

### IRI IV

## NEXT GENERATION VRV FROM THE WORLD LEADER IN AIRCONDITIONING



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AIR TREATMENT EQUIPMENT LINEUP





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 IV SYSTEM TO REINFORCE OUR INDUSTRY LEADERSHIP. THE SYSTEM NOW OFFERS AN ENHANCED LINE-UP TO MEET AN EVER WIDENING VARIETY OF NEEDS, WHILE IMPROVING ENERGY SAVINGS, COMFORT AND EASE OF INSTALLATION.

THE VRV IV IS THE MOST ADVANCED AIRCONDITIONING SYSTEM IN THE WORLD AND IS IDEAL FOR LARGE AND SMALL SPACES.

### ENERGY SAVING TECHNOLOGY FOR VRV SYSTEM

### **ENERGY SAVING**

Higher COP and VRT technology

### **VRT-VARIABLE REFRIGERANT TEMPERATURE**

The new **VRV IV** system now 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 technology, running costs are reduced.

### ENHANCED LINEUP

Up to 60 HP

### EASE OF INSTALLATION

Compact and Lightweight design

### COMFORT

Lower operation sound

### DAIKIN

### THE WORLD LEADER IN AIRCONDITIONING

AT DAIKIN® WE ARE A LEADING INNOVATOR AND PROVIDER OF ADVANCED, HIGH-QUALITY AIRCONDITIONING SOLUTIONS FOR RESIDENTIAL, COMMERCIAL AND INDUSTRIAL APPLICATIONS.

As World's No. 1 Airconditioning Company, we are committed to delivering airconditioning solutions that enhance the quality of life all around the world. We, at Daikin Industries Ltd., are a diverse multinational company, active in airconditioning, chemicals and oil hydraulics, was established in 1924. With headquarters at Osaka, Japan, our Daikin family has more than 51,000 members, working across 60 production base units and 208 consolidated subsidiaries worldwide. As the world's sole manufacturer that develops a long line of products from refrigerants to airconditioners, 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 airconditioning products.



### EUROPE/MIDDLE EAST/AFRICA



Daikin Airconditioning Central Europe



**Daikin Airconditioning** Snain



Daikin Airconditioning Italy



Daikin Europe N.V.



Daikin Airconditioning



**Daikin Airconditioning** Germany



**Daikin Airconditioning** 



Czech Republic



Daikin Chemical France

### **CHINA**



(China) Investment





Daikin Airconditioning Shanahai



Xi'an Daikin Qing'an Compressor



Hui Zhou Daikin Suns Airconditioning



Daikin Device (Suzhou)



Daikin Fluoro Coatina Shanahai



Daikin Fluorochemicals

### ASIA/OCEANIA



Daikin Industries Thailand



**Daikin Compressor** Industries



Daikin Airconditioning Singapore



Daikin Australia



**Daikin Airconditioning** India



Daikin Industries Head Office (Inside Umeda Center Building) Japan

### **CENTRAL & SOUTH AMERICA**



Daikin America



Daikin AC (Americas)



Daikin Holding USA

### EXPLORING NEW R&D FRONTIERS

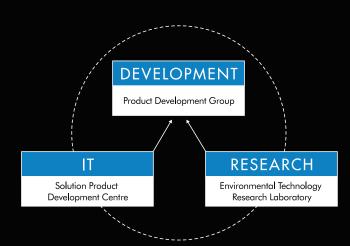
AT DAIKIN, WE ARE CREATING VALUE THROUGH INNOVATIVE TECHNOLOGIES. AS A GLOBAL INDUSTRY FRONTRUNNER, WE ARE CARRYING OUT RESEARCH AND DEVELOPMENT ON THE WORLD'S MOST ADVANCED AIRCONDITIONING TECHNOLOGY.

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

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



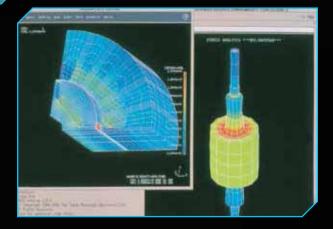
To create more advanced functions and new value, we have instituted specialised R&D divisions: the 'Environmental Technology Research Laboratory' and the 'Solution Product Development Centre'. In combination with the Product Development Group, each of the three divisions work in close cooperation to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











### THE SOLUTIONS PRODUCT DEVELOPMENT CENTRE: INTEGRATING AIRCONDITIONERS 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.

### ENVIRONMENTAL TECHNOLOGY RESEARCH LABORATORY: INTENSIVE RESEARCH ON ENVIRONMENTALLY CONSCIOUS, ENERGY SAVING AIRCONDITIONING TECHNOLOGY

Accelerating globalisation of our airconditioning 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 'airconditioning' and 'the environment'. With our mission to promote energy savings in airconditioners, 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.

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## EXCELLENT OPERATIONAL PERFORMANCE

### **ENHANCED LINEUP UP TO 60 HP**

### Normal (Space Saving) Type



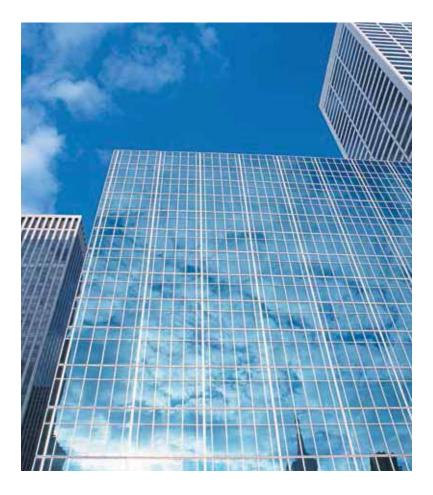
New series with compact and lightweight design 6 HP-60 HP with 28 models lineup

**YRY** IV

Installation Space

**Product Weight** 

0.95 m<sup>2</sup> 320 kg

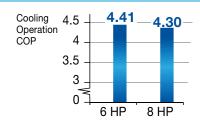


### Lineup

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
Normal Type																												

### **ENERGY SAVING**

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





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

### **EASE OF INSTALLATION**

### **Compact & lightweight design**

Highly-integrated *VRV* IV system offers compact outdoor units to achieve maximum utilisation of the installation space.



**VRV IV** 12 HP

Installation Space 0.71 m<sup>2</sup>

> Product Weight 195 kg

### **COMFORT**

### Lower operation sound

Improves heat exchanger efficency, helps reduced operation sound.

Sound level(dB(A												
	6 HP	8 HP	10 HP	12 HP								
YRY IV	55	56	57	59								

### 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.

Streamlined air grille
It promotes the discharge of
swirling airflow, further
reducing the
pressure loss.

#### Streamlined scroll fan

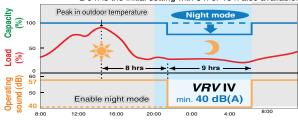
The sharp edge of each fan blade has a certain curvature, reducing both the vibration and the pressure loss.



#### 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.

\*1 8 h is the initial setting with 6 h or 10 h also available.
\*2 9 h is the initial setting with 8 h or 10 h also available.



Notes: · This function is available in setting at site.

- The operating sound in quiet operation mode is the actual value measured by our company.
- The relationship of outdoor temperature (load) and time shown above is just an example.

### VRT-VARIABLE REFRIGERANT TEMPERATURE

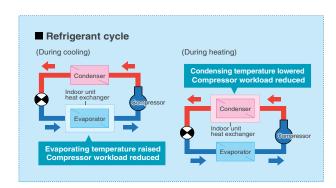
### STATE-OF-THE-ART ENERGY SAVING TECHNOLOGY FOR VRV SYSTEM

### Customise your VRV system for optimal annual efficiency

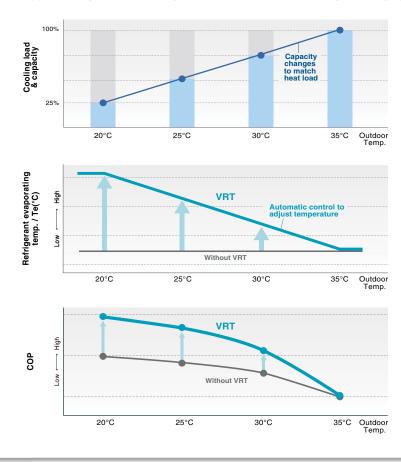
The new *VRV* IV system now features VRT technology. VRT automatically adjusts refrigerant temperature to individual building and climate requirement, thus further improving annual energy efficiency and maintaining comfort. With this excellent technology, running costs are reduced.

### 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



Required capacity changes as airconditioning load changes according to outdoor temperature.

In case of fixed evaporating temperature, excessive cooling, thermo on-off loss, and other inefficiencies occur.

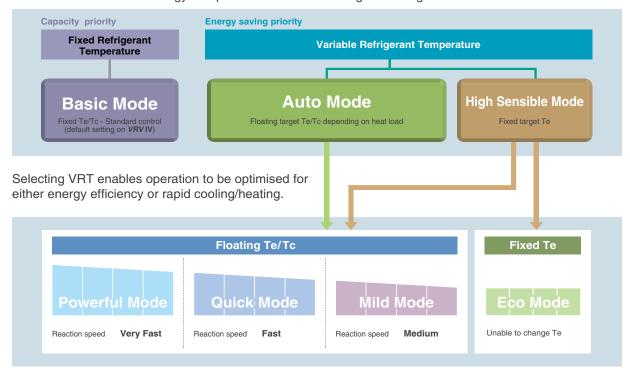
Automatic control adjusts evaporating temperature to heat load change.

Energy efficiency is improved without sacrificing comfort.

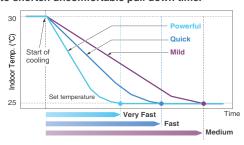
### Fine control to match user preference available through mode selection

Basic mode is selected to maintain optimal comfort.

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



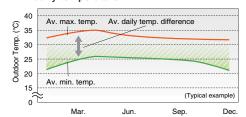
VRT offers quicker cool down to shorten uncomfortable pull down time.



Powerful mode	Can boost capacity above 100% if needed. The refrigerant temperature can go lower in cooling (higher in heating) than the set minimum (maximum in heating).     Gives priority to very fast reaction speed. The refrigerant temperature goes down (or up in heating) fast to keep the room setpoint stable.
Quick mode	Gives priority to fast reaction speed.  The refrigerant temperature goes down (or up in heating) fast to keep the room setpoint stable.
Mild mode	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.

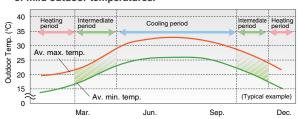
#### Recommended for use in these situations

Cooling only regions having differences in daily temperature.



VRT is particularly effective at night when temperatures are low.

Cooling/heating regions having periods of mild outdoor temperatures.



VRT is particularly effective during the intermediate periods.

### MORE FLEXIBLE SYSTEM DESIGN

### MORE OPTIONS FOR INSTALLATION LOCATION

### Long piping length

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

For connection of only VRV indoor units

Max. actual piping length

165 m

■Max. equivalent piping length

190 m

■ Max. total piping length

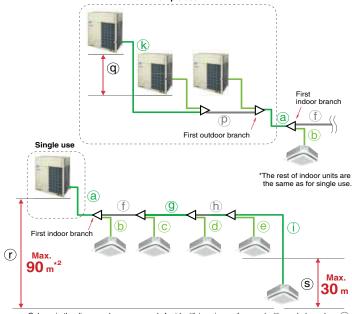
1000 m

Max. level difference between the outdoor units and the indoor units

90 m \*2

Max. level difference between the indoor units

30 m



Colours in the diagram above are merely for identifying pipes referenced with symbols such as (a).

		Actual piping length	Example	Equivalent piping length
	Refrigerant piping length	<b>165</b> m	a+f+g+h+i	<b>190</b> m
Maximum allowable	Total piping length	<b>1000</b> m	a+b+c+d+e+f+g+h+i	_
piping length	Between the first indoor branch and the farthest indoor unit	<b>90</b> m*1	f+g+h+i	_
	Between the outdoor branch and the last outdoor unit	<b>10</b> m	k+p	<b>13</b> m

			Level Difference	Example
	Between the outdoor units (Mu	Iltiple use)	5 m	q
Maximum allowable	Between the indoor units		<b>30</b> m	s
level difference	Between the outdoor units	If the outdoor unit is above.	<b>90</b> m* <sup>2</sup>	r
	and the indoor units	If the outdoor unit is below.	<b>90</b> m	r

<sup>\*1.</sup> 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

### **Connection ratio**

Connection capacity at maximum is 200%.

50%-200%

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

#### Conditions of VRV indoor unit connection capacity

Applicable VRV indoor units	FXDQ, FXMQ-P, FXAQ models	Other VRV indoor unit models*1
Single outdoor units		200%
Double outdoor units	200%	160%
Triple outdoor units		130%

<sup>\*1</sup> For the FXFQ25LU, and FXVQ models, maximum connection ratio is 130% for the entire range of outdoor units.

 <sup>1.</sup> No special requirements up to 40 in. The maximum actual piping length.
 2. When level differences are 50 m or more, the diameter of the main liquid piping size must be increased and connection ratio must be 80% to 130%. If the outdoor unit is above the indoor unit, a dedicated setting on the outdoor unit is required.

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

<sup>\*</sup>Refer to page 47 for outdoor unit combination details.

### **High external static pressure**

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

- 78.4 Pa

   More options in the opening/angle of louvre

   Outstanding heat dissipation effect in both hierarchical and intensive arrangement



### RELIABLE AND STABLE SYSTEM

### MULTIPLE ADVANCED FEATURES ENSURING MORE ACCURATE TEST OPERATION AND STABLE SYSTEM

### **Efficient automatic test operation**

Daikin **VRVIV** system incorporates a simplified and efficient test operation function, not only greatly accelerating the installation process, but effectively improving the field setting quality as well.

- 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 airconditioning system.

# Automatic check

Wiring check

Piping check

Stop valve check

### SIMPLIFIED COMMISSIONING AND AFTER-SALES SERVICE

### Function of information display by luminous digital tube

**VRV IV** system utilises the 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.

#### 7-segment digital display

Displays system operation information directly



#### Conventional LED display

Figures out system operation information by reading light emitting state of different diodes, which is both inefficient and fallible.



#### **VRV** configurator

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



### **OUTDOOR UNIT SEQUENCING TECHNOLOGY**

### **Automatic sequencing operation**

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

Stage 1 Stage 2 Stage 3



### DOUBLE BACKUP OPERATION FUNCTIONS RESPONDING RESILIENTLY TO VARIOUS UNEXPECTED SITUATIONS

### **Double backup operation functions**

Daikin *VRV* IV system boasts double backup operation functions, which can secure the use of air conditioners in this area to the greatest extent by emergently enabling double backup operation functions even if failure occurs in a set of airconditioning equipment.

In the event of a failure, emergency operation can be conveniently enabled to allow the remaining system to operate in a limited fashion.

#### **Unit backup 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).



#### **Compressor backup 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 RX(Y)Q14-20TRY6 models).



## ADVANCED TECHNOLOGIES ACHIEVE

### LARGE CAPACITY ALL DC INVERTER COMPRESSOR IN COMPACT CASING

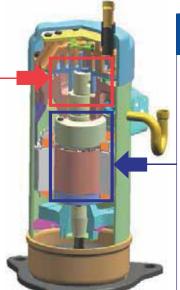
Large capacity inverter compressor using high tension strength material, realise 12 HP compressor using 8 HP casing.

#### Development of high strength material

Gives 2.4 times tensile strength compared to conventional material New Material: 600 MPa Conventional Material: 250 MPa Increases compression chamber volume by using thin spiral design.

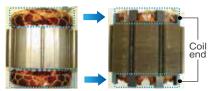


As a result of having thinned a wall thickness of the scroll, compression chamber volume increase 50%



### Small type high efficiency concentrated winding motor

Distributed winding motor 
Concentrated winding motor (Current 8 HP compressor) (New 12 HP compressor)



Small sizing 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.



Change fin shape from fine louvre to waffle fin.
Fin pitch can be reduced fin pitch from 2.0 mm to 1.4 mm, to realise unit efficiency which increases heat exchanger area.



	Heat exchanger area	Contribution of COP (cooling)
10 HP	13%UP	105.5%
16 HP	24%UP	111.5%

#### VARIOUS ADVANCED CONTROL MAIN PC BOARD

#### SMT\* packaging technology

- SMT packaging technology adopted by the whole computer control panel improves the anti-clutter performance.
- Protects your computer boards from adverse effects of sandy and humid weather.





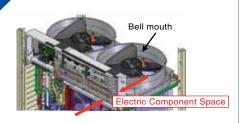
packaging material

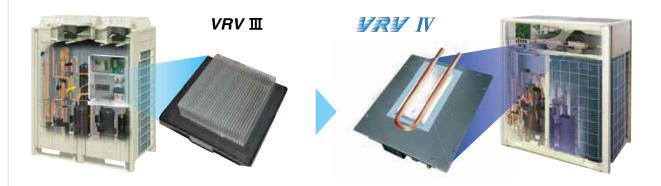
\*SMT: Surface mounted technology

### Refrigerant cooling technology, ensures stability of PCB temperature

### Improved inner design to increase smooth airflow

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





### 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 airconditioning capacity and also ensures efficient and reliable operation.

- VRV IV outdoor unit offers a higher capacity of up to 60 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.
- Outdoor units with anti-corrosion specifications (-E type on request) are designed specifically for use in areas which are subject to salt damage and atmospheric pollution.

