DAIKIN

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.

Dealer

PT. DAIKIN AIRCONDITIONING INDONESIA

HEAD OFFICE :
Wisma KEIAI 18th Floor
Jl. Jendral Sudirman Kav. 3, Jakarta Pusat 10220
Telp : +6221 5724 377
Fax : +6221 5724 366/55
Website : www.daikin.co.id

Management System ISO 9001:2008
TÜVRheinland CERTIFIED
www.tuv.com ID 9105084313

• **SERVICE AND SPARE PARTS : Rempoa**, Telp. : 021-736 92899 **I Cirebon**, Telp. : 0231-880 2760 **Samarinda**, Telp. : 0541-252 2889 **I Banjarmasin**, Tlp. : 0511-326 8168
• **TRAINING CENTER : Sunter**, Telp. : 021-295 61950 • **BRANCH : Bekasi**, Telp. :021-294 50585 **Tangerang**, Telp. : 021-531 41195 **I Bandung**, Telp. : 022-522 5150 **I Semarang**, Telp. : 024-841 2695 **Yogyakarta**, Telp. : 0274-551 321 **I Surabaya**, Telp. : 031-503 1138 **I Denpasar**, Telp. : 0361-900 5514 **Makassar**, Telp. : 0411-446 263 **I Palembang**, Telp. : 0711-573 2282 **I Pekanbaru**, Telp. : 0761-561 139 **Medan**, Telp. : 061-4200 8866

Daikin Contact Center : 0800 1 081 081 (Toll Free)

DAIKIN CONTACT CENTER
0800 1 081 081
BEBAS PULSA
365 hari/tahun
Jam Beroperasi :
Senin - Jumat :
07:00 – 19:00 WIB
Sabtu - Minggu & Libur Nasional :
08:00 – 17:00 WIB

•Specifications, designs and other content appearing in this brochure are current as of May 2018 but subject to change without notice.

DAIKIN

VRV General Catalogue

Cooling Only 50 Hz

DAIKIN

PCVID1815A

Exceeding Boundari es with Innovative Energy Sa vings

New

*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** X and A series. By combining the tec hnologies of **VRV**, VRT and VAV, we have attained both energy savings and comfortable air conditioning.*

VRV+VRT +VAV

VRV X

VRV A

VRV X series / A series movie

Energy savings

Uniting ***VRV***, VRT and VAV technologies

Automatic refrigerant charge function

- Optimised operation efficiency
- Higher installation quality
- Easier installation

High reliability

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

Contents

Background 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 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

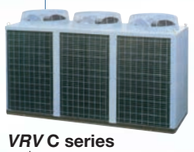
'17

'18

***VRV* D series**
-Cooling only-

***VRV* F series**
-Cooling only-

***VRV* G series**
-Heat recovery-



***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* K series**

***VRV* KA series**

***VRV* II-S series**

***VRV* III-S series**

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

***VRV* III series**

***VRV* II MA series**

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

***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* A series**
-Cooling only-

***VRV* X series**
-Cooling only-

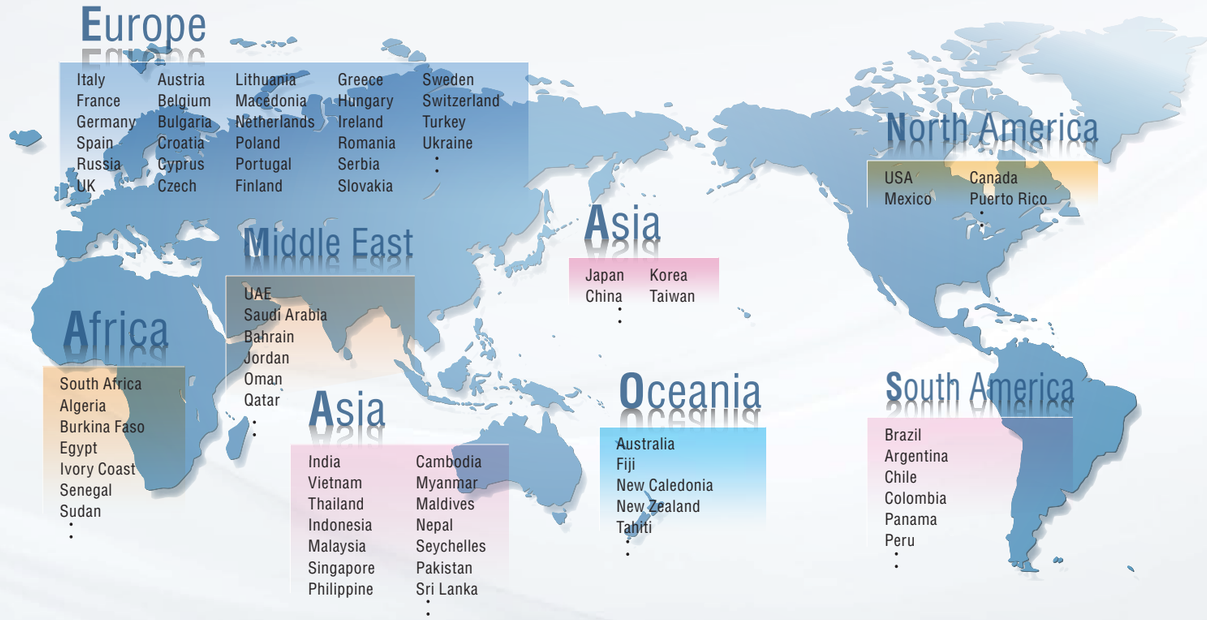
VRV

General Catalogue

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

Expansion of the country of sale

Sales is undergoing in more than 70 countries



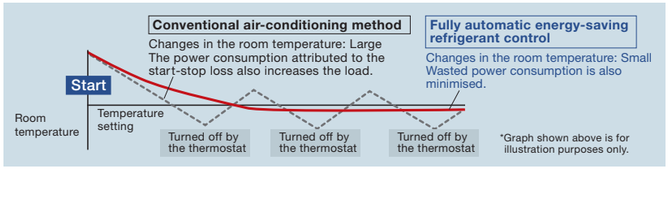
VRV User Benefits

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

Energy saving & comfortable environment

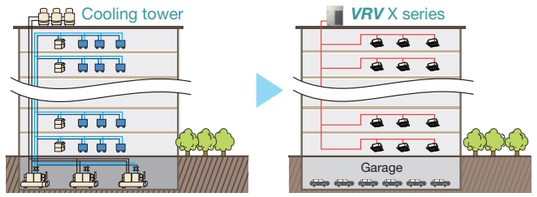
Based on the idea of using only as much space as absolutely required, Daikin first launched its commercial multi-split air conditioning systems in 1982. Since then, customers have benefitted from much increased energy efficiency. Now, our revolutionary new systems dramatically reduce energy with VRT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

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



Efficient space utilisation

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



High reliability

Double backup operation

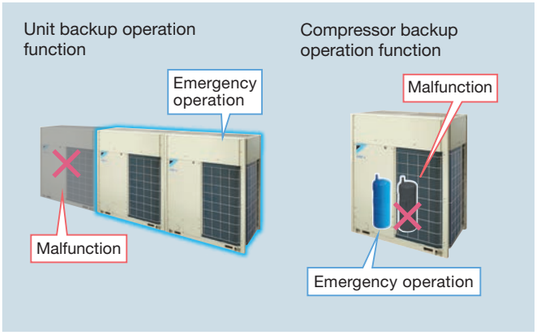
Daikin ***VRV*** outdoor unit goes beyond just highly reliable compressors with a backup system that ensures continued operation.

Unit backup

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

Compressor backup

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

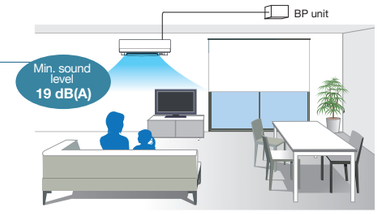


Comfortable environment

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

Residential indoor units

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

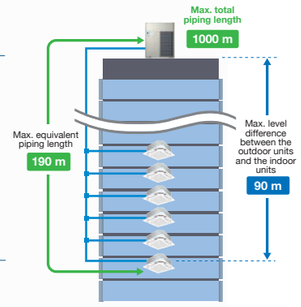


Varied lineup of models

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

Long piping provides more flexible system design

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



Compatible with engineering software

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

Energy efficient

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

Automatic refrigerant charge function

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

Lightweight and compact large-capacity single units

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

Simple piping, easy wiring

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

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 X

P.11

Cooling Only

New

RXUQ-A

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

New heights in energy efficiency during actual operation

The ***VRV*** X series features new models specially developed for higher efficiency. All compressors used in outdoor units are new scroll compressors designed to enhance energy efficiency.

Lineup

HP	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
Single outdoor units	●	●	●	●	●	●	●	●																				
Double outdoor units				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
Triple outdoor units							●	●											●	●	●	●	●	●	●	●	●	●

VRV A

P.29

Cooling Only

New

RXQ-A

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

Achieves space saving & excellent performance to meet the needs in various buildings

The new ***VRV*** A 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

HP	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
Single outdoor units	●	●	●	●	●	●	●	●																				
Double outdoor units							●	●	●	●	●	●	●	●	●	●	●	●										
Triple outdoor units																			●	●	●	●	●	●	●	●	●	●

VRV IV S SERIES

P.45

Cooling Only

RXMQ-A

4-6 HP 1-phase, 220 V, 50 Hz

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

Especially designed for residential houses, small offices and shops

VRV IV S series 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 5 models to suit your needs.

Lineup

HP	4	5	6	8	9
Cooling Only	●	●	●	●	●

VRV IV Q SERIES

P.55

Cooling Only

RQQ-T

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

For quick & high quality replacement use

VRV IV 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

HP	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							●	●					●	●	●	●	●	●	●	●	●	●

VRV IV W SERIES

P.75

Cooling Only

RWEYQ-T

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

Water cooled system suitable for tall multi-storied buildings

Water cooled ***VRV*** IV 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

HP	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Cooling Only	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

VRV IV HEAT RECOVERY HOT WATER SYSTEM

P.95

Cooling Only

RWHQ-T

HWHQ30A

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

Comfortable air conditioning and energy-efficient hot water heating

This energy-efficient, multifunction system recovers waste heat generated by air conditioning, as energy to heat water. It is suitable for different business applications and provides flexible combination of ***VRV*** IV indoor units achieving comfort and aesthetic.

Lineup

HP	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
High-COP Type				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
Standard Type	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Space Saving Type							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					

Wide range indoor unit lineup creating various comfortable airflow

VRV indoor units

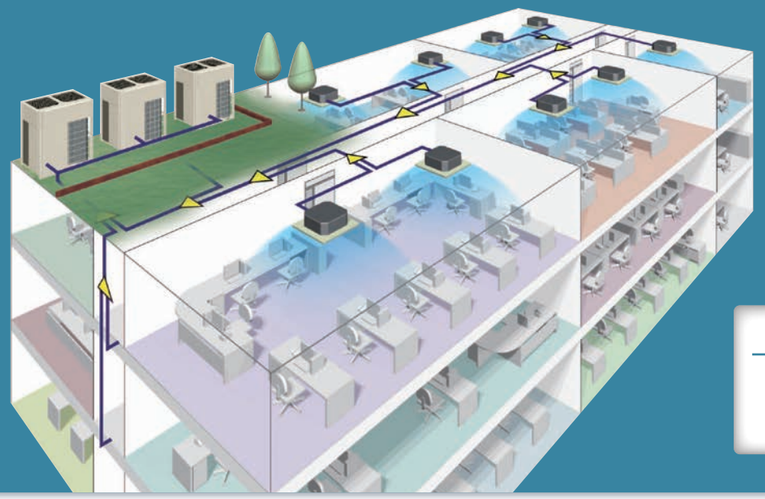
● New lineup

Type	Model Name		20	25	32	40	50	63	80	100	125	140	200	250	400	500
		Capacity Range	0.8 HP	1 HP	1.25 HP	1.6 HP	2 HP	2.5 HP	3.2 HP	4 HP	5 HP	6 HP	8 HP	10 HP	16 HP	20 HP
		Capacity Index	20	25	31.25	40	50	62.5	80	100	125	140	200	250	400	500
Ceiling Mounted Cassette (Round Flow with Sensing)	New FXFSQ-AV4			●	●	●	●	●	●	●	●	● New capacity				
Ceiling Mounted Cassette (Round Flow)	New FXFQ-AV4			●	●	●	●	●	●	●	●	● New capacity				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE4		●	●	●	●	●									
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE4		●	●	●	●	●	●	●		●					
Ceiling Mounted Cassette Corner	FXKQ-MAVE4			●	●	●		●								
Slim Ceiling Mounted Duct (Standard Series)	New FXDQ-PDVE4 (with drain pump)	(700mm width type)	●	●	●											
	New FXDQ-PDVT4 (without drain pump)		●	●	●											
	New FXDQ-NDVE4 (with drain pump)	(900 / 1,100mm width type)				●	●	●								
	New FXDQ-NDVT4 (without drain pump)					●	●	●								
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV14		●	●	●	●	●	●								
Middle Static Pressure Ceiling Mounted Duct	New FXSQ-PAV4		●	●	●	●	●	●	●	●	●	●				
Ceiling Mounted Duct	New FXMQ-PAV4		●	●	●	●	●	●	●	●	●	●				
	FXMQ-MVE4												●	●		
Outdoor-Air Processing Unit	FXMQ-MFV7										●		●	●		
Ceiling Suspended	FXHQ-MAV7				●			●		●						
Wall Mounted	FXAQ-PVE4		●	●	●	●	●	●								
Floor Standing	FXLQ-MAVE4		●	●	●	●	●	●								
Concealed Floor Standing	FXNQ-MAVE4		●	●	●	●	●	●								
Floor Standing Duct	FXVQ-NY14										●		●	●	●	●
Clean Room Air Conditioner	FXBQ-PVE4					●	●	●								
	FXBPQ-PVE4							●								
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h													
Air Handling Unit	AHUR		6–120 HP													

Residential indoor units with connection to BP units

Type	Model Name	Rated Capacity (kW)	25	35	50	60	71
		Capacity Index	25	35	50	60	71
Slim Ceiling Mounted Duct	FDKS-EVMB4	(700 mm width type)	●	●			
	FDKS-CVMB4	(900/1,100 mm width type)	●	●	●	●	
Wall Mounted	FTKJ-NVM4W		●	●	●		
	FTKJ-NVM4S		●	●	●		
	FTKS-DVM4		●	●			
	FTKS-FVM4				●	●	●

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



New
RXUQ-A

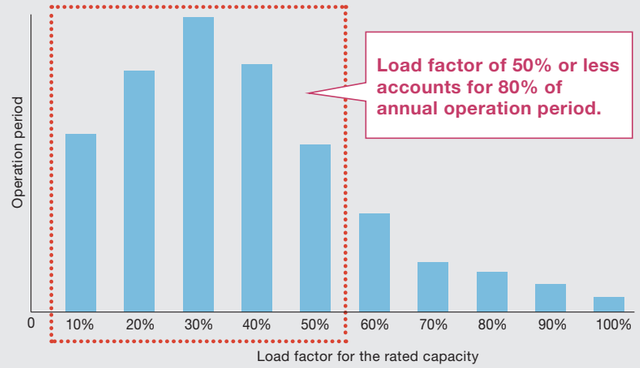
Cooling Only
6 HP - 60 HP
(16 kW) (168 kW)

Greater energy savings during low-load operation

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

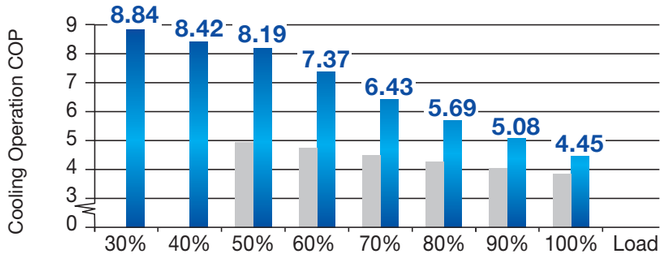
Using data gathered from actual operation, Daikin discovered that air conditioning systems operate at a load factor of 50% or less for 80% of their annual operation period.
This inspired us to develop new technologies to enhance energy efficiency during low-load operation.
Utilising these technologies,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

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



Higher Coefficient of Performance (COP)

COP for 10 HP



Annual power consumption
20%* lower

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

VRV IV (RXQ10T)
VRV X

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

Advanced technologies for greater energy savings

VRV+VRT+VAV

VRV X SERIES

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

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

Software technology

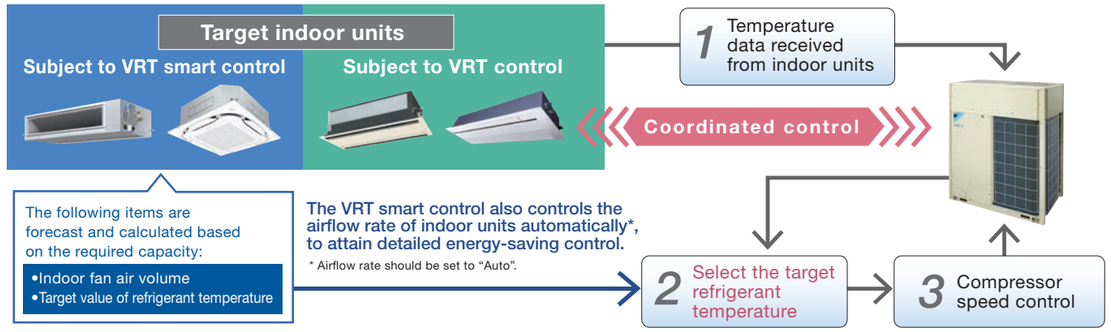
Optimally supply only for the needed capacity of indoor units

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

Variable Refrigerant Temperature

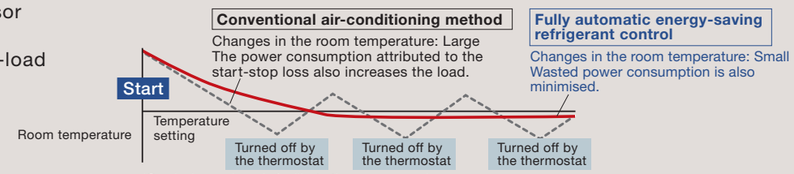
VRT Smart Control Function movie

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



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

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



*Graph shown above is for illustration purposes only.

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

Optimum utilisation of VRT Smart Control and VRT Control

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

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

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

New Scroll Compressor

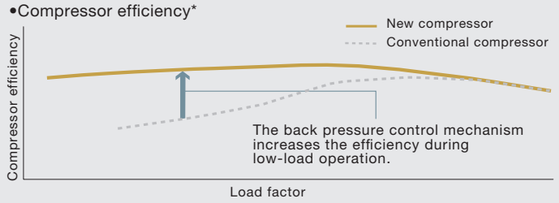
Available on all models

Hardware technology

Refrigerant leakage is minimised during low-load operation.

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

•Compressor efficiency*



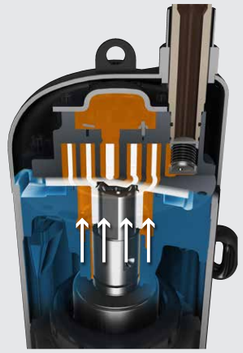
*Graph shown above is for illustration purposes only.

New Scroll Compressor movie

Back pressure control mechanism

Conventional mechanism

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

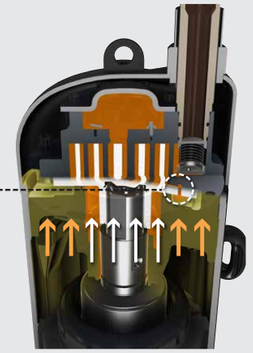


The force pressing the movable scroll decreases during low-load operation.

New

New intermediate pressure mechanism

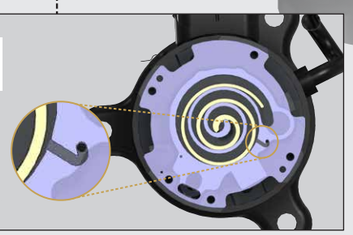
The force pressing the movable scroll is optimised according to operating conditions. The behavior of the movable scroll has been stabilised to increase efficiency during low-load operation.



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

Intermediate pressure adjustment port

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



Advanced oil temperature control

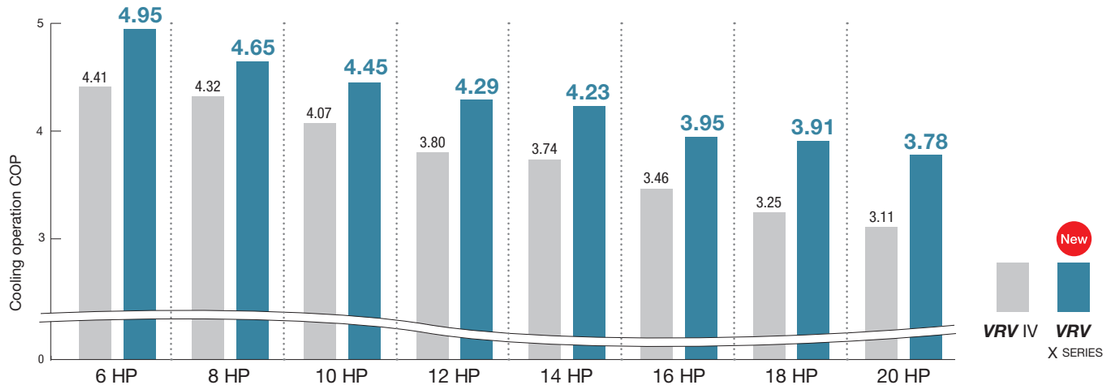
Standby power consumption is reduced

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

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

Higher efficiency is provided during rated operation.

COP at 100% operation load



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

Extensive product lineup

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

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

Lineup

New lineup

HP		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
VRV X SERIES	Single outdoor units	●	●	●	●	●	●	●	●																				
	Double outdoor units				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
	Triple outdoor units							●	●											●	●	●	●	●	●	●	●	●	●

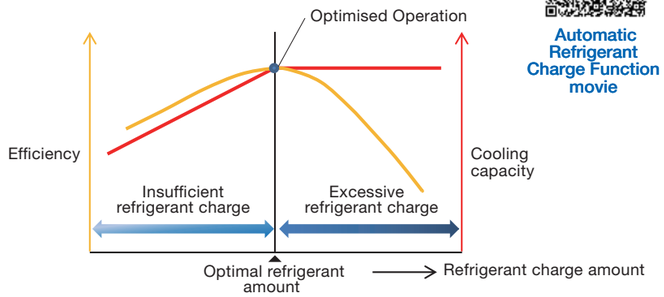
Automatic refrigerant charge function

Contribute to optimised operation efficiency, higher quality and easier installation

Automatic Refrigerant Charge Function movie

Optimised operation efficiency

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



Higher quality and easier installation

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

VRV IV

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

VRV X

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

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

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

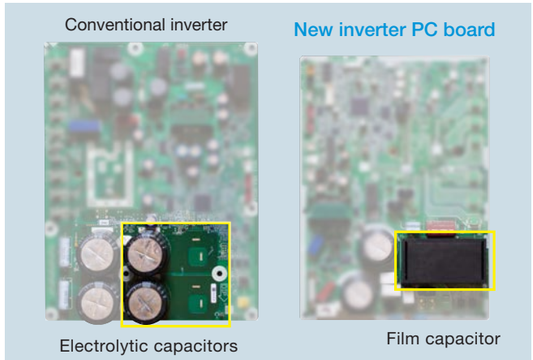
The automatic refrigerant charge operation can also be used again when adding or replacing indoor units or even when changing the layout after installation.

High reliability

New inverter PC board

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

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



Comfort

Low operation sound

High efficiency heat exchanger helps to achieve low operation sound.

Sound level (dB(A))

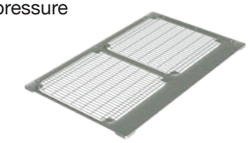
	6 HP	8/10 HP	12 HP	14/16 HP
VRV X	54	56	58	59

Large airflow, high static pressure and quiet technology

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

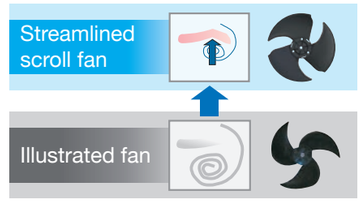
Streamlined air grille

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



Streamlined scroll fan

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

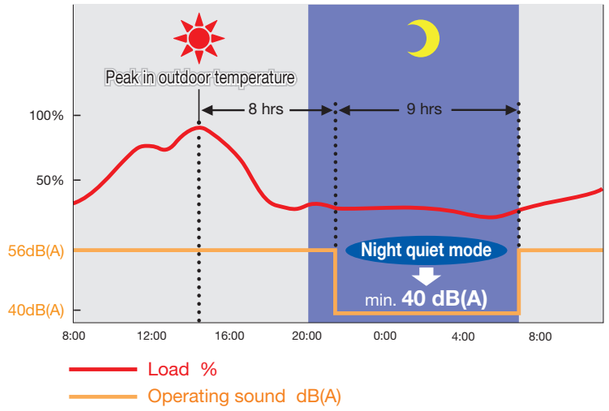


Nighttime quiet operation function

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

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

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



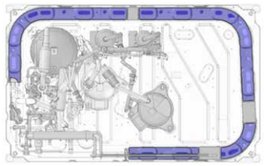
Note:
· The night quiet mode lowers operating sound by reducing capacity. This function is available in setting at site.
· The operating sound in quiet operation mode is the actual value measured by our company.
Because priority is given to protection mode,such as for oil recovery, the operating sound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

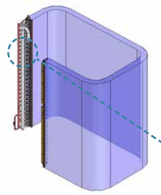
Realising compact technology with performance

Highly integrated heat exchanger

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

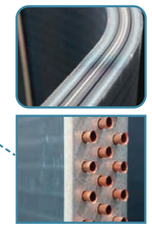
4-sided heat exchanger





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

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

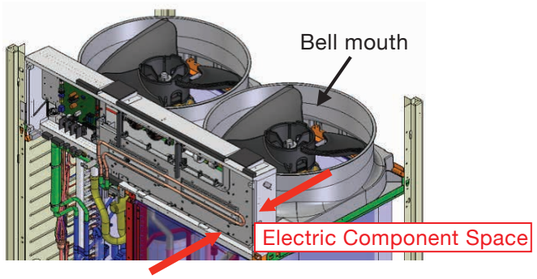


20 HP

3-row small pipe design increases heat transfer efficiency.

Optimised inner design to ensure smooth airflow

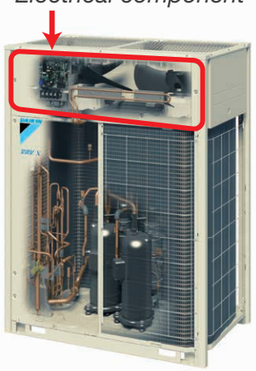
Electric components were downsized and positioned in the dead space of the bell mouth side to decrease airflow resistance.



Easy maintenance

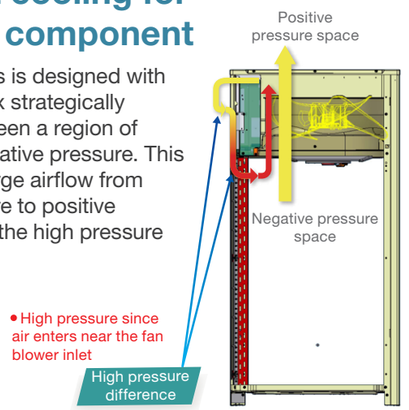
The electrical components are strategically located on the top which eases the maintenance process. Moreover, the heat exchanger on the front side can be used effectively to improve its performance.

Electrical component



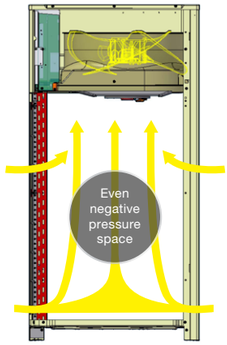
Sufficient cooling for electrical component

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



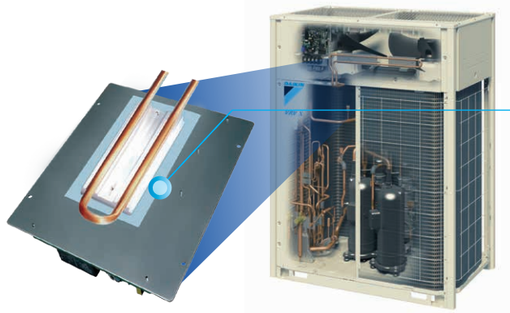
Eliminate suction resistance issue

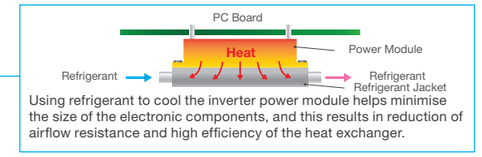
Without affecting the fan volume, the electric components are designed to be at the top and this ulitises dead space. This eliminates the problem of suction resistance.



High reliability at high ambient temperature

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





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

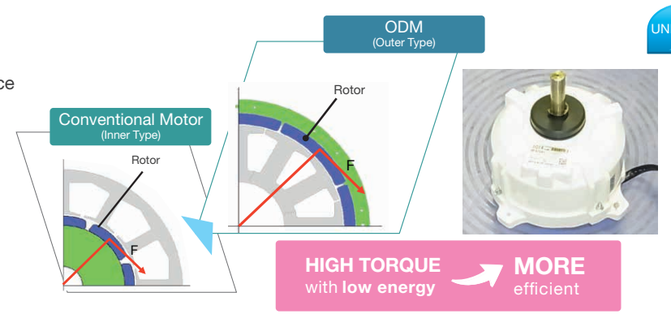
Control board failure ratio at stable operation is reduced.

Outer Rotor DC Motor (ODM)

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

Advantages of ODM

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

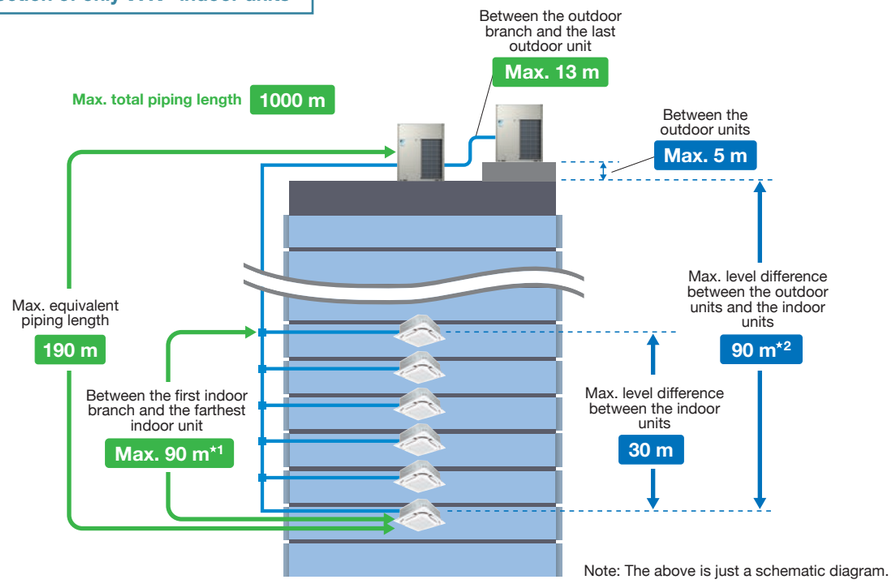


More options for installation location

Long piping length

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

For connection of only *VRV* indoor units



Note: The above is just a schematic diagram.

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

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

Connection ratio

Connection capacity at maximum is 200%.

Connection ratio
50%–200%

Connection ratio =

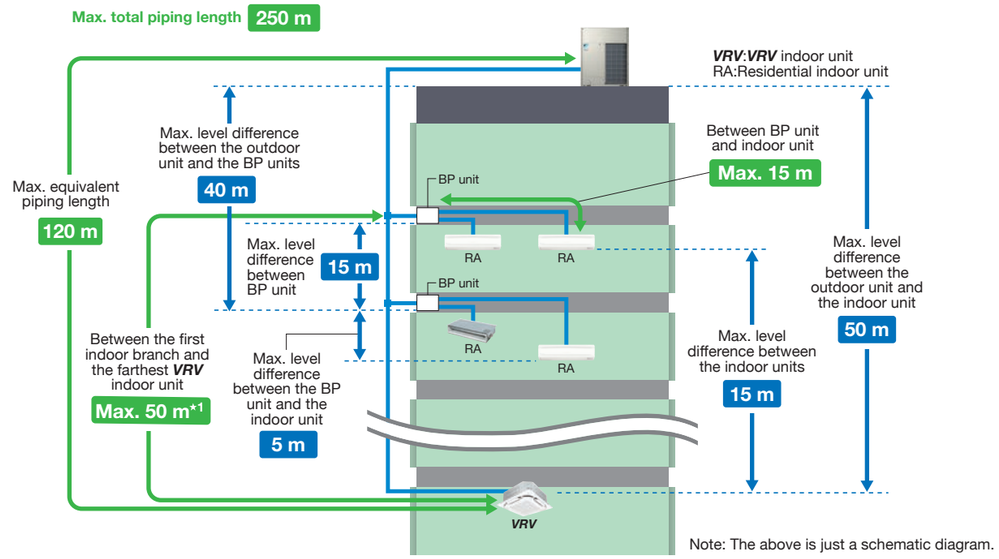
$$\frac{\text{Total capacity index of the indoor units}}{\text{Capacity index of the outdoor units}}$$

Conditions of *VRV* indoor unit connection capacity

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

*1 For the FXF(S)Q25 and FXVQ models, maximum connection ratio is 130% for the entire range of outdoor units.
Note: If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the indoor units.
*Refer to page 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 50% to 130%. Refer to page 24 for outdoor unit combination details.

High external static pressure

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

78.4 Pa

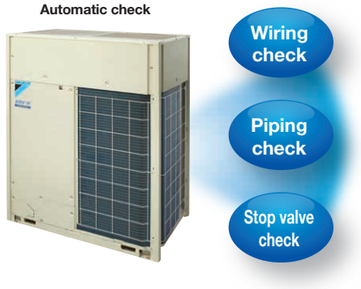
- More options in the opening/angle of louvre
- Outstanding heat dissipation effect in both hierarchical and intensive arrangement

More accurate test operation and stable system

Efficient automatic test operation

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

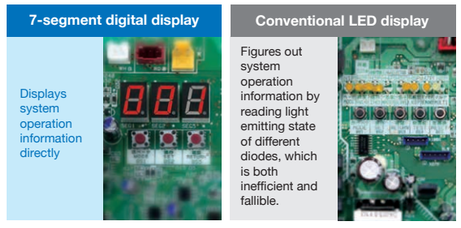
- Automatically checks the wirings between outdoor units and indoor units to confirm whether there is a defective wiring.
- Confirms piping length to optimise operation.
- Automatically checks whether the stop valve in each outdoor unit is in normal status to ensure the smooth operation of air conditioning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



Simplified commissioning and after-sales service

Function of information display by luminous digital tube

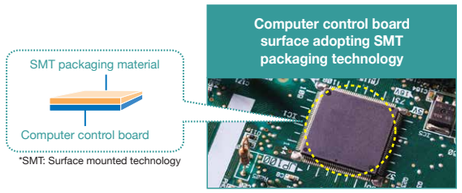
VRV X series utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.



Advanced control main PC board

SMT* packaging technology

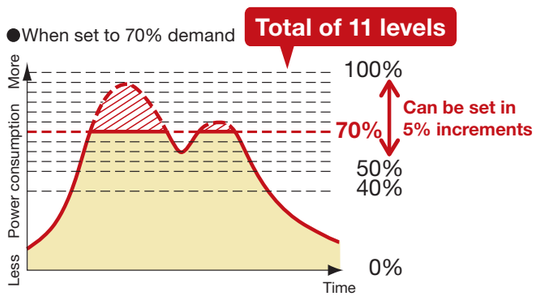
- SMT packaging technology adopted by the whole computer control panel improves the anti-clutter performance.
- Protects your computer boards from the adverse effect of sandy and humid weather.



I-demand function

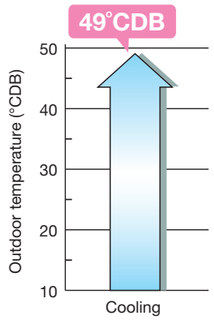
Limit to power consumption can be set precisely to one of 11 levels. Peak power cut-off can be accomplished according to each user situation.

*Set on the circuit board of the outdoor unit.



Wide operation temperature range up to 49°C

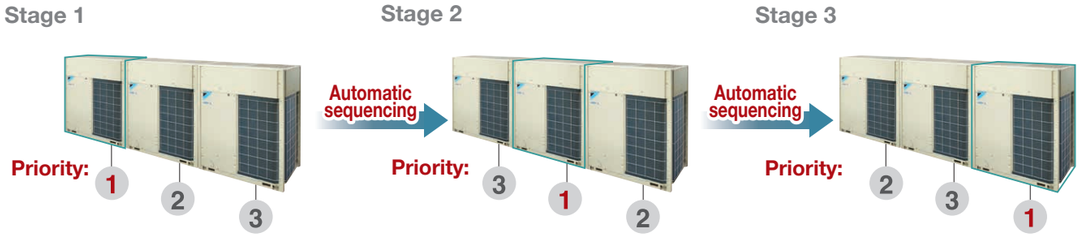
The versatile operation range of the ***VRV*** X series works to reduce limitations on installation locations.
The operation temperature range for cooling can be performed with outdoor temperatures as high as 49°C.
This enables reliable operation even under high temperature conditions.



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

Automatic sequencing operation

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



Double backup operation functions

Daikin ***VRV*** X series outdoor unit boasts double backup operation functions, which can secure the use of air conditioners in this area to the greatest extent 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 one of the unit 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.

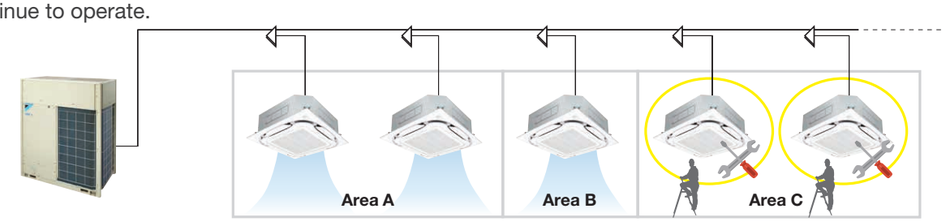
Compressor backup operation function

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. (The capacity is saved during backup operation.)

* For a single outdoor unit system RXUQ14-20AY14 models. On-site settings are required using the printed circuit board of the outdoor unit.

Ease of Maintenance

VRV X series provides 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 and is not applicable for all situations.
For more information, please contact Daikin sales office.

VRV X Series Outdoor Units New

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

- ***VRV*** X series outdoor unit offers a high capacity of up to 60 HP, responding to the needs of large-sized building.
- The single outdoor unit has only 2 different shapes and dimensions, not only simplifying the design process, but also bringing the system flexibility to a new level.
- With the outdoor unit capacity increased in increment of 2 HP, customers' needs can be precisely met.

Lineup

New lineup

HP		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
VRV X SERIES	Single outdoor units	●	●	●	●	●	●	●	●																				
	Double outdoor units				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
	Triple outdoor units							●	●											●	●	●	●	●	●	●	●	●	●

●Single Outdoor Units

6, 8 HP

RXUQ6AY14
RXUQ8AY14

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

RXUQ10AY14
RXUQ12AY14
RXUQ14AY14
RXUQ16AY14
RXUQ18AY14
RXUQ20AY14

●Double Outdoor Units

12, 14, 16 HP

RXUQ12AMY14
RXUQ14AMY14
RXUQ16AMY14

18, 20 HP

RXUQ18AMY14
RXUQ20AMY14

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

RXUQ22AMY14
RXUQ24AMY14
RXUQ26AMY14
RXUQ28AMY14
RXUQ30AMY14
RXUQ32AMY14
RXUQ34AMY14
RXUQ36AMY14
RXUQ38AMY14
RXUQ40AMY14

●Triple Outdoor Units

18, 20 HP

RXUQ18AM1Y14
RXUQ20AM1Y14

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

RXUQ42AMY14
RXUQ44AMY14
RXUQ46AMY14
RXUQ48AMY14
RXUQ50AMY14
RXUQ52AMY14
RXUQ54AMY14
RXUQ56AMY14
RXUQ58AMY14
RXUQ60AMY14

Outdoor Unit Combinations

For connection of *VRV* indoor units only

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

Note: *1. For multiple connection, the outdoor unit multi connection piping kit (separately sold) is required.
*2. Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units. Refer to page 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	HP	Capacity index	Total capacity index of connectable indoor units*2			Maximum number of connectable indoor units
				Combination (%)*2			
				50%	100%	130%	
RXUQ6AY14	16.0	6	150	75	150	195	9
RXUQ8AY14	22.4	8	200	100	200	260	13
RXUQ10AY14	28.0	10	250	125	250	325	16
RXUQ12AY14	33.5	12	300	150	300	390	19
RXUQ14AY14	40.0	14	350	175	350	455	22
RXUQ16AY14	45.0	16	400	200	400	520	26
RXUQ18AY14	50.0	18	450	225	450	585	29
RXUQ20AY14	56.0	20	500	250	500	650	32

Note: *1. Only single outdoor unit (RXUQ6-20AY14) can be connected.
*2. Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outdoor unit.

VRV X

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 | VRT smart: Indoor units subject to VRT smart control | VRT: Indoor units subject to VRT control

Type	Model Name		Capacity Range	0,8 HP	1 HP	1,25 HP	1,6 HP	2 HP	2,5 HP	3,2 HP	4 HP	5 HP	6 HP	8 HP	10 HP	16 HP	20 HP
			Capacity Index	20	25	31.25	40	50	62.5	80	100	125	140	200	250	400	500
Ceiling Mounted Cassette (Round Flow with Sensing)	New FXFSQ-AV4	VRT smart			●	●	●	●	●	●	●	●	● New capacity				
Ceiling Mounted Cassette (Round Flow)	New FXFQ-AV4	VRT smart			●	●	●	●	●	●	●	●	● New capacity				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE4	VRT		●	●	●	●	●									
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE4	VRT		●	●	●	●	●	●	●		●					
Ceiling Mounted Cassette Corner	FXKQ-MAVE4	VRT			●	●	●		●								
Slim Ceiling Mounted Duct (Standard Series)	New FXDQ-PDVE4 (with drain pump)	VRT smart	(700mm width type)	●	●	●											
	New FXDQ-PDVT4 (without drain pump)	VRT smart	(700mm width type)	●	●	●											
	New FXDQ-NDVE4 (with drain pump)	VRT smart	(900 / 1,100mm width type)				●	●	●								
	New FXDQ-NDVT4 (without drain pump)	VRT smart	(900 / 1,100mm width type)				●	●	●								
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV14	VRT		●	●	●	●	●	●								
Middle Static Pressure Ceiling Mounted Duct	New FXSQ-PAV4	VRT smart		●	●	●	●	●	●	●	●	●	●				
Ceiling Mounted Duct	New FXMQ-PAV4	VRT smart		●	●	●	●	●	●	●	●	●	●				
	FXMQ-MVE4	VRT												●	●		
Outdoor-Air Processing Unit	FXMQ-MFV7											●		●	●		
Ceiling Suspended	FXHQ-MAV7	VRT				●			●		●						
Wall Mounted	FXAQ-PVE4	VRT		●	●	●	●	●	●								
Floor Standing	FXLQ-MAVE4	VRT		●	●	●	●	●	●								
Concealed Floor Standing	FXNQ-MAVE4	VRT		●	●	●	●	●	●								
Floor Standing Duct	FXVQ-NY14	VRT										●		●	●	●	●
Clean Room Air Conditioner	FXBQ-PVE4	VRT					●	●	●								
	FXBPQ-PVE4	VRT							●								
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h														
Air Handling Unit	AHUR		6–120 HP														

Residential indoor units with connection to BP units

Type	Model Name		Rated Capacity (kW)	25	35	50	60	71
			Capacity Index	25	35	50	60	71
Slim Ceiling Mounted Duct	FDKS-EVMB4	VRT	(700 mm width type)	●	●			
	FDKS-CVMB4	VRT	(900/1,100 mm width type)	●	●	●	●	
Wall Mounted	FTKJ-NVM4W	VRT		●	●	●		
	FTKJ-NVM4S	VRT		●	●	●		
	FTKS-DVM4	VRT		●	●			
	FTKS-FVM4	VRT				●	●	●

Note: BP units are necessary for residential indoor units. Only single outdoor unit (RXUQ6-20AY14) can be connected.

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

VRV indoor unit only system

***VRV* indoor units only**

Max. 64 indoor units

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

Residential indoor unit and *VRV* indoor unit mix system

Max. 32 indoor units

Residential indoor units **VRV indoor units**

- BP units are necessary for residential indoor units. Only single outdoor unit (RXUQ6-20AY14) can be connected.
- If a system has both residential indoor units and *VRV* indoor units, the system is operated under VRT control.

Residential indoor unit only system

Max. 32 indoor units

Residential indoor units only

- BP units are necessary for residential indoor units. Only single outdoor unit (RXUQ6-20AY14) can be connected.
- If a system has only residential indoor units, the system is operated under VRT control.

