### Note:

- Ask an authorised Daikin dealer to install Daikin products. Do not try to install the product yourself or get
  it installed by any unauthorised dealer. Improper installation can result in water or refrigerant leakage,
  electrical shock, fire or explosion. Warranty of the product shall be void if not installed by an authorised
  Daikin dealer.
- Use only those parts and accessories supplied or specified by Daikin. Ask authorised Daikin dealer for any repair or component. Warranty of the product / component shall be void if non-specified spares are used or repaired by a non Daikin dealer.
- Please ensure to install ELCB (Earth Leakage Circuit Breaker) for outdoor units to prevent ground fault effects.
- Read the user's manual carefully before using the product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

For any enquiry, either call the numbers mentioned below or contact your nearest Daikin dealer.

### 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.





About ISO 900

ISO 9001 is a plant certification system defined by the International Organization for Standardization (ISO) relating to quality assurance. ISO 9001 certification covers quality assurance aspects related to the "design, development, manufacture, installation, and supplementary service" of products manufactured at the plant.



- About ISO 14001

ISO 14001 is the standard defined by the International Organization for Standardization (ISO) relating to environmental management systems. Our group has been acknowledged by an internationally accredited compliance organisation as having an appropriate programs of environmental protection procedures and activities to meet the requirements of ISO 14001

### DAIKIN AIRCONDITIONING INDIA PVT. LTD.

12th Floor, Building No. 9, Tower A, DLF Cyber City, DLF Phase III, Gurgaon - 122 002, Haryana, India. Tel.: 0124-4555444, Fax.: 0124-4555333



VRV S - DAIPL-2024/25-24/2/EA&SL-1B

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www.facebook.com/DaikinEastAfrica/

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- www.youtube.com/user/DaikinACIndia

• The specifications, designs, and information in this brochure are subject to change without notice.



## WORLD'S LEADING AIR CONDITIONING COMPANY FROM JAPAN



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## ABOUT DAIKIN

At Daikin®, we are a leading innovator and provider of advanced, high-quality air-conditioning solutions for residential, commercial and industrial applications.

As world's leading air conditioning company, we are committed to delivering air conditioning solutions that enhance the quality of life all around the world.

Established in 1924, Daikin Industries Ltd., is a diverse multinational company active in air conditioning, chemicals and oil hydraulics. With headquarters in Osaka, Japan, our Daikin family has more than 84,870 members, working across 100+ production base units and 316 consolidated subsidiaries worldwide.

As the world's sole manufacturer that develops a long line of products from refrigerants to air conditioners, we advocate comfortable living on the strength of advanced technologies.

We are present in USA, Canada, Europe and Russia, The Middle East, Africa, Asia, Oceania and Latin America. We aim to serve our customers in each of these markets by providing optimal air conditioning solutions.



## EXPLORING NEW R&D FRONTIERS

At Daikin, we are creating value through innovative technologies. As a global industry frontrunner, we are carrying out research and development on the world's most advanced air-conditioning technology.

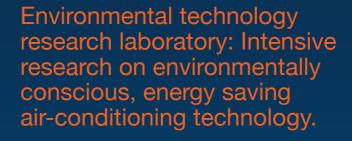
Our strong R&D edge has helped us create futuristic products that enrich people's lives. As symbolised by the VRV, Daikin has put forth a multitude of products and varied technology that have always been, and continue to be at the forefront of innovation.

To be able to offer such products and services that delight and astound our customers, we have constructed an advanced R&D architecture.





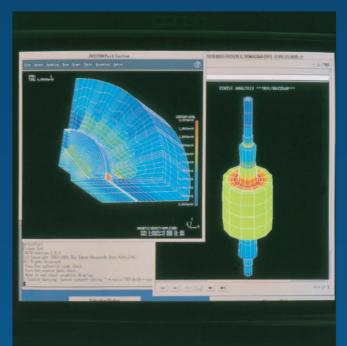
To create more advanced functions and new value, we have instituted specialised R&D divisions: the 'Environmental Technology Research Laboratory' and the 'Solution Product Development Centre'. In combination with the Product Development Group, each of the three divisions work in close cooperation to precisely ascertain the customers' needs and to enable commercialisation of products, incorporating advanced technology that take the lead over our competitors.



Accelerating globalisation of our air-conditioning business and varied needs of customers across geographies are increasing our research challenges. We have established a research laboratory devoted to the two fields of 'air-conditioning' and 'the environment'. With our mission to promote energy savings in air-conditioners, we are engaged in R&D on cutting-edge technologies. Our aim is to create futuristic products from fundamental research on motor inverters and other areas to support individual product development.

Going forward, we will elevate our technology edge to achieve further business expansion globally.





## The solutions product development centre: integrating air-conditioners with IT.

Keeping in mind the changes in business brought in by the computerisation and networking of society, we have integrated IT into our airconditioners, including communication technology, software technology and digital control. We are initiating R&D that will offer new system services a comfortable environment with superior energy savings by networking air-conditioners. Such a scenario will enable them to exchange information with service centres.



# INTRODUCING 'VRV S'

VRV S is the ideal air-conditioning system as it replaces multiple outdoor units with only one unit, maintaining the picturesque view of the building. VRV S is ideally suited for small offices, shops, gyms and residences as it offers panoply of indoor units, which can be connected with only one outdoor unit.



45

Space saving
Sufficient capacity
Slim design
Sound-reduced

Easy installation

1 E

VRV S is available up to 12 HP (9.6 Ton) and a maximum of 19 indoor units can be connected with one outdoor unit. The compact, trunk-shaped outdoor unit can easily be installed on a balcony or ledge creating a spick and span space around the building.



## WHY 'VRV S'?

In a conventional split air-conditioning system, a house requires same number of outdoor units and indoor units. For example, a house with four rooms will have four indoor units and four outdoor units.

With increase in number of rooms the number of outdoor units also keeps on increasing; a big house may require more than 15 outdoor units. An apartment or a house that does not have sufficient space will find it difficult to accommodate numerous outdoor units. Even if the outdoor units are somehow crowded together, they will consume a lot of space, look cluttered and ruin the aesthetics of the house.

VRV S replaces all the outdoor units of the house with just one outdoor unit. A total of 19 indoor units can be connected to one outdoor unit to create the space you have always desired. Also there are different styles of indoor units like cassette type, duct type and hi-wall, among others that can be connected with a single outdoor unit. Furthermore, actual piping length of up to 150 meters coverage of widespread spaces is ensured.

## THE IDEAL AIR-CONDITIONING SYSTEM FOR SMALL OFFICES AND SHOPS



## MAIN FEATURES

## Wide range of choices

To suit the variety of rooms found in small offices and shops, the VRV S system offers a wide range of indoor and outdoor units.

VRV S indoor and outdoor units are almost as easy to install as residential air-conditioning systems, making them ideal for small offices and shops.

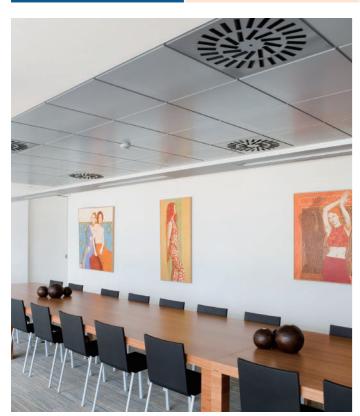
### **Outdoor units**

### 12 models

Outdoor unit can be selected from six models to provide the power that suits your needs. The trunkshaped outdoor unit can be neatly installed outside the office.



	Outdoor u	nit line-up	
MODEL NAME	RX(Y)MQ4	RX(Y)MQ5	RX(Y)MQ6
CAPACITY RANGE	4 HP (11.2 KW)	5 HP (14.0 KW)	6 HP (16 KW)
CAPACITY INDEX	APACITY INDEX 100		150
MODEL NAME	RX(Y)MQ8	RX(Y)MQ10	RX(Y)MQ12
CAPACITY RANGE	CITY RANGE 8 HP (22.4 KW)		12 HP (33.5 KW)
CAPACITY INDEX	200	250	300





## MAIN FEATURES

## **Energy efficiency and quiet operation**

Outdoor units use Daikin's unique compressor to realise energy saving performance and quiet operation.

## High COP during both cooling and heating operations

One of the top features of VRV S is its energy efficiency. It achieves high COP during cooling and heating operations by employing Daikin's unique compressor.

## **Quiet operation provides luxurious comfort**

Quietness is yet another important feature of Daikin's VRV S system. To reduce noise and realise comfortable operation, latest technologies and features are applied to the outdoor units.

## **Night-time 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 become active 8 hours\*1 after the peak temperature in the daytime, and operation will return to normal 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).

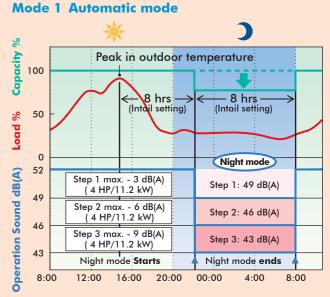
### Mode 2 Manual mode

Starting time and ending time can be entered. (An external control adaptor for outdoor unit, DTA104A61 or DTA104A62, 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.



• This function is available in setting at site.

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

## MAIN FEATURES

## A collection of cutting-edge technologies realises efficient and quiet operation

The high efficiency compressor to achieve a higher COP.

## Compressor equipped with Reluctance DC motor

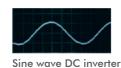
Daikin DC inverter models are equipped with the Reluctance DC motor for compressor. The Reluctance DC motor uses 2 different types of torque, neodymium magnet\*1 and reluctance torque\*2. This motor can save energy because it generates more power with a smaller electric power than an AC or conventional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

# Reluctance DC Motor Conventional DC motor AC motor AC motor Small load Low capacity Large load High capacity



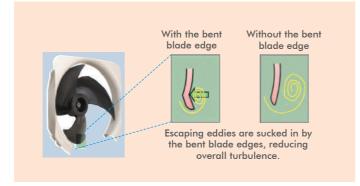
### >> Smooth sine wave DC inverter

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



## 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.

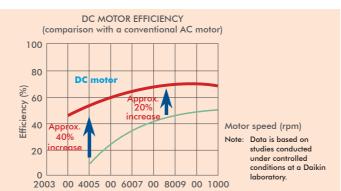


### DC fan motor

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

DC FAN MOTOR STRUCTURE





## MAIN FEATURES

## **Design flexibility**

VRV S systems offer broad design flexibility with long refrigerant piping lengths and multiple indoor unit combinations, which provide generous freedom for office and shop design both inside and outside.

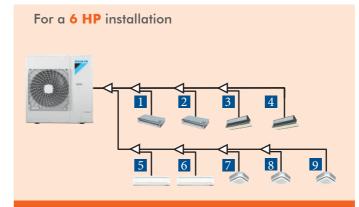
## As many as 19 indoor units can be connected to a single outdoor unit

Multiple indoor unit combinations are possible.\*
As many as 19 indoor units can be connected to a single outdoor unit, making the VRV S a remarkably versatile system.

\* Total capacity index of connectable indoor units must be 50 - 130 % of the capacity index of the outdoor unit.

## Long piping design possible

The VRV S provides the long piping length possibility of 150m, with a total piping length of 300m. If the outdoor unit is installed above indoor units, the level difference can be up to a maximum of 50m. These generous allowances facilitate an extensive variety of system designs.



### Max. 19 units

- >> Max. 6 indoor units for a 4 HP installation
- >> Max. 8 indoor units for a 5 HP installation
- >> Max. 9 indoor units for a 6 HP installation
- >> Max. 13 indoor units for a 8 HP installation
- >> Max. 16 indoor units for a 10 HP installation
- >> Max. 19 indoor units for a 12 HP installation

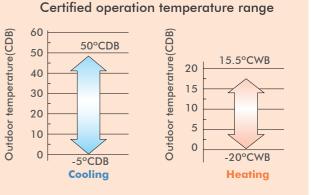
# Note: \*1.40 m when the outdoor unit is installed below indoor units. \*2. Max. 15m Level difference between indoor units. \*2. Maximum piping length between the indoor unit and the first branch is 40 m. \*3 Applicable for ODU for capacity of 6/8/10/12 HP

## Wide operation temperature range

The versatile operation range of the VRV S system works to reduce limitations on installation locations. The operation temperature range for heating goes all the way down to -20°C, while cooling can be performed with outdoor temperatures as high as 50°C.

Note: Operating temperature range is different for different capacity Outdoor units.

Refer Page No. 49 for details.



## MAIN FEATURES

## **Easy installation**

A variety of functions are provided that make installation easier, such as simple wiring and piping and automatic test operation.

## **Automatic test operation**

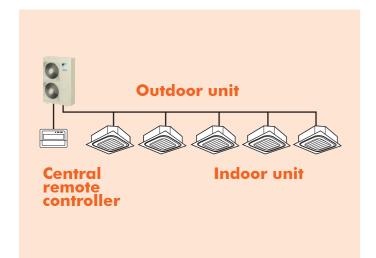
Simply press the test operation button and the unit performs an automatic system check, including wiring, shutoff valves and sensors. The results are returned automatically after the check finishes.

## Simple wiring and piping connection

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

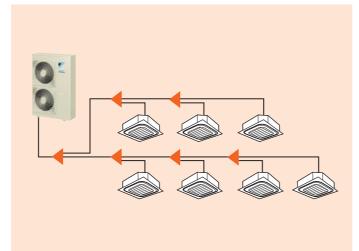
### >> Super wiring system

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.



## INDOOR UNIT LINE-UP

## **Enhanced Range Of Choices**

A variety of VRV indoor units is enabled in one system, opening the door to stylish and quiet indoor units.

VRV Indoor Units 16 types 73 models

Туре	Model Name	Capacity Range Capacity Index	0.8 HP 20	1 HP 25	1.25 HP 32	1.6 HP 40	2 HP 50	2.5 HP 63	3 HP 71	3.2 HP 80	4 HP 100	5 HP 125	6 HP 140	7 HP 170	8 HP 200	10 HP 250	16 HP 400	20 HP 500
Ceiling Mounted Cassette Round Flow & Round Flow with Sensing (Optional)	FXFSQ-ARV			•	•	•		0			•	•	•		 			
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-AVM		0	•	0	•	•											
Ceiling Mounted Cassette (Double Flow)	FXCQ-AVM			0	•		0	•		•	 	•			 			
Ceiling Mounted Cassette Corner	FXKQ-AV				•		•				 	 			 			
Slim Ceiling Mounted Duct	FXDQ-PDV (with drain pump)	(700mm width type)	0	0	•	 					 							
Modified Duci	FXDQ-NDV (with drain pump)	(900/1,100mm width type)				•	•	0										
Ceiling Mounted Duct	FXMQ-PA/PB		•	0	0			•		0				 	     			
3	FXMQ-NVE					 					 	 				•		
Mid Static Ceilling Mounted Duct	FXMQ-ARV											 			 			
Ceiling Suspended	FXHQ-MA/AV				•	 	     	•										
4-Way Flow Ceiling Suspended	FXUQ-AVEB								0		0							
Wall Mounted	FXAQ-ARV		0	•	•	•	0	•			 	 			I I I I			
Floor Standing	FXLQ-MAVE					 					 	 	 		 			
Concealed Floor Standing	FXNQ-MAVE				0		•	0										
Multi Cube/Spot	FXPQ-AVM	0		•		1												
Clean Room Air Conditioner	FXBQ-PVE																	
	FXBPQ-PVE					 		•			 	 					1	

At Daikin, we offer a wide range of indoor units, including both VRV and residential models, responding to a variety of needs of our customers that require air conditioning solutions.

## **VRV Indoor Units**

Ceiling Mounted Cassette Round Flow & Round Flow with Sensing (Optional)

FXFSQ-ARV



Ceiling Mounted Cassette (Compact Multi Flow) Type



Quiet, compact and designed for user comfort.



Ceiling Mounted Cassette (Double Flow) Type

Presence of people and floor

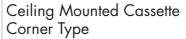
temperature can be detected to

provide comfort and energy savings.

FXCQ-AVM



Add finishing touch to your ceiling with enhancing function and design.



FXKQ-AV



Slim design for flexible installation



## Slim Ceiling Mounted Duct Type

FXDQ-PDV

FXDQ-NDV



Slim design, quietness and static pressure switching.



## Ceiling Mounted Duct Type

FXMQ-PA/PB

FXMQ-ARV FXMQ-NVE



High/Mid 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



Slim body with quiet and wide airflow.



## INDOOR UNIT LINE-UP

Wall Mounted Type

FXAQ-ARV



Stylish flat panel design harmonised with your interior décor.



Floor Standing Type

FXLQ-MAVE



Concealed Floor Standing Type

FXNQ-MAVE



Suitable for perimeter zone air conditioning



Multi Cube (Spot AC) Type

FXPQ-AVM





New solution in large space comfort.



Clean Room Air Conditioner

FXBQ-PVE

**FXBPQ-PVE** 



Suitable for hospitals and other clean spaces.





## **VRV Indoor Units**

Ceiling Mounted Cassette Round Flow & Round Flow with Sensing (Optional)

FXFSQ25A / FXFSQ32A / FXFSQ40A / FXFSQ50A / FXFSQ63A / FXFSQ80A / FXFSQ100A / FXFSQ125A / FXFSQ140A



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

**Dual sensors\*1** 



## Infrared presence sensor

The 4 sensors detect human presence.

Ceiling height	2.7m	3.5m	4.0m
Detection range	approx.	approx.	approx.
(diameter) <sub>*3</sub>	8.5m	11.5m	13.5m

<sup>\*3.</sup> 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)*4	approx.	approx. 14m	approx. 16m

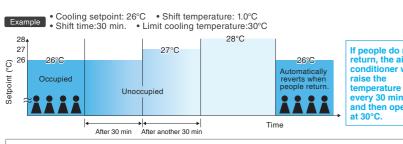
<sup>\*4.</sup> The infrared floor sensor detects at the floor surface

## **Various sensing functions** Sensing sensor mode\*5\*6

## Sensing sensor low mode (default: OFF)

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

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



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

## INDOOR UNIT LINE-UP

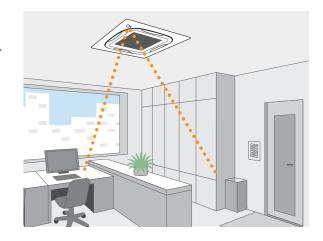
## **VRV Indoor Units**

## Sensing sensor stop mode (default: OFF)

When there are no people in a room, the system stops automatically. $^{\star7}$ 

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.

## Auto airflow function\*8

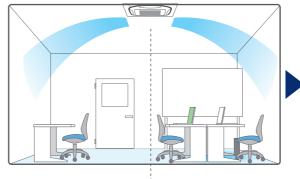
\*8. Airflow direction shoud be set to "Auto"



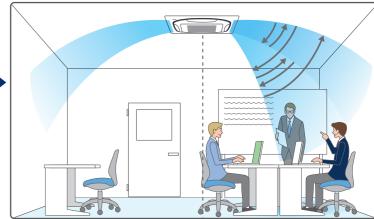




Cooling



Optimal air direction by "Auto'



Drv

Optimal air direction by "Auto"

Swing (narrow)

• With Auto airflow direction mode, flaps are controlled to deliver optimal airflow when the room is unoccupied.



• When human is detected, air direction is set to "Swing (narrow)" to deliver cool air

<sup>\*1.</sup> Applicable when sensing panel (BYCQ140EEF6/BYCQ125EEK) is installed.

<sup>\*5.</sup> These functions are not available when using the group control system. \*6. User can set these functions with remote controlle

<sup>\*7.</sup> Please note that upon re-entering the room, air conditioner will not switch on automatically.

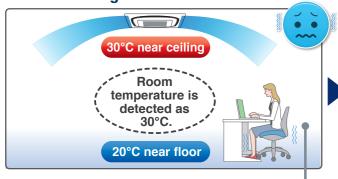
## Comfort and energy saving preventing over cooling\*9

\*9. Airflow direction and airflow rate should be set to "Auto".

Floor temperature is detected and over cooling prevented.

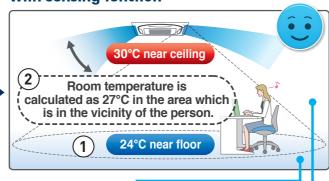
Cooling

## Without sensing function



Area around feet gets too cold because air conditioner continues until the temperature near the ceiling reaches the set temperature.

## With sensing function



The floor temperature, which is lower than near the ceiling, is detected.

Automatic control using the temperature near the person as the room temperature.

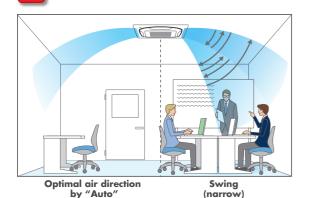
Energy Savings The temperature near the person is automatically calculated by detecting the temperature of the floor. Energy is saved because the area around the feet does not get too cold.

## Savings









### Individual Airflow Direction Control



The illustration shows typical airflow.

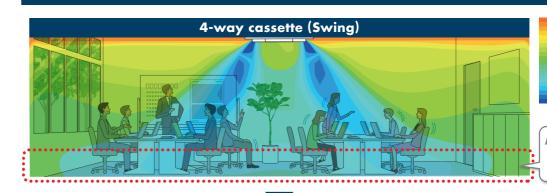
## INDOOR UNIT LINE-UP

## **Circulation Air Flow**

\*1. Applicable when wired remote controller BRC1E62 is used. \*2. Not applicable when using individual airflow direction control.



## Comfort to the entire room with even temperatures and no cold air pockets at floor level



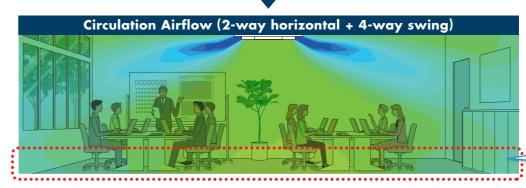
### O.O Comparison Conditions

- 8.0 Room size: 17.0 Width 7.5m x depth 7.5m x height 2.6m
- .0 Indoor unit capacity:71 class
- Outdoor air temperature:35°C

  Airflow rate and air direction:
  high / swing

Areas at floor level are cold while areas

around walls are hot.

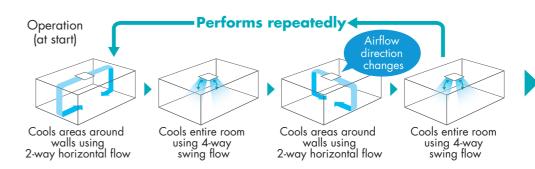


## Approx. 5% energy savings by reducing uneven temperatures

\*3.Calculated under the following comparison conditions: When the average temperature at a height of 0.6m above the floor reaches set temperature. [26°C]

Full comfort is provided with no cold feet.

## Configurations of Circulation Airflow



When the target temperature is reached, normal operation (all-round flow) begins.

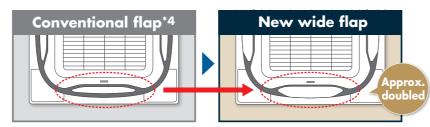
Note: Results may vary depending on equipment conditions, room size and distance from indoor unit to walls

## Three technologies that achieved circulation airflow

Flow-out is straight, horizontal and strong, so the air travels far and even reaches the wall from which it falls to the floor. This approach and technology makes circulation airflow possible.

## Use of new wide flaps (Straight)

Compared to conventional models, the new wide flap increases straightness of the airflow, so coverage is approximately doubled.



\*4. FXFQ-S model

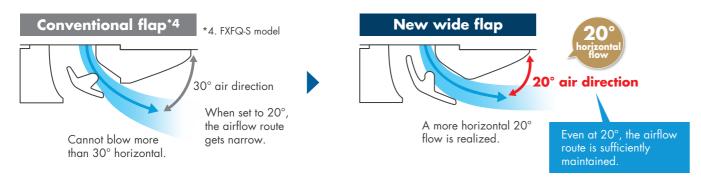
## **New wide flap construction inhibits** ceiling dirt and grime

By tapering both flap ends, the airflow that causes dirty ceilings is directed downward.



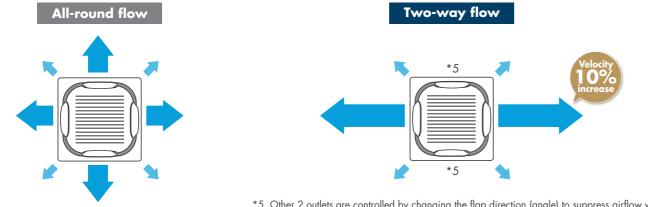
## 2 Optimising airflow angle (Horizontally)

Even with the flap angle raised, a sufficient airflow route is maintained to realize a more horizontal airflow angle.



## 3 Increased velocity in 2-way flow (Strongly)

Velocity is increased by making 2-way flow. Powerful airflow is realized



### \*5. Other 2 outlets are controlled by changing the flap direction (angle) to suppress airflow volume.

## INDOOR UNIT LINE-UP

\*1. Applicable when wired remote

## Comfortable air conditioning for all room layouts and conditions



## Individual airflow settings

- No individual setting (Auto airflow)

- Position 3
- Position 4 (Lowest point)

Individual settings are possible as stated above.

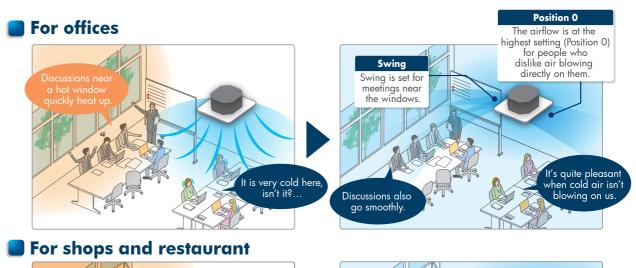
19

## When individual airflow is selected, airflow direction can be adjusted to room layout.

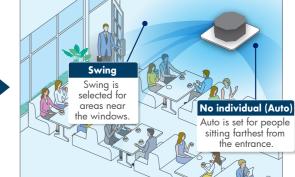
**Position 4** 

(Fixed airflow to the

lowest position)



(Up/down)



## **VRV Indoor Units**

New Wide variety of decoration panels (Option)

• Designer choice has been given a boost with the increase in number of new types of decoration panels.











Standard panel with sensing

Designer panel\*2

Standard panel\*2

## New Designer panel (Option)



## Decoration Panel Line-up (Option)



Standard panel\*1 BYCQ125EAF9 (Fresh White)



Sensing panel BYCQ140EEF6 (Fresh White)



Standard panel<sup>11</sup> BYCQ125EAK (Black)



Sensing panel BYCQ125EEK (Black)



BYCQ125EAPF (Fresh White)

\*1. Sensing function is applicable when sensing panel is installed.

## New Auto grille panel (Option)\*1

- Clogged filters strain performance of the indoor unit and may result in breakdowns. Impeded airflow through the filter also lowers operational efficiency, which increases electricity bills.
- With the auto grille, anyone can easily clean the filter, which translates to lower maintenance cost and longer life of the air conditioner.
- With the auto grille panel, motorised raising and lowering allows suction panel and air filter cleaning to be carried out without the need

- Where the air is dusty and likely to soil the air condition
- Where simple and quick filter and grille cleaning is a worthwhile benefit.



Auto grille panel BYCQ125EASF (Fresh White)

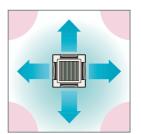
A dedicated wireless remote controller is supplied with the auto grille panel.

## INDOOR UNIT LINE-UP

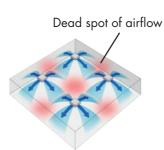
## **VRV Indoor Units**

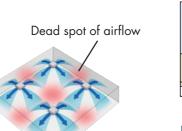
### **Comfortable airflow**

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



There are areas of uneven temperature.





**Easy maintenance** 

**Easy installation** 

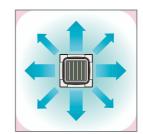
with a 850mm lift.

• Internal hygiene can be easily checked without removing the whole panel. Simply opening the suction panel allows the internal drain pan to be checked.

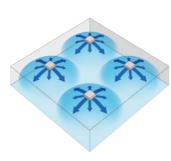
• Drain pump is equipped as a standard accessory

850mm





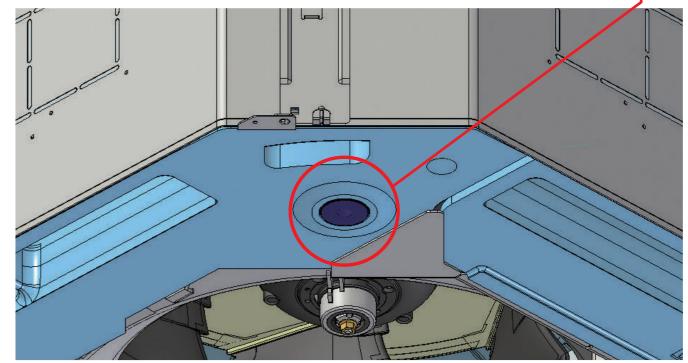
There are much fewer areas of uneven temperature.

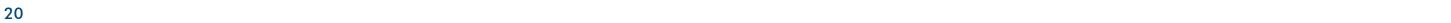




• 24mm diameter drain outlet

The drain outlet allows insertion of a finger or dental mirror for inspection of the internal cleanliness of the drain pan. Removal of the suction panel enables access.



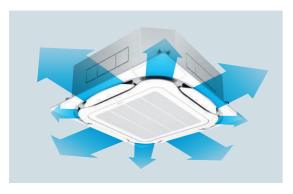


## **VRV Indoor Units**

## **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 room layout.

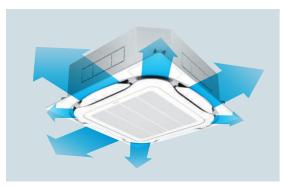
### All-round flow



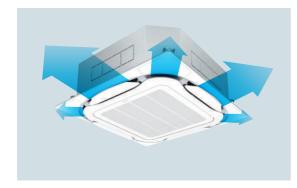
4-way flow



3-way flow



L-shaped 2-way flow



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.

- 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 lifespan of a silver ion cartridge depends on the usage environment, but should be
  changed once every two to three years.)
- 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.





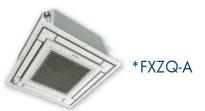
• Control of the airflow rate can be selected from 5-step control and Auto.

## INDOOR UNIT LINE-UP

## **VRV Indoor Units**

Ceiling Mounted Cassette (Compact Multi Flow) Type

FXZQ20AVM / FXZQ25AVM / FXZQ32AVM / FXZQ40AVM / FXZQ50AVM



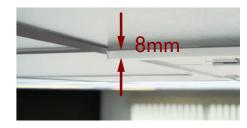
## Quiet, Compact, Designed for user comfort



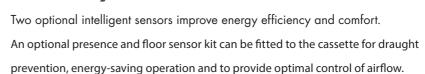
Fully-flat integration in standard architectural ceiling tiles, leaving only 8mm.

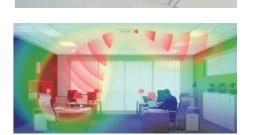
Remarkable blend of iconic design and engineering excellence with an elegant finish in white.

The newly designed panel integrates fully within one ceiling tile enabling lights, speakers and sprinklers to be installed in the adjoining ceiling tiles.



## **Efficiency & Comfort**



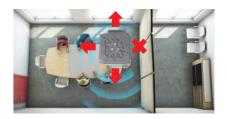


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Individual airflow direction control: flexibility to suit every room layout without changing the location of the unit.







## **Auto Swing (Up/Down)**

Possibility to select automatic vertical moving of the air discharge flaps for efficient air and temperature distribution throughout the room.

## **Ceiling Soiling Prevention**

Prevents air from blowing against the ceiling to prevent ceiling stains.

Reduced energy consumption, thanks to the specially developed small tube heat exchanger, DC fan motor, and drain pump Optional fresh air intake kit.

## **VRV Indoor Units**

Ceiling Mounted Cassette (Double Flow) Type

FXCQ25AVM / FXCQ32AVM / FXCQ40AVM / FXCQ50AVM / FXCQ63AVM / FXCQ80AVM / FXCQ125AVM



## Add finishing touch to your ceiling with enhancing function and design.

Stylish unit blends easily with any interior. Integrated ceiling surface with sophisticated panel design with the adoption of flat flap add finishing touch to your ceiling, with enhancing function and design.

 Individual airflow direction control (unavailable during automatic airflow mode, airflow angle: configurable from 0 to 4 swing positions.)

## Individual flap control



The flat flaps close entirely when the unit is not operating and there are no air intake grilles visible.

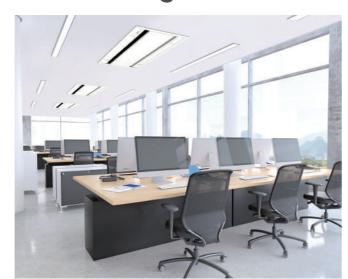
 Reduced energy consumption thanks to specially developed small tube heat exchanger, DC fan motor and drain pump.

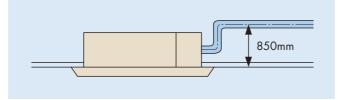
### Enhanced functions from various aspects such as maintenance

- Check contamination in drain pan by simply removing suction grille and panel.
- The flap parts are easy to clean because it is hard to condensate and get dirty.
- Equipped with long life filter which requires only 1-year maintenance interval.
- Adjuster pockets mounted at four corners of the unit enable to adjust the main unit without removing the panel
- Drain pump is equipped as standard accessory with 850mm lift



Adjuster Pocket





 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 lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)





• Easy visual inspection of drainage through the transparent body drain socket.

## INDOOR UNIT LINE-UP

## **VRV Indoor Units**

**Ceiling Mounted Cassette Corner Type** 

FXKQ32AV / FXKQ40AV FXKQ50AV / FXKQ63AV







- Very compact & elegant design.
- Sleek panel with dual tone styling that give rational choice of elegance.

This new Indoor unit has been awarded the Good Design Award.

• Flexibility to install on several height false ceiling minimum up to 3.9 inches (100mm) with the help of multiple spacers (Optional).



White Color Panel



lver Color Panel



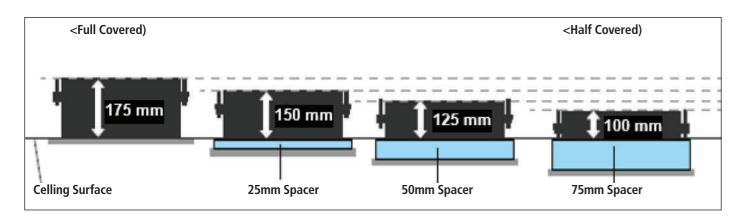
## **VRV Indoor Units**

## **Installation with Panel Spacers**

It has the flexibility to install on several height false ceiling i.e its ceiling height can be minimized with multiple options by spacers (25mm each) from 25mm to 75mm.

Note-Spacer colour-Dark gray





				Space Kit-Model Name		
Item Name	Requ	uired Height (mm)	BKF25A6	BKF25CA6	BKF50CA6	BKF75SA6
			Spacers (Nos): 2 + 2	Comers 4 Nos + Screws 4 Nos	Comers 4 Nos + Screws 4 Nos	Installation Hook: 6 Nos
		App. Model/Qty.	1	1	Х	Х
	25 (mm)	ltem/Images	//		NA	NA
		App. Model/Qty. 2		2	1	Χ
	50 (mm)	ltem/Images	//		2	NA
		App. Model/Qty.	3	3	1	1
	75 (mm)	Item/Images	//			
75mm S	pacer			Detail View	6	BKF50CA6

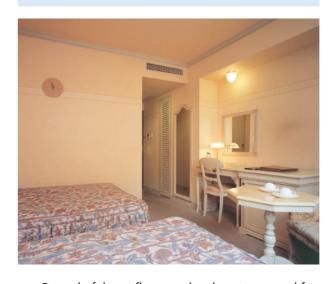
## INDOOR UNIT LINE-UP

## **VRV Indoor Units**

**Slim Ceiling Mounted Duct Type** 

## Slim design, quietness and static pressure switching





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

Low operation sound	v operation sound level							
FXDQ-PD/ND	20/25/32	40	50	63				
Sound level (HH/H/L)	33/31/29	34/32/30	35/33/31	36/34/32				

<sup>\*</sup> 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).

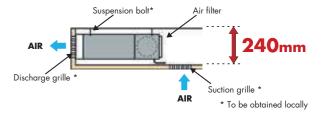


## FXDQ40ND / FXDQ50ND / FXDQ63ND

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



1,100 mm m widin for the 17DQ03ND model.

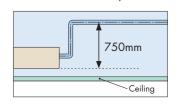


 External static pressure selectable by remote controller switching which makes this indoor unit a very comfortable and flexible model.

10 Pa-30 Pa/factory set: 10 Pa for FXDQ-PD models. 15 Pa-44 Pa/factory set: 15 Pa for FXDQ-ND models

 FXDQ-PD and FXDQ-ND models are available with a drain pump as a standard accessory.

FXDQ-PD/NDVE: with a drain pump (750mm lift) as a standard accessory



Values are based on the following conditions:
 FXDQ-PD: external static pressure of 10 Pa; FXDQ-ND: external static pressure of 15 Pa.

## **VRV Indoor Units**

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

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



## 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

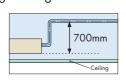
30 Pa-160 Pa for FXMQ40P

50 Pa-200 Pa for FXMQ50P-125P

50 Pa-140 Pa for FXMQ140P

All models are only 300mm in height, an improvement over the 390mm height of conventional models. The weight of the FXMQ40P has been reduced from 44 kg to 28kg.

Drain pump is equipped as standard accessory with 700mm lift.

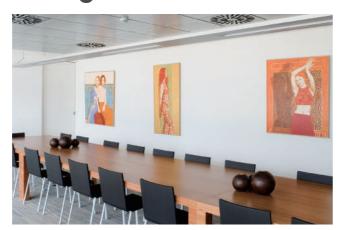


Control of the airflow rate has been improved from 2-step to 3-step control.

Low operat	ow operation sound level (dB(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 operations. 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.



### **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.

## INDOOR UNIT LINE-UP

## **VRV Indoor Units**

## Mid Static Pressure Ceiling Mounted Duct Type

FXMQ40A / FXMQ50A / FXMQ63A FXMQ80A / FXMQ100A

## Mid static pressure allows for flexible duct design

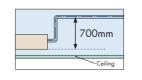
 AC fan motor is installed to suit applications where external static pressure is required at nominal capacity.

30 Pa-50 Pa for FXMQ40-80ARV16

30 Pa-60 Pa for FXMQ100ARV16

All models are only 300mm in height, an improvement over the 390mm height of conventional models. The weight of the FXMQ40P has been reduced from 44 kg to 28kg.

Drain pump is equipped as standard accessory with 700mm lift.



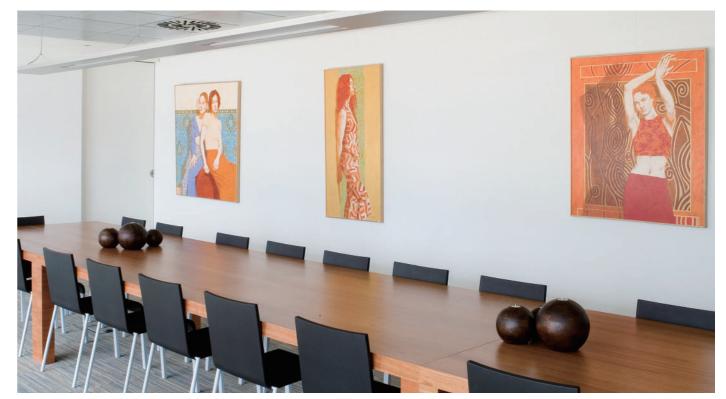
## High airflow rate

Airflow rate is optimised to meet wider spectrum of airflow requirements.

ow operation	ow operation sound level						
FXMQ-A	40	50	63	80	100		
Sound level (H/L)	39/37	41/39	42/40	43/41	44/42		

### 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.



## **VRV Indoor Units**

## **Ceiling Suspended Type**

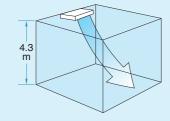
## Slim body with quiet and wide airflow

## New 125 / 140 models provide greater capacity for large spaces

- The technology of the DC fan motor, wide sirocco fan, and large heat exchanger combine for greater airflow and quiet operation.
- Sophisticated design
- Flap neatly closes when not in use.



• Suitable for high ceilings



- Switchable fan speed: 3 steps
- Control of airflow rate has been improved from 2-step to 3-step.
- Drain pump kit (option) includes a silver ion antibacterial agent that assists in preventing the growth of slime, bacteria, and mould that cause smells and clogging.
- Wireless LCD remote controller
- A signal receiver must be added to the indoor unit.

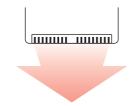


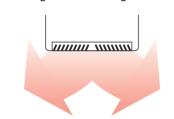
## FXHQ32/63/100MA New FXHQ125/140A



### Comfort

- Auto swing (up and down) and louvers (left and right by hand) bring comfort to the room.
- Louvre manually adjusts for straight or wide angle airflow.





### **Quiet operation**

 Uses quiet stream fan and other quiet technologies. (FXHQ32-100MA)

Sound absorption member

Straightening vane

Turbulent flow is produced

			W. 2. 1				
Indoor unit		Sound level					
maoor unit	Н	M	L				
FXHQ32MA	36	_	31				
FXHQ63MA	39	_	34				
FXHQ100MA	45	_	37				
FXHQ125A	46	41	37				
FXHQ140A	48	42	37				

## INDOOR UNIT LINE-UP

## **VRV Indoor Units**

## Wall Mounted Type

FXAQ20A / FXAQ25A FXAQ32A / FXAQ40A FXAQ50A / FXAQ63A



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## Stylish flat panel design harmoised 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.
- Vertical auto-swing realises efficiency of air distribution. The louvre closes automatically when the unit stops.

## **VRV Indoor Units**

## Floor Standing Type

FXLQ32MA / 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
- A long-life filter is equipped as standard accessory. \*8 hr/day, 25 day/month. For dust concentration of 0.15mg/m<sup>3</sup>



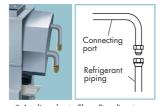
## **Concealed Floor Standing Type**

FXNQ32MA / FXNQ50MA FXNQ63MA



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

- The unit is concealed in the skirting-wall of the perimeter, that creates a classy interior design.
- The connecting port faces downwards, greatly facilitating on-site piping work.
- A long-life filter is equipped as a standard accessory.



Applies also to Floor Standing type \* 8 hr/day, 25 day/month. For dust concentration of 0.15mg/m3



## INDOOR UNIT LINE-UP

## **VRV Indoor Units**

## 4-Way Flow Ceiling Suspended Type

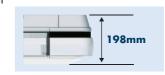
FXUQ71A / FXUQ100A



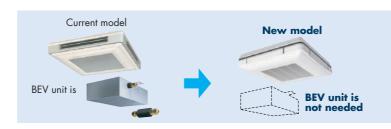
## This slim and stylish indoor unit achieves optimum air distribution and can be installed without a ceiling cavity.

- Unit body and suction panel adopted round shapes and realized a slim appearance design. The unit can be used for various locations such as the ceilings with no cavity and bore 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.





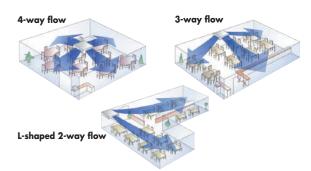
• Built-in electronic expansion valve eliminates the need for a BEV unit, which improves flexibility of installation.



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

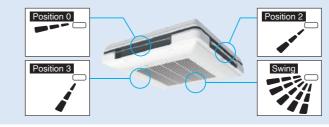


- Control of the airflow rate has been improved from 2-step to 3-step control. Auto airflow rate control can be selected with wired remote controller BRC1E62.
- Energy efficiency has been improved, thanks to the adoption of new heat exchanger with smaller tubes, DC fan motor and DC drain pump motor.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



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## Individual airflow direction example case



## **VRV Indoor Units**

## **Clean Room Type Air Conditioner**





## Suitable for hospitals and other clean spaces

## Easily provides the high cleanliness environment required by various industries

Daikin's clean room air conditioners are specially designed to achieve an environment cleanliness class 10,000. These air conditioners easily realize a cleanliness-class environment and help create a proper environment for hospitals, food and beverage factories, electronics factories and other spaces that require clean air.