### **Normal (Space Saving) Type**

Single Outdoor Units

6, 8, 10, 12 HP

RX(Y)Q6TRY6(E)

RX(Y)Q8TRY6(E)

RX(Y)Q10TRY6(E)

RX(Y)Q12TRY6(E)



14, 16 HP

RX(Y)Q14TRY6(E) RX(Y)Q16TRY6(E)

RX(Y)Q18TRY6(E) RX(Y)Q20TRY6(E)

18, 20 HP

Double Outdoor Units

22, 24 HP



RX(Y)Q22TRY6 RX(Y)Q24TRY6

26, 28, 30, 32 HP



RX(Y)Q26TRY6 RX(Y)Q30TRY6 RX(Y)Q28TRY6 RX(Y)Q32TRY6

Double Outdoor Units

34, 36, 38, 40 HP



RX(Y)Q34TRY6 RX(Y)Q36TRY6 RX(Y)Q38TRY6 RX(Y)Q40TRY6 • Triple Outdoor Units

42, 44 HP



RX(Y)Q42TRY6 RX(Y)Q44TRY6 46, 48, 50, 52, 54, 56, 58, 60 HP



RX(Y)Q46TRY6 RX(Y)Q48TRY6 RX(Y)Q50TRY6 RX(Y)Q52TRY6 RX(Y)Q54TRY6 RX(Y)Q56TRY6 RX(Y)Q58TRY6 RX(Y)Q60TRY6

### Lineup

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
Normal (Space Saving) Type																												

## MDOOR UNIT LINEUP

### **ENHANCED RANGE OF CHOICES**

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

VRV indoor u				0=-		4.0	50.	00			100	405-			types		1
Tyron	Model Name															400	500
Type	Wodel Name	Capacity Range Capacity Index	0.8 HP 20	1 HP 25	31.25 HP	1.6 HP 40	2 HP 50	2.5 HP 62.5	3 HP 71	3.2 HP 80	4 HP 100	5 HP 125	6 HP	8 HP 200	10 HP 250	16 HP 400	20 F
Ceiling Mounted Cassette (Round Flow with Sensing) (Optional)	FXFQ-SVM	Capacity macx	20	New	New	New	New	New	7	New	New	New	140	200	230	400	300
Ceiling Mounted Cassette (Round Flow)	FXFQ-LUV1			•	•	0	•	•		•	0	•					
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE		•	0	•	•	0										
4-Way Flow Ceiling Suspended	FXUQ-AVEB								New		New						
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE		•	•	•	•	•	•		•		•					
Ceiling Mounted Cassette Corner	FXKQ-MAVE			0	0	•		0									
Clim Calling	FXDQ-PBVE (with drain pump)	(700 mm width type)	•	•	•												
Slim Ceiling Mounted Duct	FXDQ-NBVE (with drain pump)	(900/1,100 mm width type)				•	•	•									
Ceiling Mounted	FXMQ-PVE	-	0	0	0	•	0	0		0	0	0	0				
Duct	FXMQ-MVE													•	•		
Ceiling Suspended	FXHQ-MAVE				•			•			•						
Wall Mounted	FXAQ-PVE		•	•	•	0	0	0									
Floor Standing	FXLQ-MAVE		•														
Concealed Floor Standing	FXNQ-MAVE		•	0	•	•	0	•									
Floor Standing Ne	FXVQ-MY1											New		New	New	New	
	FXVQ-MY16 (high static pressure type)																N

At Daikin, we offer a wide range of indoor units, including both  $\mathit{VRV}$  and residential models, responding to a variety of needs of our customers that require airconditioning solutions.

### **VRV** Indoor Units

### Ceiling Mounted Cassette (Round Flow) Type

FXFQ-LUV1



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



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

FXFQ-SVM





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



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

FXZQ-MVE



Quiet, compact, and designed for user comfort



### 4-Way Flow Ceiling Suspended Type

**FXUQ-AVEB** 





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



### Ceiling Mounted Cassette (Double Flow) Type

FXCQ-MVE



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



### Ceiling Mounted Cassette Corner Type

FXKQ-MAVE



Slim design for flexible installation



### Slim Ceiling Mounted Duct

Type





FXDQ-NBVE



Slim design, quietness and static pressure switching



### Ceiling Mounted Duct Type

FXMQ-PVE



FXMQ-MAVE



High external static pressure allows flexible installations



### Ceiling Suspended Type

FXHQ-MAVE



Slim body with quiet and wide airflow



### Floor Standing Duct Type

FXVQ-MY1 FXVQ-MY16 (high static pressure type)





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



### Floor Standing Type

FXLQ-MAVE



Concealed Floor Standing
Type

FXNQ-MAVE



Suitable for perimeter zone air conditioning



### Wall Mounted Type

FXAQ-PVE



Stylish flat panel design harmonised with your interior décor



### INDOOR UNIT LINEUP

### **VRV INDOOR UNITS**

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

New

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

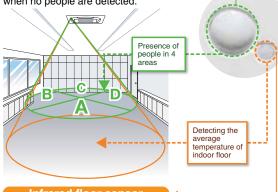


### Presence of people and floor temperature can be detected to provide comfort and energy savings

 Dual sensors detect the presence of people and floor temperature to provide comfortable air-conditioning and energy savings.

#### Infrared presence sensor

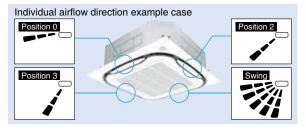
 The sensor detects human presence and adjusts the airflow direction automatically to prevent drafts.
 Energy saving control can be performed when no people are detected.



•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.

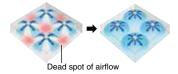
#### Individual airflow direction control

•Thanks to the individual airflow direction control function, airflow direction can be individually adjusted for each air discharge outlet. Five directions of airflow and auto-swing can be selected with wired remote controller BRC1E62, which realises optimum air distribution.





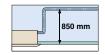
•Indoor unit offers 360° airflow, discharges air in all directions with more uniform temperature distribution.



- Energy efficiency has been improved thanks to the adoption of a new heat exchanger with smaller tubes, DC fan motor and DC drain pump motor.
- •Low operation sound level

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

- Control of airflow rate can be selected from 3-step control, which provides comfortable airflow. Auto airflow rate control can be selected with wired remote controller BRC1E62.
- Drain pump is equipped as standard accessory with 850 mm lift



### Sensing function

Auto airflow rate mode + Auto airflow direction mode

• Floor temperature is detected and over cooling prevented.





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

#### ■With sensing function



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

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

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.

#### Comfortable airflow

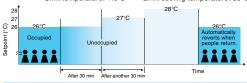
Airflow rate automatically increases during hot or cold periods (when there is a large difference with set temperature), and operation is rapidly performed for cooling or heating. When the difference with set temperature becomes small, drafts are prevented by automatically reducing airflow rate, and raising the flap to a horizontal position during the cooling operation.

### Sensing sensor mode

- Sensing sensor low mode \*1.2
- When there are no people in a room, the set temperature is shifted automatically.

Example: • Cooling setpoint: 26°C

- Shift time: 30 min. • Shift temperature: 1.0°C · Limit cooling temperature: 30°C



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

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

- Sensing sensor stop mode \*1.2
  - When there are no people in a room, the system stops automatically.

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

- \*1. These functions are not available when using the group control system.
- \*2. User can set these functions with remote controller.

### Airflow block function '3

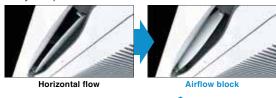
 Total comfort by individual airflow direction control and newly-equipped "airflow block function"



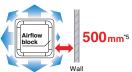
Airflow block function prevents uncomfortable drafts by reducing air velocity to approx. 0.3m/s.\*4



- New airflow block function prevents uncomfortable drafts by reducing air velocity. It can be set using the BRC1E62 remote controller. There is no need for sealing material of air discharge outlet (option).
- •This function only works when all-round flow is used. It cannot be used when sealing material is used in the air discharge outlet (option).
- Easy setup with remote controller



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



- \*3. Works in one direction only.
- \*4. In case of FXFQ63S type (Data is based on Daikin research.)
- \*5. A gap of 1500 mm is required if the air block function is not used

## INDOOR UNIT LINEUP

### **VRV INDOOR UNITS**

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

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



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

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

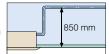


Round Flow

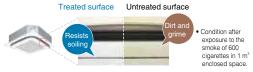
There are areas of uneven temperature.

There are much fewer

- \* As of April 2004, the release date for Japan.
- The light weight unit at 19.5 kg for FXFQ25-50LU models make installation easy.
- Drain pump is equipped as a standard accessory with a 850 mm lift



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



- Control of the airflow rate can be selected from 3-step control.
- ●Low operation sound level (dB(A))

  FXFQ-LU 25/32 40 50 63 80 100 125

  Sound level (H-H/H/L) 30/28.5/27 31/29/27 32/29.5/27 34/31/28 36/33.5/31 43/37.5/32 44/39/34

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

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









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

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

FXZQ20M / FXZQ25M / FXZQ32M FXZQ40M / FXZQ50M



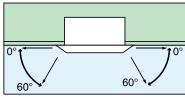
### Quiet, compact, and designed for user comfort

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

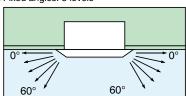
(dB(A))

FXZQ-M	20/25	32	40	50
Sound level (H/L)	30/25	32/26	36/28	41/33

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

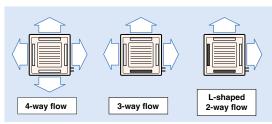


•Fixed angles: 5 levels



\*Angles can be also set on site to prevent drafts (0°-35°) or soiling of the ceiling (25°-60°), other than standard setting (0°-60°).

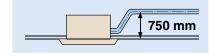
2 2-, 3-, and 4-way airflow patterns are available, enabling installation in the corner of a room.



\*For 3-way or 2-way flow installation, the sealing member for air discharge outlet (option) must be used to close each unused outlet.



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



### INDOOR UNIT LINEUP

### **VRV INDOOR UNITS**

### 4-Way Flow Ceiling Suspended Type





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





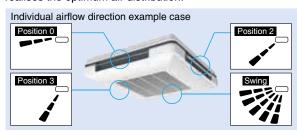
 Built-in electronic expansion valve eliminates the need for a BEV unit, which improves flexibility of installation.

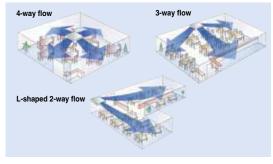


 With adoption of the individual flap control, airflow direction adjustment can be individually set for each air outlet. Five directions of airflow and auto-swing can be selected with wired remote controller BRC1E62, which realises the optimum air distribution.



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





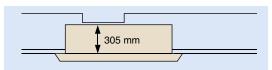
### **Ceiling Mounted Cassette (Double Flow) Type**

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



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

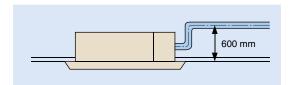
•The thin unit (only 305 mm high) can be installed in a ceiling space as narrow as 350 mm. All models feature a compact design with a depth of only 600 mm.



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

ow operation		(220 V)(dB(A))					
FXCQ-M	20	25/32	40/50	63	80	125	
Sound level (H/L)	32/27	34/28	34/29	37/32	39/34	44/38	

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





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

### INDOOR UNIT LINEUP

### **VRV INDOOR UNITS**

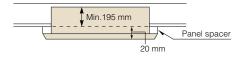
### **Ceiling Mounted Cassette Corner Type**

FXKQ25MA / FXKQ32MA FXKQ40MA / FXKQ63MA

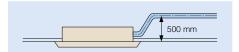


### Slim design for flexible installation

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

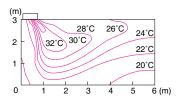


- Single-flow type allows effective air discharge from corner or from drop-ceiling.
- Drain pump is equipped as standard accessory with 500 mm lift.

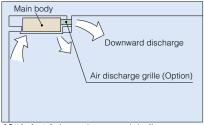




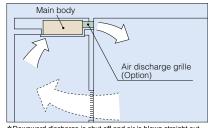
 Providing 3 different settings of standard, draft prevention and ceiling soiling prevention, the auto swing mechanism assures even distribution of airflow and room temperature.



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



\*Set for front discharge using a suspended ceiling.



- \*Downward discharge is shut off and air is blown straight out (front discharge).
- A long-life filter is equipped as a standard accessory.
- $^{\star}$  8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m $^{3}$

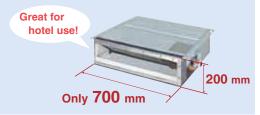
### **Slim Ceiling Mounted Duct Type**

### Slim design, quietness and static pressure switching



### FXDQ20PB / FXDQ25PB / FXDQ32PB

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





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

Low operation sound level

Low operation sound level (dB(A								
FXDQ-PB/NB	20/25/32	40	50	63				
Sound level (HH/H/L)	33/31/29	34/32/30	35/33/31	36/34/32				

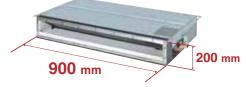
- \* The values of operation sound level represent those for rear-suction operation.

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

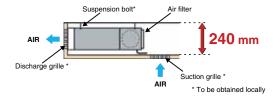


### FXDQ40NB / FXDQ50NB / FXDQ63NB

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

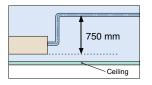


\* 1,100 mm in width for the FXDQ63NB model.



- External static pressure selectable by remote controller switching make this indoor unit a very comfortable and flexible model.
  - 10 Pa-30 Pa/factory set: 10 Pa for FXDQ-PB models. 15 Pa-44 Pa/factory set: 15 Pa for FXDQ-NB models.
- FXDQ-PB and FXDQ-NB models are available with a drain pump as a standard accessory.

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



### NDOOR UNIT LINEUP

### **VRV INDOOR UNITS**

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

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

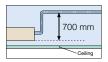


### Middle and high static pressure allows for flexible duct design

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

30 Pa-100 Pa for FXMQ20P-32P 30 Pa-160 Pa for FXMQ40P 50 Pa-200 Pa for FXMQ50P-125P 50 Pa-140 Pa for FXMQ140P

- All models are only 300 mm in height, an improvement over the 390 mm height of conventional models. The weight of the FXMQ40P has been reduced from 44 kg to 28 kg.
- Drain pump is equipped as standard accessory with 700 mm lift.



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

•	(dB)											
	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.

#### FXMQ200MA/FXMQ250MA



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

### **Ceiling Suspended Type**

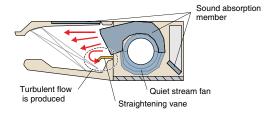
### FXHQ32MA / FXHQ63MA FXHQ100MA



### Slim body with quiet and wide airflow

#### •Adoption of QUIET STREAM FAN

Uses the quiet stream fan and many more advanced technologies.

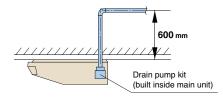


• Low operation sound level

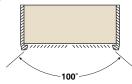
(dB(A))

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

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



 Wide air discharge openings produce a spreading 100° airflow.





- Maintenance is easy
  - Non-dew flap with no implanted bristles
     Bristle-free flap minimises
     contamination and makes
     cleaning simpler.



Non-dew Flap

- Easy-to-clean flat design
- Maintenance is easier because everything can be performed from below the unit.
- A long-life filter is equipped as standard accessory.
- $^{\star}$  8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m  $^{3}$

### INDOOR UNIT LINEUP

### **VRV INDOOR UNITS**

### **Wall Mounted Type**

FXAQ20P / FXAQ25P FXAQ32P / FXAQ40P FXAQ50P / FXAQ63P

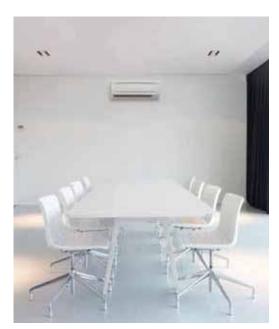


### Stylish flat panel design harmonised with your interior décor

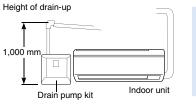
- •Stylish flat panel design creates a graceful harmony that enhances any interior space.
- •Flat panel can be cleaned with only the single pass of a cloth across their smooth surface.
  Flat panel can also be easily removed and washed for more thorough cleaning.
- Low operation sound level

zon operation coaria level									
FXAQ-P	20	25	32	40	50	63			
Sound level (H/L)	35/31	36/31	38/31	39/34	42/37	47/41			

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



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





### **Floor Standing Type**

FXLQ20MA / FXLQ25MA FXLQ32MA / FXLQ40MA FXLQ50MA / FXLQ63MA



### Suitable for perimeter zone airconditioning

- •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/m



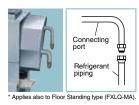
### **Concealed Floor Standing Type**

FXNQ20MA / FXNQ25MA FXNQ32MA / FXNQ40MA 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.
- $^{\ast}$  8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m  $^{3}$





## INDOOR UNIT LINEUP

### VRV INDOOR UNITS

### **Floor Standing Duct Type**



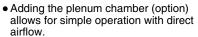
FXVQ125M / FXVQ200M FXVQ250M / FXVQ400M FXVQ500MY16

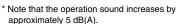


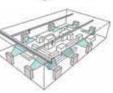


- Large airflow type that fits for spacious areas such as factories and large stores.
- Various installations can be supported from full-scale duct connection airflow to direct airflow that allows for easy installation.
- Full-scale duct connection airflow allows for airconditioning evenly in spacious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





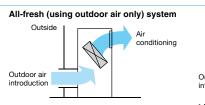






- The high static pressure type driven by the belt drive system allows for use of air discharge outlets in various shapes as well as long ducts. Highly flexible installation is possible.
- High maintainability design that allows major services and maintenance services to be performed at the front.
-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

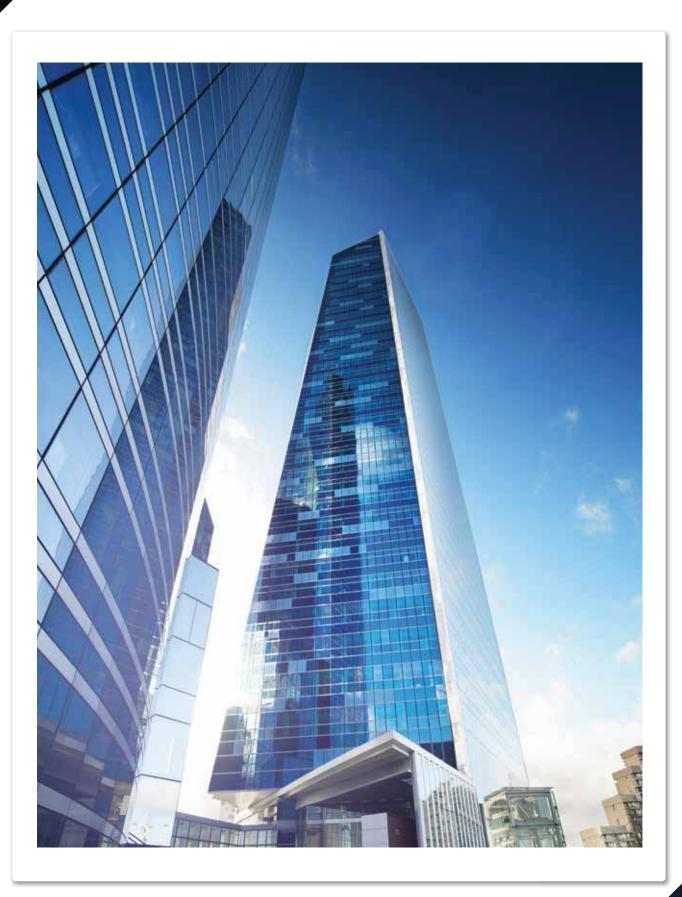
\*When using the unit as an outdoor-air processing unit, there are some restrictions.



