#### 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.



Daikin, Bangladesh www.daikinbangladesh.com

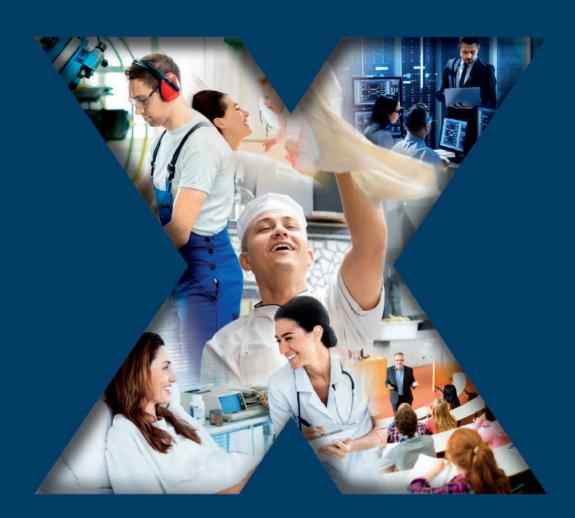


WORLD'S LEADING AIR CONDITIONING COMPANY FROM JAPAN

PRESENTING THE NEW



**Cooling Only** 



ADVANTAGE

X' TENSIVE RANGE X' TRA
POWER SAVINGS

X' CELLENT TECHNOLOGY X' TENDED
RELIABILITY

# INDEX

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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 around the world.

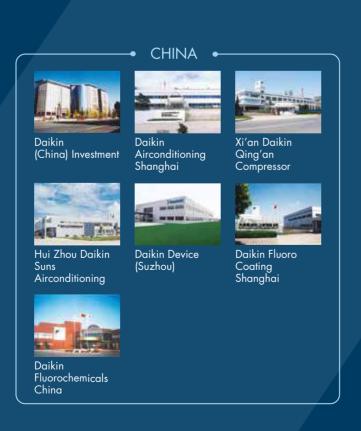
Established in 1924, Daikin Industries Ltd., is a diverse multinational company, active in air conditioning, chemicals and oil hydraulics. With headquarters at Osaka, Japan, our Daikin family has more than 67,000 members, working across 80 production base and 208 consolidated subsidiaries worldwide.

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.











### 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.

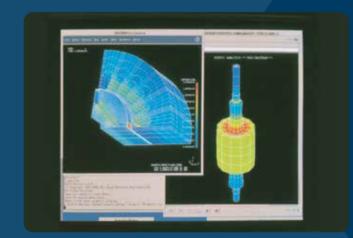
To create more advanced functions and new value, we have instituted specialised R&D divisions: the 'Environmental Technology Research Laboratory' and the 'Solution Product Development Centre'. In combination with the Product Development Group, each of the three divisions work in close co-operation to 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.

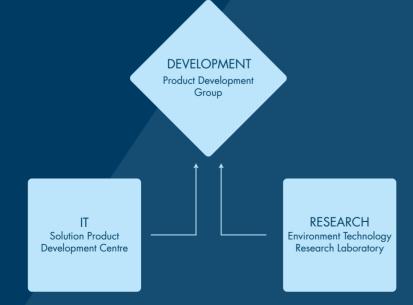
Going forward, we will elevate our technology edge to achieve further business expansion globally.





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.

### X' TENSIVE RANGE UP TO 66 HP





World's most advanced \*\*\*

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-66 HP with 31 models line-up for 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	66
Cooling Only																													

### 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.

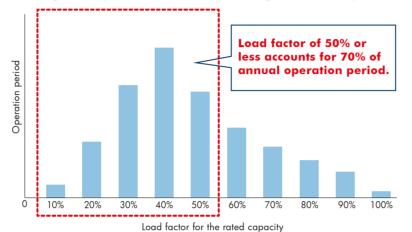
### **New Scroll Compressor\***

#### 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.

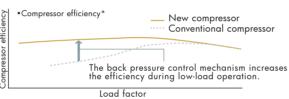
•Correlation between the load factor for the rated capacity and operation time

\*According to a survey by Daikin (based on Air Conditionina Network Service System data)



Hardware technology





#### \*Graph shown above is for illustration purposes only.

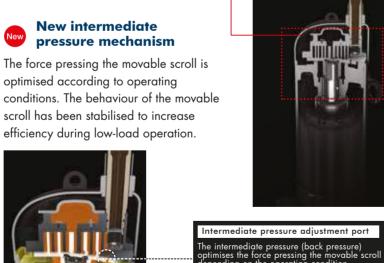
### **Back pressure control mechanism**

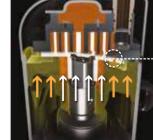
#### **Conventional mechanism**

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.

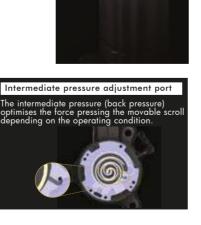


The force pressing the movable scroll decreases during low-load operation.





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



### Energy saving



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

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

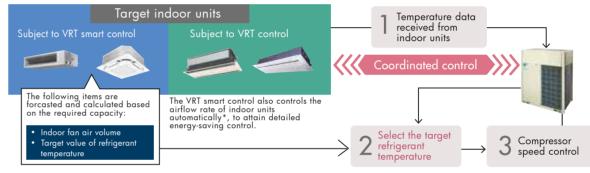
Software

#### 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

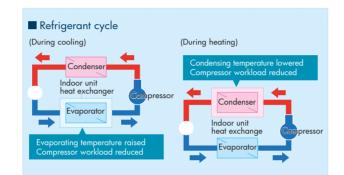
#### **Customise your VRV** system for optimal annual efficiency

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.

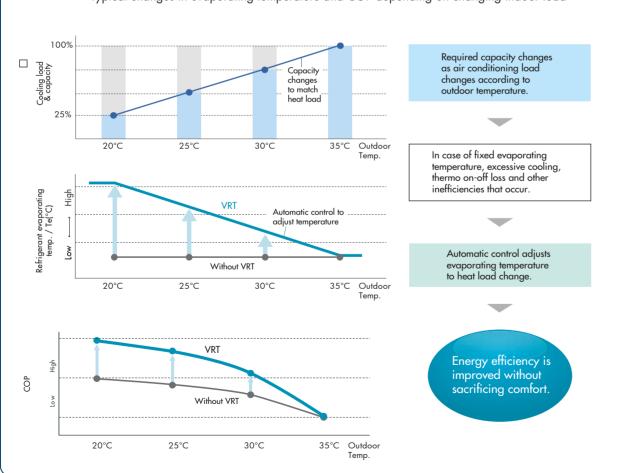
With this excellent technology, running costs are reduced.

#### 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.



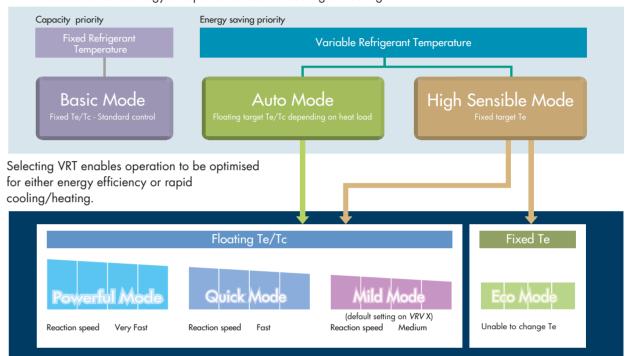
#### Typical changes in evaporating temperature and COP depending on changing indoor load



#### Fine control to match user preference available through mode selection

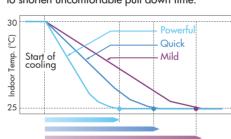
Basic mode is selected to maintain optimal comfort.

VRT is selected to save energy and prevent excessive cooling or heating.



mode

VRT offers quicker cool down to shorten uncomfortable pull down time.



The refrigerant temperature can go low in cooling (high in heating) than the set minimum (maximum in heating). Powerful mode

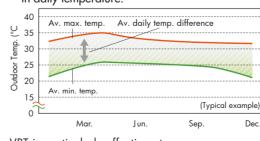
Gives priority to very fast reaction speed. The refrigerant temperature goes down (or up in heating) fast to keep the room setpoint stable.

Gives priority to fast reaction speed. Quick The refrigerant temperature goes down (or up in heating) fast to keep the room setpoint stable. mode

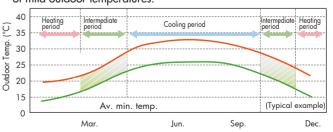
Mild Gives priority to efficiency. The refrigerant temperature goes down (or up in heating) gradually, giving priority to the efficiency of the system instead of the reaction speed.

### **Recommended for use in these situations**

 $\square$  Cooling only regions having differences in daily temperature.



☐ Cooling/heating regions having periods of mild outdoor temperatures



VRT is particularly effective at night when temperatures are low.

VRT is particularly effective during the intermediate periods.

### X' CELLENT TECHNOLOGY



# Large capacity all DC inverter compressor in compact casing

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

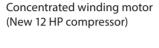
### Compact & high efficiency concentrated winding motor

Distributed winding motor (Current 8 HP compressor)

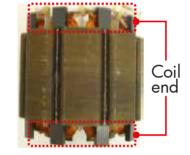








12



Realises highly integrated heat exchanger performance by

in airflow resistance by adopting small pipe size design.

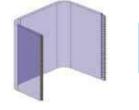
employing 3 rows and reduced fin pitch coil as well as reduction

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









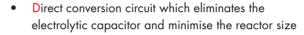


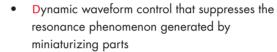
### 4D Inverter Technology

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

4Ds mean...

- Direct Inverter
- Dynamic
- Drive
- High Energy Density

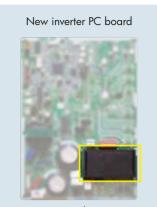




- Drive technology
- High Density integration of parts on small printed circuit board

Conventional inverter

lectrolytic capacitors



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.

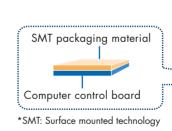
#### Excellent Performance

### Various advanced control main PC board

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

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

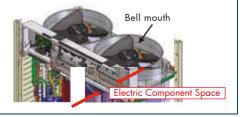
Protects your computer board from adverse effect of sandy and humid weather.





#### 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

#### 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.

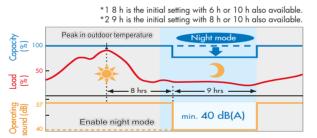
Without increasing operation sound, advanced analytic technologies are utilised to optimise fan design, increase airflow rate and external static pressure.



	Sound 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.

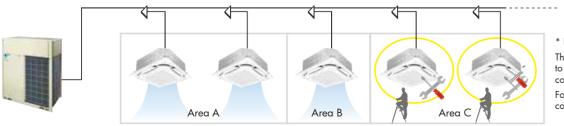


#### Notes:

- 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.

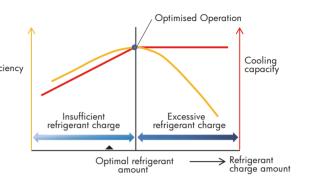
### Automatic Refrigerant Charge Function

Contribute to optimised operation efficiency, higher quality and easier installation

### **Optimised operation efficiency**

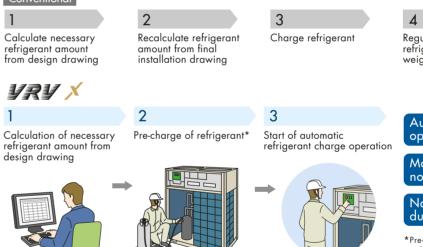
The automatic refrigerant charge function automatically determines the optimal amount of refrigerant to be charged.

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**



Area A Area B Area C contact Daikin sales office. operation is achieved.

### X' TENDED RELIABILITY

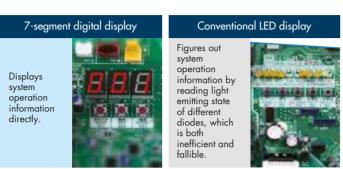
### MORE FLEXIBLE SYSTEM DESIGN



# 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.



#### **VRV** configurator

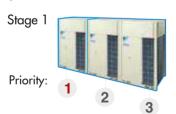
- The VRV configurator is an advanced solution that allows for easy system configuration and commissioning.
- Less time is required on the roof configuring the outdoor unit.
- Multiple system at different sites can be managed in exactly the same way, thus offering simplified commissioning for key accounts.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

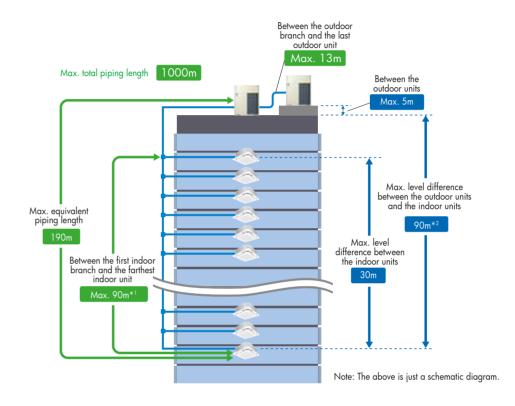
If malfunction occurs in an outdoor unit, emergency operation can be conveniently set and enabled by the remote controller for indoor unit (for systems composed of two or more outdoor units).



# 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)
Add the condition of the state of the said.	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%.

Connection ratio 50%—200%

Connection ratio =

Total capacity index of the indoor units

Capacity index of the outdoor units

Conditions of VRV indoor unit connection capacity

Conditions of VKV Indoor	unii connection c	шриспу		
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.

16

## OUTDOOR UNIT LINE-UP





#### 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.



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



### **Outdoor Units**

### The outdoor unit capacity is up to 66 HP in increment of 2 HP.

- VRV X outdoor unit offers a higher capacity of up to 66 HP, responding to the needs of large-sized buildings.
- 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

RXQ6A

RXQ8A RXQ10A

RXQ12A









RXQ20A RXQ215A

18, 20, 22 HP

• Double Outdoor Units

22, 24 HP



RXQ24A

RXQ28A RXQ30A

26, 28, 30 HP

• Double Outdoor Units

32, 34, 36, 38, 40, 44 HP



RXQ32A RXQ34A RXQ36A RXQ38A RXQ40A RXQ430A • Triple Outdoor Units

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



RXQ42A RXQ44A RXQ46A RXQ48A RXQ50A RXQ52A



54, 56, 58, 60, 66 HP

RXQ54A RXQ56A RXQ58A RXQ60A RXQ645A

#### 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	66
Cooling Only																													



### **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 76 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 40 50 63 71 80 100 125 140 170 200 250 400 500 FXFSQ-ARV
VRT Smart Control 0 FXCQ-AVM FXKQ-AV Slim Ceiling Mounted Duct 000 FXMQ-PA/PB
VRT Smart Control 000 0 0 0 0 FXMQ-NV Mid Static Ceilling Mounted Duct FXMQ-ARV 0 VRT FXHQ-MA/AV 0 FXUQ-AVEB FXAQ-ARV
VRT Smart Control 00000 Wall Mounted Floor Standing FXLQ-MA 00 Concealed Floor Standing 0 VRT FXNQ-MAVE Multi Cube/Spot FXPQ-AVM 0000 Floor Standing Duct VRT FXVQ-NY1(6) 0 FXBQ-PVE Clean Room Air Conditione 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



Ceiling Mounted Cassette (Double Flow) Type

FXCQ-AVM



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



Ceiling Mounted Cassette Corner Type

FXKQ-AV



Slim design for flexible



Slim Ceiling Mounted Duct Type

FXDQ-PDV



FXDQ-NDV



Slim design, quietness and static pressure switching

4-Way Flow Ceiling

This slim and stylish indoor unit

achieves optimum air distribution,

and can be installed without the

need for ceiling cavity.