### Instances of installation by type (for a hospital)

## Select the air flow system and installation method to match the layout and purpose of the room

Two types of clean room air conditioners are available – an integrated unit model and a separate outlet unit model. It is also possible to configure the air flow system to ceiling intake or floor-level intake according to the panel selected. This flexible design enables the air conditioner to easily adopt to any room layout or use.

Ту	/pe	Ceiling intake (high speed contracted flow/l	e type nigh ceiling model)	Floor-level intake type (gentle wind distribution/high cleanness class model)			
Fea	Features  Construction work is simple and a ceiling installation is possible.  Dust filtering and air-conditioning can be started immediately.			Easy to increase the cleanness and air-conditioning effect.  A low flow speed prevents drying of the affected part and the experience of drafts.			
Cleanline	Cleanliness class*1 100,000 to 10,000		,000	10,0	000		
Wind speed 1.0m/s or higher Approxima		ely 0.5m/s					
Blow	Integrated outlet unit model	Concentrated air conditioning centered directly under the unit     Easy installation  Applications: Surgery	prep rooms, recovery rooms, nurse stations, etc.	Total air conditioning with an emphasis on cleanliness	Intoke (corred locally)  Applications: Operating theatres, delivery rooms, etc.		
method	Separate outlet unit model	Somewhat concentrated air conditioning centered directly under the outlet     Can provide air conditioning in rooms with irregular shapes	Oulet Air conditioner  Applications: CCU*2, sterile rooms, etc.	Total air conditioning with an emphasis on cleanliness     Maintenance possible from a different room  Applications	Intake ocally)  Premature nurseries, newborn nurseries, ICU*3, etc.		

- \*1. Cleanliness class. A scale expressing the cleanliness of air established by NASA (National Aeronautics and Space Administration). Class 10,000 represents a state of less than 10,000 minute particles of diameter under 0.5 µm per cubic foot For comparison, the cleanliness of a typical office is around class 1,000,000.

  \*2. CCU (Cardiac Care Unit). A ward dedicated to the admission of patients with myocardial infarctions and other heart diseases.

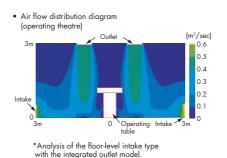
  \*3. ICU (Intensive Care Unit). A ward for the careful treatment and nursing of patients with serious illnesses, injuries, or recovering from operations

## Can be easily installed in existing buildings

A simple structure makes it easy to realize a highly clean environment with the same installation work as for a typical air conditioner. Can be easily installed in new buildings, existing structures and refurbishments.

## Prevents uncomfortable drafts with a low flow speed of approximately 0.5m/s

The floor-level intake system has a low flow speed of approximately 0.5 m/s, improving dust filtration and eliminating the feeling of drafts. Broadly air-conditions the room with a gentle air flow and creates a comfortable environment.



## INDOOR UNIT LINE-UP

## **VRV Indoor Units**

### **Filtration**

## Class 10,000 clean room condition achieved with a **HEPA** filter (sold separately)

The low pressure-loss HEPA filter (sold separately) demonstrates superior dust filtering performance and easily accomplishes an air cleanliness of class 10.000. HFPA filter

The HEPA filter has a structure incorporating a pleated glass fibre filter medium, making it highly efficient and suitable for clean rooms, etc.



FXB(P)Q-P

Installation example (in a medical facility)

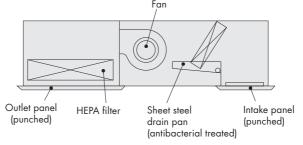
### **Antibacterial**

### Suppresses the propagation of bacteria in the duct with a proprietary antibacterial coating

The filter implements an antibacterial treatment with a new coating, combining a silver-based inorganic antibacterial material (an organic antibacterial material that is effective against germs) that prevents mould. This enhances the antibacterial properties of the duct. An antibacterial treatment using a silver-based organic substance reduces mould.

### Antibacterial fibre used in the intake filter

With a long-life filter employing anti-mould antibacterial fibre near the intake, cleaning performance is further enhanced.



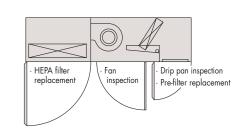
- Please be aware that antibacterial products suppress the propagation of bacteria but do not have a sterilising effect. Also, mould may grow in
- A material for which the registered safety was verified by Japanese chemicals and dangerous substances regulation law (Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.) is used for the antibacterial material
- Periodic maintenance is required (such as cleaning the air filter and washing the inside to the unit).

## Labour-saving

## Filter maintenance unnecessary for about five years Easy access from underneath unit provides easy maintenance

The HEPA filter has an exceptionally long life and does not require maintenance for about five years. Daikin has aimed to reduce maintenance work from a variety of perspectives, including a service access system that eliminates the necessity for service panels.

\*The maintenance period differs significantly according to the cleanliness of the room and hours of air conditioner operation



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### Quiet

### All models incorporate an industry-leading quiet design, operating at under 41dB

Operating noise is substantially reduced by employing a proprietary double-structure outlet filter chamber, sound absorbing insulation and a low pressure-loss HEPA filter. Sound level of all models are under 41dB (38dB during low-fan speed operation).

<sup>\*</sup>It may not be possible to maintain cleanliness in rooms with low air tightness

<sup>\*</sup>Operating noise may be greater than these values in highly reflective locations.

## **VRV Indoor Units**

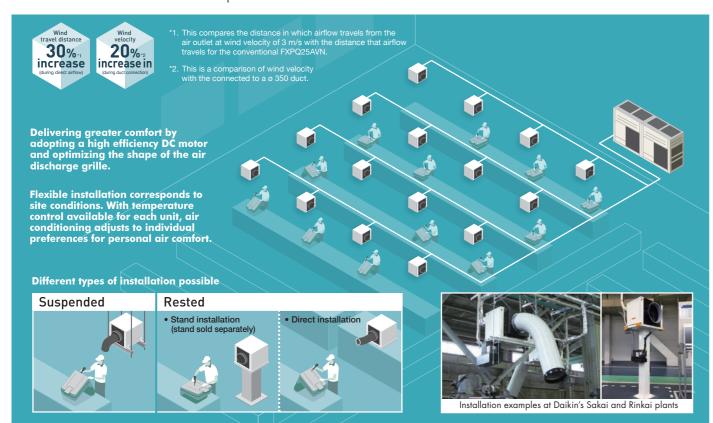
## Multi Cube (Spot AC) type for VRV system

**FXPQ25AVM** 



## Personal Air Comfort Delivered to Large Spaces

Even in large spaces, Daikin ensures individual air comfort for each person. Our compact Spot Air Conditioner was created to serve individual air conditioning needs in large spaces. Compared to commercial buildings and offices, air conditioning factories and other large spaces used to be extremely difficult. With this Spot Air Conditioner, temperatures can now be individually adjusted for a comfortable work environment to suit each person.



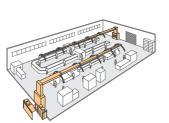
No ducts

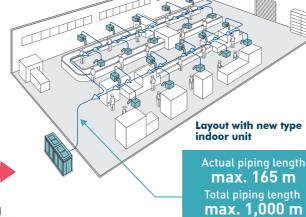
required!

## Versatile installation options enable free layout

Because VRV systems allow use of long refrigerant piping, unit layout is flexible and can be freely designed to fit large spaces. Not only does this make ductwork unnecessary, it simplifies installation and enables easy unit relocation in the future. Installation costs are also greatly reduced.







## INDOOR UNIT LINE-UP

## **VRV Indoor Units**

## Easy relocation/expansion

Only requirement is connection to preinstalled Shut-off Valve kit for additional indoor units (Option).

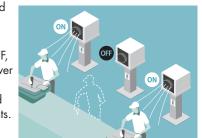


## Adjustable comfort for individual users

Each Spot Air Conditioner can be controlled with a dedicated wired remote controller. Individual users

can set the temperature and airflow volume.

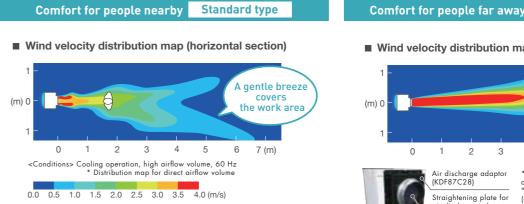
Moreover, since each unit can be turned ON and OFF, it is possible to reduce power consumption resulting from unnecessary operation and to eliminate associated costs



## Delivering comfort with a large volume of air

The large propeller fan provides a gentle, comfortable breeze and greater wind volume.

Additionally, by installing an optional air discharge adaptor and straightening plate, strong airflow can be achieved that extends even further.



## Comfort for people far away Long-distance type ■ Wind velocity distribution map (horizontal section) \*6. Installation of the optional items "air discharge adaptor (KDF87C28)" and ning plate for air discharge adapto (KPW87A28)" is necessary

## Designed for installation in any environment

### Withstands oil mists

For the heat exchanger cooling pipe, a material with 3 to 6 times'7 the durability of standard materials has been selected.

### Leakage failsafe

### An emergency reservoir

is fitted in the underframe beneath the drain pan. This provides reassuring backup against drain pan overflow.

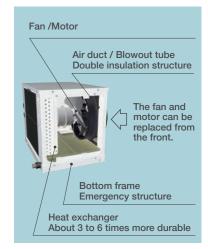
### **Condensation suppression**

To minimize condensation, the air duct and blowout tubes are double insulated. This enables use in kitchens and other highly humid environment.

### Simple maintenance

### Easy maintenance design

includes front access for fan motor replacement.







## **VRV Indoor Units**

## Ceiling Mounted Cassette Round Flow & Round Flow with Sensing (Optional)



	MODEL		FXFSQ25ARV1 FXFSQ25ARV16	FXFSQ32ARV1 FXFSQ32ARV16	FXFSQ40ARV1 FXFSQ40ARV16	FXFSQ50ARV1 FXFSQ50ARV16	FXFSQ63ARV1 FXFSQ63ARV16	FXFSQ80ARV1 FXFSQ80ARV16	FXFSQ100ARV1 FXFSQ100ARV16	FXFSQ125ARV1 FXFSQ125ARV16	FXFSQ140ARV1 FXFSQ140ARV16
Power suppl	у		1-phase, 220-240V, 50Hz								
Cl:		Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800	54,600
Cooling cap	acity	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0
U		Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	42,700	54,600	54,600
Heating capacity		kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	16.0
Casing						G	alvanised steel pla	ite			
Airtlow rate (H/HM/M/M/MI/I) —		m³/min	13/12.5/1	1.5/11/10	17/13.5/12.5/12/11	23/20.5/19/14.5/11	23.5/21/20/16/13.5	24.5/22/20.5/20/15	33.5/30.5/27/23.5/21	34.5/31.5/28.5/25.5/23	35.5/32.5/29.5/26.5/23
		cfm	459/441/40	06/388/353	600/477/441/424/388	812/724/671/512/388	830/742/706/565/477	865/777/724/706/530	1,183/1,077/954/830/742	1218/1112/1006/901/812	1,254/1,148/1,042/936/812
Sound level	(H/HM/M/ML/L)	dB(A)	30/29.5/2	30/29.5/28.5/28/27		38/35/34.5/29.5/27	38/36/35.5/31.5/28	39/37/36/35.5/31	44/41/38/35/33	45/42.5/39.5/37/35	46/43.5/40.5/38/35
Dimensions (	(H×W×D)	mm		256×840×840 298×840×840							
Machine we	ight	kg		19 22				25			
D	Liquid (Flare)			Ø 6.4 Ø 9.5							
Piping connections	Gas (Flare)	mm		Ø 1	2.7				Ø 15.9		
COTITIOCITOTIS	Drain					VP25 (Exter	nal Dia, 32/Inter	nal Dia, 25)			
Standard	Model					BYCQ	125EAF9 (Fresh	White)			
panel (Non sensing)  Dimensions (HxWxD) mm							50x950x950				
(White)	Weight	kg	5.5								
Sensing	Model			BYCQ140EEF6 (Fresh White)							
panel	Dimensions (HxWxD)	mm					50x950x950				
(White)	Weight	kg					5.5				

### Note: Specifications are based on the following conditions;

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

- See Engineering Data Book for details.]

  Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Decora	tion Panel (Optio	n)	ROUND FLOW TYPE
		•	FXFSQ-A
c.	MODEL		BYCQ125EAF9 (Fresh White ) / BYCQ125EAK (Black)
Standard panel	Dimensions (HxWxD)	mm	50×950×950
Weight kg		kg	5.5
Model Model			BYCQ140EEF6 (Fresh White ) / BYCQ125EEK
Sensing panel	Dimensions (HxWxD)	mm	50×950×950
p =	Weight	kg	5.5
	Model		BYCQ125EAPF (Fresh White)
Designer panel	Dimensions (HxWxD)	mm	97×950×950
pa.io.	Weight	kg	6.5
Auto Model			BYCQ125EASF (Fresh White)
grille	Dimensions (HxWxD)	mm	105×950×950
panel	Weight kg		8





Standard panel BYCQ125EAF9 (Fresh White)



Sensing panel BYCQ140EEF6 (Fresh White)



Standard panel BYCQ125EAK (Black)



Sensing panel BYCQ125EEK (Black)



Designer panel BYCQ125EAPF (Fresh White)



Auto grille panel<sup>2</sup> BYCQ125EASF (Fresh White)

Note: When opting Black panel, wireless remote controller model will be BRC7M634K

## **VRV Indoor Units**

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



MODEL			FXZQ20AVM	FXZQ25AVM	FXZQ32AVM	FXZQ40AVM	FXZQ50AVM	
Power supply					1-Phase, 220-240 V, 50H:	z		
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	
11 . 6 . 5		Btu/h	8,500	10,900	13,600	17,100	21,500	
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3	
Casing			Galvanised steel plate					
A: (1 . /11/A4	/1)	m³/min	8.7/7.5/6.5	9.0/8.0/6.5	10.0/8.5/7.0	11.5/9.5/8.0	14.5/12.5/10.0	
Airflow rate (H/M	/ L)	cfm	307/265/229	318/282/229	353/300/247	406/335/282	512/441/353	
Sound level (H/M/	/L)	dB(A)	32.0/29.5/25.5	33.0/30.0/25.5	33.5/30.0/26.0	37.0/32.0/28.0	43.0/40.0/33.0	
Dimensions (HxW:	×D)	mm		260×575×5	75 (For depth add 63mm for	electrical box)		
Machine weight kg			15	5.5	16	16.5		
	Liquid (Flare)			φ6.4				
Piping connections	Gas (Flare)	mm			φ12.7			
	Drain			VP20	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: 7.5 m, Level difference: 0 m.

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

  Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)

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

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

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



	MODEL		FXCQ25AVM	FXCQ32AVM	FXCQ40AVM	FXCQ50AVM	FXCQ63AVM	FXCQ80AVM	FXCQ125AVM
Power supply			1-phase, 220-240 V/50 Hz						
C 1: ::		Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	47,800
Cooling capacity		kW	2.8	3.6	4.5	5.6	7.1	9.0	14.0
		Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	54,600
Heating capacity		kW	3.2	4.0	5.0	6.3	8.0	10.0	16.0
Casing					Go	Ivanised steel pl	ate		
A . (1 . /1 III	/14 /13	m³/min	11.5/10.5,	/9.5/8.5/8	12/11/10.5/9.5/8.5	15/14/13/11.5/10.5	16/15/14/12.5/11.5	26/24/22.5/20.5/18.5	32/29.5/27.5/25/22.5
Airflow rate (HH,	/M/L)	cfm	406/371/33	35/300/282	424/388/371/335/300	530/494/459/406/371 565/530/494/441/406 918/847/794/724/653 1130		1130/1041/971/883/794	
Sound level (H/L	) 220 V	dB(A)	34/33/31/30/29	34/33/32/31/30	36/35/33/32/31	37/36/35/33/31	39/38/37/35/32	42/40/38/36/33	46/44/42/40/38
Dimensions (HxV	V×D)	mm		305x775x620		305x99	90x620 305x1,445x620		
Machine weight		kg		19		22	25	33	38
	Liquid (Flare)			Ø	6.4			ø9.5	
Piping connections	Gas (Flare)	mm		øl	2.7			ø15.9	
Connections	Drain				VP25 (Extern	nal Dia, 32/Inte	rnal Dia, 25)		
	Model			BYBCQ40CF		BYBCC	Q63CF	ВУВСС	125CF
Panel	Colour				Fresh	white (6.5Y 9.5	5/0.5)		
(Option)	Dimensions(H×W×D)	mm		55x1,070x700		55x1,2	85x700	55x1,740x700	
	Weight	kg		10		1	1	13	

## **SPECIFICATIONS**

## **VRV Indoor Units**

## **Ceiling Mounted Cassette Corner Type**



MODEL				FXKQ32AV16	FXKQ40AV16	
Power supply				1 Phase, 220-	240 V, 50 Hz	
★1★3 Cooling (	Capacity		Btu/h	12,300	15,400	
			kW	3.6	4.5	
Btu/h			Btu/h	12,300	15,400	
★2★3 Heating Capacity kW			kW	3.6	4.5	
Casing/Colour Galvanized Steel Plate					Steel Plate	
Dimensions (HxWxD) mm			mm	145x12°	10x523	
		Airflow Rate Cooling	m³/min	9.7/9.3/8.9/8.7/8.5	11.1/10.3/9.5/9.0/8.6	
			cfm	342/328/314/307/300	392/364/335/318/304	
I all	(H / HM /	/ ML/ L) Heating	m³/min	11.2/10.8/10.4/10.1/9.9	12.9/12.0/11.0/10.6/10.1	
	IVI / IVIL/ L)		cfm	395/381/367/357/349	455/424/388/374/357	
	Liquid Pipes		mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	
Piping	Gas Pipes		mm	φ12 .7 (Flare Connection)		
Connections	Drain Pipes		mm	ф26 (1	Hole)	
Mass			kg	20	)	
★4 Sound Pressu	ure Level (H/HM/M/I	ML/L)	dBA	36/35/34/33	39/37/36/35/34	
	Model			Fuse	Fuse	
	iviodei			BYKQ63AHW/BYKQ63AHS	BYKQ63AHW/BYKQ63AHS	
Decoration	Colour			White	/Silver	
Panel (Option)	Dimensions (Hx	WxD)	mm	41x139	00x595	
	Air Filter			Resin Net (with mould resistance)		
	Weight		kg	6.	6	

- ★1. Indoor Temp: 27°CDB, 19°CWB/Outdoor Temp: 35°CDB, 24°CWB/ Equivalent Piping Length: 7.5 m, height difference: 0 m.
- ★2. Indoor Temp: 20°CDB, 15°CWB/Outdoor Temp: 7°CDB, 6°CWB/ Equivalent Piping Length: 7.5 m, height difference: 0 m.
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for Indoor fan motor heat.
- \*4. Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1.0 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions

Conversion Formulae	
kcal/ h = kW x 860	
Btu/h = kW x 3412	
cfm = m <sup>3</sup> /min x 35.3	
I/s = m <sup>3</sup> /min x 1000/60	



MODEL				FXKQ50AV16	FXKQ63AV16		
Power supply				1 Phase, 220-2	240 V, 50 Hz		
★1★3 Cooling Cap	acity		Btu/h	19,100	24,200		
			kW	5.6	7.1		
★2★3 Heating Capacity Btu/h			Btu/h	19,100	24,200		
	kW		kW	5.6	7.1		
Casing/Colour	g/Colour Galvanized Steel Plate				Steel Plate		
Dimensions (HxWxD) mm			mm	145x121	0x523		
	Airflow Rate	Cooling	m³/min	13.2/12.2/11.1/10.3/9.5	17.4/15.4/13.9/12.4/10.8		
		Cooling	cfm	466 /431/392/364/335	614/544/491/438/381		
ran	H/HM/M	Heating	m³/min	15.3/14.1/12.9/12.0/11.0	19.7/18.2/16.6/15.1/13.6		
	/ML/L)	IVIL/L) Heating	cfm	540/498/455/424/388	695/642/586/533/480		
	Liquid Pipes		mm	Ø6.4 (Flare Connection)	Ø9.5 (Flare Connection)		
Piping Connections	Gas Pipes		mm	Ø12 .7 (Flare Connection)	Ø15 .9 (Flare Connection)		
	Drain Pipes		mm	Ø26 (H	Hole)		
Mass			kg	20	)		
★4 Sound Pressure	Level (H/HM/M/I	VIL/L)	dBA	43/41/39/37/36	49/47/45/43/41		
	Model			Fuse	Fuse		
	Iviodei			BYKQ63AHW/BYKQ63AHS	BYKQ63AHW/BYKQ63AHS		
Decoration	Colour			White/	Silver		
Panel (Option)	Dimensions (Hx	WxD)	mm	41x139	0x595		
	Air Filter			Resin Net (with mould resistance)			
	Weight		kg	6.0	5		

- ★1. Indoor Temp: 27°CDB, 19°CWB/Outdoor Temp: 35°CDB, 24°CWB/ Equivalent Piping Length: 7.5 m, height difference: 0 m.
- ★2. Indoor Temp: 20°CDB, 15°CWB/Outdoor Temp: 7°CDB, 6°CWB/ Equivalent Piping Length: 7.5 m, height difference: 0 m.
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for Indoor fan motor heat.
- \*4. Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1.0 m downward. During actual operation, these values are normally

Conversion Formulae Btu/h = kW x 3412  $cfm = m^3/min \times 35.3$  $l/s = m^3/min \times 1000/60$ 

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## **VRV Indoor Units**

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

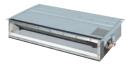


MODEL	with dro	ain pump	FXDQ20PDVM FXDQ20PDV36	FXDQ25PDVM FXDQ25PDV36	FXDQ32PDVM FXDQ32PDV36
Power supply				1-phase, 220-240 V/220 V, 50 Hz	
Cooling capa	city	Btu/h	7,500	9,600	12,300
Cooling capacity		kW	2.2	2.8	3.6
Heating capacity		Btu/h	8,500	10,900	13,600
		kW	2.5	3.2	4.0
Casing				Galvanised steel plate	
A*-fl t ft	/ /	m³/min	8.0/7.2/6.4	8.0/7.2/6.4	8.0/7.2/6.4
Airflow rate (	пп/п/ц	cfm	282/254/226	282/254/226	282/254/226
External static	pressure	Pa		30-10*2	
Sound level (H	HH/H/L) *1*3	dB(A)	33/31/29	33/31/29	33/31/29
Dimensions (H	H×W×D)	mm	200×700×620	200×700×620	200×700×620
Machine weig	ght	kg	23.0	23.0	23.0
	Liquid (Flare)		ø 6.4	ø 6.4	ø 6.4
Piping connections	Gas (Flare)	mm	ø 12.7	ø 12.7	ø 12.7
	Drain	1 [	VF	220 (External Dia, 26/Internal Dia, 20	0)

## **SPECIFICATIONS**

## **VRV Indoor Units**

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



MODEL	With dr	ain pump	FXDQ40NDVM FXDQ40NDV36	FXDQ50NDVM FXDQ50NDV36	FXDQ63NDVM FXDQ63NDV36		
Power supply				1-phase, 220-240 V/220 V, 50 Hz			
Cooling capacity  Btu/h kW		Btu/h	15,400	19,100	24,200		
		kW	4.5	5.6	7.1		
Heating capacity  Btu/h kW		Btu/h	17,100	21,500	27,300		
		kW	5.0	6.3	8.0		
Casing			Galvanised steel plate				
A: (1 . //	11.71.713	m³/min	10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0		
Airflow rate (I	HH/H/L)	cfm	371/335/300	441/388/353	583/512/459		
External static	pressure	Pa		44-15 <sup>2</sup>			
Sound level (H	IH/H/L) *1*3	dB(A)	34/32/30	35/33/31	36/34/32		
Dimensions (H	lxWxD)	mm	200×900×620	200×900×620	200×1,100×620		
Machine weig	ıht	kg	27.0	28.0	31.0		
	Liquid (Flare)		ø 6.4	ø 6.4	Ø 9.5		
Piping connections	Gas (Flare)	mm	ø 12.7	ø 12.7	ø 15.9		
Commoditions	Drain		٧	P20 (External Dia, 26/Internal Dia, 20)			

### Note: Specifications are based on the following conditions;

- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
   Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB Equivalent piping length: 7.5 m, Level difference: 0 m.
   Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.
   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-P: external static pressure of 15 Pa.
   2: External static pressure is changeable to set by the remote controller. This pressure means "litio traffic pressure." Standard"
- 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-P models and 15 Pa for FXDQ-N 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 dBA.

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



MODEL	With dr	ain pump	FXMQ40ARV1 FXMQ40ARV16	FXMQ50ARV1 FXMQ50ARV16	FXMQ63ARV1 FXMQ63ARV16	FXMQ80ARV1 FXMQ80ARV16	FXMQ100ARV1 FXMQ100ARV16			
Power supply				1-pho	ase, 220-240 V, 50 Hz					
Cooling capacity		Btu/h	15,400	19,100	24,200	30,700	38,200			
		kW	4.5	5.6	7.1	9.0	11.2			
Heating capacity  Btu/h		Btu/h	17,100	21,500	27,300	34,100	42,700			
rioumig capat	/	kW	5.0	6.3	8.0	10.0	12.5			
Casing				Galvanized Steel Plate						
V. U ' '	11.1/11/11	m³/min	15/12	19/16	24/20	30/25	34/29			
Airflow rate (I	1H/H/L)	cfm	530/425	671/565	848/706	1060/883	1200/1024			
External static	pressure	Pa		30	-50		30-60			
Sound level (H	/L)	dB(A)	39/37	41/39	42/40	43/41	44/42			
Dimensions (H	lxWxD)	mm	300×70	00x700		300×1000×700				
Machine weig	ht	kg	27	28	33	5	36			
	Liquid (Flare)		6.4 (Flare C	Connection)	9.5 (Flare Connection)					
Piping connections	Gas (Flare)	mm	12.7 (Flare	Connection)	15.9 (Flare Connection)					
	Drain			VP25 (E	xternal Dia. 32, Internal	Dia. 25				

### Note: Specifications are based on the following conditions:

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

## **VRV Indoor Units**

## **Ceiling Mounted Duct Type**



	MODEL		FXMQ20PAVE	FXMQ25PAVE	FXMQ32PAVE	FXMQ40PBV1 FXMQ40PBV36	FXMQ50PBV1 FXMQ50PBV36			
Power supply			1-phase, 220-240 V/220 V, 50 Hz							
Cooling cana	rcih.	Btu/h	7,500	9,600	12,300	15,400	19,100			
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6				
Usatina sana	aib.	Btu/h	8,500	10,900	13,600	17,100	21,500			
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3			
Casing					Galvanised steel plate					
4: n		m³/min	9/7.5/6.5 9.5/8/7		16/13/11	18/16.5/15				
Airflow rate (	HH/H/L)	cfm	318/265/230 335/282/24		335/282/247	565/459/388	635/582/530			
External static	pressure	Pa		30-100 (50) *2		30-160 (100) *2 50-200 (100) *2				
Sound level (H	HH/H/L)	dB(A)	33/3	31/29	34/32/30	39/37/35	41/39/37			
Dimensions (H	H×W×D)	mm		300X550X700	•	300X700X700	300X1,000X700			
Machine weig	ght	kg		25		27	35			
	Liquid (Flare)									
Piping connections	Gas (Flare)	mm		Ø 12.7						
	Drain	1	VP25 (External Dia, 32/Internal Dia, 25)							

	MODEL		FXMQ63PBV1 FXMQ63PBV36	FXMQ80PBV1 FXMQ80PBV36	FXMQ100PBV1 FXMQ100PBV36	FXMQ125PBV1 FXMQ125PBV36	FXMQ140PBV1 FXMQ140PBV36			
Power supply	,		1-phase, 220-240 V/220 V, 50 Hz							
Cooling capa	ıcity	Btu/h	24,200	30,700	38,200	47,800	54,600			
cooming capa	iciiy	kW	7.1	9.0	11.2	14.0	16.0			
Heating capa	ıcity	Btu/h	27,300	34,100	42,700	54,600	61,400			
r lealing capa	rieding capacity		8.0	10.0	12.5	16.0	18.0			
Casing					Galvanised steel plate		18.0 46/39/32 1,624/1,377/1,130			
4: fi /		m³/min	19.5/17.5/16	25/22.5/20	32/27/23	39/33/28	46/39/32			
Airflow 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 statio	pressure	Pa		50-200 (100)*2	•	50-200 (100)*2	1,624/1,377/1,130 50-140 (100)*2			
Sound level (H	HH/H/L)	dB(A)	42/40/38	43/41/39	43/41/39	44/42/40	46/45/43			
Dimensions (H	H×W×D)	mm	300x1,0	000x700		300x1,400x700				
Machine weight kg		kg	3	35	4	5	46			
	Liquid (Flare)				9.5					
Piping connections	Gas (Flare)	mm			15.9					
	Drain			VP25 (External Dia, 32/Internal Dia, 25)						

### Note: Specifications are based on the following condiations

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

- 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 (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.

## **SPECIFICATIONS**

## **VRV Indoor Units**

## **Ceiling Mounted Duct Type**



Heating capacity

	MODEL		FXMQ170NVE6	FXMQ200NVE6	FXMQ250NVE6		
Power suppl	у		1-p	hase, 220, 240 V/220 V, 50	Hz		
Btu/h		Btu/h	65,800	76,400	95,500		
Cooling cap	acity	kW	19.3	22.4	28		
Heating capacity		Btu/h	71,600	83,300	1,07,500		
		kW	21	25	31.5		
Casing			Galvanised steel plate				
v. U .	/11/11	m³/min	58/50	68/58	80/73		
Airflow rate	(H/L)	cfm	2,047/1,765	2400/2,047	2,825/2,578		
External stati	ic pressure	Pa	100-140 *2	100-200 *2	190-270 *²		
Sound level	(H/L) 220V	dB(A)	45/42	47/45	49/47		
Dimensions	(H×W×D)	mm	440x1,19	90x1,090	440x1,490x1,090		
Machine we	ight	kg	11	0	130		
D: :	Liquid (Flare)			ø 9.5			
Piping connections	Gas (Flare)	mm	ø 1	9.1	ø 22.2		
	Drain		External Dia 32				

## **Ceiling Suspended Type**



	MODEL		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE	FXHQ125AVM	FXHQ140AVM	
Power supply			1-phase, 2	220-240 V/220 V, 5	50/60 Hz	1-phase, 220-240 V/	220-230 V, 50/60 Hz	
Cooling capacity		Btu/h	12,300	24,200	38,200	48,000	52,900	
		kW	3.6	7.1	11.2	14.1	15.5	
Heating capacity		Btu/h	13,600	27,300	42,700	54,600	58,000	
		kW	4.0	8.0	12.5	16.0	17.0	
		m3/min	12/-/10	17.5/-/14	25/-/19.5	34/26/20	36/27/20	
Airflow rate	(H/M/L)	cfm	424/-/353	618/-/494	883/-/688	1,200/918/706	1,271/953/706	
Sound level	(H/M/L)	dB(A)	36/-/31	39/-/34	45/-/37	46/41/37	48/42/37	
Dimensions (	(H×W×D)	mm	195×960×680	195×1,160×680	195×1,400×680	235×1,	590×690	
Machine we	ight	kg	24	28	33	4	11	
	Liquid (Flare)		φ6.4	φ9.5				
connections	Gas (Flange)	mm	φ12.7	<i>ϕ</i> 15.9				
	Drain		VP20 (External Dia. 26/Internal Dia. 20)					

### Note: Specifications are based on the following conditions

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

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

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

## **VRV Indoor Units**

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



	MODEL		FXUQ71AVEB	FXUQ100AVEB			
Power supply			1-phase, 220-240 V	//220-230V, 50 Hz			
C. It	9	Btu/h	27,300	38,200			
Cooling capa	city	kW	8.0	11.2			
11 - 2		Btu/h	30,700	42,700			
Heating capa	city	kW	9.0	12.5			
Casing			Fresh white				
Airflow rate (	LI /II	m³/min	22.5/19.5/16	31/26/21			
Airnow rate (	п/ ц	cfm	794/688/565	1,094/918/741			
Sound level (H	H/M//L)	dB(A)	40/38/36	47/44/40			
Dimensions (H	H×W×D)	mm	198×93	50×950			
Machine weig	ght	kg	26	27			
	Liquid (Flare)		9.5				
Piping connections	Gas (Flare)	mm	15.9				
Connections	Drain	1 [	VP20 (External Dia, 26/Internal Dia, 20)				

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

- 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.

## **Wall Mounted Type**

MODEL			FXAQ20ARVM FXAQ20ARVE6	FXAQ25ARVM FXAQ25ARVE6	FXAQ32ARVM FXAQ32ARVE6	FXAQ40ARVM FXAQ40ARVE6	FXAQ50ARVM FXAQ50ARVE6	FXAQ63ARVM FXAQ63ARVE6		
Power supply					1-phase, 220 V	//220 V, 50 Hz				
c It it		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200		
Cooling capa	city	kW	2.2	2.8	3.6	4.5	5.6	7.1		
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300		
		kW	2.5	3.2	4.0	5.0	6.3	8.0		
Casing			White (N9.5)							
A: (I	11/1)	m³/min	7.5/4.5 9/5		11/5.5	13/9	15/12	19/14		
Airflow rate (	п/ц	cfm	265/159	318/177	388/194	459/318	530/424	671/494		
Sound level (H	H/L)	dB(A)	35/31	36/31	38/31	39/34	42/37	47/41		
Dimensions (H	HxWxD)	mm			298×92	29×258				
Machine weig	ght	kg			13	3.0				
	Liquid (Flare)			Ø 6.4						
Piping connections	Gas (Flare)	mm			Ø 12.7			Ø 15.9		
	Drain				VP13 (External Dia,	18/Internal Dia, 13	)			

## **SPECIFICATIONS**

## **VRV Indoor Units**

## Floor Standing Type/Concealed Floor Standing Type



**FXLQ** 



MODEL			FXLQ32MAVE8	FXLQ50MAVE8	FXLQ63MAVE8			
	MODEL		FXNQ32MAVE8	FXNQ50MAVE8	FXNQ63MAVE8			
Power supply			1-phase, 220-240 V/220 V, 50 Hz					
Cl:	ata .	Btu/h	12,300	19,100	24,200			
Cooling capacity kV		kW	3.6	5.6	7.1			
U C	ata .	Btu/h	13,600	21,500	27,300			
Heating capacity		kW	4.0	6.3	8.0			
Casing			FXLQ: Ivory white (5Y7.5/1)/FXNQ: Galvanised steel plate					
A: (I . (I	11/11	m³/min	8/6	14/11	16/12			
Airflow rate (	H/L)	cfm	282/212	494/388	565/424			
Sound level (H	H/L) 220V	dB(A)	35/32	39/34	40/35			
Dimensions	FXLQ		600×1,140×222	600×1,420×222	600×1,420×222			
(HxWxD)	FXNQ	mm	610×1,070×220	610×1,350×220	610×1,350×220			
	FXLQ		30.0	36.0	36.0			
Machine weig	FXNQ	- kg	23.0	27.0	27.0			
	Liquid (Flare)		Ø 6.4	Ø 6.4	ø 9.5			
Piping	Gas (Flare)	mm [	Ø 12.7	Ø 12.7	Ø 15.9			

 Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB Equivalent piping length: 7.5 m, Level difference: 0 m.
 Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.
 Sound level: (FXAQ-P) Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward.
 (FXIQ-MA, FXNQ-MA) Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions

## Clean Room Type Air Conditioner FXB(P)Q-P



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T					1				
Туре			!	ntegrated outlet unit mode	el	Separate outlet unit mode			
MODEL	Indoor unit		FXBQ40PVE	FXBQ50PVE	FXBQ63PVE	FXBPQ63PVE			
MODEL	Outlet unit		Int	unit	BAF82A63				
Power supp	ly		1-phase, 220-240 V/220 V, 50/60 Hz						
Caaliaa aa	:h .	Btu/h	15,400	19,100	24,200	24,200			
Cooling cap	pacily	kW	4.5	5.6	7.1	7.1			
Power consumption kW		kW	0.31	0.31	0.45	0.45			
Intake filter	efficiency *1		•	70% by gro	avimetric method				
Outlet HEPA	A filter efficiency *2		99.97% by DOP method *5						
Indoor unit weight kg			140 *3		185 *3	120 *6			
Casing			Galvanised steel plate						
۸: المار مارد	. /LL /I\	cfm	19.5/12	7.5	26	26/22.5			
Airflow rate	е (П/ L)	m³/min	688/6	18	918/794				
Dimensions	(H×W×D)	mm	492×1,788×1,000		492×1,788×1,300	492×1,078×1,300			
Outlet unit v	weight	kg	-			65 *3			
	Liquid (Flare)		ø6.4	,		ø9.5			
Piping connections	Gas (Flare)	mm	ø12.7	7	Q	ø15.9			
COMMECHONS	Drain	1	PTIB						
Filter(Option)	HEPA filter		BAFH82A50		BAF	FH82A63			
Panel	Ceiling intake type	Model	BYB82A	50C	BYB82A63C	BYB82A63CP			
(Option)	Floor-level intake type		BYB82A5	50W	BYB82A63W	BYB82A63WP			

### 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.)
- An intake air filter is only attached to the ceiling intake type.
- \*2: HEPA filter sold separately. The dust collection efficiency of HEPA filter is 99.97%. However, air may slightly leak around the filter when installing.
- \*3: Weight including HEPA filter and panel.
- \*4: Anechoic chamber conversion value under JIS B 8616 test conditions. Value usually increases slightly in practice due to surrounding conditions \*5: The clean room air conditioner does not support DOP testing (leak test) based on GMP standards (Standards for Manufacturing Control and Quality Control for Medical Devices) due to slight leakage at time of product installation.

<sup>\*6:</sup> Weight including panel.

<sup>\*</sup>In the case of an installation in an operating theatre etc. where an air conditioner malfunction may have serious consequences, please build in redundancy with two or more outdoor units.

## **VRV Indoor Units**

## Multi Cube (Spot AC) type)



	MODEL		FXPQ25AVM		
Power Supply			1 Phase, 50Hz, 220-240 V		
	Cooling		2800		
Capacity (watt)	Heating		3200		
Dimension	(HXWXD) mm		455X555X470		
Casing		Galvanised Steel plate			
	Туре		Propeller Fan		
		СМН	13.5 / 11.0		
Fan	Airflow Rate (H/L)	CFM	477 / 393		
	External Static Pressure	PA	5		
	Drive		Direct Drive		
Sound Level		dB(A)	51		
Machine Weight		Kg	30		
	Liquid Pipe	mm	6.4mm dia (Flare Connection)		
Piping Connections	Gas Pipe	mm	12.7mm dia (Flare Connection)		
	Drain Pipe	mm	(External dia 27.2mm, internal dia 21.6mm)		
Refrigerant Control	•		Electronic Expansion Valve		
Air Filter			Long Life Filter (Resin Net)		

### Specifications are based on he following conditions:

- Cooling: Indoor temp.: 27CDB, 19.5CWB, Outdoor temp.: 35CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
  Heating: Indoor temp.: 20CDB, 15CWB, Outdoor temp.: 7CDB, 6CWB, 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.

## **SPECIFICATIONS**

## **VRV Outdoor Units**

MODEL				RXMQ4BRV1 RX(Y)MQ4BRV16	RXM Q5BRV1 RX(Y)M Q5BRV16	RXMQ6ARV1 RX(Y)MQ6ARV16	RXMQ8ARY1 RX(Y)MQ8ARY16	RXMQ10ARY1 RX(Y)MQ10ARY16	RXMQ12ARY1 RX(Y)MQ12ARY16		
Power Supply					1 Phase, 220-240V, 50Hz			3 Phase, 380-414V, 50Hz			
Bt			Btu/h	38,200 47,700		54,500	76,400	95,500	1,14,000		
Cooling Capacity			kW	11.2	14.0	16.0	22.4	28	33.5		
			Btu/h	38,200	47,700	61,400	85,300	95,500	1,14,000		
Heating Capacity			kW	11.2	14.0	18.0	25.0	28	33.5		
Capacity Control			%	24-100	16-100	16-100	09-100	11-	100		
Casing Colour				lvory White							
Compressor Type				Hermetically Sealed Swing Type Hermetically Sealed Scroll Type							
	No. of compressor					1	1				
Airflow Rate			m³/ min	8	30	87	123	123 182			
Dimension (HxWxD)			mm	990x94	40x320	870x11	00x460	1627x940x460			
Marshin - Marshinha			1	RXMQ4BRV16: 76	RXMQ5BRV16: 80						
Machine Weight			kg	RXYMQ4BRV16: 78	RXYMQ5BRV16: 82	100	120	165	170		
Sound Level (Cooling)			dBA	53	54	52	59	59	60		
O	Cooling		°CDB	-5	-50	0-	52	2 -5-50			
Operation Range	Heating		°CWB		-20-	15.5		0-1	5.5		
	Туре			R410A							
Refrigerant	Liquid			ø9.5 (	(Flare)	ø9.5 (Flare)		ø9.5 (Brazing)	ø12.7 (Brazing)		
	Gas		mm	ø15.9 (Flare)	ø19.1 (Brazing)	ø19.1 (E	Brazing)	ø22.2 (Brazing)	ø25.4 (Brazing)		
Combination Ratio			%	50-130%							

### Specifications are based on the following conditions:

- Cooling: Indoor temp: 27°CDB, 19.5°CWB, Outdoor temp 35°CDB, Equivalent Piping Length: 7.5 m, Level difference: 0 m.
- Heating Indoor temp.: 20°CDB 15°CWB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent Piping Length: 7.5 m, Level difference 0 m.
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values on normally somewhat higher as a result of ambient conditions.



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## Reiri for Office

Reiri for Office is the ideal building management solution for all sizes of commercial buildings, especially for small to medium-sized buildings, regardless of location. This smart building solution provides affordable and scalable building control and energy management, allowing users greater control and automation of building utilities such as air-conditioning and lighting, and to monitor and manage energy performance and indoor air quality.





## Reiri for Home



Reiri for Home is the complete smart home solution with seamless integration capabilities, allowing users to control and monitor all smart home devices conveniently from just a single mobile app. From security and safety enhancements to indoor air quality and energy management, Reiri for Home is the ideal home automation system for every homeowner.



Reiri for Home DCPH01



Reiri for Home **Lite Version** DCPH02

## Reiri for Hotel

Reiri for Hotel effectively saves energy and cost while prioritizing guests' comfort and satisfaction. With this smart hotel solution, energy consumption is optimised without compromising on the guests' in-room comfort. Hotel managers and staff are also able to conveniently monitor the status and manage the settings of every room.



Reiri for Hotel



DCPR01





### **CONNECTABLE**

Various types of equipment in a building can be controlled by a single controller.

Individual Air-conditioning Control
From VRV to SkyAir to Split Units, conveniently manage all air-conditioning needs with flexible and precise control when connected to Reiri.





## Lighting Control DALI Compatible

Monitor and control DALI-compatible LED lighting systems from a single controller, with enhanced automation through interlocking functions with air-conditioners and other connectable devices.





### Smart Devices

Connect to a wide variety of smart devices, ranging from IP cameras to locks and sensors, and access all of them from just one Reiri app.