## Return + Outdoor air mixed system Outside Outdoor air mixed system Outdoor air conditioning

\* Air introduced from the outside and circulated air must be mixed in the air conditioner primary side before introduction into the air conditioner.





### **SPECIFICATIONS**

### **VRV INDOOR UNITS**

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



	FXFQ25LUV1	EVECONI IIVA	EVEO 401 111/4	FXFQ50LUV1	EVEOCOL LIVA	EVECONI IIVA	FXFQ100LUV1	EVEO10ELIIV1				
MODEL			FAFQZDLUVI	FXFQ32LUV1					FAFQIUULUVI	FAFQ123LUVI		
Power supply			1-phase, 220-240 V, 50 Hz									
		kcal/h	2,400	3,100	3,900	4,800	6,100	7,700	9,600	12,000		
Cooling capaci	ty	Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800		
		kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0		
		kcal/h	2,800	3,400	4,300	5,400	6,900	8,600	10,800	13,800		
Heating capaci	ty	Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	42,700	54,600		
		kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0		
Casing			Galvanised steel plate									
Airflow rato (H	Airflow rate (HH/H/L)		13/11.5/10	13/11.5/10	15/13/11	16/13.5/11	19/16.5/13.5	21/18/15	32/26/20	33/28/22.5		
Allilow rate (Fi			459/406/353	459/406/353	530/459/388	565/477/388	671/583/477	742/636/530	1,130/918/706	1,165/989/794		
Sound level (H	Sound level (HH/H/L) dB(A)			30/28.5/27	31/29/27	32/29.5/27	34/31/28	36/33.5/31	43/37.5/32	44/39/34		
Dimensions (H	×W×D)	mm	246×840×840 288×840							40×840		
Machine weigh	t	kg		19	9.5		2	2	2	5		
	Liquid (Flare)		φ 6.4 φ 9.5									
Piping connections	Gas (Flare)	mm		φ12.7 φ15						15.9		
Connections	Drain		VP25 (External Dia, 32/Internal Dia, 25)									
	Model		BYCP125K-W1									
Panel	Colour					Fresh w	hite	te				
(Option)	Dimensions(H×W×D)	mm				50×950×	<950					
	Weight	kg	5.5									

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



	FXFQ25SVM	FXFQ32SVM	FXFQ40SVM	FXFQ50SVM	FXFQ63SVM	FXFQ80SVM	FXFQ100SVM	FXFQ125SVM			
MODEL Power supply			FXFQ25SVM FXFQ32SVM FXFQ40SVM FXFQ50SVM FXFQ63SVM FXFQ80SVM FXFQ100SVM FXFQ125SVM 1-phase, 220-240 V, 50 Hz								
kcal/h		kcal/h	2,400	3,100	3,900	4,800	6,100	7,700	9,600	12,000	
Cooling capac	city	Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800	
		kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	
kcal/h		2,800	3,400	4,300	5,400	6,900	8,600	10,800	13,800		
Heating capac	city	Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	42,700	54,600	
		kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	
Casing			Galvanised steel plate								
Airflow roto (I	m³/m		12.5/11.5/10.0	12.5/11.5/10.0	14.5/13.0/11.0	22.0/17.5/13.5	23.5/18.5/13.5	23.5/19.5/15.0	33.0/26.0/19.0	34.5/27.5/21.0	
Airflow rate (H/M/L)		cfm	441/406/353	441/406/353	512/459/388	777/618/477	830/653/477	830/688/530	1,165/918/671	1,218/971/741	
Sound level (F	H/M/L)	dB(A)	30/28.5/27	30/28.5/27	31/29/27	36/32/28	38/33/28	38/35/31	44/38/32	45/40/35	
Dimensions (H	H×W×D)	mm	246×840×840 288×840×						40×840		
Machine weigl	ht	kg		19			23		2	26	
	Liquid (Flare)		<i>ϕ</i> 6.4 <i>ϕ</i> 9.5								
Piping connections	Gas (Flare)	mm	φ12.7 φ15.9								
COTTIECTIONS	Drain		I.D. <i>ϕ</i> 25×O.D. <i>ϕ</i> 32(VP25)								
	Model		BYCQ125B-W1								
Panel	Colour					Fresh	white	white			
(Option)	Dimensions(H×W×D)	mm				50×95	0×950				
	Weight	kg	5.5								

Note: Specifications are based on the following conditions;

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



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



	MOD	EL		FXZQ20MVE	FXZQ25MVE	FXZQ32MVE	FXZQ40MVE	FXZQ50MVE		
Power supp	oly				1-phase	e, 220-240 V/220 \	/, 50 Hz			
			kcal/h	1,900	2,400	3,100	3,900	4,800		
Cooling capacity		Btu/h	7,500 9,600		12,300	15,400	19,100			
			kW	2.2	2.8	3.6	4.5	5.6		
			kcal/h	2,200	2,800	3,400	4,300	5,400		
Heating cap	acity		Btu/h	8,500	10,900	13,600	17,100	21,500		
			kW	2.5	3.2	4.0	5.0	6.3		
Casing				Galvanised steel plate						
Airflow rate	, /LI/L\		m³/min	9/7		9.5/7.5	11/8	14/10		
Allilow rate	≠ (⊓/L)		cfm	318/247		335/265	388/282	493/353		
Sound level	(H/L)	230 V	dB(A)	30	/25	32/26	36/28	41/33		
Dimensions	(H×W	×D)	mm	286×575×575						
Machine we	eight		kg	18						
	Liquid	(Flare)				<b>∮</b> 6.4				
Piping connections	Gas (I	Flare)	mm	φ12.7						
CONTICCTIONS	Drain			VP20 (External Dia, 26/Internal Dia, 20)						
Model			BYFQ60B8W1							
Panel	Colou	Colour		White (6.5Y9.5/0.5)						
(Option)	Dimensio	ons(H×W×D)	mm			55×700×700				
	Weigh	nt	kg			2.7				

#### 4-way Flow Ceiling Suspended Type



	MODEL		FXUQ71AVEB	FXUQ100AVEB			
Power supp	oly		1-phase, 220-240	V/220-230 V, 50 Hz			
		kcal/h	6,900	9,600			
Cooling cap	pacity	Btu/h	27,300	38,200			
		kW	8.0	11.2			
		kcal/h	7,700	10,800			
Heating cap	pacity	Btu/h	30,700	42,700			
		kW	9.0	12.5			
Casing			Fresh white				
Airflow rate	- (□/M/L)	m³/min	22.5/19.5/16	31/26/21			
Allilow rate	5 (11/1VI/L)	cfm	794/688/565	1,094/918/741			
Sound leve	I (H/M/L)	dB(A)	40/38/36	47/44/40			
Dimensions	s (H×W×D)	mm	198×9	50×950			
Machine we	eight	kg	26	27			
	Liquid (Flare)		$\phi$ 9	0.5			
Piping connections	Gas (Flare)	mm	<i>φ</i> 1	5.9			
CONTROCTIONS	Drain		VP20 (External Dia,	26/Internal Dia, 20)			

- Note: Specifications are based on the following conditions;

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

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

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

   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.

## SPECIFICATIONS

#### **VRV INDOOR UNITS**

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



	MODEL		FXCQ20MVE	FXCQ25MVE	FXCQ32MVE	FXCQ40MVE	FXCQ50MVE	FXCQ63MVE	FXCQ80MVE	FXCQ125MVE	
Power supp	oly				1-phas	e, 220-240	V/220 V, 50	) Hz			
		kcal/h	1,900	2,400	3,100	3,900	4,800	6,100	7,700	12,000	
Cooling cap	acity	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	30,700	47,800	
		kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	14.0	
		kcal/h	2,200	2,800	3,400	4,300	5,400	6,900	8,600	13,800	
Heating cap	acity	Btu/h	8,500	10,900	13,600	17,100	21,500	27,300	34,100	54,600	
		kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	16.0	
Casing				Galvanised steel plate							
Airflow rate	· (ШШ/M/L)	m³/min	7/5	9/6.5	9/6.5	12/9	12/9	16.5/13	26/21	33/25	
Allilow rate	(HH/W/L)	cfm	247/177	318/230	318/230	424/318	424/318	582/459	918/741	1,165/883	
Sound level	(H/L) 220 V	dB(A)	32/27	34/28	34/28	34/29	34/29	37/32	39/34	44/38	
Dimensions	(H×W×D)	mm	305×775×600	305×775×600	305×775×600	305×990×600	305×990×600	305×1,175×600	305×1,665×600	305×1,665×600	
Machine we	eight	kg	26.0	26.0	26.0	31.0	32.0	35.0	47.0	48.0	
	Liquid (Flare)		<i>ϕ</i> 6.4	<b></b> <i>ϕ</i> 6.4	<b></b> <i>∮</i> 6.4	<i>ϕ</i> 6.4	<i>∲</i> 6.4	<i>∲</i> 9.5	φ9.5	φ9.5	
Piping connections	Gas (Flare)	mm	φ12.7	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 15.9	<i>∲</i> 15.9	<i>∲</i> 15.9	
COMMODITORIO	Drain				VP25 (E	xternal Dia,	32/Internal	Dia, 25)	•	•	
Model Panel Colour			В	YBC32G-W	/1	BYBC5	0G-W1	BYBC63G-W1	BYBC12	25G-W1	
						White (1	0Y9/0.5)		,		
(Option)	Dimensions(HxWxD)	mm	53×1,030×680	53×1,030×680	53×1,030×680	53×1,245×680	53×1,245×680	53×1,430×680	53×1,920×680	53×1,920×680	
	Weight	kg	8.0	8.0	8.0	8.5	8.5	9.5	12.0	12.0	

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



	MODEL		FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE			
Power supp	oly			1-phase, 220-24	0 V/220 V, 50 Hz				
		kcal/h	2,400	3,100	3,900	6,100			
Caaling oor	О		9,600	12,300	15,400	24,200			
Cooling capacity		kW	2.8	3.6	4.5	7.1			
		kcal/h	2,800	3,400	4,300	6,900			
Heating cap	acity	Btu/h	10,900	13,600	17,100	27,300			
		kW	3.2	4.0	5.0	8.0			
Casing				Galvanised steel plate					
Airflow rote	. (11/1)	m³/min	11/9	11/9	13/10	18/15			
Airflow rate	₹ (□/L)	cfm	388/318	388/318	459/353	635/530			
Sound level	(H/L) 220 V	dB(A)	38/33	38/33	40/34	42/37			
Dimensions	s (H×W×D)	mm	215×1,110×710	215×1,110×710	215×1,110×710	215×1,310×710			
Machine we	eight	kg	31	31	31	34			
	Liquid (Flare)		φ 6.4	φ 6.4	φ 6.4	φ 9.5			
Piping connections	Gas (Flare)	mm	φ 12.7	φ 12.7	φ 12.7	φ 15.9			
	Drain			VP25 (External Dia	32/Internal Dia, 25)				
	Model			BYK4	5FJW1	BYK71FJW1			
Panel	Colour			White (1	0Y9/0.5)				
(Option)	Dimensions(H×W×D)	mm	70×1,240×800 70×1,240×800		70×1,240×800	70×1,440×800			
	Weight	kg	8.5	8.5	8.5	9.5			

Note: Specifications are based on the following conditions;

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

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

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

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

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

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

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



MODE	with drai	n pump	FXDQ20PBVE	FXDQ25PBVE	FXDQ32PBVE		
WODE	-						
Power supp	oly		1-p	hase, 220-240 V/220 V, 50 Hz			
		kcal/h	1,900	2,400	3,100		
Cooling cap	acity	Btu/h	7,500	9,600	12,300		
		kW	2.2	2.8	3.6		
		kcal/h	2,200	2,800	3,400		
Heating cap	acity	Btu/h	8,500	10,900	13,600		
		kW	2.5 3.2		4.0		
Casing				Galvanised steel plate			
Airflow roto	(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	· (ПП/П/L)	cfm	282/254/226	282/254/226	282/254/226		
External sta	tic pressure	Pa	30-10 <sup>*2</sup>				
Sound level	(HH/H/L)*1*3	dB(A)	33/31/29	33/31/29	33/31/29		
Dimensions	(H×W×D)	mm	200×700×620	200×700×620	200×700×620		
Machine weight kg		kg	23.0	23.0	23.0		
	Liquid (Flare)		<i>ϕ</i> 6.4	φ6.4	<i>ϕ</i> 6.4		
Piping connections	Gas (Flare)	mm	φ12.7	<i>ϕ</i> 12.7	φ12.7		
2011100000113	Drain		VP20 (External Dia, 26/Internal Dia, 20)				

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



MODE	with d	rain pump	FXDQ40NBVE	FXDQ50NBVE	FXDQ63NBVE				
WODL	-								
Power supp	oly		1-phase, 220-240 V/220 V, 50 Hz						
	kca		3,900	4,800	6,100				
Cooling cap	acity	Btu/h	15,400	19,100	24,200				
		kW	4.5	5.6	7.1				
		kcal/h	4,300	5,400	6,900				
Heating cap	acity	Btu/h	17,100	21,500	27,300				
		kW	5.0 6.3		8.0				
Casing				Galvanised steel plate					
Airflow rate	. /⊔⊔/⊔/  \	m³/min	10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0				
Allilow rate	· (ΠΠ/Π/L)	cfm	371/335/300	441/388/353	583/512/459				
External sta	tic pressure	Pa		44-15 <sup>*2</sup>					
Sound level	(HH/H/L)*1*	dB(A)	34/32/30	35/33/31	36/34/32				
Dimensions	(H×W×D)	mm	200×900×620	200×900×620	200×1,100×620				
Machine weight		kg	27.0	28.0	31.0				
Liquid (Flare)		e)	<b></b> <i>ϕ</i> 6.4	<b> </b>	<i>ϕ</i> 6.4				
Piping connections	Gas (Flare)	mm	<i>∲</i> 12.7	<i>∲</i> 12.7	<i>∲</i> 12.7				
COMMICCUOMS	Drain		VP2	20 (External Dia, 26/Internal Dia	a, 20)				

- Note: Specifications are based on the following conditions;

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

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

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

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

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

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

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

## SPECIFICATIONS

#### **VRV INDOOR UNITS**

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



	MODEL		EVMONODVE	FXMQ25PVE	FXMQ32PVE	FXMQ40PVE	FXMQ50PVE		
			FXMQ20PVE				FXIVIQUEVE		
Power supp	oly		1-phase, 220-240 V/220 V, 50 Hz						
		kcal/h	1,900	2,400	3,100	3,900	4,800		
Cooling cap	Cooling capacity		7,500	9,600	12,300	15,400	19,100		
		kW	2.2	2.8	3.6	4.5	5.6		
		kcal/h	2,200	2,800	3,400	4,300	5,400		
Heating cap	acity	Btu/h	8,500	10,900	13,600	17,100	21,500		
		kW	2.5	3.2	4.0	5.0	6.3		
Casing				G	alvanised steel pla	te			
Airflow rate	· /⊔⊔/⊔/I \	m³/min	9/7.5/6.5	9/7.5/6.5	9.5/8/7	16/13/11	18/16.5/15		
Allilow fate	e (HH/H/L)	cfm	318/265/230	318/265/230	335/282/247	565/459/388	635/582/530		
External sta	tic pressure	Pa	30-100 (50)*2	30-100 (50)*2	30-100 (50)*2	30-160 (100)*2	50-200 (100)* <sup>2</sup>		
Sound level	(HH/H/L)	dB(A)	33/31/29	33/31/29	34/32/30	39/37/35	41/39/37		
Dimensions	(H×W×D)	mm	300X550X700	300X550X700	300X550X700	300X700X700	300×1,000×700		
Machine weight kg		25	25	25	28	36			
	Liquid (Flare)		φ 6.4	φ 6.4	φ 6.4	<i>ϕ</i> 6.4	φ 6.4		
Piping connections	Gas (Flare)	mm	φ12.7	φ12.7	φ 12.7	<i>∮</i> 12.7	¢12.7		
	Drain			VP25 (Exte	ernal Dia, 32/Intern	al Dia, 25)			

	MODEL		FXMQ63PVE	FXMQ80PVE	FXMQ100PVE	FXMQ125PVE	FXMQ140PVE			
Power supp	oly			1-phase	e, 220-240 V/220 V	, 50 Hz				
		kcal/h	6,100	7,700	9,600	12,000	13,800			
Cooling cap	acity	Btu/h	24,200	30,700	38,200	47,800	54,600			
		kW	7.1	9.0	11.2	14.0	16.0			
		kcal/h	6,900	8,600	10,800	13,800	15,500			
Heating cap	acity	Btu/h	27,300	34,100	42,700	54,600	61,400			
		kW	8.0	10.0	12.5	16.0	18.0			
Casing			Galvanised steel plate							
Airflow rate	. /ШШ/Ш/  )	m³/min	19.5/17.5/16	25/22.5/20	32/27/23	39/33/28	46/39/32			
All low rate	: (HH/H/L)	cfm	688/618/565	883/794/706	1,130/953/812	1,377/1,165/988	1,624/1,377/1,130			
External sta	tic pressure	Pa	50-200 (100)*2	50-200 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	50-140 (100)* <sup>2</sup>			
Sound level	(HH/H/L)	dB(A)	42/40/38	43/41/39	43/41/39	44/42/40	46/45/43			
Dimensions	(H×W×D)	mm	300×1,000×700	300×1,000×700	300×1,400×700	300×1,400×700	300×1,400×700			
Machine we	Machine weight kg		36	36	46	46	47			
Liquid (Flare)			<i>\$</i> 9.5	<i>∮</i> 9.5	φ 9.5	<i>\$</i> 9.5	<i>\$</i> 9.5			
Piping connections	Gas (Flare)	mm	φ15.9	φ 15.9	φ 15.9	φ 15.9	φ 15.9			
22111130110110	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.

