DAIKIN

DSP-VRV-19001B

VRV X Series Catalogue

VRV X SERIES

RXUQ18AYM
RXUQ20AYM

RXUQ14AYM
RXUQ16AYM

RXUQ12AYM

RXUQ6AYM
RXUQ8AYM
RXUQ10AYM

Cooling Only 50Hz

R-410A

Cooling Only 50Hz

Exceeding Boundaries with Innovative Energy Savings

New

*Daikin **VRV** system has been embraced by world markets for over 35 years. Now, Daikin proudly introduces the new **VRV** X. By combining the technologies of **VRV**, VRT and VAV, we have attained both energy savings and comfortable air conditioning.*

With Daikin Smart Connection, pipes can be joined easily and quickly without brazing or using any special tools - refer to page 15 for more information.

VRV X SERIES

VRV+VRT +VAV

VRV X series movie

Energy savings

Uniting **VRV**, VRT and VAV technologies

Automatic refrigerant charge function

- Optimised operation efficiency
- Higher installation quality
- Easier installation

High reliability

- New inverter PC board
- Double backup operation
- Refrigerant cooling for PC board

Contents

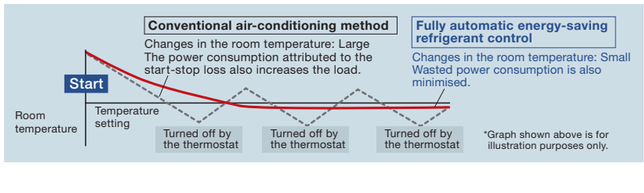
VRV User Benefits

First launched in 1982, the Daikin ***VRV*** system has been providing comfort and reliability to building owners and their tenants for over 35 years. Leveraging the latest in energy-saving technology, Daikin has further improved energy savings while reducing space requirements. This added value is one reason why Daikin is the right choice for building owners.

Energy saving & comfortable environment

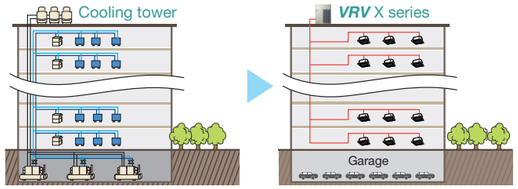
Based on the idea of using only as much space as absolutely required, Daikin first launched its commercial multi-split air conditioning systems in 1982. Since then, customers have benefitted from much increased energy efficiency. Now, our revolutionary new systems dramatically reduce energy with VRT Smart Control. During operating periods, control programs ensure thermal loading is generally low, thus boosting energy efficiency. This greatly reduces the amount of energy required for building air conditioning.

While optimally operating at low load, it maintains a comfortable indoor environment.



Efficient space utilisation

Daikin ***VRV*** system can be used to develop a large-scale air conditioning system on a single refrigerant system, thus reducing the space required for air conditioning equipment. Because the difference in height between the indoor and the outdoor unit can be as large as 90 m, even with a 20-storey building all of the outdoor units can be placed on the rooftop for more efficient utilisation of space.



High reliability

Double backup operation

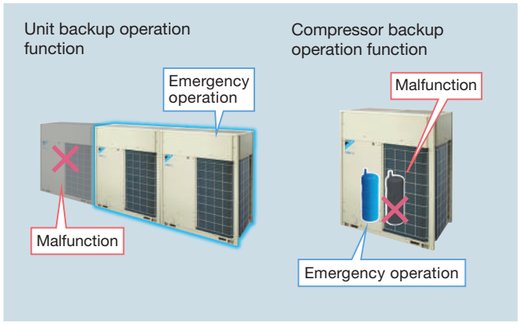
Daikin ***VRV*** outdoor unit goes beyond just highly reliable compressors with a backup system that ensures continued operation.

Unit backup

Should one outdoor unit in a multiple unit system fail, the other outdoor units switch to emergency operation. If for some reason a failure occurs, the system for that unit does not completely stop, and air conditioning is maintained.

Compressor backup

Since units are equipped with two compressors, even if one compressor fails, the other compressor carries on in emergency mode.



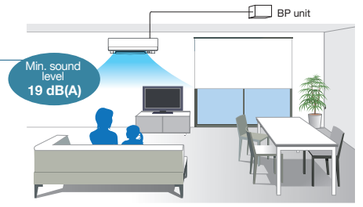
Comfortable environment

While operating optimally at low load, VRT smart operation maintains the indoor temperature and ensures a comfortable environment.

Residential indoor units*

Because indoor units developed for residential use can be connected, it is possible to realise quiet operation.
You can include indoor units that operate at min.19 dB(A), and to reduce the noise of refrigerant passing through the piping by remotely installing an BP unit.

*For indoor units connectability, please refer to the indoor unit product lineups.

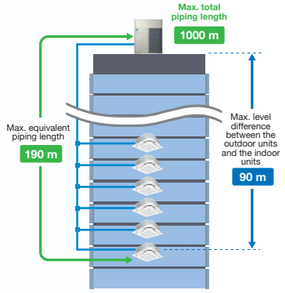


Varied lineup of models

System applications range from family residences to large commercial buildings. With various types of indoor units available, comfortable airflow is ensured in every space.

Long piping provides more flexible system design

Greater design freedom is provided because equivalent piping between indoor and outdoor unit can run as large as 190 m and reach a maximum height difference of 90 m.

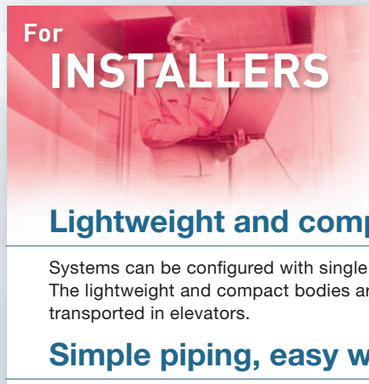


Compatible with engineering software

We at Daikin provide the software, the simulation results, and drawing materials to support the business-information modeling (BIM) currently entering the mainstream in construction industries.

Energy efficient

Daikin's innovative energy-saving technology helps you to achieve your green building solution.



Automatic refrigerant charge function

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

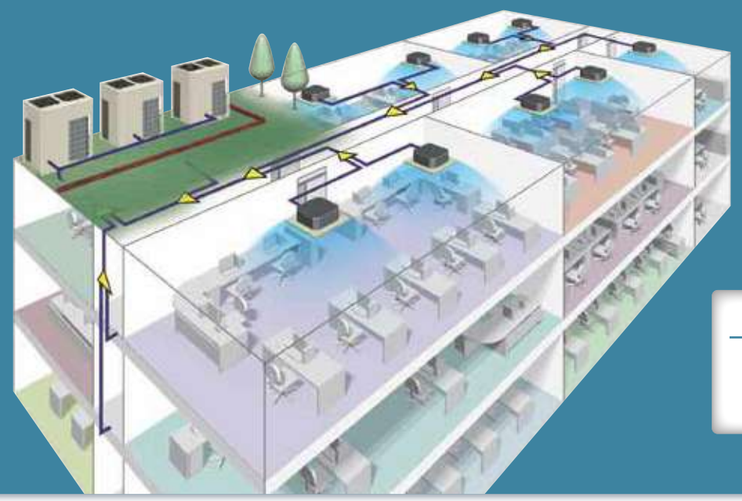
Lightweight and compact large-capacity single units

Systems can be configured with single modules providing up to 20 HP. The lightweight and compact bodies are both easy to install and can be transported in elevators.

Simple piping, easy wiring

The REFNET piping system and DIII-NET system simplify refrigerant piping and control wiring installation.

VRV X SERIES — New Heights in Energy Efficiency During Actual Operation



New

RXUQ-A

Cooling Only

6 HP - 60 HP
(16 kW) (168 kW)

Greater energy savings during low-load operation

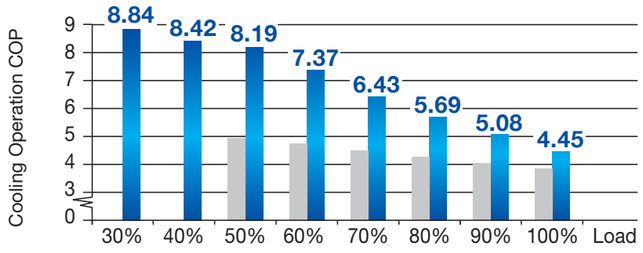
The key to innovative energy savings is to increase efficiency during low-load operation.

Using data gathered from actual operation, Daikin discovered that air conditioning systems operate at a load factor of 50% or less for 80% of their annual operation period.
This inspired us to develop new technologies to enhance energy efficiency during low-load operation.
Utilising these technologies, Daikin's new ***VRV*** X series raises the standard of energy efficiency.

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

Higher Coefficient of Performance (COP)

COP for 10 HP



Annual power consumption
20%* lower

* Simulation conditions :
- Location : Bangkok, Thailand
- System : Outdoor unit (10 HP) x 1
  Indoor unit (2 HP, Round Flow with Sensing type) x 5
- Operation time : 8:00-20:00 5 days/week
- Outdoor units :
  New model : RXUQ10A (***VRV*** X series)
  Conventional model : RXQ10T (***VRV*** IV)

VRV IV (RXQ10T)

VRV X SERIES

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

Advanced technologies for greater energy savings — VRV+VRT+VAV

By uniting advanced **software** and **hardware** technologies for greater energy savings during actual operation and combining the technologies of ***VRV***, VRT and VAV, we have attained both energy savings and comfortable air conditioning.

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

Software technology

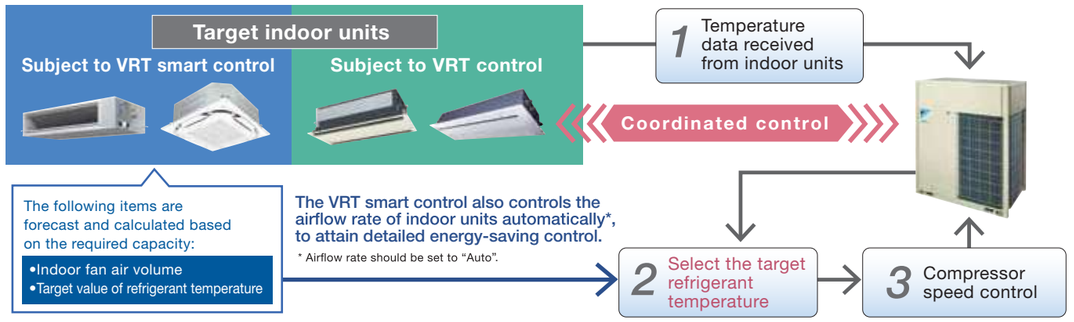
Optimally supply only for the needed capacity of indoor units

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

Variable Refrigerant Temperature

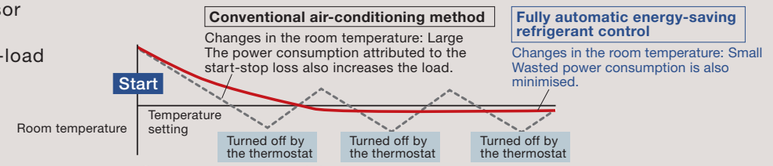
VRT Smart Control Function movie

•Overview of the control (system control flow)
Different automatic energy-saving refrigerant control applies depending on the indoor units connected.



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

•Changes in the air-conditioned room temperature during low-load operation*



*Graph shown above is for illustration purposes only.

Note:
•For the classification of indoor units (VRT smart control and VRT control), refer to page 25–26.
•If a system has indoor units subject to both VRT smart and VRT control, the system is operated under VRT control.
•If a system has both outdoor-air processing air conditioners and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.

Optimum utilisation of VRT Smart Control and VRT Control

Effectiveness can be demonstrated for VRT Smart Control and VRT Control when all the indoor units operate under low load conditions in a similar manner.
Low load conditions are the time when room temperature approaches set temperature.
For this reason, please note the following to maximise energy efficiency.

•When selecting indoor units
Indoor units are installed in a system so that they operate largely under the same conditions.
Energy efficiency decreases for the installation patterns shown below.
Example:
1) A load imbalance occurs because an indoor unit in the same system is installed near the perimeter of the room or in the vicinity of a room entrance.
2) Different operating hours for indoor units.

•Time of Use
1. Energy efficiency decreases when the set temperature of a specified indoor unit is excessively lowered during cooling operation.
2. The airflow rate setting is set to "Auto" during VRT Smart Control.

New Heights in Energy Efficiency During Actual Operation

New Scroll Compressor

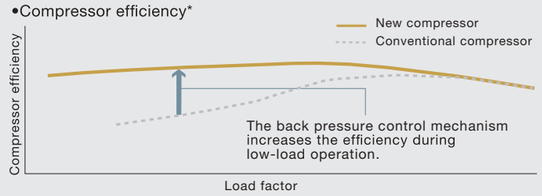
Available on all models

Hardware technology

Refrigerant leakage is minimised during low-load operation.

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

•Compressor efficiency*



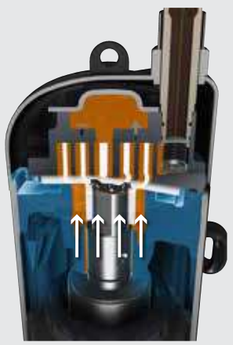
*Graph shown above is for illustration purposes only.

New Scroll Compressor movie

Back pressure control mechanism

Conventional mechanism

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

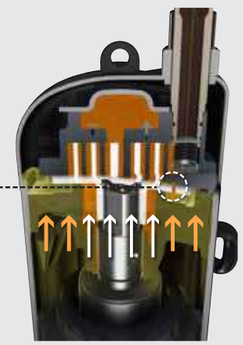


The force pressing the movable scroll decreases during low-load operation.

New

New intermediate pressure mechanism

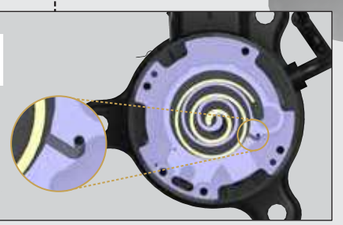
The force pressing the movable scroll is optimised according to operating conditions. The behavior of the movable scroll has been stabilised to increase efficiency during low-load operation.



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

Intermediate pressure adjustment port

The intermediate pressure (back pressure) optimises the force pressing the movable scroll depending on the operating condition.



Advanced oil temperature control

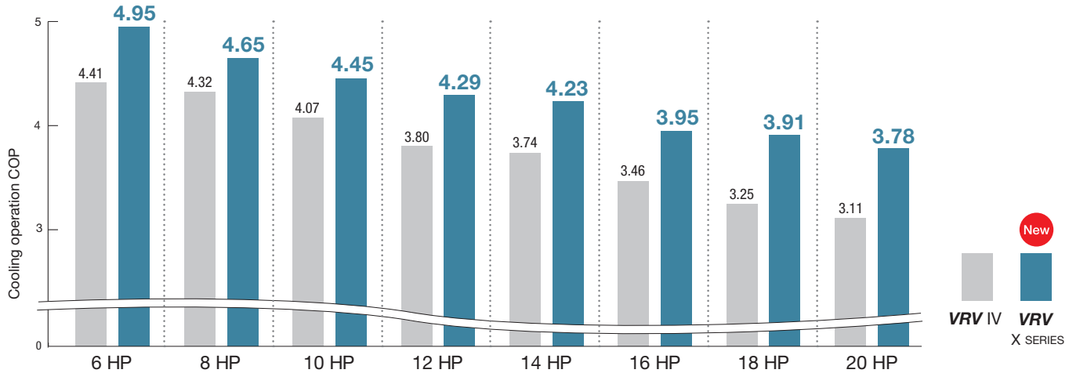
Standby power consumption is reduced

The advanced oil temperature control reduces standby power consumption by up to 65.4%* annually compared to conventional models. Standby power needed for preheating refrigerator oil, which consumed substantial standby power, was reduced to save energy when the air conditioner is stopped.

* Operation calculation conditions: ***VRV*** X series 14 HP
Location: Singapore
Operation time: 08:00–18:00 on weekdays

Higher efficiency is provided during rated operation.

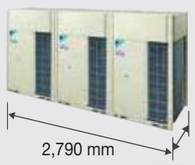
COP at 100% operation load



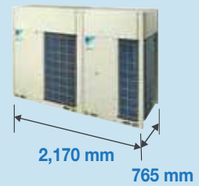
Cooling operation conditions : Indoor temp, of 27°CDB, 19°CWB, and outdoor temp, of 35°CDB.

Extensive product lineup

•The ***VRV*** X series achieves higher efficiency in a design that is more compact and lightweight than the ***VRV*** IV High-COP type, and the capacity of the lineup has been further expanded. (12 HP–50 HP → **6 HP–60 HP**)



	VRV IV High-COP type (18 HP)		New ***VRV*** X SERIES (18 HP)	
COP	4.40	→	4.54	3% Increase
Installation space	2.13 m²	→	1.66 m²	22% Decrease
Product weight	555 kg	→	400 kg	28% Decrease



Lineup

New 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
VRV X SERIES	Single outdoor units	●	●	●	●	●	●	●	●																				
	Double outdoor units				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
	Triple outdoor units							●	●					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Excellent Operational Performance

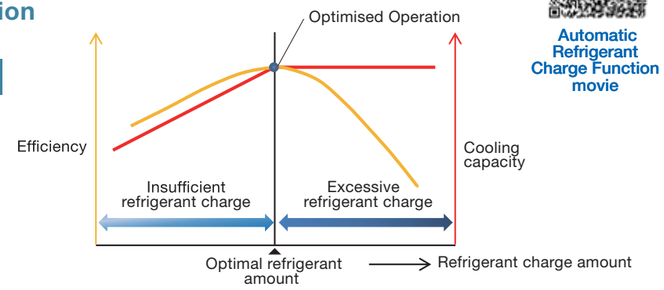
Automatic refrigerant charge function

Contribute to optimised operation efficiency, higher quality and easier installation

Automatic Refrigerant Charge Function movie

Optimised operation efficiency

The automatic refrigerant charge function automatically determines the optimal amount of refrigerant to be charged. This function prevents a capacity shortage or energy loss due to excessive or insufficient refrigerant.



Higher quality and easier installation

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

VRV IV

1	2	3	4	5
Calculate necessary refrigerant amount from design drawing	Recalculate refrigerant amount from final installation drawing	Charge refrigerant	Regularly check refrigerant weight on weighing scale	Complete by manually closing valves when proper weight is reached

VRV X SERIES

1	2	3
Calculation of necessary refrigerant amount from design drawing	Pre-charge of refrigerant*	Start of automatic refrigerant charge operation

- **Automatic completion by proper refrigerant amount**
- **Monitoring refrigerant charging is unnecessary**
- **No recalculation of charge amounts due to minor design changes locally**

*Pre-charge amount changes according to conditions, and pre-charging is unnecessary when necessary refrigerant amount is 4 kg and under.
Please refer to Engineering Data Book for details.

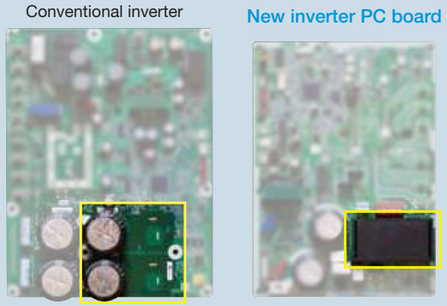
Even if a refrigerant leak occurs from local piping after installation, the proper refrigerant amount can still be charged without needing to calculate the necessary amount.
Starting the automatic refrigerant charge operation again will ensure that optimum operation efficiency and installation quality are maintained.

High reliability

New inverter PC board

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

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



Comfort

Low operation sound

High efficiency heat exchanger helps to achieve low operation sound.

Sound level (dB(A))

	6 HP	8/10 HP	12 HP	14/16 HP
VRV X SERIES	54	56	58	59

Large airflow, high static pressure and quiet technology

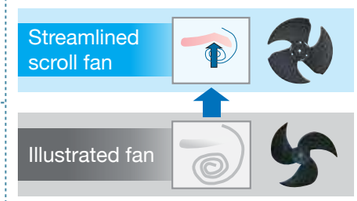
Advanced analytic technologies are utilised to optimise fan design and increase airflow rate and high external static pressure.

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.

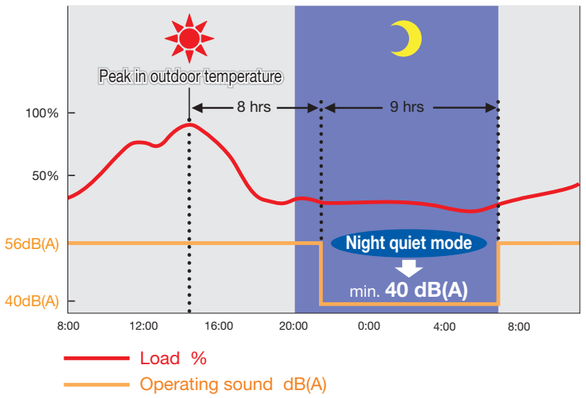


Nighttime quiet operation function

For areas where there are stringent limitations to sound levels, the outdoor unit sound level can be reduced during the nighttime, to meet the requirement.

The automatic night quiet mode will initiate 8 hours*1 after the peak temperature is reached in the daytime, and normal operation will resume 9 hours*2 after that.

*1. Initial setting is 8 hours. Can be selected from 6, 8 and 10 hours.
*2. Initial setting is 9 hours. Can be selected from 8, 9 and 10 hours.
*3. In case of 10 HP outdoor unit.



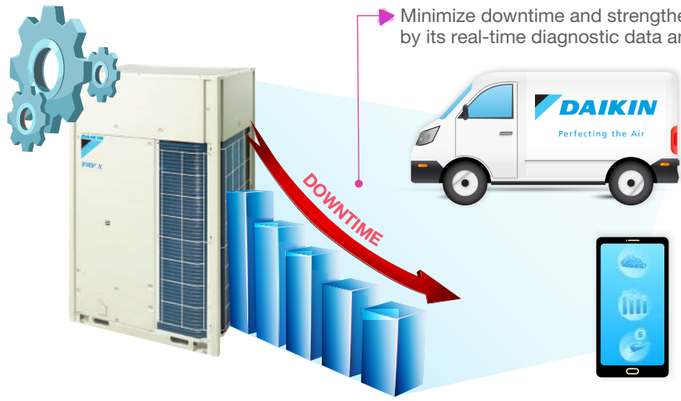
Note:
- The night quiet mode lowers operating sound by reducing capacity. This function is available in setting at site.
- The operating sound in quiet operation mode is the actual value measured by our company. Because priority is given to protection mode, such as for oil recovery, the operating sound may become higher temporarily.
- The relationship of outdoor temperature (load) and time shown above is just an example.

Cloud Connection Ready

DAIKIN REMOTE MONITORING SYSTEM

Introducing Daikin's 1st *VRV* IoT solution that enables automated airconditioning systems with data analytics-driven. Integrated into Daikin *VRV* X, this IoT solution ensures maximum operating efficiency with performance monitoring and predictive features.

FAULT MANAGEMENT



- Minimize downtime and strengthen preventive maintenance by its real-time diagnostic data and predictive analytics.
- Daikin's predictive alert system sends real-time notification for service and maintenance works to be carried out before system breakdown, preventing disruption to users.
- Malfunction history and trend can be monitored via mobile application.
- Notification and troubleshooting guide via SMS, email or mobile application.

EFFICIENCY AND ENERGY DASHBOARD

- Monitor *VRV* system using Daikin's built-in state-of-the-art methodology.
- Display system efficiency on visual charts and graphs.
- Allow user to conduct preliminary analysis based on detailed individual outdoor and indoor unit performance.
- Monthly report will be automatically sent to user via email.

ADD-ON SMART GREEN PACKAGE*

EFFICIENCY MANAGEMENT

- Monitor the *VRV* system's efficiency and energy consumption patterns on mobile devices or computers.
- Automate adjustment and corrective actions to maximize operational efficiency.

CONTROL MANAGEMENT

- Enable remote operation with active control from anywhere on smart devices or computers.
- Multiple operational mode selection based on user's preference

IAQ MANAGEMENT

- Ensure indoor air quality to optimize indoor comfort.
- Collect and monitor IAQ data such as CO_2 sensor, RH sensor, VOC, PM2.5, etc.

**Please contact Daikin sales office for more information.*

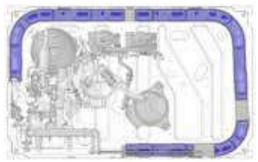
Refined Design Meets Advanced Technologies

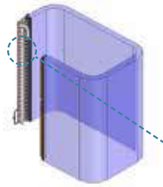
Realising compact technology with performance

Highly integrated heat exchanger

The unique 4-sided all round heat exchanger ensure sufficient surface area for the heat exchanger. This improves the heat exchanger performance without increasing the footprint.

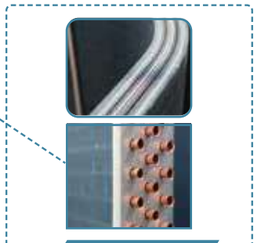
4-sided heat exchanger





Waffle Fin
A waffled-shaped fin with fin pitch of 1.4 mm was adopted to realise sufficient heat exchanger area for optimum unit efficiency.

High efficiency heat exchanger is realised by reducing airflow resistance with adoption of small cooling tubes with a diameter of Φ7.

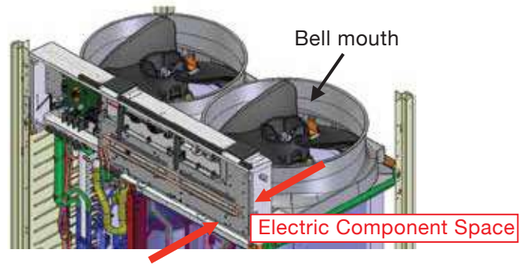


20 HP

3-row small pipe design increases heat transfer efficiency.

Optimised inner design to ensure smooth airflow

Electric components were downsized and positioned in the dead space of the bell mouth side to decrease airflow resistance.



Easy maintenance

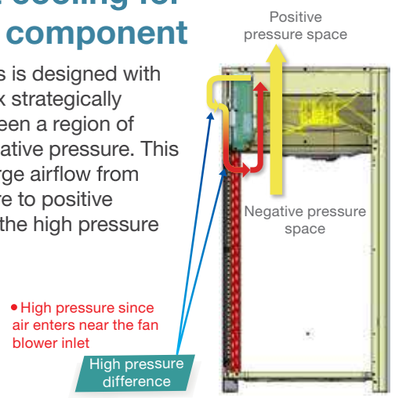
The electrical components are strategically located on the top which eases the maintenance process. Moreover, the heat exchanger on the front side can be used effectively to improve its performance.

Electrical component

Refined Design Meets Advanced Technologies

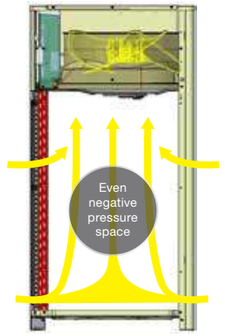
Sufficient cooling for electrical component

The ***VRV*** X series is designed with the electrical box strategically positioned between a region of positive and negative pressure. This design allows large airflow from negative pressure to positive pressure due to the high pressure difference.



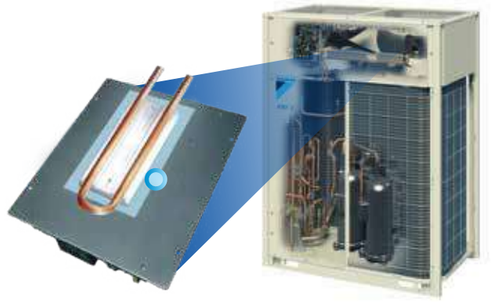
Eliminate suction resistance issue

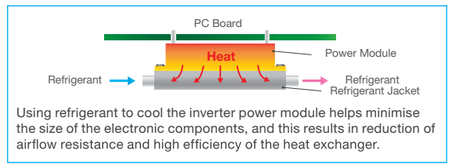
Without affecting the fan volume, the electric components are designed to be at the top and this ulitises dead space. This eliminates the problem of suction resistance.



High reliability at high ambient temperature

It is possible to keep operation stable even at high ambient temperatures by cooling the inverter power module. This helps maintain air-conditioning capacity and reduces failure ratio.





Using refrigerant to cool the inverter power module helps minimise the size of the electronic components, and this results in reduction of airflow resistance and high efficiency of the heat exchanger.

Control board failure ratio at stable operation is reduced.

Outer Rotor DC Motor (ODM)

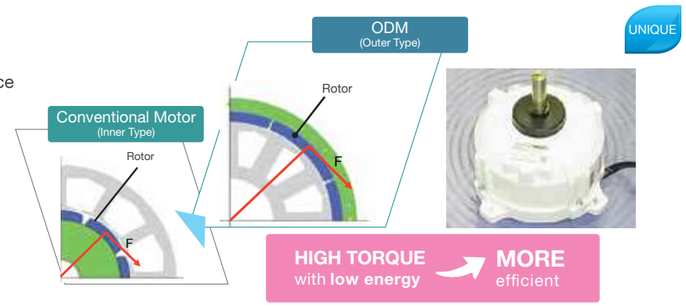
Only Daikin has adapted an ODM with the feature of stable rotation and volumetric efficiency.

Advantages of ODM

Thanks to large diameter of the rotor,

① Large torque with same electromagnetic force

② Stable rotation in all range, and can be operated with small number of rotations



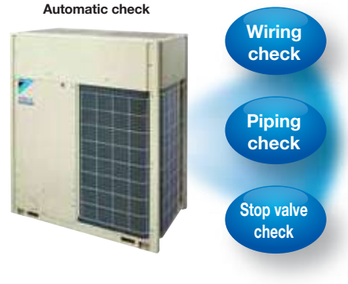
Reliable and Stable System

More accurate test operation and stable system

Efficient automatic test operation

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

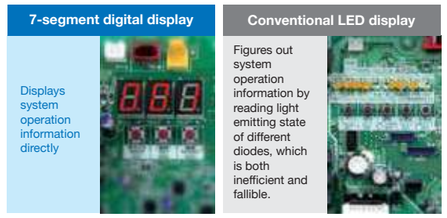
- Automatically checks the wirings between outdoor units and indoor units to confirm whether there is a defective wiring.
- Confirms piping length to optimise operation.
- Automatically checks whether the stop valve in each outdoor unit is in normal status to ensure the smooth operation of air conditioning system.



Simplified commissioning and after-sales service

Function of information display by luminous digital tube

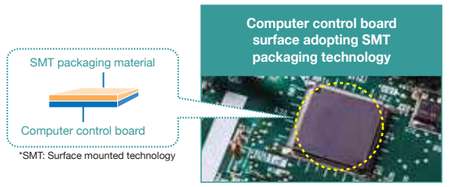
VRV X series utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.



Advanced control main PC board

SMT* packaging technology

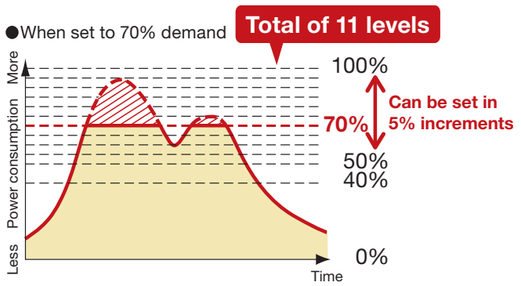
- SMT packaging technology adopted by the whole computer control panel improves the anti-clutter performance.
- Protects your computer boards from the adverse effect of sandy and humid weather.



I-demand function

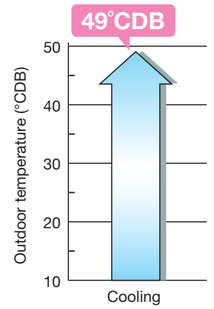
Limit to power consumption can be set precisely to one of 11 levels. Peak power cut-off can be accomplished according to each user situation.

*Set on the circuit board of the outdoor unit.



Wide operation temperature range up to 49°C

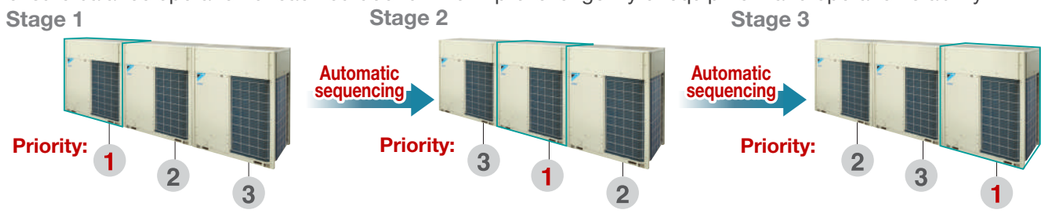
The versatile operation range of the ***VRV*** X series works to reduce limitations on installation locations.
The operation temperature range for cooling can be performed with outdoor temperatures as high as 49°C.
This enables reliable operation even under high temperature conditions.



Note: When outdoor temperature falls below 10°C, the thermostat shuts OFF, the outdoor unit stops, and operation switches from cooling to fan operation.

Automatic sequencing operation

During start-up, Daikin ***VRV*** X series outdoor unit sequencing operation will be automatically enabled to ensure balance operation of each outdoor unit to improve longevity of equipment and operation stability.



Double backup operation functions

Daikin ***VRV*** X series outdoor unit boasts double backup operation functions, which can secure the use of air conditioners in this area to the greatest extent in an emergency by enabling double backup operation functions even if failure occurs in a set of air conditioning 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

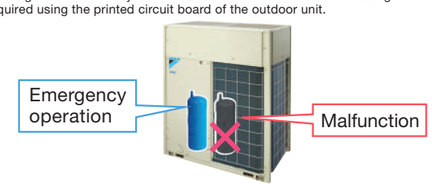
If one of the units in a multiple outdoor system malfunctions, the other outdoor units provide emergency operation until repairs can be made.

* For systems composed of two or more outdoor units.