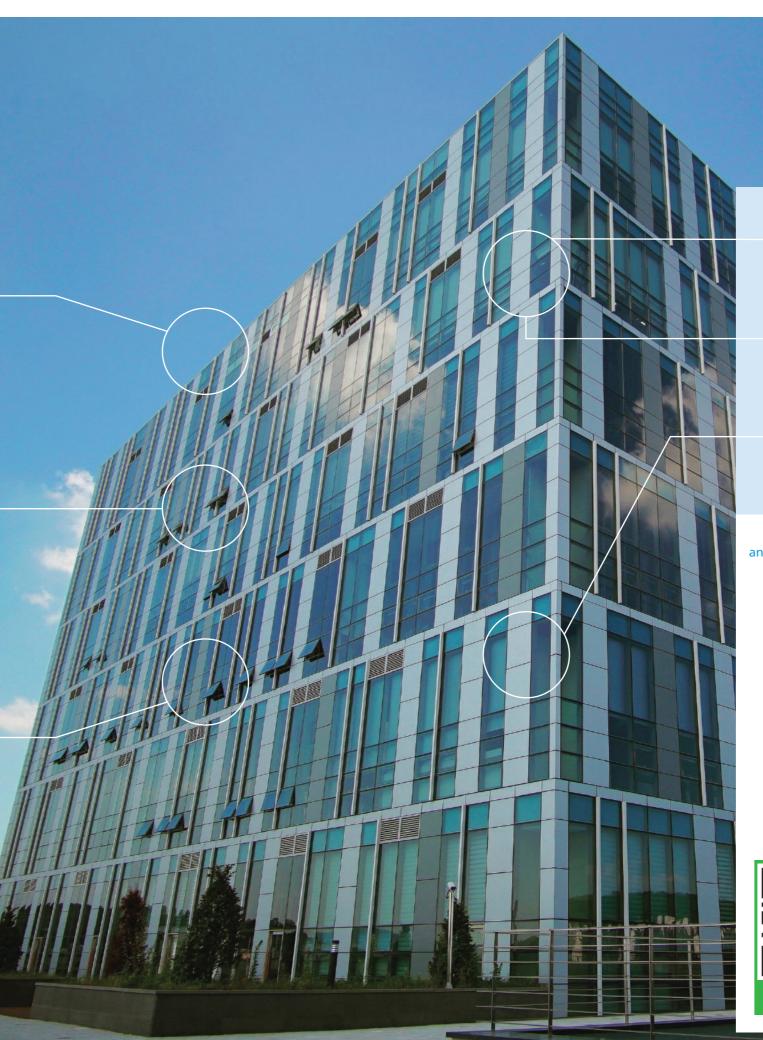












### **BENEFITS OF REIRI**

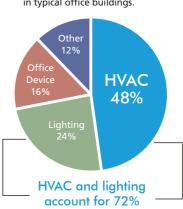
Energy Saving
By automating air-conditioning and
lighting controls through available functions such
as Scheduling and Interlocking, energy consumption is greatly minimized while maximising comfort and efficiency.

**Energy and Cost Management**Easily monitor and analyse energy consumption with data trend graphs, reports and even real-time energy monitoring display. Tenant billing management is also available for effective cost management.

Integration Capabilities
Reiri is able to integrate and connect to various sensors and smart devices, thus making it the ideal all-in-one platform to monitor and control every room's indoor environment, such as temperature, humidity, indoor air quality and illuminance.Integration Capabilities

Energy-efficient control of air-conditioning and lighting is the key to cutting energy costs.

Electricity consumption ratio in typical office buildings.



Source: Agency for Natural Resources and Energy, Government of Japan





'Scan Me'

## **VRV Indoor Units**

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

## Navigation remote controller (Wired remote controller) (Optional)

BRC1E63 & **BRC1F61 (Only for FXEQ Series)** 

## **Clear display**

## • Dot matrix display

A combination of fine dots enables various icons. Large text display is easy to see.

## • Backlight display

Backlight display helps operating in dark rooms.

## Simple operation

## • Large buttons and arrow keys

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





### Guide on display

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

## **Energy saving**

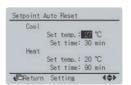
### Set point range set

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



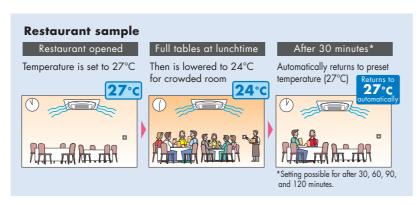
### Set point auto-reset

- 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.



## **VRV Indoor Units**

### Convenience

### Setback (default:OFF)

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

Ex) Setback temperature Cooling :  $35^{\circ}$ C Recovery differential Cooling :  $\cdot 2^{\circ}$ C When the room temperature goes above  $35^{\circ}$ C, the air conditioner starts operating in Cooling automatically

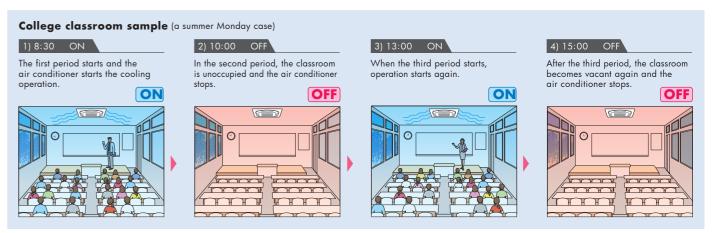
When room temprature reaches 33°C, the air conditioner turns OFF.

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

### Weekly schedule

- Five 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.
- Three independent schedules can be set. (e.g. summer, winter, mid-season)

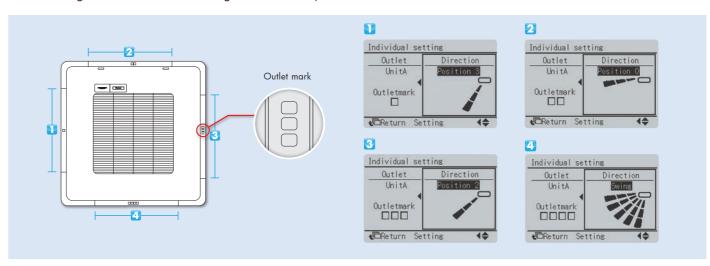




## Comfort

## 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
  \*2 Only available for VRV 4-Way Flow Ceiling Suspended type FXUQ-A series

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## **Individual Control Systems for VRV Systems**

## Stylish remote controller (Option) - Madoka





A complete redesigned controller focused to enhance user experience

BRC1H61W (White)

BRC1H61K (Black)

## **Product Features**

- Echoes the distinct blue circle and simplicity of design
- Two attractive colours to match any interior
- Compact, measures only 85 x 85 mm

Combines refinement and simplicity

## **User-friendly interface**

- · Just three buttons and a large-figure display
- Customisable display

reddot design award

Direct access to basic functions (ON/OFF, Operation mode, emperature setting, Airflow rate, Airflow direction)





## Easy setting via Bluetooth App with smartphone (for Installer/Facility manager)

## **Keep hotel room comfortable**

• Improved setback function by setting the lower temperature limit in cooling mode.

### **Shorter installation time**

- Easy to create multiple remote control and field settings via App
- Prepare a setting in advance at the office and immediately send it to the on-site remote controller
- Save and reuse settings



### <App screen image>

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

Easy operation with new intuitive design



## Simple operation

Using only six buttons, users have direct access to basic functions. This enables them to easily set comfort to their preference.

ON/OFF

- Airflow rate (5-step & Auto)\*
- Operation mode
- Up and down airflow direction (5-step & Swing)\*
- Temperature setting
- ON/OFF timer

## Intuitive design

• By using pictograms, the user- friendly interface enables convenient and easy operation.

## **Compact size**

 Measuring only 85 x 85 mm, the new remote controller is extremely compact and complements any interior design.

## Wireless remote controller (Option)



- Then same operation mode and setting as with wired remote controllers are possible. \*Individual airflow direction, auto air-flow 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 wall or ceiling is
- 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

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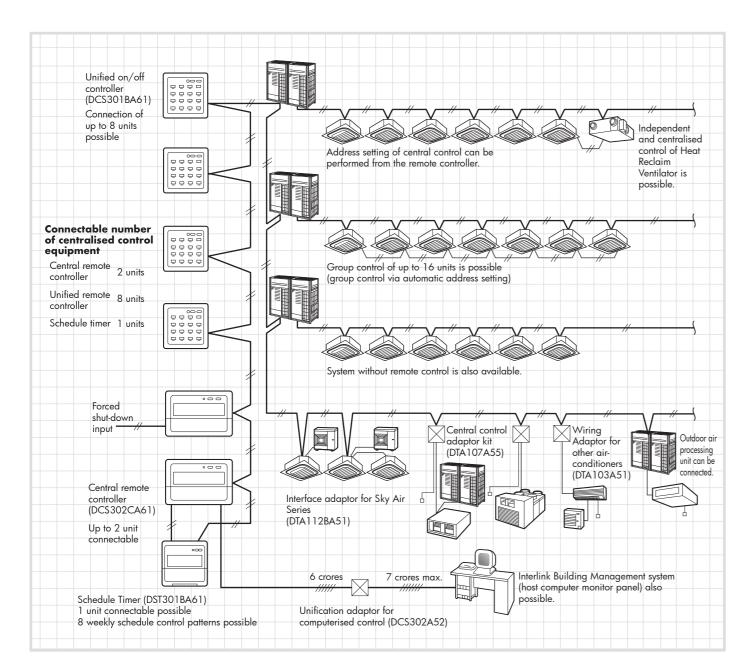
Signal receiver unit

*Wireless remote controller and sign	al receiver unit are sold as a set
*Refer to page 90 for the name of ea	ich model

Wide variation of remote controller for VRV indoor unit											
	FXFQ-AVM FXFQ-S	FXZQ	FXCQ	FXUQ	FXEQ	FXDQ	FXMQ	FXHQ	FXAQ	FXL(N)Q	FXVQ
Navigation remote controller (Wired remote controller) BRC1E63											
Wired remote controller (BRC2E61)											
Wireless remote controller*	•										

## Individual Control Systems for VRV Systems

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



• Certain indoor units limit the functions of some control systems.

## Individual Control Systems for VRV Indoor Units

## **Residential remote controller (Optional)**



DCS303A51

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

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

## **Central remote controller** (Optional)



DCS302CA61

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

## **Unified ON/OFF controller** (Optional)



DC\$301BA61

- Max. 16 groups of indoor units can be operated simultaneously/individually.
- Max. 16 group (128 indoor units) controllable.
- 2 remote controllers can be used to control 2 different places.
- Operating status indication (Normal Operation, Alarm).
- Centralised control indication.
- Max. wiring length 1,000m (Total: 2,000m).
- Compact size casing (Thickness: 16mm).

## **Schedule timer** (Optional)



DST301BA61

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

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

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

## Intelligent Manager

One touch selection enables flexible control of equipment in a building.



DCM601B51

Various types of equipment in a building can be controlled by a single controller.

## Individual air-conditioning control

The flexible control achieved by the VRV system precisely meets different air conditioning needs in each room (e.g. offices, conference rooms, hotel rooms).





### **Lighting control**

DALI-compatible

DALI-compatible LED lighting systems can be controlled and monitored. Lighting control is enhanced through an interlock function with air conditioners and other functions.





### Air conditioning control for large spaces

Air handling units can also be controlled. Large spaces, such as entrance halls and shopping malls, can be easily controlled to ensure comfort.





## **Building equipment control**

Various types of equipment other than air conditioners, including ventilators, fans, and pumps, can also be controlled.

'Scan Me





## For Energy Saving & Comfort

## **Intelligent Touch Manager maximises the** advantages of VRV features

Intelligent Touch Manager is an advanced multi-zone controller that provides the most cost-effective way to control and monitor the Daikin VRV system.

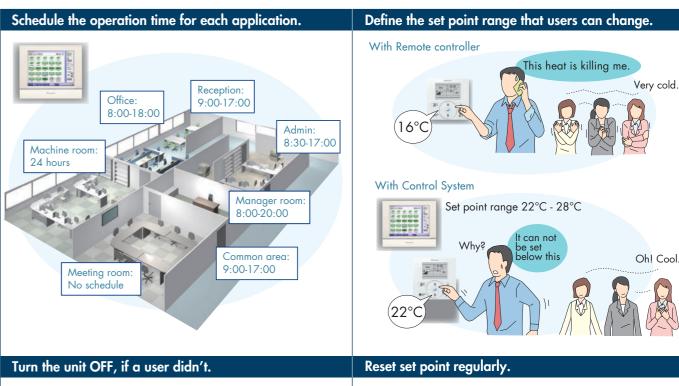
The 10.4" LCD touch screen is easy to use with three different screen views to include the floor plan layout view, icon view and list view and menus for system configurations.

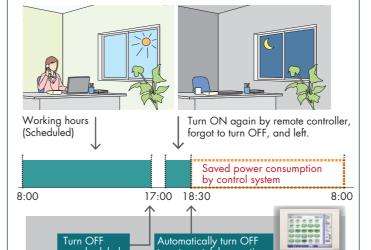
It is also easy to use with standardised remote Web Access from your PC.

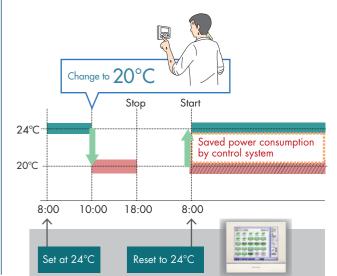
It can manage a total of 650 management points consisting of up to 512 Daikin indoor unit groups

(up to 1024 indoor units) along with building equipment control / monitoring with Digital Inputs / Output

(Di/Dio), Analog Inputs / Output (Ai/Ao) and Pulse input (Pi) optional devices.







## Advanced Control Systems for VRV Indoor Units

In addition to switching lights on and off, advanced lighting control, such as illuminance adjustment, can be achieved

## **Lighting control (Optional)**

Connection to DALI - compatible lighting control system Simple wiring (daisy chain) enables management of LED lighting by the intelligent Touch Manager.



Various air conditioning and lighting control is enabled through the interlock with occupancy sensors and illuminance sensors.

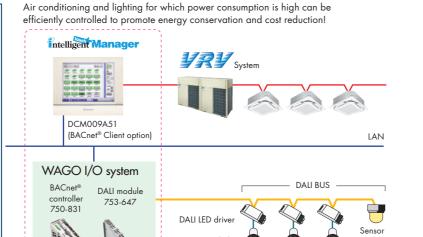
## Lighting control achieved by the intelligent Touch Manager

### [Operation]

- Switch-on/switch-off operation
- Illuminance (1–100%) control
- Various illuminance patterns can be registered
- Registered pattern can be selected from intelligent Touch Manager

### [Monitoring]

- Switch-on/switch-off status monitoring
- Lighting abnormality monitoring
- Illuminance monitoring
- DALI occupancy sensor monitoring
- DALI illuminance sensor monitoring



### [Overview of control]

- Up to 5 DALI modules can be connected to a single BACnet® controller.
- Up to 64 DALI LED drivers (64 addresses) can be connected to a single DALI module.
- 64 DALI addresses can be freely assigned to up to 16 groups using a single DALI module.
   (Each group corresponds to a management point of
- the intelligent Touch Manager.)Up to 16 scenes can be set to a single DALI module.
- Up to 12 sensors (occupancy, illuminance) can be connected to a single DALI module.
- DALI BAS simplifies wiring and setting work by daisy chain wiring and automatic address setting.

## Easy maintenance and energy saving by lighting control

### Case 1

Switch-on/switch-off and illuminance are controlled based on a schedule to cut wasteful power consumption.



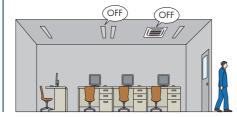


• Optimal illuminance reduces energy

### Case 2

Occupancy sensors are used to eliminate both wasteful lighting and air conditioning. When a room is unoccupied, the air conditioning stops and the lighting.

the air conditioning stops and the lighting is switched off.



### Case 3

Lighting abnormalities (e.g. burned-out bulbs) can be checked on the *intelligent Touch Manager* screen.

Lighting maintenance becomes easier and quicker.



## Tenant Management (PPD Option)

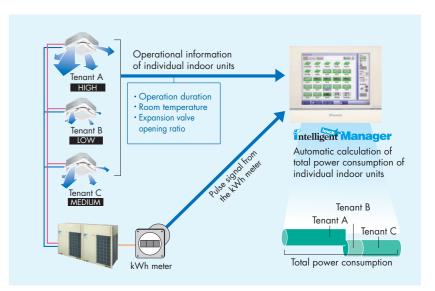
## Reporting the power consumption of VRV system for each tenant

## With the PPD function, power consumption can be calculated for each indoor unit (Optional)

The energy consumption is proportionally calculated for each indoor unit. The data can be used for energy management and calculation of air conditioning usage fees for respective tenants.

Operational information of individual indoor units are monitored, based on distribution of power consumption of outdoor units.

Daikin's PPD keeps track of power distribution for each indoor unit. It performs air conditioning billing calculations quickly and automatically.



 ${\rm *PPD} \; \hbox{(Power Proportional Distribution) is Daikin's proprietary calculation method.}$ 

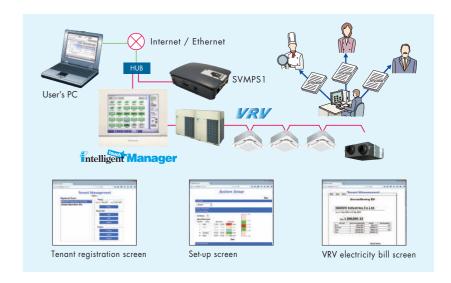
It is easy to output PPD data.

PPD data is output in CSV format to a PC or USB memory device and can be freely processed and managed.

## Air conditioning bills can be issued by one click

## Electricity bills can be easily calculated for each tenant (Optional)

The power consumption of VRV controlled by the intelligent Touch Manager can be easily managed for each tenant using a PC. The electricity bill settings facilitate billing work through easy calculation and issuance of VRV electricity bills.

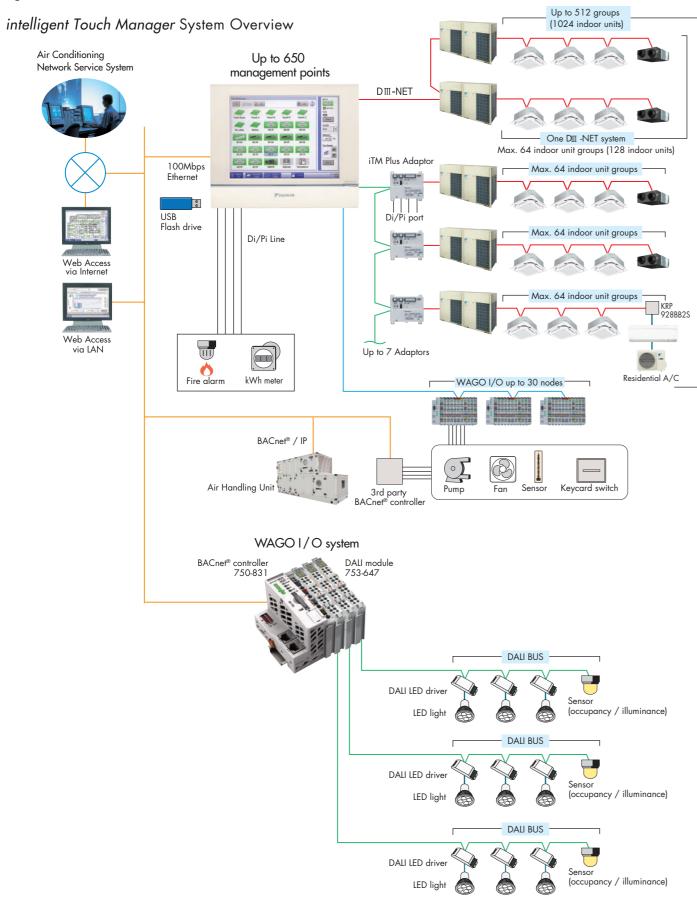


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- [ Main functions ]
- Register tenants
- Set the electricity unit price for 5 time zones
- $\bullet$  Calculate power consumption and electricity charge for each tenant
- Show aggregation results in the specified period for each tenant
- Output the results (Printout and CSV file)

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

## System structure



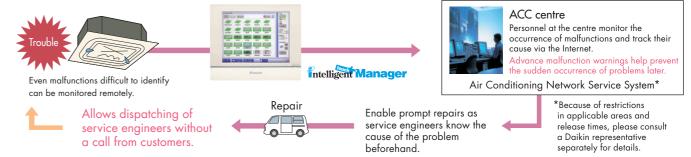
## **Air Conditioning Network Service System**

## **Preventive Maintenance**

The intelligent Touch Manager can be connected to Daikin's own Air Conditioning Network Service System for remote monitoring and verification of operation status for VRV system. By its ability to predict malfunctions, this service provides customers with additional peace of mind.

## Enhanced convenience with link to the Air Conditioning Network Service System

The intelligent Touch Manager connects seamlessly to Daikin's 24-hour Air Conditioning Network Service System.



## Daikin Offers a Variety of Control Systems

## Convenient controllers that offer more freedom to administrators



## Intelligent Controller

Ease of use and expanded control functions

The user-friendly controller features colours, multilingual function, and icons in the display for ease of understanding. A wide variety of control methods can be accommodated, permitting administrators to monitor and operate the system even when they are away from the controller.

## Connect VRV system to your BMS via BACnet® or LONWORKS®

Compatible with BACnet® and LONWORKS®, the two leading open network comunication protocols, Daikin offers interfaces that provide a seamless connection between VRV system and your BMS.

Dedicated interfaces make Daikin air conditioners freely compatible with open networks



(Interface for use in BACnet®)

Seamless connection between VRV system and BACnet® open network protocol.



Facilitating the network integration of VRV system and LONWORKS®

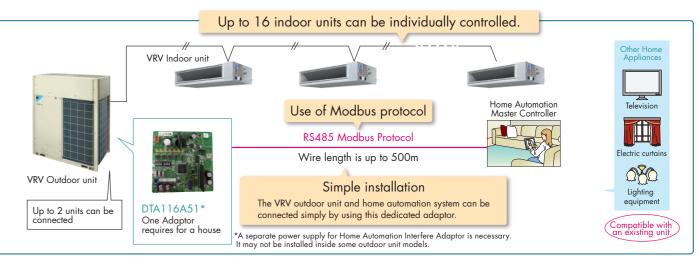
LONWORKS®

DMS504B51 (Interface for use in LONWORKS®)

Notes: 1. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

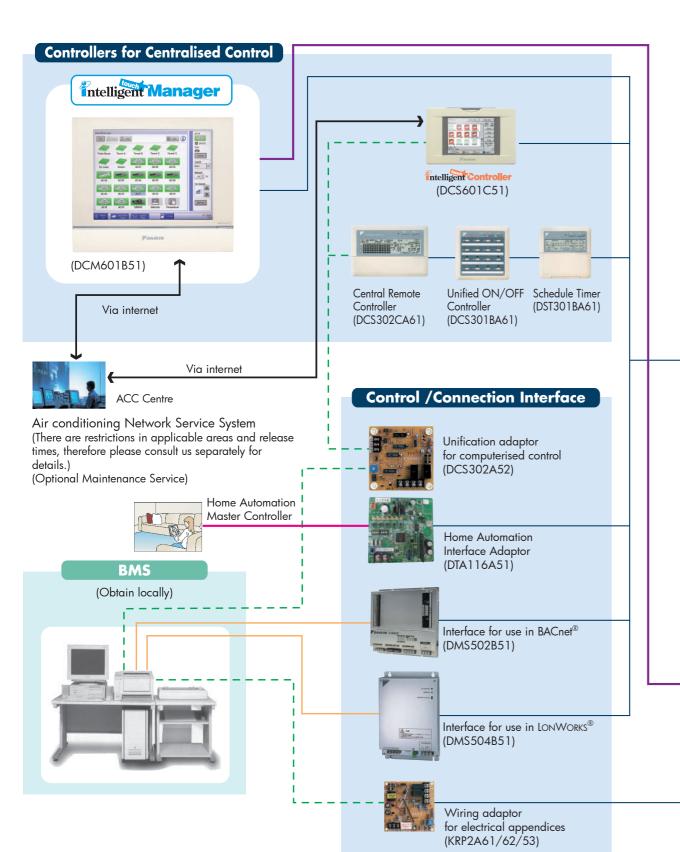
2. LONWORKS® is a trademark of Echelon Corporation registered in the United States and other countries.

## **Modbus Interface Adaptor**



## **Integrated Building Monitoring System**

The high speed transmission of DIII-NET enables more advanced control of the VRV system, providing you with enhanced comfort.



## **Integrated Building Monitoring System**



### Caution:

Limitation may apply to some models and functions. Please contact your local sales office for details. Consultation is necessary before employing this control system. Please contact your local sales office before making a purchase.

**Note:** BACnet<sup>®</sup> is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). LONWORKS<sup>®</sup> is a trademark of Echelon Corporation registered in the United States and other countries.

· Crime and fire prevention equipment

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VRV

## **Option List**

## **Operation Control System Optional Accessories**

## For VRV indoor unit use

⋆ No.	Item		Туре	FXFSQ-A (For Black Panel)	FXFSQ-A	FXZQ-A	FXUQ-A	FXCQ-A	FXKQ-AV	FXDQ-PD FXDQ-ND
		NAC 1	Receiver	BRC7M634K	BRC7M632F-6	BRC7M530W	BRC7CB58	BRC7M65	BRC63AV	BRC4M61-6
1	Remote Controller	Wireless	Handset		BRC4M150W16	BNC/IVI330VV	BINC/ CB30	BNC/IVIOS	BRC4M150W16	
		Wired		BRC	BRC1E63			BRC2E61		
2	Navigation Remote Controller (Wired Remote Controller)						BRC1E63 Note 7			
3	Simplified Remote Controller (Exposed type)						BRC2C51			
4	Remote Controller for hotel use (Concealed type)							BRC3A61		
5	Adapting for wiring			★KRP1C63		★KRP1BA57		★KRP1B61	KRP1B61	★KRP1B56
6-1	Wiring Adaptor for Electrical	Appendices (1)		★KRP2A62		★KRP2A62		KRP2A61	★KRP2A61	★KRP2A53
6-2	Wiring Adaptor for Electrical	Appendices (2)		★KRP	4AA53	<b>★</b> KRP4AA53 <b>★</b> KRP4AA51 <b>★</b> KRP4AA51		KRP4AA51	KRP4A54	
7	Remote Sensor (for Indoor te	mperature)		KRCS01-4B		KRCS01-1B				
8	Installation box for Adaptor F	СВ★		Note 2, 3 KRP1H98		Note 4, 6 KRP1BA101	KRP1BA97	Note 2, 3 KRP1B96		Note 4, 6 KRP1BA101
9	External control Adaptor for	Outdoor Unit		<b>★</b> DTA104A62		<b>★</b> DTA104A62		<b>★</b> DTA104A61	DTA104A61	*DTA104A53
10	O Adaptor for Multi Tenant		<b>★</b> DTA114A61							

No.	Item		Туре	FXMQ-P/FXMQ-ARV	FXMQ-NVE	FXHQ-MA/AVM	FXAQ-A	FXLQ-MA FXNQ-MA
		Wireless	Receiver	BRC4N	BRC4M61-6		BRC7N618-6	BRC4M61-6
1	Remote Controller	vvireiess	Handset	BRC4M1	50W16	BRC7M53	BRC4M1	50W16
		Wired				BRC2E61		
2	Navigation remote controller (Wired	Remote Controller)				BRC1E63 Note 7		
3	Wired Remote Controller with week	ly Schedule Timer				BRC1D61		
4	Simplified Remote Controller (Expos	ed type)		BRC2C51	BRC2C51		BRC2C51	
5	Remote Controller for hotel use (Co	ncealed type)		BRC3A61	BRC3A61		BRC3A61	
6	Adapting for Wiring			★KRP1C64	KRP1B61	KRP1BA54		KRP1B61
7-1	Wiring Adaptor for Electrical Appen	dices (1)		★KRP2A61	KRP2A61	★KRP2A61	★KRP2A61	KRP2A61
7-2	Wiring Adaptor for Electrical Appen	dices (2)		★KRP4AA51	KRP4AA51	★KRP4AA52	★KRP4AA52	KRP4AA51
8	Remote Sensor (for Indoor tempera	ture)		KRCS01-4B	****		KRCS01-1B	••••
9	Installation Box for Adaptor PCB★			Note 1 KRP4A96	••••	Note 3 KRP1CA93	Note 1 KRP4AA93	
10	External Control Adaptor for Outdo	or Unit		*DTA104A61	DTA104A61	★DTA104A62	<b>★</b> DTA104A61	DTA104A61
11	Adaptor for Multi Tenant			*DTA114A61 *DTA114A61				••••
12	External Control Adaptor for Coolin							
13	Remote Controller with Key							

Functional List	Round Flow with Sensing Type FXFSQ-A		
D C II	Wired	BRC1E63	
Remote Controller	Wireless		
Dual Sensor*1	0		
Direct Airflow *1	0		
Sensing Sensor Low Mode *1	0		
Sensing Sensor Stop Mode *1	0		
Circulation Airflow		0	
Individual Airflow Direction Control		0	
Switchable 5 step Fan Speed		0	
Auto-Airflow Rate		0	
Auto-Swing		0	
Swing Pattern Selection	0		
High Ceiling Application	0		

- Note:

  1 Installation box ★ is necessary for each adaptor marked★.

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

  3. Only one installation box can be installed for each Indoor Unit.

  4. Up to 2 installation box ★ is necessary for second adaptor.

  5. Installation box ★ is necessary for second adaptor.

  6. Installation box ★ is necessary for each adaptor.

  7. Individual airflow direction, auto airflow rate and sensing sensor control can be set only via wired remote controller BRC1E63. Cannot be set via other remote controllers.

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

  9. When using BRC1E63, be sure to remove the control panel and since BRC1E63 cannot be stored inside the Indoor Unit, please place it separately.

## **Option List**

## **System Configuration**

No.	Item	Туре	Model No.	Function
1	Residential central remote controller		Note 2 DCS303A51	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.
2	Central remote control	ller	DCS302CA61	
2-1	Electrical box with ear	th terminal (3 blocks)	KJB311AA	temperature setting and monitoring can be accomplished individually or simultaneously. Connectable up to 2 controllers in one system.
3	Unified ON/OFF cont	roller	DCS301BA61	• Up to 16 groups of indoor units (128 units) can be turned, ON/OFF individually or
3-1	Electrical box with ear	th terminal (2 blocks)	KJB212AA	simultaneously, and operation and malfunction can be displayed. Can be used in
3-2	Noise filter (for electromag	gnetic interface use only)	KEK26-1A	combination with up to 8 controllers.
4	Schedule timer		DST301BA61	Programmed time weekly schedule can be controlled by unified control for up to 64 groups of indoor units (128 units). Can turn units ON/OFF twice per day.
5	5-room centralised controller for residential indoor units	For CDXS, FDK(X)S, FTK(X)S	Note 3 KRC72A	Up to 5 indoor units can be controlled. This is a low cost system which can only control ON/OFF.
6	Interface adaptor for residential indoor units	For CDXS, FDK(X)S, FTK(X)S	KRP928BB2S	Adaptors required to connect products other than those of the VRV System to the high-speed DIII-NET communication system adopted for the VRV System.
7	Interface adaptor for SkyAir-series	For FCQ-B, FFQ-B, FHQ-BV, FBQ-B	<b>★</b> DTA112BA51	, , ,
8	Central control adaptor kit	For UAT(Y)-K(A), FD-K	<b>★DTA107A55</b>	installed on the product unit to be controlled.
9	Wiring adaptor for oth	her air-conditioner	*DTA103A51	Installed on the product unit to be controlled.
10	DIII-NET Expander Adaptor		DTA109A51	Up to 1024 units can be centrally controlled in 64 different groups.  Wiring restrictions (max. length: 1,000m, total wiring length: 2,000m, max. number of branches: 16) apply to each adaptor.
10-1	Mounting plate		KRP4A92	• Fixing plate for DTA109A51

- Installation box for ★ adaptor must be obtained locally.
   For residential use only. Cannot be used with other centralised control equipment.
   A wiring adaptor (KRP413AB1S) is also required for each indoor unit.

## **Building Management System**

No.	o. Item				Model No.	Function
1	Intelligent Touch Controller	Basic	Hardware	Intelligent Touch Controller	DCS601C51	Air conditioning management system that can be controlled by a compact all-in-one unit.
1-1		Option	Hardware	DIII-NET Plus Adaptor	DCS601A52	Additional 64 groups (10 outdoor units) is possible.
1-2	2 Electrical box with earth terminal (4 blocks)				KJB411A	Wall embedded switch box.
2	Intelligent Touch Manager	Basic	Hardware	Intelligent Touch Manager	DCM601B51	Air Conditioning management system that can be controlled by touch screen.
2-1		Option	Hardware	iTM Plus Adaptor	DCM601A52	Additional 64 groups (10 outdoor units) is possible. Max. 7 iTM plus adaptors can be connected to intelligent Touch Manager.
2-2				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	1.4 Di Unit				DEC101A51	8 pairs based on a pair of ON/OFF input and abnormality input.
2-5	5 Dio Unit				DEC102A51	4 pairs based on a pair of ON/OFF input and abnormality input.
3		*1 Interface for use in BACnet®			DMS502B51	Interface unit to allow communications between VRV and BMS. Operation and monitoring of air conditioning systems through BACnet® communication.
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 Interface	Optional Di board			DAM412B51	Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.
4		*2 Interface for use in LONWORKS®			DMS504B51	Interface unit to allow communications between VRV and BMS. Operation and monitoring of air conditioning systems through LonWorks® communication.
5		Home Automation Interface Adaptor			DTA116A51	Use of the Modbus protocol enables the connection of the VRV system with a variety of home automation systems from other manufacturers.

- ★ 1. BACnet<sup>®</sup> is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
   ★ 2. LonWorks<sup>®</sup> is a trademark of Echelon Corporation registered in the United States and other countries.
   ★ 3. Installation box for ★ adaptor must be obtained locally.

# AIR HANDLING UNIT

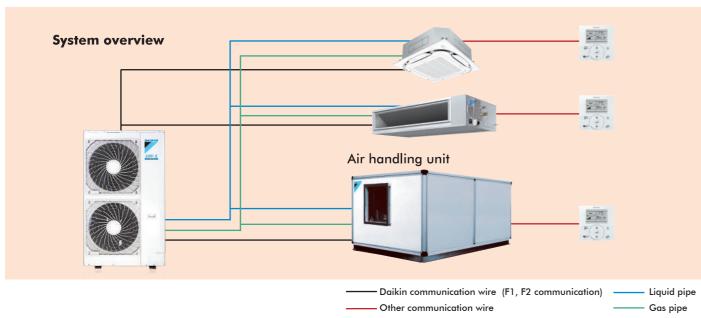
# Integrate your air handling unit for large size spaces such as factories and for fresh air solutions.

## Applicable with ODU Capacity 10 HP & 12 HP



- Easy design and installation
- The system is easy to design and install since no additional water systems such as boilers, tanks, gas connections, etc. are required
- Inverter controlled units
- Control of air temperature via standard Daikin wired remote control





Air handling units can be connected to VRV systems.

This combination can be built to order as a system. Outdoor air series is also possible. Please contact your local sales office for details.

\*Control box and expansion valve kit are necessary for integration of AHU and VRV system.

# THE INNOVATIVE REFRIGERANT PIPING OF NEXT GENERATION

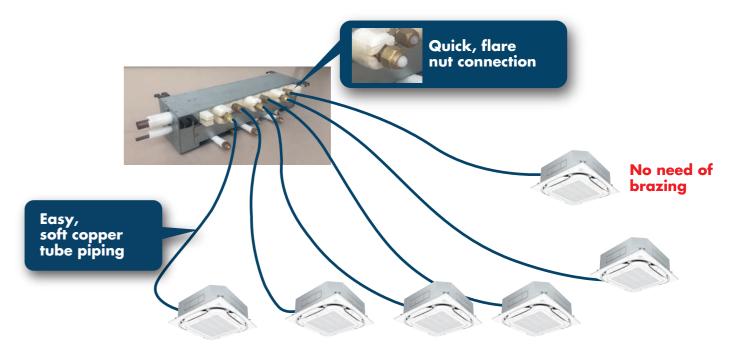
Daikin innovated Next Generation of Quality and Efficiency for VRV Installation. It offers differentaited soulutions in installation. It ensures quality installation with reduction of site work.



Header Pack

#### **Advantage**

- Installation time saving: Up to 1/3 of conventional method
- Easy to Install: Hanging points available
- Safety: Consists of faring method and no brazing required\*
- Space saving: Head pack to Indoor unit soft drawn pipe, top side of refrigerant pipe doesn't need space for brazing torch movement
- Quality Installation: Elimination of difficult process and enhancing quality Installation



#### Compact design to fit into narrow attic space

Lightweight and the compact body give minimum damage on the building structure.

#### **Header Pack Line-up**

		-		
		Piping connection	ns (Liquid/Gas mm)	
Model Name	HP	Outdoor unit side	Indoor unit side	Indoor unit total capacity index
BHF6ARHP6 BHF6ARHP6Z	6	Ø9.5/Ø15.9	(Ø9.5/Ø15.9)×2 (Ø6.4/Ø12.7)×4	<150
BHF6RHP6 BHF6RHP6Z	6	Ø9.5/Ø15.9	(Ø9.5/Ø15.9)×1 (Ø6.4/Ø12.7)×3	<150
BHF8RHP6 BHF8RHP6Z	8	Ø9.5/Ø19.1		150 ≦ X < 200
BHF10RHP6 BHF10RHP6Z	10	Ø9.5/Ø22.2	(Ø9.5/Ø15.9)x3 (Ø6.4/Ø12.7)x3	200 ≦ X < 290
BHF16RHP6 BHF16RHP6Z	16	Ø12.7/Ø28.6		290 ≦ X < 420



71

# NON-BRAZED CONNECTION FOR REFRIGERANT PIPING

#### **Evolutionally - Advanced Feature**

A combination of rubber packing and screwed metal body offers gas-tight and rigid connection without brazing. Patented "Leverage Method" mechanically holds the pipe and prevents it from pull-out.



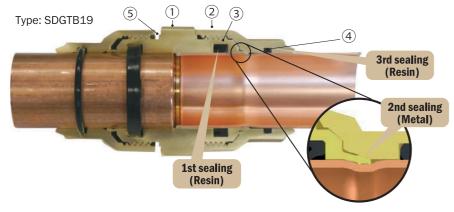
Size  $\phi$  6.4 -  $\phi$  41.3

#### Mechanism

Daikin DGT is a non-brazed connection suitable for piping. Pipes can be joined easily and quickly without brazing or using any special tools. It meets stringent safety requirements and provides leak-free tightness among various substantial benefits.

- Double edged claw catches the pipe to form tight mechanical sealing
- 3 types of connectors suitable for most pipe sizes and applications
- Unique mechanical and resin sealing prevent gas leak completely.
- It is durable up to 4 times (17.2MPa) of max. operating pressure.





#### **System Reliability**

- No risk of copper oxide or soot in pipes due to no brazing
- Prevents early compressor failure and prolongs the lifespan of air-conditioners



#### **Safety First**

- As no brazing is required, fire hazards are completely eliminated during installation on site
- No risk of handling high pressure and flammable gas



#### **Time & Costs Savings**

- No need to apply for hot work permit or station fire safety watchers onsite, thus saving time and cost with less administrative work
- Simple installation process also reduces installation time



#### Daikin Gas-tight Joint Line up

(Matching for various piping sizes)

#### Standard Joints (Connecting the same pipes)

Figure	Model Name	Size (mm/inch)	ØD (mm)	W (mm)	L (mm)
	SDGTB06	Ø6.4 (1/4")	6.35	15.0	50.4
	SDGTB09	Ø9.5 (3/8")	9.52	19.9	55.5
	SDGTB12	Ø12.7 (1/2")	12.7	23.5	59.0
	SDGTB15	Ø15.9 (5/8")	15.88	30.0	74.0
	SDGTB19	Ø19.1 (3/4")	19.05	34.6	76.8
OD THE W	SDGTB22	Ø22.2 (7/8")	22.22	40.2	83.4
	KNJ25A	Ø25.4 (1")	25.4	43.5	85.4
	SDGTB28	Ø28.6 (11/8")	28.58	46.7	88.0
	KMJ31A	Ø31.8 (11/4")	31. <i>7</i> 5	48.4	98.4
	BDGTA34	Ø34.9 (13/8")	34.92	51.1	101.5
	KMJ38A	Ø38.1 (11/2")	38.1	54.7	102.4
	BDGTA41	Ø41.3 (15/8")	41.28	58.3	103.5

#### Asymmetry Joints (Connecting different size pipes)

Figure	Model Name	Size (mm/inch)	ØD1 (mm)	ØD2 (mm)	W (mm)	L (mm)
	SDGTB0906	Ø9.5 (3/8") ↔ Ø6.4 (1/4")	9.52	6.35	19.9	52.7
	SDGTB1209	Ø12.7 (1/2") ↔ Ø9.5 (3/8")	12.7	9.52	23.5	57.5
	SDGTB1512	Ø15.9 (5/8") ↔ Ø12.7 (1/2")	15.88	12.7	30.0	65.0
	SDGTB1915	Ø19.1 (3/4") ↔ Ø15.9 (5/8")	19.05	15.88	30.0	76.8
ØD1 ØD2 W	SDGTB2219	Ø22.2 (7/8") ↔ Ø19.1 (3/4")	22.2	19.05	40.2	81.5
L	SDGTB2522	Ø25.4 (1") ↔ Ø22.2 (7/8")	25.4	22.22	43.5	85.8
	SDGTB2825	Ø28.6 (11/8") ↔ Ø25.4 (1")	28.58	25.4	46.7	88.1
	KMJR3128A	Ø31.8 (11/4") ↔ Ø28.6 (11/8")	31.75	28.58	48.4	93.5
	SDGTB3428	Ø34.9 (13/8") ↔ Ø28.6 (11/8")	34.92	28.58	51.1	95.7

VRV X Catalogue India\_A4

#### Note:

- Ask an authorised Daikin dealer to install Daikin products. Do not try to install the product yourself or get it installed by any unauthorised dealer. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion. Warranty of the product shall be void if not installed by an authorised Daikin dealer.
- Use only those parts and accessories supplied or specified by Daikin. Ask authorised Daikin dealer for any repair or component. Warranty of the product / component shall be void if non-specified spares are used or repaired by a non Daikin dealer.
- Please ensure to install ELCB (Earth Leakage Circuit Breaker) for outdoor units to prevent ground fault effects.
- Read the user's manual carefully before using the product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

For any enquiry, either call the numbers mentioned below or contact your nearest Daikin dealer.

#### 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.







About ISO 9001 ISO 9001 is a plant certification system defined by the International Organization for Standardization (ISO) relating to quality assurance. ISO 9001 certification covers quality assurance aspects related to the idesign, development, manufacture, nstallation, and supplementary service" of products manufactured at the plant.



EC99J2044

- Ahout ISO 14001

ISO 14001 is the standard defined by the International Organization for Standardization (ISO) relating to environmental management systems. Our group has been acknowledged by an internationally accredited compliance in milentationary accreamed compilative organisation as having an appropriate programm of environmental protection procedures and activities to meet the requirements of ISO 14001.

#### DAIKIN AIRCONDITIONING INDIA PVT. LTD.

12th Floor, Building No. 9, Tower A, DLF Cyber City, DLF Phase III, Gurgaon - 122 002, Haryana, India. Tel.: 0124-4555444, Fax.: 0124-4555333

East Africa: #816, 8th Floor, Purshottam Place Delta Tower 1, Westland Nairobi, Kenva Tel.: +254720284146

Visit us at https://www.daikineastafrica.com/

www.facebook.com/DaikinEastAfrica/

Sri Lanka: Unit No. 217, 2nd Floor, Bernard Business Park, No. 106, Dutugemunu Street, Dehiwala Colombo

Visit us at https://www.daikinsrilanka.com/

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To know more, give a missed call or SMS: <DAIKIN> to 9210188999

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- www.youtube.com/user/DaikinACIndia
- The specifications, designs, and information in this brochure are subject to change without notice.

