



- 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.

Đại lý phân phối



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# Jay IV 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.



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• Air Treatment Equipment Lineup	P63











# **Main Features**





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

### **VRV IV S SERIES**



Lineup

5 models

Model Name	RXMQ4AVE	RXMQ5AVE	RXMQ6AVE	RXMQ8AY1	RXMQ9AY1	
Power Supply	1-phas	se, 220-230 V/220 V, 50	3-phase, 380 – 415 V, 50 Hz			
Capacity Range			6 HP (16.0 kW)	8 HP (22.4 kW)	9 HP (24.0 kW)	
Capacity Index	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.

# Elegant appearance with European style









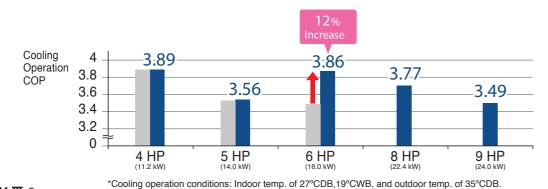
New FTKJ-N series indoor unit

# 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 

# 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.)

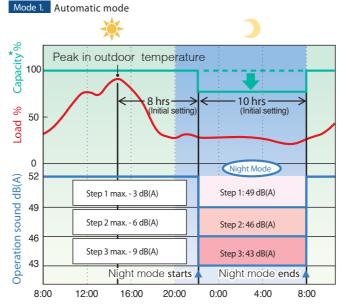
### Mode 3. Combined mode

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

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

\*The capacity reduction rate differs depending on the operation sound level step selected.



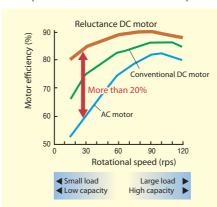
• The relationship of outdoor temperature (load) and time shown in the graph is just an example.

# 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.





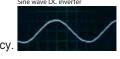


Note: Data are based on studies conducted under controlled conditions at a Daikin laboratory using Daikin products.

- \*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.

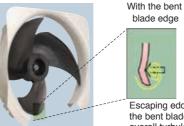


# >> The structural scroll Sucked gas is compressed in the

scrolling part before the heated motor, so that Discharg 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.





blade edge

Without 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





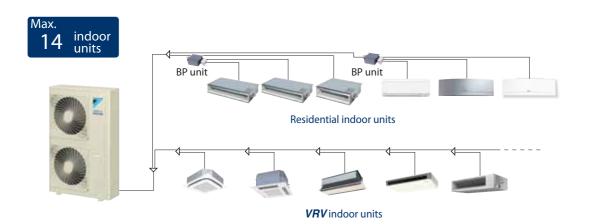
# **Main Features**

# 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: Total capacity index of connectable indoor units must be 50-130% of the capacity index of the outdoor unit. Refer to page 46 for the maximum number of connectable indoor unit.



### 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.

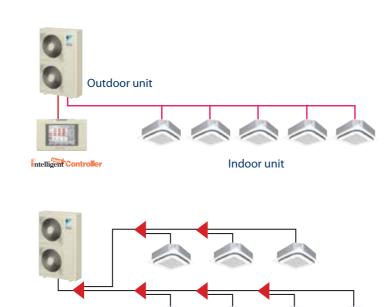
### >> Super wiring system

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.

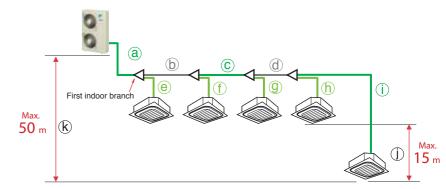


# Long piping design possible

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

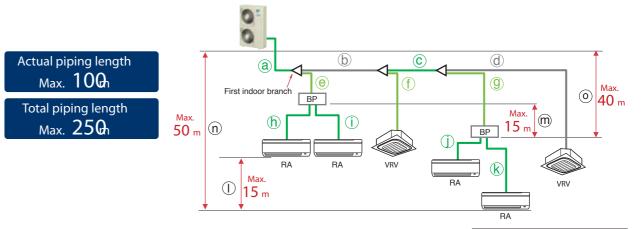
### When only VRV indoor units are connected





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

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



				4 HP	5 HP	6-9 HP
	Refrigerant piping length		a+b+c+g+k, a+b+c+d	50 m	70 m	100 m
Max. allowable piping length	Total piping length	Total piping length			250 m	250 m
lengui	The first indoor branch - th	ne farthest BP or VRV indoor unit	b+c+g, b+c+d	40 m	40 m	40 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		+k 250 m 250 40 m 40 2 m-15 m 2 m 2 m-12 m 2 m 2 m-8 m 2 m 5 m 5 1 10 m 15 10 m 15 30 m 30 30 m 30	2 m–8 m	2 m–8 m
Min. allowable piping length	Outdoor unit - the first indo	oor branch	a	5 m	5 m	5 m
	Between the indoor units		I	10 m	15 m	15 m
	Between BP units		m	10 m	15 m	15 m
Max. allowable level difference	Outdoor unit - the indoor	If the outdoor unit is above	n	30 m	30 m	50 m
difference	unit	If the outdoor unit is below	n	30 m	30 m	40 m
	Outdoor unit - the BP unit		0	30 m	30 m	40 m

 $\sim$  07

# 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 19 types 99 models

VIII IIIGOOI													ypcsz		
			20	25	32	40	50	63	71	80	100	125	140	200	250
Туре	Model Name	Capacity Range	0.8HP	1HP	1.25HP	1.6HP	2HP	2.5HP	3HP	3.2HP	4HP	5HP	6HP	8HP	10HF
		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													1 1 1 1 1 1	1 1 1 1 1
Ceiling Mounted Cassette (Round Flow)	FXFQ-LUV1													1 1 1 1 1 1 1	! ! ! ! ! !
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE										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
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE					•		•				•		1	1
Ceiling Mounted Cassette Corner	FXKQ-MAVE					•		•						1	
	FXDQ-PBVE (with drain pump)				•										
Slim Ceiling Mounted Duct	FXDQ-PBVET (without drain pump)	(700 mm width type)			•									1 1 1 1 1 1	1
(Standard Series)	FXDQ-NBVE (with drain pump)			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-NBVET (without drain pump)	(900/1,100 mm width type)		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	 
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV1		New	New	New	New	New	New	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 1 1
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PVE		New	New	New	New	New	New		New	New	New	New	1	1
Ceiling Mounted	FXMQ-PVE					•		•				•	•	1	
Duct	FXMQ-MAVE			 											•
4-Way Flow Ceiling Suspended	FXUQ-AVEB														1
Ceiling Suspended	FXHQ-MAVE	-												1 1 1 1 1 1 1	 
Wall Mounted	FXAQ-PVE							•						1 1 1 1 1 1	1 1 1 1 1 1
Floor Standing	FXLQ-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
Concealed Floor Standing	FXNQ-MAVE								1		1			1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Floor Standing Number 1	FXVQ-NY1			1					1			New		New	New

# Residential indoor units with connection to BP units 6 types 18 models Type Model Name Rated Capacity (kW) 2.5 3.5 5.0 6.0 7.1 Capacity Index 25 35 50 60 7.1 Capacity Index 25 35 50 60 7.1 FDKS-EAVMB FDKS-EAVMB FDKS-C(A)VMB FFKJ-NVMW FFKJ-NVMS FFKJ-NVMS Wall Mounted FTKS-BVMA FTKS-BVMA FTKS-FVM FTKS-FVM

Residential indoor units

VRV indoor units only

**VRV** indoor units

<sup>\*</sup>Refer to page 46 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

FXFQ-SVM



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



Ceiling Mounted Cassette (Double Flow) Type

FXCQ-MVE



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-PBVE(T)

FXDQ-NBVE(T)



Slim design, quietness and static pressure switching



Slim Ceiling Mounted Duct Type

(Compact Series)





Slim and compact design for easy and flexible installation



Middle Static Pressure Ceiling Mounted Duct Type

FXSQ-PVE



Middle external static pressure and slim design allow flexible installations



Ceiling Mounted Duct Type



FXMQ-MAVE



High external static pressure allows flexible installations



4-Way Flow Ceiling Suspended Type

FXUQ-AVEB



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



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



Floor Standing Type

FXLQ-MAVE



Concealed Floor Standing Type

FXNQ-MAVE



Suitable for perimeter zone air conditioning



Floor Standing Duct Type

FXVQ-NY1



Large airfiow type for large spaces. Flexible interior design for each tenant.



# Residential indoor units with connection to BP units

Slim Ceiling Mounted Duct Type





Slim and smooth design suits your shallow ceiling



Wall Mounted Type



W FTKJ-NVMS

Elegant appearance with

European style



Wall Mounted Type





FTKS-FVM Stylish flat panel harmonises

with your interior décor



FTKS-BVMA

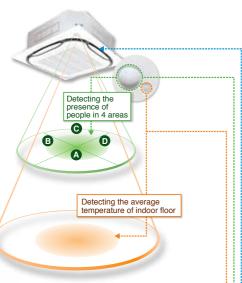
**VRV Indoor Units** 

# 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





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.

1	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

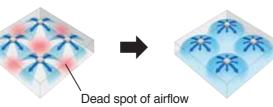
The sensor detects the floor temperature and automatically adjusts operation of the indoor unit to reduce the temperature difference between the ceiling and the floor.

- [	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.

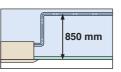


 Improved energy efficiency thanks to a new heat exchanger with smaller tubes, DC fan motor, and DC drain pump motor.

•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.

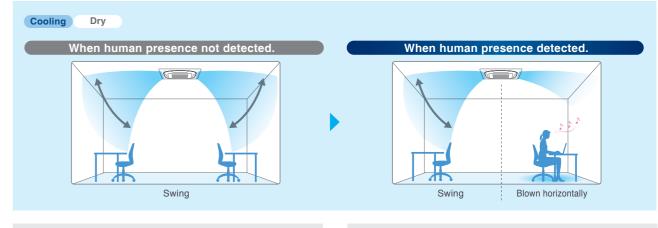


Selectable airflow rate: 3 steps and Auto.
 (Auto airflow rate is available when BRC1E62 is used.)

### 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 not detected for 5 minutes, the unit automatically returns to controlling the flaps for an unoccupied room.
- When a person is detected, drafts are prevented by making the flap horizontal.

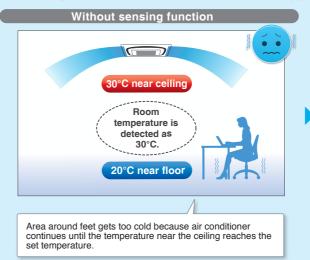
\*1.Airflow direction should be set to Auto. 
\*2.Draft prevention function is OFF in the initial setting. It can be set ON using the remote controller.

### Comfort and Energy saving preventing over Cooling \*1.2

Auto airflow direction mode + Auto airflow rate mode

### Cooling

Floor temperature is detected and over cooling prevented.



Room temperature is calculated as 27°C in the area which is in the vicinity of the person.

24°C near floor

Automatic control using the temperature near the person as the ceiling, is detected.

With sensing function

Energy

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.

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.

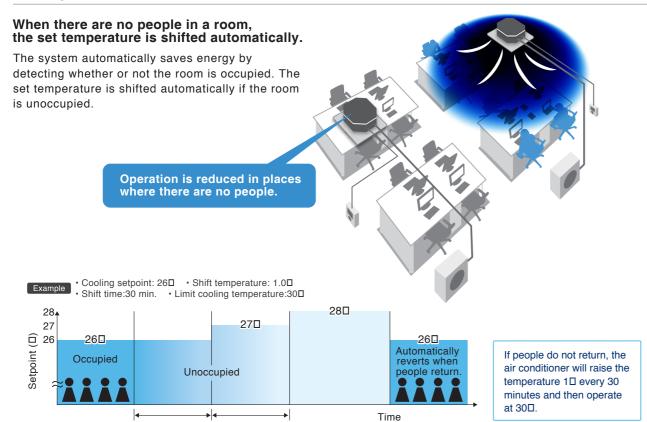
\*1.Both airflow direction and airflow rate shoud be set to Auto. 
\*2.Draft prevention function is set OFF in the initial setting.