VRV X Series Outdoor Units **RXUQ-A**

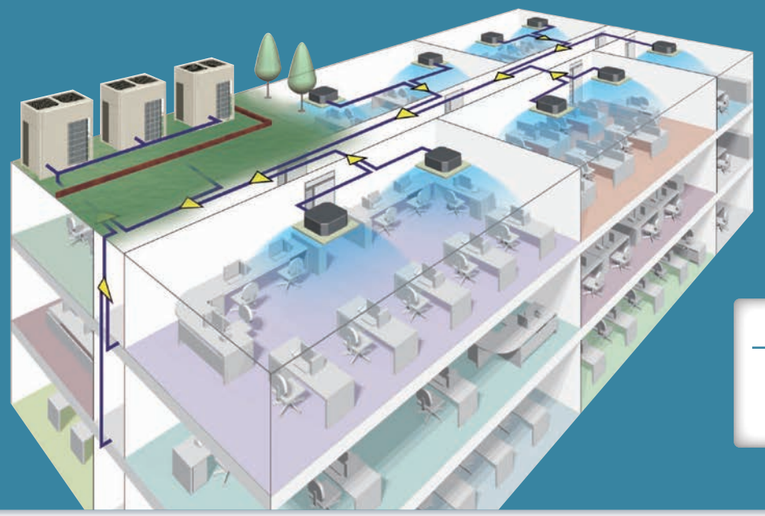
																				
MODEL			RXUQ6AY14	RXUQ8AY14	RXUQ10AY14	RXUQ12AY14	RXUQ14AY14	RXUQ16AY14	RXUQ18AY14	RXUQ20AY14	RXUQ12AMY14	RXUQ14AMY14	RXUQ16AMY14	RXUQ18AMY14	RXUQ20AMY14	RXUQ18AM1Y14	RXUQ20AM1Y14	RXUQ22AMY14	RXUQ24AMY14	RXUQ26AMY14
Combination units			—	—	—	—	—	—	—	—	RXUQ6AY14	RXUQ6AY14	RXUQ8AY14	RXUQ8AY14	RXUQ8AY14	RXUQ6AY14	RXUQ6AY14	RXUQ10AY14	RXUQ12AY14	RXUQ12AY14
			—	—	—	—	—	—	—	—	RXUQ6AY14	RXUQ8AY14	RXUQ8AY14	RXUQ10AY14	RXUQ12AY14	RXUQ6AY14	RXUQ6AY14	RXUQ12AY14	RXUQ12AY14	RXUQ14AY14
			—	—	—	—	—	—	—	—	—	—	—	—	—	RXUQ6AY14	RXUQ8AY14	—	—	—
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	109,000	131,000	153,000	172,000	191,000	164,000	186,000	210,000	229,000	251,000
		kW	16.0	22.4	28.0	33.5	40.0	45.0	50.0	56.0	32.0	38.4	44.8	50.4	55.9	48.0	54.4	61.5	67.0	73.5
Power consumption		kW	3.23	4.82	6.29	7.81	9.46	11.4	12.8	14.8	6.46	8.05	9.64	11.1	12.6	9.69	11.3	14.1	15.6	17.3
Capacity control		%	23-100	19-100	13-100	12-100	11-100	9-100		7-100	11-100	10-100	9-100	8-100	7-100	8-100	7-100	6-100		
Casing colour			Ivory white (5Y7.5/1)								Ivory white (5Y7.5/1)									
Compressor	Type		Hermetically sealed scroll type								Hermetically sealed scroll type									
	Motor output	kW	2.4×1	3.4×1	4.2×1	5.2×1	(3.4×1)+(2.9×1)	(3.4×1)+(3.9×1)	(3.7×1)+(4.3×1)	(4.9×1)+(4.2×1)	(2.4×1)+(2.4×1)	(2.4×1)+(3.4×1)	(3.4×1)+(3.4×1)	(3.4×1)+(4.2×1)	(3.4×1)+(5.2×1)	(2.4×1)+(2.4×1)+(2.4×1)	(2.4×1)+(2.4×1)+(3.4×1)	(4.2×1)+(5.2×1)	(5.2×1)+(5.2×1)	(5.2×1)+(3.4×1)+(2.9×1)
Airflow rate		m³/min	119	178		191	218			268	119+119	119+178	178+178		178+191	119+119+119	119+119+178	178+191	191+191	191+218
Dimensions (H×W×D)		mm	1,657×930×765		1,657×1,240×765						(1,657×930×765)+(1,657×930×765)			(1,657×930×765)+(1,657×1,240×765)		(1,657×930×765)+(1,657×930×765)+(1,657×930×765)		(1,657×1,240×765)+(1,657×1,240×765)		
Machine weight		kg	185		215		275			291	185+185			185+215		185+185+185		215+215		215+275
Sound level		dB(A)	54	56		58	59		62	65	57	58	59		60	59	60		61	62
Operation range		°CDB	10 to 49								10 to 49									
Refrigerant	Type		R-410A								R-410A									
	Charge	kg	6.4	6.6	7.1	7.3	8.5	8.6	11.7		6.4+6.4	6.4+6.6	6.6+6.6	6.6+7.1	6.6+7.3	6.4+6.4+6.4	6.4+6.4+6.6	7.1+7.3	7.3+7.3	7.3+8.5
Piping connections	Liquid	mm	ϕ9.5 (Brazing)			ϕ12.7 (Brazing)			ϕ15.9 (Brazing)		ϕ12.7 (Brazing)			ϕ15.9 (Brazing)						ϕ19.1 (Brazing)
	Gas	mm	ϕ19.1 (Brazing)		ϕ22.2 (Brazing)	ϕ28.6 (Brazing)					ϕ28.6 (Brazing)								ϕ34.9 (Brazing)	

																				
MODEL			RXUQ28AMY14	RXUQ30AMY14	RXUQ32AMY14	RXUQ34AMY14	RXUQ36AMY14	RXUQ38AMY14	RXUQ40AMY14	RXUQ42AMY14	RXUQ44AMY14	RXUQ46AMY14	RXUQ48AMY14	RXUQ50AMY14	RXUQ52AMY14	RXUQ54AMY14	RXUQ56AMY14	RXUQ58AMY14	RXUQ60AMY14
Combination units			RXUQ12AY14	RXUQ12AY14	RXUQ12AY14	RXUQ14AY14	RXUQ16AY14	RXUQ18AY14	RXUQ20AY14	RXUQ12AY14	RXUQ12AY14	RXUQ12AY14	RXUQ12AY14	RXUQ12AY14	RXUQ12AY14	RXUQ14AY14	RXUQ16AY14	RXUQ18AY14	RXUQ20AY14
			RXUQ16AY14	RXUQ18AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ12AY14	RXUQ12AY14	RXUQ14AY14	RXUQ16AY14	RXUQ18AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14
			—	—	—	—	—	—	—	RXUQ18AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14	RXUQ20AY14
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	268,000	285,000	305,000	328,000	345,000	362,000	382,000	399,000	420,000	444,000	461,000	478,000	498,000	519,000	536,000	553,000	573,000
		kW	78.5	83.5	89.5	96.0	101	106	112	117	123	130	135	140	146	152	157	162	168
Power consumption		kW	19.2	20.6	22.6	24.3	26.2	27.6	29.6	28.4	30.4	32.1	34.0	35.4	37.4	39.1	41.0	42.4	44.4
Capacity control		%	5-100			4-100				4-100	3-100								2-100
Casing colour			Ivory white (5Y7.5/1)							Ivory white (5Y7.5/1)									
Compressor	Type		Hermetically sealed scroll type							Hermetically sealed scroll type									
	Motor output	kW	(5.2×1)+(3.4×1)+(3.9×1)	(5.2×1)+(3.7×1)+(4.3×1)	(5.2×1)+(4.9×1)+(4.2×1)	(3.4×1)+(2.9×1)+(4.9×1)+(4.2×1)	(3.4×1)+(3.9×1)+(4.9×1)+(4.2×1)	(3.7×1)+(4.3×1)+(4.9×1)+(4.2×1)	(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(5.2×1)+(5.2×1)+(3.7×1)+(4.3×1)	(5.2×1)+(5.2×1)+(4.9×1)+(4.2×1)	(5.2×1)+(3.4×1)+(2.9×1)+(4.9×1)+(4.2×1)	(5.2×1)+(3.4×1)+(3.9×1)+(4.9×1)+(4.2×1)	(5.2×1)+(3.7×1)+(4.3×1)+(4.9×1)+(4.2×1)	(5.2×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(3.4×1)+(2.9×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(3.4×1)+(3.9×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(3.7×1)+(4.3×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)	(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)+(4.9×1)+(4.2×1)
Airflow rate		m³/min	191+218	191+268		218+268		268+268		191+191+268	191+218+268		191+268+268		218+268+268		268+268+268		
Dimensions (H×W×D)		mm	(1,657×1,240×765)+(1,657×1,240×765)							(1,657×1,240×765)+(1,657×1,240×765)+(1,657×1,240×765)									
Machine weight		kg	215+275	215+291		275+291		291+291		215+215+291	215+275+291		215+291+291		275+291+291		291+291+291		
Sound level		dB(A)	62	63	66			67	68	65	66	67		68	69			70	
Operation range		°CDB	10 to 49							10 to 49									
Refrigerant	Type		R-410A							R-410A									
	Charge	kg	7.3+8.6	7.3+11.7		8.5+11.7	8.6+11.7	11.7+11.7		7.3+7.3+11.7	7.3+8.5+11.7	7.3+8.6+11.7	7.3+11.7+11.7		8.5+11.7+11.7	8.6+11.7+11.7	11.7+11.7+11.7		
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.
- •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.

VRV A Saves Space and Delivers Excellent Performance



New

RXQ-A

Cooling Only

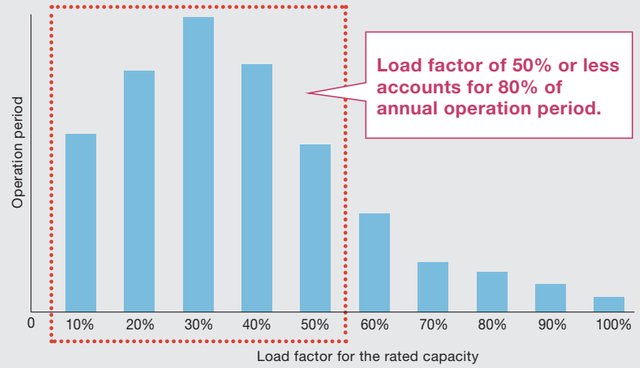
6 HP - 60 HP
(16 kW) (168 kW)

Greater energy savings during low-load operation

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

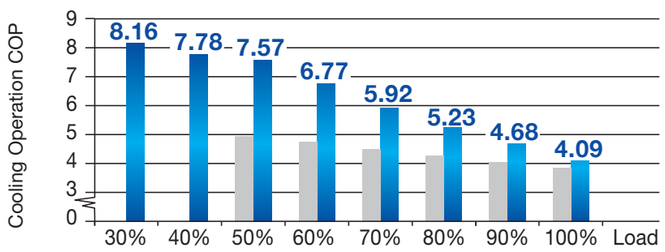
Using data gathered from actual operation, Daikin discovered that air conditioning systems operate at a load factor of 50% or less for 80% of their annual operation period.
This inspired us to develop new technologies to enhance energy efficiency during low-load operation.
Utilising these technologies,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

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



Higher Coefficient of Performance (COP)

COP for 10 HP



Annual power consumption
14%* lower

* Simulation conditions :
- Location : Bangkok, Thailand
- System : Outdoor unit (10 HP) x 1
  Indoor unit (2 HP, Round Flow with Sensing type) x 5
- Operation time : 8:00-20:00 5 days/week
- Outdoor units :
  New model : RXQ10A (***VRV*** A series)
  Conventional model : RXQ10T (***VRV*** IV)

VRV IV (RXQ10T)

VRV A

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

Advanced technologies for greater energy savings

VRV+VRT+VAV

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

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

Software technology

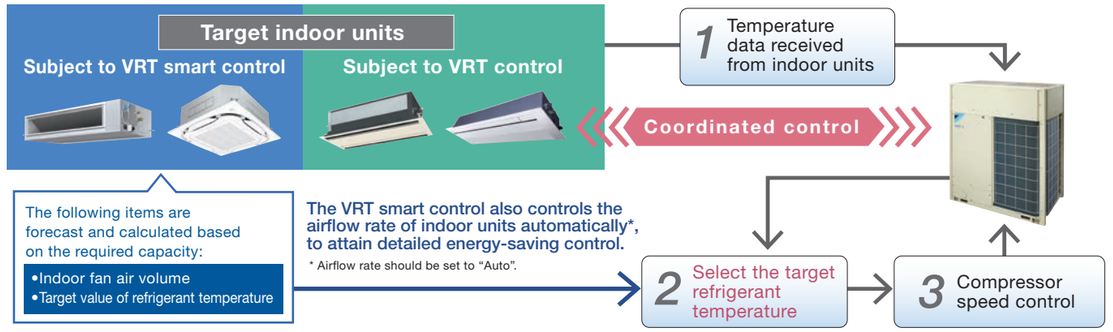
Optimally supply only for the needed capacity of indoor units

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

Variable Refrigerant Temperature

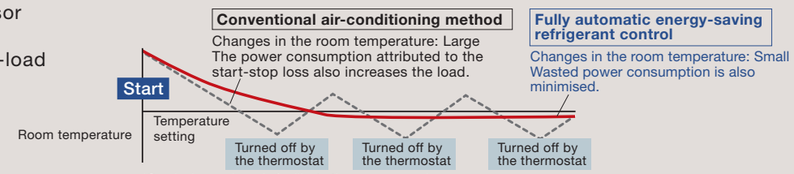
VRT Smart Control Function movie

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



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

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



*Graph shown above is for illustration purposes only.

Note:
•For the classification of indoor units (VRT smart control and VRT control), refer to page 41–42.
•If a system has indoor units subject to both VRT smart and VRT control, the system is operated under VRT control.
•If a system has both outdoor-air processing air conditioners and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.

Optimum utilisation of VRT Smart Control and VRT Control

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

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

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

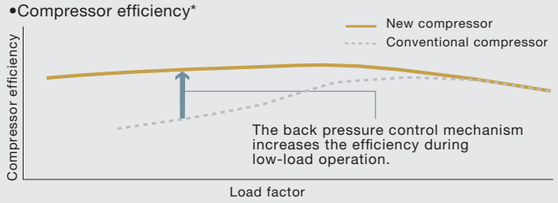
New Scroll Compressor*

Hardware technology

Refrigerant leakage is minimised during low-load operation.

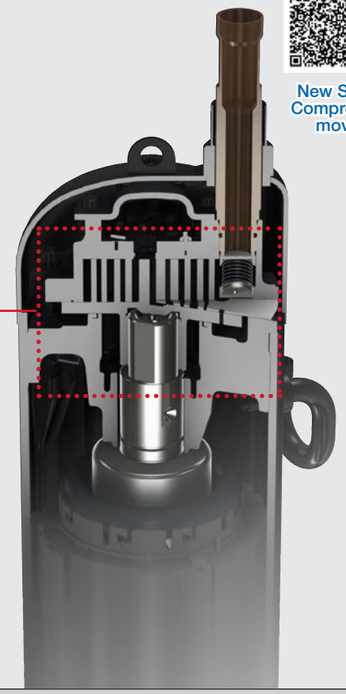
Operation loss due to refrigerant leakage is reduced by the proprietary back pressure control mechanism to ensure stable low-load operation.

•Compressor efficiency*



*Graph shown above is for illustration purposes only.

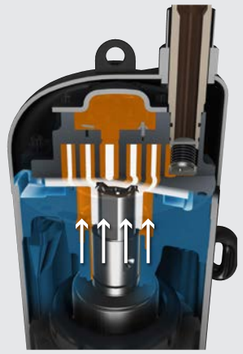
New Scroll Compressor movie



Back pressure control mechanism

Conventional mechanism

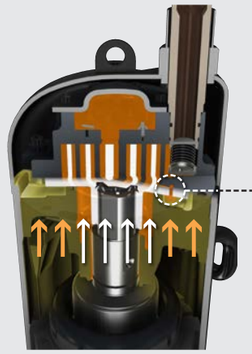
The movable scroll is pressed by the pressure difference between high and low pressures.
The force pressing the movable scroll decreases during low-load operation, resulting in compression leakage from movable parts.



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

New **New intermediate pressure mechanism**

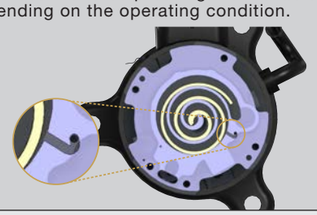
The force pressing the movable scroll is optimised according to operating conditions. The behavior of the movable scroll has been stabilised to increase efficiency during low-load operation.



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

Intermediate pressure adjustment port

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



* The new mechanism is used in RXQ10,12,14 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*** A series 14 HP Location: Singapore Operation time: 08:00–18:00 on weekdays.

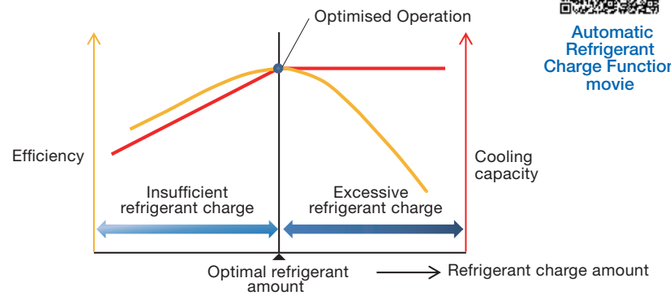
Automatic refrigerant charge function

Contribute to optimised operation efficiency, higher quality and easier installation

Automatic Refrigerant Charge Function movie

Optimised operation efficiency

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



Higher quality and easier installation

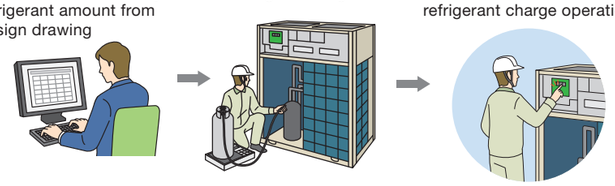
The automatic refrigerant charge function automates the charging of the proper refrigerant amount and the closing of shut-off valves by simply pressing a switch after pre-charging.
Simplified installation eliminates excessive and insufficient refrigerant charge amounts due to calculation mistakes, and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

VRV IV

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

VRV A

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



Automatic completion by proper refrigerant amount

Monitoring refrigerant charging is unnecessary

No recalculation of charge amounts due to minor design changes locally

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

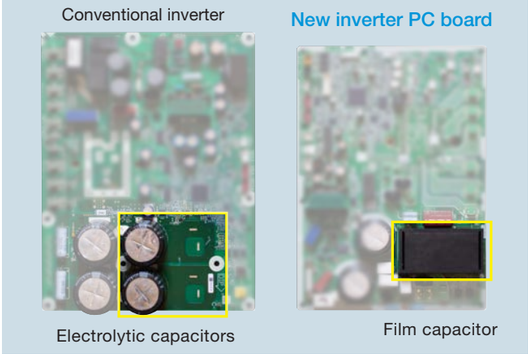
The automatic refrigerant charge operation can also be used again when adding or replacing indoor units or even when changing the layout after installation.

High reliability

New inverter PC board

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

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



Comfort

Low operation sound

High efficiency heat exchanger helps to achieve low operation sound.

Sound level(dB(A))

	6/8 HP	10 HP	12 HP	14/16 HP
VRV A	56	57	59	60

Large airflow, high static pressure and quiet technology

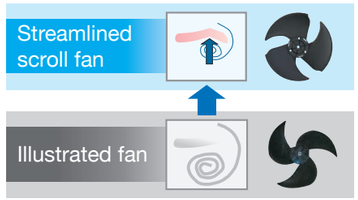
Advanced analytic technologies are utilised to optimise fan design and increase airflow rate and high external static pressure.

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.

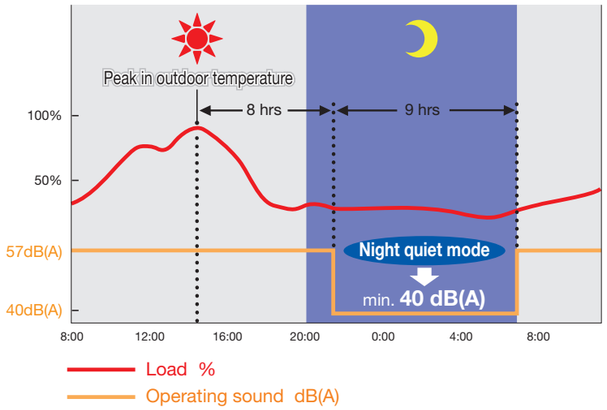


Nighttime quiet operation function

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 HP outdoor unit.



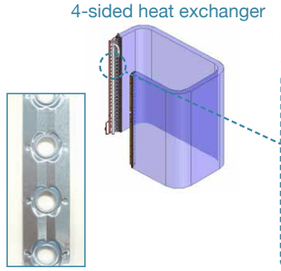
Note:
· The night quiet mode lowers operating sound by reducing capacity. This function is available in setting at site.
· The operating sound in quiet operation mode is the actual value measured by our company. Because priority is given to protection mode,such as for oil recovery, the operating sound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

Compact design with high performance

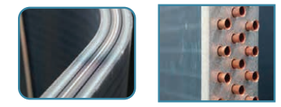
Highly integrated heat exchanger

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.

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.



20 HP

3-row small pipe design increases heat transfer efficiency.

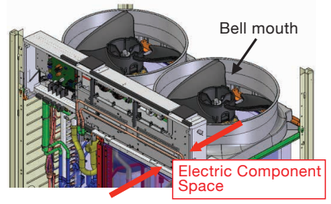
Waffle Fin

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

VRV A SERIES

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.



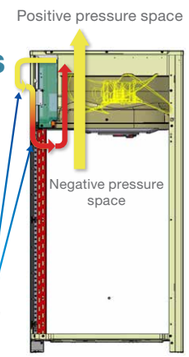
Easy maintenance

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*** A 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.

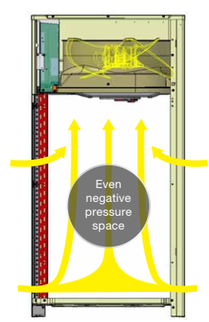


• High pressure since air enters near the fan blower inlet

High pressure difference

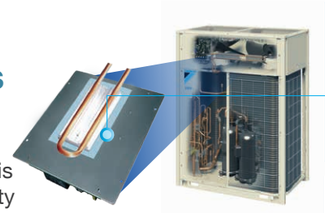
Eliminate suction resistance issue

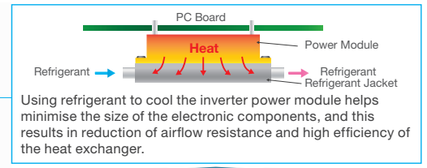
Without affecting the fan volume, the electric components are designed to be at the top and this ulitises dead space. This eliminates the problem of suction resistance.



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.

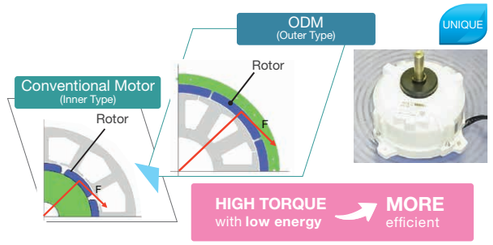
Control board failure ratio at stable operation is reduced.

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

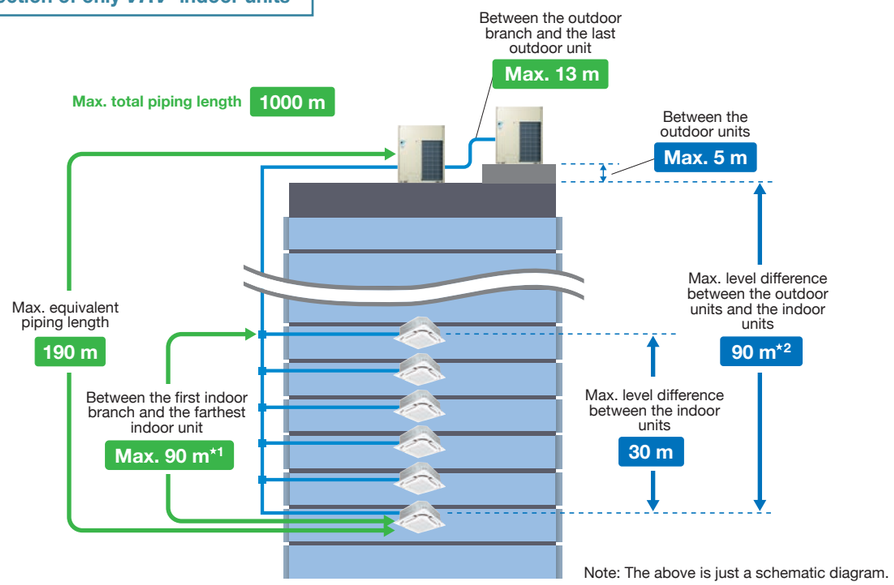


More options for installation location

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*** A series is easy to extend to 90 m by lessening the conditions from conventional ***VRV*** IV models. Be sure to refer to the Engineering Data Book for details of these conditions and requirements.
★2. When level differences are 50 m or more, the diameter of the main liquid piping size must be increased. If the outdoor unit is above the indoor unit, a dedicated setting on the outdoor unit is required. Refer to the Engineering Data Book and contact your local dealer for more information.

Connection ratio

Connection capacity at maximum is 200%.

Connection ratio
50%–200%

Connection ratio =

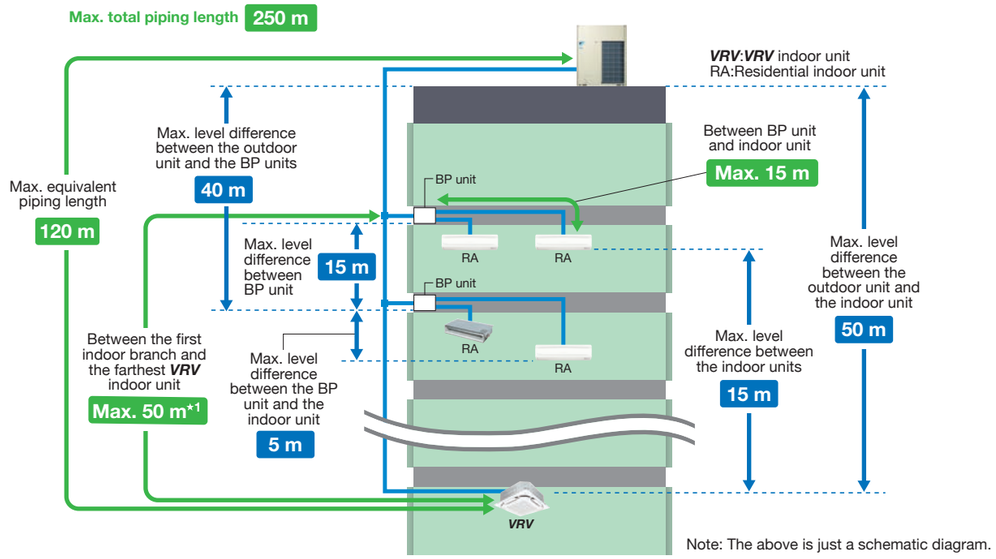
$$\frac{\text{Total capacity index of the indoor units}}{\text{Capacity index of the outdoor units}}$$

Conditions of *VRV* indoor unit connection capacity

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

*1 For the FXF(S)Q25 and FXVQ models, maximum connection ratio is 130% for the entire range of outdoor units.
Note: If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the indoor units.
*Refer to page 40 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 50% to 130%. Refer to page 40 for outdoor unit combination details.

High external static pressure

VRV A 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.

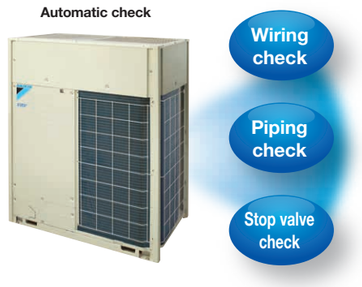
78.4 Pa
- More options in the opening/angle of louvre
- Outstanding heat dissipation effect in both hierarchical and intensive arrangement

More accurate test operation and stable system

Efficient automatic test operation

Daikin ***VRV*** A 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.

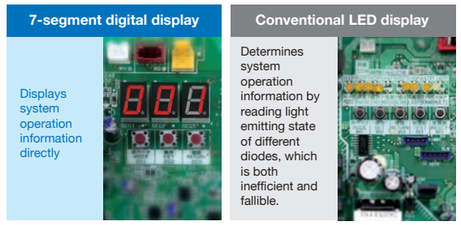
- Automatically checks the wiring between outdoor units and indoor units to confirm whether there is defective wiring.
- Confirms piping length to optimise operation.
- Automatically checks whether the stop valve in each outdoor unit is functioning normally to ensure the smooth operation of air conditioning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



Simplified commissioning and after-sales service

Function of information display by luminous digital tube

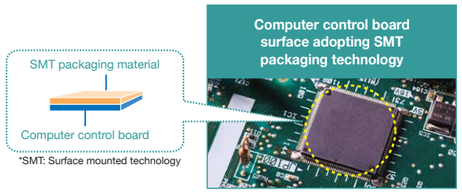
VRV A series utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.



Advanced control main PC board

SMT* packaging technology

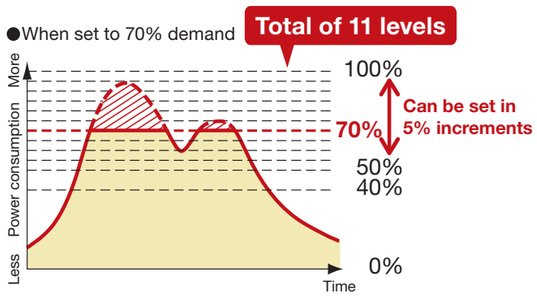
- SMT packaging technology adopted by the computer control panel improves the anti-clutter performance.
- Protects your computer boards from the adverse effects of sandy climates and humid weather.



I-demand function

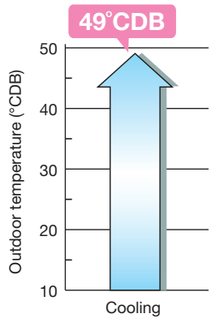
Limit to power consumption can be set precisely to one of 11 levels. Peak power cut-off can be accomplished according to each user situation.

*Set on the circuit board of the outdoor unit.



Wide operation temperature range up to 49°C

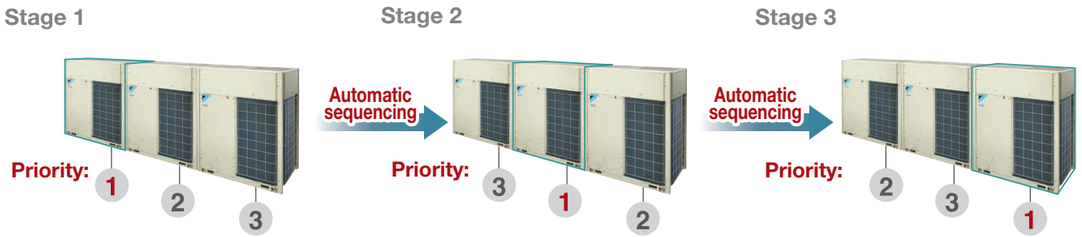
The versatile operation range of the ***VRV*** A series works to reduce limitations on installation locations.
The operation temperature range for cooling can be performed with outdoor temperatures as high as 49°C.
This enables reliable operation even under high temperature conditions.



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

Automatic sequencing operation

During start-up, Daikin ***VRV*** A 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*** A series outdoor unit boasts double backup operation functions, which can secure the use of air conditioners in this area to the greatest extent in an emergency by enabling double backup operation functions even if failure occurs in a set of air conditioning equipment.
In the event of a failure, emergency operation can be conveniently enabled to allow the remaining system to operate in a limited fashion.

Unit backup operation function

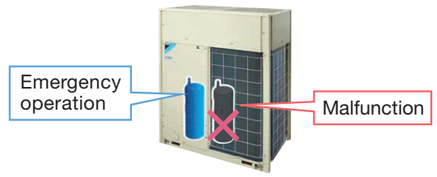
If one of the units in a multiple outdoor system malfunctions, the other outdoor units provide emergency operation until repairs can be made.

* For systems composed of two or more outdoor units.

Compressor backup operation function

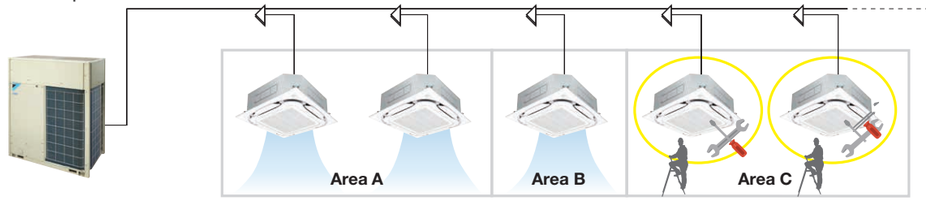
The outdoor unit is equipped with two compressors. Even if one compressor malfunctions, the other compressor provides emergency operation, reducing the risk of air conditioning shutdown due to compressor failure. (Capacity is saved during backup operation.)

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



Ease of Maintenance

VRV A 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 A Series Outdoor Units New

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

- ***VRV*** A series outdoor unit offers a high capacity of up to 60 HP, responding to the needs of large-sized building.
- The single outdoor unit has only 2 different shapes and dimensions, not only simplifying the design process, but also bringing the system flexibility to a new level.
- With the outdoor unit capacity increased in increment of 2 HP, customers' needs can be precisely met.

Lineup

HP		6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
VRV A SERIES	Single outdoor units	●	●	●	●	●	●	●	●																				
	Double outdoor units							●	●	●	●	●	●	●	●	●	●	●	●										
	Triple outdoor units																			●	●	●	●	●	●	●	●	●	●

•Single Outdoor Units

6, 8, 10, 12 HP

RXQ6AY14
RXQ8AY14
RXQ10AY14
RXQ12AY14

14, 16, 18, 20 HP

RXQ14AY14
RXQ16AY14
RXQ18AY14
RXQ20AY14

•Double Outdoor Units

18, 20, 22, 24 HP

RXQ18AMY14
RXQ20AMY14
RXQ22AMY14
RXQ24AMY14

26, 28, 30 HP

RXQ26AMY14
RXQ28AMY14
RXQ30AMY14

32, 34, 36, 38, 40 HP

RXQ32AMY14
RXQ34AMY14
RXQ36AMY14
RXQ38AMY14
RXQ40AMY14

•Triple Outdoor Units

42, 44 HP

RXQ42AMY14
RXQ44AMY14

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

RXQ46AMY14
RXQ48AMY14
RXQ50AMY14
RXQ52AMY14

RXQ54AMY14
RXQ56AMY14
RXQ58AMY14
RXQ60AMY14

Outdoor Unit Combinations

For connection of *VRV* indoor units only

HP	kW	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit*1	Total capacity index of connectable indoor units*2	Maximum number of connectable indoor units*2
6 HP	16.0	150	RXQ6A	RXQ6A	–	75 to 195 (300)	9 (15)
8 HP	22.4	200	RXQ8A	RXQ8A	–	100 to 260 (400)	13 (20)
10 HP	28.0	250	RXQ10A	RXQ10A	–	125 to 325 (500)	16 (25)
12 HP	33.5	300	RXQ12A	RXQ12A	–	150 to 390 (600)	19 (30)
14 HP	40.0	350	RXQ14A	RXQ14A	–	175 to 455 (700)	22 (35)
16 HP	45.0	400	RXQ16A	RXQ16A	–	200 to 520 (800)	26 (40)
18 HP	50.0	450	RXQ18A	RXQ18A	–	225 to 585 (900)	29 (45)
20 HP	56.0	500	RXQ20A	RXQ20A	–	250 to 650 (1,000)	32 (50)
18 HP	50.4	450	RXQ18AM	RXQ8A + RXQ10A	BHFP22P100	225 to 585 (720)	29 (36)
20 HP	55.9	500	RXQ20AM	RXQ8A + RXQ12A		250 to 650 (800)	32 (40)
22 HP	61.5	550	RXQ22AM	RXQ10A + RXQ12A		275 to 715 (880)	35 (44)
24 HP	67.0	600	RXQ24AM	RXQ12A × 2		300 to 780 (960)	39 (48)
26 HP	73.5	650	RXQ26AM	RXQ12A + RXQ14A		325 to 845 (1,040)	42 (52)
28 HP	78.5	700	RXQ28AM	RXQ12A + RXQ16A		350 to 910 (1,120)	45 (56)
30 HP	83.5	750	RXQ30AM	RXQ12A + RXQ18A		375 to 975 (1,200)	48 (60)
32 HP	90.0	800	RXQ32AM	RXQ14A + RXQ18A		400 to 1,040 (1,280)	52 (64)
34 HP	95.0	850	RXQ34AM	RXQ16A + RXQ18A		425 to 1,105 (1,360)	55 (64)
36 HP	100	900	RXQ36AM	RXQ18A × 2		450 to 1,170 (1,440)	58 (64)
38 HP	106	950	RXQ38AM	RXQ18A + RXQ20A		475 to 1,235 (1,520)	61 (64)
40 HP	112	1,000	RXQ40AM	RXQ20A × 2		500 to 1,300 (1,600)	64 (64)
42 HP	117	1,050	RXQ42AM	RXQ12A × 2 + RXQ18A	BHFP22P151	525 to 1,365 (1,365)	
44 HP	123	1,100	RXQ44AM	RXQ12A × 2 + RXQ20A		550 to 1,430 (1,430)	
46 HP	130	1,150	RXQ46AM	RXQ14A × 2 + RXQ18A		575 to 1,495 (1,495)	
48 HP	135	1,200	RXQ48AM	RXQ14A + RXQ16A + RXQ18A		600 to 1,560 (1,560)	
50 HP	140	1,250	RXQ50AM	RXQ14A + RXQ18A × 2		625 to 1,625 (1,625)	
52 HP	145	1,300	RXQ52AM	RXQ16A + RXQ18A × 2		650 to 1,690 (1,690)	
54 HP	150	1,350	RXQ54AM	RXQ18A × 3		675 to 1,755 (1,755)	
56 HP	156	1,400	RXQ56AM	RXQ18A × 2 + RXQ20A		700 to 1,820 (1,820)	
58 HP	162	1,450	RXQ58AM	RXQ18A + RXQ20A × 2		725 to 1,885 (1,885)	
60 HP	168	1,500	RXQ60AM	RXQ20A × 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 35 for notes on connection capacity of indoor units.

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

Model name*1	kW	HP	Capacity index	Total capacity index of connectable indoor units*2			Maximum number of connectable indoor units
				Combination (%)*2			
				50%	100%	130%	
RXQ6AY14	16.0	6	150	75	150	195	9
RXQ8AY14	22.4	8	200	100	200	260	13
RXQ10AY14	28.0	10	250	125	250	325	16
RXQ12AY14	33.5	12	300	150	300	390	19
RXQ14AY14	40.0	14	350	175	350	455	22
RXQ16AY14	45.0	16	400	200	400	520	26
RXQ18AY14	50.0	18	450	225	450	585	29
RXQ20AY14	56.0	20	500	250	500	650	32

Note: *1. Only single outdoor unit (RXQ6-20AY14) can be connected.
*2. Total capacity index of connectable indoor units must be 50%–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　VRT smart Indoor units subject to VRT smart control　VRT Indoor units subject to VRT control

Type	Model Name		Capacity Range	20 0.8 HP	25 1 HP	32 1.25 HP	40 1.6 HP	50 2 HP	63 2.5 HP	80 3.2 HP	100 4 HP	125 5 HP	140 6 HP	200 8 HP	250 10 HP	400 16 HP	500 20 HP
			Capacity Index	20	25	31.25	40	50	62.5	80	100	125	140	200	250	400	500
Ceiling Mounted Cassette (Round Flow with Sensing)	New FXFSQ-AV4	VRT smart			●	●	●	●	●	●	●	●	New capacity ●				
Ceiling Mounted Cassette (Round Flow)	New FXFQ-AV4	VRT smart			●	●	●	●	●	●	●	●	New capacity ●				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE4	VRT		●	●	●	●	●									
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE4	VRT		●	●	●	●	●	●	●		●					
Ceiling Mounted Cassette Corner	FXKQ-MAVE4	VRT			●	●	●		●								
Slim Ceiling Mounted Duct (Standard Series)	New FXDQ-PDVE4 (with drain pump)	VRT smart	(700mm width type)	●	●	●											
	New FXDQ-PDVT4 (without drain pump)	VRT smart		●	●	●											
	New FXDQ-NDVE4 (with drain pump)	VRT smart	(900 / 1,100mm width type)				●	●	●								
	New FXDQ-NDVT4 (without drain pump)	VRT smart					●	●	●								
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV14	VRT		●	●	●	●	●	●								
Middle Static Pressure Ceiling Mounted Duct	New FXSQ-PAV4	VRT smart		●	●	●	●	●	●	●	●	●	●				
Ceiling Mounted Duct	New FXMQ-PAV4	VRT smart		●	●	●	●	●	●	●	●	●	●				
	FXMQ-MVE4	VRT												●	●		
Outdoor-Air Processing Unit	FXMQ-MFV7											●		●	●		
Ceiling Suspended	FXHQ-MAV7	VRT				●			●		●						
Wall Mounted	FXAQ-PVE4	VRT		●	●	●	●	●	●								
Floor Standing	FXLQ-MAV4	VRT		●	●	●	●	●	●								
Concealed Floor Standing	FXNQ-MAV4	VRT		●	●	●	●	●	●								
Floor Standing Duct	FXVQ-NY14	VRT										●		●	●	●	●
Clean Room Air Conditioner	FXBQ-PVE4	VRT					●	●	●								
	FXBPQ-PVE4	VRT							●								
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h														
Air Handling Unit	AHUR		6–120 HP														

Residential indoor units with connection to BP units

Type	Model Name		Rated Capacity (kW)	25 2.5	35 3.5	50 5.0	60 6.0	71 7.1
			Capacity Index	25	35	50	60	71
Slim Ceiling Mounted Duct	FDKS-EVMB4	VRT	(700 mm width type)	●	●			
	FDKS-CVMB4	VRT	(900/1,100 mm width type)	●	●	●	●	
Wall Mounted	FTKJ-NVM4W	VRT		●	●	●		
	FTKJ-NVM4S	VRT		●	●	●		
	FTKS-DVM4	VRT		●	●			
	FTKS-FVM4	VRT				●	●	●

Note: BP units are necessary for residential indoor units. Only single outdoor unit (RXQ6-20AY14) can be connected.

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

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 (RXQ6-20AY14) 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 system

Max. 32 indoor units

Residential indoor units only

- BP units are necessary for residential indoor units. Only single outdoor unit (RXQ6-20AY14) can be connected.
- If a system has only residential indoor units, the system is operated under VRT control.

VRV A Series Outdoor Units

RXQ-A

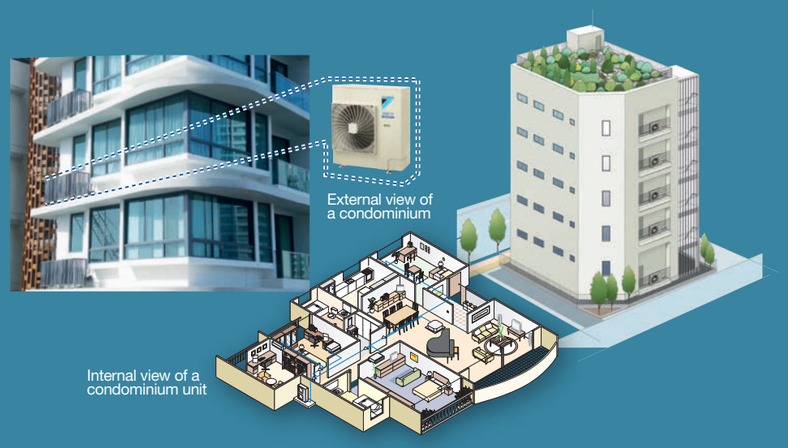
																	
MODEL		RXQ6AY14	RXQ8AY14	RXQ10AY14	RXQ12AY14	RXQ14AY14	RXQ16AY14	RXQ18AY14		RXQ20AY14	RXQ18AMY14	RXQ20AMY14	RXQ22AMY14	RXQ24AMY14	RXQ26AMY14	RXQ28AMY14	RXQ30AMY14
Combination units		–	–	–	–	–	–	–		–	RXQ8AY14	RXQ8AY14	RXQ10AY14	RXQ12AY14	RXQ12AY14	RXQ12AY14	RXQ12AY14
		–	–	–	–	–	–	–		–	RXQ10AY14	RXQ12AY14	RXQ12AY14	RXQ12AY14	RXQ14AY14	RXQ16AY14	RXQ18AY14
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	172,000	191,000	210,000	229,000	251,000	268,000	285,000
	kW	16.0	22.4	28.0	33.5	40.0	45.0	50.0		56.0	50.4	55.9	61.5	67.0	73.5	78.5	83.5
Power consumption	kW	3.38	5.17	6.84	8.70	10.7	12.9	15.3		17.7	12.0	13.9	15.5	17.4	19.4	21.6	24.0
Capacity control	%	25-100	20-100	13-100	12-100	11-100	10-100	10-100		7-100	7-100	7-100	6-100	6-100	6-100	5-100	5-100
Casing colour		Ivory white (5Y7.5/1)								Ivory white (5Y7.5/1)							
Compressor Type		Hermetically sealed scroll type								Hermetically sealed scroll type							
Compressor Motor output	kW	2.3×1	3.4×1	4.5×1	5.6×1	6.4×1	(3.5×1)+(3.5×1)	(4.0×1)+(4.0×1)		(3.8×1)+(6.3×1)	(3.4×1)+(4.5×1)	(3.4×1)+(5.6×1)	(4.5×1)+(5.6×1)	(5.6×1)+(5.6×1)	(5.6×1)+(6.4×1)	(5.6×1)+(3.5×1) +(3.5×1)	(5.6×1)+(4.0×1) +(4.0×1)
Airflow rate	m³/min	119	178		191	257				297	178+178	178+191		191+191	191+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)		
Machine weight	kg	175		185		215	260			285	175+185		185+185		185+215	185+260	
Sound level	dB(A)	56		57	59	60		61		65	60	61		62	63		
Operation range	°CDB	10 to 49								10 to 49							
Refrigerant Type		R-410A								R-410A							
Refrigerant Charge	kg	5.9		6.7	6.8	7.4	8.2	8.4		11.8	5.9+6.7	5.9+6.8	6.7+6.8	6.8+6.8	6.8+7.4	6.8+8.2	6.8+8.4
Piping connections Liquid	mm	ϕ9.5 (Brazing)			ϕ12.7 (Brazing)			ϕ15.9 (Brazing)		ϕ15.9 (Brazing)					ϕ19.1 (Brazing)		
Piping connections Gas	mm	ϕ19.1 (Brazing)		ϕ22.2 (Brazing)	ϕ28.6 (Brazing)					ϕ28.6 (Brazing)				ϕ34.9 (Brazing)			

																	
MODEL		RXQ32AMY14	RXQ34AMY14	RXQ36AMY14	RXQ38AMY14	RXQ40AMY14	RXQ42AMY14	RXQ44AM14		RXQ46AMY14	RXQ48AMY14	RXQ50AMY14	RXQ52AMY14	RXQ54AMY14	RXQ56AMY14	RXQ58AMYM14	RXQ60AMY14
Combination units		RXQ14AY14	RXQ16AY14	RXQ18AY14	RXQ18AY14	RXQ20AY14	RXQ12AY14	RXQ12AY14		RXQ14AY14	RXQ14AY14	RXQ14AY14	RXQ16AY14	RXQ18AY14	RXQ18AY14	RXQ18AY14	RXQ20AY14
		RXQ18AY14	RXQ18AY14	RXQ18AY14	RXQ20AY14	RXQ20AY14	RXQ12AY14	RXQ12AY14		RXQ14AY14	RXQ16AY14	RXQ18AY14	RXQ18AY14	RXQ18AY14	RXQ18AY14	RXQ20AY14	RXQ20AY14
		–	–	–	–	–	RXQ18AY14	RXQ20AY14		RXQ18AY14	RXQ18AY14	RXQ18AY14	RXQ18AY14	RXQ18AY14	RXQ20AY14	RXQ20AY14	RXQ20AY14
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	307,000	324,000	341,000	362,000	382,000	399,000	420,000		444,000	461,000	478,000	495,000	512,000	532,000	553,000	573,000
	kW	90.0	95.0	100	106	112	117	123		130	135	140	145	150	156	162	168
Power consumption	kW	26.0	28.2	30.6	33.0	35.4	32.7	35.1		36.7	38.9	41.3	43.5	45.9	48.3	50.7	53.1
Capacity control	%	5-100	5-100	5-100	4-100	3-100	4-100	3-100		3-100	3-100	3-100	3-100	3-100	3-100	2-100	2-100
Casing colour		Ivory white (5Y7.5/1)								Ivory white (5Y7.5/1)							
Compressor Type		Hermetically sealed scroll type								Hermetically sealed scroll type							
Compressor Motor output	kW	(6.4×1)+(4.0×1) +(4.0×1)	(3.5×1)+(3.5×1) +(4.0×1)+(4.0×1)	(4.0×1)+(4.0×1) +(4.0×1)+(4.0×1)	(4.0×1)+(4.0×1) +(3.8×1)+(6.3×1)	(3.8×1)+(6.3×1) +(3.8×1)+(6.3×1)	(5.6×1)+(5.6×1) +(4.0×1)+(4.0×1)	(5.6×1)+(5.6×1) +(3.8×1)+(6.3×1)		(6.4×1)+(6.4×1) +(4.0×1)+(4.0×1)	(6.4×1)+(3.5×1)+(3.5×1) +(4.0×1)+(4.0×1)	(6.4×1)+(4.0×1)+(4.0×1) +(4.0×1)+(4.0×1)	(3.5×1)+(3.5×1)+(4.0×1) +(4.0×1)+(4.0×1)+(4.0×1)	**(4.0×1)+(4.0×1)+(4.0×1) +(4.0×1)+(4.0×1)+(4.0×1)**	(4.0×1)+(4.0×1)+(4.0×1) +(4.0×1)+(3.8×1)+(6.3×1)	(4.0×1)+(4.0×1)+(3.8×1) +(6.3×1)+(3.8×1)+(6.3×1)	(3.8×1)+(6.3×1)+(3.8×1) +(6.3×1)+(3.8×1)+(6.3×1)
Airflow rate	m³/min	257+257			257+297	297+297	191+191+257	191+191+297		257+257+257					257+257+297	257+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)			(1,657×1,240×765)+(1,657×1,240×765)+(1,657×1,240×765)							
Machine weight	kg	215+260	260+260		260+285	285+285	185+185+260	185+185+285		215+215+260	215+260+260		260+260+260		260+260+285	260+285+285	285+285+285
Sound level	dB(A)	64			66	68	65	67		65				66	68	69	70
Operation range	°CDB	10 to 49								10 to 49							
Refrigerant Type		R-410A								R-410A							
Refrigerant Charge	kg	7.4+8.4	8.2+8.4	8.4+8.4	8.4+11.8	11.8+11.8	6.8+6.8+8.4	6.8+6.8+11.8		7.4+7.4+8.4	7.4+8.2+8.4	7.4+8.4+8.4	8.2+8.4+8.4	8.4+8.4+8.4	8.4+8.4+11.8	8.4+11.8+11.8	11.8+11.8+11.8
Piping connections Liquid	mm	ϕ19.1 (Brazing)								ϕ19.1 (Brazing)							
Piping connections 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.
- 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.

