DAIKIN

PCVAU1809B

Heat Pump / Heat Recovery 50 Hz

R-410A

Next generation ***VRV*** system featuring VRT now with Airside Control

*First launched in Japan in 1982, the Daikin **VRV** system has been embraced by world markets for over 35 years. Now, Daikin proudly introduces the new **VRV** H and R series. By uniting advanced software and hardware technologies, **VRV** H series / R series is able to attain greater heights in energy savings and comfort.*

VRV
H SERIES / R SERIES

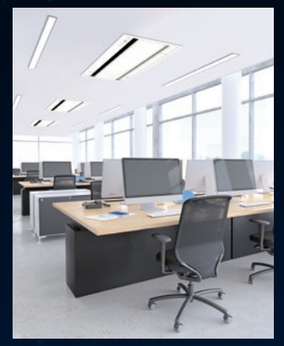
Contents

New Products Information

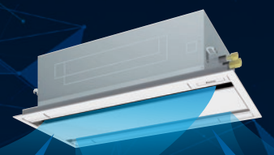
Ceiling Mounted Cassette (Double Flow) Type P.128

Stylish unit blends easily with any interior.

FXCQ-A



- This model features a stylish flat panel with fresh white colour for a new sophisticated appearance.
- Airflow direction can be individually adjusted for each air discharge outlet to deliver optimal air distribution.
- Control of airflow rate has been improved from 3-step to 5-step. Auto airflow rate is newly available.

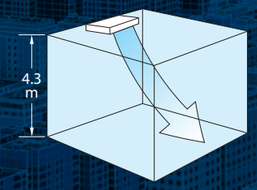


Ceiling Suspended Type P.139

New 125 / 140 models provide greater capacity for large spaces

FXHQ-A

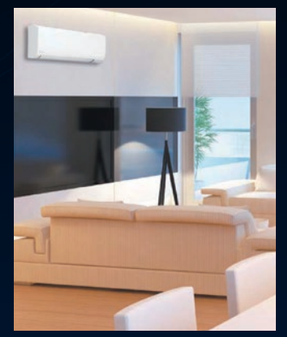
- The technology of the DC fan motor, wide sirocco fan, and large heat exchanger combine for greater airflow and quiet operation.
- Control of airflow rate has been improved from 2-step to 3-step.
- Suitable for high ceilings



Wall Mounted Type P.141

Stylish flat panel design harmonised with your interior décor

FXAQ-A



- Higher airflow is achieved to enhance comfort.
- Whisper quiet in operation, with sound levels as low as 28.5 dB(A).

Simplified Remote Controller P.173

Easy operation with new intuitive design

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

BRC2E61

History of *VRV* development

The 1st Generation

VRV series released in 1982

<The birth of innovative products that changed the history of air conditioning technology>

- 2.5-year development term
- Completion of development in May, 1982
- Technical award of Japan Society of Refrigerating & Air-conditioning Engineers in 1983

Development history

To meet the needs of the times, we've been continuously developing technologies as the leading air conditioning manufacturer in the world.

'82

'84

'88

'90

'92

'95

'96

'99

'00

'02

'04

'05

'06

'07

'08

'10

'11

'12

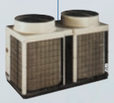
'14

'15

'16

'18

VRV D series
-Cooling only-

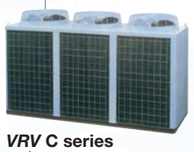


VRV F series
-Cooling only-

VRV G series
-Heat recovery-

VRV K series

VRV C series
-Cooling only-



VRV H series
-Made possible to connect to BMS using the DIII-NET

VRV G series
-Heat pump-

VRV K Plus series

VRV KA series

VRV L series
-Adopted the new R-407C refrigerant

VRV II M series
-Adopted the new R-410A refrigerant

VRV II-S series

VRV II MA series

VRV-WII series

VRV III-S series

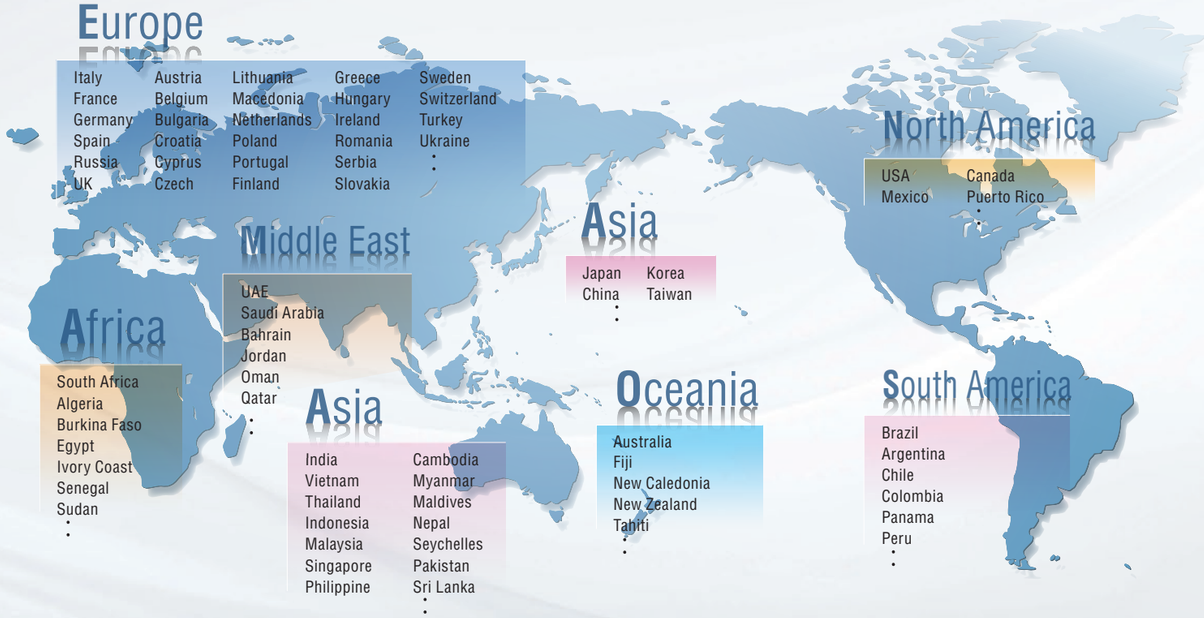
VRV III series

VRV
General Catalogue

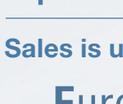
* ***VRV*** is a trademark of Daikin Industries, Ltd.

Expansion of the country of sale

Sales is undergoing in more than 70 countries



VRV III-C series
-Low outdoor temp. area use-



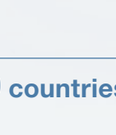
VRV III Q series
-Replacement use-

VRV-WIII series

VRV Multi function series
-Cooling/heating, hot water supply-

VRV III Connection to residential indoor unit series

VRV IV
-Cooling only / Heat pump-



VRV IV
-Heat recovery-

VRV IV S series

VRV IV Heat Recovery Hot Water System

VRV IV W series
-Water cooled system-

VRV IV Q series
-Replacement use-

VRV R series
-Heat recovery-

VRV H series
-Heat pump-

VRV WS series
-Water cooled system-

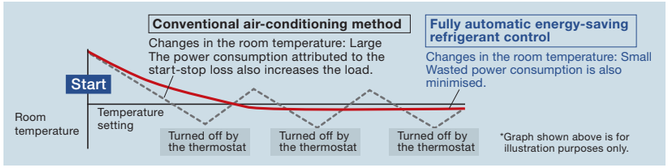
VRV User Benefits

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

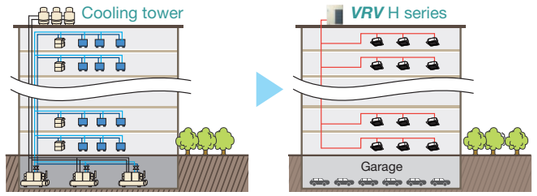
Based on the idea of using only as much space as absolutely required, Daikin first launched its commercial multi-split air conditioning systems in 1982. Since then, customers have benefitted from much increased energy efficiency. Now, our revolutionary new systems dramatically reduce energy with VRT 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

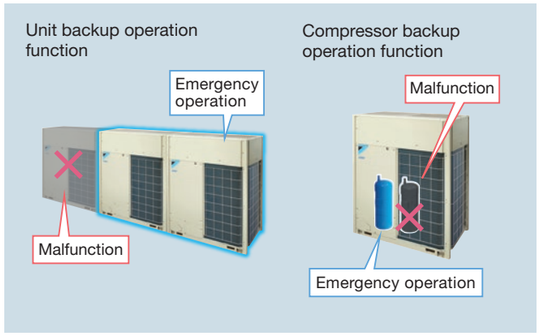
Daikin ***VRV*** outdoor unit goes beyond just highly reliable compressors with a backup system that ensures continued operation.

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.

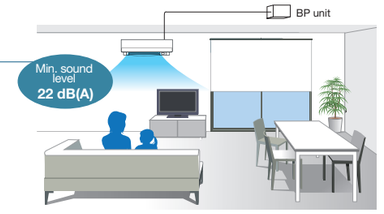


Comfortable environment

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. 22 dB(A), and to reduce the noise of refrigerant passing through the piping by remotely installing an BP unit.

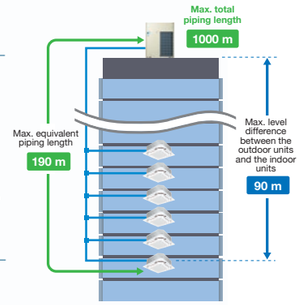


Varied lineup of models

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.

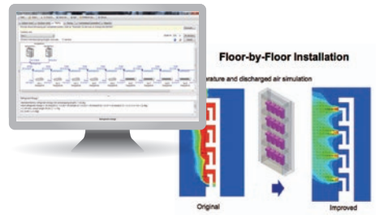


Compatible with engineering software

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.



Lightweight and compact large-capacity single units

Systems can be configured with single modules providing up to 20 class.
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.

Wide variety of series models to supply total air solutions

From residential houses to large buildings, and from newly constructed to renovated buildings, ***VRV*** system meets a wide range of air conditioning needs and supplies total air solutions.

VRV H SERIES

P.13

Heat Pump

3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz

RXYQ-A

Saves space and delivers excellent performance

The ***VRV*** H series achieves high efficiency in a design that is more compact and lightweight. It also offers comfort, easy installation, and high reliability to meet the needs in various buildings.

Lineup

class	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
High-COP Type				●	●	●	●	●	●	●	●	●	●	●	●	●												
Standard Type	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

VRV R SERIES

P.31

Heat Recovery

3-phase 4-wire system, 380-415 V, 50 Hz

REYQ-TA

Maximum comfort via simultaneous cooling and heating

The ***VRV*** R series enables simultaneous operation of cooling and heating within a single refrigerant piping circuit by controlling the BS unit. This series also substantially improves energy efficiency by recycling exhaust heat.

Lineup

class	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
High-COP Type				●	●	●	●	●	●	●	●	●	●	●	●	●												
Standard Type	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

VRV IV S SERIES

P.53

Heat Pump

3.5-6 class 1-phase, 220-230 V/220 V, 50/60 Hz

8-9 class 3-phase, 380-415 V, 50 Hz

RXYMQ-A

Especially designed for residential houses, small offices and shops

VRV IV S series is the system that aims to provide sufficient capacity, along with the compact size required by residential houses, small offices and shops. Outdoor units are designed to be slim and space saving, and offer 6 models to select from, providing the power that suits your needs.

Lineup

class	3.5	4	5	6	8	9
Heat Pump	●	●	●	●	●	●

VRV IV Q SERIES

P.63

Heat Pump

3-phase 4-wire system, 380-415 V, 50 Hz

VRV IV Q series Heat Pump
RQYQ-T

VRV III Q series Heat Recovery
RQCEQ-P

3-phase 4-wire system, 380-415 V, 50 Hz

For quick & high quality replacement use

VRV IV Q series/***VRV*** III Q series, a replacement ***VRV*** unit, can be installed using existing refrigerant piping, so renovation of the air conditioning system can be carried out quickly and smoothly. This minimises inconveniences to activities and users in the building.

Lineup

class			6	8	10	12	13	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
VRV IV Q series	Heat Pump	Standard Type	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		Space Saving Type								●	●						●	●	●	●	●	●	●	●	●
VRV III Q series	Heat Recovery				●		●		●	●	●	●	●	●	●	●									

VRV IV W SERIES

P.81

Heat Pump / Heat Recovery

3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz

RWEYQ-T

Water cooled system suitable for tall multi-storey buildings

Water cooled ***VRV*** IV W series utilises water as a heat source. The temperature of heat source water can be from 10°C to 45°C, and outdoor air temperature does not affect cooling capacity. The outside unit is compact and saves space in the machine room.

Lineup

class	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Heat Pump	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat Recovery	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

VRV WS SERIES

P.105

Heat Pump

1-phase, 220-240 V, 50 Hz

RWXYQ-A

Water cooled system suitable for residential houses

Water cooled ***VRV*** WS series outside units are designed to be compact and lightweight, and single phase power supply enables simplified installation in residential applications.

Lineup

class	3	4	5	6
Heat Pump	●	●	●	●

Wide range indoor unit lineup creating various comfortable airflow

VRV indoor units

New lineup

Type	Model Name	Capacity Range(kW)	20	25	32	40	50	63	71	80	100	125	140	145	160	180	200	250
		Capacity Index	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	16.2	18	20	22.4	28
			20	25	31.25	40	50	62.5	71	80	100	125	140	145	160	180	200	250
Ceiling Mounted Cassette (Round Flow with Sensing)	FXFSQ-AVM			●	●	●	●	●		●	●	●	●					
Ceiling Mounted Cassette (Round Flow)	FXFQ-PVE			●	●	●	●	●		●	●	●						
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-A2VEB		●	●	●	●	●											
4-Way Flow Ceiling Suspended	FXUQ-AVEB								●		●							
Ceiling Mounted Cassette (Double Flow)	New FXCQ-AVM		●	●	●	●	●	●		●		●						
Ceiling Mounted Cassette (Single Flow)	FXEQ-AV36		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-TV1B(A)		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Standard Series)	FXDQ-PDVE	(700mm width type)	●	●	●													
	FXDQ-NDVE	(900 / 1,100mm width type)				●	●	●										
Ceiling Concealed Duct	FXDYQ-MAV1									●	●	●		●				
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PAVE		●	●	●	●	●	●		●	●	●	●					
Ceiling Mounted Duct	FXMQ-PAVE		●	●	●	●	●	●		●	●	●	●					
	FXMQ-PV1A														●	●	●	●
Outdoor-Air Processing Unit	FXMQ-MFV1											●					●	●
Ceiling Suspended	FXHQ-MAVE				●			●			●							
	New FXHQ-AVM											●	●					
Wall Mounted	New FXAQ-AVM		●	●	●	●	●	●										
Floor Standing	FXLQ-MAVE		●	●	●	●	●	●										
Concealed Floor Standing	FXNQ-MAVE		●	●	●	●	●	●										
Heat Reclaim Ventilator with DX-Coil and Humidifier	VKM-GA(M)V1		Airflow rate 500-1000 m^3/h															
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m^3/h															
Air Handling Unit	AHUR		6–60 class															

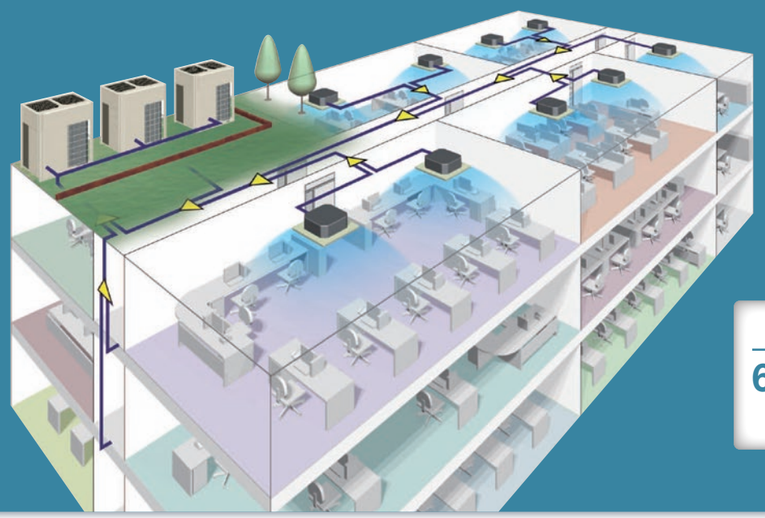
Residential indoor units with connection to BP units

Type	Model Name	Rated Capacity (kW)	20	25	35	50	60	71
		Capacity Index	20	25	35	50	60	71
Ceiling Mounted Cassette (Compact Multi Flow)	FFQ-BV1B			●	●	●	●	
Slim Ceiling Mounted Duct	FDXS-CVMA	(900/1,100 mm width type)		●	●	●	●	
Wall Mounted	FTXS-KVMA		●	●	●			
	FTXS-KAVMA					●	●	●

Note: For indoor units connectability, please refer to the indoor unit product lineups under individual outdoor unit series.

VRV H SERIES Saves Space and Delivers Excellent Performance

VRV H SERIES Heat Pump



RXYQ-A

Heat Pump

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

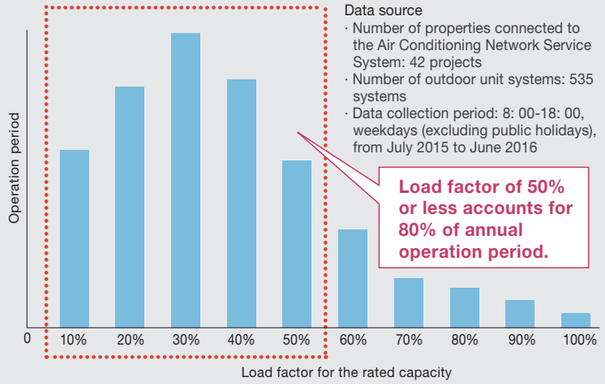
Greater energy savings during low-load operation

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*** H series raises the standard of energy efficiency.

* Main factors for frequent operation at low load of 50% or lower
· Because individual control is possible for ***VRV*** system, air conditioning is turned OFF to unoccupied rooms such as conference rooms, private rooms, and storage rooms.
· Maximum number of people assumed at the time of design has not been reached.
· There are zones without tenants such as the tenants' office building.

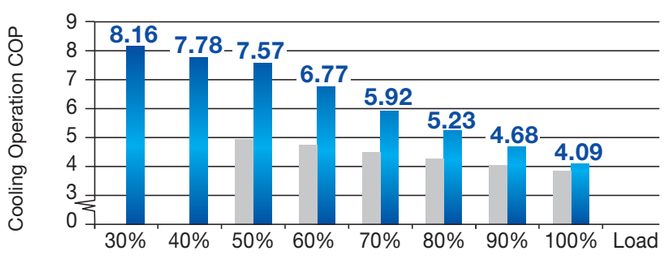
•Correlation between the load factor for the rated capacity and operation time (in office buildings in Singapore)
*According to a survey by Daikin (based on Air Conditioning Network Service System data)



Data source
· Number of properties connected to the Air Conditioning Network Service System: 42 projects
· Number of outdoor unit systems: 535 systems
· Data collection period: 8: 00-18: 00, weekdays (excluding public holidays), from July 2015 to June 2016

Higher Coefficient of Performance (COP)

COP for 10 class



Annual power consumption
14%* lower

* Simulation conditions :
• Location : Bangkok, Thailand
• System : Outdoor unit (10 class) x 1
Indoor unit (2 class, Round Flow with Sensing type) x 5
• Operation time : 8:00-20:00 5 days/week
• Outdoor units :
New model : RXYQ10A (***VRV*** H series)
Conventional model : RXYQ10T (***VRV*** IV)

VRV IV (RXYQ10T)

VRV H SERIES

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

Advanced technologies for greater energy savings

By uniting advanced software and hardware technologies, *VRV* H Series is able to attain greater heights in energy savings and comfort.

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

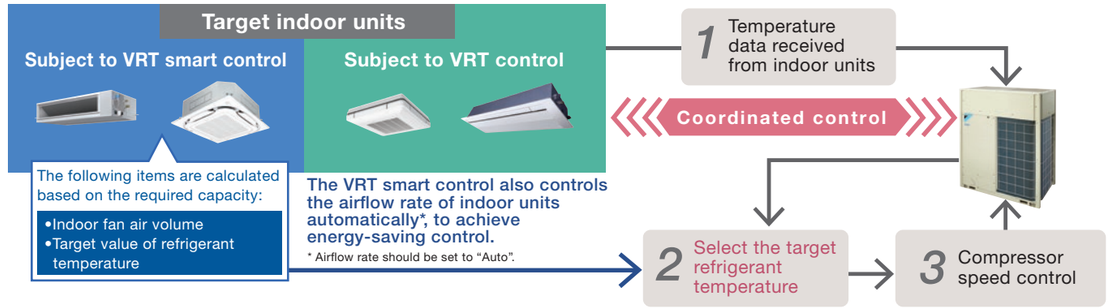
Software technology

Daikin's VRT Smart technology takes comfort and energy performance to the next level. Building on our variable refrigerant temperature technology which enables the evaporating temperature to adjust to meet the varying load, VRT Smart is now also able to automatically adjust the indoor unit airflow rate (Airside Control) to ensure optimal comfort and energy performance is delivered at all times.

VRT SMART

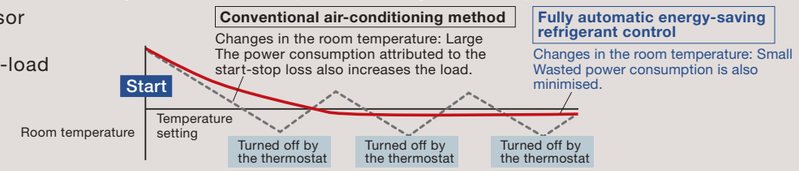
VRT Smart Control Function movie

•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 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 pages 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

VRT Smart and VRT control is most effective when all the indoor units operate under low load conditions in a similar manner.
Low load conditions is the time when room temperature approaches set temperature.
For this reason, please note the following to maximise efficacy.

•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 indicated below.
Example:
1) A load imbalance occurs because an indoor unit on 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.
3) Energy efficiency decreases when the set temperature of a specified indoor unit is set to an extreme during cooling operation. E.g. 18°C

Achieves Space Saving & Excellent Performance

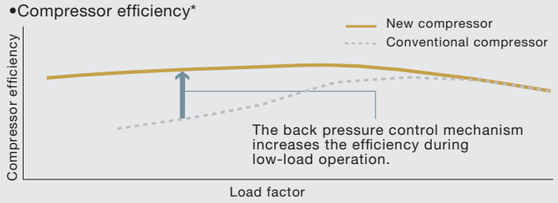
New Scroll Compressor*

Hardware technology

Refrigerant leakage is minimised during low-load operation.

Operational loss due to refrigerant leakage is reduced with the inclusion of a proprietary back pressure control mechanism to ensure stable low-load operation.

•Compressor efficiency*



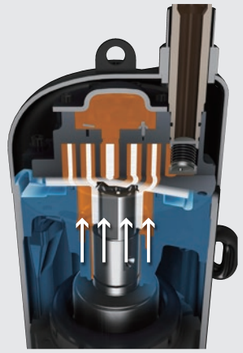
*Graph shown above is for illustration purposes only.

New Scroll Compressor movie

Back pressure control mechanism

Conventional mechanism

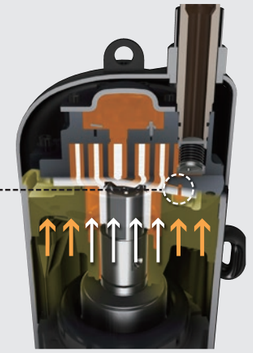
The orbiting scroll is engaged by the pressure difference between high and low pressures.
The force engaging the orbiting scroll decreases during low-load operation, resulting in compression leakage from movable parts.



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

New intermediate pressure mechanism

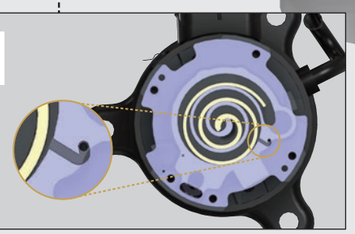
The pressure on the orbiting scroll is optimised according to operating conditions. As a result, the orbiting scroll has been stabilised to increase efficiency during low-load operation.



The intermediate pressure maintains pressure on the orbiting scroll during low-load operation.

Intermediate pressure adjustment port

The intermediate pressure (back pressure) optimises the pressure on the orbiting scroll depending on the operating condition.



* The new mechanism is only applicable to RXYQ10, 12 and 20A models.

Advanced oil temperature control

Standby power consumption is reduced

The advanced oil temperature control reduces standby power consumption by up to 82.7%* 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*** H series 14 class
Location: Singapore
Operation time: 08:00–18:00 on weekdays.

High reliability

New inverter PC board

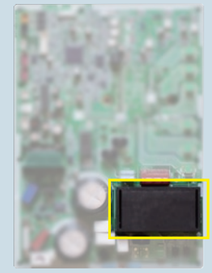
The control functions of inverter technology have been integrated on printed circuit boards. As well as improving reliability, this has reduced the number of parts and enabled downsizing.

- 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.

Conventional inverter

Electrolytic capacitors

New inverter PC board



Film capacitor

Comfort

Low operation sound

High efficiency heat exchanger helps to achieve low operation sound.

Sound level(dB(A))

	6/8 class	10 class	12 class	14/16 class
VRV H SERIES	56	57	59	60

Large airflow, high static pressure and quiet technology

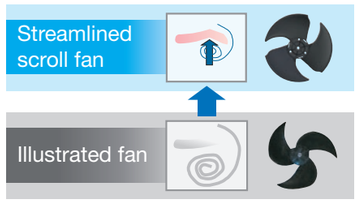
Advanced analytic technologies are utilised to optimise fan design and increase airflow rate and high external static pressure.

Streamlined air grille

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

Streamlined scroll fan

The curvature of each fan blade edge reduces both vibration and pressure loss.

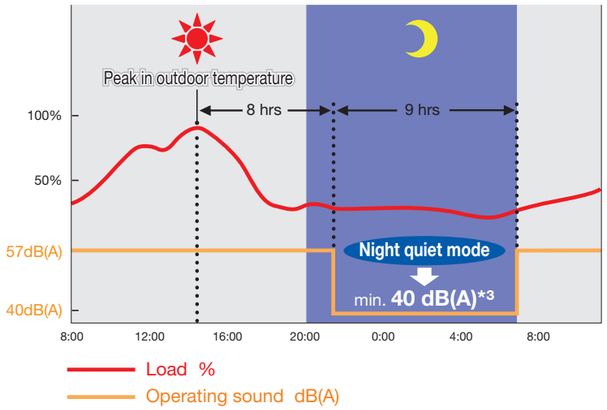


Nighttime quiet operation function

For areas with stringent restrictions placed on outdoor sound levels, the outdoor unit can be set for low operation sound during the nighttime to meet sound restrictions.

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 class 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.

Compact design with high performance

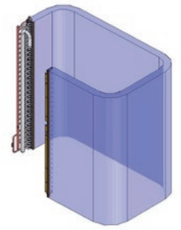
Highly integrated heat exchanger

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

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.

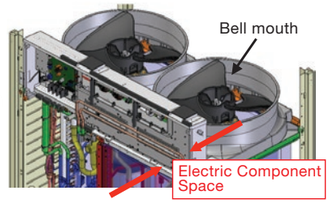
4-sided heat exchanger



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

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.

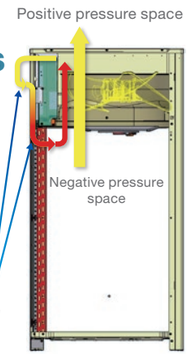
Electrical components

Sufficient cooling for electrical components

The ***VRV*** H 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.

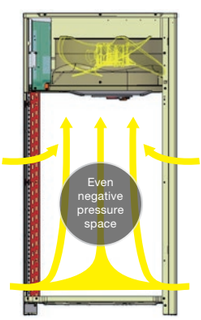
- High pressure since air enters near the fan blower inlet

High pressure difference



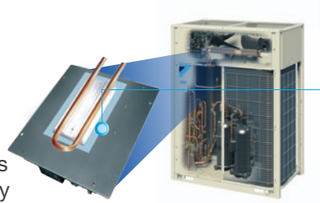
Eliminate suction resistance issue

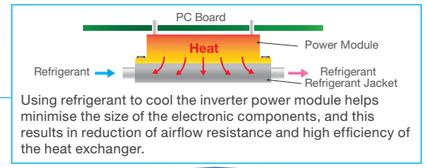
Without affecting the fan volume, the electric components are designed to be at the top and this ulitises dead space. This eliminates the problem of suction resistance.



High reliability at high ambient temperatures

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.

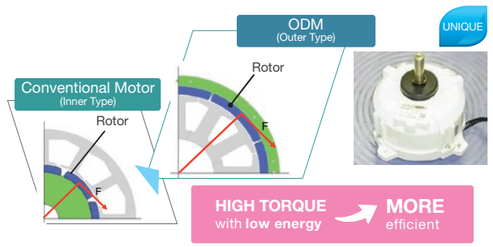
Control board failure ratio at stable operation is reduced.

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 the large diameter of the rotor,
① Large torque with same electromagnetic force
② Stable rotation in all ranges and can be operated with small number of rotations

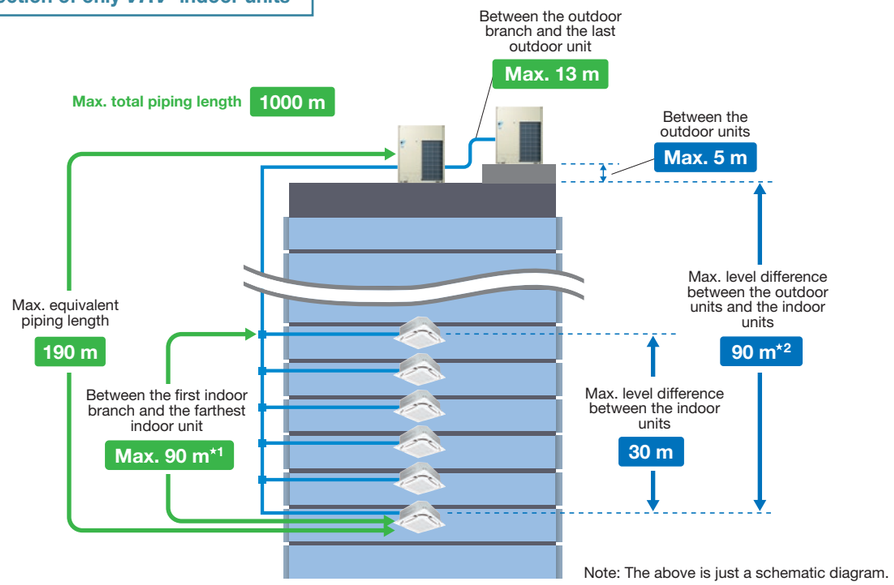


More options for installation location

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*** H 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 =

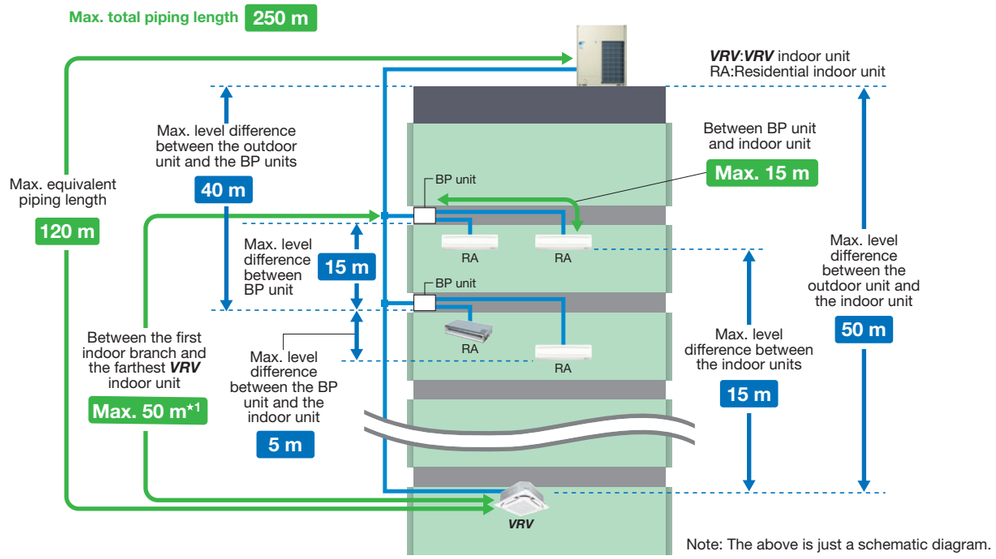
$$\frac{\text{Total capacity index of the indoor units}}{\text{Capacity index of the outdoor units}}$$

Conditions of *VRV* indoor unit connection capacity

Applicable ***VRV*** indoor units	FXDQ, FXSQ, FXMQ-PA, FXAQ 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 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 24 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.	**2** m–**12** m
		If indoor unit capacity index is 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 80% to 130%. Refer to page 24 for outdoor unit combination details.

High external static pressure

VRV H 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.

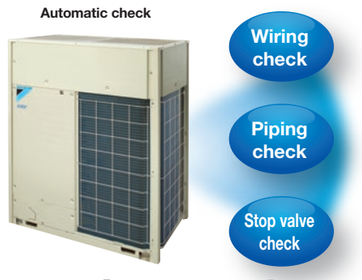
78.4 Pa
- More options in the opening/angle of louvre
- Outstanding heat dissipation effect in both hierarchical and intensive arrangement

More accurate test operation and stable system

Efficient automatic test operation

Daikin ***VRV*** H series incorporates a simplified and efficient test operation function, that not only greatly accelerates the installation process, but also effectively improves the field setting quality.

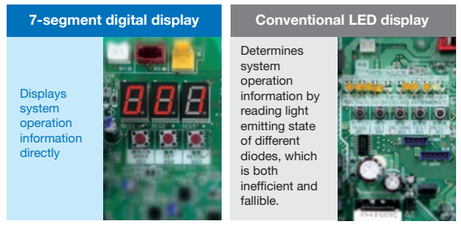
- Automatically checks the wiring between outdoor units and indoor units to confirm whether there is defective wiring.
- Confirms piping length to optimise operation.
- Automatically checks whether the stop valve in each outdoor unit is functioning normally to ensure the smooth operation of air conditioning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



Simplified commissioning and after-sales service

Function of information display by luminous digital tube

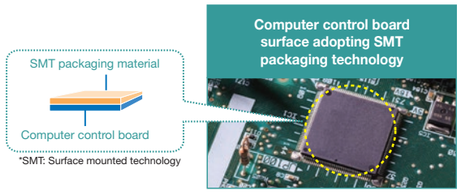
VRV H series utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.



Advanced control main PC board

SMT* packaging technology

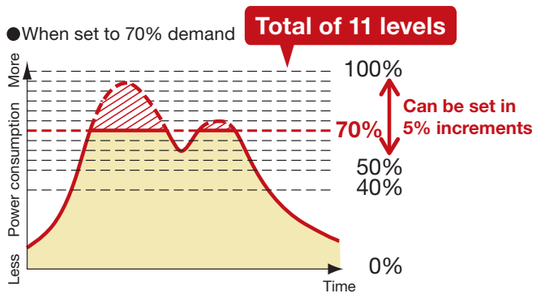
- SMT packaging technology adopted by the computer control panel improves the anti-clutter performance.
- Protects your computer boards from the adverse effects of sandy climates and humid weather.



I-demand function

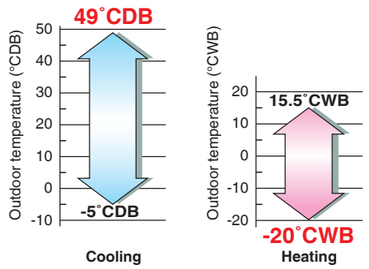
Limit to power consumption can be set precisely to one of 11 levels. Peak power cut-off can be accomplished according to each user situation.

*Set on the circuit board of the outdoor unit.



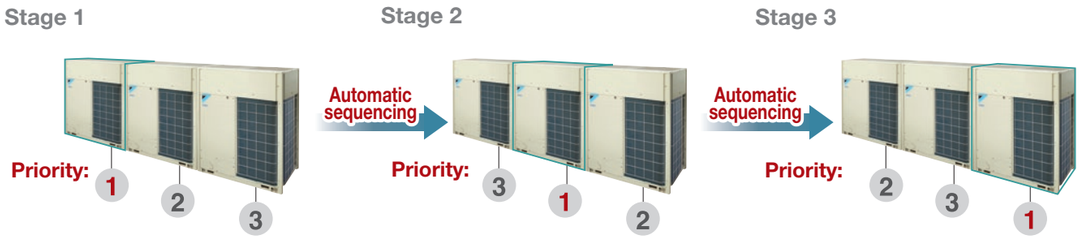
Wide operation temperature range

The versatile operation range of the ***VRV*** H series works to reduce limitations on installation locations. The operation temperature range for heating goes all the way down to -20˚C, while cooling can be performed with outdoor temperatures as high as 49˚C.



Automatic sequencing operation

During start-up, Daikin ***VRV*** H 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*** H 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

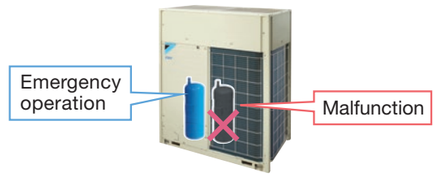
If one of the units in a multiple outdoor system malfunctions, the other outdoor units provide emergency operation until repairs can be made.

* For systems composed of two or more outdoor units.

Compressor backup operation function

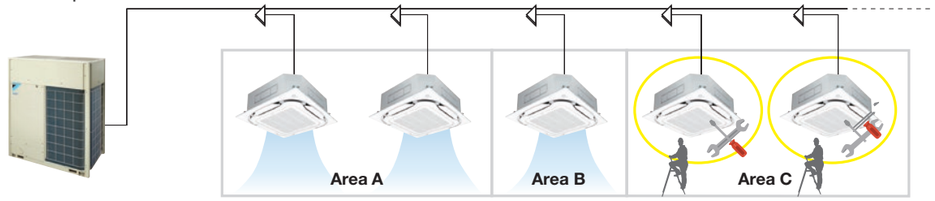
The outdoor unit is equipped with two compressors. Even if one compressor malfunctions, the other compressor provides emergency operation, reducing the risk of air conditioning shutdown due to compressor failure. (Capacity is saved during backup operation.)

* For single outdoor unit system RXYQ14-20AYM models. On-site settings are required using the printed circuit board of the outdoor unit.



Ease of maintenance

VRV H 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.

VRV H Series Outdoor Units Heat Pump

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

- ***VRV*** H series outdoor unit offers a high capacity of up to 60 class, 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 class, customers' needs can be precisely met.

Lineup

class		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 H SERIES	High-COP Type				●	●	●	●	●	●	●	●	●	●	●	●	●												
	Standard Type	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

High-COP Type

•Double Outdoor Units

12, 14, 16, 18, 20 class

RXYQ12AHYMA
RXYQ14AHYMA
RXYQ16AHYMA
RXYQ18AHYMA
RXYQ20AHYMA

•Triple Outdoor Units

22, 24, 26, 28, 30, 32, 34, 36 class

RXYQ22AHYMA
RXYQ24AHYMA
RXYQ26AHYMA
RXYQ28AHYMA
RXYQ30AHYMA
RXYQ32AHYMA
RXYQ34AHYMA
RXYQ36AHYMA

Standard Type

•Single Outdoor Units

6, 8, 10, 12 class

RXYQ6AYM
RXYQ8AYM
RXYQ10AYM
RXYQ12AYM

14, 16, 18, 20 class

RXYQ14AYM
RXYQ16AYM
RXYQ18AYM
RXYQ20AYM

•Double Outdoor Units

22, 24 class

RXYQ22AYMA
RXYQ24AYMA

26, 28, 30 class

RXYQ26AYMA
RXYQ28AYMA
RXYQ30AYMA

32, 34, 36 class

RXYQ32AYMA
RXYQ34AYMA
RXYQ36AYMA

•Triple Outdoor Units

38, 40 class

RXYQ38AYMA
RXYQ40AYMA

42, 44 class

RXYQ42AYMA
RXYQ44AYMA

46, 48, 50, 52, 54, 56, 58, 60 class

RXYQ46AYMA
RXYQ48AYMA
RXYQ50AYMA
RXYQ52AYMA
RXYQ54AYMA
RXYQ56AYMA
RXYQ58AYMA
RXYQ60AYMA

Outdoor Unit Combinations

For connection of only *VRV* indoor units

High-COP Type

class	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
12	32.0	300	RXYQ12AH	RXYQ6A × 2	BHFP22P100	150 to 390 (480)	19 (24)
14	38.4	350	RXYQ14AH	RXYQ6A + RXYQ8A		175 to 455 (560)	22 (28)
16	44.8	400	RXYQ16AH	RXYQ8A × 2		200 to 520 (640)	26 (32)
18	50.4	450	RXYQ18AH	RXYQ8A + RXYQ10A		225 to 585 (720)	29 (36)
20	55.9	500	RXYQ20AH	RXYQ8A + RXYQ12A		250 to 650 (800)	32 (40)
22	60.8	550	RXYQ22AH	RXYQ6A + RXYQ8A × 2	BHFP22P151	275 to 715 (715)	35 (35)
24	67.2	600	RXYQ24AH	RXYQ8A × 3		300 to 780 (780)	39 (39)
26	72.8	650	RXYQ26AH	RXYQ8A × 2 + RXYQ10A		325 to 845 (845)	42 (42)
28	78.3	700	RXYQ28AH	RXYQ8A × 2 + RXYQ12A		350 to 910 (910)	45 (45)
30	83.9	750	RXYQ30AH	RXYQ8A + RXYQ10A + RXYQ12A		375 to 975 (975)	48 (48)
32	89.4	800	RXYQ32AH	RXYQ8A + RXYQ12A × 2		400 to 1,040 (1,040)	52 (52)
34	95.0	850	RXYQ34AH	RXYQ10A + RXYQ12A × 2		425 to 1,105 (1,105)	55 (55)
36	101	900	RXYQ36AH	RXYQ12A × 3		450 to 1,170 (1,170)	58 (58)

Standard Type

class	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
6	16.0	150	RXYQ6A	RXYQ6A	–	75 to 195 (300)	9 (15)
8	22.4	200	RXYQ8A	RXYQ8A	–	100 to 260 (400)	13 (20)
10	28.0	250	RXYQ10A	RXYQ10A	–	125 to 325 (500)	16 (25)
12	33.5	300	RXYQ12A	RXYQ12A	–	150 to 390 (600)	19 (30)
14	40.0	350	RXYQ14A	RXYQ14A	–	175 to 455 (700)	22 (35)
16	45.0	400	RXYQ16A	RXYQ16A	–	200 to 520 (800)	26 (40)
18	50.0	450	RXYQ18A	RXYQ18A	–	225 to 585 (900)	29 (45)
20	56.0	500	RXYQ20A	RXYQ20A	–	250 to 650 (1,000)	32 (50)
22	61.5	550	RXYQ22A	RXYQ10A + RXYQ12A	BHFP22P100	275 to 715 (880)	35 (44)
24	67.0	600	RXYQ24A	RXYQ12A × 2		300 to 780 (960)	39 (48)
26	73.5	650	RXYQ26A	RXYQ12A + RXYQ14A		325 to 845 (1,040)	42 (52)
28	78.5	700	RXYQ28A	RXYQ12A + RXYQ16A		350 to 910 (1,120)	45 (56)
30	83.5	750	RXYQ30A	RXYQ12A + RXYQ18A		375 to 975 (1,200)	48 (60)
32	90.0	800	RXYQ32A	RXYQ16A × 2		400 to 1,040 (1,280)	52 (64)
34	95.0	850	RXYQ34A	RXYQ16A + RXYQ18A		425 to 1,105 (1,360)	55 (64)
36	101	900	RXYQ36A	RXYQ16A + RXYQ20A		450 to 1,170 (1,440)	58 (64)
38	107	950	RXYQ38A	RXYQ12A × 2 + RXYQ14A	BHFP22P151	475 to 1,235 (1,235)	61 (61)
40	112	1,000	RXYQ40A	RXYQ12A × 2 + RXYQ16A		500 to 1,300 (1,300)	64 (64)
42	118	1,050	RXYQ42A	RXYQ10A + RXYQ16A × 2		525 to 1,365 (1,365)	
44	124	1,100	RXYQ44A	RXYQ12A + RXYQ16A × 2		550 to 1,430 (1,430)	
46	130	1,150	RXYQ46A	RXYQ14A + RXYQ16A × 2		575 to 1,495 (1,495)	
48	135	1,200	RXYQ48A	RXYQ16A × 3		600 to 1,560 (1,560)	
50	140	1,250	RXYQ50A	RXYQ16A × 2 + RXYQ18A		625 to 1,625 (1,625)	
52	145	1,300	RXYQ52A	RXYQ16A + RXYQ18A × 2		650 to 1,690 (1,690)	
54	150	1,350	RXYQ54A	RXYQ18A × 3		675 to 1,755 (1,755)	
56	156	1,400	RXYQ56A	RXYQ18A × 2 + RXYQ20A		700 to 1,820 (1,820)	
58	162	1,450	RXYQ58A	RXYQ18A + RXYQ20A × 2		725 to 1,885 (1,885)	
60	168	1,500	RXYQ60A	RXYQ20A × 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 19 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	class	Capacity index	Total capacity index of connectable indoor units*2 Combination (%)			Maximum number of connectable indoor units
				80%	100%	130%	
RXYQ6AYM	16.0	6	150	120	150	195	9
RXYQ8AYM	22.4	8	200	160	200	260	13
RXYQ10AYM	28.0	10	250	200	250	325	16
RXYQ12AYM	33.5	12	300	240	300	390	19
RXYQ14AYM	40.0	14	350	280	350	455	22
RXYQ16AYM	45.0	16	400	320	400	520	26
RXYQ18AYM	50.0	18	450	360	450	585	29
RXYQ20AYM	56.0	20	500	400	500	650	32

Note: *1. Only single outdoor unit (RXYQ6-20AYM) can be connected.
*2. Total capacity index of connectable indoor units must be 80%–130% of the capacity index of the outdoor unit.

Enhanced range of choices

A mixed combination of ***VRV*** indoor units and residential indoor units is enabled all in one system, opening the door to stylish and quiet indoor units.

VRV indoor units

● New lineup ● Indoor units subject to VRT smart control

Type	Model Name		20	25	32	40	50	63	71	80	100	125	140	145	160	180	200	250
		Capacity Range(kW)	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	16.2	18	20	22.4	28
		Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	145	160	180	200	250
Ceiling Mounted Cassette (Round Flow with Sensing)	FXFSQ-AVM			●	●	●	●	●		●	●	●	●					
Ceiling Mounted Cassette (Round Flow)	FXFQ-PVE			●	●	●	●	●		●	●	●						
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-A2VEB		●	●	●	●	●											
4-Way Flow Ceiling Suspended	FXUQ-AVEB								●		●							
Ceiling Mounted Cassette (Double Flow)	New FXCQ-AVM		●	●	●	●	●	●		●		●						
Ceiling Mounted Cassette (Single Flow)	FXEQ-AV36		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-TV1B(A)		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Standard Series)	FXDQ-PDVE	(700mm width type)	●	●	●													
	FXDQ-NDVE	(900 / 1100mm width type)				●	●	●										
Ceiling Concealed Duct	FXDYQ-MAV1									●	●	●		●				
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PAVE		●	●	●	●	●	●		●	●	●	●					
Ceiling Mounted Duct	FXMQ-PAVE		●	●	●	●	●	●		●	●	●	●					
	FXMQ-PV1A														●	●	●	●
Outdoor-Air Processing Unit	FXMQ-MFV1											●					●	●
Ceiling Suspended	FXHQ-MAVE				●			●			●							
	New FXHQ-AVM											●	●					
Wall Mounted	New FXAQ-AVM		●	●	●	●	●	●										
Floor Standing	FXLQ-MAVE		●	●	●	●	●	●										
Concealed Floor Standing	FXNQ-MAVE		●	●	●	●	●	●										
Heat Reclaim Ventilator with DX-Coil and Humidifier	VKM-GA(M)V1		Airflow rate 500-1000 m³/h															
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h															
Air Handling Unit	AHUR		6–60 class															

Note: For indoor units without 'VRT Smart', the standard 'VRT' control is available (excludes Heat Reclaim Ventilators & Outdoor-Air Processing Unit).

Residential indoor units with connection to BP units

Type	Model Name		20	25	35	50	60	71
		Rated Capacity (kW)	2.0	2.5	3.5	5.0	6.0	7.1
		Capacity Index	20	25	35	50	60	71
Ceiling Mounted Cassette (Compact Multi Flow)	FFQ-BV1B			●	●	●	●	
Slim Ceiling Mounted Duct	FDXS-CVMA	(900/1,100 mm width type)		●	●	●	●	
Wall Mounted	FTXS-KVMA		●	●	●			
	FTXS-KAVMA					●	●	●

Note: BP units are necessary for residential indoor units. Only single outdoor unit (RXYQ6-20AYM) can be connected.

VRV indoor unit type combinations

VRV indoor unit 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.

Mixed residential and *VRV* indoor unit system

Max. 32 indoor units

Residential indoor units **VRV indoor units**

- BP units are necessary for residential indoor units. Only single outdoor unit (RXYQ6-20AYM) 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 (RXYQ6-20AYM) can be connected.
- If a system has only residential indoor units, the system is operated under VRT control.

VRV H Series Outdoor Units Heat Pump RXYQ-A

High-COP Type

											
Model			**RXYQ12AHYMA**	**RXYQ14AHYMA**	**RXYQ16AHYMA**		**RXYQ18AHYMA**	**RXYQ20AHYMA**	**RXYQ22AHYMA**		
Combination units			**RXYQ6AYM**	**RXYQ6AYM**	**RXYQ8AYM**		**RXYQ8AYM**	**RXYQ8AYM**	**RXYQ6AYM**		
			RXYQ6AYM	**RXYQ8AYM**	**RXYQ8AYM**		**RXYQ10AYM**	**RXYQ12AYM**	**RXYQ8AYM**		
			–	–	–		–	–	**RXYQ8AYM**		
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	109,000	131,000	153,000		172,000	191,000	207,000		
		kW	32.0	38.4	44.8		50.4	55.9	60.8		
Heating capacity		Btu/h	123,000	147,000	171,000		193,000	213,000	232,000		
		kW	36.0	43.0	50.0		56.5	62.5	68.0		
Power consumption	Cooling	kW	6.76	8.55	10.3		12.0	13.9	13.7		
	Heating	kW	7.46	9.40	11.3		12.9	14.6	15.1		
Capacity control		%	12-100	11-100	10-100		7-100				
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)+(2.4×1)	(2.4×1)+(3.4×1)	(3.4×1)+(3.4×1)		(3.4×1)+(4.5×1)	(3.4×1)+(5.5×1)	(2.4×1)+(3.4×1)+(3.4×1)		
Airflow rate		ℓ/s	1,983+1,983	1,983+2,967	2,967+2,967		2,967+2,967	2,967+3,183	1,983+2,967+2,967		
		m³/min	119+119	119+178	178+178		178+178	178+191	119+178+178		
Dimensions (H×W×D)		mm	(1,657×930×765)+(1,657×930×765)				(1,657×930×765)+(1,657×930×765)		(1,657×930×765)+(1,657×930×765)+(1,657×930×765)		
Machine weight		kg	185+185				185+200		185+185+185		
Sound level		dB(A)	59				60	61			
Sound power		dB(A)	80				81	82			
Operation range	Cooling	°CDB	-5 to 49				-5 to 49				
	Heating	°CWB	-20 to 15.5				-20 to 15.5				
Refrigerant	Type		R-410A				R-410A				
	Charge	kg	6.9+6.9	6.9+7.0	7.0+7.0		7.0+7.4	7.0+7.6	6.9+7.0+7.0		
Piping connections	Liquid	mm	ϕ12.7 (Brazing)				ϕ15.9 (Brazing)				
	Gas	mm	ϕ28.6 (Brazing)				ϕ28.6 (Brazing)				

											
Model			**RXYQ24AHYMA**	**RXYQ26AHYMA**	**RXYQ28AHYMA**		**RXYQ30AHYMA**	**RXYQ32AHYMA**	**RXYQ34AHYMA**	**RXYQ36AHYMA**	
Combination units			**RXYQ8AYM**	**RXYQ8AYM**	**RXYQ8AYM**		**RXYQ8AYM**	**RXYQ8AYM**	**RXYQ10AYM**	**RXYQ12AYM**	
			RXYQ8AYM	**RXYQ8AYM**	**RXYQ8AYM**		**RXYQ10AYM**	**RXYQ12AYM**	**RXYQ12AYM**	**RXYQ12AYM**	
			RXYQ8AYM	**RXYQ10AYM**	**RXYQ12AYM**		**RXYQ12AYM**	**RXYQ12AYM**	**RXYQ12AYM**	**RXYQ12AYM**	
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	229,000	248,000	267,000		286,000	305,000	324,000	345,000	
		kW	67.2	72.8	78.3		83.9	89.4	95.0	101	
Heating capacity		Btu/h	256,000	278,000	299,000		321,000	341,000	365,000	386,000	
		kW	75.0	81.5	87.5		94.0	100	107	113	
Power consumption	Cooling	kW	15.5	17.2	19.0		20.7	22.6	24.2	26.1	
	Heating	kW	17.0	18.6	20.3		21.8	23.5	25.1	26.7	
Capacity control		%	7-100	5-100			5-100		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	(3.4×1)+(3.4×1)+(3.4×1)	(3.4×1)+(3.4×1)+(4.5×1)	(3.4×1)+(3.4×1)+(5.5×1)		(3.4×1)+(4.5×1)+(5.5×1)	(3.4×1)+(5.5×1)+(5.5×1)	(4.5×1)+(5.5×1)+(5.5×1)	(5.5×1)+(5.5×1)+(5.5×1)	
Airflow rate		ℓ/s	2,967+2,967+2,967		2,967+2,967+3,183		2,967+2,967+3,183	2,967+3,183+3,183		3,183+3,183+3,183	
		m³/min	178+178+178		178+178+191		178+178+191	178+191+191		191+191+191	
Dimensions (H×W×D)		mm	(1,657×930×765)+(1,657×930×765)+(1,657×930×765)				(1,657×930×765)+(1,657×930×765)+(1,657×930×765)				
Machine weight		kg	185+185+185	185+185+200			185+200+200		200+200+200		
Sound level		dB(A)	61		62		62	63		64	
Sound power		dB(A)	82		83		83	84		85	
Operation range	Cooling	°CDB	-5 to 49				-5 to 49				
	Heating	°CWB	-20 to 15.5				-20 to 15.5				
Refrigerant	Type		R-410A				R-410A				
	Charge	kg	7.0+7.0+7.0	7.0+7.0+7.4	7.0+7.0+7.6		7.0+7.4+7.6	7.0+7.6+7.6	7.4+7.6+7.6	7.6+7.6+7.6	
Piping connections	Liquid	mm	ϕ15.9 (Brazing)	ϕ19.1 (Brazing)			ϕ19.1 (Brazing)				
	Gas	mm	ϕ34.9 (Brazing)				ϕ34.9 (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.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.

•Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

VRV H Series Outdoor Units Heat Pump RXYQ-A

Standard Type

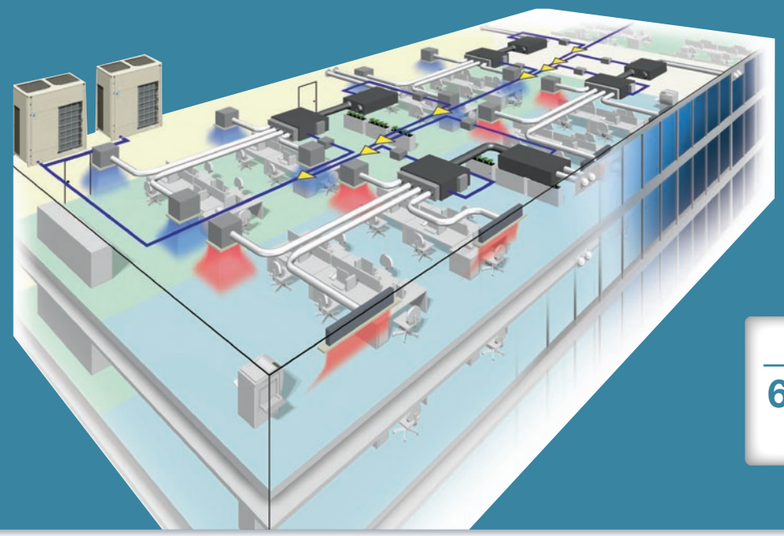
																		
Model			**RXYQ6AYM**	**RXYQ8AYM**	**RXYQ10AYM**	**RXYQ12AYM**	**RXYQ14AYM**	**RXYQ16AYM**		**RXYQ18AYM**	**RXYQ20AYM**	**RXYQ22AYMA**	**RXYQ24AYMA**	**RXYQ26AYMA**	**RXYQ28AYMA**	**RXYQ30AYMA**	**RXYQ32AYMA**
Combination units			–	–	–	–	–	–		–	–	RXYQ10AYM	RXYQ12AYM	RXYQ12AYM	RXYQ12AYM	RXYQ12AYM	RXYQ16AYM
			–	–	–	–	–	–		–	–	RXYQ12AYM	RXYQ12AYM	RXYQ14AYM	RXYQ16AYM	RXYQ18AYM	RXYQ16AYM
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	210,000	229,000	251,000	268,000	285,000	307,000
		kW	16.0	22.4	28.0	33.5	40.0	45.0		50.0	56.0	61.5	67.0	73.5	78.5	83.5	90.0
Heating capacity		Btu/h	61,400	85,300	107,000	128,000	154,000	171,000		191,000	215,000	235,000	256,000	281,000	299,000	319,000	341,000
		kW	18.0	25.0	31.5	37.5	45.0	50.0		56.0	63.0	69.0	75.0	82.5	87.5	93.5	100
Power consumption	Cooling	kW	3.38	5.17	6.84	8.70	10.7	12.9		15.3	17.7	15.5	17.4	19.4	21.6	24.0	25.8
	Heating	kW	3.73	5.67	7.23	8.91	11.0	12.6		14.9	17.1	16.1	17.8	19.9	21.5	23.8	25.2
Capacity control		%	25-100	20-100	13-100	12-100	11-100	10-100		10-100	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	2.4×1	3.4×1	4.5×1	5.5×1	(2.9×1)+(3.3×1)	(3.6×1)+(3.7×1)		(4.1×1)+(4.0×1)	(3.7×1)+(6.3×1)	(4.5×1)+(5.5×1)	(5.5×1)+(5.5×1)	(5.5×1)+(2.9×1)+(3.3×1)	(5.5×1)+(3.6×1)+(3.7×1)	(5.5×1)+(4.1×1)+(4.0×1)	(3.6×1)+(3.7×1)+(3.6×1)+(3.7×1)
Airflow rate		ℓ/s	1,983	2,967		3,183	4,283			4,200	4,950	2,967+3,183	3,183+3,183	3,183+4,283		3,183+4,200	4,283+4,283
		m³/min	119	178		191	257			252	297	178+191	191+191	191+257		191+252	257+257
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)		(1,657×930×765)+(1,657×1,240×765)			(1,657×1,240×765)+(1,657×1,240×765)
Machine weight		kg	185		200		285			305	325	200+200		200+285		200+305	285+285
Sound level		dB(A)	56		57	59	60			61	65	61	62	63			
Sound power		dB(A)	77		78	80	81			82	86	82	83	84			
Operation range	Cooling	°CDB	-5 to 49							-5 to 49							
	Heating	°CWB	-20 to 15.5							-20 to 15.5							
Refrigerant	Type		R-410A							R-410A							
	Charge	kg	6.9	7.0	7.4	7.6	9.1	9.3		11.8		7.4+7.6	7.6+7.6	7.6+9.1	7.6+9.3	7.6+11.8	9.3+9.3
Piping connections	Liquid	mm	ϕ9.5 (Brazing)			ϕ12.7 (Brazing)				ϕ15.9 (Brazing)				ϕ19.1 (Brazing)			
	Gas	mm	ϕ19.1 (Brazing)		ϕ22.2 (Brazing)		ϕ28.6 (Brazing)			ϕ28.6 (Brazing)				ϕ 34.9 (Brazing)			

																	
Model			**RXYQ34AYMA**	**RXYQ36AYMA**	**RXYQ38AYMA**	**RXYQ40AYMA**	**RXYQ42AYMA**	**RXYQ44AYMA**		**RXYQ46AYMA**	**RXYQ48AYMA**	**RXYQ50AYMA**	**RXYQ52AYMA**	**RXYQ54AYMA**	**RXYQ56AYMA**	**RXYQ58AYMA**	**RXYQ60AYMA**
Combination units			**RXYQ16AYM**	**RXYQ16AYM**	**RXYQ12AYM**	**RXYQ12AYM**	**RXYQ10AYM**	**RXYQ12AYM**		**RXYQ14AYM**	**RXYQ16AYM**	**RXYQ16AYM**	**RXYQ16AYM**	**RXYQ18AYM**	**RXYQ18AYM**	**RXYQ18AYM**	**RXYQ20AYM**
			RXYQ18AYM	**RXYQ20AYM**	**RXYQ12AYM**	**RXYQ12AYM**	**RXYQ16AYM**	**RXYQ16AYM**		**RXYQ16AYM**	**RXYQ16AYM**	**RXYQ16AYM**	**RXYQ18AYM**	**RXYQ18AYM**	**RXYQ18AYM**	**RXYQ20AYM**	**RXYQ20AYM**
			–	–	**RXYQ14AYM**	**RXYQ16AYM**	**RXYQ16AYM**	**RXYQ16AYM**		**RXYQ16AYM**	**RXYQ16AYM**	**RXYQ18AYM**	**RXYQ18AYM**	**RXYQ18AYM**	**RXYQ20AYM**	**RXYQ20AYM**	**RXYQ20AYM**
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	324,000	345,000	365,000	382,000	403,000	423,000		444,000	461,000	478,000	495,000	512,000	532,000	553,000	573,000
		kW	95.0	101	107	112	118	124		130	135	140	145	150	156	162	168
Heating capacity		Btu/h	362,000	386,000	409,000	427,000	450,000	471,000		495,000	512,000	532,000	553,000	573,000	597,000	621,000	645,000
		kW	106	113	120	125	132	138		145	150	156	162	168	175	182	189
Power consumption	Cooling	kW	28.2	30.6	28.1	30.3	32.6	34.5		36.5	38.7	41.1	43.5	45.9	48.3	50.7	53.1
	Heating	kW	27.5	29.7	28.8	30.4	32.4	34.1		36.2	37.8	40.1	42.4	44.7	46.9	49.1	51.3
Capacity control		%	5-100	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	(3.6×1)+(3.7×1)+(4.1×1)+(4.0×1)	(3.6×1)+(3.7×1)+(3.7×1)+(6.3×1)	(5.5×1)+(5.5×1)+(2.9×1)+(3.3×1)	(5.5×1)+(5.5×1)+(3.6×1)+(3.7×1)	(4.5×1)+(3.6×1)+(3.7×1)+(3.6×1)+(3.7×1)	(5.5×1)+(3.6×1)+(3.7×1)+(3.6×1)+(3.7×1)		(2.9×1)+(3.3×1)+(3.6×1)+(3.7×1)+(3.6×1)+(3.7×1)	(3.6×1)+(3.7×1)+(3.6×1)+(3.7×1)+(3.6×1)+(3.7×1)	(3.6×1)+(3.7×1)+(3.6×1)+(3.7×1)+(4.1×1)+(4.0×1)	(3.6×1)+(3.7×1)+(4.1×1)+(4.0×1)+(4.1×1)+(4.0×1)	(4.1×1)+(4.0×1)+(4.1×1)+(4.0×1)+(4.1×1)+(4.0×1)	(4.1×1)+(4.0×1)+(4.1×1)+(4.0×1)+(3.7×1)+(6.3×1)	(4.1×1)+(4.0×1)+(3.7×1)+(6.3×1)+(3.7×1)+(6.3×1)	(3.7×1)+(6.3×1)+(3.7×1)+(6.3×1)+(3.7×1)+(6.3×1)
Airflow rate		ℓ/s	4,283+4,200	4,283+4,950	3,183+3,183+4,283		2,967+4,283+4,283	3,183+4,283+4,283		4,283+4,283+4,283		4,283+4,283+4,200	4,283+4,200+4,200	4,200+4,200+4,200	4,200+4,200+4,950	4,200+4,950+4,950	4,950+4,950+4,950
		m³/min	257+252	257+297	191+191+257		178+257+257	191+257+257		257+257+257		257+257+252	257+252+252	252+252+252	252+252+297	252+297+297	297+297+297
Dimensions (H×W×D)		mm	(1,657×1,240×765)+(1,657×1,240×765)		(1,657×930×765)+(1,657×930×765)+(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)+(1,657×1,240×765)							
Machine weight		kg	285+305	285+325	200+200+285		200+285+285			285+285+285		285+285+305	285+305+305	305+305+305	305+305+325	305+325+325	325+325+325
Sound level		dB(A)	64	66	64					65				66	68	69	70
Sound power		dB(A)	85	87	85					86				87	89	90	91
Operation range	Cooling	°CDB	-5 to 49							-5 to 49							
	Heating	°CWB	-20 to 15.5							-20 to 15.5							
Refrigerant	Type		R-410A							R-410A							
	Charge	kg	9.3+11.8		7.6+7.6+9.1	7.6+7.6+9.3	7.4+9.3+9.3	7.6+9.3+9.3		9.1+9.3+9.3	9.3+9.3+9.3	9.3+9.3+11.8	9.3+11.8+11.8	11.8+11.8+11.8			
Piping connections	Liquid	mm	ϕ19.1 (Brazing)							ϕ19.1 (Brazing)							
	Gas	mm	ϕ34.9 (Brazing)	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.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.

•Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

Maximum Comfort via Simultaneous Cooling and Heating

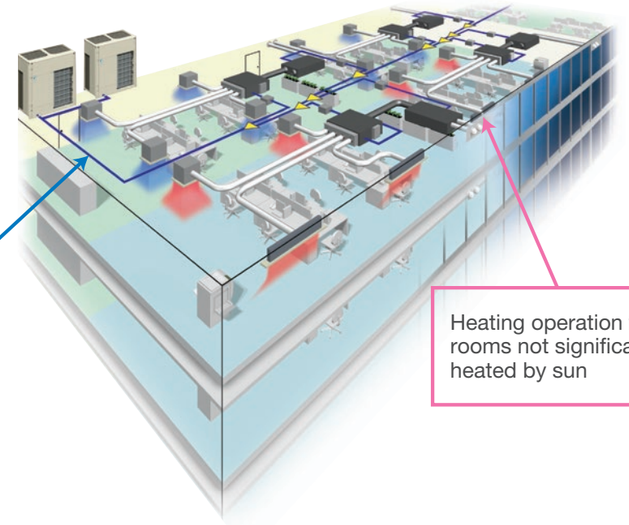


REYQ-TA

Heat Recovery

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

Offers simultaneous cooling and heating operation on the same floor!

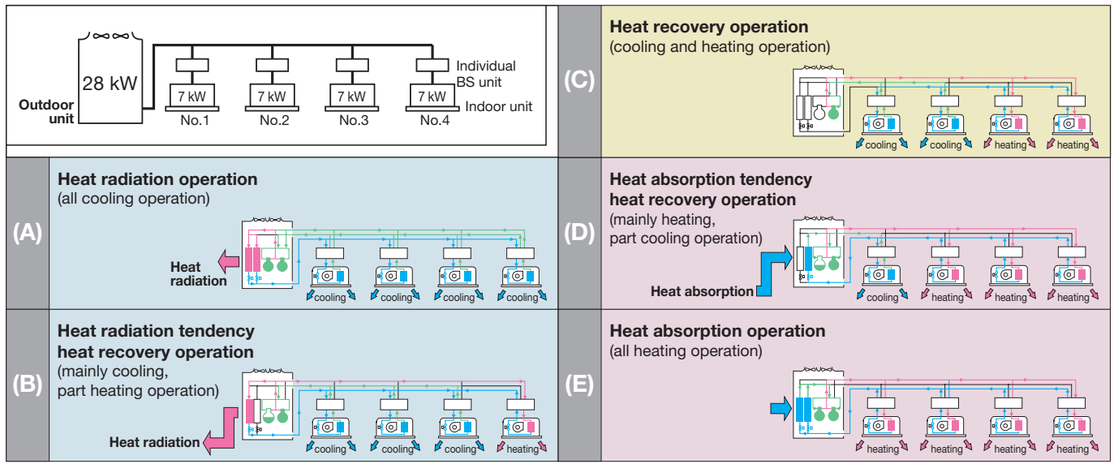


What is Heat Recovery Air Conditioner?

Modern office buildings are highly airtight and subject to an increasing heat load due to the use of computers, lighting equipment and other office equipment. In these buildings some rooms may require artificial cooling even in winter, depending on the amount of sunshine received and the number of people in the room. In order to meet such requirements the Heat Recovery Series enables the simultaneous operation of cooling and heating by controlling the BS unit that switches cooling and heating. This series also substantially improves energy efficiency by recycling waste heat.

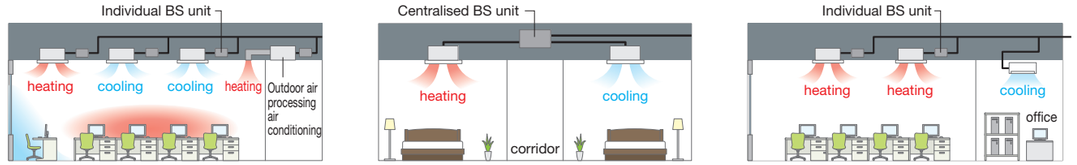
Operation mode

Heat recovery operation mode



Note: Operation modes (A) and (E) are applicable when the outdoor temperature is 35°C and 7°C respectively; The other modes are applicable under typical outdoor conditions.

Increasing demand for simultaneous cooling and heating needs



Winter season (Office Building)

- Difference between the load of cold air and heat from room is large
- Can be use with the outdoor air processing air conditioning

Winter season (Hotel)

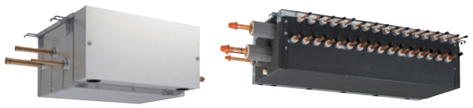
- Able to cater to individual heating and cooling requirement

Individual office

- Provides heating and annual cooling depending on space area

BS unit (Individual type/Centralised type)

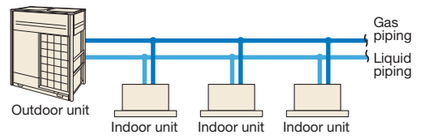
By adding suction gas piping and a BS unit (sold separately), simultaneous cooling and heating operation can be provided by a single system.



Individual BS unit

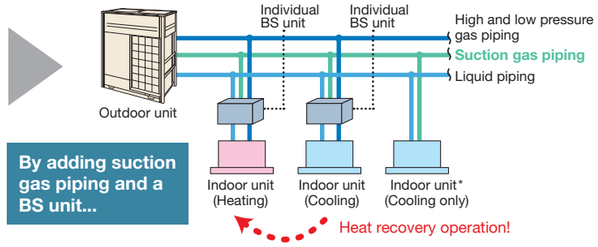
Centralised BS unit

Heat pump



* For indoor units used for cooling only (do not connect to BS unit when using for heat recovery), total capacity index must be 50% or less than the capacity index of the outdoor units.

Heat recovery



Advanced technologies for greater energy savings

By utilising advanced software technologies, ***VRV*** R Series is able to attain greater heights in energy savings and comfort.

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

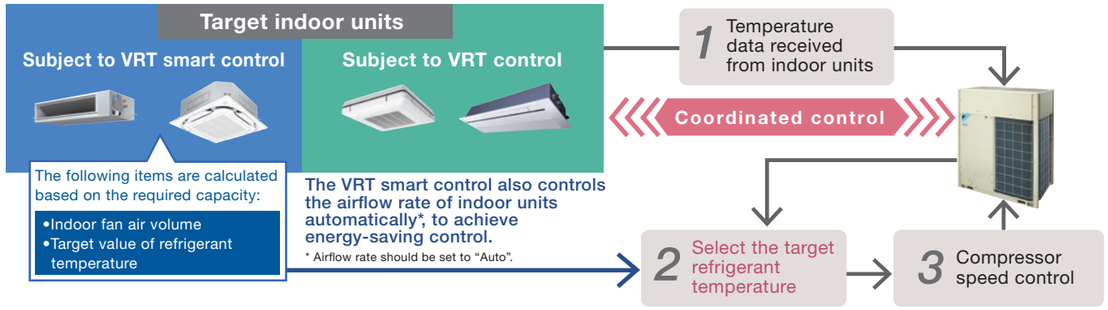
Software technology

Daikin's VRT Smart technology takes comfort and energy performance to the next level. Building on our variable refrigerant temperature technology which enables the evaporating temperature to adjust to meet the varying load, VRT Smart is now also able to automatically adjust the indoor unit airflow rate (Airside Control) to ensure optimal comfort and energy performance is delivered at all times.

VRT Smart Control Function movie

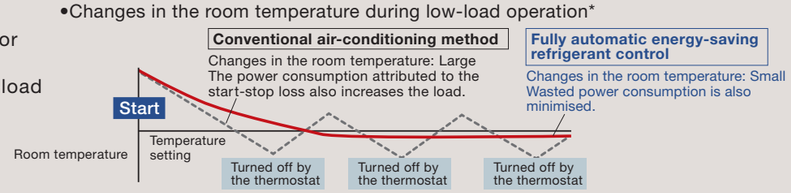
•Overview of the control (system control flow)

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 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 pages 47–48.
- 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 only available during either all cooling operation or all heating operation.

Optimum utilisation of VRT Smart Control and VRT Control

VRT Smart and VRT control is most effective when all the indoor units operate under low load conditions in a similar manner. Low load conditions is the time when room temperature approaches set temperature. For this reason, please note the following to maximise efficacy.

•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 indicated below.

Example:

1) A load imbalance occurs because an indoor unit on 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.
3) Energy efficiency decreases when the set temperature of a specified indoor unit is set to an extreme during cooling operation. E.g. 18°C

Enhanced lineup

Wider capacity range from 6 to 60 class

With its enhanced lineup of 2 types-High-COP and Standard types, ***VRV*** R series Heat Recovery outdoor units offer a wider capacity range from 6 class (16 kW) to 60 class (168 kW) to meet an ever wider variety of needs.

•Single Outdoor Unit

VRV Ⅲ

8, 10, 12, 14, 16 class

From 8 to 16 class

VRV R SERIES

6, 8, 10, 12 class　14, 16, 18, 20 class

From 6 to 20 class

•Multiple Outdoor Units

VRV Ⅲ

From 18 to 48 class

1 type only

VRV R SERIES

From 12 to 60 class

2 types of High-COP type and Standard type

Lineup

class	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
High-COP Type				●	●	●	●	●	●	●	●	●	●	●	●	●												
Standard Type	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Ease of installation

Compact & lightweight design

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

***VRV* Ⅲ**
12 class(33.5 kW)

***VRV* R SERIES**
12 class(33.5 kW)

	***VRV* Ⅲ** 12 class (33.5 kW)	***VRV* R SERIES** 12 class(33.5 kW)	
Installation Space	0.99 m²	0.71 m²	28% Decrease
Product Weight	331 kg	230 kg	30% Decrease

Comfort

Lower operation sound

Improve heat exchanger efficency, helps to reduced operation sound.

Sound level(dB(A))

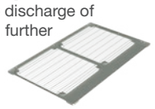
	6/8 class	10 class	12 class	14 class	16 class
***VRV* Ⅲ**	58	58	60	62	63
***VRV* R SERIES**	56	57	59	60	61

1-2 dB(A) reduction than conventional model

Large airflow, high static pressure and quiet technology

Without increasing operation sound, advanced analytical 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.

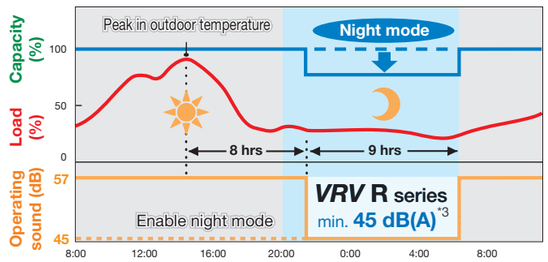


Streamlined scroll fan
The sharp edge of each fan blade has a certain curvature, reducing both the vibration and the pressure loss.

Nighttime quiet operation function

Outdoor PCB automatically memorises the time when the peak outdoor temperature appears. It will enable quiet operation mode after 8 h*1, and return to normal mode after it keeps for 9 h*2.

*1. 8 h is the initial setting with 6 h or 10 h also available.
*2. 9 h is the initial setting with 8 h or 10 h also available.
*3. In case of 10 class outdoor unit during cooling operation.



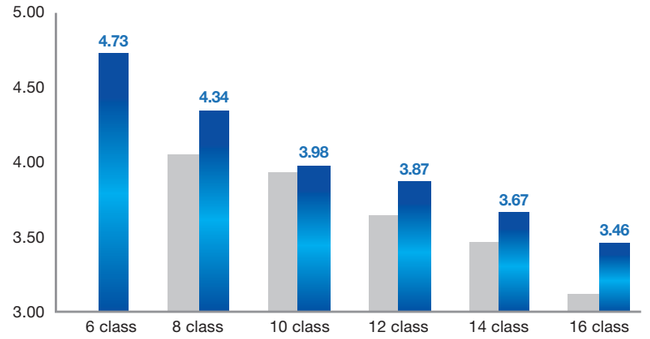
Note: · This function is available in setting at site.
· The operating sound in quiet operation mode is the actual value measured by our company.
· The relationship of outdoor temperature (load) and time shown above is just an example.

Energy saving

Higher Coefficient of Performance (COP)

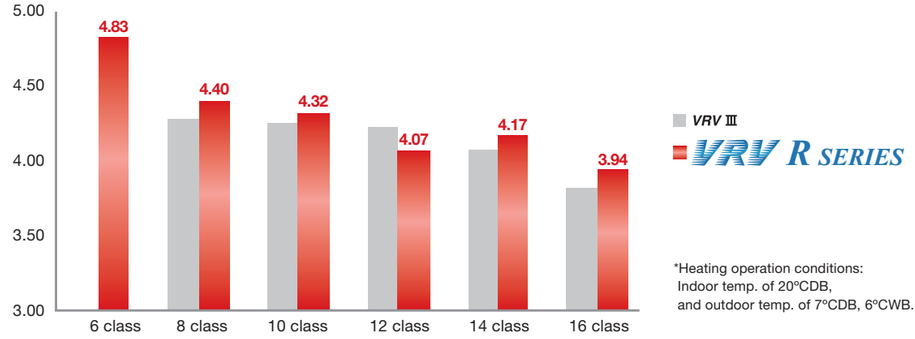
It has become essential for air conditioning manufacturers to develop systems that provide high energy savings. We at Daikin have made great efforts in this field, and the ***VRV*** R series delivers highly efficient performance, contributing to high energy savings.

Cooling Operation COP



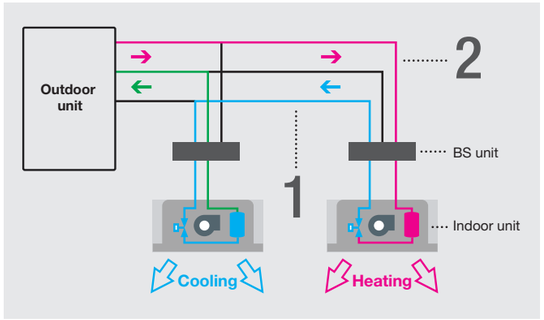
*Cooling operation conditions:
Indoor temp. of 27°CDB,19°CWB, and outdoor temp. of 35°CDB.

Heating Operation COP



*Heating operation conditions:
Indoor temp. of 20°CDB, and outdoor temp. of 7°CDB, 6°CWB.

The heat recovery system utilises waste heat, achieving outstanding energy conservation performance.



1 The (cold) waste heat from heating is used for the cooling operation.

2 The waste heat from cooling is used to generate heat that is needed for heating operation while conserving electricity.

The flexibility of simultaneous cooling and heating operation has been further enhanced by various advanced technologies.

Development of a highly efficient heat exchanger utilising of a two-split structure

In a conventional system, two heat exchanger panels are utilised: one is used as an evaporator; while the other is used as a condenser. In the newly developed system, a two-split structure is utilised, with one panel split into two parts (top and bottom) at an optimal ratio depending on the capacity required for simultaneous cooling and heating operation. Heat radiation loss has been minimised, and the heat recovery efficiency and partial load characteristics have been improved.

■Comparison of 12 class system (During simultaneous cooling and heating operation)

Conventional model (*VRV* Ⅲ)

Two heat exchanger panels are used. Heat radiation loss from the condenser is high.

VRV R SERIES

The heat exchanger panel utilises a two-split structure (top and bottom), achieving higher heat recovery efficiency than the conventional model.

The size has been reduced by using four heat exchanger panels.

Indoor and outdoor heat balance (conceptual image)

[Indoor unit side]

Cooling load (heat absorption)

Heating load (heat radiation)

Heat recovery

The thermal load that cannot be recovered needs to be radiated from the outdoor unit.

[Outdoor unit]

Conventional model (*VRV* Ⅲ)

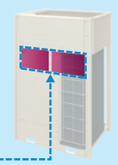
The condenser is large, resulting in unnecessary heat radiation.

Heat loss

VRV R SERIES

The optimal condensation capacity can be attained.

Heat loss control



Condenser Evaporator

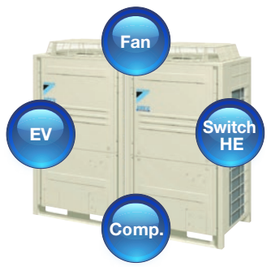
Heat Recovery Link control to reduce the heat loss

Heat loss is minimised by interlocking the heat exchanger switching, motor-operated valves, compressors, and fans, which are conventionally controlled independently during simultaneous cooling and heating operation, leading to a significant increase in efficiency.

***VRV* Ⅲ**

Refrigerant circuit is balanced based on the independent control of each elements

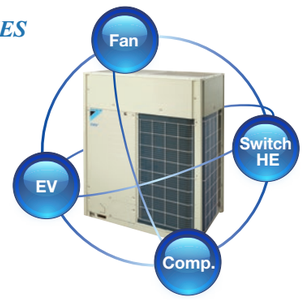
⇒ occurred heat loss



VRV R SERIES

Interlocking operation with each elements in order to reduce energy

⇒ Improvement of Heat recovery

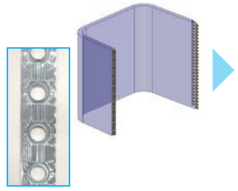


Advanced technologies achieve excellent performance

Highly integrated heat exchanger

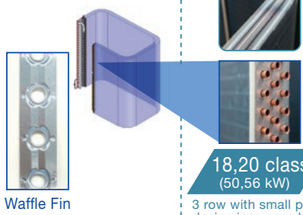
Improve performance by increasing heat exchanger area while maintaining the same installation space.

***VRV* Ⅲ**



Fine Louvre Fin

VRV R SERIES



Waffle Fin

18,20 class (50,56 kW)

3 row with small pipe design,increases heat transfer efficiency

Realise highly integrated heat exchanger performance (increase row, reduce fin pitch) by reducing of airflow resistance which changes cooling tube to Ø7.

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

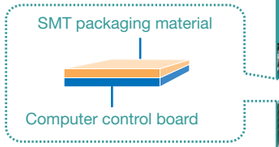
	Heat exchanger area	Contribution of COP (cooling)
16 class (45 kW)	24%UP	108.5%

Various advanced control main PC board

SMT* packaging technology

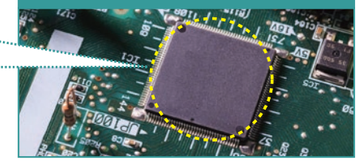
SMT packaging technology adopted by the whole computer control panel improves the anti-clutter performance.

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



*SMT: Surface mounted technology

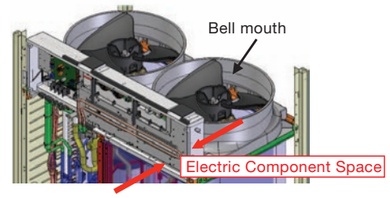
Computer control board surface adopting SMT packaging technology



Refrigerant cooling technology, ensures stability of PCB temperature

Improved inner design to increase smooth airflow

Downsize electric component, re-locate to dead space of bell mouth side to decrease airflow resistance.



***VRV* Ⅲ**

Roof terrace temperature in summer is over 40°C, seriously affecting inverter cooling efficiency, resulting in decline of inverter operating speed. Finally device parts response speed is reduced.

VRV R SERIES

Control board failure ratio at stable operation is reduced.

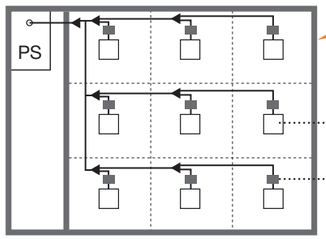
Improve reliability at high ambient temperature
It is possible to cool the inverter power module stability even at high ambient temperature.
This helps to keep air-conditioning capacity and also reduces failure ratio.

Individual and centralised BS unit allow greater design flexibility.

Individual BS unit

BSQ100AV1
BSQ160AV1
BSQ250AV1

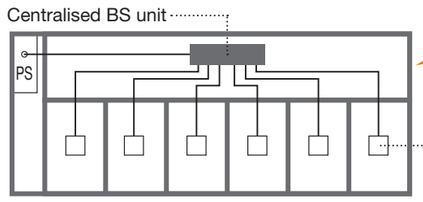
- Compact and flexible installation
- Flexible design
- Low noise



Recommended for large spaces or areas subject to frequent layout change

Centralised BS unit

BS4Q14AV1
BS6Q14AV1
BS8Q14AV1
BS10Q14AV1
BS12Q14AV1
BS16Q14AV1



Recommended for areas which have many small rooms

- Enhanced Line up

No. of branches	4	6	8	10	12	16
Conventional Centralised BS Unit	●	●				
Centralised BS Unit	●	●	●	●	●	●

- Compact and lightweight design

Compared to conventional BS unit (6 branch)

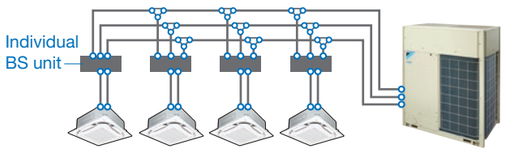
BS unit size **reduced by 65%**

BS unit weight **reduced by 73%**

Installation and maintenance work have been made easier through the integration of multiple BS units.

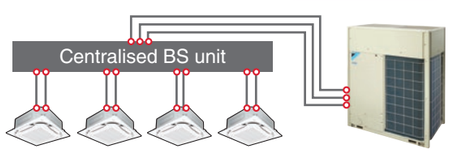
Individual BS unit

58 connecting point



Centralised BS unit

22 connecting point



*Centralised BS unit requires drain pipe

Greater design flexibility achieved by increasing the connection capacity range

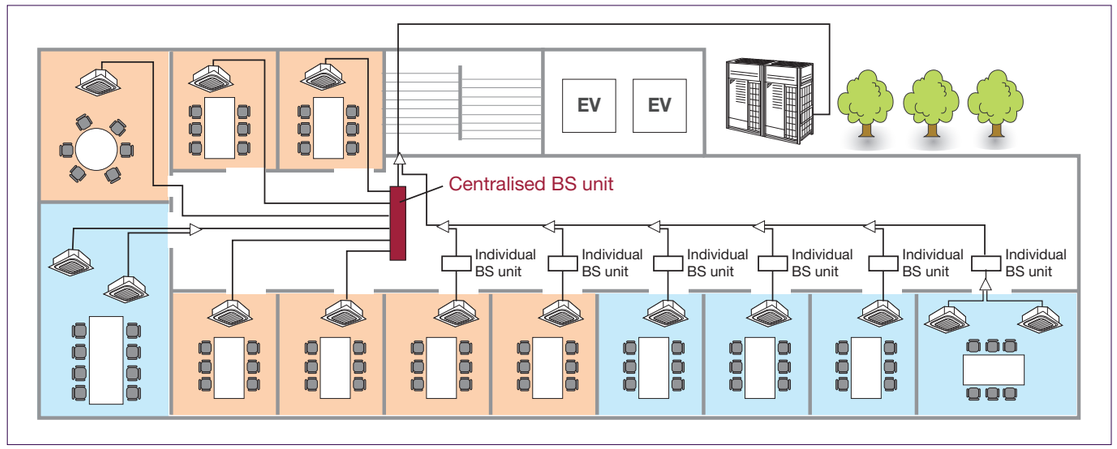
Centralised BS unit

Increased from
2.2–16.0 kW
(Up to 11.2 kW in the conventional system)

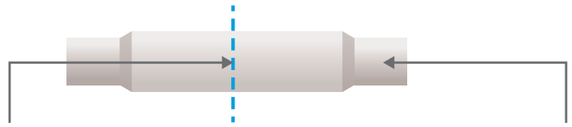
Centralised BS unit

By merging two branches
Adaptable up to
28.0 kW

Combined use of a centralised BS unit and individual BS units meets the needs of many design plans.



Faster installation of centralised BS unit thanks to open connection



Time saving!

Cut and braze the pipe
(for indoor units bigger or equal to 7.1 kW (63 class))

No need to cut the pipe before brazing
(for indoor units smaller or equal to 5.6 kW (50 class))

Lower transient sound

New BS units achieve lower transient sound level than conventional BS units.

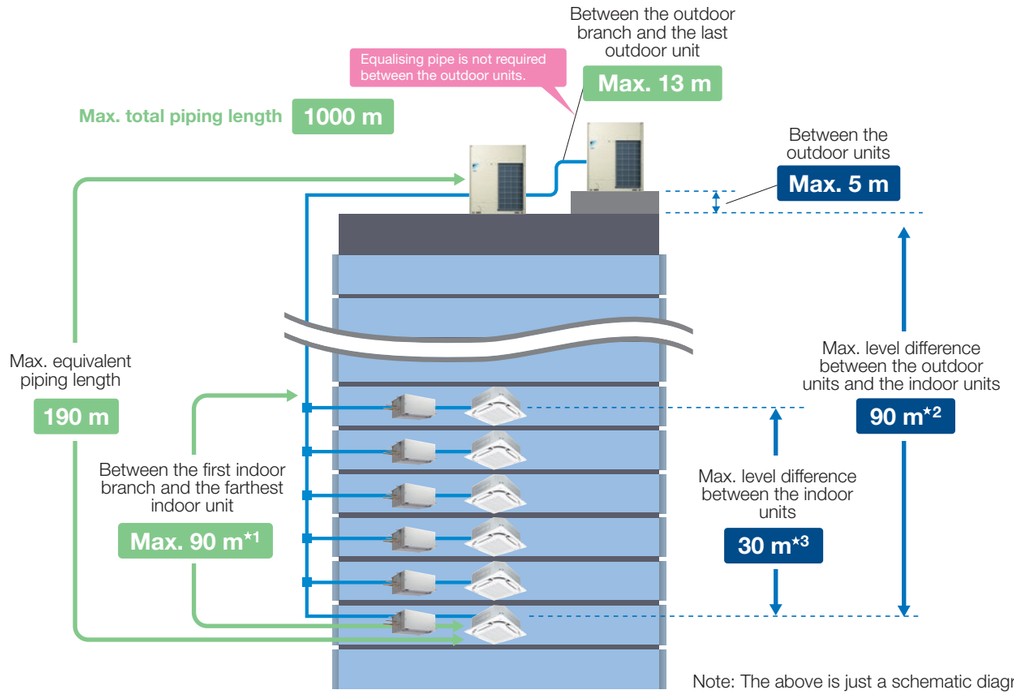
Maximum transient sound		Centralised BS unit						Individual BS unit		
		4 branch	6 branch	8 branch	10 branch	12 branch	16 branch	100 type	160 type	250 type
New BS units	**Sound level (dB(A))***	**45**	**47**	**47**	**48**	**48**	**49**	**40**	**45**	**45**
Conventional BS units	Sound level (dB(A))*	51.5	53.5	—				45.5	46.5	47.5

*Anechoic chamber conversion value, measured at a point 1 m downward from the unit centre.

More options for equipment placement

Long piping length

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



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★3
	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*** R 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.
★3. When level differences are 15 m or more, maximum actual piping length must be 120 m.

Connection ratio

Connection capacity at maximum is 200%.

Connection ratio
50%–200%

Connection ratio = Total capacity index of the indoor units / Capacity index of the outdoor units

Conditions of *VRV* indoor unit connection capacity

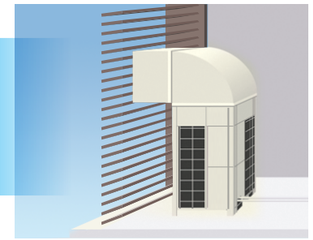
Applicable ***VRV*** indoor units	FXDQ, FXSQ, FXMQ-PA, FXAQ models	Other ***VRV*** indoor unit models*1
Single outdoor units	200%	200%
Double outdoor units		160%
Triple outdoor units		130%

*1 For the FXF(S)Q25 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 46 for outdoor unit combination details.

High external static pressure

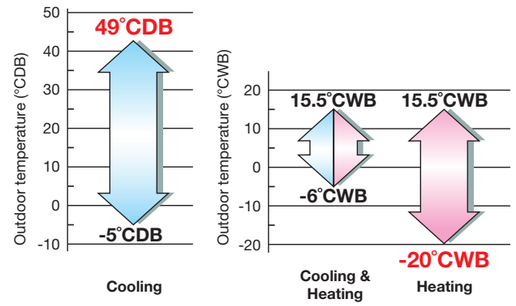
VRV R series outdoor unit has been achieved high external static pressure up to 78.4 Pa, ensuring the efficient heat dissipation and stable operation of equipment in either hierarchical or intensive arrangement.

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



Wide operation temperature range

The versatile operation range of the ***VRV*** R series works to reduce limitations on installation locations. The operation temperature range for heating goes all the way down to -20˚C, while cooling can be performed with outdoor temperatures as high as 49˚C. Both these achievements are due to the employment of a high-pressure dome-type compressor.

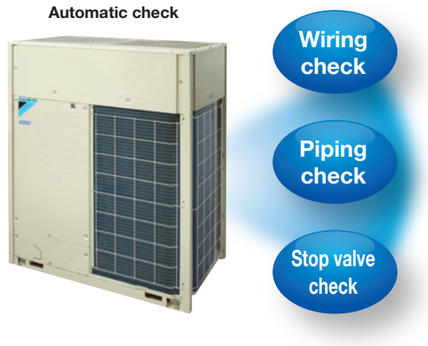


Multiple advanced features ensuring more accurate test operation and stable system

Efficient automatic test operation

Daikin ***VRV*** R 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.
- Optimises operations to suit field piping lengths.
- Automatically check 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 R 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.

7-segment digital display	Conventional LED display
Displays system operation information directly 	Figures out system operation information by reading light emitting state of different diodes, which is both inefficient and fallible. 

Compliant with the RoHS Directive*

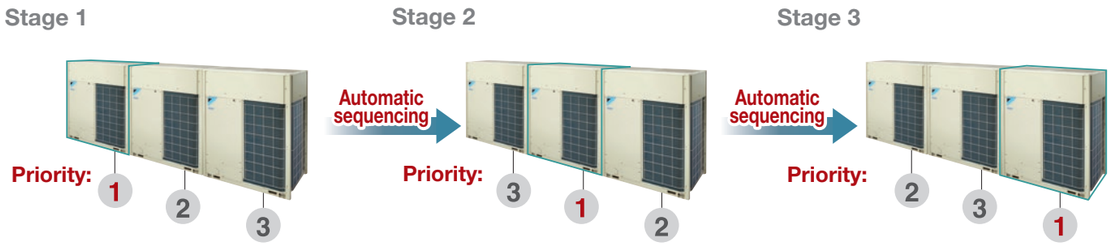
We have been making efforts to facilitate the transition to using RoHS Directive*-compliant materials for system parts.

* RoHS Directive
The RoHS (Restriction of Hazardous Substances (in electrical and electronic equipment)) Directive is an environmental directive enacted to regulate the use of designated chemical substances (lead, cadmium, hexavalent chromium, mercury, polybrominated biphenyls and polybrominated diphenylether) in electrical equipment. All household products subject to this Directive and sold in Europe from July 1, 2006 are legally bound to comply with the RoHS Directive.

Outdoor unit sequencing technology

Automatic sequencing operation

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



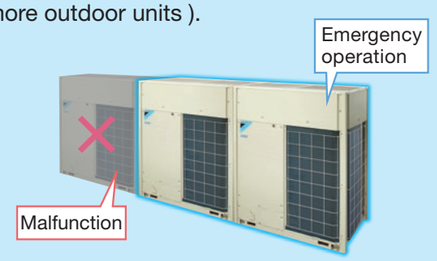
Double backup operation functions responding resiliently to various unexpected situations

Double backup operation functions

Daikin ***VRV*** R series boasts double backup operation functions, which can secure the use of air conditioners in this area to the greatest extent by emergently enabling double backup operation functions even if failure occurs in a set of 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 malfunction occurs in an outdoor unit...
Emergency operation can be conveniently set and enabled by the remote controller for indoor unit (for systems composed of two or more outdoor units).



Compressor backup operation function

If malfunction occurs in a compressor...
Emergency operation can be easily set and enabled by the outdoor unit (for a single outdoor unit system REYQ14-20TAY1 models).

VRV R Series Outdoor Units Heat Recovery

Wider capacity range from 6 to 60 class

- With its enhanced lineup of 2 types-High-COP and Standard types, ***VRV*** R series Heat Recovery outdoor units offer a wider capacity range from 6 class (16 kW) to 60 class (168 kW) to meet an ever wider variety of needs.
- The single outdoor unit has only 2 different shapes and dimensions, not only simplifying the design process, but also bringing the system design flexibility to a new level.

High-COP Type

●Double Outdoor Units

12, 14, 16, 18, 20 class

REYQ12TAHY1 REYQ18TAHY1
REYQ14TAHY1 REYQ20TAHY1
REYQ16TAHY1

●Triple Outdoor Units

22, 24, 26, 28, 30, 32, 34, 36 class

REYQ22TAHY1 REYQ30TAHY1
REYQ24TAHY1 REYQ32TAHY1
REYQ26TAHY1 REYQ34TAHY1
REYQ28TAHY1 REYQ36TAHY1

Standard Type

●Single Outdoor Units

6, 8, 10, 12 class

REYQ6TAY1
REYQ8TAY1
REYQ10TAY1
REYQ12TAY1

14, 16, 18, 20 class

REYQ14TAY1
REYQ16TAY1
REYQ18TAY1
REYQ20TAY1

●Double Outdoor Units

22, 24 class

REYQ22TAY1
REYQ24TAY1

26, 28, 30 class

REYQ26TAY1
REYQ28TAY1
REYQ30TAY1

32, 34, 36 class

REYQ32TAY1
REYQ34TAY1
REYQ36TAY1

●Triple Outdoor Units

38, 40 class

REYQ38TAY1
REYQ40TAY1

42, 44 class

REYQ42TAY1
REYQ44TAY1

46, 48, 50, 52, 54, 56, 58, 60 class

REYQ46TAY1 REYQ52TAY1 REYQ58TAY1
REYQ48TAY1 REYQ54TAY1 REYQ60TAY1
REYQ50TAY1 REYQ56TAY1

Lineup

	class	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 R SERIES	High-COP Type				●	●	●	●	●	●	●	●	●	●	●	●	●												
	Standard Type	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Outdoor Unit Combinations

High-COP Type

class	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
12	32.0	300	REYQ12TAH	REYQ6TA x 2	BHFP26P90	150 to 390 (480)	19 (24)
14	38.4	350	REYQ14TAH	REYQ6TA + REYQ8TA		175 to 455 (560)	22 (28)
16	44.8	400	REYQ16TAH	REYQ8TA x 2		200 to 520 (640)	26 (32)
18	50.4	450	REYQ18TAH	REYQ8TA + REYQ10TA		225 to 585 (720)	29 (36)
20	55.9	500	REYQ20TAH	REYQ8TA + REYQ12TA		250 to 650 (800)	32 (40)
22	60.8	550	REYQ22TAH	REYQ6TA + REYQ8TA x 2	BHFP26P136	275 to 715 (715)	35 (35)
24	67.2	600	REYQ24TAH	REYQ8TA x 3		300 to 780 (780)	39 (39)
26	72.8	650	REYQ26TAH	REYQ8TA x 2 + REYQ10TA		325 to 845 (845)	42 (42)
28	78.3	700	REYQ28TAH	REYQ8TA x 2 + REYQ12TA		350 to 910 (910)	45 (45)
30	83.9	750	REYQ30TAH	REYQ8TA + REYQ10TA + REYQ12TA		375 to 975 (975)	48 (48)
32	89.4	800	REYQ32TAH	REYQ8TA+ REYQ12TA x 2		400 to 1,040 (1,040)	52 (52)
34	95.0	850	REYQ34TAH	REYQ10TA+ REYQ12TA x 2		425 to 1,105 (1,105)	55 (55)
36	101	900	REYQ36TAH	REYQ12TA x 3		450 to 1,170 (1,170)	58 (58)

Note: *1. The outdoor unit multi connection piping kit (separately sold) is required for multiple connection.
*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 42 for note on connection capacity of indoor units.

Standard Type

class	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
6	16.0	150	REYQ6TA	REYQ6TA	–	75 to 195 (300)	9 (15)
8	22.4	200	REYQ8TA	REYQ8TA	–	100 to 260 (400)	13 (20)
10	28.0	250	REYQ10TA	REYQ10TA	–	125 to 325 (500)	16 (25)
12	33.5	300	REYQ12TA	REYQ12TA	–	150 to 390 (600)	19 (30)
14	40.0	350	REYQ14TA	REYQ14TA	–	175 to 455 (700)	22 (35)
16	45.0	400	REYQ16TA	REYQ16TA	–	200 to 520 (800)	26 (40)
18	50.0	450	REYQ18TA	REYQ18TA	–	225 to 585 (900)	29 (45)
20	56.0	500	REYQ20TA	REYQ20TA	–	250 to 650 (1,000)	32 (50)
22	61.5	550	REYQ22TA	REYQ10TA + REYQ12TA	BHFP26P90	275 to 715 (880)	35 (44)
24	67.0	600	REYQ24TA	REYQ12TA × 2		300 to 780 (960)	39 (48)
26	73.5	650	REYQ26TA	REYQ12TA + REYQ14TA		325 to 845 (1,040)	42 (52)
28	78.5	700	REYQ28TA	REYQ12TA + REYQ16TA		350 to 910 (1,120)	45 (56)
30	83.5	750	REYQ30TA	REYQ12TA + REYQ18TA		375 to 975 (1,200)	48 (60)
32	90.0	800	REYQ32TA	REYQ16TA × 2		400 to 1,040 (1,280)	52 (64)
34	95.0	850	REYQ34TA	REYQ16TA + REYQ18TA		425 to 1,105 (1,360)	55 (64)
36	101	900	REYQ36TA	REYQ16TA + REYQ20TA		450 to 1,170 (1,440)	58 (64)
38	107	950	REYQ38TA	REYQ12TA × 2 + REYQ14TA	BHFP26P136	475 to 1,235 (1,235)	61 (61)
40	112	1,000	REYQ40TA	REYQ12TA × 2 + REYQ16TA		500 to 1,300 (1,300)	64 (64)
42	118	1,050	REYQ42TA	REYQ10TA + REYQ16TA × 2		525 to 1,365 (1,365)	
44	124	1,100	REYQ44TA	REYQ12TA + REYQ16TA × 2		550 to 1,430 (1,430)	
46	130	1,150	REYQ46TA	REYQ14TA + REYQ16TA × 2		575 to 1,495 (1,495)	
48	135	1,200	REYQ48TA	REYQ16TA × 3		600 to 1,560 (1,560)	
50	140	1,250	REYQ50TA	REYQ16TA × 2 + REYQ18TA		625 to 1,625 (1,625)	
52	145	1,300	REYQ52TA	REYQ16TA + REYQ18TA × 2		650 to 1,690 (1,690)	
54	150	1,350	REYQ54TA	REYQ18TA × 3		675 to 1,755 (1,755)	
56	156	1,400	REYQ56TA	REYQ18TA × 2 + REYQ20TA		700 to 1,820 (1,820)	
58	162	1,450	REYQ58TA	REYQ18TA + REYQ20TA × 2		725 to 1,885 (1,885)	
60	168	1,500	REYQ60TA	REYQ20TA × 3		750 to 1,950 (1,950)	

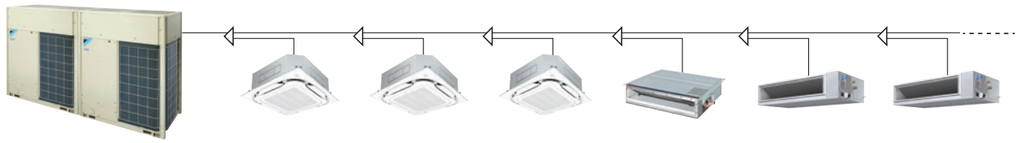
Note: *1. For multiple connection of 22 class systems and above, the outdoor unit multi connection piping kit (separately sold) is required.
*2. Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units. Refer to page 42 for note on connection capacity of indoor units.

Enhanced range of choices

● New lineup ● Indoor units subject to VRT smart control

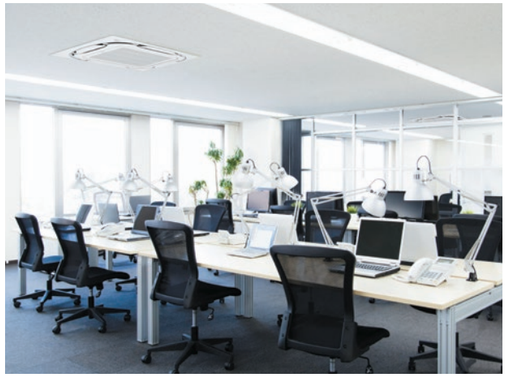
Type	Model Name		20	25	32	40	50	63	71	80	100	125	140	145	160	180	200	250
		Capacity Range(kW)	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	16.2	18	20	22.4	28
		Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	145	160	180	200	250
Ceiling Mounted Cassette (Round Flow with Sensing)	FXFSQ-AVM			●	●	●	●	●		●	●	●	●					
Ceiling Mounted Cassette (Round Flow)	FXFQ-PVE			●	●	●	●	●		●	●	●						
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-A2VEB		●	●	●	●	●											
4-Way Flow Ceiling Suspended	FXUQ-AVEB								●		●							
Ceiling Mounted Cassette (Double Flow)	New FXCQ-AVM		●	●	●	●	●	●		●		●						
Ceiling Mounted Cassette (Single Flow)	FXEQ-AV36		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-TV1B(A)		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Standard Series)	FXDQ-PDVE	(700mm width type)	●	●	●													
	FXDQ-NDVE	(900 / 1100mm width type)				●	●	●										
Ceiling Concealed Duct	FXDYQ-MAV1									●	●	●		●				
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PAVE		●	●	●	●	●	●		●	●	●	●					
Ceiling Mounted Duct	FXMQ-PAVE		●	●	●	●	●	●		●	●	●	●					
	FXMQ-PV1A														●	●	●	●
Outdoor-Air Processing Unit	FXMQ-MFV1											●					●	●
Ceiling Suspended	FXHQ-MAVE				●			●			●							
	New FXHQ-AVM											●	●					
Wall Mounted	New FXAQ-AVM		●	●	●	●	●	●										
Floor Standing	FXLQ-MAVE		●	●	●	●	●	●										
Concealed Floor Standing	FXNQ-MAVE		●	●	●	●	●	●										
Heat Reclaim Ventilator with DX-Coil and Humidifier	VKM-GA(M)V1		Airflow rate 500-1000 m³/h															
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h															

Note: For indoor units without 'VRT Smart', the standard 'VRT' control is available (excludes Heat Reclaim Ventilators & Outdoor-Air Processing Unit).



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.



VRV R Series Outdoor Units Heat Recovery REYQ-TA

High-COP Type

												
Model			**REYQ12TAHY1**	**REYQ14TAHY1**	**REYQ16TAHY1**	**REYQ18TAHY1**	**REYQ20TAHY1**	**REYQ22TAHY1**	**REYQ24TAHY1**	**REYQ26TAHY1**	**REYQ28TAHY1**	**REYQ30TAHY1**
Combination units			**REYQ6TAY1**	**REYQ6TAY1**	**REYQ8TAY1**	**REYQ8TAY1**	**REYQ8TAY1**	**REYQ6TAY1**	**REYQ8TAY1**	**REYQ8TAY1**	**REYQ8TAY1**	**REYQ8TAY1**
			REYQ6TAY1	**REYQ8TAY1**	**REYQ8TAY1**	**REYQ10TAY1**	**REYQ12TAY1**	**REYQ8TAY1**	**REYQ8TAY1**	**REYQ8TAY1**	**REYQ8TAY1**	**REYQ10TAY1**
			–	–	–	–	–	**REYQ8TAY1**	**REYQ8TAY1**	**REYQ10TAY1**	**REYQ12TAY1**	**REYQ12TAY1**
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz					3-phase 4-wire system, 380-415 V, 50 Hz				
Cooling capacity		Btu/h	109,000	131,000	153,000	172,000	191,000	207,000	229,000	248,000	267,000	286,000
		kW	32.0	38.4	44.8	50.4	55.9	60.8	67.2	72.8	78.3	83.9
Heating capacity		Btu/h	123,000	147,000	171,000	193,000	213,000	232,000	256,000	278,000	299,000	321,000
		kW	36.0	43.0	50.0	56.5	62.5	68.0	75.0	81.5	87.5	94.0
Power consumption	Cooling	kW	6.76	8.54	10.3	12.2	13.8	13.7	15.5	17.4	19.0	20.9
	Heating	kW	7.46	9.41	11.4	13.0	14.9	15.1	17.0	18.7	20.6	22.2
Capacity control		%	10-100			8-100		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	(2.3×1)+(2.3×1)	(2.3×1)+(3.3×1)	(3.3×1)+(3.3×1)	(3.3×1)+(4.0×1)	(3.3×1)+(4.9×1)	(2.3×1)+(3.3×1)+(3.3×1)	(3.3×1)+(3.3×1)+(3.3×1)	(3.3×1)+(3.3×1)+(4.0×1)	(3.3×1)+(3.3×1)+(4.9×1)	(3.3×1)+(4.0×1)+(4.9×1)
Airflow rate		ℓ/s	1,983+1,983	1,983+2,633	2,633+2,633	2,633+2,800	2,633+3,000	1,983+2,633+2,633	2,633+2,633+2,633	2,633+2,633+2,800	2,633+2,633+3,000	2,633+2,800+3,000
		m³/min	119+119	119+158	158+158	158+168	158+180	119+158+158	158+158+158	158+158+168	158+158+180	158+168+180
Dimensions (H×W×D)		mm	(1,657×930×765)+(1,657×930×765)					(1,657×930×765)+(1,657×930×765)+(1,657×930×765)				
Machine weight		kg	215+215			215+230		215+215+215		215+215+230		215+230+230
Sound level		dB(A)	59			60	61	61			62	
Sound power		dB(A)	80			81	82	82			83	
Operation range	Cooling	°CDB	-5 to 49					-5 to 49				
	Heating	°CWB	-20 to 15.5					-20 to 15.5				
	Cooling & Heating	°CWB	-6 to 15.5					-6 to 15.5				
Refrigerant	Type		R-410A					R-410A				
	Charge	kg	9.7+9.7			9.7+9.8	9.7+9.9	9.7+9.7+9.7		9.7+9.7+9.8	9.7+9.7+9.9	9.7+9.8+9.9
Piping connections	Liquid	mm	ϕ12.7 (Brazing)			ϕ15.9 (Brazing)		ϕ15.9 (Brazing)		ϕ19.1 (Brazing)		
	Gas	mm	ϕ28.6 (Brazing)					ϕ28.6 (Brazing)	ϕ34.9 (Brazing)			
	High and low pressure gas	mm	ϕ19.1 (Brazing)	ϕ22.2 (Brazing)			ϕ28.6 (Brazing)	ϕ28.6 (Brazing)				

					
Model			**REYQ32TAHY1**	**REYQ34TAHY1**	**REYQ36TAHY1**
Combination units			**REYQ8TAY1**	**REYQ10TAY1**	**REYQ12TAY1**
			REYQ12TAY1	**REYQ12TAY1**	**REYQ12TAY1**
			REYQ12TAY1	**REYQ12TAY1**	**REYQ12TAY1**
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz		
Cooling capacity		Btu/h	305,000	324,000	345,000
		kW	89.4	95.0	101
Heating capacity		Btu/h	341,000	365,000	386,000
		kW	100	107	113
Power consumption	Cooling	kW	22.5	24.4	26.0
	Heating	kW	24.1	25.7	27.7
Capacity control		%	5-100		
Casing colour			Ivory white (5Y7.5/1)		
Compressor	Type		Hermetically sealed scroll type		
	Motor output	kW	(3.3×1)+(4.9×1)+(4.9×1)	(4.0×1)+(4.9×1)+(4.9×1)	(4.9×1)+(4.9×1)+(4.9×1)
Airflow rate		ℓ/s	2,633+3,000+3,000	2,800+3,000+3,000	3,000+3,000+3,000
		m³/min	158+180+180	168+180+180	180+180+180
Dimensions (H×W×D)		mm	(1,657×930×765)+(1,657×930×765)+(1,657×930×765)		
Machine weight		kg	215+230+230	230+230+230	
Sound level		dB(A)	63		64
Sound power		dB(A)	84		85
Operation range	Cooling	°CDB	-5 to 49		
	Heating	°CWB	-20 to 15.5		
	Cooling & Heating	°CWB	-6 to 15.5		
Refrigerant	Type		R-410A		
	Charge	kg	9.7+9.9+9.9	9.8+9.9+9.9	9.9+9.9+9.9
Piping connections	Liquid	mm	ϕ19.1 (Brazing)		
	Gas	mm	ϕ34.9 (Brazing)		ϕ41.3 (Brazing)
	High and low pressure gas	mm	ϕ28.6 (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.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
  When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

VRV R Series Outdoor Units Heat Recovery REYQ-TA

Standard Type

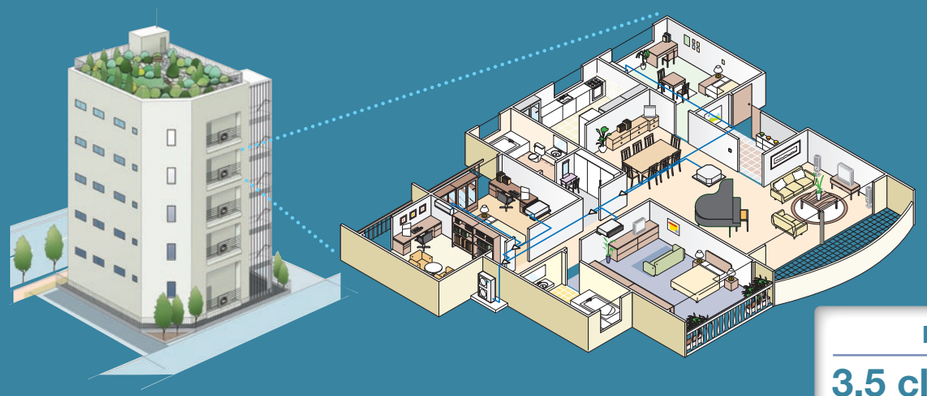
																	
Model			**REYQ6TAY1**	**REYQ8TAY1**	**REYQ10TAY1**	**REYQ12TAY1**	**REYQ14TAY1**	**REYQ16TAY1**		**REYQ18TAY1**	**REYQ20TAY1**	**REYQ22TAY1**	**REYQ24TAY1**	**REYQ26TAY1**	**REYQ28TAY1**	**REYQ30TAY1**	**REYQ32TAY1**
Combination units			–	–	–	–	–	–		–	–	**REYQ10TAY1**	**REYQ12TAY1**	**REYQ12TAY1**	**REYQ12TAY1**	**REYQ12TAY1**	**REYQ16TAY1**
			–	–	–	–	–	–		–	–	**REYQ12TAY1**	**REYQ12TAY1**	**REYQ14TAY1**	**REYQ16TAY1**	**REYQ18TAY1**	**REYQ16TAY1**
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz							3-phase 4-wire system, 380-415 V, 50 Hz							
Cooling capacity		Btu/h	54,600	76,400	95,500	114,000	136,000	154,000		171,000	191,000	210,000	229,000	251,000	268,000	285,000	307,000
		kW	16.0	22.4	28.0	33.5	40.0	45.0		50.0	56.0	61.5	67.0	73.5	78.5	83.5	90.0
Heating capacity		Btu/h	61,400	85,300	107,000	128,000	154,000	171,000		191,000	215,000	235,000	256,000	281,000	299,000	319,000	341,000
		kW	18.0	25.0	31.5	37.5	45.0	50.0		56.0	63.0	69.0	75.0	82.5	87.5	93.5	100
Power consumption	Cooling	kW	3.38	5.16	7.04	8.66	10.9	13.0		15.4	18.0	15.7	17.3	19.6	21.7	24.1	26.0
	Heating	kW	3.73	5.68	7.29	9.22	10.8	12.7		15.0	17.5	16.5	18.4	20.0	21.9	24.2	25.4
Capacity control		%	20-100		16-100	15-100	11-100	10-100		8-100				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	2.3x1	3.3x1	4.0x1	4.9x1	(3.0x1)+(3.1x1)	(3.4x1)+(3.7x1)		(3.6x1)+(5.0x1)	(4.0x1)+(6.1x1)	(4.0x1)+(4.9x1)	(4.9x1)+(4.9x1)	(4.9x1)+(3.0x1)+(3.1x1)	(4.9x1)+(3.4x1)+(3.7x1)	(4.9x1)+(3.6x1)+(5.0x1)	(3.4x1)+(3.7x1)+(3.4x1)+(3.7x1)
Airflow rate		ℓ/s	1,983	2,633	2,800	3,000	3,900	3,983		3,767	4,483	2,800+3,000	3,000+3,000	3,000+3,900	3,000+3,983	3,000+3,767	3,983+3,983
		m³/min	119	158	168	180	234	239		226	269	168+180	180+180	180+234	180+239	180+226	239+239
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)		(1,657×930×765)+(1,657×1,240×765)			(1,657×1,240×765)+(1,657×1,240×765)
Machine weight		kg	215		230		310			342		230+230		230+310		230+342	310+310
Sound level		dB(A)	56		57	59	60	61		62	65	61	62	63		64	
Sound power		dB(A)	77		78	80	81	82		83	86	82	83	84		85	
Operation range	Cooling	°CDB	-5 to 49							-5 to 49							
	Heating	°CWB	-20 to 15.5							-20 to 15.5							
	Cooling & Heating	°CWB	-6 to 15.5							-6 to 15.5							
Refrigerant	Type		R-410A							R-410A							
	Charge	kg	9.7		9.8	9.9	11.8			11.8		9.8+9.9	9.9+9.9	9.9+11.8			11.8+11.8
Piping connections	Liquid	mm	ϕ9.5 (Brazing)			ϕ12.7 (Brazing)				ϕ15.9 (Brazing)				ϕ19.1 (Brazing)			
	Gas	mm	ϕ19.1 (Brazing)		ϕ22.2 (Brazing)	ϕ28.6 (Brazing)				ϕ28.6 (Brazing)				ϕ 34.9 (Brazing)			
	High and low pressure gas	mm	ϕ15.9 (Brazing)		ϕ19.1 (Brazing)		ϕ22.2 (Brazing)			ϕ22.2 (Brazing)	ϕ28.6 (Brazing)						

																		
Model			**REYQ34TAY1**	**REYQ36TAY1**	**REYQ38TAY1**	**REYQ40TAY1**	**REYQ42TAY1**	**REYQ44TAY1**		**REYQ46TAY1**	**REYQ48TAY1**	**REYQ50TAY1**	**REYQ52TAY1**	**REYQ54TAY1**	**REYQ56TAY1**	**REYQ58TAY1**	**REYQ60TAY1**
Combination units			**REYQ16TAY1**	**REYQ16TAY1**	**REYQ12TAY1**	**REYQ12TAY1**	**REYQ10TAY1**	**REYQ12TAY1**		**REYQ14TAY1**	**REYQ16TAY1**	**REYQ16TAY1**	**REYQ16TAY1**	**REYQ18TAY1**	**REYQ18TAY1**	**REYQ18TAY1**	**REYQ20TAY1**
			REYQ18TAY1	**REYQ20TAY1**	**REYQ12TAY1**	**REYQ12TAY1**	**REYQ16TAY1**	**REYQ16TAY1**		**REYQ16TAY1**	**REYQ16TAY1**	**REYQ16TAY1**	**REYQ18TAY1**	**REYQ18TAY1**	**REYQ18TAY1**	**REYQ20TAY1**	**REYQ20TAY1**
			–	–	**REYQ14TAY1**	**REYQ16TAY1**	**REYQ16TAY1**	**REYQ16TAY1**		**REYQ16TAY1**	**REYQ16TAY1**	**REYQ18TAY1**	**REYQ18TAY1**	**REYQ18TAY1**	**REYQ20TAY1**	**REYQ20TAY1**	**REYQ20TAY1**
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz							3-phase 4-wire system, 380-415 V, 50 Hz							
Cooling capacity		Btu/h	324,000	345,000	365,000	382,000	403,000	423,000		444,000	461,000	478,000	495,000	512,000	532,000	553,000	573,000
		kW	95.0	101	107	112	118	124		130	135	140	145	150	156	162	168
Heating capacity		Btu/h	362,000	386,000	409,000	427,000	450,000	471,000		495,000	512,000	532,000	553,000	573,000	597,000	621,000	645,000
		kW	106	113	120	125	132	138		145	150	156	162	168	175	182	189
Power consumption	Cooling	kW	28.4	31.0	28.2	30.3	33.0	34.7		36.9	39.0	41.4	43.8	46.2	48.8	51.4	54.0
	Heating	kW	27.7	30.2	29.2	31.1	32.7	34.6		36.2	38.1	40.4	42.7	45.0	47.5	50.0	52.5
Capacity control		%	4-100							3-100							
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	(3.4x1)+(3.7x1)+(3.6x1)+(5.0x1)	(3.4x1)+(3.7x1)+(4.0x1)+(6.1x1)	(4.9x1)+(4.9x1)+(3.0x1)+(3.1x1)	(4.9x1)+(4.9x1)+(3.4x1)+(3.7x1)	(4.0x1)+(3.4x1)+(3.7x1)+(3.4x1)+(3.7x1)	(4.9x1)+(3.4x1)+(3.7x1)+(3.4x1)+(3.7x1)		(3.0x1)+(3.1x1)+(3.4x1)+(3.7x1)+(3.4x1)+(3.7x1)	(3.4x1)+(3.7x1)+(3.4x1)+(3.7x1)+(3.4x1)+(3.7x1)	(3.4x1)+(3.7x1)+(3.4x1)+(3.7x1)+(3.6x1)+(5.0x1)	(3.4x1)+(3.7x1)+(3.6x1)+(5.0x1)+(3.6x1)+(5.0x1)	(3.6x1)+(5.0x1)+(3.6x1)+(5.0x1)+(3.6x1)+(5.0x1)	(3.6x1)+(5.0x1)+(3.6x1)+(5.0x1)+(4.0x1)+(6.1x1)	(3.6x1)+(5.0x1)+(4.0x1)+(6.1x1)+(4.0x1)+(6.1x1)	(4.0x1)+(6.1x1)+(4.0x1)+(6.1x1)+(4.0x1)+(6.1x1)
Airflow rate		ℓ/s	3,983+3,767	3,983+4,483	3,000+3,000+3,900	3,000+3,000+3,983	2,800+3,983+3,983	3,000+3,983+3,983		3,900+3,983+3,983	3,983+3,983+3,983	3,983+3,983+3,767	3,983+3,767+3,767	3,767+3,767+3,767	3,767+3,767+4,483	3,767+4,483+4,483	4,483+4,483+4,483
		m³/min	239+226	239+269	180+180+234	180+180+239	168+239+239	180+239+239		234+239+239	239+239+239	239+239+226	239+226+226	226+226+226	226+226+269	226+269+269	269+269+269
Dimensions (H×W×D)		mm	(1,657×1,240×765)+(1,657×1,240×765)		(1,657×930×765)+(1,657×930×765)+(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)+(1,657×1,240×765)							
Machine weight		kg	310+342		230+230+310		230+310+310			310+310+310		310+310+342	310+342+342	342+342+342			
Sound level		dB(A)	65	66	64	65				65	66			67	68	69	70
Sound power		dB(A)	86	87	85	86				86	87			88	89	90	91
Operation range	Cooling	°CDB	-5 to 49							-5 to 49							
	Heating	°CWB	-20 to 15.5							-20 to 15.5							
	Cooling & Heating	°CWB	-6 to 15.5							-6 to 15.5							
Refrigerant	Type		R-410A							R-410A							
	Charge	kg	11.8+11.8		9.9+9.9+11.8		9.8+11.8+11.8	9.9+11.8+11.8		11.8+11.8+11.8							
Piping connections	Liquid	mm	ϕ19.1 (Brazing)							ϕ19.1 (Brazing)							
	Gas	mm	ϕ34.9 (Brazing)	ϕ41.3 (Brazing)						ϕ41.3 (Brazing)							
	High and low pressure gas	mm	ϕ28.6 (Brazing)		ϕ34.9 (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.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
  When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

VRV IV S SERIES The Ideal Air Conditioning System for Residential, Small Offices and Shops



RXYMQ-A

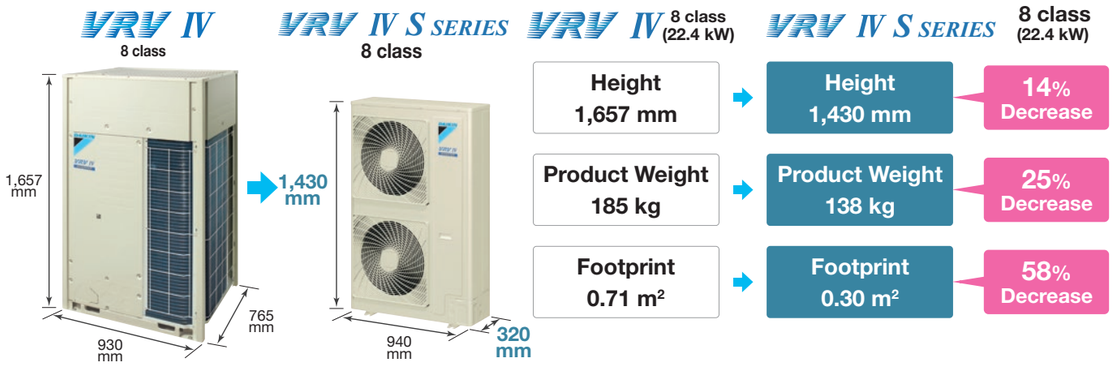
Heat Pump

3.5 class-9 class

(9 kW) (24 kW)

Compact & lightweight design

The new design has been optimised for the ***VRV*** IV S series, with the height of 3.5 class to 5 class models reduced to only 990 mm. This design gives the building a sleek look externally and provides the occupants with a clear, unobstructed view of the scenery. The ***VRV*** IV S series is now slim and compact, with outdoor units that require minimal installation space.