CUSTOMER CONTACT CENTRE: 011-40319300, 1860-180-3900

customerservice@daikanindia.com

For more product information:





WORLD'S LEADING AIR CONDITIONING COMPANY FROM JAPAN





# ADVANTAGE









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Equipped with Advanced Technology, that results in high energy efficiency. This technological innovation gives end user the advantage of better comfort and works further towards creating a sustainable environment.



# DAIKIN The world leader in air conditioning

At Daikin, we are a leading innovator and provider of advanced, high-quality air conditioning solutions for residential, commercial and industrial applications.

As world's leading air conditioning company, we are committed to deliver air conditioning solutions that enhance the quality of life all ground the world

Established in 1924, Daikin Industries Ltd., is a diverse multinational company, active in air conditioning, chemicals and oil hydraulics. With headquarters at Osaka, Japan, our Daikin family has more than 67,000 members, working across 80 production base and 208 consolidated subsidiaries worldwide.

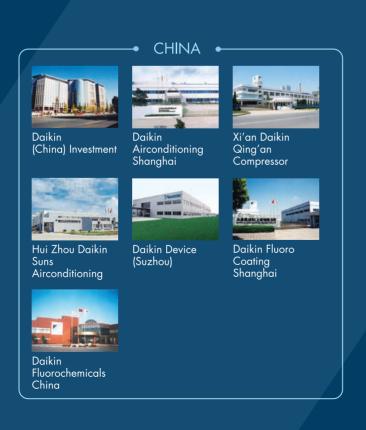
As the world's sole manufacturer that develops a long line of products from refrigerants to air conditioners, we advocate comfortable living on the strength of advanced technologies.

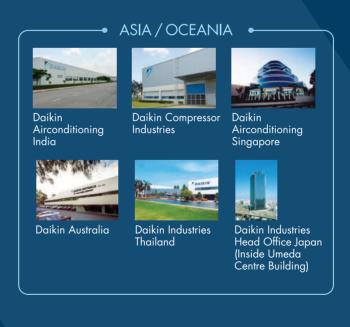
We are present in USA, Europe and Russia, The Middle East, Africa, Asia, Oceania and Middle-South America. We aim to serve our customers in each of these markets by providing optimal air conditioning solutions.

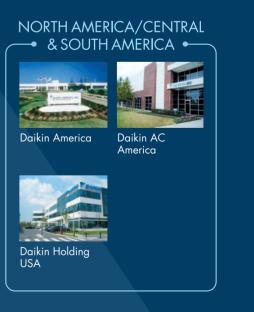




Daikin Chemical







# Exploring new R&D frontiers

At Daikin, we are creating value through innovative technologies. As a global industry front-runner, we are carrying out research and development on the world's most advanced air conditioning technology.

Our strong R&D edge has helped us create futuristic products that enrich people's lives. As symbolised by the VRV, Daikin has put forth a multitude of products and varied technology that have always been and continue to be, at the forefront of innovation.

To be able to offer such products and services that delight and astound our customers, we have constructed an advanced R&D architecture.





Formation of a three-division system of research, IT and development to support our superior products.

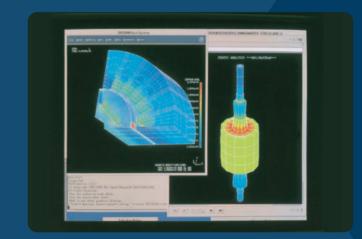
To create more advanced functions and new value, we have instituted specialised R&D divisions: the 'Environmental Technology Research Laboratory' and the 'Solution Product Development Centre'. In combination with the Product Development Group, each of the three divisions work in close co-operation to precisely ascertain the customers' needs and to enable commercialisation of products, incorporating advanced technology that take the lead over our competitors.



Accelerating globalisation of our air conditioning business and varied needs of customers across geographies are increasing our research challenges. We have established a research laboratory devoted to the two fields of 'air conditioning' and 'the environment'. With our mission to promote energy savings in air conditioners, we are engaged in R&D on cutting-edge technologies. Our aim is to create futuristic products from fundamental research on motor inverters and other areas to support individual product development.

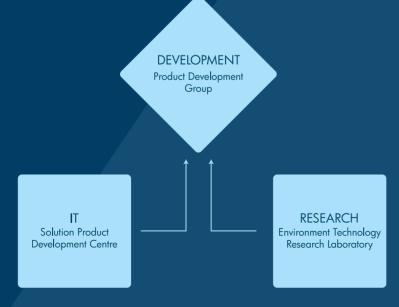
Going forward, we will elevate our technology edge to achieve further business expansion globally.





The Solutions Product Development Centre: Integrating Air Conditioners with IT.

Keeping in mind the changes in business brought in by the computerisation and networking of society, we have integrated IT into our airconditioners, including communication technology, software technology and digital control. We are initiating R&D that will offer new system services - a comfortable environment with superior energy savings by networking air conditioners. Such a scenario will enable them to exchange information with service centres.





Technology & Innovation Centre, Japan:

Aiming for new value creation as a core base for technology development.



Research & Development Centre, India:

Reiterating to its commitment to Indian market, Daikin India R&D is dedicated to provide customised solutions to its customers.

7

## X' TENSIVE RANGE UP TO 60 HP





World's most advanced XXX air conditioning system with Innovative VRT technology.

First launched in Japan in 1982, the Daikin VRV system has been embraced by the world markets for over three decades. Now, we at Daikin introduce the next generation VRV X system to reinforce our industry leadership. The system offers an enhanced line-up to meet an ever widening variety of needs, while improving energy savings, comfort and ease of installation.

The VRV X is the most advanced air conditioning system in the world and is ideal for small and large spaces.

#### **Energy saving technology for VRV X System**

## X' TRA POWER SAVINGS

Next Generation Compressor & VRT Smart Control VRT-Variable Refrigerant Temperature in Indoor Unit (IDU) and Outdoor Unit (ODU)

The new VRV X system now features VRT technology in IDU & ODU. VRT automatically adjusts refrigerant temperature to individual building load and climate requirement, thus further improving annual energy efficiency and maintaining comfort. With this technology, running costs are reduced.





X' TENDED RELIABILITY

Auto-Optimisation
Refrigerant
Charging

#### Standard Type

New series with compact and light weight design
6 HP-60 HP with 56 models line-up (For Heat Pump & Cooling Only)

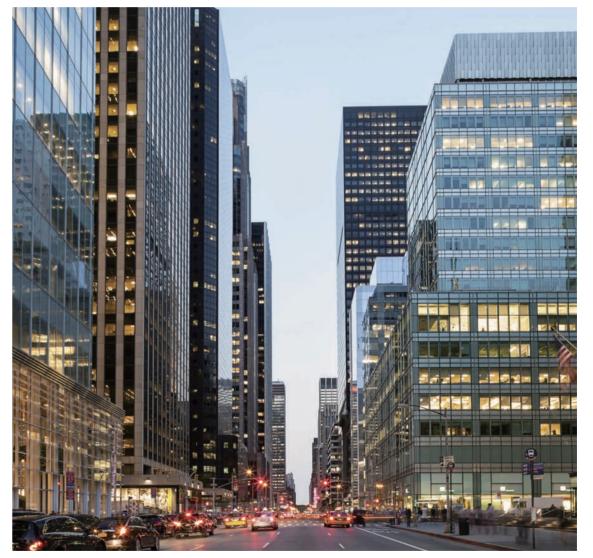


 Installation Space
 0.95 m²

 Product Weight\*
 285 kg

\*For cooling only mod





#### Line-up

HP	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
Cooling Only/ Heat Pump																												

9

## X' TRA POWER SAVING



#### New heights in energy efficiency during actual operation

The key to innovative energy savings is to increase efficiency during low-load operation.

Using data gathered from actual operation, Daikin discovered that air conditioning systems operate at a load factor of 50% or less for 70% of their annual operation period.

This inspired us to develop new technologies to enhance energy efficiency during low loads.

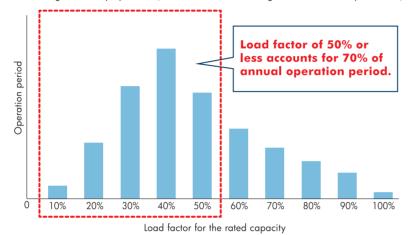
Utilising these technologies, Daikin's new VRV X series raise the standard for energy efficiency.

#### **New Scroll Compressor\***

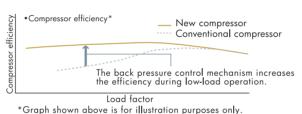
#### Refrigerant leakage is minimised during low-load operation.

Operation loss due to refrigerant leakage is reduced by the proprietary back pressure control mechanism to ensure stable low-load operation.

• Correlation between the load factor for the rated capacity and operation time \*According to a survey by Daikin (based on Air Conditioning Network Service System data)







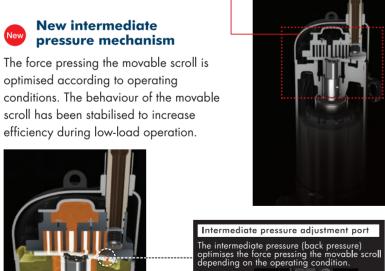
#### **Back pressure control mechanism**

#### **Conventional mechanism**

The movable scroll is pressed by the pressure difference between high and low pressures. The force pressing the movable scroll decreases during low-load operation, results in compression leakage from movable parts.



The force pressing the movable scroll decreases during low-load operation.



The intermediate pressure keeps pressing the movable scroll during low-load operation

## Energy saving

VRV+VRT+VAV

Uniting advanced software and hardware technologies for greater energy savings during actual operation.

VRT Smart Control (Fully Automatic Energy-saving Refrigerant Control)

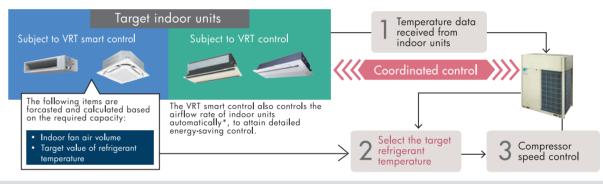
Software

#### Optimally supply only for the needed capacity of indoor units

Daikin developed VRT smart control by combining air volume control (VAV: Variable Air Volume) for indoor units with conventional VRT control, which optimises compressor speed by calculating the required load for the entire system and optimal target refrigerant temperature based on data sent from each indoor unit. Coordination with the air volume control reduces compressor load and minimises operation loss based on detailed control. VRT smart control ensures energy savings and comfortable air conditioning to meet actual operating conditions.

Overview of the control (system control flow)

Different automatic energy-saving refrigerant control applies depending on the indoor units connected.



The smooth control (which keeps the compressor running) saves energy and ensures comfort during low-load operation.

• Changes in the air-conditioned room temperature during low-load operation\* Conventional air-conditioning method Fully automatic energy-saving refrigerant control Changes in the room temperature: Large The power consumption attributed to the Changes in the room temperature: Small wasted power consumption is \*Graph shown above is for illustration purpose only

- For the classification of indoor units (VRT smart control and VRT control), refer to page 20.
- In case system is having both VRT Control and VRT Smart Control types of Indoor units, system will operate under VRT Control.
- If a system has air handling unit or outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.

#### Higher efficiency is provided during rated operation.

# COP at 100% operation load X SERIES

## Advanced oil temperature control

#### Standby power consumption is reduced

The advanced oil temperature control reduces standby power consumption compared to conventional models. Standby power is needed for preheating refrigerator oil, which consumes substantial standby power and is reduced to save energy when the air conditioner is stopped.

Cooling operation conditions: Indoor temp, of 27°CDB, 19°CWB and outdoor temp, of 35°CDB.

## VRT - VARIABLE REFRIGERANT TEMPERATURE

## State-of-the-art energy saving technology for VRV system

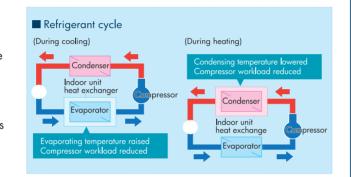
# Customise your VRV system for optimal annual efficiency

The new VRV X system features VRT technology. VRT automatically adjusts refrigerant temperature to individual building and climate requirement, thus further improving annual energy efficiency and maintaining comfort.

With this excellent technology, running costs are reduced.

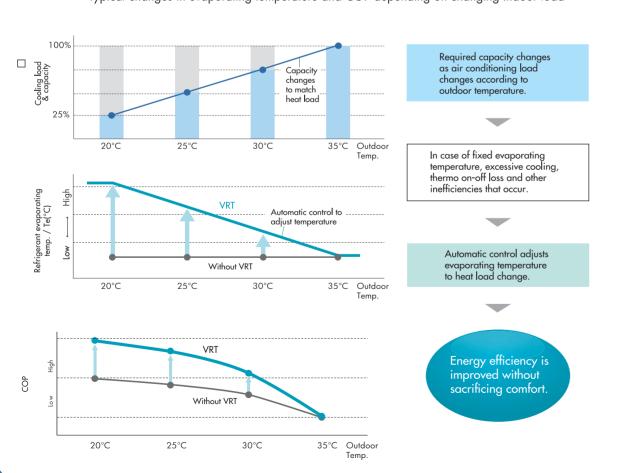
#### How is energy reduced?

During cooling, the refrigerant evaporating temperature (Te) is raised to minimise the difference with the condensing temperature. During heating, the condensing temperature (Tc) is lowered to minimise the difference to the evaporating temperature. Compressors work less and this reduces power comsumption.



10

#### Typical changes in evaporating temperature and COP depending on changing indoor load



#### Fine control to match user preference available through mode selection Basic mode is selected to maintain optimal comfort. VRT is selected to save energy and prevent excessive cooling or heating. Energy saving priority Variable Refrigerant Temperature High Sensible Mode Basic Mode Auto Mode Selecting VRT enables operation to be optimised for either energy efficiency or rapid cooling/heating. (default setting on VRV X) Unable to change Te Reaction speed Very Fast Reaction speed Fast Reaction speed Medium VRT offers quicker cool down to shorten uncomfortable pull down time. The refrigerant temperature can go low in cooling (high in heating) Powerful Gives priority to very fast reaction speed. mode The refrigerant temperature goes down (or up in heating) fast to keep the room setpoint stable. - Quick - Mild Gives priority to fast reaction speed. Quick The refrigerant temperature goes down (or up in heating) fast to keep the room setpoint stable. mode Mild Gives priority to efficiency. The refrigerant temperature goes down (or up in heating) gradually, giving priority to the efficiency of the system instead of the reaction speed. mode Recommended for use in these situations ☐ Cooling only regions having differences ☐ Cooling/heating regions having periods in daily temperature. of mild outdoor temperatures Av. daily temp. difference Cooling period € 35 g 30 호 25 i ່<sub>ດ</sub> 25 20 20 Av. min. temp Av. min. temp Mar. VRT is particularly effective during the VRT is particularly effective at

intermediate periods.

night when temperatures are low.

## X' CELLENT TECHNOLOGY

#### Large capacity all DC inverter compressor in compact casing

Concentrated winding motor (New 12 HP compressor)

Coil

12

Large capacity inverter compressor using high tensile strength material, realise 12 HP compressor using 8 HP casing.

#### Compact & high efficiency concentrated winding motor

Distributed winding motor (Current 8 HP compressor)





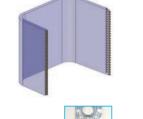


Small size coil end using concentrated winding, reduces copper loss(winding resistance). Improves motor efficiency in low rpm range (improves intermediate efficiency).

#### Highly integrated heat exchanger

Improves performance by increasing heat exchanger area while maintaining the same installation space.

# **Conventional**





Fine Louvre Fin







Realises highly integrated heat exchanger performance by

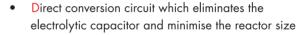
employing 3 rows and reduced fin pitch coil as well as reduction

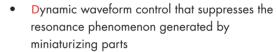
#### 4D Inverter Technology

#### Improved reliability by introducing Daikin 3-phase capacitor-less 4D Inverter technology

4Ds mean...

- Direct Inverter
- Dynamic
- Drive
- High Energy Density





- Drive technology
- High Density integration of parts on small printed circuit board

# Conventional inverter



New inverter PC board

Film capacito

#### **New Inverter PC Board**

The control functions of inverter technology have been integrated on printed circuit boards. As well as improving reliability, this has reduced the number of parts and enabled downsizing.

- · New waveform control improves tolerance of variations in power supply voltage. Even if the power supply has irregularities, rises in current are suppressed and operation continues.
- Durability of the inverter printed circuit board improved by changing the electrolylic capacitors for the compressor to film capacitors.

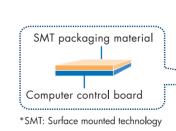
#### Excellent Performance

#### Various advanced control main PC board

#### **SMT\*** packaging technology

SMT packing technology adopted by the whole computer control panel improve the anti-clutter performance.

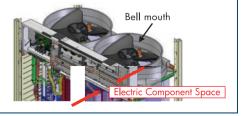
Protects your computer board from adverse effect of sandy and humid weather.





#### Improved inner design to increase smooth airflow

Downsizes electric component, relocates to dead space of bell mouth side to decrease airflow resistance.

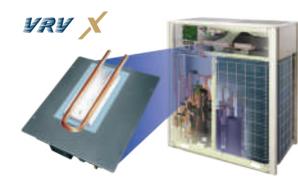


## ADVANCE TECHNOLOGY ACHIEVED

## X' TENDED RELIABILITY



#### Excellent Performance



## Refrigerant cooling technology, ensures stability of PCB temperature

14

#### Improves reliability at high ambient temperature

It is possible to cool the inverter power module stability even at high ambient temperature. This helps to keep air conditioning capacity and also ensures efficient and reliable operation.

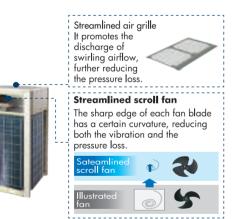
#### Comfort

#### Lower operation sound

Improves heat exchanger efficiency, helps to reduce operation sound.

Large airflow, high static pressure and quiet technology.

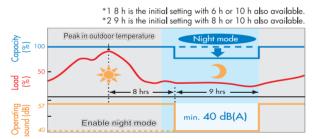
Without increasing operation sound, advanced analytic technologies are utilised to optimise fan design, increase airflow rate and external static pressure.



			So	und level(dB(A))
	6 HP	8 HP	10 HP	12 HP
VRV X	56	56	57	59

#### **Quiet night-time operation function**

Outdoor PCB automatically memorises the time when the peak outdoor temperature appears. It enables quiet operation mode after 8 h\*1 and returns to normal mode after it keeps this on for 9 h\*2.

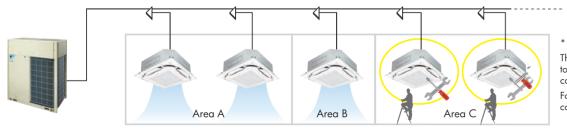


#### Notes:

- This function is available in field setting.
- The operating sound in quiet operation mode is the actual value measured by Daikin.
- The relationship of outdoor temperature (load) and time shown above is just an example.
- For 10 HP ODU.

## Ease of Maintenance

**VRV** X series provides a maintenance feature\* which allows the shut down of indoor unit without shutting down the whole **VRV** system. This feature comes in handy during maintenance period as the remaining indoor units continue to operate.



\* Field setting is required.

This feature does not apply to residential indoor unit connection.

For more information, please contact Daikin sales office.

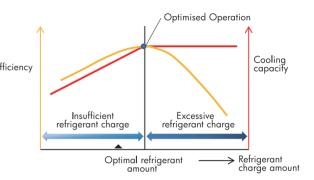
#### Automatic Refrigerant Charge Function

Contribute to optimised operation efficiency, higher quality and easier installation

#### **Optimised operation efficiency**

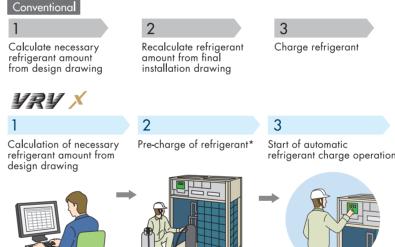
The automatic refrigerant charge function automatically determines the optimal amount of refrigerant to be charged.

This function prevents a capacity shortage or energy loss due to excessive or insufficient refrigerant.



#### Higher quality and easier installation

The automatic refrigerant charge function automates the charging of the proper refrigerant amount and the closing of shut-off valves with just one press of the switch after pre-charging. Simplified installation eliminates excessive and insufficient refrigerant charge amounts due to calculation mistakes and this has led to higher installation quality.



4
Regularly check

Regularly check refrigerant weight on weighing scale Complete by manually closing valves when proper weight is reached

Automatic completion with optimal refrigerant amount

Monitoring refrigerant charging is not required

No recalculation of charge amounts due to minor design changes at site

\*Pre-charge amount changes according to conditions, and there are cases when pre-charging is unnecessary.

## Multiple Advanced Features Ensuring More Accurate Test Operation And Stable System

#### **Efficient automatic test operation**

Automatically checks the wirings between outdoor units and indoor units to confirm whether there is a defective wiring.

#### Confirms and corrects the actual piping length.

Automatically checks whether the stop valve in each outdoor unit is in normal status to ensure the smooth operation of air conditioning system.

#### Free Phase Technology

Phase reversal occurs in areas where power supply is frequent. At the time of power recovery, phase reversal may take place due to AC source and device may stop for PCB protection. By employing Free Phase technology, continued operation is achieved.

## Automatic check



#### 17

## X' TENDED RELIABILITY

## MORE FLEXIBLE SYSTEM DESIGN



## **Simplified commissioning**

## and after-sales service Function of information display

#### by luminous digital tube VRV X system utilises the 7-segment luminous digital tubes to display system operation

information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.

#### 7-segment digital display Conventional LED display information by reading light emitting state of different directly. diodes, which is both inefficient and

16

#### **VRV** configurator

- The VRV configurator is an advanced solution that allows for easy system configuration and commissioning.
- · Less time is required on the roof configuring the outdoor unit.
- Multiple system at different sites can be managed in exactly the same way, thus offering simplified commissioning for
- Initial setting on the outdoor unit can be easily retrieved.



#### Outdoor unit sequencing technology

#### **Automatic sequencing operation**

During start-up, the Daikin VRV X unit sequencing operation will be automatically enabled to ensure balanced operation of each outdoor unit to improve longevity of equipment and stable operation.











#### Double back-up operation functions responding resiliently to various unexpected situations

#### **Double back-up operation functions**

Daikin VRV X system boasts double back-up operation functions, which can secure the use of air conditioners in this area to the greatest extent by emergently enabling double back-up operation functions even if failure occurs in a set of air conditioning equipment. In the event of a failure, emergency operation can be enabled conveniently to allow the remaining system to operate in a limited fashion.

#### **Compressor back-up Operation Function**

If malfunction occurs in a compressor..

Emergency operation can be easily set and enabled by the outdoor unit (for a single outdoor unit system RXQ16-20ARY6 : for Cooling only model RXYQ14-20ARY6: for Heat Pump model).



#### **Unit back-up operation function**

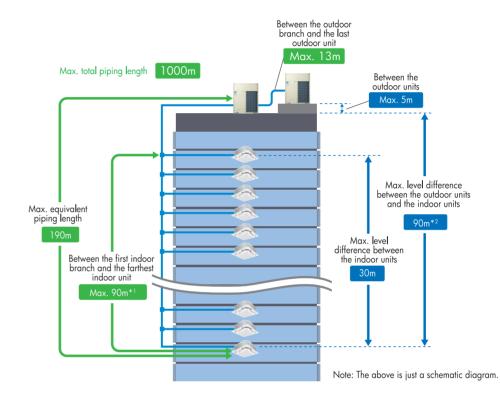
If malfunction occurs in an outdoor unit, emergency operation can be conveniently set and enabled by the remote controller for indoor unit (for systems composed of two or more outdoor units)



#### More options for installation location

#### Long piping length

The long piping length provides more design flexibility, which can match even large-sized buildings.



	Actual piping length (Equivalent)	165 m (190 m)
W	Total piping length	1000 m
Maximum allowable piping length	Between the first indoor branch and the farthest indoor unit	90 m*1
	Between the outdoor branch and the last outdoor unit (Equivalent)	10 m (13 m)
	Between the outdoor units (Multiple use)	5 m
Maximum allowable level difference	Between the indoor units	30 m
	Between the outdoor units and the indoor units	90m*2

- 1. No special requirements up to 40 m. The maximum actual piping length can be 90 m, depending on conditions. Various conditions and requirements have to be met to allow utilisation of 90 m piping length
- 2. When level differences are 50 m or more, the diameter of the main liquid piping size must be increased. If the outdoor unit is above the indoor unit, a dedicated setting on the outdoor unit is required.

## **Connection ratio**

**Connection capacity** at maximum is 200%.

50%-200%

Connection ratio =

Total capacity index of the indoor units Capacity index of the outdoor units

Conditions of VPV indoor unit connection canacity

Conditions of VKV Indoor	unii connection c	араспу		
Applicable VRV indoor units	FXDQ,	FXMQ-PB,	FXAQ, models	Other VRV indoor unit models*1
Single outdoor units		0000	/	200%
Double outdoor units		7009	0	160%
Triple outdoor units				130%

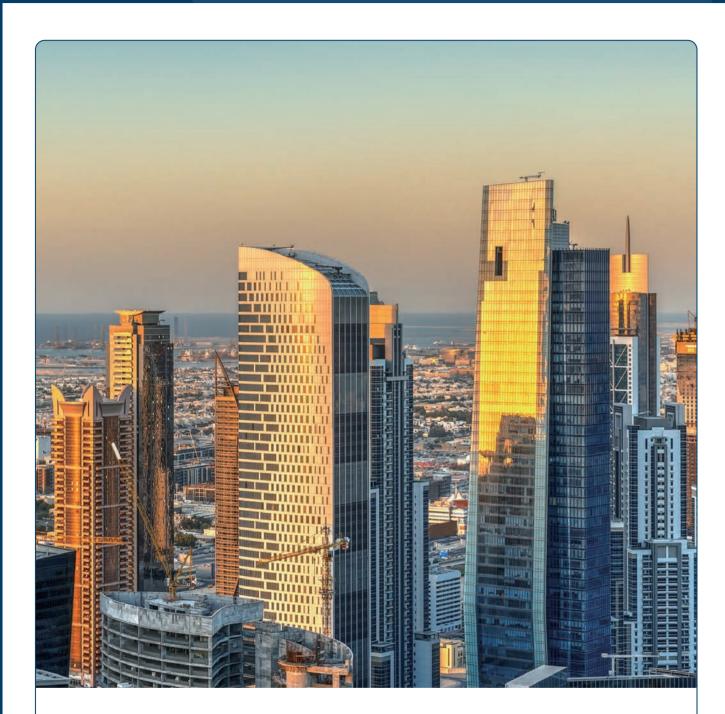
 $^{*}1$  For the FXFQ25 and FXVQ models, maximum connection ratio is 130% for the entire range of outdoor units.

Note: If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the

\*Refer to page 65 for outdoor unit combination details.

## **OUTDOOR UNIT LINE-UP**





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#### High external static pressure

VRV X outdoor unit has achieved high external static pressure up to 78.4 Pa, ensuring the efficient heat dissipation and stable operation of equipment in either hierarchical or intensive arrangement.

## 78.4 Pa

- More options in the opening/angle of louvre
   Outstanding heat dissipation effect in both hierarchical and



## **Outdoor Units**

• VRV X outdoor unit offers a higher capacity of up to 60 HP, responding to the needs of large-sized buildings.

The outdoor unit capacity is up to 60 HP in increment of 2 HP.

- The single outdoor unit has only 2 different shapes and dimensions, not only simplifying the design process, but also bringing the system flexibility to a new level.
- With the outdoor unit capacity increased in increment of 2 HP, customers' needs can be precisely met.

#### **Standard Type**

- Single Outdoor Units
- 6, 8, 10, 12 HP

RX(Y)Q6A





RX(Y)Q16A RX(Y)Q10A RX(Y)Q12A



14, 16 HP

RX(Y)Q20A



• Double Outdoor Units

22, 24 HP



RX(Y)Q22A RX(Y)Q24A



26, 28, 30 HP

RX(Y)Q26A RX(Y)Q28A RX(Y)Q30A

- Double Outdoor Units
  - 32, 34, 36, 38, 40 HP



RX(Y)Q32A RX(Y)Q34A RX(Y)Q36A RX(Y)Q38A RX(Y)Q40A

#### • Triple Outdoor Units

42, 44, 46, 48, 50, 52 HP



RX(Y)Q42A RX(Y)Q44A RX(Y)Q46A RX(Y)Q48A RX(Y)Q50A RX(Y)Q52A





RX(Y)Q54A RX(Y)Q56A RX(Y)Q58A RX(Y)Q60A

#### Line-up

HP	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
Cooling Only/ Heat Pump																												



## **Enhanced Range Of Choices**

A variety of VRV indoor units is enabled in one system, opening the door to stylish and quiet indoor units.

17 types 78 models **VRV Indoor Units** Capacity Range 10.8 HP 11 HP 1.25 HP 11.6 HP 2 HP 2.5 HP 3 HP 3.2 HP 4 HP 5 HP 6 HP 7 HP 8 HP 10 HP 16 HP 20 HP FXFSQ-ARV
VRT Smart Control Ceiling Mounted Cassette (Double Flow) 0 FXCQ-AVM Cei**l**ing Mounted Cassette Corner FXKQ-AV Slim Ceiling Mounted Duct 000 VRT Smart Control 0000 VRT Mid Static Cei**ll**ing Mounted Duct 0 | 0 FXMQ-ARV 0 0 VRT FXHQ-MA/AV FXUQ-AVEB 0 0 FXAQ-ARV VRT Smart Control 00000 Wa**ll** Mounted Floor Standing FXLQ-MAVE 00 0 VRT FXNQ-MAVE FXPQ-AVM Multi Cube/Spot 0000 Floor Standing VRT FXVQ-NY1(6) 0 FXBQ-PVE Clean Room Air Conditioner VRT FXBPQ-PVE 

At Daikin, we offer a wide range of indoor units, including both *VRV* and residential models, responding to a variety of needs of our customers that require air conditioning solutions.

## **VRV** Indoor Units

Ceiling Mounted Cassette Round Flow & Round Flow with Sensing (Optional)

FXFSQ-ARV



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



Ceiling Mounted Cassette (Compact Multi Flow) Type

FXZQ-AVM



Quiet, compact and designed for users comfort



Ceiling Mounted Cassette (Double Flow) Type

FXCQ-AVM



Add finishing touch to your ceiling, with enhancing function and design



Ceiling Mounted Cassette Corner Type





Slim design for flexible installation



Slim Ceiling Mounted
Duct Type

FXDQ-PDV



FXDQ-NDV



Slim design, quietness and static pressure switching

4-Way Flow Ceiling

Suspended Type

FXUQ-AVEB



Ceiling Mounted Duct Type

FXMQ-PA/PB

FXMQ-ARV

fxmq-nve



High/Mid external static pressure allows flexible installations



Ceiling Suspended Type

FXHQ-MA/AV





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

Slim body with quiet and wide airflow





FXVQ-NY (High static pressure type)



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

## Floor Standing Type FXLQ-MAVE Concealed Floor Standing FXNQ-MAVE Suitable for perimeter zone air conditioning

Wall Mounted Type

FXAQ-ARV



Stylish flat panel design harmonised with your interior





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Multi Cube (Spot AC) Type

FXPQ-AVM





New Solution in Large Space Comfort





## **VRV** Indoor Units

#### Ceiling Mounted Cassette Round Flow & Round Flow with Sensing (Optional)

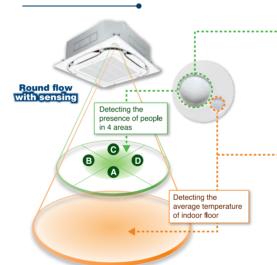
FXFSQ25A / FXFSQ32A / FXFSQ40A / FXFSQ50A / FXFSQ63A / FXFSQ80A / FXFSQ100A / FXFSQ125A / FXFSQ140A



Round flow with sensing (Optional)

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

#### **Dual sensors\*1**



#### Infrared presence sensor

The 4 sensors detect human presence.

Ceiling height	2.7m	3.5m	4.0m
Detection range (diameter) <sub>*3</sub>	approx. 8.5m	approx. 11.5m	арргох. 13.5m

<sup>\*3.</sup> 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	approx.	approx.	approx.
(diameter)*4	11m	14m	16m

#### \*4 The infrared floor sensor detects at the floor surface

## **Various sensing functions**

#### Sensing sensor mode\*5\*6

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

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

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

• Cooling setpoint: 26°C • Shift temperature: 1.0°C
• Shift time:30 min. • Limit cooling temperature:30°C

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

Applicable when sensing panel (BYCQ140EEF6/BYCQ125EEK) is installed.



## **VRV Indoor Units**

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

When there are no people in a room, the system stops automatically.\*7

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.



#### Auto airflow function\*8

New Direct Airflow (default: OFF)

When human presence is not detected



Optimal air direction by "Auto"

\*8.Airflow direction shoud be set to "Auto".

Cooling Dry

When human presence is detected

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• With Auto airflow direction mode, flaps are controlled to deliver optimal airflow when the room is unoccupied.



Optimal air direction by "Auto"

 When human is detected, air direction is set to "Swing (narrow)" to deliver cool air

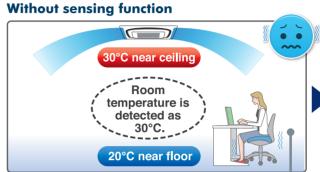
Swing (narrow)

#### Comfort and energy saving preventing over cooling\*9

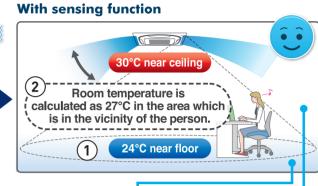
\*9. Airflow direction and airflow rate should be set to "Auto".

Floor temperature is detected and over cooling prevented.

Cooling



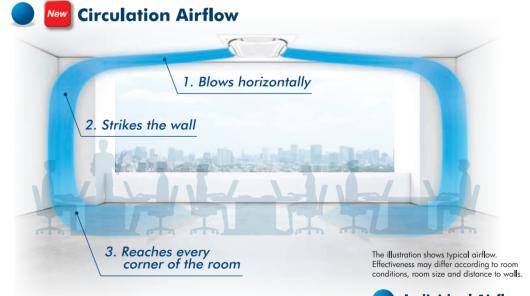
Area around feet gets too cold because air conditioner continues until the temperature near the ceiling reaches the set temperature.



The floor temperature, which is lower than near the ceiling, is detected.

Automatic control using the temperature near the person as the room temperature.

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.





Direct Airflow

Optimal air direction 5 (n

Individual Airflow
Direction Control



The illustration shows typical airflow.

 $\mathcal{L}^{\Delta}$ 

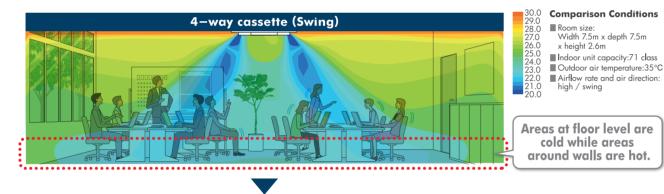
<sup>&</sup>lt;sup>7</sup> Please note that upon re-entering the room, air conditioner will not switch on automatically.





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#### Comfort to the entire room with even temperatures and no cold air pockets at floor level



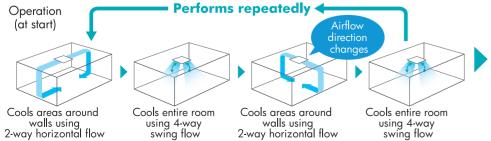


# Approx. 5% energy savings by reducing uneven temperatures

\*3.Calculated under the following comparison conditions: When the average temperature at a height of 0.6m above the floor reaches set temperature. (26°C)

Full comfort is provided with no cold feet.

#### Configurations of Circulation Airflow



When the target temperature is reached, normal operation (all-round flow) begins

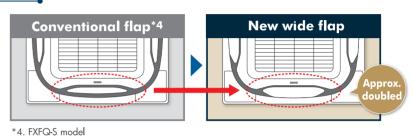
Note: Results may vary depending on equipment conditions, room size and distance from indoor unit to walls

#### Three technologies that achieved circulation airflow

Flow-out is straight, horizontally and strong, so the air travels far and even reaches the wall from which it falls to the floor. This approach and technology makes circulation airflow possible.

#### Use of new wide flaps (Straight)

Compared to conventional models, the new wide flap increases straightness of the airflow, so coverage is approximately doubled.



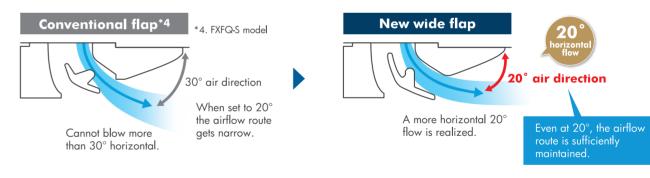
## New wide flap construction inhibits ceiling dirt and grime

By tapering both flap ends, the airflow that causes dirty ceilings is directed downward.



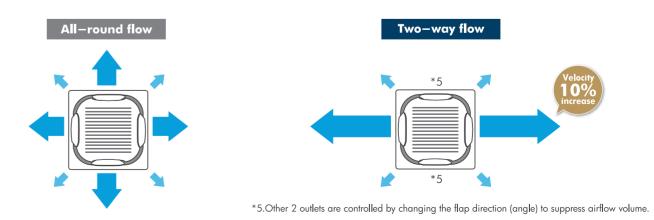
#### Optimising airflow angle (Horizontally)

Even with the flap angle raised, a sufficient airflow route is maintained to realize a more horizontal airflow angle.



#### Increased velocity in 2-way flow (Strongly)

Velocity increased by making 2-way flow. Powerful airflow was realized.





\*1. Applicable when wired remote controller BRC1E63 is used.

#### Comfortable air conditioning for all room layouts and conditions

Easy setting is possible with a wired remote controller.

Airflow direction can be individually adjusted for each air discharge outlet to deliver optimal air distribution.

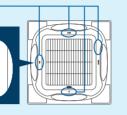
Position 0 (Fixed airflow to

highest position)

BRC1E63



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## No individual setting (Auto—airflow)

Position 4 (Fixed airflow to the lowest position)

#### Individual airflow settings

- No individual setting (Auto airflow)
- Position 0 (Highest point)
- Position 1
- Position 2
- Position 3
- Position 4 (Lowest point)

Individual settings are possible as stated above.

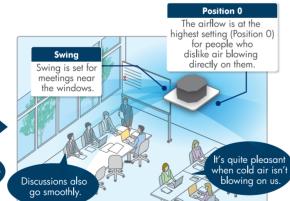
#### When individual airflow is selected, airflow direction can be adjusted to room layout.



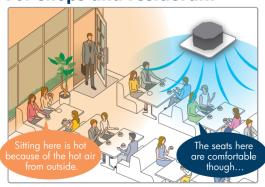
Swing

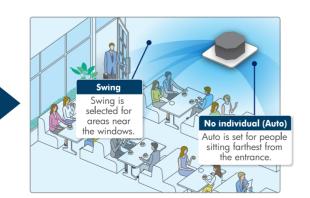
(Up/down)





#### For shops and restaurant





#### New Wide variety of decoration panels (Option)

• Designer choice has been given a boost with the increase in number of new types of decoration panels.











- Standard panel with sensing

Designer panel\*2

Standard panel\*2

## New Designer panel (Option)



#### Decoration Panel Line-up (Option)



Standard panel BYCQ125EAF9 (Fresh White)



BYCQ140EEF6 (Fresh White)





Sensing panel

BYCQ125EEK (Black)

Standard panel<sup>11</sup>

BYCQ125EAK (Black)



\*1. Sensing function is applicable when sensing panel is installed Designer panel BYCQ125EAPF (Fresh White)

#### Auto grille panel (Option)\*1

- Clogged filters strain performance of the indoor unit and may result in breakdowns. Impeded airflow through the filter also lowers operational efficiency, which increases electricity bills. With the auto grille, anyone can easily clean the filter, which translates to lower maintenance cost and longer life of the
- With the auto grille panel, motorised raising and lowering allows suction panel and air filter cleaning to be carried out without the need for a step ladder.

A dedicated wireless remote controller is supplied with the auto grille panel.

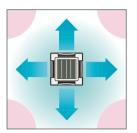
- Where the air is dusty and likely to soil the air conditione
- Where simple and quick filter and grille cleaning is a worthwhile benefi



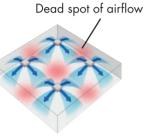
Auto grille panel<sup>1</sup> BYCQ125EASF (Fresh White)

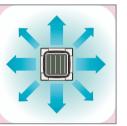
#### **Comfortable airflow**

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

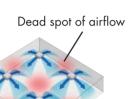


There are areas of uneven temperature.





There are much fewer areas of uneven temperature.



**Easy maintenance** 

**Easy installation** 

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Internal hygiene can be easily checked without removing the whole panel. Simply opening the suction panel allows the internal drain pan to be checked.

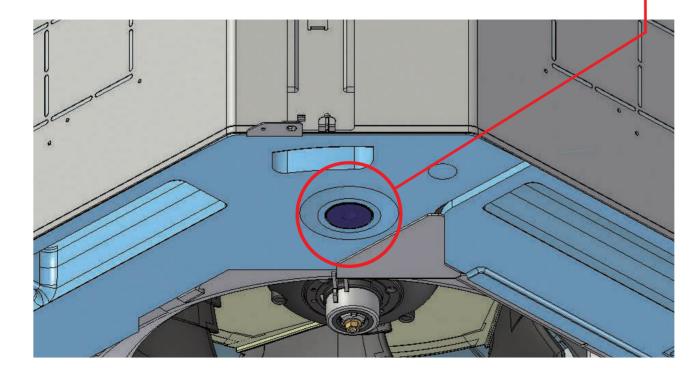
• Drain pump is equipped as a standard accessory

850mm



• 24mm diameter drain outlet

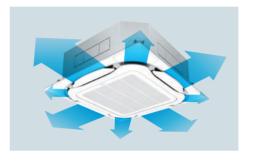
The drain outlet allows insertion of a finger or dental mirror for inspection of the internal cleanliness of the drain pan. Removal of the suction panel enables access.



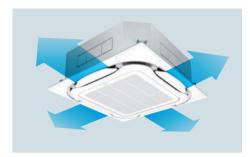
#### **Example of airflow patterns**

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 room layout.

All-round flow



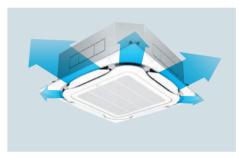
4-way flow



3-way flow



L-shaped 2-way flow



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.

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 room layout.

- 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 lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)
- 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.





• Control of the airflow rate can be selected from 5-step control and Auto.



## **VRV Indoor Units**

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

FXZQ20AVM / FXZQ25AVM / FXZQ32AVM / FXZQ40AVM / FXZQ50AVM



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# Quiet, Compact, Designed for user comfort

#### **Compact & Elegant Design**

Fully-flat integration in standard architectural ceiling tiles, leaving only 8mm

Remarkable blend of iconic design and engineering excellence with an elegant finish in white

The newly designed panel integrates fully within one ceiling tile enabling lights, speakers and sprinklers to be installed in the adjoining ceiling tiles.



## **Efficiency & Comfort**

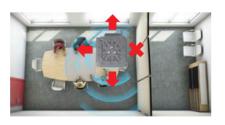
Two optional intelligent sensors improve energy efficiency and comfort.

An optional presence and floor sensor kit can be fitted to the cassette for draught prevention, energy-saving operation and to provide optimal control of airflow.

Individual airflow direction control: flexibility to suit every room layout without changing the location of the unit.







## Auto swing (up/down)

Possibility to select automatic vertical moving of the air discharge flaps for efficient air and temperature distribution throughout the room.