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

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

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

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

  \*1: Power consumption values are based on conditions of rated external static pressure.

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

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



	MODEL		FXMQ200MVE	FXMQ200MVE			
Power supp	oly		1-phase, 220-240	V/220 V, 50 Hz			
		kcal/h	19,300	24,100			
Cooling cap	acity	Btu/h	76,400	95,500			
		kW	22.4	28.0			
		kcal/h	21,500	27,100			
Heating cap	acity	Btu/h	85,300	107,500			
		kW	25.0	31.5			
Casing			Galvanised steel plate				
Airflow rate	(H/L)	m³/min	58/50	72/62			
Allilow late	; (I I/L)	cfm	2,047/1,765	2,542/2,189			
External sta	tic pressure	Pa	132-221 * <sup>2</sup>	191-270* <sup>2</sup>			
Sound level	I(H/L) 220 V	dB(A)	48/45	48/45			
Dimensions	(H×W×D)	mm	470×1,380×1,100	470×1,380×1,100			
Machine we	Machine weight kg		137	137			
	Liquid (Flare)		φ 9.5	φ 9.5			
Piping connections	Gas (Flare)	mm	φ19.1	φ 22.2			
	Drain		PS1	В			

#### **Ceiling Suspended Type**



	MODEL		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE			
Power supp	oly		1-	phase, 220-240 V/220 V, 50 Hz				
		kcal/h	3,100	6,100	9,600			
Cooling cap	pacity	Btu/h	12,300	24,200	38,200			
		kW	3.6	7.1	11.2			
		kcal/h	3,400	6,900	10,800			
Heating cap	pacity	Btu/h	13,600	27,300	42,700			
		kW	4.0 8.0		12.5			
Casing			White (10Y9/0.5)					
Airflow rate	· (U/L)	m³/min	12/10	17.5/14	25/19.5			
Allilow fale	s (n/L)	cfm	424/353	618/494	883/688			
Sound level	(H/L)	dB(A)	36/31	39/34	45/37			
Dimensions	s (H×W×D)	mm	195×960×680	195×1,160×680	195×1,400×680			
Machine we	eight	kg	24.0	28.0	33.0			
	Liquid (Flare)		φ6.4	<b>∮</b> 9.5	φ9.5			
COMPECTIONS	Gas (Flare)	mm	<i>∲</i> 12.7	<i>ϕ</i> 15.9	<i>ϕ</i> 15.9			
	Drain		VP2	0 (External Dia, 26/Internal Dia	a, 20)			

- Note: Specifications are based on the following conditions;

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

   Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°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

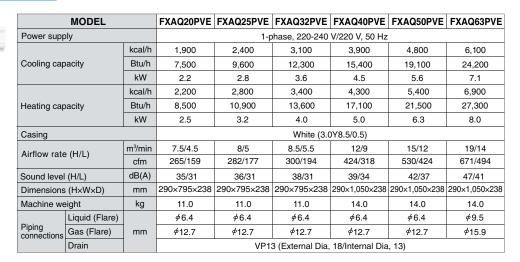
  \*1: Power consumption values are based on conditions of standard external static pressure.

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

## SPECIFICATIONS

#### **VRV INDOOR UNITS**

#### **Wall Mounted Type**



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



FXLQ



**FXNQ** 

				FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE			
	MOI	DEL		FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE			
Power suppl	Power supply				1-phase, 220-240 V/220 V, 50 Hz							
kcal/h		1,900	2,400	3,100	3,900	4,800	6,100					
Cooling capa	acity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200			
			kW	2.2	2.8	3.6	4.5	5.6	7.1			
			kcal/h	2,200	2,800	3,400	4,300	5,400	6,900			
Heating capa	acity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300			
			kW	2.5	3.2	4.0	5.0	6.3	8.0			
Casing					FXLQ: Ivory w	hite (5Y7.5/1)/F	XNQ: Galvanis	sed steel plate				
Airflow rate	/ <b>山</b> /I \		m³/min	7/6	7/6	8/6	11/8.5	14/11	16/12			
All llow rate	(II/L)		cfm	247/212	247/212	282/212	388/300	494/388	565/424			
Sound level	(H/L)	220 V	dB(A)	35/32	35/32	35/32	38/33	39/34	40/35			
Dimensions		FXLQ	mm	600×1,000×222	600×1,000×222	600×1,140×222	600×1,140×222	600×1,420×222	600×1,420×222			
(H×W×D)		FXNQ		610×930×220	610×930×220	610×1,070×220	610×1,070×220	610×1,350×220	610×1,350×220			
Machine wei	abt	FXLQ	kg	25.0	25.0	30.0	30.0	36.0	36.0			
FXNQ		, kg	19.0	19.0	23.0	23.0	27.0	27.0				
Liquid (F		d (Flare)		<i>ϕ</i> 6.4	<b></b> <i>ϕ</i> 6.4	<b></b> <i>ϕ</i> 6.4	<b></b> <i>ϕ</i> 6.4	φ6.4	φ9.5			
Piping connections	Gas	(Flare)	mm	φ12.7	φ12.7	φ12.7	φ12.7	<i>ϕ</i> 12.7	<i>ϕ</i> 15.9			
22.11.001.0710	Drair	1				210	D.D.					

- Note: Specifications are based on the following conditions;

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

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

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

  - 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		FXVQ125MY1	FXVQ200MY1	FXVQ250MY1	FXVQ400MY1	FXVQ500MY16	
Power supp	ly			3-phase	4-wire syster	m, 380–415 V	′, 50 Hz	
		kcal/h	12,000	19,300	24,100	38,700	48,200	
Cooling capacity		Btu/h	47,800 76,400 9		95,500	154,000	191,000	
		kW	14.0	22.4	28.0	45.0	56.0	
		kcal/h	13,800	21,500	27,100	43,000	54,200	
Heating cap	acity	Btu/h	54,600	85,300	107,500	171,000	215,000	
		kW	16.0	25.0	31.5	50.0	63.0	
Casing colour				Ivory white (5Y7.5/1)				
Dimensions	(H×W×D)	mm	1,670×750×510	1,670×950×510	1,670×1,170×510	1,900×1,170×720	1,900×1,470×720	
Machine we	eight	kg	115	140	165	225	295	
Sound level **	1	dB(A)	52	55	59	64	67	
5	Liquid	mm		∮9.5 (Brazino	g)	φ 12.7 (Brazing)		
Piping connections	Gas	mm		₱ 19.1 (Brazing)	φ22.2 (Brazing)			
	Drain	mm	Rp1 (PS 1B internal thread)					
Air filter	Туре			Long	g-life filter (ant	ti-mould resin	net)	
	Motor output	kW	0.75	1.5	1.5	3.7	5.5	
	Airflaw rata	m³/min	43	69	86	134	172	
Fan	Airflow rate	cfm	1,518	2,436	3,036	4,730	6,072	
	External static pressure *2	Pa	150	210	270	380	480	
	Drive system				Belt drive	e system		

- Notes: Specifications are based on the following conditions;

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

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

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

  \*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.

## SPECIFICATIONS

#### **OUTDOOR UNITS**

#### **Normal (Space Saving) Type**

MODEL			RXYQ6TRY6(E)	RXYQ8TRY6(E)	RXYQ10TRY6(E)	RYXQ12TRY6(E)	RXYQ14TRY6(E)	RXYQ16TRY6(E)		
Combination	units		_	_	_	_	_	_		
Power supply	/			3-phas	se 4-wire syste	m, 380–415 V	, 50 Hz			
		kcal/h	13,800	19,300	24,100	28,800	34,400	38,700		
Cooling capa	city	Btu/h	54,600	76,400	95,500	114,000	136,000	154,000		
		kW	16.0	22.4	28.0	33.5	40.0	45.0		
		kcal/h	15,500	21,500	27,100	32,300	38,700	43,000		
Heating capa	city	Btu/h	61,400	85,300	107,000	128,000	154,000	171,000		
		kW	18.0	25.0	31.5	37.5	45.0	50.0		
Capacity con	trol	%	20-100	20-100	16-100	15-100	11-100	10-100		
Casing colou	r				Ivory white	(5Y7.5/1)				
	Туре			He	ermetically Sea	aled Scroll Typ	е			
Compressor	No. of compressor		1	1	1	1	2	2		
Airflow rate		m³/min	119	157	165	178	233	233		
Dimensions (	HxWxD)	mm	1,657×930×765	1,657×930×765	1,657×930×765	1,657×930×765	1,657X1,240X765	1,657×1,240×765		
Machine wei	ght	kg	185	185	195	195	285	285		
Sound level		dB(A)	55	56	57	59	60	61		
Operation	Cooling	°CDB			-5 t	o 49				
range	Heating	°CWB			-20 to	15.5				
Dofrigoroat	Туре				R-4	10A				
Refrigerant	Charge	kg	5.9	5.9	6.0	6.3	10.3	10.4		
Piping	Liquid m			$\phi$ 9.5 (Brazing)			₱12.7 (Brazing)			
connections	Gas	mm	<i>∲</i> 1 (Bra	9.1 zing)	$\phi$ 22.2 (Brazing)		∲28.6 (Brazing)			

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

<sup>•</sup>Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m. •Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.



#### **HEAT PUMP**

#### **Normal (Space Saving) Type**

MODEL			RXYQ18TRY6(E)	RXYQ20TRY6(E)	RXYQ22TRY6(E)	RXYQ24TRY6(E)
			_	_	RXYQ10TRY6(E)	RXYQ12TRY6(E)
Combination	units		_	_	RXYQ12TRY6(E)	RXYQ12TRY6(E)
			_	_	`	
Power supply	y			3-phase 4-wire syste	m, 380–415 V, 50 Hz	
		kcal/h	43,000	48,200	52,900	57,600
Cooling capa	city	Btu/h	171,000	191,000	210,000	229,000
		kW	50.0	56.0	61.5	67.0
		kcal/h	48,200	54,200	59,300	64,500
Heating capa	acity	Btu/h	191,000	215,000	235,000	256,000
		kW	56.0	63.0	69.0	75.0
Capacity con	trol	%	10-100	8-100	8-100	8-100
Casing colou	r			Ivory white	e (5Y7.5/1)	
	Туре			Hermetically Sea	aled Scroll Type	
Compressor	No. of compressor		2	2	2	2
Airflow rate		m³/min	233	268	165+178	178+178
Dimensions (	(HXWXD)	mm	1,657×1,240×765	1,657×1,240×765	(1,657×930×765)+ (1,657×930×765)	(1,657×930×765)+ (1,657×930×765)
Machine wei	ght	kg	300	320	195+195	195+195
Sound level		dB(A)	62	65	61	62
Operation	Cooling	°CDB		-5 to	49	
range	Heating	°CWB		-20 to	15.5	
Refrigerant	Туре			R-4	10A	
nemyerani	Charge	kg	11.7	11.8	6.0+6.3	6.3+6.3
Piping	Liquid	mm	∲15.9 (Brazing)	<b>∲</b> 15.9 (Brazing)	∲15.9 (Brazing)	<b>∲</b> 15.9 (Brazing)
connections	Gas	mm	<b>≠</b> 28.6 (Brazing)	$\phi$ 28.6 (Brazing)	<i>∲</i> 28.6 (Brazing)	

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

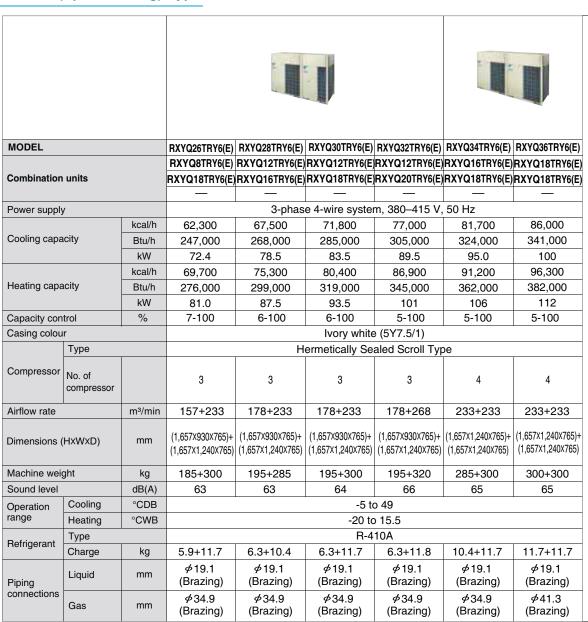
<sup>•</sup>Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m. •Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.

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

## SPECIFICATIONS

#### **OUTDOOR UNITS**

#### **Normal (Space Saving) Type**



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

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

<sup>•</sup>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

#### **HEAT PUMP**







RXYQ38TRY6(E)	RXYQ40TRY6(E)	RXYQ42TRY6(E)	RXYQ44TRY6(E)	RXYQ46TRY6(E)	RXYQ48TRY6(E)	RXYQ50TRY6(E)
RXYQ18TRY6(E)	RXYQ20TRY6(E)	RXYQ12TRY6(E)	RXYQ12TRY6(E)	RXYQ12TRY6(E)	RXYQ12TRY6(E)	RXYQ12TRY6(E)
RXYQ20TRY6(E)	RXYQ20TRY6(E)	RXYQ12TRY6(E)	RXYQ12TRY6(E)	RXYQ16TRY6(E)	RXYQ18TRY6(E)	RXYQ18TRY6(E)
_	_	RXYQ18TRY6(E)	RXYQ20TRY6(E)	RXYQ18TRY6(E)	RXYQ18TRY6(E)	RXYQ20TRY6(E)
		3-phase 4-w	rire system, 380-	415 V, 50 Hz		
91,200	96,300	101,000	106,000	111,000	115,000	120,000
362,000	382,000	399,000	420,000	440,000	457,000	478,000
106	112	117	123	129	134	140
102,000	108,000	113,000	119,000	124,000	129,000	135,000
406,000	430,000	447,000	471,000	491,000	512,000	536,000
119	126	131	138	144	150	157
4-100	4-100	4-100	4-100	4-100	4-100	3-100
		lv	ory white (5Y7.5/	1)		
		Hermet	ically Sealed Scr	oll Type		
4	4	4	4	5	5	5
233+268	268+268	178+178+233	178+178+268	178+233+233	178+233+233	178+233+268
(1,657X1,240X765)+ (1,657X1,240X765)	(1,657×1,240×765)+ (1,657×1,240×765)	(1,657X930X765)+ (1,657X930X765)+ (1,657X1,240X765)	(1,657X930X765)+ (1,657X930X765)+ (1,657X1,240X765)	(1,657X930X765)+ (1,657X1,240X765)+ (1,657X1,240X765)	(1,657X930X765)+ (1,657X1,240X765)+ (1,657X1,240X765)	(1,657X930X765)+ (1,657X1,240X765)+ (1,657X1,240X765)
300+320	320+320	195+195+300	195+195+320	195+285+300	195+300+300	195+300+320
67	68	65	67	66	66	67
			-5 to 49			
			-20 to 15.5			
			R-410A			
11.7+11.8	11.8+11.8	6.3+6.3+11.7	6.3+6.3+11.8	6.3+10.4+11.7	6.3+11.7+11.7	6.3+11.7+11.8
<ul><li> <i>ϕ</i> 19.1 (Brazing)</li></ul>	<i>∲</i> 19.1 (Brazing)	<b>∲</b> 19.1 (Brazing)	<b>∲</b> 19.1 (Brazing)	<b>∲</b> 19.1 (Brazing)	<b>∲</b> 19.1 (Brazing)	
<ul><li></li></ul>	<ul><li></li></ul>	<b></b> <i>ϕ</i> 41.3 (Brazing)		<ul><li></li></ul>	<ul><li></li></ul>	<ul><li></li></ul>

#### **Normal (Space Saving) Type**

MODEL			RXYQ52TRY6(E)	RXYQ54TRY6(E)	RXYQ56TRY6(E)	RXYQ58TRY6(E)	RXYQ60TRY6(E)
			RXYQ16TRY6(E)	RXYQ18TRY6(E)	RXYQ18TRY6(E)	RXYQ18TRY6(E)	RXYQ20TRY6(E)
Combination	units				. ,	RXYQ20TRY6(E)	. ,
			RXYQ18TRY6(E)	RXYQ18TRY6(E)	RXYQ20TRY6(E)	RXYQ20TRY6(E)	RXYQ20TRY6(E)
Power supply	1		3-р	hase 4-wire	system, 380	–415 V, 50 F	lz
		kcal/h	125,000	129,000	134,000	139,000	144,000
Cooling capa	city	Btu/h	495,000	512,000	532,000	553,000	573,000
		kW	145	150	156	162	168
		kcal/h	139,000	144,000	151,000	157,000	163,000
Heating capa	city	Btu/h	553,000	573,000	597,000	621,000	645,000
		kW	162	168	175	182	189
Capacity con	trol	%	3-100	3-100	3-100	3-100	3-100
Casing colou	r			white (5Y7)			
	Туре		Hermetica	ally Sealed S	croll Type	T	T
Compressor	No. of compressor		6	6	6	6	6
Airflow rate		m³/min	233+233+233	233+233+233	233+233+268	233+268+268	268+268+268
Dimensions (	HxWxD)	mm	(1,657X1,240X765)+ (1,657X1,240X765)+ (1,657X1,240X765)	(1,657X1,240X765)+		(1,657X1,240X765)+ (1,657X1,240X765)+ (1,657X1,240X765)	(1,657X1,240X765)+
Machine weig	ght	kg	285+300+300	300+300+300	300+300+320	300+320+320	320+320+320
Sound level		dB(A)	66	67	68	69	70
Operation	Cooling	°CDB		-5 to 49			
range	Heating	°CWB		-20 to 15.5			
Refrigerant	Туре			R-410A			
	Charge	kg	10.4+11.7+11.7	11.7+11.7+11.7	11.7+11.7+11.8	11.7+11.8+11.8	11.8+11.8+11.8
Piping	Liquid	mm	₱19.1 (Brazing)	$\phi$ 19.1 (Brazing)	₱19.1 (Brazing)	₱19.1 (Brazing)	₱ 19.1 (Brazing)
connections	Gas	mm	<i>∲</i> 41.3 (Brazing)	$\phi$ 41.3 (Brazing)	<ul><li></li></ul>		<ul><li></li></ul>

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.