Enhanced lineup

To suit a variety of room sizes, ***VRV*** IV S series expands our range to include 3.5 class, 8 class and 9 class.

VRV IV S SERIES

3.5 class 4 class 5 class 6 class 8 class 9 class

Lineup

Model Name	RXYMQ3AV4A	RXYMQ4AV4A	RXYMQ5AV4A	RXYMQ6AV4A	RXYMQ8AY1	RXYMQ9AY1
Power Supply	1-phase, 230-240 V, 50 Hz				3-phase, 380-415 V, 50 Hz	
Capacity Range	3.5 class (9.0 kW)	4 class (11.2 kW)	5 class (14.0 kW)	6 class (16.0 kW)	8 class (22.4 kW)	9 class (24.0 kW)
Capacity Index	80	100	125	150	200	215

Wide variety of indoor units

Indoor units can be selected from 2 lineups, both ***VRV*** and residential indoor units, to match rooms and preferences. A mixed combination of ***VRV*** indoor units and residential indoor units can be included into one system, opening the door to stylish and quiet indoor units.

Energy saving

Higher Coefficient of Performance (COP)

VRV IV S series provides greater energy saving as compared to ***VRV*** III S series, especially for 6 class.

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

VRV III S

VRV IV S SERIES

Quiet operation

Nighttime quiet operation function

Operation sound level selectable from 3 steps for the night mode

Mode 1. **Automatic mode**

Set on the outdoor PCB. Time of maximum temperature is memorised. The low operating mode will initiate 8 hours*1 after the peak temperature in the daytime, and normal operation will resume 10 hours*2 after that. The operation sound level for the night mode can be selected from 49 dB(A) (Step 1), 46 dB(A) (Step 2) and 43 dB(A) (Step 3).*3

Mode 2. **Manual mode**

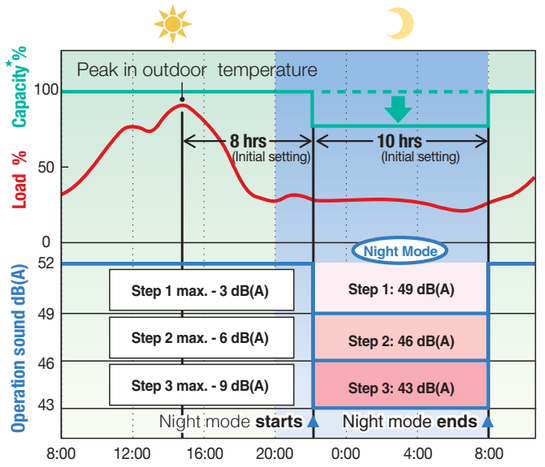
Starting time and ending time can be input. (An external control adaptor for outdoor unit, DTA104A53/61/62, and a locally obtained timer are necessary.)

Mode 3. **Combined mode**

Combinations of modes 1 and 2 can be used depending on your needs.

*1. Initial setting. Can be selected from 6, 8 and 10 hours.
*2. Initial setting. Can be selected from 8, 9 and 10 hours.
*3. In case of 4 class outdoor unit during cooling operation

Mode 1. **Automatic mode**



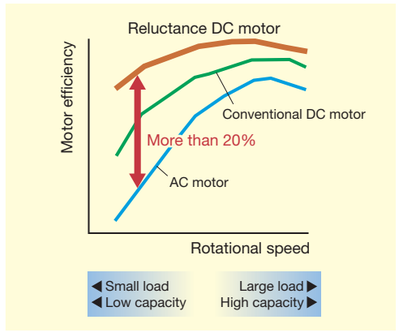
Note: • This function is available in setting at site.
• The relationship of outdoor temperature (load) and time shown in the graph is just an example.
* The capacity reduction rate differs depending on the operation sound level step selected.

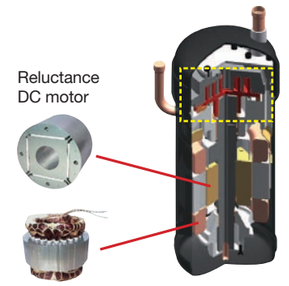
Collection of cutting-edge technologies realises efficient and quiet operation

The high efficiency compressor to achieve a higher COP

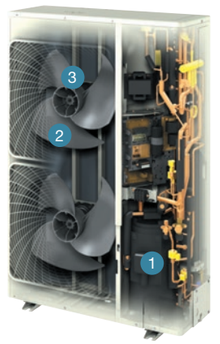
1 Compressor equipped with Reluctance DC motor

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





8, 9 class



Note: Data are based on studies conducted under controlled conditions at a Daikin laboratory using Daikin products.
*1 A neodymium magnet is approximately 10 times stronger than a standard ferrite magnet.
*2 The torque created by the change in power between the iron and magnet parts.

>> Smooth sine wave DC inverter

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

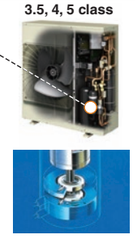
Sine wave DC inverter

RXYMQ3, 4, 5, 6AV4A

>> Swing compressor

Daikin swing compressor has integrated the rotor with the blade, completely solving the refrigerant leakage and the wear problem caused by the mechanical friction between the rotor and the blade, which enhances the compressor efficiency and makes the compressor more quiet and durable.

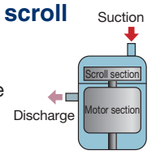
3.5, 4, 5 class



RXYMQ8, 9AY1

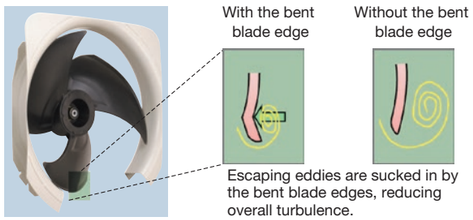
>> The structural scroll

Sucked gas is compressed in the scrolling part before the heated motor, so that the machine compress the non-expanded gas, resulting in high efficiency compression.



2 Smooth Air Inlet Bell Mouth and Aero Spiral Fan

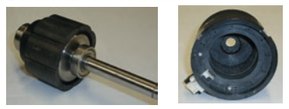
These two features work to reduce sound. Guides are added to the bell mouth intake to reduce turbulence in the airflow generated by fan suction. The Aero Spiral Fan features fan blades with the bent blade edges, further reducing turbulence.



3 DC fan motor

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

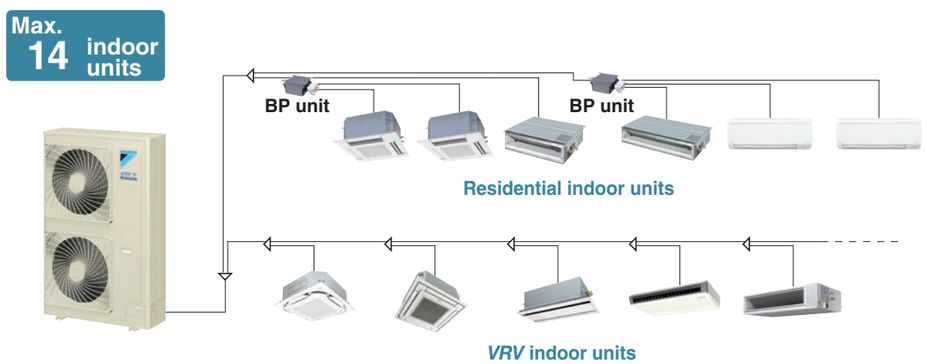
DC fan motor structure



Connectable up to 14 indoor units

As many as 14 indoor units can be connected to a single outdoor unit, making the ***VRV*** IV S series a remarkably versatile system.

Note: Refer to page 61 for the maximum number of connectable indoor unit.



Automatic test operation

Simply press the test operation button and the unit performs an automatic system check, including wiring, stop valves, piping, and refrigerant charging amount. The results are returned automatically after the check finishes.

Simple wiring and piping connection

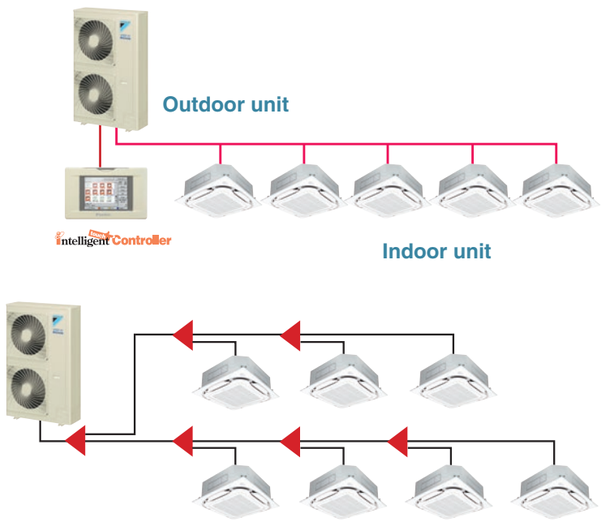
Unique piping and wiring systems make it possible to install a ***VRV*** IV S series quickly and easily.

>> Super wiring system

A super wiring system is used to enable shared use of the wiring between indoor and outdoor units and the central control wiring, with a relatively simple wiring operation.
The DIII-NET communication system is employed to enable the use of advanced control systems.

>> REFNET piping system

Daikin's advanced REFNET piping system makes installation easy. Only two main refrigerant lines are required in any one system. REFNET greatly reduces the imbalances in refrigerant flow between units, while using small-diameter piping.



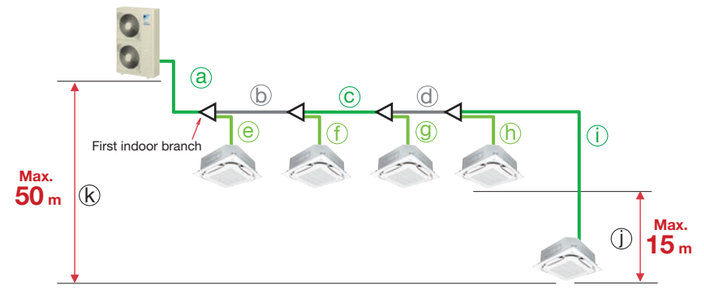
Long piping design possible

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

When only *VRV* indoor units are connected

Actual piping length Max. 120 m

Total piping length Max. 300 m

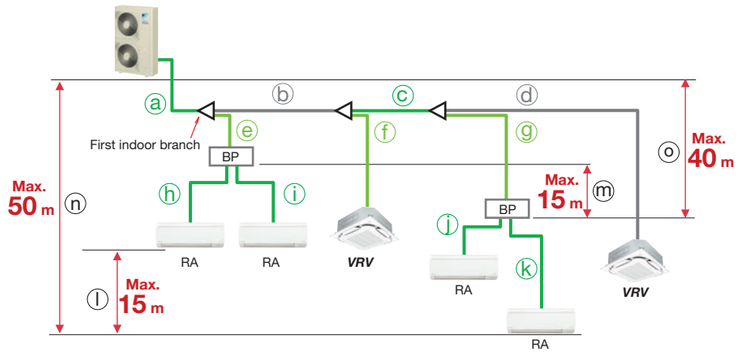


				3.5,4 class	5 class	6 class	8,9 class
Max. allowable piping length	Refrigerant piping length		a+b+c+d+i	70 m	70 m	120 m	100 m
	Equivalent piping length			90 m	90 m	150 m	130 m
	Total piping length		a+b+c+d+e+f+g+h+i	250 m	300 m	300 m	300 m
	Between the first indoor branch and the farthest indoor unit		b+c+d+i	40 m	40 m	40 m	40 m
Max. allowable level difference	Between the indoor units		j	10 m	15 m	15 m	15 m
	Between the outdoor unit and the indoor unit	If the outdoor unit is above	k	30 m	30 m	50 m	50 m
		If the outdoor unit is below	k	30 m	30 m	40 m	40 m

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

Actual piping length Max. 100 m

Total piping length Max. 250 m



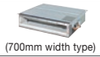
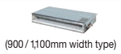
				3.5,4 class	5 class	6-9 class
Max. allowable piping length	Refrigerant piping length		a+b+c+g+k, a+b+c+d	70 m	70 m	100 m
	Equivalent piping length			90 m	90 m	125 m
	Total piping length		a+b+c+d+e+f+g+h+i+j+k	250 m	250 m	250 m
	The first indoor branch - the farthest BP or ***VRV*** indoor unit		b+c+g, b+c+d	40 m	40 m	40 m
Max. & min. allowable piping length	BP unit - indoor unit	If indoor unit capacity index < 60	h, i, j, k	2 m–15 m	2 m–15 m	2 m–15 m
		If indoor unit capacity index is 60		2 m–12 m	2 m–12 m	2 m–12 m
		If indoor unit capacity index is 71		2 m–8 m	2 m–8 m	2 m–8 m
Min. allowable piping length	Outdoor unit - the first indoor branch		a	5 m	5 m	5 m
Max. allowable level difference	Between the indoor units		l	10 m	15 m	15 m
	Between BP units		m	10 m	15 m	15 m
	Outdoor unit - the indoor unit	If the outdoor unit is above	n	30 m	30 m	50 m
		If the outdoor unit is below	n	30 m	30 m	40 m
	Outdoor unit - the BP unit		o	30 m	30 m	40 m

Enhanced range of choices

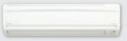
A mixed combination of ***VRV*** indoor units and residential indoor units can be included into one system, opening the door to stylish and quiet indoor units.

VRV indoor units

New lineup

Type	Model Name		20	25	32	40	50	63	71	80	100	125	140	145	160	180	200	250
		Capacity Range(kW)	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	16.2	18	20	22.4	28
		Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	145	160	180	200	250
Ceiling Mounted Cassette (Round Flow with Sensing)	FXFSQ-AVM			●	●	●	●	●		●	●	●	●					
Ceiling Mounted Cassette (Round Flow)	FXFQ-PVE			●	●	●	●	●		●	●	●						
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-A2VEB		●	●	●	●	●											
4-Way Flow Ceiling Suspended	FXUQ-AVEB								●		●							
Ceiling Mounted Cassette (Double Flow)	New FXCQ-AVM		●	●	●	●	●	●		●		●						
Ceiling Mounted Cassette (Single Flow)	FXEQ-AV36		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-TV1B(A)		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Standard Series)	FXDQ-PDVE	 (700mm width type)	●	●	●													
	FXDQ-NDVE	 (900 / 1,100mm width type)				●	●	●										
Ceiling Concealed Duct	FXDYQ-MAV1									●	●	●		●				
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PAVE		●	●	●	●	●	●		●	●	●	●					
Ceiling Mounted Duct	FXMQ-PAVE		●	●	●	●	●	●		●	●	●	●					
	FXMQ-PV1A														●	●	●	●
Outdoor-Air Processing Unit	FXMQ-MFV1											●					●	
Ceiling Suspended	FXHQ-MAVE				●			●			●							
	New FXHQ-AVM											●	●					
Wall Mounted	New FXAQ-AVM		●	●	●	●	●	●										
Floor Standing	FXLQ-MAVE		●	●	●	●	●	●										
Concealed Floor Standing	FXNQ-MAVE		●	●	●	●	●	●										
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h															

Residential indoor units with connection to BP units

Type	Model Name		20	25	35	50	60	71
		Rated Capacity (kW)	2.0	2.5	3.5	5.0	6.0	7.1
		Capacity Index	20	25	35	50	60	71
Ceiling Mounted Cassette (Compact Multi Flow)	FFQ-BV1B			●	●	●	●	
Slim Ceiling Mounted Duct	FDXS-CVMA	 (900/1,100 mm width type)		●	●	●	●	
Wall Mounted	FTXS-KVMA		●	●	●			
	FTXS-KAVMA					●	●	●

Note: BP units are necessary for residential indoor units.

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

*Refer to page 61 for the maximum number of connectable indoor units.

VRV IV S Series Outdoor Units Heat Pump RXYMQ-A

MODEL			RXYMQ3AV4A	RXYMQ4AV4A	RXYMQ5AV4A	RXYMQ6AV4A	RXYMQ8AY1	RXYMQ9AY1
Power supply			1-phase, 230-240 V, 50 Hz				3-phase, 380-415 V, 50 Hz	
Cooling capacity		Btu/h	30,700	38,200	47,800	54,600	76,400	81,900
		kW	9.0	11.2	14.0	16.0	22.4	24.0
Heating capacity		Btu/h	34,100	42,700	47,800	61,400	85,300	88,700
		kW	10.0	12.5	14.0	18.0	25.0	26.0
Power consumption	Cooling	kW	2.44	2.88	3.93	4.14	5.94	6.88
	Heating		2.28	2.60	3.04	4.07	6.25	6.82
Capacity control		%	24 to 100		16 to 100		20 to 100	
Casing colour			Ivory white (5Y7.5/1)					
Compressor	Type		Hermetically sealed swing type				Hermetically sealed scroll type	
	Motor output	kW	1.92		3.0	3.5	3.8	4.8
Airflow rate		ℓ/s	1,267			1,767	2,333	
		m³/min	76			106	140	
Dimensions (H x W x D)		mm	990 x 940 x 320			1,345 x 900 x 320	1,430 x 940 x 320	
Machine weight		kg	71		82	104	138	
Sound level (Cooling/Heating)		dB(A)	51/52	52/54	53/54	55/56	57/58	58/59
Sound power		dB(A)	69	70	71	73	75	76
Operation range	Cooling	°CDB	-5 to 46					
	Heating	°CWB	-20 to 15.5					
Refrigerant	Type		R-410A					
	Charge	kg	2.9		3.4	3.6	5.8	
Piping connections	Liquid	mm	ϕ 9.5 (Flare)				ϕ 9.5 (Brazing)	
	Gas		ϕ 15.9 (Flare)			ϕ 19.1 (Flare)	ϕ 19.1 (Brazing)	ϕ 22.2 (Brazing)

Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
  When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.
- Refrigerant charge is required.

Outdoor Unit Combinations

Model	kW	Class	Capacity index	Total capacity index of connectable indoor units				Maximum number of connectable indoor units
				Combination (%)				
				50%*1	80%*2	100%*3	130%	
RXYMQ3AV4A	9.0	3.5	80	40	64	80	104	5
RXYMQ4AV4A	11.2	4	100	50	80	100	130	6
RXYMQ5AV4A	14.0	5	125	62.5	100	125	162.5	8
RXYMQ6AV4A	16.0	6	150	75	120	150	195	9
RXYMQ8AY1	22.4	8	200	100	160	200	260	13
RXYMQ9AY1	24.0	9	215	107.5	172	215	280	14

Note: *1. When only ***VRV*** indoor units are connected, connection ratio must be 50% to 130%.
*2. When a mixed combination of ***VRV*** and residential indoor units is connected or when only residential indoor units are connected, connection ratio must be 80% to 130%.
*3. When outdoor-air processing unit is connected, connection ratio must be 50% to 100%. A mixed combination of the outdoor-air processing unit and standard indoor unit in one system is not allowed.

VRV III S Series Outdoor Units Heat Pump RXYMQ-P

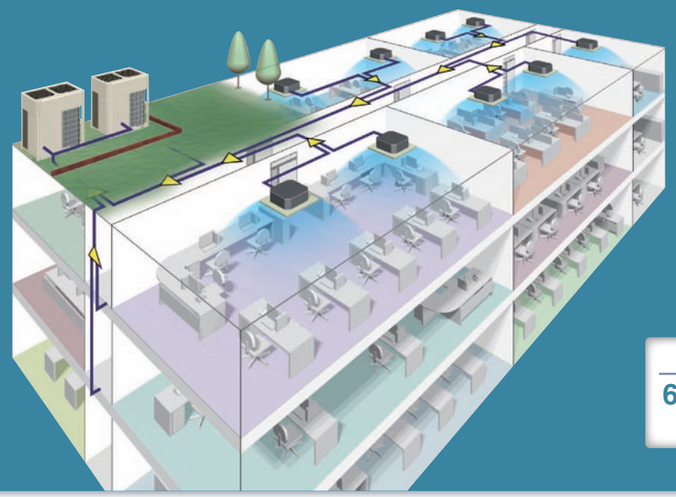
MODEL			RXYMQ5PV4A
Power supply			1-phase, 230-240 V, 50 Hz
Cooling capacity		Btu/h	47,800
		kW	14.0
Heating capacity		Btu/h	54,600
		kW	16.0
Power consumption	Cooling	kW	3.97
	Heating		4.09
Capacity control		%	24 to 100
Casing colour			Ivory white (5Y7.5/1)
Compressor	Type		Hermetically sealed scroll type
	Motor output	kW	3.0
Airflow rate		ℓ/s	1,767
		m³/min	106
Dimensions (H x W x D)		mm	1,345 x 900 x 320
Machine weight		kg	125
Sound level (Cooling/Heating)		dB(A)	51/53
Sound power		dB(A)	69
Operation range	Cooling	°CDB	-5 to 46
	Heating	°CWB	-20 to 15.5
Refrigerant	Type		R-410A
	Charge	kg	4.0
Piping connections	Liquid	mm	ϕ 9.5 (Flare)
	Gas		ϕ 15.9 (Flare)

Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19.5°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
  When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.
- Refrigerant charge is required.

Please refer to the *VRV* III S series brochure and Engineering Data Book for more information.

VRV IV Q SERIES For Quick & High Quality Replacement Use

VRV IV Q SERIES
Heat Pump



VRV IV Q series
RQYQ-T

Heat Pump
6 class-48 class
(16 kW) (135 kW)

VRV III Q series
RQCEQ-P

Heat Recovery
10 class-30 class
(28 kW) (84.8 kW)

Reusing existing piping for speedy replacement to an advanced energy-saving air conditioning system

Upgrading air conditioning systems in the past used to require replacement of refrigerant piping in buildings, leading to major construction and costs exceeding those of the original installation.
To save time and cost, Daikin developed the ***VRV*** IV Q Series as a model specializing in system replacement. This revolutionary system reuses existing piping and enables quick and high quality replacement to the latest energy-saving air conditioning system without renovation work for new piping.

The VRV IV Q SERIES concept

Reusing existing refrigerant piping minimizes:

- Piping removal and new construction along with installation time and cost
- Impact to the interior and exterior of buildings
- Suspension of daily business operations for renovation

Improvement in capacity and greater number of indoor units with the *VRV* IV Q Series

- Increase in capacity is possible while using existing piping.
- More indoor units can be connected in a single system, enabling consolidation of existing piping.

An automatic refrigerant charge function enables high quality installation for the *VRV* IV Q Series.

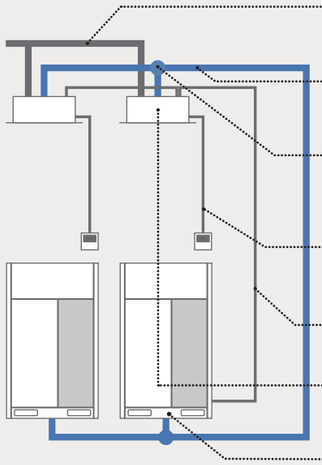
- The system is automatically charged with the proper amount of refrigerant even when the length of the existing piping is unknown.
- Equipment automatically performs a sequence of tasks from refrigerant charging to test operation.

Quick, Quality and Economical

Reuse

Simple use of existing refrigerant piping.
In the past, special equipment and work was needed to clean pipes when using existing piping, but this is no longer required. A new function automatically deals with contamination inside piping during refrigerant charging, eliminating the work involved in cleaning.

Even applicable for non-DAIKIN systems! The Daikin low-cost upgrade solution



- Reuse drain pipes
  Durable PVC pipes can be easily reused. Only flow tests are required.
- Reuse refrigerant pipes
  Pipes used for R-22 and R-407C will also work with ***VRV*** IV Q series, thanks to lower operating pressures of the system.
- Reuse refrigerant branch pipes*1
  There are no restrictions when upgrading from a Daikin ***VRV*** system. Other VRF systems require branch pipes withstand pressure up to 3.3 MPa.
- Reuse remote control wiring
  Reuse wiring when upgrading from a Daikin ***VRV*** system. In other cases, this will depend on the cable type.
- Reuse indoor-outdoor wiring
  Restrictions: see remote control wiring.
- Replace indoor units*2
- Replace outdoor units

*1 For reuse of existing refrigerant piping, it is possible to use piping or branched piping capable of handling 3.3 MPa or more (In case of using Φ 41.3 pipe, the design pressure must be 3.1 MPa or more). Heat insulation is necessary for liquid piping and gas piping. Even if the existing liquid piping is not insulated, the piping can be reused by its field setting. Refer to the installation manual for details for the field setting.
*2 It is not possible to combine old R-22 and new R-410A indoor units in one system due to incompatibility of communication. It is not possible to keep R-407C indoor units.

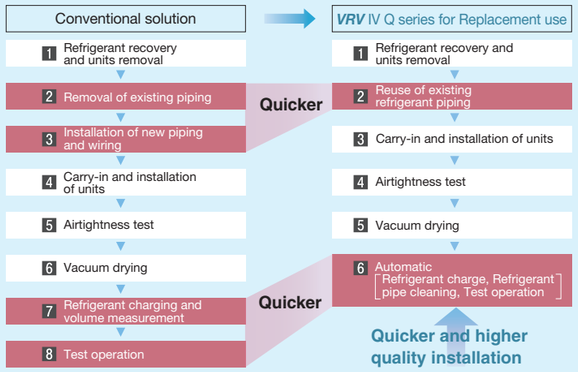
Automatic

Refrigerant charging, cleaning and test operation done with just a single switch.
The unique automatic refrigerant charge eliminates the need to calculate refrigerant volume, simplifying the installation process. Not knowing the exact piping lengths because of changes or mistakes in case you didn't do the original installation or replacing a competitor installation no longer poses a problem. Furthermore, there is no need to clean inside piping as this is handled automatically by the ***VRV*** IV Q unit.

* There are conditions in the range (ambient temperature, connection ratio) in which the automatic refrigerant charge can be used. Refer to the installation manual for details. The refrigerant amount that can be automatically charged may differ from the additional refrigerant amount that is provided from calculations, but there are no problems in performance and quality.

Time saving

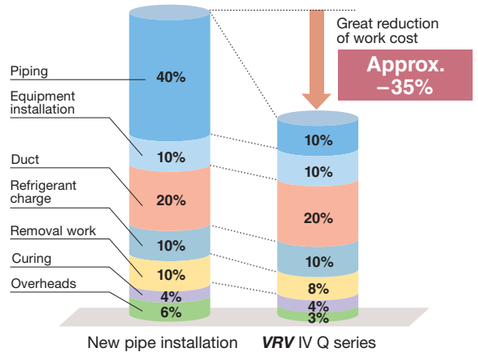
Enables smooth replacement of air conditioning with less effect on operations and users in the building.



Cost saving

Work costs for pipe removal, installation and insulation account for much of the total cost.
By the reuse of existing piping, 35% of cost down can be realized compared to installing new pipes.

■ Cost details (10 class example)
★Estimated in Japan by Daikin.



Design flexibility

Significantly more compact outdoor unit enables the effective use of limited space!

Compact design enables the effective use of space taken up by existing machinery

Conventional
VRV K PLUS series : RXY20K
(model from 20 years previous)
20 class outdoor unit

Installation space
2.25 m²

VRV IV Q SERIES : RQYQ20T
20 class outdoor unit

Installation space
0.95 m²

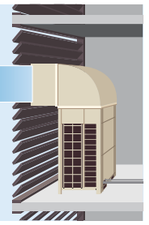
58% less space

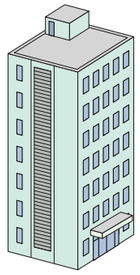
High external static pressure 78.4 Pa

Conventional ***VRV*** K series
(model from 20 years previous)
49.0 Pa

VRV IV Q SERIES
78.4 Pa

External static pressure
78.4 Pa
Easier discharge hood connection (field setting)





Easy installation on each floor for use in tall buildings

Small and light, significantly reducing constraints during carry-in

Can be carried on a cart

Can be transported easily by elevator

System flexibility

An increased number of connectable indoor units in a single system

More indoor units can be connected in a single system, enabling consolidation of existing piping!

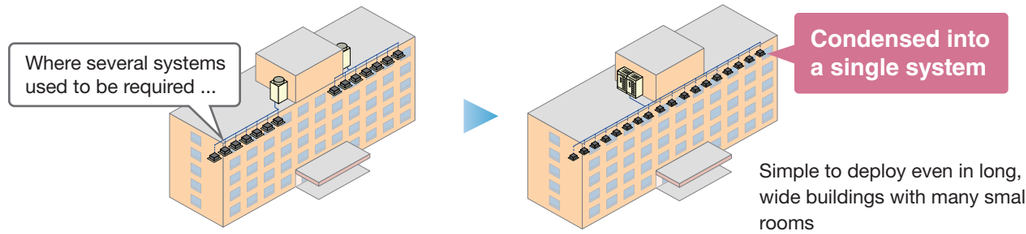
The number of connectable indoor units has been drastically increased from 30 to 64.

Conventional ***VRV*** K PLUS series: RXY24–30K
(model from 20 years previous)

Up to 30 indoor units connectable

VRV IV Q SERIES : RQYQ40–48T

Up to 64 indoor units connectable

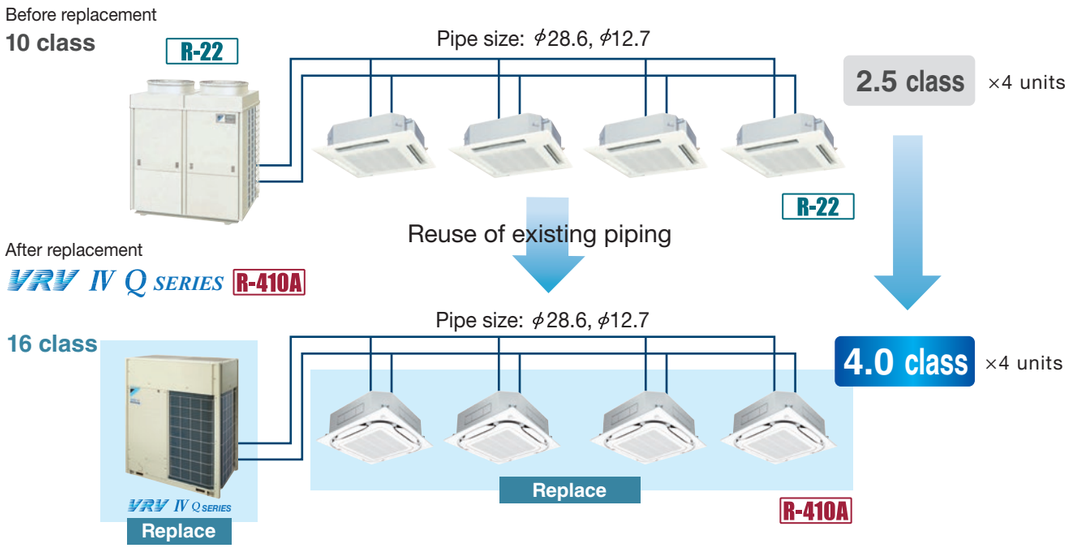


Simple to deploy even in long, wide buildings with many small rooms

Enables increased capacity

System can be upgraded using existing piping

VRV IV Q series for replacement use enables the system capacity to be increased without changing the refrigerant piping. For example, it is possible to install a 16 class ***VRV*** IV Q series using the refrigerant piping of an 10 class R-22 system.



* For reuse of existing refrigerant piping, it is possible to use piping or branched piping capable of handling 3.3 MPa or more (In case of using Φ41.3 pipe, the design pressure must be 3.1 MPa or more). Heat insulation is necessary for liquid piping and gas piping. Even if the existing liquid piping is not insulated, the piping can be reused by its field setting. Refer to the installation manual for details for the field setting.

Enhanced lineup

2 types up to 48 class

With its enhanced lineup of 2 types and Standard and Space saving types, ***VRV*** IV Q series outdoor units offer a high capacity up to 48 class to meet an ever wider variety of needs.

Single outdoor unit

VRV III Q SERIES

8, 10, 12 class 14, 16 class

1 type only

VRV IV Q SERIES

6, 8, 10, 12 class 14, 16, 18, 20 class

2 type of Standard type and Space saving type

Lineup

class	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Standard Type	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Space Saving Type							●	●					●	●	●	●	●	●	●	●	●	●

Compact & light weight design

New Space Saving type with refined design

As a leading global innovator, Daikin advanced from the conventional 2 module combination to a single module for 18 and 20 class models. This allows the installation area to reduce by 33% as compared to the previous models.

VRV III Q SERIES

18, 20 class

VRV IV Q SERIES

18, 20 class

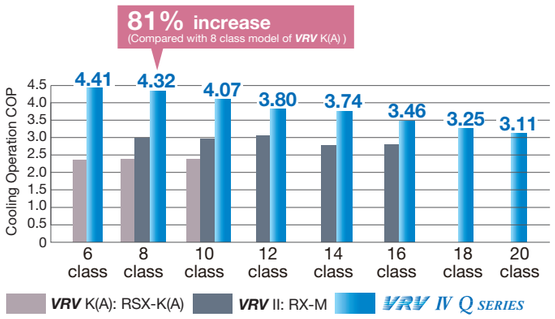
Foot print	1.42 m²	0.95 m²	33% decrease
Product weight	487 kg	320 kg	34% decrease

Energy saving

Higher Coefficient of Performance (COP)

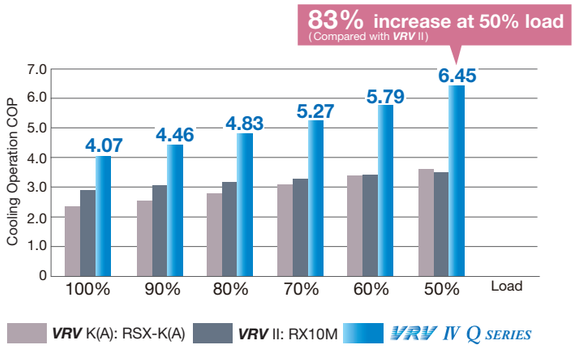
COP at 100% operation load

VRV IV Q series delivers highly efficient performance, contributing to high energy savings.



COP for 10 class

Improved efficiency during long operation under low load



*Cooling operation conditions: Indoor temp. of 27ºCDB, 19ºCWB, and outdoor temp. of 35ºCDB.

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

Customise your *VRV* system for optimal annual efficiency

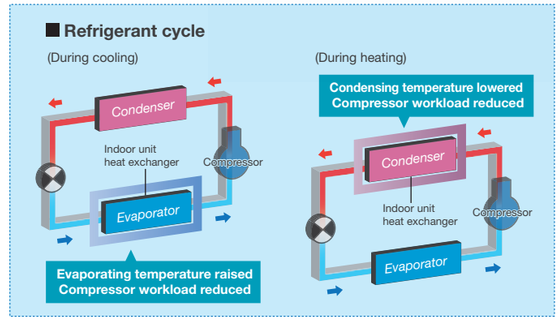
Variable Refrigerant Temperature

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

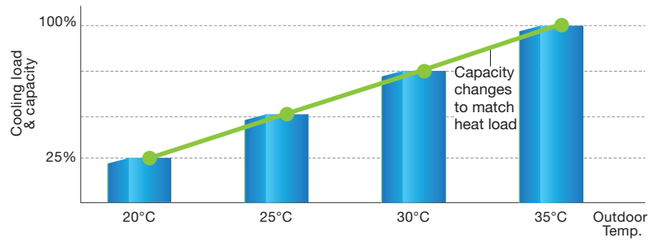
How is energy reduced?

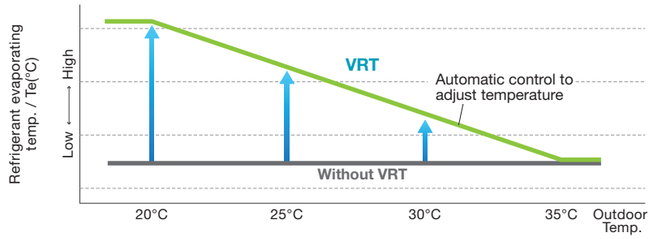
During cooling, the refrigerant evaporating temperature (Te) is raised to minimise the difference with the condensing temperature. During heating, condensing temperature (Tc) is lowered to minimise the difference to the evaporating temperature. Compressors work less, and this reduces power consumption.

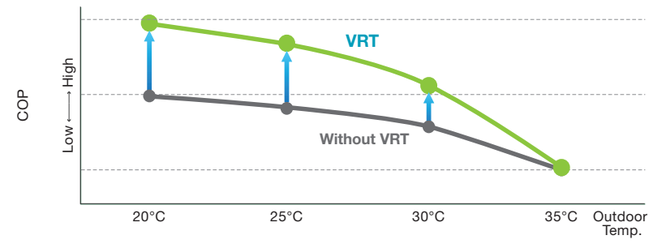
■ Refrigerant cycle



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







Required capacity changes as air conditioning load changes according to outdoor temperature.

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

Automatic control adjusts evaporating temperature to heat load change.

Energy efficiency is improved without sacrificing comfort.

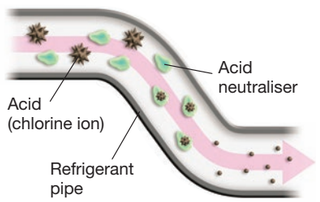
New technology that enables use of existing piping

New tested contamination collection method
A new method collects contamination from existing piping, eliminating compressors and electric valves malfunction.

VRV IV Q series Only

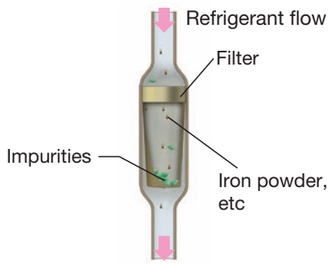
Acid

An acid neutraliser agent is added to disable acids (chlorine ions), which cause corrosion.



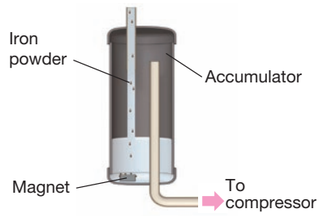
Impurities

A generously sized filter is provided inside the refrigerant circuit which traps impurities.



Iron powder

A magnet is installed inside the accumulator where liquid refrigerant accumulates.
The magnet attracts iron powder to keep the system clean.



Outer Rotor DC Motor (ODM)

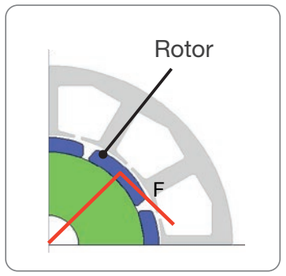
Only Daikin adapted ODM with feature ofstable rotation and volumetric efficiency

Advantages of ODM

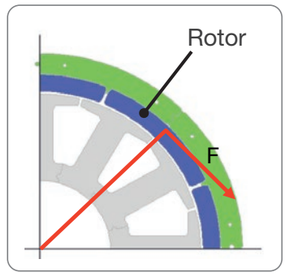
Thanks to large diameter of the rotor,
① Large torque with same electromagnetic force
② Stable rotation in all range, and can beoperated with small number of rotations

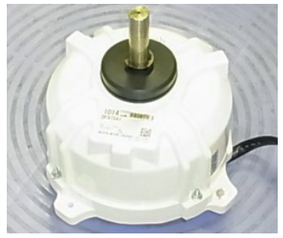
UNIQUE

Conventional Motor (Inner Type)



ODM (Outer Type)

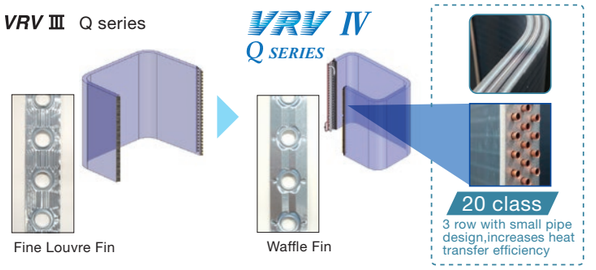




HIGH TORQUE with low energy → MORE efficient

Highly integrated heat exchanger

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



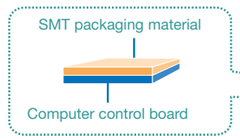
Realise highly integrated heat exchanger performance (increase row, reduce fin pitch) by reducing of airflow resistance which changes cooling tube to Ø7.

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

Advanced control main PC board

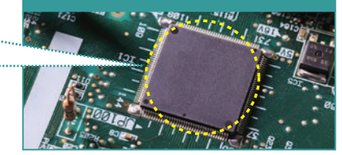
SMT* packaging technology

- 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.



*SMT: Surface mounted technology

Computer control board surface adopting SMT packaging technology



Refrigerant cooling technology, ensures stability of PCB temperature

Improved inner design to increase smooth airflow

Downsize electric component, re-locate to dead space of bell mouth side to decrease airflow resistance.

VRV III Q series

VRV IV Q SERIES

Using refrigerant to cool the inverter power module helped minimize the electric component, and this resulted in reduced airflow resistance and improved efficiency of the heat exchanger.

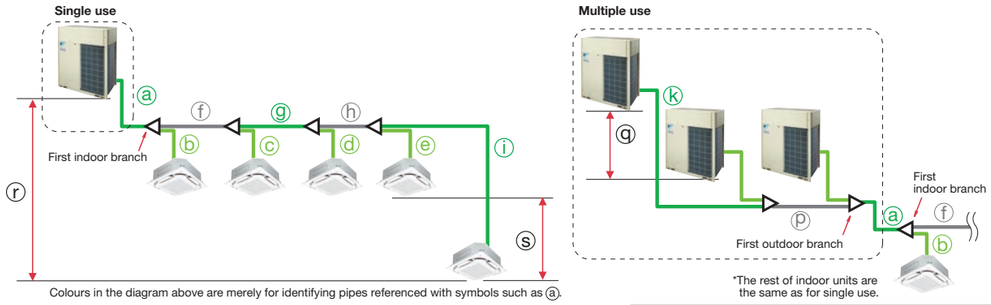
Roof terrace temperature in summer is over 40°C, seriously affecting inverter cooling efficiency, resulting in decline of inverter operating speed. Finally device parts response speed is reduced.

Control board failure ratio at stable operation is reduced.

Improve reliability at high ambient temperature
It is possible to cool the inverter power module stability even at high ambient temperature. This helps to keep air-conditioning capacity and also reduces failure ratio.

Piping limits for reuse of existing piping

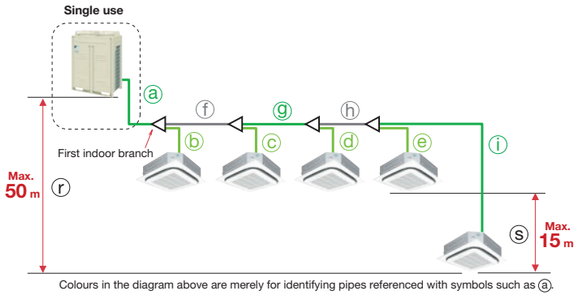
VRV IV Q Series Heat Pump

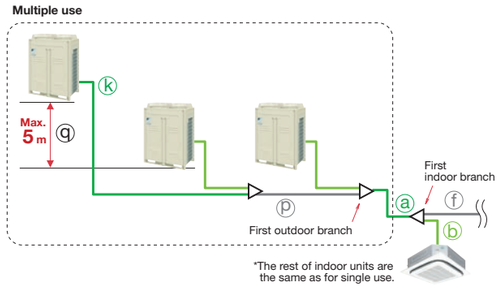


			Actual piping length	Example	Equivalent piping length
Maximum allowable piping length	Refrigerant piping length		150 m	a+f+g+h+i	175 m
	Total piping length		300 m	a+b+c+d+e+f+g+h+i	—
	Between the first indoor branch and the farthest indoor unit		40 m	f+g+h+i	—
	Between the outdoor branch and the last outdoor unit		10 m	k+p	13 m

			Level Difference	Example
Maximum allowable level difference	Between the outdoor units (Multiple use)		5 m	q
	Between the indoor units		15 m	s
	Between the outdoor units and the indoor units	If the outdoor unit is above.	50 m	r
		If the outdoor unit is below.	40 m	r

VRV III Q Series Heat Recovery





			Actual piping length	Example	Equivalent piping length
Maximum allowable piping length	Refrigerant piping length	RQYQ8-48P	150 m	a+f+g+h+i	175 m
		RQYQ140P, RQCEQ-P	120 m		150 m
	Total piping length		300 m	a+b+c+d+e+f+g+h+i	—
	Between the first indoor branch and the farthest indoor unit		40 m	f+g+h+i	—
	Between the outdoor branch and the last outdoor unit		10 m	k+p	13 m

			Level Difference	Example
Maximum allowable level difference	Between the outdoor units (Multiple use)		5 m	q
	Between the indoor units		15 m	s
	Between the outdoor units and the indoor units	If the outdoor unit is above.	50 m	r
		If the outdoor unit is below.	40 m	r

Reusability of existing piping

VRV IV Q Series Heat Pump

Type of piping	Capacity	Piping size: Liquid ϕ6.4	ϕ9.5	ϕ12.7	ϕ15.9	ϕ19.1	ϕ22.2	Gas ϕ12.7	ϕ15.9	ϕ19.1	ϕ22.2	ϕ25.4	ϕ28.6	ϕ34.9	ϕ41.3	ϕ54.1
Main piping	6 class	×	S○●			×	×	×	×	S○	●			×	×	×
	8 class	×	S○	●		×	×	×	×	S○		●	●	×	×	×
	10 class	×	S○	●		×	×	×	×	×	S○		●	×	×	×
	12 class	×	×	S○	●	×	×	×	×	×	×	×	S○	●	×	×
	14 class	×	×	S○	●	×	×	×	×	×	×	×	S○	●	×	×
	16 class	×	×	S○	●	×	×	×	×	×	×	×	S○	●	×	×
	18 class	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×
	20 class	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×
	22 class	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×
	24 class	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●	×
	26 class	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	28 class	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	30 class	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	32 class	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	34 class	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	36 class	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	38 class	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	40 class	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	42 class	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	44 class	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	46 class	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	48 class	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
From REFNET to REFNET*1	< 100	×	S○●		×	×	×	×	S○●		×	×	×	×	×	×
	100 ≤ X < 150	×	S○●		×	×	×	×	S○	●	×	×	×	×	×	×
	150 ≤ X < 160	×	S○●		×	×	×	×	×	S○●			×	×	×	×
	160 ≤ X < 200	×	S○	●	×	×	×	×	×	S○	●		×	×	×	×
	200 ≤ X < 290	×	S○	●		×	×	×	×	×	S○	●		×	×	×
	290 ≤ X < 330	×	×	S○●		×	×	×	×	×	×	●	S○		×	×
	330 ≤ X < 420	×	×	S○	●	×	×	×	×	×	×	●	S○	●	×	×
	420 ≤ X < 480	×	×	×	S○●		×	×	×	×	×	●	S○	●	×	×
	480 ≤ X < 640	×	×	×	S○	●	×	×	×	×	×	●	S○	●	×	×
	640 ≤ X < 900	×	×	×	×	S○●		×	×	×	×	×	S○	●		
	900 ≤ X < 920	×	×	×	×	S○	●	×	×	×	×	×	S○			●
	920 ≤	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	●
From REFNET to indoor unit*2	20-40 class	S○●		×	×	×	×	S●		×	×	×	×	×	×	×
	50 class	S○	●	×	×	×	×	S○	●	×	×	×	×	×	×	×
	63-80 class	×	S○●		×	×	×	×	S○●		×	×	×	×	×	×
	100-125 class	×	S○●		×	×	×	×	S○	●			×	×	×	×
	140-145 class	×	S○		×	×	×	×	S○				×	×	×	×
	180 class	×	S○		×	×	×	×	×	S○			×	×	×	×
	200 class	×	S○	●	×	×	×	×	×	S○		●		×	×	×
	250 class	×	S○	●	×	×	×	×	×	×	S○		●	×	×	×

● : Piping size of conventional R-22, R-407C model
○ : Piping size of conventional R-410A model
S : Standard piping size of ***VRV*** IV Q series
: Possible
: Standard piping size of ***VRV*** IV Q series. However, when equivalent piping length between outdoor unit and indoor unit is 90 m or more, size of main piping must be increased.
× : Not possible

*1 Piping between REFNETs depends on total capacity index of indoor units connected below each REFNET. It cannot exceed piping size of upstream side.
*2 Piping from REFNET to indoor unit depends on the capacity of the connected indoor unit. It cannot exceed piping size of upstream side.

VRV III Q Series Heat Recovery

Type of piping	class	Piping size: Liquid ϕ6.4	ϕ9.5	ϕ12.7	ϕ15.9	ϕ19.1	ϕ22.2	Suction gas ϕ12.7	ϕ15.9	ϕ19.1	ϕ22.2	ϕ25.4	ϕ28.6	ϕ34.9	ϕ41.3	High and low pressure gas ϕ9.5	ϕ12.7	ϕ15.9	ϕ19.1	ϕ22.2	ϕ25.4	ϕ28.6	ϕ34.9
Main piping	10 class	×	S○	●	×	×	×	×	×	×	S○		●	×	×	×	×	×	S○●		×	×	×
	13 class	×	×	S		×	×	×	×	×	×	S		×	×	×	×	×	S		×	×	×
	16 class	×	×	S○	●		×	×	×	×	×	×	S○	●	×	×	×	×	×	S○	●	×	×
	18 class	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×	×	×	×	S○	●	×	×
	20 class	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×	×	×	×	S	●	○	×
	22 class	×	×	×	S○		×	×	×	×	×	×	S○		×	×	×	×	×	×	S	○	×
	24 class	×	×	×	S○	●	×	×	×	×	×	×	S	○	×●	×	×	×	×	×	S	○●	×
	26 class	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×	×	×	×	S	○●	×
	28 class	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×	×	×	×	S○	× ●	
	30 class	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×	×	×	×	×	S○	× ●
From REFNET to REFNET*1	< 50	S●	○	×	×	×	×	S●	○	×	×	×	×	×	×	S●	○	×	×	×	×	×	×
	50 ≤ X < 100	×	S○●		×	×	×	×	S○●		×	×	×	×	×	×	S○●		×	×	×	×	×
	100 ≤ X < 150	×	S○●		×	×	×	×	S○	●			×	×	×	×	S○	●	×	×	×	×	×
	150 ≤ X < 160	×	S○●		×	×	×	×	×	S○●			×	×	×	×	×	S○●		×	×	×	×
	160 ≤ X < 200	×	S○	●	×	×	×	×	×	S○	●		×	×	×	×	×	S○	●	×	×	×	×
	200 ≤ X < 290	×	S○	●		×	×	×	×	×	S○	●		×	×	×	×	×	S○●		×	×	×
	290 ≤ X < 330	×	×	S○●		×	×	×	×	×	×	●	S○		×	×	×	×	S○●		×	×	×
	330 ≤ X < 420	×	×	S○	●	×	×	×	×	×	×	●	S○	× ●	×	×	×	×	S○		●	×	×
	420 ≤ X < 480	×	×	×	S○●		×	×	×	×	×	●	S○	●	×	×	×	×	×	×	S●	○	×
	480 ≤ X < 640	×	×	×	S○	●	×	×	×	×	×	●	S○	●	×	×	×	×	×	×	S●	○	×
	640 ≤ X < 700	×	×	×	×	S○●		×	×	×	×	×	×	●	×	×	×	×	×	×	S●	○	×
	700 ≤ X < 900	×	×	×	×	S○●		×	×	×	×	×	S○	●		×	×	×	×	×	S	○	× ●
	900 ≤	×	×	×	×	S○●		×	×	×	×	×	×	S	○●	×	×	×	×	×	×	S○	× ●
From BS to indoor unit*2	20-40 class	S○●		×	×	×	×	S○●		×	×	×	×	×	×								
	50 class	S○	●	×	×	×	×	S○	●	×	×	×	×	×	×								
	63 class	×	S○●		×	×	×		S○●		×	×	×	×	×								
	80 class	×	S○●		×	×	×	×	S○●		×	×	×	×	×								
	100-125 class	×	S○●		×	×	×	×	S○	●			×	×	×								
	140-145 class	×	S○		×	×	×	×	S○				×	×	×								
	180 class	×	S○		×	×	×	×	×	S○			×	×	×								
	200 class	×	S○	●		×	×	×	×	S○		●		×	×								
	250 class	×	S○	●		×	×	×	×	×	S○		●	×	×								

● : Piping size of conventional R-22, R-407C model
○ : Piping size of conventional R-410A model
S : Standard piping size of ***VRV*** III Q series
: Possible
: Standard piping size of ***VRV*** III Q. However, when equivalent piping length between outdoor unit and indoor unit is 90 m or more, size of main piping must be increased.
× : Not possible

*1 Piping between REFNETs depends on total capacity index of indoor units connected below each REFNET. It cannot exceed piping size of upstream side.
*2 Piping from BS to indoor unit depends on the capacity of the connected indoor unit. It cannot exceed piping size of upstream side.

