Piping	Liquid	(Flare)				φ 6	6.4		
connections	Gas (F	lare)	mm	φ 9.5 φ12.7 φ1				φ15.9	
	Drain			φ18.0					
Heat insul	lation				Both liquid and gas pipes				

#### BP Units for connection to residential indoor units





	MO	DEL		BPMKS967A3	BPMKS967A2			
Power su				1-phase, 220-240 V/2				
	,			1 /	<u> </u>			
Number o	•			3 (connectable to 1-3 indoor units)	2 (connectable to 1-2 indoor units)			
Power co	nsumpti	on	W	10				
Running	current		Α	0.0	5			
Dimensio	ns (H×V	/×D)	mm	180×294 (+3	356*)×350			
Machine	weight		kg	8	7.5			
Number o	of wiring	connection	ons	3 for power supply (including earth wiring), 2 f 4 for interunit wiring				
	Liquid	Main	mm	φ9.5×1				
Piping connections	Liquid	Branch	mm	φ6.4×3	φ6.4×2			
(Brazing)	0	Main	mm	φ19.1	1×1			
	Gas	Branch	mm	∮15.9×3	<i>ϕ</i> 15.9×2			
Heat insu	lation			Both liquid an	d gas pipes			
Connecta	ble indo	or units		2.0 kW class to 7.1 kW class	ss residential indoor units			
Min. rated			kW 2.0					
Max. rate			kW	20.8	14.2			

Note: \* Total auxiliary piping leng

# **Outdoor Units**

# **VRV IV S** SERIES

### **Heat Pump**







				*				
МС	DEL		RXYMQ3AVE	RXYMQ4AVE	RXYMQ5AVE	RXYMQ6AVE	RXYMQ8AY1	RXYMQ9AY1
Power supply				1-phase, 220-230	V/220 V, 50/60 Hz		3-phase, 380-	·415 V, 50 Hz
		kcal/h	7,740	9,600	12,000	13,800	19,300	20,600
Cooling capacity		Btu/h	30,700	38,200	47,800	54,600	76,400	81,900
		kW	9.0	11.2	14.0	16.0	22.4	24.0
		kcal/h	8,600	10,800	12,000	15,500	21,500	22,400
Heating capacity		Btu/h	34,100	42,700	47,800	61,400	85,300	88,700
		kW	10.0	12.5	14.0	18.0	25.0	26.0
Power consumption	Cooling	l kW	2.44	2.88	3.93	4.14	5.94	6.88
rower consumption	Heating		2.28	2.60	3.04	4.07	6.25	6.82
Capacity control		%	24 to	100	16 to	100	20 to	100
Casing colour					Ivory white	e (5Y7.5/1)		
Compressor	Туре			Hermetically sea	aled swing type		Hermetically seal	led scroll type
Compressor	Motor outpu	t kW	1.9	92	3.0	3.5	3.8	4.8
Airflow rate		m³/min		76		106	14	40
Dimensions (H×W	/×D)	mm		990×940×320		1,345×900×320	1,430×9	940×320
Machine weight		kg	7	'1	82	104	13	38
Sound level (Cool	ing/Heating	dB(A)	51/52	52/54	53/54	55/56	57/58	58/59
Operation range	Cooling	°CDB			-5 t	o 46		
Operation range	Heating	°CWB			-20 to	0 15.5		
Refrigerant	Туре				R-4	110A		
nenigerani	Charge	kg	2.	9	3.4	3.6	5	5.8
Dining connection	Liquid	mm		φ9.5 (F	Flare)		φ9.5 (E	Brazing)
Piping connection	Gas	111111		∮15.9 (Flare)		φ19.1 (Flare)	φ 19.1 (Brazing)	φ 22.2 (Brazing)

- Note: Specifications are based on the following conditions;

  Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.

  Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.

  Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.

  During actual operation, these values are normally somewhat higher as a result of ambient conditions.

  Refrigerant charge is required.

#### **Outdoor unit combinations**

МО	DEL		RXYMQ3AVE	RXYMQ4AVE	RXYMQ5AVE	RXYMQ6AVE	RXYMQ8AY1	RXYMQ9AY1
kW			9.0	11.2	14.0	16.0	22.4	24.0
HP			3	4	5	6	8	9
Capacity index	Capacity index		80	100	125	150	200	215
		50%*1	40	50	62.5	75	100	107.5
Total capacity index		80%*2	64	80	100	120	160	172
of connectable	Combination (%)	100%	80	100	125	150	200	215
indoor units	(/-/	130%	104	130	162.5	195	260	280
Maximum number of connectable indoor units		5	6	8	9	13	14	

Note: \*1. When only VRV indoor units are connected, connection ratio must be 50% to 130%.

\*2. When a mixed combination of VRV and residential indoor units is connected or when only residential indoor units are connected, connection ratio must be 80% to 130%.

# **Option List**

# **VRV** Indoor Units

### **Ceiling Mounted Cassette (Round Flow with Sensing) Type**

No.	Item		Туре	FXFQ25S	FXFQ32S	FXFQ40S	FXFQ50S	FXFQ63S	FXFQ80S	FXFQ100S	FXFQ125S
1	Decoration panel						BYCQ1	25B-W1			
2	Sealing material of air	discharge outlet		KDBHQ55B140							
3	Panel spacer			KDBP55H160FA							
		High efficiency	filter unit 65%		KAFP556B80					KAFP5	56B160
		High efficiency	High efficiency filter unit 90%			KAFP5	57B80			KAFP5	57B160
	4 Filter related	Replacement hig	h efficiency filter 65%			KAFP5	52B80			KAFP552B160	
1		Replacement hig	Replacement high efficiency filter 90%		KAFP553B80						53B160
4		Filter chamber		KDDFP55B160							
		Long life replac	Long life replacement filter		KAFP551K160						
		Ultra long-life f	Ultra long-life filter		KAFP55B160						
		Replacement u	ıltra long-life filter	KAFP55H160H							
		Chamber type	Without T joint-pipe and fan				KDDQ!	55B140			
5	Fresh air intake kit	Chamber type	With T joint-pipe without fan				KDDP5	5B160K			
		Direct installation type		KDDP55X160							
6	Branch duct chamber			KDJP55B80 KDJP55					5B160		
7	Insulation kit for high h	umidity		KDTP55K80 KDTP55K160					5K160		

#### **Ceiling Mounted Cassette (Round Flow) Type**

No.	Item		Туре	FXFQ25LU	FXFQ32LU	FXFQ40LU	FXFQ50LU	FXFQ63LU	FXFQ80LU	FXFQ100LU	FXFQ125LU
1	Decoration panel						BYCP1	25K-W1			
2	Sealing material of air of	lischarge outlet		KDBH55K160F							
3	Panel spacer			KDBP55H160FA							
		High efficiency	filter unit 65%			KAFPS	556B80			KAFP5	56B160
		High efficiency	filter unit 90%			KAFPS	557B80			KAFP5	57B160
		Replacement high efficiency filter 65				KAFPS	552B80			KAFP5	52B160
4	4 Filler related	Replacement hig	Replacement high efficiency filter 90%		KAFP553B80						53B160
-		Filter chamber	Filter chamber		KDDFP55B160						
		Long life replac	cement filter		KAFP551K160						
		Ultra long-life f	ilter	KAFP55B160							
		Replacement u	Itra long-life filter				KAFP5	5H160H			
		Chamber type	Without T joint-pipe and fan				KDDP:	55B160			
5	Fresh air intake kit	Chamber type	With T joint-pipe without fan				KDDP5	5B160K			
		Direct installati	on type	KDDP55X160							
6	Branch duct chamber			KDJP55B80 KDJP55B1						5B160	
7	Chamber connection kit			KKSJ55KA160							
8	Insulation kit for high hu	umidity		KDTP55K80 KDTP55K160					5K160		

#### **Ceiling Mounted Cassette (Compact Multi Flow) Type**

No.	Item	Туре	FXZQ20M	FXZQ25M	FXZQ32M	FXZQ40M	FXZQ50M		
1	Decoration panel		BYFQ60B3W1						
2	Sealing material of air dischar	ge outlet	KDBH44BA60						
3	Panel spacer				KDBQ44BA60A				
4	Replacement long-life filter				KAFQ441BA60				
5	Fresh air intake kit	Direct installation type	KDDO44XA60						

#### **4-Way Flow Ceiling Suspended Type**

No.	Item Type	FXUQ71A	FXUQ100A
1	Sealing material of air discharge outlet	KDBHP	49B140
2	Decoration panel for air discharge	KDBTP	49B140
3	Replacement long-life filter	KAFP5	51K160

#### **Ceiling Mounted Cassette (Double Flow) Type**

No.	Item		Туре	FXCQ20M FXCQ25M FXCQ32M	FXCQ40M	FXCQ50M	FXCQ63M	FXCQ80M	FXCQ125M
1	Decoration panel			BYBC32G-W1	BYBC50G-W1		BYBC63G-W1	BYBC125G-W1	
		High efficiency filter 65% ★1		KAFJ532G36	KAFJ5	32G56	KAFJ532G80	KAFJ50	32G160
2	Filter related	High efficiency filter 90% ★1		KAFJ533G36	KAFJ533G56		KAFJ533G80	KAFJ5	33G160
2	I liter related	Filter chamber		KDDFJ53G36	KDDFJ	153G56	KDDFJ53G80	KDDFJ53G160	
	Long life replacement filter			KAFJ531G36	KAFJ531G56		KAFJ531G80	KAFJ50	31G160
Note: ★1 Filter chamber is required if installing high efficiency filter.									