## **Ceiling soiling prevention**

Prevents air from blowing against the ceiling to prevent ceiling stains.

Reduced energy consumption, thanks to the specially developed small tube heat exchanger, DC fan motor, and drain pump Optional fresh air intake kit.

## **VRV** Indoor Units

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

FXCQ25AVM / FXCQ32AVM / FXCQ40AVM / FXCQ50AVM / FXCQ63AVM / FXCQ80AVM / FXCQ125AVM



# Add finishing touch to your ceiling, with enhancing function and design.

Stylish unit blends easily with any interior. Integrated ceiling surface with sophisticated panel design with the adoption of flat flap. Add finishing touch to your ceiling, with enhancing function and design.

 Individual airflow direction control (Unavailable during automatic airflow mode, airflow angle: configurable from 0 to 4 swing positions.)

#### Individual flap control



The flat flaps close entirely when the unit is not operating and there are no air intake grilles visible.

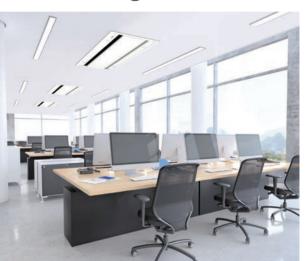
 Reduced energy consumption thanks to specially developed small tube heat exchanger, DC fan motor and drain pump.

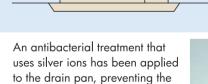
## Enhanced functions from various aspects such as

- Check contamination in drain pan by simply remove suction grille and panel.
- The flap parts are easy to clean because it is hard to condensate and get dirty.
- Equipped with long life filter which requires only 1-year maintenance interval.
- Adjuster pockets mount at four corners of the unit enable to adjust the main unit without removing the panel
- Drain pump is equipped as standard accessory with 850mm lift.



djuster Pocket





and odours.

(The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)

growth of slime, mould and bacteria that cause blockages





Drain socket part

• Easy visual inspection of drainage through the transparent body drain socket.



## **VRV** Indoor Units

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

FXKQ32AV / FXKQ40AV FXKQ50AV / FXKQ63AV



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This new Indoor unit has been awarded with Good Design Award



- Very Compact & Elegant Design
- Sleek panel with dual tone styling that give rational choice of elegancy
- Flexibility to install on several height false ceiling minimum up to 3.9 inches (100mm) with the help of multiple spacers (Optional).



White Color Pan



lver Color Pane



## **VRV** Indoor Units

## **Installation with Panel Spacers**

It has the flexibility to install on several height false ceiling i.e its ceiling height can be minimize with multiple optional by spacers (25mm each) from 25mm to 75mm

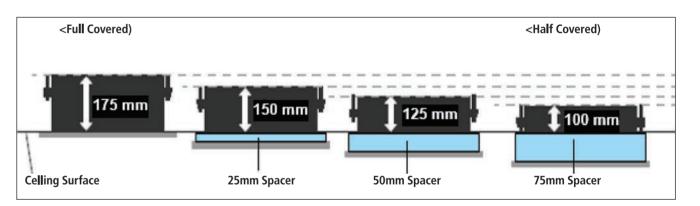
Note- Spacer colour- Dark gray

Standard Ceiling Height
175mm (6.88 Inches)

Reduced by 25mm
150mm (5.9 Inches)

Further
Reduced by 25mm
125mm (4.9 Inches)

Reduced by 25mm
100mm (3.9 Inches)



				Space Kit-Model Name		
tem Name	Requ	ired Height (mm)	BKF25A6	BKF25CA6	BKF50CA6	BKF75SA6
			Spacers (Nos): 2 + 2	Spacers (Nos): 2 + 2 Comers 4 Nos + Screws 4 Nos Comers 4 Nos + Screw		
		App. Model/Qty.	1	1	X	Х
	25 (mm)	Item/Images	//		NA	NA
		App. Model/Qty.	2	2	1	Х
Spacer Assembly		Item/Images	//			NA
		App. Model/Qty.	3	3	1	1
	75 (mm)	Item/Images	//			
75mm S	pacer			Detail View	6	BKF50CA6



## **VRV** Indoor Units

#### Slim Ceiling Mounted Duct Type

FXDQ20PD / FXDQ25PD / FXDQ32PD FXDQ40ND / FXDQ50ND / FXDQ63ND



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VRT Smart Control

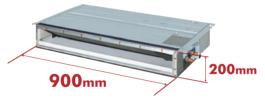
#### Slim design, quietness and static pressure switching

#### Suited to use in drop-ceilings

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



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



\* 1,100mm in width for the FXDQ63ND model.



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

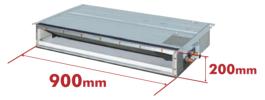
ow operation sound	level			(dB(A)
FXDQ-PD/ND	20/25/32	40	50	63

33/31/29 34/32/30 35/33/31 36/34/32

\* 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).

Sound level (HH/H/L)

\* Values are based on the following conditions: FXDQ-PD: external static pressure of 10 Pa; FXDQ-ND: external static pressure of 15 Pa.

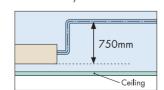


\* To be obtained locally

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

10 Pa-30 Pa/factory set: 10 Pa for FXDQ-PD models. 15 Pa-44 Pa/factory set: 15 Pa for FXDQ-ND models.

FXDQ-PD and FXDQ-ND models are available with a drain pump as a standard accessory. FXDQ-PD/NDVE: with a drain pump (750mm lift) as a standard



## **VRV Indoor Units**

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

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



## 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

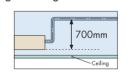
30 Pa-160 Pa for FXMQ40P

50 Pa-200 Pa for FXMQ50P-125P

50 Pa-140 Pa for FXMQ140P

All models are only 300mm in height, an improvement over the 390mm 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 700mm lift.



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

L	ow operation sound level										
	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 operations. With the conventional model, the airflow rate was controlled from the PC board. It is automatically adjusted to the range between approximately  $\pm 10\%$  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.

# FXMQ170N/FXMQ200N FXMQ250N

#### **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.



## **VRV Indoor Units**

#### Mid Static Pressure Ceiling Mounted Duct Type

FXMQ40A / FXMQ50A / FXMQ63A FXMQ80A / FXMQ100A

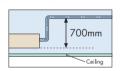


## Mid static pressure allows for flexible duct design

• AC fan motor is installed to suit applications where external static pressure is required at nominal capacity. 30 Pa-50 Pa for FXMQ40-80ARV16 30 Pa-60 Pa for FXMQ100ARV16

All models are only 300mm in height, an improvement over the 390mm 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 700mm lift.



#### High airflow rate

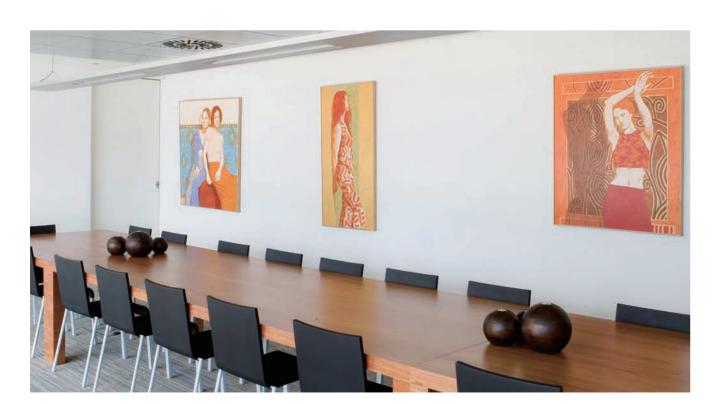
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Airflow rate is optimised to meet wider spectrum of airflow requirements.

Low operation	sound level				(dB(A))	
FXMQ-A	40	50	63	80	100	
Sound level (H/L)	39/37	41/39	42/40	43/41	44/42	

#### 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.



## **VRV** Indoor Units

#### **Ceiling Suspended Type**

#### FXHQ32 / 63 / 100MA

### Slim body with quiet and wide airflow



#### FXHQ125 / 140A

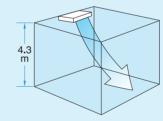


#### New 125 / 140 models provide greater capacity for large spaces

- The technology of the DC fan motor, wide sirocco fan, and large heat exchanger combine for greater airflow and quiet operation.
- Sophisticated design
- •Flap neatly closes when not in use.



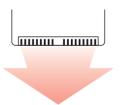
• Suitable for high ceilings

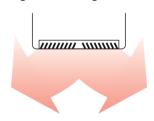


- Switchable fan speed: 3 steps
- •Control of airflow rate has been improved from 2-step to 3-step.
- Drain pump kit (option) includes a silver ion antibacterial agent that assists in preventing the growth of slime, bacteria, and mould that cause smells and clogging.



- Auto swing (up and down) and louvers (left and right by hand) bring comfort to the room.
- Louver manually adjusts for straight or wide angle airflow.





#### **Quiet operation**

Uses quiet stream fan and other quiet technologies. (FXHQ32-100MA) Sound absorption

Turbulent flow is produced

Straightening vane

dB(A)

Indoor unit	Sound level						
muoor unit	Н	M	L				
FXHQ32MA	36	_	31				
FXHQ63MA	39	_	34				
FXHQ100MA	45		37				
FXHQ125A	46	41	37				
FXHQ140A	48	42	37				



## **VRV** Indoor Units

#### **Wall Mounted Type**

FXAQ20A / FXAQ25A FXAQ32A / FXAQ40A FXAQ50A / FXAQ63A



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## 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.
- Vertical auto-swing realises efficiency of air distribution. The louvre closes automatically when the unit stops.

## **VRV** Indoor Units

#### Floor Standing Type

FXLQ32MA / 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.

01.05.2022

- The adoption of a fibre-less discharge grille, featuring an original design to prevent condensation, also helps prevent staining and makes
- A long-life filter is equipped as standard accessory. \*8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>





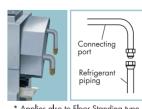
#### **Concealed Floor Standing Type**

FXNQ32MA / FXNQ50MA FXNQ63MA



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

- The unit is concealed in the skirting-wall of the perimeter, that creates a classy interior design.
- The connecting port faces downwards, greatly facilitating on-site piping work.
- A long-life filter is equipped as a standard accessory.
  - \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m3



(FXLQ-MA).





## **VRV** Indoor Units

#### Floor Standing Duct Type

FXVQ125N / FXVQ200N FXVQ250N / FXVQ400N FXVQ500NY16



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

- Large airflow type that fits for spacious areas such as factories and large stores.
- Various installations can be supported from full-scale duct connection airflow to direct airflow that allows for easy installation.
- Full-scale duct connection airflow allows for air conditioning evenly in spacious areas.

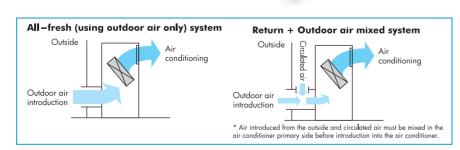


- Adding the plenum chamber (option) allows for simple operation with direct airflow.
  - \* Note that the operation sound increases by approximately 5 dB(A).

#### **Direct airflow type**

- The high static pressure type driven by the belt drive system allows the usage of air discharge outlets in various shapes as well as long ducts. Highly flexible installation is possible.
- High maintainability design that allows major services and maintenance services to be performed at the front.
- A long-life filter is equipped as a standard accessory.
   \*8 hr/day, 26 day/month. For dust concentration of 0.15 ma/m3
- A wide range of optional accessories is available such as high-efficiency filters.
- Outdoor air intake mode is useable as an outdoor-air processing airconditioner.

\*When using the unit as an outdoor-air processing unit, there are some restrictions.



## **VRV** Indoor Units

#### 4-Way Flow Ceiling Suspended Type

#### FXUQ71A / FXUQ100A



# This slim and stylish indoor unit achieves optimum air distribution and can be installed without a ceiling cavity.

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

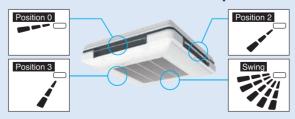


Built-in electronic expansion valve eliminates the need for a BEV unit, which improves flexibility of installation.



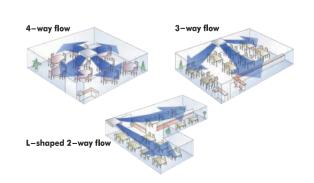
 With adoption of the individual flap control, airflow direction adjustment can be individually set for each air outlet. Five directions of airflow and auto-swing can be selected with wired remote controller BRC1E62, which realizes the optimum air distribution.

#### Individual airflow direction example case





- 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 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 500mm to 600mm.
- Depending on the installation site requirements or room conditions, 2-way, 3-way and 4-way discharge patterns are available.



## VRV INDOOR UNIT



## **VRV** Indoor Units

#### **Clean Room Type Air Conditioner**

#### FXBQ40/FXBQ50 FXBQ63/FXBPQ63

#### Suitable for hospitals and other clean spaces

#### Easily provides the high cleanliness environment required by various industries

Daikin's clean room air conditioners are specially designed to achieve an environment cleanliness class 10,000. These air conditioners easily realize a cleanliness-class environment and help create a proper environment of hospitals, food and beverage factories, electronics factories and other spaces that require clean air.

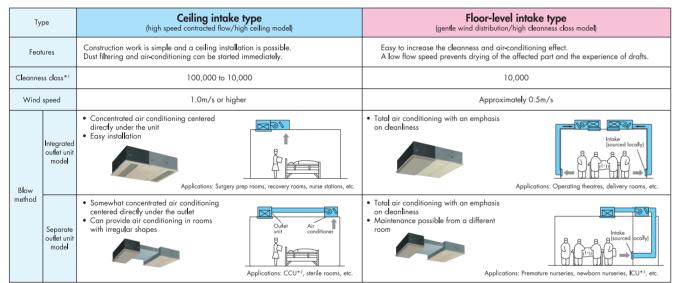
Instances of installation by type (for a hospital)



44

#### Select the air flow system and installation method to match the layout and purpose of the room

Two types of clean room air conditioners are available – an integrated unit model and a separate outlet unit model. It is also possible to configure the air flow system to ceiling intake or floor-level intake according to the panel selected. This flexible design enables the air conditioner to easily adopt to any room layout or use.



- \*1. Cleanliness class. A scale expressing the cleanliness of air established by NASA (National Aeronautics and Space Administration). Class 10,000 represents a state of less than 10,000 minute particles of diameter under 0.5 µm per cubic foot For comparison, the cleanliness of a typical office is around class 1,000,000.

  2. CCU (Cardiac Card Unit). A ward dedicated to the admission of patients with myocardial infarctions and other heart diseases.

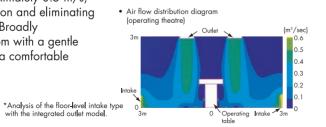
  3. ICU (Intensive Care Unit). A ward for the careful treatment and nursing of patients with serious illnesses, injuries, or recovering from operations.

#### Can be easily installed in existing buildings

A simple structure makes it easy to realize a highly clean environment with the same installation work as for a typical air conditioner. Can be easily installed in new buildings, existing structures and refurbishments.

#### Prevents uncomfortable drafts with a low flow speed of approximately 0.5m/s

The floor-level intake system has a low flow speed of approximately 0.5 m/s, improving dust filtration and eliminating the feeling of drafts. Broadly air-conditions the room with a gentle air flow and creates a comfortable environment



#### **Filtration**

#### Class 10,000 clean room condition achieved with a **HEPA** filter (sold separately)

The low pressure-loss HEPA filter (sold separately) demonstrates superior dust filtering performance and easily accomplishes an air cleanliness of class 10,000.

The HEPA filter has a structure incorporating a pleated glass fibre filter medium, making it highly efficient and suitable for clean rooms, etc.

\*It may not be possible to maintain deanliness in rooms with low air tightness.





Installation example (in a medical facility)

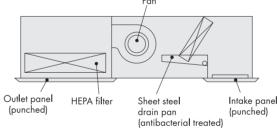
#### **Antibacterial**

#### Suppresses the propagation of bacteria in the duct with a proprietary antibacterial coating

The filter implements an antibacterial treatment with a new coating, combining a silver-based inorganic antibacterial material (an organic antibacterial material that is effective against germs) that prevents mould. This enhances the antibacterial properties of the duct. An antibacterial treatment using a silver-based organic substance reduces mould.

#### Antibacterial fibre used in the intake filter

With a long-life filter employing anti-mould antibacterial fibre near the intake, cleaning performance is further enhanced.



- Please be aware that antibacterial products suppress the propagation of bacteria but do not have a sterilising effect. Also, mould may grow in places where dust or soot accumulates.
- . A material for which the registered safety was verified by Japanese chemicals and dangerous substances regulation law (Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.) is used for the antibacterial mat
- Periodic maintenance is required (such as cleaning the air filter and washing the inside to the unit).

#### Labour-savina

#### Filter maintenance unnecessary for about five years Easy access from underneath unit provides easy maintenance

The HEPA filter has an exceptionally long life and does not require maintenance for about five years. Daikin has aimed to reduce maintenance work from a variety of perspectives, including a service access system that eliminates the necessity for service panels.

\*The maintenance period differs significantly according to the deanliness of the room and hours of air conditioner operation.

# HFPA filter Pre-filter replacement

#### Quiet

#### All models incorporate an industry-leading quiet design, operating at under 41dB

Operating noise is substantially reduced by employing a proprietary double-structure outlet filter chamber, sound absorbing insulation and a low pressure-loss HEPA filter. Sound level of all models are under 41dB (38dB during low-fan speed operation).

\*Operating noise may be greater than these values in highly reflective locations.

## VRV INDOOR UNIT



## **VRV** Indoor Units

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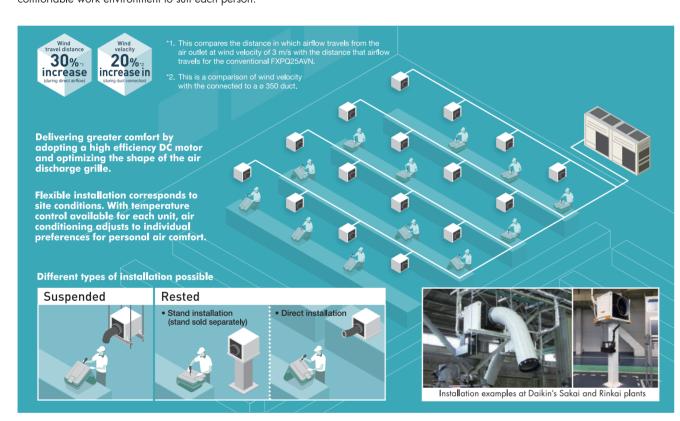
#### Multi Cube (Spot AC) type for VRV system

#### FXPQ25AVM

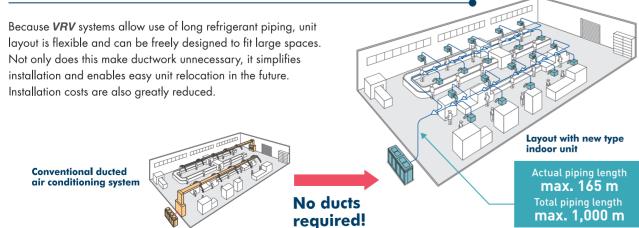


#### **Personal Air Comfort Delivered to Large Spaces**

Even in large spaces, Daikin ensures individual air comfort for each person. Our compact Spot Air Conditioner was created to serve individual air conditioning needs in large spaces. Compared to commercial buildings and offices, air conditioning factories and other large spaces used to be extremely difficult. With this Spot Air Conditioner, temperatures can now be individually adjusted for a comfortable work environment to suit each person.



## Versatile installation options enable free layout



## **VRV** Indoor Units

#### Easy relocation/expansion

Only requirement is connection to preinstalled Shut-off Valve kit for additional indoor units (Option).



#### **Adjustable comfort for** individual users

Each Spot Air Conditioner can be controlled with a dedicated wired remote controller. Individual users can set the temperature and airflow volume.

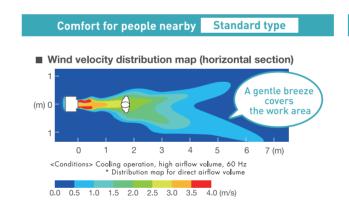
Moreover, since each unit can be turned ON and OFF. it is possible to reduce power consumption resulting from unnecessary operation and to eliminate associated costs.

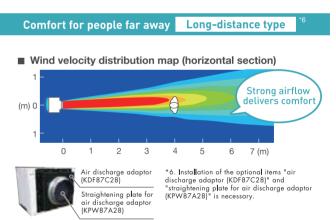


#### Delivering comfort with a large volume of air

The large propeller fan provides a gentle, comfortable breeze and greater wind volume.

Additionally, by installing an optional air discharge adaptor and straightening plate, strong airflow can be achieved that extends even further.





#### Designed for installation in any environment

#### Withstands oil mists

For the heat exchanger cooling pipe, a material with 3 to 6 times'7 the durability of standard materials has been selected.

#### Leakage failsafe

#### An emergency reservoi

is fitted in the underframe beneath the drain pan. This provides reassuring backup against drain pan overflow.

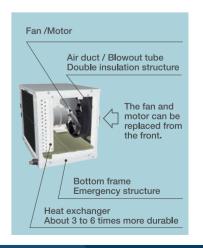
#### **Condensation suppression**

To minimize condensation, the air duct and blowout tubes are double **insulated.** This enables use in kitchens and other highly humid environment.

#### Simple maintenance

#### Easy maintenance design includes front access for

fan motor replacement.







#### Ceiling Mounted Cassette Round Flow & Round Flow with Sensing (Optional)



MODEL			FXFSQ25ARV1 FXFSQ25ARV16	FXFSQ32ARV1 FXFSQ32ARV16	FXFSQ40ARV1 FXFSQ40ARV16	FXFSQ50ARV1 FXFSQ50ARV16	FXFSQ63ARV1 FXFSQ63ARV16	FXFSQ80ARV1 FXFSQ80ARV16	FXFSQ100ARV1 FXFSQ100ARV16	FXFSQ125ARV1 FXFSQ125ARV16	FXFSQ140ARV1 FXFSQ140ARV16	
Power supply 1-phase, 220-240V, 50Hz												
Cooling capacity		Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800	54,600	
Cooling capo	acity	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0	
Hardan		Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	42,700	54,600	54,600	
Heating capa	acity	kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	16.0	
Casing						G	alvanised steel pla	ate				
A:	(H/HM/M/ML/L)	m³/min	13/12.5/1	1.5/11/10	17/13.5/12.5/12/11	23/20.5/19/14.5/11	23.5/21/20/16/13.5	24.5/22/20.5/20/15	33.5/30.5/27/23.5/21	34.5/31.5/28.5/25.5/23	35.5/32.5/29.5/26.5/23	
Airriow rate	(II/ IIM/ M/ ML/ L)	cfm	459/441/40	06/388/353	600/477/441/424/388	812/724/671/512/388	830/742/706/565/477	865/777/724/706/530	1,183/1,077/954/830/742	1218/1112/1006/901/812	1,254/1,148/1,042/936/812	
Sound level (	(H/HM/M/ML/L)	dB(A)	30/29.5/2	8.5/28/27	35/29.5/29/28/27	38/35/34.5/29.5/27	38/36/35.5/31.5/28	39/37/36/35.5/31	44/41/38/35/33	45/42.5/39.5/37/35	46/43.5/40.5/38/35	
Dimensions (	(H×W×D)	mm			256×8	40×840				298×840×840		
Machine wei	ight	kg	19				22	22 25 26			26	
D	Liquid (Flare)			Ø	6.4	.4			Ø 9.5			
Piping	Gas (Flare)	mm		Ø 1	2.7				Ø 15.9			
connections	Drain					VP25 (Exter	nal Dia, 32/Inter	nal Dia, 25)				
Standard	Model					BYCG	125EAF9 (Fresh	White)				
Panel (Non Sensing)	Dimensions (HxWxD)	mm					50x950x950					
(White)	Weight	kg					5.5					
Sensing	Model					BYCG	140EEF6 (Fresh \	White)				
Panel	Dimensions (HxWxD)	mm					50x950x950					
(White)	Weight	kg					5.5					

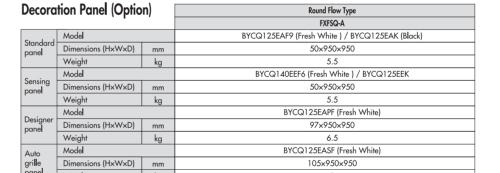
#### Note: Specifications are based on the following conditions;

- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
   Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB Equivalent piping length: 7.5 m, Level difference: 0 m.
   Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.
   (See Engineering Data Book for details.)
   Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. During actual operation, these values are normally somewhat higher as a result of ambient conditions.



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SPECIFICATIONS





Standard panel BYCQ125EAF9 (Fresh White)



Standard panel BYCQ125EAK (Black)



Designer panel BYCQ125EAPF (Fresh White)



Sensing panel BYCQ125EEK (Black)



Auto grille panel\*2 BYCQ125EASF (Fresh White)

Sensing panel BYCQ140EEF6 (Fresh White)

Note: When opting Black panel, wireless remote controller model will be BRC7M634K



## **VRV** Indoor Units

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



MODEL			FXZQ20AVM	FXZQ25AVM	FXZQ32AVM	FXZQ40AVM	FXZQ50AVM		
Power supply					1-Phase, 220-240 V, 50H	z			
Clt		Btu/h	7,500	9,600	12,300	15,400	19,100		
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6		
		Btu/h	8,500	10,900	13,600	17,100	21,500		
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3		
Casing			Galvanised steel plate						
Airflow rate (H/M/	/n	m³/min	8.7/7.5/6.5	9.0/8.0/6.5	10.0/8.5/7.0	11.5/9.5/8.0	14.5/12.5/10.0		
Airriow rate (n/m/	LJ	cfm	307/265/229	318/282/229	353/300/247	406/335/282	512/441/353		
Sound level (H/M/	L)	dB(A)	32.0/29.5/25.5	33.0/30.0/25.5	33.5/30.0/26.0	37.0/32.0/28.0	43.0/40.0/33.0		
Dimensions (HxW>	<d)< td=""><td>mm</td><td></td><td colspan="6">260×575×575 (For depth add 63mm for electrical box)</td></d)<>	mm		260×575×575 (For depth add 63mm for electrical box)					
Machine weight kg		15.5 16.5 18.5							
Piping Connections Liquid (Flare) Gas (Flare)					φ6.4				
		mm			φ12.7				
333113	Drain			VP20	(External Dia. 26/Internal	Dia. 20)			

Note: Specifications are based on the following conditions;

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

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

• Capacity of indoor unit is only for reference. Actual capacity of indoor unit is only for reference. Actual capacity of indoor unit is only for reference. Actual capacity of indoor unit is only for reference. Actual capacity of indoor unit is only for reference. Our 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



	MODEL		FXCQ25AVM	FXCQ32AVM	FXCQ40AVM	FXCQ50AVM	FXCQ63AVM	FXCQ80AVM	FXCQ125AVM	
Power supply					1-pha	se, 220-240 V/	50 Hz			
		Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	47,800	
Cooling capaci	ty	kW	2.8	3.6	4.5	5.6	7.1	9.0	14.0	
		Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	54,600	
Heating capaci	ty	kW	3.2	4.0	5.0	6.3	8.0	10.0	16.0	
Casing					Go	Ivanised steel pl	ate			
		m³/min	11.5/10.5,	/9.5/8.5/8	12/11/10.5/9.5/8.5	15/14/13/11.5/10.5	16/15/14/12.5/11.5	26/24/22.5/20.5/18.5	32/29.5/27.5/25/22.5	
Airflow rate (H	H/M/L)	cfm	406/371/335/300/282 424/388/371/335/300		530/494/459/406/371	565/530/494/441/406	918/847/794/724/653	1130/1041/971/883/794		
Sound level (H/	′L) 220 V	dB(A)	34/33/31/30/29	34/33/32/31/30	36/35/33/32/31	37/36/35/33/31	39/38/37/35/32	42/40/38/36/33	46/44/42/40/38	
Dimensions (Hx	(W×D)	mm	305x775x620			305x99	90x620	305x1,445x620		
Machine weigh	t	kg		19		22	25	33	38	
	Liquid (Flare)			Ø	6.4			ø9.5		
Piping connections	Gas (Flare)	mm		øl	2.7			ø15.9		
Connections	Drain				VP25 (Extern	nal Dia, 32/Inte	rnal Dia, 25)			
	Model		BYBCQ40CF B			ВУВСО	Q63CF	ВУВСС	Q125CF	
Panel	Panel Colour				Fresh	white (6.5Y 9.5	ite (6.5Y 9.5/0.5)			
(Option)	Dimensions(HxWxD)	mm		55x1,070x700		55x1,2	85x700	55x1,7	40x700	
	Weight	kg		10		1	1	1	3	

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



	Model			FXKQ32AV16	FXKQ40AV16	
Power supply				1 phase, 220-240 V, 50 Hz	1 phase, 220-240 V, 50 Hz	
★1 ★3 Cooling capacity			Btu/h	12,300	15,400	
		kW	3.6	4.5		
★2 ★3 Heatin	ng capacity		Btu/h	12,300	15,400	
			kW	3.6	4.5	
Casing / Colo	ur			Galvanized steel plate	Galvanized steel plate	
Dimensions: (	(H × W × D)		mm	145 × 1,210 × 523	145 × 1,210 × 523	
		Cooling	m³/min	9.7 / 9.3 / 8.9 / 8.7 / 8.5	11.1 / 10.3 / 9.5 / 9.0 / 8.6	
Fan	Airflow rate		cfm	342 / 328 / 314 / 307 / 300	392 / 364 / 335 / 318 / 304	
	(H / HM / M /   ML / L)		Heating	m³/min	11.2 / 10.8 / 10.4 / 10.1 / 9.9	12.9 / 12.0 / 11.0 / 10.6 / 10.1
		Tleating	cfm	395 / 381 / 367 / 357 / 349	455 / 424 / 388 / 374 / 357	
	Liquid pipes		mm	φ6.4 (flare connection)	φ6.4 (flare connection)	
Piping connections	Gas pipes		mm	φ12.7 (flare connection)	φ12.7 (flare connection)	
Connections	Drain pipe		mm	φ26 (ho <b>l</b> e)	φ26 (hole)	
Mass			kg	20	20	
★4 Sound pre (H / HM / M /			dB(A)	36 / 35 / 34 / 34 / 33	39 / 37 / 36 / 35 / 34	
	20-4-1			Fuse	Fuse	
	Model			BYKQ63AHW / BYKQ63AHS	BYKQ63AHW / BYKQ63AHS	
Decoration	Colour			White /	Silver	
panel (option)	Dimensions: (	$(H \times W \times D)$	mm	1,390 × 595 × 41	1,390 × 595 × 41	
(4),	Air filter			Resin net (with mould resistance)	Resin net (with mould resistance)	
	Mass		kg	6.6	6.6	

- ★1. Indoor temp.: 27°CDB, 19°CWB / outdoor temp.: 35°CDB, 24°CWB / Equivalent piping length: 7.5 m, height difference: 0 m.
  ★2. Indoor temp.: 20°CDB, 15°CWB / outdoor temp.: 7°CDB, 6°CWB / Equivalent piping length: 7.5 m, height difference: 0 m.

- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

  ★4. Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1.0 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion formulae kcal/h = kW × 860 Btu/h = kW × 3,412 cfm = m³/min × 35.3 I/s = m³/min × 1,000/60



## **VRV** Indoor Units

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



	Model			FXKQ50AV16	FXKQ63AV16	
Power supply				1 phase, 220-240 V, 50 Hz	1 phase, 220-240 V, 50 Hz	
★1 ★3 Cooling capacity			Btu/h	19,100	24,200	
X I X 3 COOM	ng capacity		kW	5.6	7.1	
★2 ★3 Heati	ng capacity		Btu/h	19,100	24,200	
			kW	5.6	7.1	
Casing / Colo	our			Galvanized steel plate	Galvanized steel plate	
Dimensions: (H × W × D) mm				145 × 1,210 × 523	145 × 1,210 × 523	
_		Cooling	m³/min	13.2 / 12.2 / 11.1 / 10.3 / 9.5	17.4 / 15.4 / 13.9 / 12.4 / 10.8	
Fan	Airflow rate (H / HM / M / ML / L)		cfm	466 / 431 / 392 / 364 / 335	614 / 544 / 491 / 438 / 381	
				Heating	m³/min	15.3 / 14.1 / 12.9 / 12.0 / 11.0
			cfm	540 / 498 / 455 / 424 / 388	695 / 642 / 586 / 533 / 480	
	Liquid pipes		mm	φ6.4 (flare connection)	φ9.5 (flare connection)	
Piping connections	Gas pipes		mm	φ12.7 (flare connection)	φ15.9 (flare connection)	
	Drain pipe		mm	φ26 (ho <b>l</b> e)	ф26 (ho <b>l</b> e)	
Mass			kg	20	20	
★4 Sound pr (H / HM / M /			dB(A)	43 / 41 / 39 / 37 / 36	49 / 47 / 45 / 43 / 41	
	Model			BYKQ63AHW / BYKQ63AHS	BYKQ63AHW / BYKQ63AHS	
Decoration	Colour			White /	Silver	
panel (option)				1,390 × 595 × 41	1,390 × 595 × 41	
7	Air filter			Resin net (with mould resistance)	Resin net (with mould resistance)	
	Mass		kg	6.6	6.6	

- ★1. Indoor temp.: 27°CDB, 19°CWB / outdoor temp.: 35°CDB, 24°CWB / Equivalent piping length: 7.5 m, height difference: 0 m.
  ★2. Indoor temp.: 20°CDB, 15°CWB / outdoor temp.: 7°CDB, 6°CWB / Equivalent piping length: 7.5 m, height difference: 0 m.
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
  ★4. Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1.0 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion formulae kcal/h = kW × 860 Btu/h = kW × 3,412 cfm = m³/min × 35.3 l/s = m³/min × 1,000/60

## **VRV** Indoor Units

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

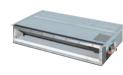


MODE	L with d	rain pump	FXDQ20PDVM FXDQ20PDV36	FXDQ25PDVM FXDQ25PDV36	FXDQ32PDVM FXDQ32PDV36				
Power supply	,		1-phase, 220-240 V/220 V, 50 Hz						
Cooling capa	ıcitv	Btu/h	7,500	9,600	12,300				
cooming capa	,	kW	2.2	2.8	3.6				
Heating capacity		Btu/h	8,500	10,900	13,600				
		kW	2.5	3.2	4.0				
Casing			Galvanised steel plate						
4 · fl	/ /	m³/min	8.0/7.2/6.4	8.0/7.2/6.4	8.0/7.2/6.4				
Airflow rate (	пп/п/ц	cfm	282/254/226 282/254/226		282/254/226				
External statio	pressure	Pa	30-10 <sup>82</sup>						
Sound level (H	HH/H/L) *1*3	dB(A)	33/31/29	33/31/29	33/31/29				
Dimensions (H	imensions (H×W×D)	mm	200×700×620	200×700×620	200×700×620				
Machine weight kg		kg	23.0 23.0		23.0				
Piping Connections  Liquid (Flare)  Gas (Flare)			ø 6.4	ø 6.4	ø 6.4				
		mm	ø 12.7	ø 12.7	ø 12.7				
COMMOCHONS	Drain		VP20 (External Dia, 26/Internal Dia, 20)						



## **VRV Indoor Units**

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



MODEL	with dro	ain pump	FXDQ40NDVM FXDQ40NDV36	FXDQ50NDVM FXDQ50NDV36	FXDQ63NDVM FXDQ63NDV36		
Power supply	Power supply		1-phase, 220-240 V/220 V, 50 Hz				
Cooling capa	city	Btu/h	15,400	19,100	24,200		
cooming capa	City	kW	4.5	5.6	7.1		
Heating capa	city	Btu/h	17,100	21,500	27,300		
ricamig capa	City	kW	5.0	6.3	8.0		
Casing			Galvanised steel plate				
A:-fl11	/ /	m³/min	10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0		
Airflow rate (	пп/п/ц	cfm	371/335/300	441/388/353	583/512/459		
External static	pressure	Pa	44-15 <sup>82</sup>				
Sound level (H	HH/H/L) *1*3	dB(A)	34/32/30	35/33/31	36/34/32		
Dimensions (H	H×W×D)	mm	200×900×620	200×900×620	200×1,100×620		
Machine weig	ght	kg	27.0	28.0	31.0		
	Liquid (Flare)		ø 6.4	ø 6.4	ø 9.5		
Piping connections	Gas (Flare)	mm	ø 12.7	ø 12.7	ø 15.9		
CONNECTIONS	Drain		٧	P20 (External Dia, 26/Internal Dia, 20	0)		

#### Note: Specifications are based on the following conditions;

- Note: Specifications are based on the following conditions;

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

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

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

  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 somewhard higher as a result of ambient conditions.

  1: Values are based on the following conditions: FXDQ-P: external static pressure of 10 Pa; FXDQ-N: 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-P models and 15 Pa for FXDQ-N 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).

## Mid Static Pressure Ceiling Mounted Duct Type



MODEL	with dro	in pump	FXMQ40ARV1 FXMQ40ARV16	FXMQ50ARV1 FXMQ50ARV16	FXMQ63ARV1 FXMQ63ARV16	FXMQ80ARV1 FXMQ80ARV16	FXMQ100ARV1 FXMQ100ARV16	
Power supply			1-phase, 220-240 V, 50 Hz					
Cooling capa	city	Btu/h	15,400	19,100	24,200	30,700	38,200	
coomig capa	c,	kW	4.5	5.6	7.1	9.0	11.2	
Heating capa	city	Btu/h	17,100	21,500	27,300	34,100	42,700	
ricaning capa	City	kW	5.0	6.3	8.0	10.0	12.5	
Casing			Galvanised steel plate					
A · fl /		m³/min	15/12	19/16	24/20	30/25	34/29	
Airflow rate (	HH/H/L)	cfm	530/425	671/565	848/706	1060/883	1200/1024	
External static	pressure	Pa	30-50				30-60	
Sound level (H	H/H/L) *1*3	dB(A)	39/37	41/39	42/40	43/41	44/42	
Dimensions (H	H×W×D)	mm	300×7	700×700	300×1,000×700			
Machine weig	jht .	kg	27	28	3	5	36	
	Liquid (Flare)		6.4 (Flare (	Connection)	9.5 (Flare Connection)			
Piping connections	Gas (Flare)	mm	12.7 (Flare	Connection)	15.9 (Flare Connection)			
Connections	Drain	1		VP25 (External Dia. 32, Internal Dia. 25				

- Note: Specifications are based on the following conditions:

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

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

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

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

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



	MODEL		FXMQ20PAVE	FXMQ25PAVE	FXMQ32PAVE	FXMQ40PBV1 FXMQ40PBV36	FXMQ50PBV1 FXMQ50PBV36		
Power supply			1-phase, 220-240 V/220 V, 50 Hz						
Cooling capa	city	Btu/h	7,500	9,600	12,300	15,400	19,100		
cooming capa	City	kW	2.2	2.8	3.6	4.5	5.6		
Heating cana	city	Btu/h	8,500	10,900	13,600	17,100	21,500		
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3		
Casing			Galvanised steel plate						
A: (1 /	/ /	m³/min	9/7.5/6.5 9.5/8/		9.5/8/7	16/13/11	18/16.5/15		
Airflow rate (	HH/H/L)	cfm	318/265/230		335/282/247	565/459/388	635/582/530		
External statio	pressure	Pa	30-100 (50) *²			30-160 (100) *2	50-200 (100) *2		
Sound level (H	HH/H/L)	dB(A)	33/3	31/29	34/32/30	39/37/35	41/39/37		
Dimensions (H	H×W×D)	mm		300X550X700		300X700X700	300X1,000X700		
Machine weig	ght	kg		25	•	27	35		
Piping connections	Liquid (Flare)								
	Gas (Flare)	mm			Ø 12.7				
	Drain	1	VP25 (External Dia, 32/Internal Dia, 25)						

	MODEL		FXMQ63PBV1 FXMQ63PBV36	FXMQ80PBV1 FXMQ80PBV36	FXMQ100PBV1 FXMQ100PBV36	FXMQ125PBV1 FXMQ125PBV36	FXMQ140PBV1 FXMQ140PBV36		
Power supply			1-phase, 220-240 V/220 V, 50 Hz						
Cooling capacity		Btu/h	24,200 30,700		38,200	47,800	54,600		
cooming capa	-117	kW	7.1	9.0	11.2	14.0	16.0		
Heating capa	city	Btu/h	27,300	34,100	42,700	54,600	61,400		
ricainig capa	cii y	kW	8.0	10.0	12.5	16.0	18.0		
Casing			Galvanised steel plate						
		m³/min	19.5/17.5/16	25/22.5/20	32/27/23	39/33/28	46/39/32		
Airflow 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 static	pressure	Pa	50-200 (100) *2			50-200 (100) *2	50-140 (100)*2		
Sound level (H	IH/H/L)	dB(A)	42/40/38	43/41/39	43/41/39	44/42/40	46/45/43		
Dimensions (H	l×W×D)	mm	300x1,0	000x700		300×1,400×700			
Machine weig	ht	kg	3	15	4	5	46		
	Liquid (Flare)				9.5				
Piping connections	Gas (Flare)	mm			15.9				
	Drain	1		VP25 (I	External Dia, 32/Internal Dia, 25)				

#### Note: Specifications are based on the following conditions

- Cooling: Indoor temp: 27°CDB, 19°CWB, Outdoor temp: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
  Heating: Indoor temp: 20°CDB, Outdoor temp: 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.
  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)

for FXMQ20-32P and 100 Pa for FXMQ40-140P



## **VRV** Indoor Units

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



	MODEL		FXMQ170NVE6	FXMQ200NVE6	FXMQ250NVE6		
Power supply	,		1-phase, 220, 240 V/220 V, 50 Hz				
Cooling cana	Cooling capacity		65,800	76,400	95,500		
cooming capa	icity	kW	19.3	22.4	28		
Heating capa	icity	Btu/h	71,600	83,300	1,07,500		
ricaling capa	icity	kW	21	25	31.5		
Casing			Galvanised steel plate				
v. U . 1	11/11	m³/min	58/50	68/58	80/73		
Airflow rate (	H/L)	cfm	2,047/1,765	2400/2,047	2,825/2,578		
External statio	pressure	Pa	100-140 *2	100-200 *2	190-270 *2		
Sound level (H	H/L) 220V	dB(A)	45/42	47/45	49/47		
Dimensions (H	H×W×D)	mm	440x1,19	0x1,090	440x1,490x1,090		
Machine weig	ght	kg	11	0	130		
	Liquid (Flare)		Ø 9.5				
Piping	Gas (Flare)	mm	Ø 1	9.1	Ø 22.2		
connections	Drain			External Dia 32	•		

#### **Ceiling Suspended Type**



	MODEL		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE	FXHQ125AVM	FXHQ140AVM	
Power supply			1-phas	se, 220-240 V/220 V,	50/60 Hz	1-phase, 220-240 V/	/220-230 V, 50/60 Hz	
Cl:	-:L.	Btu/h	12,300	24,200	38,200	48,000	52,900	
Cooling capacity		kW	3.6	7.1	11.2	14.1	15.5	
Heating capacity		Btu/h	13,600	27,300	42,700	54,600	58,000	
		kW	4.0	8.0	12.5	16.0	17.0	
		m3/min	12/-/10	17.5/-/14	25/-/19.5	34/26/20	36/27/20	
Airflow rate (I	1/M/L)	cfm	424/-/353	618/-/494	883/-/688	1,200/918/706	1,271/953/706	
Sound level (H	I/M/L)	dB(A)	36/-/31	39/-/34	45/-/37	46/41/37	48/42/37	
Dimensions (H	lxWxD)	mm	195×960×680	195×1,160×680	195×1,400×680	235×1,5	590×690	
Machine weig	ht	kg	24	28	33	41		
Piping connections	Liquid (Flare)		<b>\$</b> 6.4			φ 9.5		
	Gas (Flange)	mm	φ 12.7			φ15.9		
	Drain	] [			VP20 (External Dia. 26/I	nternal Dia. 20)		

#### Note: Specifications are based on the following conditions

- Note: Specifications are based on the tollowing conditions

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

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

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

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

  [FXHQ-MA] Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward.