System lineup for replacement use

VRV IV Q Series Outdoor Units Heat Pump

Standard Type

•Single Outdoor Units

6, 8, 10, 12 class

RQYQ6TY1A(E)
RQYQ8TY1A(E)
RQYQ10TY1A(E)
RQYQ12TY1A(E)

14, 16 class

RQYQ14TY1A(E)
RQYQ16TY1A(E)

•Double Outdoor Units

18, 20, 22, 24 class

RQYQ18TNY1A(E)
RQYQ20TNY1A(E)
RQYQ22TNY1A(E)
RQYQ24TNY1A(E)

26, 28 class

RQYQ26TNY1A(E)
RQYQ28TNY1A(E)

30, 32 class

RQYQ30TNY1A(E)
RQYQ32TNY1A(E)

•Triple Outdoor Units

34, 36 class

RQYQ34TNY1A(E)
RQYQ36TNY1A(E)

38, 40 class

RQYQ38TNY1A(E)
RQYQ40TNY1A(E)

42, 44 class

RQYQ42TNY1A(E)
RQYQ44TNY1A(E)

46, 48 class

RQYQ46TNY1A(E)
RQYQ48TNY1A(E)

Space Saving Type

•Single Outdoor Units

18, 20 class

RQYQ18TY1A(E)
RQYQ20TY1A(E)

•Double Outdoor Units

30, 32 class

RQYQ30TSY1A(E)
RQYQ32TSY1A(E)

34, 36, 38, 40 class

RQYQ34TSY1A(E)
RQYQ36TSY1A(E)
RQYQ38TSY1A(E)
RQYQ40TSY1A(E)

•Triple Outdoor Units

42, 44 class

RQYQ42TSY1A(E)
RQYQ44TSY1A(E)

46, 48 class

RQYQ46TSY1A(E)
RQYQ48TSY1A(E)

Lineup

class	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Standard Type	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Space Saving Type							●	●					●	●	●	●	●	●	●	●	●	●

Outdoor Unit Combinations

Standard Type

class	kW	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit*1	Total capacity index of connectable indoor units*3	Maximum number of connectable indoor units*2
6	16.0	150	RQYQ6T	RQYQ6T	–	75 to 195	9
8	22.4	200	RQYQ8T	RQYQ8T	–	100 to 260	13
10	28.0	250	RQYQ10T	RQYQ10T	–	125 to 325	16
12	33.5	300	RQYQ12T	RQYQ12T	–	150 to 390	19
14	40.0	350	RQYQ14T	RQYQ14T	–	175 to 455	22
16	45.0	400	RQYQ16T	RQYQ16T	–	200 to 520	26
18	50.4	450	RQYQ18TN	RQYQ8T + RQYQ10T	BHFP22P100	225 to 585	29
20	55.9	500	RQYQ20TN	RQYQ8T + RQYQ12T		250 to 650	32
22	61.5	550	RQYQ22TN	RQYQ10T + RQYQ12T		275 to 715	35
24	67.0	600	RQYQ24TN	RQYQ12T × 2		300 to 780	39
26	73.5	650	RQYQ26TN	RQYQ12T + RQYQ14T		325 to 845	42
28	78.5	700	RQYQ28TN	RQYQ12T + RQYQ16T		350 to 910	45
30	85.0	750	RQYQ30TN	RQYQ14T + RQYQ16T		375 to 975	48
32	90.0	800	RQYQ32TN	RQYQ14T + RQYQ18T		400 to 1,040	52
34	95.0	850	RQYQ34TN	RQYQ10T + RQYQ12T × 2	BHFP22P151	425 to 1,105	55
36	101	900	RQYQ36TN	RQYQ12T × 3		450 to 1,170	58
38	106	950	RQYQ38TN	RQYQ8T + RQYQ12T + RQYQ18T		475 to 1,235	61
40	112	1,000	RQYQ40TN	RQYQ12T × 2 + RQYQ16T		500 to 1,300	64
42	119	1,050	RQYQ42TN	RQYQ12T + RQYQ14T + RQYQ16T		525 to 1,365	
44	124	1,100	RQYQ44TN	RQYQ12T + RQYQ16T × 2		550 to 1,430	
46	130	1,150	RQYQ46TN	RQYQ14T × 2 + RQYQ18T		575 to 1,495	
48	135	1,200	RQYQ48TN	RQYQ14T + RQYQ16T + RQYQ18T		600 to 1,560	

Note: *1 For multiple connection of 18 class systems and above, the outdoor unit multi connection piping kit (separately sold) is required.
*2 Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outdoor units.
*3 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. And the connection ratio must not exceed 100%.

Space Saving Type

class	kW	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit*1	Total capacity index of connectable indoor units*3	Maximum number of connectable indoor units*2
18	50.0	450	RQYQ18T	RQYQ18T	–	225 to 585	29
20	56.0	500	RQYQ20T	RQYQ20T	–	250 to 650	32
30	83.5	750	RQYQ30TS	RQYQ12T + RQYQ18T	BHFP22P100	375 to 975	48
32	89.5	800	RQYQ32TS	RQYQ12T + RQYQ20T		400 to 1,040	52
34	95.0	850	RQYQ34TS	RQYQ16T + RQYQ18T		425 to 1,105	55
36	100	900	RQYQ36TS	RQYQ18T x 2		450 to 1,170	58
38	106	950	RQYQ38TS	RQYQ18T + RQYQ20T		475 to 1,235	61
40	112	1,000	RQYQ40TS	RQYQ20T x 2		500 to 1,300	64
42	117	1,050	RQYQ42TS	RQYQ12T x 2 + RQYQ18T	BHFP22P151	525 to 1,365	
44	123	1,100	RQYQ44TS	RQYQ12T x 2 + RQYQ20T		550 to 1,430	
46	129	1,150	RQYQ46TS	RQYQ12T + RQYQ16T + RQYQ18T		575 to 1,495	
48	134	1,200	RQYQ48TS	RQYQ12T + RQYQ18T x 2		600 to 1,560	

Note: *1 For multiple connection of 30 class and above the outdoor unit multi connection piping kit (separately sold) is required.
*2 Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outdoor units.
*3 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. And the connection ratio must not exceed 100%.

System lineup for replacement use

VRV III Q Series Outdoor Units Heat Recovery

10, 13 class

RQCEQ280PY1
RQCEQ360PY1

16, 18, 20, 22 class

RQCEQ460PY1
RQCEQ500PY1
RQCEQ540PY1
RQCEQ636PY1

24, 26, 28, 30 class

RQCEQ712PY1
RQCEQ744PY1
RQCEQ816PY1
RQCEQ848PY1

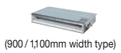
Outdoor Unit Combinations

class	kW	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit*1	Total capacity index of connectable indoor units*2 *3 Combination (%) 50%	100%	130%	Maximum number of connectable indoor units
10	**28.0**	250	RQCEQ280P	RQEQ140P+RQEQ140P	BHFP26P36C	125	250	325	16
13	**36.0**	325	RQCEQ360P	RQEQ180P+RQEQ180P		162.5	325	422.5	21
16	**46.0**	400	RQCEQ460P	RQEQ140P+RQEQ140P +RQEQ180P	BHFP26P63C	200	400	520	26
18	**50.0**	450	RQCEQ500P	RQEQ140P+RQEQ180P +RQEQ180P		225	450	585	29
20	**54.0**	500	RQCEQ540P	RQEQ180P+RQEQ180P +RQEQ180P		250	500	650	32
22	**63.6**	550	RQCEQ636P	RQEQ212P+RQEQ212P +RQEQ212P		275	550	715	35
24	**71.2**	600	RQCEQ712P	RQEQ140P+RQEQ180P +RQEQ180P+RQEQ212P	BHFP26P84C	300	600	780	39
26	**74.4**	650	RQCEQ744P	RQEQ140P+RQEQ180P +RQEQ212P+RQEQ212P		325	650	845	42
28	**81.6**	700	RQCEQ816P	RQEQ180P+RQEQ212P +RQEQ212P+RQEQ212P		350	700	910	45
30	**84.8**	750	RQCEQ848P	RQEQ212P+RQEQ212P +RQEQ212P+RQEQ212P		375	750	975	48

*1 The outdoor unit multi connection piping kit (separately sold) is required for multiple connections.
*2 Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outdoor units.
*3 For indoor units used for cooling only (do not connect to BS unit when using for heat recovery), total capacity index must be 50% or less than the capacity index of the outdoor units.
*4 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. And the connection ratio must not exceed 100%.

Variety of Indoor Unit

● New lineup

Type	Model Name		Capacity Range(kW)	20	25	32	40	50	63	71	80	100	125	140	145	160	180	200	250
				2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	16.2	18	20	22.4	28
			Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	145	160	180	200	250
Ceiling Mounted Cassette (Round Flow with Sensing)	FXFSQ-AVM				●	●	●	●	●		●	●	●	●					
Ceiling Mounted Cassette (Round Flow)	FXFQ-PVE				●	●	●	●	●		●	●	●						
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-A2VEB			●	●	●	●	●											
4-Way Flow Ceiling Suspended	FXUQ-AVEB									●		●							
Ceiling Mounted Cassette (Double Flow)	New FXCQ-AVM			●	●	●	●	●	●		●		●						
Ceiling Mounted Cassette (Single Flow)	FXEQ-AV36			●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-TV1B(A)			●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Standard Series)	FXDQ-PDVE		(700mm width type)	●	●	●													
	FXDQ-NDVE		(900 / 1,100mm width type)				●	●	●										
Ceiling Concealed Duct	FXDYQ-MAV1										●	●	●		●				
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PAVE			●	●	●	●	●	●		●	●	●	●					
Ceiling Mounted Duct	FXMQ-PAVE			●	●	●	●	●	●		●	●	●	●					
	FXMQ-PV1A															●	●	●	●
Outdoor-Air Processing Unit	FXMQ-MFV1												●				●	●	
Ceiling Suspended	FXHQ-MAVE					●			●			●							
	New FXHQ-AVM												●	●					
Wall Mounted	New FXAQ-AVM			●	●	●	●	●	●										
Floor Standing	FXLQ-MAVE			●	●	●	●	●	●										
Concealed Floor Standing	FXNQ-MAVE			●	●	●	●	●	●										
Heat Reclaim Ventilator with DX-Coil and Humidifier	VKM-GA(M)V1		Airflow rate 500-1000 m³/h																
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h																

* It is not possible to combine old R-22 and new R-410A indoor units in one system due to incompatibility of communication.
It is not possible to keep R-407C indoor units.

VRV IV Q Series Outdoor Units Heat Pump RQYQ-T

Standard Type

MODEL			RQYQ6TY1A(E)	RQYQ8TY1A(E)	RQYQ10TY1A(E)	RQYQ12TY1A(E)	RQYQ14TY1A(E)	RQYQ16TY1A(E)	RQYQ18TNY1A(E)	RQYQ20TNY1A(E)	RQYQ22TNY1A(E)	RQYQ24TNY1A(E)	RQYQ26TNY1A(E)	RQYQ28TNY1A(E)	RQYQ30TNY1A(E)	RQYQ32TNY1A(E)
	Combination units		-	-	-	-	-	-	RQYQ8TY1A(E) RQYQ10TY1A(E)	RQYQ8TY1A(E) RQYQ12TY1A(E)	RQYQ10TY1A(E) RQYQ12TY1A(E)	RQYQ12TY1A(E) RQYQ12TY1A(E)	RQYQ12TY1A(E) RQYQ14TY1A(E)	RQYQ12TY1A(E) RQYQ16TY1A(E)	RQYQ14TY1A(E) RQYQ16TY1A(E)	RQYQ14TY1A(E) RQYQ18TY1A(E)
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz						3-phase 4-wire system, 380-415 V, 50 Hz							
Cooling capacity		Btu/h	54,600	76,400	95,500	114,000	136,000	154,000	172,000	191,000	210,000	229,000	251,000	268,000	290,000	307,000
		kW	16.0	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0	73.5	78.5	85.0	90.0
Heating capacity		Btu/h	61,400	85,300	107,000	128,000	154,000	171,000	193,000	213,000	235,000	256,000	281,000	299,000	324,000	345,000
		kW	18.0	25.0	31.5	37.5	45.0	50.0	56.5	62.5	69.0	75.0	82.5	87.5	95.0	101
Power consumption	Cooling	kW	3.63	5.21	7.29	9.01	10.9	13.0	12.5	14.2	16.3	18.0	19.9	22.0	23.9	26.3
	Heating		3.99	5.69	7.29	9.06	11.1	12.8	13.0	14.8	16.4	18.1	20.2	21.9	23.9	26.2
Capacity control		%	20-100		16-100	15-100	11-100	10-100	8-100				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	2.4X1	3.4X1	4.1X1	5.2X1	(2.9X1)+(3.3X1)	(3.6X1)+(3.7X1)	(3.4X1)+(4.1X1)	(3.4X1)+(5.2X1)	(4.1X1)+(5.2X1)	(5.2X1)+(5.2X1)	(5.2X1)+(2.9X1)+(3.3X1)	(5.2X1)+(3.6X1)+(3.7X1)	(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)	(2.9X1)+(3.3X1)+(4.4X1)+(4.0X1)
Airflow rate		ℓ/s	1,983	2,616	2,749	2,966	3,883		2,616+2,749	2,616+2,966	2,749+2,966	2,966+2,966	2,966+3,883		3,883+3,883	
		m³/min	119	157	165	178	233		157+165	157+178	165+178	178+178	178+233		233+233	
Dimensions (HXWXD)		mm	1,657X930X765				1,657X1,240X765		(1,657X930X765)+(1,657X930X765)				(1,657X930X765)+(1,657X1,240X765)		(1,657X1,240X765)+(1,657X1,240X765)	
Machine weight		kg	185		195		285		185+195		195+195		195+285		285+285	285+300
Sound level		dB(A)	55	56	57	59	60	61	60	61		62	63		64	
Sound power		dB(A)	75	76	78	79	80	83	80	81	82		83	84	85	
Operation range	Cooling	°CDB	-5 to 49						-5 to 49							
	Heating	°CWB	-20 to 15.5						-20 to 15.5							
Refrigerant	Type		R-410A						R-410A							
	Charge	kg	5.9		6.0	6.3	10.3	10.4	5.9+6.0	5.9+6.3	6.0+6.3	6.3+6.3	6.3+10.3	6.3+10.4	10.3+10.4	10.3+11.7
Piping connections	Liquid	mm	ϕ 9.5 (Brazing)			ϕ 12.7 (Brazing)			ϕ 15.9 (Brazing)				ϕ19.1 (Brazing)			
	Gas		ϕ19.1 (Brazing)		ϕ 22.2 (Brazing)		ϕ 28.6 (Brazing)		ϕ 28.6 (Brazing)			ϕ 34.9 (Brazing)				

MODEL			RQYQ34TNY1A(E)	RQYQ36TNY1A(E)	RQYQ38TNY1A(E)	RQYQ40TNY1A(E)	RQYQ42TNY1A(E)	RQYQ44TNY1A(E)	RQYQ46TNY1A(E)	RQYQ48TNY1A(E)
	Combination units		RQYQ10TY1A(E) RQYQ12TY1A(E) RQYQ12TY1A(E)	RQYQ12TY1A(E) RQYQ12TY1A(E) RQYQ12TY1A(E)	RQYQ8TY1A(E) RQYQ12TY1A(E) RQYQ18TY1A(E)	RQYQ12TY1A(E) RQYQ12TY1A(E) RQYQ16TY1A(E)	RQYQ12TY1A(E) RQYQ14TY1A(E) RQYQ16TY1A(E)	RQYQ12TY1A(E) RQYQ16TY1A(E) RQYQ16TY1A(E)	RQYQ14TY1A(E) RQYQ14TY1A(E) RQYQ18TY1A(E)	RQYQ14TY1A(E) RQYQ16TY1A(E) RQYQ18TY1A(E)
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz						3-phase 4-wire system, 380-415 V, 50 Hz	
Cooling capacity		Btu/h	324,000	345,000	362,000	382,000	406,000	423,000	444,000	461,000
		kW	95.0	101	106	112	119	124	130	135
Heating capacity		Btu/h	365,000	386,000	406,000	427,000	454,000	471,000	498,000	515,000
		kW	107	113	119	125	133	138	146	151
Power consumption	Cooling	kW	25.3	27.0	29.6	31.0	32.9	35.0	37.2	39.3
	Heating		25.4	27.2	29.9	30.9	33.0	34.7	37.3	39.0
Capacity control		%	5-100		4-100				3-100	
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	(4.1X1)+(5.2X1)+(5.2X1)	(5.2X1)+(5.2X1)+(5.2X1)	(3.4X1)+(5.2X1)+(4.4X1)+(4.0X1)	(5.2X1)+(5.2X1)+(3.6X1)+(3.7X1)	(5.2X1)+(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)	(5.2X1)+(3.6X1)+(3.7X1)+(3.6X1)+(3.7X1)	(2.9X1)+(3.3X1)+(2.9X1)+(3.3X1)+(4.4X1)+(4.0X1)	(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)+(4.4X1)+(4.0X1)
Airflow rate		ℓ/s	2,749+2,966+2,966	2,966+2,966+2,966	2,616+2,966+3,883	2,966+2,966+3,883	2,966+3,883+3,883		3,883+3,883+3,883	
		m³/min	165+178+178	178+178+178	157+178+233	178+178+233	178+233+233		233+233+233	
Dimensions (HXWXD)		mm	(1,657X930X765)+(1,657X930X765) +(1,657X930X765)		(1,657X930X765)+(1,657X930X765) +(1,657X1,240X765)		(1,657X930X765)+(1,657X1,240X765) +(1,657X1,240X765)		(1,657X1,240X765)+(1,657X1,240X765) +(1,657X1,240X765)	
Machine weight		kg	195+195+195		185+195+300	195+195+285	195+285+285		285+285+300	
Sound level		dB(A)	63	64		65			66	
Sound power		dB(A)	83	84	86			87	87	
Operation range	Cooling	°CDB	-5 to 49						-5 to 49	
	Heating	°CWB	-20 to 15.5						-20 to 15.5	
Refrigerant	Type		R-410A						R-410A	
	Charge	kg	6.0+6.3+6.3	6.3+6.3+6.3	5.9+6.3+11.7	6.3+6.3+10.4	6.3+10.3+10.4	6.3+10.4+10.4	10.3+10.3+11.7	10.3+10.4+11.7
Piping connections	Liquid	mm	ϕ 19.1 (Brazing)						ϕ 19.1 (Brazing)	
	Gas		ϕ34.9 (Brazing)	ϕ 41.3 (Brazing)					ϕ 41.3 (Brazing)	

Note: 1. Models with (E) are the outdoor units with anti-corrosion specifications. Please refer to Engineering Data Book for details.

2. Specifications are based on the following conditions;

- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- 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 the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

VRV IV Q Series Outdoor Units Heat Pump RQYQ-T

Space Saving Type

MODEL	Combination units		RQYQ18TY1A(E)	RQYQ20TY1A(E)	RQYQ30TSY1A(E)	RQYQ32TSY1A(E)	RQYQ34TSY1A(E)	RQYQ36TSY1A(E)	RQYQ38TSY1A(E)	RQYQ40TSY1A(E)	RQYQ42TSY1A(E)	RQYQ44TSY1A(E)	RQYQ46TSY1A(E)	RQYQ48TSY1A(E)
			-	-	RQYQ12TY1A(E) RQYQ18TY1A(E)	RQYQ12TY1A(E) RQYQ20TY1A(E)	RQYQ16TY1A(E) RQYQ18TY1A(E)	RQYQ18TY1A(E) RQYQ18TY1A(E)	RQYQ18TY1A(E) RQYQ20TY1A(E)	RQYQ20TY1A(E) RQYQ20TY1A(E)	RQYQ12TY1A(E) RQYQ12TY1A(E) RQYQ18TY1A(E)	RQYQ12TY1A(E) RQYQ12TY1A(E) RQYQ20TY1A(E)	RQYQ12TY1A(E) RQYQ16TY1A(E) RQYQ18TY1A(E)	RQYQ12TY1A(E) RQYQ18TY1A(E) RQYQ18TY1A(E)
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz						3-phase 4-wire system, 380-415 V, 50 Hz					
Cooling capacity		Btu/h	171,000	191,000	285,000	305,000	324,000	341,000	362,000	382,000	399,000	420,000	440,000	457,000
		kW	50.0	56.0	83.5	89.5	95.0	100	106	112	117	123	129	134
Heating capacity		Btu/h	191,000	215,000	319,000	345,000	362,000	382,000	406,000	430,000	447,000	471,000	491,000	512,000
		kW	56.0	63.0	93.5	101	106	112	119	126	131	138	144	150
Power consumption	Cooling	kW	15.4	18.0	24.4	27.0	28.4	30.8	33.4	36.0	33.4	36.0	37.4	39.8
	Heating		15.1	17.5	24.2	26.6	27.9	30.2	32.6	35.0	33.2	35.6	37.0	39.3
Capacity control		%	10-100	8-100	6-100	5-100			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	(4.4X1)+(4.0X1)	(4.6X1)+(5.5X1)	(5.2X1)+(4.4X1)+(4.0X1)	(5.2X1)+(4.6X1)+(5.5X1)	(3.6X1)+(3.7X1)+(4.4X1)+(4.0X1)	(4.4X1)+(4.0X1)+(4.4X1)+(4.0X1)	(4.4X1)+(4.0X1)+(4.6X1)+(5.5X1)	(4.6X1)+(5.5X1)+(4.6X1)+(5.5X1)	(5.2X1)+(5.2X1)+(4.4X1)+(4.0X1)	(5.2X1)+(5.2X1)+(4.6X1)+(5.5X1)	(5.2X1)+(3.6X1)+(3.7X1)+(4.4X1)+(4.0X1)	(5.2X1)+(4.4X1)+(4.0X1)+(4.4X1)+(4.0X1)
Airflow rate		ℓ/s	3,883	4,466	2,966+3,883	2,966+4,466	3,883+3,883		3,883+4,466	4,466+4,466	2,966+2,966+3,883	2,966+2,966+4,466	2,966+3,883+3,883	
		m³/min	233	268	178+233	178+268	233+233		233+268	268+268	178+178+233	178+178+268	178+233+233	
Dimensions (HXWXD)		mm	1,657X1,240X765		(1,657X930X765)+(1,657X1,240X765)		(1,657X1,240X765)+(1,657X1,240X765)		(1,657X1,240X765)+(1,657X1,240X765)		(1,657X930X765)+(1,657X930X765)+(1,657X1,240X765)		(1,657X930X765)+(1,657X1,240X765)+(1,657X1,240X765)	
Machine weight		kg	300	320	195+300	195+320	285+300	300+300	300+320	320+320	195+195+300	195+195+320	195+285+300	195+300+300
Sound level		dB(A)	62	65	64	66	65		67	68	65	67	66	
Sound power		dB(A)	84	87	85	88	87	87	89	90	86	88	87	88
Operation range	Cooling	°CDB	-5 to 49						-5 to 49					
	Heating	°CWB	-20 to 15.5						-20 to 15.5					
Refrigerant	Type		R-410A						R-410A					
	Charge	kg	11.7	11.8	6.3+11.7	6.3+11.8	10.4+11.7	11.7+11.7	11.7+11.8	11.8+11.8	6.3+6.3+11.7	6.3+6.3+11.8	6.3+10.4+11.7	6.3+11.7+11.7
Piping connections	Liquid	mm	ϕ 15.9(Brazing)		ϕ19.1(Brazing)				ϕ19.1(Brazing)					
	Gas		ϕ 28.6(Brazing)		ϕ 34.9(Brazing)			ϕ 41.3(Brazing)	ϕ 41.3(Brazing)					

Note: 1. Models with (E) are the outdoor units with anti-corrosion specifications. Please refer to Engineering Data Book for details.
2. Specifications are based on the following conditions;
•Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
•Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.

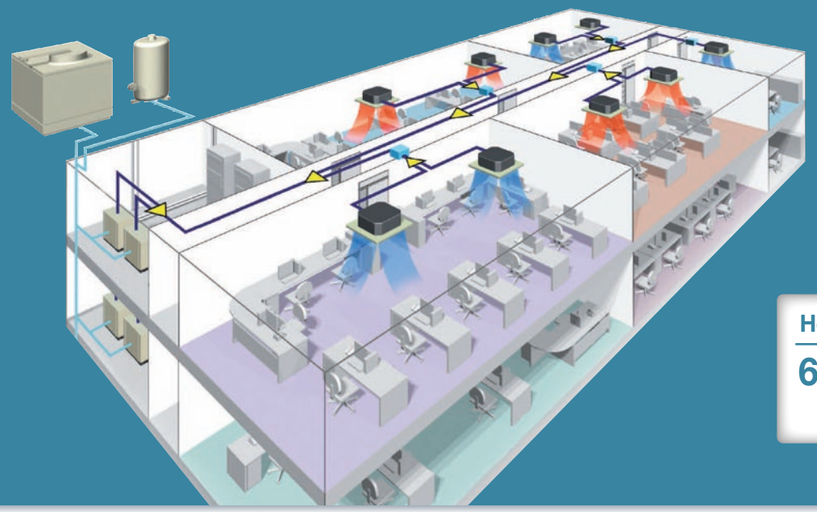
• Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

VRV III Q Series Outdoor Units Heat Recovery RQCEQ-P

MODEL	Combination units		RQCEQ280PY1	RQCEQ360PY1	RQCEQ460PY1	RQCEQ500PY1	RQCEQ540PY1	RQCEQ636PY1	RQCEQ712PY1	RQCEQ744PY1	RQCEQ816PY1	RQCEQ848PY1
			RQEQ140PY1 RQEQ140PY1	RQEQ180PY1 RQEQ180PY1	RQEQ140PY1 RQEQ140PY1 RQEQ180PY1	RQEQ140PY1 RQEQ180PY1 RQEQ180PY1	RQEQ180PY1 RQEQ180PY1 RQEQ180PY1	RQEQ212PY1 RQEQ212PY1 RQEQ212PY1	RQEQ140PY1 RQEQ180PY1 RQEQ180PY1 RQEQ212PY1	RQEQ140PY1 RQEQ180PY1 RQEQ212PY1 RQEQ212PY1	RQEQ180PY1 RQEQ212PY1 RQEQ212PY1 RQEQ212PY1	RQEQ212PY1 RQEQ212PY1 RQEQ212PY1 RQEQ212PY1
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz						3-phase 4-wire system, 380-415 V, 50 Hz			
Cooling capacity (*1) (*2)		Btu/h(*1)	96,200	124,000	158,000	172,000	186,000	218,000	245,000	256,000	280,000	291,000
		kW (*1)	28.2	36.3	46.3	50.4	54.4	64.0	71.7	74.9	82.2	85.4
		kW (*2)	28.0	36.0	46.0	50.0	54.0	63.6	71.2	74.4	81.6	84.8
Heating capacity		Btu/h	109,000	136,000	177,000	191,000	205,000	229,000	268,000	276,000	298,000	306,000
		kW	32.0	40.0	52.0	56.0	60.0	67.2	78.4	80.8	87.2	89.6
Power consumption	Cooling(*2)	kW	7.04	10.3	12.2	13.9	15.5	21.9	21.2	23.3	27.1	29.2
	Heating		8.00	10.7	13.4	14.7	16.1	17.7	20.7	21.2	23.1	23.6
Capacity control		%	13-100	10-100	8-100	7-100			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	2.8X2	3.3X2	2.8X2+3.3	2.8+3.3X2	3.3X3	3.6X3	2.8+3.3X2+3.6	2.8+3.3+3.6X2	3.3+3.6X3	3.6X4
Airflow rate		ℓ/s	1583+1583	1833+1833	1583+1583+1833	1583+1833+1833	1833+1833+1833		1583+1833+1833+1833		1833+1833+1833+1833	
		m³/min	95+95	110+110	95+95+110	95+110+110	110+110+110		95+110+110+110		110+110+110+110	
Dimensions (HXWXD)		mm	(1,680X635X765)+(1,680X635X765)		(1,680X635X765)+(1,680X635X765)+(1,680X635X765)				(1,680X635X765)+(1,680X635X765)+(1,680X635X765)+(1,680X635X765)			
Machine weight		kg	175+175		175+175+175			179+179+179	175+175+175+179	175+175+179+179	175+179+179+179	179+179+179+179
Sound level		dB(A)	57	61		62	63	65	64	65	66	
Operation range	Cooling	°CDB	-5 to 43						-5 to 43			
	Heating	°CWB	-20 to 15.5						-20 to 15.5			
	Cooling & Heating	°CWB	-6 to 15.5						-6 to 15.5			
Refrigerant	Type		R-410A						R-410A			
	Charge	kg	10.3+10.3	10.6+10.6	10.3+10.3+10.6	10.3+10.6+10.6	10.6+10.6+10.6	11.2+11.2+11.2	10.3+10.6+10.6+11.2	10.3+10.6+11.2+11.2	10.6+11.2+11.2+11.2	11.2+11.2+11.2+11.2
Piping connections	Liquid	mm	ϕ 9.5 (Brazing)	ϕ12.7 (Brazing)		ϕ15.9 (Brazing)			ϕ 15.9 (Brazing)	ϕ 19.1 (Brazing)		
	Suction gas		ϕ 22.2 (Brazing)	ϕ 25.4 (Brazing)	ϕ 28.6 (Brazing)				ϕ 28.6 (Brazing)	ϕ 34.9 (Brazing)		
	High and low pressure gas		ϕ 19.1 (Brazing)	ϕ 19.1 (Brazing)	ϕ 22.2 (Brazing)			ϕ 25.4 (Brazing)	ϕ 25.4 (Brazing)	ϕ 25.4 (Brazing)	ϕ28.6 (Brazing)	

Note: Specifications are based on the following conditions;
•Cooling:(*1) Indoor temp.: 27°CDB, 19.5°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
(*2) Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
•Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.

• Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.
When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.



RWEYQ-T

Heat Pump / Heat Recovery

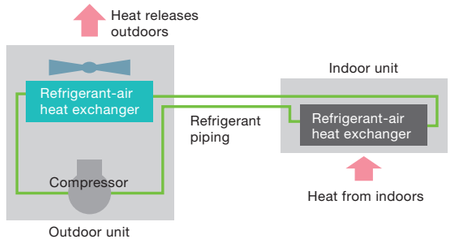
6 class - 36 class
(16 kW) (101 kW)

A water cooled intelligent individual air conditioning system suitable for tall multi-storey buildings.

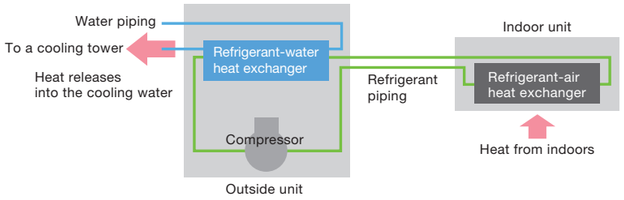
What is a water cooled system?

While an air cooled air conditioning system is designed to exchange heat recovered from indoors with outdoor air, a water cooled air conditioning system is designed for heat exchange with water Cooling Tower.

Air cooled system



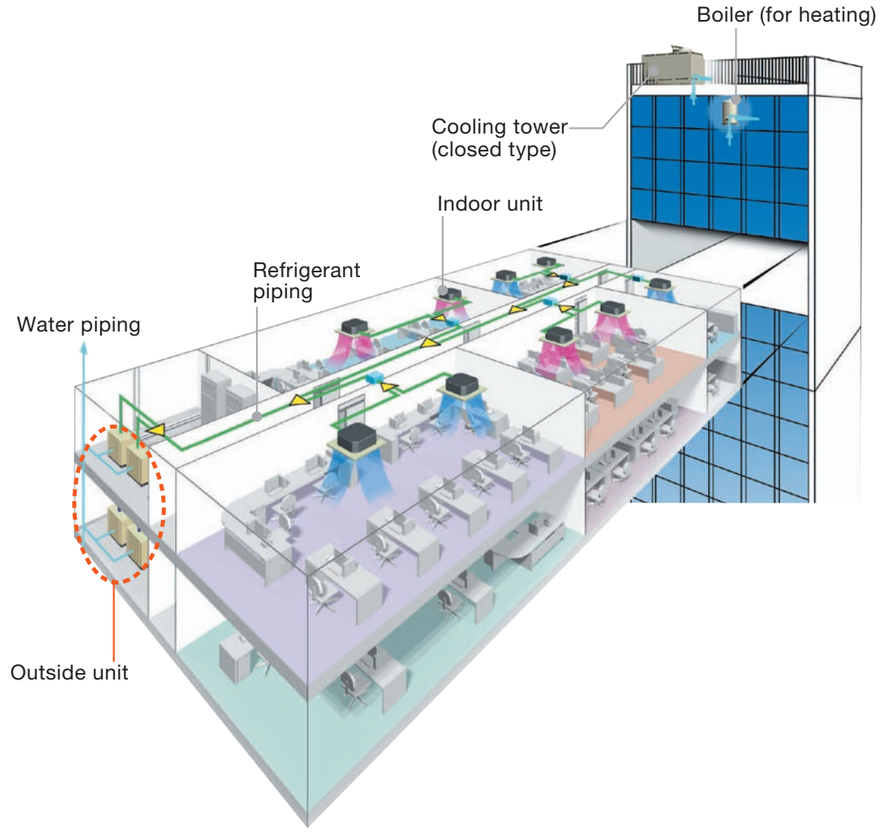
Water cooled system



As a water cooled system does not require to exchange heat with outdoor air,

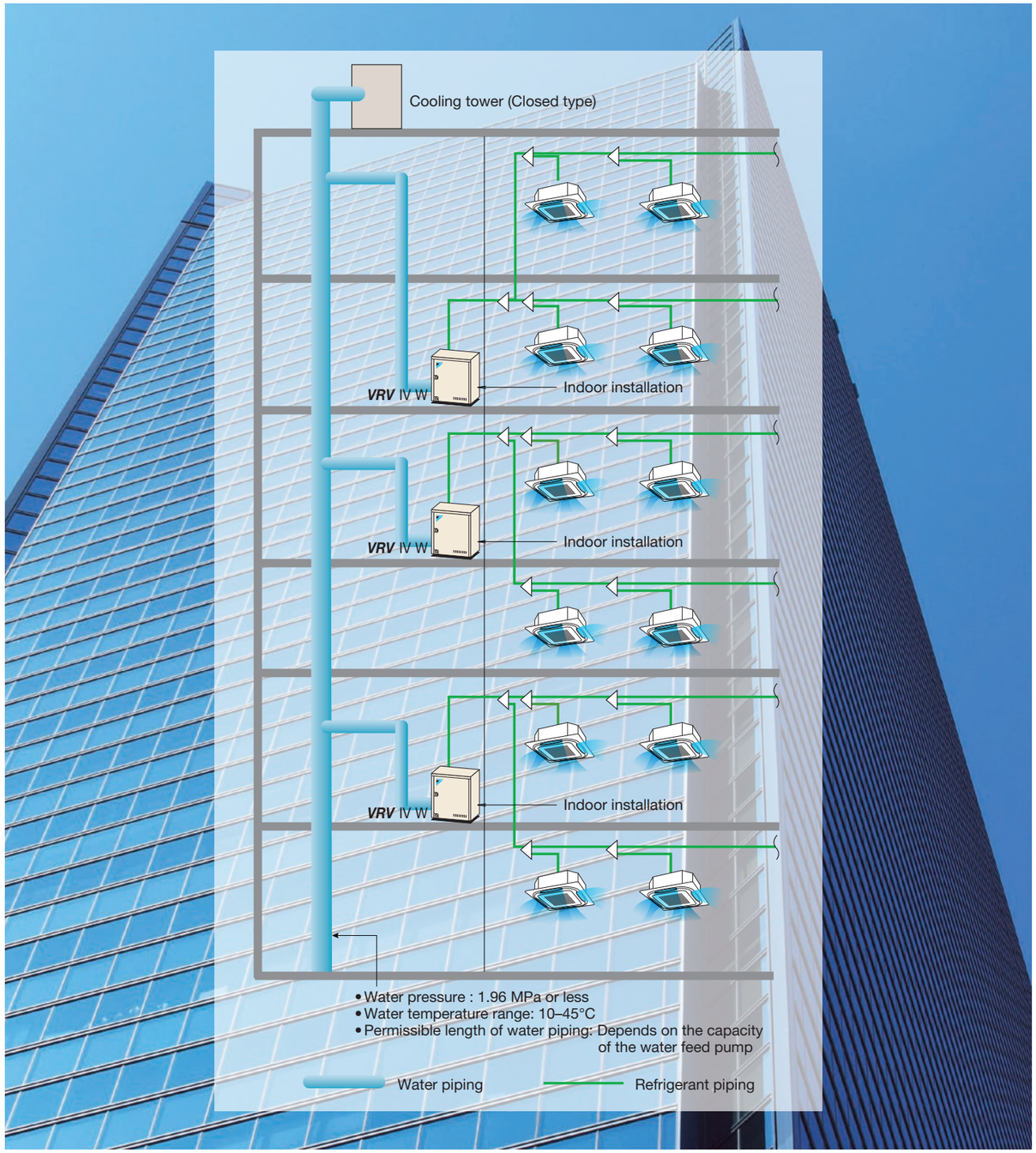
- Outside units can be installed indoors, for example, on basement floors.
  → **High installation flexibility**
- The air conditioning operation is stable even when the outdoor air temperature is high.
  → **Improved comfort**

The *VRV* IV W series combines the characteristics of a water cooled system with the *VRV* system



- Individual air conditioning is achieved via on-demand operation in each room.
- Outside units can be installed internally in a building if they can be connected with water piping.
- The length of the refrigerant piping can be minimized by installing outside units in proximity to indoor units.
  [The system helps reduce energy loss caused by long refrigerant piping.]
- Refrigerant piping is connected to indoor units.
  This design helps reduce the risks of indoor water leakage.

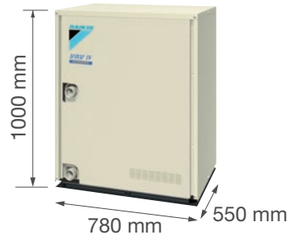
The *VRV* IV W series can meet various air conditioning needs by taking full advantage of the characteristics of a water cooled system.

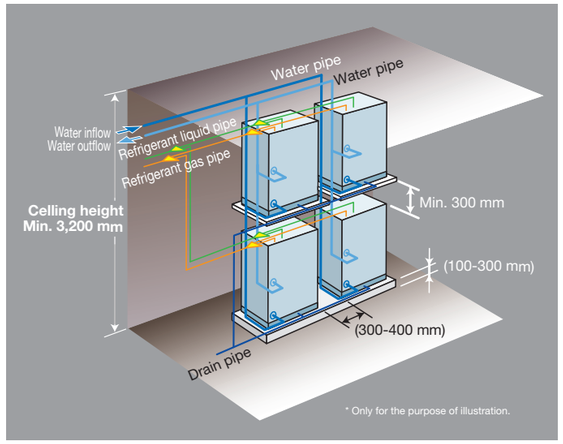


Adaptable to high-rise buildings due to easy installation on each floor

No balcony required

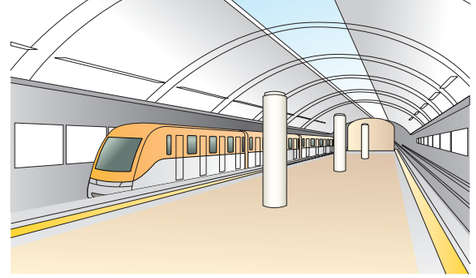
Compact outside units can be easily installed in the machine rooms on each floor. This helps overcome the restriction on differences in height of refrigerant piping. Individual air conditioning can be easily provided in high-rise buildings using this ***VRV*** system.





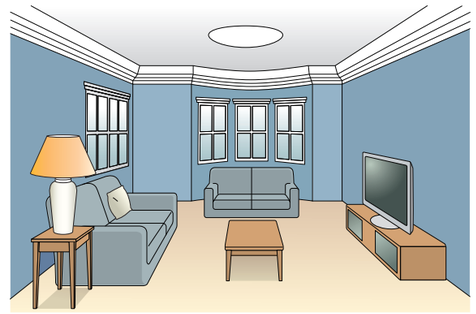
Easy to install in underground shopping malls and subway systems

Individual air conditioning can be easily provided in underground shopping malls, subway systems, etc. using this ***VRV*** system because heat exchange with outdoor air is not required.

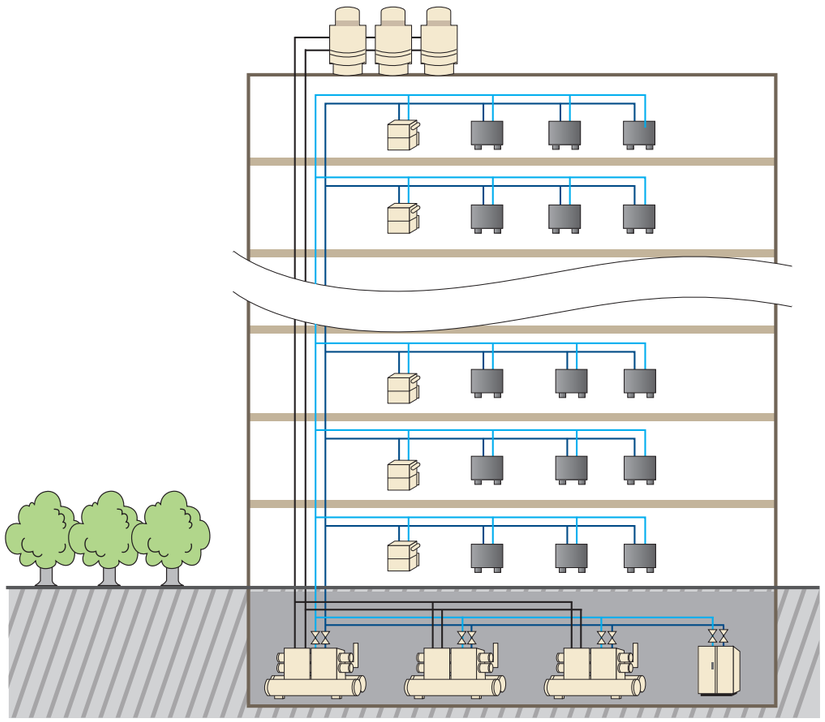


Suitable for high rise residential development

We offer an extensive lineup of small capacity outside units as well as connectable residential indoor units.



As conventional water based systems age, service and maintenance issues arise



* System diagram

Why is a Retrofit Solution Necessary?

1. As equipment age, air-conditioning capacity and performance deteriorates.
2. The maintenance cost for the equipment keeps rising.
3. After an extended period of operations, the noise generated by the equipment increases.
4. Scale formation in water pipes are difficult to clean, impact on performance and leads to corrosion issues.
5. Difficulty in catering to new tenancy design changes and requirements.
6. Individual energy billing for multi tenancy application is difficult.
7. After hours operations for tenants is costly and inefficient.
8. Building Management Systems are expensive to install and operate.

Issues to consider in a retrofit project

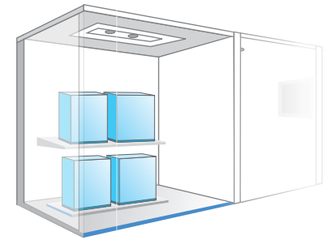
1. How to avoid damaging the building structure?
2. How to reduce the impact on tenants during renovation?
3. How to bring the renovation costs down to lowest level possible?
4. How to securely transport the air conditioning outside unit without incident?
5. How to simplify maintenance of the air conditioning system?

A Flexible System Convenient for Expansion / Retrofit

Benefits of Water Cooled *VRV* IV System

1 Outdoor unit located internally

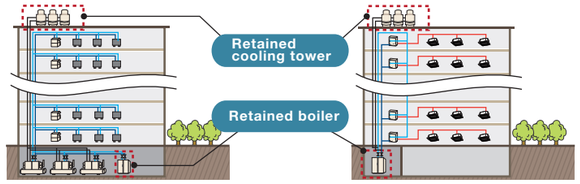
The outside units of the water cooled ***VRV*** IV W series negates the need of direct heat exchange with outdoor air. This feature makes it possible to place the outside unit room inside the building, which greatly extends design flexibility and makes it easier to adapt to different types of buildings and open to various kinds of creative building exteriors.



2 Part of the old system can be retained for cost reduction

The water cooled ***VRV*** IV W series can retain the cooling tower and boiler of the old system during renovation, effectively keeping costs down.

Note:
Closed circuit is necessary. In case of Open Towers, use of Plate Heat Exchanger is required between Open Tower and condenser water circuit.



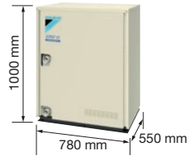
Before Retrofit

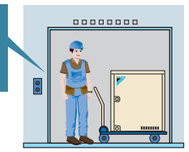
After Retrofit

* System diagram

3 Minimal plant room space

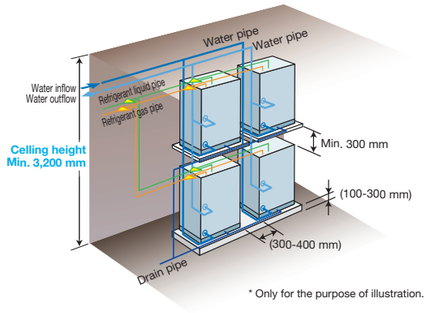
- The outside units of the water cooled ***VRV*** IV W series are conveniently compact, which not only enables transport by elevator possible, but also effectively simplifies installation. This also saves a great deal of time and labor.





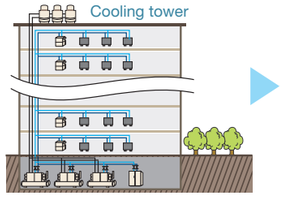
- The modular design featured by the water cooled ***VRV*** IV W series enables a free and flexible configuration of the outside units. Outside units may be double stacked to minimize plant space.

Stacking up of the outside units

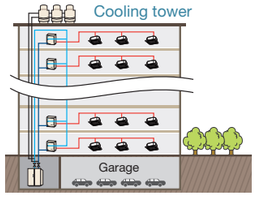


* Only for the purpose of illustration.

Saving more space for other purposes



With a conventional central air conditioning system, the outside units take up a disproportionately large amount of space for installation.



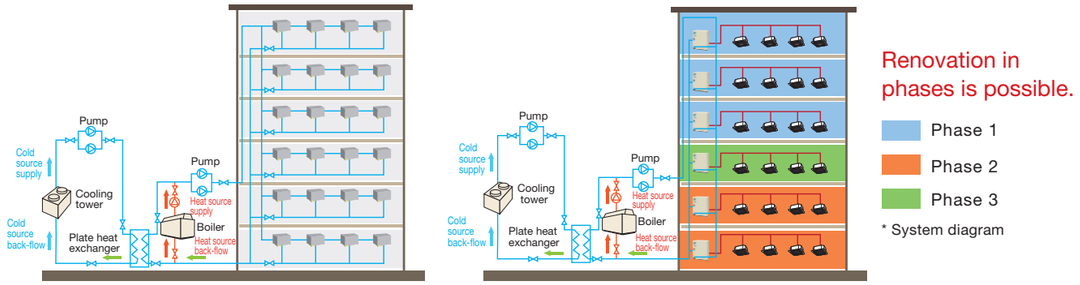
With the water cooled ***VRV*** IV W series, the outside units are modular design and can be arranged more freely and flexibly, saving part of the outside unit room for purposes such as business or car parking.

* System diagram

Water Cooled *VRV* IV as a Retrofit Solution

4 Floor by floor retrofit without interrupting

Based on the actual situation, renovation work can be carried out in phases, and floor by floor. This truly and properly gives expression to the outstanding flexibility of the water cooled ***VRV*** IV W series.



Water cooled packaged air conditioning system

Water cooled ***VRV*** IV W series

Renovation in phases is possible.

- Phase 1
- Phase 2
- Phase 3

* System diagram

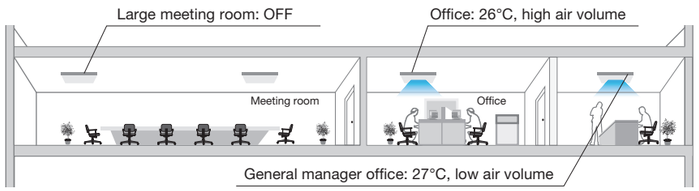
5 Compact refrigerant pipes and *VRV* indoor units help to free up ceiling space

The outside units and indoor units of the water cooled ***VRV*** IV W series are connected by refrigerant pipes. As the ***VRV*** indoor units and the diameter of refrigerant pipes are significantly smaller than duct and water pipes, less ceiling space is occupied and more floor height is saved. Less work is needed for expansion and renovation of the air conditioning system, thus minimizing the influence on other tenants.

Individual air conditioning comfort can be realized when and where it is actually required.

1 Independent control provides greater comfort and convenience

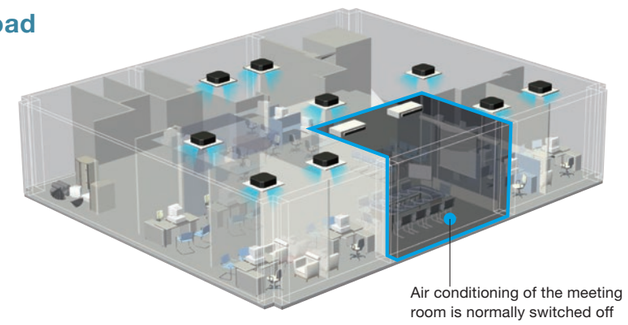
Each indoor unit of the water cooled ***VRV*** IV W series can be independently controlled and adjusted according to each tenant's individual needs for temperature and air volume.
This achieves optimal comfort and convenience.



Based on cooling condition

2 Higher efficiency with partial load

An air-conditioning plant operates at partial load for most of the year given the changing nature of both the external and internal loads.
By incorporating advanced DC Inverter, Refrigerant Control technology and VRT, Daikin's ***VRV*** IV W series is able to deliver superior partial load performances.



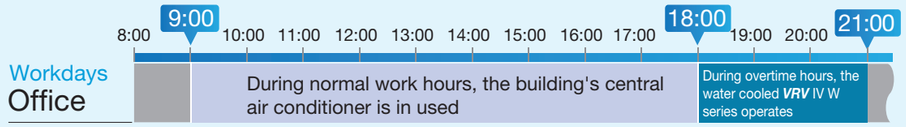
Actual conditions of the floor

3 Suitable as a low load or supplementary system

When combined up with a conventional central air conditioning system, the water cooled ***VRV*** IV W series can easily handle the air conditioning needs for after-hours work while the building's central air conditioner can be utilized during normal work hours. The water cooled ***VRV*** IV W series can be added according to actual needs.

- Cumbersome application procedures are eliminated, and the tenants' daily air conditioning costs decrease.
- Based on actual schedules, operation for each indoor unit can be precisely and individually set.

E.g.: air conditioning control for different rooms of the same floor



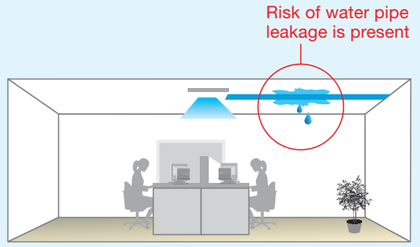
The water cooled ***VRV*** IV W series is utilized to meet overtime work needs

The water cooled ***VRV*** IV W series is utilized to meet weekend work needs

When a large number of people are present, the water cooled ***VRV*** IV W series can work to supplement insufficient capacity of the building's central air conditioner

4 Connection using refrigerant pipes eliminate the risk of water leakage

The outside units and indoor units of the water cooled ***VRV*** IV W series are connected by refrigerant pipes, with water pipes centralised in the outside unit room and the pipe well. This arrangement greatly reduces the risk of damage of important equipment indoors caused by water leakage of the system.



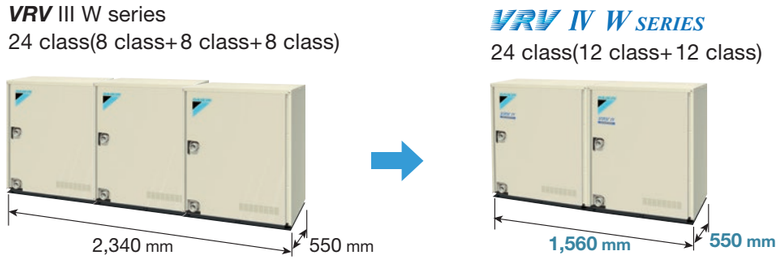
Adoption of water pipes for indoor connections in an all-water central air conditioning system

Adoption of refrigerant pipes for indoor connections in a water cooled ***VRV*** IV W series system

Compact and lightweight

Adoption of a water heat exchanger and optimisation of the refrigerant control circuit has resulted in compact and lightweight equipment.
A weight of 146 kg and height of 1,000 mm make it possible for installation in buildings with limited space, or where space is unavailable for outdoor units.
This makes the system ideal for places that doesn't have area outside—such as underground malls.

* The unit is designed for indoor installation only.



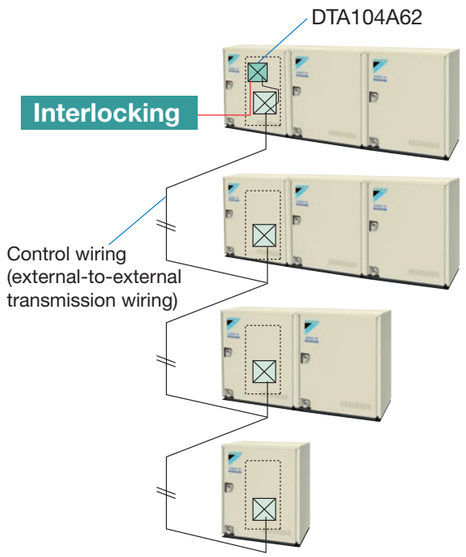
Footprint	1.29 m²	0.86 m²	33% Decrease
Product Weight	447 kg	294 kg	34% Decrease

Enhanced usability

Centralised interlocking function

Centralised interlocking input operate by using an external control adaptor (DTA104A62).

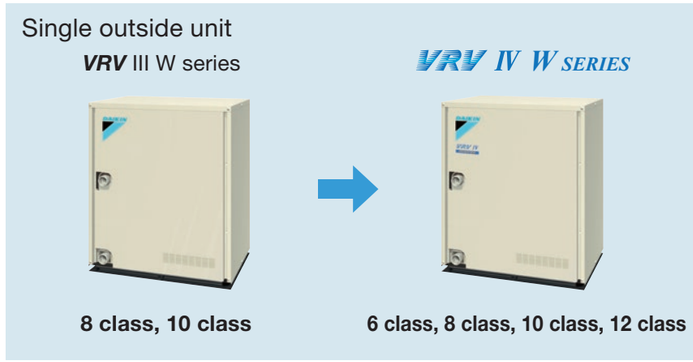
Using one external control adaptor circuit board makes centralised interlocking input to multiple units within the same water system possible.



Enhanced lineup

Wider capacity range from 6 to 36 class

With its enhanced lineup of 2 new models-6 class and 12 class single outside units, ***VRV*** IV W series offers a wider capacity range from 6 class to 36 class to meet broad variety of needs.



VRV IV W SERIES

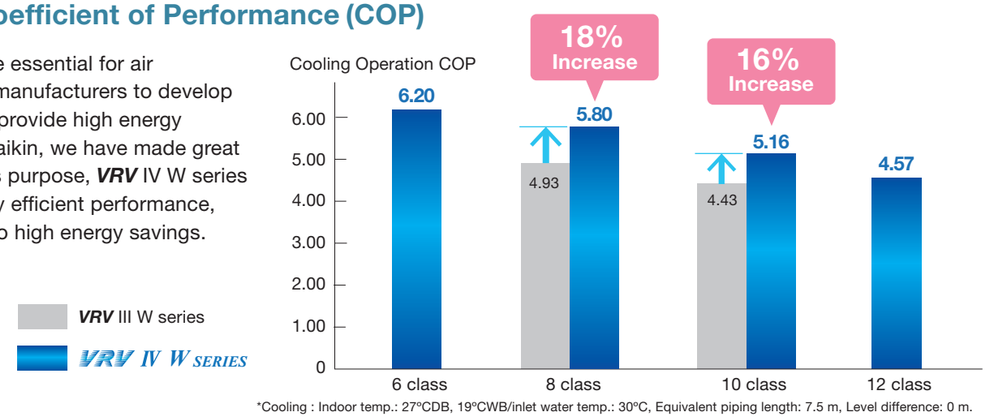
6,8,10,12 class		14,16,18,20,22,24 class		26,28,32,34,36 class	
RWEYQ6TYM	RWEYQ10TYM	RWEYQ14TYM	RWEYQ20TYM	RWEYQ26TYM	RWEYQ32TYM
RWEYQ8TYM	RWEYQ12TYM	RWEYQ16TYM	RWEYQ22TYM	RWEYQ28TYM	RWEYQ34TYM
		RWEYQ18TYM	RWEYQ24TYM	RWEYQ30TYM	RWEYQ36TYM

Capacity Range	class	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
	kW	16.0	22.4	28.0	33.5	38.4	44.8	50.4	56.0	61.5	67.0	72.8	78.4	84.0	89.4	95.0	101
Conventional model ***VRV*** III W series			○	○			○	○	○		○	○	○	○			
VRV IV W SERIES		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Energy saving

Higher Coefficient of Performance (COP)

It has become essential for air conditioning manufacturers to develop systems that provide high energy savings. At Daikin, we have made great efforts for this purpose, ***VRV*** IV W series delivers highly efficient performance, contributing to high energy savings.



*Cooling : Indoor temp.: 27°CDB, 19°CWB/inlet water temp.: 30°C, Equivalent piping length: 7.5 m, Level difference: 0 m.