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



RXMQ-A

Cooling Only

4 HP - 9 HP
(11.2 kW) (24 kW)

Compact & lightweight design

The new design has been optimised for the ***VRV*** IV S series, with the height of 4 HP and 5 HP 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 the range to 8 HP and 9 HP.

VRV IV S SERIES

4 HP 5 HP 6 HP 8 HP 9 HP

Lineup

5 models

Model Name	RXMQ4AVE4	RXMQ5AVE4	RXMQ6AVE4	RXMQ8AY14	RXMQ9AY14
Power Supply	1-phase, 220 V, 50 Hz			3-phase, 380-415 V, 50 Hz	
Capacity Range	4 HP (11.2 kW)	5 HP (14.0 kW)	6 HP (16.0 kW)	8 HP (22.4 kW)	9 HP (24.0 kW)
Capacity Index	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.

Elegant appearance with European style

FTKJ-N series indoor unit

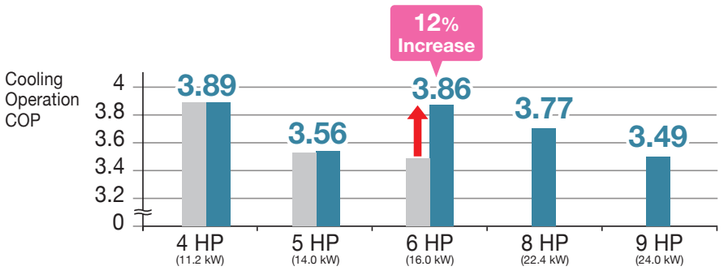
reddot award 2014 winner

German Design Award SPECIAL MENTION 2015

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 HP.



*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

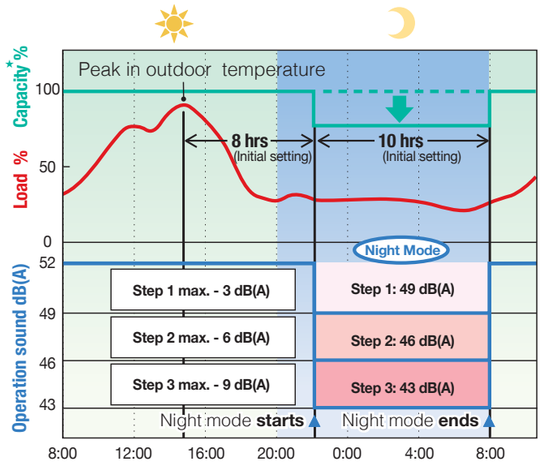
Starting time and ending time can be input. (An external control adaptor for outdoor unit, DTA104A53/61/62, and a locally obtained timer are necessary.)

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 HP outdoor unit during cooling operation

Mode 1. Automatic mode



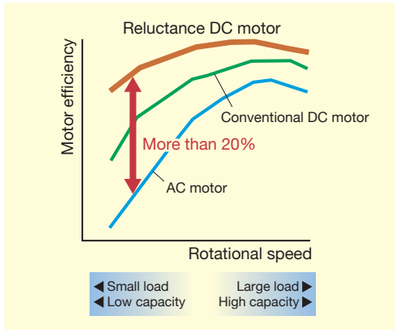
Note: • This function is available in setting at site.
• The relationship of outdoor temperature (load) and time shown in the graph is just an example.
* The capacity reduction rate differs depending on the operation sound level step selected.

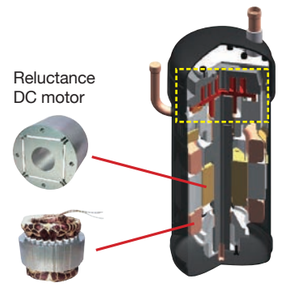
Collection of cutting-edge technologies realises efficient and quiet operation

The high efficiency compressor to achieve a higher COP

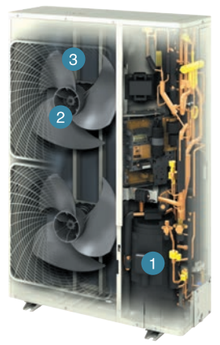
1 Compressor equipped with Reluctance DC motor

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.



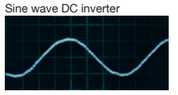


8, 9 HP



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.

Sine wave DC inverter



>> Smooth sine wave DC inverter

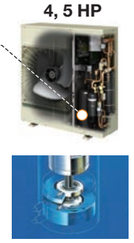
Use of an optimised sine wave smoothes motor rotation, further improving operating efficiency.

RXMQ 4, 5, 6AVE4

4, 5 HP

>> Swing compressor

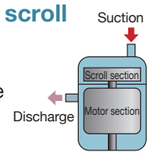
Daikin swing compressor has integrated the rotor with the blade, completely solving the refrigerant leakage and the wear problem caused by the mechanical friction between the rotor and the blade, which enhances the compressor efficiency and makes the compressor more quiet and durable.



RXMQ8, 9AY14

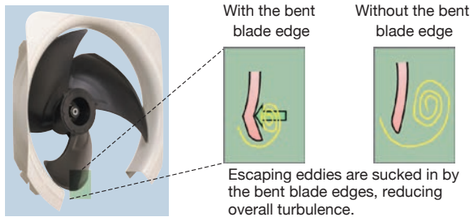
>> The structural scroll

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

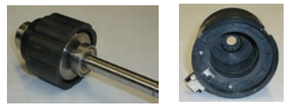
These two features work to reduce sound. Guides are added to the bell mouth intake to reduce turbulence in the airflow generated by fan suction. The Aero Spiral Fan features fan blades with the bent blade edges, further reducing turbulence.



3 DC fan motor

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

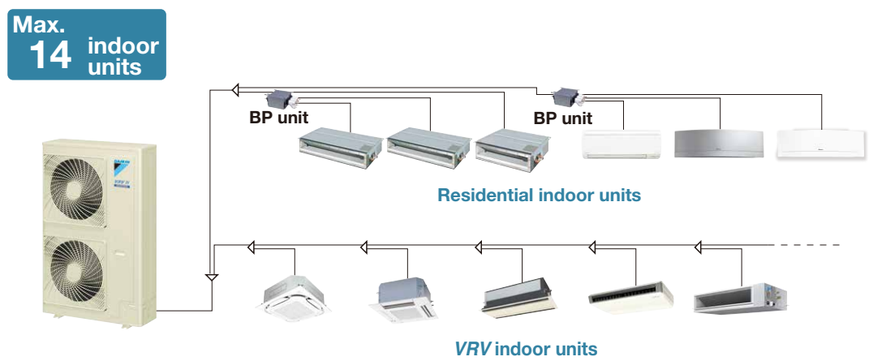
DC fan motor structure



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: Total capacity index of connectable indoor units must be 50-130% of the capacity index of the outdoor unit. Refer to page 54 for the maximum number of connectable indoor unit.



Automatic test operation

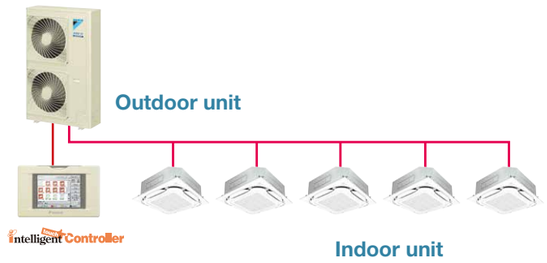
Simply press the test operation button and the unit will perform an automatic system check, including wiring, stop valves, piping, and refrigerant charging amount. The results then returned automatically after the check finishes.

Simple wiring and piping connection

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

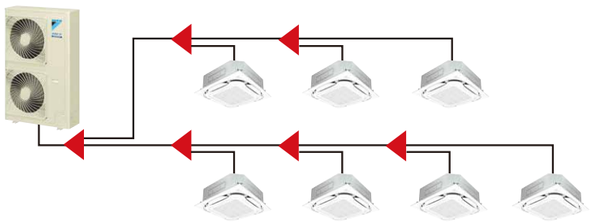
>> Super wiring system

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.



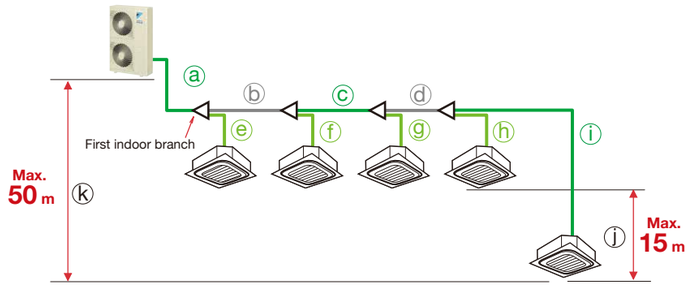
Makes the long piping design possible

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

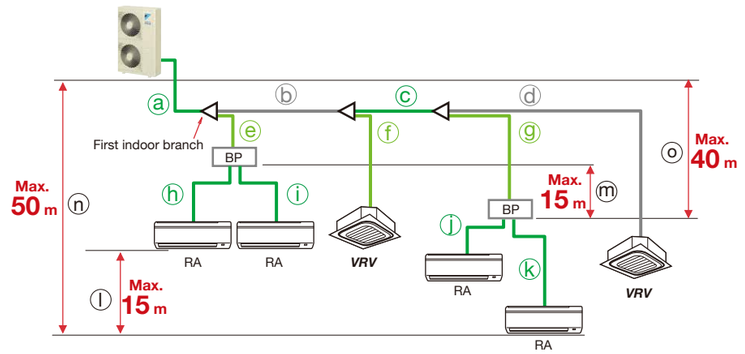


			4 HP	5 HP	6 HP	8,9 HP
Max. allowable piping length	Refrigerant piping length	a+b+c+d+i	50 m	70 m	120 m	100 m
	Total piping length	a+b+c+d+e+f+g+h+i	250 m	300 m	300 m	300 m
	Between the first indoor branch and the farthest indoor unit	b+c+d+i	40 m	40 m	40 m	40 m
Max. allowable level difference	Between 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
	Between the outdoor unit and the indoor unit — 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



				4 HP	5 HP	6-9 HP
Max. allowable piping length	Refrigerant piping length		a+b+c+g+k, a+b+c+d	50 m	70 m	100 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

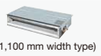
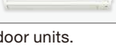
A mixed combination of ***VRV*** indoor units and residential indoor units can be combined into one system, opening the door to stylish and quiet indoor units.

VRV indoor units

● New lineup

Type	Model Name		20	25	32	40	50	63	80	100	125	140	200	250
		Capacity Range	0.8 HP	1 HP	1.25 HP	1.6 HP	2 HP	2.5 HP	3.2 HP	4 HP	5 HP	6 HP	8 HP	10 HP
		Capacity Index	20	25	31.25	40	50	62.5	80	100	125	140	200	250
Ceiling Mounted Cassette (Round Flow with Sensing)	New FXFSQ-AV4			●	●	●	●	●	●	●	●	New capacity ●		
Ceiling Mounted Cassette (Round Flow)	New FXFQ-AV4			●	●	●	●	●	●	●	●	New capacity ●		
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE4		●	●	●	●	●							
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE4		●	●	●	●	●	●	●		●			
Ceiling Mounted Cassette Corner	FXKQ-MAVE4			●	●	●		●						
Slim Ceiling Mounted Duct (Standard Series)	New FXDQ-PDVE4 (with drain pump)	 (700mm width type)	●	●	●									
	New FXDQ-PDVT4 (without drain pump)		●	●	●									
	New FXDQ-NDVE4 (with drain pump)	 (900 / 1100mm width type)				●	●	●						
	New FXDQ-NDVT4 (without drain pump)					●	●	●						
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV14		●	●	●	●	●	●						
Middle Static Pressure Ceiling Mounted Duct	New FXSQ-PAV4		●	●	●	●	●	●	●	●	●	●		
Ceiling Mounted Duct	New FXMQ-PAV4		●	●	●	●	●	●	●	●	●	●		
	FXMQ-MVE4												●	●
Outdoor-Air Processing Unit	FXMQ-MFV7										●		●	●
Ceiling Suspended	FXHQ-MAV7				●			●		●				
Wall Mounted	FXAQ-PVE4		●	●	●	●	●	●						
Floor Standing	FXLQ-MAVE4		●	●	●	●	●	●						
Concealed Floor Standing	FXNQ-MAVE4		●	●	●	●	●	●						
Floor Standing Duct	FXVQ-NY14										●		●	●
Clean Room Air Conditioner	FXBQ-PVE4					●	●	●						
	FXBPQ-PVE4							●						
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h											

Residential indoor units with connection to BP units

Type	Model Name		25	35	50	60	71
		Rated Capacity (kW)	2.5	3.5	5.0	6.0	7.1
		Capacity Index	25	35	50	60	71
Slim Ceiling Mounted Duct	FDKS-EVMB4	 (700 mm width type)	●	●			
	FDKS-CVMB4	 (900/1,100 mm width type)	●	●	●	●	
Wall Mounted	FTKJ-NVM4W		●	●	●		
	FTKJ-NVM4S		●	●	●		
	FTKS-DVM4		●	●			
	FTKS-FVM4				●	●	●

Note: BP units are necessary for residential indoor units.

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

*Refer to page 54 for the maximum number of connectable indoor units.

VRV IV S Series Outdoor Units RXMQ-A

							
MODEL			**RXMQ4AVE4**	**RXMQ5AVE4**	**RXMQ6AVE4**	**RXMQ8AY14**	**RXMQ9AY14**
Power supply			1-phase, 220 V, 50 Hz			3-phase, 380-415 V, 50 Hz	
Cooling capacity		Btu/h	38,200	47,800	54,600	76,400	81,900
		kW	11.2	14.0	16.0	22.4	24.0
Power consumption		kW	2.88	3.93	4.14	5.94	6.88
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		m^3/min	76		106	140	
Dimensions (H×W×D)		mm	990×940×320		1,345×900×320	1,430×940×320	
Machine weight		kg	71	80	102	131	
Sound level		dB(A)	52	53	55	57	58
Operation range		°CDB	-5 to 46				
Refrigerant	Type		R-410A				
	Charge	kg	2.9	3.4	3.6	5.8	
Piping connections	Liquid	mm	ϕ9.5 (Flare)			ϕ9.5 (Brazing)	
	Gas		ϕ15.9 (Flare)		ϕ19.1 (Flare)	ϕ19.1 (Brazing)	ϕ22.2 (Brazing)

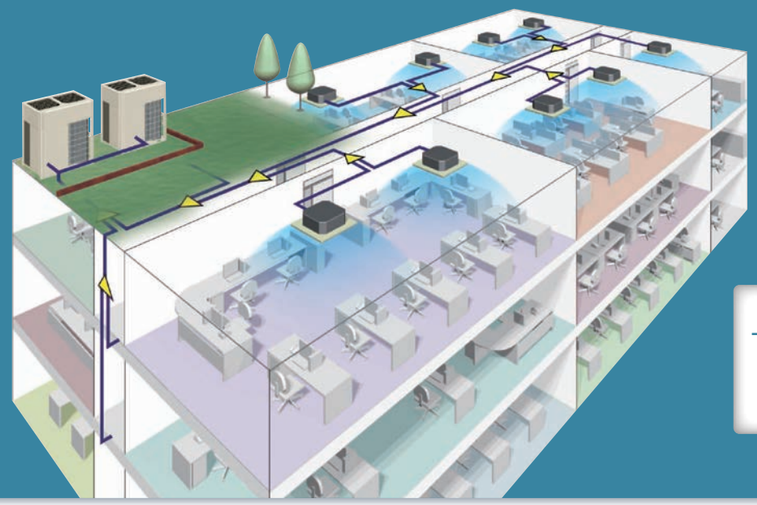
Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.
  During 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			**RXMQ4AVE4**	**RXMQ5AVE4**	**RXMQ6AVE4**	**RXMQ8AY14**	**RXMQ9AY14**
kW			11.2	14.0	16.0	22.4	24.0
HP			4	5	6	8	9
Capacity index			100	125	150	200	215
Total capacity index of connectable indoor units	Combination (%)	50%	50	62.5	75	100	107.5
		100%	100	125	150	200	215
		130%	130	162.5	195	260	280
Maximum number of connectable indoor units			6	8	9	13	14

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

VRV IV Q SERIES For Quick & High Quality Replacement Use VRV IV Q SERIES



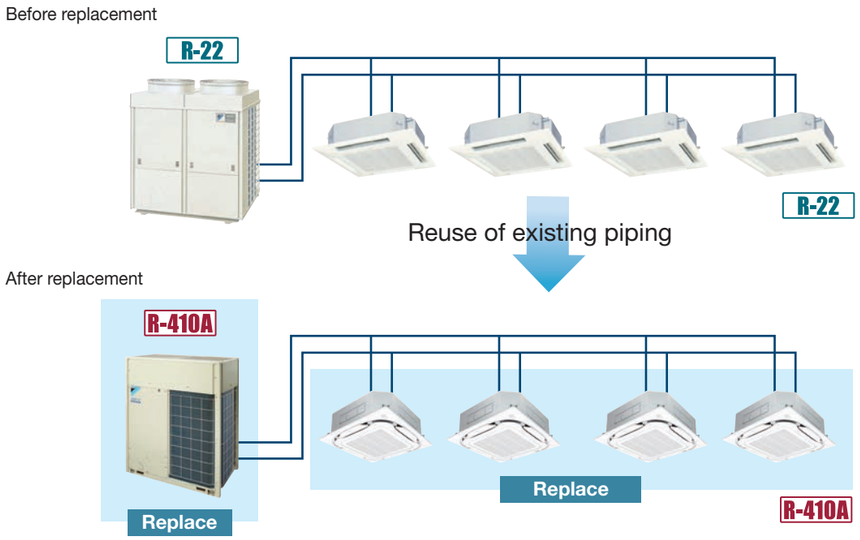
RQQ-T

Cooling Only

6 HP - 48 HP
(16 kW) (135 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.



* It is possible to keep R-22 indoor units from K-series and later version. It is not possible to combine old R-22 and new R-410A indoor units in one system due to incompatibility of communication.

Quick & High Quality replacement

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

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.

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.

Enhanced lineup

2 types up 48 HP

Energy saving

Higher COP and VRT technology

Variety of indoor unit

Multiple functions for greater comfort

Convenient control system

Advanced energy-saving management

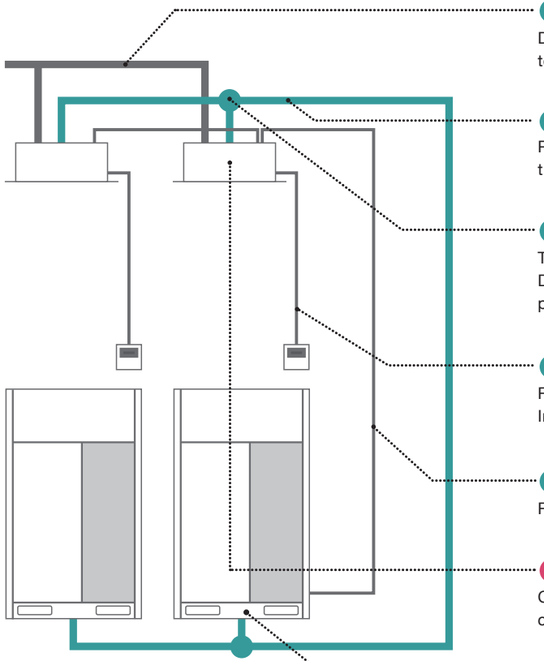
Quick, Quality and Economical

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 R22 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
Contact your local dealer to check compatibility in case you need to keep the indoor units.

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. Heat insulation is necessary for liquid piping and gas piping.
*2 It is possible to keep R-22 indoor units from K-series and later version. It is not possible to combine old R-22 and new R-410A indoor units in one system due to incompatibility of communication.

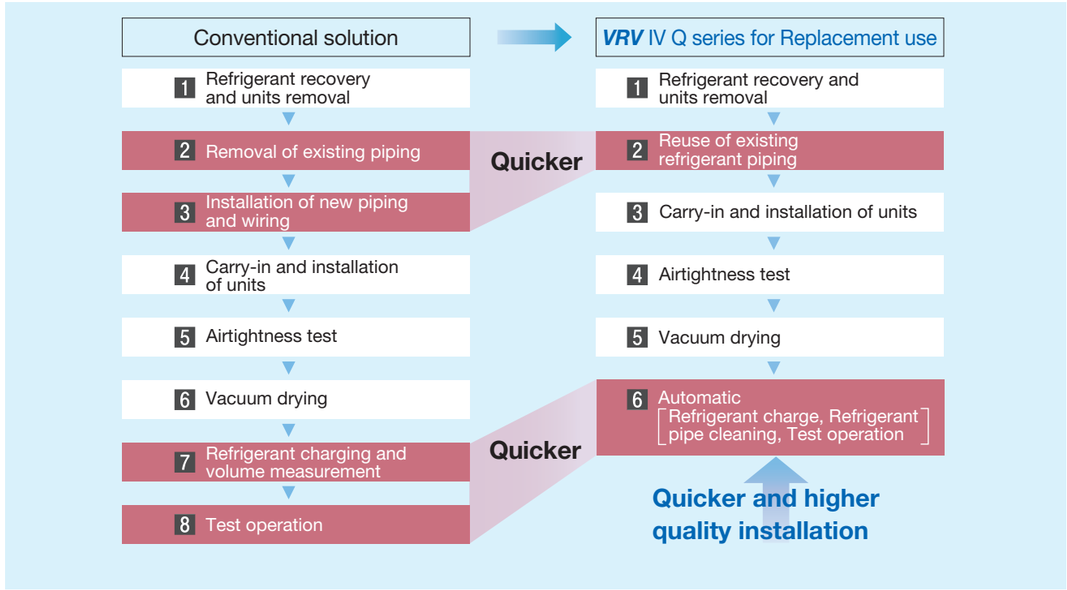
Automatic

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.

Time saving

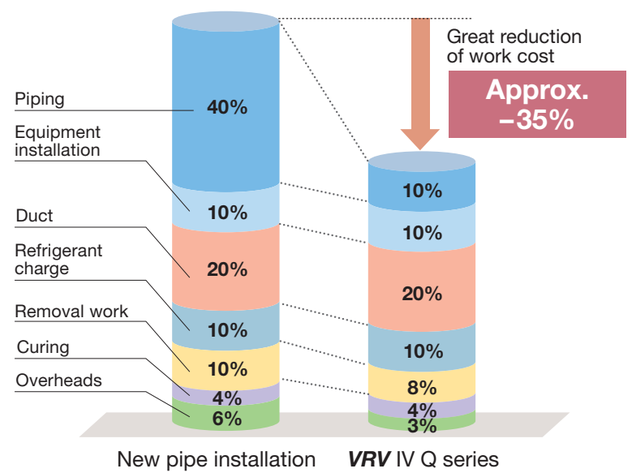
Enables smooth replacement of air conditioning with less effect on operations and users in the building.



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 HP example)



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 : RX20K
(model from 20 years previous)
20 HP outdoor unit

Installation space
2.25 m²

VRV IV Q SERIES : RQQ20T
20 HP outdoor unit

Installation space
0.95 m²

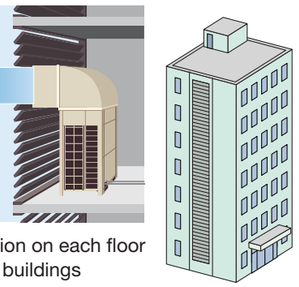
58% less space

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!

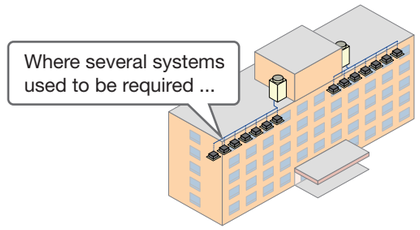
The number of connectable indoor units has been drastically increased from 30 to 64.

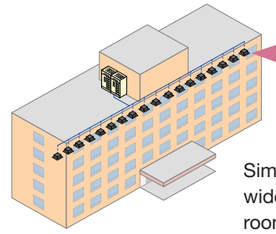
Conventional ***VRV*** K PLUS series: RX24–30K
(model from 20 years previous)

Up to 30 indoor units connectable

VRV IV Q SERIES : RQQ40–48T

Up to 64 indoor units connectable





Condensed into a single system

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

Enables increased capacity

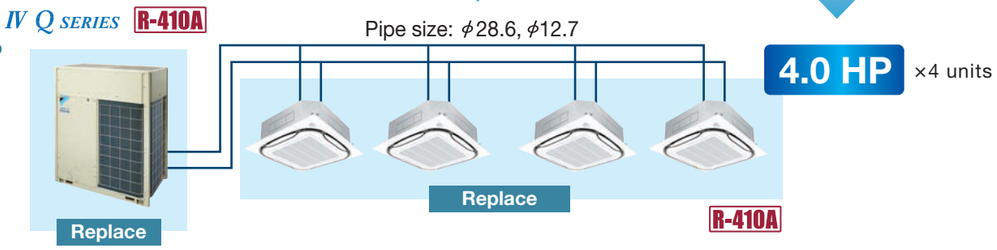
System can be upgraded using existing piping

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 HP ***VRV*** IV Q series using the refrigerant piping of an 10 HP R-22 system.

Before replacement
10 HP

Reuse of existing piping

After replacement
VRV IV Q SERIES R-410A
16 HP



* For reuse of existing refrigerant piping, it is possible to use piping or branched piping capable of handling 3.3 MPa or more. Heat insulation is necessary for liquid piping and gas piping.

Enhanced Lineup

2 types up to 48 HP

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 HP to meet an ever wider variety of needs.

Single outdoor unit

VRV III Q SERIES

8, 10, 12 HP

14, 16 HP

1 type only

VRV IV Q SERIES

6, 8, 10, 12 HP

14, 16, 18, 20 HP

2 type of Standard type and Space saving type

Lineup

HP	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 HP models. This allows the installation area to reduce by 33% as compared to the previous models.

VRV III Q SERIES

18, 20 HP

VRV IV Q SERIES

18, 20 HP

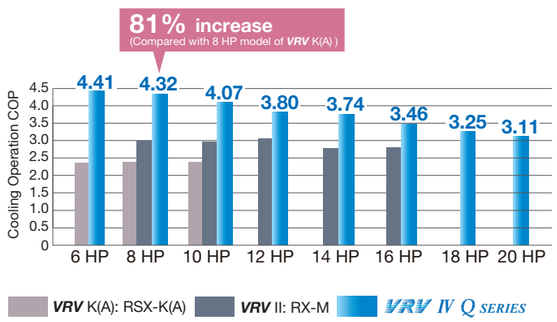
Foot print	1.42 m²	0.95 m²	33% decrease
Product weight	487 kg	320 kg	34% decrease

Energy Saving

Higher Coefficient of Performance (COP)

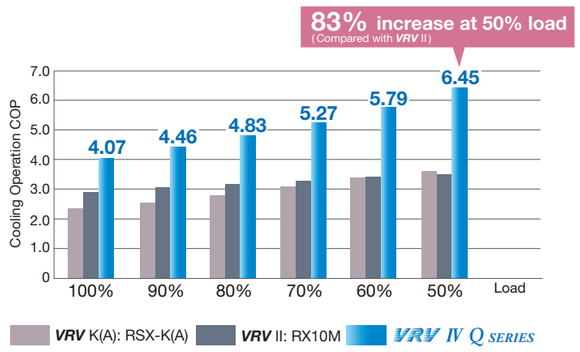
COP at 100% operation load

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



COP for 10 HP

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

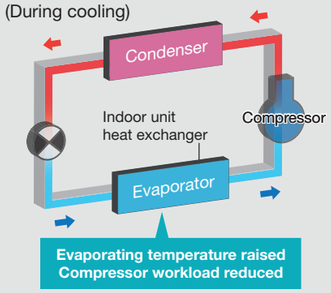
The new ***VRV*** IV Q series now features VRT technology. VRT automatically adjusts refrigerant temperature to individual building and climate requirement, thus further improving annual energy efficiency and maintaining comfort. With this excellent technology, running costs are reduced.

Variable Refrigerant Temperature

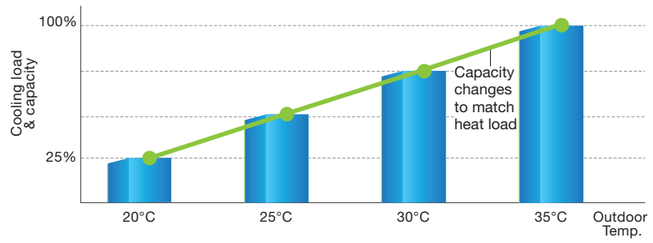
How is energy reduced?

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

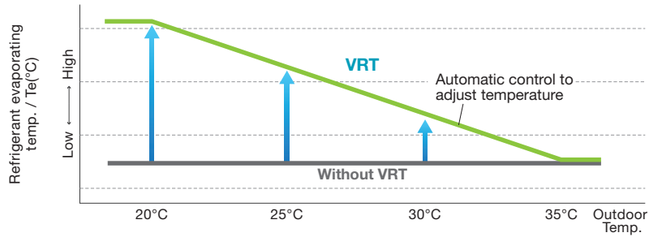
■ **Refrigerant cycle**
(During cooling)



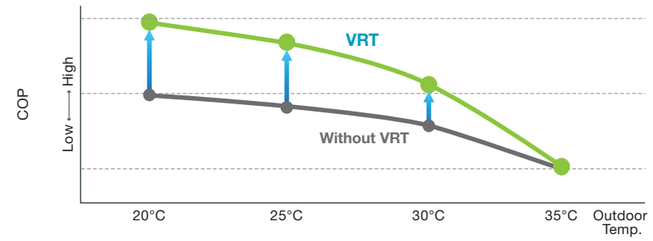
■ **Typical changes in evaporating temperature and COP depending on changing indoor load**



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.

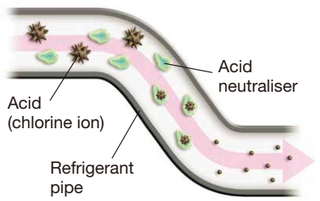
New technology that enables use of existing piping

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

VRV IV Q series Only

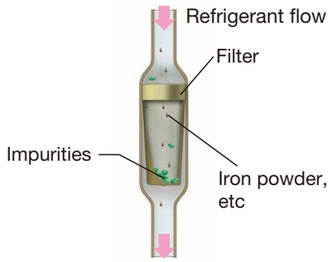
Acid

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



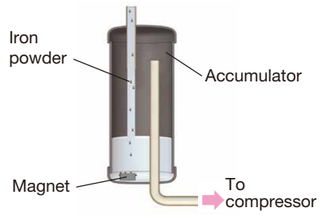
Impurities

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)

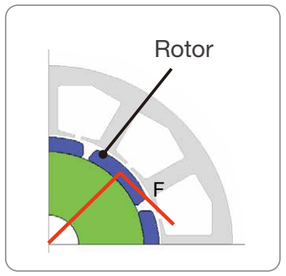
Only Daikin adapted ODM with feature ofstable rotation and volumetric efficiency

Advantages of ODM

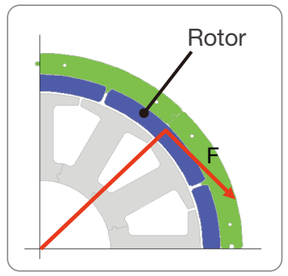
Thanks to large diameter of the rotor,
① Large torque with same electromagnetic force
② Stable rotation in all range, and can beoperated with small number of rotations

UNIQUE

Conventional Motor (Inner Type)



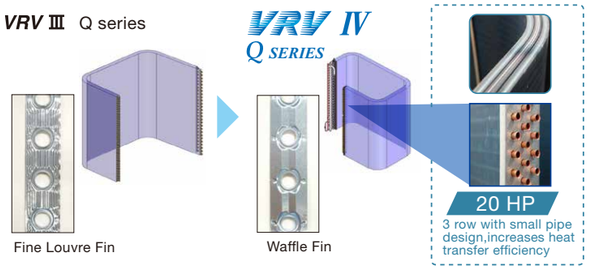
ODM (Outer Type)



HIGH TORQUE with low energy → MORE efficient

Highly integrated heat exchanger

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



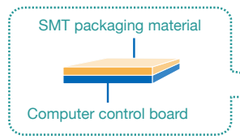
Realise highly integrated heat exchanger performance (increase row, reduce fin pitch) by reducing of airflow resistance which changes cooling tube to Ø7.

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

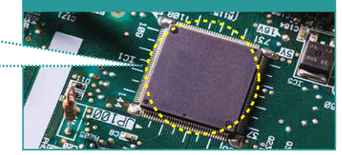
SMT* packaging technology

- 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



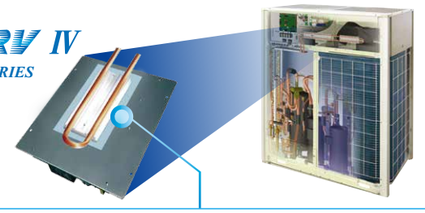
Refrigerant cooling technology, ensures stability of PCB temperature

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.

Enhanced lineup to 2 types

- 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 HP 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 flexibility to a new level.
- With the outdoor unit capacity increased in increment of 2 HP, customers' needs can be precisely met.
- Outdoor units with anti-corrosion specifications (-E type on request) are designed specifically for use in areas which are subject to salt damage and atmospheric pollution.

Standard Type

●Single Outdoor Units

6, 8, 10, 12 HP

RQQ6TY14(E)
RQQ8TY14(E)
RQQ10TY14(E)
RQQ12TY14(E)

14, 16 HP

RQQ14TY14(E)
RQQ16TY14(E)

●Double Outdoor Units

18, 20, 22, 24 HP

RQQ18TNY14(E)
RQQ20TNY14(E)
RQQ22TNY14(E)
RQQ24TNY14(E)

26, 28 HP

RQQ26TNY14(E)
RQQ28TNY14(E)

30, 32 HP

RQQ30TNY14(E)
RQQ32TNY14(E)

●Triple Outdoor Units

34, 36 HP

RQQ34TNY14(E)
RQQ36TNY14(E)

38, 40 HP

RQQ38TNY14(E)
RQQ40TNY14(E)

42, 44 HP

RQQ42TNY14(E)
RQQ44TNY14(E)

46, 48 HP

RQQ46TNY14(E)
RQQ48TNY14(E)

Space Saving Type

●Single Outdoor Units

18, 20 HP

RQQ18TY14(E)
RQQ20TY14(E)

●Double Outdoor Units

30, 32 HP

RQQ30TSY14(E)
RQQ32TSY14(E)

34, 36, 38, 40 HP

RQQ34TSY14(E)
RQQ36TSY14(E)
RQQ38TSY14(E)
RQQ40TSY14(E)

●Triple Outdoor Units

42, 44 HP

RQQ42TSY14(E)
RQQ44TSY14(E)

46, 48 HP

RQQ46TSY14(E)
RQQ48TSY14(E)

Lineup

HP	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							●	●					●	●	●	●	●	●	●	●	●	●

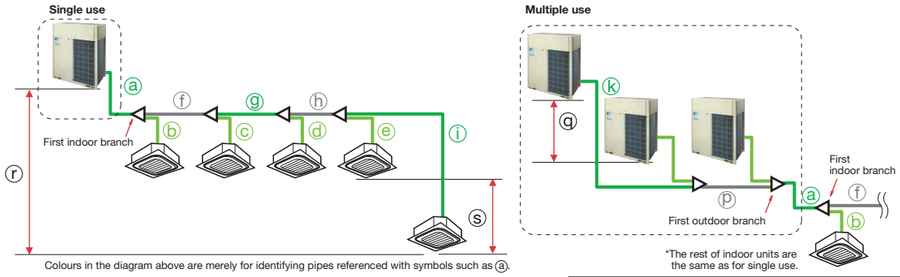
Variety of indoor unit

● New lineup

Type	Model Name	Capacity Range	20	25	32	40	50	63	80	100	125	140	200	250	400	500
		Capacity Index	0.8 HP	1 HP	1.25 HP	1.6 HP	2 HP	2.5 HP	3.2 HP	4 HP	5 HP	6 HP	8 HP	10 HP	16 HP	20 HP
			20	25	31.25	40	50	62.5	80	100	125	140	200	250	400	500
Ceiling Mounted Cassette (Round Flow with Sensing)	New FXFSQ-AV4			●	●	●	●	●	●	●	●	New capacity ●				
Ceiling Mounted Cassette (Round Flow)	New FXFQ-AV4			●	●	●	●	●	●	●	●	New capacity ●				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE4		●	●	●	●	●									
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE4		●	●	●	●	●	●	●		●					
Ceiling Mounted Cassette Corner	FXKQ-MAVE4			●	●	●		●								
Slim Ceiling Mounted Duct (Standard Series)	New FXDQ-PDVE4 (with drain pump)	(700mm width type)	●	●	●											
	New FXDQ-PDVT4 (without drain pump)	(700mm width type)	●	●	●											
	New FXDQ-NDVE4 (with drain pump)	(900 / 1100mm width type)				●	●	●								
	New FXDQ-NDVT4 (without drain pump)	(900 / 1100mm width type)				●	●	●								
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV14		●	●	●	●	●	●								
Middle Static Pressure Ceiling Mounted Duct	New FXSQ-PAV4		●	●	●	●	●	●	●	●	●	●				
Ceiling Mounted Duct	New FXMQ-PAV4		●	●	●	●	●	●	●	●	●	●				
	FXMQ-MVE4												●	●		
Outdoor-Air Processing Unit	FXMQ-MFV7										●		●	●		
Ceiling Suspended	FXHQ-MAV7				●			●		●						
Wall Mounted	FXAQ-PVE4		●	●	●	●	●	●								
Floor Standing	FXLQ-MAVE4		●	●	●	●	●	●								
Concealed Floor Standing	FXNQ-MAVE4		●	●	●	●	●	●								
Floor Standing Duct	FXVQ-NY14										●		●	●	●	●
Heat Reclaim Ventilator	VAM-GJVE	Airflow rate 150-2000 m³/h														

* It is possible to keep R-22 indoor units from K-series and later version. It is not possible to combine old R-22 and new R-410A indoor units in one system due to incompatibility of communication.

Piping limits for reuse of existing piping



		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

Reusability of existing piping for *VRV* IV Q series

Type of piping	Capacity	Piping size														
		Liquid						Gas								
		ϕ6.4	ϕ9.5	ϕ12.7	ϕ15.9	ϕ19.1	ϕ22.2	ϕ12.7	ϕ15.9	ϕ19.1	ϕ22.2	ϕ25.4	ϕ28.6	ϕ34.9	ϕ41.3	ϕ54.1
Main piping	6 HP	×	S○●			×	×	×	×	S○	●			×	×	×
	8 HP	×	S○	●		×	×	×	×	S○		●	●	×	×	×
	10 HP	×	S○	●		×	×	×	×	×	S○		●	×	×	×
	12 HP	×	×	S○	●	×	×	×	×	×	×	×	S○	●	×	×
	14 HP	×	×	S○	●	×	×	×	×	×	×	×	S○	●	×	×
	16 HP	×	×	S○	●	×	×	×	×	×	×	×	S○	●	×	×
	18 HP	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×
	20 HP	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×
	22 HP	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×	×
	24 HP	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●	×
	26 HP	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	28 HP	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	30 HP	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	32 HP	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	34 HP	×	×	×	×	S○	●	×	×	×	×	×	×	S○	●	×
	36 HP	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	38 HP	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	40 HP	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	42 HP	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	44 HP	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	46 HP	×	×	×	×	S○	●	×	×	×	×	×	×	×	S○	●
	48 HP	×	×	×	×	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 class	×	S○		×	×	×	×	S○				×	×	×	×
	200 class	×	S○	●	×	×	×	×	×	S○		●		×	×	×
	250 class	×	S○	●	×	×	×	×	×	×	S○		●	×	×	×
	400 class	×	×	S○		×	×	×	×	×	×	×	S○		×	×
	500 class	×	×	S○			×	×	×	×	×	×	S○		×	×

● : Piping size of conventional R-22 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.

Outdoor Unit Combinations

Standard Type

HP	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	RQQ6T	RQQ6T	–	75 to 195	9
8	22.4	200	RQQ8T	RQQ8T	–	100 to 260	13
10	28.0	250	RQQ10T	RQQ10T	–	125 to 325	16
12	33.5	300	RQQ12T	RQQ12T	–	150 to 390	19
14	40.0	350	RQQ14T	RQQ14T	–	175 to 455	22
16	45.0	400	RQQ16T	RQQ16T	–	200 to 520	26
18	50.4	450	RQQ18TN	RQQ8T + RQQ10T	BHFP22P100	225 to 585	29
20	55.9	500	RQQ20TN	RQQ8T + RQQ12T		250 to 650	32
22	61.5	550	RQQ22TN	RQQ10T + RQQ12T		275 to 715	35
24	67.0	600	RQQ24TN	RQQ12T × 2		300 to 780	39
26	73.5	650	RQQ26TN	RQQ12T + RQQ14T		325 to 845	42
28	78.5	700	RQQ28TN	RQQ12T + RQQ16T		350 to 910	45
30	85.0	750	RQQ30TN	RQQ14T + RQQ16T		375 to 975	48
32	90.0	800	RQQ32TN	RQQ14T + RQQ18T		400 to 1,040	52
34	95.0	850	RQQ34TN	RQQ10T + RQQ12T × 2	BHFP22P151	425 to 1,105	55
36	101	900	RQQ36TN	RQQ12T × 3		450 to 1,170	58
38	106	950	RQQ38TN	RQQ8T + RQQ12T + RQQ18T		475 to 1,235	61
40	112	1,000	RQQ40TN	RQQ12T × 2 + RQQ16T		500 to 1,300	64
42	119	1,050	RQQ42TN	RQQ12T + RQQ14T + RQQ16T		525 to 1,365	
44	124	1,100	RQQ44TN	RQQ12T + RQQ16T × 2		550 to 1,430	
46	130	1,150	RQQ46TN	RQQ14T × 2 + RQQ18T		575 to 1,495	
48	135	1,200	RQQ48TN	RQQ14T + RQQ16T + RQQ18T		600 to 1,560	

Note: *1 For multiple connection of 18 HP 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

HP	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	RQQ18T	RQQ18T	–	225 to 585	29
20	56.0	500	RQQ20T	RQQ20T	–	250 to 650	32
30	83.5	750	RQQ30TS	RQQ12T + RQQ18T	BHFP22P100	375 to 975	48
32	89.5	800	RQQ32TS	RQQ12T + RQQ20T		400 to 1,040	52
34	95.0	850	RQQ34TS	RQQ16T + RQQ18T		425 to 1,105	55
36	100	900	RQQ36TS	RQQ18T x 2		450 to 1,170	58
38	106	950	RQQ38TS	RQQ18T + RQQ20T		475 to 1,235	61
40	112	1,000	RQQ40TS	RQQ20T x 2		500 to 1,300	64
42	117	1,050	RQQ42TS	RQQ12T x 2 + RQQ18T	BHFP22P151	525 to 1,365	
44	123	1,100	RQQ44TS	RQQ12T x 2 + RQQ20T		550 to 1,430	
46	129	1,150	RQQ46TS	RQQ12T + RQQ16T + RQQ18T		575 to 1,495	
48	134	1,200	RQQ48TS	RQQ12T + RQQ18T x 2		600 to 1,560	

Note: *1 For multiple connection of 30 HP 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%.

VRV IV Q Series Outdoor Units RQQ-T

Standard Type

																	
MODEL		**RQQ6TY14(E)**	**RQQ8TY14(E)**	**RQQ10TY14(E)**	**RQQ12TY14(E)**	**RQQ14TY14(E)**	**RQQ16TY14(E)**		**RQQ18TNY14(E)**	**RQQ20TNY14(E)**	**RQQ22TNY14(E)**	**RQQ24TNY14(E)**	**RQQ26TNY14(E)**	**RQQ28TNY14(E)**	**RQQ30TNY14(E)**	**RQQ32TNY14(E)**
Combination units		—	—	—	—	—	—		**RQQ8TY14(E)**	**RQQ8TY14(E)**	**RQQ10TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ14TY14(E)**	**RQQ14TY14(E)**
									RQQ10TY14(E)	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ14TY14(E)**	**RQQ16TY14(E)**	**RQQ16TY14(E)**	**RQQ18TY14(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
Power consumption	kW	3.63	5.18	6.88	8.82	10.7	13.0		12.1	14.0	15.7	17.6	19.5	21.8	23.7	26.1
Capacity control	%	20-100	20-100	16-100	15-100	11-100	10-100		8-100	8-100	8-100	8-100	6-100	6-100	5-100	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	m³/min	119	157	165	178	233	233		157+165	157+178	165+178	178+178	178+233	178+233	233+233	233+233
Dimensions (HxWxD)	mm	1,657X930X765	1,657X930X765	1,657X930X765	1,657X930X765	1,657X1,240X765	1,657X1,240X765		(1,657X930X765)+(1,657X930X765)	(1,657X930X765)+(1,657X930X765)	(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	185	185	195	195	285	285		185+195	185+195	195+195	195+195	195+285	195+285	285+285	285+285
Sound level	dB(A)	55	56	57	59	60	61		60	61	61	62	63	63	64	64
Operation range	°CDB	-5 to 49							-5 to 49							
Refrigerant	Type	R-410A							R-410A							
	Charge kg	5.9	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+10.5
Piping connections	Liquid mm	ϕ9.5 (Brazing)			ϕ12.7 (Brazing)				ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)
	Gas mm	ϕ19.1 (Brazing)		ϕ22.2 (Brazing)	ϕ28.6 (Brazing)				ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (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.
•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.

VRV IV Q Series Outdoor Units RQQ-T

Standard Type

										
MODEL		**RQQ34TNY14(E)**	**RQQ36TNY14(E)**	**RQQ38TNY14(E)**	**RQQ40TNY14(E)**	**RQQ42TNY14(E)**	**RQQ44TNY14(E)**		**RQQ46TNY14(E)**	**RQQ48TNY14(E)**
Combination units		**RQQ10TY14(E)**	**RQQ12TY14(E)**	**RQQ8TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**		**RQQ14TY14(E)**	**RQQ14TY14(E)**
		RQQ12TY14(E)	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ14TY14(E)**	**RQQ16TY14(E)**		**RQQ14TY14(E)**	**RQQ16TY14(E)**
		RQQ12TY14(E)	**RQQ12TY14(E)**	**RQQ18TY14(E)**	**RQQ16TY14(E)**	**RQQ16TY14(E)**	**RQQ16TY14(E)**		**RQQ18TY14(E)**	**RQQ18TY14(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
Power consumption	kW	24.5	26.5	29.4	30.6	32.5	34.8		36.8	39.1
Capacity control	%	5-100	5-100	4-100	4-100	4-100	4-100		3-100	3-100
Casing colour		Ivory white (5Y7.5/1)							Ivory white (5Y7.5/1)	
Compressor Type		Hermetically Sealed Scroll Type							Hermetically Sealed Scroll Type	
Compressor 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	m³/min	165+178+178	178+178+178	157+178+233	178+178+233	178+233+233	178+233+233		233+233+233	233+233+233
Dimensions (HxWxD)	mm	(1,657X930X765)+(1,657X930X765)+(1,657X930X765)	(1,657X930X765)+(1,657X930X765)+(1,657X930X765)	(1,657X930X765)+(1,657X930X765)+(1,657X1,240X765)	(1,657X930X765)+(1,657X930X765)+(1,657X1,240X765)	(1,657X930X765)+(1,657X1,240X765)+(1,657X1,240X765)	(1,657X930X765)+(1,657X1,240X765)+(1,657X1,240X765)		(1,657X1,240X765)+(1,657X1,240X765)+(1,657X1,240X765)	(1,657X1,240X765)+(1,657X1,240X765)+(1,657X1,240X765)
Machine weight	kg	195+195+195	195+195+195	185+195+285	195+195+285	195+285+285	195+285+285		285+285+285	285+285+285
Sound level	dB(A)	63	64	64	65	65	65		66	66
Operation range	°CDB	-5 to 49							-5 to 49	
Refrigerant Type		R-410A							R-410A	
Refrigerant Charge	kg	6.0+6.3+6.3	6.3+6.3+6.3	5.9+6.3+10.5	6.3+6.3+10.4	6.3+10.3+10.4	6.3+10.4+10.4		10.3+10.3+10.5	10.3+10.4+10.5
Piping connections Liquid	mm	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)		ϕ19.1 (Brazing)	ϕ19.1 (Brazing)
Piping connections Gas	mm	ϕ34.9 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)		ϕ41.3 (Brazing)	ϕ41.3 (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.
•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.