No.	Item	Туре	FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA			
-1	Danel veleted	Decoration panel		BYK45FJW1					
'	Panel related	Panel spacer		KPBJ52F80W					
		Long life replacement filter		KAFJ521F56		KAFJ521F80			
2	Air inlet and air	Air discharge grille		K-HV7AW		K-HV9AW			
2	discharge outlet related	Air discharge blind panel		KDBJ52F56W		KDBJ52F80W			
		Flexible duct (with shutter)		KFDJ52FA80					

#### **Slim Ceiling Mounted Duct Type**

**Ceiling Mounted Cassette Corner Type** 

No.	Item Type	FXDQ20PB	FXDQ25PB	FXDQ32PB	FXDQ40NB	FXDQ50NB	FXDQ63NB
1	Insulation kit for high humidity		KDT25N32		KDT2	25N50	KDT25N63

#### **Middle Static Pressure Ceiling Mounted Duct Type**

No.	Type		FXSQ20P FXSQ25P FXSQ32P	FXSQ40P	FXSQ50P FXSQ63P FXSQ80P	FXSQ100P FXSQ125P	FXSQ140P
-1	High efficiency filter *1	65%	KAFP632B36	KAFP632B56	KAFP632B80	KAFP632B160	KAF632B160B
'	night eniciency filter i	90%	KAFP633B36	KAFP633B56	KAFP633B80	KAFP633B160	KAF633B160B
2	Filter chamber (for rear suct	ion) *1	KDDFP63B36	KDDFP63B56	KDDFP63B80	KDDFP63B160	KDDF63B160B
3	Long-life filter *1		KAFP631B36	KAFP631B56	KAFP631B80	KAFP631B160	KAF631B160B
		White	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ2	5K160W
4	Service panel	Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ2	5K160F
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ2	5K160T
5	Air discharge adaptor Shield plate for side plate		KDAP25A36A	KDAP25A56A	KDAP25A71A	KDAP25A140A	KDAP25A160A *2
6				KDBD6	3A160		_

Note: \*1. If installing high efficiency filter and long-life filter to the unit, filter chamber is required. \*2. This option is a set of KDAP25A140A and KDBHP37A160.

### **Ceiling Mounted Duct Type**

No.	Item	Туре	FXMQ20P FXMQ25P FXMQ32P	FXMQ40P	FXMQ50P FXMQ63P FXMQ80P	FXMQ100P FXMQ125P FXMQ140P	FXMQ200MA FXMQ250MA
1	Drain pump kit			-	_		KDU30L250VE
2	High efficiency filter	65%	KAF372AA36	KAF372AA56	KAF372AA80	KAF372AA160	KAFJ372L280
2	nigh efficiency filter	90%	KAF373AA36	KAF373AA56	KAF373AA80	KAF373AA160	KAFJ373L280
3	Filter chamber		KDDF37AA36	KDDF37AA56	KDDF37AA80	KDDF37AA160	KDJ3705L280
4	Long life replacement filter		KAF371AA36	KAF371AA56	KAF371AA80	KAF371AA160	KAFJ371L280
5	Long life filter chamber kit		KAF375AA36	KAF375AA56	KAF375AA80	KAF375AA160	
		White	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W	
6	Service panel	Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25K160F	1 –
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	1
7	Air discharge adaptor		KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A	

#### **Ceiling Suspended Type**

No.	Item Type	FXHQ32MA	FXHQ63MA	FXHQ100MA	
1	Drain pump kit	KDU50N60VE	KDU50N125VE		
2	Replacement long-life filter (Resin net)	KAF501DA56	KAF501DA80	KAF501DA112	
3	L-type piping kit (for upward direction)	KHFP5MA63	KHFP5	MA160	

#### **Wall Mounted Type**

No.	Item Type	FXAQ20P	FXAQ25P	FXAQ32P	FXAQ40P	FXAQ50P	FXAQ63P
1	Drain pump kit			K-KDU:	572EVE		

#### **Floor Standing Type**

No.	Item Type	FXLQ20MA	FXLQ25MA	FXLQ32MA	FXLQ40MA	FXLQ50MA	FXLQ63MA
1	Long life replacement filter	KAFJ3	61K28	KAFJ361K45		KAFJ3	61K71

#### **Concealed Floor Standing Type**

No.	Item Type	FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
1	Long life replacement filter	KAFJ3	61K28	KAFJ3	61K45	KAFJ3	61K71

# **Option List**

# Residential Indoor Units with Connection to BP Units

### **Slim Ceiling Mounted Duct Type**

No.	Item Type	CDXS25EAVMA C	CDXS35EAVMA	FDXS25CVMA	FDXS35CVMA	FDXS50CVMA	FDXS60CVMA	
1	Insulation kit for high humidity	KDT25	N32		KDT25N50		KDT25N63	l

#### **BP** Units for connection to residential indoor units

No.	Item Type	BPMKS967A2	BPMKS967A3		
1	REFNET joint	KHRP2	26A22T		

Note: A single BP unit does not require a REFNET joint. 2 BP units require only 1 REFNET joint, and 3 BP units require only 2 REFNET joints.

# Outdoor Units

No.	Item Type	RXYMQ3AVE	RXYMQ4AVE	RXYMQ5AVE	RXYMQ6AVE	RXYMQ8AY1	RXYMQ9AY1	
1	Cool/Heat selector		KRC1	9-26A		_		
1-1	Fixing box		KJB <sup>-</sup>	111A		_		
2	REFNET header	KHRP26M22H (Max. 4 branch)						
	TIET NET Header			(Max. 8 branch)				
3	REFNET joint		KHRP2		KHRP26A22T, KHRP26A33T			
4	Central drain plug	KKPJ5G280 KKPJ5F180				KKPJ5G280		
5	Fixture for preventing overturning		KKTP5B112	KPT-60B160	KKTP5B112			
6	Wire fixture for preventing overturning	_				K-KYZP15C		

# **Option List**

# **Control Systems**

#### **Operation Control System Optional Accessories**

#### For VRV indoor unit use

No.	Item	Туре	FXFQ-S	FXFQ-LU	FXZQ-M	FXUQ-A	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB
-	Remote controller	Wireless	BRC7	BRC7F634F BRC7E530W BRC7CB58 BRC4C62 BRC4C61					BRC4C65
1	Tiernote controller	Wired		BRC1C62					
2	Navigation remote controller (Wired remote controller				E	BRC1E62 Note	7		
3	Simplified remote controller (Exposed type)					_			BRC2C51
4	Remote controller for hotel use (Concealed type)					_			BRC3A61
5	Adaptor for wiring		★KRP	1C63	<b>★KRP1BA57</b>	_	★KRP1B61	KRP1B61	★KRP1B56
6-1	Wiring adaptor for ele	ectrical appendices (1)	★KRF	2A62	★KRP2A62	_	★KRP2A61	KRP2A61	★KRP2A53
6-2	Wiring adaptor for ele	ectrical appendices (2)	*KRP	4AA53	<b>★KRP4AA53</b>	<b>★</b> KRP4AA53	★KRP4AA51	KRP4AA51	★KRP4A54
7	Remote sensor (for in	ndoor temperature)	KRCS	01-4B	KRCS01-1B	KRCS01-4B		KRCS01-1B	
8	Installation box for adaptor PCB ☆		Note 2 KRP	, з 1H98	Note 4, 6 KRP1BA101	KRP1BA97	Note 2, 3 KRP1B96	_	Note 4, 6 KRP1BA101
9	External control adaptor for outdoor unit		★ DTA1	04A62	<b>★</b> DTA104A62	_	<b>★</b> DTA104A61	DTA104A61	<b>★</b> DTA104A53
10	Adaptor for multi tenant		<b>★</b> DTA1	14A61	_				