**VRV Indoor Units** 

# Ceiling Mounted Cassette (Round Flow with Sensing) Type

# Sensing sensor mode\*1\*2

Sensing sensor low mode (default: OFF)



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

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

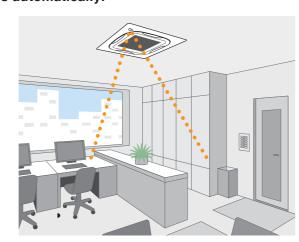
### When there are no people in a room, the system stops automatically.\*3

After another 30 min

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.

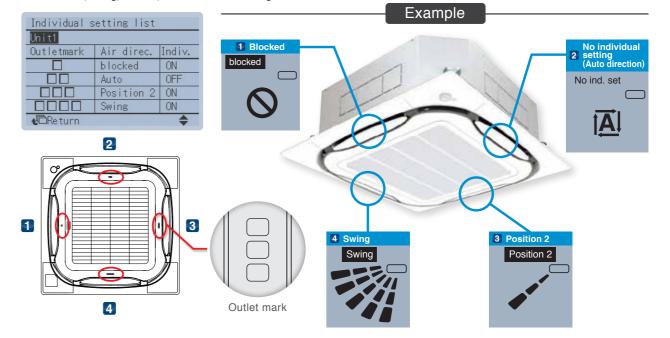


### Individual airflow direction control

### 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"

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.

- 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).

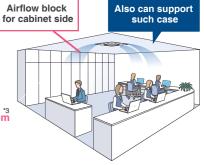


Airflow block function prevents uncomfortable drafts by reducing air velocity to approx.  $0.3 \text{m/s.}^{*2}$ 

# Easy setup with remote controller Horizontal flow Airflow block

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

Airflow block
Wall



- \*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.

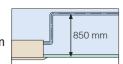
●The industry's first\* Round Flow Ceiling Mounted Cassette type offers 360° airflow with improved temperature distribution.



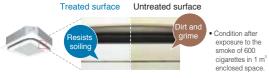


uneven temperature.

- ●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					
	Sound level (HH/H/L)	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.

• Example of airflow patterns: All-round flow is available, as well as 2-way to 4-way flows, so you can choose the most suitable airflow pattern depending on location or



(dB(A))







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

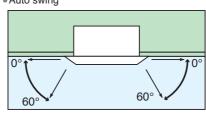


# Quiet, compact, and designed for user comfort

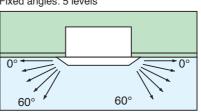
- Dimensions correspond with 600 mm x 600 mm architectural module ceiling design specifications.
- Low operation sound level

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

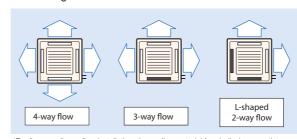
- Comfortable airflow
- 1 Wide discharge angle: 0° to 60°
- Auto swing



•Fixed angles: 5 levels



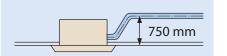
- \*Angles can be also set on site to prevent drafts (0°-35°) or soiling of the ceiling (25°-60°), other than standard setting (0°-60°).
- 2-, 3-, and 4-way airflow patterns are available. enabling installation in the corner of a room.



\*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** 

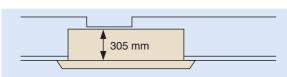
# Ceiling Mounted Cassette (Double Flow) Type

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.

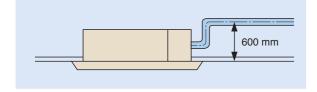


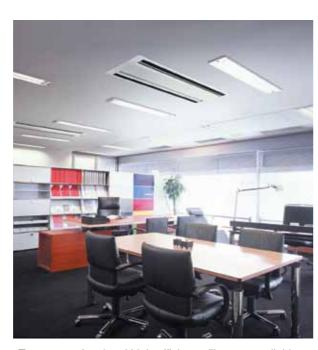
(When a high-efficiency filter is attached, the unit's height is 400 mm.)

•Low operation sound level

W Operation Sound level (220 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.
- $^{\star}$  8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m  $^{3}$
- Major maintenance work can be performed by removing the panel. A flat-type suction grille and a detachable blade make cleaning easy.

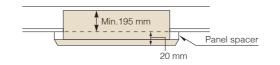
# Ceiling Mounted Cassette Corner Type

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.

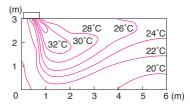


- Single-flow type allows effective air discharge from corner or from drop-ceiling.
- Drain pump is equipped as standard accessory with 500 mm lift.

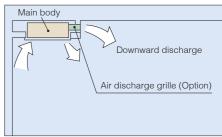




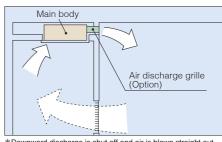
 Providing 3 different settings of standard, draft prevention and ceiling soiling prevention, the auto swing mechanism realises even distribution of airflow and room temperature.



• 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>

**VRV Indoor Units** 

# Slim Ceiling Mounted Duct Type (Standard Series)

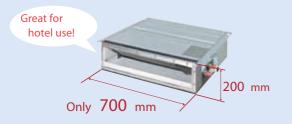
# Slim design, quietness and static pressure switching



### 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					

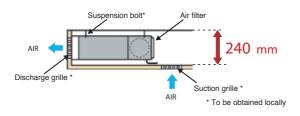
- \* The values of operation sound level represent those for rear-suction operation
- Sound level values for bottom-suction operation can be obtained by adding 5 dB(A). \* Values are based on the following conditions
- FXDQ-PB: external static pressure of 10 Pa; FXDQ-NB: external static pressure

### 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.



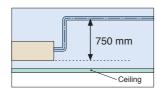
• External static pressure selectable by remote controller switching make this indoor unit a very comfortable and

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



# Slim Ceiling Mounted Duct Type (Compact Series)

Great for





# Slim and compact design for easy and flexible installation

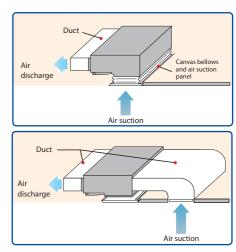
• It comes with a slim and compact design with a height of only 200 mm that requires as little as 240 mm in height for the ceiling space between the drop-ceiling and ceiling slab. The depth of the product is only 450 mm which is suitable to install in limited spaces.



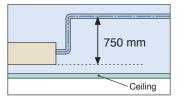


Side view Top view

•It is available in two types - ceiling return and ordinary duct to suit different installation conditions.

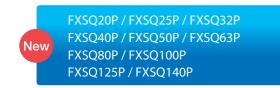


Drain pump is equipped as standard accessory with 750 mm lift.



**VRV Indoor Units** 

# Middle Static Pressure Ceiling Mounted Duct Type Indoor Unit





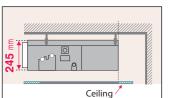
Middle external static pressure and slim design allow flexible installations

### Installation flexibility

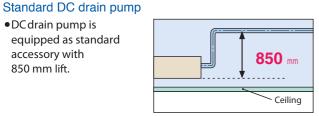
### Slim design

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





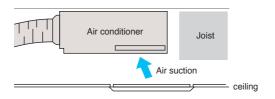
•DCdrain pump is equipped as standard accessory with 850 mm lift.





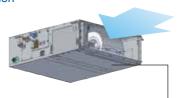
### Bottom suction possible

• Bottom suction is possible which facilitates installation and maintenance. Wiring connections and 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



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

### Rear suction



Switch bottom plate ■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 available 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.

> Adjustable external static pressure 30 Pa\* 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

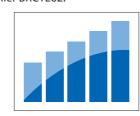
### Comfort

### 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 le	ve	I					(dB(A)
FXSQ-PVE	20/25		32	4	0	50		63
Sound level (H/M/L)	33/30/28	34	1/32/30	36/3	3/30	34/32/2	29	36/32/29
FXSQ-PVE	80		100	)		125		140
Sound level	37 5/34/3	0	39/35	/32	42/	88 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  $\pm 10\%$  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

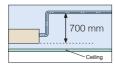
 A DC fan motor increases the external static pressure capacity range to include middle to high static pressures, increasing design flexibility.

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.

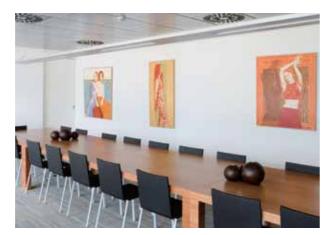
•I ow operation sound level



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

								(ub (A))
FXMQ-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.

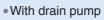
### FXMQ200MA/FXMQ250MA

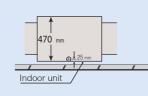


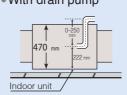
• Simplified Static Pressure Control External static pressure can be easily adjusted using a change-over switch inside the electrical box to meet the resistance in the duct system.



Without drain pump







# 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.

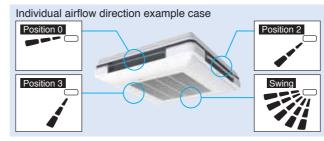
- Unit body and suction panel adopted round shapes and realised a slim appearance design. The unit can be used for various locations such as the ceilings with no cavity and bare ceilings.
- Flaps close automatically when the unit stops, which gives a simple appearance.
- Unified slim height of 198 mm 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.

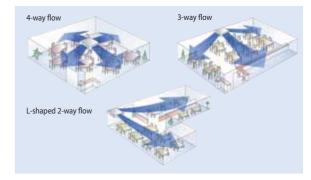


 With adoption of the individual flap control, airflow direction adjustment can be individually set for each air outlet. 5 directions of airflow and auto-swing can be selected with wired remote controller BRC1E62, which realises the optimum air distribution.





- 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.



 $_{25}$ 

**VRV Indoor Units** 

# Ceiling Suspended Type

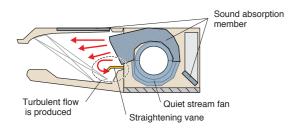
FXHQ32MA / FXHQ63MA FXHQ100MA



# Slim body with quiet and wide airflow

Adoption of QUIET STREAM FAN

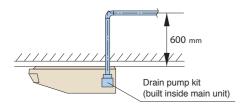
Uses the quiet stream fan and many more advanced technologies.



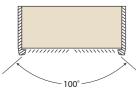
• Low operation sound level

ow operation	Souria level		(dB(A))
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.

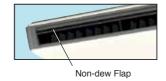


•Wide air discharge openings produce a spreading 100°





- 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>

# Wall Mounted Type

FXAQ20P / FXAQ25P FXAQ32P / FXAQ40P FXAQ50P / FXAQ63P



# Stylish flat panel design harmonised with your interior décor

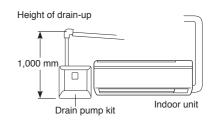
- •Stylish flat panel design creates a graceful harmony that enhances any interior space.
- •Flat panel can be cleaned with only the single pass of a cloth across their smooth surface. Flat panel can also be easily removed and washed for more thorough cleaning.

•	_ow opera	tion sou	nd level				(dB(A))
	FXAQ-P	20	25	32	40	50	63
	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.





**VRV Indoor Units** 

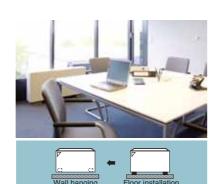
# Floor Standing Type

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/m³



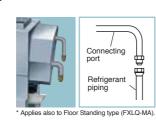
# **Concealed Floor Standing Type**

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/m³



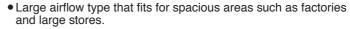


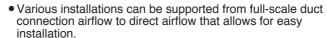
# Floor Standing Duct Type



FXVQ125N / FXVQ200N FXVQ250N

# Large airflow type for large spaces. Flexible interior design for each tenant.





 Full-scale duct connection airflow allows for air conditioning evenly in spacious areas.

### Duct connection airflow type

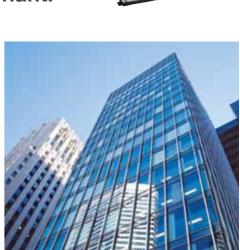
- Adding the plenum chamber (option) allows for simple operation with direct airflow.
- \* Note that the operation sound increases by approximately 5 dB(A).

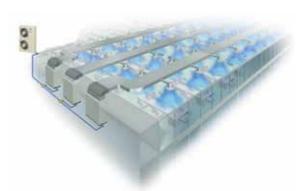
### Direct airflow type

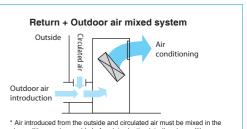
- The high static pressure type driven by the belt drive system allows for use of air discharge outlets in various shapes as well as long ducts. Highly flexible installation is possible.
- Design with high maintainability that allows major services and maintenance services to be performed at the front.
- A long-life filter (maintenance free up to one year\*) is equipped as a standard accessory.
- \* 8 hr/day, 26 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>
- A wide range of optional accessories are available such as high-efficiency filters.
- Outdoor air intake mode is useable as an outdoor-air processing air conditioner.