Compressor backup operation function

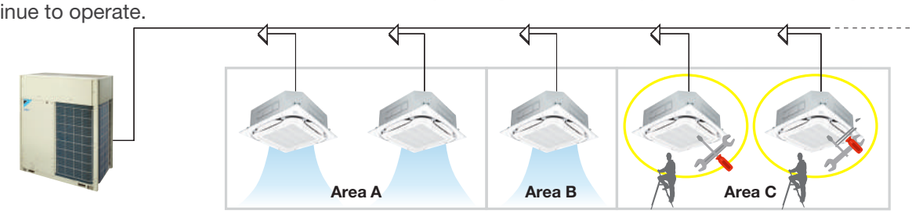
The outdoor unit is equipped with two compressors. Even if one compressor malfunctions, the other compressor provides emergency operation, reducing the risk of air conditioning shutdown due to compressor failure. (Capacity is saved during backup operation.)

* For single outdoor unit system RXQ16-20AYM models. On-site settings are required using the printed circuit board of the outdoor unit.



Ease of Maintenance

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



* Field setting is required.
This feature does not apply to residential indoor unit connection.
For more information, please contact Daikin sales office.

Smart Connection

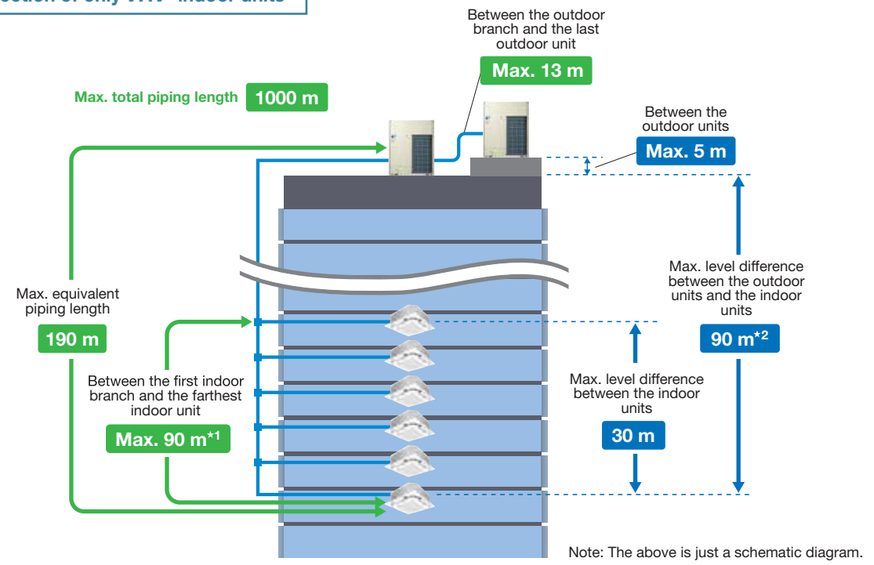
With this smart connection, pipes can be joined easily and quickly without brazing or using any special tools. Only a wrench is required. It meets the stringent requirements in terms of safety and leak tightness while providing substantial benefits.

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



Note: The above is just a schematic diagram.

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

*1. No special requirements up to 40 m. The maximum actual piping length can be 90 m, depending on conditions. The ***VRV*** X series is easy to extend to 90 m by lessening the conditions from conventional ***VRV*** IV models. Be sure to refer to the Engineering Data Book for details of these conditions and requirements.
*2. When level differences are 50 m or more, the diameter of the main liquid piping size must be increased. If the outdoor unit is above the indoor unit, a dedicated setting on the outdoor unit is required. Refer to the Engineering Data Book and contact your local dealer for more information.

Connection ratio

Connection capacity at maximum is 200%.

Connection ratio
50%–200%

Connection ratio =

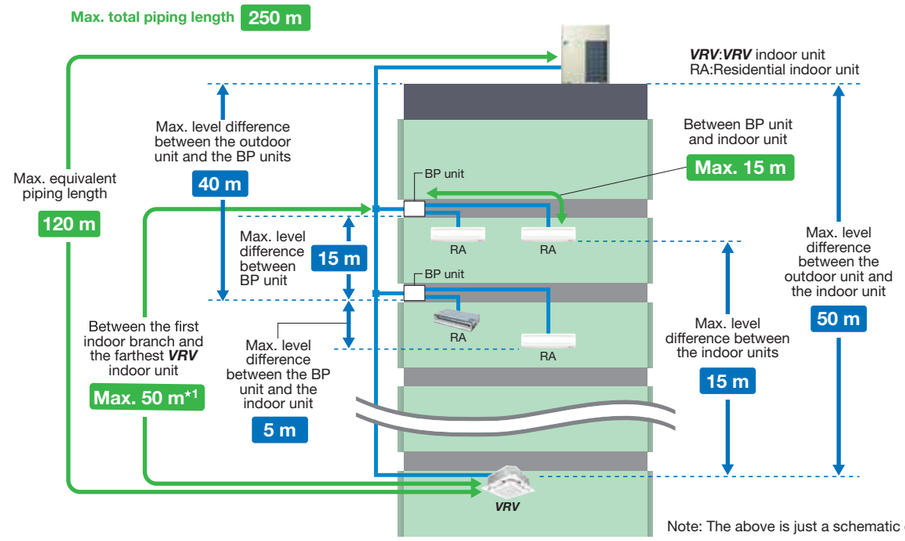
$$\frac{\text{Total capacity index of the indoor units}}{\text{Capacity index of the outdoor units}}$$

Conditions of *VRV* indoor unit connection capacity

Applicable ***VRV*** indoor units	 FXDQ, FXSQ, FXMQ-PA, FXAQ, FXB(P)Q models	Other ***VRV*** indoor unit models*1
Single outdoor units	**200%**	200%
Double outdoor units		160%
Triple outdoor units		130%

*1 For the FXF(S)Q25 and FXVQ models, maximum connection ratio is 130% for the entire range of outdoor units.
Note: If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the indoor units.
*Refer to page 19 for outdoor unit combination details.

For mixed combination of *VRV* and residential indoor units



Note: The above is just a schematic diagram.

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

Maximum allowable piping length	Actual piping length (Equivalent)		**100** m (**120** m)
	Total piping length		**250** m
	Between BP unit and indoor unit	If indoor unit capacity index < 60.	**2** m–**15** m
		If indoor unit capacity index is 60 and 71.	**2** m–**8** m
	Between the first indoor branch and the farthest BP unit or between the first indoor branch and the farthest *VRV* indoor unit		**50** m*1
	Between outdoor unit and the first indoor branch		**5** m
Maximum allowable level difference	Between the indoor units		**15** m
	Between BP units		**15** m
	Between the outdoor unit and the indoor unit	If the outdoor unit is above.	**50** m
		If the outdoor unit is below.	**40** m
	Between the outdoor unit and the BP unit		**40** m
	Between the BP unit and the indoor unit		**5** m

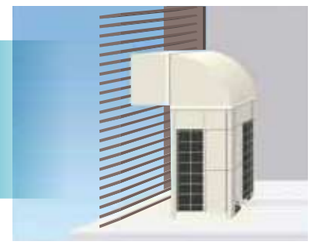
★1. If the piping length between the first indoor branch and BP unit or *VRV* indoor unit is over 20 m, it is necessary to increase the gas and liquid piping size between the first indoor branch and BP unit or *VRV* indoor unit. If the piping diameter of the sized up piping exceeds the diameter of the piping before the first indoor branch kit, then the latter also requires a liquid piping and gas piping size up. Please refer to Engineering Data Book for details.

*When a mixed combination of *VRV* and residential indoor units is connected or when only residential indoor units are connected, connection ratio must be 50% to 130%. Refer to page 19 for outdoor unit combination details.

High external static pressure

VRV X series outdoor unit has been 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



Outdoor Unit Lineup

VRV X Series Outdoor Units

The outdoor unit capacity is up to 60 HP (168 kW) in increment of 2 HP.

- *VRV* X series outdoor unit offers a high capacity of up to 60 HP, responding to the needs of large-sized building.
- 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.

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
VRV X SERIES	Single outdoor units	●	●	●	●	●	●	●	●																				
	Double outdoor units				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
	Triple outdoor units							●	●					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

• Single Outdoor Units

6, 8 HP

RXUQ6AYM
RXUQ8AYM

10, 12, 14, 16, 18, 20 HP

RXUQ10AYM
RXUQ12AYM
RXUQ14AYM
RXUQ16AYM
RXUQ18AYM
RXUQ20AYM

• Double Outdoor Units

12, 14, 16 HP

RXUQ12AMYM
RXUQ14AMYM
RXUQ16AMYM

18, 20, 22 HP

RXUQ18AMYM
RXUQ20AMYM
RXUQ22AMYM-SG

22, 24, 26, 28, 30, 32, 34, 36, 38, 40 HP

RXUQ22AMYM
RXUQ24AMYM
RXUQ24AMYM-SG
RXUQ26AMYM
RXUQ28AMYM
RXUQ30AMYM
RXUQ32AMYM
RXUQ34AMYM
RXUQ36AMYM
RXUQ38AMYM
RXUQ40AMYM

• Triple Outdoor Units

18, 20 HP

RXUQ18AM1YM
RXUQ20AM1YM

42, 44, 46, 48, 50, 52, 54, 56, 58, 60 HP

RXUQ42AMYM
RXUQ44AMYM
RXUQ46AMYM
RXUQ48AMYM
RXUQ50AMYM
RXUQ52AMYM
RXUQ54AMYM
RXUQ56AMYM
RXUQ58AMYM
RXUQ60AMYM

30, 32, 34, 36, 38, 40 HP

RXUQ30AMYM-SG
RXUQ32AMYM-SG
RXUQ34AMYM-SG
RXUQ36AMYM-SG
RXUQ38AMYM-SG
RXUQ40AMYM-SG

Outdoor Unit Combinations

For connection of *VRV* indoor units only

HP	kW	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	Tick Ratings
6 HP	16.0	150	RXUQ6A	RXUQ6A	–	75 to 195 (300)	9 (15)	5
8 HP	22.4	200	RXUQ8A	RXUQ8A	–	100 to 260 (400)	13 (20)	4
10 HP	28.0	250	RXUQ10A	RXUQ10A	–	125 to 325 (500)	16 (25)	4
12 HP	33.5	300	RXUQ12A	RXUQ12A	–	150 to 390 (600)	19 (30)	4
14 HP	40.0	350	RXUQ14A	RXUQ14A	–	175 to 455 (700)	22 (35)	3
16 HP	45.0	400	RXUQ16A	RXUQ16A	–	200 to 520 (800)	26 (40)	3
18 HP	50.0	450	RXUQ18A	RXUQ18A	–	225 to 585 (900)	29 (45)	2
20 HP	56.0	500	RXUQ20A	RXUQ20A	–	250 to 650 (1,000)	32 (50)	3
12 HP	32.0	300	RXUQ12AM	RXUQ6A + RXUQ6A	BHFP22P100	150 to 390 (480)	19 (24)	Refer to individual models
14 HP	38.4	350	RXUQ14AM	RXUQ6A + RXUQ8A		175 to 455 (560)	22 (28)	
16 HP	44.8	400	RXUQ16AM	RXUQ8A + RXUQ8A		200 to 520 (640)	26 (32)	
18 HP	50.4	450	RXUQ18AM	RXUQ8A + RXUQ10A		225 to 585 (720)	29 (36)	
20 HP	55.9	500	RXUQ20AM	RXUQ8A + RXUQ12A		250 to 650 (800)	32 (40)	
18 HP	48.0	450	RXUQ18AM1	RXUQ6A × 3	BHFP22P151	225 to 585 (585)	29 (29)	
20 HP	54.4	500	RXUQ20AM1	RXUQ6A × 2 + RXUQ8A		250 to 650 (650)	32 (32)	
22 HP	61.5	550	RXUQ22AM	RXUQ10A + RXUQ12A	BHFP22P100	275 to 715 (880)	35 (44)	
22 HP	62.4	550	RXUQ22AM-SG	RXUQ8A + RXUQ14A		275 to 715 (880)	35 (44)	
24 HP	67.0	600	RXUQ24AM	RXUQ12A × 2		300 to 780 (960)	39 (48)	
24 HP	68.0	600	RXUQ24AM-SG	RXUQ10A + RXUQ14A		300 to 780 (960)	39 (48)	
26 HP	73.5	650	RXUQ26AM	RXUQ12A + RXUQ14A		325 to 845 (1,040)	42 (52)	
28 HP	78.5	700	RXUQ28AM	RXUQ12A + RXUQ16A		350 to 910 (1,120)	45 (56)	
30 HP	83.5	750	RXUQ30AM	RXUQ12A + RXUQ18A		375 to 975 (1,200)	48 (60)	
32 HP	89.5	800	RXUQ32AM	RXUQ12A + RXUQ20A		400 to 1,040 (1,280)	52 (64)	
34 HP	96.0	850	RXUQ34AM	RXUQ14A + RXUQ20A		425 to 1,105 (1,360)	55 (64)	
36 HP	101	900	RXUQ36AM	RXUQ16A + RXUQ20A		450 to 1,170 (1,440)	58 (64)	
38 HP	106	950	RXUQ38AM	RXUQ18A + RXUQ20A		475 to 1,235 (1,520)	61 (64)	
40 HP	112	1,000	RXUQ40AM	RXUQ20A × 2		500 to 1,300 (1,600)	64 (64)	
30 HP	84.0	750	RXUQ30AM -SG	RXUQ6A + RXUQ10A + RXUQ14A	BHFP22P151	375 to 975 (975)	48 (48)	
32 HP	89.4	800	RXUQ32AM -SG	RXUQ8A + RXUQ12A + RXUQ12A		400 to 1,040 (1,040)	52 (52)	
34 HP	95.9	850	RXUQ34AM -SG	RXUQ8A + RXUQ12A + RXUQ14A		425 to 1,105 (1,105)	55 (55)	
36 HP	99.5	900	RXUQ36AM -SG	RXUQ6A + RXUQ12A + RXUQ18A		450 to 1,170 (1,170)	58 (58)	
38 HP	106	950	RXUQ38AM -SG	RXUQ6A + RXUQ12A + RXUQ20A		475 to 1,235 (1,235)	61 (61)	
40 HP	112	1,000	RXUQ40AM -SG	RXUQ6A + RXUQ14A + RXUQ20A		500 to 1,300 (1,300)	64 (64)	
42 HP	117	1,050	RXUQ42AM	RXUQ12A × 2 + RXUQ18A		525 to 1,365 (1,365)		
44 HP	123	1,100	RXUQ44AM	RXUQ12A × 2 + RXUQ20A		550 to 1,430 (1,430)		
46 HP	130	1,150	RXUQ46AM	RXUQ12A + RXUQ14A + RXUQ20A		575 to 1,495 (1,495)		
48 HP	135	1,200	RXUQ48AM	RXUQ12A + RXUQ16A + RXUQ20A		600 to 1,560 (1,560)		
50 HP	140	1,250	RXUQ50AM	RXUQ12A + RXUQ18A + RXUQ20A		625 to 1,625 (1,625)		
52 HP	146	1,300	RXUQ52AM	RXUQ12A + RXUQ20A × 2		650 to 1,690 (1,690)		
54 HP	152	1,350	RXUQ54AM	RXUQ14A + RXUQ20A × 2		675 to 1,755 (1,755)		
56 HP	157	1,400	RXUQ56AM	RXUQ16A + RXUQ20A × 2		700 to 1,820 (1,820)		
58 HP	162	1,450	RXUQ58AM	RXUQ18A + RXUQ20A × 2		725 to 1,885 (1,885)		
60 HP	168	1,500	RXUQ60AM	RXUQ20A × 3		750 to 1,950 (1,950)		

Note: *1. For multiple connection, 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 16 for notes on connection capacity of indoor units.

For mixed combination of *VRV* and residential indoor units or connection of residential indoor units only

Model name*1	kW	HP	Capacity index	Total capacity index of connectable indoor units*2			Maximum number of connectable indoor units	Tick ratings
				Combination (%)*2				
				50%	100%	130%		
RXUQ6AYM	16.0	6	150	75	150	195	9	5
RXUQ8AYM	22.4	8	200	100	200	260	13	5
RXUQ10AYM	28.0	10	250	125	250	325	16	5
RXUQ12AYM	33.5	12	300	150	300	390	19	4
RXUQ14AYM	40.0	14	350	175	350	455	22	3
RXUQ16AYM	45.0	16	400	200	400	520	26	3
RXUQ18AYM	50.0	18	450	225	450	585	29	2
RXUQ20AYM	56.0	20	500	250	500	650	32	3

Note: *1. Only single outdoor unit (RXUQ6-20AYM) can be connected.
*2. Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outdoor unit.

Specifications

VRV X Series Outdoor Units RXUQ-A

													
MODEL			**RXUQ6AYM**	**RXUQ8AYM**	**RXUQ10AYM**	**RXUQ12AYM**	**RXUQ14AYM**	**RXUQ16AYM**	**RXUQ18AYM**	**RXUQ20AYM**	**RXUQ12AMYM***	**RXUQ14AMYM***	**RXUQ16AMYM***
Combination units			–	–	–	–	–	–	–	–	RXUQ6AYM	RXUQ6AYM	RXUQ8AYM
			–	–	–	–	–	–	–	–	RXUQ6AYM	RXUQ8AYM	RXUQ8AYM
			–	–	–	–	–	–	–	–	–	–	–
Power supply			3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz					3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz					
Cooling capacity		Btu/h	54,600	76,400	95,500	114,000	136,000	154,000	171,000	191,000	109,000	131,000	153,000
		kW	16.0	22.4	28.0	33.5	40.0	45.0	50.0	56.0	32.0	38.4	44.8
Power consumption		kW	3.23	4.82	6.29	7.81	9.46	11.4	12.8	14.8	6.46	8.05	9.64
Capacity control		%	23-100	19-100	13-100	12-100	11-100	9-100		7-100	11-100	10-100	9-100
Casing colour			Ivory white (5Y7.5/1)					Ivory white (5Y7.5/1)					
Compressor	Type		Hermetically sealed scroll type					Hermetically sealed scroll type					
	Motor output	kW	2.4×1	3.4×1	4.2×1	5.2×1	(3.4×1)+(2.9×1)	(3.4×1)+(3.9×1)	(3.7×1)+(4.3×1)	(4.9×1)+(4.2×1)	(2.4×1)+(2.4×1)	(2.4×1)+(3.4×1)	(3.4×1)+(3.4×1)
Airflow rate		m3/min	119	178		191	218	218	268	297	119+119	119+178	178+178
Dimensions (H×W×D)		mm	1,657×930×765		1,657×1,240×765			1,657×1,240×765			(1,657×930×765)+(1,657×930×765)		
Machine weight		kg	185		215		275	275	291		185+185		
Sound level		dB(A)	54	56		58	59	59	62	65	57	58	59
Operation range		°CDB	10 to 49					10 to 49					
Refrigerant	Type		R-410A					R-410A					
	Charge	kg	6.4	6.6	8.3	8.5	9.7	9.8	11.7		6.4+6.4	6.4+6.6	6.6+6.6
Piping connections	Liquid	mm	ϕ9.5 (Brazing)			ϕ12.7 (Brazing)		ϕ12.7 (Brazing)	ϕ15.9 (Brazing)		ϕ12.7 (Brazing)		
	Gas	mm	ϕ19.1 (Brazing)		ϕ22.2 (Brazing)	ϕ28.6 (Brazing)		ϕ28.6 (Brazing)					

															
MODEL			**RXUQ18AMYM***	**RXUQ20AMYM***	**RXUQ18AM1YM***	**RXUQ20AM1YM***	**RXUQ22AMYM***	**RXUQ22AMYM-SG***	**RXUQ24AMYM***	**RXUQ24AMYM-SG***	**RXUQ26AMYM***	**RXUQ28AMYM***	**RXUQ30AMYM***		
Combination units			RXUQ8AYM	RXUQ8AYM	RXUQ6AYM	RXUQ6AYM	RXUQ10AYM	RXUQ8AYM	RXUQ12AYM	RXUQ10AYM	RXUQ12AYM	RXUQ12AYM	RXUQ12AYM		
			RXUQ10AYM	RXUQ12AYM	RXUQ6AYM	RXUQ6AYM	RXUQ12AYM	RXUQ14AYM	RXUQ12AYM	RXUQ14AYM	RXUQ14AYM	RXUQ16AYM	RXUQ18AYM		
			–	–	RXUQ6AYM	RXUQ8AYM	–	–	–	–	–	–	–		
Power supply			3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz					3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz							
Cooling capacity		Btu/h	172,000	191,000	164,000	186,000	210,000	213,000	229,000	232,000	251,000	268,000	285,000		
		kW	50.4	55.9	48.0	54.4	61.5	62.4	67.0	68.0	73.5	78.5	83.5		
Power consumption		kW	11.1	12.6	9.69	11.3	14.1	14.3	15.6	15.8	17.3	19.2	20.6		
Capacity control		%	8-100	7-100	8-100	7-100	6-100	7-100	6-100			5-100			
Casing colour			Ivory white (5Y7.5/1)					Ivory white (5Y7.5/1)							
Compressor	Type		Hermetically sealed scroll type					Hermetically sealed scroll type							
	Motor output	kW	(3.4×1)+(4.2×1)	(3.4×1)+(5.2×1)	(2.4×1)+(2.4×1)+(2.4×1)	(2.4×1)+(2.4×1)+(3.4×1)	(4.2×1)+(5.2×1)	(3.4×1)+(3.4×1)+(2.9×1)	(5.2×1)+(5.2×1)	(4.2×1)+(3.4×1)+(2.9×1)	(5.2×1)+(3.4×1)+(2.9×1)	(5.2×1)+(3.4×1)+(3.9×1)	(5.2×1)+(3.7×1)+(4.3×1)		
Airflow rate		m3/min	178+178	178+191	119+119+119	119+119+178	178+191	178+218	191+191	178+218	191+218	191+218	191+268		
Dimensions (H×W×D)		mm	(1,657×930×765)+(1,657×1,240×765)		(1,657×930×765)+(1,657×930×765)+(1,657×930×765)		(1,657×1,240×765)+(1,657×1,240×765)	(1,657×930×765)+(1,657×1,240×765)	(1,657×1,240×765)+(1,657×1,240×765)						
Machine weight		kg	185+215		185+185+185		215+215	185+275	215+215	215+275			215+291		
Sound level		dB(A)	59	60	59	60		61			62		63		
Operation range		°CDB	10 to 49					10 to 49							
Refrigerant	Type		R-410A					R-410A							
	Charge	kg	6.6+8.3	6.6+8.5	6.4+6.4+6.4	6.4+6.4+6.6	8.3+8.5	6.6+9.7	8.5+8.5	8.3+9.7	8.5+9.7	8.5+9.8	8.5+11.7		
Piping connections	Liquid	mm	ϕ15.9 (Brazing)					ϕ15.9 (Brazing)			ϕ19.1 (Brazing)				
	Gas	mm	ϕ28.6 (Brazing)					ϕ28.6 (Brazing)	ϕ34.9 (Brazing)						

Note: Specifications are based on the following conditions;
- •Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
  When there is concern for noise to the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

*Refer to individual models for Green Tick Rating.

Specifications

													
MODEL		**RXUQ30AMYM-SG***	**RXUQ32AMYM***	**RXUQ32AMYM-SG***	**RXUQ34AMYM***	**RXUQ34AMYM-SG***		**RXUQ36AMYM***	**RXUQ36AMYM-SG***	**RXUQ38AMYM***	**RXUQ38AMYM-SG***	**RXUQ40AMYM***	**RXUQ40AMYM-SG***
Combination units		RXUQ6AYM	RXUQ12AYM	RXUQ8AYM	RXUQ14AYM	RXUQ8AYM		RXUQ16AYM	RXUQ6AYM	RXUQ18AYM	RXUQ6AYM	RXUQ20AYM	RXUQ6AYM
		RXUQ10AYM	RXUQ20AYM	RXUQ12AYM	RXUQ20AYM	RXUQ12AYM		RXUQ20AYM	RXUQ12AYM	RXUQ20AYM	RXUQ12AYM	RXUQ20AYM	RXUQ14AYM
		RXUQ14AYM	—	RXUQ12AYM	—	RXUQ14AYM		—	RXUQ18AYM	—	RXUQ20AYM	—	RXUQ20AYM
Power supply		3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz						3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz					
Cooling capacity	Btu/h	287,000	305,000	305,000	328,000	327,000		345,000	339,000	362,000	362,000	382,000	382,000
	kW	84.0	89.5	89.4	96.0	95.9		101	99.5	106	106	112	112
Power consumption	kW	19.0	22.6	20.4	24.3	22.1		26.2	23.8	27.6	25.8	29.6	27.5
Capacity control	%	5-100			4-100			4-100					
Casing colour		Ivory white (5Y7.5/1)						Ivory white (5Y7.5/1)					
Compressor	Type	Hermetically sealed scroll type						Hermetically sealed scroll type					
	Motor output kW	(2.4×1)+(4.2×1)+(3.4×1)+(2.9×1)	(5.2×1)+(4.9×1)+(4.2×1)	(3.4×1)+(5.2×1)+(5.2×1)	(3.4×1)+(2.9×1)+(4.9×1)+(4.2×1)	(3.4×1)+(5.2×1)+(3.4×1)+(2.9×1)		(3.4×1)+(3.9×1)+(4.9×1)+(4.2×1)	(2.4×1)+(5.2×1)+(3.7×1)+(4.3×1)	(3.7×1)+(4.3×1)+(4.9×1)+(4.2×1)	(2.4×1)+(5.2×1)+(4.9×1)+(4.2×1)	(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(2.4×1)+(3.4×1)+(2.9×1)+(4.9×1)+(4.2×1)
Airflow rate	m3/min	119+178+218	191+297	178+191+191	218+297	178+191+218		218+297	119+191+268	268+297	119+191+297	297+297	119+218+297
Dimensions (H×W×D)	mm	(1,657×930×765)+(1,657×1,240×765)+(1,657×1,240×765)	(1,657×1,240×765)+(1,657×1,240×765)	(1,657×930×765)+(1,657×1,240×765)+(1,657×1,240×765)	(1,657×1,240×765)+(1,657×1,240×765)	(1,657×930×765)+(1,657×1,240×765)+(1,657×1,240×765)		(1,657×1,240×765)+(1,657×1,240×765)	(1,657×930×765)+(1,657×1,240×765)+(1,657×1,240×765)	(1,657×1,240×765)+(1,657×1,240×765)	(1,657×930×765)+(1,657×1,240×765)+(1,657×1,240×765)	(1,657×1,240×765)+(1,657×1,240×765)	(1,657×930×765)+(1,657×1,240×765)+(1,657×1,240×765)
Machine weight	kg	185+215+275	215+291	185+215+215	275+291	185+215+275		275+291	185+215+291	291+291	185+215+291	291+291	185+275+291
Sound level	dB(A)	62	66	62	66	63		66	64	67	66	68	66
Operation range	°CDB	10 to 49						10 to 49					
Refrigerant	Type	R-410A						R-410A					
	Charge kg	6.4+8.3+9.7	8.5+11.7	6.6+8.5+8.5	9.7+11.7	6.6+8.5+9.7		9.8+11.7	6.4+8.5+11.7	11.7+11.7	6.4+8.5+11.7	11.7+11.7	6.4+9.7+11.7
Piping connections	Liquid mm	ϕ19.1 (Brazing)						ϕ19.1 (Brazing)					
	Gas mm	ϕ34.9 (Brazing)						ϕ41.3 (Brazing)					

												
MODEL		**RXUQ42AMYM***	**RXUQ44AMYM***	**RXUQ46AMYM***	**RXUQ48AMYM***	**RXUQ50AMYM***	**RXUQ52AMYM***	**RXUQ54AMYM***	**RXUQ56AMYM***	**RXUQ58AMYM***	**RXUQ60AMYM***
Combination units		RXUQ12AYM	RXUQ12AYM	RXUQ12AYM	RXUQ12AYM	RXUQ12AYM	RXUQ12AYM	RXUQ14AYM	RXUQ16AYM	RXUQ18AYM	RXUQ20AYM
		RXUQ12AYM	RXUQ12AYM	RXUQ14AYM	RXUQ16AYM	RXUQ18AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM
		RXUQ18AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM	RXUQ20AYM
Power supply		3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz					3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz				
Cooling capacity	Btu/h	399,000	420,000	444,000	461,000	478,000	498,000	519,000	536,000	553,000	573,000
	kW	117	123	130	135	140	146	152	157	162	168
Power consumption	kW	28.4	30.4	32.1	34.0	35.4	37.4	39.1	41.0	42.4	44.4
Capacity control	%	4-100	3-100				3-100				2-100
Casing colour		Ivory white (5Y7.5/1)					Ivory white (5Y7.5/1)				
Compressor	Type	Hermetically sealed scroll type					Hermetically sealed scroll type				
	Motor output kW	(5.2×1)+(5.2×1)+(3.7×1)+(4.3×1)	(5.2×1)+(5.2×1)+(4.9×1)+(4.2×1)	(5.2×1)+(3.4×1)+(2.9×1)+(4.9×1)+(4.2×1)	(5.2×1)+(3.4×1)+(3.9×1)+(4.9×1)+(4.2×1)	(5.2×1)+(3.7×1)+(4.3×1)+(4.9×1)+(4.2×1)	(5.2×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(3.4×1)+(2.9×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(3.4×1)+(3.9×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(3.7×1)+(4.3×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)
Airflow rate	m3/min	191+191+268	191+191+297	191+218+297		191+268+297	191+297+297	218+297+297		268+297+297	297+297+297
Dimensions (H×W×D)	mm	(1,657×1,240×765)+(1,657×1,240×765)+(1,657×1,240×765)					(1,657×1,240×765)+(1,657×1,240×765)+(1,657×1,240×765)				
Machine weight	kg	215+215+291		215+275+291		215+291+291	215+291+291	275+291+291		291+291+291	
Sound level	dB(A)	65	66	67			68	69			70
Operation range	°CDB	10 to 49					10 to 49				
Refrigerant	Type	R-410A					R-410A				
	Charge kg	8.5+8.5+11.7		8.5+9.7+11.7	8.5+9.8+11.7	8.5+11.7+11.7	8.5+11.7+11.7	9.7+11.7+11.7	9.8+11.7+11.7	11.7+11.7+11.7	
Piping connections	Liquid mm	ϕ19.1 (Brazing)					ϕ19.1 (Brazing)				
	Gas mm	ϕ41.3 (Brazing)					ϕ41.3 (Brazing)				

Note: Specifications are based on the following conditions;
- •Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
  When there is concern for noise to the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

*Refer to individual models for Green Tick Rating.

Indoor Unit Lineup

Enhanced range of choices

VRV indoor units

● New lineup　VRT smart Indoor units subject to VRT smart control　VRT Indoor units subject to VRT control

Type	Model Name		Capacity Range	20	25	32	40	50	63	71	80	100	125	140	200	250	400	500
				0.8 HP	1 HP	1.25 HP	1.6 HP	2 HP	2.5 HP	3 HP	3.2 HP	4 HP	5 HP	6 HP	8 HP	10 HP	16 HP	20 HP
			Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	200	250	400	500
Ceiling Mounted Cassette (Round Flow with Sensing)	FXFSQ-AVM	VRT smart			●	●	●	●	●		●	●	●	●				
Ceiling Mounted Cassette (Round Flow)	FXFQ-AVM	VRT smart			●	●	●	●	●		●	●	●	●				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE	VRT		●	●	●	●	●										
4-Way Flow Ceiling Suspended	FXUQ-AVEB	VRT								●		●						
Ceiling Mounted Cassette (Double Flow)	New FXCQ-AVM	VRT smart		●	●	●	●	●	●		●		●					
Ceiling Mounted Cassette (Single Flow)	FXEQ-AV36	VRT		●	●	●	●	●	●									
Slim Ceiling Mounted Duct (Standard Series)	FXDQ-PDVE (with drain pump)	VRT smart	(700mm width type)	●	●	●												
	FXDQ-PDVET (without drain pump)	VRT smart		●	●	●												
	FXDQ-NDVE (with drain pump)	VRT smart	(900 / 1100mm width type)				●	●	●									
	FXDQ-NDVET (without drain pump)	VRT smart					●	●	●									
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV1	VRT		●	●	●	●	●	●									
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PAVE	VRT smart		●	●	●	●	●	●		●	●	●	●				
Ceiling Mounted Duct	FXMQ-PAVE	VRT smart		●	●	●	●	●	●		●	●	●	●				
	FXMQ-MVE9	VRT													●	●		
Outdoor-Air Processing Unit	FXMQ-MFV1												●		●	●		
Ceiling Suspended	FXHQ-MAVE	VRT				●			●			●						
	New FXHQ-AVM	VRT											●	●				
Wall Mounted	New FXAQ-AVM	VRT smart		●	●	●	●	●	●									
Floor Standing	FXLQ-MAVE	VRT		●	●	●	●	●	●									
Concealed Floor Standing	FXNQ-MAVE	VRT		●	●	●	●	●	●									
Floor Standing Duct	FXVQ-NY1	VRT											●		●	●	●	●
	FXVQ-NY16 (high static pressure type)	VRT																●
Clean Room Air Conditioner	FXBQ-PVE	VRT					●	●	●									
	FXBPQ-PVE	VRT							●									
Heat Reclaim Ventilator with DX-Coil	VKM-GAV1		Airflow rate 500-1000 m³/h															
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h															
Air Handling Unit	AHUR		6–120 HP															

Residential indoor units with connection to BP units

Type	Model Name		Rated Capacity (kW)	25 (2.5)	35 (3.5)	50 (5.0)	60 (6.0)	71 (7.1)
			Capacity Index	25	35	50	60	71
Slim Ceiling Mounted Duct	FDKS-EAVMB	VRT	(700 mm width type)	●	●			
	FDKS-C(A)VMB	VRT	(900/1,100 mm width type)	●	●	●	●	
Wall Mounted	FTKS-DVM	VRT		●	●			
	FTKS-BVMA	VRT				●		
	FTKS-FVM	VRT				●	●	●

Note: BP units are necessary for residential indoor units. Only single outdoor unit (RXUQ6-20AYM) can be connected.