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

## OUTDOOR UNIT COMBINATIONS URV IV

#### Normal (Space Saving) Type

HP	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit *1	Total capacity index of connectable indoor units*2	Maximum number of connectable indoor units*2
6	150	RX(Y)Q6T	RX(Y)Q6T	_	75 to 195 (300)	9 (15)
8	200	RX(Y)Q8T	RX(Y)Q8T	_	100 to 260 (400)	13 (20)
10	250	RX(Y)Q10T	RX(Y)Q10T	_	125 to 325 (500)	16 (25)
12	300	RX(Y)Q12T	RX(Y)Q12T	_	150 to 390 (600)	19 (30)
14	350	RX(Y)Q14T	RX(Y)Q14T	_	175 to 455 (700)	22 (35)
16	400	RX(Y)Q16T	RX(Y)Q16T	_	200 to 520 (800)	26 (40)
18	450	RX(Y)Q18T	RX(Y)Q18T	_	225 to 585 (900)	29 (45)
20	500	RX(Y)Q20T	RX(Y)Q20T	_	250 to 650 (1,000)	32 (50)
22	550	RX(Y)Q22T	RX(Y)Q10T + RX(Y)Q12T		275 to 715 (880)	35 (44)
24	600	RX(Y)Q24T	RX(Y)Q12T x 2		300 to 780 (960)	39 (48)
26	650	RX(Y)Q26T	RX(Y)Q8T + RX(Y)Q18T	BHFP22P100	325 to 845 (1,040)	42 (52)
28	700	RX(Y)Q28T	RX(Y)Q12T + RX(Y)Q16T		350 to 910 (1,120)	45 (56)
30	750	RX(Y)Q30T	RX(Y)Q12T + RX(Y)Q18T		375 to 975 (1,200)	48 (60)
32	800	RX(Y)Q32T	RX(Y)Q12T + RX(Y)Q20T		400 to 1,040 (1,280)	52 (64)
34	850	RX(Y)Q34T	RX(Y)Q16T + RX(Y)Q18T		425 to 1,105 (1,360)	55 (64)
36	900	RX(Y)Q36T	RX(Y)Q18T x 2		450 to 1,170 (1,440)	58 (64)
38	950	RX(Y)Q38T	RX(Y)Q18T + RX(Y)Q20T		475 to 1,235 (1,520)	61 (64)
40	1,000	RX(Y)Q40T	RX(Y)Q20T x 2		500 to 1,300 (1,600)	
42	1,050	RX(Y)Q42T	RX(Y)Q12T x 2 + RX(Y)Q18T		525 to 1,365 (1,365)	
44	1,100	RX(Y)Q44T	$RX(Y)Q12T \times 2 + RX(Y)Q20T$		550 to 1,430 (1,430)	
46	1,150	RX(Y)Q46T	RX(Y)Q12T + RX(Y)Q16T + RX(Y)Q18T	BHFP22P151	575 to 1,495 (1,495)	
48	1,200	RX(Y)Q48T	RX(Y)Q12T + RX(Y)Q18T x 2		600 to 1,560 (1,560)	
50	1,250	RX(Y)Q50T	RX(Y)Q12T + RX(Y)Q18T + RX(Y)Q20T		625 to 1,625 (1,625)	64 (64)
52	1,300	RX(Y)Q52T	$RX(Y)Q16T + RX(Y)Q18T \times 2$		650 to 1,690 (1,690)	
54	1,350	RX(Y)Q54T	RX(Y)Q18T × 3		675 to 1,755 (1,755)	
56	1,400	RX(Y)Q56T	$RX(Y)Q18T \times 2 + RX(Y)Q20T$		700 to 1,820 (1,820)	
58	1,450	RX(Y)Q58T	$RX(Y)Q18T + RX(Y)Q20T \times 2$		725 to 1,885 (1,885)	
60	1,500	RX(Y)Q60T	RX(Y)Q20T × 3		750 to 1,950 (1,950)	

Note: \*1 For multiple connection of 22 HP systems and above, the outdoor unit multi connection piping kit (separately sold) is required.

\*2 Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units. Refer to page 10 for notes on connection capacity of indoor units.

## OPTION LIST

#### **VRV INDOOR UNITS**

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

No.	Item		Туре	FXFQ25S	FXFQ32S	FXFQ40S			FXFQ80S	FXFQ100S	FXFQ125S
1	Decoration panel			BYCQ125B-W1							
2	Sealing material of ai	r discharge outle	et	KDBHQ55B140							
3	Panel spacer						KDBP55	H160FA			
		High efficiency filter unit 65%				KAFP	556B80			KAFP5	56B160
		High efficience	y filter unit 90%			KAFPS	557B80			KAFP5	57B160
		Replacement high efficiency filter 65% Replacement high efficiency filter 90%				KAFPS	552B80			KAFP5	52B160
4	Filter related			KAFP553B80						KAFP5	53B160
4	Filler related	Filter chambe	r	KDDFP55B160							
		Long life repla	acement filter	KAFP551K160							
		Ultra long-life	filter	KAFP55B160							
		Replacement	ultra long-life filter				KAFP5	5H160H			
		Chamber type	Without T joint-pipe and fan	KDDQ55B140							
5	Fresh air intake kit	Chamber type	With T joint-pipe without fan				KDDP5	5B160K			
	Direct installation type		KDDP55X160								
6	Branch duct chamber			KDJP55B80 KDJP5					5B160		
7	Insulation kit for high	Insulation kit for high humidity			KDTP55K80 KDTP55					55K160	

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

No.	Item		Туре	FXFQ25LU	FXFQ32LU	FXFQ40LU	FXFQ50LU	FXFQ63LU	FXFQ80LU	FXFQ100LU	FXFQ125LU
1	Decoration panel			BYCP125K-W1							
2	Sealing material of air	r discharge outle	et				KDBH5	5K160F			
3	Panel spacer						KDBP55	H160FA			
		High efficience	y filter unit 65%			KAFP	556B80			KAFP5	56B160
		High efficience	y filter unit 90%			KAFP	557B80			KAFP5	57B160
		Replacement hig	h efficiency filter 65%			KAFP	552B80			KAFP5	52B160
4	Filter related	Replacement high efficiency filter 90% Filter chamber		KAFP553B80					KAFP5	53B160	
4	Filler related			KDDFP55B160							
		Long life repla	acement filter	KAFP551K160							
		Ultra long-life	filter	KAFP55B160							
		Replacement	ultra long-life filter				KAFP5	5H160H			
		Chamber type	Without T joint-pipe and fan				KDDP	55B160			
5	Fresh air intake kit	Chamber type	With T joint-pipe without fan				KDDP5	5B160K			
		Direct installat	ion type				KDDP:	55X160			
6	Branch duct chamber	r				KDJP	55B80			KDJP5	5B160
7	Chamber connection kit			KKSJ55KA160							
8	Insulation kit for high	humidity				KDTP	55K80			KDTP5	55K160

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

No.	Item	Туре	FXZQ20M	FXZQ25M	FXZQ32M	FXZQ40M	FXZQ50M	
1	Decoration panel		BYFQ60B8W1					
2	Sealing material of air disch	narge outlet	KDBH44BA60					
3	Panel spacer		KDBQ44BA60A					
4	Replacement long-life filter		KAFQ441BA60					
5	Fresh air intake kit	Direct installation type	KDDQ44XA60					

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

No.	Item Type	FXUQ71A	FXUQ100A		
1	Sealing material of air discharge outlet	KDBHP49B140			
2	Decoration panel for air discharge	KDBTP49B140			
3	Replacement long-life filter	KAFP5	51K160		

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

No.	Item	Туре	FXCQ25M FXCQ32M	FXCQ40M	FXCQ50M			FXCQ125M
1	Decoration panel		BYBC32G-W1	BYBC5	0G-W1	BYBC63G-W1	BYBC12	25G-W1
		High efficiency filter 65% ★1	KAFJ532G36	KAFJ5	32G56	KAFJ532G80	KAFJ50	32G160
2	Filter related	High efficiency filter 90% ★1	KAFJ533G36	KAFJ5	33G56	KAFJ533G80	KAFJ50	33G160
	i iitei reiatea	Filter chamber   bottom suction	KDDFJ53G36	KDDFJ	153G56	KDDFJ53G80	KDDFJ:	53G160
		Long life replacement filter	KAFJ531G36	KAFJ5	31G56	KAFJ531G80	KAFJ50	31G160

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

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

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

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

No.	Item Type	FXDQ20PB	FXDQ25PB	FXDQ32PB
1	Insulation kit for high humidity		KDT25N32	

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

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

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

No.	Item	Туре	FXMQ20P FXMQ25P FXMQ32P	FXMQ40P	FXMQ50P FXMQ63P FXMQ80P	FXMQ100P FXMQ125P FXMQ140P	FXMQ200MA FXMQ250MA
1	Drain pump kit			KDU30L250VE			
2	2 High efficiency filter		KAF372AA36	KAF372AA56	KAF372AA80	KAF372AA160	KAFJ372L280
_	Tright emciency filter	90%	KAF373AA36	KAF373AA56	KAF373AA80	KAF373AA160	KAFJ373L280
3	Filter chamber	KDDF37AA36	KDDF37AA56	KDDF37AA80	KDDF37AA160	KDJ3705L280	
4	Long life replacement filter		KAF371AA36	KAF371AA56	KAF371AA80	KAF371AA160	KAFJ371L280
5	Long life filter chamber kit		KAF375AA36	KAF375AA56	KAF375AA80	KAF375AA160	
		White	KTBJ25K36W	KTB25KA56W	KTB25KA80W	KTB25KA160W	
6	Service panel	Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25K160F	_
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	1
7	Air discharge adaptor		KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A	

#### **Ceiling Suspended Type**

No.	Item Type	FXHQ32MA	FXHQ63MA	FXHQ100MA		
1	Drain pump kit	KDU50N60VE	KDU50N125VE			
2	Replacement long-life filter (Resin net)	KAF501DA56	KAF501DA80	KAF501DA112		
3	L-type piping kit (for upward direction)	KHFP5MA63	KHFP5MA160			

## OPTION LIST

#### **VRV INDOOR UNITS**

#### **Wall Mounted Type**

No.	Item Type	FXAQ20P	FXAQ25P	FXAQ32P	FXAQ40P	FXAQ50P	FXAQ63P
1	Drain pump kit			K-KDU	72EVE		

#### Floor Standing Type

No.	Item Type	FXLQ20MA	FXLQ25MA	FXLQ32MA	FXLQ40MA	FXLQ50MA	FXLQ63MA
1	Long life replacement filter	KAFJ3	61K28	KAFJ3	61K45	KAFJ3	61K71

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

No.	Item Type	FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
1	Long life replacement filter	KAFJ	861K28	KAFJ3	61K45	KAFJ3	61K71

#### Floor Standing Duct Type

No.	Ite	em			Туре	FXVQ125M	FXVQ200M	FXVQ250M	FXVQ400M	FXVQ500M					
1		Replacement long	life filter			KAFJ261L140	KAFJ261L224	KAFJ261L280	KAFJ261M450	KAFJ261M560					
2		Ultra long-life filter				=			KAFSJ9A400	KAFSJ9A560					
3	Filter chamber for high				65%	KDDF-92A140	KDDF-92A200	KDDF-92A280	KDDF-92A400	KDDF-92A560					
4	on		efficiency fi	efficiency filter *1		KDDF-93A140	KDDF-93A200	KDDF-93A280	KDDF-93A400	KDDF-93A560					
5	ncti	Front suction filter	Front suction	n base flange		KD-9A140	KD-9A200	KD-9A280	KD-9A400	KD-9A560					
6	S	chamber for High	h Suction grille			KDGF-9A140	KDGF-9A200	KDGF-9A280	KDGF-9A400	KDGF-9A560					
7	anc	efficiency filter		Long-life filte	r *3	KAF-91A140	KAF-91A200	KAF-91A280	KAF-91A400	KAF-91A560					
8	rge		Replacement High efficience		filter *2					65%	KAF-92A140	KAF-92A200	KAF-92A280	KAF-92A400	KAF-92A560
9	har		mior 2	filter	90%	KAF-93A140	KAF-93A200	KAF-93A280	KAF-93A400	KAF-93A560					
10	Disc	Plenum chamber 3	*4			KPCJ140A	KPC5J	KPC8J	KPCJ400A	KPC15JA					
11		Pulley for plenum	chamber *4			KPP8JA	KPP9JA	KPP10JA	-	=					
12		Fresh air intake kit	t			KD106D10			KDFJ9	06A560					
13		Rear suction kit				KDFJ905A140	KDFJ905A200	KDFJ905A280	KDFJ905A400	KDFJ905A560					
14		Discharge grille fo	r plenum sid	е		KD101A10			KD101A20						
15	Wo	od base				KKWJ9A140	KWF1G5P	KWF1G8P	KKWJ9A400	KWF1G15					
16	Vib	ration isolating fran	ne			K-ABSG1406A	K-ABSG1407A	K-ABSG1408A	K-ABSG1409A	K-ABSG1410A					

<sup>\*1</sup> 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 Use the plenum chamber and pulley for plenum chamber in combination.

#### **OUTDOOR UNITS**

Cool / Heat selector

#### **Normal (Space Saving) Type**

Option	al Accessories	RX(Y)Q6TRY6(E) RX(Y)Q8TRY6(E) RX(Y)Q10TRY6(E)		RX(Y)Q1	2TRY6(E)	RX(Y)Q14TRY6(E) RX(Y)Q16TRY6(E)				
Distributive piping	REFNET header	KHRP26M22H, (Max. 4 branch) KHRP26M33H (Max. 8 branch)			KHRP26M22H, KHRP26M33H, Max. 4 branch) (Max. 8 branch)					
	REFNET joint	KHRP26A22T KHRP26A33T		ŀ	KHRP26A22T, KHRP26A33T, F	(HRP26A72T				
Cool / Heat sel	lector			KRC19-26A (App	lies to RXYQ only)					
Opti	onal Accessories		RX(Y)Q18TRY6(E) RX(Y)Q20TRY6(E)							
Disinbutive biping	REFNET header				26M33H, KHRP26M72H 3 branch) (Max.8 branch)					
oiping .	REFNET joint		KHRP26A22T, KHRP26A33T, KHRP26A72T							
Cool / Heat sele	ector			KRC19-26A (App	olies to RXYQ only)					
Opti	onal Accessories	RX(Y)Q22TRY6(E)	RX(Y	)Q24TRY6(E)	RX(Y)Q26TRY6(E) RX(Y)Q28TRY6(E) RX(Y)Q30TRY6(E) RX(Y)Q32TRY6(E)	RX(Y)Q34TRY6(E) RX(Y)Q36TRY6(E) RX(Y)Q38TRY6(E) RX(Y)Q40TRY6(E)				
REFNET header Disinbutive oping		KHRP26M22H (Max.4 branch), KHRP26M33H (Max.8 branch), KHRP26M72H (Max.8 branch),			H, KHRP26M73H n) (Max.8 branch)					
	REFNET joint	KHRP26A22T, KHRP26M33T, KHRP26M72T,		KHRP26A22	2T, KHRP26A33T, KHRP26A72	T, KHRP26A73T				
Pipe size reduc	er	_			KHRP26M73TP, KHRP26M73	HP				
Outdoor unit co	nnection piping kit			BHFP	22P100					
Cool / Heat sele	ector			KRC19-26A (App	olies to RXYQ only)					
Optional Accessories			2TRY6(E) 4TRY6(E)							
Disinbutive piping	REFNET header				H, KHRP26M72H, KHRP26M73 ) (Max.8 branch) (Max.8 branch					
	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T								
Pipe size reduc		KHRP26M73TP, KHRP26M73HP								
	nnection piping kit				222P151					
Cool / Hoot cold	notor			KDC10.264 (Apr	alies to RYVO only)					

KRC19-26A (Applies to RXYQ only)

#### INDIVIDUAL CONTROL SYSTEMS FOR VRV INDOOR UNITS

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





BRC1E62

#### **Clear display**

#### Dot matrix display

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

#### Backlight display

· Backlight display helps operating in dark rooms.





#### Simple operation

#### Large buttons and arrow keys

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





#### Guide on display

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

#### **Energy saving**

#### Auto operation mode

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



#### • Setpoint range set New



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



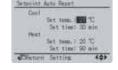
#### Off timer

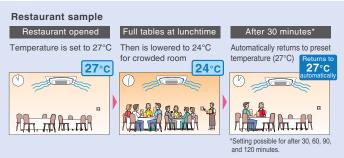
- · Turns off the airconditioner after a preset period of time.
- · Period can be preset from 30 to 180 minutes in 10-minute increments.

#### •Setpoint auto reset New



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





#### Convenience

#### Setback (default:OFF) New



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

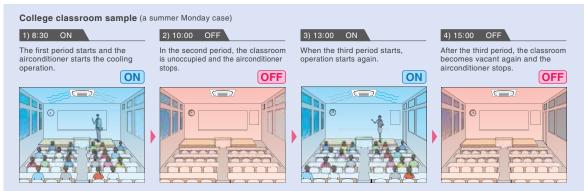
Ex) Setback temperature Cooling : 35°C Recovery differential Cooling : -2°C When the room temperature goes above 35°C, the air conditioner starts operating in Cooling automatically. When room temprature reaches 33°C, the air conditioner returns OFF.

		Setback temperature	Recovery differential
ĺ	Cooling	33 — 37°C	-2 — -8°C
	Heating	10 — 15°C	+2 — +8°C

#### Weekly schedule

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



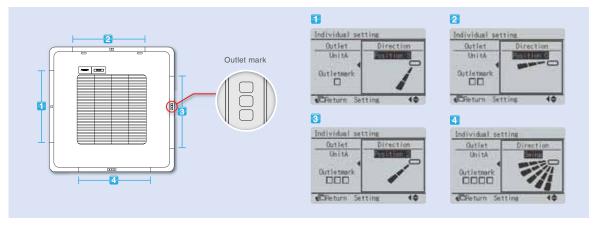


#### **Comfort**

#### 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) New



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 INDOOR UNITS

#### Wired remote controller (Option)



BRC1C62

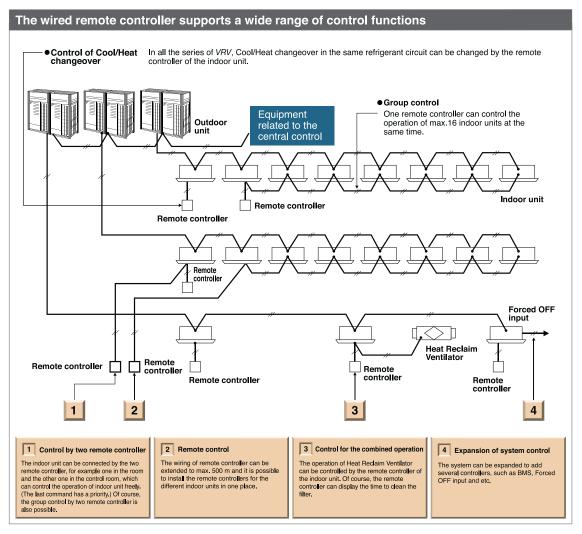
- · Displays current airflow, swing, temperature, operating mode and timer settings.
- \* Easier to read because LCD screen is larger.
- Digital display lets you set temperature in 1°C units.
- temperature in 1°C units.