\*When using the unit as an outdoor-air processing unit, there are some restrictions. Strictly follow the restrictions specified in the Engineering Data Book.









Residential Indoor Units with connection to BP units

# Slim Ceiling Mounted Duct Type

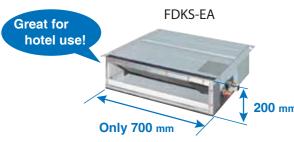


(700 mm width type)
FDKS25EA / FDKS35EA
(900/1,1000 mm width type)
FDKS25CA / FDKS35CA
FDKS50C / FDKS60C

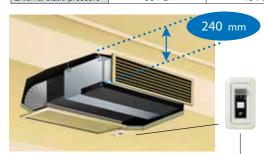


# Slim and smooth design suits your shallow ceiling

•Models in the FDKS-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.



	FDKS25EA	FDKS35EA	FDKS25CA	FDKS35CA	
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 m³/min		9.5 m³/min	10 m³/min	
External static pressure	30	Da	40 Pa		



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

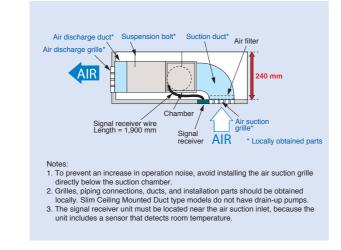
•Low operation sound level

FDKS25 FDKS35 FDKS50 FDKS60

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



# Wall Mounted Type









# Elegant appearance with European style

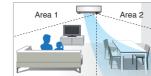
### Elegant Appearance with Curved Panel

•The sleek design of the FTKJ-N indoor unit features a uniquely European style. This elegant body houses state-of-the-art technology which delivers superior performance. The FTKJ-N series offers a versatile choice for home-owners, designers and architects alike.

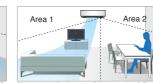


### Two-Area Intelligent Eye

•A combination of Comfort Airflow Mode and Intelligent Eye directs airflow away from people to avoid drafts. If there is no movement in a room for 20 minutes, Intelligent Eye automatically adjusts the set temperature by approximately 2°C to save energy.



If a person is detected in area 1, airflow is directed away from him/her.



If a person is detected in area 2, airflow is directed away from him/her.

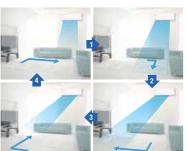
### Comfort Airflow Mode

 Comfort Airflow Mode prevents uncomfortable drafts from blowing directly on to a person's body. During cooling operation, the flap moves upwards to prevent cold drafts. During heating operation, the flap turns vertically downwards to drive warm air to the floor.



### 3D Airflow

• 3D Airflow combines Vertical and Horizontal Auto-Swing to reduce indoor temperature fluctuation. This function circulates air to every part of a room for uniform cooling or heating of even large spaces. To start 3D Airflow, push both the Vertical and Horizontal Auto-Swing buttons. The flaps and louvers swing in turn.

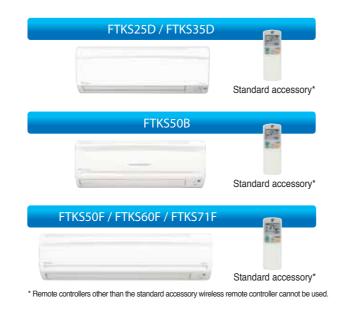


The flaps and louvers swing in turn expanding the comfort zone.

Residential Indoor Units with connection to BP units

# Wall Mounted Type





# Stylish flat panel harmonises with your interior décor

•Wall Mounted indoor units achieve quiet sound levels of 22 dB (A). (H/L/SL)

FTKS25D	FTKS35D	FTKS50F	FTKS60F	FTKS71F
37/25/22 dB (A)	39/26/23 dB (A)	43/34/31 dB (A)	45/36/ <mark>33</mark> dB (A)	46/37/34 dB (A)

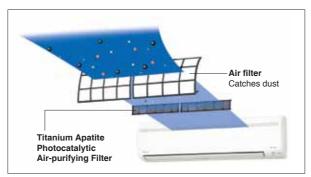
•Intelligent Eye with its infrared sensor automatically controls air conditioner operation according to human movement in a room. When there is no movement, it adjusts the temperature by 2°C for energy savings.



•3-D Airflow combines Vertical and Horizontal Auto-Swing to circulate air to every part of a room for uniform cooling of even large spaces.

\* This function is available for FTKS50/60/71F.

•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



A uniform temperature is achieved throughout the entire room.

# **Specifications**

# **VRV** Indoor Units

# Ceiling Mounted Cassette (Round Flow with Sensing) Type



			sensing, Typ						
	MODEL		FXFQ25SVM	FXFQ32SVM	FXFQ40SVM	FXFQ50SVM			
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz						
		kcal/h	2,400 3,100 3,900			4,800			
Cooling capac	ity	Btu/h	9,600	12,300	15,400	19,100			
		kW	2.8 3.6 4.5		5.6				
Power consum	ption Cooling	kW	0.031	0.031	0.041	0.080			
Casing				Galvanised	steel plate				
A:	1/84/1	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			
Airflow rate (F	1/M/L)	cfm	441/406/353	441/406/353	512/459/388	777/618/477			
Sound level (H	I/M/L)	dB(A)	30/28.5/27	30/28.5/27	31/29/27	36/32/28			
Dimensions (H	l×W×D)	mm	246×840×840						
Machine weigh	nt	kg	19 23						
	Liquid (Flare)		<i>ϕ</i> 6.4						
Piping connections	Gas (Flare)	mm		<i>φ</i> 12	2.7				
Connections	Drain	] [	VP25 (External Dia, 32/Internal Dia, 25)						
	Model		BYCQ125B-W1						
Panel	Colour		Fresh white						
(Option)	Dimensions(H×W×D)	mm		50×95	0×950				
	Weight	kg		5	.5				

	MODEL		FXFQ63SVM	FXFQ80SVM	FXFQ100SVM	FXFQ125SVM			
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz						
		kcal/h	6,100	7,700	9,600	12,000			
Cooling capac	city	Btu/h	24,200	30,700	38,200	47,800			
		kW	7.1	9.0	11.2	14.0			
Power consum	nption Cooling	kW	0.095	0.095	0.194	0.219			
Casing				Galvanise	d steel plate				
A:	11/84/15	m³/min	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/IVI/L)	cfm	830/653/477	830/688/530	1,165/918/671	1,218/971/741			
Sound level (I	H/M/L)	dB(A)	38/33/28	38/35/31	44/38/32	45/40/35			
Dimensions (H	H×W×D)	mm	246×840×840 288×840×840						
Machine weig	ht	kg		23		26			
	Liquid (Flare)		φ9.5						
Piping connections	Gas (Flare)	mm		<i>ϕ</i> 1	5.9				
COTTTECTIONS	Drain		VP25 (External Dia, 32/Internal Dia, 25)						
	Model			BYCQ1	25B-W1				
Panel	Colour			Fresh	n white				
(Option)	Dimensions(H×W×D)	mm		50×95	50×950				
	Weight	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.
-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

# VRV Indoor Units

# Ceiling Mounted Cassette (Round Flow) Type



	MOE	DEL		FXFQ25LUV1	FXFQ32LUV1	FXFQ40LUV1	FXFQ50LUV1	FXFQ63LUV1	FXFQ80LUV1	FXFQ100LUV1	FXFQ125LUV1	
Power supp	ly			1-phase, 220-240 V, 50 Hz								
			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	
Power consumption   Cooling			kW	0.033	0.033	0.047	0.052	0.066	0.093	0.187	0.209	
Casing							Galvanised	steel plate	)			
Airflow rate	. /UU/L	1/1 /	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	(ПП/П	1/L)	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/H	I/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	(H×W	×D)	mm	246×840×840 288×840×840							40×840	
Machine we	eight		kg		19	9.5		22 25				
	Liquic	d (Flare)			φ6	6.4			φ	9.5		
Piping connections	Gas (	Flare)	mm		<i>φ</i> 1:	2.7			$\phi$	15.9		
COTTRECTIONS	Drain			VP25 (External Dia, 32/Internal Dia, 25)								
	Model			BYCP125K-W1								
Panel Colour						Fresh	white					
(Option)	Dimensio	ons(H×W×D)	mm				50×95	0×950				
	Weigl	ht	kg				5	.5				

# Ceiling Mounted Cassette (Compact Multi Flow) Type



	MODEL		FXZQ20MVE	FXZQ25MVE	FXZQ32MVE	FXZQ40MVE	FXZQ50MVE			
Power supp	oly			1-phase,	220-240 V/220 V,	50/60 Hz				
		kcal/h	1,900	2,400	3,100	3,900	4,800			
Cooling capacity		Btu/h	7,500 9,600		12,300	15,400	19,100			
		kW	2.2 2.8		3.6	4.5	5.6			
Power consumption   Cooling   kW			0.0	)73	0.076	0.089	0.115			
Casing			Galvanised steel plate							
Airflow rote	. (11/1)	m³/min	9.	/7	9.5/7.5	11/8	14/10			
Airflow rate	; (П/L)	cfm	318	/247	335/265	388/282	493/353			
Sound level (H/L)	230 V, 50 Hz- 240 V, 50 Hz	dB(A)	30/25	-32/26	32/26-34/28	36/28-37/29	41/33-42/35			
Dimensions	(H×W×D)	mm	286×575×575							
Machine we	eight	kg			18					
	Liquid (Flare)		φ6.4							
Piping connections	Gas (Flare)	mm	φ12.7							
COTITICOLIOTIS	Drain		VP20 (External Dia, 26/Internal Dia, 20)							
	Model		BYFQ60B3W1							
Panel	Colour		White (6.5Y9.5/0.5)							
(Option)	Dimensions(H×W×D)	mm			55×700×700					
	Weight	kg			2.7					

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.

\*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 (Double Flow) Type



	- (-			, , , , , ,								
	MOI	DEL		FXCQ20MVE	FXCQ25MVE	FXCQ32MVE	FXCQ40MVE	FXCQ50MVE	FXCQ63MVE	FXCQ80MVE	FXCQ125MVE	
Power supp	oly			1-phase, 220-240 V/220 V, 50/60 Hz								
Cooling capacity E		kcal/h	1,900	2,400	3,100	3,900	4,800	6,100	7,700	12,000		
			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		
Power consur	mption	Cooling	kW	0.077	0.092	0.092	0.130	0.130	0.161	0.209	0.256	
Casing							Galvanised	steel plate				
A:fl			m³/min	7/5	9/6.5	9/6.5	12/9	12/9	16.5/13	26/21	33/25	
Airflow rate (HH/M/L)		cfm	247/177	318/230	318/230	424/318	424/318	582/459	918/741	1,165/883		
Sound level	/山/1 \	220 V	dB(A)	32/27	34/28	34/28	34/29	34/29	37/32	39/34	44/38	
Souria level	(H/L)	240 V	UD(A)	34/29	36/30	36/30	37/32	37/32	39/34	41/36	46/40	
Dimensions	(H×V	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	φ6.4	φ6.4	<i>ϕ</i> 6.4	<i>ϕ</i> 6.4	φ9.5	<i>∲</i> 9.5	<i>ϕ</i> 9.5	
Piping connections	Gas (	(Flare)	mm	φ12.7	φ12.7	<i>ф</i> 12.7	<i>ф</i> 12.7	φ12.7	<i>∲</i> 15.9	φ15.9	<i>∲</i> 15.9	
COTITICOLIOTIS	Drain	ı				VP25 (E	xternal Dia,	32/Internal	Dia, 25)			
	Mode	el		В	YBC32G-W	/1	BYBC5	0G-W1	BYBC63G-W1	BYBC1:	25G-W1	
Panel	Colou	ır					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



	MODEL		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 capacity		Btu/h	9,600	12,300	15,400	24,200			
		kW	2.8	3.6	4.5	7.1			
Power consumption   Cooling		kW	0.066	0.066	0.076	0.105			
Casing				Galvanised	d steel plate				
Airflow rote	\ (H/I \)	m³/min	11/9	11/9	13/10	18/15			
Airflow rate (H/L)		cfm	388/318 388/318 459/353		635/530				
0	220 V	dB(A)	38/33	38/33	40/34	42/37			
Sound level	240 V	ub(A)	40/35	40/35	42/36	44/39			
Dimensions	(H×W×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 (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			
00111100110110	Drain	] [		VP25 (External Dia	32/Internal Dia, 25)				
Model				BYK4	5FJW1	BYK71FJW1			
Panel	Colour			White (1	0Y9/0.5)				
(Option)	Dimensions(H×W×D	mm	70×1,240×800	70×1,240×800	70×1,240×800	70×1,440×800			
	Weight	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.