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

VRV indoor unit only system

VRV indoor units only

Max. 64 indoor units

- If a system has indoor units subject to both VRT smart and VRT control, the system is operated under VRT control.
- If a system has both outdoor-air processing air conditioners and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.

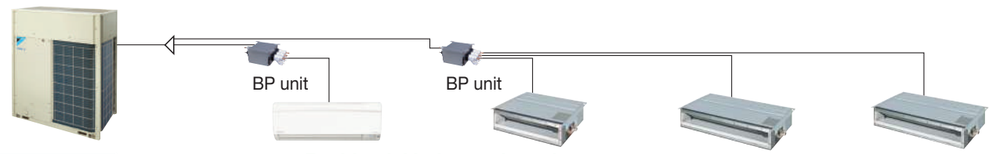
Residential indoor unit and *VRV* indoor unit mix system

Max. 32 indoor units

Residential indoor units　　*VRV* indoor units

- BP units are necessary for residential indoor units. Only single outdoor unit (RXUQ6-20AYM) can be connected.
- If a system has both residential indoor units and *VRV* indoor units, the system is operated under VRT control.

Residential indoor unit only system



Max. 32 indoor units

Residential indoor units only

- BP units are necessary for residential indoor units. Only single outdoor unit (RXUQ6-20AYM) can be connected.
- If a system has only residential indoor units, the system is operated under VRT control.

Indoor Unit Lineup

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

VRV indoor units

Ceiling Mounted Cassette (Round Flow with Sensing) Type

FXFSQ-AVM

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

Ceiling Mounted Cassette (Round Flow) Type

FXFQ-AVM

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

Ceiling Mounted Cassette (Compact Multi Flow) Type

FXZQ-MVE

Quiet, compact, and designed for user comfort.

4-Way Flow Ceiling Suspended Type

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

New **FXCQ-AVM**

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

Ceiling Mounted Cassette (Single Flow) Type

FXEQ-AV36

Slim design for flexible installation

Slim Ceiling Mounted Duct Type

FXDQ-PDVE(T)

FXDQ-NDVE(T)

Slim design, quietness and static pressure switching.

Slim Ceiling Mounted Duct Type (Compact Series)

FXDQ-SPV1

Slim and compact design for easy and flexible installation

Middle Static Pressure Ceiling Mounted Duct Type

FXSQ-PAVE

Middle static pressure and slim design allow flexible installations.

Ceiling Mounted Duct Type

FXMQ-PAVE

FXMQ-MVE9

Middle and high static pressure allows for flexible duct design.

Outdoor-Air Processing Unit

FXMQ-MFV1

Combine fresh air treatment and air conditioning, supplied from a single system.

Ceiling Suspended Type

FXHQ-MAVE

New **FXHQ-AVM**

Slim body with quiet and wide airflow.

Wall Mounted Type

New **FXAQ-AVM**

Stylish flat panel design harmonised with your interior décor.

Floor Standing Type

FXLQ-MAVE

Concealed Floor Standing Type

FXNQ-MAVE

Suitable for perimeter zone air conditioning.

Floor Standing Duct Type

FXVQ-NY1

FXVQ-NY16

(high static pressure type)

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

Clean Room Air Conditioner

FXBQ-PVE

FXBPQ-PVE

Suitable for hospitals and other clean spaces

Air Handling Unit

AHUR

Integrate your air handling unit in a total solution for large size spaces such as factories and large stores.

Residential indoor units with connection to BP units

Slim Ceiling Mounted Duct Type

FDKS-EAVMB

FDKS-C(A)VMB

Slim and smooth design suits your shallow ceiling

Wall Mounted Type

FTKS-DVM

FTKS-BVMA

FTKS-FVM

Stylish flat panel harmonises with your interior décor

Air treatment equipment

Heat Reclaim Ventilator with DX-Coil

VKM-GAV1

Heat Reclaim Ventilator

VAM-GJVE

Ceiling Mounted Cassette (Round Flow with Sensing) Type

FXFSQ-A

Round flow with sensing

Ceiling Mounted Cassette (Round Flow) Type

FXFQ-A

ROUND FLOW

Wide variety of decoration panels (Option)

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

FXFSQ series only

Standard panel with sensing

Designer panel

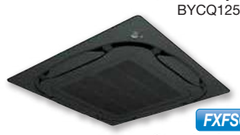
Standard panel

Designer panel (Option)

Decoration Panel Lineup (Option)

FXFSQ series only

Standard panel with sensing[*1]
BYCQ125EEF (Fresh White)



FXFSQ series only

Standard panel with sensing[*1]
BYCQ125EEK (Black)

Standard panel[*2]
BYCQ125EAF (Fresh White)

Standard panel[*2]
BYCQ125EAK (Black)

Designer panel[*2]
BYCQ125EAPF (Fresh White)

*1.Sensing function is applicable when sensing panel is installed.
*2.These panels do not contain the sensing function.

Auto grille panel[*2]
BYCQ125EASF
(Fresh White)

Specifications

Ceiling Mounted Cassette (Round Flow with Sensing) Type

MODEL		FXFSQ25AVM	FXFSQ32AVM	FXFSQ40AVM	FXFSQ50AVM	FXFSQ63AVM	FXFSQ80AVM	FXFSQ100AVM	FXFSQ125AVM	FXFSQ140AVM
Power supply		1-phase, 220-240 V/220-230 V, 50/60 Hz								
Cooling capacity	Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800	54,600
	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0
Power consumption	kW	0.028		0.035	0.056	0.061	0.092	0.164	0.170	0.194
Casing		Galvanised steel plate								
Airflow rate (H/HM/M/ML/L)	m^3/min	13/12.5/11.5/11/10		17/13.5/12.5/12/11	23/20.5/19/14.5/11	23.5/21/20/16/13.5	24.5/22/20.5/20/15	33.5/30.5/27/23.5/21	34.5/31.5/28.5/25.5/23	35.5/32.5/29.5/26.5/23
	cfm	459/441/406/388/353		600/477/441/424/388	812/724/671/512/388	830/741/706/565/477	865/777/724/706/530	1,183/1,077/953/830/741	1,218/1,112/1,006/900/812	1,253/1,147/1,041/935/812
Sound level (H/HM/M/ML/L)	dB(A)	30/29.5/28.5/28/27		35/29.5/29/28/27	38/35/34.5/29.5/27	38/36/35.5/31.5/28	39/37/36/35.5/31	44/41/38/35/33	45/42.5/39.5/37/35	46/43.5/40.5/38/35
Dimensions (H×W×D)	mm	256×840×840						298×840×840		
Machine weight	kg	19			24	22		25		26
Piping connections: Liquid (Flare)	mm	ϕ6.4				ϕ9.5				
Piping connections: Gas (Flare)	mm	ϕ12.7				ϕ15.9				
Piping connections: Drain	mm	VP25 (External Dia. 32/Internal Dia. 25)								

Ceiling Mounted Cassette (Round Flow) Type

MODEL		FXFQ25AVM	FXFQ32AVM	FXFQ40AVM	FXFQ50AVM	FXFQ63AVM	FXFQ80AVM	FXFQ100AVM	FXFQ125AVM	FXFQ140AVM
Power supply		1-phase, 220-240 V/220-230 V, 50/60 Hz								
Cooling capacity	Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800	54,600
	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0
Power consumption	kW	0.029		0.036	0.040	0.063	0.096	0.158	0.178	0.203
Casing		Galvanised steel plate								
Airflow rate (H/HM/M/ML/L)	m^3/min	13/12.5/11.5/11/10		17/13.5/13/12/11	18/17/13.5/12.5/11	21/20/16/15/13.5	22.5/21.5/21/20/15	32/29/26/23/21	33/30.5/28/25.5/21	35.5/32.5/29.5/26.5/23
	cfm	459/441/406/388/353		600/477/459/424/388	635/600/477/441/388	741/706/565/530/477	794/759/741/706/530	1,130/1,024/918/812/741	1,165/1,077/988/900/741	1,253/1,147/1,041/935/812
Sound level (H/HM/M/ML/L)	dB(A)	30/29.5/28.5/28/27		35/29.5/29/28/27	35/33.5/29.5/28.5/27	36/35.5/31.5/31/28	37/36.5/36/35.5/29.5	43/40.5/37.5/35/33	44/41.5/39/36.5/33	46/43.5/40.5/38/35
Dimensions (H×W×D)	mm	256×840×840						298×840×840		
Machine weight	kg	19				22		25		26
Piping connections: Liquid (Flare)	mm	ϕ6.4				ϕ9.5				
Piping connections: Gas (Flare)	mm	ϕ12.7				ϕ15.9				
Piping connections: Drain	mm	VP25 (External Dia. 32/Internal Dia. 25)								

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

Decoration Panel (Option)

			Round Flow with Sensing Type	Round Flow Type
			FXFSQ-A	FXFQ-A
Standard panel with sensing	Model		BYCQ125EEF (Fresh White) / BYCQ125EEK (Black)	—
	Dimensions(H×W×D)	mm	50×950×950	—
	Weight	kg	5.5	—
Standard panel	Model		BYCQ125EAF (Fresh White) / BYCQ125EAK (Black)	
	Dimensions(H×W×D)	mm	50×950×950	
	Weight	kg	5.5	
Designer panel	Model		BYCQ125EAPF (Fresh White)	
	Dimensions(H×W×D)	mm	97×950×950	
	Weight	kg	6.5	
Auto grille panel	Model		BYCQ125EASF (Fresh White)	
	Dimensions(H×W×D)	mm	105×950×950	
	Weight	kg	8	

Function List

		Round Flow with Sensing Type		Round Flow Type	
		FXFSQ-A		FXFQ-A	
Remote controller	Wired	BRC1E63	—	BRC1E63	—
	Wireless	—	BRC7M635F(K)	—	BRC7M635F(K)
Dual sensors *1		○			
Direct airflow *1		○			
Sensing sensor low mode *1		○			
Sensing sensor stop mode *1		○			
Circulation airflow		○		○	
Individual airflow direction control		○		○	
Switchable 5 step fan speed		○	○	○	○
Auto airflow rate		○	○	○	○
Auto swing		○	○	○	○
Swing pattern selection		○	○	○	○
High ceiling application		○		○	

*1. Applicable when sensing panel is installed.

New Round Flow Cassette movie at Daikin official YouTube site.

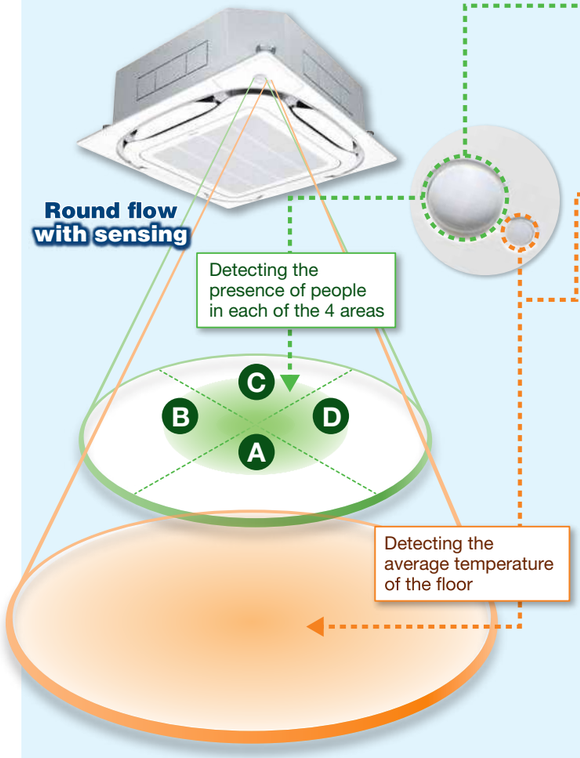
Daikin Advanced Sensing Functions*1,2 FXFSQ series only

Ceiling Mounted Cassette (Round Flow with Sensing) Type **FXFSQ-A**

Dual Sensors*1

*1. Applicable when sensing panel (BYCQ125EEF/EEK) is installed.
*2. Applicable when wired remote controller BRC1E63 is used.

Dual sensors and individual airflow direction control automatically provide optimal control of airflow.



Infrared presence sensor

The sensor detects the presence of people in each of the 4 areas.

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

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

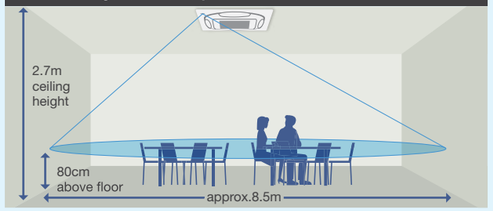
Infrared floor sensor

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

Ceiling height	2.7m	3.5m	4.0m
Detection range (diameter)*4	approx. 11m	approx. 14m	approx. 16m

*4. The infrared floor sensor detects at the floor surface.

Standard range for infrared presence sensor *



*[Concerning infrared presence sensor]
- People are detected by large movements such as the motion of people walking at a certain distance away from sensor.
- Human detection is not possible for blind areas of sensor.

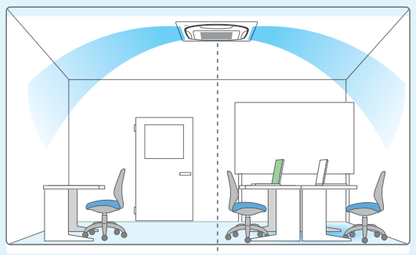
[Concerning infrared floor sensor]
- The detected temperature may sometimes be affected by a heat source, window, or device emitting heat in the detection range.

Auto Airflow Function*5

*5. Airflow direction should be set to “Auto”.

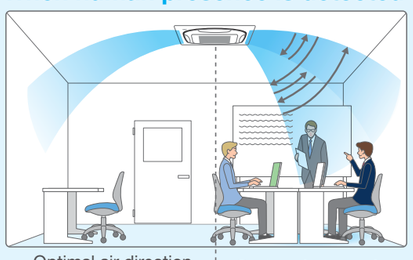
Direct Airflow (default: OFF) Cooling Dry

When human presence is not detected



Optimal air direction by “Auto”

When human presence is detected



Optimal air direction by “Auto” → **Swing (narrow)**

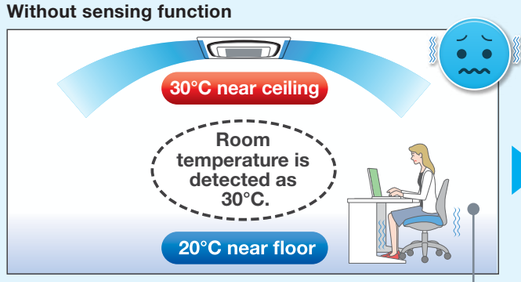
- With “Auto” airflow direction mode, flaps are controlled to deliver optimal airflow when the room is unoccupied.
- When presence is detected, air direction is set to “Swing (narrow)” to deliver cool air to users.

Comfort and Energy Saving Preventing Overcooling*6

*6. Airflow direction and airflow rate should be set to “Auto”.

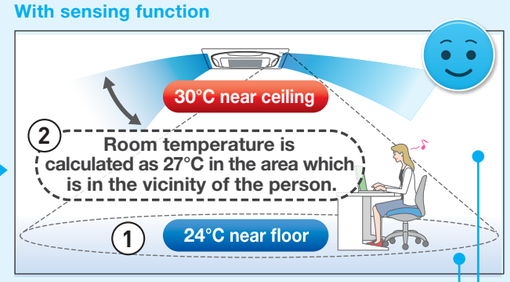
Floor temperature is detected and overcooling prevented. Cooling

Without sensing function



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

With sensing function



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

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

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

Sensing Sensor Functions*7,8,9

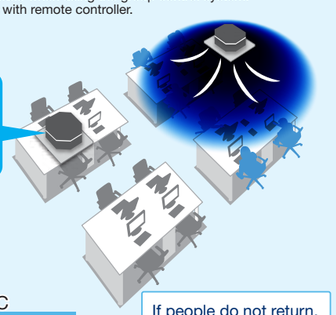
*7. Applicable when sensing panel (BYCQ125EEF/EEK) is installed.
*8. These functions are not available when using the group control system.
*9. User can set these functions with remote controller.

Sensing sensor low mode (default: OFF)

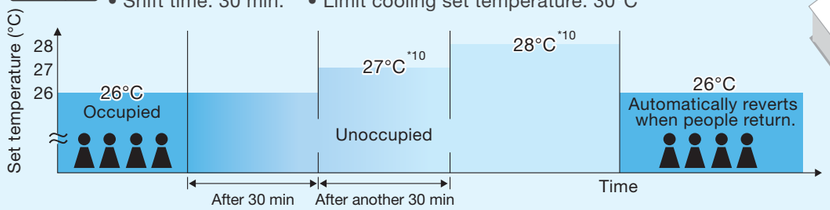
When there are no people in a room, the set temperature is shifted automatically.

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

Operation is reduced in places where there are no people.



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



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

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

*10. On basic screen of remote controller, set temperature does not change.

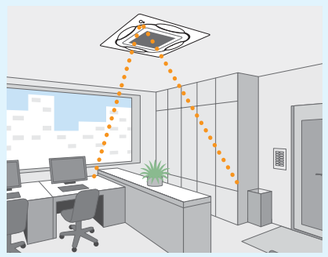
Sensing sensor stop mode (default: OFF)

When there are no people in a room, the system stops automatically.*11,12

- The system automatically saves energy by detecting whether or not the room is occupied.
- Based on preset user conditions, the system automatically stops operation if the room is unoccupied.

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

*11.Please note that upon re-entering the room, the air conditioner will not switch on automatically.
*12.To protect the machine, the standby system may operate temporarily.



New Round Flow Cassette movie at Daikin official YouTube site.

Circulation Airflow*1

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

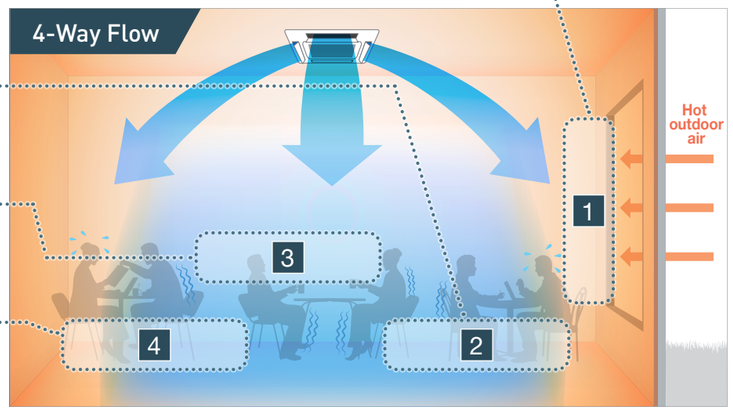
Airflow until now had areas that were either too cool or not cool enough.

Problem 1
Hot outdoor air entering through windows and walls causes these areas to become hot.

Problem 2
Cool air accumulating directly underneath causes cold air pockets at floor level.

Problem 3
Airflow blowing directly on people causes discomfort for people in the room.

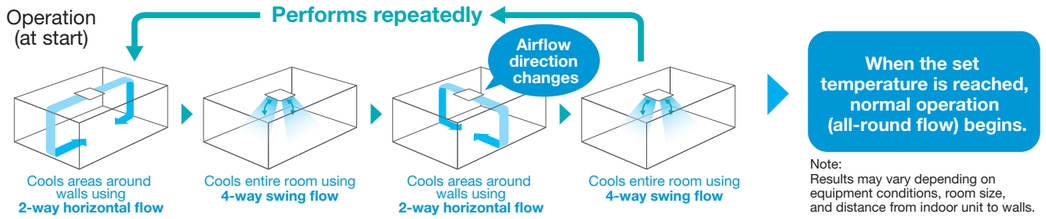
Problem 4
Quick descent of cool air causes insufficient cooling for corners of the room.



Circulation airflow cools the entire room to deliver comfort that never feels cold.

Configurations of Circulation Airflow

Cools the entire room to deliver comfort that never feels cold.

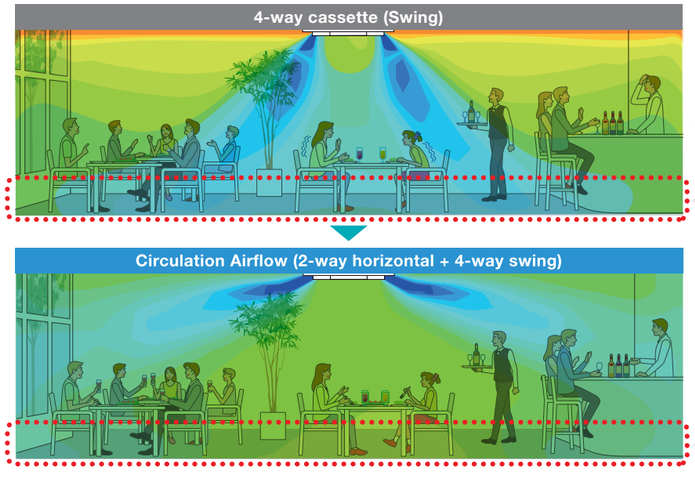


Note:
Results may vary depending on equipment conditions, room size, and distance from indoor unit to walls.

Ceiling Mounted Cassette (Round Flow with Sensing) Type **FXFSQ-A**

Ceiling Mounted Cassette (Round Flow) Type **FXFQ-A**

Comfort to the Entire Room with Even Temperatures and No Cold Air Pockets at Floor Level



Comparison Conditions
- Room size: Width 7.5m x depth 7.5m x height 2.6m
- Indoor unit capacity: 80 class
- Outdoor air temperature: 35°C
- Airflow rate and air direction: high / swing

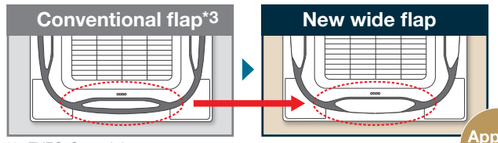
Approx. 5% energy savings by reducing uneven temperatures *2

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

Three Technologies That Achieved Circulation Airflow

1 Use of new wide flaps (Straight)

With new, larger flaps, a straighter trajectory for airflow was achieved.



*3. FXFQ-S model

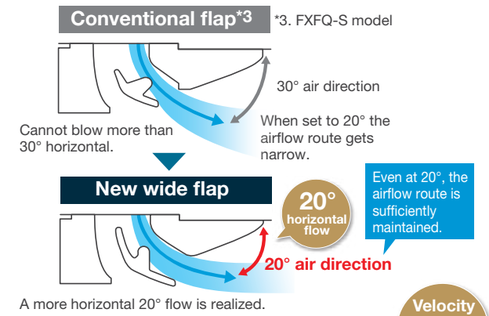
Approx. doubled

New wide flap construction inhibits ceiling dirt and grime.

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

2 Optimizing airflow angle (Horizontally)

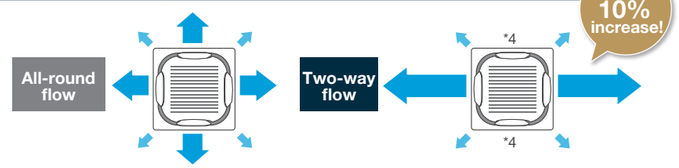
The airflow angle was made more horizontal.



3 Increased velocity in 2-way flow (Strongly)

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

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

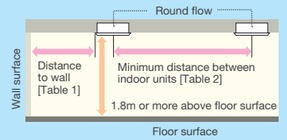


Things to remember when using circulation airflow

Main points for use

- Effectiveness may differ according to room conditions, room size, and distance to walls.
- Airflow operation differs when using the designer panel. (Operation repeatedly switches from 3-way horizontal flow to 4-way downward flow [swing] to 2-way horizontal flow to 4-way downward flow [swing].)
- Circulation airflow functions during connection with wired remote controller. (BRC1E63). However, use is not possible for the following conditions:
  - When a sealing material of air discharge outlet and branch ducts are used;
  - When individual airflow setting is selected;
  - When using group control other than round flow.

Installation conditions



[Table 1]
Distance to wall from indoor unit

Indoor unit capacity	FXF(S)Q 25-50	FXF(S)Q 63/80	FXF(S)Q 100-140
Maximum distance	1.5m-4m	1.5m-5m	1.5m-7m

[Table 2]
Minimum distance between indoor units

Indoor unit capacity	FXF(S)Q 25-50	FXF(S)Q 63/80	FXF(S)Q 100-140
Minimum distance	4m or more	5m or more	7m or more

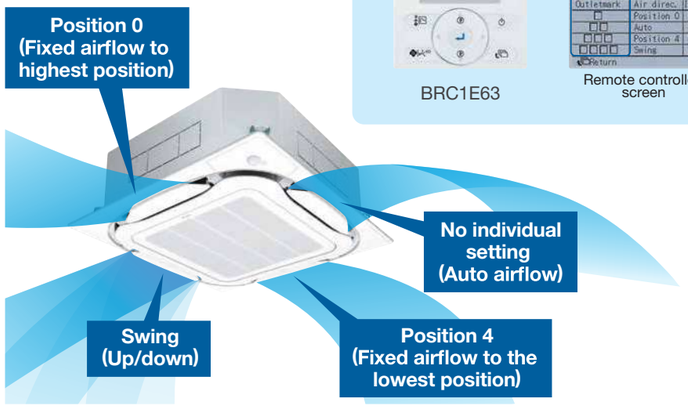
New Round Flow Cassette movie at Daikin official YouTube site.

Individual Airflow Direction Control*1

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

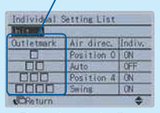
Comfortable air conditioning for all room layouts and conditions

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

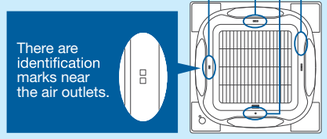


Easy setting is possible with a wired remote controller.

BRC1E63



Remote controller screen



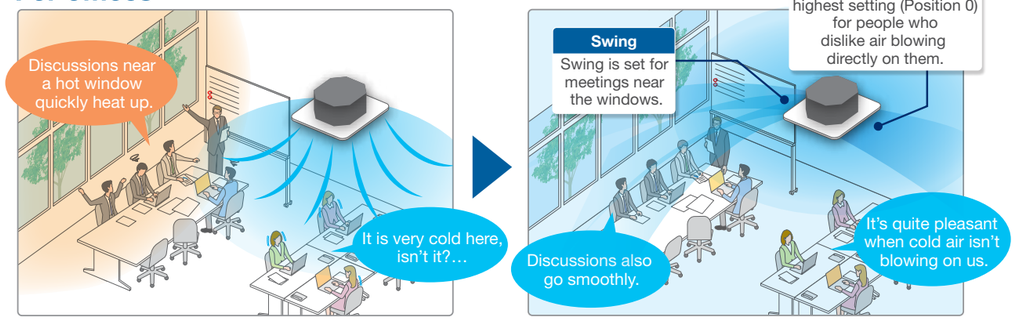
Individual airflow settings

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

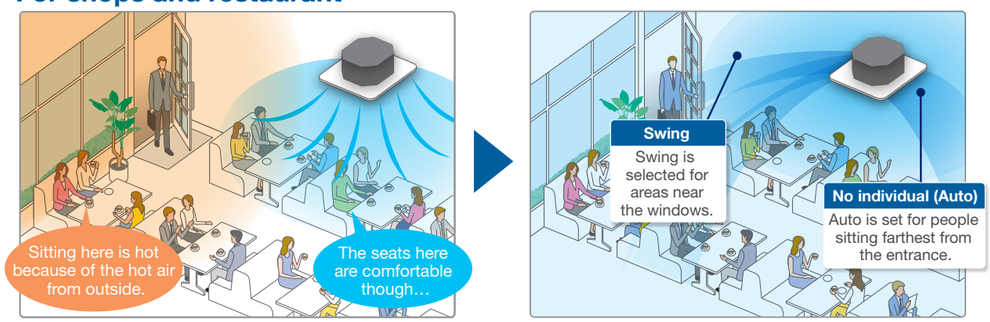
Individual settings are possible as stated above.

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

For offices



For shops and restaurant



Ceiling Mounted Cassette (Round Flow with Sensing) Type **FXFSQ-A** | Ceiling Mounted Cassette (Round Flow) Type **FXFQ-A**

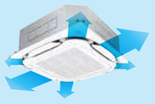
Other Functions

Comfort

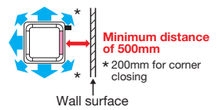
360° Airflow & Selectable Airflow Pattern

Indoor unit offers 360° airflow discharges air in all directions with more uniform temperature distribution.
Because air flows out from corner outlets, comfort spreads more widely.

Typical flow patterns There are a total of 18 flow patterns.

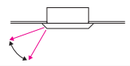
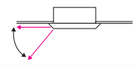
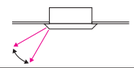
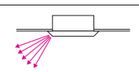
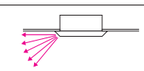
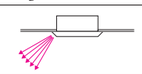
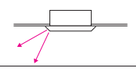
All-round flow	3-way flow	L-shaped 2-way flow	Opposite 2-way flow
			
(E.g., installed in middle of ceiling) 4-way flow also possible.	(E.g., installed near a wall)	(E.g., installed in a corner)	(E.g., installed in a long room)

Required distance to wall surface for closing air discharge outlet



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.
- Operation sound increases when using 2-way or 3-way flow.
- Designer panel cannot operate 2-way and 3-way flow.

Optimal comfort and convenience assured by 3 air discharge modes

Air direction	Standard setting[1]	Draft prevention setting (field setting)	Ceiling soiling prevention setting[2] (field setting)
Desired situation	For gentle drafts.	When drafts are unwanted.	For shops with light coloured ceilings that must be kept spotless.
Auto-swing			
5-level air direction setting			
Auto air direction control	 The air direction is set automatically to the memorised position of the previous air direction.		

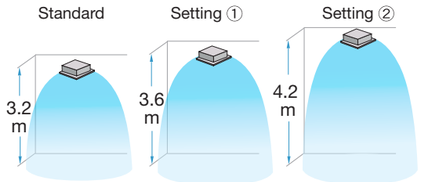
Note:
[1]Air direction is set to the standard position when the unit is shipped from the factory. The position can be changed from the remote controller.
[2]Closing of the corner discharge outlets is recommended.

Switchable fan speed: 5 steps and Auto

Control of airflow rate has been improved from 3-step to 5-step.
Auto airflow rate is newly available.

Suitable for high ceilings

Even in spaces with high ceilings, a comfortable airflow is carried down to the floor level.



When all round flow is selected, ceilings up to 4.2 m in height can be accommodated. (FXF(S)Q100-140A)

■Criteria for ceiling height and number of air discharge outlets used
(Ceiling height is reference value)

		Number of air discharge outlets used							
		FXF(S)Q25-80A				FXF(S)Q100–140A			
		All round flow	4-way flow	3-way flow	2-way flow	All round flow	4-way flow	3-way flow	2-way flow
Ceiling height	Standard	2.7 m	3.1 m	3.0 m	3.5 m	3.2 m	3.4 m	3.6 m	4.2 m
	High ceiling ①	3.0 m	3.4 m	3.3 m	3.8 m	3.6 m	3.9 m	4.0 m	4.2 m
	High ceiling ②	3.5 m	4.0 m	3.5 m	—	4.2 m	4.5 m	4.2 m	—

Note:
- The aforementioned is for standard panels. See the installation manual for designer panels.
- Factory settings are for standard ceiling height and all-round flow.
  High ceiling settings (1) and (2) are set with the remote controller by field setting.
- High-efficiency filters are not available for high ceiling applications.

Indoor Unit Lineup

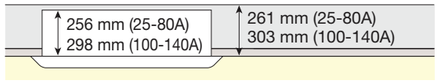
Quick and Easy Installation

Lightweight

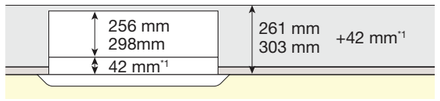
All models can be installed without using a lifter.

Installable in tight ceiling spaces

Standard panel

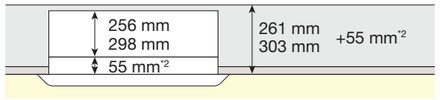


Designer panel



*1.Body height (ceiling required space) is 42 mm higher than standard panel.

Auto grille panel

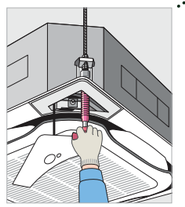


*2.Body height (ceiling required space) is 55 mm higher than standard panel.
*When the ceiling space is limited, an optional panel spacer is available. (See page 100)

Easy height adjustment

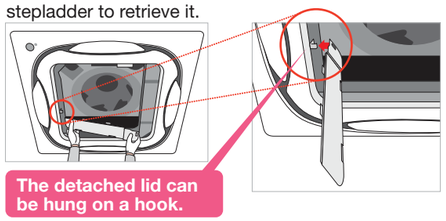
Each corner of the unit has an adjuster pocket that lets you easily adjust the unit's suspended height.

Note:
If the wireless remote controller is installed, a signal receiver unit is housed in one of the adjuster pockets.



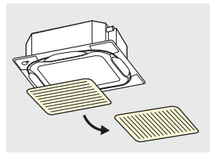
Temporary placement of control box lid

Because the control box lid can be temporarily hung on the unit, there is no need to climb down the stepladder to retrieve it.



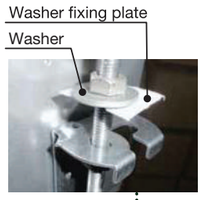
Installed in any direction

Since the orientation of the suction grille can be adjusted after installing, the direction of the suction grille lines can be unified when multiple units are installed.



Easy hanging

Washer fixing plates secure washers in place and prevent washers from falling for easy installation.

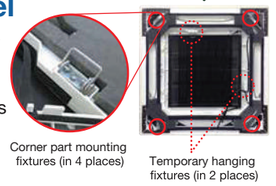


Easy removal of corner cover

It is possible to easily remove without use of screws or tools.