Space Saving Type

				
MODEL			**RQQ18TY14(E)**	**RQQ20TY14(E)**
Combination units			—	—
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz	
Cooling capacity		Btu/h	171,000	191,000
		kW	50.0	56.0
Power consumption		kW	15.4	18.0
Capacity control		%	10-100	8-100
Casing colour			Ivory white (5Y7.5/1)	
Compressor	Type		Hermetically Sealed Scroll Type	
Compressor	Motor output	kW	(4.4X1)+(4.0X1)	(4.6X1)+(5.5X1)
Airflow rate		m³/min	233	268
Dimensions (HxWxD)		mm	1,657X1,240X765	1,657X1,240X765
Machine weight		kg	285	320
Sound level		dB(A)	62	65
Operation range		°CDB	-5 to 49	
Refrigerant	Type		R-410A	
Refrigerant	Charge	kg	10.5	11.8
Piping connections	Liquid	mm	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)
Piping connections	Gas	mm	ϕ28.6 (Brazing)	ϕ28.6 (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.
•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.

VRV IV Q Series Outdoor Units RQQ-T

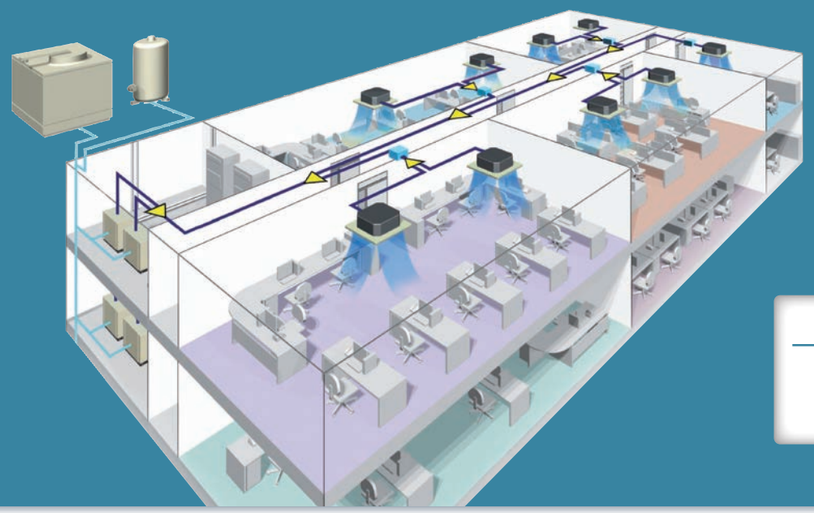
Space Saving Type

												
MODEL		**RQQ30TSY14(E)**	**RQQ32TSY14(E)**	**RQQ34TSY14(E)**	**RQQ36TSY14(E)**		**RQQ38TSY14(E)**	**RQQ40TSY14(E)**	**RQQ42TSY14(E)**	**RQQ44TSY14(E)**	**RQQ46TSY14(E)**	**RQQ48TSY14(E)**
Combination units		**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ16TY14(E)**	**RQQ18TY14(E)**		**RQQ18TY14(E)**	**RQQ20TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**
		RQQ18TY14(E)	**RQQ20TY14(E)**	**RQQ18TY14(E)**	**RQQ18TY14(E)**		**RQQ20TY14(E)**	**RQQ20TY14(E)**	**RQQ12TY14(E)**	**RQQ12TY14(E)**	**RQQ16TY14(E)**	**RQQ18TY14(E)**
		—	—	—	—		—	—	**RQQ18TY14(E)**	**RQQ20TY14(E)**	**RQQ18TY14(E)**	**RQQ18TY14(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	285,000	305,000	324,000	341,000		362,000	382,000	399,000	420,000	440,000	457,000
	kW	83.5	89.5	95.0	100		106	112	117	123	129	134
Power consumption	kW	24.2	26.8	28.4	30.8		33.4	36.0	33.0	35.6	37.2	39.6
Capacity control	%	6-100	5-100	5-100	5-100		4-100	4-100	4-100	4-100	4-100	4-100
Casing colour		Ivory white (5Y7.5/1)					Ivory white (5Y7.5/1)					
Compressor	Type	Hermetically Sealed Scroll Type					Hermetically Sealed Scroll Type					
	Motor output kW	(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	m³/min	178+233	178+268	233+233	233+233		233+268	268+268	178+178+233	178+178+268	178+233+233	178+233+233
Dimensions (HxWxD)	mm	(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)		(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)
Machine weight	kg	195+285	195+320	285+285	285+285		285+320	320+320	195+195+285	195+195+320	195+285+285	195+285+285
Sound level	dB(A)	64	66	65	65		67	68	65	67	66	66
Operation range	°CDB	-5 to 49					-5 to 49					
Refrigerant	Type	R-410A					R-410A					
	Charge kg	6.3+10.5	6.3+11.8	10.4+10.5	10.5+10.5		10.5+11.8	11.8+11.8	6.3+6.3+10.5	6.3+6.3+11.8	6.3+10.4+10.5	6.3+10.5+10.5
Piping connections	Liquid mm	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)		ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)
	Gas mm	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ41.3 (Brazing)		ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (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.
- 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.



RWEYQ-T

Cooling Only

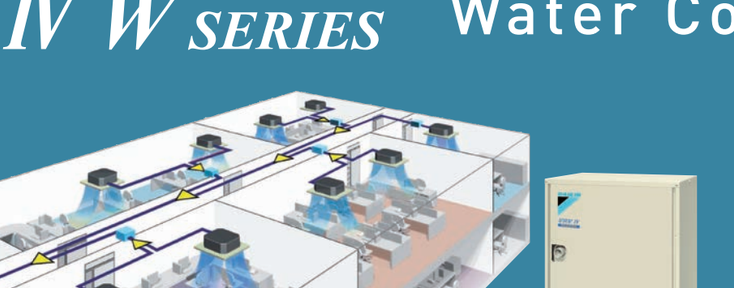
6 HP - 36 HP
(16 kW) (101 kW)

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

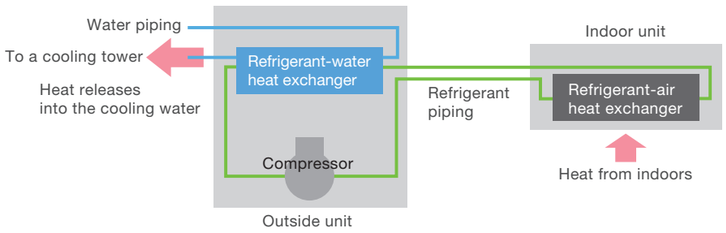
What is a water cooled system?

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.

Air cooled system



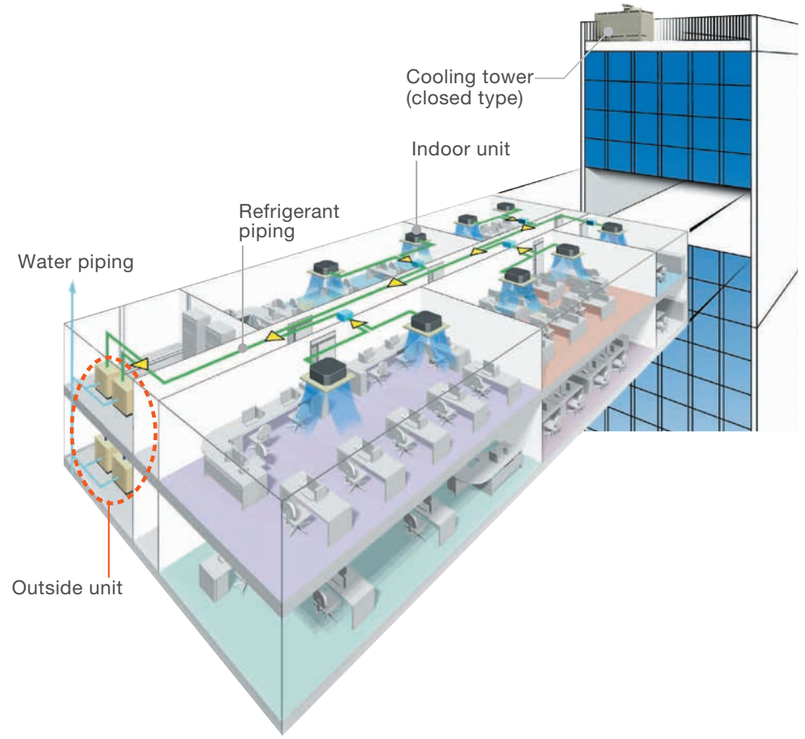
Water cooled system



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

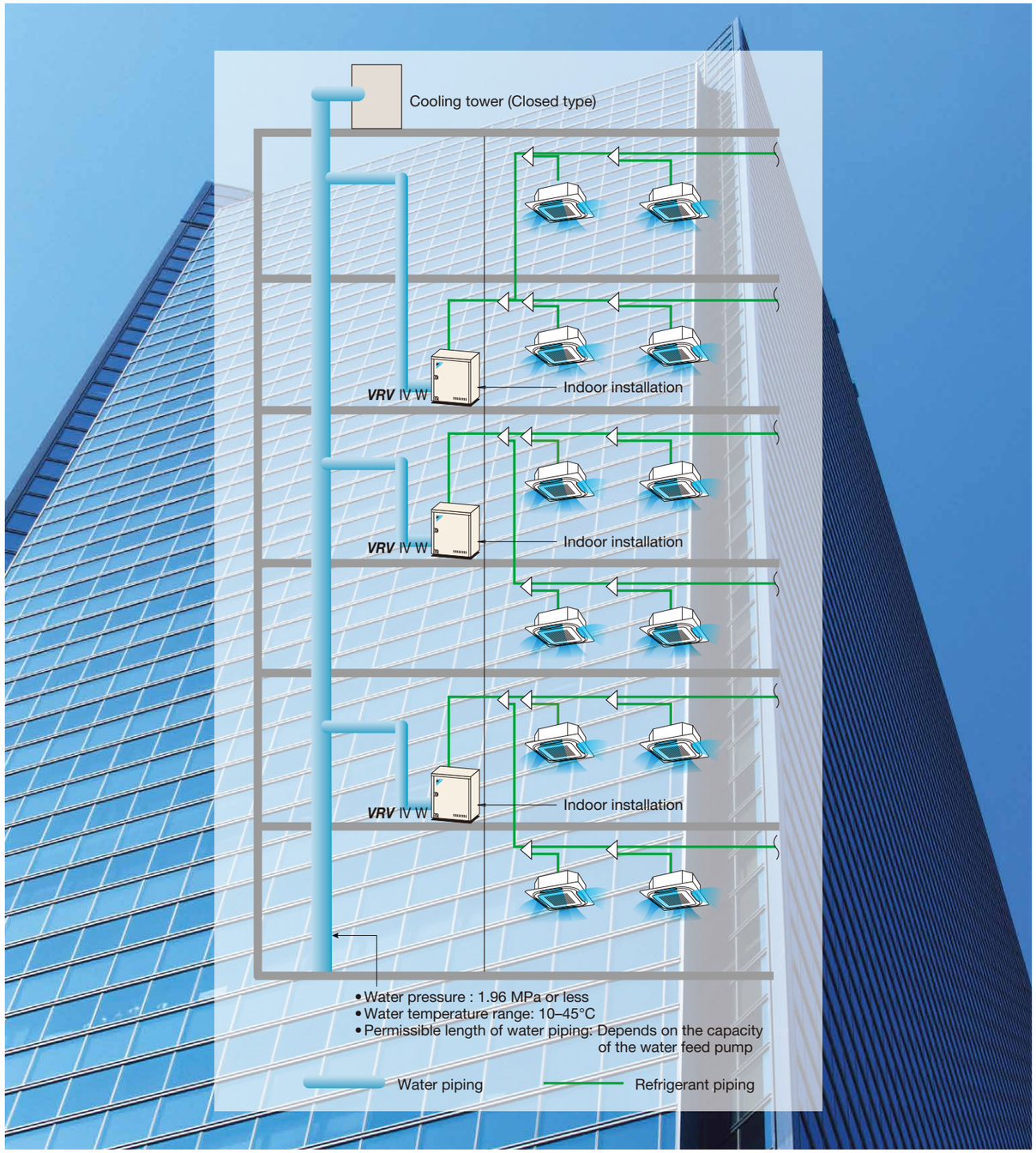
- Outside units can be installed indoors, for example, on basement floors.
  →**High installation flexibility**
- The air conditioning operation is stable even when the outdoor air temperature is high.
  →**Improved comfort**

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 anywhere 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 can easily fit into long building floors.]
  [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.

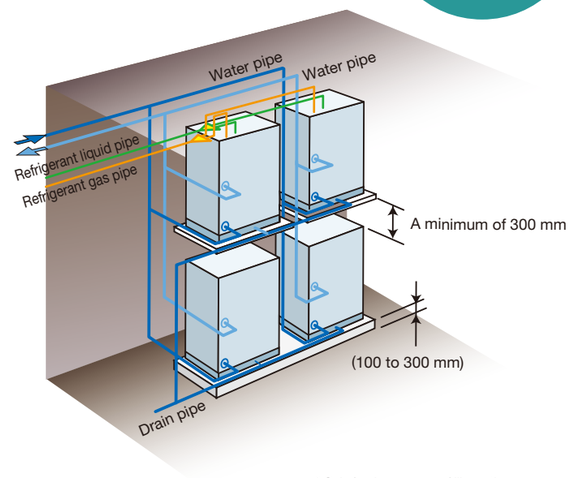
The *VRV* IV W series can meet various air conditioning needs by taking full advantage of the characteristics of a water cooled system.



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

No balcony required

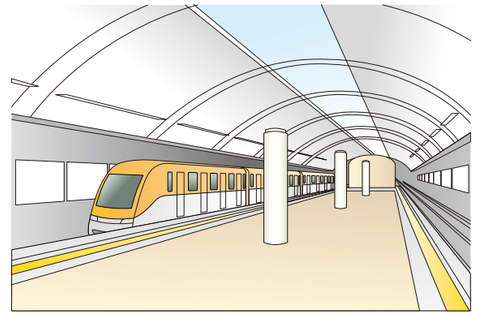
Compact outside units can be easily installed in the machine rooms on each floor.
This helps overcome the restriction on differences in height of refrigerant piping.
Individual air conditioning can be easily provided in high-rise buildings using this ***VRV*** system.



* Only for the purpose of illustration.

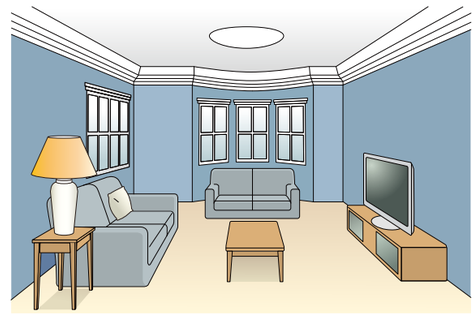
Easy to install in underground shopping malls and subway systems

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

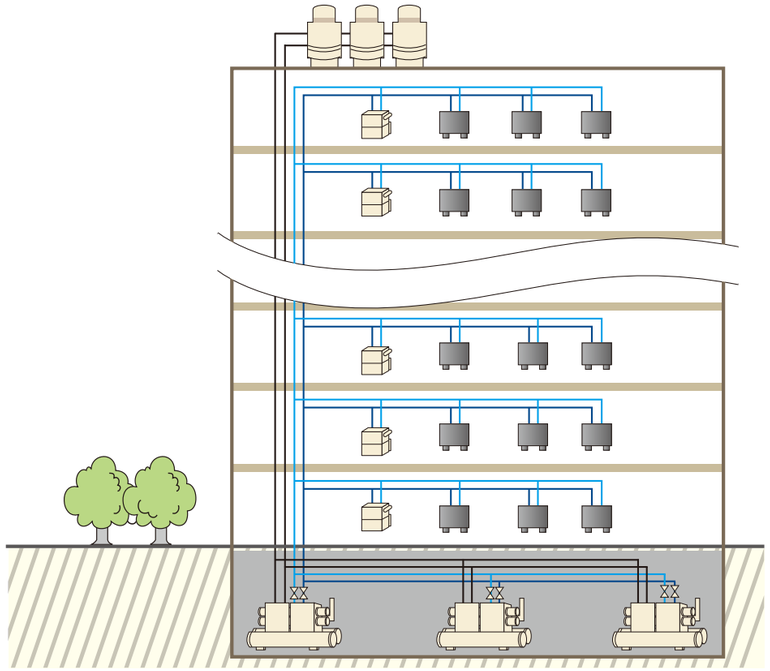


Also recommended for condominiums and detached houses

We offer an extensive lineup of small capacity outside units as well as connectable residential indoor units for detached houses. Compact outside units can be installed indoors.



Rising problems for old, conventional water system



* System diagram

Why is renovation necessary?

1. As equipment ages, its air conditioning capacity weakens with each passing year.
2. With frequent breakdowns in the outside unit, normal use of air conditioners is unachievable.
3. The maintenance cost for the equipment keeps rising.
4. The longer the equipment serves, its noise becomes louder.
5. Scale formed in water pipes is hard to clean, accelerating corrosion and aging processes.
6. Meeting the requirements of a 24-hour running IT room is out of the question.
7. Catering to new tenants' partitioning changes in a timely manner is difficult.
8. Charging by household is not possible.
9. Serving tenants working overtime is difficult.
10. Central control and management costs too much.

Troublesome issues in renovation?

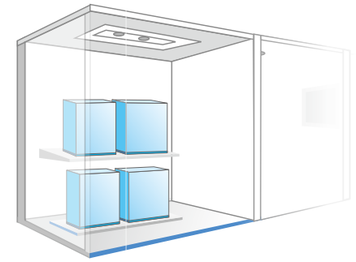
1. How to avoid damaging the building structure?
2. How to reduce the impact on tenants during renovation?
3. How to bring the renovation costs down to lowest level possible?
4. How to securely transport the air conditioning outside unit without incident?
5. How to simplify maintenance of the air conditioning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

A Flexible System, Convenient for Expansion/Renovation

Problems with existing water systems can be solved with minimal construction work.

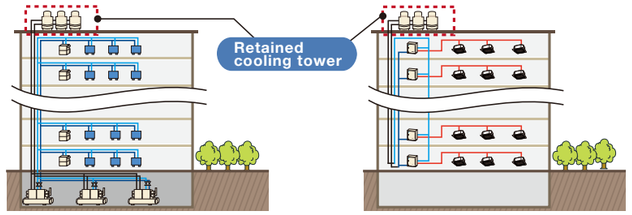
1 Indoor installation solves the puzzle of proper placement of outdoor units

The outside units of the water cooled ***VRV*** IV W series don't have necessity to direct heat exchanging with outdoor air. This feature makes it possible to place the outside unit 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 of the old system during renovation, effectively keeping costs down.



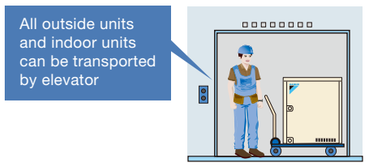
Before renovation

After renovation

* System diagram

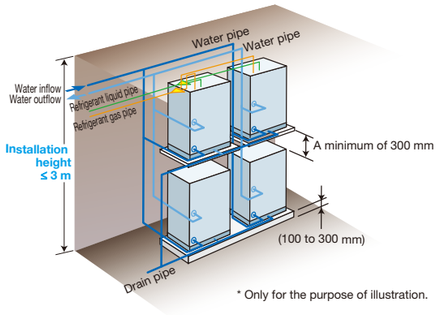
3 The compact outside units facilitate the renovation process and saves space for the outside unit area

- 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.



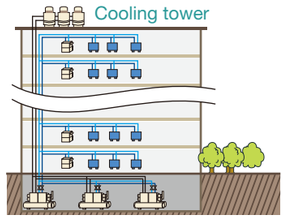
- The modular design featured by the water cooled ***VRV*** IV W series enables a free and flexible configuration of the outside units. Outside units can be arranged with one on top of another, saving space for other purposes.

Stacking up of the outside units

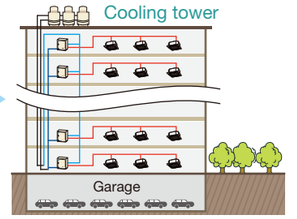


* Only for the purpose of illustration.

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.

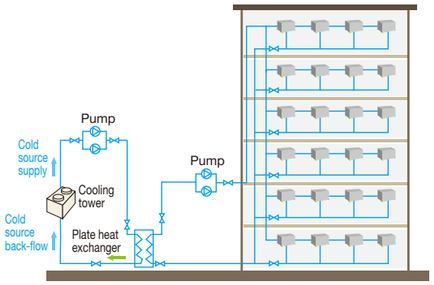


With the water cooled ***VRV*** IV W series, the outside units are modular design and can be arranged more freely and flexibly, saving part of the outside unit room for purposes such as business or car parking.

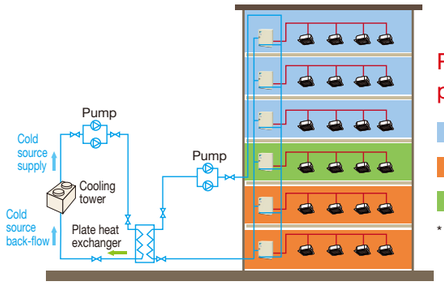
* System diagram

4 Floor by floor renovation without disturbing other tenants

Based on the actual situation, renovation work can be carried out in phases, lot by lot 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

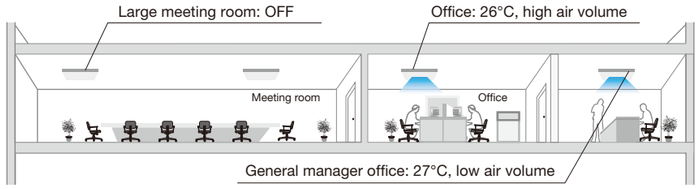
5 Compact refrigerant pipes and *VRV* indoor units help to save ceiling space

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

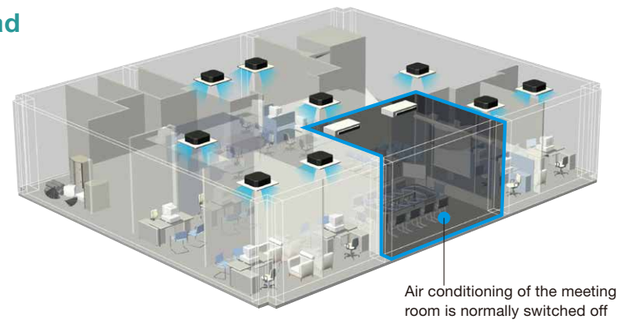
Each indoor unit of the water cooled ***VRV*** IV W series can be independently controlled and adjusted according to each tenant's individual needs for temperature and air volume.
This achieves optimal comfort and convenience.



Based on cooling condition

2 Higher efficiency with partial load

In actual operation, an air conditioning system's load may vary due to external climate change or variation of indoor unit operation rate, making the air conditioning system work in a partial load operation most of the time. By virtue of Daikin's advanced DC inverter technology and advanced refrigerant control technology, the water cooled ***VRV*** IV W series boasts a higher efficiency in a partial load state than in the rated operating conditions.



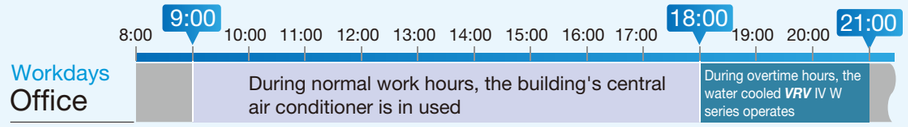
Actual conditions of the floor

3 Flexibly satisfies conditions for working overtime and times of insufficient load

When teaming up with a conventional central air conditioning system, the water cooled ***VRV*** IV W series can easily handle the air conditioning needs for working after-hours 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.

- Inconvenient transportation 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



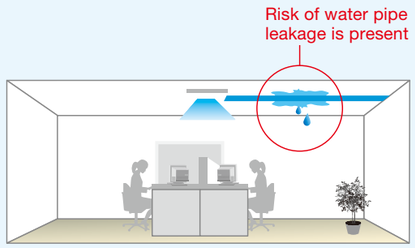
The water cooled ***VRV*** IV W series is utilized to meet overtime work needs

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 on 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.

VRV IV W SERIES

Footprint : 0.43 m²

Product Weight : 146 kg

VRV III W series
24 HP(8 HP+8 HP+8 HP)

VRV IV W SERIES
24 HP(12 HP+12 HP)

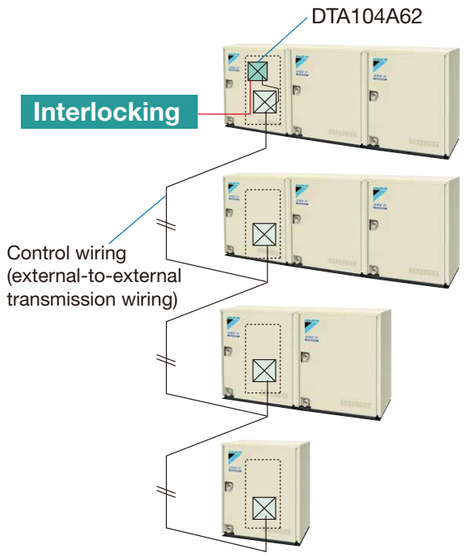
Footprint	1.29 m²	0.86 m²	33% Decrease
Product Weight	447 kg	294 kg	34% Decrease

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 HP

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

Single outside unit

VRV III W series

8 HP, 10 HP

VRV IV W SERIES

6 HP, 8 HP, 10 HP, 12 HP

VRV IV W SERIES

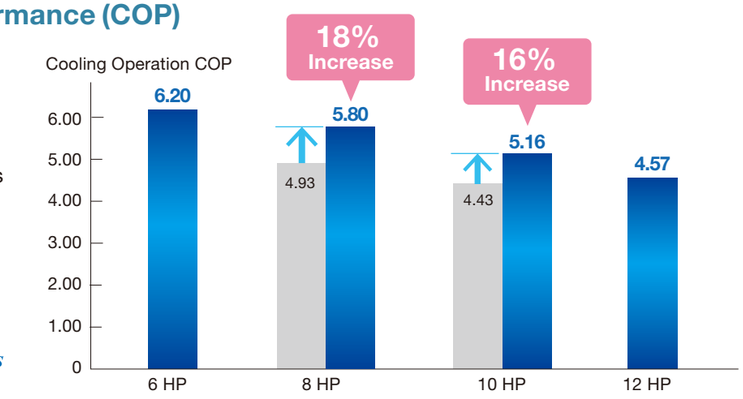
6,8,10,12 HP		14,16,18,20,22,24 HP		26,28,32,34,36 HP	
					
RWEYQ6TY14	RWEYQ10TY14	RWEYQ14TY14	RWEYQ20TY14	RWEYQ26TY14	RWEYQ32TY14
RWEYQ8TY14	RWEYQ12TY14	RWEYQ16TY14	RWEYQ22TY14	RWEYQ28TY14	RWEYQ34TY14
		RWEYQ18TY14	RWEYQ24TY14	RWEYQ30TY14	RWEYQ36TY14

Capacity Range	HP	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

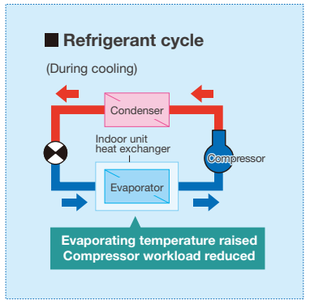
Customise your *VRV* system for optimal annual efficiency

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.

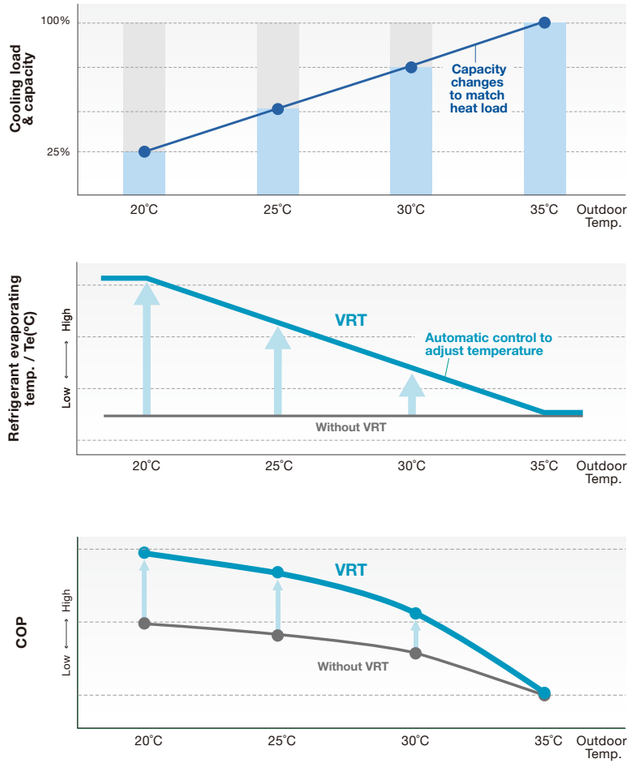
Variable Refrigerant Temperature

How is energy reduced?

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



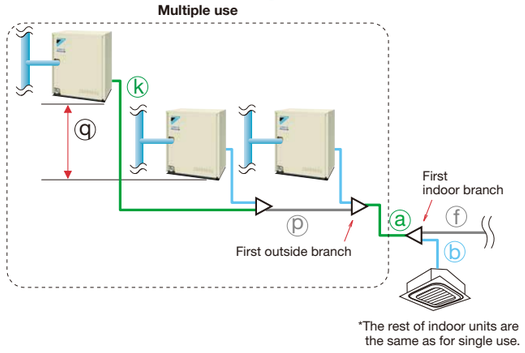
■ Typical changes in evaporating temperature and COP depending on changing indoor load

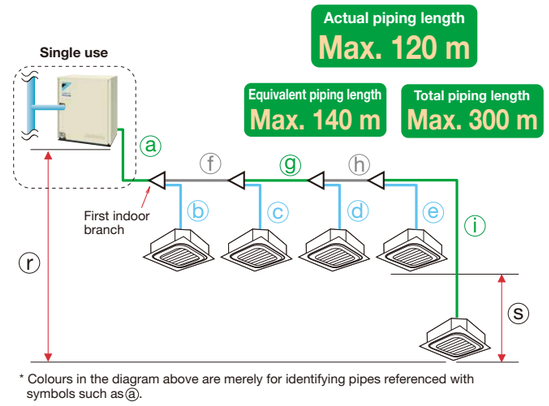


Long refrigerant piping length

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.



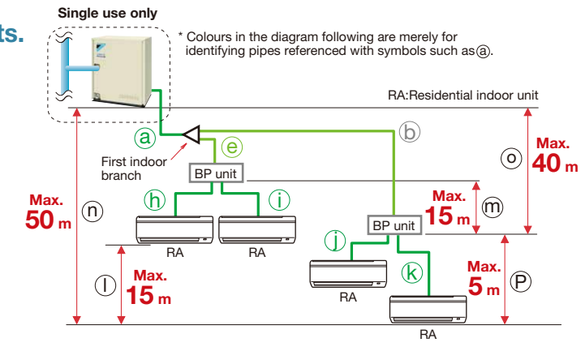


			Actual piping length	Example	Equivalent piping length
Max. allowable piping length	Refrigerant piping length		120 m	a+f+g+h+i	140 m
	Total piping length		300 m	a+b+c+d+e+f+g+h+i	—
	Between the first indoor branch and the farthest indoor unit		90 m*1	f+g+h+i	—
	Between the first outside branch and the 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



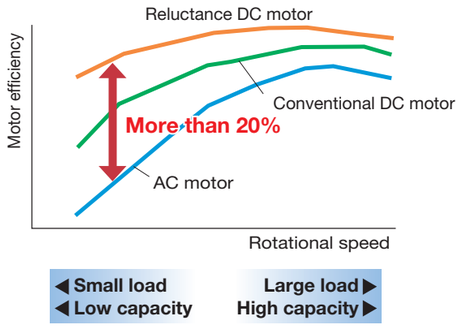
			Actual piping length	Example	Equivalent Example piping length
Max. allowable piping length	Refrigerant piping length		100 m	a+b+k	120 m
	Total piping length		200 m	a+b+e+h+j+k	—
	Between the first indoor branch and the farthest indoor unit		50 m*1	b+k	—
Max. and min. allowable piping length	Between BP 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	—

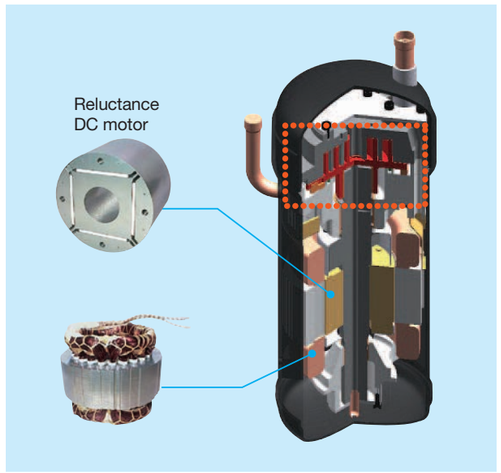
*1. When the piping length exceeds 20 m, the size of the main pipes (the gas side and the liquid side) must be increased. Please refer to Engineering Data Book for details.

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.





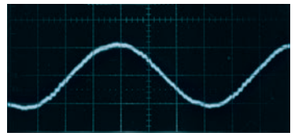
Note: Data are based on studies conducted under controlled conditions at a Daikin laboratory using Daikin products.

*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

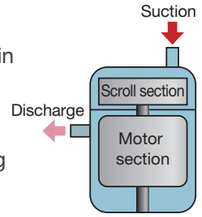
Use of an optimised sine wave smoothes motor rotation, further improving operating efficiency.



Sine wave DC inverter

Scroll compressor

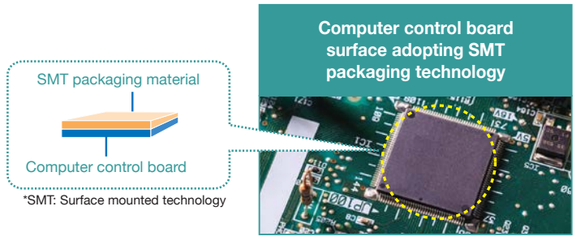
Sucked gas is compressed in the scrolling part before the heated motor, so that the machine compress the non-expanded gas, resulting in high efficiency compression.



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.



*SMT: Surface mounted technology

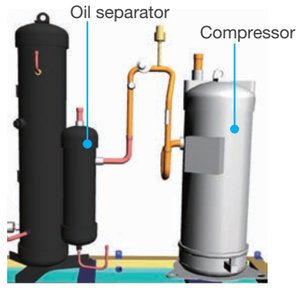
Minimize performance degradation from refrigeration oil in all stages of operation

Newly designed oil receiver

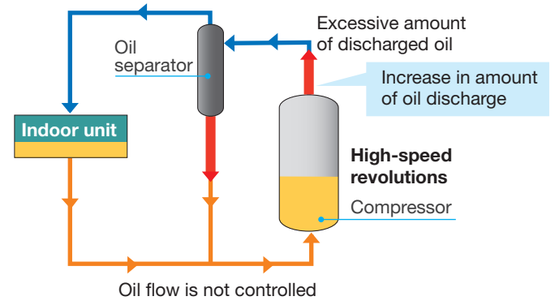
Adding a container vessel (Oil Receiver) helps eliminate performance degradation by retaining refrigeration oil and preventing excessive oil from flowing to the heat exchanger.
The new design enables the oil receiver to automatically supply the compressor with only the necessary amount of oil.

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.

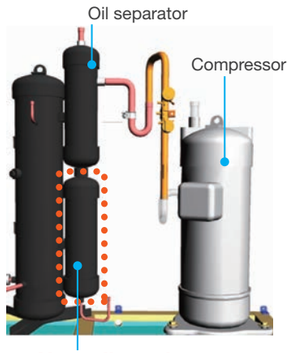


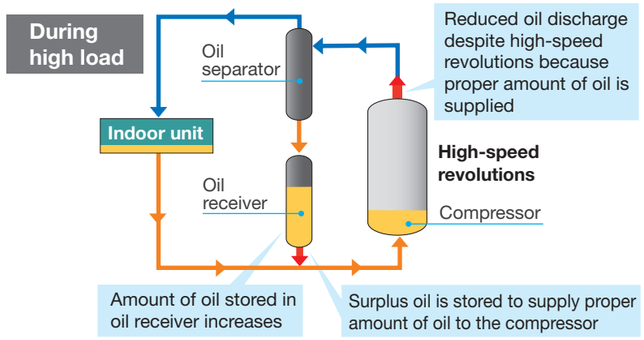
Oil flows to the indoor and outside unit heat exchangers through the oil separator.



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.





Simplified commissioning and after-sales service

Function of information display by luminous digital tube

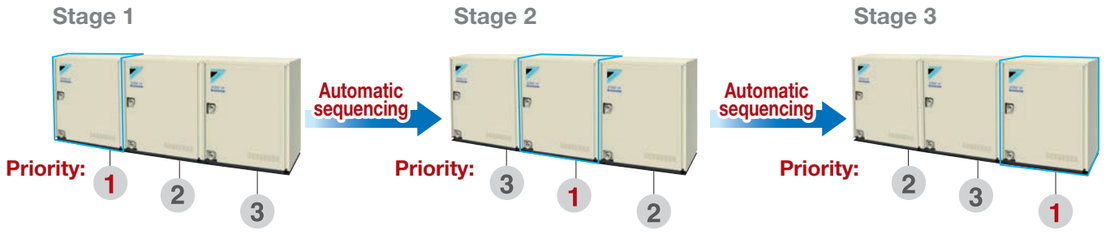
VRV IV W series utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.

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

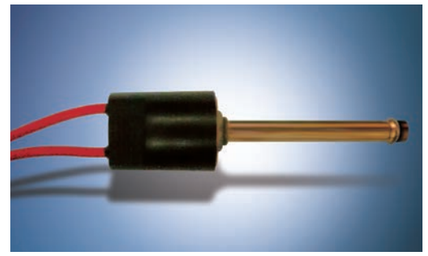
Whether the indoor or outside unit accidentally experiences a power interruption during normal operation or not, the system will keep a record of the operating mode adopted before the power interruption. When the power supply recovers, the air conditioning system will then restore itself back into the 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 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 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

HP	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 HP 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	HP	Capacity index	Total capacity index of connectable indoor units*2			Maximum number of connectable indoor units
				Combination (%)*2			
				50%*2	100%	130%	
RWEYQ6T	16.0	6 HP	150	75	150	195	9
RWEYQ8T	22.4	8 HP	200	100	200	260	13
RWEYQ10T	28.0	10 HP	250	125	250	325	16
RWEYQ12T	33.5	12 HP	300	150	300	390	19

*1. Only single outside unit (RWEYQ6-12T) can be connected.
*2. Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outside unit.

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

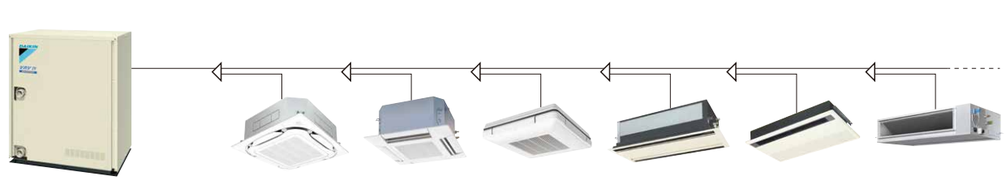
New lineup

Type	Model Name		20	25	32	40	50	63	80	100	125	140	200	250	400	500
Capacity Range			0.8 HP	1 HP	1.25 HP	1.6 HP	2 HP	2.5 HP	3.2 HP	4 HP	5 HP	6 HP	8 HP	10 HP	16 HP	20 HP
Capacity Index			20	25	31.25	40	50	62.5	80	100	125	140	200	250	400	500
Ceiling Mounted Cassette (Round Flow with Sensing)	New	FXFSQ-AV4		●	●	●	●	●	●	●	●	New capacity ●				
Ceiling Mounted Cassette (Round Flow)	New	FXFQ-AV4		●	●	●	●	●	●	●	●	New capacity ●				
Ceiling Mounted Cassette (Compact Multi Flow)		FXZQ-MVE4	●	●	●	●	●									
Ceiling Mounted Cassette (Double Flow)		FXCQ-MVE4	●	●	●	●	●	●	●		●					
Ceiling Mounted Cassette Corner		FXKQ-MAVE4		●	●	●		●								
Slim Ceiling Mounted Duct (Standard Series)	New	FXDQ-PDVE4 (with drain pump) (700mm width type)	●	●	●											
	New	FXDQ-PDVT4 (without drain pump) (700mm width type)	●	●	●											
	New	FXDQ-NDVE4 (with drain pump) (900 / 1,100mm width type)				●	●	●								
	New	FXDQ-NDVT4 (without drain pump) (900 / 1,100mm width type)				●	●	●								
Slim Ceiling Mounted Duct (Compact Series)		FXDQ-SPV14	●	●	●	●	●	●								
Middle Static Pressure Ceiling Mounted Duct	New	FXSQ-PAV4	●	●	●	●	●	●	●	●	●	●				
Ceiling Mounted Duct	New	FXMQ-PAV4	●	●	●	●	●	●	●	●	●	●				
		FXMQ-MVE4											●	●		
Outdoor-Air Processing Unit		FXMQ-MFV7									●		●	●		
Ceiling Suspended		FXHQ-MAV7			●			●		●						
Wall Mounted		FXAQ-PVE4	●	●	●	●	●	●								
Floor Standing		FXLQ-MAVE4	●	●	●	●	●	●								
Concealed Floor Standing		FXNQ-MAVE4	●	●	●	●	●	●								
Floor Standing Duct		FXVQ-NY14									●		●	●	●	●
Heat Reclaim Ventilator		VAM-GJVE	Airflow rate 150-2000 m³/h													

Residential indoor units with connection to BP units

Type	Model Name	Rated Capacity (kW)	25	35	50	60	71
		Capacity Index	25	35	50	60	71
Slim Ceiling Mounted Duct	FDKS-EVMB4	(700 mm width type)	●	●			
	FDKS-CVMB4	(900/1,100 mm width type)	●	●	●	●	
Wall Mounted	FTKJ-NVM4W		●	●	●		
	FTKJ-NVM4S		●	●	●		
	FTKS-DVM4		●	●			
	FTKS-FVM4				●	●	●

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



Max. 58 indoor units

VRV indoor units only

Max. 19 indoor units

Residential indoor units only

*Refer to page 90 for the maximum number of connectable indoor units.

VRV IV W Series Outside Units RWEYQ-T

													
MODEL			**RWEYQ6TY14**	**RWEYQ8TY14**	**RWEYQ10TY14**	**RWEYQ12TY14**		**RWEYQ14TY14**	**RWEYQ16TY14**	**RWEYQ18TY14**	**RWEYQ20TY14**	**RWEYQ22TY14**	**RWEYQ24TY14**
Combination units			–	–	–	–		**RWEYQ6TY14**	**RWEYQ8TY14**	**RWEYQ8TY14**	**RWEYQ10TY14**	**RWEYQ10TY14**	**RWEYQ12TY14**
			–	–	–	–		**RWEYQ8TY14**	**RWEYQ8TY14**	**RWEYQ10TY14**	**RWEYQ10TY14**	**RWEYQ12TY14**	**RWEYQ12TY14**
			–	–	–	–		–	–	–	–	–	–
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		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
Power consumption		kW	2.58	3.86	5.43	7.33		6.44	7.72	9.29	10.9	12.8	14.7
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		ϕ19.1 (Brazing) *2		ϕ22.2 (Brazing) *2			ϕ28.6 (Brazing) *2					
Water piping connections	Water inlet		PT1 1/4B internal thread					(PT1 1/4B) × 2 internal thread					
	Water outlet		PT1 1/4B internal thread					(PT1 1/4B) × 2 internal thread					
	Drain outlet		PS1/2B internal thread					(PS1/2B) × 2 internal 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 charge	Type		R-410A					R-410A					
	Charge	kg	3.5		4.2			3.5 + 3.5		3.5 + 4.2		4.2 + 4.2	

										
MODEL			**RWEYQ26TY14**	**RWEYQ28TY14**	**RWEYQ30TY14**		**RWEYQ32TY14**	**RWEYQ34TY14**	**RWEYQ36TY14**	
Combination units			**RWEYQ8TY14**	**RWEYQ8TY14**	**RWEYQ10TY14**		**RWEYQ10TY14**	**RWEYQ10TY14**	**RWEYQ12TY14**	
			RWEYQ8TY14	**RWEYQ10TY14**	**RWEYQ10TY14**		**RWEYQ10TY14**	**RWEYQ12TY14**	**RWEYQ12TY14**	
			RWEYQ10TY14	**RWEYQ10TY14**	**RWEYQ10TY14**		**RWEYQ12TY14**	**RWEYQ12TY14**	**RWEYQ12TY14**	
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	248,000	268,000	287,000		305,000	324,000	345,000	
		kW	72.8	78.4	84.0		89.5	95.0	101	
Power consumption		kW	13.2	14.7	16.3		18.2	20.1	22.0	
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		ϕ34.9 (Brazing) *2				ϕ34.9 (Brazing) *2			
Water piping connections	Water inlet		(PT1 1/4B) × 3 internal thread				(PT1 1/4B) × 3 internal thread			
	Water outlet		(PT1 1/4B) × 3 internal thread				(PT1 1/4B) × 3 internal thread			
	Drain outlet		(PS1/2B) × 3 internal thread				(PS1/2B) × 3 internal 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 charge	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.
- •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.

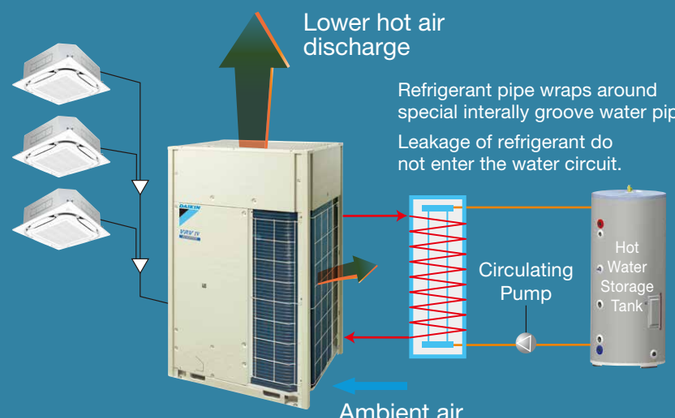
2. This unit cannot be installed in the outdoors. Install indoors (Machine room, etc).
3. Hold ambient temperature at 0–40°C and humidity at 80%RH or less. Heat rejection from the casing: 0.51 kW/6-8 HP/hour, 0.58 kW/10-12 HP/hour.
4. Connectable to closed type cooling tower only. *1: In the case of cooling only system, suction gas pipe is not used. *2: In the case of cooling only system.

•Be sure to refer to the Engineering Data Book for facility design.

VRV IV HEAT RECOVERY HOT WATER SYSTEM

Suitable for different business applications

VRV IV HEAT RECOVERY HOT WATER SYSTEM



RWHQ-T

Cooling Only

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

Air conditioning indoor unit

Outdoor unit

Serpentine heat exchanger unit*

The system can be used in combination with other water heaters depending on the required amount and temperature of hot water.

Hot water storage tank

Flexible combination of *VRV* IV indoor units achieves comfort and aesthetic

AIR CONDITIONING


Home


Fitness gym


Hotel


Restaurant

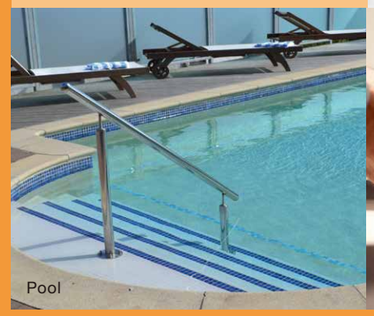

Retirement home

Extremely energy-efficient energy source

HOT WATER SUPPLY


Bath


Shower


Pool


Lavatory

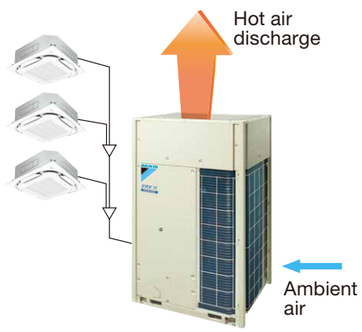

Kitchen

The energy-efficient system recovers waste heat as energy to heat water.