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.

# **VRV** Indoor Units

### Slim Ceiling Mounted Duct Type (Standard Series)





900/1,100 mm

MODEI		with drain	n pump	FXDQ20PBVE	FXDQ25PBVE	FXDQ32PBVE	FXDQ40NBVE	FXDQ50NBVE	FXDQ63NBVE	
without		without dra	ain pump	FXDQ20PBVET	FXDQ25PBVET	FXDQ32PBVET	FXDQ40NBVET	FXDQ50NBVET	FXDQ63NBVET	
Power supply			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	
Power consum (FXDQ-PBVE)		Cooling	kW	0.086	0.067	0.070	0.147	0.165	0.181	
Power consum (FXDQ-PBVET		Cooling	kW	0.067	0.067	0.070	0.147	0.152	0.168	
Casing				Galvanised steel plate						
Airflow rate	/பப/	Ц/()	m³/min	8.0/7.2/6.4	8.0/7.2/6.4	8.0/7.2/6.4	10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0	
Allilow rate	(ПП/	Π/L)	cfm	282/254/226	282/254/226	282/254/226	371/335/300	441/388/353	583/512/459	
External stati	ic pres	sure	Pa		30-10* <sup>2</sup>		44-15 <sup>*2</sup>			
Sound level	(HH/H	/L)*1*3	dB(A)	28/2	6/23	28/26/24	30/28/26	33/30/27	33/31/29	
Dimensions	(H×W	×D)	mm	200×700×620	200×700×620	200×700×620	200×900×620	200×900×620	200×1,100×620	
Machine weight kg		kg	23.0	23.0	23.0	27.0	28.0	31.0		
	Liquid	d (Flare)		<i>ϕ</i> 6.4	φ6.4	<i>ϕ</i> 6.4	<i>∲</i> 6.4	<i>∲</i> 6.4	<i>∲</i> 9.5	
Piping connections	Gas (	Flare)	mm	φ12.7	<i>∲</i> 12.7	φ12.7	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>\$</i> 15.9	
3311100110110	Drain				VP2	20 (External Dia,	26/Internal Dia,	20)		

Note: Specifications are based on the following conditions;

\*Cooling: Indoor temp.: 27DDB, 19DWB, Outdoor temp.: 35DDB, 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 of 15 Pa.

\*2: 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-PB models and 15 Pa for FXDQ-NB models.)

\*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).

### Slim Ceiling Mounted Duct Type (Compact Series)



	MOD	EL		FXDQ20SPV1	FXDQ25SPV1	FXDQ32SPV1	FXDQ40SPV1	FXDQ50SPV1	FXDQ63SPV1		
Power suppl	y			1-phase, 220-240 V, 50 Hz							
	kcal/h		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		kW	2.2	2.8	3.6	4.5	5.6	7.1		
Power consumpt	Power consumption *1 Cooling k		kW	0.072	0.075	0.078	0.180	0.180	0.196		
Casing				Galvanised steel plate							
Airflow rate	/⊔⊔/⊔	// )	m³/min	8.7/7.6/6.5	9.0/8.0/7.0	10.0/9.0/8.0	15.0/13.0/10.5 20.0		20.0/16.0/12.5		
All llow rate	(1111/11/	/L)	cfm	307/268/229	318/282/247	353/318/282	530/459/371		706/565/441		
External stati	ic press	sure	Pa	30-10 *2			50-20 *2		40-20 *2		
Sound level	(HH/H/	L)*1*3	dB(A)	33/31/29		34/32/30	35/33/31		37/35/33		
Dimensions	(H×W×	:D)	mm		200×700×450		200×9	200×900×450			
Machine wei	ight		kg		17		2	20			
	Piping Gas (Flare)					φ	6.4		φ 9.5		
Piping connections			mm			<i>φ</i> 1	2.7		φ 15.9		
3330010110	Drain				VP	20 (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: 5.0 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: FXDQ20-32SP: external static pressure of 10 Pa; FXDQ40-63SP: external static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard". (Factorysetting is 10 Pa for FXDQ20-32SP models and 20 Pa for FXDQ40-63SP models.)

\*2: The values of experting expectables for expectations operations. Sound level values for hottom suprison operations can be obtained by adding 5 RP(A).

\*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).

# Middle Static Pressure Ceiling Mounted Duct Type



MODEL		FXSQ20PVE	FXSQ25PVE	FXSQ32PVE	FXSQ40PVE	FXSQ50PVE		
у		1-phase, 220-240 V/220 V, 50/60 Hz						
	kcal/h	1,900 2,400 3,100		3,900	4,800			
acity	Btu/h	7,500	9,600	12,300	15,400	19,100		
	kW	2.2	2.8	3.6	4.5	5.6		
consumption Cooling kW 0.104 *1 0.104 *1 0.111 *1		0.162*1	0.164*1					
		Galvanised steel plate						
(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		
(I I/IVI/L)	cfm	318/265/230	318/265/230	335/282/247	530/441/371	600/512/406		
ic pressure	Pa	30-150 (50)*2 50-150 (50)*2						
H/M/L)	dB(A)	33/3	0/28	34/32/30	36/33/30	34/32/29		
(H×W×D)	mm		245X550X800		245X700X800	245×1,000×800		
ght	kg		25		27	35		
Liquid (Flare)				φ 6.4				
Gas (Flare)	mm				φ 12.7			
Drain			VP25 (Ext	ernal Dia, 32/Intern	al Dia, 25)			
i i i i i	c pressure H/M/L) (HxWxD) ght Liquid (Flare) Gas (Flare)			Second   S	Coling   C	Second   S		

	MODEL		FXSQ63PVE	FXSQ80PVE	FXSQ100PVE	FXSQ125PVE	FXSQ140PVE			
Power supp	oly		1-phase, 220-240 V/220 V, 50/60 Hz							
			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			
Power consum	nption Cooling	kW	0.222 *1	0.230 *1	0.331 *1	0.360 *1	0.411 *1			
Casing				Galvanised steel plate						
Airflow rate	(H/M/L)	m³/min	21/17.5/14.5	23/19.5/16	32/27/22.5	37/31.5/26	39/33.5/28			
Airiow rate	(1 1/1V1/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)* <sup>2</sup>						
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	400×800	245×1,550×800			
Machine we	eight	kg	35	37	46	47	52			
	Liquid (Flare)				<i>φ</i> 9.5					
Piping connections	Gas (Flare)	mm			φ 15.9					
	Drain			VP25 (Ext	ernal Dia, 32/Intern	nal 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.

• 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: Power consumption value is the value when airflow rate is maximum at maximum external static pressure position.

\*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

# **VRV** Indoor Units

# **Ceiling Mounted Duct Type**



	MODEL		FXMQ20PVE	FXMQ25PVE	FXMQ32PVE	FXMQ40PVE	FXMQ50PVE			
Power supp	Power supply			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			
Power consun	nption Cooling	kW	0.056 *1	0.056 *1	0.060 *1	0.151*1	0.128*1			
Casing	·		Galvanised steel plate							
Airflow rate	· /⊔⊔/⊔/I )	m³/min	9/7.5/6.5	9/7.5/6.5	9.5/8/7	16/13/11	18/16.5/15			
Allilow rate	; (IIII/II/L)	cfm	318/265/230	318/265/230	335/282/247	565/459/388	635/582/530			
External sta	tic pressure	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/L)	dB(A)	33/31/29	33/31/29	34/32/30	39/37/35	41/39/37			
Dimensions	(H×W×D)	mm	300X550X700	300X550X700	300X550X700	300X700X700	300×1,000×700			
Machine we	eight	kg	25	25	25	28	36			
	Liquid (Flare)		φ 6.4	φ 6.4	φ 6.4	φ 6.4	φ 6.4			
Piping connections	Gas (Flare)	mm	φ12.7	φ12.7	φ 12.7	φ 12.7	φ12.7			
2211130110110	Drain			VP25 (External Dia, 32/Internal Dia, 25)						

	MODEL			FXMQ80PVE	FXMQ100PVE	FXMQ125PVE	FXMQ140PVE		
Power supp	ly		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		
Power consur	nption Cooling	kW	0.138 *1	0.185 *1	0.215*1	0.284 *1	0.405 *1		
Casing			Galvanised steel plate						
Airflow rate	(44/4/1)	m³/min	19.5/17.5/16	25/22.5/20	32/27/23	39/33/28	46/39/32		
Allilow rate	(HH/H/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 pressure	Pa	50-200 (100)* <sup>2</sup>	50-200 (100)*2	50-200 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	50-140 (100)* <sup>2</sup>		
Sound level	(HH/H/L)	dB(A)	42/40/38	43/41/39	43/41/39	44/42/40	46/45/43		
Dimensions	(H×W×D)	mm	300×1,000×700	300×1,000×700	300×1,400×700	300×1,400×700	300×1,400×700		
Machine we	eight	kg	36	36	46	46	47		
	Liquid (Flare)		<i>∮</i> 9.5	φ 9.5	φ 9.5	φ 9.5	φ 9.5		
Piping connections	Gas (Flare)	mm	<i>∮</i> 15.9	φ 15.9	φ 15.9	φ 15.9	φ 15.9		
22304.01.0	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.

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

  - 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: 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.

# Ceiling Mounted Duct Type



	MODEL		FXMQ200MAVE	FXMQ250MAVE			
Power supp	oly		1-phase, 220-240	V/220 V, 50/60 Hz			
		kcal/h	19,300	24,100			
Cooling cap	acity	Btu/h	76,400	95,500			
		kW	22.4	28.0			
Power consur	Power consumption   Cooling   kW		1.294 *1	1.465 *1			
Casing			Galvanised steel plate				
Airflow rate	(H/L)	m³/min	58/50	72/62			
7 III II OW TALO	(11/2)	cfm	2,047/1,765	2,542/2,189			
External sta	tic pressure	Pa	132-221 * <sup>2</sup>	191-270 * <sup>2</sup>			
Caund lava	220 V	dD(A)	48/45	48/45			
Sound 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 we	eight	kg	137	137			
	Liquid (Flare)		φ 9.5	φ9.5			
Piping connections	Gas (Brazing)	mm	φ19.1	φ 22.2			
	Drain		PS	1B			

# 4-Way Flow Ceiling Suspended Type



	MODEL		FXUQ71AVEB	FXUQ100AVEB			
Power supp	oly		1-phase, 220-240 V/220-230 V, 50/60 Hz				
		kcal/h	6,900	9,600			
Cooling cap	acity	Btu/h	27,300	38,200			
		kW	8.0	11.2			
Power consun	Power consumption Cooling		0.090	0.200			
Casing			Fresh white				
Airflow rate	\ (\L/M/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	198×95	0×950			
Machine we	eight	kg	26	27			
Liquid (Flare)			<i>φ</i> 9.	5			
Piping connections	Gas (Flare)	mm	<i>ф</i> 15	5.9			
00111100110110	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.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.
- 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.
   (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
   \*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".

# **VRV** Indoor Units

# Ceiling Suspended Type



	MODEL		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE				
Power supp	oly		1-p	1-phase, 220-240 V/220 V, 50/60 Hz					
kcal/h		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				
Power consur	Power consumption   Cooling   kW		0.111	0.115	0.135				
Casing			White (10Y9/0.5)						
Airflow rate	\ (H/I \)	m³/min	12/10	17.5/14	25/19.5				
All llow rate	5 (I I/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 we	eight	kg	24.0	28.0	33.0				
	Liquid (Flare)		φ6.4	<i>ϕ</i> 9.5	φ9.5				
Piping connections	Gas (Flare)	mm	φ12.7	<i>ϕ</i> 15.9	φ15.9				
	Drain		VP20 (External Dia, 26/Internal Dia, 20)						

### Wall Mounted Type

			I	I	I	I	ı	ı		
	MODEL		FXAQ20PVE	FXAQ25PVE	FXAQ32PVE	FXAQ40PVE	FXAQ50PVE	FXAQ63PVE		
Power supp	oly			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 cap	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		
Power consur	nption Cooling	kW	0.019	0.028	0.030	0.020	0.033	0.050		
Casing	·		White (3.0Y8.5/0.5)							
Airflow rate	\ (H/I \)	m³/min	7.5/4.5	8/5	8.5/5.5	12/9	15/12	19/14		
Allilow rate	; (I I/L)	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×W×D)	mm	290×795×238	290×795×238	290×795×238	290×1,050×238	290×1,050×238	290×1,050×238		
Machine we	eight	kg	11.0	11.0	11.0	14.0	14.0	14.0		
	Liquid (Flare)		φ6.4	φ6.4	φ6.4	φ6.4	φ6.4	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		
	Drain			VP1	3 (External Dia,	18/Internal Dia	, 13)			

- 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.