State-of-the-art energy saving technology

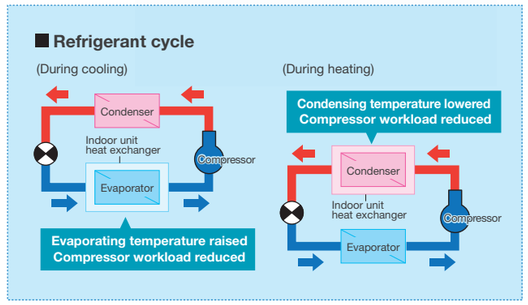
Customise your *VRV* system for optimal annual efficiency

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

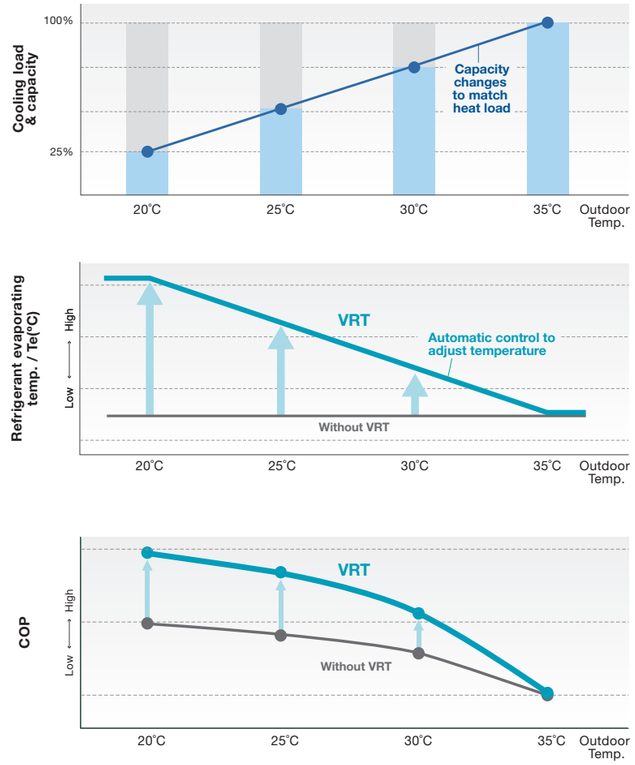
Variable Refrigerant Temperature

How is energy reduced?

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



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



Required capacity changes as air conditioning load changes according to outdoor temperature.

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

Automatic control adjusts evaporating temperature to heat load change.

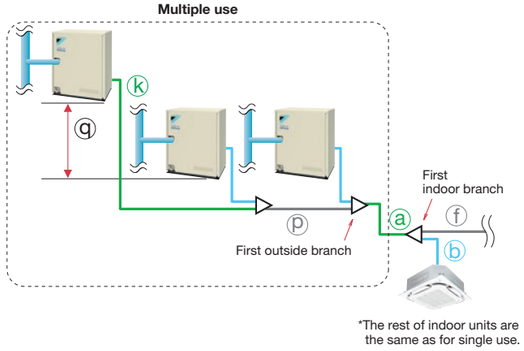
Energy efficiency is improved without sacrificing comfort.

* VRT is only available during either all cooling operation or all heating operation.

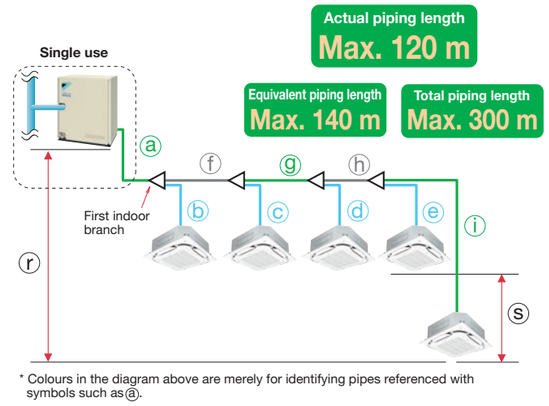
Long refrigerant piping length

Within the refrigerant piping system, a maximum of 120 m of actual piping length and 50 m of level difference between the ***VRV*** IV W series and indoor units are possible. Water piping does not enter occupied spaces, so there is little chance of water leaking.

For connection of only *VRV* indoor units.



*The rest of indoor units are the same as for single use.



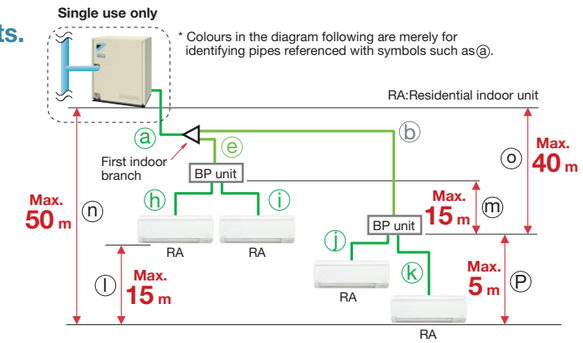
* Colours in the diagram above are merely for identifying pipes referenced with symbols such as ⓐ.

			Actual piping length	Example	Equivalent piping length
Max. allowable piping length	Refrigerant piping length		120 m	a+f+g+h+i	140 m
	Total piping length		300 m	a+b+c+d+e+f+g+h+i	—
	Between the first indoor branch and the farthest indoor unit		90 m*1	f+g+h+i	—
	Between the first outside branch and the last outside unit		10 m	k+p	13 m
Max. allowable level difference	Between the outside units (multiple use)		2 m	q	—
	Between the indoor units		15 m	s	—
	Between the outside units and the indoor units	If the outside unit is above.	50 m	r	—
		If the outside unit is below.	40 m	r	—

*1 No special requirements up to 40 m. The maximum actual piping length can be 90 m, depending on conditions. The ***VRV*** IV W series is easy to extend to 90 m by lessening the conditions from conventional ***VRV*** III W models. Be sure to refer to the Engineering Data Book for details of these conditions and requirements.

For connection of only residential indoor units.

Actual piping length
Max. 100 m
Equivalent piping length
Max. 120 m
Total piping length
Max. 200 m



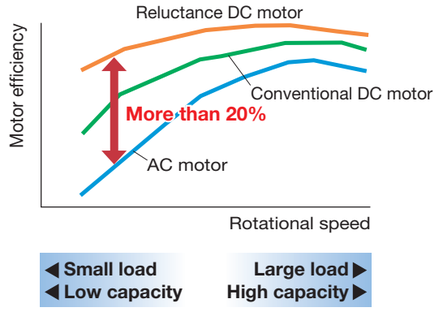
			Actual piping length	Example	Equivalent Example piping length
Max. allowable piping length	Refrigerant piping length		100 m	a+b+k	120 m
	Total piping length		200 m	a+b+e+h+j+k	—
	Between the first indoor branch and the farthest indoor unit		50 m*1	b+k	—
Max. and min. allowable piping length	Between BP unit and indoor unit	If indoor unit capacity index < 60	2 m - 15 m	h,i,j,k	—
		If indoor unit capacity index is 60	2 m - 12 m	h,i,j,k	—
		If indoor unit capacity index is 71	2 m - 8 m	h,i,j,k	—
Max. allowable level difference	Between the outside unit and the indoor unit	If the outside unit is above.	50 m	n	—
		If the outside unit is below.	40 m	n	—
	Between the indoor units		15 m	l	—
	Between the outside unit and the BP unit		40 m	o	—
	Between BP units		15 m	m	—
	Between the BP unit and the indoor unit		5 m	p	—

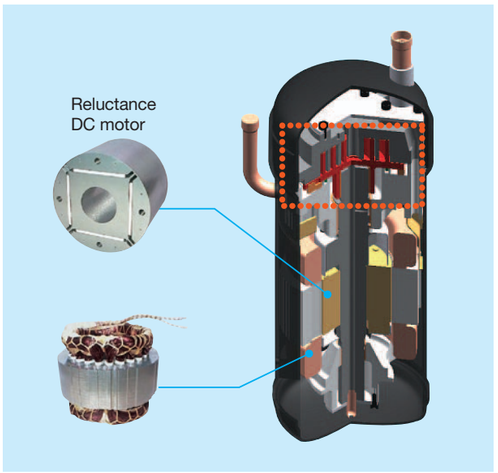
*1. When the piping length exceeds 20 m, the size of the main pipes (the gas side and the liquid side) must be increased. Please refer to Engineering Data Book for details.

High efficiency compressor to achieve a high COP

Compressor equipped with Reluctance DC motor

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





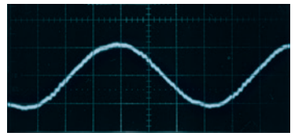
Note: Data are based on studies conducted under controlled conditions at a Daikin laboratory using Daikin products.

*1 A neodymium magnet is approximately 10 times stronger than a standard ferrite magnet.

*2 The torque created by the change in power between the iron and magnet parts.

Smooth sine wave DC inverter

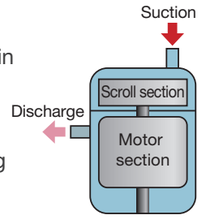
Use of an optimised sine wave smoothes motor rotation, further improving operating efficiency.



Sine wave DC inverter

Scroll compressor

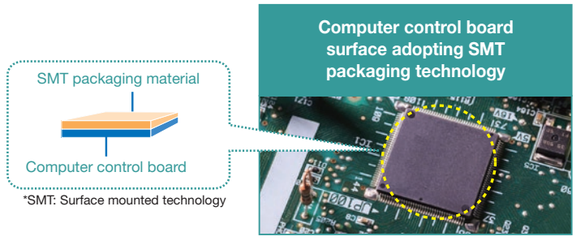
Sucked gas is compressed in the scrolling part before the heated motor, so that the machine compress the non-expanded gas, resulting in high efficiency compression.



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.



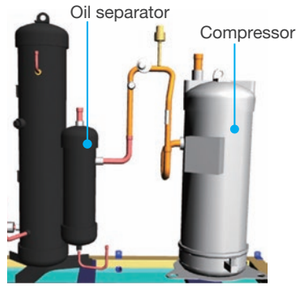
Minimize performance degradation from refrigeration oil in all stages of operation

Newly designed oil receiver

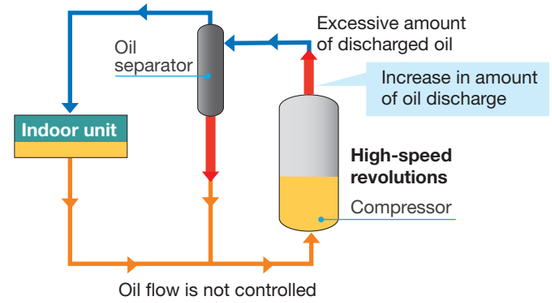
Adding a container vessel (Oil Receiver) helps eliminate performance degradation by retaining refrigeration oil and preventing excessive oil from flowing to the heat exchanger.
The new design enables the oil receiver to automatically supply the compressor with only the necessary amount of oil.

Conventional *VRV* III W series

Refrigeration oil discharged from the compressor circulates in the refrigerant cycle and lowers the heat transfer capabilities of the indoor and outside unit heat exchangers.

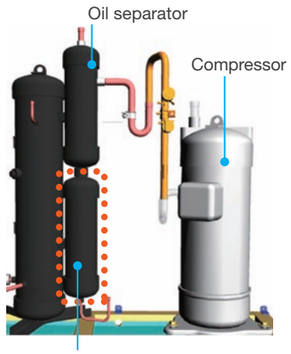


Oil flows to the indoor and outside unit heat exchangers through the oil separator.

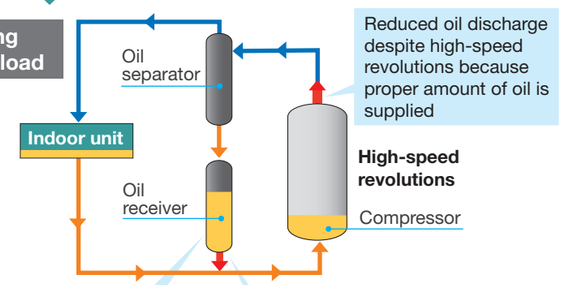


VRV IV W SERIES

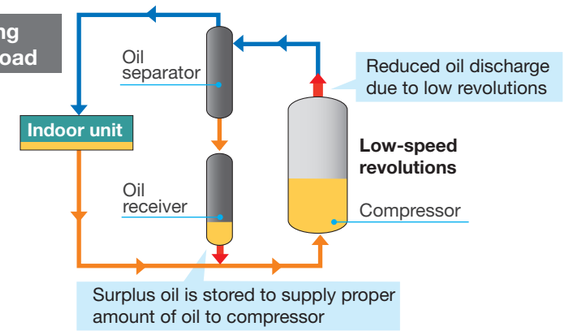
Surplus oil is stored in the oil receiver and automatically controls the amount of refrigeration oil in the refrigerant cycle. This prevents a reduction in performance for heat exchanger.



During high load



During low load



Simplified commissioning and after-sales service

Function of information display by luminous digital tube

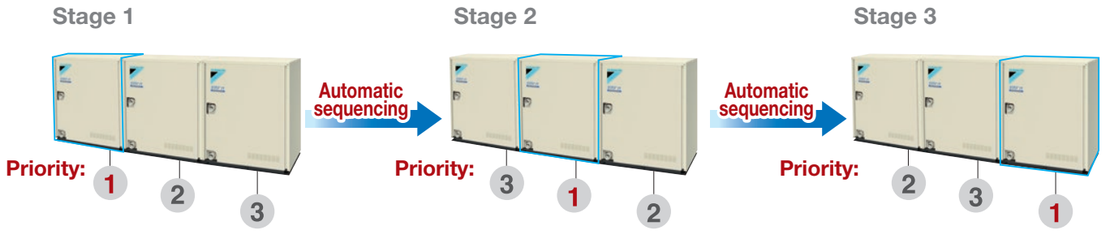
VRV IV W series utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.

7-segment digital display	Conventional LED display
Displays system operation information directly 	Figures out system operation information by reading light emitting state of different diodes, which is both inefficient and fallible. 

Outside unit sequencing technology

Automatic sequencing operation

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



Reliable and convenient air conditioning system

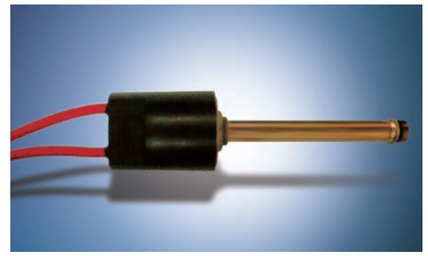
Auto-restart technology after power interruption

Even if the indoor or outside unit accidentally experiences a power interruption during normal operation, the system will keep a record of the operating mode adopted before the power interruption. When the power supply recovers, the air conditioning system will then restore itself back into the recorded operating status, simplifying the operation after an accidental power interruption.

Refrigerant pressure detection technology makes system operation more stable and efficient

Quick and accurate detection of the system's refrigerant status is crucial to the stable and efficient operation of the system. The water cooled ***VRV*** IV W series not only utilizes temperature sensors to detect the system's operating status, but also employs high and low pressure sensors to carry out a quick, comprehensive and accurate detection of the system's refrigerant status, ensuring more stable and efficient operation.

More stable operation



- Low pressure protection: the system can effectively protect the compressor from being affected by instantaneous low pressure changes through monitoring the pressure data of the air suction pipe. Compared with the conventional low pressure protection method featuring temperature sensors, the pressure-sensor method boasts quicker response and can better reflect the system's instantaneous operating status.
- High pressure protection: the system can also keep the compressor from being affected by instantaneous high pressure changes.

More efficient operation

- A low pressure sensor, together with advanced supercooling technologies and high pressure protection control, helps to realize fast starting of the compressor, and can also quickly adjust rotational speed according to refrigerant status to adjust to indoor load fluctuations more rapidly.

Outside Unit Combinations

For connection of only ***VRV*** indoor units

class	kW	Capacity index	Model	Combination	Total capacity index of connectable indoor units*2	Maximum number of connectable indoor units
6	16.0	150	RWEYQ6T	RWEYQ6T × 1	75 to 195	9
8	22.4	200	RWEYQ8T	RWEYQ8T × 1	100 to 260	13
10	28.0	250	RWEYQ10T	RWEYQ10T × 1	125 to 325	16
12	33.5	300	RWEYQ12T	RWEYQ12T × 1	150 to 390	19
14	38.4	350	RWEYQ14T*1	RWEYQ6T + RWEYQ8T	175 to 455	22
16	44.8	400	RWEYQ16T*1	RWEYQ8T × 2	200 to 520	26
18	50.4	450	RWEYQ18T*1	RWEYQ8T + RWEYQ10T	225 to 585	29
20	56.0	500	RWEYQ20T*1	RWEYQ10T × 2	250 to 650	32
22	61.5	550	RWEYQ22T*1	RWEYQ10T + RWEYQ12T	275 to 715	35
24	67.0	600	RWEYQ24T*1	RWEYQ12T × 2	300 to 780	39
26	72.8	650	RWEYQ26T*1	RWEYQ8T × 2 + RWEYQ10T	325 to 845	42
28	78.4	700	RWEYQ28T*1	RWEYQ8T + RWEYQ10T × 2	350 to 910	45
30	84.0	750	RWEYQ30T*1	RWEYQ10T × 3	375 to 975	48
32	89.5	800	RWEYQ32T*1	RWEYQ10T × 2 + RWEYQ12T	400 to 1,040	52
34	95.0	850	RWEYQ34T*1	RWEYQ10T + RWEYQ12T × 2	425 to 1,105	55
36	101	900	RWEYQ36T*1	RWEYQ12T × 3	450 to 1,170	58

*1. An outside unit multi connection piping kit (option) is necessary for multiple connections of 14 class systems and above.
*2. Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outside units.

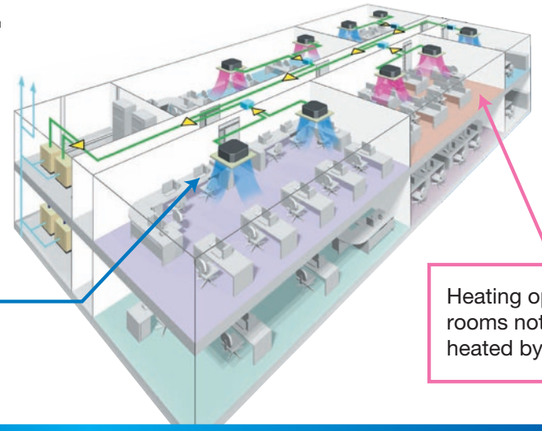
For connection of only residential indoor units

Model name*1	kW	class	Capacity index	Total capacity index of connectable indoor units*2			Maximum number of connectable indoor units
				Combination (%)*2			
				80%*2	100%	130%	
RWEYQ6T	16.0	6	150	120	150	195	9
RWEYQ8T	22.4	8	200	160	200	260	13
RWEYQ10T	28.0	10	250	200	250	325	16
RWEYQ12T	33.5	12	300	240	300	390	19

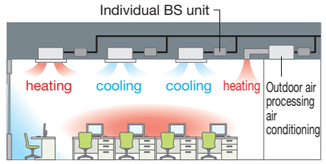
*1. Only single outside unit (RWEYQ6-12T) heat pump type can be connected.
*2. Total capacity index of connectable indoor units must be 80%–130% of the capacity index of the outside unit.

Easily responds to simultaneous heating and cooling needs.

Offers simultaneous cooling and heating operation on the same floor!

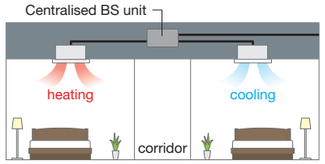


Increasing demand for simultaneous cooling and heating needs



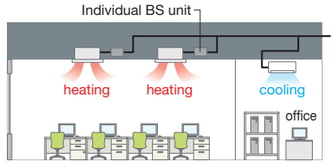
Winter season (Office Building)

- Difference between the load of cold air and heat from room is large
- Can be use with the outdoor air processing air conditioning



Winter season (Hotel)

- Able to cater to individual heating and cooling requirement



Individual office

- Provides heating and annual cooling depending on space area

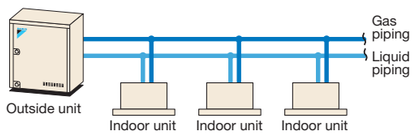
BS unit (Individual type/Centralised type)

By adding suction gas piping and a BS unit (sold separately), simultaneous cooling and heating operation can be provided by a single system.

Individual BS unit

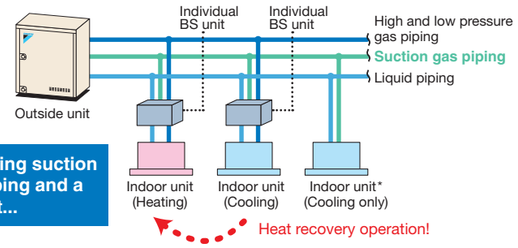
Centralised BS unit

Heat pump



* For indoor units used for cooling only (do not connect to BS unit when using for heat recovery), total capacity index must be 50% or less than the capacity index of the outdoor units.

Heat recovery



2-stage heat recovery operation improves energy efficiency

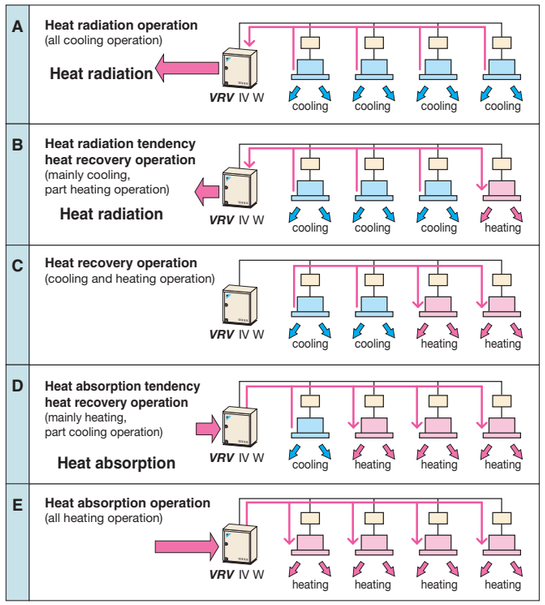
Daikin offers 2-stage heat recovery operation.
The first stage of heat recovery operation is within the refrigerant system.
By controlling the BS unit that switches cooling and heating, simultaneous cooling and heating operation is made possible, with heat recovery performed between indoor units.
The second stage of heat recovery operation is within the water loop, where heat recovery is performed between the ***VRV*** IV W systems.
This 2-stage heat recovery operation substantially improves energy efficiency and makes the system the ideal solution to the requirements of modern office buildings, where some areas may require cooling even in winter, depending on the amount of sunshine received and the number of people in the room.

Stage 1

Simultaneous heating and cooling operation within the refrigerant system.

In mainly cooling, partly heating mode, the system recycles heat exhausted from the cooling operation to use for heating. In mainly heating, partly cooling mode, the system uses cooled post-heating operation refrigerant for cooling. Efficiency improves the more simultaneous operation is performed.

The first stage: Between indoor units

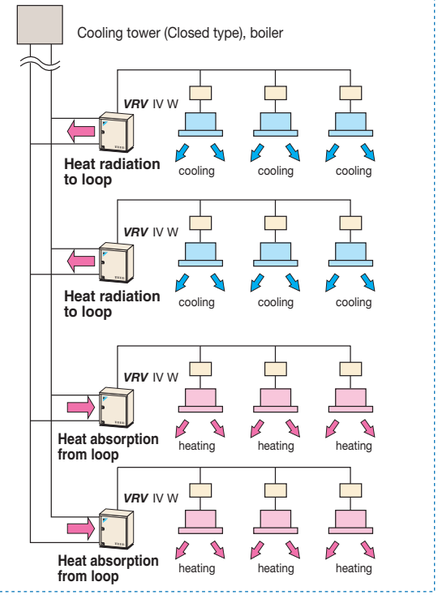


Stage 2

Heat recovery operation between the *VRV* IV W systems.

Heat recovery operation is also available between systems connected to the same water loop, with systems exchanging heat via water. This increases energy efficiency.

The second stage: Between *VRV* IV W systems



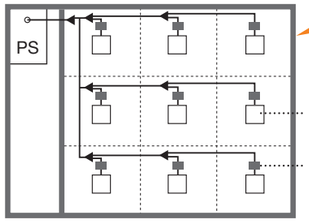
Note: • Above system configurations are for illustration purposes only.

Individual and centralised BS unit allow greater design flexibility

Individual BS unit

BSQ100AV1
BSQ160AV1
BSQ250AV1

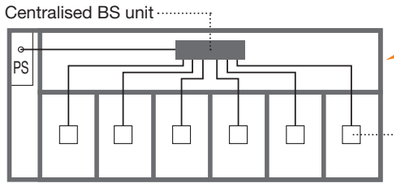
- Compact and flexible installation
- Flexible design
- Low noise



Recommended for large spaces or areas subject to frequent layout change

Centralised BS unit

BS4Q14AV1
BS6Q14AV1
BS8Q14AV1
BS10Q14AV1
BS12Q14AV1
BS16Q14AV1



Recommended for areas which have many small rooms

- Enhanced Line up

No. of branches	4	6	8	10	12	16
Conventional Centralised BS Unit	●	●				
Centralised BS Unit	●	●	●	●	●	●

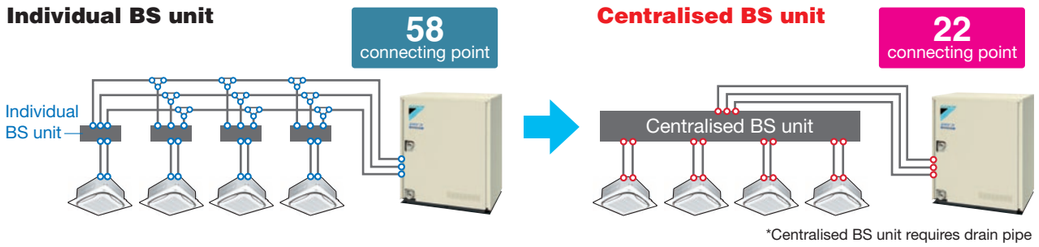
- Compact and lightweight design

Compared to conventional BS unit (6 branch)

BS unit size **reduced by 65%**

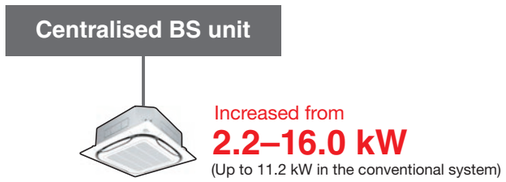
BS unit weight **reduced by 73%**

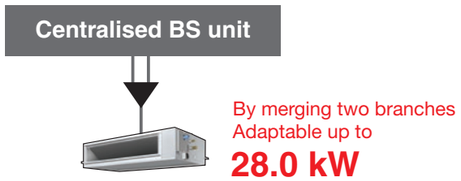
Installation and maintenance work have been made easier through the integration of multiple BS units.



*Centralised BS unit requires drain pipe

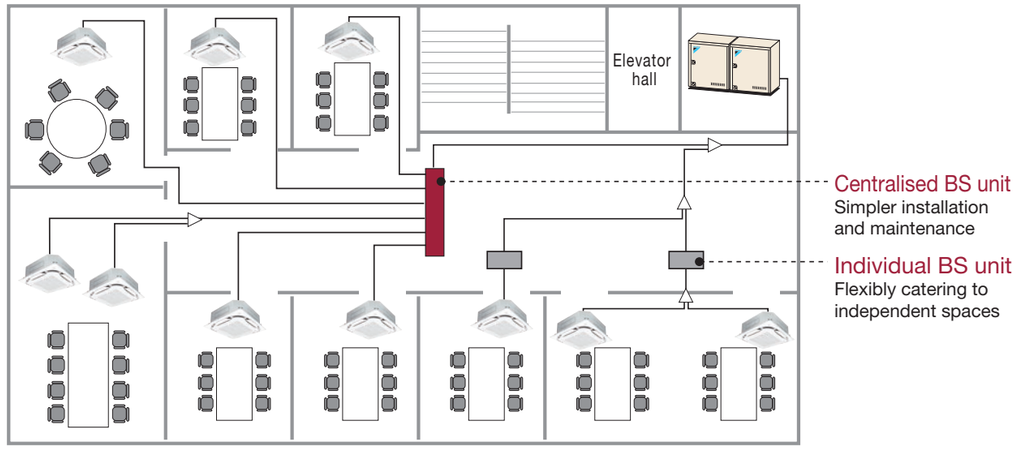
Greater design flexibility achieved by increasing the connection capacity range





Combined use of a centralised BS unit and individual BS units meets the needs of many design plans.

Availability of individual type and centralised type BS units can better satisfy different design needs, with the former catering flexibly to independent spaces, and the latter for more convenient system installation and maintenance.



Faster installation of centralised BS unit thanks to open connection

Cut and braze the pipe
(for indoor units bigger or equal to 7.1 kW (63 class))

No need to cut the pipe before brazing
(for indoor units smaller or equal to 5.6 kW (50 class))

Lower transient sound

New BS units achieve lower transient sound level than conventional BS units.

Maximum transient sound		Centralised BS unit						Individual BS unit		
		4 branch	6 branch	8 branch	10 branch	12 branch	16 branch	100 type	160 type	250 type
New BS units	**Sound level (dB(A))***	**45**	**47**	**47**	**48**	**48**	**49**	**40**	**45**	**45**
Conventional BS units	Sound level (dB(A))*	51.5	53.5	—				45.5	46.5	47.5

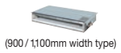
*Anechoic chamber conversion value, measured at a point 1 m downward from the unit centre.

Enhanced range of choices

Indoor units can be selected from 2 lineups, both ***VRV*** and residential indoor units, to match rooms and preferences.

VRV indoor units

New lineup

Type	Model Name		20	25	32	40	50	63	71	80	100	125	140	145	160	180	200	250
		Capacity Range(kW)	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	16.2	18	20	22.4	28
		Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	145	160	180	200	250
Ceiling Mounted Cassette (Round Flow with Sensing)	FXFSQ-AVM			●	●	●	●	●		●	●	●	●					
Ceiling Mounted Cassette (Round Flow)	FXFQ-PVE			●	●	●	●	●		●	●	●						
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-A2VEB		●	●	●	●	●											
4-Way Flow Ceiling Suspended	FXUQ-AVEB								●		●							
Ceiling Mounted Cassette (Double Flow)	New FXCQ-AVM		●	●	●	●	●	●		●		●						
Ceiling Mounted Cassette (Single Flow)	FXEQ-AV36		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-TV1B(A)		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Standard Series)	FXDQ-PDVE	 (700mm width type)	●	●	●													
	FXDQ-NDVE	 (900 / 1,100mm width type)				●	●	●										
Ceiling Concealed Duct	FXDYQ-MAV1									●	●	●		●				
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PAVE		●	●	●	●	●	●		●	●	●	●					
Ceiling Mounted Duct	FXMQ-PAVE		●	●	●	●	●	●		●	●	●	●					
	FXMQ-PV1A														●	●	●	●
Outdoor-Air Processing Unit	FXMQ-MFV1											●					●	●
Ceiling Suspended	FXHQ-MAVE				●			●			●							
	New FXHQ-AVM											●	●					
Wall Mounted	New FXAQ-AVM		●	●	●	●	●	●										
Floor Standing	FXLQ-MAVE		●	●	●	●	●	●										
Concealed Floor Standing	FXNQ-MAVE		●	●	●	●	●	●										
Heat Reclaim Ventilator with DX-Coil and Humidifier	VKM-GA(M)V1		Airflow rate 500-1000 m³/h															
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h															

Residential indoor units with connection to BP units

Type	Model Name		20	25	35	50	60	71
		Rated Capacity (kW)	2.0	2.5	3.5	5.0	6.0	7.1
		Capacity Index	20	25	35	50	60	71
Ceiling Mounted Cassette (Compact Multi Flow)	FFQ-BV1B			●	●	●	●	
Slim Ceiling Mounted Duct	FDXS-CVMA	 (900/1,100 mm width type)		●	●	●	●	
Wall Mounted	FTXS-KVMA		●	●	●			
	FTXS-KAVMA					●	●	●

Note: BP units are necessary for residential indoor units. Only single outside unit (RWEYQ6-12T) heat pump type can be connected.

Max. 58 indoor units

VRV indoor units only

Max. 19 indoor units

Residential indoor units only

*Refer to page 96 for the maximum number of connectable indoor units.

VRV IV W Series Outside Units RWEYQ-T

Heat Pump / Heat Recovery

MODEL			**RWEYQ6TYM**	**RWEYQ8TYM**	**RWEYQ10TYM**	**RWEYQ12TYM**		**RWEYQ14TYM**	**RWEYQ16TYM**	**RWEYQ18TYM**	**RWEYQ20TYM**	**RWEYQ22TYM**	**RWEYQ24TYM**
Combination units			–	–	–	–		**RWEYQ6TYM**	**RWEYQ8TYM**	**RWEYQ8TYM**	**RWEYQ10TYM**	**RWEYQ10TYM**	**RWEYQ12TYM**
			–	–	–	–		**RWEYQ8TYM**	**RWEYQ8TYM**	**RWEYQ10TYM**	**RWEYQ10TYM**	**RWEYQ12TYM**	**RWEYQ12TYM**
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		131,000	153,000	172,000	191,000	210,000	229,000
		kW	16.0	22.4	28.0	33.5		38.4	44.8	50.4	56.0	61.5	67.0
Heating capacity		Btu/h	61,400	85,300	107,000	128,000		147,000	171,000	193,000	215,000	235,000	256,000
		kW	18.0	25.0	31.5	37.5		43.0	50.0	56.5	63.0	69.0	75.0
Power consumption	Cooling	kW	2.58	3.86	5.43	7.33		6.44	7.72	9.29	10.9	12.8	14.7
	Heating	kW	2.69	3.98	5.60	7.87		6.67	7.96	9.58	11.2	13.5	15.7
Casing colour			Ivory white (5Y7.5/1)					Ivory white (5Y7.5/1)					
Dimensions (H×W×D)		mm	1,000 × 780 × 550					(1,000 × 780 × 550) × 2					
Compressor	Type		Hermetically sealed scroll type					Hermetically sealed scroll type					
	Motor output	kW	1.9	2.8	3.7	4.7		1.9 + 2.8	2.8 × 2	2.8 + 3.7	3.7 × 2	3.7 + 4.7	4.7 × 2
Refrigerant piping connections	Liquid	mm	ϕ9.5 (Flare)			ϕ12.7 (Flare)		ϕ12.7 (Flare)		ϕ15.9 (Flare)		ϕ19.1 (Flare)	
	Suction gas *1		ϕ19.1 (Brazing)		ϕ22.2 (Brazing)			ϕ28.6 (Brazing)					
	High and low pressure gas		ϕ15.9*2, ϕ19.1*3 (Brazing)		ϕ19.1*2, ϕ22.2*3 (Brazing)			ϕ22.2*2, ϕ28.6*3 (Brazing)					
Water piping connections	Water inlet		PT1 1/4B intenal thread					(PT1 1/4B) × 2 intenal thread					
	Water outlet		PT1 1/4B intenal thread					(PT1 1/4B) × 2 intenal thread					
	Drain outlet		PS1/2B intenal thread					(PS1/2B) × 2 intenal thread					
Machine weight (Operating weight)		kg	146 (148)		147 (149)			146 × 2 (148 × 2)		146 + 147 (148 + 149)		147 × 2 (149 × 2)	
Sound level		dB(A)	49	50	51	53		53		54		55	56
Operation range (Inlet water temp.)		°C	10 to 45					10 to 45					
Capacity control		%	23-100		19-100			23-100		20-100		19-100	
Refrigerant	Type		R-410A					R-410A					
	Charge	kg	3.5		4.2			3.5 + 3.5		3.5 + 4.2		4.2 + 4.2	

MODEL			**RWEYQ26TYM**	**RWEYQ28TYM**	**RWEYQ30TYM**		**RWEYQ32TYM**	**RWEYQ34TYM**	**RWEYQ36TYM**
Combination units			**RWEYQ8TYM**	**RWEYQ8TYM**	**RWEYQ10TYM**		**RWEYQ10TYM**	**RWEYQ10TYM**	**RWEYQ12TYM**
			RWEYQ8TYM	**RWEYQ10TYM**	**RWEYQ10TYM**		**RWEYQ10TYM**	**RWEYQ12TYM**	**RWEYQ12TYM**
			RWEYQ10TYM	**RWEYQ10TYM**	**RWEYQ10TYM**		**RWEYQ12TYM**	**RWEYQ12TYM**	**RWEYQ12TYM**
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	248,000	268,000	287,000		305,000	324,000	345,000
		kW	72.8	78.4	84.0		89.5	95.0	101
Heating capacity		Btu/h	278,000	300,000	322,000		345,000	365,000	386,000
		kW	81.5	88.0	94.5		101	107	113
Power consumption	Cooling	kW	13.2	14.7	16.3		18.2	20.1	22.0
	Heating	kW	13.6	15.2	16.8		19.1	21.3	23.6
Casing colour			Ivory white (5Y7.5/1)				Ivory white (5Y7.5/1)		
Dimensions (H×W×D)		mm	(1,000 × 780 × 550) × 3				(1,000 × 780 × 550) × 3		
Compressor	Type		Hermetically sealed scroll type				Hermetically sealed scroll type		
	Motor output	kW	2.8 × 2 + 3.7	2.8 + 3.7 × 2	3.7 × 3		3.7 × 2 + 4.7	3.7 + 4.7 × 2	4.7 × 3
Refrigerant piping connections	Liquid	mm	ϕ19.1 (Flare)				ϕ19.1 (Flare)		
	Suction gas *1		ϕ34.9 (Brazing)				ϕ34.9 (Brazing)		
	High and low pressure gas		ϕ28.6*2, ϕ34.9*3 (Brazing)				ϕ28.6*2, ϕ34.9*3 (Brazing)		
Water piping connections	Water inlet		(PT1 1/4B) × 3 intenal thread				(PT1 1/4B) × 3 intenal thread		
	Water outlet		(PT1 1/4B) × 3 intenal thread				(PT1 1/4B) × 3 intenal thread		
	Drain outlet		(PS1/2B) × 3 intenal thread				(PS1/2B) × 3 intenal thread		
Machine weight (Operating weight)		kg	146 × 2 + 147 (148 × 2 + 149)	146 + 147 × 2 (148 + 149 × 2)	147 × 3 (149 × 3)		147 × 3 (149 × 3)		
Sound level		dB(A)	55	56			57		58
Operation range (Inlet water temp.)		°C	10 to 45				10 to 45		
Capacity control		%	21-100	20-100	19-100		19-100		
Refrigerant	Type		R-410A				R-410A		
	Charge	kg	3.5 + 3.5 + 4.2	3.5 + 4.2 + 4.2	4.2 + 4.2 + 4.2		4.2 + 4.2 + 4.2		

Note :
1. Specifications are based on the following conditions ;
   - ·Cooling : Indoor temp. : 27°CDB, 19°CWB / inlet water temp. :30°C, Equivalent piping length : 7.5 m, Level difference : 0 m.
   - ·Heating : Indoor temp. : 20°CDB / inlet water temp. : 20°C, 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.
2. This unit cannot be installed in the outdoors. Install indoors (Machine room, etc).
3. Hold ambient temperature at 0 – 40°C and humidity at 80%RH or less. Heat rejection from the casing : 0.51 kW / 6 - 8 class / hour, 0.58 kW / 10 - 12 class / hour.
4. Connectable to closed type cooling tower only.
   - *1 : In the case of heat pump system, suction gas pipe is not used.
   - *2 : In the case of heat recovery system.
   - *3 : In the case of heat pump system.
   - ·Be sure to refer to the Engineering Data Book for facility design.

RWXYQ-A

Heat Pump
3 class - 6 class
(8 kW) (16 kW)

Easy installation & servicing

Compact and lightweight

The adoption of a new water heat exchanger and optimisation of the refrigerant control circuit has resulted in compact and lightweight design.
The unit weight of 90 kg and height of 1,000 mm makes installation easy.

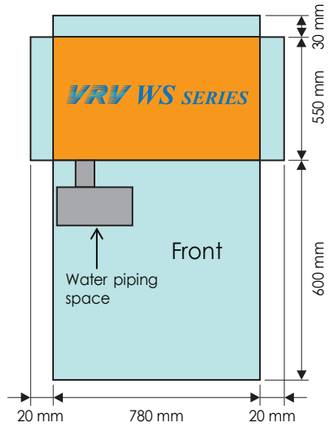
* The unit is designed for indoor installation only.

- Small footprint & lightweight
- Minimal service & installation space required
- Stackable flat top design

Service space (Single installation)

- Service access from the front with minimal space required at rear of the condenser (30 mm)

Note: This is only applicable when drain pipe is connected to the front drain port.
Please secure 500 mm rear service space if drain pipe is connected to the rear drain port.



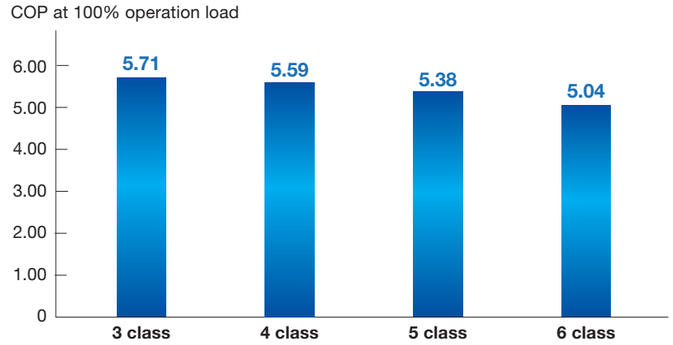
Single phase electric power supply

Single phase power supply enables simplified installation in residential applications.

Energy saving

High Coefficient of Performance (COP)

It has become essential for air conditioning manufacturers to develop systems that provide high energy savings. At Daikin, we have made great efforts for this purpose, ***VRV*** WS series delivers highly efficient performance, contributing to high energy savings.



*Cooling : Indoor temp.: 27°CDB, 19°CWB/inlet water temp.: 30°C, Equivalent piping length: 7.5 m, Level difference: 0 m.

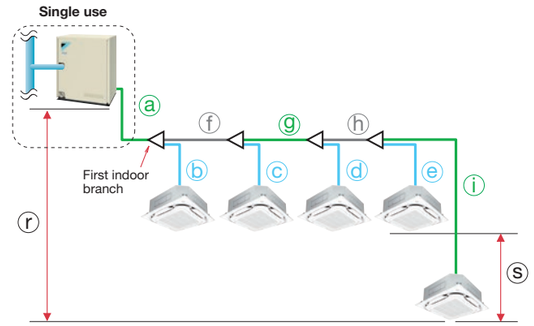
Long refrigerant piping length

Within the refrigerant piping system, a maximum of 120 m of actual piping length and 30 m of level difference between the ***VRV*** WS series and indoor units are possible. Water piping does not enter occupied spaces, so there is little chance of water leaking.

Actual piping length
Max. 120 m

Equivalent piping length
Max. 140 m

Total piping length
Max. 300 m



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

		Actual piping length	Example	Equivalent piping length
Max. allowable piping length	Refrigerant piping length	**120** m	a+f+g+h+i	140 m
	Total piping length	**300** m	a+b+c+d+e+f+g+h+i	—
	Between the first indoor branch and the farthest indoor unit	**40** m	f+g+h+i	—
Max. allowable level difference	Between the indoor units	**15** m	s	—
	Between the outside units and the indoor units	**30** m	r	—

Tube-in-Tube Type Heat Exchanger

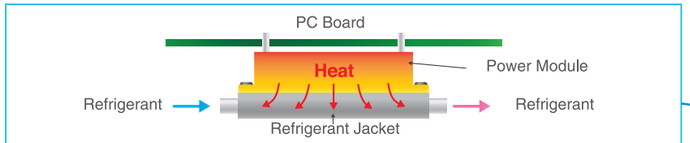
The Tube-in-Tube type heat exchanger with refrigerant lines spiraling around the water circuit in a counter flow design delivers superior heat exchange. While the inner groove structure of the water circuit lowers risk of blockage and delivers optimal performance.

Tube in tube structure for simple installation and maintenance

Use of copper pipes enhances tolerance against corrosive effects of chloride ions

Refrigerent cooling technology

By introducing refrigerant cooling for ***VRV*** WS's inverter power module, heat rejected from the unit to machine room can be significantly reduced. This also helps to keep the unit operation stable even at high ambient temperature and reduces PCB failure ratio.



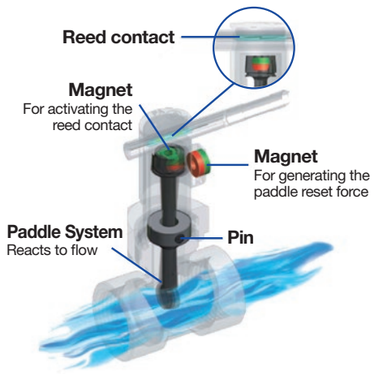
The main heat generating parts (inverter power module) in the electric compo-nent is adopted to reduce the size of the refrigerant cooling technology. Heat rejection from casing : 0.21 kW/3 class,0.28 kW/4 class, 0.31 kW/5 class, 0.35 kW/6 class.

Easy maintenance

The electrical components are strategically located at the front which eases the maintenance process. Moreover, the major components are also designed in a way that they can be accessed from front for maintenance.

Built in water flow switch

Mechanical water flow switch is built into the system to enhance system reliability.



Standard water strainer

A standard water strainer is provided together with the unit as an accessory item. This reduces the additional cost and installation time at field. A standard water reduces installation time.

Enhanced range of choices

New lineup

Type	Model Name		Capacity Range(kW)	20	25	32	40	50	63	71	80	100	125	140	145	160	180
			Capacity Range(kW)	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	16.2	18	20
			Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	145	160	180
Ceiling Mounted Cassette (Round Flow with Sensing)	FXFSQ-AVM				●	●	●	●	●		●	●	●	●			
Ceiling Mounted Cassette (Round Flow)	FXFQ-PVE				●	●	●	●	●		●	●	●				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-A2VEB			●	●	●	●	●									
4-Way Flow Ceiling Suspended	FXUQ-AVEB									●		●					
Ceiling Mounted Cassette (Double Flow)	New FXCQ-AVM			●	●	●	●	●	●		●		●				
Ceiling Mounted Cassette (Single Flow)	FXEQ-AV36			●	●	●	●	●	●								
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-TV1B(A)			●	●	●	●	●	●								
Slim Ceiling Mounted Duct (Standard Series)	FXDQ-PDVE	(700mm width type)		●	●	●											
	FXDQ-NDVE	(900 / 1,100mm width type)					●	●	●								
Ceiling Concealed Duct	FXDYQ-MAV1										●	●	●		●		
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PAVE			●	●	●	●	●	●		●	●	●	●			
Ceiling Mounted Duct	FXMQ-PAVE			●	●	●	●	●	●		●	●	●	●			
	FXMQ-PV1A															●	●
Ceiling Suspended	FXHQ-MAVE					●			●			●					
	New FXHQ-AVM												●	●			
Wall Mounted	New FXAQ-AVM			●	●	●	●	●	●								
Floor Standing	FXLQ-MAVE			●	●	●	●	●	●								
Concealed Floor Standing	FXNQ-MAVE			●	●	●	●	●	●								

VRV WS Series Outside Units RWXYQ-A

Heat Pump

MODEL			RWXYQ3AV1	RWXYQ4AV1	RWXYQ5AV1	RWXYQ6AV1
Power supply			1-Phase, 220-240 V, 50 Hz			
Cooling capacity		Btu/h	27,300	38,200	47,800	54,600
		kW	8.0	11.2	14.0	16.0
Heating capacity		Btu/h	30,700	42,700	54,600	61,400
		kW	9.0	12.5	16.0	18.0
Power consumption	Cooling	kW	1.40	2.00	2.60	3.17
	Heating	kW	1.60	2.10	2.60	2.80
Casing colour			Ivory white (5Y7.5/1)			
Dimensions (H×W×D)		mm	1,000×780×550			
Compressor	Type		Hermetically sealed swing type			
	Motor output	kW	1.92			
Refrigerant piping connections	Liquid	mm	ϕ9.5 (Flare)			
	Suction gas		ϕ15.9 (Flare)			
Water piping connections	Water inlet		PT1B external thread			PT1 1/4B external thread
	Water outlet		PT1B external thread			PT1 1/4B external thread
	Drain outlet		PS1/2B internal thread			
Machine weight		kg	90	94		99
Sound level		dB(A)	48	50		
Sound power		dB(A)	66	68		
Operation range (Inlet water temp.)		°C	15 to 45 (Range for continuous operation)			
Capacity control		%	20-100			
Refrigerant	Type		R-410A			
	Charge	kg	2.2	2.4		2.7
Rated water flow (Range of water flow)		L/min	30 (15 to 45)	40 (20 to 60)	50 (25 to 75)	57 (28.5 to 85.5)

Note :1. Specifications are based on the following conditions ;
- Cooling : Indoor temp. : 27°CDB, 19°CWB / inlet water temp. :30°C, Equivalent piping length : 7.5 m, Level difference : 0 m.
- Heating : Indoor temp. : 20°CDB / inlet water temp. : 20°C, 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.

2. This unit cannot be installed in the outdoors. Install indoors (Machine room, etc).
3. Hold ambient temperature at 0-40°C and humidity at 80% RH or less.
   Heat rejection from the casing: 0.21 kW/3 class /hour, 0.28 kW/4 class /hour, 0.31 kW/5 class /hour, 0.35 kW/6 class /hour

Outside Unit Combinations

Model name	kW	class	Capacity index	Total capacity index of connectable indoor units			Maximum number of connectable indoor units
				Combination (%)			
				50%	100%	130%	
RWXYQ3A	8.0	3	75	37.5	75	97.5	4
RWXYQ4A	11.2	4	100	50	100	130	6
RWXYQ5A	14.0	5	125	62.5	125	162.5	8
RWXYQ6A	16.0	6	150	75	150	195	9

Note: Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outside unit.

Indoor Unit Lineup

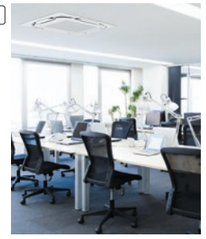
Daikin offers a wide range of indoor units includes both ***VRV*** and residential models responding to variety of needs of our customers that require air-conditioning solutions.

VRV indoor units

Ceiling Mounted Cassette (Round Flow with Sensing) Type P.113

FXFSQ-AVM

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



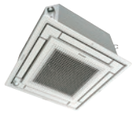
Ceiling Mounted Cassette (Round Flow) Type P.123

FXFQ-PVE

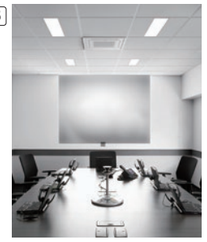
360◦airflow improves temperature distribution and offers a comfortable living environment

Ceiling Mounted Cassette (Compact Multi Flow) Type P.125

FXZQ-A2VEB



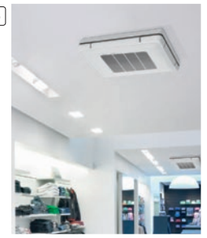
Quiet, compact, and designed for user comfort



4-Way Flow Ceiling Suspended Type P.126

FXUQ-AVEB

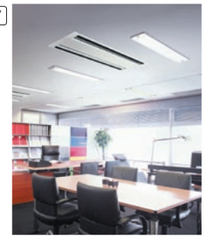
This slim and stylish indoor unit achieves optimum air distribution, and can be installed without the need for ceiling cavity



Ceiling Mounted Cassette (Double Flow) Type P.127

New **FXCQ-AVM**

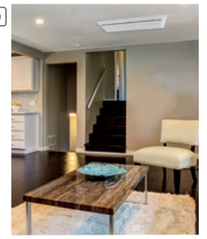
Thin, lightweight, and easy to install in narrow ceiling spaces



Ceiling Mounted Cassette (Single Flow) Type P.129

FXEQ-AV36

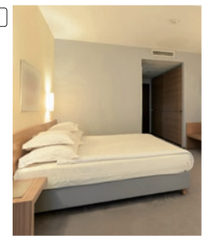
Slim design for flexible installation



Slim Ceiling Mounted Duct Type (Compact Series) P.131

FXDQ-TV1B(A)

Slim and compact design for easy and flexible installation

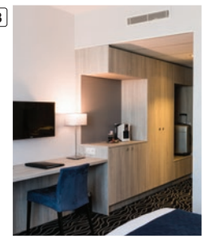


Slim Ceiling Mounted Duct Type (Standard Series) P.133

FXDQ-PDVE

FXDQ-NDVE

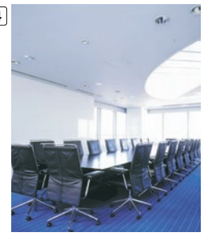
Slim design, quietness and static pressure switching



Ceiling Concealed (Duct) Type P.134

FXDYQ-MAV1

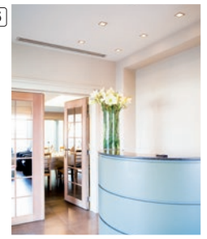
High static pressure offers flexible duct design that blends in with any interior décor in stores and offices



Middle Static Pressure Ceiling Mounted Duct Type P.135

FXSQ-PAVE

Middle static pressure and slim design allow flexible installations

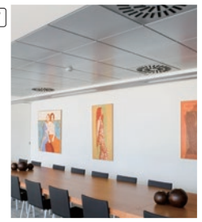


Ceiling Mounted Duct Type P.137

FXMQ-PAVE

FXMQ-PV1A

Middle and high static pressure allows flexible installations



Ceiling Suspended Type P.139

FXHQ-MAVE

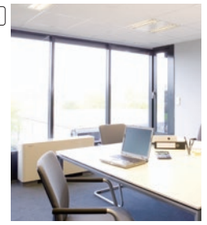
New **FXHQ-AVM**

Slim body with quiet and wide airflow.

Floor Standing Type P.143

FXLQ-MAVE

Suitable for perimeter zone air conditioning



Outdoor-Air Processing Unit P.161

FXMQ-MFV1

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

Wall Mounted Type P.141

New **FXAQ-AVM**

Stylish flat panel design harmonised with your interior décor.

Concealed Floor Standing Type P.144

FXNQ-MAVE

Designed to be concealed in the perimeter skirting-wall

Residential indoor units with connection to BP units

Ceiling Mounted Cassette (Compact Multi Flow) Type P.145

FFQ-BV1B

Quiet, compact, and designed for user comfort

Slim Ceiling Mounted Duct Type P.147

FDXS-CVMA

Slim and smooth design suits your shallow ceiling

Wall Mounted Type P.148

FTXS-KVMA

FTXS-KAVMA

Stylish flat panel harmonises with your interior décor

Air treatment equipment

Heat Reclaim Ventilator with DX-Coil and Humidifier P.159

VKM-GA(M)V1

Heat Reclaim Ventilator P.163

VAM-GJVE

New Round Flow Cassette movie at Daikin official YouTube site.

Ceiling Mounted Cassette (Round Flow with Sensing) Type

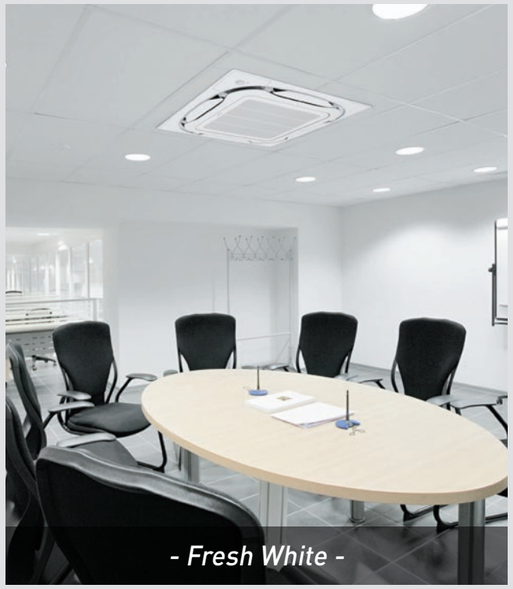
FXFSQ-A

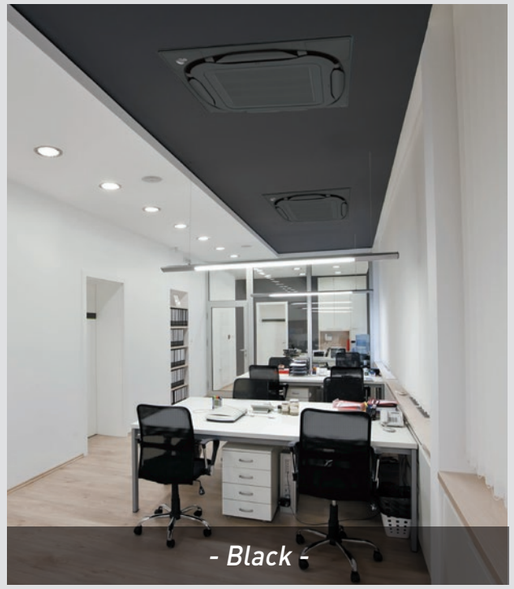
Round flow with sensing

Panel variations (Option)

Standard panel with sensing
BYCQ125EEF (Fresh White)

Standard panel with sensing
BYCQ125EEK (Black)





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
Heating capacity		Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	42,700	54,600	
		kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	
Power consumption	Cooling	kW	0.028		0.035	0.056	0.061	0.092	0.164	0.170	0.194
	Heating		0.026		0.034	0.056	0.060	0.092	0.144	0.159	0.183
Casing			Galvanised steel plate								
Airflow rate (H/HM/M/ML/L)		ℓ/s	217/208/192/183/167		283/225/208/200/183	383/342/317/242/183	392/350/333/267/225	408/367/342/333/250	558/508/450/392/350	575/525/475/425/383	592/542/492/442/383
		m³/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
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				
	Gas (Flare)		ϕ12.7				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.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Decoration Panel (Option)

Standard panel with sensing	Model		BYCQ125EEF (Fresh White) / BYCQ125EEK (Black)
	Dimensions(H×W×D)	mm	50×950×950
	Weight	kg	5.5

Function List

Remote controller	Wired	BRC1E63	–
	Wireless	–	BRC7M634F(K)
Dual sensors		○	
Direct airflow		○	
Sensing sensor low mode		○	
Sensing sensor stop mode		○	
Circulation airflow		○	
Individual airflow direction control		○	
Switchable 5 step fan speed		○	○
Auto airflow rate		○	○
Auto swing		○	○
Swing pattern selection		○	○
High ceiling application		○	

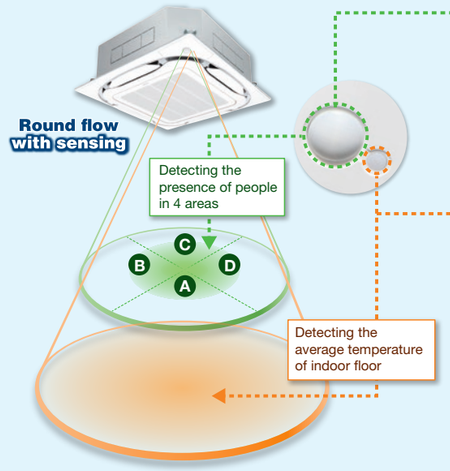
Ceiling Mounted Cassette (Round Flow with Sensing) Type FXFSQ-A

Daikin Advanced Sensing Functions*1

Dual sensors*1

*1. 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 4 sensors detect human presence.