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

  1: Power consumption values are based on conditions of standard external static pressure.

  2: External static pressure is changeable to change over the connectors inside electrical box, this pressure means "Standard-High static pressure".

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



	MODEL		FXUQ71AVEB	FXUQ100AVEB		
Power supply			1-phase, 220-240 V/220-230V, 50 Hz			
Cooling capa	ıcity	Btu/h	27,300	38,200		
cooming capa	icity	kW	8.0	11.2		
Heating capa	ıcit.	Btu/h	30,700	42,700		
rieding capa	icity	kW	9.0	12.5		
Casing			Fresh white			
A · N · /	11/11	m³/min	22.5/19.5/16	31/26/21		
Airflow rate (	H/L)	cfm	794/688/565	1,094/918/741		
Sound level (H	-1/M//L)	dB(A)	40/38/36	47/44/40		
Dimensions (H	HxWxD)	mm	198×9	50×950		
Machine weig	ght	kg	26	27		
	Liquid (Flare)		9	2.5		
Piping connections	Gas (Flare)	mm	1.	15.9		
	Drain	1 [	VP20 (External Dia, 26/Internal Dia, 20)			

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

#### **Wall Mounted Type**

	MODEL		FXAQ20ARVM FXAQ20ARVE6	FXAQ25ARVM FXAQ25ARVE6	FXAQ32ARVM FXAQ32ARVE6	FXAQ40ARVM FXAQ40ARVE6	FXAQ50ARVM FXAQ50ARVE6	FXAQ63ARVM FXAQ63ARVE6	
Power supply				1-phase, 220 V/220 V, 50 Hz					
Cooling capa	city	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	
cooming capa	,	kW	2.2	2.8	3.6	4.5	5.6	7.1	
Heating capa	city	Btu/h	8,500	10,900	13,600	17,100	21,500	27,300	
oag capa	,	kW	2.5	3.2	4.0	5.0	6.3	8.0	
Casing			White (N9.5)						
A . (1	1/13	m³/min	7.5/4.5	9/5	11/5.5	13/9	15/12	19/14	
Airflow rate (	-1/L)	cfm	265/159	318/177	388/194	459/318	530/424	671/494	
Sound level (H	I/L)	dB(A)	35/31	36/31	38/31	39/34	42/37	47/41	
Dimensions (H	l×W×D)	mm	298×929×258						
Machine weig	ht	kg			13	3.0			
	Liquid (Flare)			Ø 6.4					
Piping connections	Gas (Flare)	mm		Ø 12.7					
	Drain				VP13 (External Dia,	18/Internal Dia, 13	)		



## **VRV** Indoor Units

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





Heating capacity

	MODEL		FXLQ32MAVE8	FXLQ50MAVE8	FXLQ63MAVE8		
	MODEL		FXNQ32MAVE8	FXNQ50MAVE8	FXNQ63MAVE8		
Power supply			1-phase, 220-240 V/220 V, 50 Hz				
Cooling capa	city	Btu/h	12,300	19,100	24,200		
cooming capa	City	kW	3.6	5.6	7.1		
Heating capa	city	Btu/h	13,600	21,500	27,300		
rieding capacity		kW	4.0	6.3	8.0		
Casing			FXLQ: Ivory white (5Y7.5/1)/FXNQ: Galvanised steel plate				
Airflow rate (I	u /II)	m³/min	8/6	14/11	16/12		
Airtiow rate (i	7/1/	cfm	282/212	494/388	565/424		
Sound level (H	1/L) 220V	dB(A)	35/32	39/34	40/35		
Dimensions	FXLQ	mm	600×1,140×222	600×1,420×222	600×1,420×222		
(HxWxD)	FXNQ	]	610×1,070×220	610×1,350×220	610×1,350×220		
Machine weig	FXLQ	kg	30.0	36.0	36.0		
Muchine weig	FXNQ	79	23.0	27.0	27.0		
	Liquid (Flare)		Ø 6.4	Ø 6.4	ø 9.5		
Piping connections	Gas (Flare)	mm	ø 12.7	Ø 12.7	ø 15.9		
	Drain			21O.D.			

#### Note: Specifications are based on the following conditions:

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB Equivalent piping length: 7.5 m, Level difference: 0 m.
 Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.
 Sound level: [FXAQ-P] Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward. [FXIQ-MA, FXNQ-MA] Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m.
 During actual operation, these values are normally somewhat higher as a result of ambient conditions.

#### Floor Standing Duct Type



	MODEL		FXVQ125NY1	FXVQ200NY1	FXVQ250NY1	FXVQ400NY1	FXVQ500NY16		
Power supply			3-phase 4-wire system, 380 -415 V, 50 Hz						
C I		Btu/h	47,800	76,400	95,500	1,54,000	1,91,000		
Cooling capa	city	kW	14.0	22.4	28.0	45.0	56.0		
U	ata .	Btu/h	54,600	85,300	1,07,500	1,71,000	2,15,000		
Heating capa	city	kW	16.0	25.0	31.5	50.0	63.0		
Casing colou	r				Ivory white (5Y7.5/1)				
Dimensions (H	HxWxD)	mm	1670×750×510	1670×950×510	1670×1170×510	1900×1170×720	1900×1470×720		
Machine wei	ght	kg	118	144	169	236	306		
Airflow rate		m³/min	43	69	86	134	172		
Airtiow rate		cfm	1,518	2,436	3,036	4,730	6,072		
External statio	Pressure*2	Pa	152	217	281	420	390		
Drive system		'			Belt drive system				
Air Fi <b>l</b> ter	Туре			Long	life filter (anti-mould resi	n net)			
Sound level *	1	dB(A)	52	56	60	65	66		
	Liquid (Flare)			9.5 (Brazing)		12.7 (Brazing)	15.9 (Brazing)		
Piping connections	Gas (Flare)	mm	15.9 (Brazing)	19.1 (Brazing)	22.2 (Brazing)	28.6 (B	Brazing)		
	Drain			R	Rp1 (PS 1B internal thread)				

#### Note: Specifications are based on the following conditions:

- Cooling: Indoor temp. of 27°CDB, 19°CWB, and outdoor temp. of 35°CDB.
- counting: mooor iremp, or Z/~U/B, JY~WB, and outdoor temp. or 35°CUB.
   Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CDB Equivalent piping length: 7.5 m, Level difference: 0 m.
   Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.
   I: 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.

#### **Clean Room Type Air Conditioner**



	Туре			Integrated outlet unit model		Separate outlet unit mode		
11005	Indoor unit		FXBQ40PVE	FXBQ50PVE	FXBQ63PVE	FXBPQ63PVE		
MODEL Outlet unit				Integrated with the indoor uni	it	BAF82A63		
Power supp	ly			1-phase, 220-240	V/220 V, 50/60 Hz	1		
Caaling	anih.	Btu/h	15,400	19,100	24,200	24,200		
Cooling cap	oacity	kW	4.5	5.6	7.1	7.1		
Power consu	umption	kW	0.31	0.31	0.45	0.45		
Intake filter	efficiency *1			70% by grav	imetric method	•		
Outlet HEPA filter efficiency *2			99.97% by DOP method *5					
Indoor unit weight kg		kg	140 *3		185 *3	120 *6		
Casing			Galvanised steel plate					
4 · U	# 1 /IV	cfm	19.5/17.5		26/	′22.5		
Airflow rate	€ (H/L)	m³/min	688/618		918/794			
Dimensions	(H×W×D)	mm	492×1,78	88×1,000	492×1,788×1,300	492×1,078×1,300		
Outlet unit v	veight	kg			_	65 *3		
	Liquid (Flare)		Ç	ø6.4	ø9.5	•		
Piping	Gas (Flare)	mm	Ø	12.7	ø15.9			
connections $\vdash$	Drain	1		PI	ПВ			
Filter(Option)	HEPA filter		BAFH82A50		BAFH	82A63		
Panel	Ceiling intake type	Model	BYB82	2A50C	BYB82A63C	BYB82A63CP		
(Option)	0 71		A50W	BYB82A63W	BYB82A63WP			

- 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.)
- \*1: An intake air filter is only attached to the ceiling intake type.

  \*2: HEPA filter sold separately. The dust collection efficiency of HEPA filter is 99.97%. However, air may slightly leak around the filter when installing.

  \*3: Weight including HEPA filter and panel.
- \*4: Anechoic chamber conversion value under JIS B 8616 test conditions. Value usually increases slightly in practice due to surrounding conditions.

  \*5: The clean room air conditioner does not support DOP testing (leak test) based on GMP standards (Standards for Manufacturing Control and Quality Control for Medical
- Devices) due to slight leakage at time of product installation.
- \*6: Weight including panel.

#### Multi Cube (Spot AC) type)



	Model		FXPQ25AVM		
Power Supply			1 Phase, 50Hz, 220-240 V		
	Cooling		2800		
Capacity (watt)	Heating		3200		
Dimension	(HXWXD) mm		455X555X470		
Casing			Galvanised Steel plate		
	Туре		Propeller Fan		
	Airflow Rate (H/L)	СМН	13.5 / 11.0		
Fan		CFM	477 / 393		
	External Static Pressure	PA	5		
	Drive		Direct Drive		
Sound Level		dB(A)	51		
Machine Weight		Kg	30		
	Liquid Pipe	mm	6.4mm dia (Flare Connection)		
Piping Connections	Gas Pipe	mm	12.7mm dia (Flare Connection)		
	Drain Pipe	mm	(External dia 27.2mm, internal dia 21.6mm)		
Refrigerant Control		·	Electronic Expansion Valve		
Air Filter			Long Life Filter (Resin Net)		

<sup>\*</sup>In the case of an installation in an operating theatre etc. where an air conditioner malfunction may have serious consequences, please build in redundancy with two or more



## **Outdoor Units**

## VRV X (Cooling Only)

							N. A. C.			
	MODEL		RXQ6ARY1 RXQ6ARY6	RXQ8ARY1 RXQ8ARY6	RXQ10ARY1 RXQ10ARY6	RXQ12ARY1 RXQ12ARY6	RXQ14ARY1 RXQ14ARY6	RXQ16ARY1 RXQ16ARY6		
Combination units			_	_	_	_	_	_		
Power supply				3-phase, 380–415 V, 50 Hz						
Btu/		Btu/h	54,600	76,400	95,500	1,14,000	1,36,000	1,54,000		
Cooling capaci	Cooling capacity		16.0	22.4	28.0	33.5	40.0	45.0		
Capacity contro	ol .	%	25~100	20~100	13~100	12~100	11~100	10~100		
Casing colour			lvory white (5Y7.5/1)							
	Туре		Hermetically Sealed Scroll Type							
Compressor No. of compressor			1	1	1	1	1	2		
Airflow rate	Airflow rate m³/min		119	119 178 191			2:	57		
Dimensions (Hx	Dimensions (HxWxD) mm		1,657X930X765			1,657X1,240X765				
Machine weigh	ıt	kg	165		175		220	260		
Sound level		dB(A)	56	56	57	59	60	60		
Operation range	Cooling	°CDB	10 ~ 50							
Dafainanant	Туре	Туре		R410A						
Refrigerant	Charge	kg	5.9		6.7	6.8	7.4	8.2		
Piping	Liquid	mm		ø 9.5			Ø 12.7			
connections	Gas	mm	Ø	9.1	ø 22.2		Ø 28.6			

- 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
  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.

## **Outdoor Units**

## VRV X (Cooling Only)

	MODEL		RXQ18ARY1 RXQ18ARY6	RXQ20ARY1 RXQ20ARY6	RXQ22ARY1 RXQ22ARY6	RXQ24ARY1 RXQ24ARY6			
c 1: ::			_	_	RXQ10ARY1 RXQ10ARY6	RXQ12ARY1 RXQ12ARY6			
Combination units			_	_	RXQ12ARY1 RXQ12ARY6	RXQ12ARY1 RXQ12ARY6			
					_	_			
Power supply			3-phase, 380–415 V, 50 Hz						
Cooling capacity  Btu/h  kW		Btu/h	1,71,000	1,91,000	2,10,000	2,29,000			
		kW	50.0	56.0	61.5	67.0			
Capacity control %		%	10~100	7~100 6~100					
Casing colour			Ivory white (5Y7.5/1)						
	Туре		Hermetically Sealed Scroll Type						
Compressor No. of compressor			2	2	1+1	1+1			
Airflow rate m³/min		m³/min	257	297	178+191	191+191			
Dimensions (HxWxD) mm		mm	1,657X1,240X765		(1,657X930X765)+(1,657X930X765)				
Machine weig	ht	kg	260	285	175+	175			
		dB(A)	61 65		61	62			
Operation range Cooling °CDB		°CDB	10~50						
D. ( .	Туре		R410A						
Refrigerant	Charge	kg	8.4	11.8	6.7+6.8	6.8+6.8			
Piping .	Liquid	mm		Ø1	15.9				
connections	Gas	mm		ø 28.6		ø 34.9			

- 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.



## **Outdoor Units**

## VRV X (Cooling Only)

	MODEL		RXQ26ARY1 RXQ26ARY6	RXQ28ARY1 RXQ28ARY6	RXQ30ARY1 RXQ30ARY6	RXQ32ARY1 RXQ32ARY6	RXQ34ARY1 RXQ34ARY6	RXQ36ARY1 RXQ36ARY6			
Combination units			RXQ12ARY1 RXQ12ARY6	RXQ12ARY1 RXQ12ARY6	RXQ12ARY1 RXQ12ARY6	RXQ14ARY1 RXQ14ARY6	RXQ16ARY1 RXQ16ARY6	RXQ18ARY1 RXQ18ARY6			
			RXQ14ARY1 RXQ14ARY6	RXQ16ARY1 RXQ16ARY6	RXQ18ARY1 RXQ18ARY6	RXQ18ARY1 RXQ18ARY6	RXQ18ARY1 RXQ18ARY6	RXQ18ARY1 RXQ18ARY6			
		_	_	_	_	<del>-</del>	_				
Power supply				3-phase, 380–415 V, 50 Hz							
Cooling capacity		Btu/h	2,47,000	2,68,000	2,85,000	3,05,000	3,24,000	3,41,000			
		kW	73.5	78.5	83.5	90	95.0	100			
Capacity contro	Capacity control %		6~100	5~100	5~100	5~100	4~100	5~100			
Casing colour			lvory white (5Y7.5/1)								
	Туре		Hermetically Sealed Scroll Type								
Compressor No. of compressor			1+1	1+2	1+2	1+2	2+2	2+2			
Airflow rate	<u>'</u>	m³/min	191+257	191+257	191+257	257+257	257+257	257+257			
Dimensions (Hx	Dimensions (HxWxD) mm		(1,657X930X765)+(1,657X1,240X765)			(1,657X1,240X765)+(1,657X1,240X765)					
Machine weigh	nt	kg	175+220	175+260		220+260	260+260				
Sound level		dB(A)		63	64						
Operation range	Cooling	°CDB	10 ~ 50								
Refrigerant	Туре		R410A								
Kenigerani	Charge	kg	6.8+7.4	6.8+8.2	6.8+8.4	7.4+8.4	8.2+8.4	8.4+8.4			
Piping	Liquid	mm	ø 19.1	ø 19.1	ø 19.1	ø 19.1	ø 19.1	ø 19.1			
connections	Gas	mm	ø 34.9	ø 34.9	ø 34.9	ø 34.9	ø 34.9	ø 41.3			

- 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.

## **Outdoor Units**

## VRV X (Cooling Only)

RXQ38ARY1 RXQ38ARY6	RXQ40ARY1 RXQ40ARY6	RXQ42ARY1 RXQ42ARY6	RXQ44ARY1 RXQ44ARY6	RXQ46ARY1 RXQ46ARY6	RXQ48ARY1 RXQ48ARY6 RXQ14ARY1 RXQ14ARY6	RXQ50ARY1 RXQ50ARY6	
RXQ18ARY1 RXQ18ARY6	RXQ20ARY1 RXQ20ARY6	RXQ12ARY1 RXQ12ARY6		RXQ14ARY1 RXQ14ARY6		RXQ14ARY1 RXQ14ARY6	
RXQ20ARY1 RXQ20ARY6	RXQ20ARY1 RXQ20ARY6	RXQ12ARY1 RXQ12ARY6	RXQ12ARY1 RXQ12ARY6	RXQ14ARY1 RXQ14ARY6	RXQ16ARY1 RXQ16ARY6	RXQ18ARY1 RXQ18ARY6	
_	_	RXQ18ARY1 RXQ18ARY6	RXQ20ARY1 RXQ20ARY6	RXQ18ARY1 RXQ18ARY6	RXQ18ARY1 RXQ18ARY6	RXQ18ARY1 RXQ18ARY6	
	I	3-	phase, 380–415 V, 50	Hz	I.		
3,62,000	3,82,000	3,99,000	4,20,000	4,40,000	4,57,000	4,78,000	
106	112	117	123	129	134	140	
4~100 3~100 4~100						100	
			Ivory white (5Y7.5/1)				
		Her	metically Sealed Scroll	Туре			
2	+2		1+	1+2		1+2+2	
257+297	257+297 297+297 191+191+257 191+191+297 257+257+257					ı	
(1,657X1,2 (1,657X1,2		(1,657X930 (1,657X930 (1,657X1,2	0X765)+		(1,657X1,240X765)- (1,657X1,240X765)- (1,657X1,240X765)	+	
260+285	285+285	175+175+260	175+175+285	220+220+260	220+260+260	220+260+260	
66	68	65	67		65		
			10 ~ 50				
			R410A				
8.4+11.8	11.8+11.8	6.8+6.8+8.4	6.8+6.8+11.8	7.4+7.4+11.8	7.4+8.2+8.4	7.4+8.4+8.4	
			Ø 19.1				

- 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.



## **Outdoor Units**

## VRV X (Cooling Only)

MODEL         RXQ52ARY1 RXQ52ARY6         RXQ54ARY1 RXQ56ARY1 RXQ56ARY6         RXQ56ARY1 RXQ56ARY6           Combination units         RXQ16ARY1 RXQ16ARY6         RXQ18ARY1 RXQ18ARY1 RXQ18ARY1         RXQ18ARY1 RXQ18ARY1 RXQ18ARY6         RXQ18ARY1 RXQ18ARY1 RXQ18ARY1         RXQ18ARY1 RXQ18ARY1 RXQ18ARY6         RXQ18ARY1 RXQ18ARY1 RXQ18ARY6         RXQ18ARY1 RXQ18ARY6         RXQ20ARY1 RXQ20ARY6           Power supply         3-phase, 380-415 V, 50 Hz	RXQ58ARY1 RXQ58ARY6 RXQ18ARY1 RXQ18ARY6 RXQ20ARY1 RXQ20ARY1 RXQ20ARY1 RXQ20ARY1 RXQ20ARY6	RXQ60ARY1 RXQ60ARY6 RXQ20ARY1 RXQ20ARY6 RXQ20ARY1 RXQ20ARY1 RXQ20ARY1 RXQ20ARY6					
RXQ16ARY1   RXQ18ARY1   RXQ18ARY1   RXQ18ARY1   RXQ18ARY6   RXQ18ARY6   RXQ18ARY6   RXQ18ARY6   RXQ18ARY6   RXQ18ARY1   RXQ18ARY1   RXQ18ARY6   RXQ18ARY6   RXQ18ARY6   RXQ18ARY6   RXQ18ARY1   RXQ20ARY1   RXQ18ARY6   RXQ20ARY6   RXQ20ARY6   RXQ20ARY6	RXQ18ARY1 RXQ18ARY6 RXQ20ARY1 RXQ20ARY6 RXQ20ARY1 RXQ20ARY1	RXQ20ARY1 RXQ20ARY6 RXQ20ARY1 RXQ20ARY6 RXQ20ARY1					
RXQ18ARY6 RXQ18ARY6 RXQ18ARY6  RXQ18ARY1 RXQ18ARY1 RXQ20ARY1 RXQ18ARY6 RXQ18ARY6 RXQ20ARY6	RXQ20ARY1 RXQ20ARY1 RXQ20ARY6	RXQ20ARY6 RXQ20ARY1					
RXQ18ARY6 RXQ18ARY6 RXQ20ARY6	RXQ20ARY6	RXQ20ARY1 RXQ20ARY6					
Power supply 3-phase, 380–415 V, 50 Hz		I I I I I I I I I I I I I I I I I I I					
Cooling capacity Btu/h 4,95,000 5,12,000 5,32,000	5,53,000	5,73,000					
kW 145 150 156	162	168					
Capacity control % 3~100		2~100					
Casing colour Ivory white (5Y7.5/1)	Ivory white (5Y7.5/1)						
Type Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type						
Compressor  No. of compressor  2+2+2	2+2+2						
Airflow rate m <sup>3</sup> /min 257+257+257	257+297+29	97					
Dimensions (HxWxD) mm (1,657X1,240X765 + 1,657X1,240X765 + 1,657X1	(1,657X1,240X765 + 1,657X1,240X765 + 1,657X1,240X765)						
Machine weight kg 260+260+260 260+260+285	260+285+285	285+285+285					
Sound level dB(A) 65 66 68	69	70					
Operation range Cooling °CDB 10~50	10~50						
Refrigerant Type R410A	R410A						
Charge kg 8.2+8.4+8.4 8.4+8.4+8.4 8.4+8.4+11.8	8.4+11.8+11.8	11.8+11.8+11.8					
Piping Liquid mm Ø 19.1							
connections Gas mm Ø 41.3	ø 41.3						

- 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.

## **Outdoor Units**

## VRV X (Heat Pump)

MODEL			RXYQ6ARY6	RXYQ8ARY6	Q8ARY6 RXYQ10ARY6 RXYQ12A		RXYQ14ARY6	S RXYQ16ARY6		
Combination units			_	_	_	_	_	_		
Power supply			3-phase, 380–415 V, 50 Hz							
Cooling capacity  Btu/h  kW		54,600	76,400	95,500	1,14,000	1,36,000	1,54,000			
		kW	16.0	22.4	28.0	33.5	40.0	45.0		
Heating capacity  Btu/h  kW		Btu/h	61,400	85,300	1,07,000	1,28,000	1,54,000	1,71,000		
		kW	18.0	25.0	31.5	37.5	45.0	50.0		
Capacity contr	ol	%	25-100	20-100	13-100	12-100	11-100	10-100		
Casing colour			Ivory white (5Y7.5/1)							
	Туре		Hermetically Sealed Scroll Type							
Compressor	No. of compressor		1			2				
Airflow rate m³/min		119	178 191		257					
Dimensions (HxWxD) mm		mm	1,657X930X765				1,657X1,240X765			
Machine weigl	nt	kg	180		195		265			
Sound level		dB(A)	56		5	57		60		
Operation Cooling		°CDB	-5 ~ 50				1			
range	Heating	°CDB	-20 ~ 15.5							
Refrigerant	Туре		R410A							
Kenigerani	Charge	kg	6.9	7.0	7.4	7.6	9.1	9.3		
Piping	Liquid	mm	ø 9.5			ø 12.7				
connections	Gas	mm	ø 1	9.1	ø 22.2	ø 28.6				

- 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.

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

  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.

## **SPECIFICATIONS**



## **Outdoor Units**

### **VRV X (Heat Pump)**



- Note: Specifications are based on the following conditions:

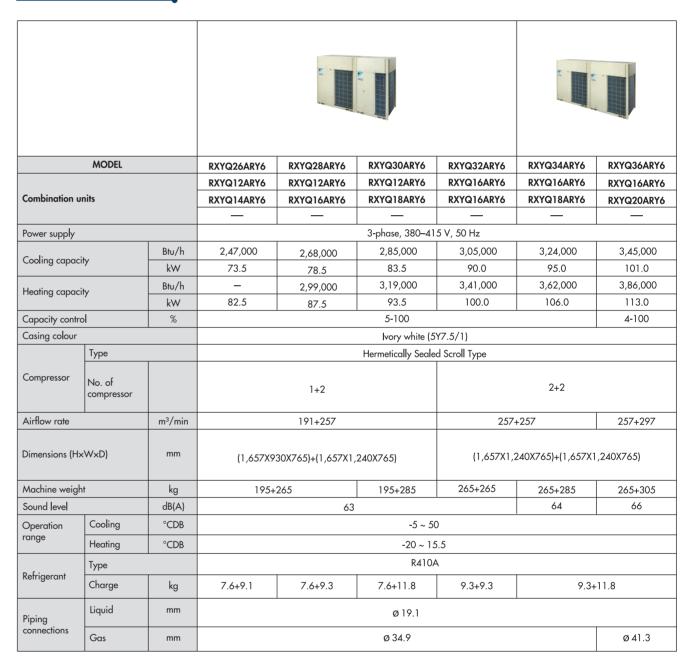
  Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0.

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

  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.

## **Outdoor Units**

## VRV X (Heat Pump)



- 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.

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

  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.

## **SPECIFICATIONS**



## **Outdoor Units**

### **VRV X (Heat Pump)**



- Note: Specifications are based on the following conditions:

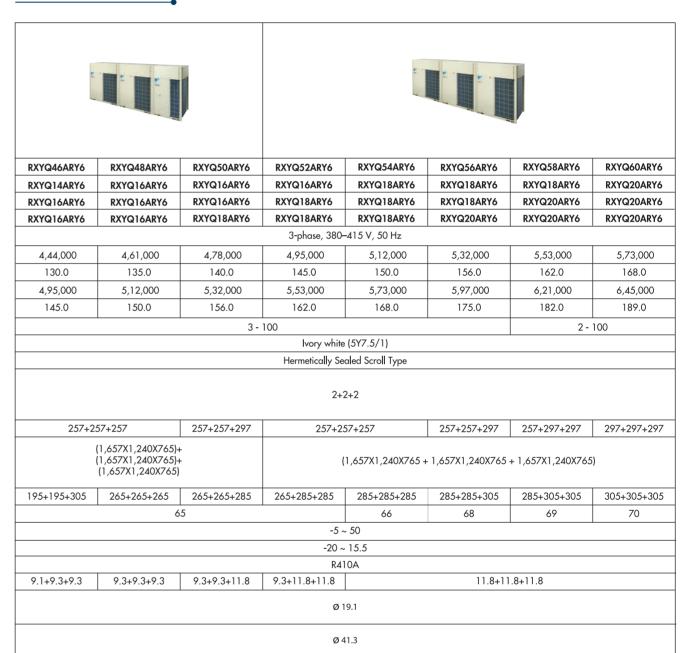
   Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0.

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

   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.

## **Outdoor Units**

## **VRV X (Heat Pump)**



- 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.

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

  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.

# OUTDOOR UNIT COMBINATIONS







## **VRV** X

HP	Capacity index	Model name	Combination for cooling only	Combination for heat pump	Outdoor unit multi connection piping kit *1	Total capacity index of connectable indoor units*2	Maximum number of connectable indoor units*2
6	150	RX(Y)Q6A	RXQ6A	RXYQ6A	_	75 to 195 (300)	9 (15)
8	200	RX(Y)Q8A	RXQ8A	RXYQ8A	_	100 to 260 (400)	13 (20)
10	250	RX(Y)Q10A	RXQ10A	RXYQ10A	_	125 to 325 (500)	16 (25)
12	300	RX(Y)Q12A	RXQ12A	RXYQ12A	_	150 to 390 (600)	19 (30)
14	350	RX(Y)Q14A	RXQ14A	RXYQ14A	_	175 to 455 (700)	22 (35)
16	400	RX(Y)Q16A	RXQ16A	RXYQ16A	_	200 to 520 (800)	26 (40)
18	450	RX(Y)Q18A	RXQ18A	RXYQ18A	_	225 to 585 (900)	29 (45)
20	500	RX(Y)Q20A	RXQ20A	RXYQ20A	_	250 to 650 (1,000)	32 (50)
22	550	RX(Y)Q22A	RXQ10A + RXQ12A	RXYQ10A + RXYQ12A		275 to 715 (880)	35 (44)
24	600	RX(Y)Q24A	RXQ12A x 2	RXYQ12A x 2		300 to 780 (960)	39 (48)
26	650	RX(Y)Q26A	RXQ12A + RXQ14A	RXYQ12A + RXYQ14A		325 to 845 (1,040)	42 (52)
28	700	RX(Y)Q28A	RXQ12A + RXQ16A	RXYQ12A + RXYQ16A	]	350 to 910 (1,120)	45 (56)
30	750	RX(Y)Q30A	RXQ12A + RXQ18A	RXYQ12A + RXYQ18A	BHFP22P1006	375 to 975 (1,200)	48 (60)
32	800	RX(Y)Q32A	RXQ14A + RXQ18A	RXYQ16A + RXYQ16A	BHIFZZF1000	400 to 1,040 (1,280)	52 (64)
34	850	RX(Y)Q34A	RXQ16A + RXQ18A	RXYQ16A + RXYQ18A		425 to 1,105 (1,360)	55 (64)
36	900	RX(Y)Q36A	RXQ18A x 2	RXYQ16A + RXYQ20A		450 to 1,170 (1,440)	58 (64)
38	950	RX(Y)Q38A	RXQ18A + RXQ20A	RXYQ18A + RXYQ20A		475 to 1,235 (1,520)	61 (64)
40	1,000	RX(Y)Q40A	RXQ20A x 2	RXYQ20A x 2		500 to 1,300 (1,600)	
42	1,050	RX(Y)Q42A	RXQ12A x 2 + RXQ18A	RXYQ12A x 2 + RXYQ18A		525 to 1,365 (1,365)	
44	1,100	RX(Y)Q44A	RXQ12A x 2 + RXQ20A	RXYQ12A x 2 + RXYQ20A		550 to 1,430 (1,430)	
46	1,150	RX(Y)Q46A	RXQ14A + RXQ14A + RXQ18A	RXYQ14A + RXYQ16A + RXYQ16A		575 to 1,495 (1,495)	
48	1,200	RX(Y)Q48A	RXQ14A + RXQ16A + RXQ18A	RXYQ16A x 3		600 to 1,560 (1,560)	
50	1,250	RX(Y)Q50A	RXQ14A + RXQ18A + RXQ18A	RXYQ16A + RXYQ16A + RXYQ18A	BHFP22P1516	625 to 1,625 (1,625)	64 (64)
52	1,300	RX(Y)Q52A	RXQ16A + RXQ18A × 2	RXYQ16A + RXYQ18A × 2	J. 111 221 1310	650 to 1,690 (1,690)	04 (04)
54	1,350	RX(Y)Q54A	RXQ18A × 3	RXYQ18A x 3		675 to 1,755 (1,755)	
56	1,400	RX(Y)Q56A	RXQ18A × 2 + RXQ20A	RXYQ18A × 2 + RXYQ20A		700 to 1,820 (1,820)	
58	1,450	RX(Y)Q58A	RXQ18A + RXQ20A × 2	RXYQ18A + RXYQ20A × 2	1	725 to 1,885 (1,885)	
60	1,500	RX(Y)Q60A	RXQ20A × 3	RXYQ20A × 3	]	750 to 1,950 (1,950)	

Note: \*1 For multiple connection of 22 HP systems and above, the outdoor unit multi connection piping kit (separately sold) is required.
\*2 Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units. Refer to page 17 for notes on connection capacity of indoor units.

## **OPTION LIST**



## **VRV** Indoor Units

#### **Ceiling Mounted Cassette Round Flow & Round Flow With Sensing (Optional)**

No.	Item			Туре	FXFSQ25A FXFSQ32A FXFSQ40A	FXFSQ50A FXFSQ63A FXFSQ80A	FXFSQ100A FXFSQ125A FXFSQ140A	
		Standard panel	Fresh whit	te	BYCQ125EAF6 *			
		Sidridara panei	Black Fresh white		BYCQ125EAK *			
1	Decoration	Designer panel 1				BYCQ125EAPF *		
'	panel	Auto grille panel <sup>2,3</sup>	Fresh whit	te		BYCQ125EASF *		
	Sencing panel		Fresh whit	te		BYCQ140EEF6 *		
		Black				BYCQ125EEK *		
2	Saaling mater	ial of air discharge outlet <sup>4</sup>	For usage	of 3-4-way flow		KDBH551C160		
	Sealing maler	ial of all discharge officer	For usage of 2-way flow		KDBH552C160			
3	Panel spacer				KDBP55H160FA			
			Chamber Without T-duct joint		KDDP55B160 (Components: KDDP55C160-1, KDDP55B160-2) 8			
4	Fresh air intal	ke kit	type 5,6 With T-duct joint		KDDP55B160K (Components: KDDP55C160-1, KDDP55B160K2) <sup>8</sup>			
			Direct installation type 7		KDDP55X160A			
5	High-efficienc		(Colorimetric method 65%)		KAFP556C80		KAFP556C160	
	(Including filte	er chamber)	(Colorime	tric method 90%)	KAFP557C80		KAFP557C160	
6	Poplacoment	high-efficiency filter 9,10	(Colorime	tric method 65%)	KAFPS	552B80	KAFP552B160	
	Replacement	migrificiency filler	(Colorime	tric method 90%)	KAFP553B80 KAFP553B160			
7	Filter chambe				KDDFP55C160			
8	Replacement	long-life filter				KAFP551K160		
9	Replacement	long-life filter (Auto grille p	anel)		KAFP551H160			
10	Ultra long-life filter unit (Including filter		namber) 9		KAFP55C160			
11	Replacement	ultra long-life filter <sup>9,10</sup>			KAFP55H160H			
12	Branch duct o	hamber <sup>4</sup>			KDJPs	55C80	KDJP55C160	
13	Insulation kit	for high humidity <sup>9,11</sup>			KDTP55K80		KDTP55K160	

- Note:

  1. When installing designer panel, body height (ceiling required dimension) is 42 mm higher than standard panel. Designer panel cannot operate 2 and 3 way flow.

  2. A dedicated wireless remote controller (BRC16A2) for the auto grille panel is included for lowering and raising the suction grille.

  3. When installing auto grille panel, body height (ceiling required dimension) is 55 mm higher than standard panel.

  4. Circulation airflow is not available with this option.

  5. When installing a fresh air intake kit (chamber type), two air outlet corners are closed.

  6. It is recommended that the volume of outdoor air introduced through the kit is limited to 10% of the maximum airflow rate of the indoor unit. Introducing higher quantities will increase the operating sound and many also influence themperature contribute.
- may also influence temperature sensing.

  7. The volume of fresh air for direct installation type is approximately 1% of the indoor unit airflow. The chamber type is recommended when more fresh air is necessary.

  8. Please order using the names of both components instead of set name.
- 9. This option cannot be installed to designer panel and auto grille panel.
- 10. Filter chamber is required.
  11. Please use in case temperature/humidity inside ceiling may get over 30°C, 80% RH.
  \*These panels do not contain the sensing function.

## Ceiling Mounted Cassette (Compact Multi Flow) Type

Model
BYFQ60CAW
BYFQ60B3W1*1
BER01A1
BRYQ60AAW
BDBHQ44C60
KAF441C60
KDDQ44XA60

- 1. Option relay wire harness adaptor (BER01A1) is necessary when installing decoration panel (BYFQ60B3W1).
- 2. Installation box\*2 is necessary for each adaptor marked ★
- 3. Up to 2 adaptors can be fixed for each installation box.
- 4. Only one installation box can be installed for each indoor unit.

## **VRV** Indoor Units

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

No.	İtem		Туре	FXCQ25A	FXCQ32A FXCQ40A	FXCQ50A	FXCQ63A	FXCQ80A	FXCQ125A
1	Decoration panel	oration panel		BYBC	Q40CF	BYBCQ	BYBCQ63CF		25CF
		und ffer file +1	65%	KAFP532B50		KAFP532B80		KAFP532B160	
2	Filter related	High efficiency filter*1	90%	KAFP533B50		KAFP533B80		KAFP53	3B160
	i iller relalea	Filter chamber bottom suction		KDDFP53B50		KDDFP53B80		KDDFP5	3B160
		Long-life replacement filter		KAFP531B50		KAFP531B80		KAFP53	1B160
3	Remote controller	Wireless H/P		BRC7M65					
4	4 Navigation remote controller (Wired remote controller)					BRC11	63		

Note: \* 1 Filter chamber is required if installing high efficiency filter.

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

lkovo	Model							
ltem	FXKQ32AV16 FXKQ40AV16 FXKQ50AV16 FXKQ63AV							
Decoration panel	BYKQ63AHW (Surface colour: White / Base colour: Dark gray)							
Decoration panel	BYKQ63AHS (Surface colour: Silver / Base colour: Dark gray)							
PM2.5 filter	Initial installation kit (Frame + PM 2.5 filter) Model: BAF25A6							
PMZ.5 filter	Only PM 2.5 filter replacement Part No.: 3P454777-3							
Spacer Kit	BKF25A6 / BKF25CA6 / BKF50CA6 / BKF75SA6							

C: 4D138977A

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

No.	Item Туре	FXDQ20PD	FXDQ25PD	FXDQ32PD
1	Insulation kit for high humidity		KDT25N32	

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

No.	ltem Туре	FXDQ40ND	FXDQ50ND	FXDQ63ND
1	Insulation kit for high humidity	KDT2	5N50	KDT25N63

## **High Static Ceiling Mounted Duct Type**

			•			
No.	İtem	Туре	FXMQ20P FXMQ25P FXMQ32P	FXMQ40PB	FXMQ50PB FXMQ63PB FXMQ80PB	FXMQ100PB FXMQ125PB FXMQ140PB
1	Drain pump kit			-	=	
2	High efficiency filter	65%	KAF372AA36	KAF372AA56	KAF372AA80	KAF372AA160
2	riigh emciency filler	90%	_	KAF373AA56	KAF373AA80	KAF373AA160
3	Filter chamber		-	BDDF37A40~6	BDDF37A80~6	BDDF37A140~6
4	Long-life replacement filter		-	KAF371AA56	KAF371AA80	KAF371AA160
5	Long-life filter chamber kit		_	KAF375AA56	KAF375AA80	KAF375AA160
		White	_	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W
6	Service panel	Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25K160F
		_	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	
7	Air discharge adaptor	KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A	
8	Suction Flange	-	BDF37A40~6	BDF37A80~6	BDF37A140~6	

# OPTION LIST



## **VRV** Indoor Units

## **Ceiling Suspended Type**

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

## Floor Standing Type/Concealed Floor Standing Type

No.	ltem Type	FXLQ32MA/FXNQ32MA	FXLQ50MA/FXNQ50MA	FXLQ63MA/FXNQ63MA
1	Long-life replacement filter	KAFJ361K45	KAFJ3	61K71

## Mid Static Ceiling Mounted Duct Type

No.	Item Type		Туре	Duct Type			
INO.				FXMQ40ARV, FXMQ50ARV	FXMQ63ARV, FXMQ80ARV, FXMQ100ARV		
1	High Efficiency Filter	65%	Туре	KAF372AA56	KAF372AA80		
2	Filter Chamber		Туре	BDDF37A40~6	BDDF37A80~6		
3	Long-Life Replacement Filter		Туре	KAF371AA56	KAF371AA80		
4	Suction Flange			BDF37A40~6	BDF37A80~6		
4	30chon Flange			KTBJ25K56W	KTBJ25K80W		
-	c . p l			KTBJ25K56F	KTBJ25K80F		
٥	5 Service Panel			KTBJ25K56T	KTBJ25K80T		
6	Air Discharge Adapater			KDAJ25K56A	KDAJ25K71A		

## Floor Standing Duct Type

No.	Ite	m			Туре	FXVQ125N	FXVQ200N	FXVQ250N	FXVQ400N	FXVQ500N
1		Replacement long life	e filter			KAFJ261M140	KAFJ261M224	KAFJ261M280	KAFJ261N450	KAFJ261N560
2	1	Ultra long-life filter	ong-life filter				_		KAFSJ9A400	KAFSJ9A560
3	1		Filter chambe	er for high	65%	KDDF-92A140	KDDF-92A200	KDDF-92A280	KDDF-92A400	KDDF-92A560
4	_ [		efficiency filte	er *1	90%	KDDF-93A140	KDDF-93A200	KDDF-93A280	KDDF-93A400	KDDF-93A560
5	양	Front suction filter	Front suction	base flange		KD-9A140	KD-9A200	KD-9A280	KD-9A400	KD-9A560
6		chamber for High	or High Suction grille			KDGF-9A140	KDGF-9A200	KDGF-9A280	KDGF-9A400	KDGF-9A560
7	] ä	efficiency filter	Replacement	Replacement Long-life filter *3		KAF-91B140	KAF-91B200	KAF-91B280	KAF-91B400	KAF-91B560
8	rge		filter *2	High efficiency	65%	KAF-92B140	KAF-92B200	KAF-92B280	KAF-92B400	KAF-92B560
9	먑			filter	90%	KAF-93B140	KAF-93B200	KAF-93B280	KAF-93B400	KAF-93B560
10	]ä	Plenum chamber *4				KPCJ140A	KPC5J	KPC8J	KPCJ400A	KPC15JA
11		Pulley for plenum ch	amber *4			KPP8JA	KPP9JA	KPP10JA	-	-
12		Fresh air intake kit					KD106D10		KDFJ90	6A560
13		Rear suction kit Discharge grille for plenum side /ood base			KDFJ905A140	KDFJ905A200	KDFJ905A280	KDFJ905A400	KDFJ905A560	
14						KD101A10		KD101A20		
15	W					KKWJ9A140	KWF1G5P	KWF1G8P	KKWJ9A400	KWF1G15
16	Vil	oration isolating frame				K-ABSG1406A	K-ABSG1407A	K-ABSG1408A	K-ABSG1409A	K-ABSG1410A

- \*1 A front suction base flange and suction grille are required (option).
  \*2 A filter chamber for high efficiency is required (option).
  \*3 Different from the filter attached as standard.
  \*4 A filter chamber for high efficiency is required (option).
  Use the plenum chamber and pulley for plenum chamber in combination.

## **Clean Room Air Conditioner**

No.	İtem	Туре	FXBQ40PVE	FXBQ50PVE	FXBQ63PVE	FXBPQ63PVE	
1	Outlet unit			-		BAF82A63	
2	Filter HEPA filter		BAFH82A50		BAFH8	32A63	
3	D	Ceiling intake type	BYB82A50C		BYB82A63C	BYB82A63CP	
4	Panel Floor-level intake type		BYB82A50W BYB82A63W			BYB82A63WP	
5	5 Outside air intake duct flange			KDFJ8	2A80		

## **Outdoor Units**

## VRV X

Optio	nal Accessories	RX(Y)Q6A RX(Y)Q8A RX(Y)Q10A	RX(Y)Q12A	RX(Y)Q14A RX(Y)Q16A
Distributive piping	REFNET header	KHRP26M22H, (Max. 4 branch) KHRP26M33H (Max. 8 branch)		26M33H, KHRP26M72H 8 branch) (Max. 8 branch)
	REFNET joint	KHRP26A22T KHRP26A33T	KHRP26A22T, KHRP2	26A33T, KHRP26A72T

Optio	nal Accessories	RX(Y)Q18A RX(Y)Q20A
Distributive	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max.4 branch) (Max.8 branch) (Max.8 branch)
piping	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T

Optional Accessories		RX(Y)Q22A	RX(Y)Q24A	RX(Y)Q26A RX(Y)Q28A RX(Y)Q30A RX(Y)Q32A	RX(Y)Q34A RX(Y)Q36A RX(Y)Q38A RX(Y)Q40A
Distributive piping	REFNET header	KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch), KHRP26M72H (Max. 8 branch),		H, KHRP26M33H, KHRP26M72H, K ) (Max.8 branch) (Max.8 branch) (	
	REFNET joint KHRP26A22T, KHRP26M33T, KHRP26M72T,		KHRP26A2	2T, KHRP26A33T, KHRP26A72T, KI	HRP26A73T
Pipe size reduce	r	_		KHRP26M73TP, KHRP26M73HP	
Outdoor unit connection piping kit			BHFP2	2P1006	

Оря	tional Accessories	RX(Y)Q42A RX(Y)Q44A	RX(Y)Q46A RX(Y)Q48A RX(Y)Q50A RX(Y)Q52A RX(Y)Q54A RX(Y)Q56A RX(Y)Q58A RX(Y)Q60A		
Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max.4 branch) (Max.8 branch) (Max.8 branch)			
piping	REFNET joint	NET joint KHRP26A22T, KHRP26A33T, KHRP26A73T			
Pipe size reduc	cer	KHRP26M73TP, KHRP26M73HP			
Outdoor unit o	onnection piping kit	BHFP2	2P1516		

CONTROL

**SYSTEMS** 



# Reiri for Office

Reiri for Office is the ideal building management solution for all sizes of commercial buildings, especially for small to medium-sized buildings, regardless of location. This smart building solution provides affordable and scalable building control and energy management, allowing users greater control and automation of building utilities such as air-conditioning and lighting, and to monitor and manage energy performance and indoor air quality.