Suspended Type

FXUQ-AVEB



Ceiling Mounted Duct Type

FXMQ-PA/PE



FXMQ-NV



High/Mid external static pressure allows flexible installations



Ceiling Suspended Type

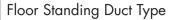
FXHQ-MA/AV



Slim body with quiet and wide airfĺow







(High static pressure type)







Wall Mounted Type

Stylish flat panel design

FXAQ-ARV











Multi Cube (Spot AC) Type

FXPQ-AVM











### **VRV** Indoor Units

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

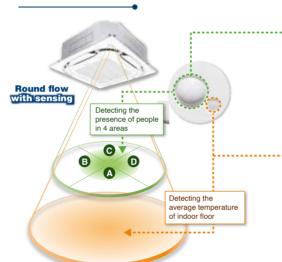
FXFSQ25A / FXFSQ32A / FXFSQ40A / FXFSQ50A / FXFSQ63A / FXFSQ80A / FXFSQ100A / FXFSQ125A / FXFSQ140A



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	approx. 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		14m	16m

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

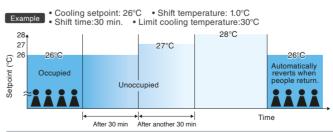
### **Various sensing functions**

### 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 o 120 minutes respectively with remote controller.

- Applicable when sensing panel (BYCQ140EEF6/BYCQ125EEK) is installed.
   These functions are not available when using the group control system.
   User can set these functions with remote controller.



### **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

Direct Airflow (default: OFF)

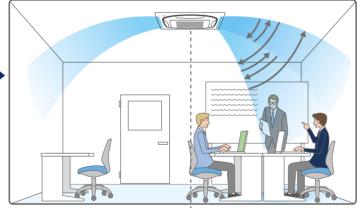


Optimal air direction by "Auto"

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

Cooling Dry

#### When human presence is detected



Optimal air direction by "Auto"

Swing (narrow)

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



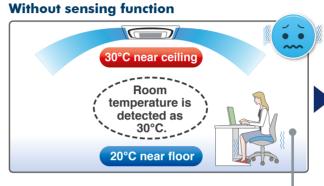
• When human is detected, air direction is set to "Swing (narrow)" to deliver cool air

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

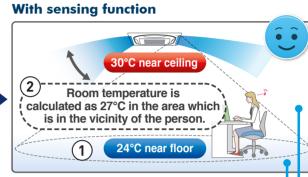
\*9.Airflow direction and airflow rate should be set to "Auto".

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.



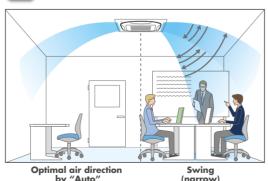
The floor temperature, which is lower than near the ceiling, is detected.

the temperature near the person as the room

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

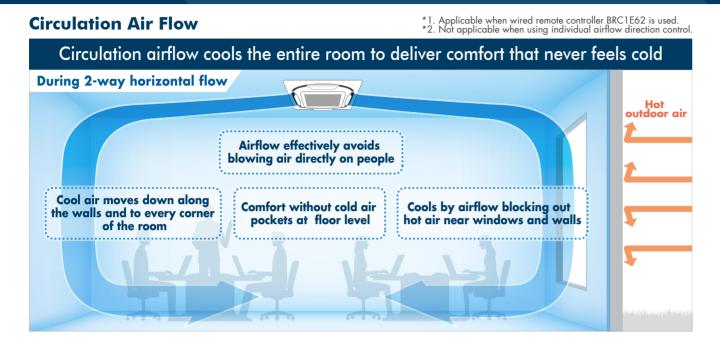


**Individual Airflow Direction Control** 

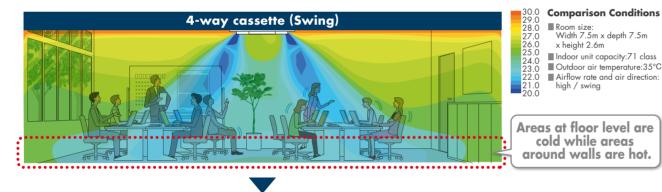


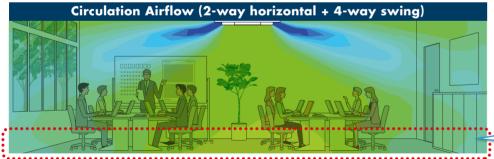
<sup>7.</sup> Please note that upon re-entering the room, air conditioner will not switch on automatically.





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



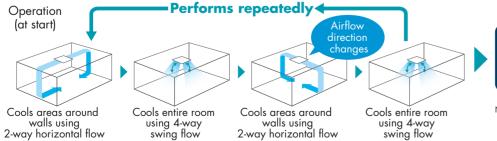


Approx. 5% energy savings by reducing uneven temperatures

\*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 mperature is reached normal operation (all-round flow) begins

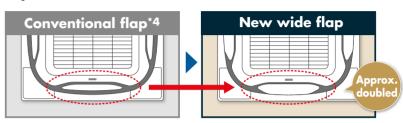
Note: Results may vary depending on and distance from indoor unit to walls

#### 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.



\*4. FXFQ-S model

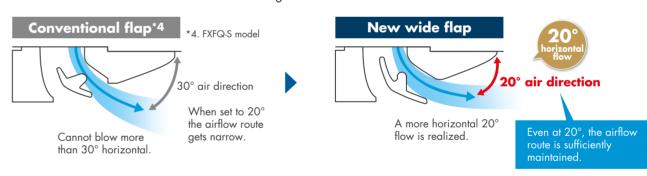
#### New wide flap construction inhibits ceiling dirt and grime

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



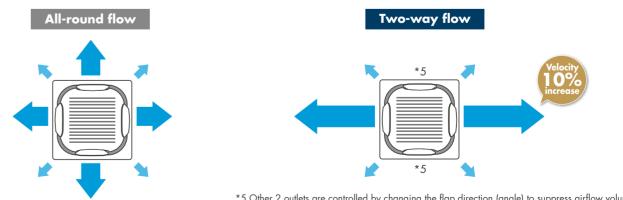
### 2 Optimising airflow angle (Horizontally)

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



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

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



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





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

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

(Up/down)

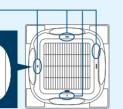
Position 0 Fixed airflow to

highest position)

BRC1E63

Easy setting is possible with a wired remote controller.







lowest position)

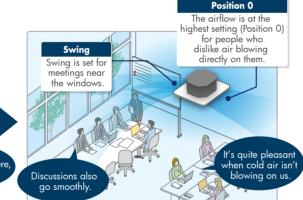
#### **Individual airflow settings**

- 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.

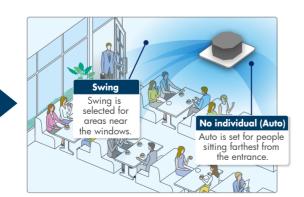
#### When individual airflow is selected, airflow direction can be adjusted to room layout.





#### 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)

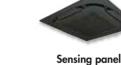


Standard panel<sup>11</sup> BYCQ125EAF9 (Fresh White)



BYCQ140EEF6 (Fresh White)





BYCQ125EEK (Black)

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

Designer panel BYCQ125EAPF (Fresh White)

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

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.

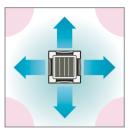
- Where the air is dusty and likely to soil the air condition
- Where simple and quick filter and grille cleaning is a worthwhile benefit



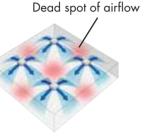
Auto grille panel\*1 BYCQ125EASF (Fresh White)

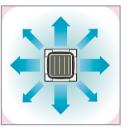
#### **Comfortable airflow**

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

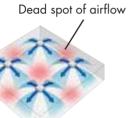


There are areas of uneven temperature.





There are much fewer areas of uneven temperature.



**Easy** maintenance

**Easy installation** 

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

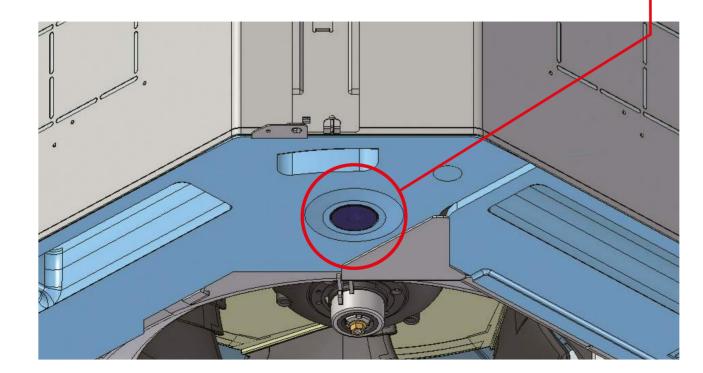
• Drain pump is equipped as a standard accessory

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.



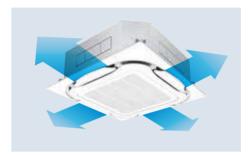
#### **Example of airflow patterns**

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.

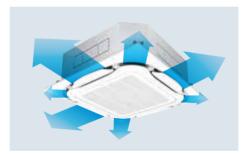
All-round flow



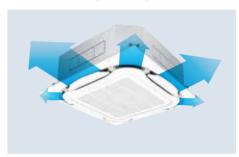
4-way flow



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



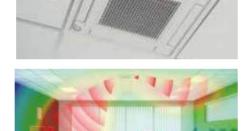
### **Quiet, Compact, Designed for** user comfort

### **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**

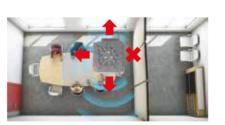
Two optional intelligent sensors improve energy efficiency and comfort.

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

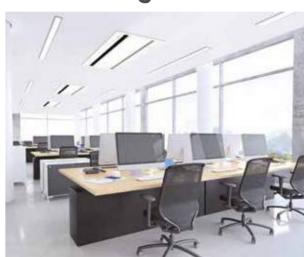
• Reduced energy consumption thanks to specially developed small tube heat exchanger, DC fan motor and drain pump.

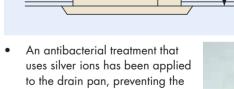
### Enhanced functions from various aspects such as

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

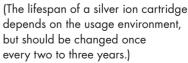


Adjuster Pocket





growth of slime, mould and bacteria that cause blockages and odours (The lifespan of a silver ion cartridge







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



### **VRV** Indoor Units

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

FXKQ32AV / FXKQ40AV FXKQ50AV / FXKQ63AV



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 Pane



ilver 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 minimize with multiple optional by spacers (25mm each) from 25mm to 75mm

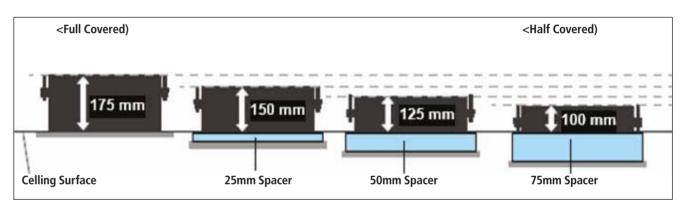
Note- Spacer colour- Dark gray

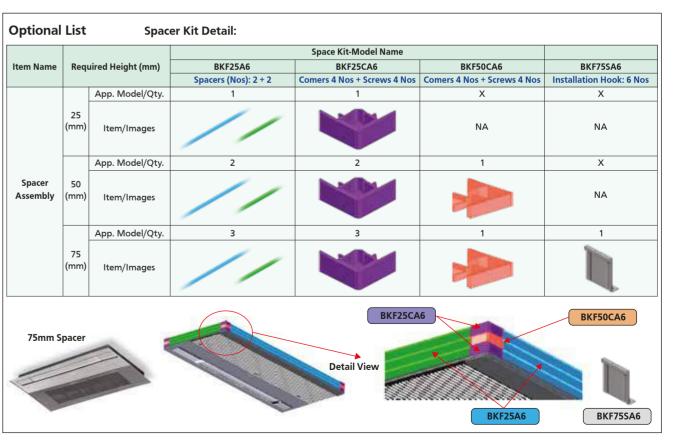
Standard Ceiling Height
175mm (6.88 Inches)

Reduced by 25mm
150mm (5.9 Inches)

Further
Reduced by 25mm
125mm (4.9 Inches)

Reduced by 25mm
100mm (3.9 Inches)





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### **VRV** Indoor Units

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

FXDQ20PD / FXDQ25PD / FXDQ32PD FXDQ40ND / FXDQ50ND / FXDQ63ND

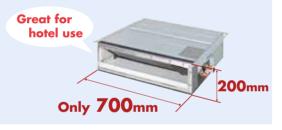


**VRT Smart Control** 

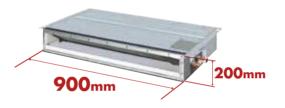
### Slim design, quietness and static pressure switching

### 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.



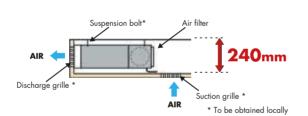
\* 1,100mm in width for the FXDQ63ND model.



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

Low operation sound	level			(dB(A))	
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	

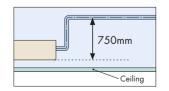
- \* The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB(A).
- \* Values are based on the following conditions: FXDQ-PD: external static pressure of 10 Pa; FXDQ-ND: external static pressure of 15 Pa.



 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



**VRT Smart Control** 

### 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

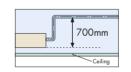
30 Pa-160 Pa for FXMQ40P

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.

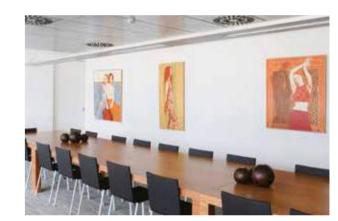


Control of the airflow rate has been improved from 2-step to 3-step control.

I	Low 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.

#### 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.

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### **VRV Indoor Units**

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

FXMQ40A / FXMQ50A / FXMQ63A FXMQ80A / FXMQ100A

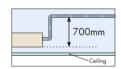


### Mid static pressure allows for flexible duct design

• 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

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

#### FXHQ125 / 140A



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

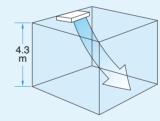
- The technology of the DC fan motor, wide sirocco fan, and large heat exchanger combine for greater airflow and quiet operation.
- Sophisticated design

and wide airflow

•Flap neatly closes when not in use.



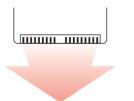
Suitable for high ceilings



- 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

dR(A)

			ab(, i)
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



# 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.
- The adoption of a fibre-less discharge grille, featuring an original design to prevent condensation, also helps prevent staining and makes cleaning easier.
- A long-life filter is equipped as standard accessory.
   \*8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m³





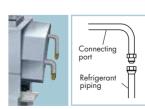
### **Concealed Floor Standing Type**

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.
  - $^{\star}$  8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m3









### **VRV** Indoor Units

### Floor Standing Duct Type

FXVQ125N / FXVQ200N FXVQ250N / FXVQ400N FXVQ500NY16



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

- Large airflow type that fits for spacious areas such as factories and
- 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.

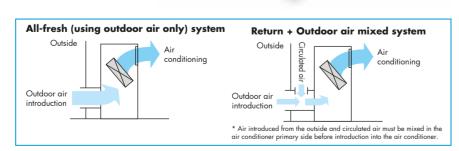


- Adding the plenum chamber (option) allows for simple operation with direct airflow.
  - \* Note that the operation sound increases by approximately 5 dB(A).



#### **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
- 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
- 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.

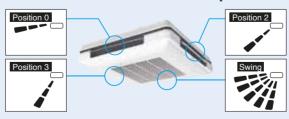


Built-in electronic expansion valve eliminates the need for a BEV unit, which improves flexibility of installation.



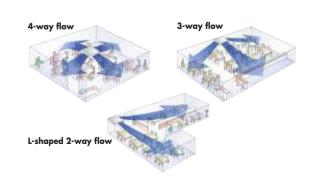
With adoption of the individual flap control, airflow direction adjustment can be individually set for each air outlet. Five directions of airflow and auto-swing can be selected with wired remote controller BRC1E62, which realizes the optimum air distribution.

#### 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 BRC1F62.
- 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

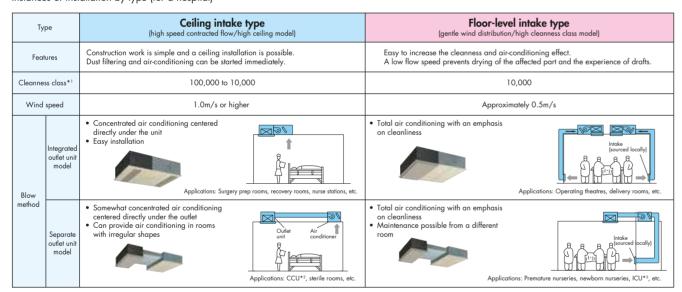
Daikin's clean room air conditioners are specially designed to achieve an environment cleanliness class 10,000. These air conditioners easily realize a cleanliness-class environment and help create a proper environment of hospitals, food and beverage factories, electronics factories and other spaces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

Instances of installation by type (for a hospital)



#### 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 word dedicated to the admission of potients with myocardial infarctions and other heart diseases.