No.	Item			FXMQ-P	FXMQ-MA	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA
4	Remote controller	Wireless	BRC4	1C65	BRC4C62	BRC7EA63W	BRC7EA618	BRC4C62
'	nemote controller	Wired			BRC	1C62		
2	Navigation remote controll	er (Wired remote controller)			BRC1E	62 Note 7		
3	Simplified remote cor	ntroller (Exposed type)	BRC2	2C51	BRC2C51		_	BRC2C51
4	Remote controller for ho	otel use (Concealed type)	BRC3	3A61	BRC3A61	_		BRC3A61
5	Adaptor for wiring		★KRP1C64		KRP1B61	KRP1BA54	_	KRP1B61
6-1	Wiring adaptor for ele	ectrical appendices (1)	★KRP2A61		KRP2A61	★KRP2A62	★ KRP2A61	KRP2A61
6-2	Wiring adaptor for ele	ectrical appendices (2)	★KRP4AA51		KRP4AA51	★ KRP4AA52	★ KRP4AA51	KRP4AA51
7	Remote sensor (for in	ndoor temperature)	KRCS	01-4B			KRCS01-1B	
8	Installation box for adaptor PCB☆		Note 2, 3 KRP4A98	Note 2, 3 KRP4A96	_	Note 3 KRP1CA93	Note 2, 3 KRP4AA93	_
9	External control adap	otor for outdoor unit	★ DTA104A61		DTA104A61	★DTA104A62	★DTA104A61	DTA104A61
10	Adaptor for multi tena	daptor for multi tenant		14A61	_	_	<b>★</b> DTA114A61	_

Note: 1. Installation box☆is necessary for each adaptor marked ★.

2. Up to 2 adaptors can be fixed for each installation box.

- Only one installation box can be installed for each indoor unit.
   Up to 2 installation boxes can be installed for each indoor unit.
- 5. Installation box☆is necessary for second adaptor.
  6. Installation box☆is necessary for each adaptor.
- Available functions depend on the type of indoor unit.

#### For residential indoor unit use

No.	Item	Туре	CDXS-EA FDXS-C	FTXS-D,E,F				
1	Remote controller	Wireless type	— Note 1					
2		lock/remote controller Note 2 ntact/normal open contact	KRP41	13AB1S				
3	Remote controller los	ss prevention chain	KKF917A4	KKF917A4				
4	Interface adaptor for	DIII-NET use	KRP928BB2S					

Note: 1. A wireless remote controller is a standard accessory.

2. Time clock and other devices should be obtained locally.

#### **System Configuration**

No.	Item	Туре	Model No.	Function			
1	Residential central remote	controller	Note 2 DCS303A51	<ul> <li>Up to 16 groups of indoor units (128 units) can be easily controlled using the large LCD panel. ON/OFF, temperature settings and scheduling can be controlled individually for indoor units.</li> </ul>			
2	Central remote controller		DCS302CA61	• Up to 64 groups of indoor units(128 units) can be connected, and ON/OFF,			
2-1	Electrical box with earth te	erminal (3 blocks)	KJB311AA	temperature setting and monitoring can be accomplished individually or simultaneously. Connectable up to 2 controllers in one system.			
3	Unified ON/OFF controller		DCS301BA61	• Up to 16 groups of indoor units(128 units) can be turned, ON/OFF individually or			
3-1	Electrical box with earth te	erminal (2 blocks)	KJB212AA	simultaneously, and operation and malfunction can be displayed. Can be used in			
3-2	Noise filter (for electromagnetic	interface use only)	KEK26-1A	combination with up to 8 controllers.			
4	Schedule timer		DST301BA61	<ul> <li>Programmed time weekly schedule can be controlled by unified control for up t 64 groups of indoor units (128 units). Can turn units ON/OFF twice per day.</li> </ul>			
5	5-room centralised controller for residential indoor units	For C(F)DXS, FTXS	Note 3 KRC72A	Up to 5 indoor units can be controlled. This is a low cost system which can only control ON/OFF.			
6	Interface adaptor for resid	ential indoor units	KRP928BB2S	Adaptors required to connect products other than those of the VRV System to the			
7	Interface adaptor for SkyA	ir-series	Note 4 ★DTA112BA51	high-speed DIII-NET communication system adopted for the VRV System.  * To use any of the above optional controllers, an appropriate adaptor must be			
8	Central control adaptor kit For	UAT(Y)-K(A),FD-K	<b>★</b> DTA107A55	installed on the product unit to be controlled.			
9	Wiring adaptor for other ai	r-conditioner	<b>★</b> DTA103A51	instance on the product will to be controlled.			
10	DIII-NET Expander Adaptor		DTA109A51	Up to 1024 units can be centrally controlled in 64 different groups. Wiring restrictions (max. length: 1,000m, total wiring length: 2,000m, max. number of branches: 16) apply to each adaptor.			
10-1	Mounting plate		KRP4A92	Fixing plate for DTA109A51			

Note: 1. Installation box for ★ adaptor must be obtained locally.

- For residential use only. Cannot be used with other centralised control equipment.
   A wiring adaptor (KRP413AB1S) is also required for each indoor unit.
   No adaptor is required for some indoor units.

#### **Building Management System**

No.		It	tem		Model No.	Function
1	intelligent Touch	Basic	Hardware	intelligent Touch Controller	DCS601C51	Air-Conditioning management system that can be controlled by a compact all-in-one unit.
1-1	Controller	Option Hardware		DIII-NET plus adaptor	DCS601A52	Additional 64 groups (10 outdoor units) is possible.
1-2	Electrical box with	h earth te	erminal (4 b	locks)	KJB411A	Wall embedded switch box.
2		Basic	Hardware	intelligent Touch Manager	DCM601A51	Air-conditioning management system that can be controlled by touch screen.
2-1			Hardware	iTM plus adaptor	DCM601A52	<ul> <li>Additional 64 groups (10 outdoor units) is possible.</li> <li>Max. 7 iTM plus adaptors can be connected to intelligent Touch Manager.</li> </ul>
2-2	intelligent Touch Manager	Option		iTM power proportional distribution	DCM002A51	<ul> <li>Power consumption of indoor units are calculated based on operation status of the indoor unit and outdoor unit power consumption measured by kWh metre.</li> </ul>
2-3			Software	iTM energy navigator	DCM008A51	Building energy consumption is visualised.     Wasted air-conditioning energy can be found out.
2-4				BACnet client	DCM009A51	BACnet equipment can be managed by intelligent Touch Manager.
2-5				HTTP Interface	DCM007A51	Interface for intelligent Touch Manager by HTTP
2-6	Di unit				DEC101A51	8 pairs based on a pair of ON/OFF input and abnormality input.
2-7	Dio unit				DEC102A51	4 pairs based on a pair of ON/OFF input and abnormality input.
3		*1 Interfa	ace for use	in BACnet®	DMS502B51	<ul> <li>Interface unit to allow communications between VRV and BMS.</li> <li>Operation and monitoring of air-conditioning systems through BACnet® communication.</li> </ul>
3-1					DAM411B51	Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently.
3-2	Communication				DAM412B51	Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.
4	interface			in LONWORKS®	DMS504B51	<ul> <li>Interface unit to allow communications between VRV and BMS.</li> <li>Operation and monitoring of air-conditioning systems through LonWorks® communication.</li> </ul>
5				DTA116A51	Use of the Modbus protocol enables the connection of the VRV system with a variety of home automation systems from other manufacturers.	
6	Contact/ analogue signal	Unificati	ion adaptor	for computerised	<b>★</b> DCS302A52	Interface between the central monitoring board and central control units.

Note: \*1. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
\*2. LonWorks® is a trademark of Echelon Corporation registered in the United States and other countries.