Expanded Features





Reiri for Office DCPF01



Reiri for Office Controller Extension



Reiri for Office Multisite Extension DCPF10

# Reiri for Home



Reiri for Home is the complete smart home solution with seamless integration capabilities, allowing users to control and monitor all smart home devices conveniently from just a single mobile app. From security and safety enhancements to indoor air quality and energy management, Reiri for Home is the ideal home automation system for every homeowner.



Reiri for Home



Reiri for Home

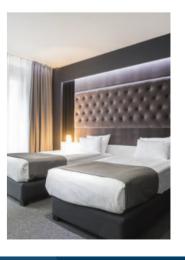
# Reiri for Hotel

Reiri for Hotel effectively saves energy and cost while prioritizing guests' comfort and satisfaction. With this smart hotel solution, energy consumption is optimised without compromising on the guests' in-room comfort. Hotel managers and staff are also able to conveniently monitor the status and manage the settings of every room.



Reiri for Hotel DCPLO 1











#### CONNECTABLE

Various types of equipment in a building can be controlled by a single controller.

Individual Air-conditioning Control From VRV to SkyAir to Split Units, conveniently manage all air-conditioning needs with flexible and precise control when connected to Reiri.





Lighting Control DALI Compatible

Monitor and control DALI-compatible LED lighting systems from a single controller, with enhanced automation through interlocking functions with air-conditioners and other





**Smart Devices** Connect to a wide variety of smart devices, ranging from IP cameras to locks and sensors, and access all of them from just one Reiri app.





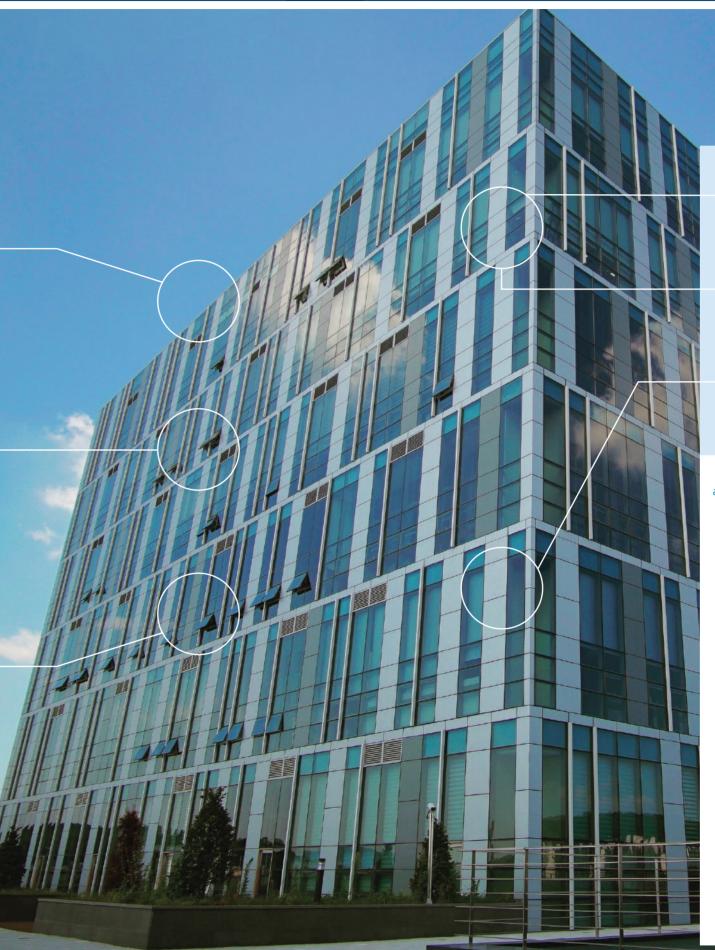












#### **BENEFITS OF REIRI**

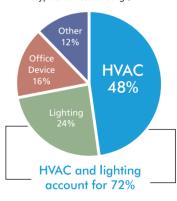
Energy Saving
By automating air-conditioning and lighting controls through availabl functions such as Scheduling and Interlocking, energy consumption is greatly minimized while n comfort and efficiency.

Energy and Cost Management
Easily monitor and analyse energy consumption
with data trend graphs, reports and even real-time
energy monitoring display. Tenant billing management
is also available for effective cost management.
Energy and Cost Management

Integration Capabilities
Reiri is able to integrate and connect to various sensors and smart devices, thus making it the ideal all-in-one platform to monitor and control every room's indoor environment, such as temperature, humidity, indoor air quality and illuminance.Integration Capabilities

Energy-efficient control of air-conditioning and lighting is the key to cutting energy costs.

Electricity consumption ratio in typical office buildings.



Source: Agency for Natural Resources and Energy, Government of Japan







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

### Navigation remote controller (Wired remote controller) (Optional)

BRC1E63 & BRC1F61 (Only for FXEQ Series)

## **Clear display**

#### Dot matrix display

A combination of fine dots enables various icons. Large text display is easy to see.

#### • Backlight display

Backlight display helps operating in dark rooms.

### Simple operation

#### • Large buttons and arrow keys

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





#### • Guide on display

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

### **Energy saving**

#### • Set point range set

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

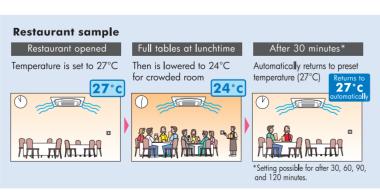
#### • Set point auto-reset

- 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.



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

#### Convenience

#### • Setback (default:OFF)

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

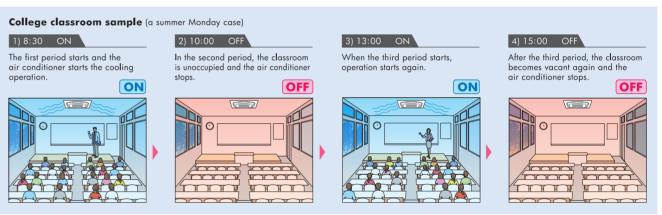
Ex) Setback temperature Cooling :  $35^{\circ}$ C Recovery differential Cooling :  $\cdot 2^{\circ}$ C When the room temperature goes above  $35^{\circ}$ C, the air conditioner starts operating in Cooling automatically. When room temprature reaches  $33^{\circ}$ C, the air conditioner turns OFF.

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

#### Weekly schedule

- Five 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.
- Three independent schedules can be set. (e.g. summer, winter, mid-season)

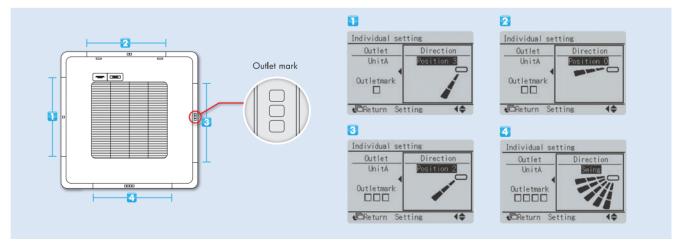




#### Comfort

#### 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 \*2 Only available for VRV 4-Way Flow Ceiling Suspended type FXUQ-A series



## **Individual Control Systems for VRV Systems**

#### Stylish remote controller (Option) - Madoka





A complete redesigned controller focused to enhance user experience



BRC1H61W (White)

BRC1H61K (Black)

ic mom (placity

#### **Product Features**

- Combines refinement and simplicity
- Echoes the distinct blue circle and simplicity of design
- Two attractive colours to match any interior
- Compact, measures only 85 x 85 mm

### **User-friendly interface**

- Just three buttons and a large-figure display
- Customisable display
- Direct access to basic functions (ON/OFF, Operation mode, emperature setting, Airflow rate, Airflow direction)









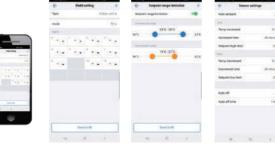
#### Easy setting via Bluetooth App with smartphone (for Installer / Facility manager)

#### **Keep hotel room comfortable**

 Improved setback function by setting the lower temperature limit in cooling mode.

#### **Shorter installation time**

- Easy to create multiple remote control and field settings via App
- Prepare a setting in advance at the office and immediately send it to the on-site remote controller
- Save and reuse settings



<App screen image>

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

### **Stylish remote controller (Option)**

Easy operation with new intuitive design



BRC2F61

#### Simple operation

Using only six buttons, users have direct access to basic functions. This enables them to easily set comfort to their preference.

• ON/OFF

- Airflow rate (5-step & Auto)\*
- Operation mode
- Up and down airflow direction (5-step & Swing)\*
- Temperature setting
- ON/OFF timer

#### Intuitive design

• By using pictograms, the user- friendly interface enables convenient and easy operation.

#### **Compact size**

• Measuring only 85 x 85 mm, the new remote controller is extremely compact and complements any interior design.

### Wireless remote controller (Option)



- Then same operation mode and setting as with wired remote controllers are possible.
   \*Individual airflow direction, auto air-flow 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 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

Signal receiver unit (Installed type)

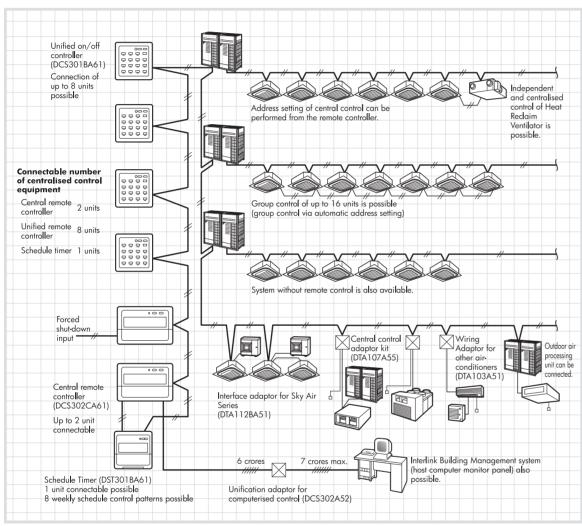
*Wireless remote controller and signal receiver unit are	sold as a set
*Refer to page 90 for the name of each model	

Wide variation ot remote controller tor VRV indoor unit											
	FXFQ-AVM FXFQ-S	FXZQ	FXCQ	FXUQ	FXEQ	FXDQ	FXMQ	FXHQ	FXAQ	FXL(N)Q	FXVQ
Navigation remote controller (Wired remote controller) BRC1E63											
Wired remote controller (BRC2E61)											
Wireless remote controller*										•	



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

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



• Certain indoor units limit the functions of some control systems.

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

#### Residential remote controller (Optional)



DCS303A51

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

#### **Central remote controller (Optional)**



DCS302CA61

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

### **Unified ON/OFF controller (Optional)**



DCS301BA61

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

## **Schedule timer (Optional)**



DST301BA61

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

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



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

## Intelligent Manager

One touch selection enables flexible control of equipment in a building.





DCM601B51

Various types of equipment in a building can be controlled by a single controller.

#### Individual air-conditioning control

The flexible control achieved by the VRV system precisely meets different air conditioning needs in each room (e.g. offices, conference rooms, hotel rooms).







#### **Lighting control**

#### DALI-compatible

DALI-compatible LED lighting systems can be controlled and monitored. Lighting control is enhanced through an interlock function with air conditioners and other functions.





#### Air conditioning control for large spaces

Air handling units can also be controlled. Large spaces, such as entrance halls and shopping malls, can be easily controlled to ensure comfort.





#### **Building equipment control**

Various types of equipment other than air conditioners, including ventilators, fans, and pumps, can also be





## For Energy Saving & Comfort

#### **Intelligent Touch Manager maximises** the advantages of VRV features

Intelligent Touch Manager is an advanced multi-zone controller that provides the most cost-effective way to control and monitor the Daikin VRV system.

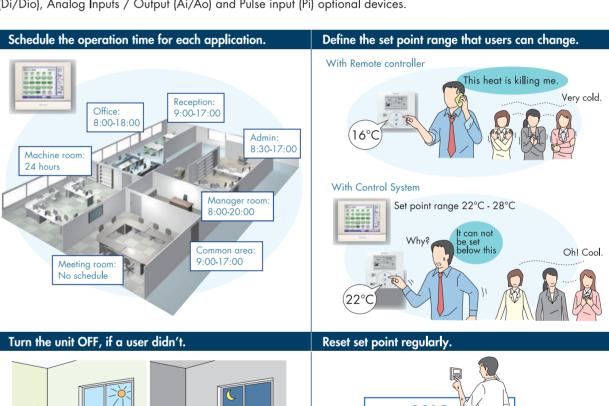
The 10.4" LCD touch screen is easy to use with three different screen views to include the floor plan layout view, icon view and list view and menus for system configurations.

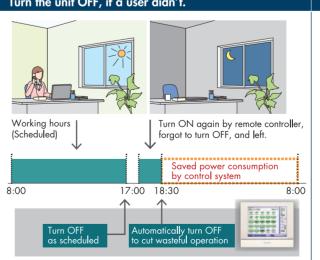
It is also easy to use with standardised remote Web Access from your PC.

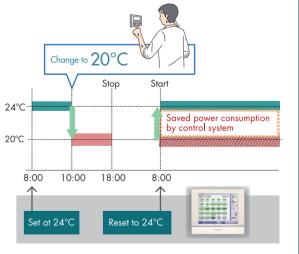
It can manage a total of 650 management points consisting of up to 512 Daikin indoor unit groups

(up to 1024 indoor units) along with building equipment control / monitoring with Digital Inputs / Output

(Di/Dio), Analog Inputs / Output (Ai/Ao) and Pulse input (Pi) optional devices.









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

In addition to switching lights on and off, advanced lighting control, such as illuminance adjustment, can be achieved

#### **Lighting control (Optional)**

Connection to DALI - compatible lighting control system

Simple wiring (daisy chain) enables management of LED lighting by the intelligent Touch Manager.

Various air conditioning and lighting control is enabled through the interlock with occupancy sensors and illuminance sensors.

lighting by the

DALI-compatible

Please contact your local sales office for details.

## Lighting control achieved by the intelligent Touch Manager

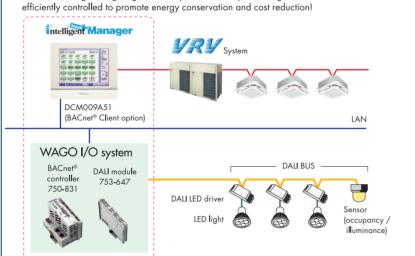
#### [Operation]

- Switch-on/switch-off operation
- Illuminance (1-100%) control
- Various illuminance patterns can be registered
- Registered pattern can be selected from intelligent Touch Manager

#### [Monitoring

- Switch-on/switch-off status monitoring
- Lighting abnormality monitoring
- Illuminance monitoring
- DALI occupancy sensor monitoring
- DALI illuminance sensor monitoring

# Air conditioning and lighting for which power consumption is high can be



#### [Overview of control]

- Up to 5 DALI modules can be connected to a single BACnet® controller.
- Up to 64 DALI LED drivers (64 addresses) can be connected to a single DALI module.
- 64 DALI addresses can be freely assigned to up to 16 groups using a single DALI module.

(Each group corresponds to a management point of the intelligent Touch Manager.)

- Up to 16 scenes can be set to a single DALI module.
- Up to 12 sensors (occupancy, illuminance) can be connected to a single DALI module.
- DALI BAS simplifies wiring and setting work by daisy chain wiring and automatic address setting.

#### Easy maintenance and energy saving by lighting control

#### Case 1

Switch-on / switch-off and illuminance are controlled based on a schedule to cut wasteful power consumption.

 Failing to switch off lights is preven



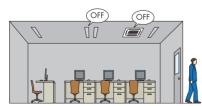


• Optimal illuminance reduces energy

#### Case 2

Occupancy sensors are used to eliminate both wasteful lighting and air conditioning.

When a room is unoccupied, the air conditioning stops and the lighting is switched off.



#### Case 3

Lighting abnormalities (e.g. burned-out bulbs) can be checked on the *intelligent Touch Manager* screen.

Lighting maintenance becomes easier and quicker.



The layout screen enables quick

## Tenant Management (PPD Option)

#### Reporting the power consumption of VRV system for each tenant

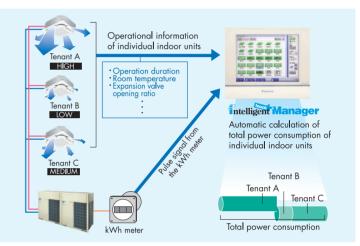
#### With the PPD function, power consumption can be calculated for each indoor unit (Optional)

The energy consumption is proportionally calculated for each indoor unit. The data can be used for energy management and calculation of air conditioning usage fees for respective tenants.

Operational information of individual indoor units are monitored, based on distribution of power consumption of outdoor units.

Daikin's PPD keeps track of power distribution for each indoor unit. It performs air conditioning billing calculations quickly and automatically.

It is easy to output PPD data.
PPD data is output in CSV format to a PC or USB memory device
and can be freely processed and managed.



\*PPD (Power Proportional Distribution) is Daikin's proprietary calculation method.

### Air conditioning bills can be issued by one click

#### Electricity bills can be easily calculated for each tenant (Optional)

The power consumption of VRV controlled by the intelligent Touch Manager can be easily managed for each tenant using a PC. The electricity bill settings facilitate billing work through easy calculation and issuance of VRV electricity bills.

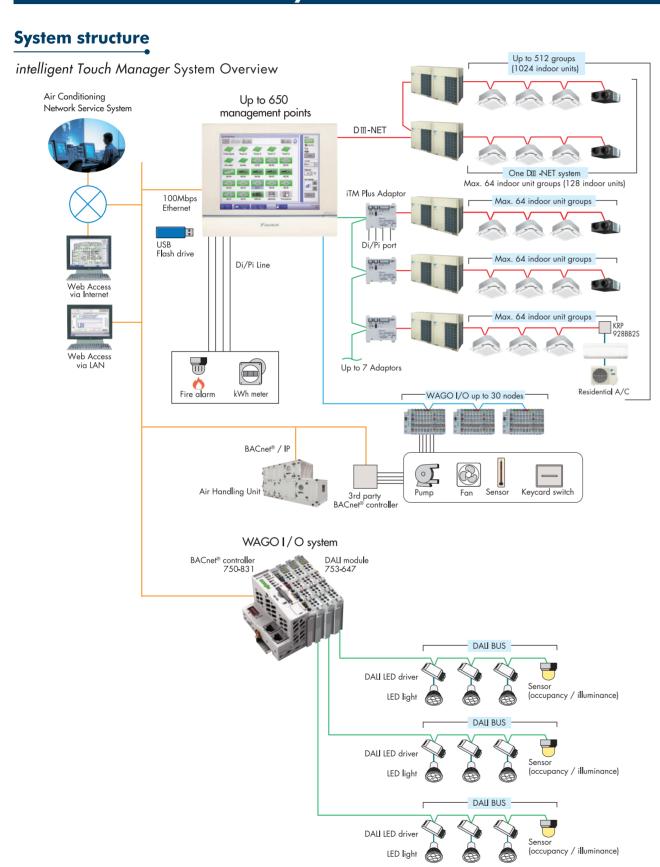
#### [ Main functions ]

- Register tenants
- Set the electricity unit price for 5 time zones
- Calculate power consumption and electricity charge for each tenant
   Show aggregation results in the specified period for each tenant
- Output the results (Printout and CSV file)





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



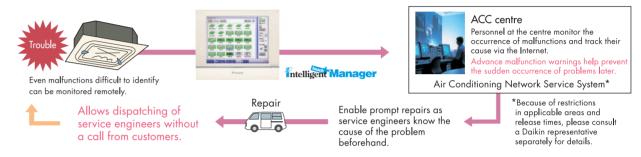
## **Air Conditioning Network Service System**

#### **Preventive Maintenance**

The intelligent Touch Manager can be connected to Daikin's own Air Conditioning Network Service System for remote monitoring and verification of operation status for VRV system. By its ability to predict malfunctions, this service provides customers with

#### Enhanced convenience with link to the Air Conditioning Network Service System

The intelligent Touch Manager connects seamlessly to Daikin's 24-hour Air Conditioning Network Service System.



#### Daikin Offers a Variety of Control Systems

#### Convenient controllers that offer more freedom to administrators



#### intelligent Controller

Ease of use and expanded control functions

The user-friendly controller features colours, multilingual function, and icons in the display for ease of understanding. A wide variety of control methods can be accommodated, permitting administrators to monitor and operate the system even when they are away from the controller.

#### Connect VRV system to your BMS via BACnet® or LONWORKS®

Compatible with BACnet® and LONWORKS®, the two leading open network comunication protocols, Daikin offers interfaces that provide a seamless connection between VRV system and your  ${\rm BMS}.$ 

Dedicated interfaces make Daikin air conditioners freely compatible with open networks



Seamless connection between VRV system and BACnet® open network protocol.



Facilitating the network integration of VRV system and LONWORKS®

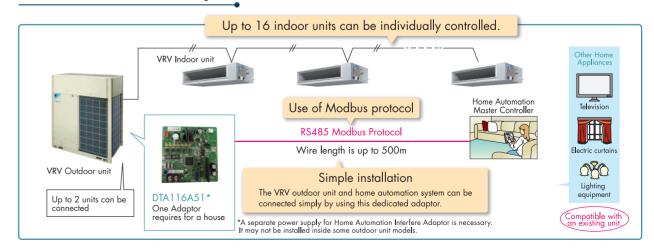
DMS504B51 (Interface for use in LONWORKS®)

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

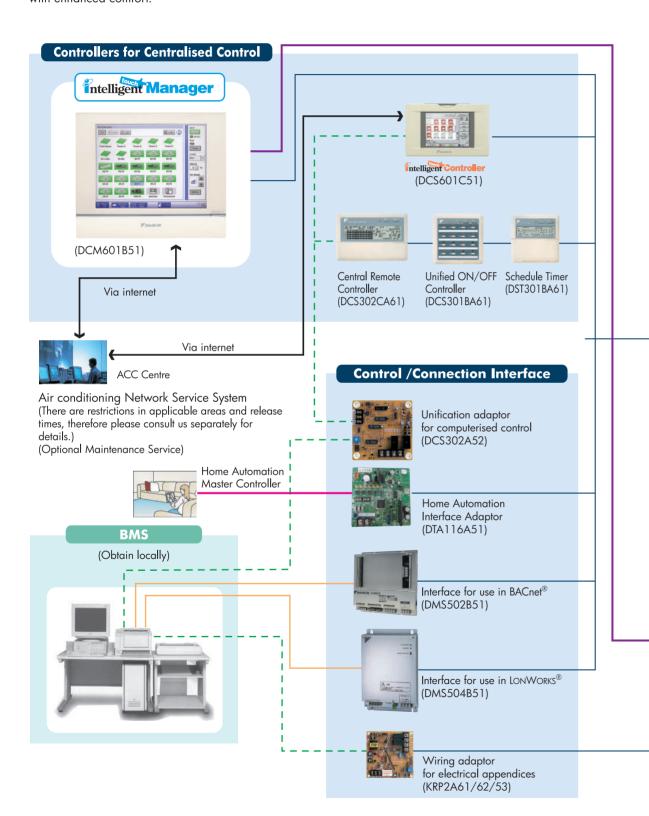
## **Modbus Interface Adaptor**





## **Integrated Building Monitoring System**

The high speed transmission of DIII-NET enables more advanced control of the VRV system, providing you with enhanced comfort.



## **Integrated Building Monitoring System**

DIII-NET Line

BACnet®/Ethernet or LONWORKS® Network Communication Line

- - - Contact Signal Line

RS485 Modbus Line

WAGO Connection

#### The DIII-NET system provides for:

- Close control and monitoring by integrating a wide variety of air conditioners in the
- entire building.
  Saving the in-building cabling using non-polar, two-wire cables. Easier wiring work with
- tremendously fewer wiring errors.

  Additional set-ups readily up and running. An extendable cabling up to 2 km in total.
- Different control equipment flexibly joined in the system for hierarchical risk
- Daikin's total heat exchangers and other devices all under integral control.

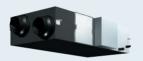


## DIII -NET

(High Speed Multiple Transmission)

DIII-NET, Our unique high speed multiple transmission system, links airconditioners and various other building equipment in accordance with applications, scale and conditions and transmits vast amounts of information between them.





Interface Adaptor for SkyAir Series (DTA112BA51)



\* No adaptor is required for the FCQ-B and FHQ-BV.

Central Control Adaptor Kit (DTA107A55)



Interface Adaptor for DIII-NET use (KRP928BB2S)



SkyAir

**Residential Airconditioner** 



#### **Building services equipment**

- Electrical equipment
   Supply water and drainage equipment
   Automatic fire alarm
- Parking equipment
- Ventilation equipment
- Lighting
  Crime and fire prevention equipment



WAGO

Limitation may apply to some models and functions. Please contact your local sales office for details. Consultation is necessary before employing this control system. Please contact your local sales office before

 $\textbf{Note:} \ \text{BACnet}^{\textcircled{\$}} \ \text{is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning}$ Engineers (ASHRAE). LONWORKS® is a trademark of Echelon Corporation registered in the United States and other countries.



## **Option List**

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

#### For VRV indoor unit use

No.	Type		Туре	FXFSQ-A (For Black Panel)	FXFSQ-A	FXZQ-M	FXUQ-A	FXCQ-M	FXKQ-AV	FXDQ-PD FXDQ-ND
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Receiver	BRC7M634K	BRC7M632F-6	BRC7M630W-6	BRC7CB58	BRC7M65	BRC63AV	BRC4M61-6
1	Remote controller	Wireless	Handset	DRC/M034K	BRC4M15	50W16	DICC/ CD30	DKC/W05	BRC4N	4150W16
		Wired			BRC1E63			BRC2E61		
2	Navigation remote controller (Wired remote controller)				DRC 1E03		В	RC1E63 Note 7		
3	Simplified remote cor	ntroller (Exp	osed type)			_				BRC2C51
4	Remote controller for ho	tel use (Conc	ealed type)							BRC3A61
5	Adaptor for wiring				★KRP1C63	★KRP1BA57	_	★KRP1B61	KRP1B61	★KRP1B56
6-1	Wiring adaptor for e	lectrical app	pendices (1)		★KRP2A62	★KRP2A62	_	★KRP2A61	KRP2A61	★KRP2A53
6-2	Wiring adaptor for e	lectrical app	pendices (2)	,	★KRP4AA53	★KRP4AA53	★KRP4AA53	★KRP4AA51	KRP4AA51	★KRP4A54
7	Remote sensor (for in-	door tempe	rature)		KRCS01-4B			KRCS01-1B		
8	Installation box for a	daptor PCB	☆	Note 2, 3 KRP1H98		Note 4, 6 KRP1BA101	KRP1BA97	Note 2, 3 KRP1B96	_	Note 4, 6 KRP1BA101
9	External control adap	otor for outd	oor unit	<b>★</b> DTA104A62		<b>★</b> DTA104A62	_	<b>★</b> DTA104A61	DTA104A61	<b>★</b> DTA104A53
10	Adaptor for multi tend	ant	*DTA114A61		_					

No.	Type		Туре	FXMQ-P/ FXMQ-ARV	FXMQ-NVE	FXHQ-MA/AVM	FXAQ-A	FXLQ-MA FXNQ-MA	FXVC	2-N
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Receiver	BRC4	M61-6	BRC7EA63W9	BRC7N618-6	BRC4M61-6	_	- ]
1	Remote controller	Wireless	Handset	BRC4M	150W16	/BRC7M53	BRC4M1	150W16	_	- 1
		Wired				BRC2E61			BRC2E61	Note 8
2	Navigation remote contr	oller (Wired r	emote contro <b>ll</b> er)			BRC1E63 Note 7			BRC1E63	Note 9
3	Wired remote controlle	er with week <b>l</b> y	schedule timer			BRC1D61			_	- 1
4	Simplified remote controller (Exposed type)		BRC2C51	BRC2C51	_	— BRC2C51				
5	Remote controller for hotel use (Concealed type)		BRC3A61	BRC3A61	— BRC3A61		BRC3A61	T - 1		
6	Adaptor for wiring			★KRP1C64	KRP1B61	KRP1BA54	_	KRP1B61	KRP1	C67
7-1	Wiring adaptor for			★KRP2A61	KRP2A61	★KRP2A61	★KRP2A61	KRP2A61	<del>-</del>	-
7-2	Wiring adaptor for	electrical c	appendices (2)	★KRP4AA51	KRP4AA51	★KRP4AA52	★KRP4AA52	KRP4AA51	KRP2	A62
8	Remote sensor (for	indoor tem	perature)	KRCS01-4B	_	-	KRCS01-1B	_	-	-
9	Installation box for adaptor PCB ☆		CB ☆	Note 1 KRP4A96	_	Note 3 KRP1CA93	Note 1 KRP4AA93		_	
10	External control adaptor for outdoor unit		★DTA104A61	DTA104A61	<b>★</b> DTA104A62	<b>★</b> DTA104A61	DTA104A61	DTA10	4A62	
11	Adaptor for multi tenant			<b>★</b> DTA114A61	_	_	<b>★</b> DTA114A61		_	
12	External control add		oling / heating					KRP6A1		
13	Remote controller v	vith key		-					KRCB:	37-1

Eun	ction	List	

unction List		Round Flow with Sensing Type
		FXFSQ-A
Remote controller	Wired	BRC1E63
zemole controller	Wireless	
Dual sensors *1		0
Direct airflow *1		0
Sensing sensor low mo	ode *1	0
Sensing sensor stop m	ode *1	0
Circulation airflow		0
ndividual airflow dired	ction control	0
Switchable 5 step fan	speed	0
Auto-airflow rate		0
Auto-swing		0
Swing pattern se <b>l</b> ection	n	0
High ceiling application	on	0

- Notes:

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

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

  3. Only one installation box can be installed for each indoor unit.

  4. Up to 2 installation box can be installed for each indoor unit.

  5. Installation box ☆ is necessary for second adaptor.

  6. Installation box ☆ is necessary for each adaptor.

  7. Individual airflow direction, auto airflow rate and sensing sensor control can be set only via wired remote controller BRC1E63. Cannot be set via other remote controllers.

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

  9. When using BRC1E63, be sure to remove the control panel and since BRC1E63 cannot be stored inside the indoor unit, please place it separately.

## **Option List**

## **System Configuration**

No.	İtem	Туре	Model No.	Function
1	Residential central remote controller		Note 2 DCS303A51	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.
2	Central remote control	ler	DCS302CA61	Up to 64 groups of indoor units (128 units) can be connected, and ON/OFF,
2-1	Electrical box with ear	th terminal (3 blocks)	KJB311AA	temperature setting and monitoring can be accomplished individually or simultaneously. Connectable up to 2 controllers in one system.
3	Unified ON/OFF cont		DCS301BA61	• Up to 16 groups of indoor units (128 units) can be turned, ON/OFF individually or
3-1	Electrical box with ear		KJB212AA	simultaneously, and operation and malfunction can be displayed. Can be used in
3-2	Noise filter (for electromag	gnetic intertace use only)	KEK26-1A	combination with up to 8 controllers.
4	Schedule timer DST301BA6		DST301BA61	<ul> <li>Programmed time weekly schedule can be controlled by unified control for up to 64 groups of indoor units (128 units). Can turn units ON/OFF twice per day.</li> </ul>
5	5-room centralised controller for residential indoor units	For CDXS, FDK(X)S, FTK(X)S	Note 3 KRC72A	Up to 5 indoor units can be controlled. This is a low cost system which can only control ON/OFF.
6	Interface adaptor for residential indoor units	For CDXS, FDK(X)S, FTK(X)S	KRP928BB2S	Adaptors required to connect products other than those of the VRV System to the high-speed DIII-NET communication system adopted for the VRV System.
7	Interface adaptor for SkyAir-series	For FCQ-B, FFQ-B, FHQ-BV, FBQ-B	<b>★</b> DTA112BA51	* To use any of the above optional controllers, an appropriate adaptor must be
8	Central control adaptor kit For UAT(Y)-K(A), FD-K		<b>★DTA107A55</b>	installed on the product unit to be controlled.
9	Wiring adaptor for oth	ner air-conditioner	*DTA103A51	пъшес он не рюсистинно ве сонгонес.
10	DIII-NET Expander Adaptor	daptor DTA109A51		Up to 1024 units can be centrally controlled in 64 different groups.  Wiring restrictions (max. length: 1,000m, total wiring length: 2,000m, max. number of branches: 16) apply to each adaptor.
10-1	Mounting plate		KRP4A92	• Fixing plate for DTA109A51

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

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.

### **Building Management System**

				•		
No.			Item		Model No.	Function
1	intelligent Touch Controller	Basic	Hardware	intelligent Touch Controller	DCS601C51	Air conditioning management system that can be controlled by a compact all-in-one unit.
1-1	Controller	Option Hard		DIII-NET plus adaptor	DCS601A52	Additional 64 groups (10 outdoor units) is possible.
1-2	Electrical box with	earth ter	minal (4 blo	ocks)	KJB411A	Wall embedded switch box.
2		Basic	Hardware	intelligent Touch Manager	DCM601B51	<ul> <li>Air conditioning management system that can be controlled by touch screen.</li> </ul>
2-1	intelligent Touch		Hardware	iTM plus adaptor	DCM601A52	Additional 64 groups (10 outdoor units) is possible.Max. 7 iTM plus adaptors can be connected to intelligent Touch Manager.
2-3	Manager	Option	Software	iTM power proportional distribution	DCM002A51	Power consumption of indoor units are calculated based on operation status of the indoor unit andoutdoor unit power consumption measured by kWh metre.
2-4				iTM energy navigator	DCM008A51	Building energy consumption is visualised.Wasted air conditioning energy can be found out.
2-5	Di unit				DEC101A51	8 pairs based on a pair of ON/OFF input and abnormality input.
2-6	Dio unit				DEC102A51	4 pairs based on a pair of ON/OFF input and abnormality input.
3		*1 Interf	ace for use	in BACnet®	DMS502B51	Interface unit to allow communications between VRV and BMS.     Operation and monitoring of air conditioning systems through BACnet® communication.
3-1		Optiona	DIII board		DAM411B51	Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently.
3-2	Communication interface	Optional	Di board		DAM412B51	Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.
4	siraco	*2 Interface for use in LONWORKS®		DMS504B51	Interface unit to allow communications between VRV and BMS. Operation and monitoring of air conditioning systems through LonWorks® communication.	
5		Home Automation Interface Adaptor		DTA116A51	Use of the Modbus protocol enables the connection of the VRV system with a variety of home automation systems from other manufacturers.	

- 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.

## AIR HANDLING UNIT

## HEADER PACK

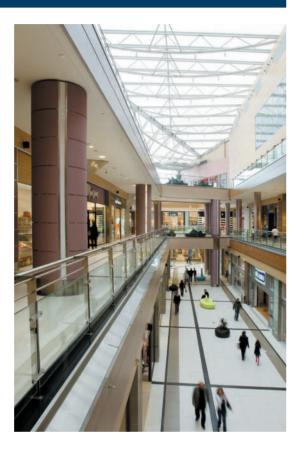


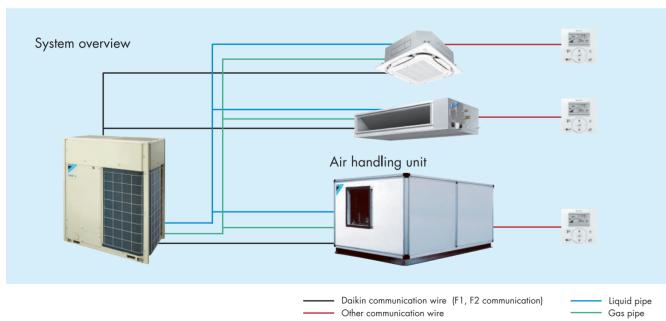
# Integrate your air handling unit for large size spaces such as factories and for fresh air solutions.

#### Capacity range: 6 - 60 HP



- Easy design and installation
- The system is easy to design and install since no additional water systems such as boilers, tanks, gas connections, etc. are required
- Inverter controlled units
- Control of air temperature via standard Daikin wired remote control





Air handling units can be connected to VRV systems.

This combination can be built to order as a system. Outdoor air series is also possible. Please contact your local sales office for details.

## The Innovative Refrigerant Piping of next generation

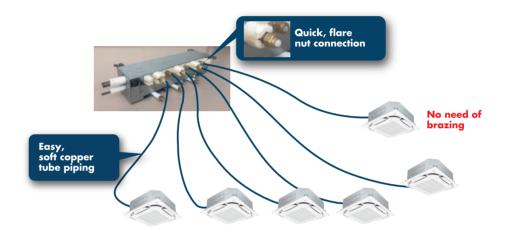
Daikin innovated Next Generation of Quality and Efficiency for VRV Installation. It offers differentiated soulutions in installation. It ensures quality installation with reduction of site work.



Header Pack

#### Advantage

- Installation time saving: Up to 1/3 of conventional method
- Easy to Install: Hanging points available
- Safety: Consists of faring method, no brazing required\*
- Space saving: Head pack to Indoor unit soft drawn pipe, top side of refrigerant pipe doesn't need space for brazing torch movement
- Quality Installation: Elimination of difficult process, enhancing quality Installation





#### Compact design to fit into narrow attic space

Light weight and the compact body give minimum damage on the building structure.

#### **Header Pack Line-up**

		Piping connection	s (Liquid/Gas mm)		
Model Name	HP	Outdoor unit side	Indoor unit side	Indoor unit total capacity index	
BHF6ARHP6 BHF6ARHP6Z	6	Ø9.5/Ø15.9	(Ø9.5/Ø15.9)×2 (Ø6.4/Ø12.7)×4	<150	
BHF6RHP6 BHF6RHP6Z	6	Ø9.5/Ø15.9	(Ø9.5/Ø15.9)x1 (Ø6.4/Ø12.7)x3	<150	
BHF8RHP6 BHF8RHP6Z	8	Ø9.5/Ø19.1		150 ≦ X < 200	
BHF10RHP6 BHF10RHP6Z	10	Ø9.5/Ø22.2	(Ø9.5/Ø15.9)×3 (Ø6.4/Ø12.7)×3	200 ≦ X < 290	
BHF16RHP6 BHF16RHP6Z	16	Ø12.7/Ø28.6		290 ≦ X < 420	

<sup>\*</sup>Control box and expansion valve kit are necessary for integration of AHU and VRV system.

## DAIKIN GAS TIGHT JOINT (DGT)



## Non-brazed connection for Refrigerant piping

### **Evolutionally - Advanced Feature**

A combination of rubber packing and screwed metal body offers gas-tight and rigid connection without brazing.

Patented "Leverage Method" mechanically holds the pipe and prevents it from pull-out.



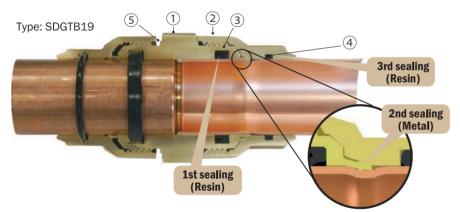
Size Φ 6.4 - φ 41.3

### Mechanism

Daikin DGT is a non-brazed connection suitable for piping. Pipes can be joined easily and quickly without brazing or using any special tools. It meets stringent safety requirements and provides leak-free tightness among various substantial benefits.

- Double edged claw catches the pipe to form tight mechanical sealing
- 3 types of connectors suitable for most pipe sizes and applications
- Unique mechanical and resin sealing prevent gas leak completely.
- It is durable up to 4 times (17.2MPa) of max. operating pressure.





### **System Reliability**

- No risk of copper oxide or soot in pipes due to no brazing
- Prevents early compressor failure and prolongs the lifespan of air-conditioners



### **Safety First**

- As no brazing is required, fire hazards are completely eliminated during installation on site
- No risk of handling high pressure and flammable gas



### Daikin Gas Tight Joint Line up (Matching for various piping sizes)

Standard Joints (Connecting the same pipes)

Ei ausa	Model Name	Dimension (mm)					
Figure	Model Name	Size	ØD	W	L		
	SDGTB06	Ø6.4(1/4")	6.35	15.0	50.4		
> **	SDGTB09	Ø9.5(3/8")	9.52	19.9	55.5		
	SDGTB12	Ø12.7(1/2")	12.7	23.5	59.0		
	SDGTB15	Ø15.9(5/8")	15.88	30.0	74.0		
	SDGTB19	Ø19.1(3/4")	19.05	34.6	76.8		
\$ <b></b>	SDGTB22	Ø22.2(7/8")	22.22	40.2	83.4		
Standard Type ]	KMJ25A	Ø25.4(1")	25.4	43.5	85.4		
Sta	SDGTB28	Ø28.6(11/8")	28.58	46.7	88.0		
	KMJ31A	Ø31.8(11/4")	31.75	48.4	98.4		
	BDGTA34	Ø34.9(13/8")	34.92	51.1	101.5		
00	КМЈ38А	Ø38.1(11/2")	38.1	54.7	102.4		
	BDGTA41	Ø41.3(15/8")	41.28	58.3	103.5		

### Asymmetry Joints (Connecting different size pipes)

r:	Model Name	Dimension (mm)					
Figure	Model Name	Size	ØD1	ØD2	W	L	
3	SDGTB0906	Ø9.5 (3/8") $\Leftrightarrow$ Ø6.4 (1/4")	9.52	6.35	19.9	52.7	
(r) (gD2)	SDGTB1209	Ø12.7 (1/2") ⇔ Ø9.5 (3/8")	12.7	9.52	23.5	57.5	
(Reducer)	SDGTB1512	Ø15.9 (5/8") $\Leftrightarrow$ Ø12.7 (1/2")	15.88	12.7	30.0	65.0	
	SDGTB1915	Ø19.1 (3/4") $\Leftrightarrow$ Ø15.9 (5/8")	19.05	15.88	30.0	<i>7</i> 6.8	
Type	SDGTB2219	Ø22.2 (7/8") ⇔ Ø19.1 (3/4")	22.2	19.05	40.2	81.5	
L Asymmetry Type	SDGTB2522	Ø25.4 (1") ⇔ Ø22.2 (7/8")	25.4	22.22	43.5	85.8	
nm ye	SDGTB2825	Ø28.6 (11/8") $\Leftrightarrow$ Ø25.4 (1")	28.58	25.4	46.7	88.1	
<b>├</b> ──	KMJR3128A	Ø31.8 (11/4") ⇔ Ø28.6 (11/8")	31.75	28.58	48.4	93.5	
Idø	SDGTB3428	Ø34.9 (13/8") $\Leftrightarrow$ Ø28.6 (11/8")	34.92	28.58	51.1	95.7	

## **Time & Costs Savings**

- No need to apply for hot work permit or station fire safety watchers onsite, thus saving time and cost with less administrative work
- Simple installation process also reduces installation time



 $^{98}$ 

## AIR TREATMENT EQUIPMENT LINE-UP









A recent trend rapidly gaining popularity is the need for air treatment along with air conditioning. Our Outdoor-Air Processing Unit can combine fresh air treatment and air conditioning, supplied from a single system. It adjusts the temperature of air from outdoors using a fixed discharge temperature control. Along with Outdoor-Air Processing Units, we also offer Heat Reclaim Ventilator systems. The Heat Reclaim Ventilator VAM series units in particular have been praised for their compactness, energy conservation and extensive operation range of outdoor temperatures. This series provides higher enthalpy efficiency, due to the greatly enhanced performance of the thin film element. Furthermore, improved external static pressure offers more flexibility for installation. The Heat Reclaim Ventilator VKM-GAM series units, equipped with a DX-coil and a humidifier, provide further advanced features, such as temperature adjustment to suit conditions indoors and to prevent cold air from blowing on people directly during heating operation. The series also realises significant energy savings by exercising heat recovery.