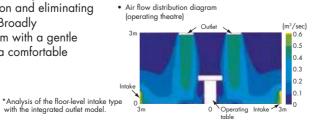
  \*3. ICU (Intensive Care Unit). A ward for the careful treatment and nursing of patients with serious illnesses, injuries, or recovering from operations.

#### 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



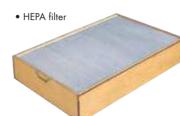
#### **Filtration**

#### 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 cleanliness in rooms with low air tightness.





Installation example (in a medical facility)

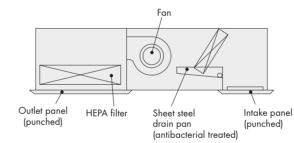
#### **Antibacterial**

#### 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
- . 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 ma
- 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 cleanliness of the room and hours of air conditioner operation.

# HFPA filter · Pre-filter replacemen

#### 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

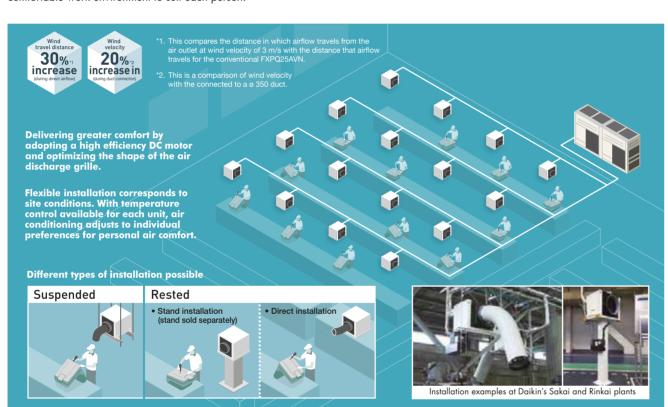
### Multi Cube (Spot AC) type for VRV system

#### FXPQ25AVM

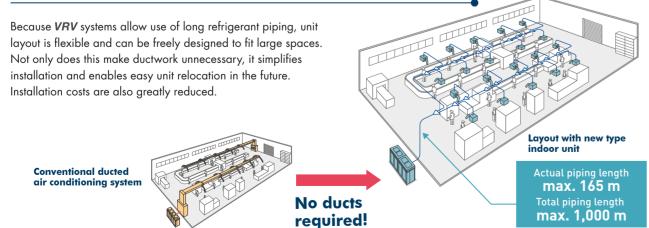


### Personal Air Comfort Delivered to Large Spaces

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).

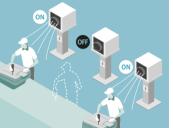


# Adjustable comfort for individual users

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

can set the temperature and airflow volume.

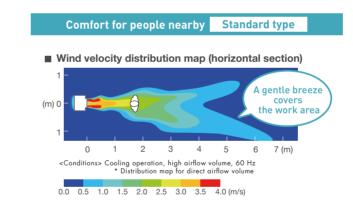
Moreover, since each unit can be turned ON and OFF, it is possible to reduce power consumption resulting from unnecessary operation and to eliminate associated costs.

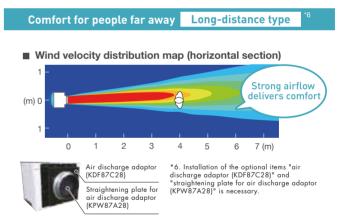


### Delivering comfort with a large volume of air

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**<sup>-7</sup> **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.

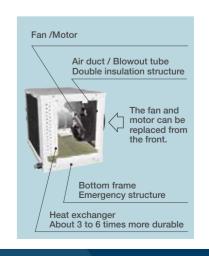
#### **Condensation suppression**

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

includes front access for fan motor replacement.



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## **SPECIFICATIONS**





### 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	у				•	1-ph	ase, 220-240V,	50Hz			
Cl:	Cooling capacity		9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800	54,600
Cooling cap			2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0
Power consumption kW		kW	0.0	)28	0.037	0.087	0.084	0.093	0.169	0.166	0.212
Casing						G	alvanised steel pla	ıte			
A - II .	/11/1144/44/441/11	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
Airflow rate	(H/HM/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	Sound level (H/HM/M/ML/L) dB(A)		30/29.5/28.5/28/27		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		256×840×840 298×840×840							
Machine wei	ight	kg	19			22			2	25	26
D: :	Liquid (Flare)			Ø	6.4		Ø 9.5				
Piping connections	Gas (Flare)	mm		Ø 1	2.7				Ø 15.9		
COMMOCHONIS	Drain					VP25 (Exter	rnal Dia, 32/Inter	nal Dia, 25)			
Standard	Model					BYCG	Q125EAF9 (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;
  Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
  Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. During actual operation, these values are normally somewhat higher as a result of ambient conditions.



Decora	tion Panel (Optio	n)	Round Flow Type
	•	•	FXFSQ-A
C1	MODEL		BYCQ125EAF9 (Fresh White ) / BYCQ125EAK (Black)
Standard panel	Dimensions (H×W×D) mn		50×950×950
pane.	Weight kg		5.5
	Model		BYCQ140EEF6 (Fresh White ) / BYCQ125EEK
Sensing panel	Dimensions (H×W×D) mm		50×950×950
pane.	Weight	kg	5.5
<b>.</b>	Model		BYCQ125EAPF (Fresh White)
Designer panel	Dimensions (HxWxD)	mm	97×950×950
pano	Weight	kg	6.5
Auto	Model		BYCQ125EASF (Fresh White)
grille	Dimensions (H×W×D) mm		105×950×950
panel	Weight	kg	8





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, 50Hz						
Caalian annaita		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		
Power consumption	Power consumption kW		0.0	073	0.076	0.089	0.15		
Casing			Galvanised steel plate						
Airflow rate (H/M/I	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		
Airriow rate (II/M/)	<u>-)</u>	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 (HxWx	D)	mm		260×575×57	75 (For depth add 63mm for	electrical box)			
Machine weight		kg	15	5.5	16	5.5	18.5		
Liquid (Flare)				·	φ6.4				
Piping connections	Gas (Flare)	mm			φ12.7				
	Drain			VP20	(External Dia. 26/Internal D	ia. 20)			

Note: Specifications are based on the following conditions;

- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
   Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (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-pha	se, 220-240 V/	50 Hz			
G 1: ':		Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	47,800	
Cooling capacity	cooling capacity kW			3.6	4.5	5.6	7.1	9.0	14.0	
Power cunsumpti	on	kW	0.0	039	0.041	0.059	0.063	0.090	0.149	
Casing					G	alvanised steel pla	ate			
A . (1 . /1.11.1	/44 /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	406/371/3	35/300/282	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 (HxV	V×D)	mm	305x775x620			305x990x620 305x1,445x620			145x620	
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			
Drain			VP25 (External Dia, 32/Internal Dia, 25)							
Model			BYBCQ40CF		BYBC	Q63CF	ВУВСС	125CF		
Panel Colour					Fresh	white (6.5Y 9.5	white (6.5Y 9.5/0.5)			
(Option)	Dimensions(H×W×D)	mm	55x1,070x700			55x1,285x700		55x1,740x700		
	Weight	kg		10		1	1	13		

- Note: Specifications are based on the following conditions;

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

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

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

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

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



	Model			FXKQ32AV16	FXKQ40AV16
Power supply	/			1 phase, 220-240 V, 50 Hz	1 phase, 220-240 V, 50 Hz
Cooling capa	city		Btu/h	12,300	15,400
Cooling capa	City		kW	3.6	4.5
Power consumption kW			kW	0.024	0.029
Casing / Colo	Casing / Colour			Galvanized steel plate	Galvanized steel plate
Dimensions:	(H × W × D)		mm	145 × 1,210 × 523	145 × 1,210 × 523
	Airflow rate (H / HM / M / ML / L)	Cooling	m³/min	9.7 / 9.3 / 8.9 / 8.7 / 8.5	11.1 / 10.3 / 9.5 / 9.0 / 8.6
Fan		Cooling	cfm	342 / 328 / 314 / 307 / 300	392 / 364 / 335 / 318 / 304
		Heating	m³/min	11.2 / 10.8 / 10.4 / 10.1 / 9.9	12.9 / 12.0 / 11.0 / 10.6 / 10.1
		riealing	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	ipes mm		φ12.7 (flare connection)	φ12.7 (flare connection)
COMMICCIONS	Drain pipe		mm	φ26 (ho <b>l</b> e)	φ26 (ho <b>l</b> e)
Mass			kg	20	20
Sound pressi (H / HM / M /			dB(A)	36 / 35 / 34 / 34 / 33	39 / 37 / 36 / 35 / 34
	Madal			Fuse	Fuse
Model			BYKQ63AHW / BYKQ63AHS	BYKQ63AHW / BYKQ63AHS	
Decoration panel	Colour			White A	Silver
(option)	Dimensions: (	H × W × D)	mm	1,390 × 595 × 41	1 390 × 595 × 41
	Air filter			Resin net (with mould resistance)	Resin net (with mould resistance)
	Mass		kg	6.6	6.6

- 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 m.

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

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

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



### **VRV** Indoor Units

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



	Model			FXKQ50AV16	FXKQ63AV16
Power supply	у			1 phase, 220-240 V, 50 Hz	1 phase, 220-240 V, 50 Hz
Cooling capa	noity		Btu/h	19,100	24,200
Cooling cap	acity		kW	5.6	7.1
Power consumption kW			kW	0.037	0.053
Casing / Colo	our			Galvanized steel plate	Galvanized steel plate
Dimensions:	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		cfm	466 / 431 / 392 / 364 / 335	614 / 544 / 491 / 438 / 381
	(H / HM / M / ML / L)	Heating	m³/min	15.3 / 14.1 / 12.9 / 12.0 / 11.0	19.7 / 18.2 / 16.6 / 15.1 / 13.6
			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)
00111100110110	Drain pipe		mm	φ26 (ho <b>l</b> e)	φ26 (ho <b>l</b> e)
Mass			kg	20	20
Sound press (H / HM / M /			dB(A)	43 / 41 / 39 / 37 / 36	49 / 47 / 45 / 43 / 41
Model			BYKQ63AHW / BYKQ63AHS	BYKQ63AHW / BYKQ63AHS	
Decoration	Colour			White /	Silver
pane <b>l</b> (option)	Dimensions:	(H × W × D)	mm	1,390 × 595 × 41	1,390 × 595 × 41
, ,	Air filter			Resin net (with mould resistance)	Resin net (with mould resistance)
	Mass		kg	6.6	6.6

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 m.

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

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

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

### **VRV** Indoor Units

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



MODE	L with dr	ain pump	FXDQ20PDVM FXDQ20PDV36	FXDQ25PDVM FXDQ25PDV36	FXDQ32PDVM FXDQ32PDV36			
Power supply			1-phase, 220-240 V/220 V, 50 Hz					
Cooling capacity  Btu/I kW		Btu/h	7,500	9,600	12,300			
		kW	2.2	2.8	3.6			
Power consumption kW		kW	0.0	86	0.089			
Casing				Galvanised steel plate				
A : [] //	111/11/11	m³/min	8.0/7.2/6.4	8.0/7.2/6.4	8.0/7.2/6.4			
Airflow rate (	ΠΠ/ Π/ L)	cfm	282/254/226 282/254/226		282/254/226			
External static	pressure	Pa	30-10* <sup>2</sup>					
Sound level (H	H/H/L) *1*3	dB(A)	33/31/29	33/31/29	33/31/29			
Dimensions (H	lxWxD)	mm	200×700×620	200×700×620	200×700×620			
Machine weig	ıht	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			
COTTRECTIONS	Drain		VP	20 (External Dia, 26/Internal Dia, 2	0)			

#### 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.

  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 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).



### **VRV** Indoor Units

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



MODE	with dro	ain pump	FXDQ40NDVM FXDQ40NDV36	FXDQ50NDVM FXDQ50NDV36	FXDQ63NDVM FXDQ63NDV36				
Power supply			1-phase, 220-240 V/220 V, 50 Hz						
Cooling capacity		Btu/h	15,400	19,100	24,200				
		kW	4.5	5.6	7.1				
Power consumption		kW	0.160	0.165	0.181				
Casing				Galvanised steel plate					
A: (1 /	11./11./11	m³/min	10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0				
Airflow rate (	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				
	Drain		\	P20 (External Dia, 26/Internal Dia, 2	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.

  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 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 dr	ain pump	FXMQ40ARV1 FXMQ40ARV16	FXMQ50ARV1 FXMQ50ARV16	FXMQ63ARV1 FXMQ63ARV16	FXMQ80ARV1 FXMQ80ARV16	FXMQ100ARV1 FXMQ100ARV16		
Power supply				1-ph	ase, 220-240 V, 50 Hz				
Cooling capacity		Btu/h	15,400	19,100	24,200	30,700	38,200		
cooming capa	/	kW	4.5	5.6	7.1	9.0	11.2		
Power consumption kW		kW	0.160	0.210	0.186	0.300	0.345		
Casing				Galvanized Steel Plate					
4: n . n	11.71.71	m³/min	15/12	19/16	24/20	30/25	34/29		
Airflow rate (I	HH/H/L)	cfm	530/425	671/565	848/706	1060/883	1200/1024		
External static	pressure	Pa		30-60					
Sound level (H	I/L)	dB(A)	39/37	41/39	42/40	43/41	44/42		
Dimensions (H	lxWxD)	mm	300x70	00x700	300x1000x700				
Machine weight kg		kg	27	28	35	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)				
COLLIGCTIONS	Drain			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.