Ceiling height	2.7m	3.5m	4.0m
Detection range (diameter)*2	approx. 8.5m	approx. 11.5m	approx. 13.5m

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

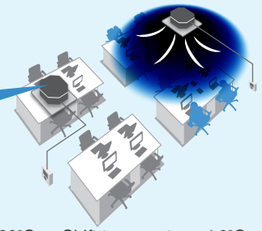
Infrared floor sensor

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

Ceiling height	2.7m	3.5m	4.0m
Detection range (diameter)*3	approx. 11m	approx. 14m	approx. 16m

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

Sensing sensor functions*4*5

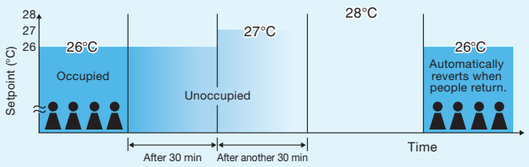


Sensing sensor low mode (default: OFF)

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

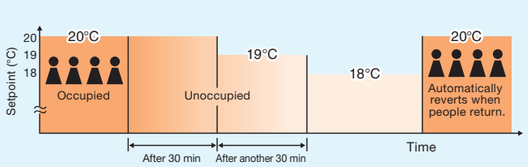
The system automatically saves energy by detecting whether or not the room is occupied. The set temperature is shifted automatically if the room is unoccupied.

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



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

Example • Heating setpoint: 20°C • Shift temperature: 1.0°C • Shift time: 30 min. • Limit heating temperature: 16°C



If people do not return, the air conditioner will lower the temperature 1°C every 30 minutes and then operate at 16°C.

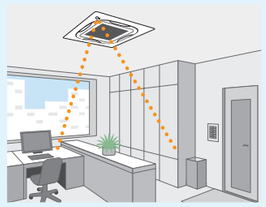
Shift temperature and time can be selected from 0.5 to 4°C in 0.5°C increments and 15, 30, 45, 60, 90 or 120 minutes respectively with remote controller.

Sensing sensor stop mode (default: OFF)

When there are no people in a room, the system stops automatically.*6*7

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

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

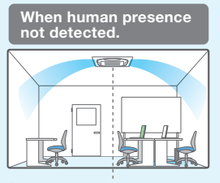


*4. These functions are not available when using the group control system.
*5. User can set these functions with remote controller.
*6. Please note that upon re-entering the room, air conditioner will not switch on automatically.
*7. To protect the machine, the standby system may operate temporarily.

Auto airflow function*8

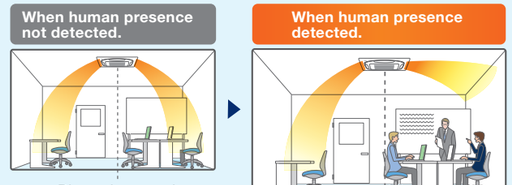
*8. Airflow direction shoud be set to "Auto".

Direct Airflow (default: OFF) Cooling Dry



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

Draft prevention function (default: OFF) Heating



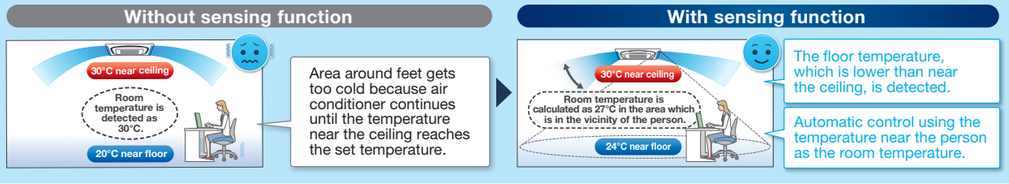
- With Auto airflow direction mode, flaps are controlled to deliver optimal airflow when the room is unoccupied.
- When human is detected, drafts are prevented by making the flap horizontal.

- When human is not detected for 5 minutes, the unit automatically returns to controlling the flaps for an unoccupied room.

Comfort and energy saving preventing over cooling/heating*9

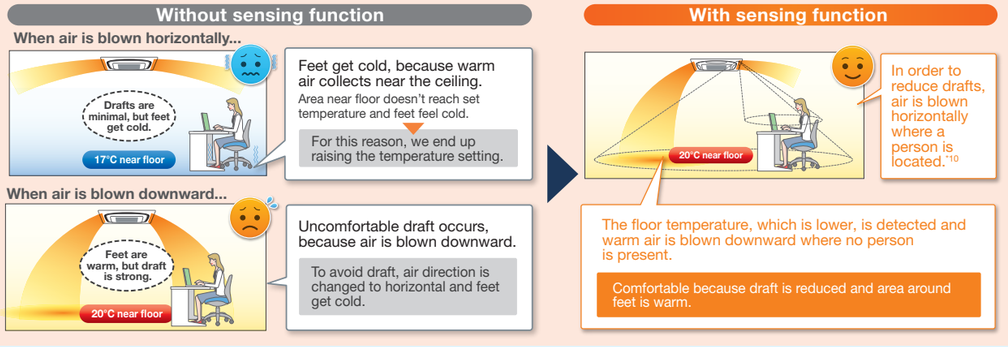
*9. Airflow direction and airflow rate should be set to "Auto".

Floor temperature is detected and over cooling prevented. Cooling



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.

Feet are kept warm and comfortable while reducing uncomfortable drafts. Heating



Energy savings The tendency of people to raise the temperature too much is prevented, because you are warmed up from the feet.

To increase comfort, Auto airflow rate mode controls the airflow in accordance with the difference between floor and ceiling temperatures.

When there is a large difference between the ceiling and floor temperatures, the airflow rate is automatically increased. When the difference becomes small, the airflow rate is automatically reduced.

*10. Draft prevention function is set OFF in the initial setting.

Ceiling Mounted Cassette (Round Flow with Sensing) Type

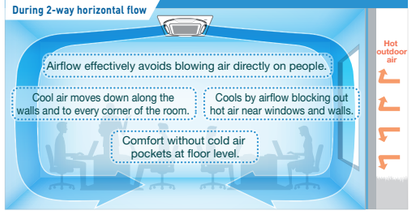
FXFSQ-A

Circulation Airflow*1, 2

*1. Applicable when wired remote controller BRC1E63 is used.
*2. Not applicable when using individual airflow direction control.

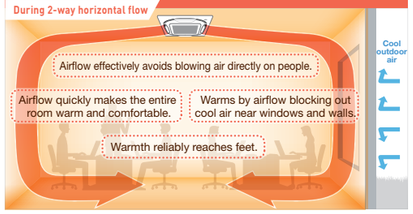
Cooling

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



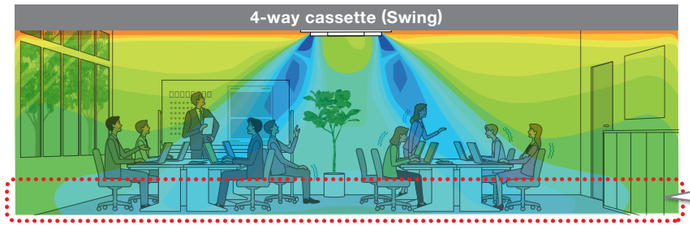
Heating

Circulation airflow warms the entire room starting from your feet.



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

Cooling



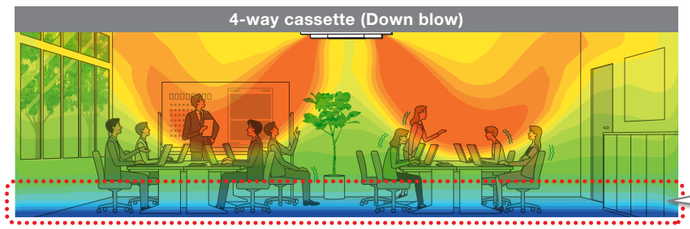
Approx. 5% energy savings by reducing uneven temperatures *3

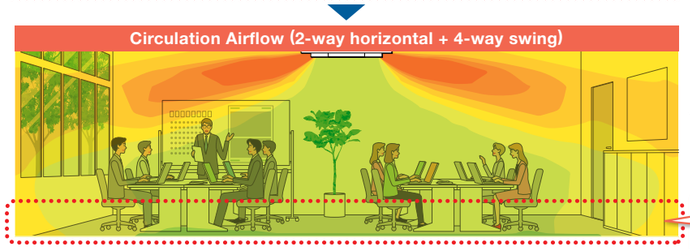
*3.Calculated under the following comparison conditions:
When the average temperature at a height of 0.6m above the floor reaches set temperature. (26°C)

Full comfort is provided with no cold feet.

Entire room evenly comfortable: warmth reaches feet

Heating





Approx. 15% energy savings by reducing uneven temperatures *4

*4.Calculated under the following comparison conditions:
When the average temperature at a height of 0.6m above the floor reaches set temperature. (22°C)

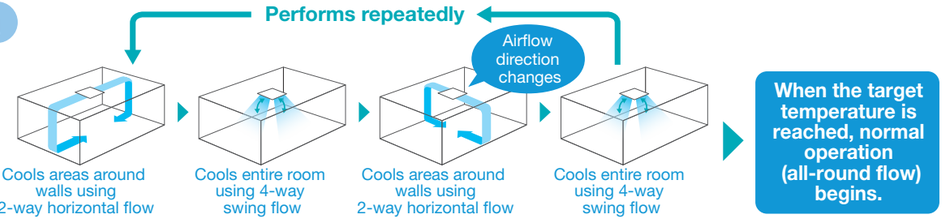
Areas around walls and feet are warm.

Configurations of Circulation Airflow

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

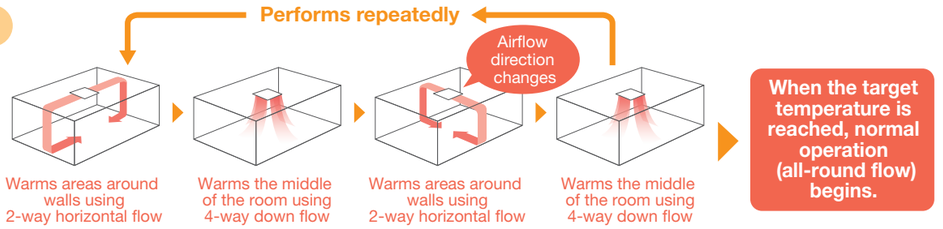
Cooling

Operation (at start)



Heating

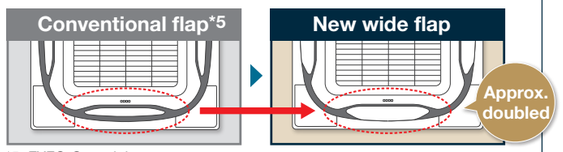
Operation (at start)



Three Technologies That Achieved Circulation Airflow

1 Use of new wide flaps (Straight)

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



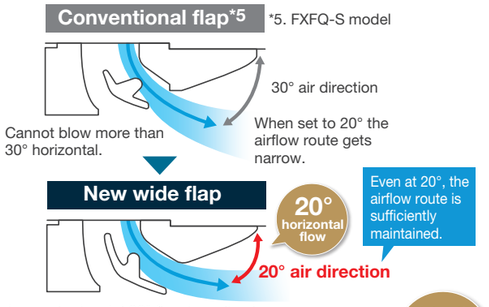
*5. FXFQ-S model

New wide flap construction inhibits ceiling dirt and grime.

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

2 Optimizing airflow angle (Horizontally)

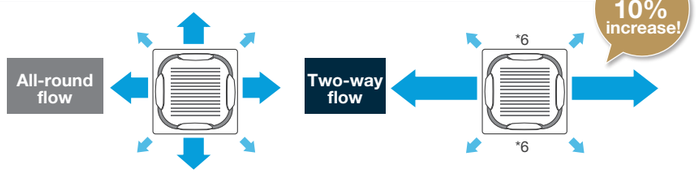
The airflow angle was made more horizontal.



3 Increased velocity in 2-way flow (Strongly)

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

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

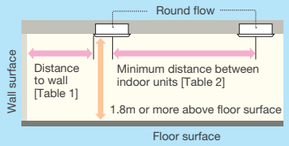


Things to remember when using circulation airflow

Main points for use

- Effectiveness may differ according to room conditions, room size, and distance to walls.
- 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	FXFSQ 25-50	FXFSQ 63/80	FXFSQ 100-140
Distance range	1.5m-4m	1.5m-5m	1.5m-7m

[Table 2]
Minimum distance between indoor units

Indoor unit capacity	FXFSQ 25-50	FXFSQ 63/80	FXFSQ 100-140
Minimum distance	4m or more	5m or more	7m or more

Ceiling Mounted Cassette (Round Flow with Sensing) Type

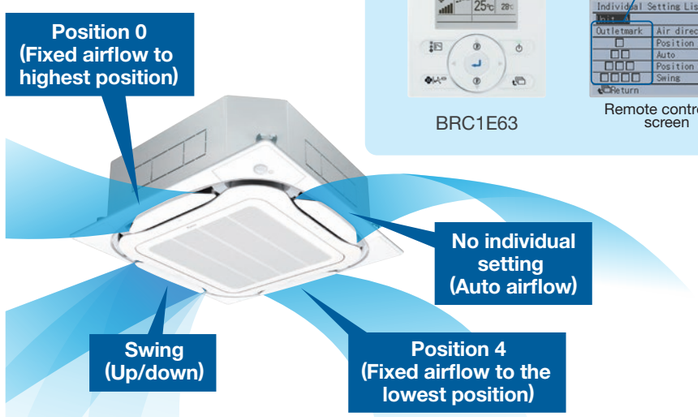
FXFSQ-A

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.

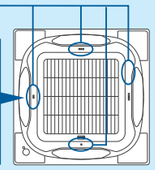


Easy setting is possible with a wired remote controller "Nav Ease".

BRC1E63

Remote controller screen

There are identification marks near the air outlets.



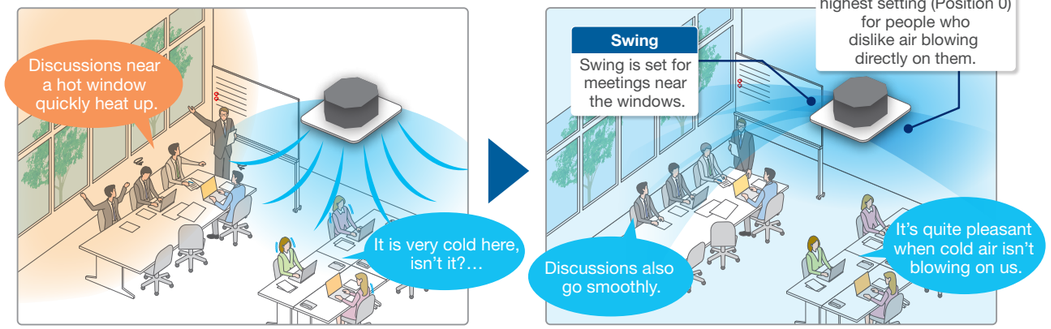
Individual airflow settings

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

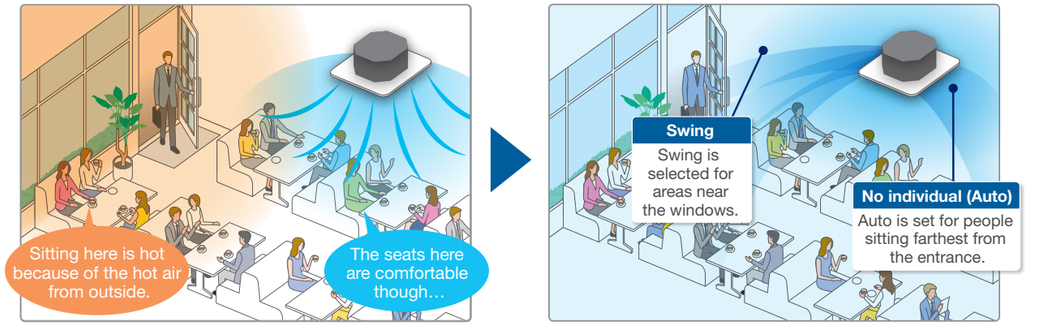
Individual settings are possible as stated above.

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

For offices



For shops and restaurant



Other Functions

Comfort

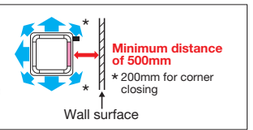
360° Airflow & Selectable Airflow Pattern

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.

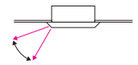
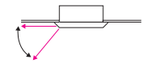
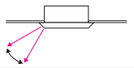
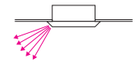
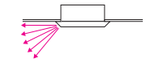
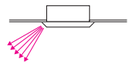
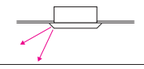
All-round flow	3-way flow	L-shaped 2-way flow	Opposite 2-way flow
			
(E.g., installed in middle of ceiling) 4-way flow also possible.	(E.g., installed near a wall)	(E.g., installed in a corner)	(E.g., installed in a long room)

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.

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.		

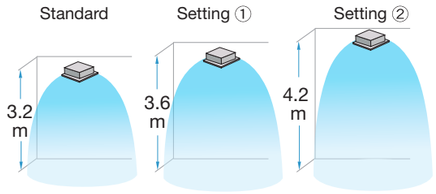
Note:
[1]Air direction is set to the standard position when the unit is shipped from the factory. The position can be changed from the remote controller.
[2]Closing of the corner discharge outlets is recommended.

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. (FXFSQ100-140A)

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

		Number of air discharge outlets used							
		FXFSQ25-80A				FXFSQ100–140A			
		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:
- 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.

Ceiling Mounted Cassette (Round Flow with Sensing) Type

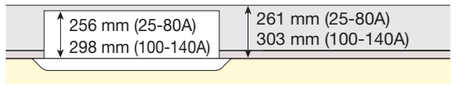
FXFSQ-A

Quick and Easy Installation

Lightweight

All models can be installed without using a lifter.

Installable in tight ceiling spaces



Easy removal of corner cover

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

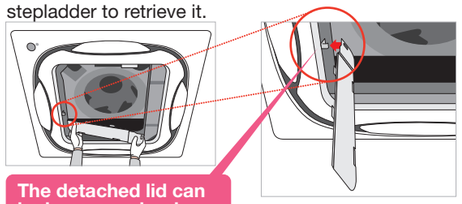
Easy height adjustment

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

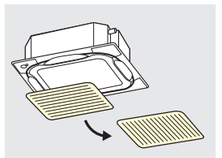
Because the control box lid can be temporarily hung on the unit, there is no need to climb down the stepladder to retrieve it.



The detached lid can be hung on a hook.

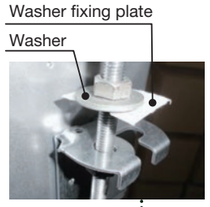
Installed in any direction

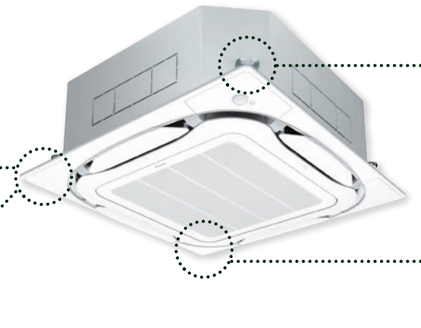
Since the orientation of the suction grille can be adjusted after installing, the direction of the suction grille lines can be unified when multiple units are installed.



Easy hanging

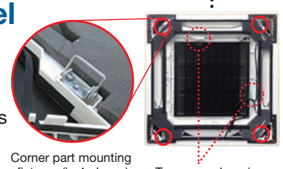
Washer fixing plates secure washers in place and prevent washers from falling for easy installation.





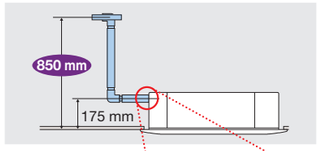
Ease in temporary hanging of decoration panel

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



Drain pump

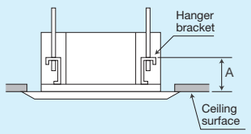
Equipped as standard accessory with 850 mm lift.



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
Chamber option*+ standard panel	175-180mm

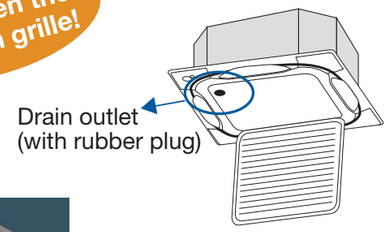
*High-efficiency filter, ultra long-life filter, and fresh air intake

Easy Maintenance

Drain pan and drain water check

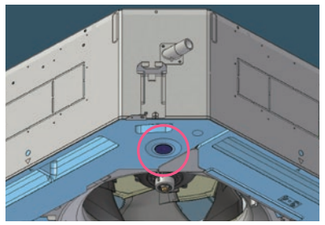
The condition of the drain pan and drain water can be checked by removing the suction grille and drain plug.

Just open the suction grille!



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.



Ultra long-life filter (option)

See page 190

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.

Ceiling Mounted Cassette (Round Flow) Type

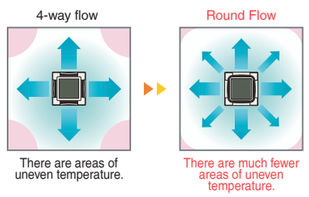
FXFQ-P

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

ROUND FLOW

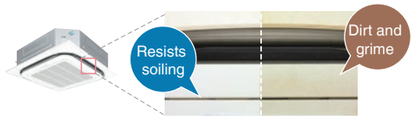
- The industry's first* Round Flow Ceiling Mounted Cassette type offers 360° airflow with improved temperature distribution.

  * As of April 2004, the release date for Japan.



- The light weight unit at 19.5 kg for FXFQ25-50P models makes installation easy.
- Drain pump is equipped as a standard accessory with a 850 mm lift.

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

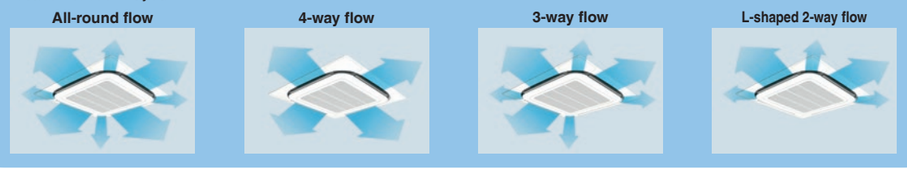


• Condition after exposure to the smoke of 600 cigarettes in 1 m^3 enclosed space.

- Control of the airflow rate can be selected from 3-step control.
- The horizontal louvres prevent dew condensation. Their non-flocking surfaces, which repel dirt, are easy to clean.
- An antibacterial treatment that uses silver ions has been applied to the drain pan, preventing the growth of slime, mould and bacteria that cause blockages and odours.
  (The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)

- The air filter has an anti-mould and antibacterial treatment that prevents the growth of mould generated from dust or moisture that may adhere to the filter.

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



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

Specifications

MODEL			FXFQ25PVE	FXFQ32PVE	FXFQ40PVE	FXFQ50PVE	FXFQ63PVE	FXFQ80PVE	FXFQ100PVE	FXFQ125PVE
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz							
Cooling capacity		Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800
		kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0
Heating capacity		Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	42,700	54,600
		kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0
Power consumption	Cooling	kW	0.033		0.047	0.052	0.066	0.093	0.187	0.209
	Heating	kW	0.027		0.034	0.038	0.053	0.075	0.174	0.200
Casing			Galvanised steel plate							
Airflow rate (HH/H/L)		ℓ/s	216/191/166		250/216/183	266/225/183	316/275/225	350/300/250	533/433/333	550/466/375
		m^3/min	13/11.5/10		15/13/11	16/13.5/11	19/16.5/13.5	21/18/15	32/26/20	33/28/22.5
Sound level (HH/H/L)		dB(A)	30/28.5/27		31/29/27	32/29.5/27	34/31/28	36/33.5/31	43/37.5/32	44/39/34
Sound power (HH/H/L)		dB(A)	48/46.5/45		49/47/45	50/47.5/45	52/49/46	53/51.5/49	60/54.5/50	61/56/52
Dimensions (H×W×D)		mm	246×840×840						288×840×840	
Machine weight		kg	19.5				22		25	
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		BYCP125K-W1							
	Colour		Fresh white							
	Dimensions(H×W×D)	mm	50X950X950							
	Weight	kg	5.5							

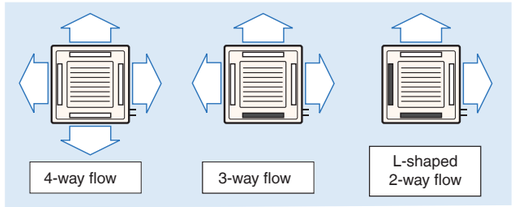
Note: Specifications are based on the following conditions;
- •Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
-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

Ceiling Mounted Cassette (Compact Multi Flow) Type FXZQ-A2

Quiet, compact, and designed for user comfort

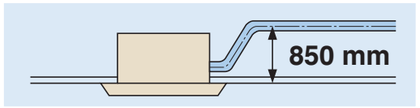
- The newly designed panel integrates fully within one ceiling tile enabling lights, speakers and sprinklers to be installed in the adjoining ceiling tiles.

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



- An optional presence and floor sensor kit (BRYQ60A2W) can be fitted to the cassette for draught prevention, energy saving operation and to avoid temperature stratification during heating.

Specifications

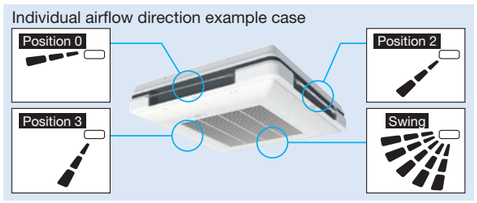
MODEL			FXZQ20A2VEB	FXZQ25A2VEB	FXZQ32A2VEB	FXZQ40A2VEB	FXZQ50A2VEB
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100
		kW	2.2	2.8	3.6	4.5	5.6
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500
		kW	2.5	3.2	4.0	5.0	6.3
Power consumption	Cooling	kW	0.043		0.045	0.059	0.092
	Heating	kW	0.036		0.038	0.053	0.086
Casing			Galvanised steel plate				
Airflow rate (H/M/L)		ℓ/s	145/125/108	150/133/108	167/142/117	192/158/133	242/208/167
		m³/min	8.7/7.5/6.5	9/8/6.5	10/8.5/7	11.5/9.5/8	14.5/12.5/10
Sound level (H/M/L)		dB(A)	32/29.5/25.5	33/30/25.5	33.5/30/26	37/32/28	43/40/33
Sound power (H)		dB(A)	49	50	51	54	60
Dimensions (H×W×D)		mm	260×575×575 (For depth add 63mm for electrical box)				
Machine weight		kg	15.5		16.5		18.5
Piping connections	Liquid (Flare)	mm	ϕ6.4				
	Gas (Flare)		ϕ12.7				
	Drain		VP20 (External Dia. 26/Internal Dia. 20)				
Panel (Option)	Model		BYFQ60C2W1W				
	Colour		White (N9.5)				
	Dimensions(H×W×D)	mm	46x620x620				
	Weight	kg	2.8				

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

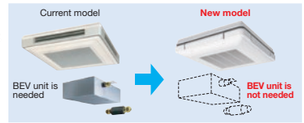
4-way Flow Ceiling Suspended Type FXUQ-A

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

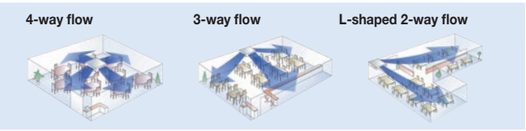
- Unit body and suction panel adopted round shapes and realised a slim appearance design. The unit can be used for various locations such as the ceilings with no cavity and bare ceilings.
- Flaps close automatically when the unit stops, which gives a simple appearance.
- Unified slim height of 198 mm for all models 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
Heating capacity		Btu/h	30,700	42,700
		kW	9.0	12.5
Power consumption	Cooling	kW	0.090	0.200
	Heating	kW	0.073	0.179
Casing			Fresh white	
Airflow rate (H/M/L)		ℓ/s	375/325/267	517/433/350
		m³/min	22.5/19.5/16	31/26/21
Sound level (H/M/L)		dB(A)	40/38/36	47/44/40
Sound power (H/M/L)		dB(A)	58/56/54	65/62/58
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.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- •Sound level: Anechoic chamber conversion value, measured at a point 1 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.

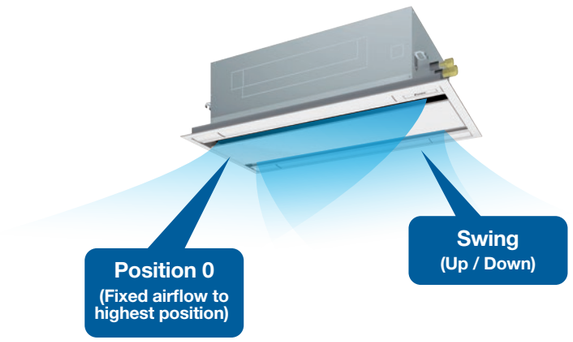
New panel design

- 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.

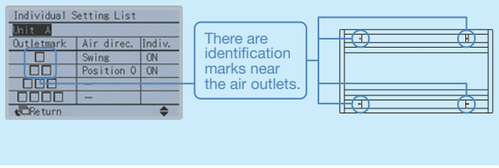
Individual Airflow Direction Control *1

- 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

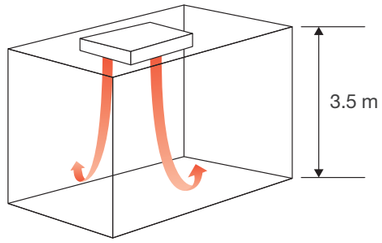
Individual settings are possible as stated above.

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.

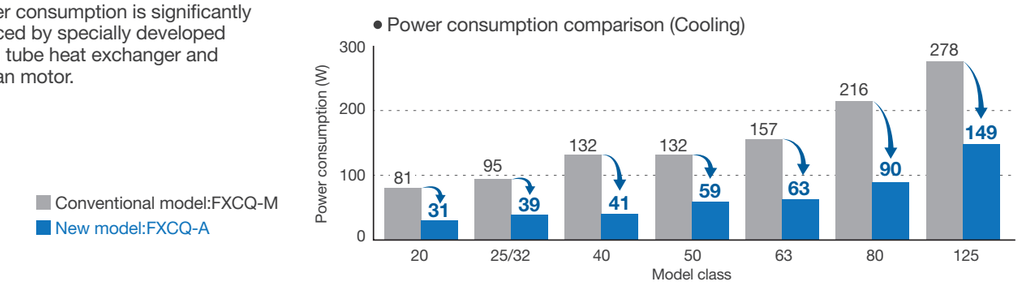
Suitable for high ceilings

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



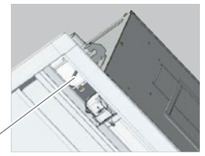
Energy saving : Reduction of energy consumption

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



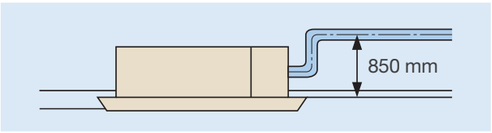
Enhanced functions from various aspects such as maintenance

- 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
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300	34,100	54,600
		kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	16.0
Power consumption	Cooling	kW	0.031	0.039		0.041	0.059	0.063	0.090	0.149
	Heating		0.028	0.035		0.037	0.056	0.060	0.086	0.146
Casing			Galvanised steel plate							
Airflow rate (H/HM/M/ML/L)		ℓ/s	175/158/150/133/125	192/175/158/142/133		200/183/175/158/142	250/233/217/192/175	267/250/233/208/192	433/400/375/342/308	533/492/458/417/375
		m³/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
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	

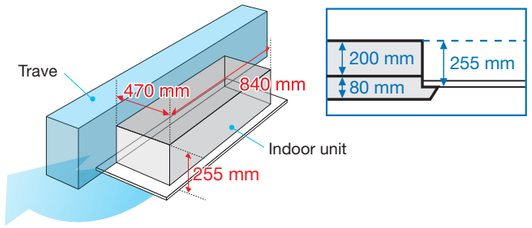
Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity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

Ceiling Mounted Cassette (Single Flow) Type

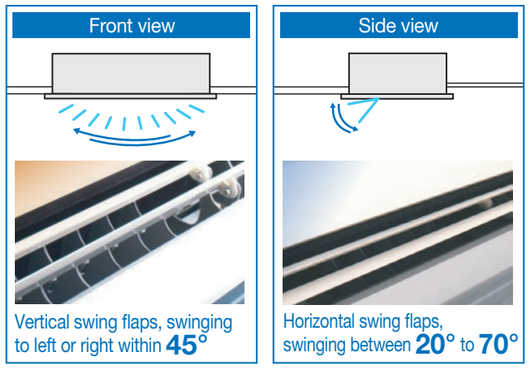
FXEQ-A

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.

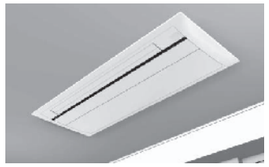


●Control of airflow rate can be selected from 5-step control and quiet operation mode, which provides comfortable airflow.

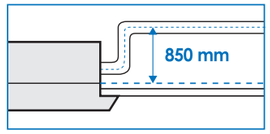
●DC motor is adopted both in the fan and drain pump of the indoor unit, not only enhancing the energy saving performance, but also reducing the operating sound and the vibration incurred to the unit.

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

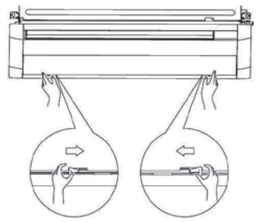
●The novel smooth panel design makes dust difficult to accumulate, thus causing the cleaning more conveniently.



●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 suspended 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

BRC4M61

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
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
		kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	Cooling	kW	0.026	0.027	0.034	0.046	0.048	0.067
	Heating		0.022	0.023	0.030	0.042	0.044	0.063
Casing			Galvanised steel plate					
Airflow rate (H/HM/M/ML/L)	Cooling	ℓ/s	100/90/82/73/67	115/107/97/88/80	133/125/117/105/92	163/147/130/117/103	208/190/173/158/145	250/227/203/183/163
		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
	Heating	ℓ/s	100/93/85/78/70	120/112/102/93/83	143/133/123/112/100	170/155/140/127/113	233/213/193/178/163	282/255/227/205/183
		m^3/min	6.0/5.6/5.1/4.7/4.2	7.2/6.7/6.1/5.6/5.0	8.6/8.0/7.4/6.7/6.0	10.2/9.3/8.4/7.6/6.8	14.0/12.8/11.6/10.7/9.8	16.9/15.3/13.6/12.3/11.0
Sound level (H/HM/M/ML/L)	Cooling	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
	Heating		33/31/29/28/26	35/33/31/30/28	38/36/34/33/31	41/39/37/35/33	41/39/37/36/34	46/44/42/40/38
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	

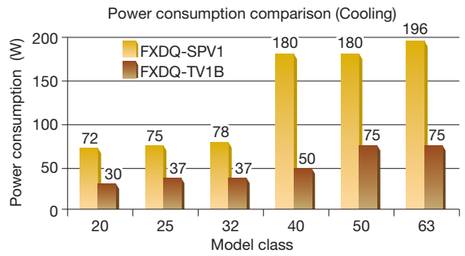
Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward.

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

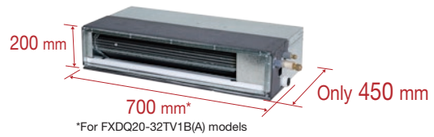
Slim and compact design for easy and flexible installation

DC Fan Motor / DC Drain Pump

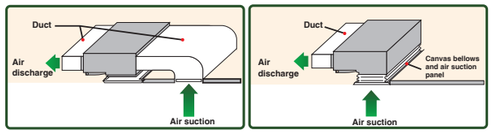
Adoption of a DC motor for both the fan motor and the drain pump has greatly reduced power consumption and also operation noise.



- Slim and compact design with a height of only 200 mm allows for installation in drop ceilings with ceiling voids of as little as 240 mm in height. The depth is also only 450 mm making it suitable for installation in limited spaces such as wardrobes.



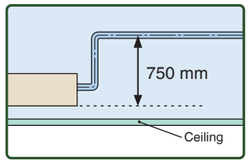
- Features rear or bottom return to suite site constraints.



Air filter included

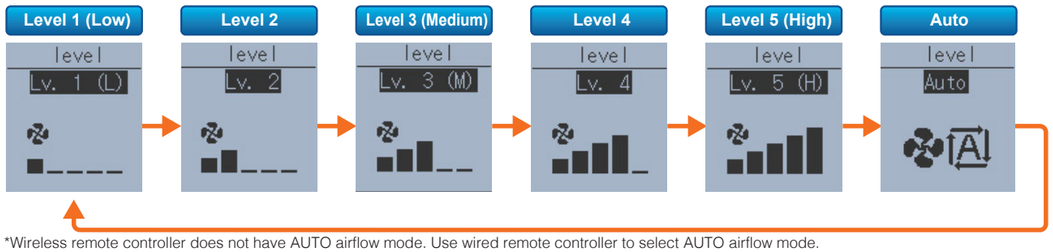
Clip-on resin net filter attached to the rear of the unit as standard.

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



Auto & 5-step Airflow Control

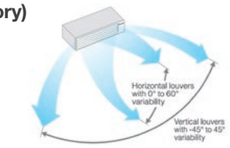
Airflow rate can be selected from 5 Steps and AUTO airflow mode. AUTO will automatically regulate the airflow rate in accordance to the difference between room temperature and set temperature.



*Wireless remote controller does not have AUTO airflow mode. Use wired remote controller to select AUTO airflow mode.

3-D Auto Swing Discharge Grille (Optional Accessory)

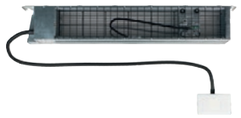
Motorised louvres provide 3-D airflow distribution for improved air circulation. Operations via BRC1E63 with functions including 3-D Auto Swing, Horizontal Auto Swing, Vertical Auto Swing & Fixed Positioning.



Model	Compatibility	HxWxD (mm)
BDG20A09	20-32 Class	180x722x70
BDG20A15	40-50 Class	180x922x70
BDG20A20	63 Class	180x1,122x70

Auto Clean Air Filter Module (Optional Accessory)

A unique rear suction mounted motorised filter cleaning module with included polyester filter for convenient filter maintenance. Scheduled automatic filter cleaning occurs once a week during non operational hours of the indoor unit (set via BRC1E63) to ensure optimal performance and increased energy savings.



Model	Compatibility	HxWxD (mm)
BAE20A62	20-32 Class	210x840x188
BAE20A82	40-50 Class	210x1,040x188
BAE20A102	63 Class	210x1,240x188

Mounts to the rear of the indoor unit with the vacuum port installed under the ceiling

Cleaning unit moves across the filter removing dust which is collected in the dust box

Dust in the dust box can be emptied by vacuuming out the dust via the vacuum port

Two Series Available

FXDQ-TV1B – Standard Model
FXDQ-TV1BA – Features Built-in Multi Tenancy Kit

This kit allows an independent 24V power source to be supplied to the indoor unit PCB in conjunction with 1 phase power from the tenants board. This ensures critical operations, such as oil return are not affected should there be an interruption to the main indoor unit power.

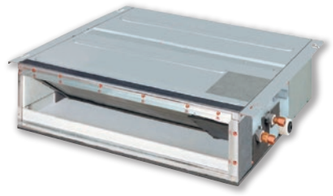
Specifications

MODEL			FXDQ20TV1B(A)	FXDQ25TV1B(A)	FXDQ32TV1B(A)	FXDQ40TV1B(A)	FXDQ50TV1B(A)	FXDQ63TV1B(A)
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
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
		kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption★1	Cooling	kW	0.030	0.037		0.050	0.075	
	Heating		0.025	0.032		0.045	0.070	
Casing			Galvanised steel plate					
Airflow rate		ℓ/s	135	150		210	250	325
		m³/min	8.1	9.0		12.6	15.0	19.5
External static pressure		Pa	40-10★2		50-10★2	60-10★2	45-10★2	
Sound level (HH/H/L) ★1★3		dB (A)	32/30/28	33/30.5/28		34/31.5/29	35/32.5/30	37/35/33
Dimensions (H x W x D)		mm	200×700×450			200×900×450		200×1,100×450
Machine weight		kg	18			21		24
Piping connections	Liquid (Flare)	mm	⌀6.4					⌀9.5
	Gas (Flare)		⌀12.7					⌀15.9
	Drain		PVC26 (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.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, 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 external static pressure of 10 Pa. For FXDQ-TV1BA models, +0.0005kW on top of cooling/heating power consumption values.
- ★2 : External static pressure is changeable to set by the remote controller. This pressure means “High static pressure - Standard”. (Factory setting is 10 Pa)
- ★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).

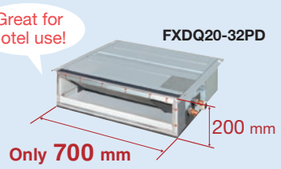
Slim Ceiling Mounted Duct Type (Standard Series) FXDQ-PD / ND

Slim design, quietness and static pressure switching



Suitable to use in drop-ceilings!

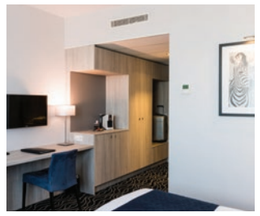
- Only 700 mm in width and 23 kg in weight, this model is suitable to install in limited spaces like drop-ceilings in hotels.



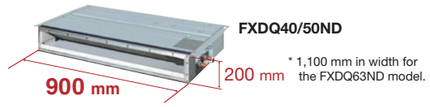
- Control of the airflow rate can be selected from 3-step control and Auto. Auto airflow rate control can be selected with wired remote controller BRC1E63.
- Low operation sound level.
- External static pressure selectable by remote controller switching make this indoor unit a very comfortable and flexible model.

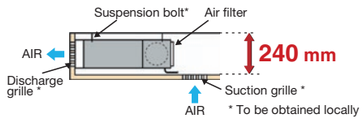
  10 Pa-30 Pa/factory set:
  10 Pa for FXDQ-PD models.

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

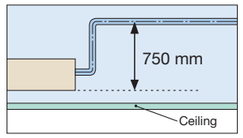


- Only 200 mm in height, this model can be installed in rooms with as little as 240 mm in height for the ceiling space between the drop-ceiling and ceiling slab.





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



Specifications

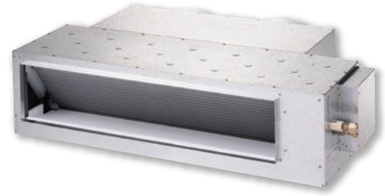
MODEL			FXDQ20PDVE	FXDQ25PDVE	FXDQ32PDVE	FXDQ40NDVE	FXDQ50NDVE	FXDQ63NDVE
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
		kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption ★1	Cooling	kW	0.086		0.089	0.160	0.165	0.181
	Heating		0.067		0.070	0.147	0.152	0.168
Casing			Galvanised steel plate					
Airflow rate (HH/H/L)		ℓ/s	133/120/106			175/158/141	208/183/166	275/241/216
		m³/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
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
Sound power (HH/H/L)		dB(A)	56/54/51		56/54/52	58/56/54	61/58/55	61/59/57
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.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.(See Engineering Data Book for details.)
- •Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.

★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).

Ceiling Concealed (Duct) Type FXDYQ-MA

High static pressure offers flexible duct design that blends in with any interior décor in stores and offices



- High efficiency Hi-X heat exchanger coils that provide even more energy savings.
- High external static pressure allows comprehensive duct layout for various applications.
  120 Pa for FXDYQ80MA–145MA
- Design of indoor units allows installation in limited roof spaces.
- Return air spigots included for ease of installation for FXDYQ80MA-145MA models.
- Two external static pressure settings for added flexibility.
- Quiet yet powerful supply air fan.
- High strength galvanised steel casing.

Specifications

MODEL			FXDYQ80MAV1	FXDYQ100MAV1	FXDYQ125MAV1	FXDYQ145MAV1
Power supply			1-phase, 220-240 V, 50 Hz			
Cooling capacity		Btu/h	30,000	38,200	47,400	54,600
		kW	8.8	11.2	13.9	16.0
Heating capacity		Btu/h	33,800	42,700	54,600	62,800
		kW	9.9	12.5	16.0	18.4
Power consumption	Cooling	kW	0.415	0.700	0.780	0.880
	Heating	kW	0.415	0.700	0.780	0.880
Casing			Galvanised steel plate			
Airflow rate (H)		ℓ/s	510	778	852	957
		m³/min	30.6	46.7	51.1	57.4
External static pressure		Pa	120 ★1			
Sound level (H)	240 V	dB(A)	45	46	48	51
Dimensions (H×W×D)		mm	360×1168×869		360×1478×899	
Machine weight		kg	50	60	65	66
Piping connections	Liquid (Flare)	mm	φ 9.5			
	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.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- •Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.

★1: External static pressure is changeable to change over the connectors inside electrical box (High static pressure-Standard static pressure).
The data above is for high static pressure setting.

Middle Static Pressure Ceiling Mounted Duct Type

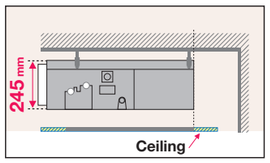
FXSQ-PA

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.

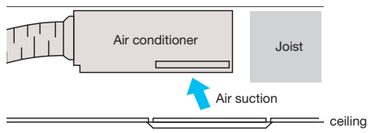


Standard DC drain pump

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

Bottom suction possible

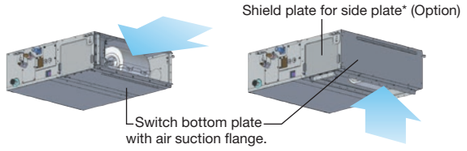
- Bottom suction is possible which facilitate installation and maintenance. Wiring connections and maintenance of control box can be done from under the unit with an optional shield plate for side plate*, extending the degree of freedom for installation in the ceiling.



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

•Rear suction

•Bottom suction

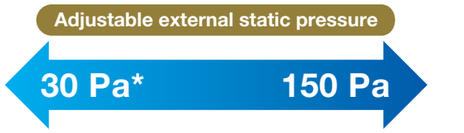


*An optional shield plate for side plate is required if wiring connections and maintenance of control box are needed from under the unit. This option is only available for FXSQ20-125PA models.

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

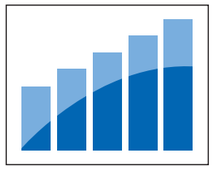
Comfort

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

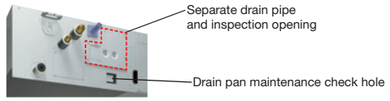
Easy installation

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.

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.)

- 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.

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
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500
		kW	2.5	3.2	4.0	5.0	6.3
Power consumption	Cooling	kW	0.058 *1		0.066 *1	0.101 *1	0.075 *1
	Heating	kW	0.053 *1		0.061 *1	0.096 *1	0.070 *1
Casing			Galvanised steel plate				
Airflow rate (H/M/L)		ℓ/s	150/125/108		158/133/116	250/208/175	283/242/192
		m³/min	9/7.5/6.5		9.5/8/7	15/12.5/10.5	17/14.5/11.5
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
Sound power (H)		dB(A)	61		62	64	62
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
Heating capacity		Btu/h	27,300	34,100	42,700	54,600	61,400
		kW	8.0	10.0	12.5	16.0	18.0
Power consumption	Cooling	kW	0.106 *1	0.126 *1	0.151 *1	0.206 *1	0.222 *1
	Heating	kW	0.101 *1	0.121 *1	0.146 *1	0.201 *1	0.217 *1
Casing			Galvanised steel plate				
Airflow rate (H/M/L)		ℓ/s	350/292/242	383/325/267	533/450/375	617/525/433	650/558/467
		m³/min	21/17.5/14.5	23/19.5/16	32/27/22.5	37/31.5/26	39/33.5/28
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
Sound power (H)		dB(A)	64	65.5	67	70	71
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.
- Heating: Indoor temp.: 20°CDB, Outdoor temp. : 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.

*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.

Ceiling Mounted Duct Type

FXMQ-P(A)

Middle and high static pressure allows for flexible duct design

FXMQ20PA / FXMQ25PA / FXMQ32PA / FXMQ40PA
FXMQ50PA / FXMQ63PA / FXMQ80PA / FXMQ100PA
FXMQ125PA / FXMQ140PA

FXMQ160P / FXMQ180P / FXMQ200P
FXMQ250P

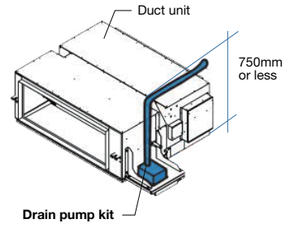
- Each model is fitted with a high efficiency DC fan motor with adjustable external static pressure to suit your duct design. The available ranges for each model are listed below:
  30 Pa – 100 Pa for FXMQ20PA-32PA
  30 Pa – 160 Pa for FXMQ40PA
  50 Pa – 200 Pa for FXMQ50PA-125PA
  50 Pa – 140 Pa for FXMQ140PA
  60 Pa – 217 Pa for FXMQ160P
  50 Pa – 210 Pa for FXMQ180P
  50 Pa – 250 Pa for FXMQ200P-250P

- The adopted DC fan motor is much more energy efficient than a conventional AC motor, yielding an approximate 20% decreased in energy consumption (FXMQ125PA).

- FXMQ20PA-140PA models are only 300mm in height making it ideal for use in modern commercial and medium density apartment development where ceiling spaces are tight.

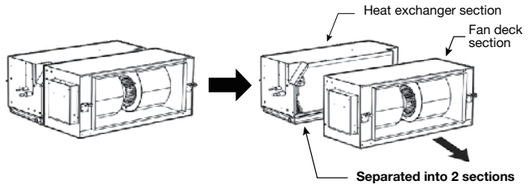
- Control of the airflow rate can be selected from 3-step control and Auto. Auto airflow rate control can be selected with wired remote controller BRC1E63 for FXMQ20PA-140PA models.

- A built-in drain pump with 700mm lift is equipped as a standard accessory for FXMQ20PA-140PA models. For FXMQ160P-250P models, a 750mm drain pump kit is available as an optional accessory.



- Automatic Airflow Adjustment feature allows the fan speed to adjust automatically to suit your duct design during commissioning, simplifying the process and saving time. The airflow is adjusted to a range between ±10% of the model's rated airflow.

- To facilitate installation, the FXMQ160P-250P models can be separated into 2 sections for convenient handling and easier installation through openings in the ceiling.



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
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500
		kW	2.5	3.2	4.0	5.0	6.3
Power consumption *1	Cooling	kW	0.056		0.060	0.151	0.128
	Heating	kW	0.044		0.048	0.139	0.116
Casing			Galvanised steel plate				
Airflow rate (HH/H/L)		ℓ/s	150/125/108		158/133/116	267/216/183	300/275/250
		m³/min	9/7.5/6.5		9.5/8/7	16/13/11	18/16.5/15
External static pressure*2		Pa	30-100 (50)			30-160 (100)	50-200 (100)
Sound level (HH/H/L)		dB(A)	33/31/29		34/32/30	39/37/35	41/39/37
Sound power (H)		dB(A)	51		52	57	59
Dimensions (H×W×D)		mm	300x550x700			300x700x700	300x1,000x700
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			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
Heating capacity		Btu/h	27,300	34,100	42,700	54,600	61,400
		kW	8.0	10.0	12.5	16.0	18.0
Power consumption *1	Cooling	kW	0.138	0.185	0.215	0.284	0.405
	Heating	kW	0.127	0.173	0.203	0.272	0.380
Casing			Galvanised steel plate				
Airflow rate (HH/H/L)		ℓ/s	325/292/267	417/375/333	533/450/383	650/550/466	767/649/533
		m³/min	19.5/17.5/16	25/22.5/20	**32/27/23**	39/33/28	46/39/32
External static pressure*2		Pa	50-200 (100)				50-140 (100)
Sound level (HH/H/L)		dB(A)	42/40/38	43/41/39		44/42/40	46/45/43
Sound power (H)		dB(A)	60	61		62	64
Dimensions (H×W×D)		mm	300x1,000x700		300x1,400x700		
Machine weight		kg	35		45		46
Piping connections	Liquid (Flare)	mm	ϕ9.5				
	Gas (Flare)		ϕ15.9				
	Drain		VP25 (External Dia. 32/Internal Dia. 25)				

MODEL			FXMQ160PV1A	FXMQ180PV1A	FXMQ200PV1A	FXMQ250PV1A
Power supply			1-phase, 220-240 V, 50 Hz			
Cooling capacity		Btu/h	61,400	68,200	76,400	95,500
		kW	18.0	20.0	22.4	28.0
Heating capacity		Btu/h	68,200	76,400	85,300	107,500
		kW	20.0	22.4	25.0	31.5
Power consumption *1	Cooling	kW	0.650		0.640	0.810
	Heating	kW	0.650		0.640	0.810
Casing			Galvanized steel plate			
Airflow rate (HH/H/L)		ℓ/s	1,120/955/790	1,160/995/820	1,200/1,025/850	1,400/1,200/1,000
		m³/min	67.2/57.3/47.4	69.6/59.7/49.2	72.0/61.5/51.0	84.0/72.0/60.0
External static pressure*2		Pa	60-217 (138)	50-210 (130)	50-250 (150)	
Sound level (HH/H/L)		dB(A)	45/41.5/38		44/40.5/37	46/42.5/39
Sound power (H)		dB(A)	73		72	74
Dimensions (H×W×D)		mm	470x1,133x919		470x1,333x919	
Machine weight		kg	70		79	85
Piping connections	Liquid	mm	ϕ9.5 (Flare)	ϕ 9.5 (Brazing)		
	Gas		ϕ15.9 (Flare)	ϕ 19.1 (Brazing)		ϕ 22.2 (Brazing)
	Drain		BSP 3/4 internal thread (OD ϕ32.7)			

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.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- •Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- ★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), ten (FXMQ140PA) or fifteen (FXMQ160-250P) levels of control.
  These values indicate the lowest and highest possible static pressures. The rated static pressure is 50 Pa for FXMQ20-32PA 100 Pa for FXMQ40-140PA, 138 Pa for FXMQ160P, 130 Pa for FXMQ180P and 150 Pa for FXMQ200-250P.

Ceiling Suspended Type

New FXHQ-MA / A

Slim body with quiet and wide airflow

FXHQ32 / 63 / 100MA

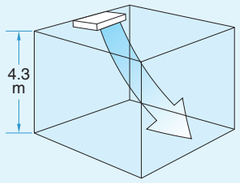
New FXHQ125 / 140A

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.

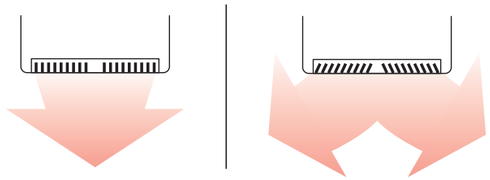
BRC7M53

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

Comfort

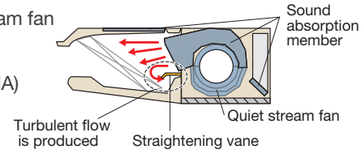
- Auto swing (up and down) and louvers (left and right by hand) bring comfort to the room.

- 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.

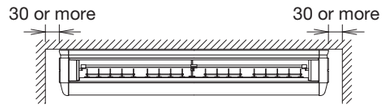
- Easy-clean, flat surfaces
  - It is easy to wipe dirt off the flat side and lower surfaces of the unit.
- Oil-resistant plastic is used for the air suction grille. This satisfies durability in restaurants and other similar environments.

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

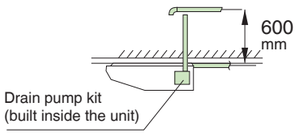
- Flexible installation
  - The unit fits more snugly into tight spaces.

[Required installation space (mm)]



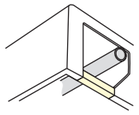
*Water used in the test-run can be drained from the air discharge opening rather than from the side as was formerly the case.

- 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.

- The rear side removable frame allows ease of access for piping work.



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
Heating capacity		Btu/h	13,600	27,300	42,700	54,600	58,000
		kW	4.0	8.0	12.5	16.0	17.0
Power consumption	Cooling	kW	0.111	0.115	0.135	0.168	0.181
	Heating		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)		ℓ/s	200/-/166	291/-/233	416/-/325	567/433/333	600/450/333
		m³/min	12/-/10	17.5/-/14	25/-/19.5	34/26/20	36/27/20
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.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1 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.

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

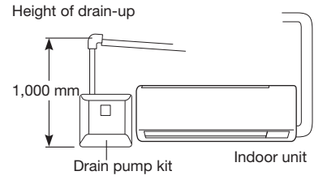
- A signal receiver must be added to the indoor unit.

BRC7M675

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

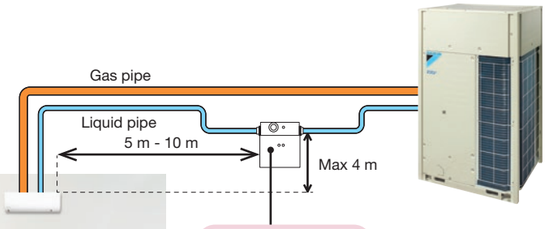
- Stylish flat panel design creates a graceful harmony that enhances any interior space.
- Flat panel can be cleaned with only the single pass of a cloth across their smooth surface.
  Flat panel can also be easily removed and washed for more thorough cleaning.
- Drain pan and air filter can be kept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



External EV kit (for heating operation) (Option)

This product, which is concealed in ceilings or corridors for quieter heating operation, is used to connect indoor units in places where quiet environment is required such as residential living rooms.



* This option is only effective for reducing operation sound during heating operation. Therefore it is ineffective when connected to cooling only outdoor units.

External EV kit
(for heating operation)

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
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
		kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	Cooling	kW	0.040	0.040	0.040	0.050	0.060	0.100
	Heating		0.040	0.040	0.050	0.050	0.070	0.110
Casing			Resin / White N9.5					
Airflow rate (H/L)		ℓ/s	151/116	156/116	163/116	203/161	250/200	316/233
		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
Sound level (H/L)	Cooling	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
	Heating		34.0/28.5	36.0/28.5	38.5/28.5	38.0/33.5	42.0/35.5	47.0/38.5
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)					

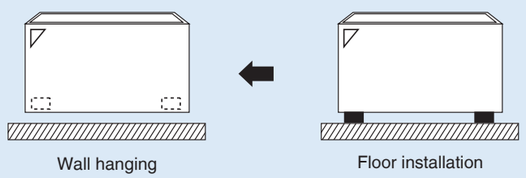
Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, 15°CWB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- Sound level: Anechoic chamber conversion value, measured at a point 1 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.

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/m^3



Specifications

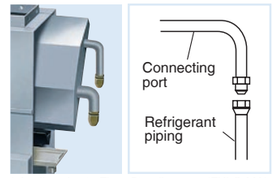
MODEL			FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
		kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	Cooling	kW	0.049		0.090		0.110	
	Heating	kW	0.049		0.090		0.110	
Casing			FXLQ: Ivory white (5Y7.5/1)					
Airflow rate (H/L)		ℓ/s	116/100		133/100	183/141	233/183	266/200
		m^3/min	7/6		8/6	11/8.5	14/11	16/12
Sound level (H/L)	240 V	dB(A)	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	25.0		30.0		36.0	
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.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- •Sound level: Anechoic chamber conversion value, measured at a point 1.5 m 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/m^3

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
Heating capacity		Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
		kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	Cooling	kW	0.049		0.090		0.110	
	Heating	kW	0.049		0.090		0.110	
Casing			FXNQ: Galvanised steel plate					
Airflow rate (H/L)		ℓ/s	116/100		133/100	183/141	233/183	266/200
		m^3/min	7/6		8/6	11/8.5	14/11	16/12
Sound level (H/L)	240 V	dB(A)	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	19.0		23.0		27.0	
Piping connections	Liquid (Flare)	mm	ϕ6.4					ϕ9.5
	Gas (Flare)		ϕ12.7					ϕ15.9
	Drain		21O.D.					

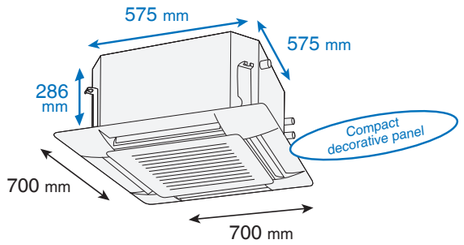
Note: Specifications are based on the following conditions;
- •Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- •Sound level: Anechoic chamber conversion value, measured at a point 1.5 m 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.