- \*3. Installation box for  $\star$  adaptor must be obtained locally.

# Individual Control Systems for VRV Indoor Units

#### Navigation remote controller (Wired remote controller) (Option)

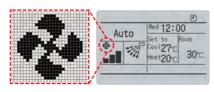


BRC1E62

#### **Clear display**

#### Dot matrix display

- · A combination of fine dots enables various icons. Large text display is easy to see.
- Backlight display
- · Backlight display helps operating in dark rooms.



#### Simple operation

#### Large buttons and arrow keys

· Large buttons and arrow keys enable easy operation. Basic setting such as fan speed and temperature can be intuitively operated. For other settings just select the function from the menu list.





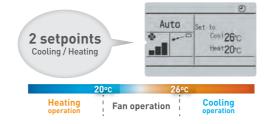
#### Guide on display

· The display gives an explanation of each setting for easy operation.

#### **Energy saving**

#### Auto operation mode

· Until now only the temperature for one point could be set, but now the new remote controller (BRC1E62) allows the setting of both Cooling and Heating, and with the fan operation, mid-range temperatures are comfortable and operation is more energy efficient.



#### Setpoint range set

- · Saves energy by limiting the min. and max. set temperature.
- · Avoids excessive cooling or heating.
- · This function is convenient when the remote controller is installed at a place where any number of people may operate it.



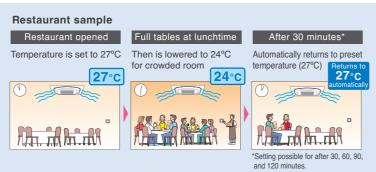
#### Off timer

- · Turns off the air conditioner after a preset period of time.
- · Period can be preset from 30 to 180 minutes in 10-minute increments.

#### Setpoint auto reset

- · Even if the set temperature is changed, it returns to the preset temperature after a preset period of
- Period selectable from 30 min/60 min/90 min/120





#### Convenience

#### Setback (default:OFF)

Maintains the room temperature in a specific range during unoccupied period by temporarily starting air conditioner that was turned OFF.

Ex) Setback temperature Cooling : 35°C Recovery differential Cooling : -2°C When the room temperature goes above 35°C, the air conditioner starts operating in Cooling automatically. When room temperature reaches 33°C, the air conditioner returns OFF.

#### temperature differential Cooling 33 — 37°C -2 -8°C +2 - +8°C

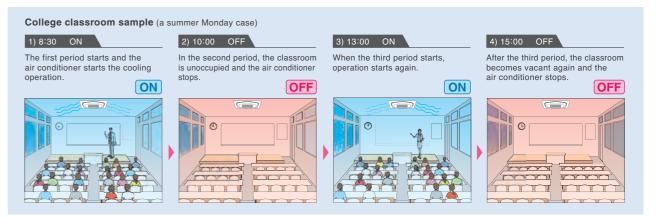
Setback

#### Weekly schedule

- · 5 actions per day can be scheduled for each day of the week.
- · The holiday function will disable schedule timer for the days that have been set as holiday.
- · 3 independent schedules can be set. (e.g. summer, winter, mid-season)



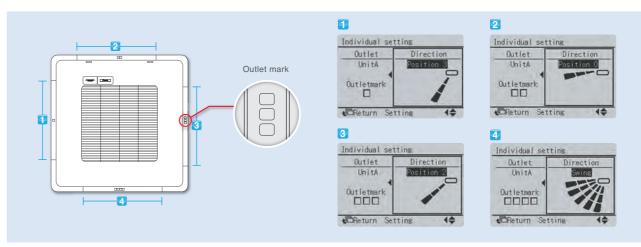
Recovery



#### Comfort

#### •Individual airflow direction (\*1)

Airflow direction of each of the four air outlets can be controlled individually. (Positions 0 to 4, Swing, and No individual setting are selectable.)



#### Auto airflow rate (\*2)

Airflow rate is automatically controlled in accordance with the difference between room temperature and set temperature.

- \*1 Only available for VRV 4-Way Flow Ceiling Suspended type FXUQ-A series and Ceiling Mounted Cassette (Round Flow with Sensing) type FXFQ-S series.
  \*2 Only available for VRV 4-Way Flow Ceiling Suspended type FXUQ-A series, Ceiling Mounted Cassette (Round Flow with Sensing) type FXFQ-S series and Middle Static Pressure Ceiling Mounted Duct type FXSQ-P series.

# Individual Control Systems for VRV Indoor Units

#### Wired remote controller (Option)



• Displays current airflow, swing, temperature, operating mode and timer settings.

\* Individual airflow direction, auto airflow rate and sensing sensor control can be set only via wired remote controller BRC1E62. Cannot be set via other remote controllers.

BRC1C62

#### The wired remote controller supports a wide range of control functions Control of Cool/Heat In all the series of VRV, Cool/Heat changeover in the same refrigerant circuit can be changed by the remote controller of the indoor unit. Group control One remote controller can control the Outdoor operation of max.16 indoor units at the related to the Remote controller Forced OFF input **Heat Reclaim** Remote controller Remote controller Remote Remote controller Remote controller 3 1 Control by two remote controller 3 Control for the combined operation 4 Expansion of system control The wiring of remote controller can be extended to max. 500 m and it is possible The system can be expanded to add several controllers, such as BMS, Forced OFF input and etc. can be controlled by the remote controller of and the other one in the control room, which can control the operation of indoor unit freely. (The last command has a priority.) Of course, the group control by two remote controller is also possible. to install the remote controllers for the the indoor unit. Of course, the remote controller can display the time to clean the different indoor units in one place

#### Wireless remote controller (Option)



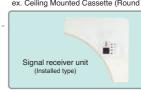
\* Refer to page 47 for the name of each model.

- The same operation modes and settings as with wired remote controllers are possible.
- \* Individual airflow direction, auto airflow rate and sensing sensor control can be set only via wired remote controller BRC1E62. Cannot be set via other remote controllers
- A compact signal receiver unit (separate type) to be mounted into a wall or ceiling is included.
- · A signal receiver unit (installed type) for a Ceiling Mounted Cassette (Round Flow, Compact Multi Flow, Double Flow) type, Ceiling Suspended type and Wall Mounted type is mounted into the indoor unit.



Signal receiver unit can be installed on the panel

ex. Ceiling Mounted Cassette (Round Flow) type



# Simplified remote controller (Option)





- The remote controller has centralised its frequently used operation selectors and switches (on/off, operation mode, temperature setting and airflow volume), making itself suitable for use in hotel rooms or conference rooms.
  - The exposed type remote controller is fitted with a thermostat sensor.