  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							
Cli	-ta	Btu/h	7,500	9,600	12,300	15,400	19,100			
Cooling capa	city	kW	2.2	2.8	3.6	4.5	5.6			
Power consumption kW		kW	0.056		0.060	0.151	0.128			
Casing					Galvanised steel plate					
A: (1 . //	11.71.71	m³/min	9/7.5/6.5		9.5/8/7	16/13/11	18/16.5/15			
Airflow rate (I	1H/H/L)	cfm	318/265/230		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	H/H/L)	dB(A)	33/3	1/29	34/32/30	39/37/35	41/39/37			
Dimensions (H	l×W×D)	mm		300X550X700		300X700X700	300X1,000X700			
Machine weight kg		kg		25	27	35				
Liquid (Flare)					Ø 6.4					
Piping connections	Gas (Flare)	mm			Ø 12.7					
connections	Drain			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						
Cl:	ts	Btu/h	24,200	30,700	38,200	47,800	54,600		
Cooling capa	city	kW	7.1	9.0	11.2	14.0	16.0		
Power consumption kW		kW	0.138	0.185	0.215	0.284	0.405		
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 statio	pressure	Pa		50-200 (100)*2	50-200 (100)*2	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	300×1,0	00x700		300×1,400×700			
Machine weight kg		kg	3	5	4	15	46		
Liquid (Flare)					9.5				
Piping connections	Gas (Flare)	mm			15.9				
	Drain			VP25 (E	xternal Dia, 32/Internal	Dia, 25)			

#### 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.
   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



### **VRV** Indoor Units

### **Ceiling Mounted Duct Type**



	MODEL		FXMQ170NVE6	FXMQ200NVE6	FXMQ250NVE6			
Power supply	,			1-phase, 220, 240 V/220 V, 50	Hz			
C 1: ::		Btu/h	65,800	76,400	95,500			
Cooling capa	icity	kW	19.3	22.4	28			
Power consumption		kW	0.9	1.1	1.65			
Casing				Galvanised steel plate				
A: (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 (I	H×W×D)	mm	440x1,1	90x1,090	440x1,490x1,090			
Machine weig	ght	kg	1	10	130			
	Liquid (Flare)			Ø 9.5	•			
Piping connections	Gas (Flare)	mm	Ø	19.1	Ø 22.2			
CONNECTIONS	Drain			External Dia 32				

#### 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.
   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".

### **Ceiling Suspended Type**



	MODEL		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE	FXHQ125AVM	FXHQ140AVM	
Power supply			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	
Power consumption kW		kW	0.111	0.115	0.135	0.168	0.181	
		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	H/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	i90×690	
Machine weig	ht	kg	24	28	33	4	11	
	Liquid (Flare)		<b>\$\phi\$</b> 6.4		$\phi$	9.5 5.9		
Piping connections	Gas (Flange)	mm	<i>ф</i> 12.7		<i>φ</i> 1			
	Drain	] [		VP20 (External Dia. 26/Internal Dia. 20)				

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

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

### 4-way Flow Ceiling Suspended Type



	MODEL		FXUQ71AVEB	FXUQ100AVEB		
Power supply	,		1-phase, 220-240 V/220-230V, 50 Hz			
C !: ::		Btu/h	27,300	38,200		
Cooling capa	icity	kW	8.0	11.2		
Power consumption		kW	0.090	0.200		
Casing			Fresh white			
Airflow rate (	ш/1)	m³/min	22.5/19.5/16	31/26/21		
Airriow rate (	п/ L)	cfm	794/688/565	1,094/918/741		
Sound level (H	H/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	15.9			
COMPONIONS	Drain		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.
   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 FXAQ32RVE6	FXAQ40ARVM FXAQ40ARVE6	FXAQ50ARVM FXAQ50ARVE6	FXAQ63ARVM FXAQ63ARVE6	
Power supply			1-phase, 220 V/220 V, 50 Hz						
c l·	B		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	
Power consumption kW		kW	0.017	0.019	0.021	0.022	0.027	0.056	
Casing			White (N9.5)						
Airflow rate (	u /1\	m³/min	7.5/4.5	9/5	11/5.5	13/9	15/12	19/14	
Alfillow rale (	ri/ L)	cfm	265/159	318/177	388/194	459/318	530/424	671/494	
Sound level (H	1/L)	dB(A)	35/31	36/31	38/31	39/34	42/37	47/41	
Dimensions (H	H×W×D)	mm	298×929×258						
Machine weig	ght	kg	13.0						
	Liquid (Flare)			Ø 6.4					
Piping connections	Gas (Flare)	mm		Ø 12.7				Ø 15.9	
COMMODITIONS	Drain			,	VP13 (External Dia, 18/Internal Dia, 13)				

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



### **VRV Indoor Units**

### Floor Standing Type/Concealed Floor Standing Type





MODEL							
'	MODEL		FXNQ32MAVE8	FXNQ50MAVE8	FXNQ63MAVE8		
Power supply			1-phase, 220-240 V/220 V, 50 Hz				
Cooling capacity  Btu/h  kW		Btu/h	12,300	19,100	24,200		
		kW	3.6	5.6	7.1		
Power consumption kW			0.090	0.110			
Casing			FXLQ: Ivory white (5Y7.5/1)/FXNQ: Galvanised steel plate				
A: (1 . /1.//	,	m³/min	8/6	14/11	16/12		
Airflow rate (H/I	-)	cfm	282/212	494/388	565/424		
Sound level (H/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		
(H×W×D)	FXNQ		610×1,070×220	610×1,350×220	610×1,350×220		
Machine weight	FXLQ	kg	30.0	36.0	36.0		
weight	FXNQ	9	23.0	27.0	27.0		

Ø 6.4

Ø 12.7

21O.D.

ø 9.5

Ø 15.9

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

Liquid (Flare)

Gas (Flare)

Drain

Ø 6.4

Ø 12.7

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

### Floor Standing Duct Type



	MODEL		FXVQ125NY1	FXVQ200NY1	FXVQ250NY1	FXVQ400NY1	FXVQ500NY16	
Power supply	,		3-phase 4-wire system, 380 -415 V, 50 Hz					
C 1:	C 1: '1		47,800	76,400	95,500	1,54,000	1,91,000	
Cooling capacity		kW	14.0	22.4	28.0	45.0	56.0	
Power consumption kW		kW	0.53	1.33	1.61	3.97	5.25	
Casing colou	r		Ivory white (5Y7.5/1)					
Dimensions (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 Filter	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 (E	Brazing)	
COTTROCTIONS	Drain			R	p1 (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.
   Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.
   1: Sound level: measured when the air discharge outlet duct (2 m) is attached (anechoic chamber conversion value). It increases by approximately 5 dB(A) when the plenum chamber is installed to deliver direct airflow.
   2: The value is the external static pressure with standard pulley.

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



	TYPE			Integrated outlet unit model		Separate outlet unit model		
	Indoor unit		FXBQ40PVE FXBQ50PVE		FXBQ63PVE	FXBPQ63PVE		
MODEL	Outlet unit		Integrated with the indoor unit		it	BAF82A63		
Power suppl	у			1-phase, 220-240	) V/220 V, 50/60 Hz	•		
Btu/h		Btu/h	15,400 19,100		24,200	24,200		
Cooling cap	acity	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 gra	vimetric method			
Outlet HEPA filter efficiency *2			99.97% by DOP method *5					
Indoor unit weight kg			140 *3		185 *3	120 *6		
Casing				Galvanis	ed steel plate			
	41.43	cfm	19.5/17.5		26,	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 w	veight	kg			_	65 *3		
	Liquid (Flare)		Ø	6.4	Ø	9.5		
Piping connections	Gas (Flare)	mm	ø	12.7	øl	15.9		
LOTHICCHOILS	Drain		PTIB					
Filter(Option)	HEPA filter		BAFH8	2A50	BAFH	82A63		
Panel	Ceiling intake type	Model	BYB82	A50C	BYB82A63C	BYB82A63CP		
(Option)	Floor-level intake type		BYB82	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.

 $\star$ 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.

### Multi Cube (Spot AC) type)

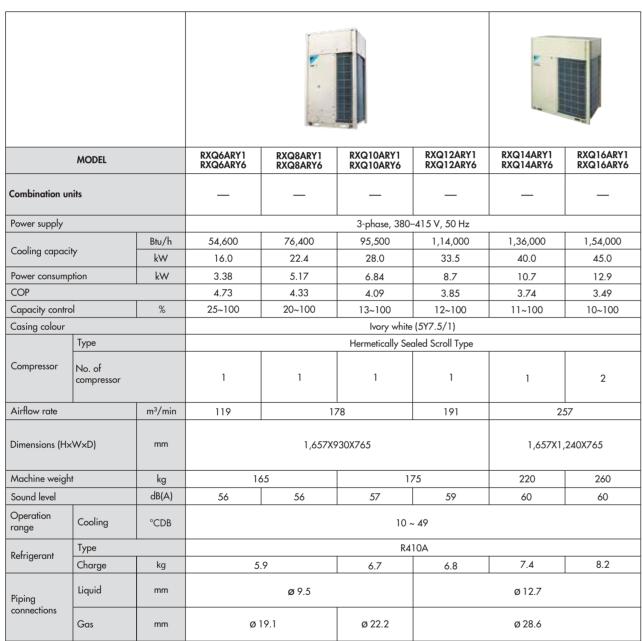


	MODEL		FXPQ25AVM		
Power Supply			1 Phase, 50Hz, 220-240 V		
	Cooling		2800		
Capacity (watt)	Heating		3200		
Dimension	(HXWXD) mm		455X555X470		
Casing			Galvanised Steel plate		
	Туре		Propeller Fan		
		СМН	13.5 / 11.0		
Fan	Airflow Rate (H/L)	CFM	477 / 393		
	External Static Pressure	PA	5		
	Drive	•	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)		



### **Outdoor Units**

### VRV X (Cooling Only)



- 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.

  (ES) for anticorrosion treated outdoor unit.

### **Outdoor Units**

### VRV X (Cooling Only)

	MODEL		RXQ18ARY1/RXQ18ARY6	RXQ20ARY1/RXQ20ARY6	RXQ22ARY1/RXQ22ARY6	RXQ24ARY1/RXQ24ARY6		
			_	_	RXQ10ARY1/RXQ10ARY6	RXQ12ARY1/RXQ12ARY6		
Combination units			_	_	RXQ12ARY1/RXQ12ARY6	RXQ12ARY1/RXQ12ARY6		
			_	_	_	_		
Power supply				3-phase, 380-	-415 V, 50 Hz			
Cooling canac	ooling capacity  Btu/h		1,71,000	1,91,000	2,10,000	2,29,000		
cooming capacity		kW	50.0	56.0	61.5	67.0		
Power consumption kW		15.3	17.7	15.5	17.4			
COP		3.27	3.16	3.97	3.85			
Capacity contr	ol	%	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	257	297	178+191	191+191		
Dimensions (H	×W×D)	mm	1,657X1,	240X765	(1,657X930X765)+(1,657X930X765)			
Machine weigl	ht	kg	260	285	175+	175		
Sound level		dB(A)	61	65	61	62		
Operation range	Cooling	°CDB		10 ~	. 49			
D (	Туре			R41	10A			
Refrigerant	Charge	kg	8.4	11.8	6.7+6.8	6.8+6.8		
Piping	Liquid	mm		Øl	5.9			
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.

  (ES) for anticorrosion treated outdoor unit.



### **Outdoor Units**

#### VRV X (Cooling Only)



- Note: Specifications are based on the following conditions:

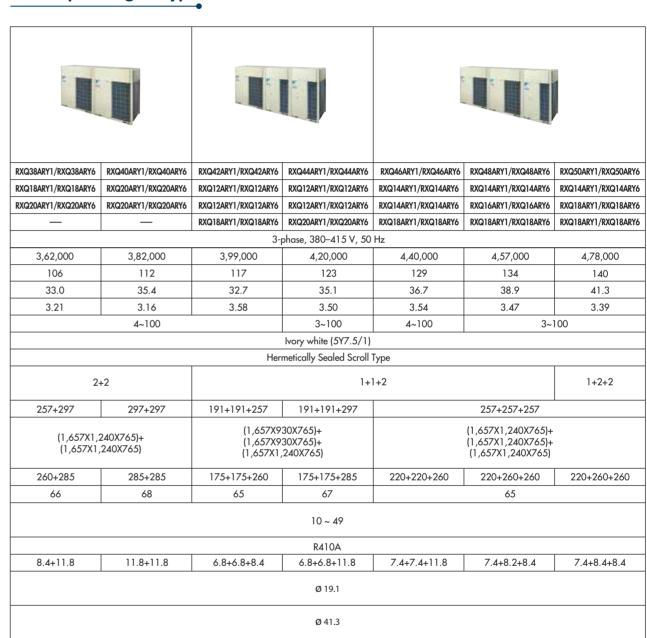
  Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.

  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.
- (ES) for anticorrosion treated outdoor unit.

### **Outdoor Units**

#### **VRV X (Cooling Only)**



- 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.

  (ES) for anticorrosion treated outdoor unit.



### **Outdoor Units**

### VRV X (Cooling Only)

	MODEL		RXQ52ARY1/RXQ52ARY6	RXQ54ARY1/RXQ54ARY6	RXQ56ARY1/RXQ56ARY6	RXQ58ARY1/RXQ58ARY6	RXQ60ARY1/RXQ60ARY6		
			RXQ16ARY1/RXQ16ARY6	RXQ18ARY1/RXQ18ARY6	RXQ18ARY1/RXQ18ARY6	RXQ18ARY1/RXQ18ARY6	RXQ20ARY1/RXQ20ARY6		
Combination units			RXQ18ARY1/RXQ18ARY6	RXQ18ARY1/RXQ18ARY6	RXQ18ARY1/RXQ18ARY6	RXQ20ARY1/RXQ20ARY6	RXQ20ARY1/RXQ20ARY6		
			RXQ18ARY1/RXQ18ARY6	RXQ18ARY1/RXQ18ARY6	RXQ20ARY1/RXQ20ARY6	RXQ20ARY1/RXQ20ARY6	RXQ20ARY1/RXQ20ARY6		
Power supply				3	-phase, 380–415 V, 50 H	· Iz			
Cooling capaci	Cooling capacity  Btu/		4,95,000	5,12,000	5,32,000	5,53,000	5,73,000		
kW		kW	145	150	156	162	168		
Power consumption kW			43.5	43.9	48.3	50.4	53.1		
COP			3.33	3.27	3.23	3.20	3.16		
Capacity control %			_	3~	100	_	2~100		
Casing colour					Ivory white (5Y7.5/1)				
	Туре		Hermetically Sealed Scroll Type						
Compressor	No. of compressor		2+2+2						
Airflow rate		m³/min	2	57+257+257		257+297+29	7		
Dimensions (Hx	«W×D)	mm	(1,657X1,240X765 + 1,657X1,240X765 + 1,657X1,240X765)						
Machine weigh	ıt	kg	260+26	60+260	260+260+285	260+285+285	285+285+285		
Sound level		dB(A)	65	66	68	69	70		
Operation range	Cooling	°CDB			10 ~ 49				
- 6.	Туре				R410A				
Refrigerant	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						

- 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.

  (ES) for anticorrosion treated outdoor unit.

### **Outdoor Units**

### VRV X (Cooling Only)

MC	ODEL		RXQ215ARY6B	RXQ430ARY6B	RXQ645ARY6B		
			_	RXQ215ARY6B	RXQ215ARY6B		
Combination Units			_	RXQ215ARY6B	RXYQ215TRY6B		
					RXQ215ARY6B		
Power Supply			3-Phase, 380-415 V, 50Hz				
C 1: C ::	E	Btu/h	204,700	409,400	614,100		
Cooling Capacity		ζW	60	120	180		
Power Consumption	Power Consumption kW		19.7	39.4	59.1		
COP	-		3.05	3.05	3.05		
Capacity Control	g,	%	50-130	50-130	50-120		
Casing Colour			Ivory white (5Y7.5/1)				
C	Туре		Hermetically Sealed Scroll Type				
Compressor	No. of compr	essor	2	4	6		
Airflow Rate	r	m³/min	297	594	891		
Dimensions (HXWX)	D) r	mm	1,657X1,240X765	(1,657X1,240X765)+ (1,657X1,240X765)	(1,657X1,240X765)+ (1,657X1,240X765)+ (1,657X1,240X765)		
Machine weight	ŀ	⟨g	285	285+285	285+285+285		
Sound level	C	dB(A)	65	68	70		
Operation Range	Cooling	CDB	10~49	10~49	10~49		
Refrigerant	Туре			R410A			
Keingerun	Charge K	(g	11.8	11.8+11.8	11.8+11.8+11.8		
Piping connections	Liquid r	mm	ф 15.9 (Brazing)	ф 19.1 (Brazing)	ф 19.1 (Brazing)		
riping connections	Gas r	mm	ф 28.6 (Brazing)	ф 41.3 (Brazing)	ф 41.3 (Brazing)		

- Note: Specifications are based on the following conditions:

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

  Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

  (ES) for anticorrosion treated outdoor unit.