  •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 m in front of the unit and 1 m downward.

  During actual programs there values are normally compounds bishor as a result of ambient conditions.

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

# Floor Standing Type/Concealed Floor Standing Type







1405	\F!		FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE		
MOL	)EL		FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE		
у				1-p	hase, 220-240	V/220 V, 50/60	Hz			
		kcal/h	1,900	2,400	3,100	3,900	4,800	6,100		
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		
ption	Cooling	kW	0.049	0.049	0.090	0.090	0.110	0.110		
				FXLQ: Ivory white (5Y7.5/1)/FXNQ: Galvanised steel plate						
(H/L)		m³/min	7/6	7/6	8/6	11/8.5	14/11	16/12		
(I I/L)		cfm	247/212	247/212	282/212	388/300	494/388	565/424		
/LI/I \	220 V	dB(A)	35/32	35/32	35/32	38/33	39/34	40/35		
(11/L)	240 V		37/34	37/34	37/34	40/35	41/36	42/37		
	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		
	FXNQ	'''''	610×930×220	610×930×220	610×1,070×220	610×1,070×220	610×1,350×220	610×1,350×220		
aht	FXLQ	ka	25.0	25.0	30.0	30.0	36.0	36.0		
Machine weight FXNQ		I Ng	19.0	19.0	23.0	23.0	27.0	27.0		
Piping Liquid			<i>ϕ</i> 6.4	φ6.4	φ6.4	φ6.4	φ6.4	φ9.5		
Gas	(Flare)	mm	φ12.7	φ12.7	φ12.7	φ12.7	φ12.7	φ15.9		
Drair	า				210	D.D.				
	y  acity  ption  (H/L)  (H/L)  ght  Liqui  Gas	ption Cooling  (H/L)  (H/L)  220 V  240 V  FXLQ  FXNQ  FXNQ  FXNQ  FXNQ	y    Accity	Second   S	STANQ2   S	FXNQ20MAVE   FXNQ25MAVE   FXNQ32MAVE   FXNQ400   FXLQ300   FXL	STANQ20MAVE   STANQ25MAVE   STANQ32MAVE   STANQ40MAVE   STANA44   STANA44   STANA444   STANA444   STANA444   STANA444   STANA444   STANA4444   STANA44444   STANA4444   STANA44444   STANA444444   STANA444444   STANA444444   STANA444444   STANA444444   STANA444444   STANA4444444   STANA444444   STANA4444444   STANA44444444   STANA44444444444   STANA444444444   STANA44444444   STANA4444444444444444444	FXNQ20MAVE   FXNQ32MAVE   FXNQ40MAVE   FXNQ50MAVE   FXNQ50MAVE   FXNQ40MAVE   FXN		

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.

  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 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.

# Floor Standing Duct Type



	MODEL		FXVQ125NY1	FXVQ200NY1	FXVQ250NY1			
Power supp	ly		3-phase 4-wire system, 380–415 V, 50 Hz					
			12,000	19,300	24,100			
Cooling cap	acity	Btu/h	47,800	76,400	95,500			
		kW	14.0	22.4	28.0			
Power consum	nption Cooling	kW	0.53	1.33	1.61			
Casing colour				Ivory white (5Y7.5/1)				
Dimensions (H×W×D) mm			1,670×750×510	1,670×950×510	1,670×1,170×510			
Machine weight kg			118 144		169			
Sound level *	1	dB(A)	52	56	60			
	Liquid mm		φ9.5 (Brazing)					
Piping connections	Gas	mm		∮19.1 (Brazing)	φ 22.2 (Brazing)			
00111100110110	Drain	mm	Rp1 (PS 1B internal thread)					
Air filter	Туре		Lo	ng-life filter (anti-mould resin n	et)			
	Motor output	kW	0.75	1.5	1.5			
	A:	m³/min	43	69	86			
Fan	Airflow rate	cfm	1,518	2,436	3,036			
	External static pressure *2	Pa	152	217	281			
	Drive system		Belt drive system					

- Notes: Specifications are based on the following conditions;

  \*Cooling: Indoor temp. of 27°CDB, 19°CWB, and outdoor temp. of 35°CDB.

  \*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.)
    \*1 Sound level : measured when the air discharge outlet duct (2 m) is attached (anechoic chamber conversion value).
  - It increases by approximately 5 dB(A) when the plenum chamber is installed to deliver direct airflow.

    \*2 The value is the external static pressure with standard pulley.

# Residential Indoor Units with connection to BP units

# Slim Ceiling Mounted Duct Type





	MODEL		FDKS25EAVMB	FDKS35EAVMB	FDKS25CAVMB	FDKS35CAVMB	FDKS50CVMB	FDKS60CVMB		
Power sup	oply			1-phase, 220-240 V/220-230 V, 50/60 Hz						
Airflow rates (H) m³/min (cfm			8.7 (	(307)	9.5 (335)	10.0 (353)	12.0 (424)	16.0 (565)		
Sound lev	els (H/L/SL)*	dB (A)		35/	31/29		37/33/31	38/34/32		
Fan speed				5 steps, quiet and automatic						
Temperature control				Microcomputer control						
Dimension	ns (H×W×D)	mm	200×700×620 200×900×620			)	200×1,100×620			
Machine v	veight	kg	21 25			27	30			
	Liquid (Flare)		φ6.4							
Piping connections	Gas (Flare)	mm	\$\phi_{9.5}  \phi_{12.7}					2.7		
CONTINUENTION	Drain			VP2	20 (External Dia	. 26/Internal Dia	. 20)			
Heat insul	Heat insulation			Both liquid and gas pipes						
External s	External 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 FDKS-EA and 40 Pa for FDKS-C. Sound level values for bottom-suction operation can be obtained by adding 6 dB (A) for FDKS-EA and 5 dB (A) for FDKS-C.

# Wall Mounted Type





	MODEL		FTKJ25NVMW	FTKJ25NVMS	FTKJ35NVMW	FTKJ35NVMS	FTKJ50NVMW	FTKJ50NVMS	
Power sup	ply			1-ph	nase, 220-240 V	220-230 V, 50/6	60 Hz	•	
Front pane	el colour		White	Silver	White Silver		White	Silver	
Airflow rate	Airflow rates (H) m³/min(cfr		nin(cfm) 8.9 (313) 10.9 (385)						
Sound leve	els (H/L/SL)	dB (A) 38/25/19 45/26/20 46/35/29				35/29			
Fan speed			5 steps, quiet and automatic				natic		
Temperatu	ire control				Microcomp	uter control			
Dimension	s (H×W×D)	mm	303x998x212						
Machine w	eight	kg	12						
	Liquid (Flare)		φ6.4						
Piping connections					2.7				
	Drain	<i>ϕ</i> 18.0							
Heat insula	insulation Both liquid and gas pipes								

# Wall Mounted Type



	MODEL		FTKS25DVM	FTKS35DVM	FTKS50BVMA	FTKS50FVM	FTKS60FVM	FTKS71FVM		
Power sup	oply			1-phase, 220-240 V/220-230 V, 50/60 Hz						
Front pan	el colour			White						
Airflow rat	tes (H)	m³/min (cfm)	8.7 (307)	8.7 (307) 8.9 (314) 11.4 (402) 14.7 (519) 16.2 (572) 17.4 (614						
Sound levels (H/L/SL) dB (A) 37/25/22 39/26/23 44/35/32 43/34/31 45/36/33 46/37					46/37/34					
Fan speed	d		5 steps, quiet and automatic							
Temperat	ure control				Microcomp	uter control				
Dimension	ns (H×W×D)	mm	283×80	00×195	290×795×238		290×1,050×23	8		
Machine v	veight	kg		9			12			
	Liquid (Flare)				ø6	5.4				
Piping connections	Gas (Flare)	mm	09.5 012.7 0					ø15.9		
	Drain		ø18.0							
Heat insul	ation			·	Both liquid a	nd gas pipes	·			

# BP Units for connection to residential indoor units





	MO	DEL		BPMKS967A3	BPMKS967A2			
Power su	pply			1-phase, 220-240 V/	220-230 V, 50/60 Hz			
Number o	f ports			3 (connectable to 1-3 indoor units)	2 (connectable to 1-2 indoor units)			
Power co	nsumpti	on	W	10				
Running current A		Α	0.0	05				
Dimensio	ns (H×V	V×D)	mm	180×294 (+	356*)×350			
Machine weight kg 8 7.5				7.5				
Number o	Number of wiring connections  3 for power supply (including earth wiring), 2 for interunit wiring (outdoor unit-BP, 4 for interunit wiring (BP-indoor unit)							
<b>5</b>	Liquid	Main	mm	φ9.5×1				
Piping connections	Liquid	Branch	mm	∮6.4×3	<i>ϕ</i> 6.4×2			
(Brazing)	0	Main	mm	<i>ϕ</i> 19.	1x1			
	Gas	Branch	mm	∮15.9×3	<i>ϕ</i> 15.9×2			
Heat insu	lation			Both liquid ar	nd gas pipes			
Connecta	ble indo	or units		2.5 kW class to 7.1 kW cla	ss residential indoor units			
Min. rated capacity of connectable indoor units kW			kW	2.5				
Max. rated capacity of connectable indoor units			kW	20.8	14.2			

Note: \* Total auxiliary piping length.

# Outdoor Units

# **VRV IV S** SERIES

# **Cooling Only**







			-	*			1000
МС	DEL		RXMQ4AVE	RXMQ5AVE	RXMQ6AVE	RXMQ8AY1	RXMQ9AY1
Power supply			1-pha	se, 220-230 V/220 V, 5	0/60 Hz	3-phase, 380	–415 V, 50 Hz
		kcal/h	9,600	12,000	13,800	19,300	20,600
Cooling capacity		Btu/h	38,200	47,800	54,600	76,400	81,900
		kW	11.2	14.0	16.0	22.4	24.0
Power consumpti	on Cooling	kW	2.88	3.93	4.14	5.94	6.88
Capacity control		%	24 to 100	16 to	100	20 to	100
Casing colour					Ivory white (5Y7.5/1)		
Compressor	Туре		Hermetically sealed swing type			Hermetically sealed scroll ty	
Compressor	Motor output	kW	1.92	3.0	3.5	3.8	4.8
Airflow rate		m³/min	7	6	106	14	40
Dimensions (H×W	/×D)	mm	990×94	10×320	1,345×900×320	1,430×9	940×320
Machine weight		kg	71	80	102	1;	31
Sound level (Coo	ling)	dB(A)	52	53	55	57	58
Operation range	Cooling	°CDB			-5 to 46		
Defricement	Туре				R-410A		
Refrigerant	Charge	kg	2.9	3.4	3.6	5	.8
Dining and a	Liquid	mm		φ9.5 (Flare)		φ9.5 (E	Brazing)
Piping connection	Gas	111111	<i>∲</i> 15.9	(Flare)	∮19.1 (Flare)	∮ 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.
 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

MC	DEL		RXMQ4AVE	RXMQ5AVE	RXMQ6AVE	RXMQ8AY1	RXMQ9AY1
kW			11.2	14.0	16.0 22.4		24.0
Class			4	5	6	8	9
Capacity index			100	125	150	200	215
Total capacity index		50%	50	62.5	75	100	107.5
of connectable	of connectable Combination 100%		100	125	150	200	215
indoor units 130%		130	162.5	.5 195 260		280	
Maximum number of connectable indoor units			6	8	9	13	14