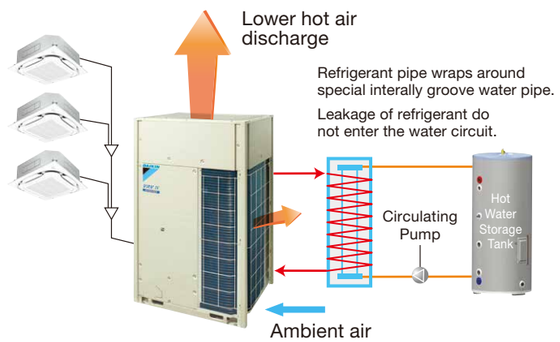
VRV IV HEAT RECOVERY HOT WATER SYSTEM

Waste heat from air conditioning (which usually released into the ambience) is recovered to heat water.

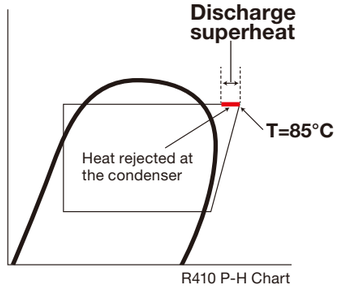
In a conventional system, waste heat from air conditioning is released into the ambience.



This system recovers waste heat from air conditioning to heat water.



During the air conditioning operation, the refrigerant is compressed by a compressor into a high-temperature, high-pressure gas. The refrigerant is then fed into the heat exchanger for heat transfer to the circulating water.



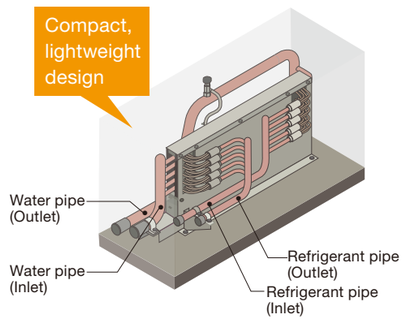
Air conditioning combined with hot water supply **Compact system**

Energy to supply hot water **Cost-effective**

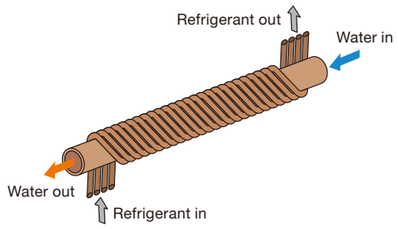
Hot water temperature **Up to 65 °C**

Can be used in combination with other water heaters depending on the required amount and temperature of hot water.

The Serpentine Heat Exchanger Unit recovers heat.



The proprietary Serpentine Heat Exchanger achieves excellent heat exchange efficiency.

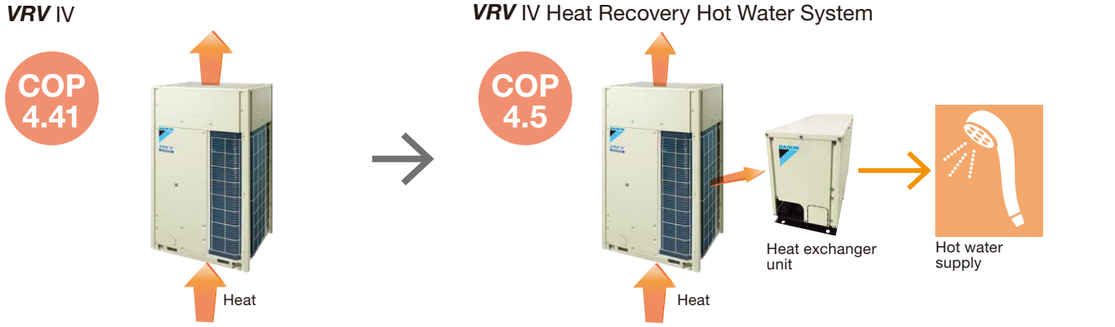


The high-temperature, high-pressure refrigerant pipe is coiled around the water pipe.

Refrigerant leakage does not contaminate water.

Increased energy efficiency of the outdoor unit

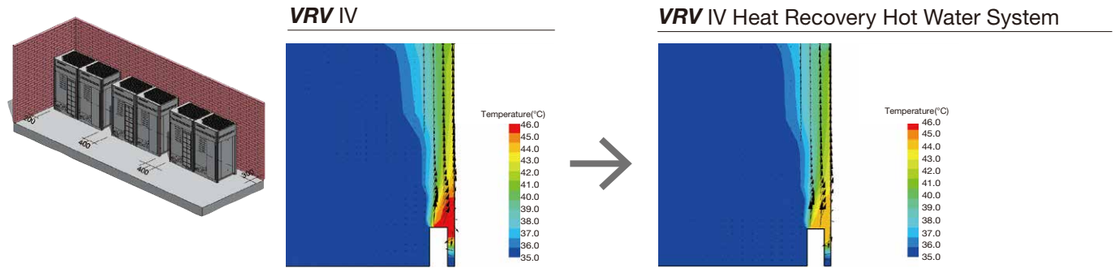
The waste heat from air conditioning is transferred to heat water.
This mechanism reduces the amount of heat processed by the outdoor unit, resulting in better operation efficiency.



* Comparison of air conditioning using a 6 HP outdoor unit

Reducing short circuits

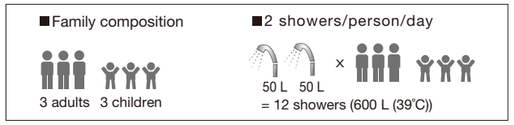
The temperature of exhaust heat from the outdoor unit is lower, minimising in ambient temperature increase. In the event of a short circuit, capacity reduction is minimised.

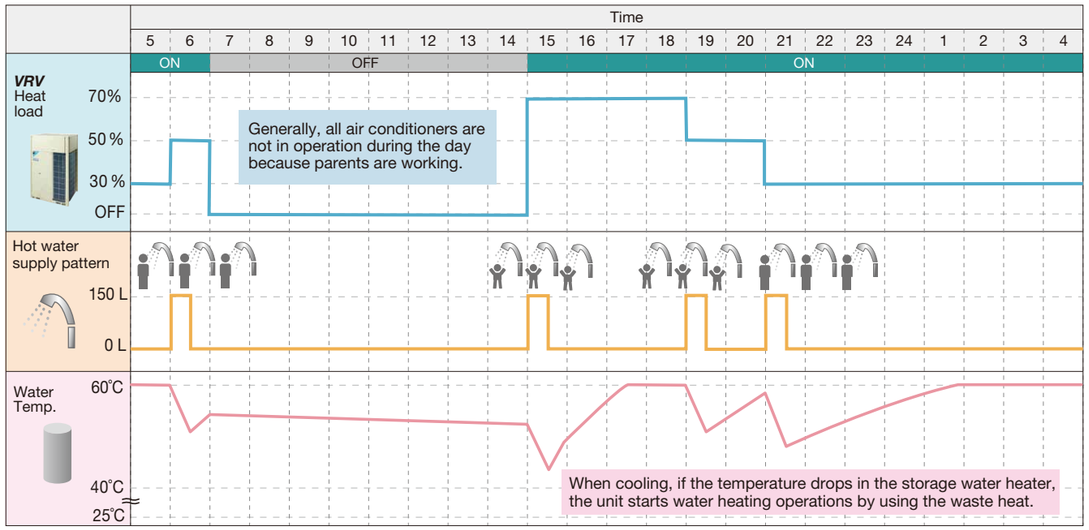


* Comparison of air conditioning using a 6 HP outdoor unit

Example on usage of *VRV* IV Heat Recovery Hot Water System for residence

In a sample family model of 3 adults and 3 children, the waste heat generated by air conditioning is sufficient to supply hot water for everybody's showers.





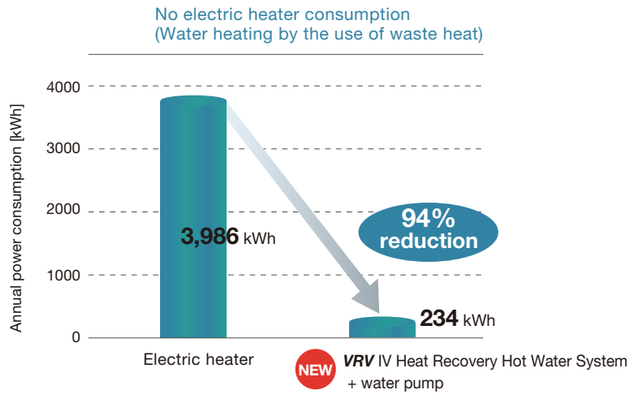
Air conditioner load conditions Operation time: 16 hours/day

Water-heating load
Tank capacity: 200 L
Boiling temperature: 25˚C to 60˚C (tap water)

Amount of hot water per person per time (standard): 50 L/shower (39˚C) (water dispensed: 10 L/min.; shower time: 5 min./shower)
Amount of water required in tank to dispense 39˚C hot water

Comparison between *VRV* IV Heat Recovery Hot Water System and electric heater

Because waste heat is used to heat water, annual electricity consumption can be reduced approximately 94% compared with consumption for separate operation of air conditioning and an electric water heater.



VRV IV Heat Recovery Hot Water Controller

BRCS82

Features

Convertible Remote Controller
Main Remote Control & Sub Remote Controller are both convertible and interchangeable.

Anti-Bacteria
By default, this would be activated every Monday morning at 2am, heating storage water up to 60°C for 10 minutes.

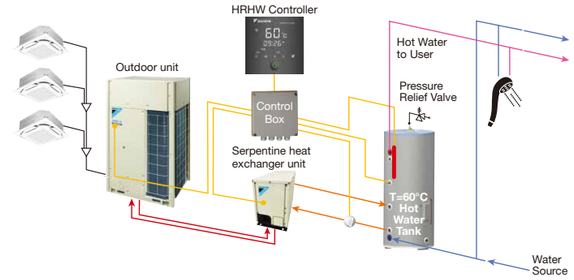
Vacation Mode
This disable all other functions, except for anti-bacterial mode.

Auto Restart
When power supply is restored after a failure, the system would revert to the last operational function.

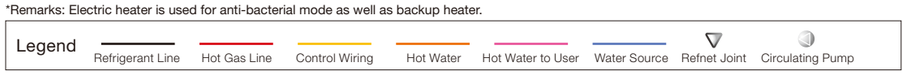
Safety-Error Code
If thermistors or communication line are faulty, as a safety precaution, operation of the electric heater is disabled.

VRV IV Heat Recovery Hot Water System overview

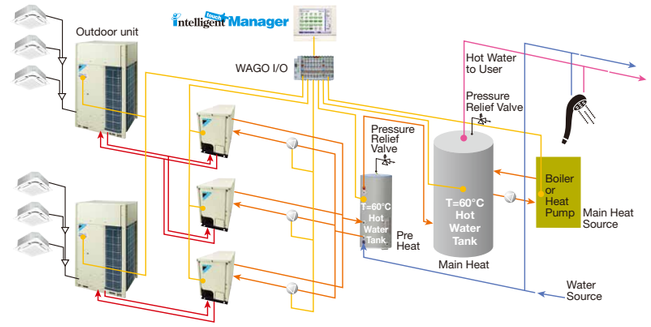
Schematic Diagram For Residential Application



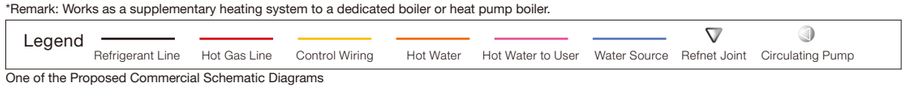
*Remarks: Electric heater is used for anti-bacterial mode as well as backup heater.



Schematic Diagram For Commercial Application



*Remark: Works as a supplementary heating system to a dedicated boiler or heat pump boiler.



One of the Proposed Commercial Schematic Diagrams

Enhanced range of choices

A mixed of stylish and quiet ***VRV*** type indoor units and residential type indoor units can be combined into one system.

VRV indoor units

New lineup

Type	Model Name		20	25	32	40	50	63	80	100	125	140	200	250	400	500
		Capacity Range	0.8 HP	1 HP	1.25 HP	1.6 HP	2 HP	2.5 HP	3.2 HP	4 HP	5 HP	6 HP	8 HP	10 HP	16 HP	20 HP
		Capacity Index	20	25	31.25	40	50	62.5	80	100	125	140	200	250	400	500
Ceiling Mounted Cassette (Round Flow with Sensing)	New FXFSQ-AV4			●	●	●	●	●	●	●	●	New capacity ●				
Ceiling Mounted Cassette (Round Flow)	New FXFQ-AV4			●	●	●	●	●	●	●	●	New capacity ●				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE4		●	●	●	●	●									
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE4		●	●	●	●	●	●	●		●					
Ceiling Mounted Cassette Corner	FXKQ-MAVE4			●	●	●		●								
Slim Ceiling Mounted Duct (Standard Series)	New FXDQ-PDVE4 (with drain pump)	(700mm width type)	●	●	●											
	New FXDQ-PDVT4 (without drain pump)	(700mm width type)	●	●	●											
	New FXDQ-NDVE4 (with drain pump)	(900 / 1100mm width type)				●	●	●								
	New FXDQ-NDVT4 (without drain pump)	(900 / 1100mm width type)				●	●	●								
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV14		●	●	●	●	●	●								
Middle Static Pressure Ceiling Mounted Duct	New FXSQ-PAV4		●	●	●	●	●	●	●	●	●	●				
Ceiling Mounted Duct	New FXMQ-PAV4		●	●	●	●	●	●	●	●	●	●				
	FXMQ-MVE4												●	●		
Outdoor-Air Processing Unit	FXMQ-MFV7										●		●	●		
Ceiling Suspended	FXHQ-MAV7				●			●		●						
Wall Mounted	FXAQ-PVE4		●	●	●	●	●	●								
Floor Standing	FXLQ-MAVE4		●	●	●	●	●	●								
Concealed Floor Standing	FXNQ-MAVE4		●	●	●	●	●	●								
Floor Standing Duct	FXVQ-NY14										●		●	●	●	●
Clean Room Air Conditioner	FXBQ-PVE4					●	●	●								
	FXBPQ-PVE4							●								
Air Handling Unit	AHUR												6–120 HP			

Residential indoor units with connection to BP units

Type	Model Name		25	35	50	60	71
		Rated Capacity (kW)	2.5	3.5	5.0	6.0	7.1
		Capacity Index	25	35	50	60	71
Slim Ceiling Mounted Duct	FDKS-EVMB4	(700 mm width type)	●	●			
	FDKS-CVMB4	(900/1,100 mm width type)	●	●	●	●	
Wall Mounted	FTKJ-NVM4W		●	●	●		
	FTKJ-NVM4S		●	●	●		
	FTKS-DVM4		●	●			
	FTKS-FVM4				●	●	●

Note: BP units (BPMKS967A2/3) are necessary for residential indoor units.

*Some model names might differ and some products might not be available depending on the country of sale. For further information, please contact one of our sales companies.

VRV IV HEAT RECOVERY HOT WATER SYSTEM Series Outdoor Units

RWHQ-T

High-COP Type

																		
MODEL			RWHQ12THY14	RWHQ14THY14	RWHQ16THY14	RWHQ18THY14	RWHQ20THY14	RWHQ22THY14	RWHQ24THY14		RWHQ26THY14	RWHQ28THY14	RWHQ30THY14	RWHQ32THY14	RWHQ34THY14	RWHQ36THY14	RWHQ38THY14	RWHQ40THY14
Combination units			RWHQ6TY14	RWHQ6TY14	RWHQ8TY14	RWHQ6TY14	RWHQ6TY14	RWHQ6TY14	RWHQ8TY14		RWHQ8TY14	RWHQ8TY14	RWHQ8TY14	RWHQ8TY14	RWHQ8TY14	RWHQ8TY14	RWHQ12TY14	RWHQ12TY14
			RWHQ6TY14	RWHQ8TY14	RWHQ8TY14	RWHQ6TY14	RWHQ6TY14	RWHQ8TY14	RWHQ8TY14		RWHQ8TY14	RWHQ8TY14	RWHQ10TY14	RWHQ12TY14	RWHQ12TY14	RWHQ14TY14	RWHQ12TY14	RWHQ14TY14
			—	—	—	RWHQ6TY14	RWHQ8TY14	RWHQ8TY14	RWHQ8TY14		RWHQ10TY14	RWHQ12TY14	RWHQ12TY14	RWHQ12TY14	RWHQ14TY14	RWHQ14TY14	RWHQ14TY14	RWHQ14TY14
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	164,000	186,000	207,000	229,000		248,000	267,000	286,000	305,000	327,000	348,000	365,000	389,000
		kW	32.0	38.4	44.8	48.0	54.4	60.8	67.2		72.8	78.3	83.9	89.4	95.9	102	107	114
Power consumption		kW	7.10	8.68	10.3	10.7	12.2	13.8	15.4		17.5	19.2	21.3	23.0	24.9	26.7	28.7	30.5
Capacity control		%	10-100	10-100	10-100	7-100	7-100	7-100	7-100		6-100	6-100	5-100	5-100	5-100	4-100	4-100	4-100
Casing colour			Ivory white(5Y7.5/1)								Ivory white (5Y7.5/1)							
Compressor	Type		Hermetically Sealed Scroll Type								Hermetically Sealed Scroll Type							
	Motor output	kW	(2.4x1)+(2.4x1)	(2.4x1)+(3.4x1)	(3.4x1)+(3.4x1)	(2.4x1)+(2.4x1)+(2.4x1)	(2.4x1)+(2.4x1)+(3.4x1)	(2.4x1)+(3.4x1)+(3.4x1)	(3.4x1)+(3.4x1)+(3.4x1)		(3.4x1)+(3.4x1)+(4.1x1)	(3.4x1)+(3.4x1)+(5.2x1)	(3.4x1)+(4.1x1)+(5.2x1)	(3.4x1)+(5.2x1)+(5.2x1)	(3.4x1)+(5.2x1)+(2.9x1)+(3.3x1)	(3.4x1)+(2.9x1)+(3.3x1)+(2.9x1)+(3.3x1)	(5.2x1)+(5.2x1)+(2.9x1)+(3.3x1)	(5.2x1)+(2.9x1)+(3.3x1)+(2.9x1)+(3.3x1)
Airflow rate		m³/min	119+119	119+157	157+157	119+119+119	119+119+157	119+157+157	157+157+157		157+157+165	157+157+178	157+165+178	157+178+178	157+178+233	157+233+233	178+178+233	178+233+233
Dimensions (HxWxD)		mm	(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)		(1,657x930x765)+(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)
Machine weight		kg	185+185	185+185	185+185	185+185+185	185+185+185	185+185+185	185+185+185		185+185+200	185+185+200	185+200+200	185+200+200	185+200+285	185+285+285	200+200+285	200+285+285
Sound level		dB(A)	58	59	59	60	60	60	61		61	62	62	63	63	64	64	64
Operation range		°CDB	15 to 49								15 to 49							
Refrigerant	Type		R-410A								R-410A							
	Charge	kg	6.4+6.4	6.4+6.4	6.4+6.4	6.4+6.4+6.4	6.4+6.4+6.4	6.4+6.4+6.4	6.4+6.4+6.4		6.4+6.4+6.5	6.4+6.4+6.8	6.4+6.5+6.8	6.4+6.8+6.8	6.4+6.8+10.3	6.4+10.3+10.3	6.8+6.8+10.3	6.8+10.3+10.3
Piping connections (Indoor unit)	Liquid	mm	ϕ12.7 (Brazing)	ϕ12.7 (Brazing)	ϕ12.7 (Brazing)	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)		ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)
	Gas	mm	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ34.9 (Brazing)		ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)
Piping connections (Heat exchanger unit)	Inlet pipe	mm	ϕ19.1(BrazingX2)			ϕ19.1(BrazingX3)					ϕ19.1(BrazingX3)							
	Outlet pipe	mm	ϕ19.1(BrazingX2)			ϕ19.1(BrazingX3)					ϕ19.1(BrazingX3)							

Note: Specifications are based on the following conditions;

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

VRV IV HEAT RECOVERY HOT WATER SYSTEM Series Outdoor Units

High-COP Type

MODEL			RWHQ42THY14	RWHQ44THY14	RWHQ46THY14	RWHQ48THY14	RWHQ50THY14
Combination units			RWHQ14TY14	RWHQ14TY14	RWHQ14TY14	RWHQ16TY14	RWHQ16TY14
			RWHQ14TY14	RWHQ14TY14	RWHQ16TY14	RWHQ16TY14	RWHQ16TY14
			RWHQ14TY14	RWHQ16TY14	RWHQ16TY14	RWHQ16TY14	RWHQ18TY14
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz				
Cooling capacity		Btu/h	409,000	427,000	444,000	461,000	478,000
		kW	120	125	130	135	140
Power consumption		kW	32.4	34.5	36.6	38.7	41.1
Capacity control		%	4-100	3-100	3-100	3-100	3-100
Casing colour			Ivory white (5Y7.5/1)				
Compressor	Type		Hermetically Sealed Scroll Type				
	Motor output	kW	(2.9X1)+(3.3X1)+(2.9X1)+(3.3X1)+(2.9X1)+(3.3X1)	(2.9X1)+(3.3X1)+(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)	(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)+(3.6X1)+(3.7X1)	(3.6X1)+(3.7X1)+(3.6X1)+(3.7X1)+(3.6X1)+(3.7X1)	(3.6X1)+(3.7X1)+(3.6X1)+(3.7X1)+(4.4X1)+(4.0X1)
Airflow rate		m³/min	233+233+233	233+233+233	233+233+233	233+233+233	233+233+233
Dimensions (HxWxD)		mm	(1,657X1,240X765)+(1,657X1,240X765)+(1,657X1,240X765)	(1,657X1,240X765)+(1,657X1,240X765)+(1,657X1,240X765)	(1,657X1,240X765)+(1,657X1,240X765)+(1,657X1,240X765)	(1,657X1,240X765)+(1,657X1,240X765)+(1,657X1,240X765)	(1,657X1,240X765)+(1,657X1,240X765)+(1,657X1,240X765)
Machine weight		kg	285+285+285	285+285+285	285+285+285	285+285+285	285+285+285
Sound level		dB(A)	65	65	65	66	66
Operation range		°CDB	15 to 49				
Refrigerant	Type		R-410A				
	Charge	kg	10.3+10.3+10.3	10.3+10.3+10.4	10.3+10.4+10.4	10.4+10.4+10.4	10.4+10.4+10.5
Piping connections (Indoor unit)	Liquid	mm	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)
	Gas	mm	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)
Piping connections (Heat exchanger unit)	Inlet pipe	mm	ϕ19.1(BrazingX3)				
	Outlet pipe	mm	ϕ19.1(BrazingX3)				

Note: Specifications are based on the following conditions;

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

RWHQ-T

Standard Type

MODEL			RWHQ6TY14	RWHQ8TY14	RWHQ10TY14	RWHQ12TY14	RWHQ14TY14	RWHQ16TY14
Combination units			—	—	—	—	—	—
Power supply			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
		kW	16.0	22.4	28.0	33.5	40.0	45.0
Power consumption		kW	3.55	5.13	7.22	8.93	10.8	12.9
Capacity control		%	20-100	20-100	16-100	15-100	11-100	10-100
Casing colour			Ivory white (5Y7.5/1)					
Compressor	Type		Hermetically Sealed Scroll Type					
	Motor output	kW	2.4X1	3.4X1	4.1X1	5.2X1	(2.9X1)+(3.3X1)	(3.6X1)+(3.7X1)
Airflow rate		m³/min	119	157	165	178	233	233
Dimensions (HxWxD)		mm	1,657X930X765	1,657X930X765	1,657X930X765	1,657X930X765	1,657X1,240X765	1,657X1,240X765
Machine weight		kg	185	185	200	200	285	285
Sound level		dB(A)	55	56	57	59	60	61
Operation range		°CDB	15 to 49					
Refrigerant	Type		R-410A					
	Charge	kg	6.4	6.4	6.5	6.8	10.3	10.4
Piping connections (Indoor unit)	Liquid	mm	ϕ9.5 (Brazing)			ϕ12.7 (Brazing)		
	Gas	mm	ϕ19.1 (Brazing)		ϕ22.2 (Brazing)	ϕ28.6 (Brazing)		
Piping connections (Heat exchanger unit)	Inlet pipe	mm	ϕ19.1(Brazing)					
	Outlet pipe	mm	ϕ19.1(Brazing)					

Note: Specifications are based on the following conditions;

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

VRV IV HEAT RECOVERY HOT WATER SYSTEM Series Outdoor Units

RWHQ-T

Standard Type

																	
MODEL			**RWHQ18TNY14**	**RWHQ20TNY14**	**RWHQ22TNY14**	**RWHQ24TNY14**	**RWHQ26TNY14**	**RWHQ28TNY14**	**RWHQ30TNY14**		**RWHQ32TNY14**	**RWHQ34TNY14**	**RWHQ36TNY14**	**RWHQ38TNY14**	**RWHQ40TNY14**	**RWHQ42TNY14**	**RWHQ44TNY14**	**RWHQ46TNY14**
Combination units			**RWHQ8TY14**	**RWHQ8TY14**	**RWHQ8TY14**	**RWHQ10TY14**	**RWHQ12TY14**	**RWHQ14TY14**	**RWHQ14TY14**		**RWHQ14TY14**	**RWHQ10TY14**	**RWHQ12TY14**	**RWHQ8TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ14TY14**
			RWHQ10TY14	**RWHQ12TY14**	**RWHQ14TY14**	**RWHQ14TY14**	**RWHQ14TY14**	**RWHQ14TY14**	**RWHQ16TY14**		**RWHQ18TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ14TY14**	**RWHQ16TY14**	**RWHQ14TY14**
			—	—	—	—	—	—	—		—	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ18TY14**	**RWHQ16TY14**	**RWHQ16TY14**	**RWHQ16TY14**	**RWHQ18TY14**
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	172,000	191,000	213,000	232,000	251,000	273,000	290,000		307,000	324,000	345,000	362,000	382,000	406,000	423,000	444,000
		kW	50.4	55.9	62.4	68.0	73.5	80.0	85.0		90.0	95.0	101	106	112	119	124	130
Power consumption		kW	12.4	14.1	15.9	18.0	19.7	21.6	23.7		26.1	25.1	26.8	29.4	30.8	32.6	34.7	36.9
Capacity control		%	8-100	8-100	7-100	6-100	6-100	5-100	5-100		5-100	5-100	5-100	4-100	4-100	4-100	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	(3.4X1)+(4.1X1)	(3.4X1)+(5.2X1)	(3.4X1)+(2.9X1)+(3.3X1)	(4.1X1)+(2.9X1)+(3.3X1)	(5.2X1)+(2.9X1)+(3.3X1)	(2.9X1)+(3.3X1)+(2.9X1)+(3.3X1)	(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)		(2.9X1)+(3.3X1)+(4.4X1)+(4.0X1)	(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)
Airflow rate		m³/min	157+165	157+178	157+233	165+233	178+233	233+233	233+233		233+233	165+178+178	178+178+178	157+178+233	178+178+233	178+233+233	178+233+233	233+233+233
Dimensions (H×W×D)		mm	(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)		(1,657x1,240x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)	(1,657x930x765)+(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765)
Machine weight		kg	185+200	185+200	185+285	200+285	200+285	285+285	285+285		285+285	200+200+200	200+200+200	185+200+285	200+200+285	200+285+285	200+285+285	285+285+285
Sound level		dB(A)	60	61	61	62	63	63	64		64	63	64	64	65	65	65	66
Operation range		°CDB	15 to 49								15 to 49							
Refrigerant	Type		R-410A								R-410A							
	Charge	kg	6.4+6.5	6.4+6.8	6.4+10.3	6.5+10.3	6.8+10.3	10.3+10.3	10.3+10.4		10.3+10.5	6.5+6.8+6.8	6.8+6.8+6.8	6.4+6.8+10.5	6.8+6.8+10.4	6.8+10.3+10.4	6.8+10.4+10.4	10.3+10.3+10.5
Piping connections (Indoor unit)	Liquid	mm	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)		ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)
	Gas	mm	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)		ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)
Piping connections (Heat exchanger unit)	Inlet pipe	mm	ϕ19.1(BrazingX2)								ϕ19.1 (BrazingX2)	ϕ19.1(BrazingX3)						
	Outlet pipe	mm	ϕ19.1(BrazingX2)								ϕ19.1 (BrazingX2)	ϕ19.1(BrazingX3)						

Note: Specifications are based on the following conditions;

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

VRV IV HEAT RECOVERY HOT WATER SYSTEM Series Outdoor Units

Standard Type

									
MODEL			**RWHQ48TNY14**	**RWHQ50TNY14**	**RWHQ52TNY14**	**RWHQ54TNY14**	**RWHQ56TNY14**	**RWHQ58TNY14**	**RWHQ60TNY14**
Combination units			**RWHQ14TY14**	**RWHQ14TY14**	**RWHQ16TY14**	**RWHQ18TY14**	**RWHQ18TY14**	**RWHQ18TY14**	**RWHQ20TY14**
			RWHQ16TY14	**RWHQ18TY14**	**RWHQ18TY14**	**RWHQ18TY14**	**RWHQ18TY14**	**RWHQ20TY14**	**RWHQ20TY14**
			RWHQ18TY14	**RWHQ18TY14**	**RWHQ18TY14**	**RWHQ18TY14**	**RWHQ20TY14**	**RWHQ20TY14**	**RWHQ20TY14**
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz						
Cooling capacity		Btu/h	461,000	478,000	495,000	512,000	532,000	553,000	573,000
		kW	135	140	145	150	156	162	168
Power consumption		kW	39.0	41.4	43.5	45.9	48.5	51.1	53.7
Capacity control		%	3-100	3-100	3-100	3-100	3-100	3-100	3-100
Casing colour			Ivory white (5Y7.5/1)						
Compressor	Type		Hermetically Sealed Scroll Type						
	Motor output	kW	(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)+(4.4X1)+(4.0X1)	(2.9X1)+(3.3X1)+(4.4X1)+(4.0X1)+(4.4X1)+(4.0X1)	(3.6X1)+(3.7X1)+(4.4X1)+(4.0X1)+(4.4X1)+(4.0X1)	(4.4X1)+(4.0X1)+(4.4X1)+(4.0X1)+(4.4X1)+(4.0X1)	(4.4X1)+(4.0X1)+(4.4X1)+(4.0X1)+(4.6X1)+(5.5X1)	(4.4X1)+(4.0X1)+(4.6X1)+(5.5X1)+(4.6X1)+(5.5X1)	(4.6X1)+(5.5X1)+(4.6X1)+(5.5X1)+(4.6X1)+(5.5X1)
Airflow rate		m^3/min	233+233+233	233+233+233	233+233+233	233+233+233	233+233+268	233+268+268	268+268+268
Dimensions (HxWxD)		mm	(1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765)
Machine weight		kg	285+285+285	285+285+285	285+285+285	285+285+285	285+285+320	285+320+320	320+320+320
Sound level		dB(A)	66	66	66	67	68	69	70
Operation range		°CDB	15 to 49						
Refrigerant	Type		R-410A						
	Charge	kg	10.3+10.4+10.5	10.3+10.5+10.5	10.4+10.5+10.5	10.5+10.5+10.5	10.5+10.5+11.8	10.5+11.8+11.8	11.8+11.8+11.8
Piping connections (Indoor unit)	Liquid	mm	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)
	Gas	mm	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)
Piping connections (Heat exchanger unit)	Inlet pipe	mm	ϕ19.1(BrazingX3)						
	Outlet pipe	mm	ϕ19.1(BrazingX3)						

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

RWHQ-T

Space Saving Type

						
MODEL			**RWHQ18TY14**	**RWHQ20TY14**	**RWHQ22TSY14**	**RWHQ24TSY14**
Combination units			—	—	**RWHQ10TY14**	**RWHQ12TY14**
					RWHQ12TY14	**RWHQ12TY14**
					—	—
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz			
Cooling capacity		Btu/h	171,000	191,000	210,000	229,000
		kW	50.0	56.0	61.5	67.0
Power consumption		kW	15.3	17.9	16.2	17.9
Capacity control		%	10-100	8-100	8-100	8-100
Casing colour			Ivory white (5Y7.5/1)			
Compressor	Type		Hermetically Sealed Scroll Type			
	Motor output	kW	(4.4X1)+(4.0X1)	(4.6X1)+(5.5X1)	(4.1X1)+(5.2X1)	(5.2X1)+(5.2X1)
Airflow rate		m^3/min	233	268	165+178	178+178
Dimensions (HxWxD)		mm	1,657X1,240X765	1,657X1,240X765	(1,657X930X765)+(1,657X930X765)	(1,657X930X765)+(1,657X930X765)
Machine weight		kg	285	320	200+200	200+200
Sound level		dB(A)	62	65	61	62
Operation range		°CDB	15 to 49			
Refrigerant	Type		R-410A			
	Charge	kg	10.5	11.8	6.5+6.8	6.8+6.8
Piping connections (Indoor unit)	Liquid	mm	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)	ϕ15.9 (Brazing)
	Gas	mm	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ28.6 (Brazing)	ϕ34.9 (Brazing)
Piping connections (Heat exchanger unit)	Inlet pipe	mm	ϕ19.1(Brazing)		ϕ19.1(BrazingX2)	
	Outlet pipe	mm	ϕ19.1(Brazing)		ϕ19.1(BrazingX2)	

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

VRV IV HEAT RECOVERY HOT WATER SYSTEM Series Outdoor Units

RWHQ-T

Space Saving Type

																
MODEL			**RWHQ26TSY14**	**RWHQ28TSY4**	**RWHQ30TSY14**	**RWHQ32TSY14**	**RWHQ34TSY14**	**RWHQ36TSY14**		**RWHQ38TSY14**	**RWHQ40TSY14**	**RWHQ42TSY14**	**RWHQ44TSY14**	**RWHQ46TSY14**	**RWHQ48TSY14**	**RWHQ50TSY14**
Combination units			**RWHQ8TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ16TY14**	**RWHQ18TY14**		**RWHQ18TY14**	**RWHQ20TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ12TY14**
			RWHQ18TY14	**RWHQ16TY14**	**RWHQ18TY14**	**RWHQ20TY14**	**RWHQ18TY14**	**RWHQ18TY14**		**RWHQ20TY14**	**RWHQ20TY14**	**RWHQ12TY14**	**RWHQ12TY14**	**RWHQ16TY14**	**RWHQ18TY14**	**RWHQ18TY14**
			—	—	—	—	—	—		—	—	**RWHQ18TY14**	**RWHQ20TY14**	**RWHQ18TY14**	**RWHQ18TY14**	**RWHQ20TY14**
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	247,000	268,000	285,000	305,000	324,000	341,000		362,000	382,000	399,000	420,000	440,000	457,000	478,000
		kW	72.4	78.5	83.5	89.5	95.0	100		106	112	117	123	129	134	140
Power consumption		kW	20.4	21.8	24.2	26.8	28.2	30.6		33.2	35.8	33.2	35.8	37.1	39.5	42.1
Capacity control		%	7-100	6-100	6-100	5-100	5-100	5-100		4-100	4-100	4-100	4-100	4-100	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	(3.4X1)+(4.4X1)+(4.0X1)	(5.2X1)+(3.6X1)+(3.7X1)	(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)	(5.2X1)+(4.4X1)+(4.0X1)+(4.6X1)+(5.5X1)
Airflow rate		m³/min	157+233	178+233	178+233	178+268	233+233	233+233		233+268	268+268	178+178+233	178+178+268	178+233+233	178+233+233	178+233+268
Dimensions (HxWxD)		mm	(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)		(1,657x1,240x765)+(1,657x1,240x765)	(1,657x1,240x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x930x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)	(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)
Machine weight		kg	185+285	200+285	200+285	200+320	285+285	285+285		285+320	320+320	200+200+285	200+200+320	200+285+285	200+285+285	200+285+320
Sound level		dB(A)	63	63	64	66	65	65		67	68	65	67	66	66	67
Operation range		°CDB	15 to 49							15 to 49						
Refrigerant	Type		R-410A							R-410A						
	Charge	kg	6.4+10.5	6.8+10.4	6.8+10.5	6.8+11.8	10.4+10.5	10.5+10.5		10.5+11.8	11.8+11.8	6.8+6.8+10.5	6.8+6.8+11.8	6.8+10.4+10.5	6.8+10.5+10.5	6.8+10.5+11.8
Piping connections (Indoor unit)	Liquid	mm	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)		ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)	ϕ19.1 (Brazing)
	Gas	mm	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ34.9 (Brazing)	ϕ41.3 (Brazing)		ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)	ϕ41.3 (Brazing)
Piping connections (Heat exchanger unit)	Inlet pipe	mm	ϕ19.1(BrazingX2)							ϕ19.1(BrazingX2)		ϕ19.1(BrazingX3)				
	Outlet pipe	mm	ϕ19.1(BrazingX2)							ϕ19.1(BrazingX2)		ϕ19.1(BrazingX3)				

Note: Specifications are based on the following conditions;

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

Serpentine Heat Exchanger Unit (HWHQ30A)

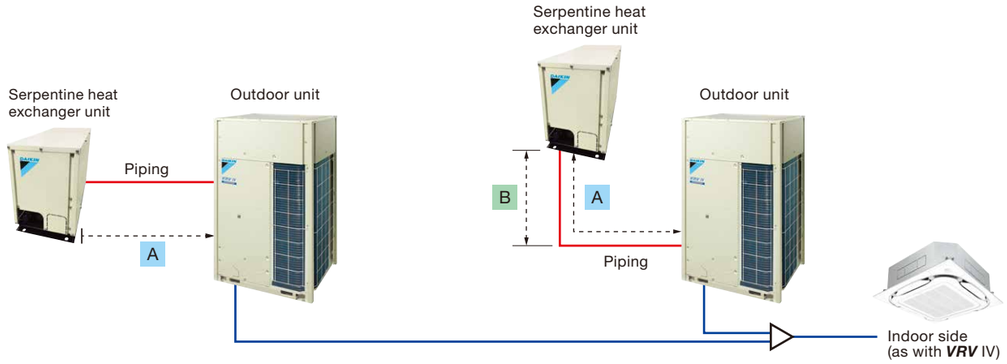
New Model Name (RWHQ-TY14, HWHQ30A)		Single Heat Exchanger Unit							
		RWHQ6TY14 +HWHQ30A	RWHQ8TY14 +HWHQ30A	RWHQ10TY14 +HWHQ30A	RWHQ12TY14 +HWHQ30A	RWHQ14TY14 +HWHQ30A	RWHQ16TY14 +HWHQ30A	RWHQ18TY14 +HWHQ30A	RWHQ20TY14 +HWHQ30A
Rated inlet temperature	°C	40							
Rated water flow	L/min	10							
Range of inlet temperature	°C	20-65							
Range of water flow	L/min	5-20							
Rated Hot-water capacity *1	kW	3.2	3.3	3.3	3.5	3.7	4.0	4.2	4.4
Machine weight	kg	27							
Diameter of Refrigerant pipe (Gas)	mm	ϕ19.1 (Braze)							
Diameter of Refrigerant pipe (Liquid)	mm	ϕ19.1 (Braze)							
Diameter of water pipe (Inlet)	mm	ϕ25.4 (Screw)							
Diameter of water pipe (Outlet)	mm	ϕ25.4 (Screw)							
Piping length (max)	m	2 (5)							
Design pressure (Water side)	MPa	0.5							
Loss of Head *2	m	0.2							
Casing colour		Ivory white (5Y7.5/1)							
Dimensions (H×W×D)	mm	446 × 306 × 765							

Note : It is necessary to satisfy the water standard of Daikin for the water that is used. In the case that the water standard is not satisfied, special measures are required. Please contact your local sales office for details.

*1: [Cooling] Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Inlet water temperature 40°C, Water flow 10L/min, Indoor load 100%, Outdoor-Heat Exchanger Unit 2m.

*2: Water flow 10L/min.

Pipe length restriction of *VRV* IV Heat Recovery Hot Water System



Max. allowable piping length	A	Between outdoor unit and heat exchanger unit length	5m
Max. allowable level difference	B	Between outdoor unit and heat exchanger unit level	3m

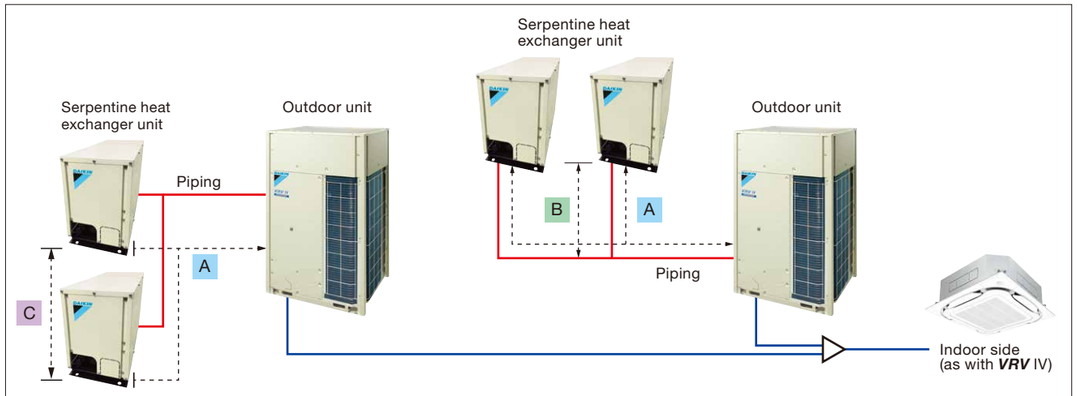
New Model Name (RWHQ-TY14, HWHQ30A)		Double Heat Exchanger Unit							
		RWHQ6TY14 +HWHQ30Ax2	RWHQ8TY14 +HWHQ30Ax2	RWHQ10TY14 +HWHQ30Ax2	RWHQ12TY14 +HWHQ30Ax2	RWHQ14TY14 +HWHQ30Ax2	RWHQ16TY14 +HWHQ30Ax2	RWHQ18TY14 +HWHQ30Ax2	RWHQ20TY14 +HWHQ30Ax2
Rated inlet temperature	°C	40							
Rated water flow	L/min	20 (10 × 2)							
Range of inlet temperature	°C	20-65							
Range of water flow	L/min	10-40 (5-20 × 2)							
Rated Hot-water capacity *1	kW	5.4	5.6	5.6	5.9	6.2	6.8	7.1	7.4
Machine weight	kg	54 (27 × 2)							
Diameter of Refrigerant pipe (Gas)	mm	ϕ19.1 (Braze) × 2							
Diameter of Refrigerant pipe (Liquid)	mm	ϕ19.1 (Braze) × 2							
Diameter of water pipe (Inlet)	mm	ϕ25.4 (Screw) × 2							
Diameter of water pipe (Outlet)	mm	ϕ25.4 (Screw) × 2							
Piping length (max)	m	2 (5)							
Design pressure (Water side)	MPa	0.5							
Loss of Head *2	m	0.2							
Casing colour		Ivory white (5Y7.5/1)							
Dimensions (H×W×D)	mm	(446 × 306 × 765) + (446 × 306 × 765)							

Note : It is necessary to satisfy the water standard of Daikin for the water that is used. In the case that the water standard is not satisfied, special measures are required. Please contact your local sales office for details.

*1: [Cooling] Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Inlet water temperature 40°C, Water flow 10L/min, Indoor load 100%, Outdoor-Heat Exchanger Unit 2m.

*2: Water flow 10L/min.

Pipe length restriction of *VRV* IV Heat Recovery Hot Water System



Max. allowable piping length	A	Between outdoor unit and heat exchanger unit length	5m
Max. allowable level difference	B	Between outdoor unit and heat exchanger unit level	3m
Max. allowable level difference	C	Between heat exchanger units	3m

Indoor Unit Lineup

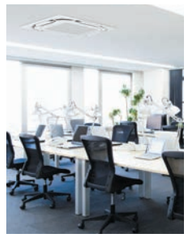
Daikin offers a wide range of indoor units includes both ***VRV*** and residential models responding to variety of needs of our customers that require air-conditioning solutions.

VRV indoor units

Ceiling Mounted Cassette (Round Flow with Sensing) Type P.117

New **FXFSQ-AV4**

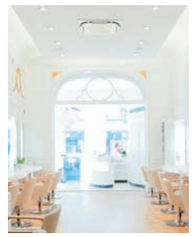
Presence of people and floor temperature can be detected to provide comfort and energy savings.



Ceiling Mounted Cassette (Round Flow) Type P.117

New **FXFQ-AV4**

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



Ceiling Mounted Cassette (Compact Multi Flow) Type P.127

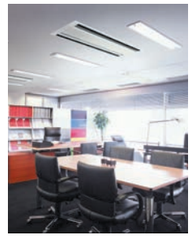
FXZQ-MVE4

Quiet, compact, and designed for user comfort

Ceiling Mounted Cassette (Double Flow) Type P.128

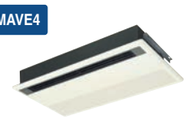
FXCQ-MVE4

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



Ceiling Mounted Cassette Corner Type P.129

FXKQ-MAVE4



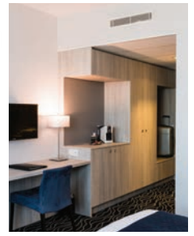
Slim design for flexible installation

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

New **FXDQ-PDVE(T)4**

New **FXDQ-NDVE(T)4**

Slim design, quietness and static pressure switching



Slim Ceiling Mounted Duct Type (Compact Series) P.132

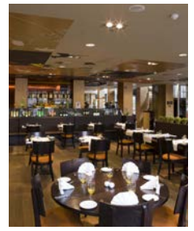
FXDQ-SPV14

Slim and compact design for easy and flexible installation

Middle Static Pressure Ceiling Mounted Duct Type P.133

New **FXSQ-PAV4**

Middle external static pressure and slim design allow flexible installations



Ceiling Mounted Duct Type P.135

New **FXMQ-PAV4**

FXMQ-MVE4

High external static pressure allows flexible installations

Outdoor-Air Processing Unit P.153

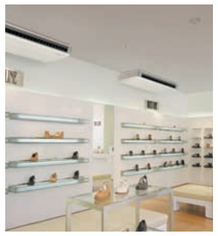
FXMQ-MFV7

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

Ceiling Suspended Type P.137

FXHQ-MAV7

Slim body with quiet and wide airflow



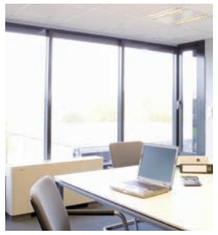
Floor Standing Type P.140

FXLQ-MAVE4

Concealed Floor Standing Type P.141

FXNQ-MAVE4

Suitable for perimeter zone air conditioning



Clean Room Air Conditioner P.143

FXBQ-PVE4

FXBPQ-PVE4

Suitable for hospitals and other clean spaces

Wall Mounted Type P.139

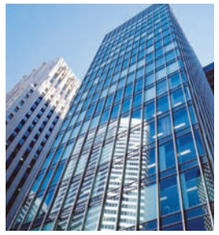
FXAQ-PVE4

Stylish flat panel design harmonised with your interior décor

Floor Standing Duct Type P.142

FXVQ-NY14

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



Air Handling Unit P.151

AHUR

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

Residential indoor units with connection to BP units

Slim Ceiling Mounted Duct Type P.146

FDKS-EVMB4

FDKS-CVMB4

Slim and smooth design suits your shallow ceiling

Wall Mounted Type P.147

FTKJ-NVM4W

FTKJ-NVM4S

Elegant appearance with European style

Wall Mounted Type P.149

FTKS-DVM4

FTKS-FVM4

Stylish flat panel harmonises with your interior décor

Air treatment equipment

Heat Reclaim Ventilator P.157

VAM-GJ

New Round Flow Cassette movie at Daikin official YouTube site.