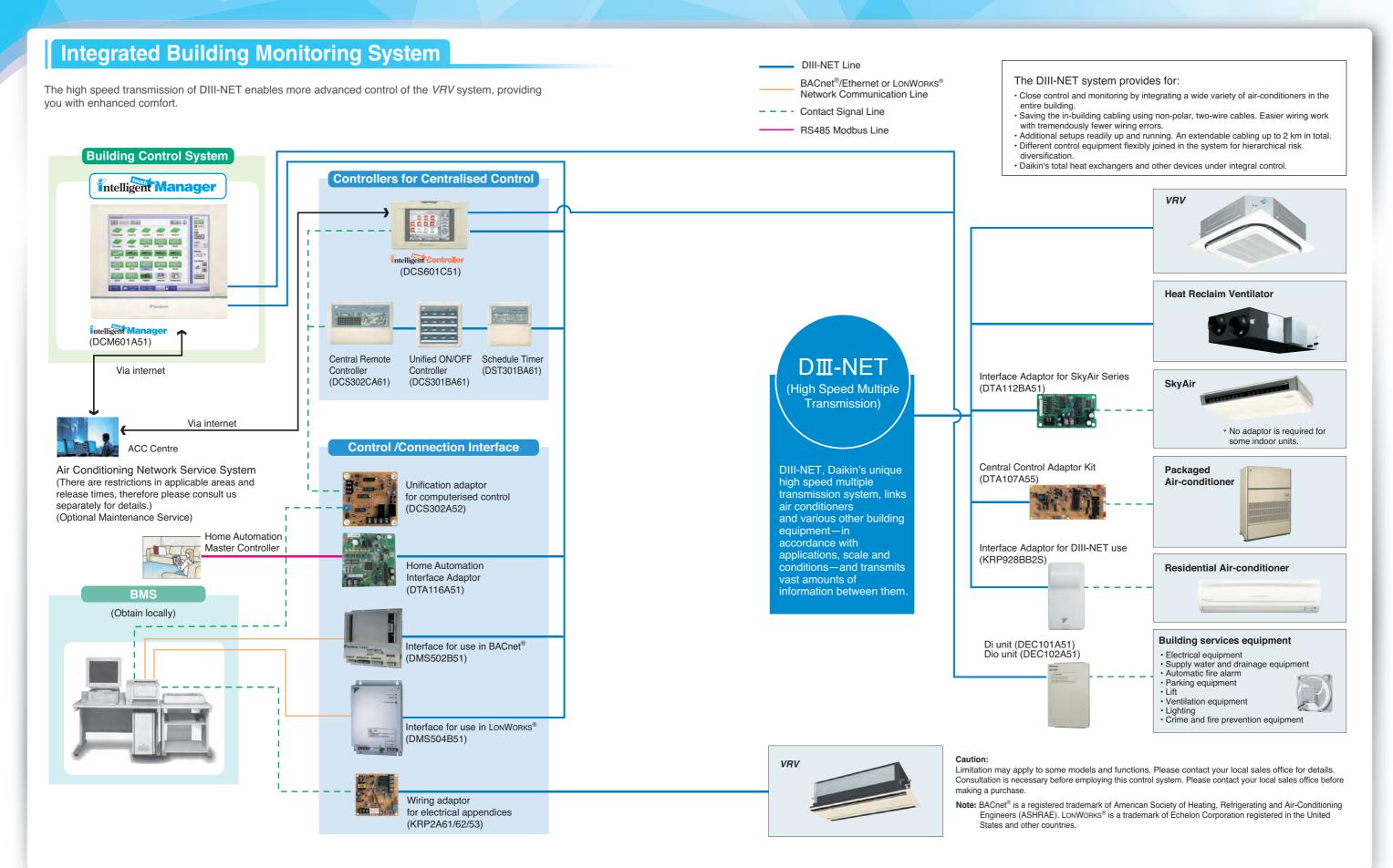


The concealed type remote controller smartly fits into a night table or console panel in a hotel room

#### Wide variation of remote controllers for VRV indoor units

	FXFQ-S	FXFQ-LU	FXZQ	FXUQ	FXCQ	FXKQ	FXDQ	FXSQ	FXMQ	FXHQ	FXAQ	FXL(N)C
Navigation remote controller (Wired remote controller) (BRC1E62)	•	•		•	•		•	•		•		•
Wired remote controller (BRC1C62)	•	•		•	•		•	•	•	•	•	•
Wireless remote controller* (Installed type signal receiver unit)	•	•	•	•	•					•	•	
Wireless remote controller* (Separate type signal receiver unit)						•	•	•	•			•
Simplified remote controller (Exposed type) (BRC2C51)							•	•	•			•
Simplified remote controller (Concealed type: for Hotel use) (BRC3A61)							•	•	•			•

\*Refer to page 47 for the name of each model



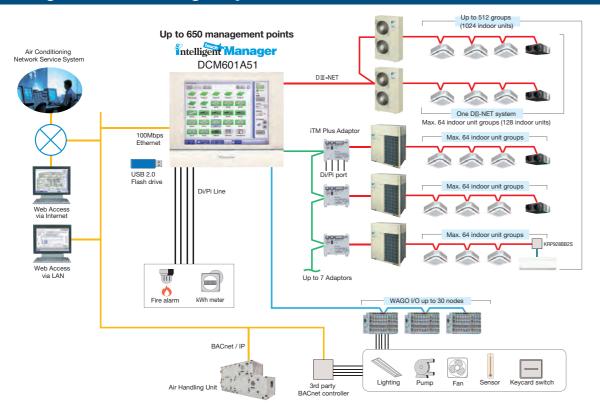
53 5-

### **Advanced Control Systems for VRV Indoor Units**

# Intelligent Manager

intelligent Touch Manager maximises the advantages of VRV features

#### intelligent Touch Manager System Overview



#### Central contro

- Handy area settings simplify detailed management of VRV system.
- Display of floor plans enables a quick search of desired air conditioning units.
- · Operation history shows manner of control and origin in past operations of air conditioning units.

#### ■ Remote access

- Remote access with a PC allows total air conditioning management using the same type of screens as those displayed in the *intelligent Touch Manager*.
- · Authorised users can centrally control individual air conditioning units from their own computers.

#### ■ Automatic control

- VRV systems are controlled automatically throughout the year by the schedule function.
- Interlocking *VRV* system and other equipment enables easy automation of building facilities operation.
- Setback adjusts temperature settings even when rooms are unoccupied.

#### ■ Energy management

• The Energy Navigator feature simplifies energy management by tracking energy consumption data and identifying inefficient operation.

#### **■** Troubleshooting

- Contact information of maintenance contractors can be registered and displayed.
- E-mails are sent automatically to alert of malfunctions and potential trouble.
- The intelligent Touch Manager can link to the Air Conditioning Network Service System for 24-hour monitoring of operating conditions and status.

#### ■ Scalability

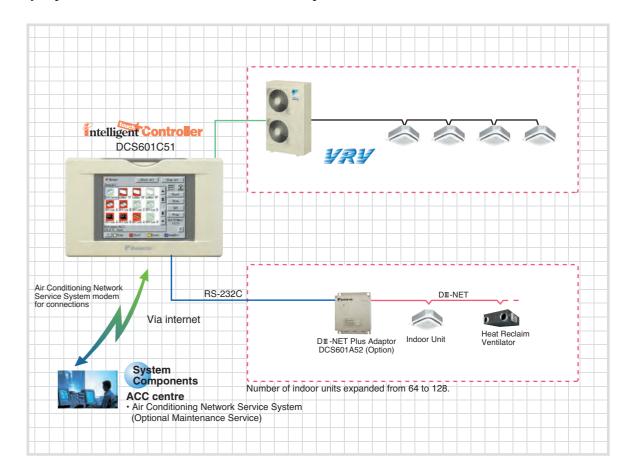
• A single intelligent Touch Manager can manage a small building or be expanded to handle medium- to large-sized buildings.

#### ■ Connectivity

- · BACnet connection with a wide range of building equipment.
- · WAGO Ao and Pi are newly supported and connectable WAGO modules are added.

# ntelligent Controller

Communication functions in the user-friendly icon-based multilingual controller simplify centralised control of the *VRV* system.



#### **Features**

- ■Colour LCD touch panel icon display
- ■Small manageable size
- ■Simplified engineering
- ■Multi language

(English, French, Italian, German, Spanish, Dutch, Portuguese, Chinese and Korean)

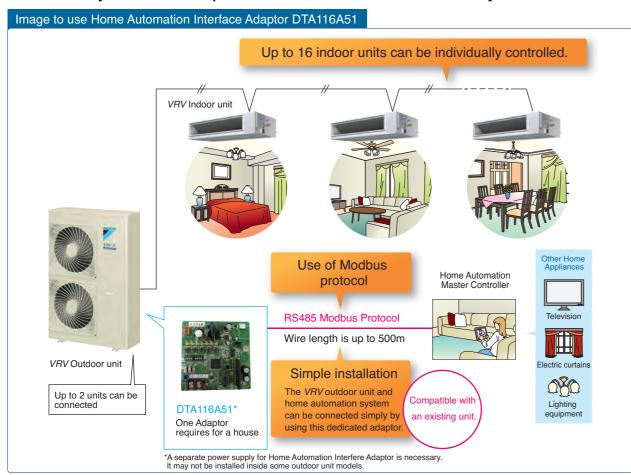
- ■Yearly schedule
- ■Auto heat/cool change-over
- ■Temperature limitation
- ■Enhanced history function
- ■Simple Interlock Function
- ■Built-in modem for connecting to Air Conditioning Network Service System (Option)
- ■Doubling of number of connectable indoor units by adding a DII-NET Plus Adaptor (Option)



# Advanced Control Systems for VRV Indoor Units

Home Automation Interface Adaptor

The VRV system can be operated from the home automation system.