# **Option List**

# VRV Indoor Units

# Ceiling Mounted Cassette (Round Flow with Sensing) Type

No.	Item		Туре	FXFQ25S	FXFQ32S	FXFQ40S	FXFQ50S	FXFQ63S	FXFQ80S	FXFQ100 S	FXFQ125 S		
1	Decoration panel						BYCQ1	25B-W1	•	•	•		
2	Sealing material of air	discharge outlet		KDBHQ55B140									
3	Panel spacer			KDBP55H160FA									
		High efficiency	filter unit 65%		KAFP556B80						56B160		
		High efficiency	filter unit 90%			KAFPS	557B80			KAFP5	57B160		
		Replacement hig	Replacement high efficiency filter 65% KAFP552B80 KAFP5						52B160				
4	Filter related	Replacement hig	h efficiency filter 90%	KAFP553B80						KAFP553B160			
4	I liter related	Filter chamber		KDDFP55B160									
		Long life replac	cement filter	KAFP551K160									
		Ultra long-life f	ilter				KAFP	55B160					
		Replacement u	ıltra long-life filter				KAFP5	5H160H					
		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 KDJP55B						5B160			
7	Insulation kit for high h	numidity				KDTP	55K80			KDTP5	55K160		

# Ceiling Mounted Cassette (Round Flow) Type

No.	Item		Туре	FXFQ25LU	FXFQ32LU	FXFQ40LU	FXFQ50LU	FXFQ63LU	FXFQ80LU	FXFQ100 LU	FXFQ125 LU	
1	Decoration panel						BYCP1	25K-W1				
2	Sealing material of air di	ischarge outlet			KDBH55K160F							
3	Panel spacer			KDBP55H160FA								
		High efficiency	filter unit 65%			KAFP	556B80			KAFP	556B160	
		High efficiency	filter unit 90%			KAFP	557B80			KAFP	557B160	
		Replacement high efficiency filter 65% KAFP552B80 KAFP552B80					KAFP	552B160				
4	Filter related	Replacement hig	h efficiency filter 90%	KAFP553B80						KAFP553B160		
4	Filter chamber		KDDFP55B160									
		Long life replac	cement filter	KAFP551K160								
		Ultra long-life f	ilter	KAFP55B160								
		Replacement u	Itra long-life filter				KAFPS	5H160H				
		Chamber type	Without T joint-pipe and fan				KDDP	55B160				
5	Fresh air intake kit	Chamber type	With T joint-pipe without fan				KDDP:	55B160K				
		Direct installati	on type				KDDP	55X160				
6	Branch duct chamber			KDJP55B80 KDJP55B160						55B160		
7	Chamber connection kit			KKSJ55KA160								
8	Insulation kit for high hu	midity		KDTP55K80 KDTP55K160						55K160		

# 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	rge outlet	KDBH44BA60						
3	Panel spacer		KDBQ44BA60A						
4	Replacement long-life filter			KAFQ441BA60					
5	Fresh air intake kit	Direct installation type	KDDQ44XA60						

# 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	BYBC1:	25G-W1
		High efficiency filter 65% ★1		KAFJ532G36	KAFJ5	32G56	KAFJ532G80	KAFJ50	32G160
2	Filter related	High efficiency fi	ter 90% ★1	KAFJ533G36	KAFJ5	KAFJ533G56		KAFJ50	33G160
	I litter relation	Filter chamber   bottom suction		KDDFJ53G36	KDDFJ53G56		KDDFJ53G80 KDDFJ53G1		53G160
	Long life replacement filter			KAFJ531G36	KAFJ5	31G56	KAFJ531G80	KAFJ50	31G160
Note: ★1 Filte	Note: ★1 Filter chamber is required if installing high efficiency filter.								

# Ceiling Mounted Cassette Corner Type

No.	Item	Туре	FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA
4	Daniel velete d	Decoration panel		BYK45FJW1		BYK71FJW1
	Panel related	Panel spacer		KPBJ52F56W		KPBJ52F80W
		Long life replacement filter		KAFJ521F56		KAFJ521F80
2	Air inlet and air	Air discharge grille		K-HV7AW		K-HV9AW
	discharge outlet related	Air discharge blind panel		KDBJ52F56W		KDBJ52F80W
		Flexible duct (with shutter)		KFDJ52FA56		KFDJ52FA80

# Slim Ceiling Mounted Duct Type (Standard Series)

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.	Item	Туре	FXSQ20P FXSQ25P FXSQ32P	FXSQ40P	FXSQ50P FXSQ63P FXSQ80P	FXSQ100P FXSQ125P	FXSQ140P
4	High efficiency filter *1	65%	KAFP632B36	KAFP632B56	KAFP632B80	KAFP632B160	KAF632B160B
'		90%	KAFP633B36	KAFP633B56	KAFP633B80	KAFP633B160	KAF633B160B
2	Filter chamber (for rear suction) *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	KTBJ25K160F	
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	
5	Air discharge adaptor		KDAP25A36A	KDAP25A56A	KDAP25A71A	KDAP25A140A	KDAP25A160A
6	Shield plate for side plate		KDBD63A160				_

Note: \*1. If installing high efficiency filter and long-life filter to the unit, filter chamber is required.

# Ceiling Mounted Duct Type

No.	Item	Туре	FXMQ20P FXMQ25P FXMQ32P	FXMQ40P	FXMQ50P FXMQ63P FXMQ80P	FXMQ100P FXMQ125P FXMQ140P	FXMQ200MA FXMQ250MA
1	Drain pump kit		<del>-</del>				
2	High efficiency filter	65%	KAF372AA36	KAF372AA56	KAF372AA80	KAF372AA160	KAFJ372L280
	rigit 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	_
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	
7	Air discharge adaptor		KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A	

# 4-Way Flow Ceiling Suspended Type

No.	Item Type	FXUQ71A	FXUQ100A			
1	Sealing material of air discharge outlet	KDBHP49B140				
2	Decoration panel for air discharge	KDBTP49B140				
3	Replacement long-life filter	KAEP551K160				

# Ceiling Suspended Type

No.	ltem 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	KHFP5MA160		

# Wall Mounted Type

No.	Item Type	FXAQ20P	FXAQ25P	FXAQ32P	FXAQ40P	FXAQ50P	FXAQ63P	
1	Drain pump kit	K-KDU572EVE						

# Floor Standing Type

	No.	Item Type	FXLQ20MA	FXLQ25MA	FXLQ32MA	FXLQ40MA	FXLQ50MA	FXLQ63MA
[	1	Long life replacement filter	KAFJ3	61K28	KAFJ361K45		KAFJ361K71	

# Concealed Floor Standing Type

No.	Item Type	FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
1	Long life replacement filter	KAFJ361K28		KAFJ361K45		KAFJ361K71	

# **Option List**

# VRV Indoor Units

# Floor Standing Duct Type

No.	Ite	em	Туре		FXVQ125N	FXVQ200N	FXVQ250N			
1		Replacemen	nt long life filter			KAFJ261L140	KAFJ261L224	KAFJ261L280		
2	7	Ultra long-life			-					
3	٦_		Front suction b	Front suction base flange		Front suction base flange KD-9A140 KD-9A200		KD-9A200	KD-9A280	
4	Suction	Front suction			KDGF-9A140	KDGF-9A200	KDGF-9A280			
5	] 2	filter chamber			fe filter *1, 2, 3	KAF-91A140	KAF-91A200	KAF-91A280		
6		for high	for high	Replacement high	65% *1, 3	KAF-92A140	KAF-92A200	KAF-92A280		
7	and	efficiency filter	efficiency			KAF-93A140	KAF-93A200	KAF-93A280		
8	a		filter *1, 2			KDDF-9A140	KDDF-9A200	KDDF-9A280		
9	cha	Plenum char	mber *4			KPCJ140A	KPC5J	KPC8J		
10		Pulley for ple	enum chamber '	*4		KPP8JA	P8JA KPP9JA KPP10JA			
11	7 "	Fresh air inta	ake kit				KD106D10			
12	7	Rear suction	ı kit			KDFJ905A140	KDFJ905A200	KDFJ905A280		
13		Discharge grille for plenum side			KD101A10					
14	Wo	ood base				KKWJ9A140	KWF1G5P	KWF1G8P		
15	Vibration isolating frame		K-ABSG1406A	K-ABSG1407A	K-ABSG1408A					

- Notes:\*1. When ordering a filter chamber for high efficiency filter (65%), please order with all the respective parts.
  \*2. When ordering a filter chamber for high efficiency filter (90%), please order with all the respective parts.
  \*3. When replacing with a new filter, please order the replacement filters with the corresponding filter model name.
  \*4. Use the plenum chamber and pulley for plenum chamber in combination.

# Residential Indoor Units with connection to BP units

# Slim Ceiling Mounted Duct Type

No.	ltem Type	FDKS25EAVMB	FDKS35EAVMB	FDKS25CAVMB	FDKS35CAVMB	FDKS50CVMB	FDKS60CVMB
1	Insulation kit for high humidity	KDT2	5N32	KDT25N50			

# Wall Mounted Type

No.	Туре	FTKJ25NVMW FTKJ25NVMS	FTKJ35NVMW FTKJ35NVMS	FTKJ50NVMW FTKJ50NVMS	FTKS25DVM FTKS35DVM	FTKS50BVMA	FTKS50FVM FTKS60FVM FTKS71FVM
1	Titanium apatite photocatalytic air-purifying filter	KAF970A46			KAF952A42	KAF952B42	

Note: Filter is a standard accessory. It should be replaced approximately 3 years.

# BP Units for connection to residential indoor units

No.	Item Type	BPMKS967A2	BPMKS967A3		
1	REFNET joint	KHRP26A22T			

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	RXMQ4AVE	RXMQ5AVE	RXMQ6AVE	RXMQ8AY1	RXMQ9AY1		
1	Fixing box		KJB111A		_			
2	REFNET header	KHRP26M22H (Max. 4 branch)						
_	TELLINET HEADS	KHRP26M33H (Max. 8 branch)						
3	REFNET joint		KHRP26A22T			KHRP26A22T, KHRP26A33T		
4	Central drain plug	KKPJ	5G280	KKPJ5F180 KKPJ		5G280		
5	Fixture for preventing overturning	KKTP5B112 KPT-6		KPT-60B160	KKTP	5B112		
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	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXDQ-SP				
4	Remote controller	Wireless	BRC7	F635F	BRC7E531W	BRC4C67	BRC4C63	BRC	4C66				
1	Tierriote controller	Wired				BRC1C62							
2	Navigation remote controll	er (Wired remote controller)		BRC1E62 Note 7									
3	Simplified remote cor	ntroller (Exposed type)			_			BRC	2C51				
4	Remote controller for ho	tel use (Concealed type)			_			BRC	3A61				
5	Adaptor for wiring		<b>★</b> KRF	1C63	★KRP1BA57	★KRP1B61	KRP1B61	★KRP1B56	_				
6-1	Wiring adaptor for ele	ectrical appendices (1)	★ KRF	P2A62	★KRP2A62	★KRP2A61	KRP2A61	★KRP2A53	_				
6-2	Wiring adaptor for ele	ectrical appendices (2)	★KRP	4AA53	★KRP4AA53   ★KRP4AA51   KRP4AA51			★KRP4A54 —					
7	Remote sensor (for in	ndoor temperature)	KRCS	01-4B	KRCS01-1B		K	(RCS01-1B					
8	Installation box for ac	laptor PCB☆	Note 2, 3 KRP1H98		Note 4, 6 KRP1BA101	Note 2, 3 KRP1B96	_	Note 4, 6 KRP1BA101	_				
9	External control adap	otor for outdoor unit	★ DTA104A62		<b>★</b> DTA104A62	★DTA104A61 DTA104A61		<b>★</b> DTA104A53	_				
10	Adaptor for multi tena	ant	<b>★</b> DTA1	14A61	_								

No.	Item	Туре	FXSQ-P	FXMQ-P	FXMQ-MA	FXUQ-A	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	FXVQ-N			
1	Remote controller	Wireless	BRC	4C66	BRC4C64	BRC7CB59	BRC7EA66	BRC7EA619	BRC4C64	_			
•	hemote controller	Wired		BRC1C62									
2	Navigation remote controlle	er (Wired remote controller)	BRC1E62 Note 7										
3	Simplified remote cor	ntroller (Exposed type)	BRC	2C51	BRC2C51		_		BRC2C51	_			
4	Remote controller for ho	tel use (Concealed type)	BRC	3A61	BRC3A61		_		BRC3A61	_			
5	Adaptor for wiring		★KRF	P1C64	KRP1B61	_	KRP1BA54	_	KRP1B61	KRP1C67			
6-1	Wiring adaptor for ele	ectrical appendices (1)	★ KRI	P2A61	KRP2A61	_	★KRP2A62	★KRP2A61	KRP2A61	KRP2A62			
6-2	Wiring adaptor for ele	ectrical appendices (2)	<b>★</b> KRP	4AA51	KRP4AA51	★KRP4AA53	<b>★</b> KRP4AA52	<b>★</b> KRP4AA51	KRP4AA51	_			
7	Remote sensor (for ir	ndoor temperature)	KRCS	01-4B	KRCS01-1B	KRCS01-4B KRC			01-1B				
8	Installation box for ad	laptor PCB☆	Notes 2, 3 Notes 2, 3 KRP4A96		_	KRP1BA97	Note 3 KRP1CA93	Note 1 KRP4AA93	-	-			
9	External control adap	tor for outdoor unit	★ DTA104A61		DTA104A61	_	★DTA104A62	★DTA104A61	DTA104A61	Note 10 DTA104A62			
10	Adaptor for multi tena	ant	★ DTA	114A61		_		★ DTA114A61	-	- ]			
11	External control adapt	tor for cooling/heating	<u>-</u>										
12	Remote controller wit	h key		=									

- 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.
   Installation box is necessary for second adaptor.
- 6. Installation box \( \frac{1}{2} \) is necessary for each adaptor.