Ceiling Mounted Cassette (Round Flow with Sensing) Type

New **FXFSQ-A**

Round flow with sensing

Ceiling Mounted Cassette (Round Flow) Type

New **FXFQ-A**

ROUND FLOW

New Wide variety of decoration panels (Option)

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

FXFSQ series only

Standard panel with sensing

Designer panel

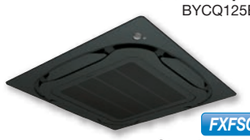
Standard panel

New Designer panel (Option)

Decoration Panel Lineup (Option)

FXFSQ series only

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



FXFSQ series only

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

Standard panel[*2]
BYCQ125EAF (Fresh White)

Standard panel[*2]
BYCQ125EAK (Black)

Designer panel[*2]
BYCQ125EAPF (Fresh White)

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

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

Specifications

Ceiling Mounted Cassette (Round Flow with Sensing) Type

MODEL		FXFSQ25AV4	FXFSQ32AV4	FXFSQ40AV4	FXFSQ50AV4	FXFSQ63AV4	FXFSQ80AV4	FXFSQ100AV4	FXFSQ125AV3	FXFSQ140AV3
Power supply		1-phase, 220-240 V, 50 Hz								
Cooling capacity	Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800	54,600
	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0
Power consumption	kW	0.028		0.035	0.056	0.061	0.092	0.164	0.170	0.194
Casing		Galvanised steel plate								
Airflow rate (H/HM/M/ML/L)	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
	cfm	459/441/406/388/353		600/477/441/424/388	812/724/671/512/388	830/741/706/565/477	865/777/724/706/530	1,183/1,077/953/830/741	1,218/1,112/1,006/900/812	1,253/1,147/1,041/935/812
Sound level (H/HM/M/ML/L)	dB(A)	30/29.5/28.5/28/27		35/29.5/29/28/27	38/35/34.5/29.5/27	38/36/35.5/31.5/28	39/37/36/35.5/31	44/41/38/35/33	45/42.5/39.5/37/35	46/43.5/40.5/38/35
Dimensions (H×W×D)	mm	256×840×840						298×840×840		
Machine weight	kg	19			24	22		25		26
Piping connections: Liquid (Flare)	mm	ϕ6.4				ϕ9.5				
Piping connections: Gas (Flare)	mm	ϕ12.7				ϕ15.9				
Piping connections: Drain	mm	VP25 (External Dia, 32/Internal Dia, 25)								

Ceiling Mounted Cassette (Round Flow) Type

MODEL		FXFQ25AV4	FXFQ32AV4	FXFQ40AV4	FXFQ50AV4	FXFQ63AV4	FXFQ80AV4	FXFQ100AV4	FXFQ125AV4	FXFQ140AV4
Power supply		1-phase, 220-240 V, 50 Hz								
Cooling capacity	Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800	54,600
	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0
Power consumption	kW	0.029		0.036	0.040	0.063	0.096	0.158	0.178	0.203
Casing		Galvanised steel plate								
Airflow rate (H/HM/M/ML/L)	m³/min	13/12.5/11.5/11/10		17/13.5/13/12/11	18/17/13.5/12.5/11	21/20/16/15/13.5	22.5/21.5/21/20/15	32/29/26/23/21	33/30.5/28/25.5/21	35.5/32.5/29.5/26.5/23
	cfm	459/441/406/388/353		600/477/459/424/388	635/600/477/441/388	741/706/565/530/477	794/759/741/706/530	1,130/1,024/918/812/741	1,165/1,077/988/900/741	1,253/1,147/1,041/935/812
Sound level (H/HM/M/ML/L)	dB(A)	30/29.5/28.5/28/27		35/29.5/29/28/27	35/33.5/29.5/28.5/27	36/35.5/31.5/31/28	37/36.5/36/35.5/29.5	43/40.5/37.5/35/33	44/41.5/39/36.5/33	46/43.5/40.5/38/35
Dimensions (H×W×D)	mm	256×840×840						298×840×840		
Machine weight	kg	19				22		25		26
Piping connections: Liquid (Flare)	mm	ϕ6.4				ϕ9.5				
Piping connections: Gas (Flare)	mm	ϕ12.7				ϕ15.9				
Piping connections: Drain	mm	VP25 (External Dia, 32/Internal Dia, 25)								

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

Decoration Panel (Option)

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

Function List

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

*1. Applicable when sensing panel is installed.

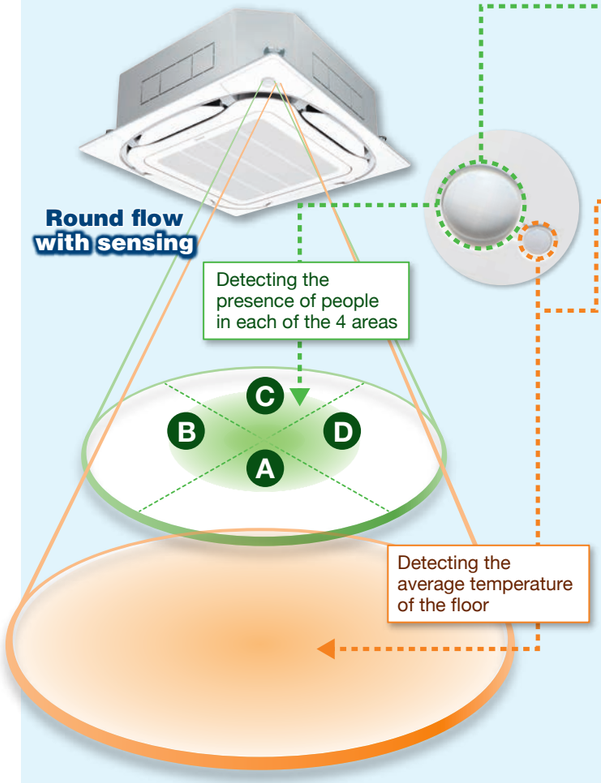
Daikin Advanced Sensing Functions[*1,2] FXFSQ series only

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

Dual Sensors[*1]

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

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



Infrared presence sensor

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

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

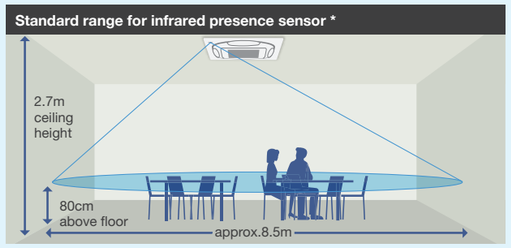
*3. The infrared presence sensor detects 80cm above the floor.

Infrared floor sensor

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

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

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



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

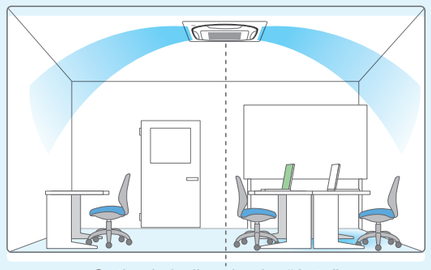
[Concerning infrared floor sensor]
- The detected temperature may sometimes be affected by a heat source, window, or device emitting heat in the detection range.

Auto Airflow Function[*5]

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

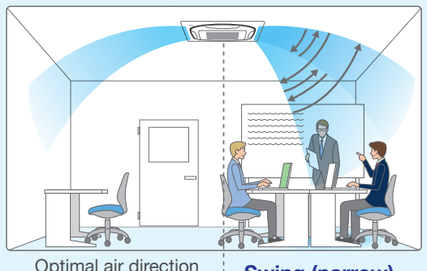
New Direct Airflow (default: OFF) Cooling Dry

When human presence is not detected



Optimal air direction by “Auto”

When human presence is detected



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

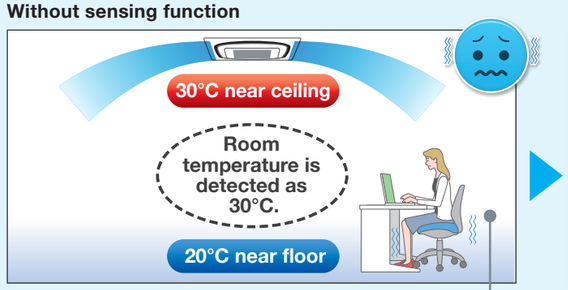
- With “Auto” airflow direction mode, flaps are controlled to deliver optimal airflow when the room is unoccupied.
- When presence is detected, air direction is set to “Swing (narrow)” to deliver cool air to users.

Comfort and Energy Saving Preventing Overcooling[*6]

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

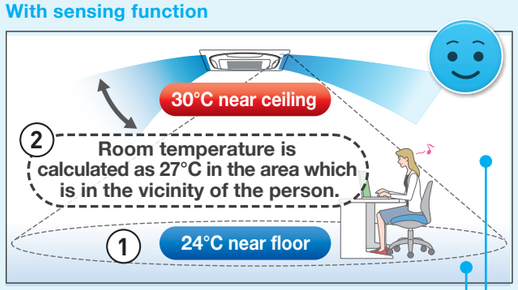
Floor temperature is detected and overcooling prevented. Cooling

Without sensing function



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

With sensing function



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

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

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

Sensing Sensor Functions[*7,8,9]

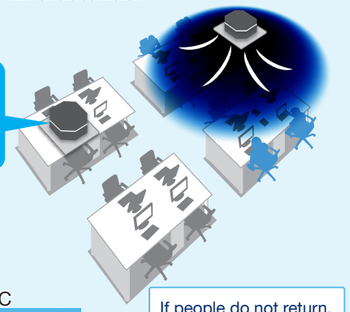
*7. Applicable when sensing panel (BYCQ125EEF/EEK) is installed.
*8. These functions are not available when using the group control system.
*9. User can set these functions with remote controller.

Sensing sensor low mode (default: OFF)

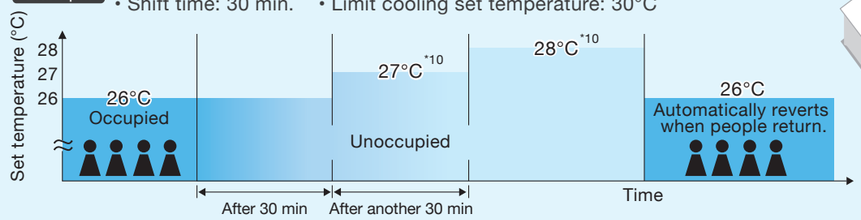
When there are no people in a room, the set temperature is shifted automatically.

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

Operation is reduced in places where there are no people.



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



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

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

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

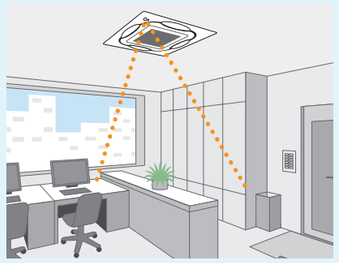
Sensing sensor stop mode (default: OFF)

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

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

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

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



New Circulation Airflow*1

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

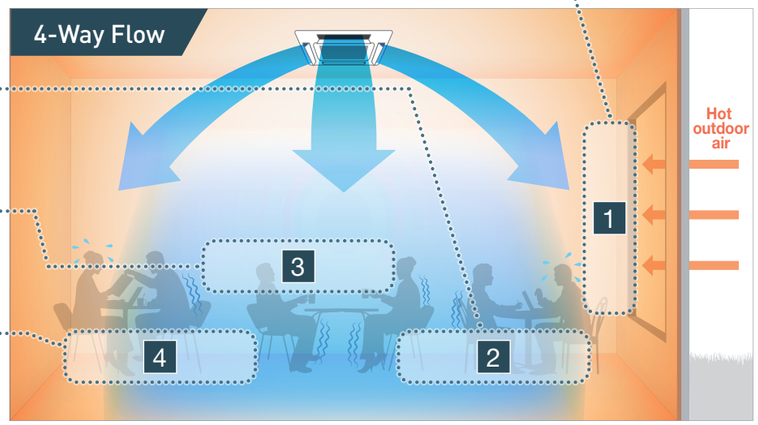
Airflow until now had areas that were either too cool or not cool enough.

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

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

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

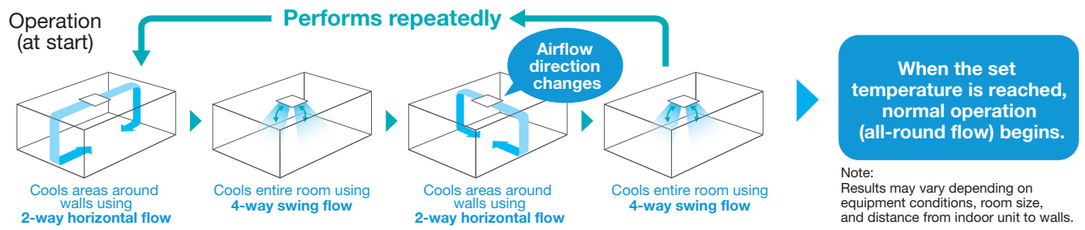
Problem 4
Quick descent of cool air causes insufficient cooling for corners of the room.



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

Configurations of Circulation Airflow

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

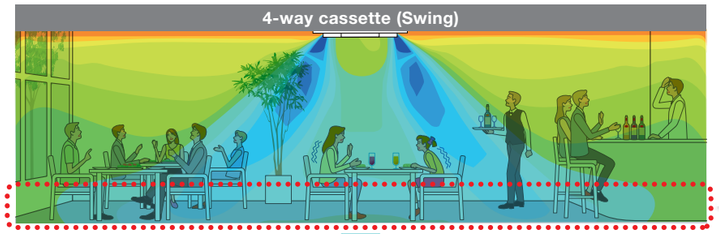


Note:
Results may vary depending on equipment conditions, room size, and distance from indoor unit to walls.

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

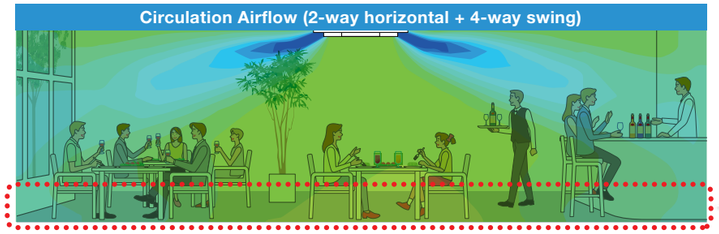
Ceiling Mounted Cassette (Round Flow) Type — New FXFQ-A

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



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

Areas at floor level are cold while areas around walls are hot.



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

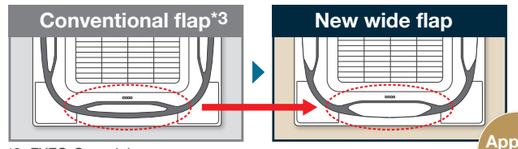
*2.Calculated under the following comparison conditions: When the average temperature at a height of 0.6m above the floor reaches set temperature. (26°C)

Full comfort is provided with no cold feet.

Three Technologies That Achieved Circulation Airflow

1 Use of new wide flaps (Straight)

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



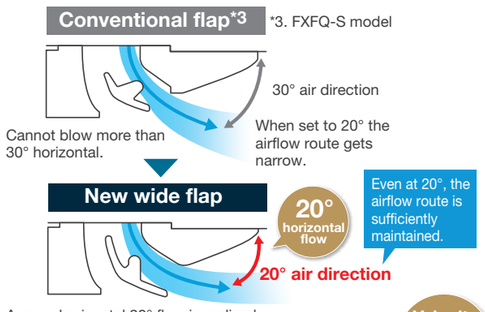
*3. FXFQ-S model

Approx. doubled

New wide flap construction inhibits ceiling dirt and grime.
By tapering both flap ends, the airflow that causes dirty ceilings is directed downward.

2 Optimizing airflow angle (Horizontally)

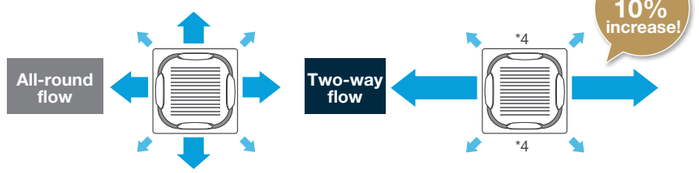
The airflow angle was made more horizontal.



3 Increased velocity in 2-way flow (Strongly)

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

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

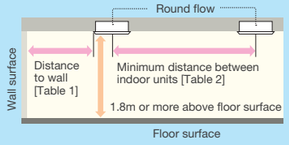


Things to remember when using circulation airflow

Main points for use

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

Installation conditions



[Table 1]
Distance to wall from indoor unit

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

[Table 2]
Minimum distance between indoor units

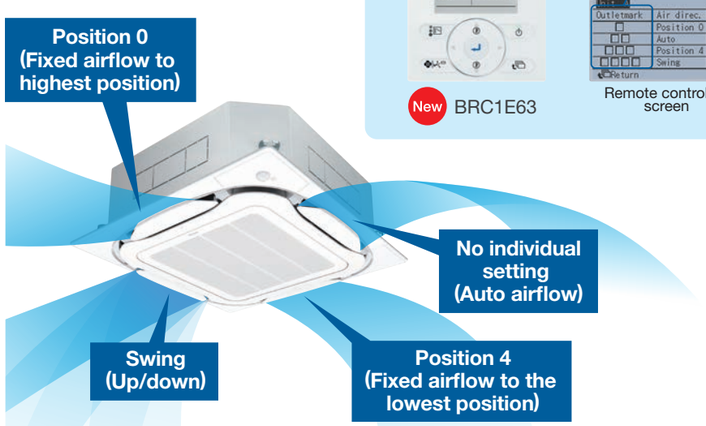
Indoor unit capacity	FXF(S)Q 25-50	FXF(S)Q 63/80	FXF(S)Q 100-140
Minimum distance	4m or more	5m or more	7m or more

New Individual Airflow Direction Control*1

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

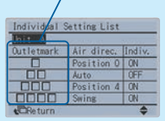
Comfortable air conditioning for all room layouts and conditions

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



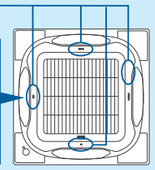
Easy setting is possible with a wired remote controller.

New BRC1E63



Remote controller screen

There are identification marks near the air outlets.



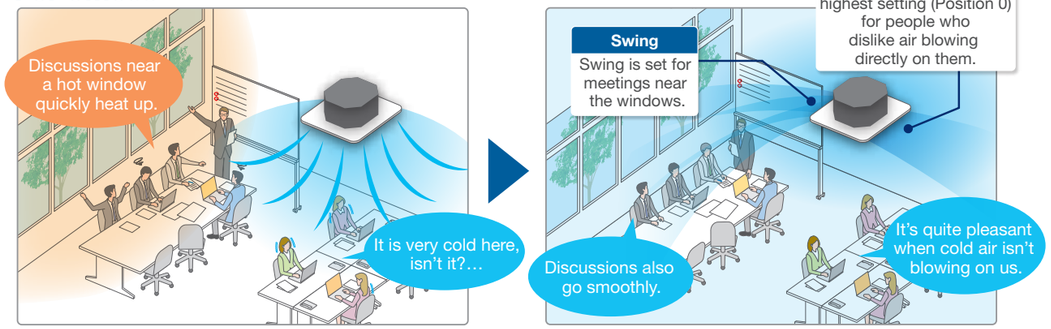
Individual airflow settings

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

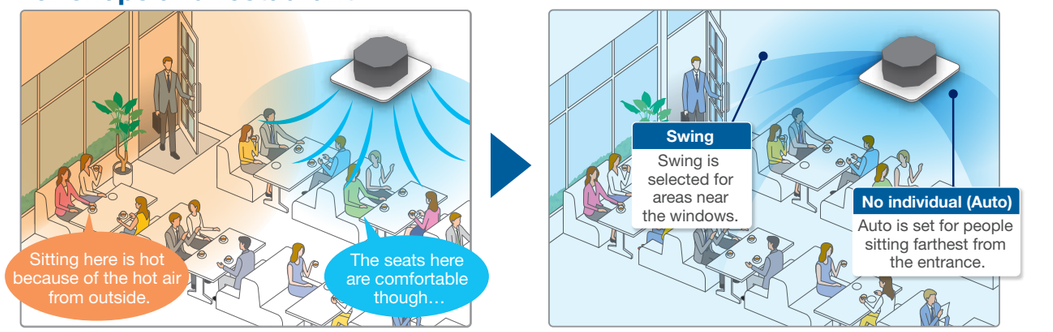
Individual settings are possible as stated above.

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

For offices



For shops and restaurant



Other Functions

Comfort

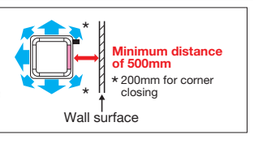
360° Airflow & Selectable Airflow Pattern

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.

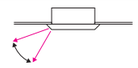
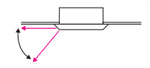
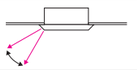
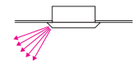
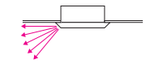
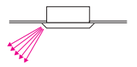
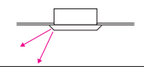
All-round flow	3-way flow	L-shaped 2-way flow	Opposite 2-way flow
			
(E.g., installed in middle of ceiling) 4-way flow also possible.	(E.g., installed near a wall)	(E.g., installed in a corner)	(E.g., installed in a long room)

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.
- Designer panel cannot operate 2-way and 3-way flow.

Optimal comfort and convenience assured by 3 air discharge modes

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

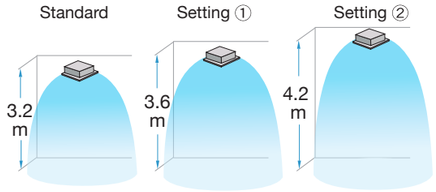
Note:
[1]Air direction is set to the standard position when the unit is shipped from the factory. The position can be changed from the remote controller.
[2]Closing of the corner discharge outlets is recommended.

Switchable fan speed: 5 steps and Auto

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

Suitable for high ceilings

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



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

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

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

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

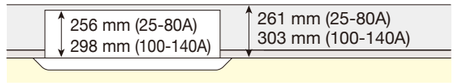
Quick and Easy Installation

Lightweight

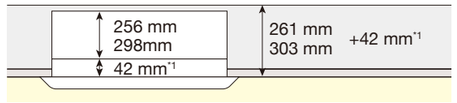
All models can be installed without using a lifter.

Installable in tight ceiling spaces

Standard panel

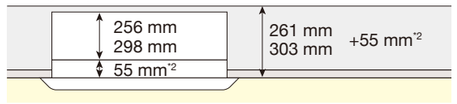


Designer panel



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

Auto grille panel

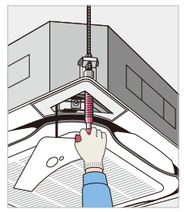


*2.Body height (ceiling required space) is 55 mm higher than standard panel.
*When the ceiling space is limited, an optional panel spacer is available.
(See page 185)

Easy height adjustment

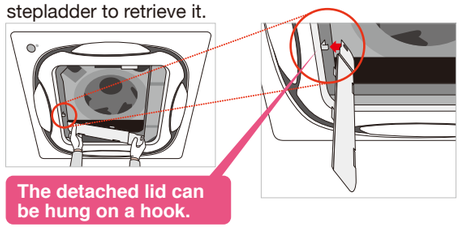
Each corner of the unit has an adjuster pocket that lets you easily adjust the unit's suspended height.

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



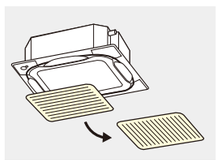
Temporary placement of control box lid

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



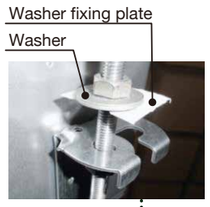
Installed in any direction

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



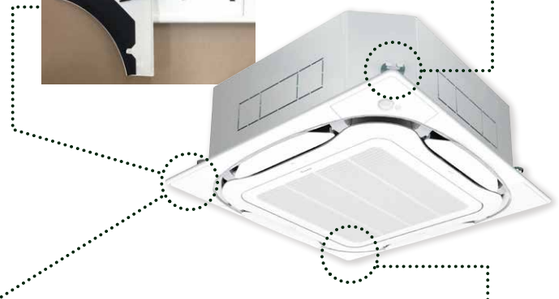
Easy hanging

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



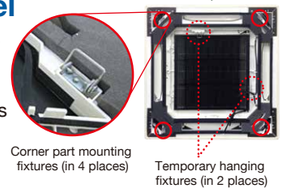
Easy removal of corner cover

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



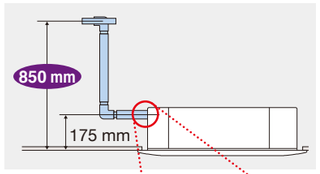
Ease in temporary hanging of decoration panel

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



Drain pump

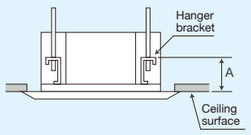
Equipped as standard accessory with 850 mm lift.



Transparent drain socket

Hanging height adjustment

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



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

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

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

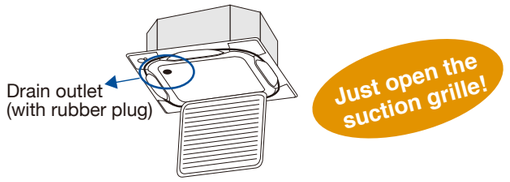
Ceiling Mounted Cassette (Round Flow) Type — New FXFQ-A

Easy Maintenance

Drain pan and drain water check

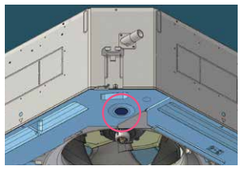
The condition of the drain pan and drain water can be checked by removing the suction grille and drain plug.

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



24 mm diameter drain outlet

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



Auto grille panel (option)

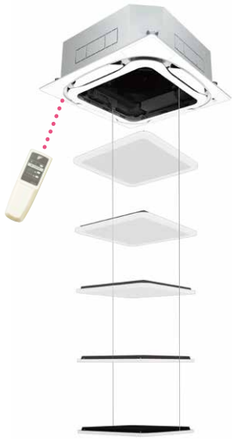
Grille and air filter cleaning can be performed without need for a stepladder by lowering the grille.

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

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

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

*Airflow range is up to 4.5m.
Please refer to “criteria for ceiling height and number of air discharge outlets” on page 124.



Ultra long-life filter (option)

See page 185

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.

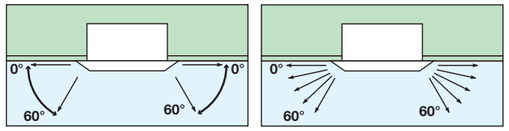
Ceiling Mounted Cassette (Compact Multi Flow) Type FXZQ-M

Quiet, compact, and designed for user comfort

- Comfortable airflow

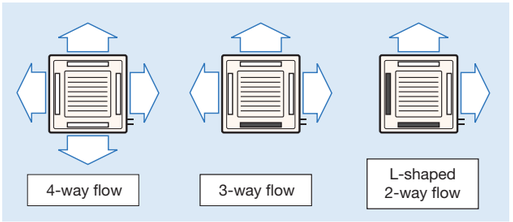
1 Wide discharge angle: 0° to 60°

- **Auto swing**
- **Fixed angles: 5 levels**



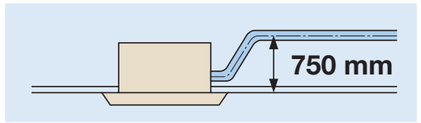
*Angles can be also set on site to prevent drafts (0°-35°) or soiling of the ceiling (25°-60°), other than standard setting (0°-60°).

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



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

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



Specifications

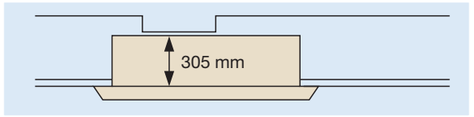
MODEL			FXZQ20MVE4	FXZQ25MVE4	FXZQ32MVE4	FXZQ40MVE4	FXZQ50MVE4
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100
		kW	2.2	2.8	3.6	4.5	5.6
Power consumption		kW	0.073		0.076	0.089	0.115
Casing			Galvanised steel plate				
Airflow rate (H/L)		m^3/min	9/7		9.5/7.5	11/8	14/10
		cfm	318/247		335/265	388/282	493/353
Sound level (H/L)	230 V	dB(A)	30/25		32/26	36/28	41/33
	240 V		32/26		34/28	37/29	42/35
Dimensions (H×W×D)		mm	286×575×575				
Machine weight		kg	18				
Piping connections	Liquid (Flare)	mm	ϕ6.4				
	Gas (Flare)		ϕ12.7				
	Drain		VP20 (External Dia, 26/Internal Dia, 20)				
Panel (Option)	Model		BYFQ60B3W1				
	Colour		White (6.5Y9.5/0.5)				
	Dimensions(H×W×D)	mm	55×700×700				
	Weight	kg	2.7				

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

Ceiling Mounted Cassette (Double Flow) Type FXCQ-M

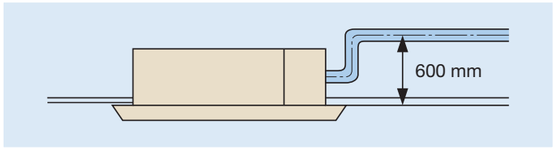
Thin, lightweight, and easy to install in narrow ceiling spaces

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



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

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



- Two types of optional high-efficiency filter are available (65% and 95%, colourimetric method).
- 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

- Major maintenance work can be performed by removing the panel. A flat-type suction grille and a detachable blade make cleaning easy.

Specifications

MODEL			FXCQ20MVE4	FXCQ25MVE4	FXCQ32MVE4	FXCQ40MVE4	FXCQ50MVE4	FXCQ63MVE4	FXCQ80MVE4	FXCQ125MVE4
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	30,700	47,800
		kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	14.0
Power consumption		kW	0.077	0.092	0.092	0.130	0.130	0.161	0.209	0.256
Casing			Galvanised steel plate							
Airflow rate (H/L)		m^3/min	7/5	9/6.5		12/9		16.5/13	26/21	33/25
		cfm	247/177	318/230		424/318		582/459	918/741	1,165/883
Sound level (H/L)	220 V	dB(A)	32/27	34/28		34/29		37/32	39/34	44/38
	240 V		34/29	36/30		37/32		39/34	41/36	46/40
Dimensions (H×W×D)		mm	305×775×600			305×990×600		305×1,175×600	305×1,665×600	
Machine weight		kg	26			31	32	35	47	48
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		BYBC32G-W1			BYBC50G-W1			BYBC63G-W1	BYBC125G-W1
	Colour		White (10Y9/0.5)							
	Dimensions(H×W×D)	mm	53×1,030×680			53×1,245×680		53×1,430×680	53×1,920×680	
	Weight	kg	8.0			8.5		9.5	12.0	

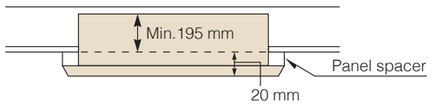
Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See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

FXKQ-MA

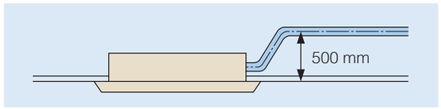
Slim design for flexible installation

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

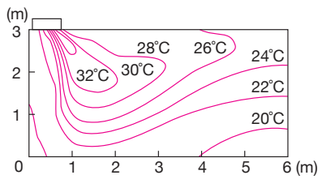


●Single-flow type allows effective air discharge from corner or from drop-ceiling.

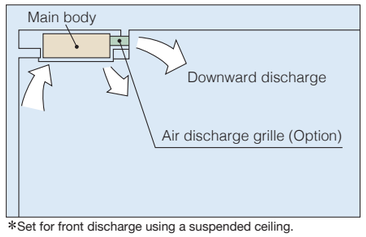
●Drain pump is equipped as standard accessory with 500 mm lift.



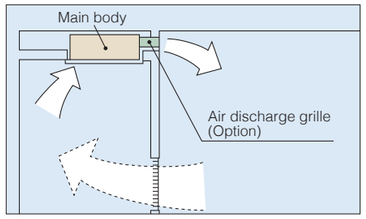
●Providing 3 different settings of standard, draft prevention and ceiling soiling prevention, the auto swing mechanism realises even distribution of airflow and room temperature.



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



*Set for front discharge using a suspended ceiling.



*Downward discharge is shut off and air is blown straight out (front discharge).

●A long-life filter (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

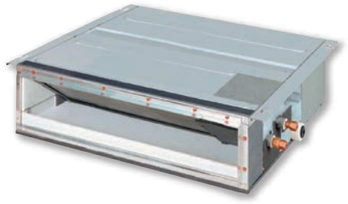
Specifications

MODEL			FXKQ25MAVE4	FXKQ32MAVE4	FXKQ40MAVE4	FXKQ63MAVE4
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz			
Cooling capacity		Btu/h	9,600	12,300	15,400	24,200
		kW	2.8	3.6	4.5	7.1
Power consumption		kW	0.066		0.076	0.105
Casing			Galvanised steel plate			
Airflow rate (H/L)		m^3/min	11/9		13/10	18/15
		cfm	388/318		459/353	635/530
Sound level (H/L)	220 V	dB(A)	38/33		40/34	42/37
	240 V		40/35		42/36	44/39
Dimensions (H×W×D)		mm	215×1,110×710			215×1,310×710
Machine weight		kg	31			34
Piping connections	Liquid (Flare)	mm	ϕ 6.4			ϕ 9.5
	Gas (Flare)		ϕ 12.7			ϕ 15.9
	Drain		VP25 (External Dia, 32/Internal Dia, 25)			
Panel (Option)	Model		BYK45FJW1			BYK71FJW1
	Colour		White (10Y9/0.5)			
	Dimensions(H×W×D)	mm	70×1,240×800			70×1,440×800
	Weight	kg	8.5			9.5

Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- 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.

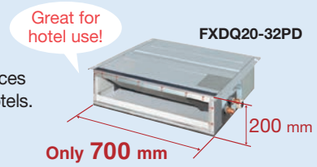
Slim Ceiling Mounted Duct Type (Standard Series) New FXDQ-PD / ND

Slim design, quietness and static pressure switching

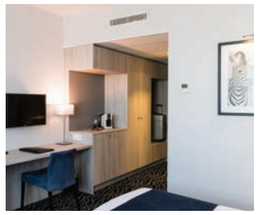


Suitable to use in drop-ceilings!

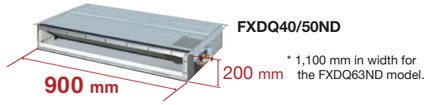
- Only 700 mm in width and 23 kg in weight, this model is suitable to install in limited spaces like drop-ceilings in hotels.

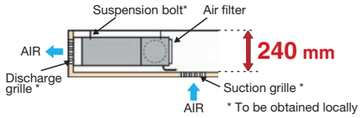


- Control of the airflow rate can be selected from 3-step control and Auto. Auto airflow rate control can be selected with wired remote controller BRC1E63.
- Low operation sound level.
- External static pressure selectable by remote controller switching make this indoor unit a very comfortable and flexible model.
  - 10 Pa-30 Pa/factory set:
    10 Pa for FXDQ-PD models.
  - 15 Pa-44 Pa/factory set:
    15 Pa for FXDQ-ND models.



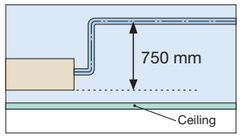
- Only 200 mm in height, this model can be installed in rooms with as little as 240 mm in height for the ceiling space between the drop-ceiling and ceiling slab.





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

  FXDQ-PD/NDVE4: with a drain pump (750 mm lift) as a standard accessory
  FXDQ-PD/NDVET4: without a drain pump



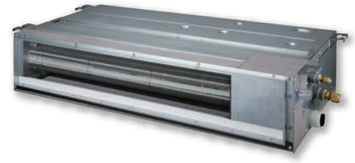
Specifications

MODEL		with drain pump	FXDQ20PDVE4	FXDQ25PDVE4	FXDQ32PDVE4	FXDQ40NDVE4	FXDQ50NDVE4	FXDQ63NDVE4
		without drain pump	FXDQ20PDVT4	FXDQ25PDVT4	FXDQ32PDVT4	FXDQ40NDVT4	FXDQ50NDVT4	FXDQ63NDVT4
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption (FXDQ-PD/NDVE4)★1		kW	0.086		0.089	0.160	0.165	0.181
Power consumption (FXDQ-PD/NDVET4)★1		kW	0.067		0.070	0.147	0.152	0.168
Casing			Galvanised steel plate					
Airflow rate (HH/H/L)		m^3/min	8.0/7.2/6.4			10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0
		cfm	282/254/226			371/335/300	441/388/353	583/512/459
External static pressure		Pa	30-10★2			44-15★2		
Sound level (HH/H/L)★1★3		dB(A)	28/26/23		28/26/24	30/28/26	33/30/27	33/31/29
Dimensions (H×W×D)		mm	200×700×620			200×900×620		200×1,100×620
Machine weight		kg	23			27	28	31
Piping connections	Liquid (Flare)	mm	ϕ6.4					ϕ9.5
	Gas (Flare)		ϕ12.7					ϕ15.9
	Drain		VP20 (External Dia, 26/Internal Dia, 20)					

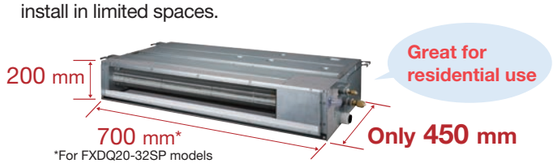
Note: Specifications are based on the following conditions;
- •Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.(See Engineering Data Book for details.)
- •Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- ★1 : Values are based on the following conditions: FXDQ-PD: external static pressure of 10 Pa; FXDQ-ND: external static pressure of 15 Pa.
- ★2 : External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard".(Factory setting is 10 Pa for FXDQ-PD models and 15 Pa for FXDQ-ND models.)
- ★3 : The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB(A).

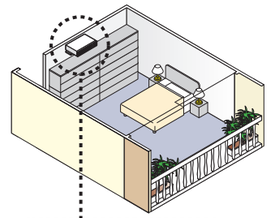
Slim Ceiling Mounted Duct Type (Compact Series) FXDQ-SP

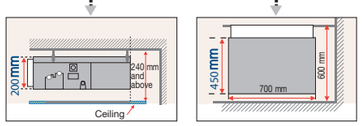
Slim and compact design for easy and flexible installation



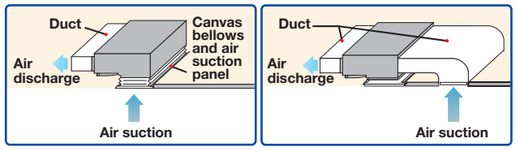
- It comes with a slim and compact design with a height of only 200 mm that requires as little as 240 mm in height for the ceiling space between the drop-ceiling and ceiling slab. The depth of the product is only 450 mm which is suitable to install in limited spaces.



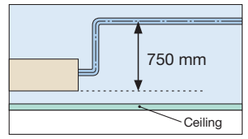




- It is available in two types – ceiling return and ordinary duct to suit different installation conditions.



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



Specifications

MODEL		FXDQ20SPV14	FXDQ25SPV14	FXDQ32SPV14	FXDQ40SPV14	FXDQ50SPV14	FXDQ63SPV14
Power supply		1-phase, 220-240 V, 50 Hz					
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption ★1	kW	0.072	0.075	0.078	0.180		0.196
Casing		Galvanised steel plate					
Airflow rate (HH/H/L)	m^3/min	8.7/7.6/6.5	9.0/8.0/7.0	10.0/9.0/8.0	15.0/13.0/10.5		20.0/16.0/12.5
	cfm	307/268/229	318/282/247	353/318/282	530/459/371		706/565/441
External static pressure	Pa	30-10★2			50-20★2		40-20★2
Sound level (HH/H/L) ★1★3	dB(A)	33/31/29		34/32/30	35/33/31		37/35/33
Dimensions (H×W×D)	mm	200×700×450			200×900×450		200×1,100×450
Machine weight	kg	17			20		23
Piping connections Liquid (Flare)	mm	ϕ6.4					ϕ9.5
Piping connections Gas (Flare)		ϕ12.7					ϕ15.9
Piping connections Drain		VP20 (External Dia, 26/Internal Dia, 20)					

Note: Specifications are based on the following conditions;
- •Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- •Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
- •Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
  During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- ★1 : Values are based on the following conditions: FXDQ20-32SP: external static pressure of 10 Pa; FXDQ40-63SP: external static pressure of 20 Pa.
- ★2 : External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard". (Factorysetting is 10 Pa for FXDQ20-32SP models and 20 Pa for FXDQ40-63SP models.)
- ★3 : The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB(A).

Middle Static Pressure Ceiling Mounted Duct Type

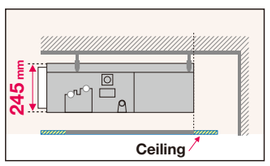
New FXSQ-PA

Middle external static pressure and slim design allow flexible installations

Installation flexibility

Slim design

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

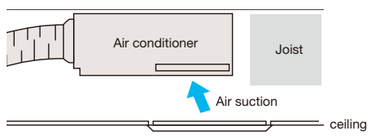


Standard DC drain pump

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

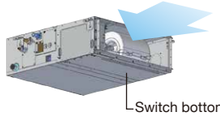
Bottom suction possible

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



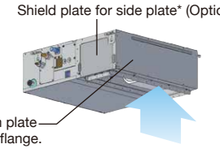
- Air suction direction can be altered from rear to bottom suction.

•Rear suction



•Bottom suction

Shield plate for side plate* (Option)



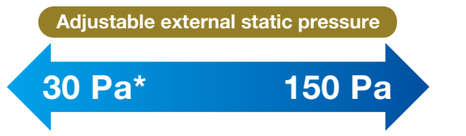
Switch bottom plate with air suction flange.

*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 FXSQ20-40PAV4
50 Pa–150 Pa for FXSQ50-125PAV4
50 Pa–140 Pa for FXSQ140PAV4

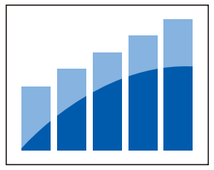
Comfort

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-PAV4	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-PAV4	80	100	125	140
Sound level (H/M/L)	37.5/34/30	39/35/32	42/38.5/35	43/40/36

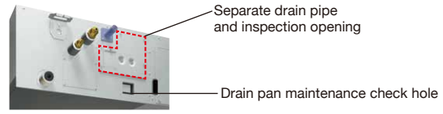
Easy installation

Airflow rate auto adjustment function

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

Easy maintenance

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



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

Specifications

MODEL		FXSQ20PAV4	FXSQ25PAV4	FXSQ32PAV4	FXSQ40PAV4	FXSQ50PAV4
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100
	kW	2.2	2.8	3.6	4.5	5.6
Power consumption	kW	0.058 ★1		0.066 ★1	0.101 ★1	0.075 ★1
Casing		Galvanised steel plate				
Airflow rate (H/M/L)	m³/min	9/7.5/6.5		9.5/8/7	15/12.5/10.5	17/14.5/11.5
	cfm	318/265/230		335/282/247	530/441/371	600/512/406
External static pressure	Pa	30-150 (50) ★2				50-150 (50) ★2
Sound level (H/M/L)	dB(A)	33/30/28		34/32/30	36/33/30	34/32/29
Dimensions (H×W×D)	mm	245×550×800			245×700×800	245×1,000×800
Machine weight	kg	25			27	35
Piping connections	Liquid (Flare)	mm	ϕ6.4			
	Gas (Flare)		ϕ12.7			
	Drain		VP25 (External Dia, 32/Internal Dia, 25)			

MODEL		FXSQ63PAV4	FXSQ80PAV4	FXSQ100PAV4	FXSQ125PAV4	FXSQ140PAV4
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	24,200	30,700	38,200	47,800	54,600
	kW	7.1	9.0	11.2	14.0	16.0
Power consumption	kW	0.106 ★1	0.126 ★1	0.151 ★1	0.206 ★1	0.222 ★1
Casing		Galvanised steel plate				
Airflow rate (H/M/L)	m³/min	21/17.5/14.5	23/19.5/16	32/27/22.5	37/31.5/26	39/33.5/28
	cfm	741/618/512	812/688/565	1,130/953/794	1,306/1,112/918	1,377/1,183/988
External static pressure	Pa	50-150 (50) ★2				50-140 (50) ★2
Sound level (H/M/L)	dB(A)	36/32/29	37.5/34/30	39/35/32	42/38.5/35	43/40/36
Dimensions (H×W×D)	mm	245×1,000×800		245×1,400×800		245×1,550×800
Machine weight	kg	35	37	46	47	52
Piping connections	Liquid (Flare)	mm	ϕ9.5			
	Gas (Flare)		ϕ15.9			
	Drain		VP25 (External Dia, 32/Internal Dia, 25)			

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

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

Ceiling Mounted Duct Type

New FXMQ-PA / M

Middle and high static pressure allows for flexible duct design

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

Adjustable external static pressure

30 Pa* ⟷ **200 Pa***

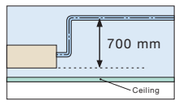
Set to low static pressure when ducts are short.

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

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

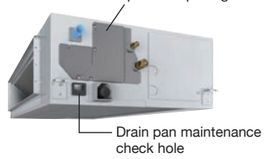
*30 Pa–100 Pa for FXMQ20P-32PA
*30 Pa–160 Pa for FXMQ40PA
*50 Pa–200 Pa for FXMQ50PA-125PA
*50 Pa–140 Pa for FXMQ140PA

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



- Control of the airflow rate can be selected from 3-step control and Auto. Auto airflow rate control can be selected with wired remote controller BRC1E63.
- Low operation sound level
- Energy-efficient
  - DC fan motor is used to realise energy-saving operation.
- Easy installation
  - Airflow rate can be controlled using a remote controller during test operation. It is automatically adjusted to the range between approximately ±10% of the rated HH tap airflow for FXMQ20P–125PA.

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

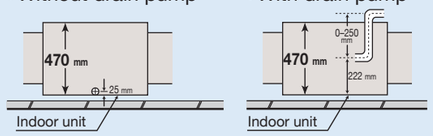


- An antibacterial treatment that uses silver ions has been applied to the drain pan, preventing the growth of slime, mould and bacteria that cause blockages and odours. (The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)

FXMQ200/250M

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

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



Specifications

MODEL		FXMQ20PAV4	FXMQ25PAV4	FXMQ32PAV4	FXMQ40PAV4	FXMQ50PAV4
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100
	kW	2.2	2.8	3.6	4.5	5.6
Power consumption	kW	0.056 ★1		0.060 ★1	0.151 ★1	0.128 ★1
Casing		Galvanised steel plate				
Airflow rate (HH/H/L)	m^3/min	9/7.5/6.5		9.5/8/7	16/13/11	18/16.5/15
	cfm	318/265/230		335/282/247	565/459/388	635/582/530
External static pressure	Pa	30-100 (50) ★2		30-100 (50) ★2	30-160 (100) ★2	50-200 (100) ★2
Sound level (HH/H/L)	dB(A)	33/31/29		34/32/30	39/37/35	41/39/37
Dimensions (H×W×D)	mm	300x550x700			300x700x700	
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		FXMQ63PAV4	FXMQ80PAV4	FXMQ100PAV4	FXMQ125PAVE	FXMQ140PAV4
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	24,200	30,700	38,200	47,800	54,600
	kW	7.1	9.0	11.2	14.0	16.0
Power consumption	kW	0.138 ★1	0.185 ★1	0.215 ★1	0.284 ★1	0.405 ★1
Casing		Galvanised steel plate				
Airflow rate (HH/H/L)	m^3/min	19.5/17.5/16	25/22.5/20	32/27/23	39/33/28	46/39/32
	cfm	688/618/565	883/794/706	1,130/953/812	1,377/1,165/988	1,624/1,377/1,130
External static pressure	Pa	50-200 (100) ★2				50-140 (100) ★2
Sound level (HH/H/L)	dB(A)	42/40/38	43/41/39		44/42/40	46/45/43
Dimensions (H×W×D)	mm	300×1,000×700		300×1,400×700		
Machine weight	kg	35		45		46
Piping connections	Liquid (Flare)	mm	ϕ9.5			
	Gas (Flare)		ϕ15.9			
	Drain		VP25 (External Dia, 32/Internal Dia, 25)			

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

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

MODEL		FXMQ200MVE4	FXMQ250MVE4
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz	
Cooling capacity	Btu/h	76,400	95,500
	kW	22.4	28.0
Power consumption	kW	1.294 ★1	1.465 ★1
Casing		Galvanised steel plate	
Airflow rate (H/L)	m^3/min	58/50	72/62
	cfm	2,047/1,765	2,542/2,189
External static pressure	Pa	132-221★2	191-270★2
Sound level (H/L)	220 V	dB(A)	48/45
	240 V		49/46
Dimensions (H×W×D)	mm	470×1,380×1,100	
Machine weight	kg	137	
Piping connections	Liquid (Flare)	mm	ϕ9.5
	Gas (Brazing)		ϕ19.1 / ϕ22.2
	Drain		PS1B

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

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

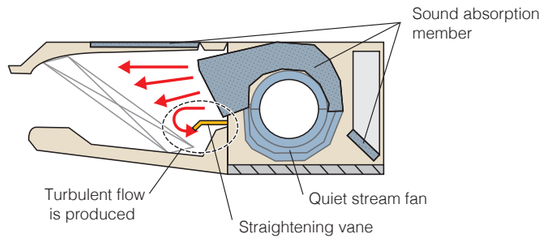
Ceiling Suspended Type

FXHQ-MA

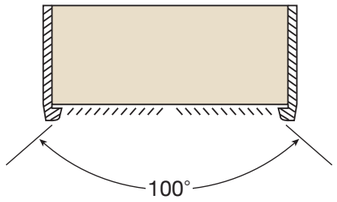
Slim body with quiet and wide airflow

- Adoption of QUIET STREAM FAN

Uses the quiet stream fan and many more advanced technologies.