#### **Functions**

#### Monitor

On/Off	On/Off status of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Setpoint of indoor units
Room temperature	Suction temperature of indoor units
Fan direction	Swing, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Forced off status	Forced off status of indoor units
Error	Malfunction, Warning with Error code
Filter sign	Filter sign of indoor units
Communication status	Communication normal/error of indoor units
Control	
0 10"	0.00

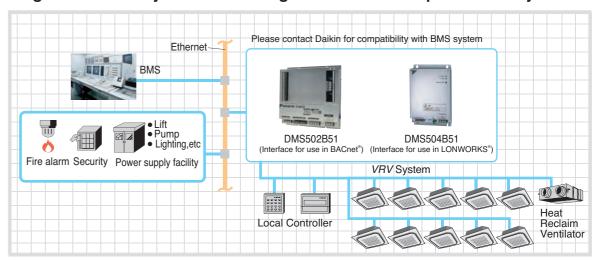
On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Cooling/Heating setpoint
Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Filter sign reset	Reset filter sign of indoor units

#### Retrieve system information

Connected indoor units	DⅢ-NET address of connected indoor units can be retrieved.
Indoor unit capabilities	Indoor unit capabilities such as operation mode, fan control, setpoint HV can be retrieved.

Interface for BACnet® and LONWORKS®

#### Integrated control systems that recognise the trend of open control systems



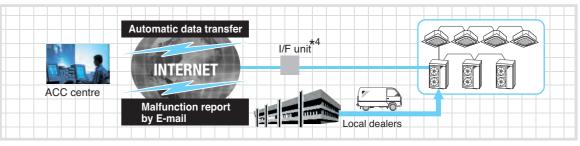
■Compatibility with BMS enhanced by utilising the international communication standards, BACnet® or LONWORKS®.

#### DMS502B51 Interface for use in BACnet®

- ■Support for Heat Reclaim Ventilator VAM series
- ■Selectable temperature unit
- ■BTL Certification
- ■PPD data (Optional Di board is required.)
- ■ISO 16484-5 (Does not support IEEE 802.3 protocol for BACnet®)
- ■Up to 40 outdoor units and 256 indoor unit groups on one gateway (optional adaptor)

#### DMS504B51 Interface for use in LONWORKS®

- ■XIF file for confirming of specifications of the units.
- ■Connectable up to 10 outdoor units and 64 indoor unit groups.
- Air Conditioning Network Service System
   Maintenance services that boost profits and customer satisfaction

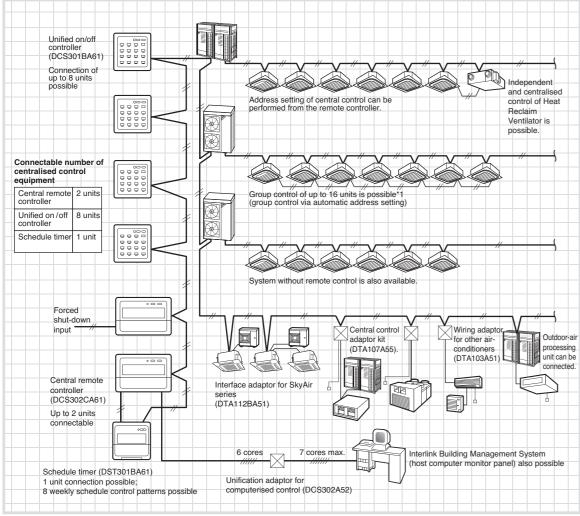


- ■24 hour on-line diagnostic system
- ■Energy saving and extension of aircon operating life
- ■Maintenance management via A/C network service system reports
- ■Reliable service at shortest lead time
- \*1. Model name varies upon the system size.
- \*2. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
- \*3. LonWorks® is a trademark of Echelon Corporation registered in the United States and other countries.
- \*4. For an I/F unit, one of the following can be selected: *Local Controller*, intelligent Touch Controller, or intelligent Touch Manager.

\*5. Refer to the Options page for the name of each model.

# **Centralised Control Systems for VRV Indoor Units**

- ■Up to 64 groups of indoor units (128 units) can be centrally controlled.
- ■Optional controllers for centralised control can be combined freely, and system can be designed in accordance with building scale and purpose
- ■System integration with various air-conditioning peripheral equipment such as Heat Reclaim Ventilator is easy.
- ■Wiring can be run up to a total length of 2 km, and adapts easily to large-scale system expansion.



- ★ 1. Refer to page 42 for the total number of indoor units that can be connected to the outdoor unit.
- · Certain indoor units limit the functions of some control systems

For more details, please refer to the Engineering Data.

#### Residential central remote controller\* (Option)



DCS303A51

#### Max. 16 groups of indoor units can be easily controlled with the large LCD panel.

- ■Max. 16 groups (128 indoor units) controllable
- ■Backlight and large LCD panel for easy readability
- ■ON/OFF, temperature settings and scheduling can be controlled individually for indoor
- ■All indoor units can be turned on or off at once with "ALL" button.
- ■Each group has a dedicated button for convenience.
- ■Outside temperature display
- \* For residential use only. Cannot be used with other centralised control equipment.

#### Central remote controller (Option)



DCS302CA61

- Max. 64 groups (zones) of indoor units can be controlled individually same as LCD Remote controller.
- ■Max. 64 groups (128 indoor units) controllable
- ■Max. 128 groups (128 indoor units) are controllable by using 2 central remote controllers, which can control from 2 different places.
- ■Zone control
- ■Malfunction code display
- ■Max. wiring length 1,000 m (Total: 2,000 m)
- ■Connectable with Unified ON/OFF controller, schedule timer and BMS system
- ■Airflow volume and direction can be controlled individually for indoor units in each group
- ■Ventilation volume and mode can be controlled for Heat Reclaim Ventilator.
- ■Up to 4 ON/OFF pairs can be set per day by connecting a schedule timer.

#### Unified ON/OFF controller (Option)



DCS301BA61

- Max. 16 groups of indoor units can be operated simultaneously/individually.
- ■Max. 16 groups (128 indoor units) controllable
- ■2 remote controllers can be used to control from 2 different places.
- ■Operating status indication (Normal operation, Alarm)
- ■Centralised control indication
- ■Max. wiring length 1,000 m (Total: 2,000 m)
- ■Compact size casing (Thickness: 16 mm)
- ■Connectable with Central Remote controller, Schedule timer and BMS system

#### Schedule timer (Option)



DST301BA61

#### Max. 128 indoor units can be operated as programmed schedule.

- ■Max. 128 indoor units controllable
- ■When used in combination with a central remote controller, a maximum of 8 weekly schedule patterns can be set, while the central controller can be used to select desired zones. Up to 2 ON/OFF pairs can be set per day.
- ■Max. 48 hours back up power supply
- ■Max. wiring length 1,000 m (Total: 2,000 m)
- ■Compact size casing (Thickness: 16 mm)
- ■Connectable with Central Remote controller, Unified ON/OFF controller and BMS

# **Air Treatment Equipment Lineup**

### **Heat Reclaim Ventilator — VAM series**

The Heat Reclaim Ventilator Creates a High-Quality Environment by Interlocking with the Air Conditioner

VAM150GJVE, VAM250GJVE, VAM350GJVE, VAM500GJVE, VAM650GJVE, VAM800GJVE, VAM1000GJVE, VAM1500GJVE, VAM2000GJVE

Improved Enthalpy Efficiency\* Higher External Static Pressure\* **Enhanced Energy Saving Functions** 

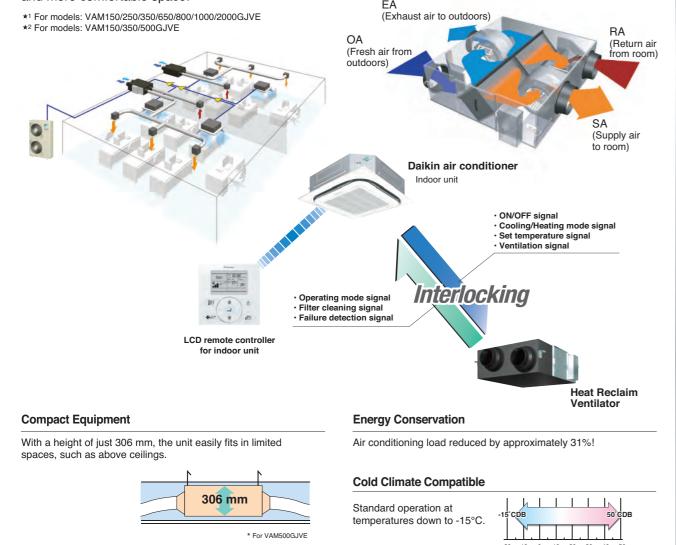




Heat Reclaim Ventilator remote controller BRC301B61 (Option)

\* This remote controller is used in case of independent operation of Heat Reclaim Ventilator

This VAM series provides higher enthalpy efficiency \*1, due to the greatly enhanced performance of the thin film element. Furthermore, improved external static pressure \*2 offers more flexibility for installation. Along with these three outstanding improvements, the nighttime free cooling operation contributes to energy conservation and more comfortable space.