## OUTDOOR UNIT COMBINATIONS







#### **VRV** X

HP	Capacity index	Model name	Combination for cooling only	Outdoor unit multi connection piping kit *1	Total capacity index of connectable indoor units*2	Maximum number of connectable indoor units*2
6	150	RXQ6A	RXQ6A	_	75 to 195 (300)	9 (15)
8	200	RXQ8A	RXQ8A	_	100 to 260 (400)	13 (20)
10	250	RXQ10A	RXQ10A	_	125 to 325 (500)	16 (25)
12	300	RXQ12A	RXQ12A	_	150 to 390 (600)	19 (30)
14	350	RXQ14A	RXQ14A	_	175 to 455 (700)	22 (35)
16	400	RXQ16A	RXQ16A	_	200 to 520 (800)	26 (40)
18	450	RXQ18A	RXQ18A	_	225 to 585 (900)	29 (45)
20	500	RXQ20A	RXQ20A	_	250 to 650 (1,000)	32 (50)
22	550	RXQ22A	RXQ10A + RXQ12A		275 to 715 (880)	35 (44)
24	600	RXQ24A	RXQ12A x 2	7 [	300 to 780 (960)	39 (48)
26	650	RXQ26A	RXQ12A + RXQ14A	1 [	325 to 845 (1,040)	42 (52)
28	700	RXQ28A	RXQ12A + RXQ16A	1 [	350 to 910 (1,120)	45 (56)
30	750	RXQ30A	RXQ12A + RXQ18A	BHFP22P1006	375 to 975 (1,200)	48 (60)
32	800	RXQ32A	RXQ14A + RXQ18A	BHIFZZF1000	400 to 1,040 (1,280)	52 (64)
34	850	RXQ34A	RXQ16A + RXQ18A	Π Γ	425 to 1,105 (1,360)	55 (64)
36	900	RXQ36A	RXQ18A x 2	7	450 to 1,170 (1,440)	58 (64)
38	950	RXQ38A	RXQ18A + RXQ20A	7 [	475 to 1,235 (1,520)	61 (64)
40	1,000	RXQ40A	RXQ20A x 2		500 to 1,300 (1,600)	
42	1,050	RXQ42A	RXQ12A x 2 + RXQ18A		525 to 1,365 (1,365)	
44	1,100	RXQ44A	RXQ12A x 2 + RXQ20A		550 to 1,430 (1,430)	
46	1,150	RXQ46A	RXQ14A + RXQ14A + RXQ18A	Π Γ	575 to 1,495 (1,495)	
48	1,200	RXQ48A	RXQ14A + RXQ16A + RXQ18A	7 [	600 to 1,560 (1,560)	
50	1,250	RXQ50A	RXQ14A + RXQ18A + RXQ18A	BHFP22P1516	625 to 1,625 (1,625)	64 (64)
52	1,300	RXQ52A	RXQ16A + RXQ18A × 2	BHIFZZF1310	650 to 1,690 (1,690)	
54	1,350	RXQ54A	RXQ18A x 3	7 [	675 to 1,755 (1,755)	
56	1,400	RXQ56A	RXQ18A × 2 + RXQ20A	7 [	700 to 1,820 (1,820)	
58	1,450	RXQ58A	RXQ18A + RXQ20A × 2	7	725 to 1,885 (1,885)	
60	1,500	RXQ60A	RXQ20A × 3	7	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.

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### **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		e		BYCQ125EAF9 *		
		Standard panel	Black			BYCQ125EAK *		
1	Decoration	Designer panel <sup>1</sup>	Fresh white			BYCQ125EAPF *		
1	panel	Auto grille panel <sup>2,3</sup>	Fresh whit	e		BYCQ125EASF *		
		Sencing panel	Fresh whit	e		BYCQ140EEF6 *		
		Sencing panel	Black			BYCQ125EEK *		
2	Soaling mater	Sealing material of air discharge outlet <sup>4</sup>		of 3-4-way flow		KDBH551C160		
2	Sealing material of all discharge officer		For usage of 2-way flow		KDBH552C160			
3	Panel spacer					KDBP55H160FA		
				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) 8			
			Direct installation type 7		KDDP55X160A			
5	High-efficienc		(Colorimetric method 65%)		KAFP5	556C80	KAFP556C160	
3	(Including filte	er chamber)	(Colorime	tric method 90%)	KAFP5	557C80	KAFP557C160	
6	Panlacament	high-efficiency filter 9,10	(Colorime	tric method 65%)	KAFPS	552B80	KAFP552B160	
0	Kepiacemeni	nigh-eniciency filler	(Colorime	tric method 90%)	KAFPS	553B80	KAFP553B160	
7	Filter chambe	r				KDDFP55C160		
8	Replacement	long-life filter				KAFP551K160		
9	Replacement	long-life filter (Auto grille pe	anel)			KAFP551H160		
10	Ultra long-life	Ultra long-life filter unit (Including filter chamber) 9				KAFP55C160		
11	Replacement	Replacement ultra long-life filter 9,10				KAFP55H160H		
12	Branch duct o	hamber <sup>4</sup>			KDJP:	55C80	KDJP55C160	
13	Insulation kit	for high humidity 9,11			KDTP	255K80	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 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  $^{\circ}\text{C}$  , 80% RH.
- \*These panels do not contain the sensing function.

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

For Unit	Model
Grid ceiling panel	BYFQ60CAW
Decoration panel	BYFQ60B3W1*1
Relay wire harness adaptor for decoration panel*1	BER01A1
Sensor kit for grid ceiling panel	BRYQ60AAW
Sealing material for air discharge outlet	BDBHQ44C60
Replacement long life filter	KAF441C60
Fresh air intake kit	KDDQ44XA60

#### Notes

- 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.
- Only one installation box can be installed for each indoor unit.

### **VRV** Indoor Units

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

No.	Item		Туре	FXCQ25A	FXCQ32A FXCQ40A	FXCQ50A	FXCQ63A	FXCQ80A	FXCQ125A
1	Decoration panel			BYBCQ40CF		BYBCQ63CF		BYBCQ125CF	
	Filter related	High efficiency filter*1	65%	KAFP	532B50	KAFP532B80		KAFP532B160	
2			90%	KAFP	533B50	KAFP533B80		KAFP533B160	
		Filter chamber bottom suction		KDDFP53B50		KDDFP53B80		KDDFP53B160	
		Long-life replacement filter		KAFP531B50 KAFP531		1B80	KAFP53	1B160	
3	Remote controller	Wireless	H/P	BRC7M65					
4	4 Navigation remote controller (Wired remote controller)			BRC1E63					

Note: \* 1 Filter chamber is required if installing high efficiency filter.

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

	Model						
İtem	FXKQ32AV16	FXKQ40AV16	FXKQ50AV16	FXKQ63AV16			
December need	BYKQ	BYKQ63AHW (Surface colour: White / Base colour: Dark gray)					
Decoration panel	BYKQ63AHS (Surface colour: Silver / Base colour: Dark gray)						
DMO F Share	Initial installation kit (Frame + PM 2.5 filter) Model: BAF25A6						
PM2.5 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.	Item Туре	FXDQ40ND	FXDQ50ND	FXDQ63ND
1	Insulation kit for high humidity	KDT25N50		KDT25N63

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

•							
No.	Item	Туре	FXMQ20P FXMQ25P FXMQ32P	FXMQ40PBV	FXMQ50PBV FXMQ63PBV FXMQ80PBV	FXMQ100PBV FXMQ125PBV FXMQ140PBV	
1	Drain pump kit		-				
2	High efficiency filter	65%	KAF372AA36	KAF372AA56	KAF372AA80	KAF372AA160	
2	riigh eniciency liller	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		
	Service panel	White	_	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W	
6		Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25K160F	
		Brown	_	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	
7	Air discharge adaptor		KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A	
8	Suction Flange	-	BDF37A40~6	BDF37A80~6	BDF37A140~6		

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## OPTION LIST



### **VRV** Indoor Units

### **Ceiling Suspended Type**

No.	Item Type	FXHQ32MA	FXHQ63MA	FXHQ100MA	
1	Drain pump kit	KDU50N60VE	KDU50I	N125VE	
2	Replacement long-life filter (Resin net)	KAF501DA56	KAF501DA80	KAF501DA112	
3	L-type piping kit (for upward direction)	KHFP5MA63	KHFP5MA160		

### Floor Standing Type/Concealed Floor Standing Type

No.	ltem Type	FXLQ32MA/FXNQ32MA	FXLQ32MA/FXNQ32MA FXLQ50MA/FXNQ50MA			
1	Long-life replacement filter	KAFJ361K45	KAFJ361K71			

### Mid Static Ceiling Mounted Duct Type

NI.	li .	Туре		Duct Type				
No.	Item		71	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	Judion Flange			KTBJ25K56W	KTBJ25K80W			
5				KTBJ25K56F	KTBJ25K80F			
3	Service Panel			KTBJ25K56T	KTBJ25K80T			
6	Air Discharge Adapater		KDAJ25K56A	KDAJ25K71A				

### Floor Standing Duct Type

No.	Iter	m			Туре	FXVQ125N	FXVQ200N	FXVQ250N	FXVQ400N	FXVQ500N	
1		Replacement long life	e filter			KAFJ261M140	KAFJ261M224	KAFJ261M280	KAFJ261N450	KAFJ261N560	
2	1	Ultra long-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	-gi		Front suction	Front suction base flange		KD-9A140	KD-9A200	KD-9A280	KD-9A400	KD-9A560	
6	S	chamber for High	Suction grille		KDGF-9A140	KDGF-9A200	KDGF-9A280	KDGF-9A400	KDGF-9A560		
7	gue	efficiency filter Replacement Long-life filter *3		3	KAF-91B140	KAF-91B200	KAF-91B280	KAF-91B400	KAF-91B560		
8	g B		filter *2	High efficiency	65%	KAF-92B140	KAF-92B200	KAF-92B280	KAF-92B400	KAF-92B560	
9	흥			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	1	Fresh air intake kit					KD106D10		KDFJ906A560		
13	1	Rear suction kit			KDFJ905A140	KDFJ905A200	KDFJ905A280	KDFJ905A400 KDFJ905A560			
14		Discharge grille for plenum side					KD101A10			KD101A20	
15	Wo	Wood base			KKWJ9A140	KWF1G5P	KWF1G8P	KKWJ9A400	KWF1G15		
16	Vik	Vibration 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.	Item	Туре	FXBQ40PVE	FXBQ50PVE	FXBQ63PVE	FXBPQ63PVE
1	Outlet unit			BAF82A63		
2	Filter	HEPA filter	BAFH8	2A50	BAFH82A63	
3	D	Ceiling intake type	BYB82	A50C	BYB82A63C	BYB82A63CP
4	Panel	Floor-level intake type	BYB82A50W		BYB82A63W	BYB82A63WP
5	Outside air intake duct	flange	KDFJ82A80			

## **Outdoor Units**

### VRV X

Optio	onal Accessories	RXQ6ARY RXQ8ARY RXQ10ARY	RXQ12ARY	RXQ14ARY RXQ16ARY	
Distributive piping	REFNET header	KHRP26M22H, (Max. 4 branch) KHRP26M33H (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)		
	REFNET joint	KHRP26A22T KHRP26A33T	KHRP26A22T, KHRP	26A33T, KHRP26A72T	

Optio	nal Accessories	RXQ18ARY RXQ20ARY
Distributive	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max.4 branch) (Max.8 branch) (Max.8 branch)
piping	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T

Opti	onal Accessories	RXQ22ARY	RXQ26ARY RXQ34ARY RXQ28ARY RXQ36ARY RXQ30ARY RXQ38ARY RXQ32ARY RXQ40ARY				
Distributive piping	REFNET header	KHRP26M22H (Max.4 branch), KHRP26M33H (Max.8 branch), KHRP26M72H (Max.8 branch),	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M (Max.4 branch) (Max.8 branch) (Max.8 branch) (Max.8 br				
	REFNET joint	KHRP26A22T, KHRP26M33T, KHRP26M72T,	KHRP26A2	22T, KHRP26A33T, KHRP26A72T, K	KHRP26A73T		
Pipe size reduce	r	_		KHRP26M73TP, KHRP26M73HP			
Outdoor unit connection piping kit			BHFP22P1006				

Optional Accessories  Distributive REFNET header		RXQ42ARY RXQ44ARY	RXQ46ARY RXQ48ARY RXQ50ARY RXQ52ARY RXQ52ARY RXQ54ARY RXQ56ARY RXQ56ARY RXQ58ARY RXQ58ARY RXQ66ARY			
Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max.4 branch) (Max.8 branch) (Max.8 branch) (Max.8 branch)				
piping	REFNET joint	KHRP26A22T, KHRP26A33T,	, KHRP26A72T, KHRP26A73T			
Pipe size reducer		KHRP26M73TP, KHRP26M73HP				
Outdoor unit connection piping kit		BHFP22	2P1516			







## 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**



DCPF01





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 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



Reiri for Resort







#### 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.





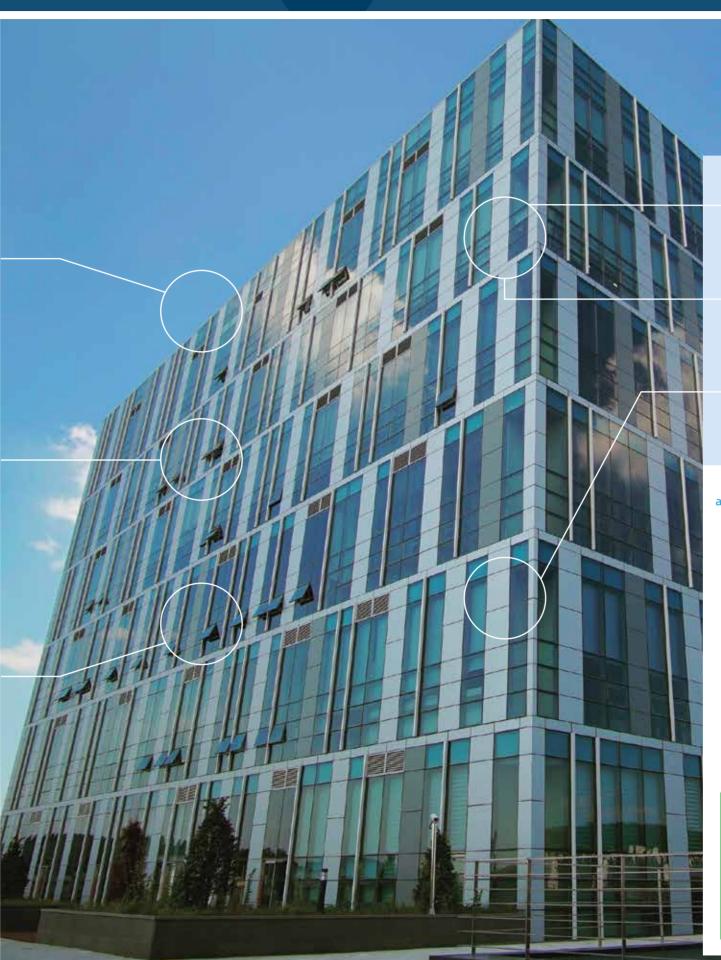












#### **BENEFITS OF REIRI**

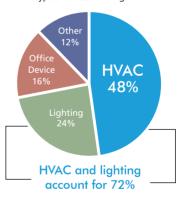
Energy Saving
By automating air-conditioning and
lighting controls through availabl functions such
as Scheduling and Interlocking, energy consumption
is greatly minimized while maximising
comfort and efficiency.

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. 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







Recovery differential

### **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.

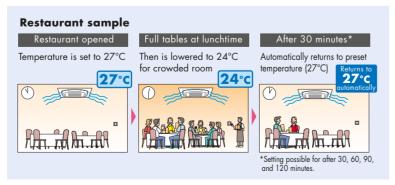
#### • Set point auto-reset

- 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 :  $-2^{\circ}$ C When the room temperature goes above  $35^{\circ}$ C, the air conditioner starts operating in Cooling automatically. When room temperature reaches  $33^{\circ}$ C, the air conditioner turns OFF.