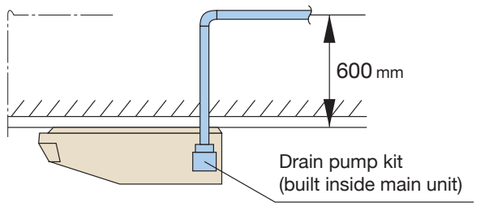
- Wide air discharge openings produce a spreading of 100° airflow.



- Low operation sound level

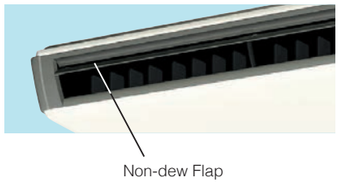
- Installation is easy

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



- Maintenance is easy
  - Non-dew Flap with no implanted bristles

Bristle-free Flap minimises contamination and makes cleaning simpler.



- Easy-to-clean flat design

- Maintenance is easier because everything can be performed from below the unit.

- 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

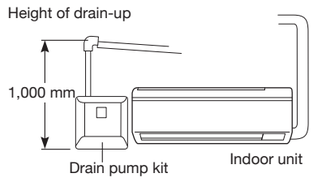
MODEL		FXHQ32MAV7	FXHQ63MAV7	FXHQ100MAV7
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz		
Cooling capacity	Btu/h	12,300	24,200	38,200
	kW	3.6	7.1	11.2
Power consumption	kW	0.111	0.115	0.135
Casing		White (10Y9/0.5)		
Airflow rate (H/L)	m^3/min	12/10	17.5/14	25/19.5
	cfm	424/353	618/494	883/688
Sound level (H/L)	dB(A)	36/31	39/34	45/37
Dimensions (H×W×D)	mm	195×960×680	195×1,160×680	195×1,400×680
Machine weight	kg	24	28	33
Piping connections	Liquid (Flare)	mm	ϕ6.4	ϕ9.5
	Gas (Flare)		ϕ12.7	ϕ15.9
	Drain		VP20 (External Dia, 26/Internal Dia, 20)	

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

Stylish flat panel design harmonised with your interior décor

- Stylish flat panel design creates a graceful harmony that enhances any interior space.
- Flat panel can be cleaned with only the single pass of a cloth across their smooth surface.
  Flat panel can also be easily removed and washed for more thorough cleaning.
- Low operation sound level
- Drain pan and air filter can be kept clean by mould-proof polystyrene.
- Vertical auto-swing realises efficiency of air distribution.
  The louvre closes automatically when the unit stops.
- 5 steps of discharge angle can be set by remote controller.
- Discharge angle is automatically set at the same angle as the previous operation when restarting. (Initial setting: 10° for cooling)
- Flexible installation
  - Drain pipe can be fitted to from either left or right sides.
- Drain pump kit is available as optional accessory, which lifts the drain 1,000 mm from the bottom of the unit.



Specifications

MODEL			FXAQ20PVE4	FXAQ25PVE4	FXAQ32PVE4	FXAQ40PVE4	FXAQ50PVE4	FXAQ63PVE4
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption		kW	0.019	0.028	0.030	0.020	0.033	0.050
Casing			White (3.0Y8.5/0.5)					
Airflow rate (H/L)		m^3/min	7.5/4.5	8/5	8.5/5.5	12/9	15/12	19/14
		cfm	265/159	282/177	300/194	424/318	530/424	671/494
Sound level (H/L)		dB(A)	35/31	36/31	38/31	39/34	42/37	47/41
Dimensions (H×W×D)		mm	290×795×238			290×1,050×238		
Machine weight		kg	11.0			14.0		
Piping connections	Liquid (Flare)	mm	ϕ6.4			ϕ9.5		
	Gas (Flare)		ϕ12.7			ϕ15.9		
	Drain		VP13 (External Dia, 18/Internal Dia, 13)					

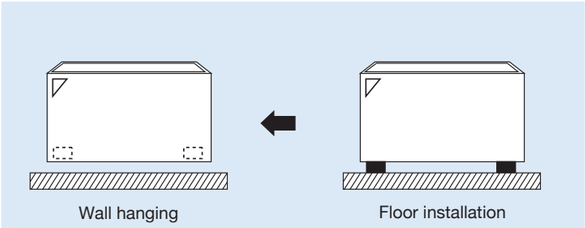
Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See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

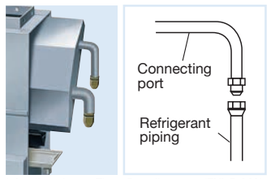
MODEL			FXLQ20MAVE4	FXLQ25MAVE4	FXLQ32MAVE4	FXLQ40MAVE4	FXLQ50MAVE4	FXLQ63MAVE4
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption		kW	0.049		0.090		0.110	
Casing			Ivory white (5Y7.5/1)					
Airflow rate (H/L)		m^3/min	7/6		8/6	11/8.5	14/11	16/12
		cfm	247/212		282/212	388/300	494/388	565/424
Sound level (H/L)	220 V	dB(A)	35/32			38/33	39/34	40/35
	240 V		37/34			40/35	41/36	42/37
Dimensions (H×W×D)		mm	600×1,000×222		600×1,140×222		600×1,420×222	
Machine weight		kg	25.0		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.
- 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			FXNQ20MAVE4	FXNQ25MAVE4	FXNQ32MAVE4	FXNQ40MAVE4	FXNQ50MAVE4	FXNQ63MAVE4
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
		kW	2.2	2.8	3.6	4.5	5.6	7.1
Power consumption		kW	0.049		0.090		0.110	
Casing			Galvanised steel plate					
Airflow rate (H/L)		m^3/min	7/6		8/6	11/8.5	14/11	16/12
		cfm	247/212		282/212	388/300	494/388	565/424
Sound level (H/L)	220 V	dB(A)	35/32			38/33	39/34	40/35
	240 V		37/34			40/35	41/36	42/37
Dimensions (H×W×D)		mm	610×930×220		610×1,070×220		610×1,350×220	
Machine weight		kg	19		23		27	
Piping connections	Liquid (Flare)	mm	ϕ6.4					ϕ9.5
	Gas (Flare)		ϕ12.7					ϕ15.9
	Drain		21O.D.					

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

Floor Standing Duct Type FXVQ-N

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

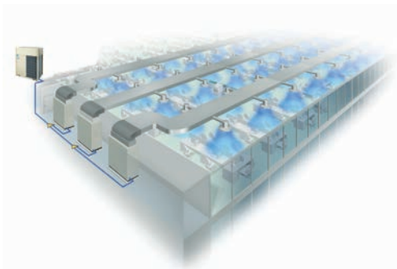
- Large airflow type that fits for spacious areas such as factories and large stores.
- Various installations can be supported from full-scale duct connection airflow to direct airflow that allows easy installation.
- Full-scale duct connection airflow allows for air conditioning evenly in spacious areas.

Duct connection airflow type

- Adding the plenum chamber (option) allows for simple operation with direct airflow.

  * Note that the operation sound increases by approximately 5dB(A).

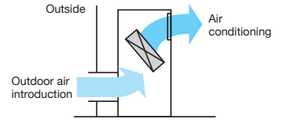
Direct airflow type



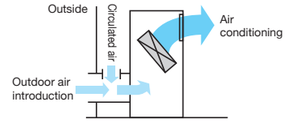
- The high static pressure type driven by the belt drive system allows for use of air discharge outlets in various shapes as well as long ducts. Highly flexible installation is possible.
- Design with high maintainability that allows major services and maintenance services to be performed at the front.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

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

All-fresh (using outdoor air only) system



Return + Outdoor air mixed system



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

Specifications

MODEL			FXVQ125NY14	FXVQ200NY14	FXVQ250NY14	FXVQ400NY14	FXVQ500NY14
Power supply			3-phase 4-wire system, 380–415 V, 50 Hz				
Cooling capacity		Btu/h	47,800	76,400	95,500	154,000	191,000
		kW	14.0	22.4	28.0	45.0	56.0
Power consumption		kW	0.53	1.33	1.61	3.97	2.62
Casing colour			Ivory white (5Y7.5/1)				
Dimensions (H×W×D)		mm	1,670×750×510	1,670×950×510	1,670×1,170×510	1,900×1,170×720	1,900×1,470×720
Machine weight		kg	118	144	169	236	281
Sound level *1		dB(A)	52	56	60	65	62
Piping connections	Liquid	mm	ϕ9.5 (Brazing)			ϕ12.7 (Brazing)	ϕ15.9 (Brazing)
	Gas	mm	ϕ15.9 (Brazing)	ϕ19.1 (Brazing)	ϕ22.2 (Brazing)	ϕ28.6 (Brazing)	
	Drain	mm	Rp1 (PS 1B internal thread)				
Air filter	Type		Long-life filter (anti-mould resin net)				
Fan	Motor output	kW	0.75	1.5		3.7	
	Airflow rate	m^3/min	43	69	86	134	165
		cfm	1,518	2,436	3,036	4,730	5,825
	External static pressure *2	Pa	152	217	281	420	142
	Drive system		Belt drive system				

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

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

*2: The value is the external static pressure with standard pulley.

Clean Room Air Conditioner

FXB(P)Q-P

Suitable for hospitals and other clean spaces

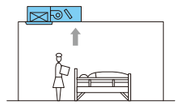
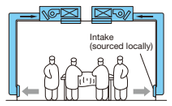
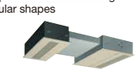
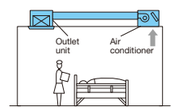
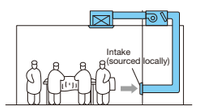
Easily provides the high cleanliness environment required by various industries

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

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

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

Instances of installation by type (for a hospital)

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

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

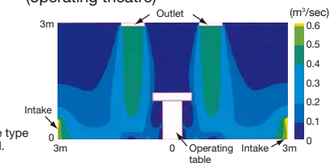
Can be easily installed in existing buildings

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

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

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

● Air flow distribution diagram (operating theatre)



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

Filtration

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

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

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

■HEPA filter

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

Installation example (in a medical facility)

Antibacterial

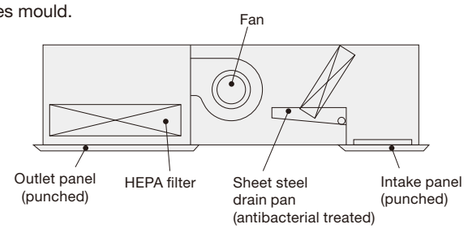
Suppresses the propagation of bacteria in the duct with a proprietary antibacterial coating

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

Antibacterial fiber used in the intake filter

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

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

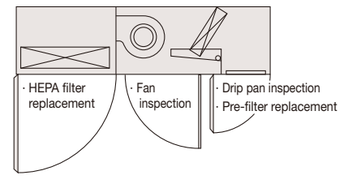


Labor-saving

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

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

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



Quiet

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

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

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

Clean Room Air Conditioner FXB(P)Q-P

Specifications

Type			Integrated outlet unit model			Separate outlet unit model
MODEL	Indoor unit		FXBQ40PVE4	FXBQ50PVE4	FXBQ63PVE4	FXBPQ63PVE4
	Outlet unit		Integrated with the indoor unit			BAF82A63
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz			
Cooling capacity		Btu/h	15,400	19,100	24,200	
		kW	4.5	5.6	7.1	
Power consumption		kW	0.31		0.45	
Intake filter efficiency *1			70% by gravimetric method			
Outlet HEPA filter efficiency *2			99.97% by DOP method *5			
Indoor unit weight		kg	140 *3		185 *3	120 *6
Casing			Galvanised steel plate			
Airflow rate (H/L)		m^3/min	19.5/17.5		26/22.5	
		cfm	688/618		918/794	
Sound level (H/L) *4		dB(A)	44/42			
Dimensions (H×W×D)		mm	492×1,788×1,000		492×1,788×1,300	492×1,078×1,300
Outlet unit weight		kg	–			65 *3
Piping connections	Liquid (Flare)	mm	ϕ6.4		ϕ9.5	
	Gas (Flare)		ϕ12.7		ϕ15.9	
	Drain		PT1B			
Filter(Option)	HEPA filter	Model	BAFH82A50		BAFH82A63	
Panel (Option)	Ceiling intake type		BYB82A50C		BYB82A63C	BYB82A63CP
	Floor-level intake type		BYB82A50W		BYB82A63W	BYB82A63WP

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

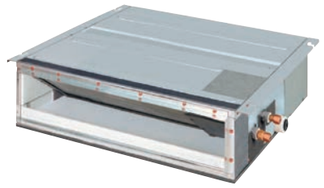
*1: An intake air filter is only attached to the ceiling intake type.
*2: HEPA filter sold separately. The dust collection efficiency of HEPA filter is 99.97 %. However, air may slightly leak around the filter when installing.
*3: Weight including HEPA filter and panel.
*4: Anechoic chamber conversion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

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

Warning

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

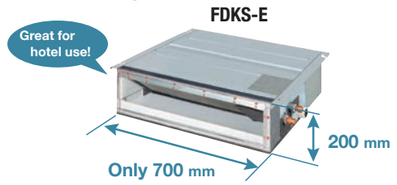
Slim Ceiling Mounted Duct Type FDKS-E/C



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

Slim and smooth design suits your shallow ceiling

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



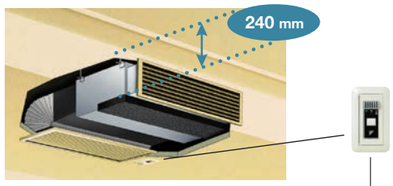
●Low operation sound level (H/L/SL)

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

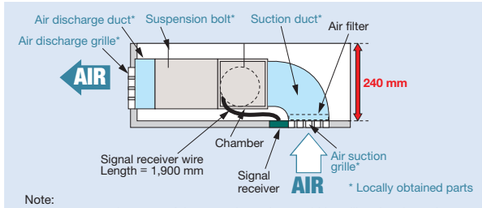
●Home Leave Operation prevents large increase or decrease in the indoor temperature by continuing operation* while someone is sleeping or left the house. This means that an air-conditioned welcome awaits when someone wakes up or returns. It also means that the indoor temperature can quickly return to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

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

	FDKS25E	FDKS35E	FDKS25C	FDKS35C
Dimensions (H x W x D)	200 x 700 x 620 mm		200 x 900 x 620 mm	
Weight	21 kg		25 kg	
Airflow rate (H)	8.7 m³/min		9.5 m³/min	10 m³/min
External static pressure	30 Pa		40 Pa	



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



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

Specifications

MODEL			FDKS25EVMB4	FDKS35EVMB4	FDKS25CVMB4	FDKS35CVMB4	FDKS50CVMB4	FDKS60CVMB4
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz					
Airflow rates (H)		m³/min (cfm)	8.7 (307)		9.5 (335)	10.0 (353)	12.0 (424)	16.0 (565)
Sound levels (H/L/SL)*		dB (A)	35/31/29				37/33/31	38/34/32
Fan speed			5 steps, quiet and automatic					
Temperature control			Microcomputer control					
Dimensions (H×W×D)		mm	200×700×620		200×900×620			200×1,100×620
Machine weight		kg	21		25		27	30
Piping connections	Liquid (Flare)	mm	ϕ6.4					
	Gas (Flare)		ϕ9.5				ϕ12.7	
	Drain		VP20 (External Dia. 26/Internal Dia. 20)					
Heat insulation			Both liquid and gas pipes					
External static pressure		Pa	30		40			

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

Wall Mounted Type — FTKJ-N

Elegant appearance with European style

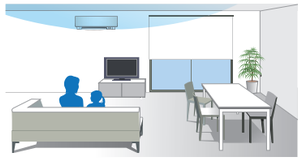
Standard accessory

reddot award 2014 winner

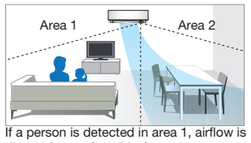
German Design Award SPECIAL MENTION 2015

- Elegant Appearance with Curved Panel
  - The sleek design of the FTKJ-N indoor unit features a uniquely European style. This elegant body houses state-of-the-art technology which delivers superior performance. The FTKJ-N series offers a versatile choice for home-owners, designers and architects alike.

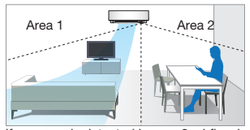
- Comfort Airflow Mode
  - Comfort Airflow Mode prevents uncomfortable impacts from blowing directly to a person's body. During cooling operation, the flap moves upwards to prevent cold impacts.



- Two-Area Intelligent Eye
  - A combination of Comfort Airflow Mode and Intelligent Eye directs airflow away from people to avoid impacts. If there is no movement in a room for 20 minutes, Intelligent Eye automatically adjusts the set temperature by approximately 2°C to save energy.

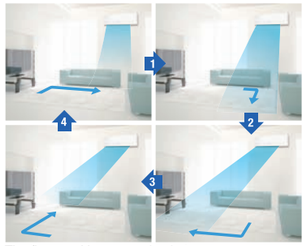


If a person is detected in area 1, airflow is directed away from him/her.



If a person is detected in area 2, airflow is directed away from him/her.

- 3D Airflow
  - 3D Airflow combines Vertical and Horizontal Auto-Swing to reduce indoor temperature fluctuation. This function circulates air to every part of a room for uniform cooling, even for large spaces. To start 3D Airflow, push both the Vertical and Horizontal Auto-Swing buttons. The flaps and louvers swing in turn.



The flaps and louvers swing in turn, expands the comfort zone.

Specifications

MODEL			FTKJ25NVM4W	FTKJ25NVM4S	FTKJ35NVM4W	FTKJ35NVM4S	FTKJ50NVM4W	FTKJ50NVM4S
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz					
Front panel colour			White	Silver	White	Silver	White	Silver
Airflow rates (H)		m^3/min (cfm)	8.9 (313)		10.9 (385)			
Sound levels (H/L/SL)		dB (A)	38/25/19		45/26/20		46/35/29	
Fan speed			5 steps, quiet and automatic					
Temperature control			Microcomputer control					
Dimensions (H×W×D)		mm	303x998x212					
Machine weight		kg	12					
Piping connections	Liquid (Flare)	mm	ϕ6.4					
	Gas (Flare)		ϕ9.5				ϕ12.7	
	Drain		ϕ18.0					
Heat insulation			Both liquid and gas pipes					

Wall Mounted Type FTKS-D/F

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

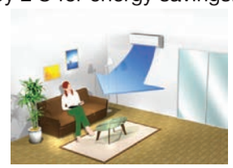
Stylish flat panel harmonises with your interior décor

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

(H/L/SL)

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

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



When you are in the room

When you go out

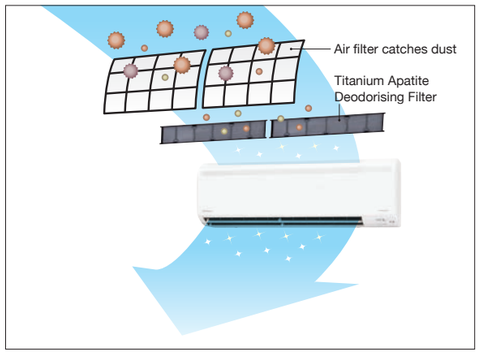
- 3-D Airflow combines Vertical and Horizontal Auto-Swing to circulate air to every part of a room for uniform cooling of even large spaces.

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

A uniform temperature is achieved throughout the entire room.

- **Titanium Apatite Deodorising Filter**

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

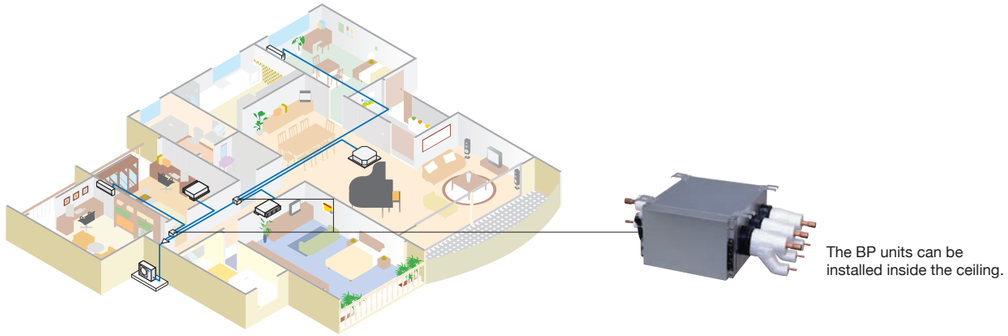


This filter is not a medical device. Benefits such as the adsorption of odours and allergens and deodorisation of odours are only effective for substances which are directly attached to the Titanium Apatite Deodorising Filter.

Specifications

MODEL			FTKS25DVM4	FTKS35DVM4	FTKS50FVM4	FTKS60FVM4	FTKS71FVM4
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz				
Front panel colour			White				
Airflow rates (H)		m^3/min (cfm)	8.7 (307)	8.9 (314)	14.7 (519)	16.2 (572)	17.4 (614)
Sound levels (H/L/SL)		dB (A)	37/25/22	39/26/23	43/34/31	45/36/33	46/37/34
Fan speed			5 steps, quiet and automatic				
Temperature control			Microcomputer control				
Dimensions (H×W×D)		mm	283×800×195		290×1,050×238		
Machine weight		kg	9		12		
Piping connections	Liquid (Flare)	mm	ϕ6.4				
	Gas (Flare)		ϕ9.5		ϕ12.7	ϕ15.9	
	Drain		ϕ18.0				
Heat insulation			Both liquid and gas pipes				

BP Units for Connection to Residential Indoor Units



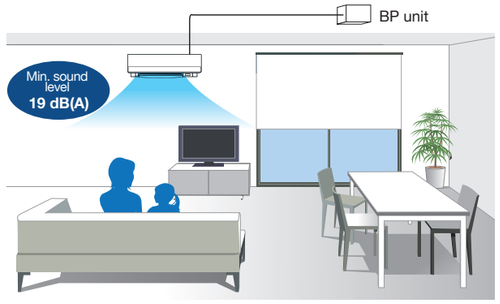
The BP units can be installed inside the ceiling.

Connectable to Residential Indoor Units

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

Quiet Operating Sound

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



BPMKS967A3

BPMKS967A2

Specifications

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

Note: * Total auxiliary piping length.

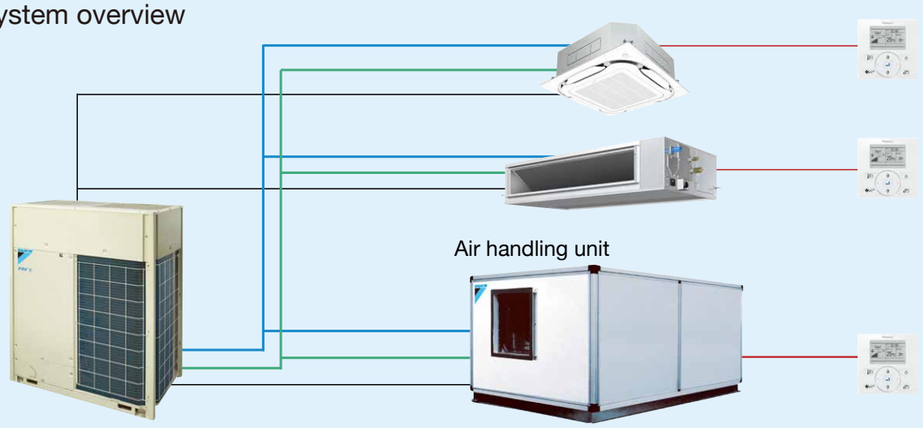
Air Handling Unit

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

AHUR
Capacity range : 6 – 120 HP

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

System overview



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

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

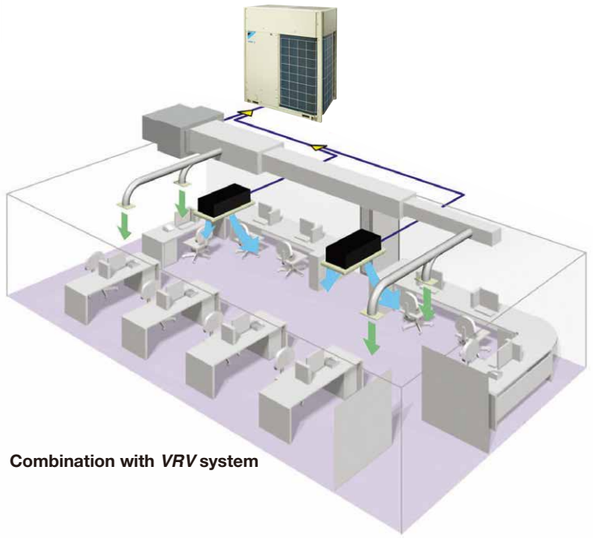
Outdoor-Air Processing Unit

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

Lineup

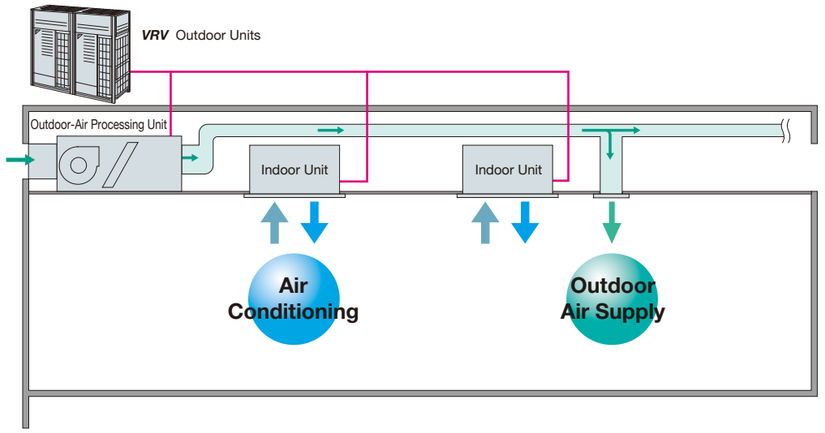
Model Name	FXMQ125MFV7	FXMQ200MFV7	FXMQ250MFV7
Capacity Index	125	200	250

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



Combination with *VRV* system

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



Connection Conditions

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

- When outdoor-air processing units are connected, the total connection capacity index must be 50% to 100% of the capacity index of the outdoor units.
- When outdoor-air processing units and standard indoor units are connected, the total connection capacity index of the outdoor-air processing units must not exceed 30% of the capacity index of the outdoor units.
  Because connection is possible depending on conditions ever when the capacity index of outdoor-air processing units exceeds 30% of the capacity index of the outdoor units, contact your local distributor.
- Outdoor-air processing units can be used without indoor units.

- The unit introduces outdoor air and adjusts the outdoor air temperature via fixed discharge temperature control, thereby reducing the air conditioning load.
  * The system can operate with outdoor-air temperatures ranging from -5 to 43°C. Heating performance is somewhat adversely affected when the outdoor-air temperature is 0°C or below.
  * When shipped from the factory, the thermostat is set at 18°C for cooling. The set temperature can be varied within the range of 13–25°C during cooling operation, in the local setting mode using the wired remote controller. The temperature, however, is not displayed on the remote controller.
  * While in machine protection mode and depending on outdoor air conditions, discharge air temperature may not be at the set temperature.
  * The fan stops when operating in defrosting, oil returning and hot start operations. The fan may stop due to mechanical protection control.

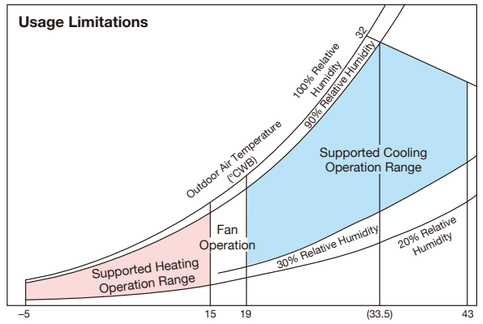
- Ceiling mounted duct units with three different capacities are available. These can be connected to ***VRV*** series outdoor units to meet a variety of different requirements.

Airflow rate

FXMQ125MFV7	1,080 m³/h
FXMQ200MFV7	1,680 m³/h
FXMQ250MFV7	2,100 m³/h

- Optional equipment includes long-life filters.

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



Note:
1. The data shown in the graph illustrates the supported operation ranges under the following conditions.
   Indoor and Outdoor Unit
   Effective piping length: 7.5 m
   Height differential: 0 m
2. The discharge temperature can be set using the remote controller. However, the actual temperature may not match the temperature setting under some circumstances due to the outdoor-air processing load or mechanical protection controls.
3. The system will not operate in fan mode when the outdoor air temperature is 5°C or below.

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

- For the ***VRV*** system, a variety of control systems can be deployed, including remote control from distances of up to 500 m.
  * Group control is not possible between this unit and standard type indoor units. Remote controllers connect to each unit separately.

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

- The “self-diagnosis function” indicates the occurrence and nature of abnormalities in the system by displaying codes on the remote controller.

- A central control system compatible with the ***VRV*** system can be installed.
  * It is not possible to change the discharge air temperature settings from the central control system.
  * Do not associate this equipment in areas which standard indoor units are installed, as central control cannot be used with them.

DCS302CA61
Central remote controller (option)

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

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

Standard Specifications

Indoor unit

Type				Ceiling Mounted Duct Type		
Model				FXMQ125MFV7	FXMQ200MFV7	FXMQ250MFV7
Power supply				1-phase 220-240 V (also required for indoor units), 50 Hz		
Cooling capacity *1			Btu/h	47,800	76,400	95,500
			kW	14.0	22.4	28.0
Power consumption			kW	0.359	0.548	0.638
Casing				Galvanised steel plate		
Dimensions (HxWxD)			mm	470X744X1,100	470X1,380X1,100	
Fan	Motor output		kW	0.380		
	Airflow rate		m^3/min	18	28	35
			cfm	635	988	1,236
	External static pressure	220V/240V	Pa	185/225	225/275	205/255
Air filter				*2		
Refrigerant piping	Liquid		mm	ϕ 9.5 (flare)		
	Gas		mm	ϕ 15.9 (flare)	ϕ 19.1 (brazing)	ϕ 22.2 (brazing)
	Drain		mm	PS1B female thread		
Machine weight			kg	86	123	
Sound level *3		220V/240V	dB(A)	42/43	47/48	
Connectable outdoor units *4				6 HP and above	8 HP and above	10 HP and above
Operation range (Fan mode operation between 15 and 19°C)			Cooling	19 to 43°C		
Range of the discharge temperature *5			Cooling	13 to 25°C		

Note : *1. Specifications are based on the following conditions;
- Cooling: Outdoor temp. of 33°CDB, 28°CWB (68% RH), and discharge temp. of 18°CDB.
- Equivalent reference piping length: 7.5 m (0 m horizontal)

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

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

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

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

Options

Indoor unit

Model			FXMQ125MFV7	FXMQ200MFV7	FXMQ250MFV7
Operation/control	Operation remote controller		BRC1E63/BRC1C62		
	Central remote controller		DCS302CA61		
	Unified ON/OFF controller		DCS301BA61		
	Schedule timer		DST301BA61		
	Wiring adaptor for electrical appendices (1)		KRP2A61		
	Wiring adaptor for electrical appendices (2)		KRP4AA51		
Filters	Long-life replacement filter		KAFJ371L140	KAFJ371L280	
	High-efficiency filter	Colourimetric method 65%	KAFJ372L140	KAFJ372L280	
		Colourimetric method 90%	KAFJ373L140	KAFJ373L280	
	Filter chamber *1		KDJ3705L140	KDJ3705L280	
PM2.5 filtration unit *2			BAF429A20A		
PM2.5 with activated carbon filtration unit *2			BAF429A20AC		
Drain pump kit			KDU30L250VE		
Adaptor for wiring			KRP1B61		

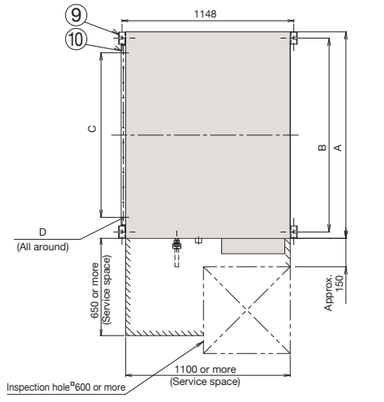
Note : *1. Filter chamber has a suction-type flange. (Main unit does not.)
- Dimensions and weight of the equipment may vary depending on the options used.
- Some options may not be usable due to the equipment installation conditions, so please confirm prior to ordering.

*2. Refer to page 166-168 for details.

- Some options may not be used in combination.
- Operating sound may increase somewhat depending on the options used.

Dimensions

FXMQ125/200/250MFV7



*These diagrams are based on FXMQ200 and FXMQ250MFV7.

Local connection piping size

Model	Gas piping diameter	Liquid piping diameter
FXMQ125MFV7	ϕ15.9	ϕ9.5
FXMQ200MFV7	ϕ19.1 attached piping	ϕ9.5
FXMQ250MFV7	ϕ22.2 attached piping	ϕ9.5

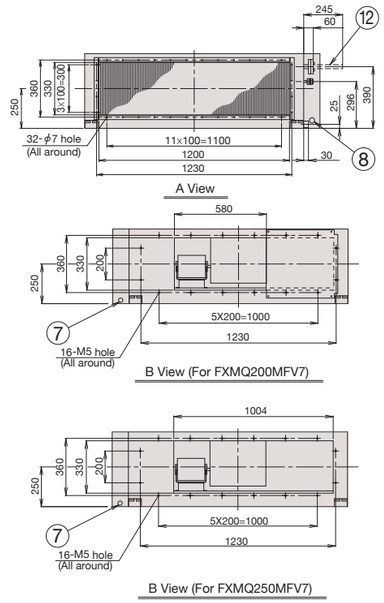
Table of dimensions

Model	A	B	C	D
FXMQ125MFV7	744	685	5X100=500	20-ϕ4.7 hole
FXMQ200MFV7	1380	1296	11X100=1100	32-ϕ4.7 hole
FXMQ250MFV7	1380	1296	11X100=1100	32-ϕ4.7 hole

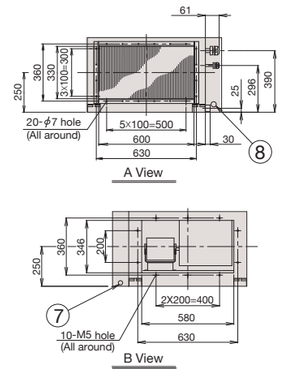
Note:
1. The attached piping in the diagram is for FXMQ200MFV7 and FXMQ250MFV7 only. The gas piping connection port (② in the diagram) has a different bore form with FXMQ125MFV7.
2. An air filter is not supplied with this unit. Be sure to mount an air filter in the suction side. [Use a filter with dust 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)

FXMQ200/250MFV7



FXMQ125MFV7



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

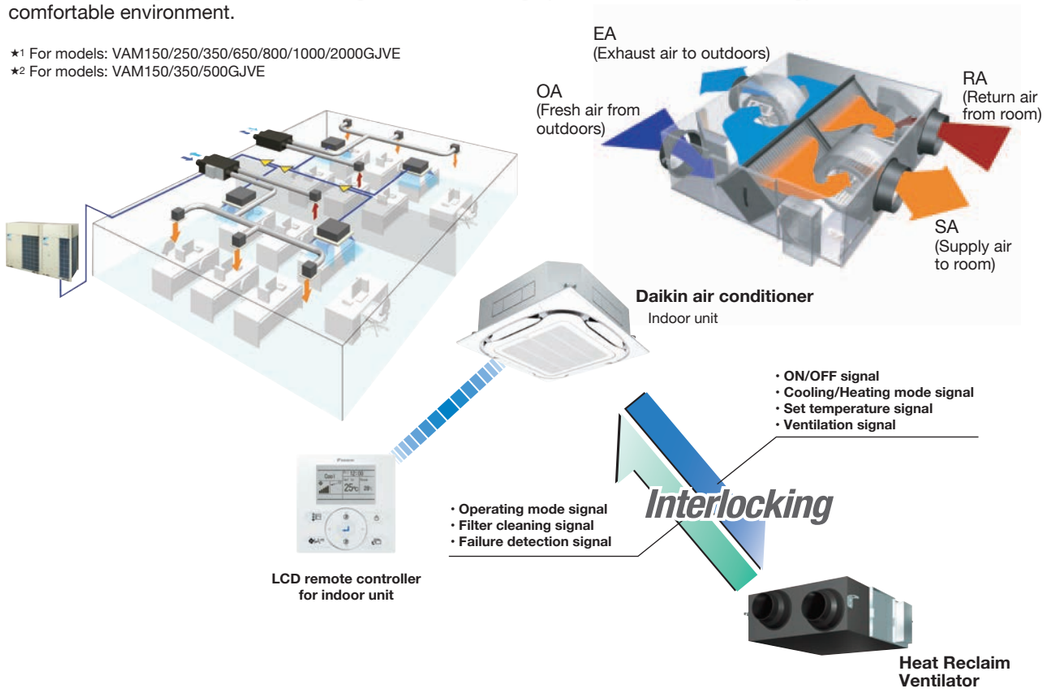
***Improved Enthalpy Efficiency*★1**
***Higher External Static Pressure*★2**
Enhanced Energy Saving Functions

Heat Reclaim Ventilator remote controller*
BRC301B61 (Option)

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

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

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



Compact Equipment

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

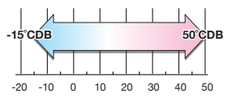
* For VAM500GJVE

Energy Conservation

Air conditioning load reduced by approximately 31%!

Cold Climate Compatible

Standard operation at temperatures down to -15°C.



Air conditioning load reduced by approximately 31%!

Total heat exchange ventilation — 23%

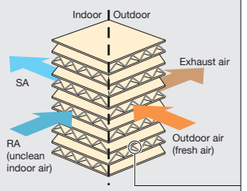
This unit recovers heat energy lost through ventilation and curbs room temperature changes caused by ventilation, thereby conserving energy and reducing the load on the air conditioning system.

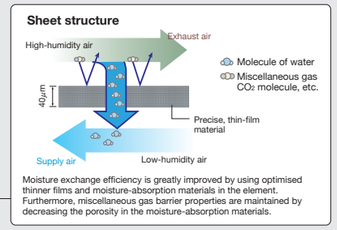
Enthalpy efficiency drastically improved by employing thin film element! (VAM-GJ model)

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

Moisture absorption increased by approx. 10%!

Thickness of the partition sheet **40 μm**





\+

Auto-ventilation Mode Changeover Switching — 6%

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

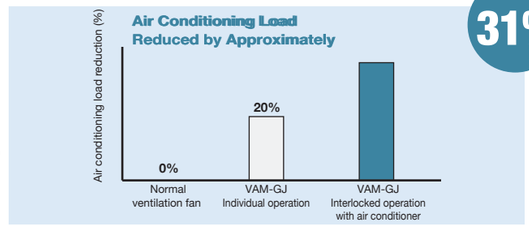
\+

Pre-cool, Pre-heat Control — 2%

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

=

31%



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

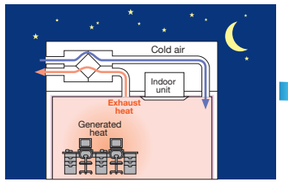
Nighttime free cooling operation*1

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

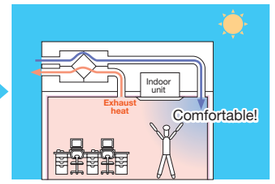
- Nighttime free cooling operation only works to cool and if connected to Building Multi or ***VRV*** systems.
- Nighttime free cooling operation is set to "off" in the factory settings, so if there is a need to turn on, please contact Daikin dealer.

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

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



Heat is discharged.



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

*Interlocked operation with an air conditioner

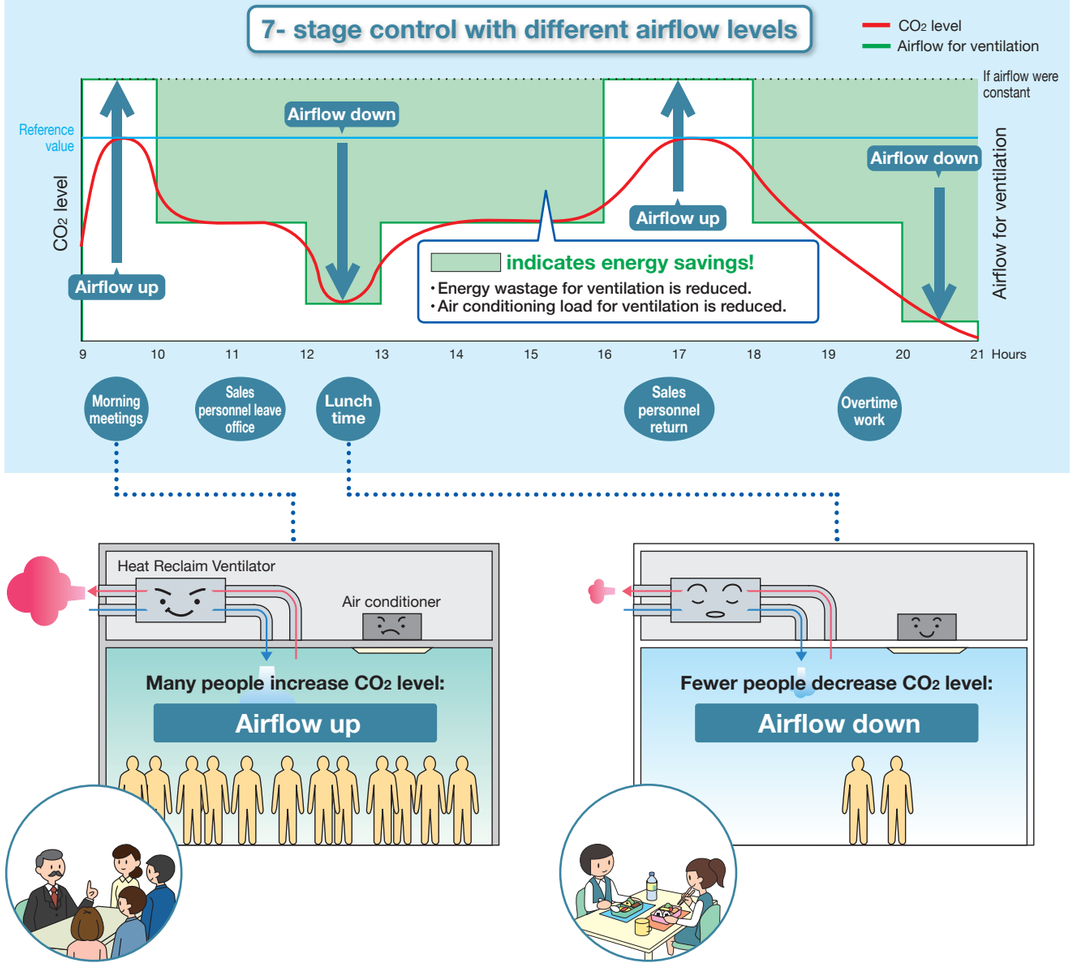
*1 This function can be operated only when interlocked with air conditioners.
*2 Value is based on the following conditions:
- Cooling operation performed from April to October.
- Calculated for air conditioning sensible heat load only (latent heat load not included).

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:**



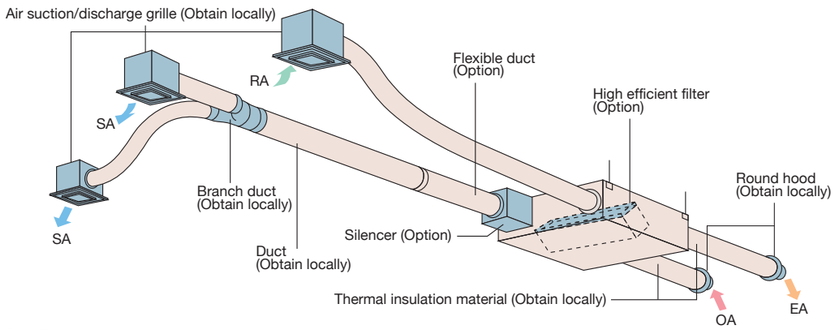
Specifications

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 (50/60 Hz)		Ultra-High	%	79/79	75/75	79/79	74/74	75/75	72/72	78/78	72/72	77/77
		High		79/79	75/75	79/79	74/74	75/75	72/72	78/78	72/72	77/77
		Low		84/85	79/79	82/82	80/80.5	77/77.5	74/74.5	80.5/81	75.5/76	79/81
Enthalpy Exchange Efficiency (50/60 Hz)	For Cooling	Ultra-High	%	66/66	63/63	66/66	55/55	61/61	61/61	64/64	61/61	62/62
		High		66/66	63/63	66/66	55/55	61/61	61/61	64/64	61/61	62/62
		Low		70/70.5	66/66	70/70	59/59.5	64/64.5	64/64.5	68.5/69	64/64.5	66/67
Power Consumption (50/60 Hz)	Heat Exchange Mode	Ultra-High	W	125/134	137/141	200/226	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542
		High		111/117	120/125	182/211	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315
		Low		57/58	60/59	122/120	128/136	196/207	435/483	476/512	835/927	966/1,039
	Bypass Mode	Ultra-High	W	125/134	137/141	200/226	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542
		High		111/117	120/125	182/211	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315
		Low		57/58	60/59	122/120	128/136	196/207	435/483	476/512	835/927	966/1,039
Sound Level (50/60 Hz)	Heat Exchange Mode	Ultra-High	dB(A)	27-28.5/28.5	27-29/29	31.5-33/33	33-35.5/34	34-36/36	39-40.5/39.5	39.5-41.5/39.5	39.5-41.5/41.5	41.5-43.5/42
		High		26-27.5/27.5	26-27.5/28	30-31.5/30	31.5-34/32	33-34.5/34	37-39.5/37.5	37.5-39.5/37.5	37.5-39.5/39.5	39-43/40
		Low		20.5-21.5/21	21-22/21	23-25/23	25-28.5/24	27.5-29.5/28	35-37.5/34	35-37.5/34.5	35-37.5/36	36-39/39
	Bypass Mode	Ultra-High	dB(A)	28.5-29.5/29.5	28.5-30.5/30.5	33-34.5/34.5	34.5-36/35.5	35-37.5/37.5	40.5-42/41	40.5-42.5/40.5	41-43/42.5	43-45.5/44
		High		27.5-28.5/28.5	27.5-29/29.5	31.5-33/31.5	33-34.5/33.5	33-35.5/35.5	38.5-40/39	38.5-40.5/38.5	39.5-41/41.5	40.5-45/42
		Low		22.5-23.5/22	22.5-23/22.5	24.5-26.5/24.5	25.5-28.5/25.5	27.5-30.5/29.5	36-38.5/35.5	36-38.5/35.5	36.5-38/37.5	37.5-39.5/41
Casing				Galvanised steel plate								
Insulation Material				Self-extinguishable polyurethane foam								
Dimensions (HXWXD)			mm	278X810X551		306X879X800		338X973X832	387X1,111X832	387X1,111X1,214	785X1,619X832	785X1,619X1,214
Machine Weight			kg	24		32		45	55	67	129	157
Heat Exchange System				Air to air cross flow total heat (Sensible heat + latent heat) exchange								
Heat Exchange Element Material				Specially processed nonflammable paper								
Air Filter				Multidirectional fibrous fleeces								
Fan	Type			Sirocco fan								
	Airflow Rate (50/60 Hz)	Ultra-High	m³/h	150/150	250/250	350/350	500/500	650/650	800/800	1,000/1,000	1,500/1,500	2,000/2,000
		High		150/150	250/250	350/350	500/500	650/650	800/800	1,000/1,000	1,500/1,500	2,000/2,000
		Low		100/95	155/155	230/230	320/295	500/470	700/670	860/840	1,320/1,260	1,720/1,580
	External Static Pressure (50/60 Hz)	Ultra-High	Pa	120/154	70/96	169/222	105/150	85/125	133/170	168/192	112/150	116/140
		High		106/131	54/65	141/145	66/52	53/67	92/85	110/86	73/72	58/32
		Low		56/60	24/20	67/30	32/18	35/38	72/61	85/60	56/50	45/45
	Motor Output		kW	0.030X2		0.090X2		0.140X2	0.280X2		0.280X4	
Connection Duct Diameter			mm	ϕ100	ϕ150		ϕ200		ϕ250		ϕ350	
Unit ambient condition				-15°C–50°CDB, 80%RH or less								

Note :
1. Sound level is measured at 1.5m below the centre of the body.
2. Airflow rate can be changed over to Low mode or High mode.
3. Sound level is measured in an anechoic chamber. Sound level generally becomes greater than this value depending on the operating conditions, reflected sound, and peripheral noise.
4. The sound level at the air discharge port is about 8 dB(A) higher than the unit's sound level.
5. The specifications, designs and information given here are subject to change without notice.
6. Temperature Exchange Efficiency is the mean value between cooling and heating.
7. Efficiency is measured under the following conditions: Ratio of rated external static pressure has been maintained as follows; outdoor side to indoor side = 7 to 1.
8. In conformance with JIS standards (JIS B 8628), operating sound level is based on the value when one unit is operated, with the value converted for an anechoic chamber. This is transmission sound from the main unit, and does not include sound from the discharge grille. Thus it is normal for the sound to be louder than the indicated value when the unit is actually installed.
9. Sound level from the discharge port causes the value to be approximately 8 dB(A) (models with the airflow rate of less than 150 to 500m³/h) to approximately 11 dB(A) (models with the airflow rate of 650m³/h or more) greater than the indicated value. Furthermore, fan rotation and noise from the discharge grille may increase depending on the on-site duct resistance conditions. Please consider noise countermeasures when installing the unit.
10. With large models in particular (1500 and 2000m³/h models), if the supply air (SA) grille is installed near the main unit, the noise of the main unit may be heard from the discharge grille via the duct, and this will result in a marked increase in noise. In such cases, if peripheral effects are included (such as reverberation of the floor and walls, combination with other equipment, and background noise), sound level may be as much as 15 dB(A) higher than the indicated value. When installing a large model, please provide as much separation as possible between the main unit and the discharge grille. If the equipment and discharge grille are near each other, please consider countermeasures such as the following:
    • Use a sound-muffling box, flexible duct and sound-muffling air supply/discharge grilles
    • Decentralised installation of discharge grilles
11. When installing in a location with particularly low background noise such as a classroom, please consider the following measures to avoid transmission sound from the main unit:
    • Use of ceiling materials with high sound insulating properties (high transmission loss)
    • Methods of blocking sound transmission, for example, by adding sound insulating materials around the bottom of the sound source.