### Air conditioning load reduced by approximately 31%!

#### Total heat exchange ventilation

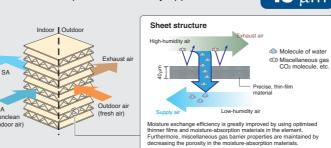
This unit recovers heat energy lost through ventilation and curbs room temperature changes caused by ventilation, thereby conserving energy and reducing the load on the air conditioning

#### Enthalpy efficiency drastically improved by employing thin film element! (VAM-GJ model)

Due to the thinner film...

- •Decreases the moisture resistance of the partition sheets drastically. •Realises more space for extra layers in the element,
- resulting in increased effective area that supply and exhaust air can be exposed to.

Moisture absorption increased by approx. 10%!



#### **Auto-ventilation Mode Changeover Switching**

Automatically switches the ventilation mode (Total Heat Exchange Mode/Bypass Mode) according to the operating status of the air conditioner.



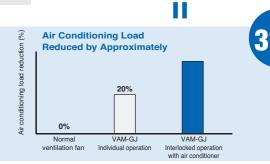
#### Pre-cool, **Pre-heat Control**

Reduces air conditioning load by not running the Heat Reclaim Ventilator while air is still clean soon after the air conditioner is turned ON.

- · The air conditioning load reduction values may vary according to weather and other environmental conditions at the location of the machine's installation.
- · The air conditioning load reduction values are based on the following conditions; Application: Tokyo office building
- Building form: 6 floors above ground, 2 floors underground, floor area 2,100 m<sup>2</sup> Personnel density: 0.25 person/m Ventilation volume: 25 m3/h

Indoor air conditioning level: summer 25°C 50% RH, intermediate seasons 24°C 50% RH. winter 22°C 40% RH

Operating time: 2745 hours (9 hours per day, approx. 25 days per month) Calculation method: simulation based on "MICRO-HASP/1982" of the Japan Building Mechanical and Electrical Engineers Association



### Nighttime free cooling operation\*1

Nighttime free cooling operation is an energy-conserving function that works at night when air conditioners are off. By ventilating rooms containing office equipment that raises the room

temperature, nighttime free cooling operation reduces the cooling load when air conditioners are turned on in the morning. It also alleviates feelings of discomfort in the morning caused by heat accumulated during the night.

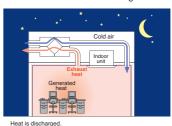
•Nighttime free cooling operation only works to cool and if connected to Building Multi or VRV systems.

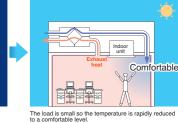
Nighttime free cooling operation is set to "off" in the factory settings, so if you wish to use it, request your dealer to turn it on.

- \*1 This function can be operated only when interlocked with air conditioners \*2 Value is based on the following conditions:
- Cooling operation performed from April to October Calculated for air conditioning sensible heat load only
- (latent heat load not included).

The indoor accumulated heat is discharged at night.

This reduces the air conditioning load the next day thereby increasing efficiency





Comfortable

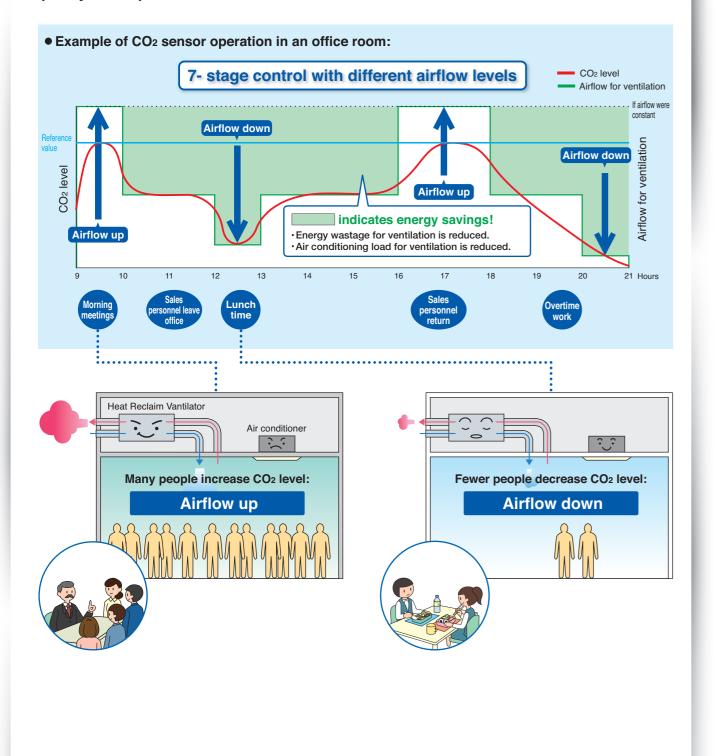
approx. **5**%

# **Air Treatment Equipment Lineup**

# Heat Reclaim Ventilator — VAM series

■ CO<sub>2</sub> Sensor Optional Kit Connection

The CO<sub>2</sub> sensor controls airflow so that it best matches the changes in CO<sub>2</sub> level. This prevents energy losses from over-ventilation while maintaining indoor air quality with optional CO2 sensor.



### **Specifications**

	MODEL			VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
Power Su	nnly						1-nhase 220	)-240 V/220 V,	50 Hz/60 Hz			
. 01101 04	PP-)	Ultra-High		79	75	79	74	75	72	78	72	77
Temp. Exc	hange	High	%	79	75	79	74	75	72	78	72	77
Efficiency		Low		84	79	82	80	77	74	80.5	75.5	79
		Ultra-High		72	71	70	67	67.5	65	70	65	72
	For Heating	High	%	72	71	70	67	67.5	65	70	65	72
Enthalpy		Low		76	74	77	74	71.5	67.5	72.5	67	75
Exchange Efficiency		Ultra-High		66	63	66	55	61	61	64	61	62
Liliciericy	For Cooling	High	%	66	63	66	55	61	61	64	61	62
		Low		70	66	70	59	64	64	68.5	64	66
	Heat	Ultra-High	Jltra-High	125	137	200	248	342	599	635	1,145	1,289
	Exchange	High W	111	120	182	225	300	517	567	991	1,151	
Power	Mode	Low		57	60	122	128	196	435	476	835	966
Consumptio		Ultra-High	Ultra-High	125	137	200	248	342	599	635	1,145	1,289
	Bypass Mode	High	w	111	120	182	225	300	517	567	991	1,151
	IVIOGE	Low		57	60	122	128	196	435	476	835	966
	Heat	Ultra-High		27-28.5	27-29	31.5-33	33-35.5	34-36	39-40.5	39.5-41.5	39.5-41.5	41.5-43.5
	Exchange	High	dB(A)	26-27.5	26-27.5	30-31.5	31.5-34	33-34.5	37-39.5	37.5-39.5	37.5-39.5	39-43
0	Mode	Low		20.5-21.5	21-22	23-25	25-28.5	27.5-29.5	35-37.5	35-37.5	35-37.5	36-39
Sound Leve	Bypass Mode	Ultra-High	ligh	28.5-29.5	28.5-30.5	33-34.5	34.5-36	35-37.5	40.5-42	40.5-42.5	41-43	43-45.5
		High dB(A	dB(A)	27.5-28.5	27.5-29	31.5-33	33-34.5	33-35.5	38.5-40	38.5-40.5	39.5-41	40.5-45
		Low		22.5-23.5	22.5-23	24.5-26.5	25.5-28.5	27.5-30.5	36-38.5	36-38.5	36.5-38	37.5-39.5
Casing					Galvanised steel plate							
Insulation	Material						Self-extingu	ishable polyur	ethane foam			
Dimension	ns (HXWXD)		mm	278×81	10×551	306×87	79×800	338×973×832	387×1,111×832	387×1,111×1,214	785×1,619×832	785×1,619×1,214
Machine V	Veigh		kg	2	4	3	2	45	55	67	129	157
Heat Exch	ange System	1				Air to air cros	ss flow total he	eat (Sensible h	eat + latent he	at) exchange		
Heat Exch	ange Elemer	nt Mate	rial				Specially prod	cessed nonflar	nmable paper			
Air Filter							Multidire	ectional fibrous	fleeces			
Тур	е							Sirocco fan				
		Ultra-High		150	250	350	500	650	800	1,000	1,500	2,000
Airf	low Rate	High	m <sup>3</sup> /h	150	250	350	500	650	800	1,000	1,500	2,000
Fan -		Low		100	155	230	320	500	700	860	1,320	1,720
	ornal Ctatio	Ultra-High		120	70	169	105	85	133	168	112	116
	ernal Static ssure	High	Pa	106	54	141	66	53	92	110	73	58
		Low		56	24	67	32	35	72	85	56	45
Mo	otor Output		kW	0.03	0×2	0.09	0×2	0.140×2	0.28	80×2	0.28	0×4
Connection	on Duct Diame	eter	mm	<i>∲</i> 100	φ.	150	φ2	200	φ:	250	$\phi$ :	350
Unit Amb	ient Condition	n					-	15°C-50°CDB	80%RH or les	SS		