  Lets you individually programme by timer the respective times for operation start and stop within a maximum of 72 hours.

  Equipped with a thermostat sensor in the remote controller that makes possible more comfortable room temperature control.
- Enables you to select cool/heat/fan operation mode with the indoor remote controller of your choice without using the cool/heat selector.
- without using the Courrieat selector.

  Constantly monitors malfunctions in the system for a min, of 40 items, and is equipped with a "self-diagnosis function" that lets you know by message immediately when a malfunction occurs.

- Lets you carry out various field settings by remote controller.
   Enables you to select the ventilation mode and the volume of the HRV.
- The rubber swithch and the oil-resisting resin casing have been adopted for durability.
- When the auto-swing function is not available, the message, THIS FUNCTION IS NOT AVAILABLE is displayed when the wind direction adjustment button is pressed.



#### Wireless remote controller (Option)





Wireless remote controller

Signal receiver unit

- \* Wireless remote controller and signal receiver unit are sold as a set. \* Refer to page 64 for the name of each model.

- The same operation modes and settings as with wired remote controllers are possible.
- Individual airflow direction, auto airflow rate and sensing sensor control can be set only via wired remote controller BRC1E62. Cannot be set via other remote controllers.
- A compact signal receiver unit (separate type) to be mounted into a wall or ceiling is included.
- $\boldsymbol{\cdot}$  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,





#### Simplified remote controller (Option)







Concealed type (For hotel use) (BRC3A61)

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



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

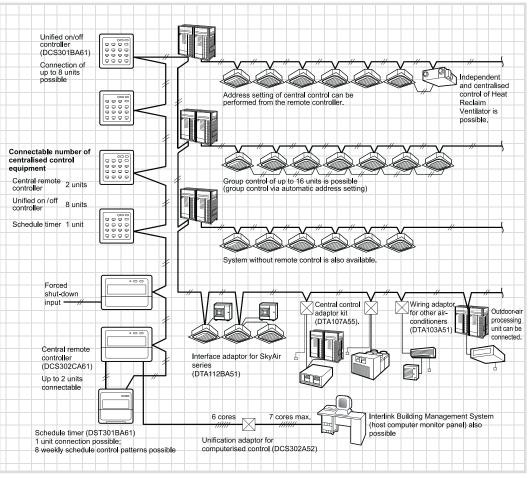
#### Wide variation of remote controllers for VRV indoor units

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

<sup>\*</sup>Refer to page 64 for the name of each model.

#### CENTRALISED CONTROL SYSTEMS FOR VRV INDOOR UNITS

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



Certain indoor units limit the functions of some control systems

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



DCS303A51

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

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

#### Central remote controller (Option)



DCS302CA61

#### Max. 64 groups (zones) of indoor units can be controlled individually same as LCD remote controller.

- •Max. 64 groups (128 indoor units) controllable
- •Max. 128 groups (128 indoor units) are controllable by using 2 central remote controllers, which can control from 2 different places.
- Zone control
- Malfunction code display
- •Max. wiring length 1,000 m (Total: 2,000 m)
- •Connectable with Unified ON/OFF controller, schedule timer and BMS system
- Airflow volume and direction can be controlled individually for indoor units in each group 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 (Option)



DCS301BA61

#### Max. 16 groups of indoor units can be operated simultaneously/individually.

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

#### Schedule timer (Option)



DST301BA61

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

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

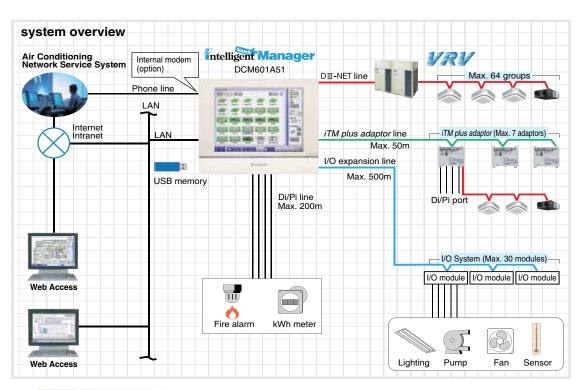
#### ADVANCED CONTROL SYSTEMS FOR VRV INDOOR UNITS

#### Intelligent Manager

#### One touch selection to total air comfort

We, at Daikin, proudly introduce our *intelligent Touch Manager*, a *VRV* system controller featuring an array of simple, useful system management functions for added value.

#### Up to 512 groups can be controlled by one intelligent Touch Manager





#### **FEATURES**

#### **Central control**

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



#### **Remote access**

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

#### **Automatic control**

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

#### **Energy management**

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





#### **Troubleshooting**

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

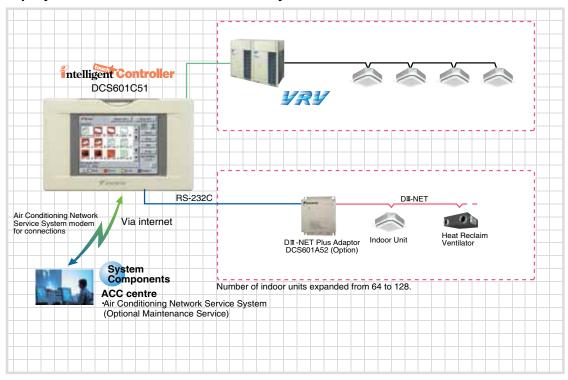
#### **Scalability**

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

#### ADVANCED CONTROL SYSTEMS FOR VRV INDOOR UNITS

#### intelligent Controller

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



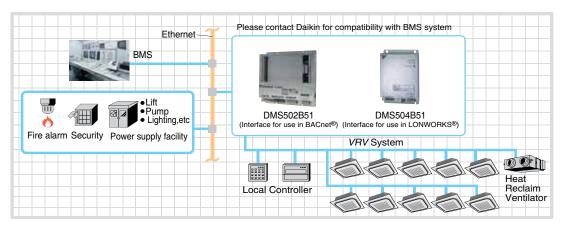
#### **FEATURES**

- •Colour LCD touch panel icon display
- •Small manageable size
- Simplified engineering
- Multi language (English, French, Italian, German, Spanish, Dutch, Portuguese, Chinese and Korean)
- Yearly schedule
- Auto heat/cool change-over
- •Temperature limitation
- Enhanced history function
- •Built-in modem for connecting to Air Conditioning Network Service System (Option)
- Doubling of number of connectable indoor units by adding a D<sub>Ⅲ</sub>-NET Plus Adaptor (Option)



#### Interface for BACnet®and LONWORKS®

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



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

#### DMS502B51 Interface for use in BACnet®

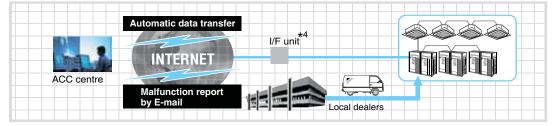
- Support for Heat Reclaim Ventilator VAM series
- Selectable temperature unit
- BTL Certification
- •PPD data (Optional Di board is required.)
- •ISO 16484-5 (Does not support IEEE 802.3 protocol for BACnet®)
- •Up to 40 outdoor units and 256 indoor unit groups on one gateway (optional adaptor)

#### DMS504B51 Interface for use in LONWORKS® •XIF file for confirming of specifications of the units.

- Connectable up to 10 outdoor units and 64 indoor unit groups.

#### **Airconditioning Network Service System**

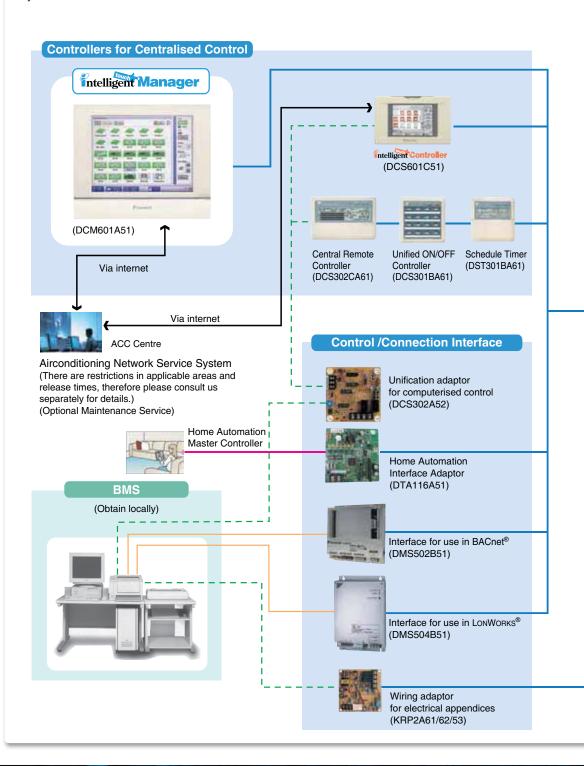
#### Maintenance services that boost profits and help attain customer satisfaction



- •24 hour on-line diagnostic system
- Energy saving and extension of aircon operating life
- Maintenance management via A/C network service system reports
- ·Reliable service at shortest lead time
  - 1. Model name varies upon the system size.
  - \*2. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
  - \*3. LonWorks® is a trademark of Echelon Corporation registered in the United States and other countries
  - \*4. For an I/F unit, one of the following can be selected: Local Controller, intelligent touch Controller, or intelligent touch Manager.
  - \*5. Refer to the Options page for the name of each model.

#### INTEGRATED BUILDING MONITORING SYSTEM

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





BACnet®/Ethernet or LonWorks® Network Communication Line

- - Contact Signal Line

RS485 Modbus Line

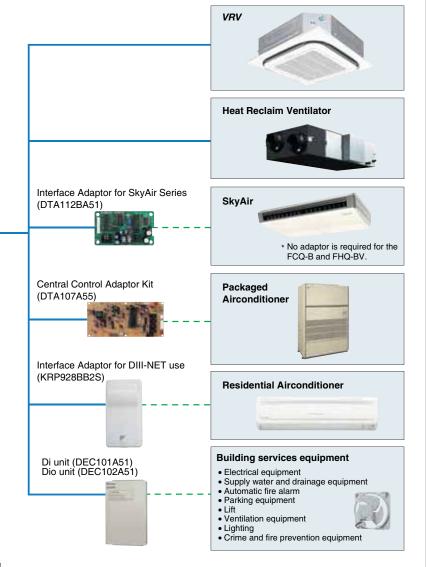
#### The DIII-NET system provides for:

- Close control and monitoring by integrating a wide variety of airconditioners in the entire building.
  • Saving the in-building cabling using non-polar, two-wire cables. Easier wiring work
- with tremendously fewer wiring errors.
- Additional setups readily up and running. An extendable cabling up to 2 km in total.
   Different control equipment flexibly joined in the system for hierarchical risk
- diversification.

  Daikin's total heat exchangers and other devices all under integral control.

#### DⅢ-NET (High Speed Multiple Transmission)

DIII-NET, Our unique high speed multiple transmission system, links airconditioners and various other building equipment in accordance with applications, scale and conditions and transmits vast amounts of information between them.



## VRV

#### Caution:

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

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

#### **OPTION LIST**

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

#### For VRV indoor unit use

No.	Item		Туре	FXFQ-S	FXFQ-LU	FXZQ-M	FXUQ-A	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	
		Wireless	C/O	BRC7F635F		BRC7E531W	BRC7CB59	BRC7C67	BRC4C63	BRC4C66	
1	Remote controller	Wileless	H/P	BRC7	F634F	BRC7E530W	BRC7CB58	BRC4C62	BRC4C61	BRC4C65	
		Wired			BRC1C62						
2	Navigation remote control	ller (Wired remote	controller)		BRC1E62 Note 7						
3	Simplified remote co	fied remote controller (Exposed type)									
4	Remote controller for hotel use (Concealed type)				<del>-</del>						
5	Adaptor for wiring			★KRP	1C63	★KRP1BA57	_	★KRP1B61	KRP1B61	★KRP1B56	
6-1	Wiring adaptor for el	ectrical appen	dices (1)	★KRF	P2A62	★KRP2A62	_	★KRP2A61	KRP2A61	★KRP2A53	
6-2	Wiring adaptor for el	ectrical appen	dices (2)	★KRP	4AA53	<b>★KRP4AA53</b>	<b>★KRP4AA53</b>	★KRP4AA51	KRP4AA51	★KRP4A54	
7	Remote sensor (for	indoor tempera	ature)	KRCS	01-4B		KRCS	601-1B		KRCS01-1B	
8	Installation box for adaptor PCB ☆			Note 2 KRP	2, 3 1H98	Note 4, 6 KRP1BA101	KRP1BA97	Note 2, 3 KRP1B96	_	Note 4, 6 KRP1BA101	
9	External control adaptor for outdoor unit		or unit	★ DTA	104A62	<b>★DTA104A62</b>	_	*DTA104A61	DTA104A61	<b>★</b> DTA104A53	
10	2 Zaternal control adapter for cutacor and				14A61						

FXVQ-M  FXVQ-M  BRC1C62 Note 8
BRC1C62 Note 8
BRC1C62 Note 8
DDC1Eco
BRC1E62 Note 9
· –
KRP1C67
_
1 KRP2A62
_
DTA104A62
KRP6A1
KRCB37-1
51

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

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

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

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

  5. Installation box % is necessary for second adaptor.

  6. Installation box % is necessary for each adaptor.

  7. Individual airflow direction, auto airflow rate and sensing sensor control can be set only via wired remote controller BRC1E62. 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 BRC1E62, be sure to remove the control panel and since BRC1E62 cannot be stored inside the indoor unit, please place it separately.

#### **System Configuration**

No.	Item	Туре	Model No.	Function
1	Residential central ren	note controller	Note 2 DCS303A51	<ul> <li>Up to 16 groups of indoor units (128 units) can be easily controlled using the large LCD panel. ON/OFF, temperature settings and scheduling can be controlled individually for indoor units.</li> </ul>
2	Central remote control	ller	DCS302CA61	<ul> <li>Up to 64 groups of indoor units(128 units) can be connected, and ON/OFF,</li> </ul>
2-1	Electrical box with ear	th terminal (3 blocks)	KJB311AA	temperature setting and monitoring can be accomplished individually or simultaneously. Connectable up to 2 controllers in one system.
3	Unified ON/OFF control	oller	DCS301BA61	• Up to 16 groups of indoor units(128 units) can be turned, ON/OFF individually or
3-1	Electrical box with ear	th terminal (2 blocks)	KJB212AA	simultaneously, and operation and malfunction can be displayed. Can be used in
3-2	Noise filter (for electromagnetic interface use only)		KEK26-1A	combination with up to 8 controllers.
4	Schedule timer		DST301BA61	<ul> <li>Programmed time weekly schedule can be controlled by unified control for up 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
7		For FCQ-B, FFQ-B, FHQ-BV, FBQ-B	<b>★</b> DTA112BA51	high-speed DIII-NET communication system adopted for the VRV System.  *To use any of the above optional controllers, an appropriate adaptor must be
8	Central control adaptor kit For UAT(Y)-K(A), FD-K		<b>★</b> DTA107A55	installed on the product unit to be controlled.
9	Wiring adaptor for other 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**

No.	Item				Model No.	Function		
1	intelligent Touch	Basic	Hardware	intelligent Touch Controller	DCS601C51	Airconditioning management system that can be controlled by a compact all-in-one unit.		
1-1	Controller	Option	tion Hardware DIII-NET plus adaptor		DCS601A52	Additional 64 groups (10 outdoor units) is possible.		
1-2	Electrical box with	n earth te	rminal (4 bl	ocks)	KJB411A	Wall embedded switch box.		
2		Basic Hardware		intelligent Touch Manager	DCM601A51	Airconditioning management system that can be controlled by touch screen.		
2-1 2-2	intelligent Touch		Hardware	iTM plus adaptor	DCM601A52	Additional 64 groups (10 outdoor units) is possible.     Max. 7 iTM plus adaptors can be connected to intelligent Touch Manager.		
2-3	Manager	Option	Software	iTM power proportional distribution	DCM002A51	Power consumption of indoor units are calculated based on operation status of the indoor unit andoutdoor unit power consumption measured by kWh metre.		
2-4				iTM energy navigator	DCM008A51	Building energy consumption is visualised.     Wasted airconditioning 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 Interface for use in BACnet ®		DMS502B51	Interface unit to allow communications between VRV and BMS.     Operation and monitoring of airconditioning systems through BACnet ® communication.			
3-1		Optional DIII board		DAM411B51	Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently.			
3-2	Communication interface	Optional Di board		DAM412B51	Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.			
4	Third Table	*2 Interface for use in LONWORKS®		DMS504B51	Interface unit to allow communications between VRV and BMS.     Operation and monitoring of airconditioning systems through LonWorks® communication.			
5		Home Automation Interface Adaptor		DTA116A51	Use of the Modbus protocol enables the connection of the VRV system with a variety of home automation systems from other manufacturers.			
6	Contact/ analogue signal	Unification adaptor for computerised control		<b>★</b> DCS302A52	Interface between the central monitoring board and central control units.			