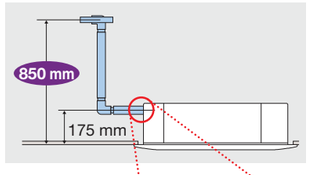
Ease in temporary hanging of decoration panel

In addition to the temporary hanging fixtures in 2 places normally used, corner part mounting fixtures in 4 places are provided.



Drain pump

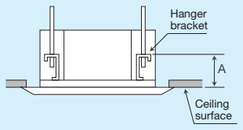
Equipped as standard accessory with 850 mm lift.



Transparent drain socket

Hanging height adjustment

Because the configuration of the hanger bracket changed, the dimensions from the ceiling to the hanger bracket also change during height adjustment for indoor unit.



	A Dimensions
Standard panel	125-130mm
Designer panel	167-172mm
Auto grille panel	180-185mm
Chamber option*+ standard panel	175-180mm

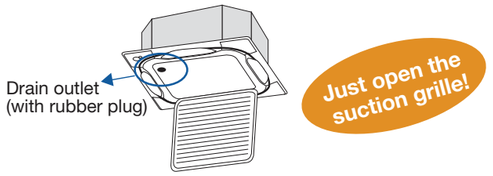
*High-efficiency filter, ultra long-life filter, and fresh air intake

Easy Maintenance

Drain pan and drain water check

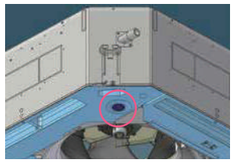
The condition of the drain pan and drain water can be checked by removing the suction grille and drain plug.

Note: For inquiries concerning auto grille panel installations, please contact your local dealer or Daikin representative.



24 mm diameter drain outlet

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



Auto grille panel (option)

Grille and air filter cleaning can be performed without need for a stepladder by lowering the grille.

A dedicated remote controller for the auto grille panel (BRC16A2) is included.
Operation is not possible using BRC1E63.

The drop length corresponds to ceiling height and can be set for 8 different levels.

Ceiling Height Standard (m)	Drop Length
2.4	1.2
2.7	1.6
3.0	2.0
3.5	2.4
3.8	2.8
4.2	3.1
4.5	3.5
5.0*	3.9

*Airflow range is up to 4.5m.
Please refer to “criteria for ceiling height and number of air discharge outlets” on page 36.

Ultra long-life filter (option)

See page 96

Maintenance is not required in normal shops or offices for up to four years.

Cleanliness

Silver ion anti-bacterial drain pan

A built-in antibacterial treatment that uses silver ion in the drain pan prevents the growth of slime, bacteria, and mould that cause odours and clogging.
(The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)

Non-flocking flaps

Flaps can be detached without use of tools.
Condensation does not easily form and dirt does not cling to non-flocking flaps.
They are easy to clean.

Filter has anti-mould and antibacterial treatment

Prevents mould and microorganisms growing out of the dust and moisture that adheres to the filters.

Indoor Unit Lineup

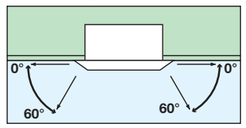
Ceiling Mounted Cassette (Compact Multi Flow) Type FXZQ-M

Quiet, compact, and designed for user comfort

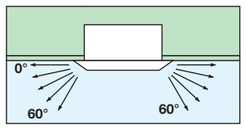
- Comfortable airflow

1 Wide discharge angle: 0° to 60°

- **Auto swing**

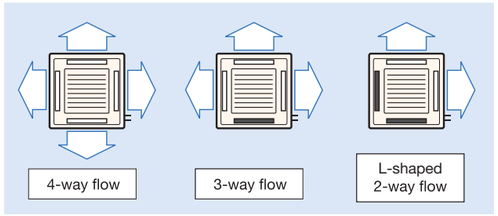


- **Fixed angles: 5 levels**



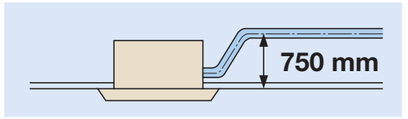
*Angles can be also set on site to prevent drafts (0°-35°) or soiling of the ceiling (25°-60°), other than standard setting (0°-60°).

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



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

- Dimensions correspond with 600 mm X 600 mm architectural module ceiling design specifications.
- Low operation sound level
- Drain pump is equipped as standard accessory with 750 mm lift.



Specifications

MODEL			FXZQ20MVE	FXZQ25MVE	FXZQ32MVE	FXZQ40MVE	FXZQ50MVE
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100
		kW	2.2	2.8	3.6	4.5	5.6
Power consumption		kW	0.073		0.076	0.089	0.115
Casing			Galvanised steel plate				
Airflow rate (H/L)		m^3/min	9/7		9.5/7.5	11/8	14/10
		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
	240 V		32/26		34/28	37/29	42/35
Dimensions (H×W×D)		mm	286×575×575				
Machine weight		kg	18				
Piping connections	Liquid (Flare)	mm	ϕ6.4				
	Gas (Flare)		ϕ12.7				
	Drain		VP20 (External Dia. 26/Internal Dia. 20)				
Panel (Option)	Model		BYFQ60B3W1				
	Colour		White (6.5Y9.5/0.5)				
	Dimensions(H×W×D)	mm	55×700×700				
	Weight	kg	2.7				

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

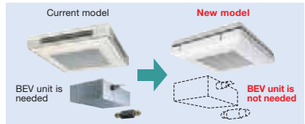
4-way Flow Ceiling Suspended Type FXUQ-A

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

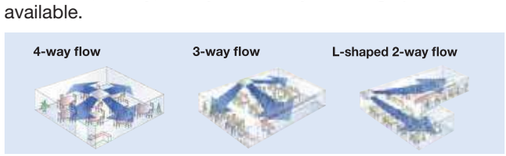
- Unit body and suction panel adopted round shapes and realised a slim appearance design. The unit can be used for various locations such as the ceilings with no cavity and bare ceilings.
- Flaps close automatically when the unit stops, which gives a simple appearance.
- Unified slim height of 198 mm for all model that gives the unified impression even when models with different capacities are installed in the same area.
- With adoption of the individual flap control, airflow direction adjustment can be individually set for each air outlet. 5 directions of airflow and auto-swing can be selected with wired remote controller BRC1E63, 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 BRC1E63.

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



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



- An antibacterial treatment that uses silver ions has been applied to the drain pan, preventing the growth of slime, mould and bacteria that cause blockages and odours. (The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)

Specifications

MODEL			FXUQ71AVEB	FXUQ100AVEB
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz	
Cooling capacity		Btu/h	27,300	38,200
		kW	8.0	11.2
Power consumption		kW	0.090	0.200
Casing			Fresh white	
Airflow rate (H/M/L)		m^3/min	22.5/19.5/16	31/26/21
		cfm	794/688/565	1,094/918/741
Sound level (H/M/L)		dB(A)	40/38/36	47/44/40
Dimensions (H×W×D)		mm	198×950×950	
Machine weight		kg	26	27
Piping connections	Liquid (Flare)	mm	ϕ9.5	
	Gas (Flare)		ϕ15.9	
	Drain		VP20 (External Dia. 26/Internal Dia. 20)	

Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions

Ceiling Mounted Cassette (Double Flow) Type

New FXCQ-A

Stylish unit blends easily with any interior. Integrated ceiling surface with sophisticated panel design with the adoption of flat flap.

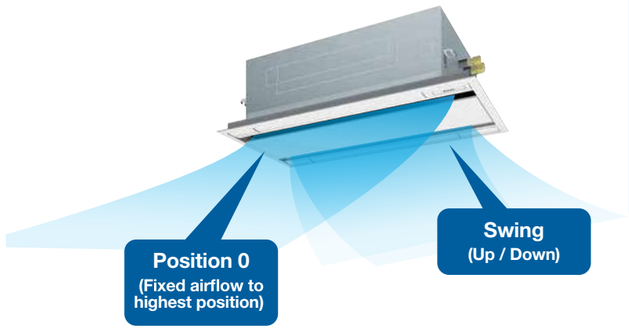
New panel design

- This model features a stylish flat panel with fresh white colour for a new sophisticated appearance.
- The flat flaps close entirely when the unit is not operating and there are no air intake grilles visible.

Individual Airflow Direction Control *1

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

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



Easy setting is possible with a wired remote controller.

Individual airflow settings

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

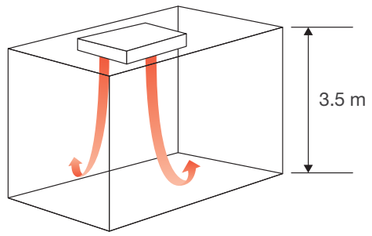
Individual settings are possible as stated above.

Switchable fan speed: 5 steps and Auto

- Control of airflow rate has been improved from 3-step to 5-step. Auto airflow rate is newly available.

Suitable for high ceilings

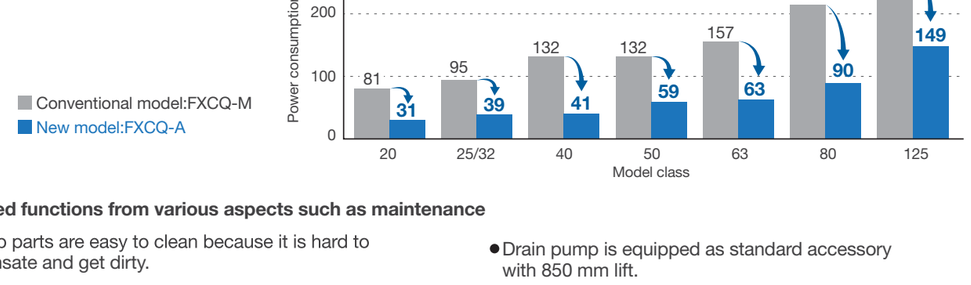
- Even in spaces with high ceilings maximum 3.5 m, a comfortable airflow is carried down to the floor level.



Energy saving : Reduction of energy consumption

- Power consumption is significantly reduced by specially developed small tube heat exchanger and DC fan motor.

- Power consumption comparison (Cooling)

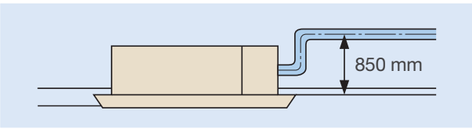


Enhanced functions from various aspects such as maintenance

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

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

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



- An antibacterial treatment that uses silver ions has been applied to the drain pan, preventing the growth of slime, mould and bacteria that cause blockages and odours. (The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)

Specifications

MODEL			FXCQ20AVM	FXCQ25AVM	FXCQ32AVM	FXCQ40AVM	FXCQ50AVM	FXCQ63AVM	FXCQ80AVM	FXCQ125AVM
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz							
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	30,700	47,800
		kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	14.0
Power consumption		kW	0.031	0.039		0.041	0.059	0.063	0.090	0.149
Casing			Galvanised steel plate							
Airflow rate (H/HM/M/ML/L)		m^3/min	10.5/9.5/9/8/7.5	11.5/10.5/9.5/8.5/8		12/11/10.5/9.5/8.5	15/14/13/11.5/10.5	16/15/14/12.5/11.5	26/24/22.5/20.5/18.5	32/29.5/27.5/25/22.5
		cfm	371/335/318/282/265	406/371/335/300/282		424/388/371/335/300	530/494/459/406/371	565/530/494/441/406	918/847/794/724/653	1,130/1,041/971/883/794
Sound level (H/HM/M/ML/L)		dB(A)	32/31/30/29/28	34/33/31/30/29	34/33/32/31/30	36/35/33/32/31	37/36/35/33/31	39/38/37/35/32	42/40/38/36/33	46/44/42/40/38
Dimensions (H×W×D)		mm	305x775x620				305x990x620		305x1,445x620	
Machine weight		kg	19				22	25	33	38
Piping connections	Liquid (Flare)	mm	ϕ6.4						ϕ9.5	
	Gas (Flare)		ϕ12.7						ϕ15.9	
	Drain		VP25 (External Dia. 32/Internal Dia. 25)							
Panel (Option)	Model		BYBCQ40CF				BYBCQ63CF		BYBCQ125CF	
	Colour		Fresh white (6.5Y 9.5/0.5)							
	Dimensions (H×W×D)	mm	55x1,070x700				55x1,285x700		55x1,740x700	
	Weight	kg	10				11		13	

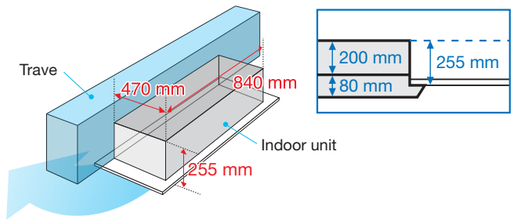
Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See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

Ceiling Mounted Cassette (Single Flow) Type

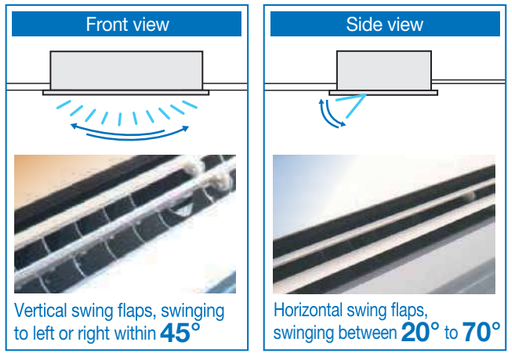
FXEQ-A

Slim design for flexible installation

●The body features a compact design with a height of just 200 mm and depth 470 mm, making the installation possible in tight ceiling spaces.



●The swinging of horizontal and vertical swing flaps can be adjusted freely with the remote controller, providing 3D airflow to every corner of the room.

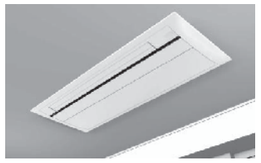


●Control of airflow rate can be selected from 5-step control and quiet operation mode, which provides comfortable airflow.

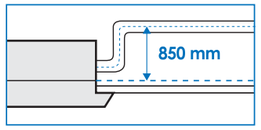
●DC motor is adopted both in the fan and drain pump of the indoor unit, not only enhancing the energy saving performance, but also reducing the operating sound and the vibration incurred to the unit.

●While creating a cozy indoor environment, the unit can prevent the suspended ceiling from being soiled by adjusting its louvre angle.

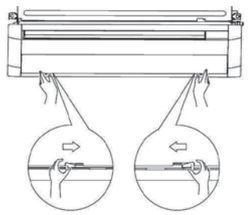
●The novel smooth panel design makes dust difficult to accumulate, thus causing the cleaning more conveniently.



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



●Servicing of common parts such as the control box etc. can be performed easily only with the suction panel removed.



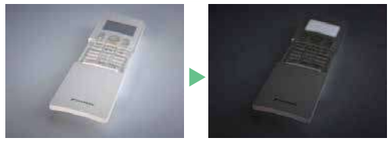
New Remote Controller (Option)

■Wireless Remote Controller

●Stylish new design giving more satisfaction of ownership
●Comes in white colour
●User-friendly buttons with new functions such as 2 flaps control, 5-step airflow control, automatic airflow
●Back light function helps operating in dark rooms

BRC4M63

LCD Backlight



The LCD panel lights up during use, making the remote controller easy to handle even in dark.

■Navigation Remote Controller (Wired Remote Controller)

New functions such as 2 flaps control, 5-step airflow control, automatic airflow can be also adjusted with the new wired remote controller.

BRC1F61

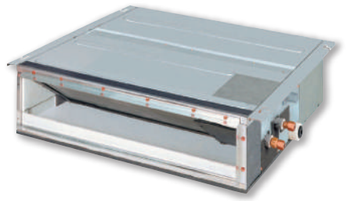
Specifications

MODEL			FXEQ20AV36	FXEQ25AV36	FXEQ32AV36	FXEQ40AV36	FXEQ50AV36	FXEQ63AV36
Power supply			1-phase, 220-240 V, 50 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption		kW	0.026	0.027	0.034	0.046	0.048	0.067
Casing			Galvanised steel plate					
Airflow rate (H/HM/M/ML/L)		m^3/min	6.0/5.4/4.9/4.4/4.0	6.9/6.4/5.8/5.3/4.8	8.0/7.5/7.0/6.3/5.5	9.8/8.8/7.8/7.0/6.2	12.5/11.4/10.4/9.5/8.7	15.0/13.6/12.2/11.0/9.8
		cfm	212/191/173/155/141	244/226/205/187/169	282/265/247/222/194	346/311/275/247/219	441/402/367/335/307	530/480/431/388/346
Sound level (H/HM/M/ML/L)		dB(A)	30/29/28/27/26	32/31/30/29/28	35/34/33/32/30	38/37/35/33/31	38/37/35/33/31	43/41/39/37/35
Dimensions (H×W×D)		mm	200×840×470				200×1,240×470	
Machine weight		kg	17			18	23	
Piping connections	Liquid (Flare)	mm	ϕ6.4					ϕ9.5
	Gas (Flare)		ϕ12.7					ϕ15.9
	Drain		PVC26 (External Dia. 26/Internal Dia. 20)					
Panel (Option)	Model		BYEP40AW1				BYEP63AW1	
	Colour		Fresh white					
	Dimensions(H×W×D)	mm	80×950×550				80×1,350×550	
	Weight	kg	8.0				10.0	

Note: Specifications are based on the following conditions;
• Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
• Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
• Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward.

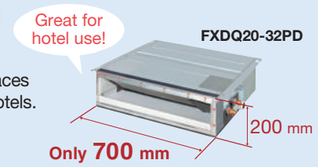
Slim Ceiling Mounted Duct Type (Standard Series) FXDQ-PD / ND

Slim design, quietness and static pressure switching



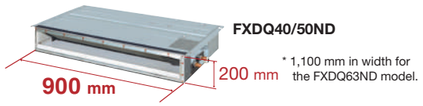
Suitable to use in drop-ceilings!

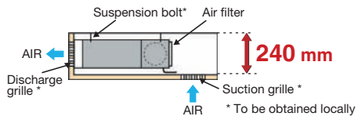
- Only 700 mm in width and 23 kg in weight, this model is suitable to install in limited spaces like drop-ceilings in hotels.



- Control of the airflow rate can be selected from 3-step control and Auto. Auto airflow rate control can be selected with wired remote controller BRC1E63.
- Low operation sound level.
- 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-PD models.
  15 Pa-44 Pa/factory set:
  15 Pa for FXDQ-ND models.

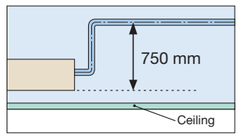
- Only 200 mm in height, this model can be installed in rooms with as little as 240 mm in height for the ceiling space between the drop-ceiling and ceiling slab.





- FXDQ-PD and FXDQ-ND models are available in two types to suit different installation conditions.

FXDQ-PD/NDVE: with a drain pump (750 mm lift) as a standard accessory
FXDQ-PD/NDVET: without a drain pump



Specifications

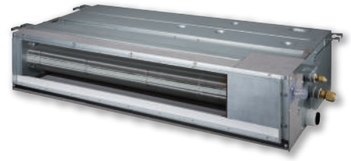
MODEL		with drain pump	FXDQ20PDVE	FXDQ25PDVE	FXDQ32PDVE	FXDQ40NDVE	FXDQ50NDVE	FXDQ63NDVE
		without drain pump	FXDQ20PDVET	FXDQ25PDVET	FXDQ32PDVET	FXDQ40NDVET	FXDQ50NDVET	FXDQ63NDVET
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption (FXDQ-PD/NDVE) ★1		kW	0.086		0.089	0.160	0.165	0.181
Power consumption (FXDQ-PD/NDVET) ★1		kW	0.067		0.070	0.147	0.152	0.168
Casing			Galvanised steel plate					
Airflow rate (HH/H/L)		m^3/min	8.0/7.2/6.4			10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0
		cfm	282/254/226			371/335/300	441/388/353	583/512/459
External static pressure		Pa	30-10★2			44-15★2		
Sound level (HH/H/L)★1★3		dB(A)	28/26/23		28/26/24	30/28/26	33/30/27	33/31/29
Dimensions (H×W×D)		mm	200×700×620			200×900×620		200×1,100×620
Machine weight		kg	23			27	28	31
Piping connections	Liquid (Flare)	mm	ϕ6.4					ϕ9.5
	Gas (Flare)		ϕ12.7					ϕ15.9
	Drain		VP20 (External Dia. 26/Internal Dia. 20)					

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

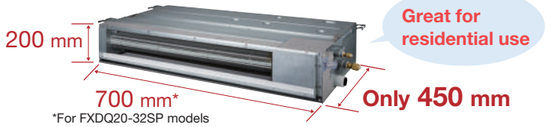
★1 : Values are based on the following conditions: FXDQ-PD: external static pressure of 10 Pa; FXDQ-ND: external static pressure of 15 Pa.
★2 : External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard".(Factory setting is 10 Pa for FXDQ-PD models and 15 Pa for FXDQ-ND models.)
★3 : The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB(A).

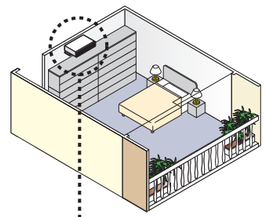
Slim Ceiling Mounted Duct Type (Compact Series) FXDQ-SP

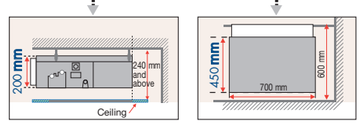
Slim and compact design for easy and flexible installation



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

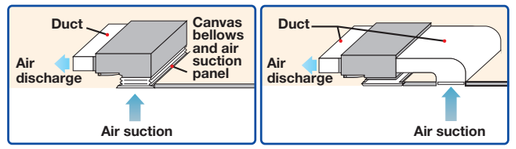




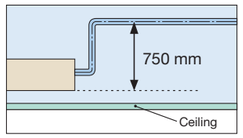


Side view Top view

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



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



Specifications

MODEL			FXDQ20SPV1	FXDQ25SPV1	FXDQ32SPV1	FXDQ40SPV1	FXDQ50SPV1	FXDQ63SPV1
Power supply			1-phase, 220-240 V, 50 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption ★1		kW	0.072	0.075	0.078	0.180	0.180	0.196
Casing			Galvanised steel plate					
Airflow rate (HH/H/L)		m^3/min	8.7/7.6/6.5	9.0/8.0/7.0	10.0/9.0/8.0	15.0/13.0/10.5		20.0/16.0/12.5
		cfm	307/268/229	318/282/247	353/318/282	530/459/371		706/565/441
External static pressure		Pa	30-10★2			50-20★2		40-20★2
Sound level (HH/H/L) ★1★3		dB(A)	33/31/29		34/32/30	35/33/31		37/35/33
Dimensions (H×W×D)		mm	200×700×450			200×900×450		200×1,100×450
Machine weight		kg	17			20		23
Piping connections	Liquid (Flare)	mm	ϕ6.4					ϕ9.5
	Gas (Flare)		ϕ12.7					ϕ15.9
	Drain		VP20 (External Dia. 26/Internal Dia. 20)					

Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.

★1 : Values are based on the following conditions: FXDQ20-32SP: external static pressure of 10 Pa; FXDQ40-63SP: external static pressure of 20 Pa.
★2 : External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard". (Factory setting is 10 Pa for FXDQ20-32SP models and 20 Pa for FXDQ40-63SP 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).

Middle Static Pressure Ceiling Mounted Duct Type

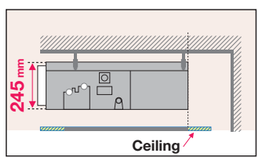
FXSQ-PA

Middle static pressure and slim design allow flexible installations

Installation flexibility

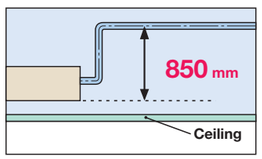
Slim design

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



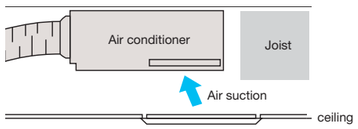
Standard DC drain pump

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



Bottom suction possible

- Bottom suction is possible which facilitate installation and maintenance. Wiring connections and maintenance of control box can be done from under the unit with an optional shield plate for side plate*, extending the degree of freedom for installation in the ceiling.

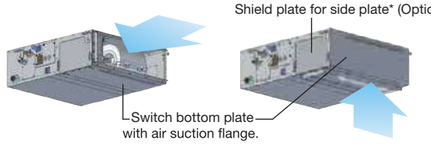


- Air suction direction can be altered from rear to bottom suction.

•Rear suction

•Bottom suction

Shield plate for side plate* (Option)

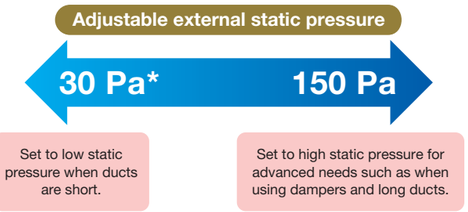


*An optional shield plate for side plate is required if wiring connections and maintenance of control box are needed from under the unit. This option is only available for FXSQ20-125PA models.

Design flexibility

Adjustable external static pressure

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



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

*30 Pa–150 Pa for FXSQ20-40PAVE
50 Pa–150 Pa for FXSQ50-125PAVE
50 Pa–140 Pa for FXSQ140PAVE

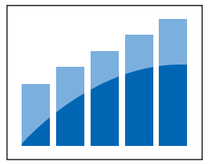
Comfort

Switchable airflow rate

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

Auto airflow rate

- 5-step airflow rate is automatically controlled in accordance with the difference between room temperature and set temperature.
  Auto airflow rate control can be selected with wired remote controller BRC1E63.



Low operation sound level

(dB(A))

FXSQ-PAVE	20/25	32	40	50	63
Sound level (H/M/L)	33/30/28	34/32/30	36/33/30	34/32/29	36/32/29

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

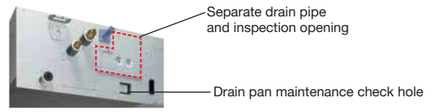
Easy installation

Airflow rate auto adjustment function

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

Easy maintenance

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



- An antibacterial treatment that uses silver ions has been applied to the drain pan, preventing the growth of slime,mould and bacteria that cause blockages and odours.
  (The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)

Specifications

MODEL		FXSQ20PAVE	FXSQ25PAVE	FXSQ32PAVE	FXSQ40PAVE	FXSQ50PAVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100
	kW	2.2	2.8	3.6	4.5	5.6
Power consumption	kW	0.058 ★1		0.066 ★1	0.101 ★1	0.075 ★1
Casing		Galvanised steel plate				
Airflow rate (H/M/L)	m^3/min	9/7.5/6.5		9.5/8/7	15/12.5/10.5	17/14.5/11.5
	cfm	318/265/230		335/282/247	530/441/371	600/512/406
External static pressure	Pa	30-150 (50) ★2				50-150 (50) ★2
Sound level (H/M/L)	dB(A)	33/30/28		34/32/30	36/33/30	34/32/29
Dimensions (H×W×D)	mm	245×550×800			245×700×800	245×1,000×800
Machine weight	kg	25			27	35
Piping connections	Liquid (Flare)	mm	ϕ6.4			
	Gas (Flare)		ϕ12.7			
	Drain		VP25 (External Dia. 32/Internal Dia. 25)			

MODEL		FXSQ63PAVE	FXSQ80PAVE	FXSQ100PAVE	FXSQ125PAVE	FXSQ140PAVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	24,200	30,700	38,200	47,800	54,600
	kW	7.1	9.0	11.2	14.0	16.0
Power consumption	kW	0.106 ★1	0.126 ★1	0.151 ★1	0.206 ★1	0.222 ★1
Casing		Galvanised steel plate				
Airflow rate (H/M/L)	m^3/min	21/17.5/14.5	23/19.5/16	32/27/22.5	37/31.5/26	39/33.5/28
	cfm	741/618/512	812/688/565	1,130/953/794	1,306/1,112/918	1,377/1,183/988
External static pressure	Pa	50-150 (50) ★2				50-140 (50) ★2
Sound level (H/M/L)	dB(A)	36/32/29	37.5/34/30	39/35/32	42/38.5/35	43/40/36
Dimensions (H×W×D)	mm	245×1,000×800		245×1,400×800		245×1,550×800
Machine weight	kg	35	37	46	47	52
Piping connections	Liquid (Flare)	mm	ϕ9.5			
	Gas (Flare)		ϕ15.9			
	Drain		VP25 (External Dia. 32/Internal Dia. 25)			

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

★1: Power consumption values are based on conditions of rated external static pressure.
★2: External static pressure can be modified using a remote controller that offers thirteen (FXSQ20-40PA), eleven (FXSQ50-125PA) or ten (FXSQ140PA) levels of control. These values indicate the lowest and highest possible static pressures. The rated static pressure is 50 Pa.

Indoor Unit Lineup

Ceiling Mounted Duct Type

FXMQ-PA / M

Middle and high static pressure allows for flexible duct design

- Using a DC fan motor, the external static pressure can be controlled within a range of 30 Pa* to 200 Pa*.

Adjustable external static pressure

30 Pa* ⟷ **200 Pa***

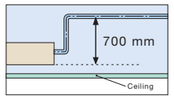
Set to low static pressure when ducts are short.

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

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

*30 Pa–100 Pa for FXMQ20PA-32PA
*30 Pa–160 Pa for FXMQ40PA
*50 Pa–200 Pa for FXMQ50PA-125PA
*50 Pa–140 Pa for FXMQ140PA

- All models are only 300 mm in height and the weight of the FXMQ40-140PA has been reduced.
- Drain pump is equipped as standard accessory with 700 mm lift.



- Control of the airflow rate can be selected from 3-step control and Auto. Auto airflow rate control can be selected with wired remote controller BRC1E63.
- Low operation sound level
- Energy-efficient
  - DC fan motor is used to realise energy-saving operation.
- Easy installation
  - Airflow rate can be controlled using a remote controller during test operation. It is automatically adjusted to the range between approximately ±10% of the rated HH tap airflow for FXMQ20PA–125PA.

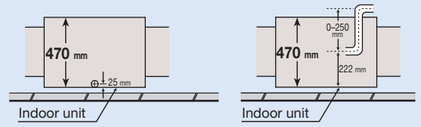
- Easy maintenance
  - Inspection and cleaning is facilitated by separating the drain pipe and inspection opening and by the drain pan maintenance check hole.

- An antibacterial treatment that uses silver ions has been applied to the drain pan, preventing the growth of slime, mould and bacteria that cause blockages and odours. (The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)

FXMQ200/250MVE9

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

- Built-in Drain Pump (Option)
  Housing the drain pump inside the unit reduces the space required for installation.
  - Without drain pump
  - With drain pump



Specifications

MODEL		FXMQ20PAVE	FXMQ25PAVE	FXMQ32PAVE	FXMQ40PAVE	FXMQ50PAVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100
	kW	2.2	2.8	3.6	4.5	5.6
Power consumption	kW	0.056 ★1		0.060 ★1	0.151 ★1	0.128 ★1
Casing		Galvanised steel plate				
Airflow rate (HH/H/L)	m^3/min	9/7.5/6.5		9.5/8/7	16/13/11	18/16.5/15
	cfm	318/265/230		335/282/247	565/459/388	635/582/530
External static pressure	Pa	30-100 (50) ★2			30-160 (100) ★2	50-200 (100) ★2
Sound level (HH/H/L)	dB(A)	33/31/29		34/32/30	39/37/35	41/39/37
Dimensions (H×W×D)	mm	300x550x700			300x700x700	300x1,000x700
Machine weight	kg	25			27	35
Piping connections: Liquid (Flare)	mm	ϕ6.4				
Piping connections: Gas (Flare)	mm	ϕ12.7				
Piping connections: Drain	mm	VP25 (External Dia, 32/Internal Dia, 25)				

MODEL		FXMQ63PAVE	FXMQ80PAVE	FXMQ100PAVE	FXMQ125PAVE	FXMQ140PAVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	24,200	30,700	38,200	47,800	54,600
	kW	7.1	9.0	11.2	14.0	16.0
Power consumption	kW	0.138 ★1	0.185 ★1	0.215 ★1	0.284 ★1	0.405 ★1
Casing		Galvanised steel plate				
Airflow rate (HH/H/L)	m^3/min	19.5/17.5/16	25/22.5/20	32/27/23	39/33/28	46/39/32
	cfm	688/618/565	883/794/706	1,130/953/812	1,377/1,165/988	1,624/1,377/1,130
External static pressure	Pa	50-200 (100) ★2				50-140 (100) ★2
Sound level (HH/H/L)	dB(A)	42/40/38	43/41/39		44/42/40	46/45/43
Dimensions (H×W×D)	mm	300×1,000×700		300×1,400×700		
Machine weight	kg	35		45		46
Piping connections: Liquid (Flare)	mm	ϕ9.5				
Piping connections: Gas (Flare)	mm	ϕ15.9				
Piping connections: Drain	mm	VP25 (External Dia, 32/Internal Dia, 25)				

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

★1: Power consumption values are based on conditions of rated external static pressure.
★2: External static pressure can be modified using a remote controller that offers seven (FXMQ20-32PA), thirteen (FXMQ40PA), fourteen (FXMQ50-125PA) or ten (FXMQ140PA) levels of control. These values indicate the lowest and highest possible static pressures. The rated static pressure is 50 Pa for FXMQ20-32PA and 100 Pa for FXMQ40-140PA.

MODEL		FXMQ200MVE9	FXMQ250MVE9
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz	
Cooling capacity	Btu/h	76,400	95,500
	kW	22.4	28.0
Power consumption	kW	1.294 ★1	1.465 ★1
Casing		Galvanised steel plate	
Airflow rate (H/L)	m^3/min	58/50	72/62
	cfm	2,047/1,765	2,542/2,189
External static pressure	Pa	132-221★2	191-270★2
Sound level (H/L): 220 V	dB(A)	48/45	
Sound level (H/L): 240 V	dB(A)	49/46	
Dimensions (H×W×D)	mm	470×1,380×1,100	
Machine weight	kg	137	
Piping connections: Liquid (Flare)	mm	ϕ9.5	
Piping connections: Gas (Brazing)	mm	ϕ19.1	ϕ22.2
Piping connections: Drain	mm	PS1B	

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

★1: Power consumption 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".