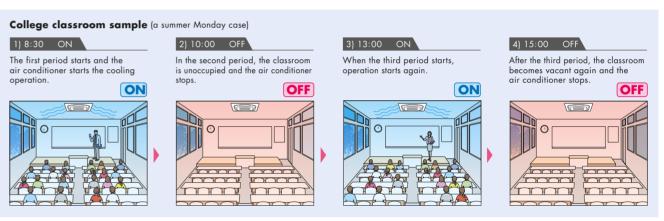
#### Weekly schedule

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



Setback

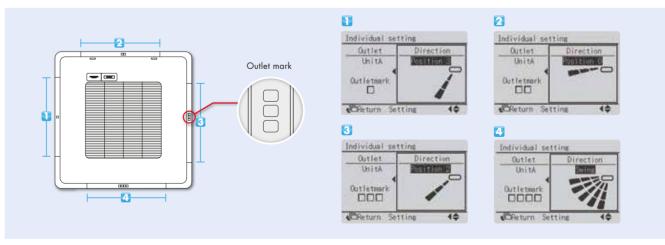
emperature



#### 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)

ν)

### **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



BRC2E61

### 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



*Wireless remote co			are sold as a set
*Refer to page 90 f	or the name of eac	h model	

Wireless remote controller

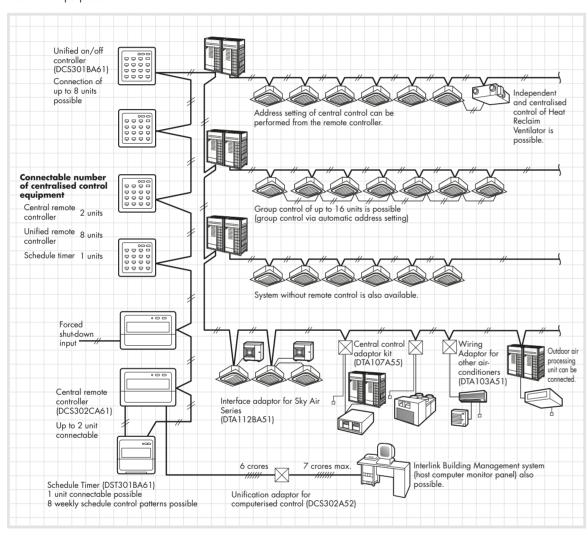
wide variation of re	vide variation of remote controller for VKV indoor unit										
	FXFQ-AVM FXFQ-S	FXZQ	FXCQ	FXUQ	FXEQ	FXDQ	FXMQ	FXHQ	FXAQ	FXL(N)Q	FXVQ
Navigation remote controller Wired remote controller) BRC1E63											
Wired remote controller BRC2E61)											

 $^{78}$ 



### **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.
- 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 disp

#### **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.

lacksquare 80

<sup>\*</sup>For residential use only. Cannot be used with other centralised control equipment.



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

## Intelligent Manager

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





DCM601A51

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).







#### 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.

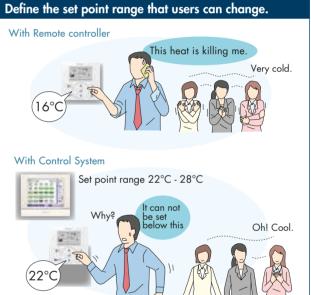
It is also easy to use with standardised remote Web Access from your PC.

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

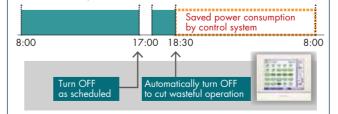
(up to 1024 indoor units) along with building equipment control / monitoring with Digital Inputs / Output

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

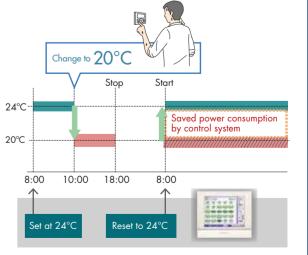








#### Reset set point regularly





### **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.



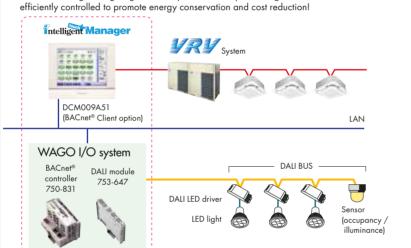
## Lighting control achieved by the intelligent Touch Manager

#### [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

- Switch-on/switch-off status monitoring
- Lighting abnormality monitoring
- Illuminance monitorina
- 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 e 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
- 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



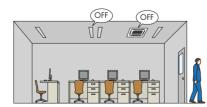


Optimal illuminance reduces energy

#### 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 auicker



### Tenant Management (PPD Option)

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

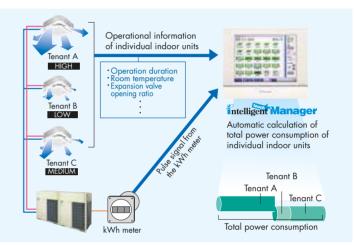
### With the PPD function, power consumption can be calculated for each indoor unit (Optional)

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.

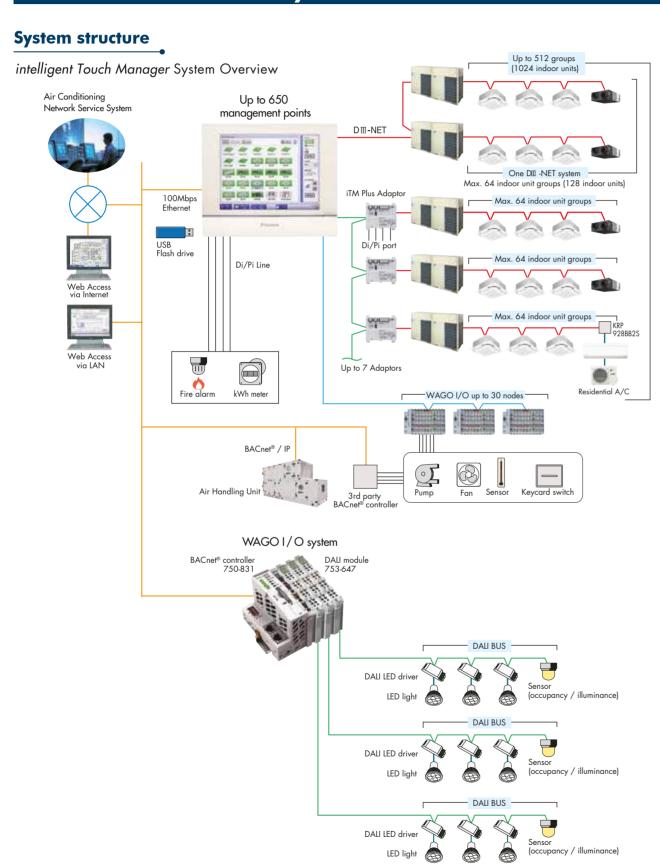
#### [ Main functions ]

- 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**



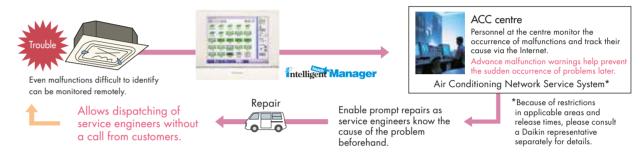
### **Air Conditioning Network Service System**

#### **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 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



BACnet®

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



Facilitating the network integration of VRV system and LONWORKS®

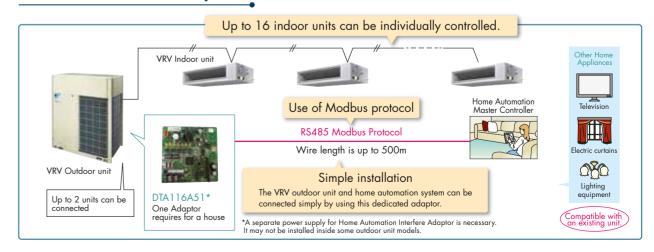
LONWORKS®

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.

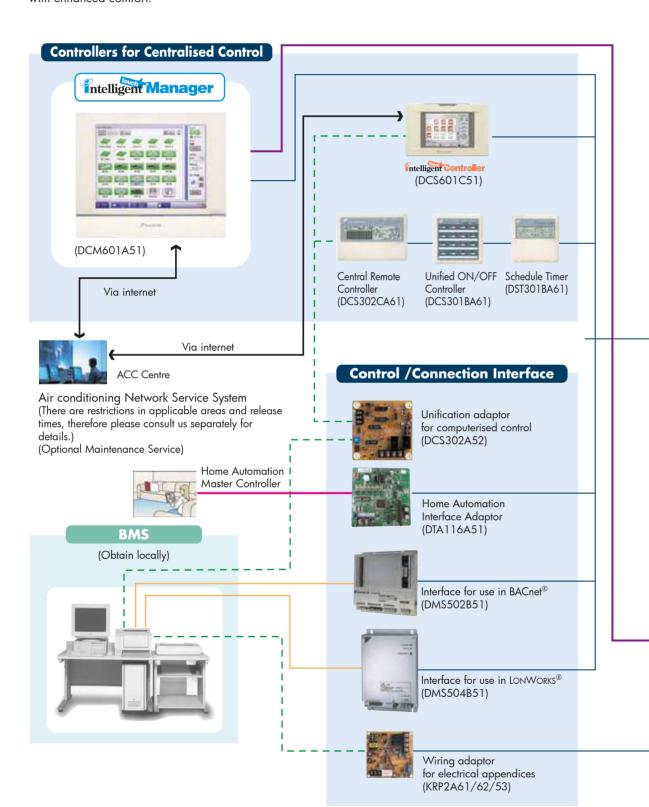
### **Modbus Interface Adaptor**





### **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**

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
- 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.



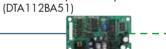
**Heat Reclaim Ventilator** 

### 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



Central Control Adaptor Kit



Interface Adaptor for DIII-NET use (KRP928BB2S)



**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 making

**Note:** BACnet<sup>®</sup> 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



## **Option List**

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

#### For VRV indoor unit use

No.	Туре		FXFSQ-A (For Black Panel)	FXFSQ-A	FXZQ-M	FXUQ-A	FXCQ-M	FXKQ-AV	FXDQ-PD FXDQ-ND	
		\A/:	Receiver	BRC7M634K	BRC7M632F-6	BRC7M630W-6	BRC7CB58	BRC7M65	BRC63AV	BRC4M61-6
1	Remote controller	Wireless	Handset	DRC/MO34K	BRC4M13	50W16	DKC/ CD30	DKC/M05	BRC4N	1150W16
		Wired		BRC1E63				BRC2E61		
2	Navigation remote control	ler (Wired rem	ote controller)		DRCTEOS	BRC1E63 Note 7				
3	Simplified remote cor	ntroller (Exp	osed type)			-				BRC2C51
4	Remote controller for hotel use (Concealed 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			★KRP4A54	
7	Remote sensor (for in-	door tempe	rature)		KRCS01-4B			KRCS01-1B		
8	Installation box for adaptor 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	loor unit	<b>★</b> DTA104A62		<b>★</b> DTA104A62	_	<b>★</b> DTA104A61	DTA104A61	<b>★</b> DTA104A53
10	Adaptor for multi tend				DTA114A61	_				

No.	Item		Туре	FXMQ-P/ FXMQ-ARV	FXMQ-NVE	FXHQ-MA/AVM	FXAQ-A	FXLQ-MA FXNQ-MA	FXVC	Q-N
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Receiver	BRC4/	M61-6	BRC7EA63W9	BRC7N618-6	BRC4M61-6	_	-
1	Remote controller	Wireless	Handset	BRC4M1	50W16	/BRC7M53	BRC4M	150W16	_	-
		Wired				BRC2E61			BRC2E61	Note 8
2	Navigation remote contr	roller (Wired re	mote controller)			BRC1E63 Note 7			BRC1E63	Note 9
3	Wired remote controlle	er with weekly	schedule timer			BRC1D61			_	-
4	Simplified remote controller (Exposed type)			BRC2C51	BRC2C51	_	-	BRC2C51	-	-
5	Remote controller for l	hotel use (Cor	ncealed type)	BRC3A61	BRC3A61	— BRC3A61		BRC3A61	_	-
6	Adaptor for wiring			★KRP1C64	KRP1B61	KRP1BA54	_	KRP1B61	KRP10	267
7-1	Wiring adaptor for	electrical a	ppendices (1)	★KRP2A61	KRP2A61	★KRP2A61	★KRP2A61	KRP2A61	_	-
7-2	Wiring adaptor for	electrical a	ppendices (2)	★KRP4AA51	KRP4AA51	★KRP4AA52	★KRP4AA52	KRP4AA51	KRP2	A62
8	Remote sensor (for	indoor temp	perature)	KRCS01-4B	_	-	KRCS01-1B	_	-	-
9	Installation box for adaptor PCB ☆			Note 1 KRP4A96	_	Note 3 KRP1CA93	Note 1 KRP4AA93	-	_	
10	External control adaptor for outdoor unit			<b>★</b> DTA104A61	DTA104A61	★DTA104A62	<b>★</b> DTA104A61	DTA104A61	DTA104	4A62
11	Adaptor for multi tenant			★DTA114A61	_	_	<b>★</b> DTA114A61	-	_	
12	External control adaptor for cooling / heating							KRP6A1		
13	Remote controller with key			=				KRCB37-1		

Function List		Round Flow with Sensing Type
		FXFSQ-A
Remote controller	Wired	BRC1E63
Kemole controller	Wireless	_
Dual sensors *1		0
Direct airflow *1		0
Sensing sensor low mo	de *1	0
Sensing sensor stop mo	ode *1	0
Circulation airflow		0
Individual airflow direc	ction control	0
Switchable 5 step fan :	speed	0
Auto-airflow rate		0
Auto-swing		0
Swing pattern selection	1	0
High ceiling application	n	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 boxes 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 controllers 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	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.	
3-1	Unified ON/OFF controller Electrical box with earth terminal (2 blocks)		DCS301BA61 KJB212AA	<ul> <li>Up to 16 groups of indoor units (128 units) can be turned, ON/OFF individually or simultaneously, and operation and malfunction can be displayed. Can be used in</li> </ul>	
3-2	Noise filter (for electromag	netic intertace use only)	KEK26-1A	combination with up to 8 controllers.	
4	Schedule timer		DST301BA61	<ul> <li>Programmed time weekly schedule can be controlled by unified control for up 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 other 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	

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**

	I					
No.	ltem				Model No.	Function
1	intelligent Touch	Basic	Hardware	intelligent Touch Controller	DCS601C51	<ul> <li>Air conditioning management system that can be controlled by a compact all-in-one unit.</li> </ul>
1-1	Controller	Option	Option Hardware 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	DCM601A51	Air conditioning management system that can be controlled by touch screen.
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	<ul> <li>Power consumption of indoor units are calculated based on operation status of the indoor unit andoutdoor unit power consumption measured by kWh metre.</li> </ul>
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	l DIII board		DAM411B51	<ul> <li>Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently.</li> </ul>
3-2	Communication interface	Optiona	l Di board		DAM412B51	<ul> <li>Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.</li> </ul>
4	illioriuce	*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 Inter		nterface Adaptor	DTA116A51	Use of the Modbus protocol enables the connection of the VRV system with a variety of home automation systems from other manufacturers.

- Notes:

  \*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

### HEADER PACK



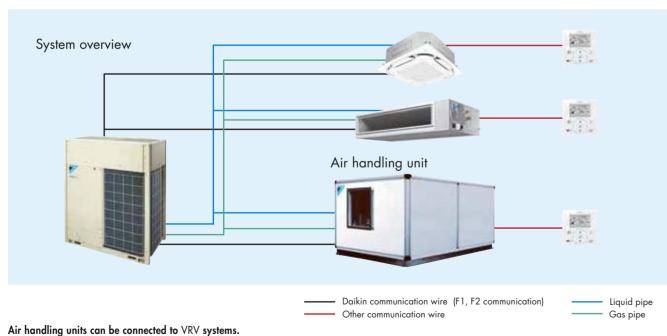
## Integrate your air handling unit for large size spaces such as factories and for fresh air solutions.

### 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





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

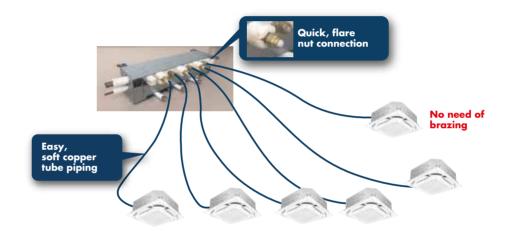
Daikin innovated Next Generation of Quality and Efficiency for VRV Installation. It offers differentiated soulutions in installation. It ensures quality installation with reduction of site work.