Notes: 1. Sound level is measured at 1.5 m below the centre of the body.

Sound level is measured at 1.5 m below the centre or the body.
 Airflow rate can be changed over to Low mode or High mode.
 Sound level is measured in an anechoic chamber.
 Sound level generally becomes greater than this value depending on the operating conditions, reflected sound, and peripheral noise.
 The sound level at the air discharge port is about 8 dB(A) higher than the unit's sound level.
 The specifications, designs and information given here are subject to change without notice.
 Temperature Exchange Efficiency is the mean value between cooling and heating.
 Efficiency is measured under the following conditions:

Efficiency is the mean value between cooling and neating.
 Efficiency is measured under the following conditions:
 Ratio of rated external static pressure has been maintained as follows; outdoor side to indoor side = 7 to 1.

 In conformance with JIS standards (JIS B 8628), operating sound level is based on the value when one unit is operated, with the value converted for an anechoic chamber. This is transmission sound from the main unit, and does not include sound from the discharge grille. Thus it is normal for the sound to be louder than the indicated value when the unit is actually installed.
 Sound level from the discharge port causes the value to be approximately 8 dB(A) (models with the airflow rate of fest) m³/h) to approximately 11 dB(A) (models with the airflow rate of 650 m³/h or more) greater than the indicated value. Furthermore, fan rotation and noise from the discharge grille may increase depending on the on-site duct

resistance conditions. Please consider noise countermeasures when installing the unit.

10. With large models in particular (1500 and 2000 m³/h models), if the supply air (SA) grille is installed near the main unit, the noise of the main unit may be heard from the discharge grille via the duct, and this will result in a marked increase in noise. In such cases, if peripheral effects are included (such as reverberation of the floor and walls, combination with other equipment, and background noise), sound level may be as much as 15 dB(A) higher than the indicated value. When installing a large model, please provide as much separation as possible between the main unit and the discharge grille. If the equipment and discharge grille are near each other, please consider countermeasures such as the following:

-Use a sound-muffling box, (fexible duct and sound-muffling air supply/discharge grilles).

Use a sound-muttling box, flexible duct and sound-muttling air supply/discharge grilles

Decentralised installation of discharge grilles

11. When installing in a location with particularly low background noise such as a classroom, please consider the following measures to avoid transmission sound from the main unit:

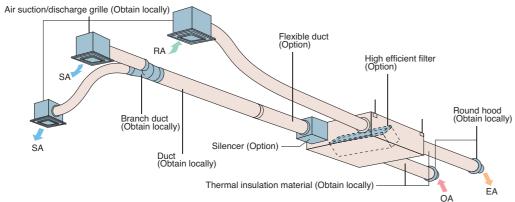
Use of ceiling materials with high sound insulating properties (high transmission loss)

Methods of blocking sound transmission, for example, by adding sound insulating materials around the bottom of the sound source.

Alternatively, consider supplementary methods such as installing the equipment in a different location (corridor, etc.)

# **Air Treatment Equipment Lineup**

# **Options**



#### **Option List**

Ite	m			Туре			VAM1	50 · 250	· 350 · 5	00 · 650	· 800 · 1	000 · 150	00 · 2000	GJVE		
	He	at Reclair	n Ver	ntilator remote controller	BRC301B61											
				ntial central remote controller		DCS303A51 *1										
				al remote controller		DCS302CA61										
	dev		Unifie	ed ON/OFF controller		DCS301BA61										
Ф	uov	100	Schedule timer							DST30	1BA61					
device		Wiring append		otor for electrical	KRP2A61											
	ptor	For humidifier			KRP50-2											
l <u></u>	dap	Installa	tion l	box for adaptor PCB	KRP50-2A90 (Mounted electric component assy of Heat Reclaim Ventilator)											
1	Ă	For hea	For heater control kit			BRP4A50										
Controlling	PC Board	For wiring Type (indoor unit of VRV)		FXFQ-S FXFQ-LU	FXZQ-M	FXUQ-A	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXSQ-P	FXMQ-P	FXMQ-MA	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	
					KRP1C63★	KRP1BA57★	KRP1C67	KRP1B61★	KRP1B61	KRP1B56★	KRP1C64★	KRP1C64★	KRP1B61	KRP1BA54	_	KRP1B61
						Note 4, 6 KRP1BA101	_	Notes 2, 3 KRP1B96	_	Notes 4, 6 KRP1BA101	Notes 2, 3 KRP4A98	Notes 2, 3 KRP4A96	_	Note 3 KRP1CA93	Notes 2, 3 KRP4AA93	_

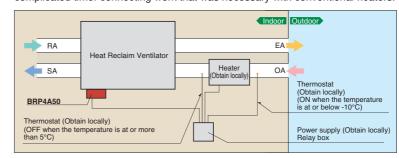
- Notes:1. Installation box ☆ is necessary for each adaptor marked ★.

  - 2. Up to 2 adaptors can be fixed for each installation box.
    3. Only one installation box can be installed for each indoor unit.
    4. Up to 2 installation boxes can be installed for each indoor unit.
- Installation box ★ is necessary for second adaptor.
- Installation box is necessary for each adaptor.
   To residential use only. When connected with a Heat Reclaim Ventilator (VAM), you can only switch the power ON/OFF. Cannot be used with other centralised control equipment.

Item		Туре	VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
_ ھ ر	Silencer			_		KDDM24B50	K	DDM24B10	0	KDDM24	B100X2
Ei Gi	Silericer	Nominal pipe diameter   mm		_		φ 2			φ 2:		
Additional function	High efficie		KAF242H25M		KAF24	2H50M	KAF242H65M	KAF242H80M	KAF242H100M	KAF242H80MX2	KAF242H100MX2
P Ad	Air filter for	r replacement	KAF241G25M		KAF24	11G50M KAF241G65M		KAF241G80M	KAF241G100M	KAF241G80MX2	KAF241G100MX2
Flexibl	e duct (1 m)		K-FDS101D	K-FDS	S151D	K-FDS201D			K-FDS		
Flexibl	e duct (2 m)		K-FDS102D K-FDS152D K-FDS202D K-FDS					S252D			
Dust o	dontor					_				YDFA	25A1
Duct a	daptor	Nominal pipe diameter   mm				_				φ 2!	50
CO <sub>2</sub> se	ensor		_	_		BRYMA65		BRYMA100		BRYMA65	BRYMA100

#### PC board adaptor for heater control kit (BRP4A50)

When the installation of an electric heater is required in a cold region, this adaptor with an internal timer function eliminates the complicated timer connecting work that was necessary with conventional heaters.



#### Notes when installing

- Examine fully an installation place and specification for using the electric heater based on the standard and regulation of each country.
- Supply the electric heater and safety production devices such as a relay and a thermostat, etc of which qualities satisfy the standard and regulation of each country at site.
- Use a non-inflammable connecting duct to the electric heater. Be sure to allow 2 m or more between the electric heater and the Heat Reclaim Ventilator for safety.
- For the Heat Reclaim Ventilator, use a different power supply from that of the electric heater and install a circuit breaker for each.