Indoor Unit Lineup

Ceiling Suspended Type

New FXHQ-MA / A

Slim body with quiet and wide airflow

FXHQ32 / 63 / 100MA

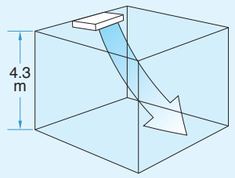
New FXHQ125 / 140A

New 125 / 140 models provide greater capacity for large spaces

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

- Sophisticated design
  - Flap neatly closes when not in use.

- Suitable for high ceilings



- Switchable fan speed: 3 steps
  - Control of airflow rate has been improved from 2-step to 3-step.

- Drain pump kit (option) includes a silver ion antibacterial agent that assists in preventing the growth of slime, bacteria, and mould that cause smells and clogging.

- Wireless LCD remote controller
  - A signal receiver must be added to the indoor unit.

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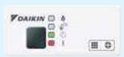
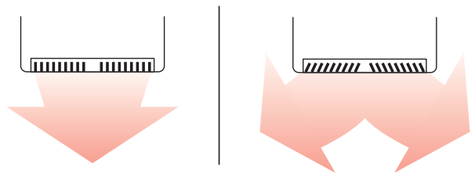


Signal receiver unit (Installed type)
Wireless remote controller is supplied in a set with a signal receiver.

Comfort

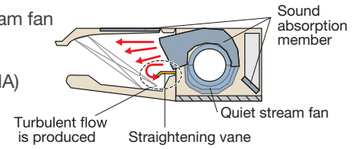
- Auto swing (up and down) and louvers (left and right by hand) bring comfort to the room.

- Louver manually adjusts for straight or wide angle airflow.



Quiet operation

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



dB(A)

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

Easy maintenance

- Non-dew flap
  - Condensation does not easily form on and dirt does not cling to non-dew flap. It is easy to clean.

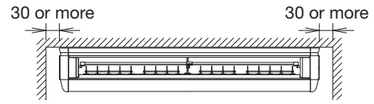
- Easy-clean, flat surfaces
  - It is easy to wipe dirt off the flat side and lower surfaces of the unit.
- Oil-resistant plastic is used for the air suction grille. This satisfies durability in restaurants and other similar environments.

Note: Intended for use in salons, dining rooms, and ordinary sales floors, this specification is not suitable for kitchens or other harsh environments.

Installation flexibility

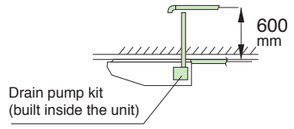
- Flexible installation
  - The unit fits more snugly into tight spaces.

[Required installation space (mm)]



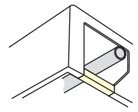
*Water used in the test-run can be drained from the air discharge opening rather than from the side as was formerly the case.

- Drain pump kit (option) can be easily incorporated.
  - Drain pipe connection can be done inside the unit. Refrigerant and drain pipe outlets are at the same opening.



- All wiring and internal servicing can be done from under the unit.

- Easier piping work for rear side by removable frame



Specifications

MODEL		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE	FXHQ125AVM	FXHQ140AVM
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz			1-phase, 220-240 V/220-230 V, 50/60 Hz	
Cooling capacity	Btu/h	12,300	24,200	38,200	48,000	52,900
	kW	3.6	7.1	11.2	14.1	15.5
Power consumption	kW	0.111	0.115	0.135	0.168	0.181
Casing		Sheet Metal / White (10Y9/0.5)			Sheet Metal / White	
Airflow rate (H/M/L)	m^3/min	12/-/10	17.5/-/14	25/-/19.5	34/26/20	36/27/20
	cfm	424/-/353	618/-/494	883/-/688	1,200/918/706	1,271/953/706
Sound level (H/M/L)	dB(A)	36/-/31	39/-/34	45/-/37	46/41/37	48/42/37
Dimensions (H×W×D)	mm	195×960×680	195×1,160×680	195×1,400×680	235×1,590×690	
Machine weight	kg	24	28	33	41	
Piping connections	Liquid (Flare)	mm	ϕ6.4	ϕ9.5		
	Gas (Flange)		ϕ12.7	ϕ15.9		
	Drain		VP20 (External Dia. 26/Internal Dia. 20)			

Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Indoor Unit Lineup

Wall Mounted Type

New **FXAQ-A**

Stylish flat panel design harmonised with your interior décor

Higher airflow

- An invisible air intake at the top of the unit
- Vertical auto-swing enables efficient air and temperature distribution throughout the room.
- The louver closes automatically when the unit stops.
- Enhanced comfort is achieved.
- 5 step discharge angles can be set by remote controller.
- Discharge angle is automatically set at the same angle as previous operation when restart.

MODEL			FXAQ20A	FXAQ25A	FXAQ32A	FXAQ40A	FXAQ50A	FXAQ63A
Airflow rate	H	m³/min	9.1	9.4	9.8	12.2	15.0	19.0
	L		7.0	7.0	7.0	9.7	12.0	14.0

Lower sound level

- Whisper quiet in operation, with sound levels as low as 28.5 dB(A)*
  *Sound level for FXAQ20-32A
- An ideal solution for a wide range of commercial spaces, including individual office spaces.

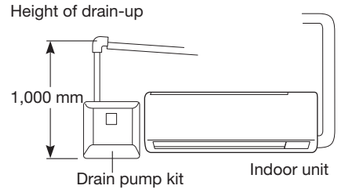
Wireless LCD remote controller

- A signal receiver must be added to the indoor unit.

BRC7M676

MODEL			FXAQ20A	FXAQ25A	FXAQ32A	FXAQ40A	FXAQ50A	FXAQ63A
Sound level	H	dB(A)	33.0	35.0	37.5	37.0	41.0	46.5
	L		28.5	28.5	28.5	33.5	35.5	38.5

- 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.
- Drain pan and air filter can be kept clean by mould-proof polystyrene.
- Flexible installation
  - Drain pipe can be fitted to from either left or right sides.
- Drain pump kit is available as optional accessory, which lifts the drain 1,000 mm from the bottom of the unit.



Specifications

MODEL			FXAQ20AVM	FXAQ25AVM	FXAQ32AVM	FXAQ40AVM	FXAQ50AVM	FXAQ63AVM
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption		kW	0.040	0.040	0.040	0.050	0.060	0.100
Casing			Resin / White N9.5					
Airflow rate (H/L)		m³/min	9.1/7.0	9.4/7.0	9.8/7.0	12.2/9.7	15.0/12.0	19.0/14.0
		cfm	321/247	332/247	346/247	431/342	530/424	671/494
Sound level (H/L)		dB(A)	33.0/28.5	35.0/28.5	37.5/28.5	37.0/33.5	41.0/35.5	46.5/38.5
Dimensions (H×W×D)		mm	290×795×266			290×1,050×269		
Machine weight		kg	12			15		
Piping connections	Liquid (Flare)	mm	ϕ6.4					ϕ9.5
	Gas (Flange)		ϕ12.7					ϕ15.9
	Drain		VP13 (External Dia. 18/Internal Dia. 15)					

Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.

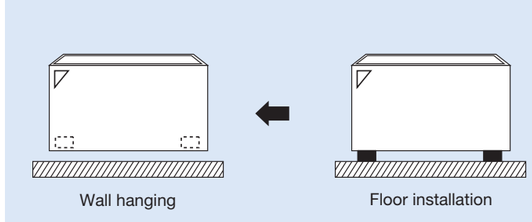
Indoor Unit Lineup

Floor Standing Type FXLQ-MA

Suitable for perimeter zone air conditioning

- Floor Standing types can be hung on the wall for easier cleaning. Running the piping from the back allows the unit to be hung on walls. Cleaning under the unit, where dust tends to accumulate, is considerably easier.
- The adoption of a fibre-less discharge grille featuring an original design to prevent condensation also helps prevent staining and makes cleaning easier.
- A long-life filter (maintenance free up to one year*) is equipped as standard accessory.

* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m³



Specifications

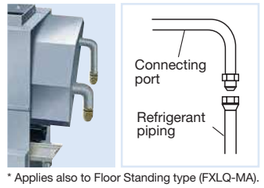
MODEL			FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption		kW	0.049		0.090		0.110	
Casing			Ivory white (5Y7.5/1)					
Airflow rate (H/L)		m³/min	7/6		8/6	11/8.5	14/11	16/12
		cfm	247/212		282/212	388/300	494/388	565/424
Sound level (H/L)	220 V	dB(A)	35/32			38/33	39/34	40/35
	240 V		37/34			40/35	41/36	42/37
Dimensions (H×W×D)		mm	600×1,000×222		600×1,140×222		600×1,420×222	
Machine weight		kg	25		30		36	
Piping connections	Liquid (Flare)	mm	ϕ6.4					ϕ9.5
	Gas (Flare)		ϕ12.7					ϕ15.9
	Drain		21O.D.					

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

Concealed Floor Standing Type FXNQ-MA

Designed to be concealed in the perimeter skirting-wall

- The unit is concealed in skirting-wall of perimeter, that enables to create high class interior design.
- The connecting port faces downward, greatly facilitating on-site piping work.



* Applies also to Floor Standing type (FXLQ-MA).

- A long-life filter (maintenance free up to one year*) is equipped as standard accessory.

* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m³

Specifications

MODEL			FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption		kW	0.049		0.090		0.110	
Casing			Galvanised steel plate					
Airflow rate (H/L)		m³/min	7/6		8/6	11/8.5	14/11	16/12
		cfm	247/212		282/212	388/300	494/388	565/424
Sound level (H/L)	220 V	dB(A)	35/32			38/33	39/34	40/35
	240 V		37/34			40/35	41/36	42/37
Dimensions (H×W×D)		mm	610×930×220		610×1,070×220		610×1,350×220	
Machine weight		kg	19		23		27	
Piping connections	Liquid (Flare)	mm	ϕ6.4					ϕ9.5
	Gas (Flare)		ϕ12.7					ϕ15.9
	Drain		21O.D.					

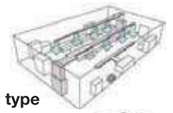
Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See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

Indoor Unit Lineup

Floor Standing Duct Type FXVQ-N

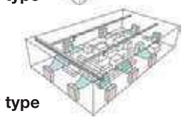
Large airflow type for large spaces. Flexible interior design for each tenant.

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

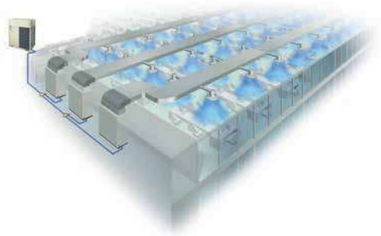


Duct connection airflow type

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



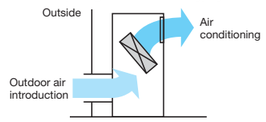
Direct airflow type



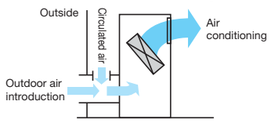
- The high static pressure type driven by the belt drive system allows for use of air discharge outlets in various shapes as well as long ducts. Highly flexible installation is possible.
- Design with high maintainability that allows major services and maintenance services to be performed at the front.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

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

All-fresh (using outdoor air only) system



Return + Outdoor air mixed system



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

Specifications

MODEL			FXVQ125NY1	FXVQ200NY1	FXVQ250NY1	FXVQ400NY1	FXVQ500NY1	FXVQ500NY16
Power supply			3-phase 4-wire system, 380–415 V, 50 Hz					
Cooling capacity		Btu/h	47,800	76,400	95,500	154,000	191,000	
		kW	14.0	22.4	28.0	45.0	56.0	
Power consumption		kW	0.53	1.33	1.61	3.97	2.62	4.70
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 weight		kg	118	144	169	236	281	306
Sound level *1		dB(A)	52	56	60	65	62	66
Piping connections	Liquid	mm	ϕ9.5 (Brazing)			ϕ12.7 (Brazing)	ϕ15.9 (Brazing)	
	Gas	mm	ϕ15.9 (Brazing)	ϕ19.1 (Brazing)	ϕ22.2 (Brazing)	ϕ28.6 (Brazing)		
	Drain	mm	Rp1 (PS1B internal thread)					
Air filter	Type		Long-life filter (anti-mould resin net)					
Fan	Motor output	kW	0.75	1.5		3.7		5.5
	Airflow rate	m^3/min	43	69	86	134	165	172
		cfm	1,518	2,436	3,036	4,730	5,825	6,072
	External static pressure *2	Pa	152	217	281	420	142	390
	Drive system		Belt drive system					

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

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

Clean Room Air Conditioner FXB(P)Q-P

Suitable for hospitals and other clean spaces

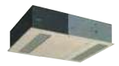
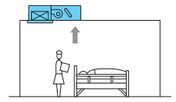
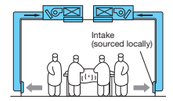
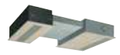
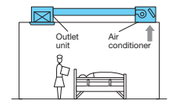
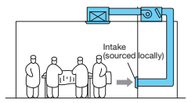
Easily provides the high cleanliness environment required by various industries

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

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

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

Instances of installation by type (for a hospital)

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

*1. Cleanliness class. A scale expressing the cleanliness of air established by NASA (National Aeronautics and Space Administration). Class 10,000 represents a state of less than 10,000 minute particles of diameter under 0.5 µm per cubic foot. For comparison, the cleanliness of a typical office is around class 1,000,000.
*2. CCU (Cardiac Care Unit). A ward dedicated to the admission of patients with myocardial infarctions and other heart diseases.
*3. ICU (Intensive Care Unit). A ward for the careful treatment and nursing of patients with serious illnesses, injuries, or recovering from operations.

Can be easily installed in existing buildings

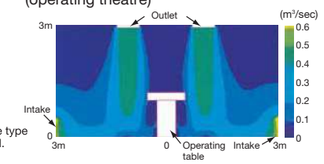
A simple structure makes it easy to realize a highly clean environment with the same installation work as for a typical air conditioner. Can be easily installed in new buildings, existing structures, and refurbishments.

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

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

*Analysis of the floor-level intake type with the integrated outlet model.

● Air flow distribution diagram (operating theatre)



Clean Room Air Conditioner

FXB(P)Q-P

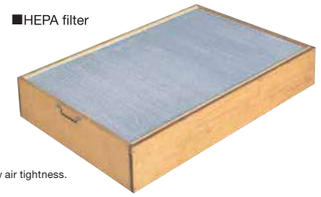
Filtration

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

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

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

■HEPA filter



Installation example (in a medical facility)

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

Antibacterial

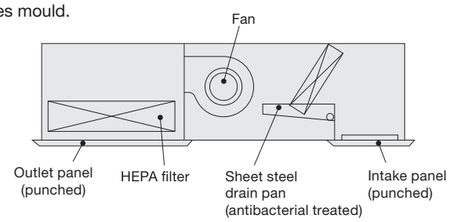
Suppresses the propagation of bacteria in the duct with a proprietary antibacterial coating

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

Antibacterial fiber used in the intake filter

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

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

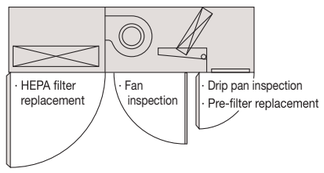


Labor-saving

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

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

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



Quiet

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

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

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

Specifications

Type			Integrated outlet unit model			Separate outlet unit model
MODEL	Indoor unit		**FXBQ40PVE**	**FXBQ50PVE**	**FXBQ63PVE**	**FXBPQ63PVE**
	Outlet unit		Integrated with the indoor unit			**BAF82A63**
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz			
Cooling capacity		Btu/h	15,400	19,100	24,200	
		kW	4.5	5.6	7.1	
Power consumption		kW	0.31		0.45	
Intake filter efficiency *1			70% by gravimetric method			
Outlet HEPA filter efficiency *2			99.97% by DOP method *5			
Indoor unit weight		kg	140 *3		185 *3	120 *6
Casing			Galvanised steel plate			
Airflow rate (H/L)		m^3/min	19.5/17.5		26/22.5	
		cfm	688/618		918/794	
Sound level (H/L) *4		dB(A)	44/42			
Dimensions (H×W×D)		mm	492×1,788×1,000		492×1,788×1,300	492×1,078×1,300
Outlet unit weight		kg	–			65 *3
Piping connections	Liquid (Flare)	mm	ϕ6.4		ϕ9.5	
	Gas (Flare)		ϕ12.7		ϕ15.9	
	Drain		PT1B			
Filter(Option)	HEPA filter	Model	BAFH82A50		BAFH82A63	
Panel (Option)	Ceiling intake type		BYB82A50C		BYB82A63C	BYB82A63CP
	Floor-level intake type		BYB82A50W		BYB82A63W	BYB82A63WP

Note: Specifications are based on the following conditions;
•Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
•Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
*1: An intake air filter is only attached to the ceiling intake type.
*2: HEPA filter sold separately. The dust collection efficiency of HEPA filter is 99.97%. However, air may slightly leak around the filter when installing.
*3: Weight including HEPA filter and panel.
*4: Anechoic chamber conversion value under JIS B 8616 test conditions. Value usually increases slightly in practice due to surrounding conditions.
*5: The clean room air conditioner does not support DOP testing (leak test) based on GMP standards (Standards for Manufacturing Control and Quality Control for Medical Devices) due to slight leakage at time of product installation.
*6: Weight including panel.

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

Warning

● **Because the ceiling intake type provides concentrated air conditioning that blows directly under the outlet. Accordingly, please be aware of the following.**
- Sufficient heating may not be achieved near the floor or at locations far from the outlet.
- In the case of utilization in a hospital, some patients may be susceptible to cool drafts, so please ensure that they do not come directly under the outlet.
- Install multiple units using two or more outdoor unit systems for installations to rooms such as operating rooms where the failure of the air conditioner may have serious consequences.
- In order to maintain static pressure in a room, the indoor fan continues to operate even when an abnormality occurs due to the thermostat shutting off, defrost operation, protection device operation, or similar issue.
- When incorporating outdoor air from the fresh air intake, install a damper or similar device to the duct routing and have it interlocked with the indoor fan so that the outdoor air is shut out when the fan stops.
  The air that incorporates the suction filter may flow backward and allow dust trapped in the filter to return to the room.
- When using gas to disinfect hospital operating rooms where this unit is installed, stop operation and cover the air inlet and outlet with plastic sheets to prevent the gas from reaching and damaging the air conditioner.

● **Use the floor-level intake type in the following kind of locations.**
- Locations in which heating of the lower part or the entire room is important.
- Locations necessitating a particularly high cleanliness factor and in which there are many people.

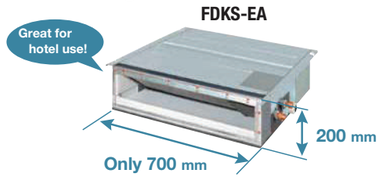
Indoor Unit Lineup

Slim Ceiling Mounted Duct Type FDKS-EA/C(A)

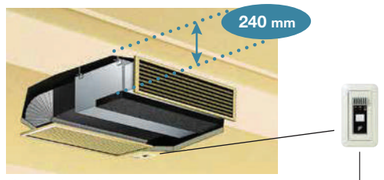
Standard accessory
Note: Remote controllers other than the standard accessory wireless remote controller cannot be used.

Slim and smooth design suits your shallow ceiling

●Models in the FDKS-EA series are only 700 mm in width and 21 kg in weight, made the installation easy in limited spaces. With only 200 mm in height, all models can be installed in rooms with as little as 240 mm depth between the drop ceiling and ceiling slab, making them ideal for even shallow ceilings.



	FDKS25EA	FDKS35EA	FDKS25CA	FDKS35CA
Dimensions (H x W x D)	200 x 700 x 620 mm		200 x 900 x 620 mm	
Weight	21 kg		25 kg	
Airflow rate (H)	8.7 m³/min		9.5 m³/min	10 m³/min
External static pressure	30 Pa		40 Pa	



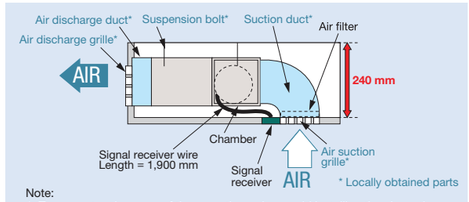
Signals from the wireless remote controller are transmitted to the signal receiver.

●Low operation sound level (H/L/SL)

FDKS25	FDKS35	FDKS50	FDKS60
35/31/29 dB (A)	35/31/29 dB (A)	37/33/31 dB (A)	38/34/32 dB (A)

●Home Leave Operation prevents large increase or decrease in the indoor temperature by continuing operation* while someone is sleeping or left the house. This means that an air-conditioned welcome awaits when someone wakes up or returns. It also means that the indoor temperature can quickly return to the preferred comfort setting.

* Home Leave Operation can set to any temperature from 18 to 32°C for cooling operation.
* Home Leave Operation function must be set by using the remote controller when going to sleep or leaving the house, and after waking up or returning home.



Note:
1. To prevent an increase of the operation noise, avoid installing the air suction grille directly below the suction chamber.
2. Grilles, piping connections, ducts, and installation parts should be obtained locally. Slim Ceiling Mounted Duct type models do not have drain-up pumps.
3. The signal receiver unit must be located near the air suction inlet, because the unit includes a sensor that detects room temperature.

Specifications

MODEL			FDKS25EAVMB	FDKS35EAVMB	FDKS25CAVMB	FDKS35CAVMB	FDKS50CVMB	FDKS60CVMB
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz					
Airflow rates (H)		m³/min (cfm)	8.7 (307)		9.5 (335)	10.0 (353)	12.0 (424)	16.0 (565)
Sound levels (H/L/SL)*		dB (A)	35/31/29				37/33/31	38/34/32
Fan speed			5 steps, quiet and automatic					
Temperature control			Microcomputer control					
Dimensions (H×W×D)		mm	200×700×620		200×900×620			200×1,100×620
Machine weight		kg	21		25		27	30
Piping connections	Liquid (Flare)	mm	ϕ6.4					
	Gas (Flare)		ϕ9.5				ϕ12.7	
	Drain		VP20 (External Dia. 26/Internal Dia. 20)					
Heat insulation			Both liquid and gas pipes					
External static pressure		Pa	30		40			

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

Wall Mounted Type — FTKS-D/B/F

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

Stylish flat panel harmonises with your interior décor

- Wall Mounted indoor units achieve quiet sound levels of 22 dB (A).

(H/L/SL)

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

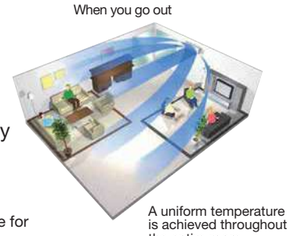
- Intelligent Eye with its infrared sensor automatically controls air conditioner operation according to human movement in a room. When there is no movement, it adjusts the temperature by 2°C for energy savings.

When you are in the room

When you go out

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

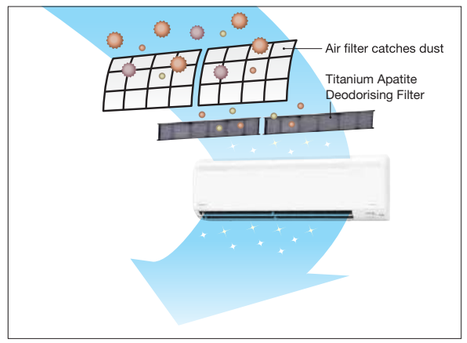
* This function is available for FTKS50/60/71F.



A uniform temperature is achieved throughout the entire room.

- **Titanium Apatite Deodorising Filter**

While the filter's micron-level fibres trap dust, titanium apatite effectively adsorbs odours and allergens, as well as deodorises odours.

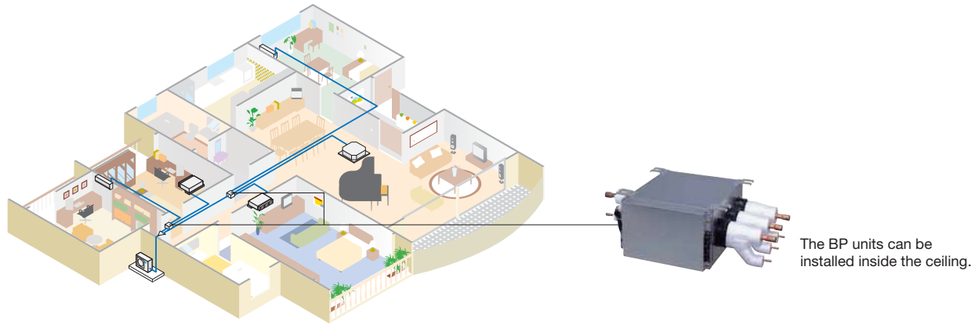


This filter is not a medical device. Benefits such as the adsorption of odours and allergens and deodorisation of odours are only effective for substances which are directly attached to the Titanium Apatite Deodorising Filter.

Specifications

MODEL			FTKS25DVM	FTKS35DVM	FTKS50BVMA	FTKS50FVM	FTKS60FVM	FTKS71FVM
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz					
Front panel colour			White					
Airflow rates (H)		m^3/min (cfm)	8.7 (307)	8.9 (314)	11.4 (402)	14.7 (519)	16.2 (572)	17.4 (614)
Sound levels (H/L/SL)		dB (A)	37/25/22	39/26/23	44/35/32	43/34/31	45/36/33	46/37/34
Fan speed			5 steps, quiet and automatic					
Temperature control			Microcomputer control					
Dimensions (H×W×D)		mm	283×800×195		290×795×238	290×1,050×238		
Machine weight		kg	9			12		
Piping connections	Liquid (Flare)	mm	ϕ6.4					
	Gas (Flare)		ϕ9.5		ϕ12.7			ϕ15.9
	Drain		ϕ18.0					
Heat insulation			Both liquid and gas pipes					

BP Units for Connection to Residential Indoor Units



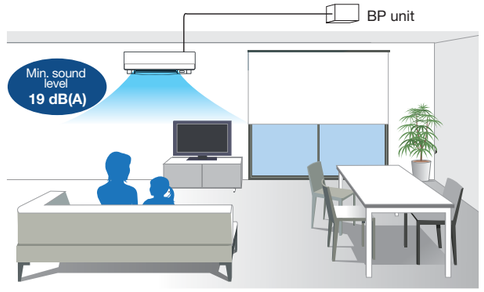
The BP units can be installed inside the ceiling.

Connectable to Residential Indoor Units

BP units allow ***VRV*** systems to be connected to Daikin's stylish and quiet residential indoor units.

Quiet Operating Sound

Expansion valves tend to create refrigerant passing noise. However, this noise can be reduced by installing the valves in BP units. The units can be fitted inside the ceiling or roof-space far from an indoor unit.
Some Daikin residential indoor units also provide minimum sound levels of just 19 dB(A). Together these features ensure your system continues to operate as quietly as possible.



BPMKS967A3

BPMKS967A2

Specifications

MODEL				BPMKS967A3	BPMKS967A2
Power supply				1-phase, 220-240 V/220-230 V, 50/60 Hz	
Number of ports				3 (connectable to 1-3 indoor units)	2 (connectable to 1-2 indoor units)
Power consumption			W	10	
Running current			A	0.05	
Dimensions (HXWXD)			mm	180X294 (+356*)X350	
Machine weight			kg	8	7.5
Number of wiring connections				3 for power supply (including earth wiring), 2 for interunit wiring (outdoor unit-BP, BP-BP), 4 for interunit wiring (BP-indoor unit)	2 for power supply (including earth wiring), 2 for interunit wiring (outdoor unit-BP, BP-BP), 3 for interunit wiring (BP-indoor unit)
Piping connections (Brazing)	Liquid	Main	mm	ϕ9.5X1	
		Branch		ϕ6.4X3	ϕ6.4X2
	Gas	Main	mm	ϕ19.1X1	
		Branch		ϕ15.9X3	ϕ15.9X2
Heat insulation				Both liquid and gas pipes	
Connectable indoor units				2.5 kW class to 7.1 kW class	
Min. rated capacity of connectable indoor units			kW	2.5	
Max. rated capacity of connectable indoor units			kW	20.8	14.2

Note: * Total auxiliary piping length.

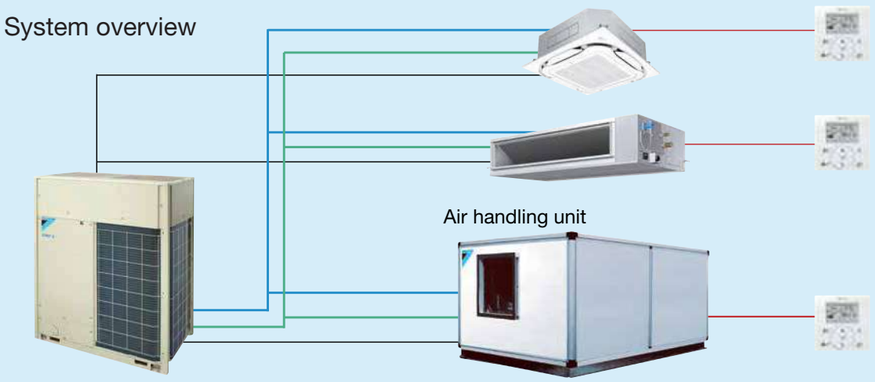
Air Handling Unit

Integrate your air handling unit in a total solution for large size spaces such as factories and large stores.

AHUR
Capacity range : 6 – 120 HP

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

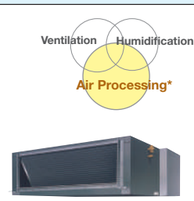
System overview



Daikin communication wire (F1, F2 communication)
Other communication wire
Liquid pipe
Gas pipe

Daikin air handling units can be connected to *VRV* systems.
This combination can be built to order as a system. Outdoor air series is also possible. Please contact your local sales office for details.

A recent trend rapidly gaining popularity is for air treatment to be required as well as air conditioning. Daikin's 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, due to the greatly enhanced performance of the thin film element. Furthermore, improved external static pressure offers more flexibility for installation. The Heat Reclaim Ventilator VKM-GA series units, equipped with a DX-coil, provide further advanced features, such as temperature adjustment to suit conditions indoors and to prevent hot air from blowing on people directly during cooling operation. The series also realises significant energy savings by exercising heat recovery.

		Outdoor-Air Processing Unit	Heat Reclaim Ventilator	
			VKM-GA Type	VAM-GJ Type
				
Connections with ***VRV*** systems	Refrigerant Piping	Connectable	Connectable	Not connectable
	Wiring	Connectable	Connectable	Connectable
	After-cool Control	Available	Available	Not available
Heat Exchange Element		–	Energy savings obtained	Energy savings obtained
High Efficiency 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/60 Hz
Airflow Rate				150 m^3/h
				250 m^3/h
				350 m^3/h
			500 m^3/h	500 m^3/h
				650 m^3/h
			800 m^3/h	800 m^3/h
		1080 m^3/h	1000 m^3/h	1000 m^3/h
		1680 m^3/h		1500 m^3/h
				2000 m^3/h
		2100 m^3/h		

*Refers to processing outdoor air close to indoor temperatures and distributing it indoor.

Air Treatment Equipment Lineup

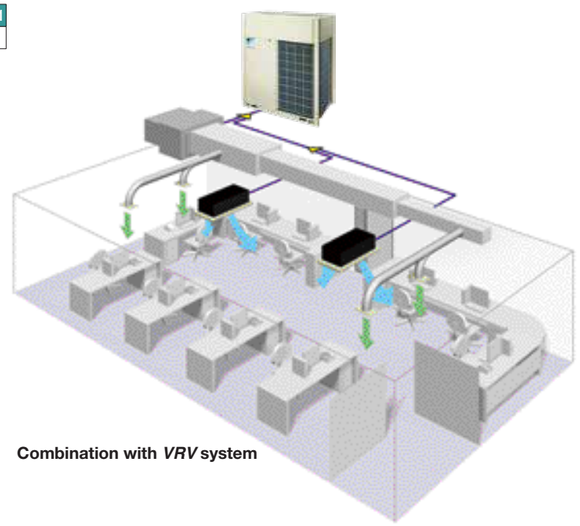
Outdoor-Air Processing Unit

Combine fresh air treatment and air conditioning, supplied from a single system.

Lineup

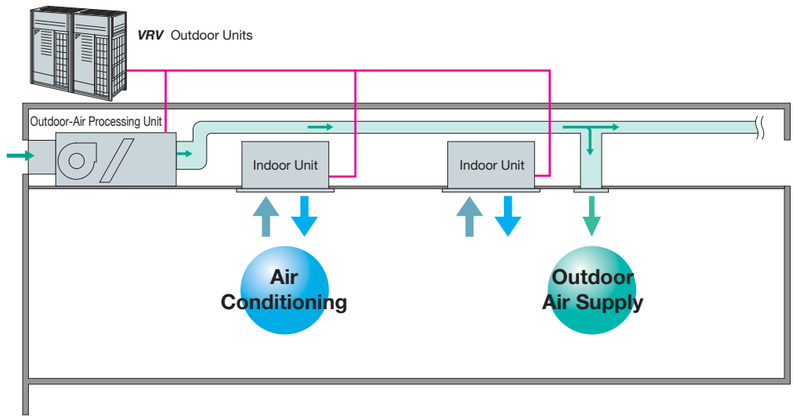
Model Name	FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
Capacity Index	125	200	250

Fresh air treatment and air conditioning can be achieved with a single system by using heat pump technology—without the usual troublesome air supply and air discharge balance design. Fan coil units for air conditioning and an outdoor-air processing unit can be connected to the same refrigerant line. This results in enhanced design flexibility and significant reduction in total system costs.