## AIR TREATMENT EQUIPMENT LINE-UP



		Outdoor-Air		Heat Reclaim	n Ventilator
		Processing Unit	VKM-GAM Type	VKM-GA Type	VAM
	Ventilation Humidification  Air Processing*		Ventilation Humidification  Air Processing*		Ventilation Humidification  Air Processing*
			VV.		OOF
	Refrigerant Piping	Connectable	Conne	ctable	Not connectable
H	Wiring	Connectable	Conne	ctable	Connectable
with <b>VRV</b> X	After-cool & After-heat Control	Available	Available		Not available
Heat Exchar	ge Element	_	Energy savings obtained		Energy savings obtained
Humidifier		_	Fitted	_	_
High Efficien	cy Filter	Option	Opt	ion	Option
Ventilation S	ystem	Air supply only	Air supply &	air exhaust	Air supply & air exhaust
Power Suppl	у	220-240 V, 50 Hz	220-240	V, 50 Hz	220-240 V/220 V, 50 Hz
					250 m³/h
Airflow Rate			800	m <sup>3</sup> /h	500 m³/h 650 m³/h 800 m³/h
		1260 m³/h 1740 m³/h 2340 m³/h	1000	) m³/h	1000 m³/h 1500 m³/h 2000 m³/h

<sup>\*</sup>Refers to bringing outdoor air to near indoor temperature and delivering to a room.

## **Outdoor-Air Processing Unit**

# Combination of fresh air treatment and air conditioning,

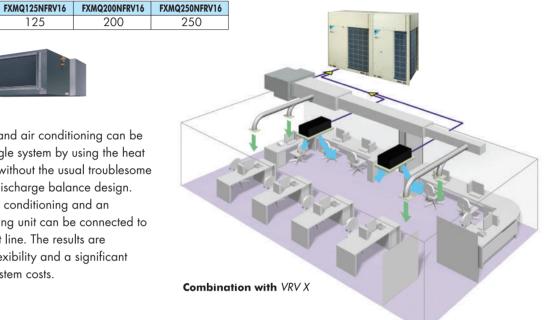
# supplied from a single system.



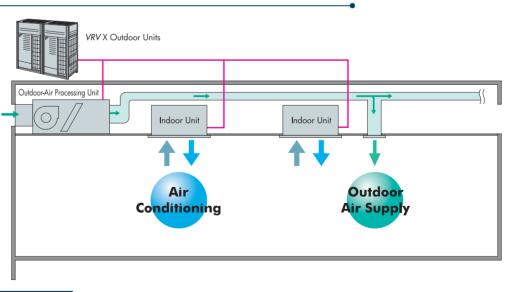
Lineup

Model Name

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



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



#### **Connection Conditions**

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

- When outdoor-air processing units are connected, the total connection capacity index must be 50% to 100% of the capacity index of the outdoor units.
- When outdoor air processing units and standard indoor units are connected, the total connection capacity index of the outdoor air processing units must not exceed 30% of the capacity index of the outdoor units.
- Outdoor-air processing units can be used without indoor units.

## AIR TREATMENT EQUIPMENT LINE-UP



## **Standard Specifications**

#### **Indoor unit**

		Туре			Ceiling Mounted Duct Type				
		Model		FXMQ125NFRV16	FXMQ200NFRV16	FXMQ250NFRV16			
Power	suppl	у		1-pho	1-phase 220-240 V (also required for indoor units), 50 Hz				
kcal/h			kcal/h	12,000	19,300	24,100			
Coolir	ng cap	acity *1	Btu/h	47,800	76,400	95,500			
			kW	14.0	22.4	28.0			
			kcal/h	7,700	12,000	15,000			
Heatir	ng cap	acity *1	Btu/h	30,400	47,400	59,400			
			kW	8.9	13.9	17.4			
Casin	g			Galvanised steel plate					
Dimer	nsions	(HXWXD)	mm	440 x 1190 x 1090 440 x 1190 x 1090					
	Moto	Motor output		0.75					
Fan	Δirfl	ow rate	m³/min	21	29	39			
Tull	7 (111)	ow rule	cfm	741	1,024	1,377			
	Extern with F	nal Static Pressure Filter (PM10+PM50)	240 V Pa	300	260	240			
		Liquid	mm		ø9.5 (flare)				
Refrig piping		Gas	mm	ø15.9 (flare)	ø19.1 (brazing)	ø22.2 (brazing)			
Pibili	'	Drain	mm		PS1B female thread				
Machi	ine we	ight	k g		115				
Sound	level	*3 220 V/	240 V dB(A)	48	50	52			
Conne	ectable	outdoor units *4 *5		6 HP an	d above	10 HP and above			

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

• Cooling: Outdoor temp. of 33°CDB, 28°CWB (68% RH), and discharge temp. of 18°CDB.

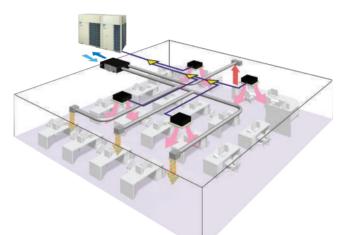
• Equivalent reference piping length: 7.5 m (0 m horizontal)

- \*2 An intoke filter is not supplied, so be sure to install the optional long-life filter or high-efficiency filter. Please mount it in the duct system of the suction side. Select a dust collection efficiency (gravity method) of 50% or more.
- \*3 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. These values are normally somewhat higher
- during actual operation as a result of ambient condition \*4. It is possible to connect to the outdoor unit if the total capacity of the indoor units is 50% to 100% of the capacity index of the outdoor units.
- \*5 Local setting mode. Not displayed on the remote controller.
- $\bullet$  This equipment cannot be incorporated into the remote group control of the VRV X system.

## **Heat Reclaim Ventilator with DX-Coil and Humidifier-**VKM Series



The Heat Reclaim Ventilator lineup features the DX-coil in response to recently diversifying outdoor air introduction requirements.



#### Efficient outdoor air introduction is possible

The Heat Reclaim Ventilator (VKM series) series introduces fresh outdoor air with minimum heat losses, while a wide variety of features responds to customer requirements.

#### Line-up

		With	DX Coil & Humidifie	Туре
Ī	Model Name	VKM50GAMV1	VKM80GAMV1	VKM100GAMV1
I	Capacity Index	31.25	50	62.5

			With DX Coil Type	
	Model Name	VKM50GAV1	VKM80GAV1	VKM100GAV1
Ī	Capacity Index	31.25	50	62.5





The line-up includes models with a humidifier, in response to diversifying customer requirements. (VKM50/80/100GAMV1 only)

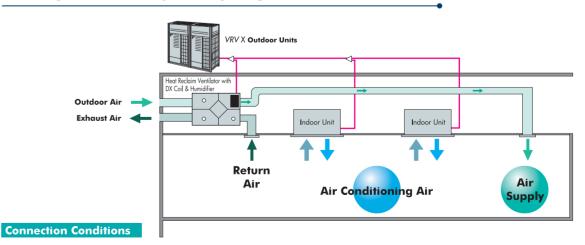
#### DX-coil

The Heat Reclaim Ventilator features DX-coil that contributes to the prevention of cold airflow hitting people directly during heating operation, due to the after-cool, after-heat operations done beforehand.

#### High static pressure

High external static pressure means enhanced design flexibility.

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



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

• When the Heat Reclaim Ventilator VKM series units are connected, the total connection capacity index must be 50% to 130% of the capacity index of the outdoor units



## **Specifications**

		MODEL			VKM50GAMV1*	VKM80GAMV1*	VKM100GAMV1*	VKM50GAV1	VKM80GAV1	VKM100GAV1
Refrigerant							R-4	10A		
Power Supply							1-phase, 220–	240 V, 50 Hz		
		Ultra-high	Airflow rate	m³/h	500	750	950	500	750	950
		Olfra-nign	Static pressure	Pa	160	140	110	180	170	150
Airflow Rate & Static		LU:l.	Airflow rate	m³/h	500	750	950	500	750	950
Pressure (Note 7)	)	High	Static pressure	Pa	120	90	70	150	120	100
		1	Airflow rate	m³/h	440	640	820	440	640	820
		Low	Static pressure	Pa	100	70	60	110	80	70
		Heat	Ultra-high		560	620	670	560	620	670
		exchange	High	w	490	560	570	490	560	570
D 6		mode	Low	1 1	420	470	480	420	470	480
Power Consumpt	non		Ultra-high		560	620	670	560	620	670
		Bypass mode	High	l w l	490	560	570	490	560	570
		mode	Low	1 1	420	470	480	420	470	480
Fan Type				_			Siroco	o Fan		
Motor Output				kW	0.280 x 2	0.280 x 2	0.280 x 2	0.280 x 2	0.280 x 2	0.280 x 2
<u> </u>		Heat	Ultra-high		37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/41
		exchange	High	dBA	35/35.5/36	36/37/37.5	37/37.5/38	36/36.5/37	37.5/38/39	38/38.5/39
Sound Level (Not	to 51	mode	Low	1 1	32/33/34	33/34/35.5	34/34.5/35.5	33.5/34.5/35.5	34.5/36/37	35/36/36.5
(220/230/240 \			Ultra-high		37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/41
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Bypass	High	dBA	35/35.5/36	36/37/37.5	37/37.5/38	36/36.5/37	37.5/38/39	38/38.5/39
		mode	Low	-	32/33/34	33/34/35.5	34/34.5/35.5	33.5/34.5/35.5	34.5/36/37	35/36/36.5
Humidification C	apacity (N	Note 4)	1	kg/h	2.7	4.0	5.4	33.07 3 1107 33.0	_	00,00,00.0
Tionnameanon capacity (1		Ultra-high		1.9,	76	78	74	76	78	74
Temp. Exchange		High		%	76	78	74	76	78	74
Efficiency		Low		┤ ~ │	77.5	79	76.5	77.5	79	76.5
		Ultra-high			64	66	62	64	66	62
Enthalpy Exchang		High Low		%	64	66	62	64	66	62
Efficiency (Coolin	ng)					68	66	67	68	66
		Ultra-high			67 67	71	65	67	71	65
Enthalpy Exchang	ge	High		%	67	71	65	67	71	65
Efficiency (Heatin	ng)	Low		- "	69	73	69	69	73	69
Casing		LOW			07	/3	Galvanised		/3	09
Insulating Materi	al						Self-Extinguishabl			
Heat Exchanging						Air to Air C	ross Flow Total Heat (		atl Evahanae	
Heat Exchanger I							Specially Processed N			
Air Fi <b>l</b> ter	Liemem						Multidirectional		ı	
	Cooling	g (Note 2)			2.8	4.5	5.6	2.8	4.5	5.6
DX-coil Capacity	<u> </u>	g (Note 3)		kW	3.2	5.0	6.4	3.2	5.0	6.4
	Tiedili	Height			387	387	387	387	387	387
Dimensions		Width		mm	1,764	1,764	1,764	1,764	1,764	1,764
Dimensions				- ''''''	832	1,214	1,214	832	1,214	1,764
Depth			mm	Ø 200	0 25	· .	Ø 200		250	
		111111	102	120	125	96		114		
Machine Weight			Net Gross (Note 8)	kg	102	120	134	70	109	114
			, ,		107	129	0°C-40°C DB,	90% DH I		
Unit Ambient Condition OA (Note 9)							-15°C-40°C DB,			
Onit Ambient Col	namon		OA (Note 9)					,		
RA (Note 9)					0°C-40°C DB, 80%RH or less					

- Notes: 1. Cooling and heating capacities are based on the following conditions. Fan is based on High and Ultra-high. When calculating the capacity as indoor units, use the following figures: VKM50GAMV1/GV1: 3.5 kW, VKM80GAMV1/GV1: 5.6 kW, VKM100GAMV1/GV1: 7.0 kW.
  - 2. Indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB.
  - 3. Indoor temperature: 20°C DB, Outdoor temperature: 7°C DB, 6°C WB.
  - 4. Humidifying capacity is based on the following conditions: Indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB.
  - 5. The operating sound measured at the point 1.5 m below the centre of the unit is converted to that measured in an The operating sound measured or the point is a free with the last of the first of the point is a free with the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the last of the las higher than this value.

For operation in a quiet room, it is required to take measures to lower the sound.

- For details, refer to the Engineering Data.

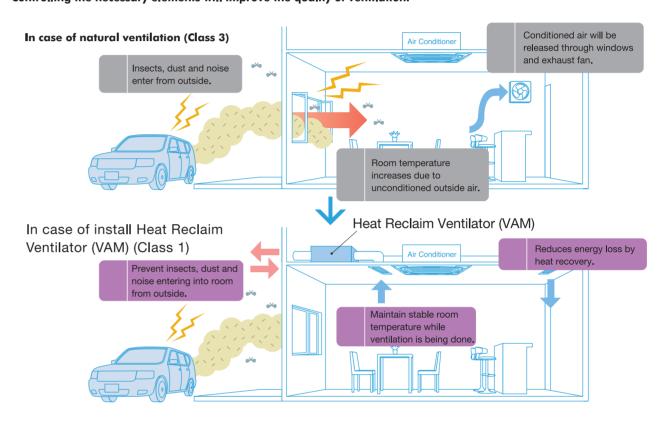
  6. The noise level at the air discharge port is about 8–11 dBA or higher than the unit's operating sound. For operation in a quiet room, it is required to take measures to lower the sound.
- 7. Airflow rate can be changed over to Low mode or High mode.
- 8. In case of holding full water in humidifier. 9. OA: fresh air from outdoor. RA: return air from room.
- 10. Specifications, design and information here are subject to change without notice.

- 11. Power consumption and efficiency depend on the above value of airflow rate.
- Fower consumption and ethiciency depend on the above value of airthov rarie.
   Temperature exchange efficiency is the mean value for Cooling and Heating. Efficiency is measured under the following condition: Ratio of rated external static pressure outdoor to indoor is kept constant at 7 to 1.
   In heating operation, freezing of the outdoor unit's coil increases. Heating capability decreases and the system goes into defrost operation. During defrost operation, the fans of the unit continue driving (factory setting). The purpose of this is to maintain the amount of ventilation and humidifying.
- 14. When connecting with a VRV system heat recovery outdoor unit and bringing the RA (exhaust gas intoke) of this unit directly in from the ceiling, connect to a BS unit identical to the VRV indoor unit (master unit), and use group-linked operation. (See the Engineering Data for details).
- 15. When connecting the indoor unit directly to the duct, always use the same system on the indoor unit as with the outdoor unit, perform group-linked operation, and make the direct duct connection settings from the remote controller. [Mode No. "17 (27)" First code No. "5" Second code No. "6".) Also, do not connect to the outlet side of the indoor unit. Depending on the fan strength and static pressure, the unit might back up.
- ★ Feed Ckan water (city water, tap water or equivalent). Dirty water may dog the valve or cause dirt deposits in the water container, resulting in poor humidifier performance. (Never use any cooling tower water and heating-purpose water.) Also, if the supply water is hard water, use a water softener because of short life.
- Life of humidifying element is about 3 years (4,000 hours) under the supply water conditions of hardness: 150 mg/l. (Life of humidifying element is about 1 year (1,500 hours) under the supply water conditions of hardness: 400 mg/l.) Annual operating hours: 10 hours/day x 26 days/month x 5 months = 1,300 hours.

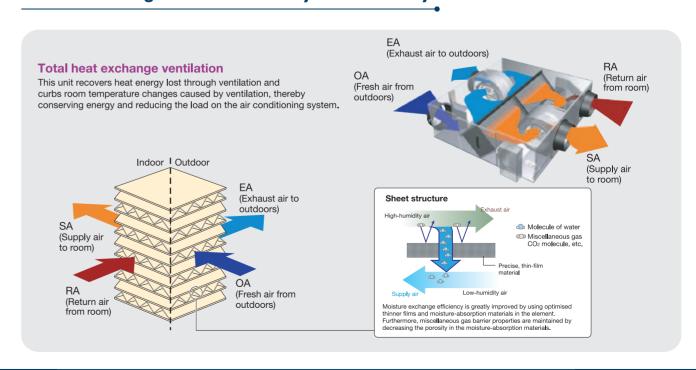
## **Heat Reclaim Ventilator - VAM Series**

#### Good quality air for every day

Controlling the necessary elements will improve the quality of ventilation.

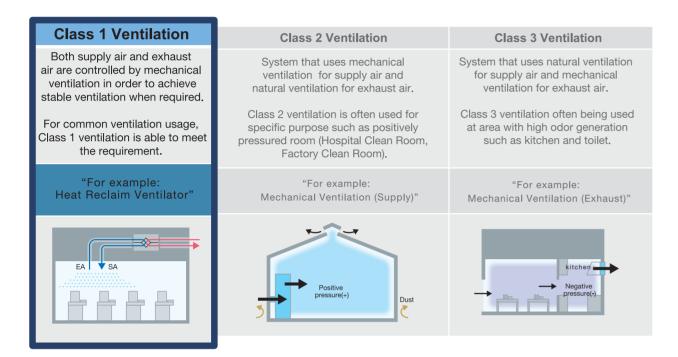


### Air conditioning load is reduced by heat recovery





#### **Airflow Control**



### **Fresh Up Operation**

By changing the airflow balance, positive pressure or negative pressure in a room can be achieved in order to prevent pollutants from entering or flowing out.

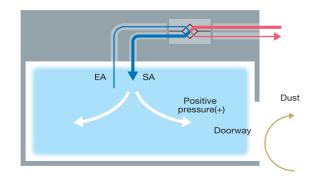
Supply fresh up operation increases the supply air volume to prevent pollutants from entering into the room.

For example, it keeps outdoor pollen and dust from entering when doors are opened or closed, or through gaps in windows.



. Example: Convenience Stores

By positive pressure in the room, the entering of dirty outside air, odors and moisture when opening and closing of doorway is prevented.





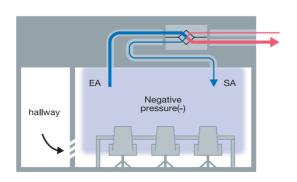
Exhaust fresh up operation will increase exhaust air volume to prevent pollutants from flowing to other area.

For example, to prevent dirty air generated indoors from flowing out in through windows and doors, the indoor air is kept under negative pressure and discharged.



Example: Conference Room

By negative pressure in the room, contaminated air and moisture from the room is prevented from leaking into other areas.

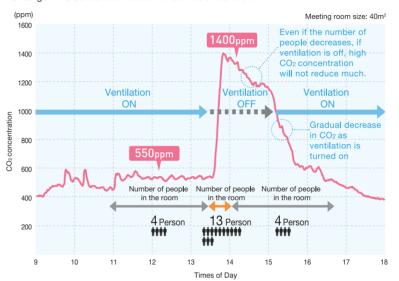


#### Ventilation volume control with CO<sub>2</sub> sensor interlocking

During increase in CO<sub>2</sub> level in the room, ventilation air volume will be increased to have higher air exchange in order to reduce the CO<sub>2</sub> level in room.

#### Human occupancy is reflected as CO<sub>2</sub> concentration

Change in CO<sub>2</sub> concentration in conference room



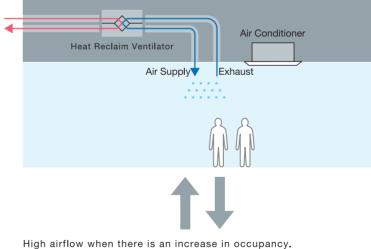


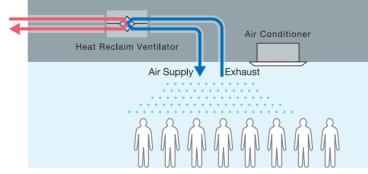
Experimental data: CO<sub>2</sub> concentration in the conference room. Closed conference rooms often tend to have stagnant air flow. In long meeting duration or meeting with full occupancy, the concentration of CO2 increases due to the exhaled CO2 from human and causes decrease in mind concentration. In order to achieve effective ventilation in short period. mechanical ventilation and natural ventilation should be

Image is for illustrative purpose.

#### Equipped with a CO<sub>2</sub> sensor to automatically control the ventilation volume according to the CO2 concentration

Low airflow when there is low occupancy.







With the new wired controller, BRC1H62W/K, the airflow is able to be automatically controlled based on CO<sub>2</sub> concentration and CO<sub>2</sub> concentration is able to be visualized on the screen\*.

\*Optional accessory CO2 sensor is required for this

This CO<sub>2</sub> sensor cannot be used as CO<sub>2</sub> measurement tool, CO<sub>2</sub> concentration value will be subject to change depending on the room



#### **Energy Saving Ventilation (interlocked with air conditioner)**

Air conditioner and ventilation system can be interlocked to provide even greater comfort and energy saving.

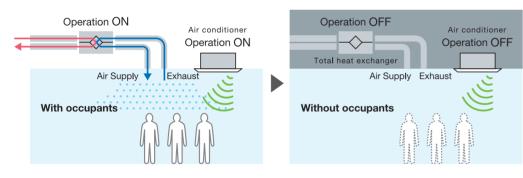
The system can be interlocked with Daikin air conditioners to provide energy saving ventilation solution for various situation.



#### **Sensing Sensor Stop Mode**

In situation of no human occupancy detection, the operation is turned off.

When the "Sensing sensor" installed on the air conditioner detects no occupancy in the room, the ventilation system and air conditioner system is turned off automatically to reduce energy wastage.

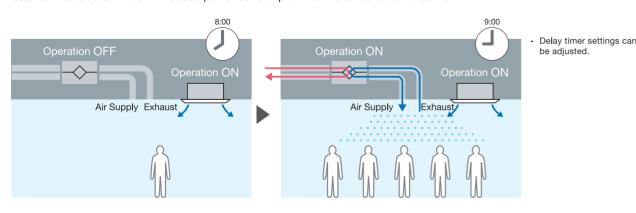


- During group controlling of air conditioner, no occupancy stop mode cannot be used. Please refer to VRV general catalogue for the target indoor units.
- When 24-hours ventilation mode is turned on, the normal operation mode is changed to 24-hours ventilation mode.
- Once the absence is detected and the operation stopped, it will not be performed automatically again.

## **Pre-Cooling/Pre-Heating Control**

The operation of ventilation system is delayed during this mode.

During first start up of the air conditioner, the start up operation of ventilation system is delayed in order to reduce additional heat load from outside air. This will reduce power consumption for the air conditioner as well.

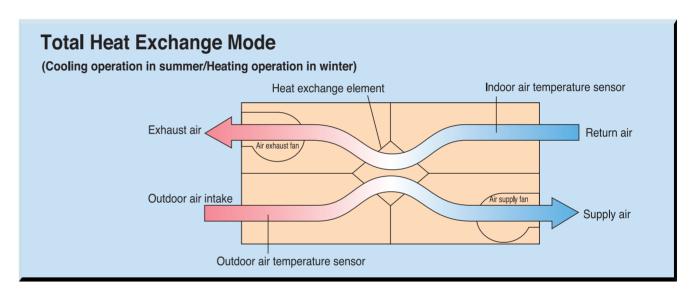


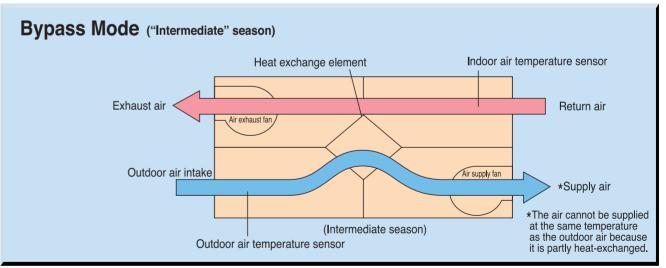
#### **Auto-Ventilation Mode Changeover Switching**

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

When the cooling operation is required in winter, use of heat recovery ventilation is not efficient because the outdoor air temperature is normally lower than that of the indoor. Thus, the proper use of ventilation mode enhances the heating / cooling efficiency.

In addition, by installing a humidity sensor (optional), automatic switching by heat (energy) or discomfort index is possible which further improves energy efficiency and comfort.





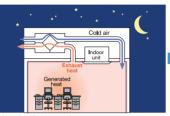


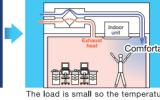
#### Night time free cooling operation

Night time 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, night time free cooling operation reduce 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.

- When connected to air conditioners, operation of heat reclaim ventilator is controlled according to the set temperature, outside air temperature and room
- When using only ventilation unit, operation of heat reclaim ventilator is controlled according to the set temperature on remote controller.
- Night time free cooling operation is possible during air conditioners linked operation by centralized
- Night time free cooling operation is set to "off" in the factory settings, so if there is a need to turn on, please contact Daikin dealer.

The indoor accumulated heat is discharged at night. This reduces the air conditioning load the next day, thereby increasing

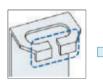




rapidly reduced to a comfortable level. \*Interlocked operation with an air conditione

### **Improved Installation Method**

- 1. Improved installation process by changing the dimension and shape of hanging bracket.
  - The nut dropout prevention structure eliminates the need to replace the hanging bracket even when mounting upside down.
  - It also prevents the anti-vibration hanging bracket from interfering with the equipment.
- 2. Improved duct installation process with new duct connector location.
  - The duct connector is adjusted to be parallel to each other in order to ease duct installation process.
- 3. Improves controllability by input / output signals and simplifies various wiring work.
  - Operation, ventilation volume, and ventilation mode can be switched by external contact input.
  - Output signal terminal for external dampers.
  - Output signal terminal for abnormal signals and filter signs.







#### **Application Example**

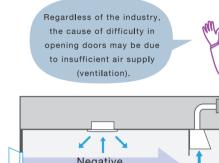
Ventilation related points to be taken into note during designing stage.

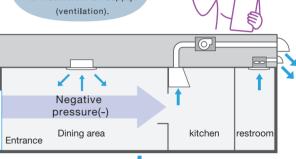
#### Restaurant

#### **Problem**

- · The entrance door is difficult to open
- · The food smell leaks to dining area.
- · Hot outside air is coming in when the entrance door is opened.

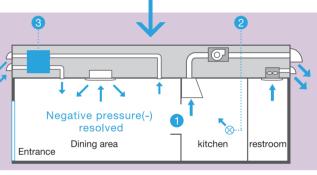
The restaurant has negative room pressure due to insufficient supply air. When the entrance door is opened, outside air enters into the restaurant bringing warm air and pollutants.





#### Countermeasure plan

- 1. Separate ventilation for kitchen and customer dining
- 2. Provide an air supply vent in the kitchen.
- 3. Install a Heat Reclaim Ventilator in the dining area.



## Office & Shoplot

#### **Problem**

- · Ventilation cannot be achieved by opening windows or doors.
- · No large windows or doors at the area.



#### No air movement due to low airflow.

In the case of windows and doors are located at the front only, there will be no air movement at the back of the shop. Air will be stagnant and not well ventilated.

# Cannot move the Lack of airflow Shop air around here.

#### Countermeasure plan

Heat Reclaim Ventilator must be installed to provide effective mechanical ventilation.

As a result, airflow is able to ventilate all areas of the shop.





## **Remote Controller & Option List**

Standard remote controller: - BRC1H62W/BRC1H62K

Optional remote controller: - Navigation remote controller-BRC1E63, Simplified remote controller-BRC2E61

(Optional controller are connectable with some function limitation.)

		BRC1H62W(K)	BRC1E63	BRC2E61
Function	Detail	-5		
Air conditioner interlock	Interlock Heat Reclaim Ventilator with air conditioner by one remote controller.	•	•	•
Ventilation mode	Switch the ventilation mode (Automatic, Heat exchange, Bypass).	•	•	-
Ventilation airflow rate	When using CO <sub>2</sub> sensor, ventilation volume can be changed.	•	•	•
Fresh up indication	Indicates that fresh up operation is being carried out.	•	-	-
CO <sub>2</sub> indication	Indicates value of CO <sub>2</sub> sensor.	0	-	-
Outdoor temperature indication	Indicates outdoor air temperature (OA).	0	-	-
Night time free cooling indication	Show the night purge icon when is set.	0	-	-
24 hours ventilating indication	Show the icon when 24hrs operation is set.	0	-	-
Ventilating operation indication	Indicates that ventilating operation is being carried out even when night purge operation and 24 hour ventilating operation is being carried out.	•	•	-
Ventilating standby indication	Indicates that ventilating operation has been stopped temporarily during pre-cool / pre-heat control.	0	-	-
Sharing CO <sub>2</sub> data	Share the CO <sub>2</sub> data to submit from main unit within the group.	0	-	-

Additional functions: • Installed functions o Additional Installation function

#### Option List:

Туре			Item	VAM250HVE	VAM500HVE	VAM650HVE	
<del>-</del> -	Silencer			-	KDDM24B100		
Additional Function		Nominal Pipe	mm	-	φ200		
igi Sir	High efficiency filter			KAF242J25M	KAF24	2J65M	
A J	Air filter for replacemen	nt		KAF241J25M	KAF24	1J65M	
Flexible	duct (1m)			K-FDS151E	K-FD	S201E	
Flexible	duct (2m)			K-FDS152E	K-FD	S202E	
CO2 sen	sor			BRYC24A25M9 BRYC24A65M9			
Humidity	/ sensor		BRYH241A1009 (for RA) / BRYH242A1009 (for OA)				
PM2.5 fi	Itration unit		BAF249A300	BAF249A500	-		
PM2.5 w	rith activated carbon filtra	ation unit		BAF249A300C	BAF249A500C	-	
Wired re	mote controller			BRC1H62W (White)	/ BRC1H62K (Black) / B	RC1E63 / BRC2E61	
			Residential central remote controller		DCS303A51*1		
device	Centralised controlling	davias	Central remote controller	DCS302CA61			
de	Centralised controlling	device	Unified ON/OFF controller	DCS301BA61			
			Schedule Timer		DST301BA61		
illo Illo			Wiring adaptor for electrical appendices	KRP2A62			
Controlling	PCB adaptor		Installation box for adaptor	KRP1C18A90			
ŏ	FOD adaptor		For heater control kit	BRP4A50A			
			PCB adaptor for wiring	KRP1C18			

Туре				Item	VAM800HVE	VAM1000HVE	VAM1500HVE	VAM2000HVE	
-	0:1				KDDDM24B100 KDDDM24B10			M24B100 x 2	
Additional function	Silencei	Silencer	Nominal pipe mm		mm		q	250	
in di	High eff	iciency filte	ncy filter		K	AF242K100M	KAF24	2K100M x 2	
Ac	Air filter	for replace	ment		K	AF241K100M	KAF24	1K100M x 2	
Flexible	duct (1r	n)				K-F	DS251E		
Flexible	duct (2r	n)				K-F	DS252E		
CO <sub>2</sub> se	nsor				BRYC24A100M9				
Humidi	ty senso	r			BRYH241A1009 (for RA) / BRYH242A1009 (for OA)				
PM2.5	filtration	unit			BAF429A20A				
PM2.5	with acti	vated carbo	on filtration unit		BAF429A20AC				
Wired	Wired remote controller				В	RC1H62W (White) / BRC1H	62K (Black) / BRC1E63	/ BRC2E61	
	a ge	Residenti	al central remote c	ontroller	DCS303A51*1				
9	alis ie ele	Central re	emote controller		DCS302CA61				
device	Centralised controlling device	Unified O	N/OFF controller		DCS301BA61				
	Residential central remote controller  Central remote controller  Unified ON/OFF controller  Schedule Timer			DST301BA61					
<u>≡</u>			aptor for electrical	appendices	KRP2A62				
ıţı	9 g	Installation box for adaptor		KRP1C18A90					
()   #		For heater control kit			BRP4A50A				
		PCB adap	otor for wiring		KRP1C18				

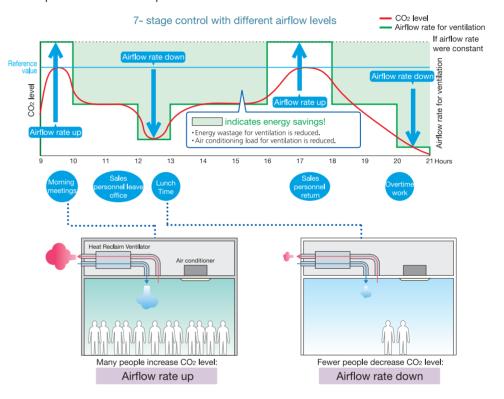
<sup>\* 1</sup> For residential only. When connect with a Heat Reclaim Ventilator (VAM), you can only switch the power ON/OFF. It cannot be used with other central control equipment.

## **Air Treatment Equipment**

#### Airflow rate control with CO<sub>2</sub> sensor

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

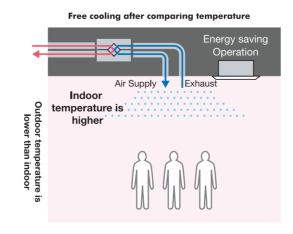
• Example of CO<sub>2</sub> sensor operation in an office room:

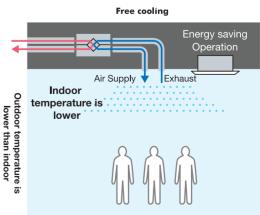


#### Automatic Ventilation Mode Switching (Bypass control) with Humidity sensor

Suitable ventilation mode depending on condition will be switched automatically.

The ventilation unit detects room temperature and outside air temperature, then automatically switches to suitable ventilation mode to provide higher energy-savings. By installing humidity sensor (optional item), the mode will be switched automatically based on the amount of heat (energy) and discomfort index to further improve energy saving and comfort. \*1





1 "Energy saving ventilation mode" or "Comfortable ventilation mode" can be selected by local setting.



	Unit			00-	00	00	
	MODEL			VAM250HVE	VAM500HVE	VAM650HVE	
Power Supply				1-phase, 220-240 V/220V, 50/60 Hz			
		Ultra-High		60.5 / 60.5	61.5 / 61.5	59.5 / 59.5	
Temp. Exchange Efficiency (50/60 Hz)	For	High	%	60.5 / 60.5	61.5 / 61.5	59.5 / 59.5	
	Cooling	Low		65.0 / 65.5	63.0 / 64.0	62.5 / 63.0	
		Ultra-High		76.5 / 76.5	80.0 / 80.0	74.5 / 74.5	
	For Heating	High	%	76.5 / 76.5	80.0 / 80.0	74.5 / 74.5	
		Low		78.5 / 79.0	81.5 / 82.5	76.5 / 77.0	
Enthalpy Exchange Efficiency (50/60 Hz)	For Cooling	Ultra-High		60.0 / 60.0	62.5 / 62.5	60.0 / 60.0	
		High	%	60.0 / 60.0	62.5 / 62.5	60.0 / 60.0	
		Low		61.5 / 62.0	64.0 / 65.0	62.5 / 63.0	
	For Heating	Ultra-High		69.5 / 69.5	71.0 / 71.0	68.0 / 68.0	
		High	%	69.5 / 69.5	71.0 / 71.0	68.0 / 68.0	
		Low		73.0 / 73.5	72.5 / 73.5	69.5 / 71.5	
Power Consumption (50/60 Hz)	Heat	Ultra-High		126-141 / 172	296-326 / 390	381-426 / 472	
	Exchange	High	w	114-123 / 144	248-261 / 329	307-319 / 413	
	Mode	Low		75-83 / 79	223-233 / 268	264-276 / 332	
		Ultra-High		126-141 / 172	296-326 / 390	381-426 / 472	
•	Bypass Mode	High	W	114-123 / 144	248-261 / 329	307-319 / 413	
		Low		75-83 / 79	223-233 / 268	264-276 / 332	
Sound Level	Heat Exchange Mode	Ultra-High		33.0-34.0 / 33.5	36.0-37.0 / 38.5	37.5-38.0 / 38.0	
		High	dBA	31.0-32.5 /28.0	35.0-36.0 / 35.0	36.0-36.5 / 37.0	
		Low		23.0-25.5 / 21.0	32.0-34.0 / 31.0	34.0-35.0 / 32.5	
(50/60 Hz)		Ultra-High		33.0-34.0 / 34.5	36.0-37.0 / 38.5	39.5-40.0 / 42.0	
	Bypass Mode	High	dBA	31.5-32.5 / 29.0	35.0-36.0 / 35.0	38.0-38.5 / 39.0	
		Low		23.5-25.5 / 21.5	32.0-34.0 / 31.0	35.5-36.5 / 33.5	
Casing	-1				Galvanised steel plate		
Insulation Material				Self-e	extinguishable polyurethan	e foam	
Dimensions (HxWxD) mm				278 x 551 x 810	338 x 8	32 x 973	
Machine Weight			kg	22	41	43	
Heat Exchange System				Air to air cross flow total heat (Sensible heat + latent heat) exchange			
Heat Exchange Eleme	nt Material			Specially processed nonflammable paper			
Air Filter				Multidirectional fibrous fleeces			
	Туре			Sirocco fan			
	Airflow Rate (50/60 Hz)	Ultra- High		250 / 250	500 / 500	650 / 650	
_		High	m³/h	250 / 250	500 / 500	650 / 650	
		Low		165 / 145	470 / 420	570 / 495	
Fan	External Static Pressure (50/60 Hz)	Ultra- High		115-130 / 135	165-190 / 245	185-190 / 260	
		High	Pa	80-90 / 60	140-175 / 180	140-155 / 210	
		Low		35-75 / 20	124-155 / 127	108-119 / 122	
	T		kW	0.030 x 2	0.100 x 2	0.170 x 2	
	Motor Output				1	1	
Net Supply Airflow Ra	<u> </u>	Ultra-High	%		90		
Net Supply Airflow Ra	tio	Ultra-High Indoor side	% mm	φ150	90 φ200	φ200	

Unit Model				00	00					
				VAM800HVE	VAM1000HVE	VAM1500HVE	VAM2000HVE			
Power Supply				1-phase, 220-240 V / 220 V, 50/60 Hz						
		Ultra-High		61.5 / 61.5	58.0 / 58.0	61.5 / 61.5	58.5 / 58.5			
Temp. Exchange Efficiency (50/60 Hz)	For	High	%	61.5 / 61.5	58.0 / 58.0	61.5 / 61.5	58.5 / 58.5			
	Cooling	Low		64.0 / 65.0	61.5 / 62.0	65.5 / 66.0	65.5 / 65.5			
	For Heating	Ultra-High		77.5 / 77.5	74.0 / 74.0	77.5 / 77.5	73.5 / 73.5			
		High	%	77.5 / 77.5	74.0 / 74.0	77.5 / 77.5	73.5 / 73.5			
		Low		78.5 / 79.5	76.0 / 76.5	79.5 / 80.0	76.5 / 77.0			
		Ultra-High		63.0 / 63.0	60.0 / 60.0	63.0 / 63.0	60.0 / 60.0			
	For Cooling	High	%	63.0 / 63.0	60.0 / 60.0	63.0 / 63.0	60.0 / 60.0			
Enthalpy Exchange	Cooling	Low		64.5 / 65.5	62.0 / 62.5	65.5 / 66.0	64.5 / 64.5			
Efficiency		Ultra-High		72.0 / 72.0	68.5 / 68.5	72.0 / 72.0	68.0 / 68.0			
(50/60 Hz)	For	High	%	72.0 / 72.0	68.5 / 68.5	72.0 / 72.0	68.0 / 68.0			
	Heating	Low		74.0 / 75.0	72.0 / 72.5	74.0 / 75.0	71.0 / 71.5			
		Ultra-High		644-684 / 829	683-736 / 883	1,274-1,353 / 1,645	1,365-1,471 / 1,763			
	Heat Exchange	High	w	603-612 / 712	621-656 / 763	1,207-1,225 / 1,423	1,241-1,311 / 1,526			
Power Consumption	Mode	Low		504-544 / 562	539-569 / 594	1,008-1,089 / 1,125	1,079-1,138 / 1,188			
(50/60 Hz)		Ultra-High		644-684 / 829	683-736 / 883	1,274-1,353 / 1,645	1,365-1,471 / 1,763			
	Bypass	High	w	603-612 / 712	621-656 / 763	1,207-1,225 / 1,423	1,241-1,311 / 1,526			
	Mode	Low		504-544 / 562	539-569 / 594	1,008-1,089 / 1,125	1,079-1,138 / 1,188			
	111	Ultra-High		41.5-42.5 / 41.0	42.0-43.0 / 42.5	43.0-44.0/ 44.0	43.5-44.0 / 44.5			
	Heat Exchange	High	dBA	39.5-41.0 / 37.0	40.0-41.0 / 38.0	41.0-42.5 / 39.0	41.5-43.0 / 40.0			
	Mode	Low		36.0-38.5 / 33.0	38.0-39.5 / 34.5	38.0-40.5 / 35.0	39.0-41.0 / 36.5			
	Bypass Mode	Ultra-High	dBA	41.5-42.5 / 41.0	42.0-43.0 / 42.5	43.0-44.0 / 44.0	43.5-44.0 / 44.5			
		High		39.5-41.0 / 37.0	40.0-41.0 / 38.0	41.0-42.5 / 39.0	41.5-43.0 / 40.0			
		Low		36.0-38.5 / 33.0	38.0-39.5 / 34.5	38.0-40.5 / 35.0	39.0-41.0 / 36.5			
Casing	1				Galvanis	ed steel plate				
Insulation Material				Self-extinguishable polyurethane foam						
Dimensions (H x W x D) mm			mm	387 x 1,012 x 1,110 785 x 1,012 x 1,110						
· · · · ·			kg	63	63	138	138			
Heat Exchange System				Air to air cross flow total heat (Sensible heat + latent heat) exchange						
Heat Exchange Element Material				Specially processed nonflammable paper						
Air Filter				Multidirectional fibrous fleeces						
	Туре				Siroco	o fan				
		Ultra-High		800 / 800	1,000 / 1,000	1,500 / 1,500	2,000 / 2,000			
	Airflow Rate	High	m³/h	800 / 800	1,000 / 1,000	1,500 / 1,500	2,000 / 2,000			
	(50/60 Hz)	Low		720 /610	880 / 835	1,350 / 1,250	1,650 / 1,580			
Fan	External	Ultra-High		210-235 / 250	205-225 / 220	195-215 / 235	190-210 / 210			
	Static	High	Pa	170-215 / 140	155-195 / 100	150-180 / 125	140-180 / 85			
	Pressure (50/60 Hz)	Low		138-174 / 81	115-150 / 70	123-146 / 88	96-123 / 53			
	Motor Output		kW	0.190 x 2		0.190 x 4				
Net Supply Airfl		Ultra-High	%	90	90	90	90			
		Indoor side	mm			φ250×4	φ250×4			
Connection Duct Diameter			φ250	φ250	□(680×290)×2	□(680×290)×2				
Unit Ambient Co	ndition	22. 0.00			-15°C-50°C DR	, 80%RH or less				

<sup>\*</sup> Values for electrical current, power consumption, and efficiency are at the above above-stated airflow.

\* Exchange efficiencies are values based on performance codes and air conditions that comply with JIS B8628:2017.

\* Temperature exchange efficiency and enthalpy exchange efficiency vary according to the ratio of supply air and exhaust air and air conditions.

\* Operation sound is an anechoic chamber conversion that complies with JISB8628:2017. When measured under actual installation conditions, the operation sound is usually greater due to ambient noise and reverberation.

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