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	
BHF6RHP6	6	Φ9.5/Φ15.9	(Φ9.5/Φ15.9)×1 (Φ6.4/Φ12.7)×3	<150	
BHF8RHP6	8	Φ9.5/Φ19.1		150 ≦ X < 200	
BHF10RHP6	10	Φ9.5/Φ22.2	(Φ9.5/Φ15.9)×3 (Φ6.4/Φ12.7)×3	200 ≦ X < 290	
BHF16RHP6	16	Φ12.7/Φ28.6		290 ≤ X < 420	



 $^{92}$ 

## 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.



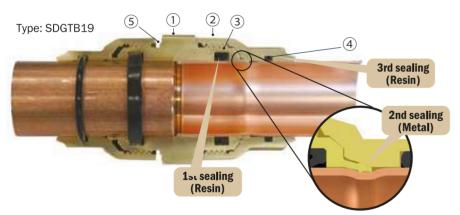
Size  $\phi$  6.4 -  $\phi$  41.3

#### 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



### Standard Joints (Connecting the same pipes)

(Matching for various piping sizes)

Daikin Gas Tight Joint Line up

Eiguno	Model Name		Wei ght /pc (g)		
Figure	Model Name	ND	AF	L	wei giii /pc (g)
	SDGTB06	φ 6.4	19.0	50.4	43
	SDGTB09	φ 9.5	22.2	55	79
	SDGTB12	φ 12.7	23.8	59	113
L	SDGTB15	φ 15.9	29.7	74	210
	SDGTB19	φ 19.1	35.0	76.8	273
	SDGTB22	φ 22.2	38.0	83.4	292
	SDGTB28	φ 22.6	45.0	88	515
	BDGTA34	φ 34.9	51.1	101.5	686
	BDGTA41	φ 41.3	58.3	103.5	881

### Asymmetry Joints (Connecting different size pipes)

Figure	Model Name		Dimension (mm)				
rigore	Model Name	ND	ND AF		L	Wei ght /pc (g)	
	SDGTB0906	φ 9.5-6.4	22.2	19	52.7	67	
	SDGTB1209	φ 12.7-9.5	23.8	22.2	57.5	101	
	SDGTB1512	φ 15.9-12.7	29.7	23.8	65	164	
	SDGTB1915	φ 19.1-15.9	35	29.7	76.8	244	
	SDGTB2219	φ 22.2-19.1	38	35	81.5	358	
	SDGTB2522	φ 25.2-22.2	41.8	38	85.8	444	
	SDGTB2825	φ 28.6-25.4	45	41.8	88.1	505	
	SDGTB3428	φ 34.9-28.6	51.1	45	101.5	645	

### 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











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-GJ 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  $\star^1$ , due to the greatly enhanced performance of the thin film element. Furthermore, improved external static pressure  $\star^2$  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.

- ★1 For models: VAM 250/650/800/1000/2000GJVE
- ★2 For models: VAM 500GJVE



		Outdoor-Air		Heat Reclaim	n Ventilator
		Processing Unit	VKM-GAM Type	VKM-GA Type	VAM-GJ Type
		Ventilation Humidification  Air Processing*		Humidification Processing*	Ventilation tumidification  Air Processing*
			00		00
	Refrigerant Piping	Connectable	Connectable		Not connectable
Connections	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 Efficier	ıcy Filter	Option	Opt	ion	Option
Ventilation S	ystem	Air supply only	Air supply &	air exhaust	Air supply & air exhaust
Power Supp	у	220-240 V, 50 Hz	220-240	V, 50 Hz	220-240 V/220 V, 50 Hz
Airflow Rate					250 m³/h
			800	m <sup>3</sup> /h m <sup>3</sup> /h ) m <sup>3</sup> /h	500 m³/h 650 m³/h 800 m³/h 1000 m³/h
		1260 m³/h 1740 m³/h 2340 m³/h	1000	m / 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**

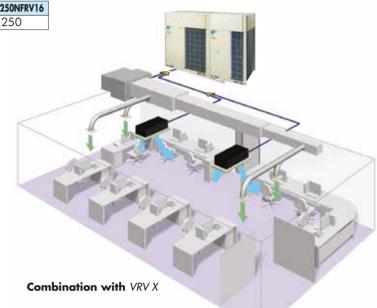
## Combination of fresh air treatment and air conditioning, supplied from a single system.

#### Lineup

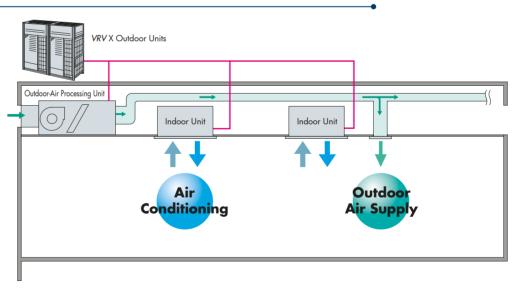
Model Name	FXMQ125NFRV16	FXMQ200NFRV16	FXMQ250NFRV16
Capacity Index	125	200	250



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.



### **Standard Specifications**

#### Indoor unit

Туре					Ceiling Mounted Duct Type				
Model				FXMQ125NFRV16	FXMQ200NFRV16	FXMQ250NFRV16			
Power	supply			1-pho	ase 220-240 V (also required for indoor units),	50 Hz			
		kcal/h	12,000	19,300	24,100				
Coolir	ng capacity *1		Btu/h	47,800	76,400	95,500			
			kW	14.0	22.4	28.0			
Power Consumption		kW	0.734	0.772	0.988				
Casin	Casing			Galvanised steel plate					
Dimer	sions (HXWXD)		mm	440 x 1190 x 1090 440 x 1190 x 1090					
	Motor output	Motor output		0.75					
Fan	Airflow rate		m³/min	21	29	39			
I un	Allilow rule		cfm	741	1,024	1,377			
	External Static Pressure with Filter (PM10+PM50)	220 V/240 V	Pa	300	260	240			
	Liquid		mm		ø9.5 (flare)				
Refrig piping			mm	ø15.9 (flare)	ø19.1 (brazing)	ø22.2 (brazing)			
Pibilié	Drain	Drain		PS1B female thread					
Machine weight k g			115						
Sound	l level *3	220 V/240 V	dB(A)	48	50	52			
Connectable outdoor units *4 *5				6 HP an	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)
   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.
   Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. These values are normally somewhat higher
- during actual operation as a result of ambient conditions.

  4. It is possible to connect to the outdoor unit if the total capacity of the indoor units is 50% to 100% of the capacity index of the outdoor units.
- \*5. Local setting mode. Not displayed on the remote controller
- 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.

Line-up

	With DX Coil & Humidifier Type					
Model Name	VKM50GAMV1	VKM80GAMV1	VKM100GAMV1			
Capacity Index	31.25	50	62.5			

	With DX Coil Type						
Model Name	VKM50GAV1	VKM80GAV1	VKM100GAV1				
Capacity Index	31.25	50	62.5				





#### **Humidifier**

The line-up includes models with a humidifier, in response to diversifying customer requirements. (VKM50/80/100GAMV1 only)

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.

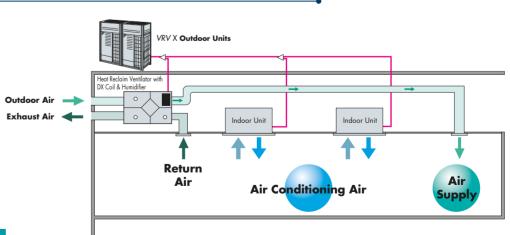
#### High static pressure

High external static pressure means enhanced design flexibility.

#### 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.

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

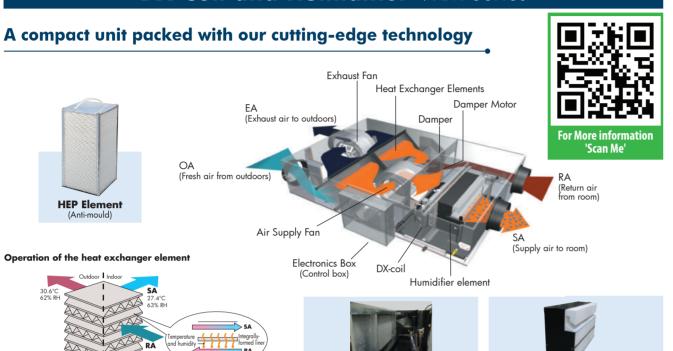


The following restrictions must be observed in order to maintain the indoor units connected to the same system.

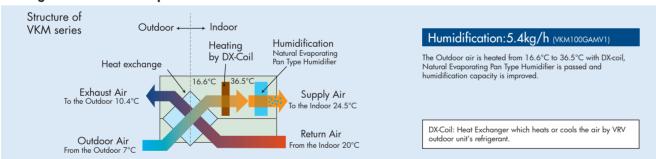
• When the Heat Reclaim Ventilator VKM series units are connected, the total connection capacity index must be 50% to 130% of the capacity index of the outdoor units



### **Heat Reclaim Ventilator with DX-Coil and Humidifier-VKM Series**



#### **Heating and humidification process**



DX-coil (Direct expansion coil)

### Efficient outdoor air introduction with heat exchanger and cooling/heating operations

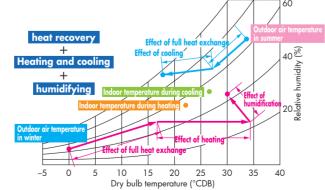
#### Indoor unit with outdoor air treatment

remote controller.

Using outdoor air, the temperature can be brought near room temperature with minimal cooling capacity through the use of outdoor air.

• Ventilation, cooling/heating and humidifying are possible with one

## Other features Integrated system includes ventilation and humidifying operations.



**Humidifier Eleme** 

### **Specifications**

	MC	ODEL			VKM50GAMV1*	VKM80GAMV1*	VKM100GAMV1*	VKM50GAV1	VKM80GAV1	VKM100GAV		
Refrigerant					R-410A							
Power Supply							1-phase, 220-	240 V, 50 Hz				
		d. 1 . 1	Airflow rate	m³/h	500	750	950	500	750	950		
	U	ltra-high	Static pressure	Pa	160	140	110	180	170	150		
Airflow Rate & Sta Pressure (Note 7)	itatic	. 1	Airflow rate	m³/h	500	750	950	500	750	950		
	) H	ligh	Static pressure	Pa	120	90	70	150	120	100		
			Airflow rate	m³/h	440	640	820	440	640	820		
	Lo	OW.	Static pressure	Pa	100	70	60	110	80	70		
	- I		Ultra-high	1	560	620	670	560	620	670		
		leat xchange	High	l w l	490	560	570	490	560	570		
		node	Low	1 "	420	470	480	420	470	480		
Power Consump	tion		Ultra-high		560	620	670	560	620	670		
		ypass	High	w	490	560	570	490	560	570		
	m	node	Low	<del> </del>	420	470	480	420	470	480		
E T			LOW		420	470			470	460		
Fan Type				kW	0.200 2	0.280 x 2	0.280 x 2		0.200 2	0.200 2		
Motor Output			Lillian Link	KVV	0.280 x 2			0.280 x 2	0.280 x 2	0.280 x 2		
0 1. 10	Heat		Ultra-high	-ID/A	37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/4		
		xchange node	High	dB(A)	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 (No	te 5)		Low		32/33/34	33/34/35.5	34/34.5/35.5	33.5/34.5/35.5	34.5/36/37	35/36/36.3		
(220/230/240		vpass	Ultra-high		37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/4		
		High .	dB(A)	35/35.5/36	36/37/37.5	37/37.5/38	36/36.5/37	37.5/38/39	38/38.5/39			
			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.		
Humidification C	Capacity (Note 4)			kg/h	2.7	4.0	5.4		_	1		
T E	Ultra-high				76	78	74	76	78	74		
Temp. Exchange Efficiency	' Н	ligh		%	76	78	74	76	78	74		
	Lo	Low			77.5	79	76.5	77.5	79	76.5		
- 1   -		Ultra-high			64	66	62	64	66	62		
Enthalpy Exchan Efficiency (Coolir	a) riigii		%		64	66	62	64	66	62		
zmeroney (coom	Lo	Low			67	68	66	67	68	66		
	U	ltra-high			67	71	65	67	71	65		
Enthalpy Exchan Efficiency (Heatin		ligh		%	67	71	65	67	71	65		
Linciency (Fledin	Lo	ow		] [	69	73	69	69	73	69		
Casing					Galvanised Steel Plate							
Insulating Materi	ial						Self-Extinguishabl	e Urethane Foam				
Heat Exchanging	g System				Air to Air Cross Flow Total Heat (Sensible + Latent Heat) Exchange							
Heat Exchanger	Element				Specially Processed Non-flammable Paper							
Air Filter							Multidirectional	Fibrous Fleeces				
DX-coil	Cooling (Note	∋ 2)		Lyce	2.8	4.5	5.6	2.8	4.5	5.6		
Capacity	Heating (Note			kW	3.2	5.0	6.4	3.2	5.0	6.4		
	Heig				387	387	387	387	387	387		
Dimensions	Widt			mm	1,764	1,764	1,764	1,764	1,764	1,764		
	Dept			1 1	832	1,214	1,214	832	1,214	1,214		
Connection Duct Diameter mm			mm	Ø 200	Ø 25		Ø 200	· ·	250			
Net .				102	120	125	96	109	114			
			kg	107	129	134	,0	96 109 112				
Around Unit Unit Ambient Condition OA (Note 9)					. 57		0°C−40°C DB,	80%RH or less				
							-15°C-40°C DB					
- (						0°C-40°C DB,						
			RA (Note 9)				0 C-40 C DB,	OO/OKH OF IESS				

- 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, Dutdoor temperature: 35°C DB
  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
- anechoic chambar built in accordance with the JIS C 1502 conditions. The adval operating sound varies depending on the surrounding conditions (near running unit's sound, reflected sound and so on) and is normally higher than this value.

- 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 dB(A) 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.

- 12. 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.
- maintain the amount of ventilation and humidifying.

  14. When connecting with a VRV system heat recovery outdoor unit and bringing the RA (exhaust gas intake) 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 clean water (city water, tap water or equivalent). Dirty water may clog 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.)

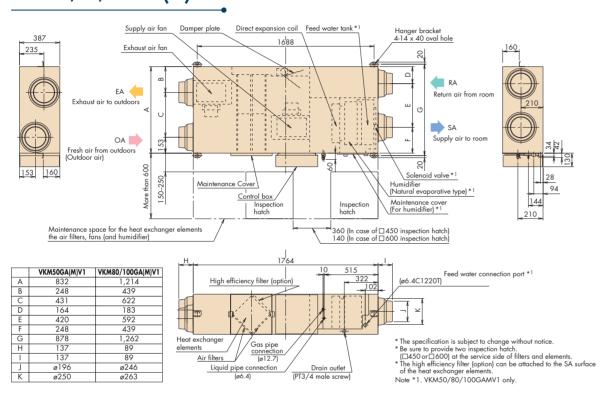
  Also, if the supply water is hard water, use a water softener because of short life.
- Life of humidifying element is about 3 years (4,000 hours) under the supply water conditions of hardness: 150 mg/l. (Life of humidifying element is about 1 year (1,500 hours) under the supply water conditions of hardness: 400 mg/l.)

  Annual operating hours:  $10 \text{ hours/day} \times 26 \text{ days/month} \times 5 \text{ months} = 1,300 \text{ hours}$



### **Dimensions**

#### VKM50/80/100GA(M)V1



### **Options**

Item	Туре				VKM50/80/100GA(M)V1											
	Remote controller				BRC1E62/BRC1C62 *1											
	C1		Resid	ential central remote controller						DCS30	3A51 *2					
		Centralised –		Central remote controller		DCS302CA61										
	devid		Unified ON/OFF controller		DC\$301BA61											
			Schedule timer		DST301BA61											
device		Wiring adaptor for electrical appendices				KRP2A61										
ြည် 		For humi	difier	running ON signal output	KRP50-2											
	ρ	For heate	er con	trol kit	BRP4A50											
Controlling	PC Board Adaptor	For wirir	Type (indoor unit of VRV)		FXFQ-S FXFQ-AVM	FXZQ-M	FXUQ-A	FXCQ-M	FXKQ-MA	FXDQ-PD FXDQ-ND		FXMQ-MA	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	FXVQ-M
					KRP1C63 ★	KRP1BA57 ★	KRP1C67	KRP1B61 ★	KRP1B61	KRP1B56 ★	KRP1C64 ★	KRP1B61	KRP1BA54	_	KRP1B61	KRP1C67
		Installation box for adaptor PCB 🜣			Notes 2, 3 KRP1H98	Note 4, 6 KRP1BA101	_	Notes 2, 3 KRP1B96	_	Notes 4, 6 KRP1BA101	Notes 2, 3 KRP4A96	_	Note 3 KRP1CA93	Notes 2, 3 KRP4AA93	_	_

- Notes: 1. Installation box \*\pi\$ is necessary for each adaptor marked \*\pi\$.

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

  - Only one installation box can be installed for each indoor unit.