Combination with *VRV* system

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



Connection Conditions

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

- When outdoor-air processing units are connected, the total connection capacity index must be 50% to 100% of the capacity index of the outdoor units.
- When outdoor-air processing units and standard indoor units are connected, the total connection capacity index of the outdoor-air processing units must not exceed 30% of the capacity index of the outdoor units.
  Because connection is possible depending on conditions ever when the capacity index of outdoor-air processing units exceeds 30% of the capacity index of the outdoor units, contact your local distributor.
- 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. The set temperature can be varied within the range of 13–25°C during cooling operation, 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 may stop due to mechanical protection control.

- Ceiling mounted duct units with three different capacities are available. These can be connected to ***VRV*** series outdoor units to meet a variety of different requirements.

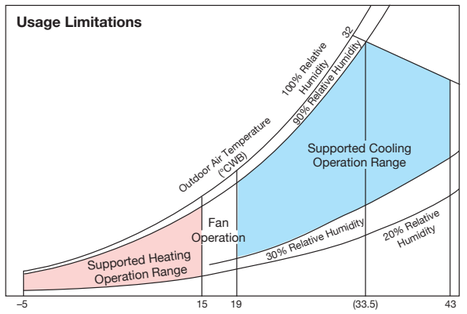
Airflow rate

FXMQ125MFV1	1,080 m³/h
FXMQ200MFV1	1,680 m³/h
FXMQ250MFV1	2,100 m³/h

- Optional equipment includes long-life filters.

- Compatible with outdoor temperatures from -5°C to 43°C.

Usage Limitations



Note:
1. 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 controls.
3. The system will not operate in fan mode when the outdoor air temperature is 5°C or below.

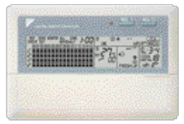
- High-performance filters with dust collection efficiencies (JIS calorimetry) of 90% and 65% are also available as options.

- For the ***VRV*** 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. Remote controllers connect to each unit separately.

BRC1E63
Navigation Remote Controller (Wired remote controller) (option)

- 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*** 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 in areas which standard indoor units are installed, as central control cannot be used with them.



DCS302CA61
Central remote controller (option)

- With the ***VRV*** system, the equipment employs the “super wiring system” so that the wiring linking the indoor and outdoor units can also be utilised for central control.

Note:
* 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, Installing or 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 standard indoor units is not supported. A separate remote controller should be connected to individual unit.
* The system will not operate in fan mode when the outdoor air temperature is 5°C or below.
* If the product is utilised 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

Standard Specifications

Indoor unit

Type				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			Btu/h	47,800	76,400	95,500
			kW	14.0	22.4	28.0
Power consumption			kW	0.359	0.548	0.638
Casing				Galvanised steel plate		
Dimensions (HxWxD)			mm	470X744X1,100	470X1,380X1,100	
Fan	Motor output		kW	0.380		
	Airflow rate		m^3/min	18	28	35
			cfm	635	988	1,236
	External static pressure	220V/240V	Pa	185/225	225/275	205/255
Air filter				*2		
Refrigerant piping	Liquid		mm	ϕ 9.5 (flare)		
	Gas		mm	ϕ 15.9 (flare)	ϕ 19.1 (brazing)	ϕ 22.2 (brazing)
	Drain		mm	PS1B female thread		
Machine weight			kg	86	123	
Sound level *3		220V/240V	dB(A)	42/43	47/48	
Connectable outdoor units *4				6 HP and above	8 HP and above	10 HP and above
Operation range (Fan mode operation between 15 and 19°C)			Cooling	19 to 43°C		
Range of the discharge temperature *5			Cooling	13 to 25°C		

Note : *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 unit.

*5. Local setting mode is not displayed on the remote controller.
- This equipment cannot be incorporated into the remote group control of the ***VRV*** system.

Options

Indoor unit

Model			FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
Operation/control	Operation remote controller		BRC1E63/BRC1C62		
	Central remote controller		DCS302CA61		
	Unified ON/OFF controller		DCS301BA61		
	Schedule timer		DST301BA61		
	Wiring adaptor for electrical appendices (1)		KRP2A61		
	Wiring adaptor for electrical appendices (2)		KRP4AA51		
Filters	Long-life replacement filter		KAFJ371L140	KAFJ371L280	
	High-efficiency filter	Colourimetric method 65%	KAFJ372L140	KAFJ372L280	
		Colourimetric method 90%	KAFJ373L140	KAFJ373L280	
	Filter chamber *1		KDJ3705L140	KDJ3705L280	
PM2.5 filtration unit *2			BAF429A20A		
PM2.5 with activated carbon filtration unit *2			BAF429A20AC		
Drain pump kit			KDU30L250VE		
Adaptor for wiring			KRP1B61		

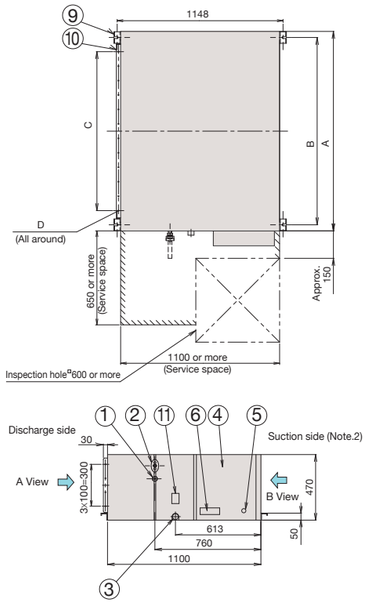
Note : *1. Filter chamber has a suction-type flange. (Main unit does not.)
- Dimensions and weight of the equipment may vary depending on the options used.
- Some options may not be usable due to the equipment installation conditions, so please confirm prior to ordering.

*2. Refer to page 80-82 for details.

- 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	ϕ15.9	ϕ9.5
FXMQ200MFV1	ϕ19.1 attached piping	ϕ9.5
FXMQ250MFV1	ϕ22.2 attached piping	ϕ9.5

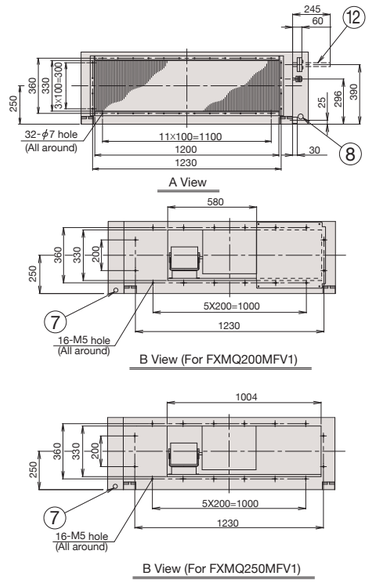
Table of dimensions

Model	A	B	C	D
FXMQ125MFV1	744	685	5X100=500	20-ϕ4.7 hole
FXMQ200MFV1	1380	1296	11X100=1100	32-ϕ4.7 hole
FXMQ250MFV1	1380	1296	11X100=1100	32-ϕ4.7 hole

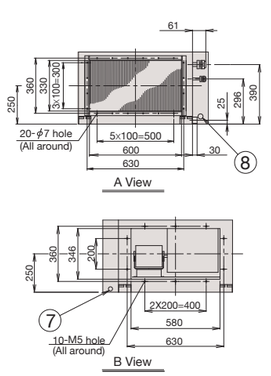
Note:
1. The attached piping in the diagram is for FXMQ200MFV1 and FXMQ250MFV1 only. The gas piping connection port (② in the diagram) has a different bore form with FXMQ125MFV1.
2. An air filter is not supplied with this unit. Be sure to mount an air filter in the suction side. [Use a filter with dust 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 condensation.

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
⑧ Transmission wiring connection
⑨ Hanger bracket
⑩ Discharge companion flange
⑪ Water supply port
⑫ Attached piping (Note. 1)

FXMQ200/250MFV1

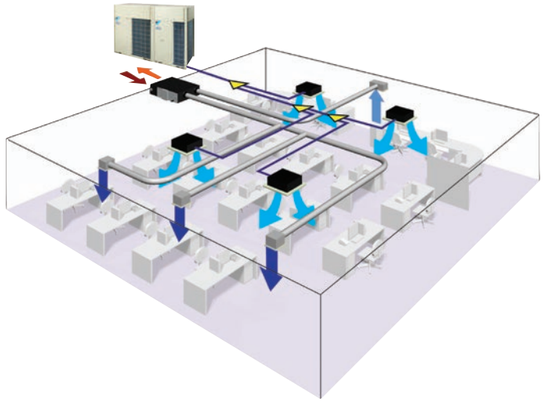


FXMQ125MFV1



Heat Reclaim Ventilator with DX-Coil — 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, with a wide variety of features cater to customer requirements.

Lineup

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

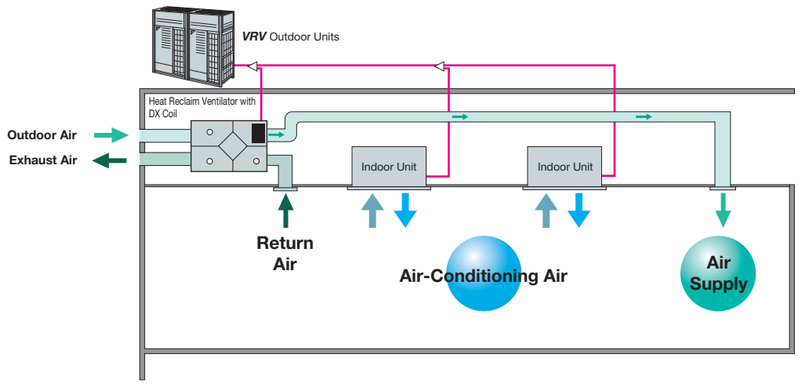
DX-coil

The Heat Reclaim Ventilator features DX-coil that contributes to the prevention of hot airflow colliding people directly during cooling operation, due to the after-cool operations done beforehand.

High static pressure

High external static pressure means enhanced design flexibility.

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



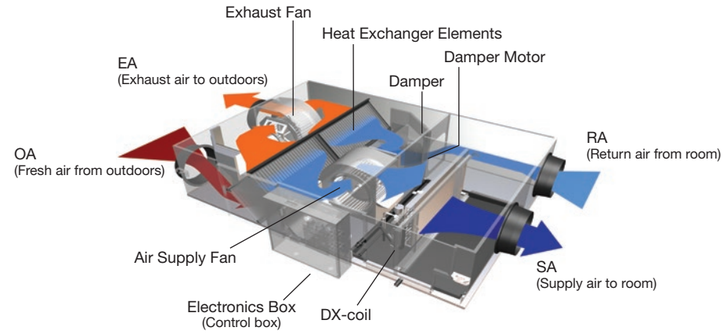
Connection Conditions

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

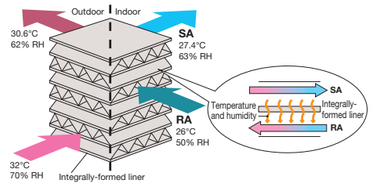
- When the Heat Reclaim Ventilator VKM series units are connected, the total connection capacity index must be 50% to 130% of the capacity index of the outdoor units.

A compact unit packed with Daikin's cutting-edge technologies.

HEP Element
(Anti-mould)



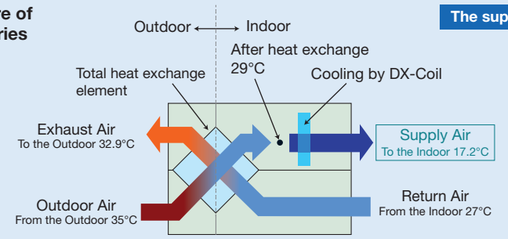
Operation of the heat exchanger element



DX-coil (Direct expansion coil)

Heat exchange and cooling process

Structure of VKM series



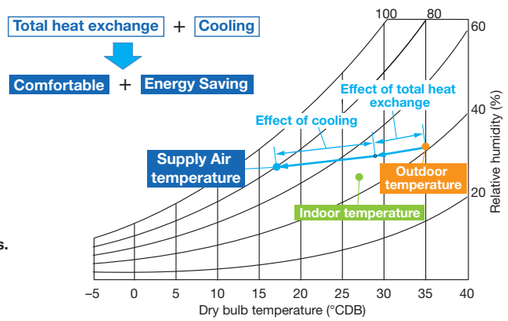
The supply air is cooled from 29°C to 17.2°C with DX-coil.

DX-Coil: Heat Exchanger which cool the supply air by the refrigerant provided from ***VRV*** outdoor unit's refrigerant.

Efficient fresh outdoor air supply with heat exchange and cooling operation.

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 air processing operations.**
- **Ventilation and cooling are possible with one remote controller.**

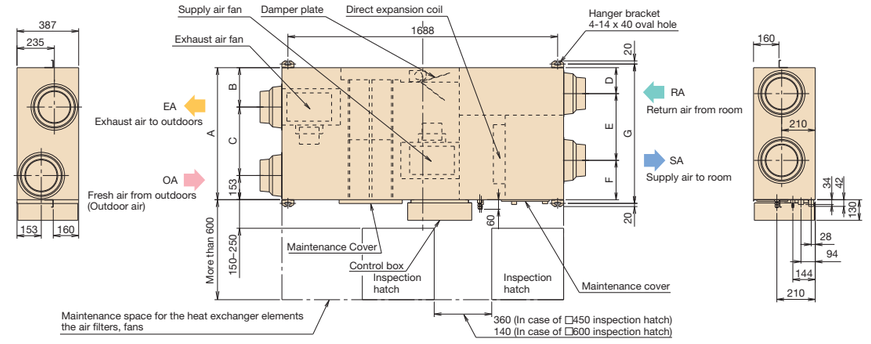
Specifications

MODEL				VKM50GAV1	VKM80GAV1	VKM100GAV1
Refrigerant				R-410A		
Power Supply				1-phase, 220–240 V, 50 Hz		
Airflow Rate & Static Pressure (Note 6)	Ultra-high	Airflow rate	m³/h	500	750	950
		Static pressure	Pa	180	170	150
	High	Airflow rate	m³/h	500	750	950
		Static pressure	Pa	150	120	100
	Low	Airflow rate	m³/h	440	640	820
		Static pressure	Pa	110	80	70
Power Consumption	Heat exchange mode	Ultra-high	W	560	620	670
		High		490	560	570
		Low		420	470	480
	Bypass mode	Ultra-high	W	560	620	670
		High		490	560	570
		Low		420	470	480
Fan Type				Sirocco Fan		
Motor Output			kW	0.280 x 2	0.280 x 2	0.280 x 2
Sound Level (Note 4) (220/230/240 V)	Heat exchange mode	Ultra-high	dB(A)	38/38.5/39	40/41/41.5	40/40.5/41
		High		36/36.5/37	37.5/38/39	38/38.5/39
		Low		33.5/34.5/35.5	34.5/36/37	35/36/36.5
	Bypass mode	Ultra-high	dB(A)	38/38.5/39	40/41/41.5	40/40.5/41
		High		36/36.5/37	37.5/38/39	38/38.5/39
		Low		33.5/34.5/35.5	34.5/36/37	35/36/36.5
Temp. Exchange Efficiency	Ultra-high		%	76	78	74
	High			76	78	74
	Low			77.5	79	76.5
Enthalpy Exchange Efficiency (Cooling)	Ultra-high		%	64	66	62
	High			64	66	62
	Low			67	68	66
Enthalpy Exchange Efficiency (Heating)	Ultra-high		%	67	71	65
	High			67	71	65
	Low			69	73	69
Casing				Galvanised Steel Plate		
Insulating Material				Self-Extinguishable Urethane Foam		
Heat Exchanging System				Air to Air Cross Flow Total Heat (Sensible + Latent Heat) Exchange		
Heat Exchanger Element				Specially Processed Nonflammable Paper		
Air Filter				Multidirectional Fibrous Fleeces		
DX-coil Capacity	Cooling (Note 2)		kW	2.8	4.5	5.6
	Heating (Note 3)			3.2	5.0	6.4
Dimensions	Height		mm	387	387	387
	Width			1,764	1,764	1,764
	Depth			832	1,214	1,214
Connection Duct Diameter			mm	ϕ200	ϕ250	
Machine Weight			kg	96	109	114
Unit Ambient Condition	Around Unit			0°C–40°CDB, 80%RH or less		
	OA (Note 7)			-15°C–40°CDB, 80%RH or less		
	RA (Note 7)			0°C–40°CDB, 80%RH or less		

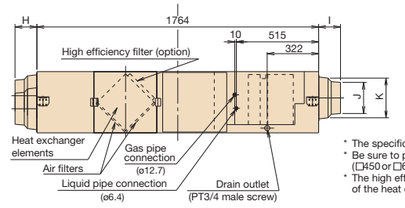
Note:
1. Cooling and heating capacities are based on the following conditions. Fan is based on High and Ultra-high.
   When calculating the capacity as indoor units, use the following figures:
   VKM50GAV1: 3.5 kW, VKM80GAV1: 5.6 kW, VKM100GAV1: 7.0 kW
2. Indoor temperature: 27°CDB, 19°CWB, Outdoor temperature: 35°CDB
3. Indoor temperature: 20°CDB, Outdoor temperature: 7°CDB, 6°CWB
4. The operating sound measured at the point 1.5 m below the centre of the unit is converted to that measured in an anechoic chamber 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 quiet room, it is required to take measures to lower the sound.
   For details, refer to the Engineering Data.
5. 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.
6. Airflow rate can be changed over to Low mode or High mode.
7. OA: fresh air from outdoor. RA: return air from room.
8. Specifications, design and information here are subject to change without notice.
9. Power consumption and efficiency depend on the above value of airflow rate.
10. Temperature exchange efficiency is the mean value for Cooling and Heating. Efficiency is measured under the following condition: Ratio of rated external static pressure outdoor to indoor is kept constant at 7 to 1.
11. 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.)
12. When connecting the indoor unit directly to the duct, always use the same system on the indoor unit as with the outdoor unit, perform group-linked operation, and make the direct duct connection settings from the remote controller. (Mode No. "17 (27)" – First code No. "5" – Second code No. "6".) Also, do not connect to the outlet side of the indoor unit. Depending on the fan strength and static pressure, the unit might back up.

Dimensions

VKM50/80/100GAV1



	VKM50GAV1	VKM80/100GAV1
A	832	1,214
B	248	439
C	431	622
D	164	183
E	420	592
F	248	439
G	878	1,262
H	137	89
I	137	89
J	ø196	ø246
K	ø250	ø263



* The specification subject to change without notice.
* Be sure to provide two inspection hatch.
(□450 or □600) at the service side of filters and elements.
* The high efficiency filter (option) can be attached to the SA surface of the heat exchanger elements.

Options

Item	Type	VKM50/80/100GAV1
Controlling device	Remote controller	BRC1E63 / BRC2E61 *1
	Centralised controlling device: Residential central remote controller	DCS303A51 *2
	Centralised controlling device: Central remote controller	DCS302CA61
	Centralised controlling device: Unified ON/OFF controller	DCS301BA61
	Centralised controlling device: Schedule timer	DST301BA61
	PC Board Adaptor: Wiring adaptor for electrical appendices	KRP2A61
	PC Board Adaptor: For humidifier running ON signal output	KRP50-2
	PC Board Adaptor: For heater control kit	BRP4A50

Item	Type	FXFSQ-A FXFQ-A	FXZQ-M	FXUQ-A	FXCQ-A	FXEQ-A	FXDQ-PD FXDQ-ND	FXDQ-SP	FXSQ-PA	FXMQ-PA	FXMQ-M	FXHQ-MA	FXHQ-A	FXAQ-A	FXLQ-MA FXNQ-MA	FXVQ-N	FXBQ-P FXBPQ-P
PC Board Adaptor: For wiring	Type (***VRV*** indoor unit)	★KRP1C11A	★KRP1BA57	–	★KRP1B61	–	★KRP1B56	–	★KRP1C64		KRP1B61	KRP1BA54		–	KRP1B61	KRP1C67	KRP1B61
	Installation box for adaptor PCB☆	Note 2, 3 KRP1H98A	Note 4 KRP1BA101	KRP1BA97	Note 2, 3 KRP1B96	–	Note 4 KRP1BA101	–	Note 2, 3 KRP4A98	Note 2, 3 KRP4A97	–	Note 3 KRP1CA93	Note 3 KRP1D93A	Note 2, 3 KRP4AA93	–		

Note:
1. Installation box ☆ is necessary for each adaptor marked ★.
2. Up to 2 adaptors can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.

*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, it cannot be used with other central control equipment.

Item	Type	VKM50GAV1	VKM80GAV1	VKM100GAV1
Additional function	Silencer	—	KDDM24B100	
	Silencer: Nominal pipe diameter (mm)	—	ϕ 250	
	Air suction/Discharge grille: White	K-DGL200B	K-DGL250B	
	Air suction/Discharge grille: Nominal pipe diameter (mm)	ϕ 200	ϕ 250	
	High efficiency filter	KAF242J80M	KAF242J100M	
	Air filter for replacement	KAF241G80M	KAF241G100M	
	Flexible duct (1 m)	K-FDS201D	K-FDS251D	
	Flexible duct (2 m)	K-FDS202D	K-FDS252D	

Heat Reclaim Ventilator — VAM series

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

Model Names

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

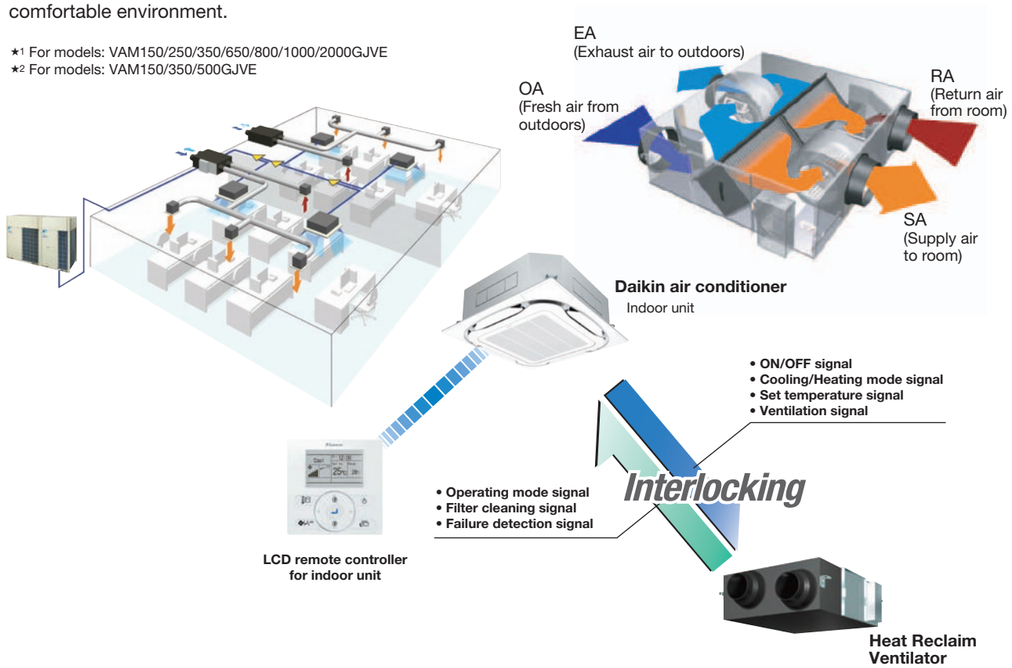
Heat Reclaim Ventilator remote controller*
BRC301B61 (Option)

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

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

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

★1 For models: VAM150/250/350/650/800/1000/2000GJVE
★2 For models: VAM150/350/500GJVE



Compact Equipment

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

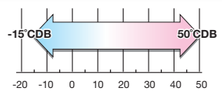
* For VAM500GJVE

Energy Conservation

Air conditioning load reduced by approximately 31%!

Cold Climate Compatible

Standard operation at temperatures down to -15°C.



Air conditioning load reduced by approximately 31%!

Total heat exchange ventilation — 23%

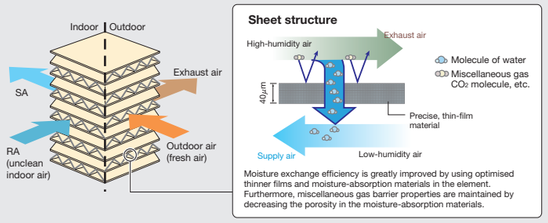
This unit recovers heat energy lost through ventilation and curbs room temperature changes caused by ventilation, thereby conserving energy and reducing the load on the air conditioning system.

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

With the thinner film...
- It can decrease the moisture resistance of the partition sheets drastically.
- Gaining more space for extra layers in the element, result in increasing of effective area that supply and exhaust air can be exposed to.

Moisture absorption increased by approx. 10%!

Thickness of the partition sheet **40 μm**



+

Auto-ventilation Mode Changeover Switching — 6%

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

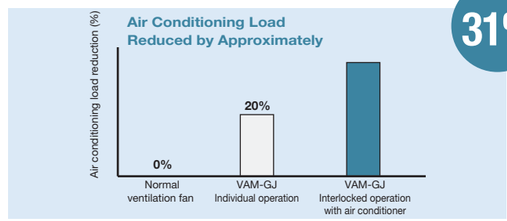
+

Pre-cool, Pre-heat Control — 2%

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

=

Air Conditioning Load Reduced by Approximately 31%



- The air conditioning load reduction values may vary according to weather and other environmental conditions at the location of the machine's installation.
- The air conditioning load reduction values are based on the following conditions;
  Application: Tokyo office building
  Building form: 6 floors above ground, 2 floors underground, floor area 2,100 m²
  Personnel density: 0.25 person/m²
  Ventilation volume: 25 m³/h
  Indoor air conditioning level: summer 25°C 50% RH, intermediate seasons 24°C 50% RH, winter 22°C 40% RH
  Operating time: 2745 hours (9 hours per day, approx. 25 days per month)
  Calculation method: simulation based on "MICRO-HASP/1982" of the Japan Building Mechanical and Electrical Engineers Association.

Nighttime free cooling operation*1

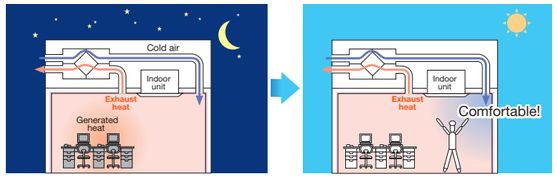
Nighttime free cooling operation is an energy-conserving function that works at night when air conditioners are off. By ventilating rooms containing office equipment that raises the room temperature, nighttime free cooling operation reduces the cooling load when air conditioners are turned on in the morning. It also alleviates feelings of discomfort in the morning caused by heat accumulated during the night.

Air conditioning sensible heat load reduced by approx. **5%*2!**

- Nighttime free cooling operation only works to cool and if connected to Building Multi or ***VRV*** systems.
- Nighttime free cooling operation is set to "off" in the factory settings, so if there is a need to turn on, please contact Daikin dealer.

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

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



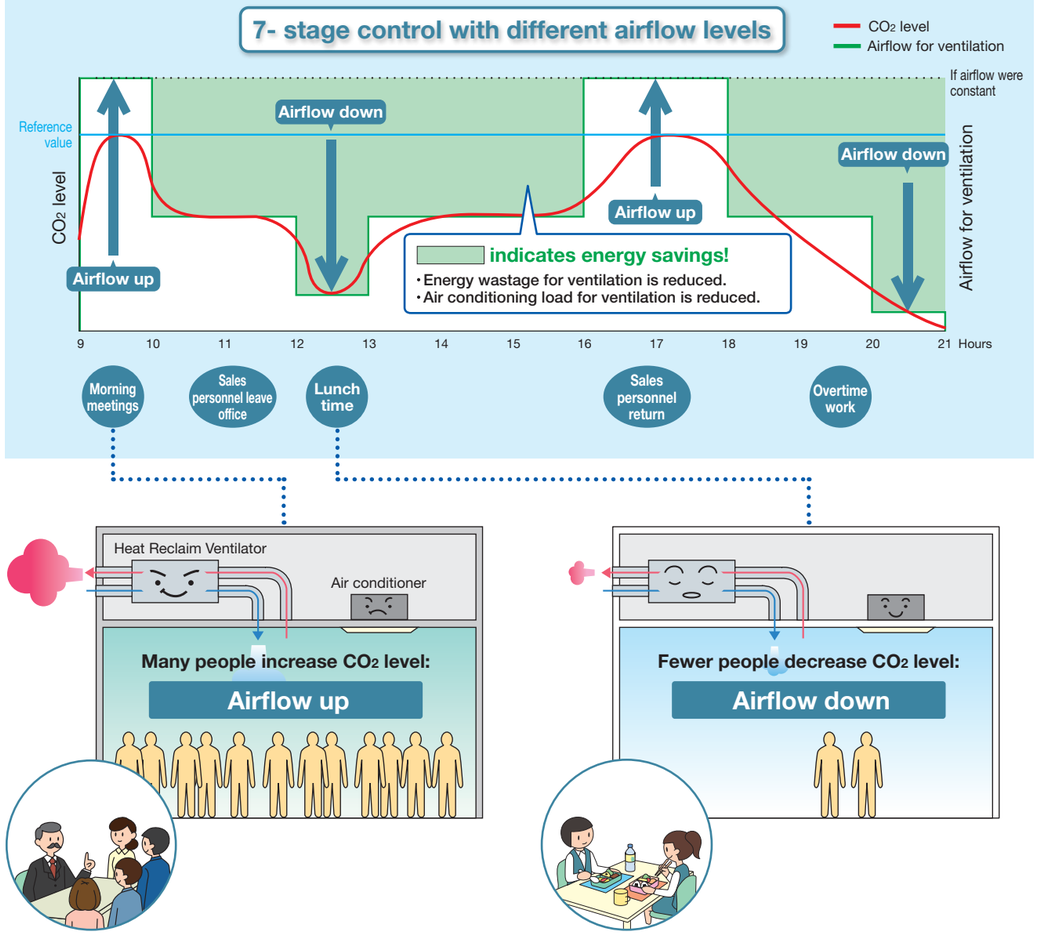
*Interlocked operation with an air conditioner

Heat Reclaim Ventilator — VAM series

CO_2 Sensor Optional Kit Connection

The CO_2 sensor controls airflow so that it best matches the changes in CO_2 level. This prevents energy losses from over-ventilation while maintaining indoor air quality with optional CO_2 sensor.

● **Example of CO_2 sensor operation in an office room:**



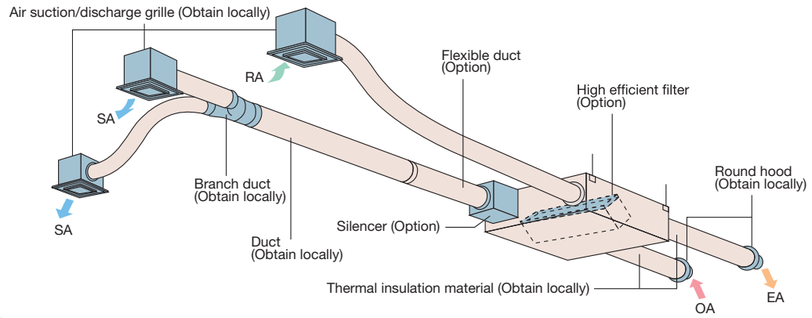
Specifications

MODEL				VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
Power Supply				1-phase, 220-240 V/ 220 V, 50/60 Hz								
Temp. Exchange Efficiency (50/60 Hz)		Ultra-High	%	79/79	75/75	79/79	74/74	75/75	72/72	78/78	72/72	77/77
		High		79/79	75/75	79/79	74/74	75/75	72/72	78/78	72/72	77/77
		Low		84/85	79/79	82/82	80/80.5	77/77.5	74/74.5	80.5/81	75.5/76	79/81
Enthalpy Exchange Efficiency (50/60 Hz)	For Cooling	Ultra-High	%	66/66	63/63	66/66	55/55	61/61	61/61	64/64	61/61	62/62
		High		66/66	63/63	66/66	55/55	61/61	61/61	64/64	61/61	62/62
		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
Power Consumption (50/60 Hz)	Heat Exchange Mode	Ultra-High	W	125/134	137/141	200/226	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542
		High		111/117	120/125	182/211	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315
		Low		57/58	60/59	122/120	128/136	196/207	435/483	476/512	835/927	966/1,039
	Bypass Mode	Ultra-High	W	125/134	137/141	200/226	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542
		High		111/117	120/125	182/211	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315
		Low		57/58	60/59	122/120	128/136	196/207	435/483	476/512	835/927	966/1,039
Sound Level (50/60 Hz)	Heat Exchange Mode	Ultra-High	dB(A)	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
		High		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
		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
	Bypass Mode	Ultra-High	dB(A)	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
		High		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
		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								
Insulation Material				Self-extinguishable polyurethane foam								
Dimensions (HXWXD)			mm	278X810X551		306X879X800		338X973X832	387X1,111X832	387X1,111X1,214	785X1,619X832	785X1,619X1,214
Machine Weight			kg	24		32		45	55	67	129	157
Heat Exchange System				Air to air cross flow total heat (Sensible heat + latent heat) exchange								
Heat Exchange Element Material				Specially processed nonflammable paper								
Air Filter				Multidirectional fibrous fleeces								
Fan	Type			Sirocco fan								
	Airflow Rate (50/60 Hz)	Ultra-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
		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
		Low		100/95	155/155	230/230	320/295	500/470	700/670	860/840	1,320/1,260	1,720/1,580
	External Static Pressure (50/60 Hz)	Ultra-High	Pa	120/154	70/96	169/222	105/150	85/125	133/170	168/192	112/150	116/140
		High		106/131	54/65	141/145	66/52	53/67	92/85	110/86	73/72	58/32
		Low		56/60	24/20	67/30	32/18	35/38	72/61	85/60	56/50	45/45
	Motor Output		kW	0.030X2		0.090X2		0.140X2	0.280X2		0.280X4	
Connection Duct Diameter			mm	ϕ100	ϕ150		ϕ200		ϕ250		ϕ350	
Unit ambient condition				-15°C–50°CDB, 80%RH or less								

Note : 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.
6. Temperature Exchange Efficiency is the mean value between cooling and heating.
7. 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 650m³/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
11. When installing in a location with particularly low background noise such as a classroom, please consider the following measures to avoid transmission sound from the main unit:
• Use of ceiling materials with high sound insulating properties (high transmission loss)
• Methods of blocking sound transmission, for example, by adding sound insulating materials around the bottom of the sound source.
Alternatively, consider supplementary methods such as installing the equipment in a different location (corridor, etc.)