  7. 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.

- Available functions depend on the type of indoor unit.

  8. Since the control panel is equipped as standard, use the option for 2 remote control system.

  9. When using BRC1E62, be sure to remove the control panel and since BRC1E62 cannot be stored inside the indoor unit, please place it separately.

  10. Remove the group control adaptor which is a standard equipment before mounting KRP6A1 and DTA104A62.

  KRP6A1 and DTA104A62 cannot be mounted to the same indoor unit at the same time.

### For residential indoor unit use

No.	Item	Туре	FDKS-EA, C(A)	FTKJ-N	FTKS-D,B,F					
1	Remote controller	Wireless type		— Note 1						
2		ock/remote controller Note 2 stact/normal open contact		KRP413AB1S						
3	Remote controller los	ss prevention chain	KKF917A4	KKF917A4 KKF910A4 KKF917A4						
4	Interface adaptor for	DIII-NET use	KRP928BB2S							

Notes: 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 ren	note 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	I controller for regidential	For FDKS, FTKJ, FTKS	Note 3 KRC72A	Up to 5 indoor units can be controlled. This is a low cost system which can only control ON/OFF.
3	Interface adaptor for re	esidential indoor units	KRP928BB2S	Adaptors required to connect products other than those of the VRV System to the
4	Interface adaptor for S	SkyAir-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
5	Central control adaptor kit	For UAT(Y)-K(A),FD-K	★DTA107A55	installed on the product unit to be controlled.
6	Wiring adaptor for other	er air-conditioner	*DTA103A51	instance on the product with to be controlled.
7	DIII-NET Expander Adaptor		DTA109A51	<ul> <li>Up to 1024 units can be centrally controlled in 64 different groups.</li> <li>Wiring restrictions (max. length: 1,000m, total wiring length: 2,000m, max. number of branches: 16) apply to each adaptor.</li> </ul>
7-1	Mounting plate		KRP4A92	Fixing plate for DTA109A51

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

  2. For residential use only. Cannot be used with other centralised control equipment.

  3. A wiring adaptor (KRP413AB1S) is also required for each indoor unit.

  - 4. No adaptor is required for some indoor units.

# **Building Management System**

No.		lt	em		Model No.	Function
1	intelligent Touch	h Basic Hardware Controller		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	Additional 64 groups (10 outdoor units) is possible.     Max. 7 iTM plus adaptors can be connected to intelligent Touch Manager.	
2-2	intelligent Touch Manager	Option		iTM power proportional distribution	DCM002A51	Power consumption of indoor units are calculated based on operation status of the indoor unit and outdoor unit power consumption measured by kWh metre.
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		Optional	DIII board		DAM411B51	Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently.
3-2	Communication	Optional	Di board		DAM412B51	Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.
4	interface	*2 Interface for use in LONWORKS		in LONWORKS®	DMS504B51	Interface unit to allow communications between VRV and BMS.     Operation and monitoring of air-conditioning systems through LonWorks® communication.
5		Home A	utomation	nterface Adaptor	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 control	on adaptor	for computerised	<b>★</b> DCS302A52	Interface between the central monitoring board and central control units.

- Notes: \*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 ★ adaptor must be obtained locally.

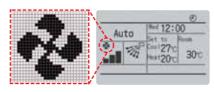
# Individual Control Systems for

# **VRV** Indoor Units

Navigation remote controller (Wired remote controller) (Option)

# 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.





BRC1E62

### 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

 $\cdot$  The display gives an explanation of each setting for easy operation.

# Energy saving

### Setpoint range set

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

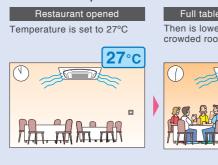


### Setpoint auto reset

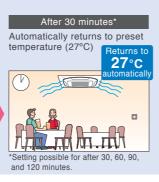
Restaurant sample

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









### 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.

### Convenience

### Setback (default:OFF)

Maintains the room by temporarily sta

om temperature in a specific range during unoccupied period		temperature	differential	
tarting air conditioner that was turned OFF.	Cooling	33 — 37°C	-2 — -8°C	
re Cooling : 35°C Recovery differential Cooling : -2°C				

Ex) Setback temperature 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

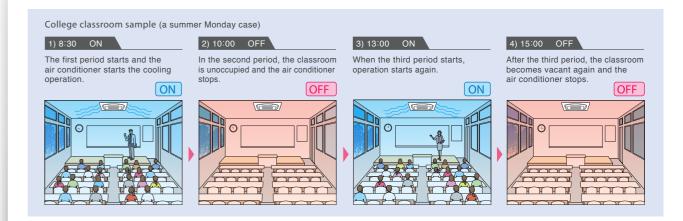
### Weekly schedule

- · 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)



Setback

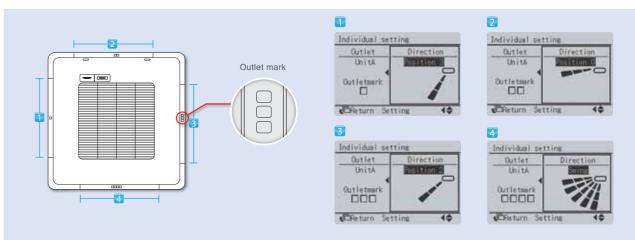
Recovery



### 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.

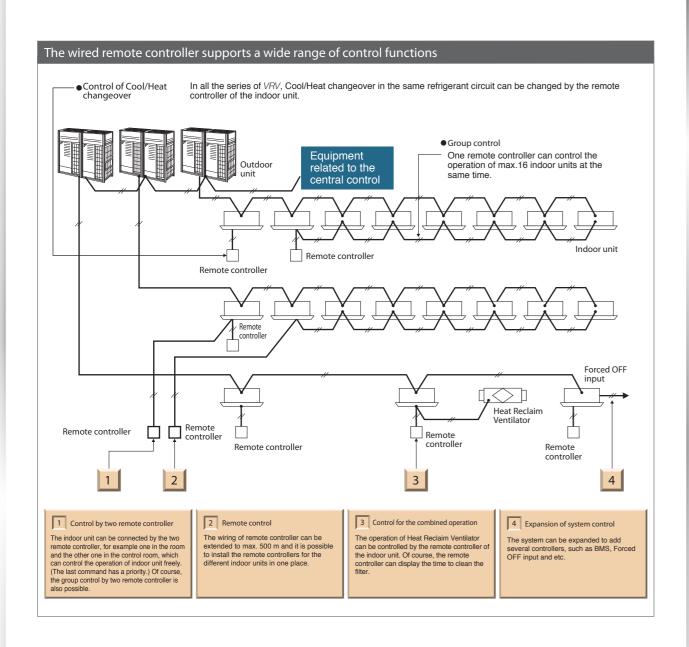
- \*1 Only available for VRV 4-Way Flow Ceiling Suspended type FXUQ-A series and Ceiling Mounted Cassette (Round Flow with Sensing) type FXFQ-S series
- \*2 Only available for VRV 4-Way Flow Ceiling Suspended type FXUQ-A series, Ceiling Mounted Cassette (Round Flow with Sensing) type FXFQ-S series and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



### Wireless remote controller



\* Refer to page 51 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
  - The exposed type remote controller is fitted with a thermostat sensor.

conference rooms.

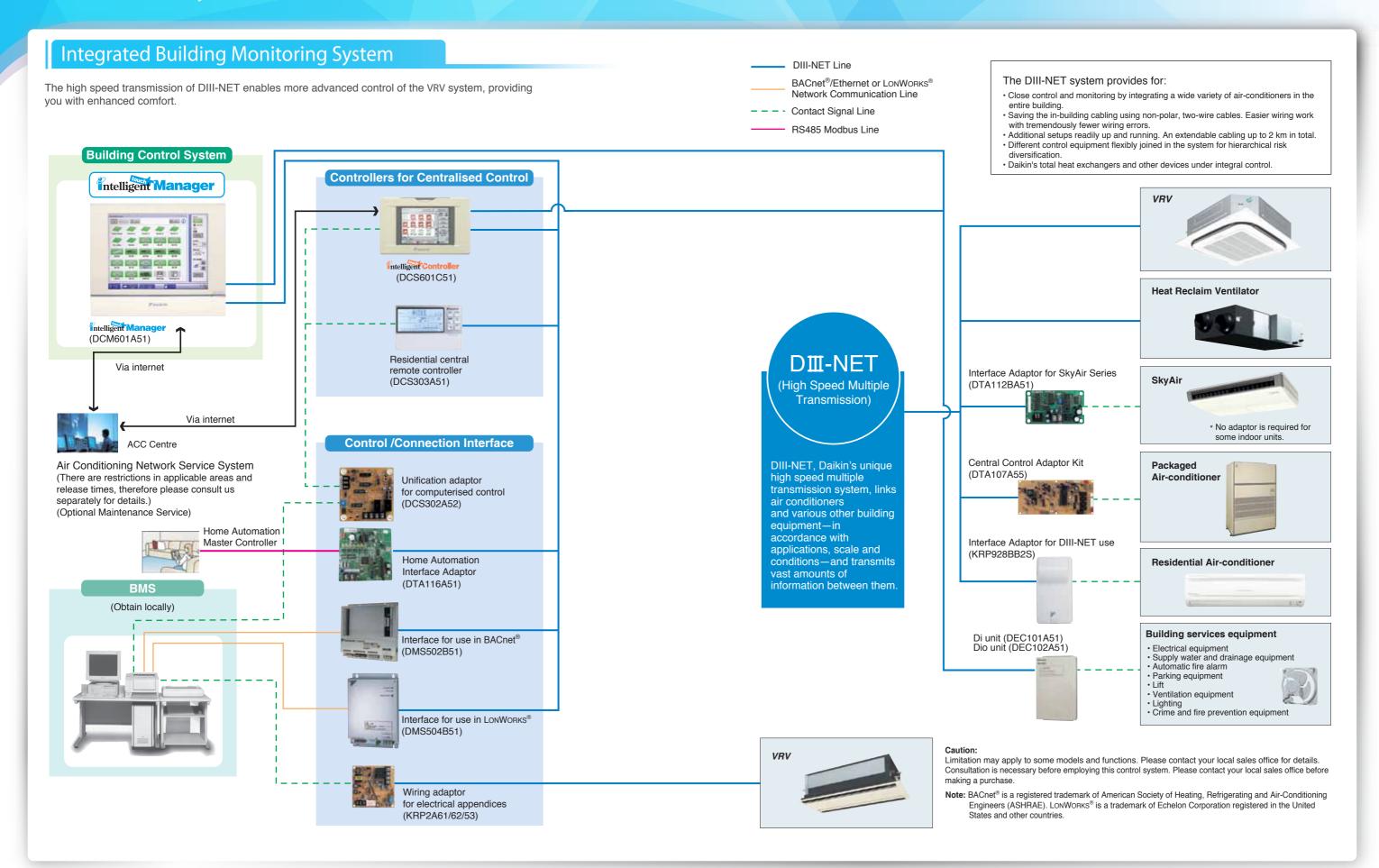


The concealed type remote controller smartly fits into a night table or console panel in a hotel room