Ceiling Mounted Cassette (Compact Multi Flow) Type

FFQ-B

Quiet, compact, and designed for user comfort

●Designed to fit 600 mm wide ceiling grids



Option

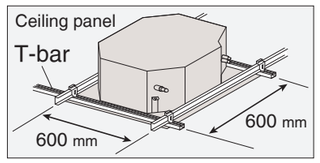
Note: Remote controller cables not included. Cables should be obtained locally.

Option

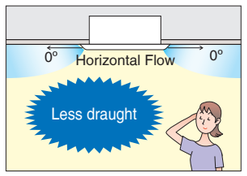
Signal receiver unit

Note: Wireless remote controllers and signal receiver units are sold as a set.

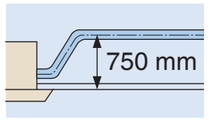
●T-bar grid does not need to be cut.



●Low draft performance is designed for your comfort.



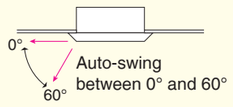
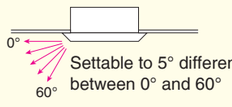
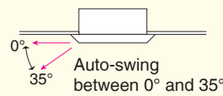
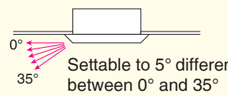
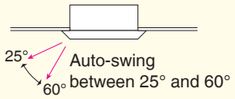
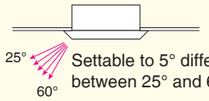
●Drain pump is equipped as standard accessory with 750 mm lift.



●Comfortable across all areas

Conditioned air is distributed evenly by Auto-swing operation.

Adjustable airflow angle to suit all room conditions.

	AUTO-SWING	5 direction
Standard setting	 Auto-swing between 0° and 60°	 Settable to 5° different levels between 0° and 60°
Draft prevention setting (Set on site)	 Auto-swing between 0° and 35°	 Settable to 5° different levels between 0° and 35°
Setting to prevent soiling of ceiling (Set on site)	 Auto-swing between 25° and 60°	 Settable to 5° different levels between 25° and 60°

Note: Angles shown above are provided as a guide. They may differ depending on the installation site.

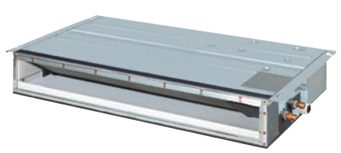
Specifications

MODEL			FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B
Power supply			1-phase, 220-240 V, 50 Hz			
Airflow rate (H)		m³/min(ℓ/s)	9.0 (150)	10.0 (167)	12.0 (200)	15.0 (250)
Sound level (H/L)*		dB(A)	29.5/24.5	32/25	36/27	41/32
Sound power level (H)		dB(A)	46.5	49	53	58
Fan speed			2 steps			
Temperature control			Microcomputer control			
Dimensions (H×W×D)		mm	286x575x575			
Machine weight		kg	17.5			
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			
Panel (Option)	Model		BYFQ60B3W1			
	Colour		White			
	Dimensions(H×W×D)	mm	55x700x700			
	Weight	kg	2.7			

Note: * Anechoic chamber conversion value, measured according to JIS parameters and criteria. During operation these values are somewhat higher owing to ambient conditions.

Slim Ceiling Mounted Duct Type — FDXS-C

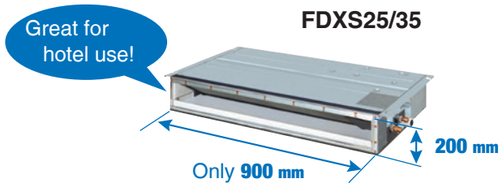
Slim and smooth design suits your shallow ceiling

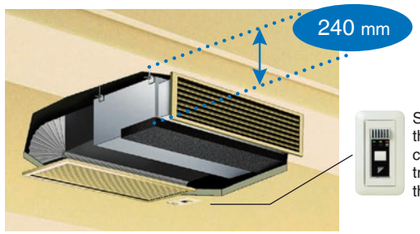


Standard accessory

Option

- Models in the FDXS25/35 series are only 900 mm in width and 25 kg in weight, so are easily installed in limited spaces. Just 200 mm in height, all models can be installed in rooms with as little as 240 mm depth between the drop ceiling and ceiling slab, making them ideal for even shallow ceilings.

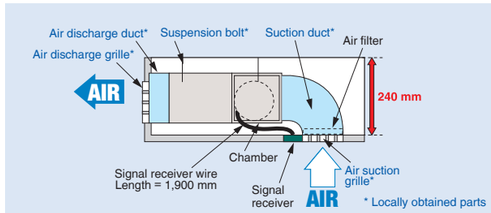




Signals from the wireless remote controller are transmitted to the signal receiver.

- Home Leave Operation prevents large rises or falls in the indoor temperature by continuing operation* while you are sleeping or out of your home. This means that an air-conditioned welcome awaits when you wake or return. It also means that the indoor temperature can quickly return to your favourite comfort setting.

* Home Leave Operation can be selected for any temperature from 18 to 32˚C for cooling operation and 10 to 30˚C for heating operation.
* Home Leave Operation function must be set using the remote controller when going to sleep or leaving the house, and after waking up or returning home.



Note:
1. To prevent an increase in 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			FDXS25CVMA	FDXS35CVMA	FDXS50CVMA	FDXS60CVMA
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz			
Airflow rate (H)		m³/min(ℓ/s)	9.5 (158)	10.0 (167)	12.0 (200)	16.0 (267)
Sound level (H/L/SL)*		dB(A)	35/31/29		37/33/31	38/34/32
Sound power (H)		dB(A)	53		55	56
Fan speed			5 steps, quiet and automatic			
Temperature control			Microcomputer control			
Dimensions (H×W×D)		mm	200x900x620			200x1,100x620
Machine weight		kg	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	40			

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

Wall Mounted Type — FTXS-K(A)

Stylish flat panel harmonises with your interior décor

Standard accessory

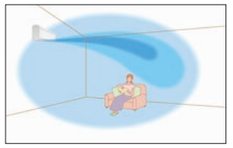
Option

- 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.

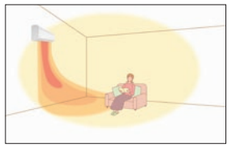
When you are in the room

When you go out

- Comfort Airflow Mode prevents uncomfortable drafts from blowing directly on to your body. With this function, when you press the COMFORT button during cooling operation, the flap moves upward to prevent direct cold drafts. During heating operation, it also moves downward to prevent direct drafts and deliver warm air to the floor.



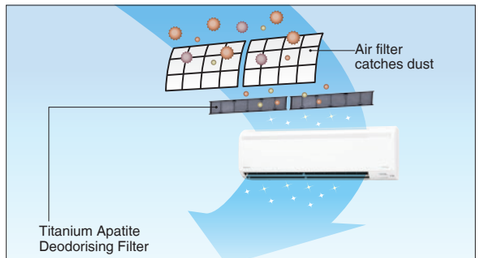
Cooling operation



Heating operation

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.

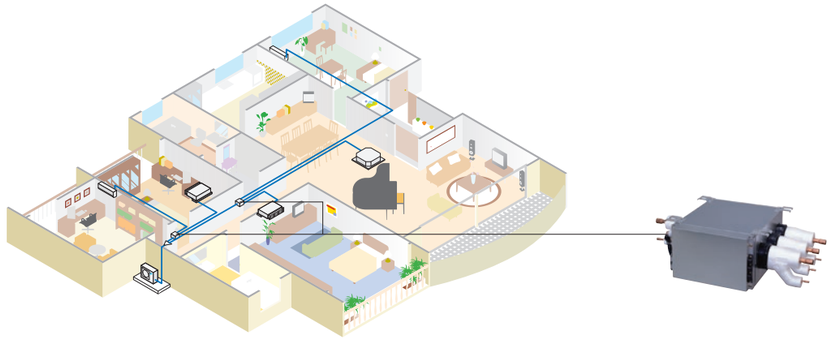


This filter is not a medical device. Benefits such as the adsorption of odours and allergens and deodorisation of odours are only effective for substances which are directly attached to the Titanium Apatite Deodorising Filter.

Specifications

MODEL			FTXS20KVMA	FTXS25KVMA	FTXS35KVMA	FTXS50KAVMA	FTXS60KAVMA	FTXS71KAVMA
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz					
Front panel colour			White					
Airflow rate (H)	Cooling	m³/min(ℓ/s)	9.7 (161)		11.3 (188)	14.7 (245)	16.2 (270)	17.4 (290)
	Heating		10.5 (175)		11.5 (191)	16.2 (270)	17.4 (290)	21.5 (358)
Sound level (H/L/SL)	Cooling	dB(A)	38/25/22		42/26/23	44/35/32	45/36/33	46/37/34
	Heating		39/28/25		42/29/26	42/33/30	44/35/32	46/37/34
Sound power (H)	Cooling	dB(A)	54		58	60	61	62
	Heating		55		58		60	62
Fan speed			5 steps, quiet and automatic					
Temperature control			Microcomputer control					
Dimensions (H×W×D)		mm	295x800x215			290x1,050x250		
Machine weight		kg	9		10	12		
Piping connections	Liquid (Flare)	mm	ϕ6.4					
	Gas (Flare)		ϕ9.5			ϕ12.7		ϕ15.9
	Drain		I.Dϕ14.0xO.Dϕ18.0					
Heat insulation			Both liquid and gas pipes					

BP Units for Connection to Residential Indoor Units



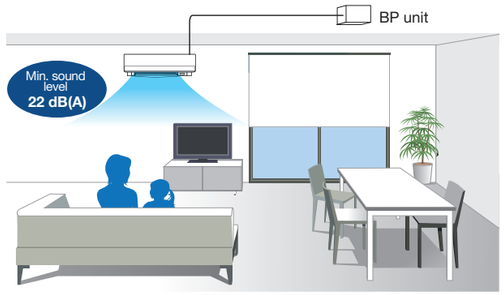
The BP units can be installed inside the ceiling.

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 22 dB(A). Together these features ensure your system continues to operate as quietly as possible.



Specifications

BPMKS967A3

BPMKS967A2

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				2.0 kW class to 7.1 kW class	
Min. rated capacity of connectable indoor units			kW	2.0	
Max. rated capacity of connectable indoor units			kW	20.8	14.2

Note: * Total auxiliary piping length.

BS Units for Heat Recovery

Specifications — Individual BS Unit

MODEL				BSQ100AV1	BSQ160AV1	BSQ250AV1
Power supply				1-phase, 220-240 V, 50 Hz		
No. of branches				1		
Total capacity index of connectable indoor units				20 to 100	More than 100 but 160 or less	More than 160 but 250 or less
No. of connectable indoor units				Max. 5	Max. 8	Max. 8
Casing				Galvanised steel plate		
Dimensions (H×W×D)			mm	207×388×326		
Piping connections	Indoor Unit	Liquid	mm	ϕ9.5 (Brazing)★1	ϕ9.5 (Brazing)	ϕ9.5 (Brazing)
		Gas		ϕ15.9 (Brazing)★1	ϕ15.9 (Brazing)★2	ϕ22.2 (Brazing)★3
	Outdoor Unit	Liquid	mm	ϕ9.5 (Brazing)	ϕ9.5 (Brazing)	ϕ9.5 (Brazing)
		Suction gas		ϕ15.9 (Brazing)	ϕ15.9 (Brazing)★2	ϕ22.2 (Brazing)★3
		High and low pressure gas		ϕ12.7 (Brazing)	ϕ12.7 (Brazing)★2	ϕ19.1 (Brazing)★3
Machine weight			kg	11	11	14
Sound level			dB(A)	35(40)★4	41(45)★4	41(45)★4

Note: ★1. When connecting with an indoor unit with a capacity index between 20 and 50, connect the attached pipe to the field pipe. (Braze the connection between the attached and field pipe.)
★2. When connecting with indoor units with total capacity indexes 150 or more and 160 or less, connect the attached pipe to the field pipe. (Braze the connection between the attached and field pipe.)
★3. When connecting with indoor units with a capacity index of 200, or with total capacity indexes more than 160 and less than 200, connect the attached pipe to the field pipe. (Braze the connection between the attached and field pipe.)
★4. Figures in brackets ( ) indicate maximum value of transient sound (the change of cooling and heating).
• Do not install at the place such as bed room. Small sound of refrigerant will be made, which may be disturbing.

4 branch

16 branch

Specifications — Centralised BS Unit

MODEL				BS4Q14AV1	BS6Q14AV1	BS8Q14AV1	BS10Q14AV1	BS12Q14AV1	BS16Q14AV1
Power supply				1-phase, 220-240 V, 50 Hz					
No. of branches				4	6	8	10	12	16
Capacity index of connectable indoor units of branch				Max. 140					
Capacity index of connectable indoor units				Max. 400	Max. 600	Max. 750			
No. of connectable indoor units per branch				5					
Casing				Galvanised steel plate					
Dimensions (H×W×D)			mm	298×370×430	298×580×430		298×820×430		298×1060×430
Piping connections	Indoor Unit	Liquid	mm	ϕ6.4, ϕ9.5 Brazing★1					
		Gas		ϕ12.7, ϕ15.9 Brazing★1					
	Outdoor Unit	Liquid	mm	ϕ9.5 Brazing★2	ϕ12.7 Brazing★2	ϕ12.7 Brazing (ϕ15.9)★2	ϕ15.9 Brazing★2	ϕ15.9 Brazing (ϕ19.1)★2	ϕ19.1 Brazing★2
		Suction gas		ϕ22.2 Brazing (ϕ19.1)★2	ϕ28.6 Brazing★2		ϕ28.6 Brazing(ϕ34.9)★2		ϕ34.9 Brazing★2
		High and low pressure gas		ϕ19.1 Brazing (ϕ15.9)★2	ϕ19.1 Brazing (ϕ22.2)★2	ϕ19.1 Brazing (ϕ22.2,28.6)★2	ϕ28.6 Brazing★2		
Machine weight			kg	17	24	26	35	38	50
Sound level			dB(A)	38(45)★3	39(47)★3		40(48)★3		41(49)★3
Drain pipe size			mm	VP20 (External Dia. 26/Internal Dia. 20)					

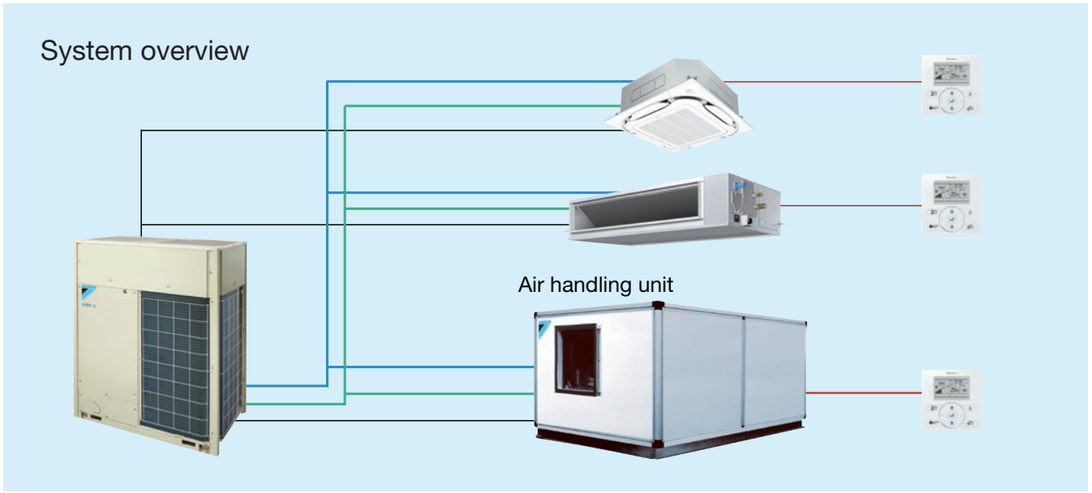
Note: ★1. When connecting with an indoor unit with a capacity index between 20 and 50, connect the attached pipe to the field pipe. (Braze connection between the attached and field pipe.) In case of others, cut the outlet pipe and connect to the connecting pipe.
★2. Reducer may be required (obtain locally) if joint diameter does not fit on the triple piping side. Figures in brackets ( ) is the size when using the attached reducer. Insulators are necessary (obtain locally) for piping connections on the outdoor unit side.
★3. Figures in brackets ( ) indicate maximum value of transient sound (the change of cooling and heating).
• Must be installed in locations where the noise generated by the BS unit does not cause any problem.

Air Handling Unit

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

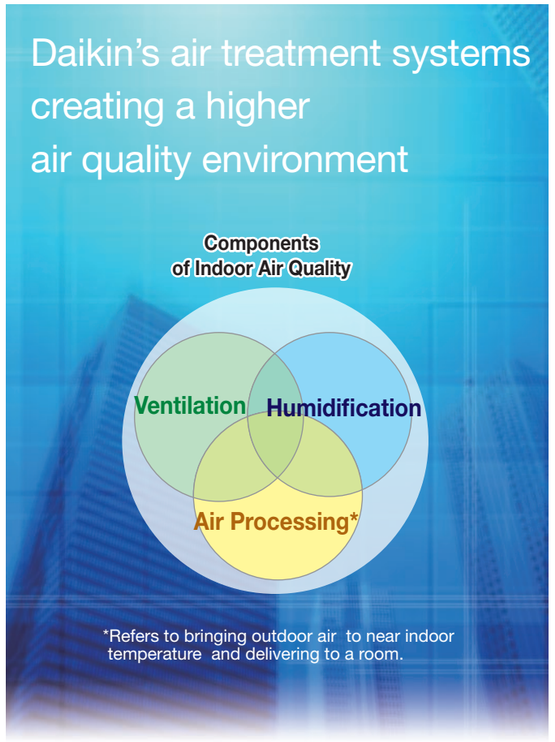
AHUR
Capacity range : 6 – 160 class

- 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



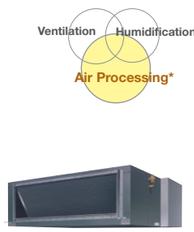
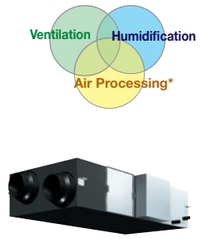
Daikin air handling units can be connected to *VRV* systems.
This combination can be built to order as a system. Outdoor air series is also possible. Please contact your local sales office for details.

Air Treatment Equipment Lineup



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 ★1 due to the greatly enhanced performance of the thin film element. Furthermore, improved external static pressure ★2 offers more flexibility for installation. The Heat Reclaim Ventilator VKM-GAM series units, equipped with a DX-coil and a humidifier, provide further advanced features, such as temperature adjustment to suit conditions indoors and to prevent cold air from blowing on people directly during heating operation. The series also realises significant energy savings by exercising heat recovery.

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

		Outdoor-Air Processing Unit	Heat Reclaim Ventilator		
			VKM-GAM Type	VKM-GA Type	VAM-GJ Type
					
Connections with *VRV* system	Refrigerant Piping	Connectable	Connectable		Not connectable
	Wiring	Connectable	Connectable		Connectable
	After-cool & After-heat Control	Available	Available		Not available
Heat Exchange Element		–	Energy savings obtained		Energy savings obtained
Humidifier		–	Fitted	–	–
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, 50/60 Hz
Airflow Rate		1080 m^3/h 1680 m^3/h 2100 m^3/h	500 m^3/h 800 m^3/h 1000 m^3/h		150 m^3/h 250 m^3/h 350 m^3/h 500 m^3/h 650 m^3/h 800 m^3/h 1000 m^3/h 1500 m^3/h 2000 m^3/h

*Refers to bringing outdoor air to near indoor temperature and delivering to a room.

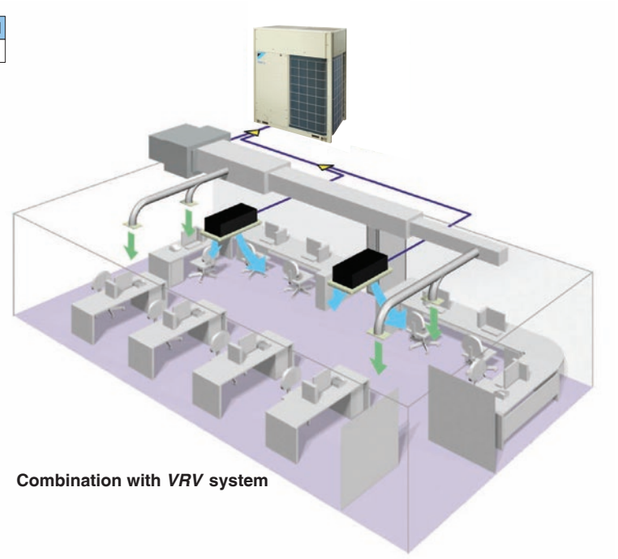
Outdoor-Air Processing Unit

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

Lineup

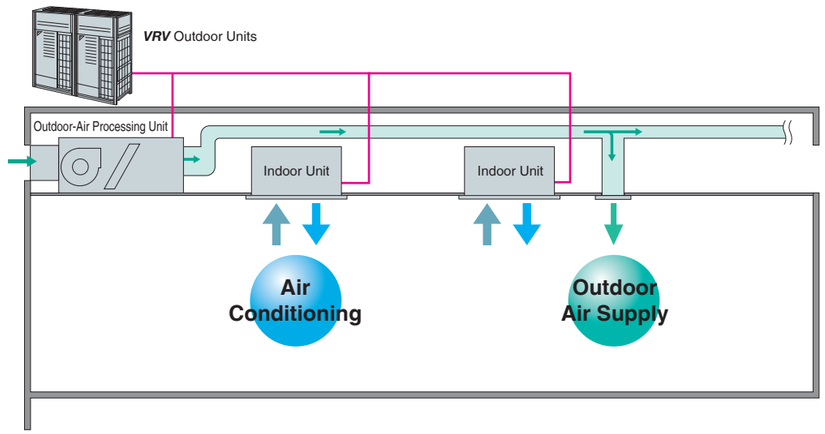
Model Name	FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
Capacity Index	125	200	250

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. The results are enhanced design flexibility and a 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.

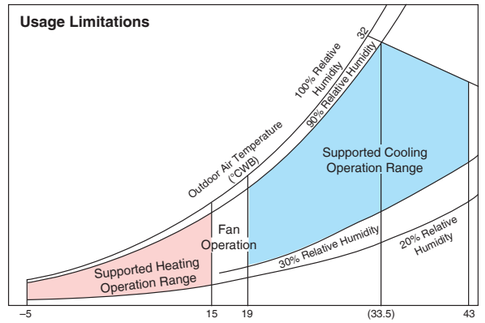
- The unit introduces outdoor air and adjusts the outdoor air temperature via fixed discharge temperature control, thereby reducing the air conditioning load.
  * The system can operate with outdoor-air temperatures ranging from -5 to 43°C. Heating performance is somewhat adversely affected when the outdoor-air temperature is 0°C or below.
  * When shipped from the factory, the thermostat is set at 18°C for cooling and 25°C for heating. The set temperature can be varied within the range of 13–25°C during cooling operation, and 18–30°C during heating 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 also may stop due to mechanical protection control.
- Ceiling mounted duct units with three differing capacities are available. These can be connected to ***VRV*** series outdoor units to meet a variety of different requirements.

Airflow rate

FXMQ125MFV1	1,080 m³/h
FXMQ200MFV1	1,680 m³/h
FXMQ250MFV1	2,100 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.
- As with 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. Connect remote controllers to each unit.

BRC1E63
"Nav Ease"
(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 into zones with standard indoor units, as central control will not be possible.

DCS302CA61
Central remote controller
(option)

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

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
Heating capacity *1			Btu/h	30,400	47,400	59,400
			kW	8.9	13.9	17.4
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		ℓ/s	300	466	583
			m³/min	18	28	35
	External static pressure	240 V	Pa	225	275	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		240 V	dB(A)	43	48	
Connectable outdoor units *4				6 class and above	8 class and above	10 class and above
Operation range (Fan mode operation between 15 and 19°C)			Cooling	19 to 43°C		
			Heating	-5 to 15°C		
Range of the discharge temperature *5			Cooling	13 to 25°C		
			Heating	18 to 30°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.
- Heating: Outdoor temp. of 0°CDB, -2.9°CWB (50% RH), and discharge temp. of 25°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. Not displayed on the remote controller.
- This equipment cannot be incorporated into the remote group control of the ***VRV*** system.

Options

Indoor unit

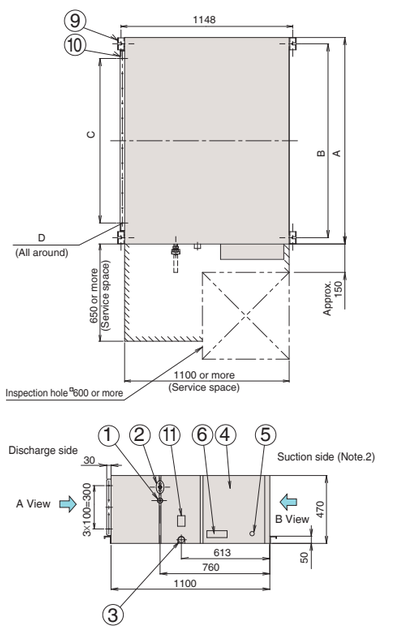
Model			FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
Operation/control	Operation remote controller		BRC1E63 / BRC2E61		
	Central remote controller		DCS302CA61		
	Unified ON/OFF controller		DCS301BA61		
	Schedule timer		DST301BA61		
	Wiring adaptor for electrical appendices (1)		KRP2A61		
	Wiring adaptor for electrical appendices (2)		KRP4AA51		
Filters	Long-life replacement filter		KAFJ371L140	KAFJ371M280	
	High-efficiency filter	Colourimetric method 65%	KAFJ372L140	KAFJ372M280	
		Colourimetric method 90%	KAFJ373L140	KAFJ373M280	
	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 168-170 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

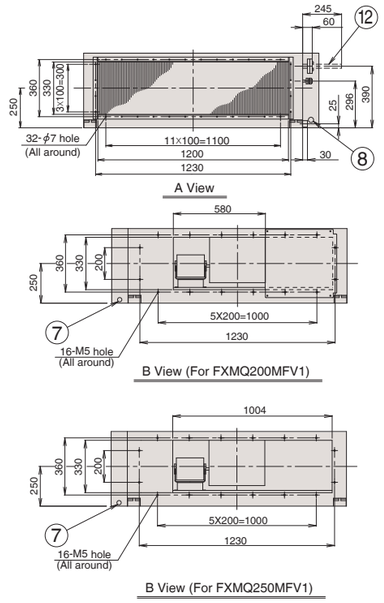
Table of dimensions

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

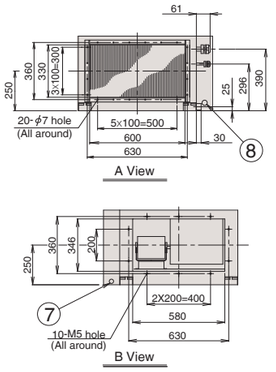
Note:
1. The attached piping in the diagram is for FXMQ200MFV1 and FXMQ250MFV1 only. The gas piping connection port (② in the diagram) has a different bore form with FXMQ125MFV1.
2. An air filter is not supplied with this unit. Be sure to mount an air filter in the suction side. [Use a filter with dust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

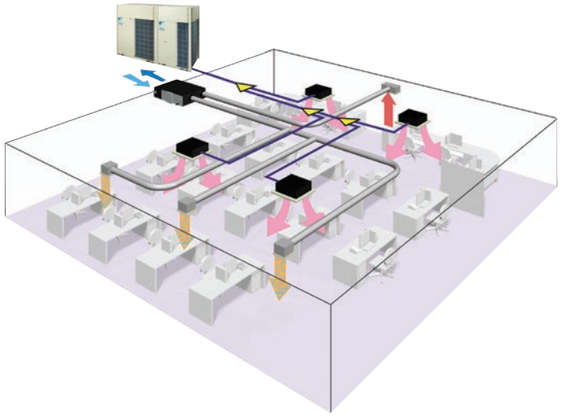


FXMQ125MFV1



Heat Reclaim Ventilator with DX-Coil and Humidifier — VKM series

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



Efficient outdoor air introduction is possible

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

Lineup

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

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

Humidifier

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

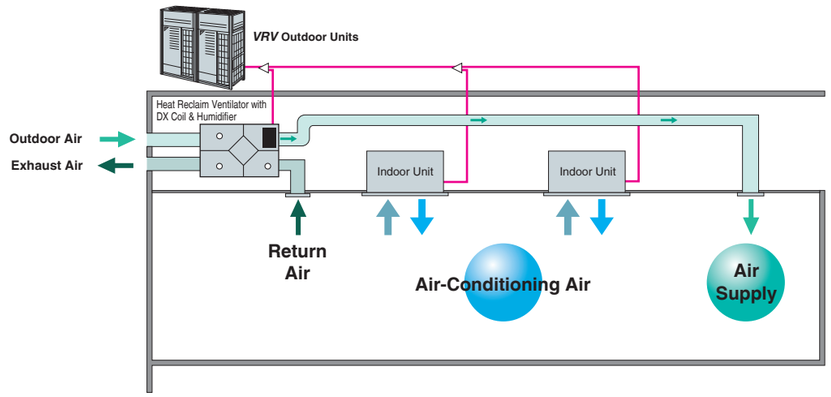
DX-coil

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

High static pressure

High external static pressure means enhanced design flexibility.

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



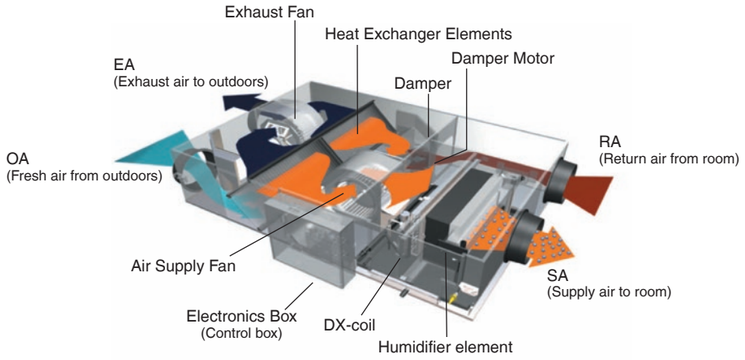
Connection Conditions

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

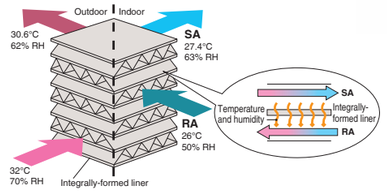
- When the Heat Reclaim Ventilator VKM series units are connected, the total connection capacity index must be 50% to 130% of the capacity index of the outdoor units.

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

HEP Element
(Anti-mould)



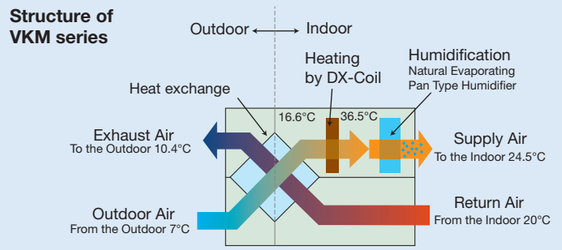
Operation of the heat exchanger element



DX-coil (Direct expansion coil)

Humidifier element

Heating and humidification process



Humidification:5.4kg/h (VKM100GAMV1)

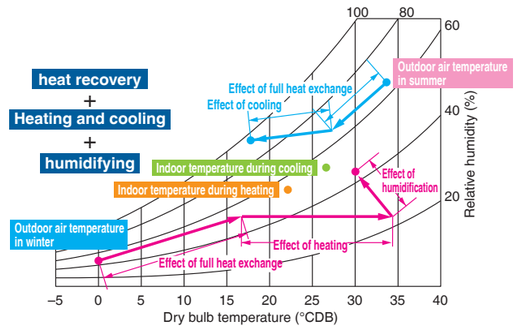
The Outdoor air is heated from 16.6°C to 36.5°C with DX-coil, Natural Evaporating Pan Type Humidifier is passed and humidification capacity is improved.

DX-Coil: Heat Exchanger which heating or cooling the air by ***VRV*** outdoor unit's refrigerant.

Efficient outdoor air introduction with heat exchanger and cooling/heating 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 humidifying operations.**
- **Ventilation, cooling/heating and humidifying are possible with one remote controller.**

Specifications

MODEL				VKM50GAMV1 *	VKM80GAMV1 *	VKM100GAMV1*	VKM50GAV1	VKM80GAV1	VKM100GAV1
Refrigerant				R-410A					
Power Supply				1-phase, 220–240 V, 50 Hz					
Airflow Rate & Static Pressure (Note 7)	Ultra-high	Airflow rate	(m3/h)/(ℓ/s)	500/138	750/208	950/263	500/138	750/208	950/263
		Static pressure	Pa	160	140	110	180	170	150
	High	Airflow rate	(m3/h)/(ℓ/s)	500/138	750/208	950/263	500/138	750/208	950/263
		Static pressure	Pa	120	90	70	150	120	100
	Low	Airflow rate	(m3/h)/(ℓ/s)	440/122	640/177	820/227	440/122	640/177	820/227
		Static pressure	Pa	100	70	60	110	80	70
Power Consumption	Heat exchange mode	Ultra-high	W	560	620	670	560	620	670
		High		490	560	570	490	560	570
		Low		420	470	480	420	470	480
	Bypass mode	Ultra-high	W	560	620	670	560	620	670
		High		490	560	570	490	560	570
		Low		420	470	480	420	470	480
Fan Type				Sirocco Fan					
Motor Output			kW	0.280 x 2	0.280 x 2	0.280 x 2	0.280 x 2	0.280 x 2	0.280 x 2
Sound Level (Note 5) (220/230/240 V)	Heat exchange mode	Ultra-high	dB(A)	37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/41
		High		35/35.5/36	36/37/37.5	37/37.5/38	36/36.5/37	37.5/38/39	38/38.5/39
		Low		32/33/34	33/34/35.5	34/34.5/35.5	33.5/34.5/35.5	34.5/36/37	35/36/36.5
	Bypass mode	Ultra-high	dB(A)	37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/41
		High		35/35.5/36	36/37/37.5	37/37.5/38	36/36.5/37	37.5/38/39	38/38.5/39
		Low		32/33/34	33/34/35.5	34/34.5/35.5	33.5/34.5/35.5	34.5/36/37	35/36/36.5
Humidification Capacity (Note 4)			kg/h	2.7	4.0	5.4	—	—	—
Temp. Exchange Efficiency	Ultra-high		%	76	78	74	76	78	74
	High			76	78	74	76	78	74
	Low			77.5	79	76.5	77.5	79	76.5
Enthalpy Exchange Efficiency (Cooling)	Ultra-high		%	64	66	62	64	66	62
	High			64	66	62	64	66	62
	Low			67	68	66	67	68	66
Enthalpy Exchange Efficiency (Heating)	Ultra-high		%	67	71	65	67	71	65
	High			67	71	65	67	71	65
	Low			69	73	69	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	2.8	4.5	5.6
	Heating (Note 3)			3.2	5.0	6.4	3.2	5.0	6.4
Dimensions	Height		mm	387	387	387	387	387	387
	Width			1,764	1,764	1,764	1,764	1,764	1,764
	Depth			832	1,214	1,214	832	1,214	1,214
Connection Duct Diameter			mm	ϕ200	ϕ250		ϕ200	ϕ250	
Machine Weight		Net	kg	102	120	125	96	109	114
		Gross (Note 8)		107	129	134	—		
Unit Ambient Condition		Around Unit		0°C–40°CDB, 80%RH or less					
		OA (Note 9)		-15°C–40°CDB, 80%RH or less					
		RA (Note 9)		0°C–40°CDB, 80%RH or less					

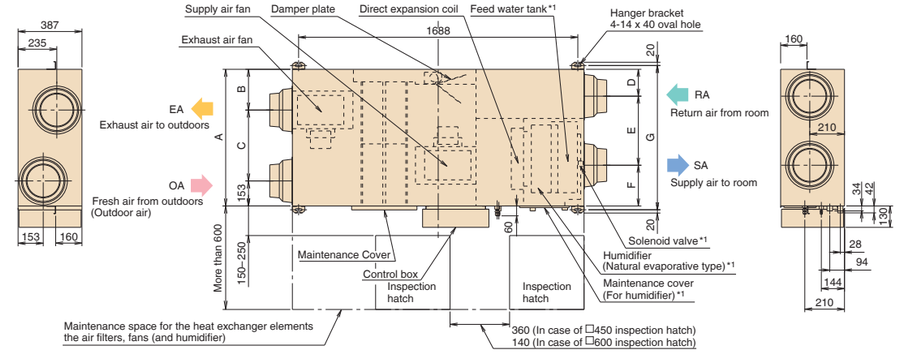
Note:
1. Cooling and heating capacities are based on the following conditions. Fan is based on High and Ultra-high.
   When calculating the capacity as indoor units, use the following figures:
   VKM50GAMV1/GV1: 3.5 kW, VKM80GAMV1/GV1: 5.6 kW, VKM100GAMV1/GV1: 7.0 kW
2. Indoor temperature: 27°CDB, 19°CWB, Outdoor temperature: 35°CDB
3. Indoor temperature: 20°CDB, Outdoor temperature: 7°CDB, 6°CWB
4. Humidifying capacity is based on the following conditions:
   Indoor temperature: 20°CDB, 15°CWB, Outdoor temperature: 7°CDB, 6°CWB
5. The operating sound measured at the point 1.5 m below the centre of the unit is converted to that measured in an anechoic chambar built in accordance with the JIS C 1502 conditions. The 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.
6. The noise level at the air discharge port is about 8–11 dB(A) or higher than the unit's operating sound.
   For operation in a quiet room, it is required to take measures to lower the sound.
7. Airflow rate can be changed over to Low mode or High mode.
8. In case of holding full water in humidifier.
9. OA: fresh air from outdoor. RA: return air from room.
10. Specifications, design and information here are subject to change without notice.
11. Power consumption and efficiency depend on the above value of airflow rate.
12. Temperature exchange efficiency is the mean value for Cooling and Heating. Efficiency is measured under the following condition: Ratio of rated external static pressure outdoor to indoor is kept constant at 7 to 1.
13. In heating operation, freezing of the outdoor unit's coil increases. Heating capability decreases and the system goes into defrost operation. During defrost operation, the fans of the unit continues driving (factory setting). The purpose of this is to maintain the amount of ventilation and humidifying.
14. When connecting with a ***VRV*** system heat recovery outdoor unit and bringing the RA (exhaust gas intake) of this unit directly in from the ceiling, connect to a BS unit identical to the ***VRV*** indoor unit (master unit), and use group-linked operation. (See the Engineering Data for details.)
15. When connecting the indoor unit directly to the duct, always use the same system on the indoor unit as with the outdoor unit, perform group-linked operation, and make the direct duct connection settings from the remote controller. (Mode No. "17 (27)" – First code No. "5" – Second code No. "6".) Also, do not connect to the outlet side of the indoor unit. Depending on the fan strength and static pressure, the unit might back up.

★ Feed clean water (city water, tap water or equivalent). Dirty water may clog the valve or cause dirt deposits in the water container, resulting in poor humidifier performance. (Never use any cooling tower water and heating-purpose water.)
Also, if the supply water is hard water, use a water softener because of short life.

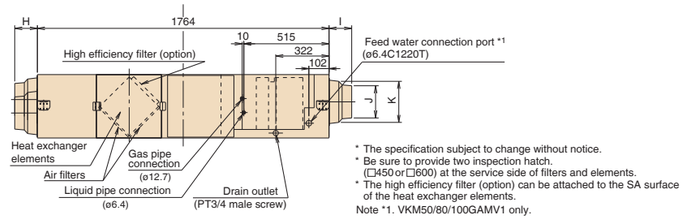
* Life of humidifying element is about 3 years (4,000 hours) under the supply water conditions of hardness: 150 mg/l. (Life of humidifying element is about 1 year (1,500 hours) under the supply water conditions of hardness: 400 mg/l.)
Annual operating hours: 10 hours/day x 26 days/month x 5 months = 1,300 hours

Dimensions

VKM50/80/100GA(M)V1



	VKM50GA(M)V1	VKM80/100GA(M)V1
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.
Note *1. VKM50/80/100GAMV1 only.

Options

Item \ Type			VKM50/80/100GA(M)V1
Controlling device	Remote controller		BRC1E63 / BRC2E61 *1
	Centralised controlling device	Residential central remote controller	DCS303A51 *2
		Central remote controller	DCS302CA61
		Unified ON/OFF controller	DCS301BA61
		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
	PC Board Adaptor: For wiring	Type (indoor unit of ***VRV***)	FXFSQ-A / FXFQ-P / FXZQ-A2 / FXUQ-A / FXCQ-A / FXEQ-A / FXDQ-PD FXDQ-ND / FXDQ-T / FXSQ-PA / FXDYQ-MA / FXMQ-PA / FXMQ-P / FXHQ-MA / FXHQ-A / FXAQ-A / FXLQ-MA FXNQ-MA
			KRP1C11A★ / KRP1C63★ / KRP1BA57★ / – / KRP1B61★ / – / KRP1B56★ / KRP1C64★ / KRP1B61 / KRP1C64★ / KRP1C67★ / KRP1BA54 / – / KRP1B61
	PC Board Adaptor: Installation box for adaptor PCB ☆		Note 2, 3 KRP1H98A / Note 4, 5 KRP1BA101 / KRP1BA97 / Note 2, 3 KRP1B96 / – / Note 4 KRP1BA101 / BRP9A90 / Note 2, 3 KRP4A98 / – / Note 2, 3 KRP4A97 / BRP9A90 / Note 3 KRP1CA93 / Note 3 KRP1CA93A / 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.
5. *1 Necessary when operating a Heat Reclaim Ventilator (VKM) independently. When operating interlocked with other air conditioners, use the remote controllers of the air conditioners.
   *2 For residential use only. When connected with a Heat Reclaim Ventilator (VKM), you can only switch the power ON/OFF. Cannot be used with other centralised control equipment.

Item \ Type			VKM50GA(M)V1	VKM80GA(M)V1	VKM100GA(M)V1
Additional function	Silencer	Nominal pipe diameter mm	—	—	KDDM24B100
			—	—	ϕ 250
	Air suction/ Discharge grille	White	K-DGL200B	K-DGL250B	
		Nominal pipe diameter mm	ϕ200	ϕ250	
	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

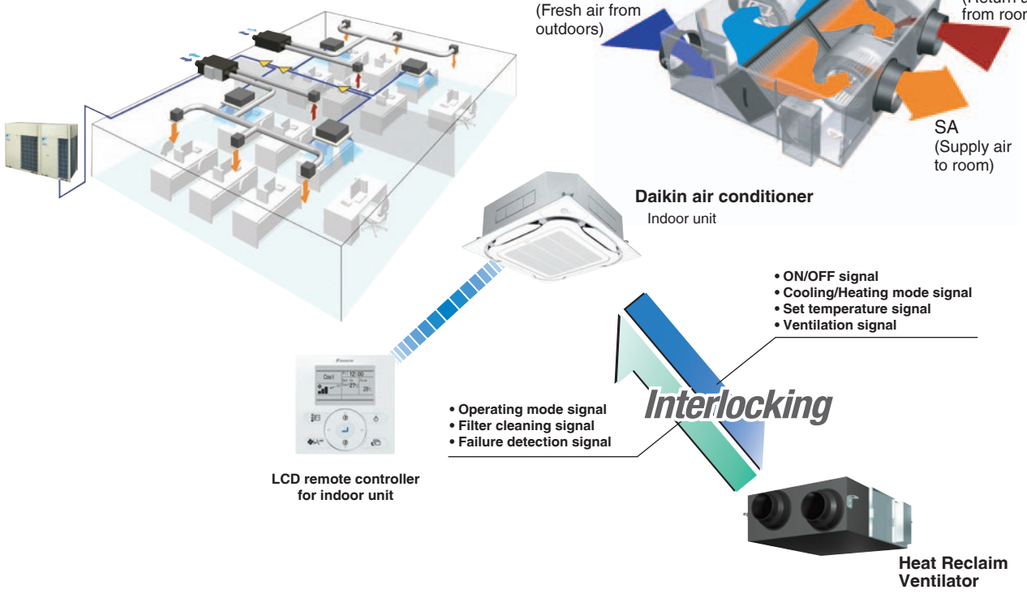
Heat Reclaim Ventilator remote controller*
BRC301B61 (Option)

* 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 space.

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



Compact Equipment

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

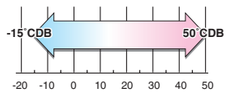
* For VAM500GJVE

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%

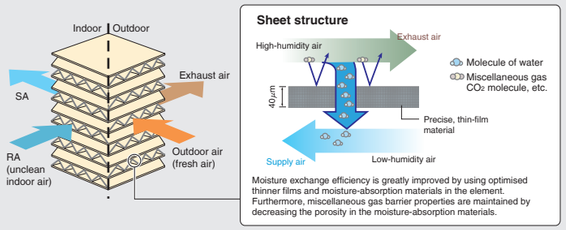
This unit recovers heat energy lost through ventilation and curbs room temperature changes caused by ventilation, thereby conserving energy and reducing the load on the air conditioning system.

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

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

Moisture absorption increased by approx. 10%!

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.

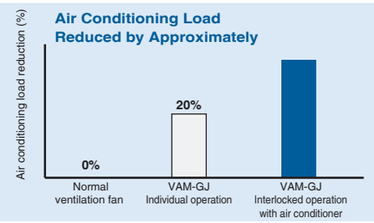
\+

Pre-cool, Pre-heat Control — 2%

Reduces air conditioning load by not running 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 m^2
Personnel density: 0.25 person/m^2
Ventilation volume: 25 m^3/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.

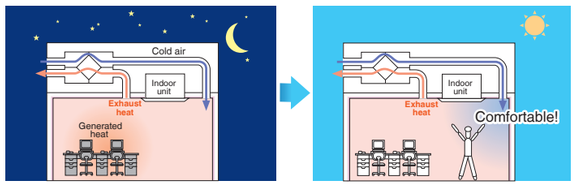
Nighttime free cooling operation*1

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 you wish to use it, request your dealer to turn it on.

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

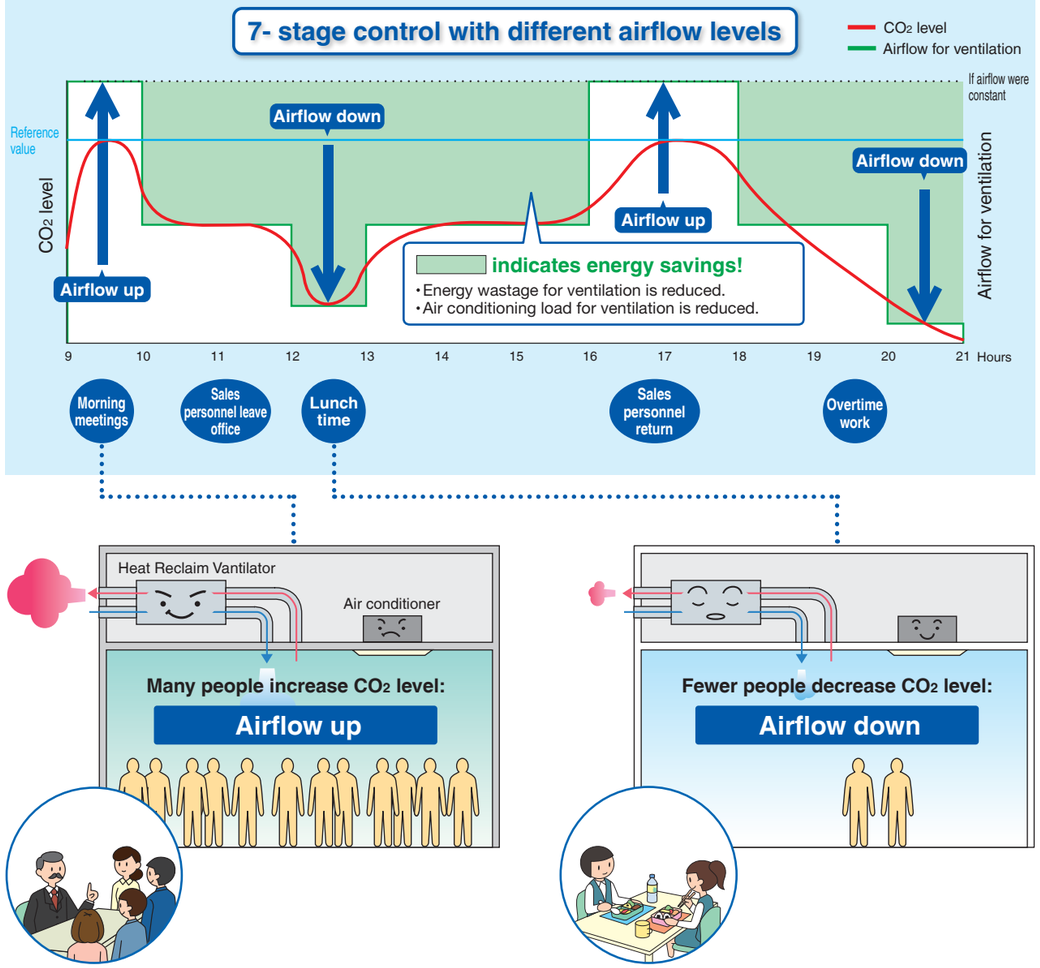
*1 This function can be operated only when interlocked with air conditioners.
*2 Value is based on the following conditions:
- Cooling operation performed from April to October.
- Calculated for air conditioning sensible heat load only (latent heat load not included).

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:**

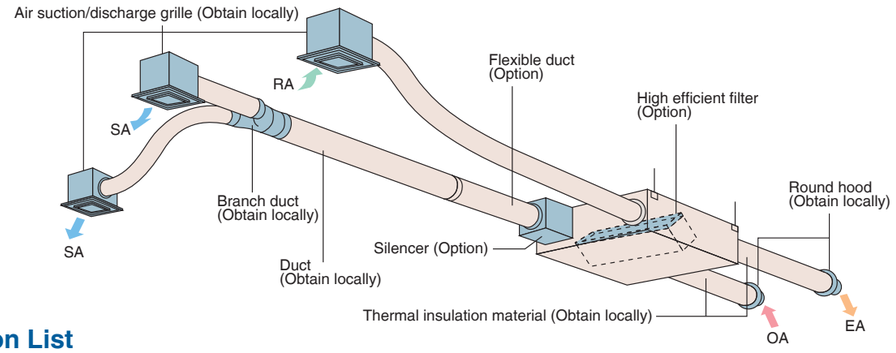


Specifications

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		Ultra-High	%	79	75	79	74	75	72	78	72	77
		High		79	75	79	74	75	72	78	72	77
		Low		84	79	82	80	77	74	80.5	75.5	79
Enthalpy Exchange Efficiency	For Heating	Ultra-High	%	72	71	70	67	67.5	65	70	65	72
		High		72	71	70	67	67.5	65	70	65	72
		Low		76	74	77	74	71.5	67.5	72.5	67	75
	For Cooling	Ultra-High	%	66	63	66	55	61	61	64	61	62
		High		66	63	66	55	61	61	64	61	62
		Low		70	66	70	59	64	64	68.5	64	66
Power Consumption	Heat Exchange Mode	Ultra-High	W	125	137	200	248	342	599	635	1,145	1,289
		High		111	120	182	225	300	517	567	991	1,151
		Low		57	60	122	128	196	435	476	835	966
	Bypass Mode	Ultra-High	W	125	137	200	248	342	599	635	1,145	1,289
		High		111	120	182	225	300	517	567	991	1,151
		Low		57	60	122	128	196	435	476	835	966
Sound Level	Heat Exchange Mode	Ultra-High	dB(A)	27-28.5	27-29	31.5-33	33-35.5	34-36	39-40.5	39.5-41.5	39.5-41.5	41.5-43.5
		High		26-27.5	26-27.5	30-31.5	31.5-34	33-34.5	37-39.5	37.5-39.5	37.5-39.5	39-43
		Low		20.5-21.5	21-22	23-25	25-28.5	27.5-29.5	35-37.5	35-37.5	35-37.5	36-39
	Bypass Mode	Ultra-High	dB(A)	28.5-29.5	28.5-30.5	33-34.5	34.5-36	35-37.5	40.5-42	40.5-42.5	41-43	43-45.5
		High		27.5-28.5	27.5-29	31.5-33	33-34.5	33-35.5	38.5-40	38.5-40.5	39.5-41	40.5-45
		Low		22.5-23.5	22.5-23	24.5-26.5	25.5-28.5	27.5-30.5	36-38.5	36-38.5	36.5-38	37.5-39.5
Casing				Galvanised steel plate								
Insulation Material				Self-extinguishable polyurethane foam								
Dimensions (HXWXD)			mm	278×810×551		306×879×800		338×973×832	387x1,111x832	387x1,111x1,214	785x1,619x832	785x1,619x1,214
Machine Weigh			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	Ultra-High	m^3/h	150	250	350	500	650	800	1,000	1,500	2,000
		High		150	250	350	500	650	800	1,000	1,500	2,000
		Low		100	155	230	320	500	700	860	1,320	1,720
		Ultra-High	ℓ/s	41	69	97	138	180	222	277	416	555
		High		41	69	97	138	180	222	277	416	555
		Low		27	43	63	88	138	194	238	366	477
	External Static Pressure	Ultra-High	Pa	120	70	169	105	85	133	168	112	116
		High		106	54	141	66	53	92	110	73	58
		Low		56	24	67	32	35	72	85	56	45
	Motor Output		kW	0.030×2		0.090×2		0.140×2	0.280×2		0.280×4	
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 1.5 m 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 500 m^3/h) to approximately 11 dB(A) (models with the airflow rate of 650 m^3/h or more) greater than the indicated value. Furthermore, fan rotation and noise from the discharge grille may increase depending on the on-site duct resistance conditions. Please consider noise countermeasures when installing the unit.
10. With large models in particular (1500 and 2000 m^3/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.)

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 Note 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 (indoor unit of ***VRV***)	FXFSQ-A / FXFQ-P / FXZQ-A2 / FXUQ-A / FXCQ-A / FXEQ-A / FXDQ-PD FXDQ-ND / FXDQ-T / FXSQ-PA / FXDYQ-MA / FXMQ-PA / FXMQ-P / FXHQ-MA / FXHQ-A / FXAQ-A / FXLQ-MA FXNQ-MA
				KRP1C11A★ / KRP1C63★ / KRP1BA57★ / – / KRP1B61★ / – / KRP1B56★ / KRP1C64★ / KRP1B61 / KRP1C64★ / KRP1C67★ / KRP1BA54 / – / KRP1B61
		Installation box for adaptor PCB★		Note 2, 3 KRP1H98A / Note 4, 5 KRP1BA101 / KRP1BA97 / Note 2, 3 KRP1B96 / – / Note 4 KRP1BA101 / BRP9A90 / Note 2, 3 KRP4A98 / – / Note 2, 3 KRP4A97 / BRP9A90 / Note 3 KRP1CA93 / Note 3 KRP1CA93A / Note 2, 3 KRP4AA93 / –

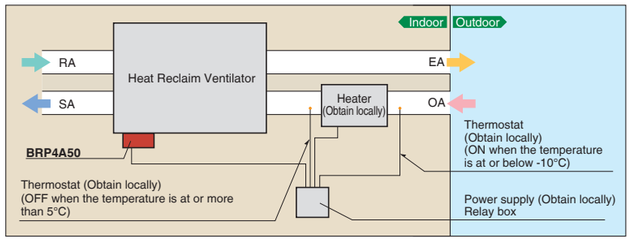
Note: 1. Installation box★ is necessary for each adaptor marked★.
2. Up to 2 adaptors can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.
5. *1 Necessary when operating a Heat Reclaim Ventilator (VKM) independently. When operating interlocked with other air conditioners, use the remote controllers of the air conditioners.

Item			Type	VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
Additional function	Silencer			—			KDDM24B50	KDDM24B100			KDDM24B100×2	
		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 168-170 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.



Note when installing

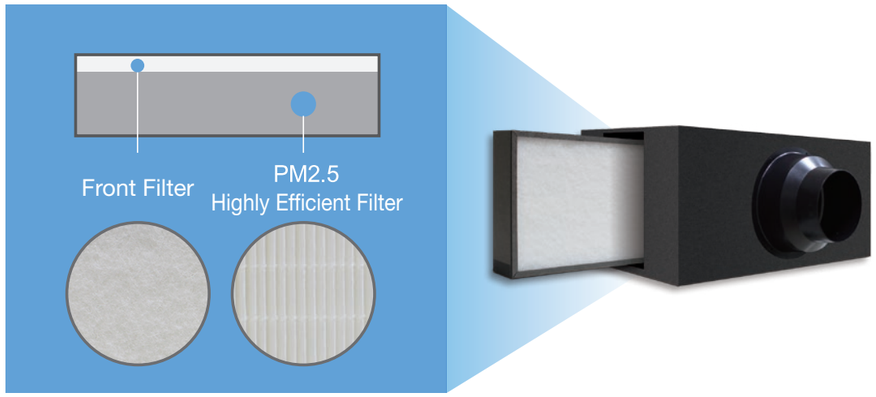
- Examine fully an installation place and specification for using the electric heater based on the standard and regulation of each country.
- Supply the electric heater and safety production devices such as a relay and a thermostat, etc of which qualities satisfy the standard and regulation of each country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

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.

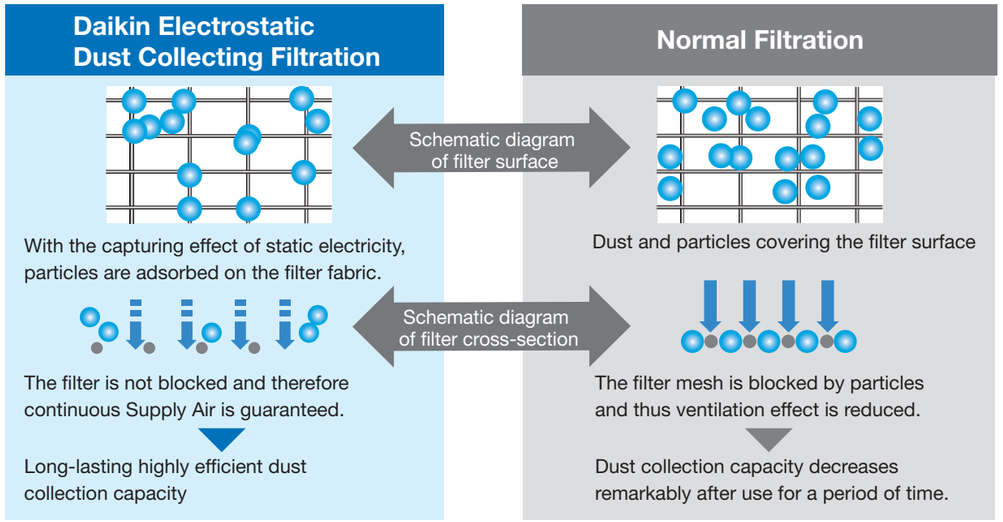
Double-layered efficient filtration

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

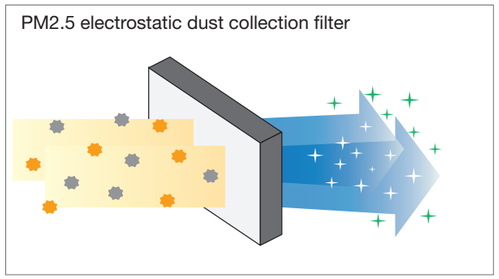
The PM2.5 filter layer contains a large amount of static electricity to capture particulate matter efficiently, including those smaller than the grid mesh.
The filter is difficult to be blocked by particles and has good ventilation and long life span.