Air Treatment Equipment Lineup

Options



Option List

Item \ Type				VAM150 · 250 · 350 · 500 · 650 · 800 · 1000 · 1500 · 2000GJVE														
Controlling device	Heat Reclaim Ventilator remote controller			BRC301B61														
	Centralised controlling device	Residential central remote controller		DCS303A51 *1														
		Central remote controller		DCS302CA61														
		Unified ON/OFF controller		DCS301BA61														
		Schedule timer		DST301BA61														
	PC Board Adaptor	Wiring adaptor for electrical appendices		KRP2A61														
		For humidifier		KRP50-2														
		Installation box for adaptor PCB		KRP50-2A90 (Mounted electric component assy of Heat Reclaim Ventilator)														
		For heater control kit		BRP4A50														
		For wiring	Type (*VRV* indoor unit)	FXFSQ-A FXFQ-A	FXZQ-M	FXUQ-A	FXCQ-A	FXEQ-A	FXDQ-PD FXDQ-ND	FXDQ-SP	FXSQ-PA	FXMQ-PA	FXMQ-M	FXHQ-MA	FXHQ-A	FXAQ-A	FXLQ-MA FXNQ-MA	FXVQ-N	FXBQ-P FXBPQ-P
				★KRP1C11A	★KRP1BA57	–	★KRP1B61	–	★KRP1B56	–	★KRP1C64		KRP1B61	KRP1BA54		–	KRP1B61	KRP1C67	KRP1B61
		Installation box for adaptor PCB☆		Note 2, 3 KRP1H98A	Note 4 KRP1BA101	KRP1BA97	Note 2, 3 KRP1B96	–	Note 4 KRP1BA101	–	Note 2, 3 KRP4A98	Note 2, 3 KRP4A97	–	Note 3 KRP1CA93	Note 3 KRP1D83A	Note 2, 3 KRP4AA93	–		

Note: 1. Installation box☆ is necessary for each adaptor marked★.
2. Up to 2 adaptors can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.

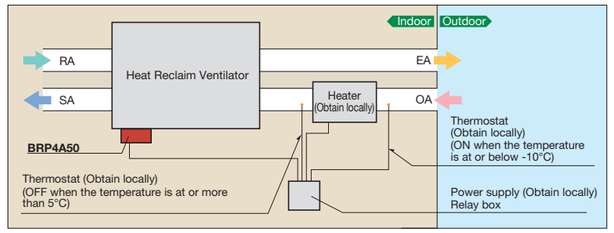
*1 For residential use only. When connect with a Heat Reclaim Ventilator (VAM), you can only switch the power ON/OFF. It cannot be used with other central control equipment.

Item \ Type			VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
Additional function	Silencer		—			KDDM24B50	KDDM24B100			KDDM24B100X2	
		Nominal pipe diameter mm	—			ϕ 200		ϕ 250			
	High efficiency filter		KAF242J25M		KAF242J50M		KAF242J65M	KAF242J80M	KAF242J100M	KAF242J80MX2	KAF242J100MX2
	Air filter for replacement		KAF241J25M		KAF241H50M		KAF241J65M	KAF241J80M	KAF241J100M	KAF241J80MX2	KAF241J100MX2
Flexible duct (1 m)			K-FDS101D	K-FDS151D		K-FDS201D		K-FDS251D			
Flexible duct (2 m)			K-FDS102D	K-FDS152D		K-FDS202D		K-FDS252D			
Duct adaptor			—							YDFA25A1	
		Nominal pipe diameter mm	—							ϕ 250	
CO_2 sensor			BRYMA65						BRYMA100	BRYMA65	BRYMA100
PM2.5 filtration unit*			BAF249A150	BAF249A300	BAF249A350	BAF249A500	—	BAF429A20A			
PM2.5 with activated carbon filtration unit*			BAF249A150C	BAF249A300C	BAF249A350C	BAF249A500C	—	BAF429A20AC			

*Refer to page 80-82 for details.

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 use 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.

PM2.5 filtration unit (Option) for VAM / FXMQ-MF series

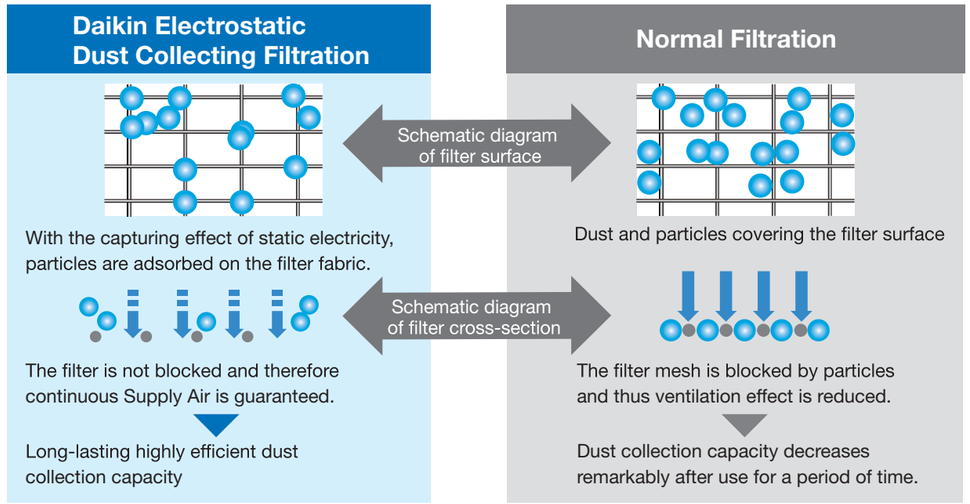
Rapid urbanization has increased industrial and automobile emissions, resulting in higher PM2.5 levels. This has become the source of respiratory diseases and poses a serious threat to a long term health issue. As the air quality has worsened, research has shown the harmful effects of PM2.5 on the health of the general public.

Double-layered efficient filtration

PM2.5 filters are double-layered.
1. The front filter effectively removes large particles.
2. The PM2.5 filter layer contains a large amount of static electricity to capture particulate matter efficiently.

Electrostatic dust collection filter: more efficient and longer lasting effect

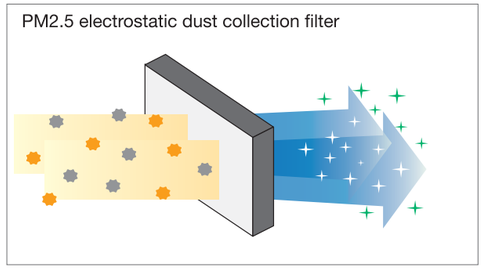
The PM2.5 filter layer contains a large amount of static electricity to capture particulate matter efficiently, including those smaller than the grid mesh.
The filter is difficult to be blocked by particles and has good ventilation and long life span.



PM2.5 filtration unit (Option) for VAM / FXMQ-MF series

Filtering PM2.5 efficiently for healthier and more comfortable environments

The PM2.5 filtering series heat reclaim ventilator is equipped with an electrostatic dust collection filter for PM2.5 removal. This filter removes 99% or more of 2.5 µm.



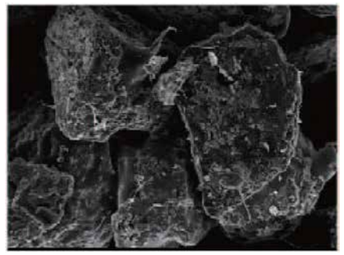
*Test results by the Heating, Ventilation and Air Conditioning Lab at Tongji University
Test environment: temperature 25-26°CDB, humidity 58-60%RH

Extra-High Performance Filter Against Sulfur Oxides and Nitrogen Oxides

Effective Use of Active Carbon Material to Enlarge the Adsorption Area

As an expert in the research and development of filters, DAIKIN has specifically selected active carbon material as the main substance to constitute the filter against sulfur oxides and nitrogen oxides. The material's usable pore surface is fully exploited, thus extending the filter's durability.

Note: Surface area of active carbon: 700 m^2/g
Given a newspaper page of 40.6 cm wide by 54.6 cm long, each gram of active carbon has a surface area of 3,000 newspaper pages.

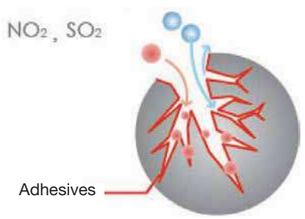


Intelligent Identification, Super-effective Adhesion

The special substance added in the pores of active carbon can exclusively target sulfur oxide and nitrogen oxide gases and stick to them without blocking other unidentified gases. This ensures long durability of the filter.

Note: The figures are based on in-house tests under the following lab conditions:
temperature 22 to 25°CDB, humidity 35 to 40% RH, air flow rate 0.2 m/s.

Unidentified Gases



PM2.5 Filtration Unit

Models			BAF249A150	BAF249A300	BAF249A350	BAF249A500	BAF429A20A
Dimensions (H × W × D)		mm	220×603×366	220×603×366	300×623×366	300×623×366	470×971×370
Connection Duct Diameter		mm	ϕ100	ϕ150	ϕ150	ϕ200	580×348
Airflow Rate		m^3/h	150	250	350	500	2,100
PM2.5 Filter	Initial Pressure Drop	Pa	34	30	31	42	less than 40
	Filter Lifetime [1]		1 year				
	Filtration Efficiency [2]		99% or higher				
	Filter Material No. [3]		BAF244A300		BAF244A500		BAF424A20A

Note: 1. Annual usage: 400 hrs/month x 12 months = 4,800 hrs
2. 99% or higher removal rate of ultra-fine particles with diameters of 2.5 µm or more.
3. Filters come with applicable filtration units with a one-year life. They can be purchased and replaced according to their model numbers.

PM2.5 with Activated Carbon Filtration Unit

Models			BAF249A150C	BAF249A300C	BAF249A350C	BAF249A500C	BAF429A20AC
Dimensions (H × W × D)		mm	220×603×366	220×603×366	300×623×366	300×623×366	470×971×370
Connection Duct Diameter		mm	ϕ100	ϕ150	ϕ150	ϕ200	580×348
Airflow Rate		m^3/h	150	250	350	500	2,100
PM2.5 Filter	Initial Pressure Drop	Pa	34	30	31	42	less than 40
	Filter Lifetime [1]		1 year				
	Filtration Efficiency [2]		99% or higher				
	Filter Material No. [3]		BAF244A300		BAF244A500		BAF424A20A
Activated Carbon Filter	Initial Pressure Drop	Pa	3	5	5	9	less than 10
	Filter Lifetime		1 year				
	Filter Material No. [3]		BAF244A300C		BAF244A500C		BAF424A20AC
Total Initial Pressure Drop for PM2.5 with Activated Carbon Filtration Unit		Pa	37	35	36	51	less than 50

Note: 1. Annual usage: 400 hrs / month × 12 months = 4,800 hrs.
2. 99% or higher removal rate of ultra-fine particles with diameters of 2.5 µm or more.
3. Filters come with applicable filtration units with a one-year life. They can be purchased and replaced according to their model numbers.

Individual Control Systems for *VRV* Systems

Navigation Remote Controller (Wired remote controller) (Option)

BRC1E63

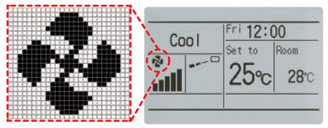
BRC1F61
(Only for FXEQ series)

This simple, modern designed remote controller with fresh white colour matches your interior design. Operation is much easier and smoother, just follow the indications on the navigation remote controller.

Clear display

•Dot matrix display

· A combation 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, select the function from the menu list.

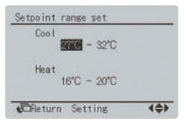
•Guide on display

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

Energy saving

•Setpoint range set

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

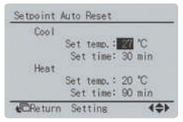


•Off timer

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

•Setpoint auto reset

· Even if the set temperature is changed, the new set temperature returns to the previous preset value after a preset duration of time.
· Period selectable from 30, 60, 90, or 120 min.



Restaurant sample

Restaurant opened	Full tables at lunchtime	After 30 minutes*
Temperature is set to 27°C	Then is lowered to 24°C for crowded room	Automatically returns to preset temperature (27°C)

*Preset-return time can be set at 30, 60, 90, or 120 min

Convenience

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

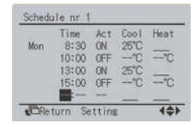
•Setback (default: OFF)

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

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

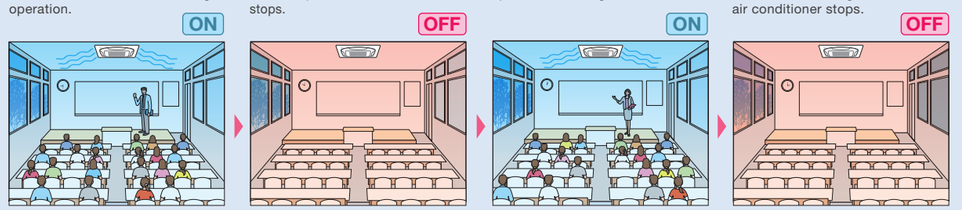
•Weekly schedule

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



College classroom sample (a summer Monday case)

1) 8:30 ON	2) 10:00 OFF	3) 13:00 ON	4) 15:00 OFF
The first period starts and the air conditioner starts the cooling operation.	In the second period, the classroom is unoccupied and the air conditioner stops.	When the third period starts, operation starts again.	After the third period, the classroom becomes vacant again and the air conditioner stops.



•Auto display off

· While operation is stopping, LCD display can be turned OFF. It will be displayed again if any button is pressed.
· Period can be preset from 10, 30, 60 minutes, and OFF. Initial setting is 30 minutes.

Comfort

•Individual airflow direction (*1)

Airflow direction can be individually adjusted for each air discharge outlet to deliver optimal air distribution that conforms to conditions for airflow direction (small and large loads).

*1. Only available for FXF(S)Q-A, FXCQ-A and FXUQ-A series.

•5-step airflow control (*2)

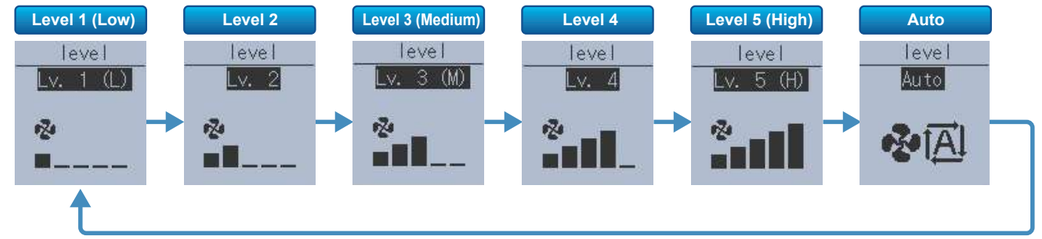
Control of airflow rate can be selected from 5-step control, which provides comfortable airflow.

*2 . The number of airflow steps differs according to the type of indoor unit. 5-step airflow is only available for FXF(S)Q-A,FXCQ-A, FXEQ-A and FXDSQ-A series.

•Auto airflow rate (*3)

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

*3 .Only available for FXF(S)Q-A, FXCQ-A, FXEQ-A, FXDQ-PD/ND, FXSQ-PA, FXMQ-PA, FXUQ-A and FXAQ-A series.



Individual Control Systems for *VRV* Systems

Simplified remote controller (Option)

New BRC2E61

Easy operation with new intuitive design

Simple operation

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

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

* The number of airflow steps and availability of auto airflow rate and swing mode depend on the type of indoor unit.

Intuitive design

•By using pictograms, the user-friendly interface enables operation is much easier and smoother.

Compact size

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

Wireless remote controller (Option)

Signal receiver unit (Installed type)

New BRC-M series

•The wireless remote controller is supplied in a set with a signal receiver.

•Signal receiver unit of installed type is contained inside decoration panel or indoor unit.

•Shape of signal receiver unit differs according to the indoor unit.

Note: The signal receiver unit shown in the photograph is for mounting inside the decoration panel of FXF(S)Q series.

New •Backlight LCD of new wireless remote controller

Pressing the backlight button helps operating in dark rooms.

Signal receiver unit (Separate type)

BRC-C, E series

•A compact signal receiver unit (separate type) to be mounted into a wall or ceiling is included.

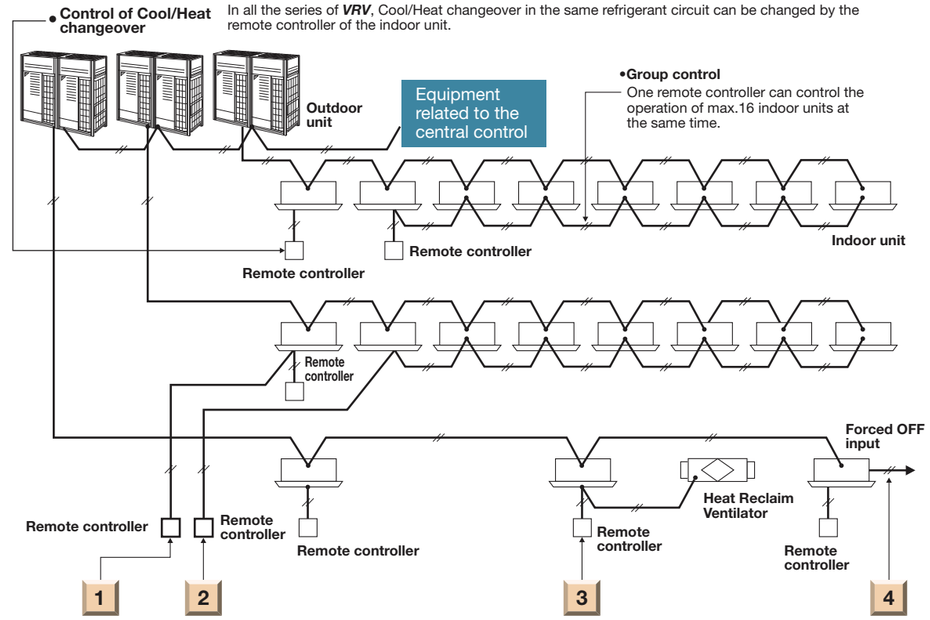
* Wireless remote controller and signal receiver unit are sold as a set.
* Refer to page 100 for the name of each model.

Wide variation of remote controllers for *VRV* indoor units

	FXFSQ	FXFQ	FXZQ	FXUQ	FXCQ	FXEQ	FXDQ	FXSQ	FXMQ	FXHQ	FXAQ	FXL(N)Q	FXVQ	FXB(P)Q
Navigation remote controller (BRC1E63)	●	●	●	●	●		●	●	●	●	●	●	●	●
Navigation remote controller (BRC1F61)						●								
Simplified remote controller (BRC2E61)		●	●	●	●	●	●	●	●	●	●	●	●	●
Wireless remote controller* (Installed type signal receiver unit)	●	●	●	●	●	●				●	●			
Wireless remote controller* (Separate type signal receiver unit)							●	●	●			●		●

*Refer to page 100 for the name of each model.

The wired remote controller supports a wide range of control functions



1 Control by two remote controllers

The indoor unit can be connected by the two remote controllers, for example one in the room and the other one in the control room, which can control the operation of indoor unit freely.(The last command has a priority.)
Of course, the group control by two remote controllers is also possible.

2 Remote control

The wiring of remote controller can be extended to max. 500 m and it is possible to install the remote controllers for different indoor units in one place.

3 Control for the combined operation

The operation of Heat Reclaim Ventilator can be controlled by the remote controller of the indoor unit. Of course, the remote controller can display the time to clean the filter.

4 Expansion of system control

The system can be expanded to add several controllers, such as BMS, Forced OFF input and etc.

Integrated Building Monitoring System

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

DIII-NET Line
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 air-conditioners in the entire building.
- Saves 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 under integral control.

Building Control System

intelligent Touch Manager

intelligent Touch Manager (DCM601A51)

Via internet

ACC Centre

Via internet

Air Conditioning Network Service System
(There are restrictions in applicable areas and release times, therefore please consult us separately for details.)
(Optional Maintenance Service)

Home Automation Master Controller

BMS

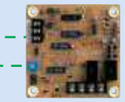
(Obtain locally)

Controllers for Centralised Control

intelligent Touch Controller (DCS601C51)

Residential central remote controller (DCS303A51)

Control /Connection Interface



Unification adaptor for computerised control (DCS302A52)

Home Automation Interface Adaptor (DTA116A51)

Interface for use in BACnet® (DMS502B51)

Interface for use in LONWORKS® (DMS504B51)

Wiring adaptor for electrical appendices (KRP2A61/62/53)

DIII-NET
(High Speed Multiple Transmission)

DIII-NET, Daikin's unique high speed multiple transmission system, links air conditioners and various other building equipment—in accordance with applications, scale and conditions—and transmits vast amounts of information between them.

VRV

VRV

Heat Reclaim Ventilator

Interface Adaptor for SkyAir Series (DTA112BA51)

SkyAir

* No adaptor is required for some indoor units.

Central Control Adaptor Kit (DTA107A55)

Packaged Air-conditioner

Interface Adaptor for DIII-NET use (KRP928BB2S)

Residential Air-conditioner

Di unit (DEC101A51)
Dio unit (DEC102A51)

Building services equipment

- Electrical equipment
- Supply water and drainage equipment
- Automatic fire alarm
- Parking equipment
- Lift
- Ventilation equipment
- Lighting
- Crime and fire prevention equipment

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.

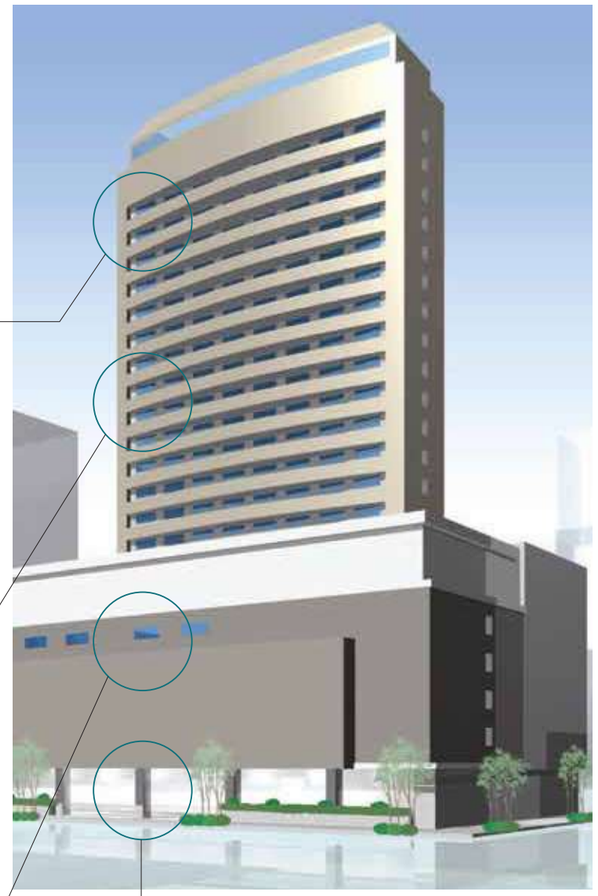
Advanced Control Systems for *VRV* Systems

intelligent touch Manager

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

DCM601A51

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

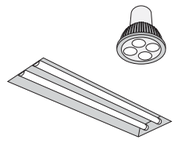


Individual air-conditioning control

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

Lighting control DALI-compatible

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



Air-conditioning control for large spaces

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

Building equipment control

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

Pump

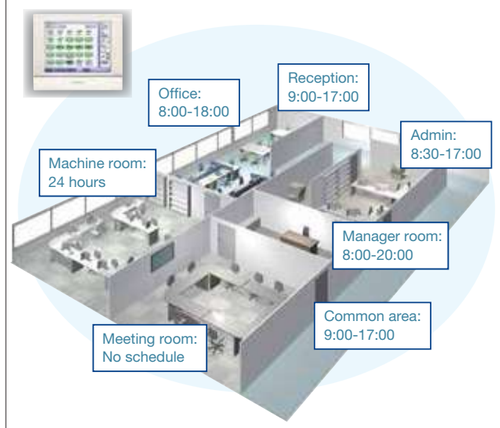
Fan

For Energy Saving & Comfort

intelligent Touch Manager maximises the advantages of *VRV* features

intelligent Touch Manager is an advanced multi-zone controller that provides the most cost-effective way to control and monitor the Daikin ***VRV*** system.
The 10.4" LCD touch screen is easy to use with three different screen views to include the floor plan layout view, icon view and list view and menus for system configurations.
It is also easy to use with standardized remote Web Access from your PC.
It can manage a total of 650 management points consisting of up to 512 Daikin indoor unit groups (up to 1024 indoor units) along with building equipment control / monitoring with Digital Inputs / Output (Di/Dio), Analog Inputs / Output (Ai/Ao) and Pulse input (Pi) optional devices.

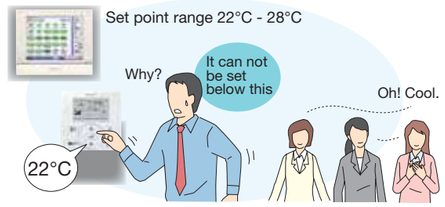
Schedule the operation time for each application.



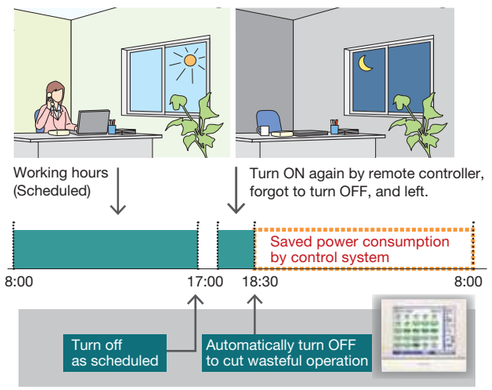
Define the setpoint range that users can change.

With Remote controller

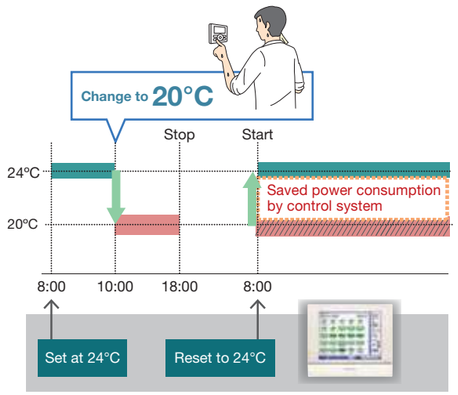
With Control System



Turn the unit OFF if a user didn't.



Reset setpoint regularly.



Advanced Control Systems for *VRV* Systems

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

Lighting control (Option)

Connection to DALI - compatible lighting control system

Simple wiring (daisy chain) enables management of LED lighting by the *intelligent Touch Manager*.
Various air conditioning and lighting control is enabled through the interlock with occupancy sensors and illuminance sensors.

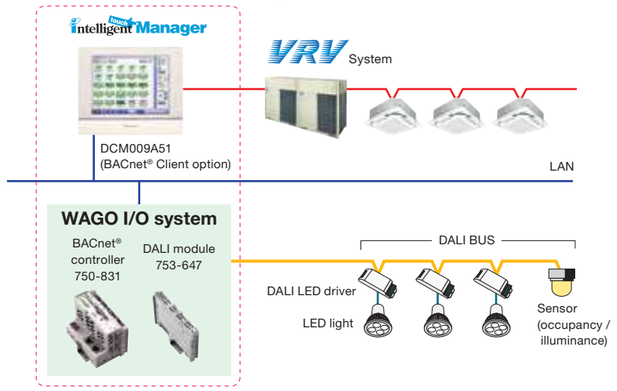
DALI-compatible
Please contact your local sales office for details.

Lighting control achieved by the *intelligent Touch Manager*

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

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

Air conditioning and lighting for which power consumption is high can be efficiently controlled to promote energy conservation and cost reduction!

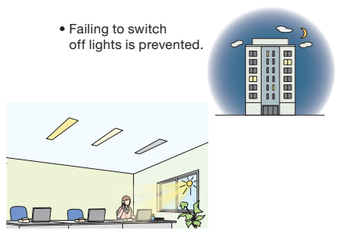


[Overview of control]
- Up to 5 DALI modules can be connected to a single BACnet® controller.
- Up to 64 DALI LED drivers (64 addresses) can be connected to a single DALI module.
- 64 DALI addresses can be freely assigned to up to 16 groups using a single DALI module. (Each group corresponds to a management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

Easy maintenance and energy saving by lighting control

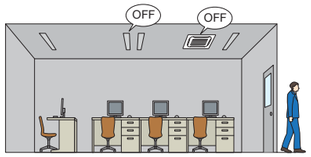
Case1

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



Case2

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



Case3

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

Lighting maintenance becomes easier and quicker.

The layout screen enables quick identification of specific locations.

Tenant Management (PPD* Option)

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

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

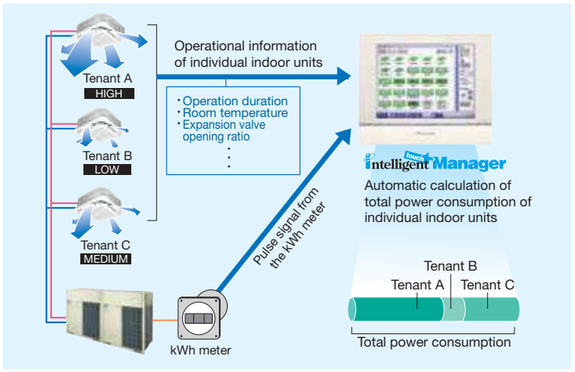
The energy consumption is proportionally calculated for each indoor unit. The data can be used for energy management and calculation of air conditioning usage fees for respective tenants.

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

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

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

*PPD (Power Proportional Distribution) is Daikin's proprietary calculation method.

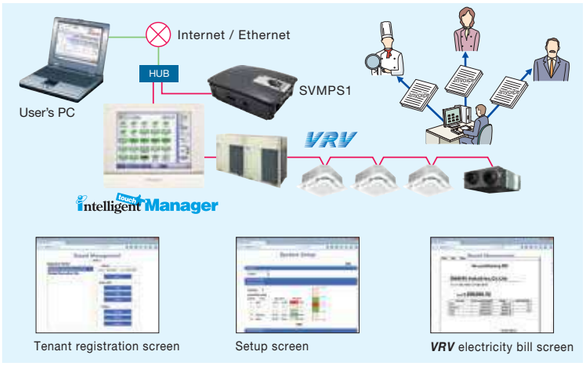


Air conditioning bills can be issued by one click

Electricity bills can be easily calculated for each tenant (Option)

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

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

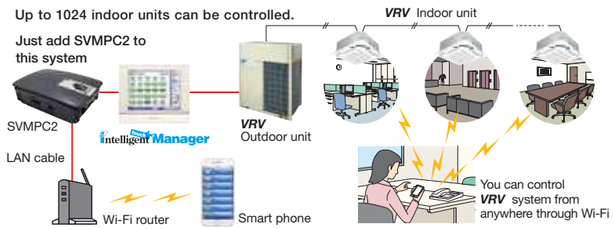


Effective service functions offered to tenants

Smart phone will be a remote controller of *VRV* system (Option)

Users can operate and check the status of ***VRV*** system from their smartphones via Wi-Fi.
It is not necessary to move where a remote controller is located with this feature.
VRV system in other rooms can be operated, and their status can be checked.
It is also possible to check if air conditioners in other rooms remain switched on etc., helping achieve energy saving.

For buildings ***VRV*** Smart Phone Remote Controller

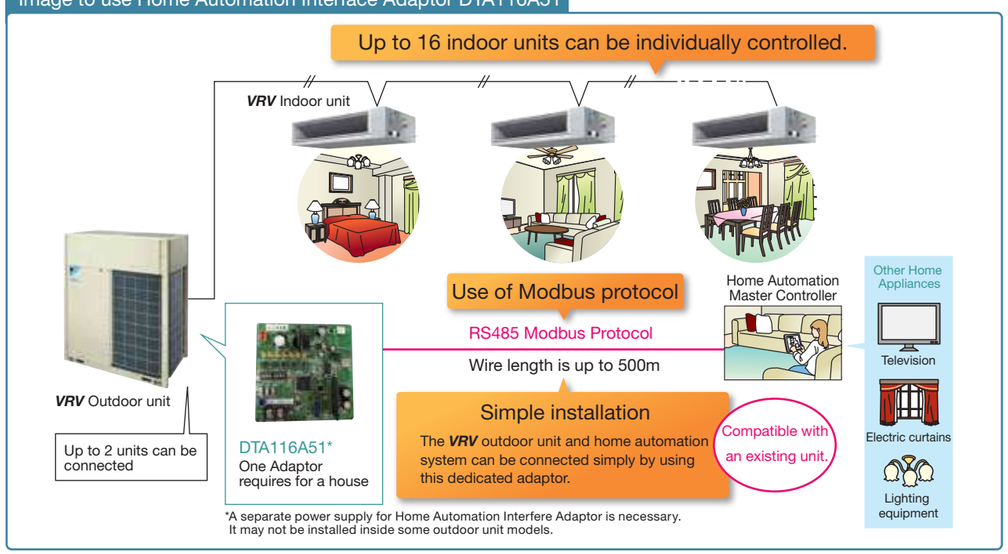


Advanced Control Systems for *VRV* Systems

Home Automation Interface Adaptor

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

Image to use Home Automation Interface Adaptor DTA116A51



Functions

● Monitor

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

● Control

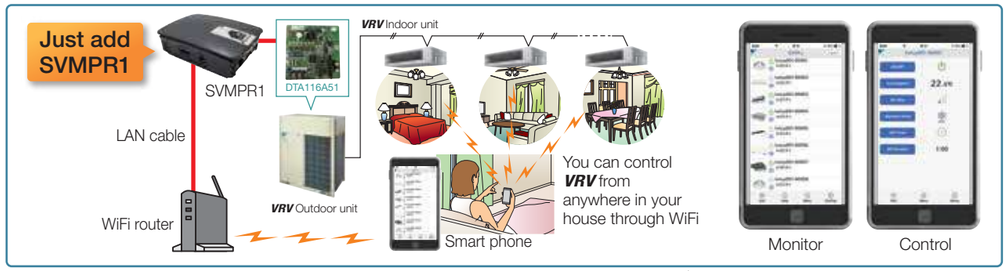
On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Cooling/Heating setpoint
Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Filter sign reset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

● Retrieve system information

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

VRV Smart Phone Control System

VRV Smart Phone Control System can be realized by SVMPR1 which is a new product to utilize DTA116A51.