- 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 TREATMENT EQUIPMENT LINEUP



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\*,¹due to the greatly enhanced performance of the thin film element. Furthermore, improved external static pressure \*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: VAM150/250/350/650/800/1000/2000GJVE
- ★ 2 For models: VAM150/350/500GJVE

		Outdoor-Air	Heat Reclaim Ventilator			
		Processing Unit	VKM-GAM Type	VKM-GA Type	VAM-GJ Type	
	Ventilation Humidific		Ventilation	Humidification Processing*	Ventilation Humidification  Air Processing*	
			00.		00	
	Refrigerant Piping	Connectable	Conne	ctable	Not connectable	
Connections	Wiring	Connectable	Connectable		Connectable	
with <i>VRV</i> IV	After-cool & After-heat Control	Available	Available		Not available	
Heat Exchange Element		_	Energy savings obtained		Energy savings obtained	
Humidifier		_	Fitted	_	_	
High Efficier	ncy Filter	Option	Option		Option	
Ventilation System		Air supply only	Air supply & air exhaust		Air supply & air exhaust	
Power Supply		220-240 V, 50 Hz	220-240 V, 50 Hz		220-240 V/220 V, 50 Hz	
Airflow Rate				m³/h	150 m³/h 250 m³/h 350 m³/h 500 m³/h 650 m³/h	
		1080 m³/h 1680 m³/h 2100 m³/h	800 1000		800 m³/h 1000 m³/h 1500 m³/h 2000 m³/h	

<sup>\*</sup>Refers to bringing outdoor air to near indoor temperature and delivering to a room.

## AIR TREATMENT EQUIPMENT LINEUP

#### OUTDOOR-AIR PROCESSING UNIT For outdoor units of 8 HP and above

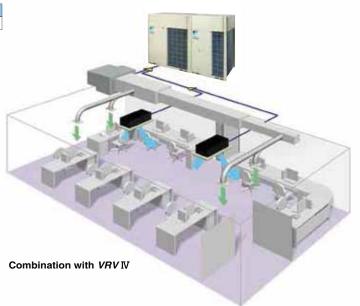
#### Combination of fresh air treatment and airconditioning, supplied from a single system.

#### Lineup

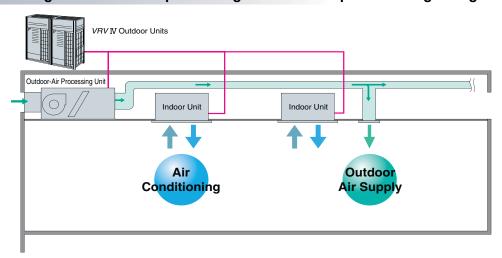
Model Name	FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
Capacity Index	125	200	250



Fresh air treatment and airconditioning 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 airconditioning 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.



#### Airconditioning 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.

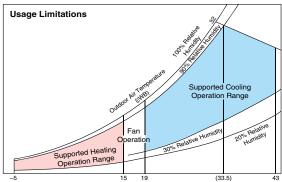
- When outdoor-air processing units are connected, the total connection capacity index must be 50% to 100% of the capacity index of the outdoor units.
- When outdoor-air processing units and standard indoor units are connected, the total connection capacity index of the outdoor-air processing units must not exceed 30% of the capacity index of the outdoor units.
- Outdoor-air processing units can be used without indoor units

- The unit introduces outdoor air and adjusts the outdoor air temperature via fixed discharge temperature control, thereby reducing the air conditioning load.
- The system can operate with outdoor-air temperatures ranging from -5 to 43°C. Heating performance is somewhat adversely affected when the outdoor-air temperature is 0°C or below.
- When shipped from the factory, the thermostat is set at 18°C for cooling and 25°C for heating. The set temperature can be varied within the range of 13-25°C during cooling operations, and 18-30°C during heating operations, in the local setting mode using the wired remote controller. The temperature, however, is not displayed on the remote controller.
- While in machine protection mode and depending on outdoor air conditions, discharge air temperature may not be at the set temperature.
- The fan stops when operating in defrosting, oil returning and hot start operations. The fan also may stop due to mechanical protection
- Ceiling mounted duct units with three differing capacities are available. These can be connected to VRV series outdoor units to meet a variety of different requirements.

#### Airflow rate

FXMQ125MFV1	1,080 m³/h
FXMQ200MFV1	1,680 m³/h
FXMQ250MFV1	2,100 m <sup>3</sup> /h

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



#### Notes:

- The data shown in the graph illustrates the supported operation ranges under the following conditions.
  Indoor and Outdoor Unit
  - Effective piping length: 7.5 m Height differential: 0 m
- 2. The discharge temperature can be set using the remote controller. However, the actual temperature may not match the temperature setting under some circumstances due to the outdoor-air processing load or mechanical protection
- 3. The system will not operate in fan mode when the outdoor air temperature is

- High-performance filters with dust collection efficiencies (JIS calorimetry) of 90% and 65% are also available as options.
- As with the VRV IV system, a variety of control systems can be deployed, including remote control from distances of up to 500 m.
- Group control is not possible between this unit and standard type indoor units. Connect remote controllers to each unit.
- The "self-diagnosis function" indicates the occurrence and nature of abnormalities in the system by displaying codes on the remote controller.
- · A central control system compatible with the VRV IV system can be installed.
- \* It is not possible to change the discharge air temperature settings from the central control system.
- \* Do not associate this equipment into zones with standard indoor units, as central control will not be possible.



DCS302CA61 Central remote controller (option)

 As with the VRV IV system, the equipment employs the "super wiring system" so that the wiring linking indoor and outdoor units can also be utilised for central control.

#### Notes:

- Linked control of the product and the Heat Reclaim Ventilator is not supported.
- This equipment is intended for the treatment of outdoor air only. It is not to be used for maintaining indoor air temperature. Install and use with standard indoor units. Be sure to position the air discharge openings of the product in positions where the airflow will not blow on people directly. When outdoor-air processing is in excess, the unit switches to thermo-off mode, and outdoor air flows into the room directly.
- \* For outdoor ducts, be sure to provide heat insulation to prevent condensation.
- \* Group control of the product and the standard indoor units is not supported. A separate remote controller should be connected to each individual unit.
- \* The system will not operate in fan mode when the outdoor air temperature is 5°C or below.
- \* If the product is allowed to operate 24 hours a day, maintenance (part replacement, etc.) must be performed periodically
- \* Temperature setting and Power Proportional Distribution (PPD) are not possible even if the intelligent Touch Controller or the intelligent Touch Manager is installed.
- \* The remote controller wired to the outdoor-air processing unit must not be set as the master remote controller. Otherwise, when set to "Auto," the operation mode will switch according to the outdoor air conditions, regardless of the indoor temperature.

# AIR TREATMENT EQUIPMENT LINEUP

#### **OUTDOOR-AIR PROCESSING UNIT**

#### STANDARD SPECIFICATIONS

#### **Indoor unit**

	Туре			Ceiling Mounted Duct Type				
Model				FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1		
Power supply				1-phase 220-240 V (also required for indoor units), 50 Hz				
Cooling capacity *1		kcal/h	12,000	19,300	24,100			
		Btu/h	47,800	76,400	95,500			
		kW	14.0	22.4	28.0			
			kcal/h	7,700	12,000	15,000		
Heating of	capacity *1		Btu/h	30,400	47,400	59,400		
		kW	8.9	13.9	17.4			
Power co	nsumption		kW	0.359	0.548	0.638		
Casing				Galvanised steel plate				
Dimensio	ons (HXWXD)		mm	470X744X1,100 470X1,380		30X1,100		
	Motor output		kW	0.380				
Fan	Airflow rate		m³/min	18	28	35		
ıaıı	Allilow rate		cfm	635	988	1,236		
	External static pressure	220 V/240 V	Pa	185/225	225/275	205/255		
Air filter				*2				
D. C.	Liquid		mm	φ 9.5 (flare)				
Refrigerant piping	Gas		mm	∮ 15.9 (flare)	φ 19.1 (brazing)			
	Drain		mm		PS1B female thread			
Machine	weight		kg	86 1:		23		
Sound level *3 220 V/240 V		dB(A)	42/43	47/	/48			
Connectable outdoor units *4 *5			8 HP and above 10 HP and above					
Operation range (Fan mode operation between 15 and 19°C)		Cooling	19 to 43°C					
		Heating	-5 to 15°C					
Range of	the discharge		Cooling		13 to 25°C			
temperature *6		Heating	18 to 30°C					

- 1. \*1. Specifications are based on the following conditions;

   Cooling: Outdoor temp. of 33°CDB, 28°CWB (68% RH), and discharge temp. of 18°CDB.

   Equivalent reference piping length: 7.5 m (0 m horizontal)

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

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

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

  \*5 It is not possible to connect to the 6 HP outdoor unit.

  \*6 Local setting mode. Not displayed on the remote controller.

  \*This equipment cannot be incorporated into the remote group control of the VRVIV system.

#### **OPTIONS**

#### **Indoor unit**

Model			FXMQ125MFV1	FXMQ200MFV1 FXMQ250N			
	Operation remo	te controller	BRC1E62/BRC1C62				
ntro	Central remote	controller	DCS302CA61				
n/co	Unified ON/OFF controller		DCS301BA61				
Operation/control	Schedule timer		DST301BA61				
Ope	Wiring adaptor for electrical appendices (1)		KRP2A61				
	Wiring adaptor for electrical appendices (2)		KRP4AA51				
	Long-life replacement filter		KAFJ371L140	KAFJ371L280			
Filters	High-efficiency	Colourimetric method 65%	KAFJ372L140	KAFJ3	72L280		
ŧ	filter	Colourimetric method 90%	KAFJ373L140	KAFJ3	73L280		
	Filter chamber *1		KDJ3705L140	KDJ3705L280			
Dr	ain pump kit		KDU30L250VE				
Ac	daptor for wiring		KRP1B61				

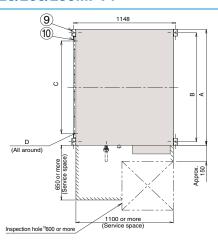
- Notes: \*1. Filter chamber has a suction-type flange. (Main unit does not.)

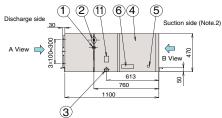
  - 1. Filter chamber has a sucunitype hange, (want this upon the prior of the equipment may vary depending on the options used.

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

### **DIMENSIONS**

### FXMQ125/200/250MFV1





\*These diagrams are based on FXMQ200 and FXMQ250MFV1.

### Local connection piping size

Model	Gas piping diameter	Liquid piping diameter
FXMQ125MFV1	<b>φ</b> 15.9	$\phi$ 9.5
FXMQ200MFV1	$\phi$ 19.1 attached piping	$\phi$ 9.5
FXMQ250MFV1	$\phi$ 22.2 attached piping	$\phi$ 9.5

### Table of dimensions

Model	Α	В	С	D
FXMQ125MFV1	744	685	5X100=500	20-φ4.7 hole
FXMQ200MFV1	1380	1296	11X100=1100	32- <b>φ</b> 4.7 hole
FXMQ250MFV1	1380	1296	11X100=1100	32- <i>ϕ</i> 4.7 hole

### Notes:

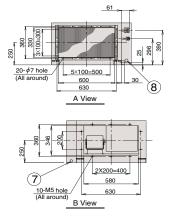
- 1. The attached piping in the diagram is for FXMQ200MFV1 and FXMQ250MFV1 only. The gas piping connection port (② in the diagram) has a different bore form with FXMQ125MFV1.
- 2. An air filter is not supplied with this unit. Be sure to mount an air filter in the suction side.[Use a filter with dust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

  3. For outdoor ducts, be sure to provide heat insulation to prevent
- - 1 Liquid pipe connection
  - ② Gas pipe connection
  - 3 Drain piping connection
- 4 Electric parts box
- ⑤ Ground terminal
- 6 Name plate
- 7 Power supply wiring connection
- ® Transmission wiring connection
- 9 Hanger bracket
- 10 Discharge companion flange
- 1 Water supply port
- 12 Attached piping (Note. 1)

### FXMQ200/250MFV1

# 11×100=1100 1200 1230 32- $\phi$ 7 hole (All around) (8) A View 5X200=1000 1230 (All around) B View (For FXMQ200MFV1) B View (For FXMQ250MFV1)

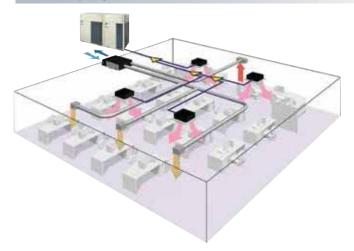
### FXMQ125MFV1



# AIR TREATMENT EQUIPMENT LINEUP

### HEAT RECLAIM VENTILATOR WITH DX-COIL AND HUMIDIFIER — VKM SERIES

## The Heat Reclaim Ventilator lineup features the DX-coil in response to recently diversifying outdoor air introduction requirements.



### Efficient outdoor air introduction is possible

The Heat Reclaim Ventilator (VKM series) series introduces fresh outdoor air with minimum heat losses, while a wide variety of features respond to customer requirements.

### Lineup

With DX Coil & Humidifier Type										
Model Name VKM50GAMV1 VKM80GAMV1 VKM100GAMV1										
<b>Capacity Index</b> 31.25 50 62.5										
-										

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



### Humidifier

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

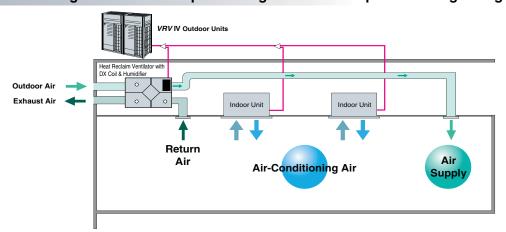
### **DX-coil**

The Heat Reclaim Ventilator features DX-coil that contributes to the prevention of cold airflow hitting people directly during heating operation, due to the after-cool, after-heat operations done beforehand.

### **High static pressure**

High external static pressure means enhanced design flexibility.

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

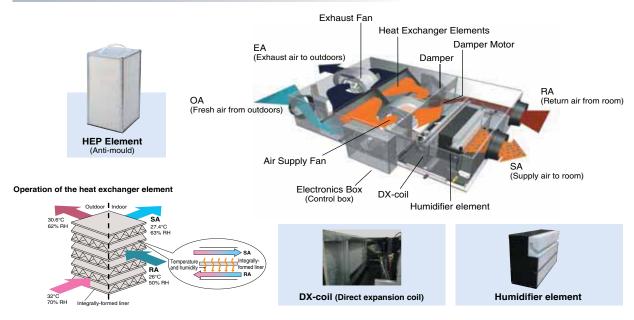


### **Connection Conditions**

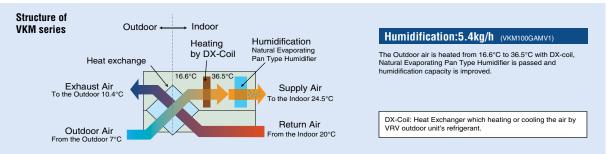
The following restrictions must be observed in order to maintain the indoor units connected to the same system.

. When 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.

### A compact unit packed with our cutting-edge technology



### Heating and humidification process



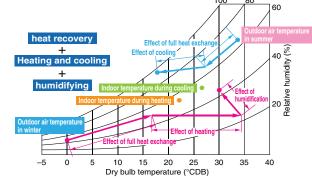
### Efficient outdoor air introduction with heat exchanger and cooling/heating operations

### Indoor unit with outdoor air treatment

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

### Other features

- Integrated system includes ventilation and humidifying operations.
- Ventilation, cooling/heating and humidifying are possible with one remote controller.



# AIR TREATMENT EQUIPMENT LINEUP

HEAT RECLAIM VENTILATOR WITH DX-COIL AND HUMIDIFIER — VKM SERIES

### **SPECIFICATIONS**

	МО	DEL			VKM50GAMV1*	VKM80GAMV1 *	VKM100GAMV1*	VKM50GAV1	VKM80GAV1	VKM100GAV1		
Refrigerant					R-410A							
Power Supply							1-phase, 220-2	40 V, 50 Hz				
		Ultra-high	Airflow rate	m <sup>3</sup> /h	500	750	950	500	750	950		
		Oilla-riigii	Static pressure	Pa	160	140	110	180	170	150		
Airflow Rate & Sta	atic	Lligh	Airflow rate	m <sup>3</sup> /h	500	750	950	500	750	950		
Pressure (Note 7)		High	Static pressure	Pa	120	90	70	150	120	100		
		Law	Airflow rate	m <sup>3</sup> /h	440	640	820	440	640	820		
		Low	Static pressure	Pa	100	70	60	110	80	70		
		Heat	Ultra-high		560	620	670	560	620	670		
		exchange	High	w	490	560	570	490	560	570		
Power Consumption		mode	Low		420	470	480	420	470	480		
Power Consumplic	OH	_	Ultra-high		560	620	670	560	620	670		
		Bypass mode	High	w	490	560	570	490	560	570		
		mode	Low		420	470	480	420	470	480		
Fan Type							Sirocco	Fan				
Motor Output				kW	0.280 × 2	0.280 × 2	0.280 × 2	0.280 × 2	0.280 × 2	0.280 × 2		
		Heat	Ultra-high		37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/41		
		exchange	High	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 (Note	2 5)	mode	Low		32/33/34	33/34/35.5	34/34.5/35.5	33.5/34.5/35.5	34.5/36/37	35/36/36.5		
(220/230/240 V)	3 0)		Ultra-high		37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/41		
		Bypass	High	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		
		mode	Low		32/33/34	33/34/35.5	34/34.5/35.5	33.5/34.5/35.5	34.5/36/37	35/36/36.5		
Humidification Cap	pacity (Note	4)		kg/h	2.7	4.0	5.4		_			
<u> </u>	, ,	Ultra-high			76	78	74	76	78	74		
Temp. Exchange		High		%	76	76 78 74 7	76	78	74			
Efficiency		Low			77.5	79	76.5	77.5	79	76.5		
		Ultra-high		64 % 64		66	62	64	66 66	62		
Enthalpy Exchang		High				66	62			62		
Efficiency (Cooling	3)	Low			67	68	66	67	68	66		
		Ultra-high			67	71	65	67	71	65		
Enthalpy Exchang	je	High		%	67	71	65	67	71	65		
Efficiency (Heating	g)	Low		, ,	69	73	69	69	73	69		
Casing							Galvan ised					
Insulating Material	I						Self-Extinguishabl					
Heat Exchanging \$						Air to Air Cros	s Flow Total Heat (S		leat) Exchange			
Heat Exchanger E							pecially Processed N					
Air Filter							Multidirectional		-			
DX-coil	Cooling (N	lote 2)			2.8	4.5	5.6	2.8	4.5	5.6		
Capacity	Heating (N			kW	3.2	5.0	6.4	3.2	5.0	6.4		
		eight			387	387	387	387	387	387		
Dimensions		/idth		mm	1,764	1,764	1,764	1,764	1,764	1,764		
	_	epth			832	1,214	1,214	832	1,214	1,214		
Connection Duct D		mm	<i>\$</i> 200		250	<i>\$</i> 200		250				
			Net		102	120	125	96	109	114		
Machine Weight			Gross (Note 8)	kg	107	129	134		_			
			Around Unit			.20	0°C-40°C DB,	80%RH or less				
Unit Ambient Cond	dition		OA (Note 9)				-15°C-40°C DB					
Jone cone			RA (Note 9)				0°C-40°C DB,					
			IIA (Note 9)				0 0 40 0 DB,	00 /01 11 1 01 1000				

- Notes: 1. Cooling and heating capacities are based on the following conditions. Fan is based on High and

  - 1. Octoin gain it is a based on high and Ultra-high.