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.



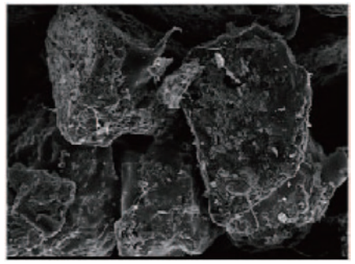
*Test results by the Heating, Ventilation and Air Conditioning Lab at Tongji University
Test environment: temperature 25-26°CDB, humidity 58-60%RH

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.

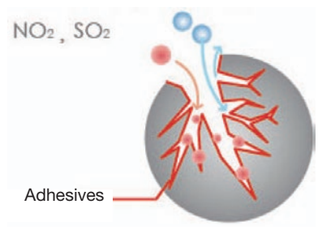
Note: Surface area of active carbon: 700 m^2/g
Given a newspaper page of 40.6 cm wide by 54.6 cm long, each gram of active carbon has a surface area of 3,000 newspaper pages.



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.



PM2.5 Filtration Unit

Models			BAF249A150	BAF249A300	BAF249A350	BAF249A500
Heat Reclaim Ventilator Models			VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE
Dimensions (H × W × D)		mm	220 x 603 x 366	220 x 603 x 366	300 x 623 x 366	300 x 623 x 366
Connection Duct Diameter		mm	Ø100	Ø150	Ø150	Ø200
Airflow Rate		m^3/h	150	250	350	500
PM2.5 Filter	Initial Pressure Drop	Pa	34	30	31	42
	Filter Lifetime [1]		1 year			
	Filtration Efficiency [2]		99% or higher			
	Filter Material No. [3]		BAF244A300		BAF244A500	

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
Heat Reclaim Ventilator Models			VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE
Dimensions (H × W × D)		mm	220×603×366	220×603×366	300×623×366	300×623×366
Connection Duct Diameter		mm	Ø100	Ø150	Ø150	Ø200
Airflow Rate		m^3/h	150	250	350	500
PM2.5 Filter	Initial Pressure Drop	Pa	34	30	31	42
	Filter Lifetime [1]		1 year			
	Filtration Efficiency [2]		99% or higher			
	Filter Material No. [3]		BAF244A300		BAF244A500	
Activated Carbon Filter	Initial Pressure Drop	Pa	3	5	5	9
	Filter Lifetime		1 year			
	Filter Material No. [3]		BAF244A300C		BAF244A500C	
Total Initial Pressure Drop for PM2.5 with Activated Carbon Filtration Unit		Pa	37	35	36	51

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* Indoor System

"Nav Ease" (Wired remote controller) (Option)

BRC1E63

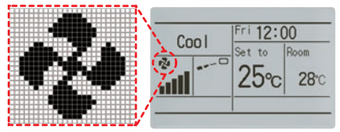
BRC1F61
(Only for FXEQ series)

This simple, contemporary remote controller with fresh white colour matches your interior design. The clear, backlight display with large easy-to-read text makes navigation easy and provides one-touch control over your in-home comfort.

Clear display

•Dot matrix display

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



•Backlight display

· Backlight display helps operating in dark rooms.

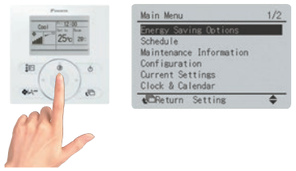
Simple operation

•Large buttons and arrow keys

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

•Guide on display

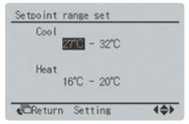
· The display gives an explanation of each setting for easy operation.



Energy saving

•Setpoint range set

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

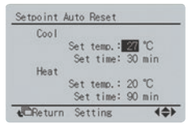


•Off timer

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

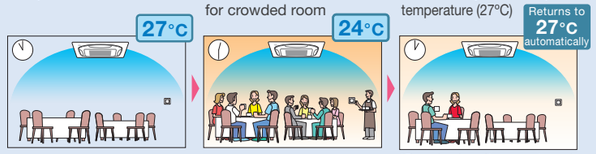
•Setpoint auto reset

· 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 (default: OFF)

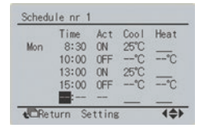
Maintains the room temperature in a specific range during unoccupied period by temporarily starting air conditioner that was turned OFF.

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

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.

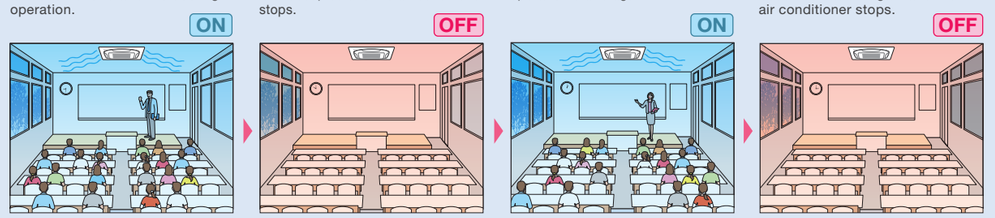
•Weekly schedule

· 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 FXFSQ-A, FXCQ-A and FXUQ-A series.

•5-step airflow control (*2)

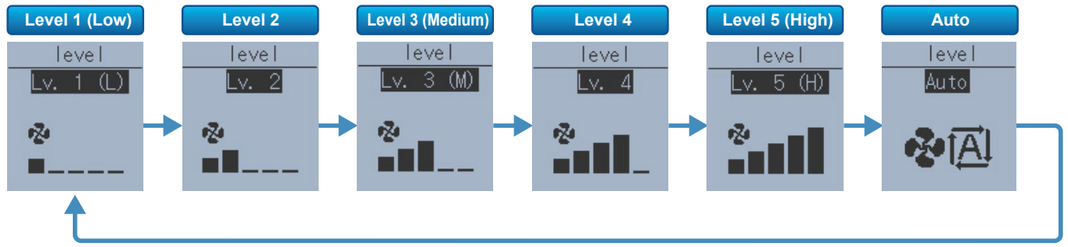
Control of airflow rate can be selected from 5-step control, which provides comfortable airflow.

*2 . The number of airflow steps differs according to the type of indoor unit. 5-step airflow is only available for FXFSQ-A, FXEQ-A and FXDQ-T 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 FXFSQ-A, FXCQ-A, FXDQ-T/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 convenient and easy operation.

Compact size

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

Wireless remote controller (Option)

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 FXFSQ 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.

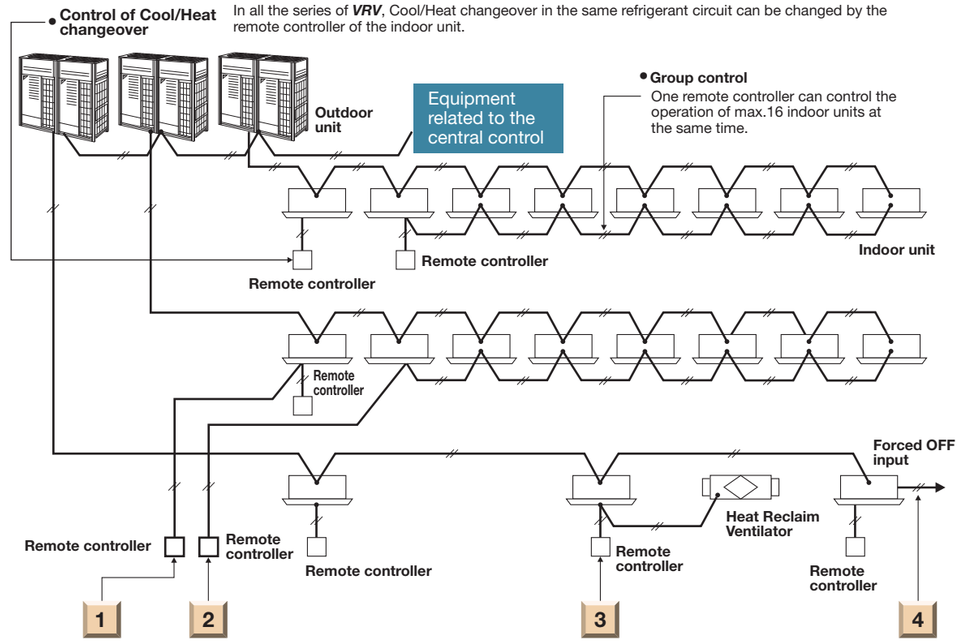
* Wireless remote controller and signal receiver unit are sold as a set.
* Refer to page 194 for the name of each model.

Wide variation of remote controllers for *VRV* indoor units

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

*Refer to page 194 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

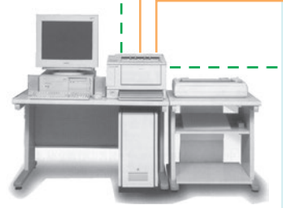
ACC Centre

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

Master Controller

BMS

(Obtain locally)

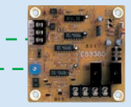


Controllers for Centralised Control

intelligent Touch Controller
(DCS601C51)

Residential central remote controller
(DCS303A51)

Control /Connection Interface



Unification adaptor for computerised control
(DCS302A52)

Modbus® Communication Adaptor
(DTA116A51)

Interface for use in BACnet®
(DMS502B51)

Interface for use in LONWORKS®
(DMS504B51)

Wiring adaptor for electrical appendices
(KRP2A61/62/51/53)

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

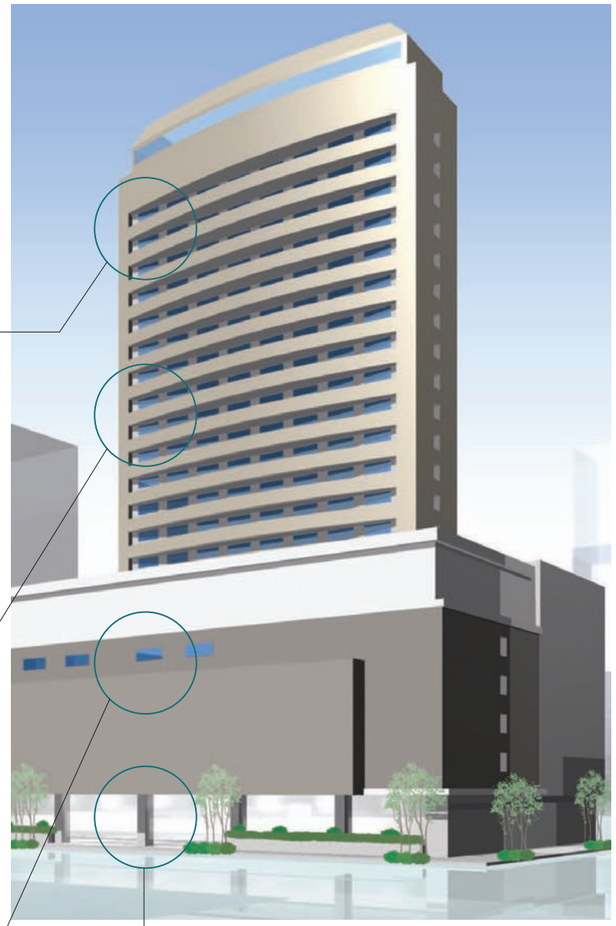
Advanced Control Systems for *VRV* Systems

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.

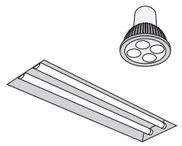


Individual air-conditioning control

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

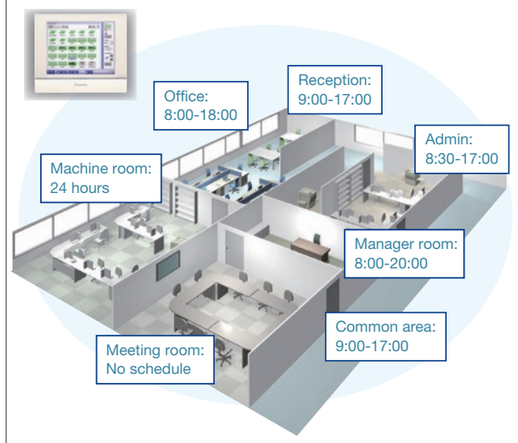
Fan

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.

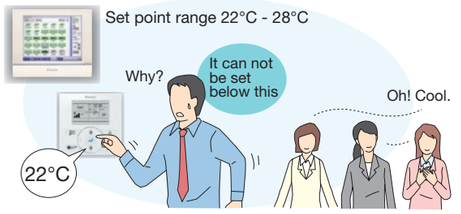
Schedule the operation time for each application.



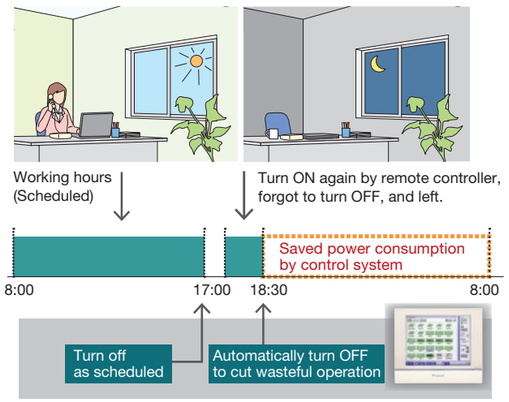
Define the setpoint range that users can change.

With Remote controller

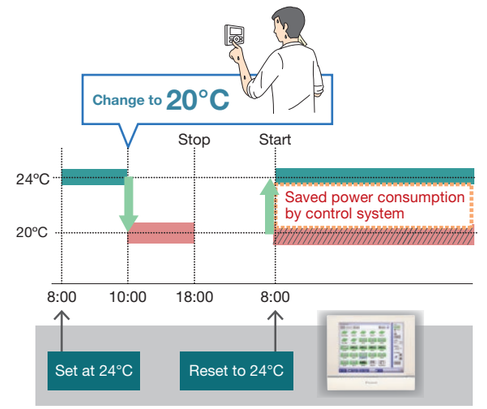
With Control System



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

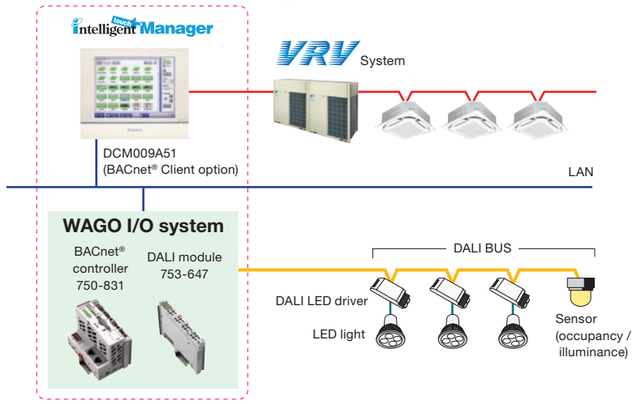
Please contact your local sales office for details.

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!



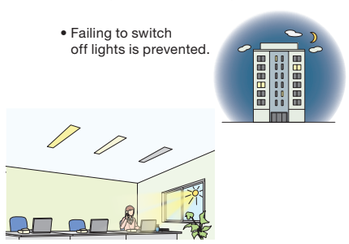
[Overview of control]
- Up to 5 DALI modules can be connected to a single BACnet® controller.
- Up to 64 DALI LED drivers (64 addresses) can be connected to a single DALI module.
- 64 DALI addresses can be freely assigned to up to 16 groups using a single DALI module. (Each group corresponds to a management 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.

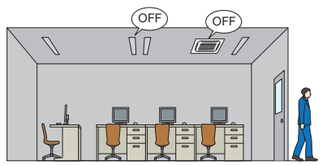
- Failing to switch off lights is prevented.



- Optimal illuminance reduces energy.

Case2

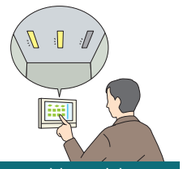
Occupancy sensors are used to eliminate both wasteful lighting and air conditioning.
When a room is unoccupied, the air conditioning stops and the lighting is switched off.



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)

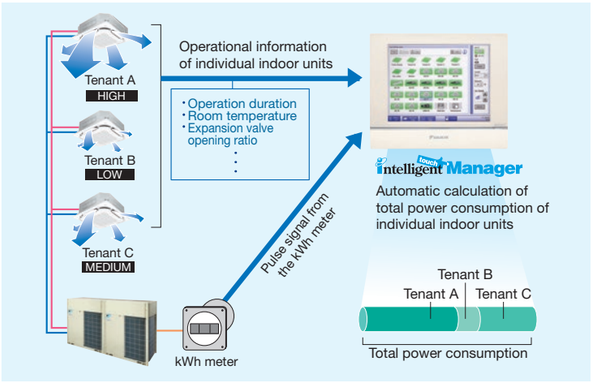
The energy consumption is proportionally calculated for each indoor unit. The data can be used for energy management and calculation of air conditioning usage fees for respective tenants.

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.

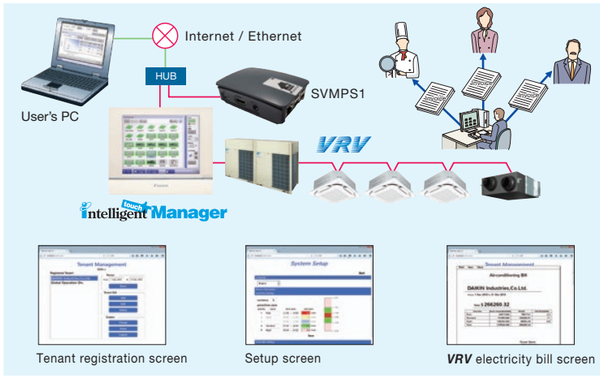


Air conditioning bills can be issued by one click

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)

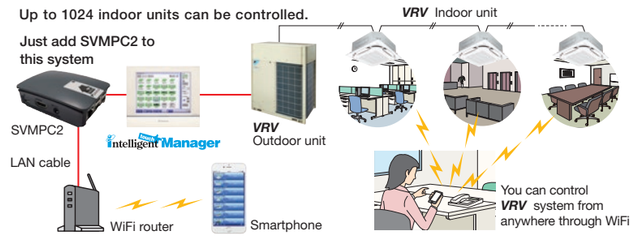


Effective service functions offered to tenants

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

Users can operate and check the status of ***VRV*** system from their smart phones via WiFi.
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.

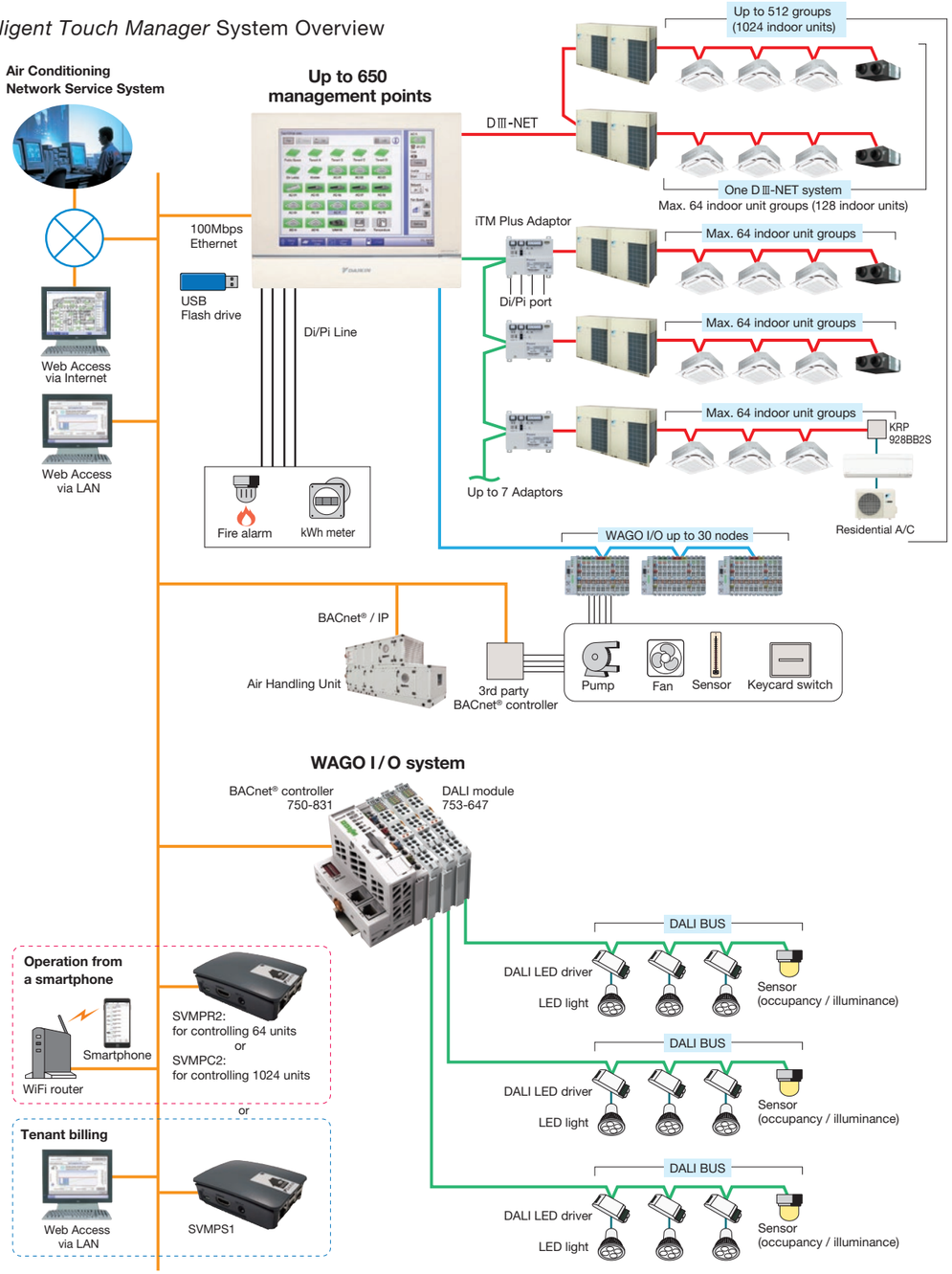
For buildings ***VRV*** Smartphone Remote Controller



Advanced Control Systems for *VRV* Systems

System structure

intelligent Touch Manager System Overview



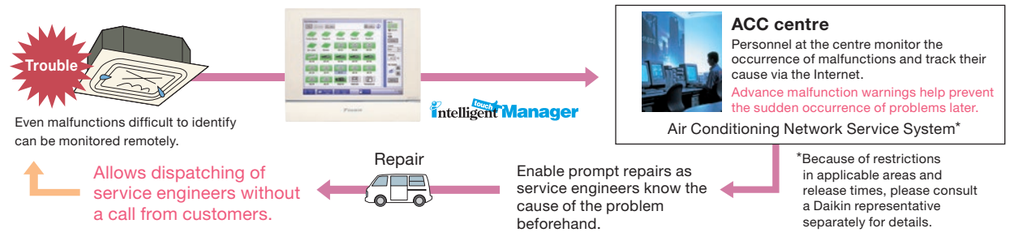
Air Conditioning Network Service System

Preventive Maintenance

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

Enhanced convenience with link to the Air Conditioning Network Service System

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



Daikin Offers a Variety of Control Systems

Convenient controllers that offer more freedom to administrators

DCS601C51

intelligent Touch Controller

Ease of use and expanded control functions

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

Connect *VRV* system to your BMS via BACnet® or LonWorks®

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

Dedicated interfaces make Daikin air conditioners freely compatible with open networks

DMS502B51
(Interface for use in BACnet®)

BACnet®

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

DMS504B51
(Interface for use in LonWorks®)

LonWorks®

Facilitating the network integration of ***VRV*** system and LonWorks®

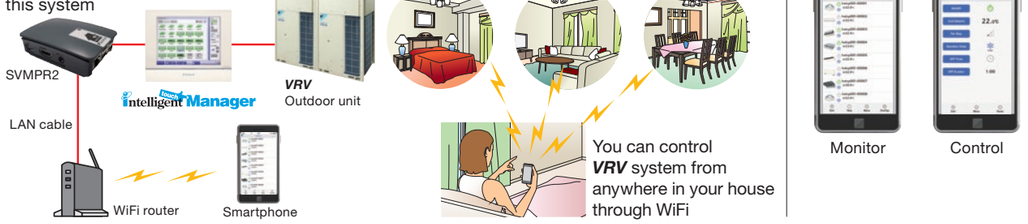
Note : 1. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
2. LonWorks® is a trademark of Echelon Corporation registered in the United States and other countries.

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

For house *VRV* Smartphone Control System

Up to 64 indoor units can be controlled.

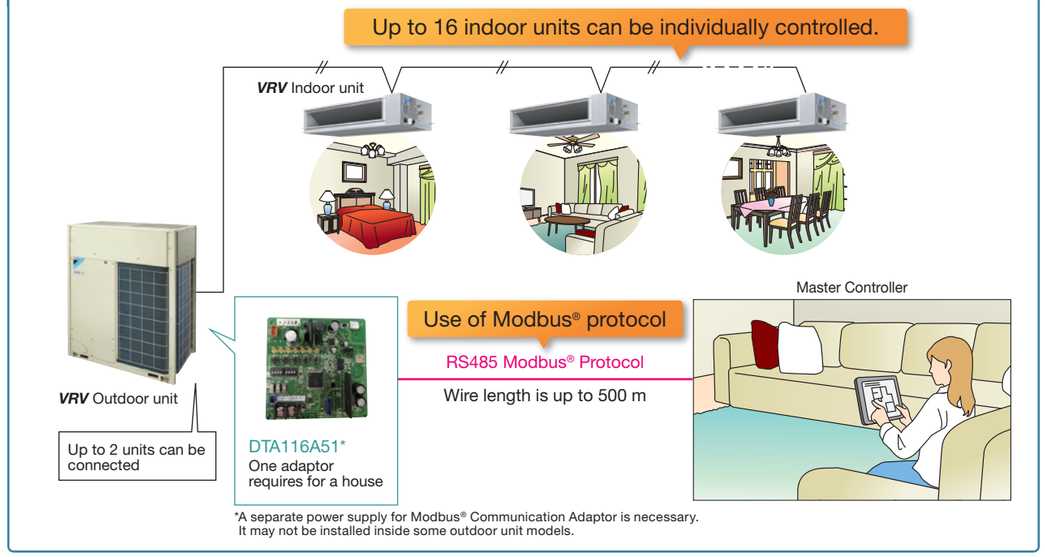
Just add SVMPR2 to this system



Advanced Control Systems for *VRV* Systems

Modbus® Communication Adaptor

Image to use Modbus® Communication Adaptor DTA116A51



*A separate power supply for Modbus® Communication Adaptor is necessary. It may not be installed inside some outdoor unit models.

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

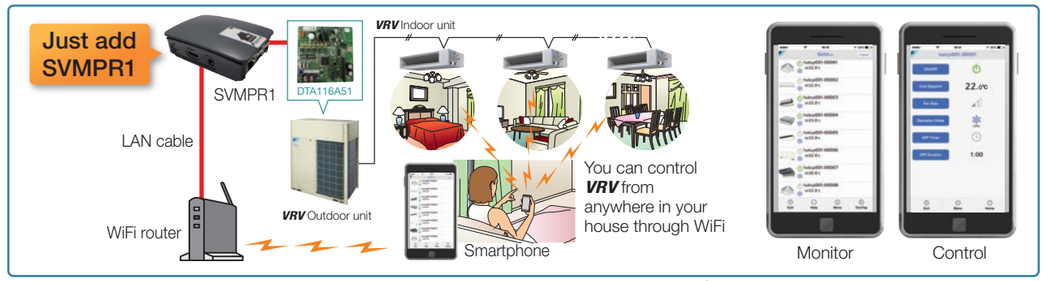
On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Cooling/Heating setpoint
Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Filter sign reset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

VRV **Smartphone 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.

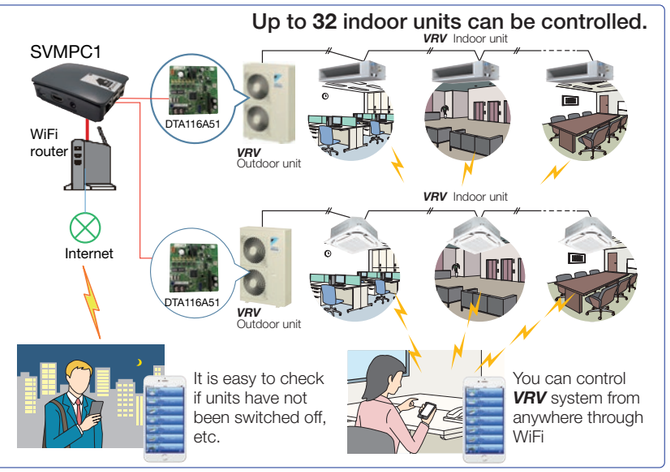
VRV Tablet and Smartphone Controller : SVMPC1

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*

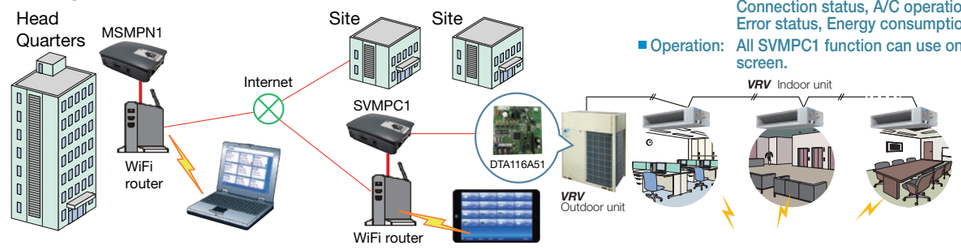
*: Only admin user can set.

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 H SERIES High-COP Type

No.	Item		Type: RXYQ12AH RXYQ14AH RXYQ16AH RXYQ18AH RXYQ20AH	RXYQ22AH	RXYQ24AH	RXYQ26AH RXYQ28AH RXYQ30AH RXYQ32AH RXYQ34AH RXYQ36AH
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)			KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H, KHRP26M73H (Max. 8 branch) (Max. 8 branch)
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T		KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T	
2	Pipe size reducer		–		KHRP26M73TP, KHRP26M73HP	
3	Outdoor unit multi connection piping kit		BHFP22P100	BHFP22P151		
4	Cool/Heat selector		KRC19-26A			

Option PCB

No.	Item	Type: RXYQ12AH RXYQ14AH RXYQ16AH	RXYQ18AH RXYQ20AH RXYQ22AH	RXYQ24AH RXYQ26AH RXYQ28AH	RXYQ30AH RXYQ32AH RXYQ34AH	RXYQ36AH
1	DIII-NET expander adaptor	DTA109A51				
2	External control adaptor	DTA104A61				
3	Modbus communication adaptor	DTA116A51				

VRV H SERIES Standard Type

No.	Item		Type: RXYQ6A RXYQ8A RXYQ10A	RXYQ12A RXYQ14A RXYQ16A	RXYQ18A RXYQ20A	RXYQ22A
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
3	Cool/Heat selector		KRC19-26A			

No.	Item		Type: RXYQ24A	RXYQ26A RXYQ28A RXYQ30A RXYQ32A RXYQ34A RXYQ36A	RXYQ38A RXYQ40A RXYQ42A RXYQ44A	RXYQ46A RXYQ48A RXYQ50A RXYQ52A	RXYQ54A RXYQ56A RXYQ58A RXYQ60A
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H (Max. 8 branch)	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			
4	Cool/Heat selector		KRC19-26A				

Option PCB

No.	Item	Type: RXYQ6A RXYQ8A RXYQ10A RXYQ12A	RXYQ14A RXYQ16A RXYQ18A RXYQ20A	RXYQ22A RXYQ24A	RXYQ26A RXYQ28A RXYQ30A RXYQ32A RXYQ34A RXYQ36A	RXYQ38A RXYQ40A RXYQ42A RXYQ44A RXYQ46A RXYQ48A	RXYQ50A RXYQ52A RXYQ54A RXYQ56A RXYQ58A RXYQ60A
1	DIII-NET expander adaptor ★	DTA109A51					
2	External control adaptor ★	DTA104A61					
3	Modbus communication adaptor ★	DTA116A51					
4	Option plate for control adaptor	–	BKS26A *1	–	BKS26A *1		

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

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

VRV R SERIES High-COP Type

No.	Item			Type: REYQ12TA REYQ14TA REYQ16TA REYQ18TA REYQ20TA	REYQ22TA	REYQ24TA	REYQ26TA REYQ28TA REYQ30TA	REYQ32TA REYQ34TA REYQ36TA
1	Distributive piping	3 Pipes	REFNET header	KHRP25M33H, KHRP25M72H (Max. 8 branch) (Max. 8 branch)			KHRP25M33H, KHRP25M72H (Max. 8 branch) (Max. 8 branch) KHRP25M73H (Max. 8 branch)	
			REFNET joint	KHRP25A22T, KHRP25A33T, KHRP25A72T		KHRP25A22T, KHRP25A33T, KHRP25A72T, KHRP25A73T		
		2 Pipes	REFNET header	KHRP26M33H, KHRP26M72H (Max. 8 branch) (Max. 8 branch)			KHRP26M33H, KHRP26M72H (Max. 8 branch) (Max. 8 branch) KHRP26M73H (Max. 8 branch)	
			REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T				
2	Pipe size reducer			KHRP25M72TP			KHRP25M72TP, KHRP25M73TP, KHRP26M73HP	
3	Outdoor unit multi connection piping kit			BHFP26P90	BHFP26P136			

Option PCB

No.	Item	Type: REYQ12TA REYQ14TA REYQ16TA	REYQ18TA REYQ20TA REYQ22TA	REYQ24TA REYQ26TA REYQ28TA	REYQ30TA REYQ32TA REYQ34TA	REYQ36TA
1	DIII-NET expander adaptor	DTA109A51				
2	External control adaptor	DTA104A61				

VRV R SERIES Standard Type

No.	Item			Type: REYQ6TA REYQ8TA REYQ10TA	REYQ12TA REYQ14TA REYQ16TA REYQ18TA REYQ20TA	REYQ22TA	REYQ24TA	REYQ26TA REYQ28TA REYQ30TA	REYQ32TA REYQ34TA REYQ36TA
1	Distributive piping	3 Pipes	REFNET header	KHRP25M33H (Max. 8 branch)	KHRP25M33H, KHRP25M72H, (Max. 8 branch) (Max. 8 branch)			KHRP25M33H, KHRP25M72H, (Max. 8 branch) (Max. 8 branch) KHRP25M73H (Max. 8 branch)	
			REFNET joint	KHRP25A22T, KHRP25A33T	KHRP25A22T, KHRP25A33T, KHRP25A72T		KHRP25A22T, KHRP25A33T, KHRP25A72T, KHRP25A73T		
		2 Pipes	REFNET header	KHRP26M33H (Max. 8 branch)	KHRP26M33H, KHRP26M72H (Max. 8 branch) (Max. 8 branch)			KHRP26M33H, KHRP26M72H (Max. 8 branch) (Max. 8 branch) KHRP26M73H (Max. 8 branch)	
			REFNET joint	KHRP26A22T, KHRP26A33T	KHRP26A22T, KHRP26A33T, KHRP26A72T				
2	Pipe size reducer			–	KHRP25M72TP			KHRP25M72TP, KHRP25M73TP, KHRP26M73HP	
3	Outdoor unit multi connection piping kit			–	BHFP26P90				

No.	Item			Type: REYQ38TA REYQ40TA REYQ42TA	REYQ44TA REYQ46TA REYQ48TA	REYQ50TA REYQ52TA REYQ54TA	REYQ56TA REYQ58TA REYQ60TA
1	Distributive piping	3 Pipes	REFNET header	KHRP25M33H, KHRP25M72H, KHRP25M73H (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
			REFNET joint	KHRP25A22T, KHRP25A33T, KHRP25A72T, KHRP25A73T			
		2 Pipes	REFNET header	KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
			REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T			
2	Pipe size reducer			KHRP25M72TP, KHRP25M73TP, KHRP26M73HP			
3	Outdoor unit multi connection piping kit			BHFP26P136			

Option PCB

No.	Item	Type: REYQ6TA REYQ8TA REYQ10TA REYQ12TA	REYQ14TA REYQ16TA REYQ18TA REYQ20TA	REYQ22TA REYQ24TA	REYQ26TA REYQ28TA REYQ30TA REYQ32TA REYQ34TA REYQ36TA	REYQ38TA REYQ40TA REYQ42TA REYQ44TA REYQ46TA REYQ48TA	REYQ50TA REYQ52TA REYQ54TA REYQ56TA REYQ58TA REYQ60TA
1	DIII-NET expand adaptor ★	DTA109A51					
2	External control adaptor ★	DTA104A61					
3	Option plate for control adaptor	–	BKS26A *1	–	BKS26A *1		

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

Option List

Outdoor Units

VRV IV S SERIES Heat Pump

No.	Item \ Type	RXYMQ3A	RXYMQ4A	RXYMQ5A	RXYMQ6A	RXYMQ8A	RXYMQ9A
1	Cool/Heat selector	KRC19-26A				–	
1-1	Fixing box	KJB111A				–	
2	REFNET header	KHRP26M22H (Max. 4 branch)					
		KHRP26M33H (Max. 8 branch)					
3	REFNET joint	KHRP26A22T				KHRP26A22T, KHRP26A33T	
4	Central drain plug	KKPJ5G280			KKPJ5F180	KKPJ5G280	
5	Fixture for preventing overturning	KKTP5B112			KPT-60B160	KKTP5B112	
6	Wire fixture for preventing overturning	–			K-KYZP15C		

VRV IV Q SERIES Heat Pump (Standard Type)

No.	Item \ Type		RQYQ6T(E) RQYQ8T(E) RQYQ10T(E)	RQYQ12T(E) RQYQ14T(E) RQYQ16T(E)
1	Distributive piping	REFNET header	KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)
		REFNET joint	KHRP26A22T KHRP26A33T	KHRP26A22T, KHRP26A33T, KHRP26A72T
2	Cool / Heat selector		KRC19-26A	

No.	Item \ Type		RQYQ18TN(E) RQYQ20TN(E)	RQYQ22TN(E)	RQYQ24TN(E) RQYQ26TN(E)	RQYQ28TN(E) RQYQ30TN(E) RQYQ32TN(E)
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H (Max. 4 branch) (Max. 8 branch), KHRP26M72H (Max. 8 branch)		KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H, KHRP26M73H (Max. 8 branch) (Max. 8 branch)	
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T		KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T	
2	Pipe size reducer		–		KHRP26M73TP, KHPR26M73HP	
3	Outdoor unit multi connection piping kit		BHFP22P100			
4	Cool / Heat selector		KRC19-26A			

No.	Item \ Type		RQYQ34TN(E) RQYQ36TN(E)	RQYQ38TN(E) RQYQ40TN(E)	RQYQ42TN(E) RQYQ44TN(E)	RQYQ46TN(E) RQYQ48TN(E)
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, KHPR26M73HP			
3	Outdoor unit multi connection piping kit		BHFP22P151			
4	Cool / Heat selector		KRC19-26A			

VRV IV Q SERIES Heat Pump (Space Saving Type)

No.	Item \ Type		RQYQ18T(E) RQYQ20T(E)
1	Disinbutive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max.4 branch) (Max.8 branch) (Max.8 branch)
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T
2	Cool / Heat selector		KRC19-26A

No.	Item \ Type		RQYQ30TS(E) RQYQ32TS(E) RQYQ34TS(E) RQYQ36TS(E) RQYQ38TS(E) RQYQ40TS(E)
1	Disinbutive 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 connection piping kit		BHFP22P100
4	Cool / Heat selector		KRC19-26A

No.	Item \ Type		RQYQ42TS(E) RQYQ44TS(E) RQYQ46TS(E) RQYQ48TS(E)
1	Disinbutive 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 connection piping kit		BHFP22P151
4	Cool / Heat selector		KRC19-26A

VRV IIIQ Heat Recovery

No.	Item \ Type		RQCEQ280P RQCEQ360P	RQCEQ460P RQCEQ500P	RQCEQ540P RQCEQ636P	RQCEQ712P RQCEQ744P RQCEQ816P RQCEQ848P
1	Distributive piping	REFNET header	KHRP25M33H (Max. 8 branch) KHRP25M72H (Max. 8 branch) KHRP25M73H (Max. 8 branch) KHRP26M22H (Max. 4 branch) KHRP26M33H (Max. 8 branch)		KHRP25M33H (Max. 8 branch) KHRP25M72H (Max. 8 branch) KHRP25M73H (Max. 8 branch) KHRP26M22H (Max. 4 branch) KHRP26M33H (Max. 8 branch)	KHRP25M33H (Max. 8 branch) KHRP25M72H (Max. 8 branch) KHRP25M73H (Max. 8 branch) KHRP26M22H (Max. 4 branch) KHRP26M33H (Max. 8 branch) KHRP26M72H (Max. 8 branch)
		REFNET joint	KHRP25A22T (Max. 4 branch) KHRP25A33T (Max. 8 branch) KHRP25A72T (Max. 8 branch) KHRP26A22T (Max. 4 branch) KHRP26A33T (Max. 8 branch)		KHRP25A22T (Max. 4 branch) KHRP25A33T (Max. 8 branch) KHRP25A72T (Max. 8 branch) KHRP25A73T (Max. 8 branch) KHRP26A22T (Max. 4 branch) KHRP26A33T (Max. 8 branch)	KHRP25A22T (Max. 4 branch) KHRP25A33T (Max. 8 branch) KHRP25A72T (Max. 8 branch) KHRP25A73T (Max. 8 branch) KHRP26A22T (Max. 4 branch) KHRP26A33T (Max. 8 branch) KHRP26A72T (Max. 8 branch)
2	Outdoor unit multi connection piping kit		BHFP26P36C	BHFP26P63C		BHFP26P84C
3	Digital pressure gauge kit		BHGP26A1×2	BHGP26A1×3		BHGP26A1×4

VRV IV W SERIES Heat Pump / Heat Recovery

No.	Item \ Type		RWEYQ6T RWEYQ8T RWEYQ10T RWEYQ12T	RWEYQ14T RWEYQ16T RWEYQ18T RWEYQ20T RWEYQ22T RWEYQ24T	RWEYQ26T RWEYQ28T RWEYQ30T RWEYQ32T RWEYQ34T RWEYQ36T
1	Cool/heat selector		KRC19-26A (Applies to heat pump type only)		
1-1	Fixing box		KJB111A (Applies to heat pump type only)		
2	Distributive piping	REFNET header	KHRP25M33H (Max. 8 branch), KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch)	KHRP25M33H (Max. 8 branch), KHRP25M72H (Max. 8 branch), KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch), KHRP26M72H (Max. 8 branch)	KHRP25M33H (Max. 8 branch), KHRP25M72H (Max. 8 branch), KHRP25M73H (Max. 8 branch), KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch), KHRP26M72H (Max. 8 branch), KHRP26M73H (Max. 8 branch)
		REFNET joint	KHRP25A22T, KHRP25A33T, KHRP26A22T, KHRP26A33T	KHRP25A22T, KHRP25A33T, KHRP25A72T, KHRP26A22T, KHRP26A33T, KHRP26A72T	KHRP25A22T,KHRP25A33T, KHRP25A72T, KHRP25A73T, KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T
3	Outside unit multi connection piping kit	For heat pump	–	BHFP22MA56	BHFP22MA84
		For heat recovery	–	BHFP26MA56	BHFP26MA84
4	External control adaptor		DTA104A62		
5	Strainer kit		BWU26A15, BWU26A20		

Note: ★1 In the case of heat recovery system, cool/heat selector cannot be connected.

VRV IV W SERIES Strainer kit specifications

Model		BWU26A15	BWU26A20
Pressure resistance	MPa	1.47	1.96
Mesh size		50	50
Connection diameter		PT1 1/4B internal thread	PT1 1/4B internal thread

VRV WS SERIES

No.	Item \ Type		RWQ3A	RWQ4A	RWQ5A	RWQ6A
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H (Max. 4 branch) (Max. 8 branch)			
		REFNET joint	KHRP26A22T			

VRV Indoor Units

Ceiling Mounted Cassette (Round Flow with Sensing) Type

No.	Item		Type	FXFSQ25A FXFSQ32A FXFSQ40A	FXFSQ50A FXFSQ63A FXFSQ80A	FXFSQ100A FXFSQ125A FXFSQ140A
1	Decoration panel	Standard panel with sensing	Fresh white	BYCQ125EEF		
			Black	BYCQ125EEK		
2	Sealing material of air discharge outlet [1]		For usage of 3-, 4-way flow	KDBH551C160		
			For usage of 2-way flow	KDBH552C160		
3	Panel spacer			KDB55J160F		
4	Fresh air intake kit		Chamber type [2,3] Without T-duct joint	KDDP55B160 (Components: KDDP55C160-1, KDDP55B160-2) [5]		
			Chamber type [2,3] With T-duct joint	KDDP55B160K (Components: KDDP55C160-1, KDDP55B160K2) [5]		
			Direct installation type [4]	KDDP55X160A		
5	High-efficiency filter unit [6] (Including filter chamber)		(Colorimetric method 65%)	KAF556D80		KAF556D160
			(Colorimetric method 90%)	KAF557D80		KAF557D160
6	Replacement high-efficiency filter [6,7]		(Colorimetric method 65%)	KAF552D80		KAF552D160
			(Colorimetric method 90%)	KAF553D80		KAF553D160
7	Filter chamber			KDDFP55C160		
8	Replacement long-life filter			KAF5511D160		
9	Ultra long-life filter unit (Including filter chamber) [6]			KAF555D160		
10	Replacement ultra long-life filter [6,7]			KAF550D160		
11	Branch duct chamber [1]			KDJP55C80		KDJP55C160
12	Insulation kit for high humidity [6,8]			KDTP55K80A		KDTP55K160A

Note: 1.Circulation airflow is not available with this option.
2.When installing a fresh air intake kit (chamber type), two air outlet corners are closed.
3.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.
4.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.
5.Please order using the names of both components instead of set name.
6.This option cannot be installed to designer panel and auto grille panel.
7.Filter chamber is required.
8.Please use in case temperature/humidity inside ceiling may get over 30˚C, 80% RH.

Ceiling Mounted Cassette (Round Flow) Type

No.	Item		Type	FXFQ25P FXFQ32P FXFQ40P FXFQ50P FXFQ63P FXFQ80P	FXFQ100P FXFQ125P
1	Decoration panel			BYCP125K-W1	
2	Sealing material of air discharge outlet			KDBH55K160F	
3	Panel spacer			KDB55J160F	
4	Filter related	High efficiency filter unit 65%		KAF556D80	KAF556D160
		High efficiency filter unit 90%		KAF557D80	KAF557D160
		Replacement high efficiency filter 65%		KAF552D80	KAF552D160
		Replacement high efficiency filter 90%		KAF553D80	KAF553D160
		Filter chamber		KDDFP55C160	
		Long life replacement filter		KAF5511D160	
		Ultra long-life filter unit		KAF555D160	
		Replacement ultra long-life filter		KAF550D160	
5	Fresh air intake kit	Chamber type	Without T-duct joint	KDDP55B160 (Components: KDDP55C160-1, KDDP55B160-2) *1	
			With T-duct joint	KDDP55B160K (Components: KDDP55C160-1, KDDP55B160K2) *1	
		Direct installation type		KDDP55X160A	
6	Branch duct chamber			KDJP55B80	KDJP55B160
7	Chamber connection kit			KKSJ55K160	
8	Insulation kit for high humidity			KDTP55K80A	KDTP55K160A

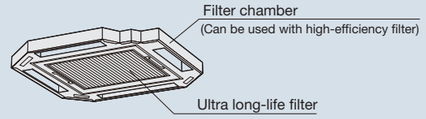
Note: *1. Please order using the names of both components instead of set name.

Options of Ceiling Mounted Cassette (Round Flow with Sensing) 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

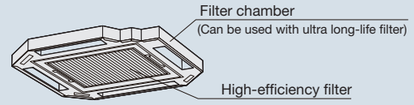
*For dust concentration of 0.3 mg/m³ (Requires separately sold Air purifier.)
1 year (Approx. 5,000 hr) ≒15 hr/day x 28 day/month x 12 month/year

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

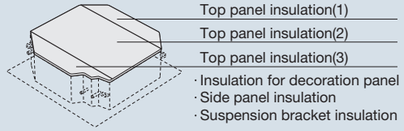
High-efficiency filter unit

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



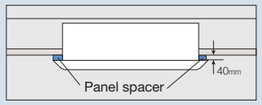
Insulation kit for high humidity

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

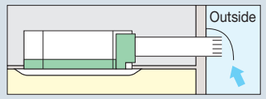
Sealing material block air discharge openings not used in 2-way or 3-way blow.

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

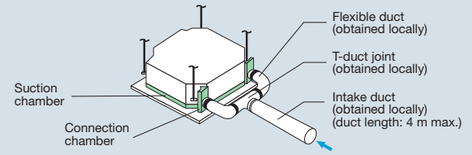
Using this kit, a duct can be connected to take in outdoor air. There are two chamber types that have intake in two places: with T-duct joint and without T-duct joint.



The units can be installed in the following different ways

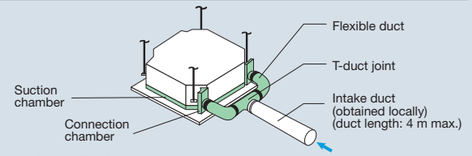
Chamber type (without T-duct joint) Note 3, 4, 5

KDDP55B160



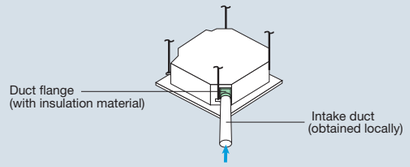
Chamber type (with T-duct joint) Note 3, 4, 5

KDDP55B160K



Direct installation type Note 6

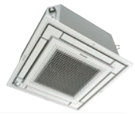
KDDP55X160A



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

VRV Indoor Units



Ceiling Mounted Cassette (Compact Multi Flow) Type

No.	Item	Type	FXZQ20A2	FXZQ25A2	FXZQ32A2	FXZQ40A2	FXZQ50A2
1	Decoration panel		BYFQ60C2W1W				
2	Sealing material of air discharge outlet		BDBHQ44C60				
3	Sensor kit		BRYQ60A2W				
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		KAFP551K160	

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

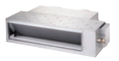
No.	Item	Type	FXEQ20A FXEQ25A FXEQ32A FXEQ40A	FXEQ50A FXEQ63A
1	Decoration panel		BYEP40AW1	BYEP63AW1

Slim Ceiling Mounted Duct Type (Compact Series)

No.	Item	Type	FXDQ20T FXDQ25T FXDQ32T	FXDQ40T FXDQ50T	FXDQ63T
1	3-D Auto Swing Discharge Grille		BDG20A09	BDG20A15	BDG20A20
2	Auto Clean Air Filter Module		BAE20A62	BAE20A82	BAE20A102

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



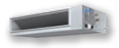
Ceiling Concealed (Duct) Type

No.	Item	Type	FXDYQ80MA	FXDYQ100MA	FXDYQ125MA	FXDYQ145MA
1	Run/fault status PCB		KRP1B5X			

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.



Ceiling Mounted Duct Type

No.	Item		FXMQ20PA FXMQ25PA FXMQ32PA	FXMQ40PA	FXMQ50PA FXMQ63PA FXMQ80PA	FXMQ100PA FXMQ125PA FXMQ140PA	FXMQ160P FXMQ180P FXMQ200P FXMQ250P
1	Drain pump kit		–				BDU37A250
2	High efficiency filter	65%	KAF372AA36	KAF372B56	KAF372B80	KAF372B160	–
		90%	–	KAF373B56	KAF373B80	KAF373B160	
3	Filter chamber		–	KDDF37AA56	KDDF37AA80	KDDF37AA160	
4	Long life replacement filter		–	KAF371B56	KAF371B80	KAF371B160	
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	

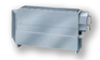
Wall Mounted Type

No.	Item	Type	FXAQ20A FXAQ25A FXAQ32A FXAQ40A	FXAQ50A FXAQ63A
1	Drain pump kit		K-KDU572EVE	
2	External EV kit (for heating operation) *1		BEV15D	BEV30D

Note: *1. This option is only effective for reducing operation sound during heating operation. Therefore it is ineffective when connected to cooling only outdoor units.

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

Residential Indoor Units with Connection to BP Units

Ceiling Mounted Cassette (Compact Multi Flow) Type

No.	Item \ Type	FFQ25B	FFQ35B	FFQ50B	FFQ60B
1	Decoration panel	BYFQ60B3W1			
2	Replacement long-life filter	KAF441C60			
3	Fresh air intake kit (Direct installation type)	KDDQ44XA60			
4	Sealing material for air discharge outlet	KDBH44BA60			
5	Panel spacer	KDBQ44BA60A			

Slim Ceiling Mounted Duct Type

No.	Item \ Type	FDXS25C	FDXS35C	FDXS50C	FDXS60C
1	Insulation kit for high humidity	KDT25N50			KDT25N63

Wall Mounted Type

No.	Item \ Type	FTXS20K	FTXS25K	FTXS35K	FTXS50KA	FTXS60KA	FTXS71KA
1	Titanium apatite deodorising filter	KAF970A46					

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

BP Units for Connection to Residential Indoor Units

No.	Item \ Type	BPMKS967A3	BPMKS967A2
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.

BS Units for Heat Recovery

Individual BS Unit

No.	Item \ Type	BSQ100A	BSQ160A	BSQ250A
1	Quiet kit	KDDN26A1		
2	External control adaptor for outdoor units	DTA104A61		
3	Adaptor for multi tenant	DTA114A61		

Centralised BS Unit

No.	Item \ Type	BS4Q14A	BS6Q14A	BS8Q14A	BS10Q14A	BS12Q14A	BS16Q14A
1	Closed pipe kit	KHFP26A100C					
2	Joint kit	KHRP26A250T					
3	Quiet kit	KDDN26B4	KDDN26B8		KDDN26B12		KDDN26B16

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-P	FXZQ-A2	FXUQ-A	FXCQ-A	FXEQ-A	FXDQ-T	FXDQ-PD FXDQ-ND
1	"Nav Ease" remote controller	BRC1E63 Note 5	BRC1E63		BRC1E63 Note 5	BRC1E63	BRC1F61	BRC1E63	
2	Simplified remote controller	—	BRC2E61						
3	Wireless remote controller	BRC7M634F (Fresh White) / BRC7M634K (Black)	BRC7M634F	BRC7E530W	BRC7CB58	BRC7M65	BRC4M61	BRC4C65	
4-1	Adaptor for wiring (operation status output)	★BRP11B62	—					—	★BRP11B61
4-2	Adaptor for wiring	★KRP1C11A	★KRP1C63	★KRP1BA57	—	★KRP1B61	—	★KRP1C64	★KRP1B56
5-1	Wiring adaptor for electrical appendices (1)	—	★KRP2A62	★KRP2A526	—	★KRP2A61	—	★KRP2A61	★KRP2A53
5-2	Wiring adaptor for electrical appendices (2)	★KRP4AA53				★KRP4AA51	—	★KRP4AA51	★KRP4A54
6	Remote sensor (for indoor temperature)	KRCS01-5B	BRCS01A-4			BRCS01A-1	BRCS01A-4		BRCS01A-1
7	Installation box for adaptor PCB☆	Note 2, 3 KRP1H98A	Note 4 KRP1BA101	KRP1BA97		Note 2, 3 KRP1B96	—	BRP9A90	Note 4 KRP1BA101
8	External control adaptor for outdoor unit	★DTA104A62			—	★DTA104A61	—	★DTA104A61	★DTA104A53
9	Adaptor for multi tenant	★DTA114A61			—				
10	Multi tenancy kit	—						Note 2 KRP114A3	—

No.	Item \ Type	FXDYQ-MA	FXSQ-PA	FXMQ-PA	FXMQ-P	FXHQ-MA	FXHQ-A	FXAQ-A	FXLQ-MA FXNQ-MA
1	"Nav Ease" remote controller	BRC1E63							
2	Simplified remote controller	BRC2E61							
3	Wireless remote controller	BRC4C62	BRC4C65			BRC7EA63W	BRC7M53	BRC7M675	BRC4C62
4-1	Adaptor for wiring (operation status output)	—	★BRP11B62		—	★BRP11B61		—	BRP11B62
4-2	Adaptor for wiring	KRP1B61	★KRP1C64		★KRP1C67	KRP1BA54		—	KRP1B61
5-1	Wiring adaptor for electrical appendices (1)	KRP2A61	★KRP2A61		★KRP2A62		—	★KRP2A61	KRP2A61
5-2	Wiring adaptor for electrical appendices (2)	KRP4AA51	★KRP4AA51		★KRP4AA52			★KRP4AA51	KRP4AA51
6	Remote sensor (for indoor temperature)	BRCS01A-1	BRCS01A-4		BRCS01-6B	BRCS01A-1	BRCS01A-4	BRCS01A-1	
7	Installation box for adaptor PCB☆	—	Note 2, 3 KRP4A98	Note 2, 3 KRP4A97	BRP9A90	Note 3 KRP1CA93	Note 3 KRP1D93A	Note 2, 3 KRP4AA93	—
8	External control adaptor for outdoor unit	DTA104A61	★DTA104A61		—	★DTA104A62		★DTA104A61	DTA104A61
9	Adaptor for multi tenant	—		★DTA114A61		—		★DTA114A61	—

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. 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.

New

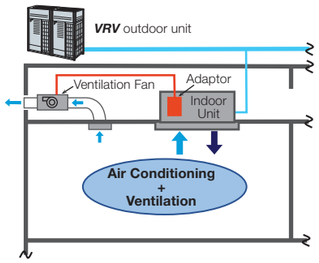
Adaptor for wiring
(operation status output)

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.



Control Systems

Operation Control System Optional Accessories

For residential indoor unit use

No.	Item \ Type		FFQ-B	FDXS-C	FTXS-K(A)
1	Remote controller	Wired Note 1	BRC1E63	BRC944B2 Note 2	
		Wireless	BRC7E530W	– Note 3	
2	Wired remote controller cord	Length 3 m (shielded wire)	–	BRCW901A03	
		Length 8 m (shielded wire)	–	BRCW901A08	
3	Adaptor for wiring		Note 4 KRP1BA57	–	
4	Wiring adaptor for electrical appendices		Note 4 KRP4AA53	–	
5	Installation box for adaptor PCB		KRP1BA101	–	
6	Remote sensor (for indoor temperature)		BRCS01A-1	–	
7	Wiring adaptor for time clock/remote controller Note 5 (Normal open pulse contact/normal open contact)		–	KRP413BB1S	
8	Remote controller loss prevention chain		–	KKF917A4	KKF910A4
9	Interface adaptor for DIII-NET use		DTA112BA51	KRP928BB2S	

Note: 1. Wiring for wired remote controller should be obtained locally.
2. 3 m (BRCW901A03) or 8 m (BRCW901A08) length wired remote controller cord is necessary.
3. A wireless remote controller is a standard accessory for FDXS and FTXS models.
4. Installation box for adaptor PCB (KRP1BA101) is necessary.
5. Time clock and other devices should be obtained locally.

System Configuration

No.	Item \ Type		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 14 class 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		*8 Modbus® Communication 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 14 class 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.
*8. Cannot apply for ***VRV*** R series.

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 assistance

For consultants and architects

Combines energy efficiency and comfort

CFD simulation to optimise outdoor unit layouts

Design flexibility

Model selection

Drawing materials support

Sales proposals

For air conditioning engineers and dealers

Model selection

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.

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).

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.

Specifications, designs and other content appearing in this brochure are current as of June 2019 but subject to change without notice.