★Modbus is a registered trademark of Schneider Electric S.A.

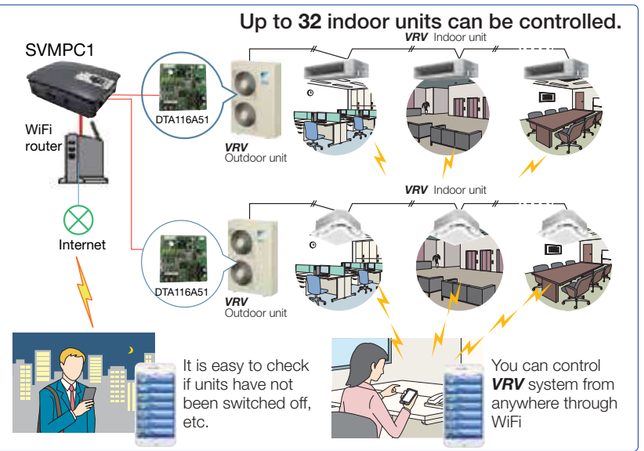
VRV Tablet and Smartphone Controller : SVMPC1

The SVMPC1 is easy to install, and enables monitoring and operation of *VRV* systems via tablets and smartphones. It is optimal for centralized management of *VRV* systems in small buildings or on individual floors of a building.

Simple and easy Smart Control

- SVMPC1 is easy to install. Just add DTA116A51 to outdoor unit and connect it to controller.
- Thanks to user-friendly screen, anyone can operate easily.

- Set point range limitation and setback function achieve energy saving and comfortable air-conditioning.
- Daily air-conditioning operation is automatically done by schedule function with annual calendar.
- Quick notification of malfunction by e-mail to support quick maintenance.



Functions

Category	Function	Detail
Main screen	Status monitoring	On/Off, Setpoint, Operation mode, Fan step, Flap, Error, Error code, Room Temperature
	Manual operation	On/Off, Setpoint, Operation mode, Fan step, Flap, Scene Control
Automatic control	Setpoint range limitation*	Cool setpoint min/max, Heat setpoint min/max
	Off timer*	Off timer on/off, Off timer duration (5min – 12h, every 5min)
	Setback operation*	Setback setpoint range (Cool: 24-35°C, Heat: 10-20°C)
	Schedule*	Action registration: Time, On/Off, Setpoint, Operation mode, Fan step, Flap, Off timer on/off, Setback setpoint
		Calendar setting: set by date or day of the week
	Interlock	Interlock operation depend on equipment status
System setting		Language, Password setting, User administration*, Point setting*

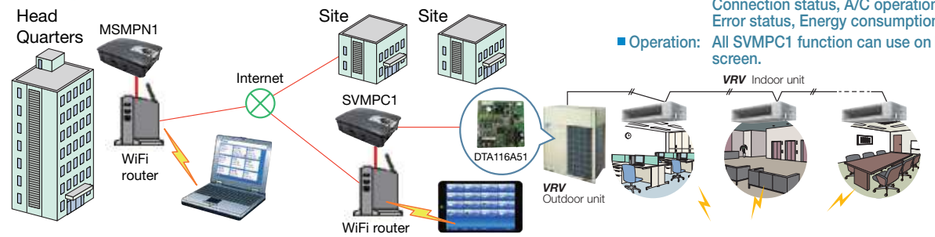
*: Only admin user can set.

Specifications

Category	Specification	Detail
Connectable units	Number of indoor units	Max 16 (per DTA116A51)
	Number of DTA116A51	Max 2 (maximum of 32 indoor units can be connected)
Connectable device	Number of Tablet/Smartphone	Max 20
	Device type	iPad, iPhone, Android tablet, Android Phone, Windows Tablet, Windows Phone, Windows PC, Mac
	Web browser	Firefox, Chrome, Safari

Multi Site Management System by using SVMPC1: MSMPN1

The MSMPN1 enables monitoring and operation of all *VRV* system connected via SVMPC1 on each site.



Function

- Monitoring: All site information show on a MSM screen. Connection status, A/C operation status, Error status, Energy consumption etc.
- Operation: All SVMPC1 function can use on MSM screen.

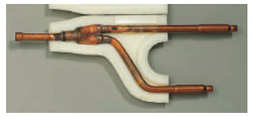
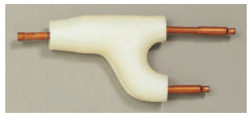
Outdoor Units

VRV X SERIES

No.	Item / Type		RXUQ6A RXUQ8A RXUQ10A	RXUQ12A RXUQ14A RXUQ16A RXUQ18A RXUQ20A	RXUQ12AM RXUQ14AM RXUQ16AM RXUQ18AM RXUQ20AM	RXUQ18AM1 RXUQ20AM1 RXUQ22AM RXUQ22AM-SG
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H (Max. 4 branch) (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)		
		REFNET joint	KHRP26A22T, KHRP26A33T	KHRP26A22T, KHRP26A33T, KHRP26A72T		
2	Outdoor unit multi connection piping kit		–		BHFP22P100	

No.	Item / Type		RXUQ24AM RXUQ24AM-SG RXUQ26AM RXUQ28AM RXUQ30AM	RXUQ32AM RXUQ34AM RXUQ36AM RXUQ38AM RXUQ40AM	RXUQ30AM-SG RXUQ32AM-SG RXUQ34AM-SG RXUQ36AM-SG RXUQ38AM-SG RXUQ40AM-SG	RXUQ42AM RXUQ44AM RXUQ46AM RXUQ48AM RXUQ50AM	RXUQ52AM RXUQ54AM RXUQ56AM RXUQ58AM RXUQ60AM
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)				
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T				
2	Pipe size reducer		KHRP26M73TP, KHRP26M73HP				
3	Outdoor unit multi connection piping kit		BHFP22P100		BHFP22P151		

REFNET joint (KHRP26A22/33/72/73T)

Option PCB

No.	Item / Type	RXUQ6A RXUQ8A	RXUQ10A RXUQ12A RXUQ14A RXUQ16A RXUQ18A RXUQ20A	RXUQ12AM RXUQ14AM RXUQ16AM RXUQ18AM1 RXUQ20AM1	RXUQ18AM RXUQ20AM
1	DIII-NET expander adaptor ★	DTA109A51			
2	External control adaptor ★	DTA104A61			
3	Home Automation Interface Adaptor ★	DTA116A51			
4	Option plate for control adaptor	–	BKS26A *1	–	BKS26A *1

No.	Item / Type	RXUQ22AM RXUQ24AM RXUQ26AM RXUQ28AM RXUQ30AM	RXUQ32AM RXUQ34AM RXUQ36AM RXUQ38AM RXUQ40AM	RXUQ42AM RXUQ44AM RXUQ46AM RXUQ48AM RXUQ50AM	RXUQ52AM RXUQ54AM RXUQ56AM RXUQ58AM RXUQ60AM
1	DIII-NET expander adaptor ★	DTA109A51			
2	External control adaptor ★	DTA104A61			
3	Home Automation Interface Adaptor ★	DTA116A51			
4	Option plate for control adaptor	BKS26A *1			

Note: *1. This plate is necessary for each adaptor marked★.

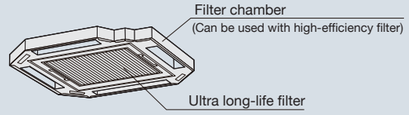
VRV Indoor Units

Options of Ceiling Mounted Cassette (Round Flow with Sensing & Round Flow) Type

Options required for specific operating environments

Ultra long-life filter unit

Even in dusty environments where the air conditioning is constantly operating, the ultra long-life filter only has to be cleaned once a year.



Dusty area: annual filter change

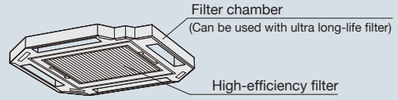
*For dust concentration of 0.3 mg/m³ (Requires separately sold Air purifier.)
1 year (Approx. 5,000 hr) ≒15 hr/day x 28 day/month x 12 month/year

Ordinary store or office: filter change every 4 years

*For dust concentration of 0.15 mg/m³
4 years (Approx. 10,000 hr) ≒ 8 hr/day x 25 day/month x 12 month/years x 4 years

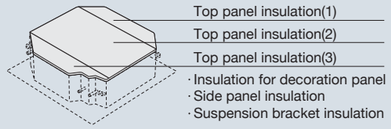
High-efficiency filter unit

Available in two types: 65% and 90% colorimetry.



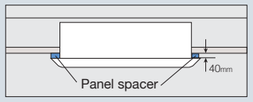
Insulation kit for high humidity

Please use if you think the temperature and humidity inside the ceiling exceeds 30°C and RH 80%, respectively.



Panel spacer

Use when only minimal space is available between drop ceilings and ceiling slabs.



Note: Some ceiling constructions may hinder installation. Contact your Daikin Dealer before installing your unit.

Sealing material of air discharge outlet

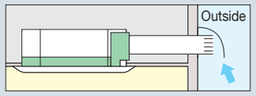
Sealing material block air discharge openings not used in 2-way or 3-way blow.

Branch duct chamber

This chamber lets you connect a round flexible duct to the air discharge opening at any time after the original installation.

Fresh air intake kit Note 1.2

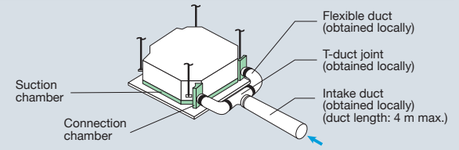
Using this kit, a duct can be connected to take in outdoor air. There are two chamber types that have intake in two places: with T-duct joint and without T-duct joint.



The units can be installed in the following different ways

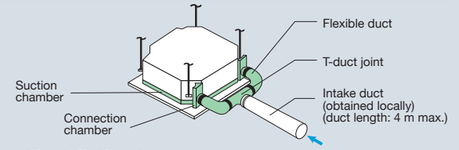
Chamber type (without T-duct joint) Note 3.4.5

KDDP55B160



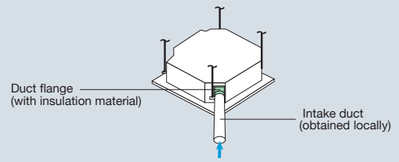
Chamber type (with T-duct joint) Note 3.4.5

KDDP55B160K



Direct installation type Note 6

KDDP55X160A



Note: 1. Use of options will increase operating sound.
2. Connecting ducts, fan, insect nets, fire dampers, air filters, and other parts should, as required, be obtained locally.
3. When a local-obtained fan is used, an interlock with air conditioner is necessary.Optional PCB (KRP1C11A) is required for interlocking.
4. When installing a fresh air intake kit (chamber type), two air outlet corners are closed.
5. It is recommended that the volume of outdoor air introduced through the kit is limited to 10% of the maximum airflow rate of the indoor unit. Introducing higher quantities will increase the operating sound and may also influence temperature sensing.
6. The volume of fresh air for direct installation type is approximately 1% of the indoor unit airflow.
The chamber type is recommended when more fresh air is necessary.

Option List

Ceiling Mounted Cassette (Compact Multi Flow) Type

No.	Item	Type	FXZQ20M	FXZQ25M	FXZQ32M	FXZQ40M	FXZQ50M
1	Decoration panel		BYFQ60B3W1				
2	Sealing material of air discharge outlet		KDBH44BA60				
3	Panel spacer		KDBQ44BA60A				
4	Replacement long-life filter		KAF441C60				
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		KAF5511D160	

Ceiling Mounted Cassette (Double Flow) Type

No.	Item	Model	FXCQ20A	FXCQ25A	FXCQ32A	FXCQ40A	FXCQ50A	FXCQ63A	FXCQ80A	FXCQ125A
1	Decoration panel		BYBCQ40CF				BYBCQ63CF		BYBCQ125CF	
2	High efficiency filter *1	65 %	KAF532C50				KAF532C80		KAF532C160	
		90 %	KAF533C50				KAF533C80		KAF533C160	
3	Filter chamber for bottom suction		KDDFP53B50				KDDFP53B80		KDDFP53B160	
4	Long life replacement filter		KAF531C50				KAF531C80		KAF531C160	

Note: *1. If installing high efficiency filter, filter chamber is required.

Ceiling Mounted Cassette (Single Flow) Type

No.	Item	Type	FXEQ20A FXEQ25A	FXEQ32A FXEQ40A	FXEQ50A FXEQ63A
1	Decoration panel		BYEP40AW1		BYEP63AW1

Slim Ceiling Mounted Duct Type (Standard Series)

No.	Item	Type	FXDQ20PD	FXDQ25PD	FXDQ32PD	FXDQ40ND	FXDQ50ND	FXDQ63ND
1	Insulation kit for high humidity		KDT25N32			KDT25N50		KDT25N63

Middle Static Pressure Ceiling Mounted Duct Type

No.	Item	Type	FXSQ20PA FXSQ25PA FXSQ32PA	FXSQ40PA	FXSQ50PA FXSQ63PA FXSQ80PA	FXSQ100PA FXSQ125PA	FXSQ140PA
1	High efficiency filter *1	65%	KAF632C36	KAF632C56	KAF632C80	KAF632C160	KAF632B160B
		90%	KAF633C36	KAF633C56	KAF633C80	KAF633C160	KAF633B160B
2	Filter chamber (for rear suction) *1		KDDFP63B36	KDDFP63B56	KDDFP63B80	KDDFP63B160	KDDF63B160B
3	Long-life filter *1		KAF631C36	KAF631C56	KAF631C80	KAF631C160	KAF631B160B
4	Service panel	White	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W	
		Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25K160F	
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	
5	Air discharge adaptor		KDAP25A36A	KDAP25A56A	KDAP25A71A	KDAP25A140A	KDAP25A160A *2
6	Shield plate for side plate		KDBD63A160				–

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

VRV Indoor Units

Ceiling Mounted Duct Type

No.	Item	Type	FXMQ20PA FXMQ25PA FXMQ32PA	FXMQ40PA	FXMQ50PA FXMQ63PA FXMQ80PA	FXMQ100PA FXMQ125PA FXMQ140PA	FXMQ200M FXMQ250M
1	Drain pump kit		–				KDU30L250VE
2	High efficiency filter	65%	KAF372AA36	KAF372B56	KAF372B80	KAF372B160	KAFJ372M280
		90%	–	KAF373B56	KAF373B80	KAF373B160	KAFJ373M280
3	Filter chamber		–	KDDF37AA56	KDDF37AA80	KDDF37AA160	KDJ3705L280
4	Long life replacement filter		–	KAF371B56	KAF371B80	KAF371B160	KAFJ371M280
5	Long life filter chamber kit		–	KAF375B56	KAF375B80	KAF375B160	–
6	Service panel	White	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W	–
		Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25K160F	–
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	–
7	Air discharge adaptor		KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A	–

Ceiling Suspended Type

No.	Item	Type	FXHQ32MA	FXHQ63MA	FXHQ100MA	FXHQ125A	FXHQ140A
1	Drain pump kit		KDU50N60VE	KDU50N125VE		KDU50R160	
2	Replacement long-life filter		KAFJ501D56	KAFJ501D80	KAFJ501D112	KAF501B160	
3	L-type piping kit (for upward direction)		KHFP5M63	KHFP5M160		KHFP5N160	
4	Fresh air intake kit		-			KDDQ50A140	

Wall Mounted Type

No.	Item	Type	FXAQ20A	FXAQ25A	FXAQ32A	FXAQ40A	FXAQ50A	FXAQ63A
1	Drain pump kit		K-KDU572EVE					

Floor Standing Type

No.	Item	Type	FXLQ20MA FXLQ25MA	FXLQ32MA FXLQ40MA	FXLQ50MA FXLQ63MA
1	Long life replacement filter		KAF361L28	KAF361L45	KAF361L71

Concealed Floor Standing Type

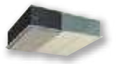
No.	Item	Type	FXNQ20MA FXNQ25MA	FXNQ32MA FXNQ40MA	FXNQ50MA FXNQ63MA
1	Long life replacement filter		KAF361L28	KAF361L45	KAF361L71

VRV Indoor Units

Floor Standing Duct Type

No.	Item			Type	FXVQ125N	FXVQ200N	FXVQ250N	FXVQ400N	FXVQ500N
1	Discharge and Suction	Replacement long life filter			KAF261M140	KAF261M224	KAF261M280	KAF261N450	KAF261N560
2		Ultra long-life filter			–			KAFSJ9A400	KAFSJ9A560
3		Front suction filter chamber for high efficiency filter	Front suction base flange		KD-9A140	KD-9A200	KD-9A280	KD-9A400	KD-9A560
4			Suction grille		KDGF-9A140	KDGF-9A200	KDGF-9A280	KDGF-9A400	KDGF-9A560
5			Filter chamber for high efficiency filter *1, 2	Replacement long-life filter *1, 2, 3	KAF-91B140	KAF-91B200	KAF-91B280	KAF-91B400	KAF-91B560
6				Replacement high efficiency filter 65% *1, 3	KAF-92B140	KAF-92B200	KAF-92B280	KAF-92B400	KAF-92B560
7				90% *2, 3	KAF-93B140	KAF-93B200	KAF-93B280	KAF-93B400	KAF-93B560
8				Filter chamber *1, 2	KDDF-9A140	KDDF-9A200	KDDF-9A280	KDDF-9A400	KDDF-9A560
9		Plenum chamber *4			KPCJ140A	KPC5J	KPC8J	KPCJ400A	KPC15JA
10		Pulley for plenum chamber *4			KPP8JA	KPP9JA	KPP10JA	–	
11		Fresh air intake kit			KD106D10			KDFJ906A560	
12		Rear suction kit			KDFJ905B140	KDFJ905B200	KDFJ905B280	KDFJ905B400	KDFJ905B560
13		Discharge grille for plenum side			KD101A10			KD101A20	
14	Wood base				KKWJ9A140	KWF1G5P	KWF1G8P	KKWJ9A400	KWF1G15
15	Vibration isolating frame				K-ABSG1406A	K-ABSG1407A	K-ABSG1408A	K-ABSG1409A	K-ABSG1410A

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



Clean Room Air Conditioner

No.	Item		Type	FXBQ40P	FXBQ50P	FXBQ63P	FXBPQ63P
1	Outlet unit			–			BAF82A63
2	Filter	HEPA filter		BAFH82A50		BAFH82A63	
3	Panel	Ceiling intake type		BYB82A50C		BYB82A63C	BYB82A63CP
4		Floor-level intake type		BYB82A50W		BYB82A63W	BYB82A63WP
5	Outside air intake duct flange			KDFJ82A80			

Residential Indoor Units with connection to BP units

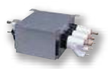
Slim Ceiling Mounted Duct Type

No.	Item	Type	FDKS25EA FDKS35EA	FDKS25CA FDKS35CA FDKS50C	FDKS60C
1	Insulation kit for high humidity		KDT25N32	KDT25N50	KDT25N63

Wall Mounted Type

No.	Item	Type	FTKS25DVM FTKS35DVM	FTKS50BVMA	FTKS50FVM FTKS60FVM FTKS71FVM
1	Titanium apatite deodorising filter		KAF970A46	KAF952A42	KAF970A46
2	Dust collection filter (PM 2.5) with frame		-		
3	Dust collection filter (PM 2.5) without frame		-		

Note: *1. Filter is a standard accessory. It should be replaced approximately 3 years.



BP Units for Connection to Residential Indoor Units

No.	Item	Type	BPMKS967A2	BPMKS967A3
1	REFNET joint		KHRP26A22T	

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

Control Systems

New Design

Remote sensor
BRCS01A-1(4)

Operation Control System Optional Accessories

For *VRV* indoor unit use

No.	Item	Type	FXFSQ-A	FXFQ-A	FXZQ-M	FXUQ-A	FXCQ-A	FXEQ-A	FXDQ-PD FXDQ-ND	FXDQ-SP
1	Navigation remote controller		BRC1E63 Note 5		BRC1E63	BRC1E63 Note 5	BRC1E63	BRC1F61	BRC1E63	
2	Simplified remote controller		—	BRC2E61					BRC2E61	
3	Wireless remote controller		BRC7M635F (Fresh White) / BRC7M635K (Black)		BRC7E531W	BRC7CB59	BRC7M66	BRC4M63	BRC4C66	
4-1	Adaptor for wiring (operation status output)		★BRP11B62		★BRP11B61	—			★BRP11B61	—
4-2	Adaptor for wiring		★KRP1C11A		★KRP1BA57	—	★KRP1B61	—	★KRP1B56	—
5-1	Wiring adaptor for electrical appendices (1)		—		★KRP2A62	—	★KRP2A61	—	★KRP2A53	—
5-2	Wiring adaptor for electrical appendices (2)		★KRP4AA53			★KRP4AA53	★KRP4AA51	—	★KRP4A54	—
6	Remote sensor (for indoor temperature)		KRCS01-5B		BRCS01A-1	BRCS01A-4	KRCS01-6B	BRCS01A-4	BRCS01A-1	
7	Installation box for adaptor PCB☆		Note 2, 3 KRP1H98A		Note 4 KRP1BA101	KRP1BA97	Note 2, 3 KRP1B96	—	Note 4 KRP1BA101	—
8	External control adaptor for outdoor unit		★DTA104A62			—	★DTA104A61	—	★DTA104A53	—
9	Adaptor for multi tenant		★DTA114A61		—					

No.	Item	Type	FXSQ-PA	FXMQ-PA	FXMQ-M	FXHQ-MA	FXHQ-A	FXAQ-A	FXLQ-MA FXNQ-MA	FXVQ-N	FXBQ-P FXBPQ-P
1	Navigation remote controller		BRC1E63							BRC1E63 Note 6, 7	BRC1E63
2	Simplified remote controller		BRC2E61							BRC2E61 Note 7	BRC2E61
3	Wireless remote controller		BRC4C66		BRC4C64	BRC7EA66	BRC7M56	BRC7M676	BRC4C64	–	BRC4C64
4-1	Adaptor for wiring (operation status output)		★BRP11B62		BRP11B62	★BRP11B61		–	BRP11B62	–	BRP11B62
4-2	Adaptor for wiring		★KRP1C64		KRP1B61	KRP1BA54		–	KRP1B61	KRP1C67	KRP1B61
5-1	Wiring adaptor for electrical appendices (1)		★KRP2A61		KRP2A61	★KRP2A62	–	★KRP2A61	KRP2A61	KRP2A62	KRP2A61
5-2	Wiring adaptor for electrical appendices (2)		★KRP4AA51		KRP4AA51	★KRP4AA52		★KRP4AA51	KRP4AA51	–	KRP4AA51
6	Remote sensor (for indoor temperature)		BRCS01A-4		BRCS01A-1	BRCS01A-1	BRCS01A-4	KRCS01-6B	BRCS01A-1		
7	Installation box for adaptor PCB☆		Note 2, 3 KRP4A98	Note 2, 3 KRP4A97	—	Note 3 KRP1CA93	Note 3 KRP1D93A	Note 2, 3 KRP4AA93	—		
8	External control adaptor for outdoor unit		★DTA104A61		DTA104A61	★DTA104A62		★DTA104A61	DTA104A61	Note 8 DTA104A62	DTA104A61
9	Adaptor for multi tenant		★DTA114A61		—	—		★DTA114A61	—		
10	External control adaptor for cooling/heating		—							KRP6A1 Note 8	—
11	Remote controller with key		—							KRCB37-1	—

Note: 1. Installation box☆is necessary for each adaptor marked★.
2. Up to 2 adaptors can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.
5. Some functions can be set only via the wired remote controller BRC1E63 or BRC1F61. They cannot be set via other remote controllers. Please refer to each indoor unit and remote controller page for function details.
6. Since the control panel is equipped as standard, use the option of BRC1E63 for 2 remote control system.
7. When using BRC1E63 or BRC2E61, be sure to remove the control panel and since BRC1E63 and BRC2E61 cannot be stored inside the indoor unit, please place it separately.
8. Remove the group control adaptor which is a standard equipment before mounting KRP6A1 and DTA104A62. KRP6A1 and DTA104A62 cannot be mounted to the same indoor unit at the same time.

New

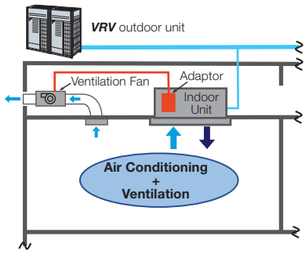
Adaptor for wiring
(operation status output)

BRP11B61

BRP11B62

By installing it in the indoor unit with a simple wire connection, this adaptor takes out the operating signals for the indoor unit fan and the compressor and enables the interlocking of equipment such as the ventilation fan.

Example: Interlocking operation of the indoor unit and ventilation fan that takes in fresh air.



For residential indoor unit use

No.	Item		Type	FDKS-EA, C(A)	FTKS-D,B,F
1	Remote controller	Wireless type		— Note 1	
2	Wiring adaptor for time clock/remote controller (Normal open pulse contact/normal open contact) Note 2			KRP413AB1S	
3	Remote controller loss prevention chain			KKF917A4	KKF917A4
4	Interface adaptor for DIII-NET use			KRP928BB2S	

Note: 1. A wireless remote controller is a standard accessory.
2. Time clock and other devices should be obtained locally.

System Configuration

No.	Item		Model No.	Function
1	Residential central remote controller		Note 2 DCS303A51	• Up to 16 groups of indoor units (128 units) can be easily controlled using the large LCD panel. ON/OFF, temperature settings and scheduling can be controlled individually for indoor units.
2	Interface adaptor for residential indoor units		KRP928BB2S	• Adaptors required to connect products other than those of the ***VRV*** System to the high-speed DIII-NET communication system adopted for the ***VRV*** System. * To use any of the above optional controllers, an appropriate adaptor must be installed on the product unit to be controlled.
3	Interface adaptor for SkyAir-series		Note 3 ★DTA112BA51	
4	Central control adaptor kit	For UAT(Y)-K(A),FD-K	★DTA107A55	
5	Wiring adaptor for other air-conditioner		★DTA103A51	
6	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.
6-1	External control adaptor		DTA104A61	• Demand control of individual or multiple systems. • Low noise option for individual or multiple systems.
6-2	Mounting plate		BKS26A	• When installing DTA109A51, DTA104A61 into outdoor units of 10 HP (***VRV*** X) or larger.

Note: 1. Installation box for ★adaptor must be obtained locally.
2. For residential use only. Cannot be used with other centralised control equipment.
3. No adaptor is required for some indoor units.

Building Management System

No.	Item				Model No.	Function
1	intelligent Touch Controller	Basic	Hardware	intelligent Touch Controller	DCS601C51	• Air-Conditioning management system that can be controlled by a compact all-in-one unit.
1-1		Option	Hardware	DIII-NET plus adaptor	DCS601A52	• Additional 64 groups (10 outdoor units) is possible.
1-2	Electrical box with earth terminal (4 blocks)				KJB411A	• Wall embedded switch box.
2	intelligent Touch Manager	Basic	Hardware	intelligent Touch Manager	DCM601A51	• Air-conditioning management system that can be controlled by touch screen.
2-1		Option	Hardware	iTM plus adaptor	DCM601A52	• Additional 64 groups (10 outdoor units) is possible. Max. 7 iTM plus adaptors can be connected to intelligent Touch Manager.
2-2			Software	iTM power proportional distribution	DCM002A51	• Power consumption of indoor units are calculated based on operation status of the indoor unit and outdoor unit power consumption measured by kWh metre.
2-3				iTM energy navigator	DCM008A51	• Building energy consumption is visualised. Wasted air-conditioning energy can be found out.
2-4				BACnet® client	DCM009A51	• BACnet® equipment can be managed by intelligent Touch Manager.
2-5				HTTP Interface	DCM007A51	• Interface for intelligent Touch Manager by HTTP
2-6			Hardware	*1 SVM series	SVMPR2	• ***VRV*** Smartphone Control System for residence
2-7					SVMPC2	• ***VRV*** Smartphone Remote Controller for building
2-8					*5 SVMPS1	• Tenant Billing System with PPD
2-9	***VRV*** Smartphone Control System				SVMPR1	• ***VRV*** Smartphone Control System for residence with DTA116A51.
2-10	***VRV*** Tablet and Smartphone Controller				SVMPC1	*6 • ***VRV*** Tablet and Smartphone Controller for small size building or residence with DTA116A51.
2-11	Multi Site Management System by using SVMPC1				MSMPN1	• MSM can control all ***VRV*** units via SVM system on multi site.
2-12	Di unit				DEC101A51	• 8 pairs based on a pair of ON/OFF input and abnormality input.
2-13	Dio unit				DEC102A51	• 4 pairs based on a pair of ON/OFF input and abnormality input.
3	Communication interface	*2 Interface for use in BACnet®			DMS502B51	• Interface unit to allow communications between ***VRV*** and BMS. Operation and monitoring of air-conditioning systems through BACnet® communication.
3-1		Optional DIII board			DAM411B51	• Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently.
3-2		Optional Di board			DAM412B51	• Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.
4		*3 Interface for use in LONWORKS®			DMS504B51	• Interface unit to allow communications between ***VRV*** and BMS. Operation and monitoring of air-conditioning systems through LonWorks® communication.
5		Home Automation Interface Adaptor			DTA116A51	*7 • Use of the Modbus® protocol enables the connection of the ***VRV*** system with a variety of home automation systems from other manufacturers.
5-1		Mounting plate			BKS26A	• When installing DTA116A51 into outdoor units of 10 HP (***VRV*** X) or larger.
6	Contact/ analogue signal	Unification adaptor for computerised control			★DCS302A52	• Interface between the central monitoring board and central control units.

Note: *1. HTTP interface (DCM007A51) is also required.
*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. Installation box for ★ adaptor must be obtained locally.
*5. PPD option (DCM002A51) for iTM is also required.
*6. Possible to connect at a maximum of 2 DTA116A51.
*7. Modbus® is a registered trademark of Schneider Electric S.A.

VRV Design and Sales Proposal Assistance

Daikin provides engineering supports for ***VRV*** systems. It consists of design supports that can assist consultants and architects, as well as sales proposal supports for air conditioning engineers and dealers. We at Daikin provide the software, the simulation results, and drawing materials to support the business-information modeling (BIM) currently entering the mainstream in construction industries.

Design

For consultants and architects

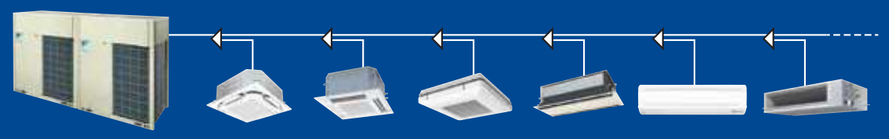
- **Combines energy efficiency and comfort**
  - Heat load calculation
  - CFD simulation to optimise outdoor unit layouts
- **Design flexibility**
  - Heat load calculation
  - Model selection
  - Drawing materials support

Sales proposals

For air conditioning engineers and dealers

- Heat load calculation
- Model selection

MEMO



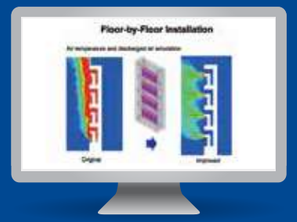
Model Selection Software

VRV Xpress

VRV Xpress is a flexible design software that optimises equipment selection. It can empower consultants and air conditioning engineers so they can fully enhance their equipment selections to design the most effective, optimum systems possible. The software also allows the choice of outdoor units based on peak loads rather than the sum of required capacities for each indoor unit. This fine-tuning feature reduces ***VRV*** system sizes and increases efficiency.

CFD Simulation to Optimise Outdoor Unit Layouts

DT FLOW II



DT FLOW II is a simulation software that uses computational fluid dynamics (CFD), aiming to optimise outdoor unit layouts right at the design stage. When discharged air from the outdoor unit is drawn back into the suction vent, it can short circuit the system and lead to: decrease in efficiency of cooling operations, capacity shortages, operation cut-offs, and shorter lifetime for the outdoor unit. To avoid the need for expensive layout modifications once construction is complete, Daikin uses the CFD method at the early design stage. This can help consultants and architects optimise their outdoor unit arrangement.

Heat Load Calculation

DACCS-HKGSG and HKGSA

The DACCS program uses a steady-state load calculation method to compute heat load over a 24-hour period on summer and winter days. The heat load coming in through outer walls and rooftops from strong summer sunlight can be substantial, but the DACCS program applies effective temperature differences based on the effects of heat accumulated in the walls. The program also accesses 24-hour weather data for all major cities. The standard design data includes accurate weather information for 140 countries.

Drawing Supports

CAD Symbols

Users download CAD symbol drawing materials, including 2D CAD symbols and 3D Revit data, for ***VRV*** systems designing. The 3D Revit data contains specifications for Daikin products, including things like capacities and electric characteristics to support Business Information Modeling (BIM).

MEMO

Warning

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

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

Cautions on product corrosion

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

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Specifications, designs and other content appearing in this brochure are current as of July 2021 but subject to change without notice.