    Up to 2 installation boxes can be installed for each indoor unit.
- 6. Installation box \*is necessary for each adaptor.
  7. \*1 Necessary when operating a Heat Reclaim Ventilator (VKM) independently. When operating interlocked with other air conditioners, use the remote controllers of the air conditioners.
  \*2 For residential use only. When connected to a Heat Reclaim Ventilator (VKM), you can only switch the power ON/OFF. Cannot be used with other centralised control equipment.
  - Installation box \* is necessary for second adaptor.

Item	1	Туре	VKM50GA(M)V1	VKM80GA(M)V1	VKM100GA(M)V1			
.E	Silencer		_	KDDM2	24B100			
function		Nominal pipe diameter mm	_	Ø2	250			
<u></u>	Air suction/	White	K-DGL200B	K-DGL250B				
Additio	Discharge grille	Nominal pipe diameter mm	ø 200	Ø 2	250			
Ad	High efficiency filter		KAF242J80M	KAF242J100M				
	Air filter for replacement		KAF241G80M	KAF241	G100M			
Flex	xible duct (1 m)		K-FDS201D	K-FDS251D				
Flex	xible duct (2 m)		K-FDS202D	K-FDS	252D			

### Heat Reclaim Ventilator — VAM Series

The Heat Reclaim Ventilator creates a high-quality environment by interlocking with the air conditioner

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

Improved Enthalpy Efficiency\*1 Higher External Static Pressure\*2 **Enhanced Energy Saving Functions** 

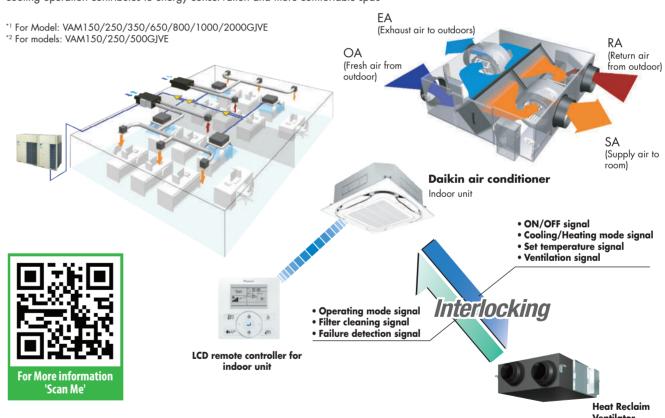




Heat Reclaim Ventilator remote controller BRC301B61 (Option)

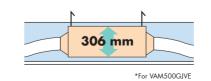
This remote controller is used in case of independent operated of Heat Reclaim Ventilator.

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



#### **Compact Equipment**

With a height of just 306mm, the unit easily fits in limited spaces, such as above ceiling.

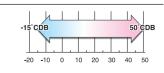


#### **Energy Conservation**

Air conditioning load reduced by approximately 31%

#### **Cold Climate Compatible**

Standard operation at temperatures down to -15°C.





### Heat Reclaim Ventilator — VAM Series

23%

### Air conditioning load reduced by approximately 31%

#### Total heat exchange ventilation

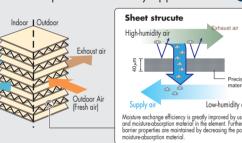
This unit recovers heat energy lost through ventilation and curbs room temperature changes caused by ventilation, thereby conserving energy and reducing the load on the air conditioning system.

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

Due to thinner film....

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

Moisture absorption increased by approx. 10%



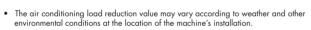
# **40** μm Molecule of water

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

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

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

Reduces air conditioning load by not running the Heat Reclaim ventilator while air is still clean soon after the airconditioner is



• The air conditioning load reduction values are based on the following conditions:

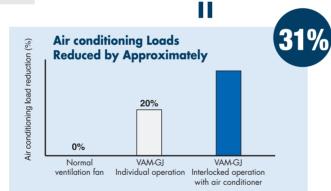
Application: Tokyo office building

Application: lokyo office building Building from: 6 floors above ground, 2 floors underground, floor area 2,100 m² Personnel density: 0.25 person/m²

Ventilation volume: 25 m<sup>3</sup>/h

The remainder volume. 23 III/II lador airconditioning level: summer 25°C 50% RH, intermediate seasons 24°C 50% RH, Winter 22°C 40%RH

Operating time: 2746 hours (9 hours per day, approx. 25 days per month)
Calculation method: simulation based on "MICRO-HASP/1982" of the Japan Building
Mechanical and Electrical Engineers Association.



### Night-time free cooling operation'

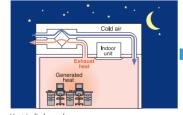
Night-time free cooling operation is an energy-conserving function that works at night when air conditioners are off. By ventilating rooms containing equipment that raises that room temperature, night-time free cooling operation reduces the cooling load when air conditioners are turned on in the morning.

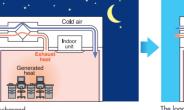
It also alleviated feeling of discomfort in the morning caused by heat accumulated during the night.

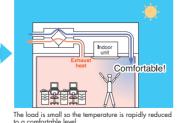
- Night-time free cooling operation only works to cool and if connected to Building Multi or VRV systems.

  Night-time free cooling operation is set to "off" in the factory setting, so
- if you wish to use it, request your dealer to turn it on.
- \*1 This Function can be operated only when interlocked with air conditioners. \*2 Value is based on the following conditions:
- Cooling operation performed from April to October.
   Calculated for air conditioning sensible heat load only (latent heat load not included).

The indoor accumulated heat is discharged at night. This reduces the air conditioning load the next day thereby increasing efficiency.







\* Interlocked operation with an air conditioner

### **Specifications**

	MODEL			VAM250GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE			
Power Sup	pply			1-phase, 220-240 V/ 220 V, 50 Hz									
Temp Evol	hanae	Ultra-High		75/75	74/74	75/75	72/72	78/78	72/72	77/77			
Temp. Exchange Efficiency (50/60 Hz)		High	%	75/75	74/74	75/75	72/72	78/78	72/72	77/77			
(50/60 Hz	z)	Low		79/79	80/80.5	77/77.5	74/74.5	80.5/81	75.5/76	79/81			
		Ultra-High		71/72	67/67	67.5/67.5	65/65	70/70	65/65	72/72			
	For Heating	High	%	71/71	67/67	67.5/67.5	65/65	70/70	65/65	72/72			
Enthalpy Exchange		Low		74/74	74/74.5	71.5/72	67.5/68	72.5/73	67/67.5	76/76			
Efficiency	_1	Ultra-High		63/63	55/55	61/61	61/61	64/64	61/61	62/62			
(50/60 Hz	For Cooling	High	%	63/63	55/55	61/61	61/61	64/64	61/61	62/62			
		Low	1	66/66	59/59.5	64/64.5	64/64.5	68.5/69	64/64.5	66/67			
	Heat	Ultra-High		137/141	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542			
	Exchange	High	w	120/125	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315			
Power Consumpti	Mode	Low	1	60/59	128/136	196/207	435/483	476/512	835/927	966/1,039			
(50/60 Hz		Ultra-High	W	137/141	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542			
	Bypass Mode	High		120/125	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315			
	Mode	Low		60/59	128/136	196/207	435/483	476/512	835/927	966/1,039			
	Heat	Ultra-High	dB(A)	27-29/29	33-35.5/34	34-36/36	39-40.5/39.5	39.5-41.5/39.5	39.5-41.5/41.5	41.5-43.5/42			
	Exchange	High		26-27.5/28	31.5-34/32	33-34.5/34	37-39.5/37.5	37.5-39.5/37.5	37.5-39.5/39.5	39-43/40			
Sound Leve	el Mode	Low		21-22/21	25-28.5/24	27.5-29.5/28	35-37.5/34	35-37.5/34.5	35-37.5/36	36-39/39			
(50/60 Hz		Ultra-High	dB(A)	28.5-30.5/30.5	34.5-36/35.5	35-37.5/37.5	40.5-42/41	40.5-42.5/40.5	41-43/42.5	43-45.5/44			
	Bypass Mode	High		27.5-29/29.5	33-34.5/33.5	33-35.5/35.5	38.5-40/39	38.5-40.5/38.5	39.5-41/41.5	40.5-45/42			
		Low		22.5-23/22.5	25.5-28.5/25.5	27.5-30.5/29.5	36-38.5/35.5	36-38.5/35.5	36.5-38/37.5	37.5-39.5/41			
Casing				Galvanised steel plate									
Insulation I	Material					Self-extingu	ishable polyurethan	e foam					
Dimension	s (HXWXD)		mm	278X810X551	306X879X800	338X973X832	387X1,111X832	387X1,111X1,214	785X1,619X832	785X1,619X1,214			
Machine V	Weigh		kg	24	32	45	55	67	129	157			
Heat Exch	ange System			Air to air cross flow total heat (Sensible heat+latent heat) exchange									
Heat Exch	ange Element Materio	ıl		Specially processed non-flammable paper									
Air Filter				Multidirectional fibrous fleeces									
Ту	<i>у</i> ре						Sirocco fan						
Α.	. 0	Ultra-High		250/250	500/500	650/650	800/800	1,000/1,000	1,500/1,500	2,000/2,000			
	irflow Rate 60/60 Hz)	High	m³/h	250/250	500/500	650/650	800/800	1,000/1,000	1,500/1,500	2,000/2,000			
Fan —		Low		155/155	320/295	500/470	700/670	860/840	1,320/1,260	1,720/1,580			
	C: D	Ultra-High		70/96	105/150	85/125	133/170	168/192	112/150	116/140			
	kternal Static Pressure 50/60 Hz)	High	Pa	54.65	66/52	53/67	92/85	110/86	73/72	58/32			
		Low		24/20	32/18	35/38	72/61	85/60	56/50	45/45			
Motor Output kW			kW	0.030X2	0.090X2	0.140X2	0.28	30X2	0.2	B0X4			
Connection Duct Diameter mm				ø150	Ø	200	Ø	250	Ø	350			
Unit ambie	ent condition					-15°C−5	60°CDB, 80%RH or l	ess	-				

- Sound level is measured at 1.5m below the centre of the body.

  - Airflow rate can be changed over to Low mode or High mode.

    Sound level is measured in an anechoic chamber.

    Sound level generally becomes greater than this value depending on the operating conditions, reflected sound
  - and perspecta noise.

    The sound level at the air discharge port is about 8 dB(A) higher than the unit's sound level.

    The specifications, designs and information given here are subject to change without notice.

    Temperature Exchange Efficiency is the mean value between cooling and heating.

    Efficiency is measured under the following conditions:

    Ratio of rated external static pressure has been maintained as follows; outdoor side to indoor side = 7 to 1.

  - In conformance with JIS standards (JIS B 8628), operating sound level is based on the value when one unit is operated, with the value converted for an anechoic chamber.
     This is transmission sound from the main unit, and does not include sound from the discharge grille. Thus it is

  - Inis is transmission sound from the main unit, and aces not include sound from the discharge grille. Into it is normal for the sound to be louder than the indicated value when the unit is actually installed.

    9. Sound level from the discharge port causes the value to be approximately 8 dB(A) (models with the airflow rate of less than 150 to 500m²/h) to approximately 11 dB(A) (models with the airflow rate of 650m²/h or more) greater than the indicated value. Furthermore, fan rotation and noise from the discharge grille may increase depending on the on-site duct resistance conditions. Please consider noise countermeasures when installing the unit.
- 10. With large models in particular (1500 and 2000m³/h models), if the supply air (SA) grille is installed near the mair 10. With large models in particular (1500 and 2000m²/h models), if the supply air (SA) grille is installed near the main unit, the noise of the main unit may be heard from the discharge grille via the duct, and this will result in a marked increase in noise. In such cases, if peripheral effects are included (such as reverberation of the floor and walls, combination with other equipment, and background noise), sound level may be as much as 15 dB(A) higher than the indicated value. When installing a large model, please provide as much separation as possible between the main unit and the discharge grille. If the equipment and discharge grille are near each other, please consider countermeasures such as the following:

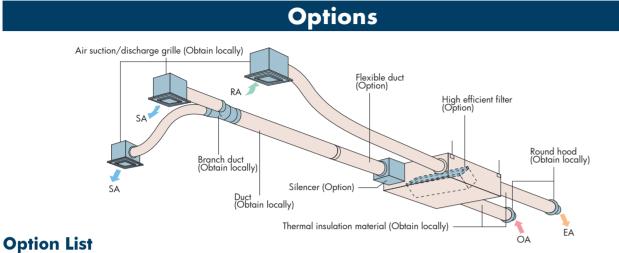
  Use a sound-muffling box, flexible duct and sound-muffling air supply/discharge grilles
  Decentralised installation of discharge grilles

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

- measures to avoid transmission sound from the main unit:
   Use of ceiling materials with high sound insulating properties (high transmission loss).
   Methods of blocking sound transmission, for example, by adding sound insulating materials around the bottom of the

Alternatively, consider supplementary methods such as installing the equipment in a different location





#### VAM 250 • 500 • 650 • 800 • 1000 • 1500 • 2000 GJVE BRC301B61 Heat Reclaim Ventilator remote controller DCS303A51 \*1 Residential central remote controlle Central remote controller DCS302CA61 Unified ON/OFF controller DST301BA61 Wiring adaptor for electrical KRP2A61 KRP50-2 For humidifier KRP50-2A90 (Mounted electric component assy of Heat Reclaim Ventilator) Installation box for adaptor PCB For heater control kit BRP4A50 FXFQ-S FXFQ-LU FXDQ-PB FXDQ-NB Type (indoor unit of VRV) FXI Q-MA FXZQ-M FXUQ-A FXCQ-M FXKQ-MA FXMQ-P FXMQ-MA FXHQ-MA FXAQ-P FXVQ-M KRP1C63★ KRP1BA57★ KRP1C67 KRP1B61★ KRP1B61 KRP1B56★ KRP1C64★ KRP1B61 KRP1BA54 KRP1R61 KRP1C67 Notes 4, 6 Notes 2, 3 KRP1BA101 KRP4A96 Notes 2, 3 Note 4, 6 KRP1H98 KRP1BA101 Notes 2, 3 Installation box for adaptor PCB KRP1CA93 KRP4AA93

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

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

  - 3. Only one installation box can be installed for each indoor unit.

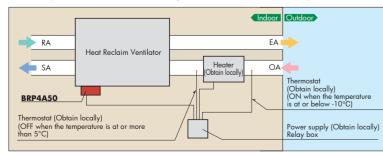
    4. Up to 2 installation boxes can be installed for each indoor unit.

- 5. Installation box ★ is necessary for second adaptor.
  6. Installation box ★ is necessary for each adaptor.
  7. \*1 For residential use only. When connected with a Heat Reclaim Ventilator (VAM), you can only switch the power ON/OFF. Cannot be used with other centralised control equipment

Item		Туре	VAM250GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE		
	Silencer		_	KDDM24B50		KDDM24B100		KDDM24	IB100X2		
iona	Nominal pipe diameter mm		_	ø 2	200 ø 2			250			
Additional function	High efficiency	y filter	KAF242J25M	KAF242J50M	KAF242J65M	KAF242J80M	KAF242J100M	KAF242J80MX2	KAF242J100MX2		
	Air filter for re	eplacement	KAF241J25M	KAF241J50M	KAF241J65M	KAF241J80M	KAF241J100M	KAF241J80MX2	KAF241J100MX2		
Flexible duct (1 m)			K-FDS151D	K-FDS	201D	K-FDS251D					
Flexible duct (2 m)		K-FDS152D	K-FDS	202D		S252D					
Duct adaptor				-	_	YDFA25A1					
		Nominal nine diameter mm						a 250			

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

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



- Examine fully an installation place and specification for using the electric heater based on the standard and regulation of each country.
- Supply the electric heater and safety production devices such as a relay and a thermostat, etc. of which qualities satisfy the standard and regulation of each country at site.
- Use a non-inflammable connecting duct to the electric heater.

  Be sure to allow 2 m or more between the electric heater and the Heat Reclaim Ventilator for safety.
- For the Heat Reclaim Ventilator, use a different power supply from that of the electric heater and install a circuit breaker

Note			
	-		

Nata