    When calculating the capacities as indoor units, use the following figures: VKMSGGAMV1/GV1: 3.5 kW, VKM8GGAMV1/GV1: 5.5 kW, VKM100GAMV1/GV1: 7.0 kW

    Indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 25°C DB

    Indoor temperature: 20°C DB, Outdoor temperature: 25°C DB

    Humidifying capacity is based on the following conditions: Indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB

    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 actual 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. For operation in a quite troom, it is required to take measures to lower the sound. For details, refer to the Engineering Data.

    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.

  - Naribor rate can be changed over to Low mode or High mode.
     In case of holding full water in humidifier.
     OA: fresh air from outdoor. RA: return air from room.
     Specifications, design and information here are subject to change without notice.
     Power consumption and efficiency depend on the above value of airflow rate.

- 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

- under the following condition: Ratio of rated external static pressure outdoor to indoor is kept constant at 7 to 3.

  13. 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 continues driving (factory setting). The purpose of this is to maintain the amount of vertilitation 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.)

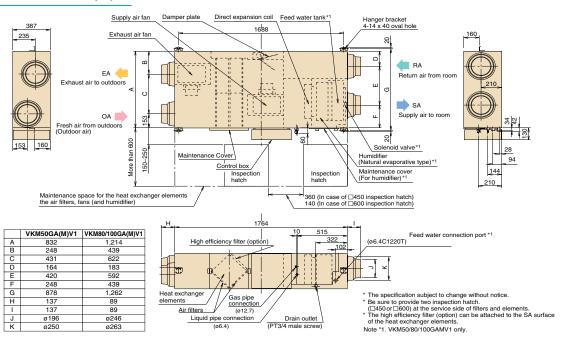
  15. When connecting the indoor unit directly to the duct, always use the same system on the indoor unit as with the outdoor unit, perform group-linked operation, and make the direct duct connection settings from the remote controller. (Mode No. "17" C97") First code No. "5" Second code No. "6".)

  Also, do not connect to the outlet side of the indoor unit. Depending on the fan strength and static pressure, the unit inglish back up.
- A 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 hours/day x 26 days/month x 5 months = 1,300 hours

### **DIMENSIONS**

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



### **OPTIONS**

Ite	m			Туре		VKM50/80/100GA(M)V1										
	Re	emote c	ontro	oller		BRC1E62/BRC1C62 *1										
	0	F	Reside	ntial central remote controller		DC\$303A51 *2										
	con	tralised trolling	Centr	al remote controller	DCS302CA61											
	dev		Unifie	d ON/OFF controller						DCS30	1BA61					
			Sche	edule timer						DST30	1BA61					
device		Wiring		otor for electrical		KRP2A61										
	_	For humi	idifier	running ON signal output		KRP50-2										
ing	[월]	For hea	ater o	control kit		BRP4A50										
Controlling	Board Adaptor	For wir	For wiring Type (indoor unit of VRV)		FXFQ-S FXFQ-LU	FXZQ-M	FXUQ-A	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXMQ-P	FXMQ-MA	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	
	[윤]				KRP1C63★	KRP1BA57★	KRP1C67	KRP1B61★	KRP1B61	KRP1B56★	KRP1C64★	KRP1B61	KRP1BA54	_	KRP1B61	KRP1C67
	_	Installat	tion b		Notes 2, 3 KRP1H98	Note 4, 6 KRP1BA101		Notes 2, 3 KRP1B96		Notes 4, 6 KRP1BA101	Notes 2, 3 KRP4A96			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.

  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 \*\pi\$ is necessary for second adaptor.
- 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 with a Heat Reclaim Ventilator (VKM), you can only switch the power ON/OFF. Cannot be used with other centralised control equipment.

Ite	em	Туре	VKM50GA(M)V1	VKM80GA(M)V1	VKM100GA(M)V1			
6	Silencer		<del>-</del>	KDDM2	24B100			
nction		Nominal pipe diameter   mm	<del>_</del>	<i>∮</i> 250	) mm			
₽	Air suction/	White	K-DGL200B	K-DGL250B				
Sug	Discharge grille	Nominal pipe diameter mm	φ200	<i>φ</i> 250				
Additional	High efficiency	filter	KAF242H80M	KAF242	2H100M			
Ą	Air filter for rep	lacement	KAF241G80M	KAF241	IG100M			
Fle	exible duct (1 m)		K-FDS201D	K-FDS251D				
Fle	exible duct (2 m)		K-FDS202D	K-FDS	S252D			

### The Heat Reclaim Ventilator Creates a High-Quality Environment by Interlocking with the Airconditioner

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

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

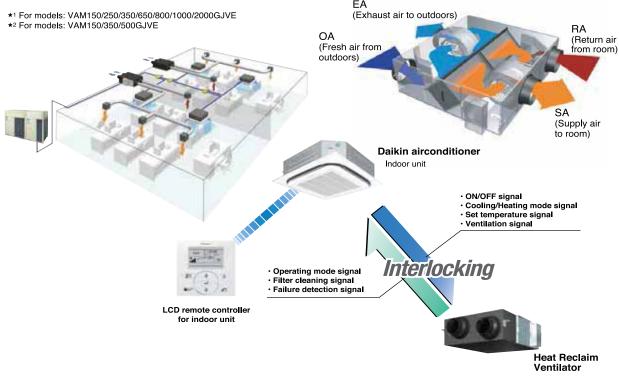




Heat Reclaim Ventilator remote controller\* BRC301B61 (Option)

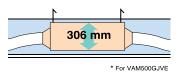
\* This remote controller is used in case of independent operation of Heat Reclaim Ventilator.

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



### **Compact Equipment**

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

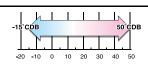


### **Energy Conservation**

Airconditioning load reduced by approximately 31%!

### **Cold Climate Compatible**

Standard operation at temperatures down to -15°C.



## Airconditioning 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 airconditioning

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

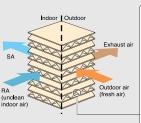
Due to the thinner film...

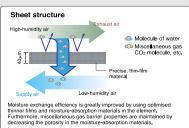
•Decreases the moisture resistance of the partition sheets drastically.

·Realises more space for extra layers in the element, resulting in increased effective area that supply and exhaust air can be exposed to.

Moisture absorption increased by approx. 10%!







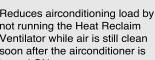
### **Auto-ventilation Mode Changeover Switching**

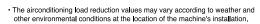
Automatically switches the ventilation mode (Total Heat Exchange Mode/Bypass Mode) according to the operating status of the airconditioner.



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

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



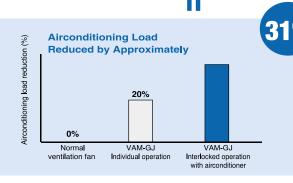


• The airconditioning load reduction values are based on the following conditions; Application: Tokyo office building

Building form: 6 floors above ground, 2 floors underground, floor area 2,100 m<sup>2</sup> Personnel density: 0.25 person/m<sup>2</sup> Ventilation volume: 25 m<sup>3</sup>/h

Indoor airconditioning level: summer 25°C 50% RH, intermediate seasons 24°C 50%

RH, winter 22°C 40% RH
Operating time: 2745 hours (9 hours per day, approx. 25 days per month)
Calculation method: simulation based on "MICRO-HASP/1982" of the Japan Building Mechanical and Electrical Engineers Association.



### Night-time free cooling operation\*1

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

temperature, night-time free cooling operation reduces the cooling load when airconditioners are turned on in the morning. It also alleviates feelings 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.

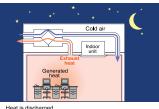
Nighttime free cooling operation is set to "off" in the factory settings, so if you wish to use it, request your dealer to turn it on.

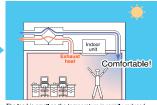
- 1 This function can be operated only when interlocked with airconditioners.
- \*2 Value is based on the following conditions:

   Cooling operation performed from April to October
- Calculated for airconditioning sensible heat load only
- (latent heat load not included)

The indoor accumulated heat is discharged at night.

This reduces the airconditioning load the next day thereby increasing efficiency.





Airconditioning sensible heat load reduced by

approx. **5%**2

The load is small so the temperature is rapidly reduced to a comfortable level.

\*Interlocked operation with an air conditioner

# AIR TREATMENT EQUIPMENT LINEUP

### **HEAT RECLAIM VENTILATOR - VAM SERIES**

### **SPECIFICATIONS**

	MOD	EL			VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
Powe	er Supply							1-phase,	L 220-240 V/ 220	V, 50 Hz			
Tomp	. Exchange	l	Ultra-High		79/79	75/75	79/79	74/74	75/75	72/72	78/78	72/72	77/77
Efficie	ency	Ī	High	%	79/79	75/75	79/79	74/74	75/75	72/72	78/78	72/72	77/77
(50/60	0 Hz)	Ī	Low		84/85	79/79	82/82	80/80.5	77/77.5	74/74.5	80.5/81	75.5/76	79/81
		ı	Ultra-High		72/72	71/72	70/70	67/67	67.5/67.5	65/65	70/70	65/65	72/72
Enthalp	For Hea	ting	High	%	72/72	71/71	70/70	67/67	67.5/67.5	65/65	70/70	65/65	72/72
Exchar			Low		76/76.5	74/74	77/77	74/74.5	71.5/72	67.5/68	72.5/73	67/67.5	76/76
Efficier	-	ı	Ultra-High		66/66	63/63	66/66	55/55	61/61	61/61	64/64	61/61	62/62
(50/60	Hz) For Coo	ling	High	%	66/66	63/63	66/66	55/55	61/61	61/61	64/64	61/61	62/62
		Ī	Low		70/70.5	66/66	70/70	59/59.5	64/64.5	64/64.5	68.5/69	64/64.5	66/67
	Heat	ı	Ultra-High		125/134	137/141	200/226	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542
	Excha	nge	High	w	111/117	120/125	182/211	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315
Power	Mode	Ī	Low		57/58	60/59	122/120	128/136	196/207	435/483	476/512	835/927	966/1,039
Consum (50/60			Ultra-High		125/134	137/141	200/226	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542
	Bypas	s	High	w	111/117	120/125	182/211	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315
	Mode	ı	Low		57/58	60/59	122/120	128/136	196/207	435/483	476/512	835/927	966/1,039
	Heat		Ultra-High		27-28.5/28.5	27-29/29	31.5-33/33	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
	Excha	nge	High	dB(A)	26-27.5/27.5	26-27.5/28	30-31.5/30	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 I	Level Mode	ı	Low		20.5-21.5/21	21-22/21	23-25/23	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			Ultra-High		28.5-29.5/29.5	28.5-30.5/30.5	33-34.5/34.5	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 dB(A)	27.5-28.5/28.5	27.5-29/29.5	31.5-33/31.5	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	
	Mode	ı	Low		22.5-23.5/22	22.5-23/22.5	24.5-26.5/24.5	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							
Insulat	tion Material							Self-extingu	ishable polyur	ethane foam			
Dimen	sions (HXW)	(D)		mm	278×8	10×551	306×8	79×800	338×973×832	387×1,111×832	387×1,111×1,214	785×1,619×832	785×1,619×1,214
Machir	ne Weigh			kg	2	4	3	2	45	55	67	129	157
Heat E	Exchange Sys	tem					Air to air cro	ss flow total he	eat (Sensible h	eat + latent hea	at) exchange		
Heat E	Exchange Ele	ment	t Mate	rial				Specially pro	cessed nonflar	nmable paper			
Air Filte	er							Multidire	ectional fibrous	fleeces			
1.	Туре								Sirocco fan				
			Ultra-High		150/150	250/250	350/350	500/500	650/650	800/800	1,000/1,000	1,500/1,500	2,000/2,000
	Airflow Rate	ŀ	High	m³/h	150/150	250/250	350/350	500/500	650/650	800/800	1,000/1,000	1,500/1,500	2,000/2,000
	(50/60 Hz)	ŀ	Low		100/95	155/155	230/230	320/295	500/470	700/670	860/840	1,320/1,260	1,720/1,580
Fan	Futowal Ct-		Ultra-High		120/154	70/96	169/222	105/150	85/125	133/170	168/192	112/150	116/140
	External State Pressure	IC	High	Pa	106/131	54/65	141/145	66/52	53/67	92/85	110/86	73/72	58/32
	(50/60 Hz)		Low		56/60	24/20	67/30	32/18	35/38	72/61	85/60	56/50	45/45
	Motor Outpu			kW	0.03		0.09		0.140×2	0.28			80×4
	ection Duct Di		ter	mm	φ100		150		200		250		350
	mbient condit				,	Τ		· ·	0°CDB, 80%R			, ,	

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

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

  3. Sound level is measured in an anechoic chamber.

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

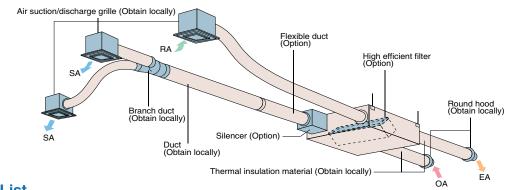
    4. The sound level at the air discharge port is about 8 dB(A) higher than the unit's sound level.

  - 5. 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.
  - 8. In conformance with JIS standards (JIS B 8628), operating sound level is based on the value when one unit is operated, with the value converted for an anechoic chamber. This is transmission sound from the main unit, and does not include sound from the discharge grille. Thus it is normal for the sound to be louder than the indicated value when the unit is actually installed.
  - 9. Sound level from the discharge port causes the value to be approximately 8 dB(A) (models with the airflow rate of less than 150 to 500m³/h) to approximately 11 dB(A) (models with the airflow rate of 60m³/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 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
   Decentralised installation of discharge grilles
   When installing in a location with particularly low background noise such as a classroom, please consider the following measures to avoid transmission sound from the main unit:
  - Use of ceiling materials with high sound insulating properties (high transmission
  - Methods of blocking sound transmission, for example, by adding sound insulating materials around the bottom of the sound source.

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

### **OPTIONS**



### **Option List**

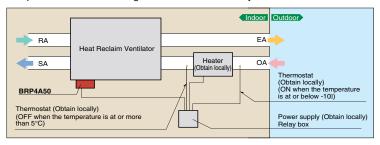
Ite	m			Туре		VAM150 · 250 · 350 · 500 · 650 · 800 · 1000 · 1500 · 2000 GJVE										
	He	at Reclair	n Ver	ntilator remote controller		BRC301B61										
	000	atualia ad	Reside	ntial central remote controller						DCS30	3A51 °1					
		ntralised trolling	Centr	al remote controller						DCS30	2CA61					
	dev		Unifie	d ON/OFF controller						DCS30	1BA61					
Φ			Sche	edule timer						DST30	1BA61					
device		Wiring append		otor for electrical		KRP2A61										
	ptor	For hu	midif	ier	KRP50-2											
i	dap	Installa	tion	box for adaptor PCB		KRP50-2A90 (Mounted electric component assy of Heat Reclaim Ventilator)										
ontrolling	⋖	For hea	ater	control kit	BRP4A50											
Cor	PC Board	For wir	ing	Type (indoor unit of <i>VRV</i> )	FXFQ-S FXFQ-LU	FXZQ-M	FXUQ-A	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXMQ-P	FXMQ-MA	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	FXVQ-M
			·		KRP1C63★	KRP1BA57★	KRP1C67	KRP1B61★	KRP1B61	KRP1B56★	KRP1C64★	KRP1B61	KRP1BA54	_	KRP1B61	KRP1C67
		Installa	tion b		Notes 2, 3 KRP1H98			Notes 2, 3 KRP1B96		Notes 4, 6 KRP1BA101				Notes 2, 3 KRP4AA93	_	_

- Notes:1. Installation box ★ is necessary for each adaptor marked ★.
  2. Up to 2 adaptors can be fixed for each installation box.
  3. Only one installation box can be installed for each indoor unit.
  4. Up to 2 installation boxes can be installed for each indoor unit.
- Installation box ★ is necessary for second adaptor.
- Installation box ★ is necessary for each adaptor.
   \*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		Ту	ре	VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
_a _	Silencer				_		KDDM24B50	K	DDM24B10	0	KDDM24	B100×2
Additional function		Nominal pipe diameter	mm		_		φ 2i	00		φ 2:	50	
ig ci	High efficie	ency filter		KAF24	2H25M	KAF24	2H50M	KAF242H65M	KAF242H80M	KAF242H100M	KAF242H80MX2	KAF242H100MX2
₽P	Air filter for	replacement		KAF24	1G25M	KAF24	KAF241G50M K		KAF241G80M	KAF241G100M	KAF241G80MX2	KAF241G100MX2
Flexibl	e duct (1 m)			K-FDS101D	K-FDS	S151D	K-FDS201D K-FD				S251D	
Flexibl	e duct (2 m)			K-FDS102D	K-FDS	S152D	K-FDS	S202D	K-FDS252D			
Duct a	dantor			_								25A1
Duct a	ισαριοί	Nominal pipe diameter	mm		_							

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

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



### Notes when installing

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





### 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 repairs or components. 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 inquiries, either call the numbers mentioned below or contact your nearer Daikin dealer.

### Cautions on product corrosion

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





## JQA-1452

### About ISO 9001

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



### About ISO 14001

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

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Mumbai - Tel.: 022-30926666
Pune - Tel.: 020-25560300

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