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

	FXFQ-S	FXFQ-LU	FXZQ	FXCQ	FXKQ	FXDQ- PB/NB	FXDQ-SP	FXSQ	FXMQ	FXUQ	FXHQ	FXAQ	FXL(N)Q	FXVQ
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)						•	•	•	•				•	

<sup>\*</sup>Refer to page 51 for the name of each model



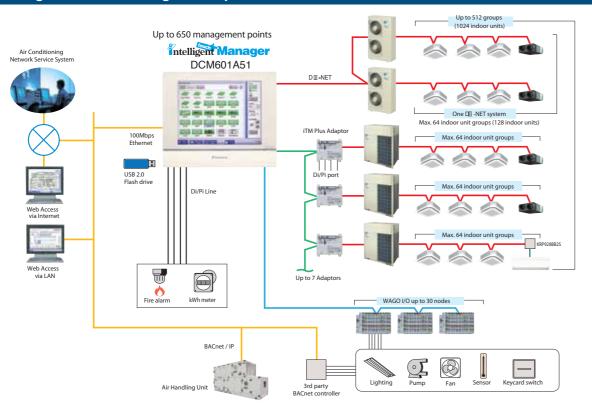
# Advanced Control Systems for

# **VRV** Indoor Units

# Intelligent Manager

intelligent Touch Manager maximises the advantages of VRV features

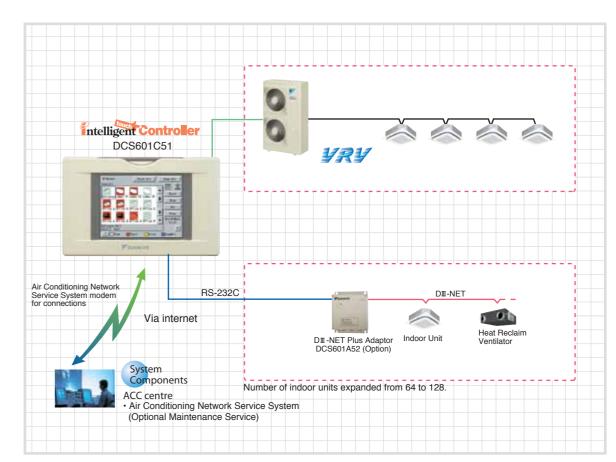
intelligent Touch Manager System Overview



- 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.
- 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.



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 DIII-NET Plus Adaptor (Option)

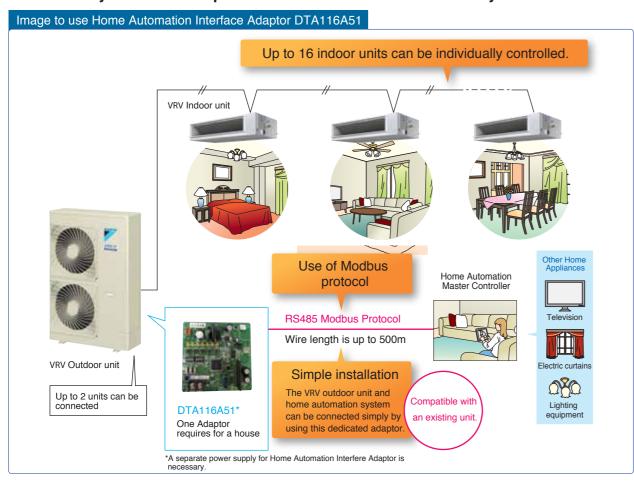


# Advanced Control Systems for VI

# **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	

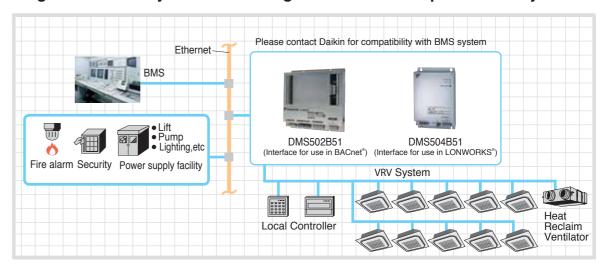
On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Cooling/Heating setpoint
Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Filter sign reset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



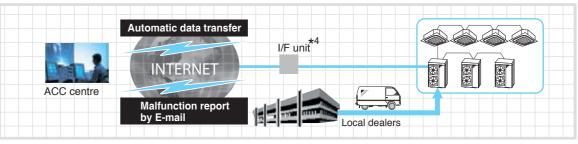
■Compatibility with BMS enhanced by utilising the international communication standards, BACnet® or LONWORKS®.

### 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.

# 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** 

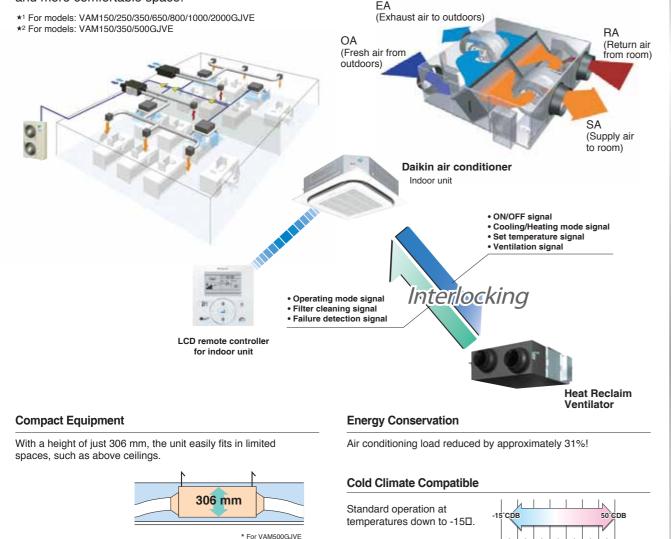




Heat Reclaim Ventilator remote controller BRC301B61 (Option)

\* 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

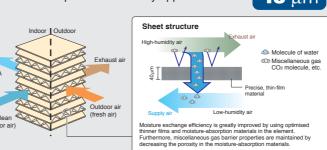
This unit recovers heat energy lost through ventilation and curbs room temperature changes caused by ventilation, thereby conserving energy and reducing the load on the air conditioning

### 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%!



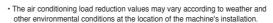
### **Auto-ventilation Mode Changeover Switching**

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**

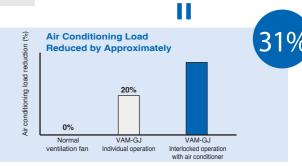
Reduces air conditioning load by not running the Heat Reclaim Ventilator while air is still clean soon after the air conditioner is turned ON.



- · The air conditioning load reduction values 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 \precede 50% RH, intermediate seasons 24 \precede 50% RH. winter 22 40% RH

Operating time: 2745 hours (9 hours per day, approx. 25 days per month) Calculation method: simulation based on "MICBO-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.

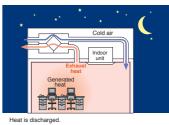
•Nighttime free cooling operation only works to cool and if connected to Building Multi or VRV systems.

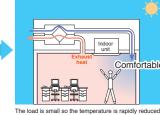
Nighttime free cooling operation is set to "off" in the factory settings, so if you wish to use it, request your dealer to turn it on.

- \*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





heat load reduced by

approx.  $5\%^{^{*2}}$ 

### CO<sub>2</sub> sensor optional kit connection

Prevent energy losses from over-ventilation while maintaining indoor air quality with optional CO2 sensor.

# Air Treatment Equipment Lineup

# **Specifications**

	MODEL			VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
Power Sup	pply						1-phase, 220	-240 V/220 V,	50 Hz/60 Hz			
		Ultra-High		79	75	79	74	75	72	78	72	77
Temp. Excl Efficiency	hange	High	%	79	75	79	74	75	72	78	72	77
Linoidridy		Low		84	79	82	80	77	74	80.5	75.5	79
Enthalpy		Ultra-High		66	63	66	55	61	61	64	61	62
Exchange	For Cooling	High	%	66	63	66	55	61	61	64	61	62
Efficiency		Low		70	66	70	59	64	64	68.5	64	66
	Heat	Ultra-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		125	137	200	248	342	599	635	1,145	1,289
Bypass Mode         High         W         111         120         182         225         300         517         567         991         1,1								1,151				
Low 57 60 122 128 196 435 476 835						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
Sound Leve	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
	Bypass	Ultra-High		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
	Mode	High	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		
Casing							Galv	vanised steel p	olate			
Insulation	Material						Self-extingu	ishable polyure	ethane foam			
Dimension	s (HXWXD)		mm	278×8	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 hea	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
Airfl	ow 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
	ernal Static	Ultra-High		120	70	169	105	85	133	168	112	116
	ssure	High	Pa	106	54	141	66	53	92	110	73	58
		Low		56	24	67	32	35	72	85	56	45
Mo	tor Output		kW	0.03	0×2	0.09	0×2	0.140×2	0.28	0×2	0.28	0×4
Connection	n Duct Diame	eter	mm	<i>∲</i> 100	φ.	150 \$\dphi 200 \$\dphi 250 \$\dphi 350\$						
Unit Amb	ient Conditio	n						-15□–50□DB,	80%RH or les	S		

- 2. Airflow rate can be changed over to Low mode or High mode
- 3. Sound level is measured in an anechoic chamber.
- Sound level is measured in an anecnoic cnamper.
   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:

- 6. 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.

  8. 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.

  9. Sound level from the discharge port causes the value to be approximately 8 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) fligher 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:

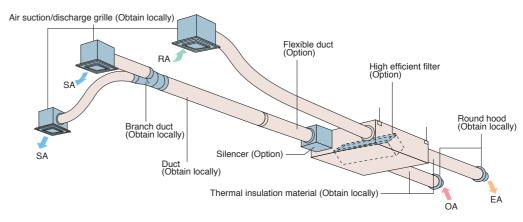
  -Decentralised installation of discharge grilles

  1. 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 mate

# Options



### **Option List**

Ite	m			Туре	VAM150 · 250 · 350 · 500 · 650 · 800 · 1000 · 1500 · 2000 GJVE												
	He	at Reclai	m Ver	ntilator remote controller	BRC301B61												
		. A I' I	Reside	ntial central remote controller	DCS303A51 *1												
	Central remote controller					DCS302CA61											
	controlling device Unified ON/OFF controller					DCS301BA61											
Ф	Schadula timer					DST301BA61											
device	Wiring adaptor for electrical appendices					KRP2A61											
	Adaptor	For hu	midif	ier	KRP50-2												
I≟	ab	Installa	tion I	box for adaptor PCB	KRP50-2A90 (Mounted electric component assy of Heat Reclaim Ventilator)												
it		For he	ater (	control kit	BRP4A50												
Controlling	PC Board				FXFQ-S FXFQ-LU	FXZQ-M	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXSQ-P	FXMQ-P	FXMQ-MA	FXUQ-A	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	FXVQ-N
					KRP1C63★	KRP1BA57★	KRP1B61★	KRP1B61	KRP1B56★	KRP	1C64★	KRP1B61	KRP1C67	KRP1BA54	_	KRP1B61	KRP1C67
	Installation box for adaptor PCB☆				Notes 2, 3 KRP1H98	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 

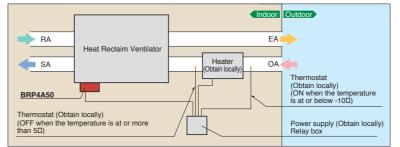
  is necessary for each adaptor marked 

  \*
  - 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.
- Installation box☆ is necessary for second adaptor
- Installation box is necessary for each adaptor.
   Ter 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
Additional function	Silencer		_			KDDM24B50	KDDM24B100			KDDM24B100×2	
	Silericer	Nominal pipe diameter mm	_			φ 200		φ 250			
	High efficiency filter		KAF242H25M		KAF24	2H50M	KAF242H65M	KAF242H80M	KAF242H100M	KAF242H80MX2	KAF242H100MX2
	Air filter for replacement		KAF241G25M		KAF241G50M		KAF241G65M	KAF241G80M	KAF241G100M	KAF241G80MX2	KAF241G100MX2
Flexible duct (1 m)			K-FDS101D	K-FDS151D		K-FDS201D		K-FDS251D			
Flexible duct (2 m)			K-FDS102D	2D K-FDS152D		K-FDS202D		K-FDS252D			
Duct adaptor Naminal nine diameter Imm			_							YDFA	25A1
Duct a	auaptor	Nominal pipe diameter mm				_				φ 2!	50
CO <sub>2</sub> sensor			_			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.