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

Options



Option List

Item \ Type			VAM150 · 250 · 350 · 500 · 650 · 800 · 1000 · 1500 · 2000GJVE
Controlling device	Heat Reclaim Ventilator remote controller		BRC301B61
	Centralised controlling device	Residential central remote controller	DCS303A51 *1
		Central remote controller	DCS302CA61
		Unified ON/OFF controller	DCS301BA61
		Schedule timer	DST301BA61
	PC Board Adaptor: Wiring adaptor for electrical appendices		KRP2A61
	PC Board Adaptor: For humidifier		KRP50-2
	PC Board Adaptor: Installation box for adaptor PCB		KRP50-2A90 (Mounted electric component assy of Heat Reclaim Ventilator)
	PC Board Adaptor: For heater control kit		BRP4A50
	PC Board Adaptor: For wiring	Type (***VRV*** indoor unit)	FXFSQ-A, FXFQ-A / FXZQ-M / FXCQ-M / FXKQ-MA / FXDQ-PD, FXDQ-ND / FXSQ-PA / FXMQ-PA / FXMQ-M / FXUQ-A / FXHQ-MA / FAXQ-P / FXLQ-MA, FXNQ-MA / FXVQ-N / FXBQ-P, FXBPQ-P
			KRP1C11A★ / KRP1BA57★ / KRP1B61★ / KRP1B61 / KRP1B56★ / KRP1C64★ / KRP1C64★ / KRP1B61 / — / KRP1BA54 / — / KRP1B61 / KRP1C67 / KRP1B61
	PC Board Adaptor: Installation box for adaptor PCB☆		Note 2, 3 KRP1H98A / Note 4, 5 KRP1BA101 / Note 2, 3 KRP1B96 / — / Note 4, 5 KRP1BA101 / Note 2, 3 KRP4A98 / Note 2, 3 KRP4A97 / — / KRP1BA97 / Note 3 KRP1CA93 / Note 2, 3 KRP4AA93 / — / — / —

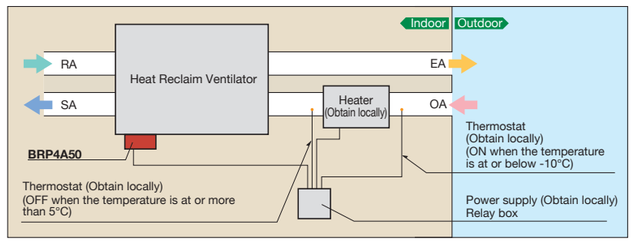
Note: 1. Installation box☆ is necessary for each adaptor marked★.
2. Up to 2 adaptors can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.
5. Installation box☆ is necessary for each adaptor.
6. *1 For residential use only. When connect with a Heat Reclaim Ventilator (VAM), you can only switch the power ON/OFF. It cannot be used with other central control equipment.

Item \ Type			VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
Additional function	Silencer		—			KDDM24B50	KDDM24B100			KDDM24B100X2	
		Nominal pipe diameter mm	—			ϕ 200		ϕ 250			
	High efficiency filter		KAF242H25M		KAF242H50M		KAF242H65M	KAF242H80M	KAF242H100M	KAF242H80MX2	KAF242H100MX2
	Air filter for replacement		KAF241H25M		KAF241H50M		KAF241H65M	KAF241H80M	KAF241H100M	KAF241H80MX2	KAF241H100MX2
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 166-168 for details.

PC board adaptor for heater control kit (BRP4A50)

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



Notes when installing

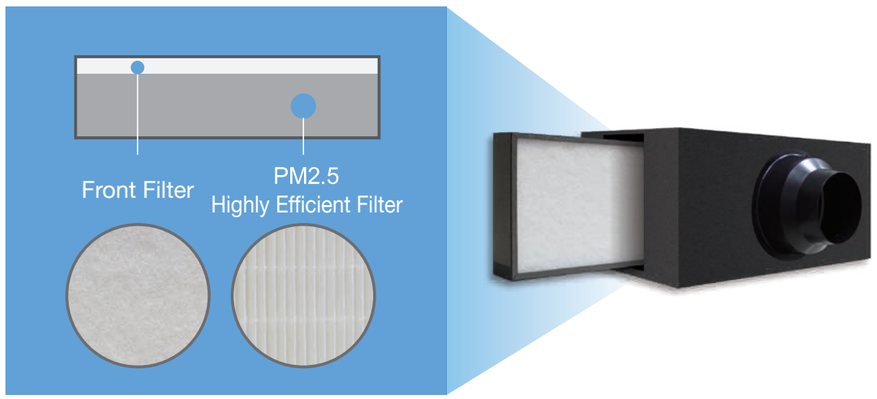
- Examine fully an installation place and specification for using the electric heater based on the standard and regulation of each country.
- Supply the electric heater and safety production devices such as a relay and a thermostat, etc of which qualities satisfy the standard and regulation of each country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

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

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

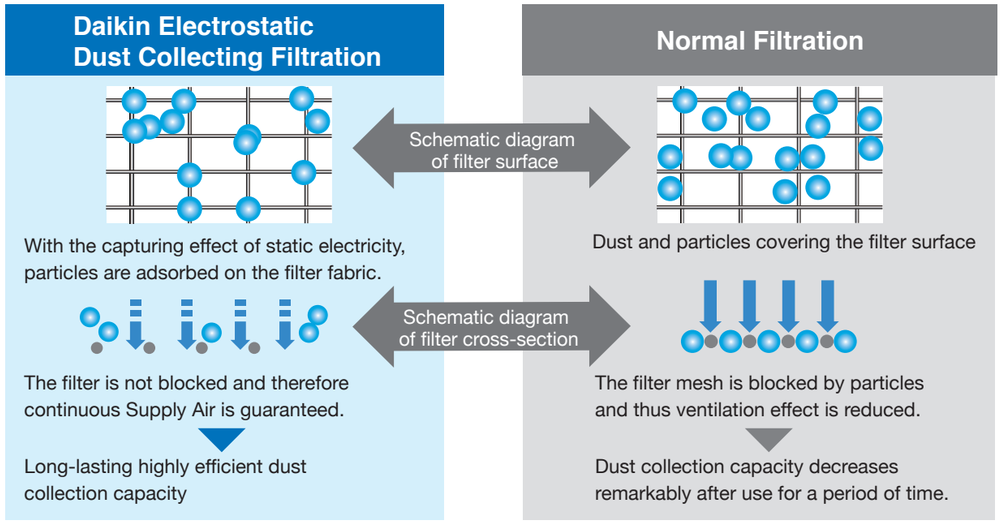
Double-layered efficient filtration

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



Electrostatic dust collection filter: more efficient and longer lasting effect

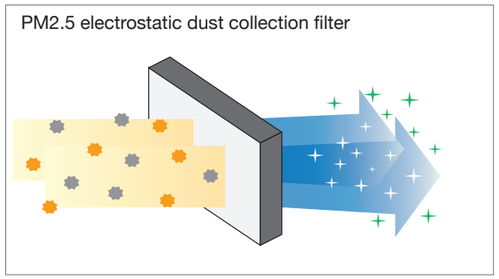
The PM2.5 filter layer contains a large amount of static electricity to capture particulate matter efficiently, including those smaller than the grid mesh.
The filter is difficult to be blocked by particles and has good ventilation and long life span.



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

Filtering PM2.5 efficiently for healthier and more comfortable environments

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



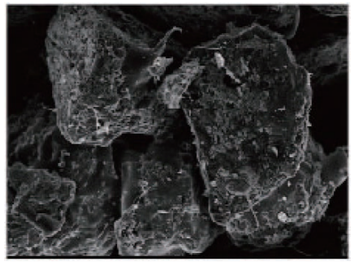
*Test results by the Heating, Ventilation and Air Conditioning Lab at Tongji University
Test environment: temperature 25-26°CDB, humidity 58-60%RH

Extra-High Performance Filter Against Sulfur Oxides and Nitrogen Oxides

Effective Use of Active Carbon Material to Enlarge the Adsorption Area

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

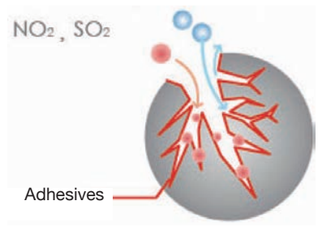
Note: Surface area of active carbon: 700 m^2/g
Given a newspaper page of 40.6 cm wide by 54.6 cm long, each gram of active carbon has a surface area of 3,000 newspaper pages.



Intelligent Identification, Super-effective Adhesion

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

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



PM2.5 Filtration Unit

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

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

PM2.5 with Activated Carbon Filtration Unit

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

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

Individual Control Systems for *VRV* Systems

Navigation Remote Controller (Wired remote controller) (Option)

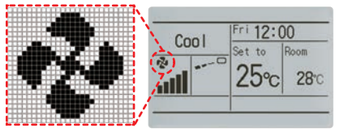
New **BRC1E63**

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

Clear display

•Dot matrix display

· A 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.

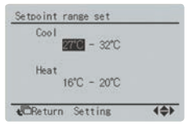
•Guide on display

· 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.
· This function is convenient when the remote controller is installed at a place where any number of people may operate it.

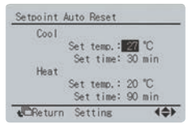


•Off timer

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

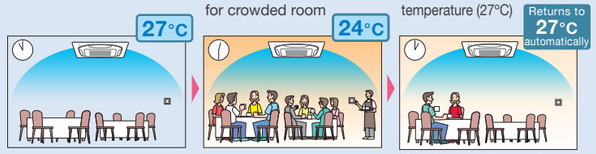
•Setpoint auto reset

· 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)

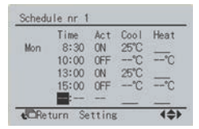
Maintains the room temperature in a specific range during unoccupied period by temporarily starting air conditioner that was turned OFF.

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

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

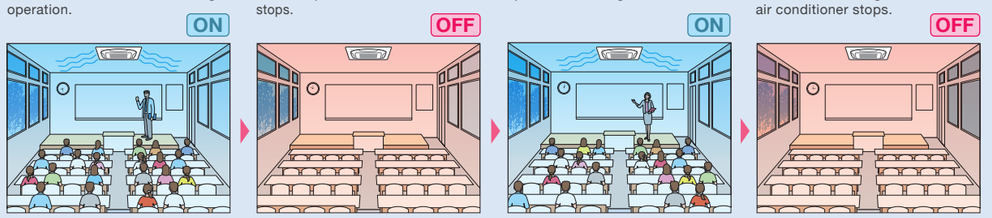
•Weekly schedule

· 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.



New **•Auto display off**

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

Comfort

•Individual airflow direction (*1)

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

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

New **•5-step airflow control (*2)**

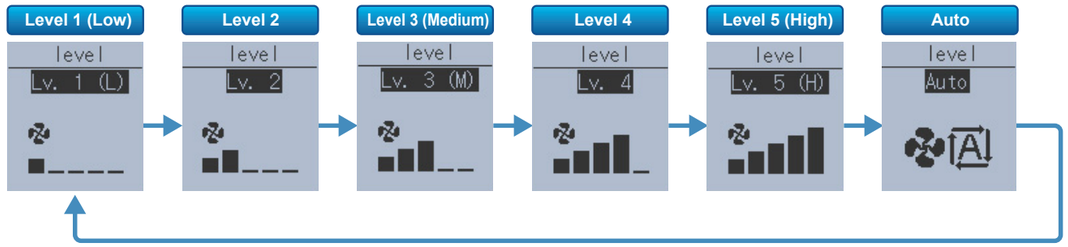
Control of airflow rate can be selected from 5-step control, which provides comfortable airflow.

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

•Auto airflow rate (*3)

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

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



Individual Control Systems for *VRV* Systems

BRC1C62

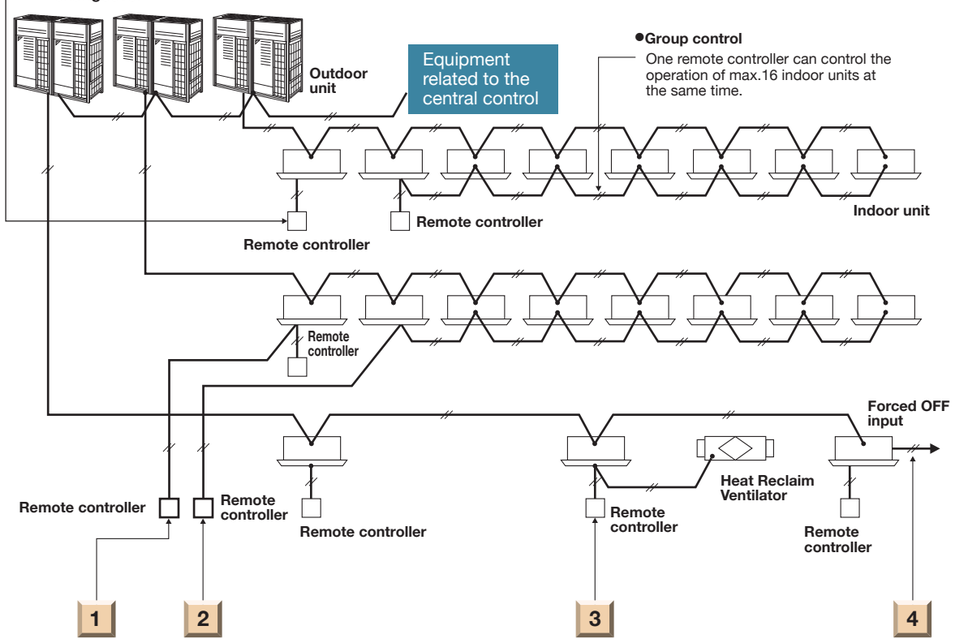
- Displays current airflow, swing, temperature, operating mode and timer settings.

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

The wired remote controller supports a wide range of control functions

- **Control of Cool/Heat changeover**

In all the series of *VRV*, Cool/Heat changeover in the same refrigerant circuit can be changed by the remote controller of the indoor unit.



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.

Wireless remote controller (Option)

New **BRC7M635F**
(For FXF(S)Q series)

Signal receiver unit (Installed type)

- The wireless remote controller is supplied in a set with a signal receiver.
- Signal receiver unit of installed type is contained inside decoration panel or indoor unit.
- Shape of signal receiver unit differs according to the indoor unit.

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

New • Backlight LCD of new wireless remote controller

Pressing the backlight button helps operating in dark rooms.

Wireless remote controller

Signal receiver unit (Separate type)

- 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 189 for the name of each model.

Simplified remote controller (Option)

Exposed type
(BRC2C51)

Concealed type
(For hotel use)
(BRC3A61)

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

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

Wide variation of remote controllers for *VRV* indoor units

	FXF(S)Q	FXZQ	FXCQ	FXKQ	FXDQ	FXSQ	FXMQ	FXHQ	FXAQ	FXL(N)Q	FXVQ	FXB(P)Q
Navigation remote controller (Wired remote controller) (BRC1E63)	●	●	●	●	●	●	●	●	●	●	●	●
Wired remote controller (BRC1C62)		●	●	●	●	●	●	●	●	●	●	●
Wireless remote controller* (Installed type signal receiver unit)	●	●	●					●	●			
Wireless remote controller* (Separate type signal receiver unit)				●	●	●	●			●		●
Simplified remote controller (Exposed type) (BRC2C51)					●	●	●			●		●
Simplified remote controller (Concealed type: for Hotel use) (BRC3A61)					●	●	●			●		●

*Refer to page 189 for the name of each model.

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

touch intelligent Manager

touch intelligent Manager (DCM601A51)

Via internet

ACC Centre

Via internet

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

Home Automation Master Controller

BMS

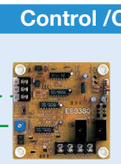
(Obtain locally)

Controllers for Centralised Control

intelligent Touch Controller (DCS601C51)

Residential central remote controller (DCS303A51)

Control /Connection Interface



Unification adaptor for computerised control (DCS302A52)

Home Automation Interface Adaptor (DTA116A51)

Interface for use in BACnet® (DMS502B51)

Interface for use in LONWORKS® (DMS504B51)

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

DIII-NET (High Speed Multiple Transmission)

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

VRV

VRV

Heat Reclaim Ventilator

Interface Adaptor for SkyAir Series (DTA112BA51)

SkyAir

* No adaptor is required for some indoor units.

Central Control Adaptor Kit (DTA107A55)

Packaged Air-conditioner

Interface Adaptor for DIII-NET use (KRP928BB2S)

Residential Air-conditioner

Di unit (DEC101A51)
Dio unit (DEC102A51)

Building services equipment

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

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

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

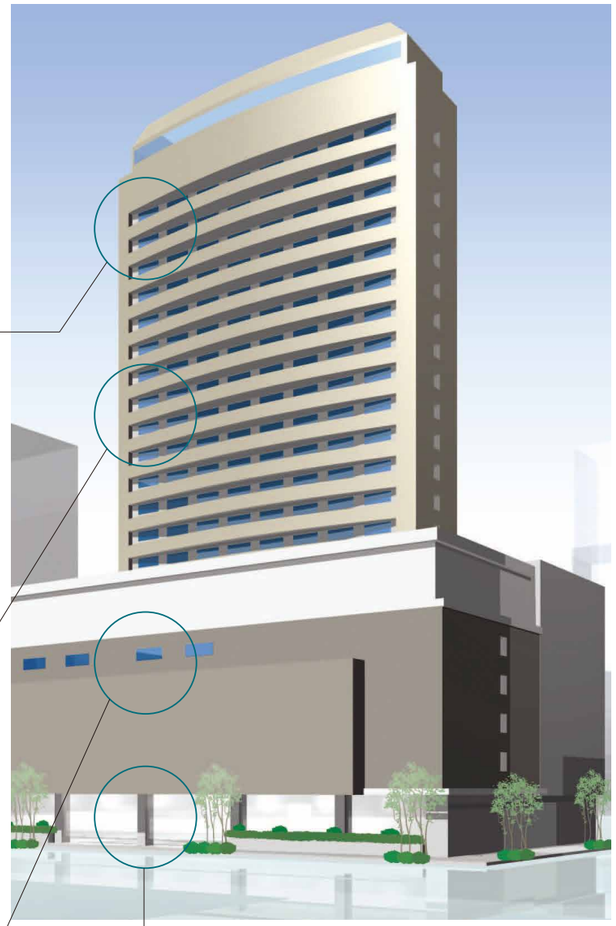
Advanced Control Systems for *VRV* Systems

intelligent touch Manager

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

DCM601A51

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



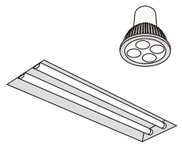
Individual air-conditioning control

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

Lighting control

DALI-compatible

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



Air-conditioning control for large spaces

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

Building equipment control

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

Pump

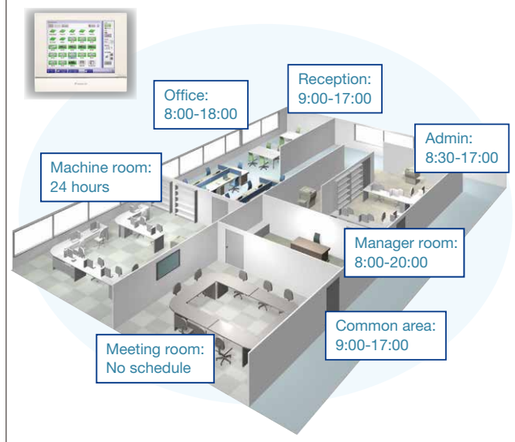
Fan

For Energy Saving & Comfort

intelligent Touch Manager maximises the advantages of *VRV* features

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

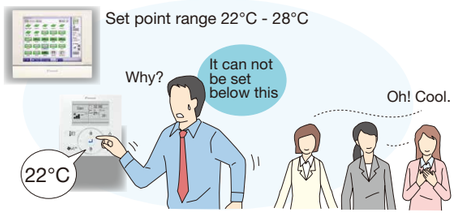
Schedule the operation time for each application.



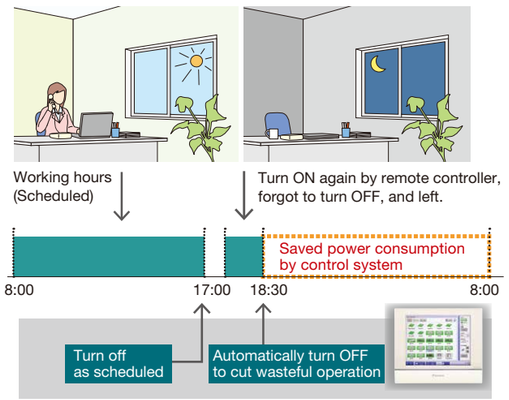
Define the setpoint range that users can change.

With Remote controller

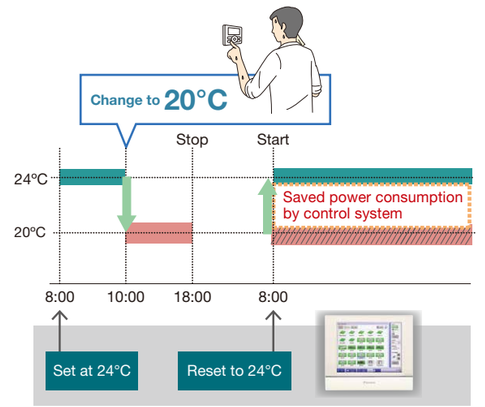
With Control System



Turn the unit OFF if a user didn't.



Reset setpoint regularly.



Advanced Control Systems for *VRV* Systems

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

Lighting control (Option)

Connection to DALI - compatible lighting control system

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

DALI-compatible

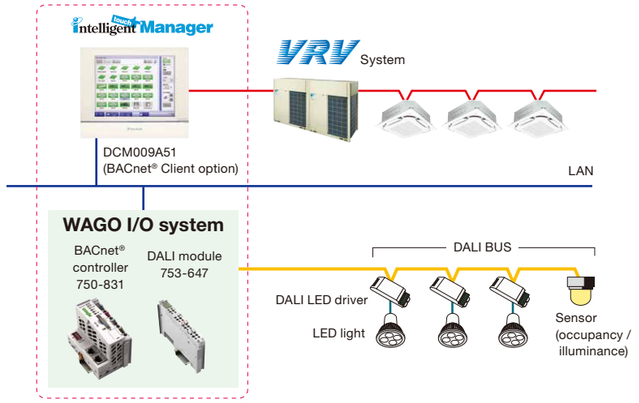
Please contact your local sales office for details.

Lighting control achieved by the *intelligent Touch Manager*

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

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

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



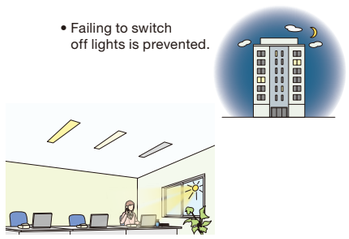
[Overview of control]
- Up to 5 DALI modules can be connected to a single BACnet® controller.
- Up to 64 DALI LED drivers (64 addresses) can be connected to a single DALI module.
- 64 DALI addresses can be freely assigned to up to 16 groups using a single DALI module. (Each group corresponds to a management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

Easy maintenance and energy saving by lighting control

Case1

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

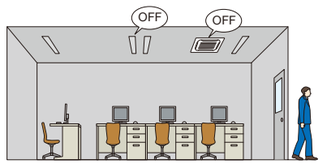
- Failing to switch off lights is prevented.



- 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)

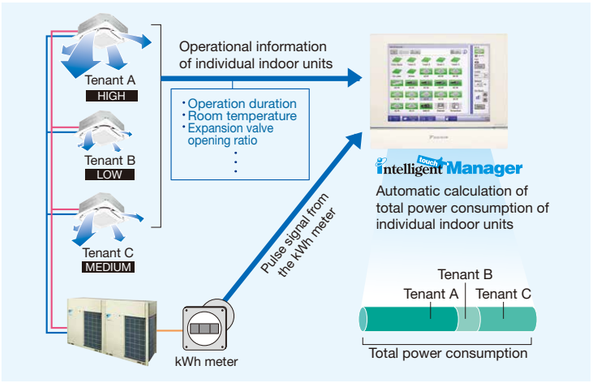
The energy consumption is proportionally calculated for each indoor unit. The data can be used for energy management and calculation of air conditioning usage fees for respective tenants.

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.

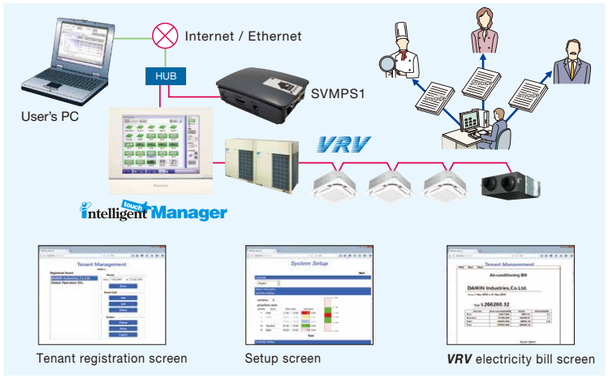


Air conditioning bills can be issued by one click

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)

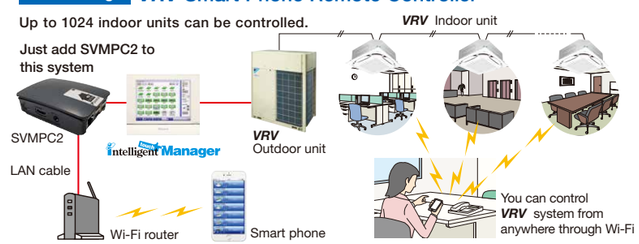


Effective service functions offered to tenants

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

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

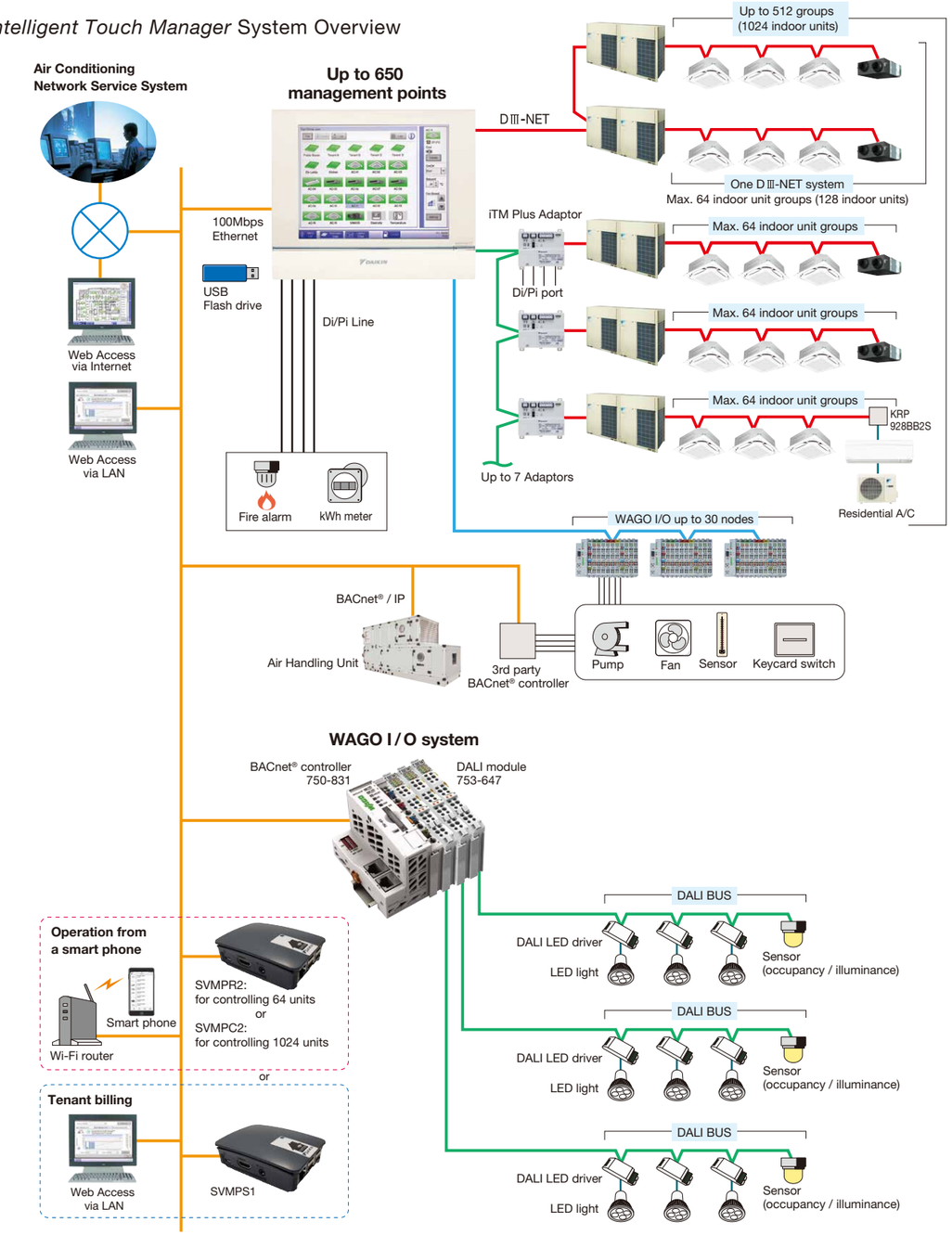
For buildings ***VRV*** Smart Phone Remote Controller



Advanced Control Systems for *VRV* Systems

System structure

intelligent Touch Manager System Overview



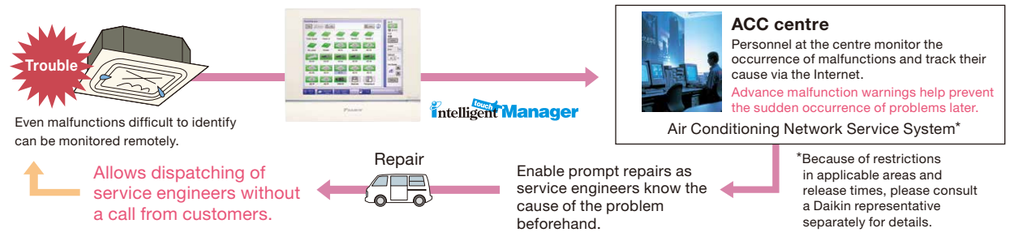
Air Conditioning Network Service System

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®

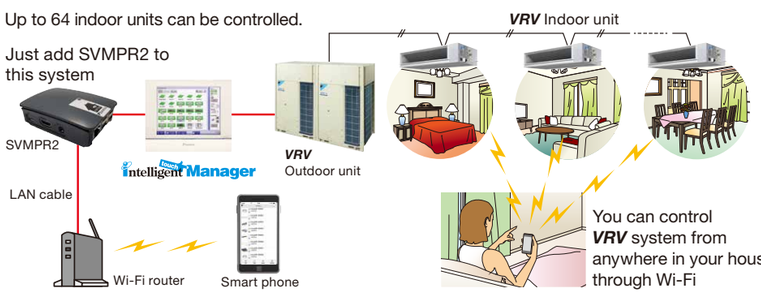
Note : 1. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
2. LonWorks® is a trademark of Echelon Corporation registered in the United States and other countries.

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

For house *VRV* Smart Phone Control System

Up to 64 indoor units can be controlled.

Just add SVMPR2 to this system



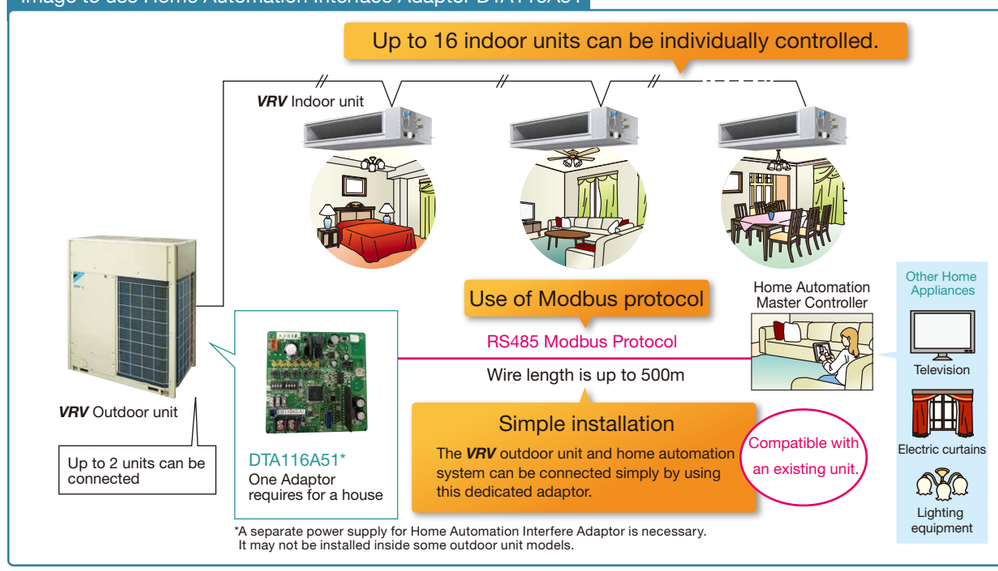
Monitor Control

Advanced Control Systems for *VRV* Systems

Home Automation Interface Adaptor

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

Image to use Home Automation Interface Adaptor DTA116A51



■ Functions

● Monitor

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

● Control

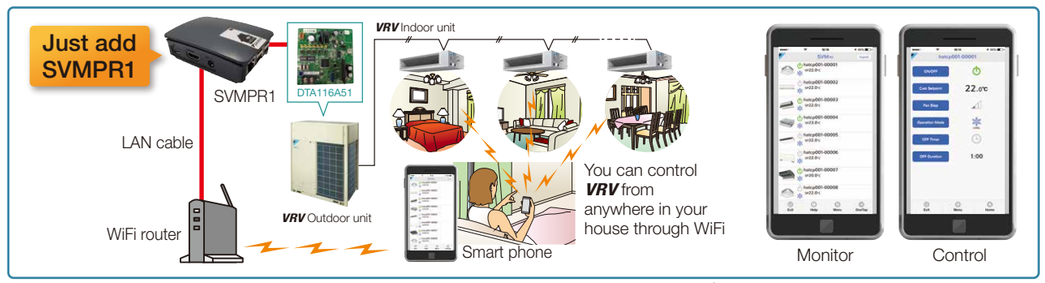
On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Cooling/Heating setpoint
Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Filter sign reset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

● Retrieve system information

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

VRV Smart Phone Control System

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



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

VRV Tablet Controller : SVMPC1

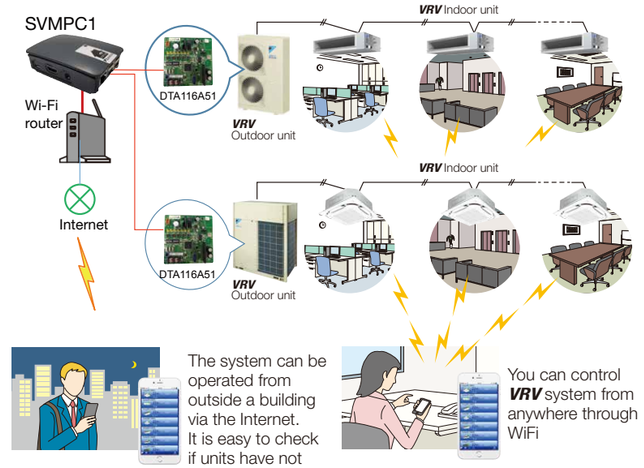
The SVMPC1 is easy to install, and enables monitoring and operation of *VRV* systems via tablets and smartphones. It is optimal for centralized management of *VRV* systems in small buildings or on individual floors of a building.

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.

- SVMPC1 allows operation of ***VRV*** system from anywhere(inside and outside of a premise) through the internet.
- 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.

Up to 32 indoor units can be monitored and controlled.



■ Functions

*: only admin user can set

Category	Function	Detail
Access security	User login	User name, password
	Device registration	Registered device (Tablet, Smartphone) can access through the internet
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
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
System setting	Language	English, Spanish, Portuguese, Thai, Vietnam, Simplified Chinese, Traditional Chinese
	Password setting	
	User administration*	Add/Modify/Delete user, Set User name, Password, Accessible points
	Point setting*	Set point name, Select icon

■ Specifications

Category	Specification	Detail
Connectable units	Number of indoor units	Max 32 (with additional DTA116A51)
	Number of DTA116A51	Max 2
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

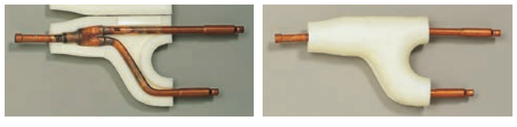
Outdoor Units

VRV X

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

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

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



Option PCB

No.	Item	Type	RXUQ6A RXUQ8A	RXUQ10A RXUQ12A RXUQ14A RXUQ16A RXUQ18A RXUQ20A	RXUQ12AM RXUQ14AM RXUQ16AM RXUQ18AM1 RXUQ20AM1	RXUQ18AM RXUQ20AM
1	DIII-NET expander adaptor ★		DTA109A51			
2	External control adaptor ★		DTA109A61			
3	Home Automation Interface Adaptor ★		DTA116A51			
4	Option plate for control adaptor		–	BKS26A *1	–	BKS26A *1

No.	Item	Type	RXUQ22AM RXUQ24AM RXUQ26AM RXUQ28AM RXUQ30AM	RXUQ32AM RXUQ34AM RXUQ36AM RXUQ38AM RXUQ40AM	RXUQ42AM RXUQ44AM RXUQ46AM RXUQ48AM RXUQ50AM	RXUQ52AM RXUQ54AM RXUQ56AM RXUQ58AM RXUQ60AM
1	DIII-NET expander adaptor ★		DTA109A51			
2	External control adaptor ★		DTA109A61			
3	Home Automation Interface Adaptor ★		DTA116A51			
4	Option plate for control adaptor		BKS26A *1			

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

VRV A

No.	Item	Type	RXQ6A RXQ8A RXQ10A	RXQ12A RXQ14A RXQ16A	RXQ18A RXQ20A	RXQ18AM RXQ20AM RXQ22AM
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H (Max. 4 branch) (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)		
		REFNET joint	KHRP26A22T, KHRP26A33T	KHRP26A22T, KHRP26A33T, KHRP26A72T		
2	Outdoor unit multi connection piping kit			–		BHFP22P100

No.	Item	Type	RXQ24AM RXQ26AM RXQ28AM RXQ30AM RXQ32AM	RXQ34AM RXQ36AM RXQ38AM RXQ40AM	RXQ42AM RXQ44AM RXQ46AM RXQ48AM RXQ50AM	RXQ52AM RXQ54AM RXQ56AM RXQ58AM RXQ60AM
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
2	Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
3	Outdoor unit multi connection piping kit		BHFP22P100		BHFP22P151	

Option PCB

No.	Item	Type	RXQ6A RXQ8A RXQ10A RXQ12A	RXQ14A RXQ16A RXQ18A RXQ20A	RXQ18AM RXQ20AM RXQ22AM RXQ24AM	RXQ26AM RXQ28AM RXQ30AM
1	DIII-NET expander adaptor ★		DTA109A51			
2	External control adaptor ★		DTA109A61			
3	Home Automation Interface Adaptor ★		DTA116A51			
4	Option plate for control adaptor		–	BKS26A *1	–	BKS26A *1

No.	Item	Type	RXQ32AM RXQ34AM RXQ36AM RXQ38AM	RXQ40AM RXQ42AM RXQ44AM RXQ46AM	RXQ48AM RXQ50AM RXQ52AM RXQ54AM	RXQ56AM RXQ58AM RXQ60AM
1	DIII-NET expander adaptor ★		DTA109A51			
2	External control adaptor ★		DTA109A61			
3	Home Automation Interface Adaptor ★		DTA116A51			
4	Option plate for control adaptor		BKS26A *1			

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

Outdoor Units

VRV IV S SERIES

No.	Item \ Type	RXMQ4A	RXMQ5A	RXMQ6A	RXMQ8A	RXMQ9A
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 Standard Type

No.	Item \ Type		RQQ6T(E) RQQ8T(E) RQQ10T(E)	RQQ12T(E) RQQ14T(E) RQQ16T(E)
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

No.	Item \ Type		RQQ18TN(E) RQQ20TN(E) RQQ22TN(E)	RQQ24TN(E) RQQ26TN(E) RQQ28TN(E)	RQQ30TN(E) RQQ32TN(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		

No.	Item \ Type		RQQ34TN(E) RQQ36TN(E)	RQQ38TN(E) RQQ40TN(E)	RQQ42TN(E) RQQ44TN(E)	RQQ46TN(E) RQQ48TN(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			

VRV IV Q SERIES Space Saving Type

No.	Item \ Type		RQQ18T(E) RQQ20T(E)
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max.4 branch) (Max.8 branch) (Max.8 branch)
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T

No.	Item \ Type		RQQ30TS(E) RQQ32TS(E) RQQ34TS(E)	RQQ36TS(E) RQQ38TS(E) RQQ40TS(E)	RQQ42TS(E) RQQ44TS(E)	RQQ46TS(E) RQQ48TS(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, KHRP26M73HP			
3	Outdoor unit connection piping kit		BHFP22P100		BHFP22P151	

VRV IV W SERIES

No.	Item \ Type		RWEYQ6T RWEYQ8T RWEYQ10T RWEYQ12T	RWEYQ14T RWEYQ16T RWEYQ18T RWEYQ20T RWEYQ22T RWEYQ24T	RWEYQ26T RWEYQ28T RWEYQ30T RWEYQ32T RWEYQ34T RWEYQ36T
1	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
2	Outside unit multi connection piping kit		–	BHFP22MA56	BHFP22MA84
3	External control adaptor		DTA104A62		
4	Strainer kit		BWU26A15, BWU26A20		

VRV IV HEAT RECOVERY HOT WATER SYSTEM High-COP Type

No.	Item \ Type		RWHQ12TH RWHQ14TH RWHQ16TH
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T
2	Outdoor unit multi connection piping kit		BHFP22P100
3	Hot water controller box		BRCM82
4	Hot water remote controller		BRCS82

No.	Item \ Type		RWHQ18TH RWHQ20TH RWHQ22TH	RWHQ24TH RWHQ26TH RWHQ28TH	RWHQ30TH RWHQ32TH RWHQ34TH
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (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		BHFP22P151		
4	Hot water controller box		BRCM82		
5	Hot water remote controller		BRCS82		

No.	Item \ Type		RWHQ36TH RWHQ38TH	RWHQ40TH RWHQ42TH	RWHQ44TH RWHQ46TH	RWHQ48TH RWHQ50TH
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
2	Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
3	Outdoor unit multi connection piping kit		BHFP22P151			
4	Hot water controller box		BRCM82			
5	Hot water remote controller		BRCS82			

Option List

Outdoor Units

VRV IV HEAT RECOVERY HOT WATER SYSTEM — Standard Type

No.	Item \ Type		RWHQ6T RWHQ8T RWHQ10T	RWHQ12T RWHQ14T RWHQ16T
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	Hot water controller box		BRCM82	
3	Hot water remote controller		BRCS82	

No.	Item \ Type		RWHQ18TN RWHQ20TN RWHQ22TN	RWHQ24TN RWHQ26TN RWHQ28TN	RWHQ30TN RWHQ32TN
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, KHRP26M73HP	
3	Outdoor unit multi connection piping kit		BHFP22P100		
4	Hot water controller box		BRCM82		
5	Hot water remote controller		BRCS82		

No.	Item \ Type		RWHQ34TN RWHQ36TN RWHQ38TN RWHQ40TN	RWHQ42TN RWHQ44TN RWHQ46TN RWHQ48TN	RWHQ50TN RWHQ52TN RWHQ54TN RWHQ56TN	RWHQ58TN RWHQ60TN
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
2	Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
3	Outdoor unit multi connection piping kit		BHFP22P151			
4	Hot water controller box		BRCM82			
5	Hot water remote controller		BRCS82			

VRV IV HEAT RECOVERY HOT WATER SYSTEM — Space Saving Type

No.	Item \ Type		RWHQ18T RWHQ20T
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T
2	Hot water controller box		BRCM82
3	Hot water remote controller		BRCS82

No.	Item \ Type		RWHQ22TS	RWHQ24TS RWHQ26TS RWHQ28TS	RWHQ30TS RWHQ32TS RWHQ34TS	RWHQ36TS RWHQ38TS RWHQ40TS
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	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T		
2	Pipe size reducer		—	KHRP26M73TP, KHRP26M73HP		
3	Outdoor unit multi connection piping kit		BHFP22P100			
4	Hot water controller box		BRCM82			
5	Hot water remote controller		BRCS82			

No.	Item \ Type		RWHQ42TS RWHQ44TS RWHQ46TS	RWHQ48TS RWHQ50TS
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)	
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T	
2	Pipe size reducer		KHRP26M73TP, KHRP26M73HP	
3	Outdoor unit multi connection piping kit		BHFP22P151	
4	Hot water controller box		BRCM82	
5	Hot water remote controller		BRCS82	

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		
		Standard panel	Fresh white	BYCQ125EAF *		
			Black	BYCQ125EAK *		
		Designer panel [1]	Fresh white	BYCQ125EAPF *		
		Auto grille panel [2,3]	Fresh white	BYCQ125EASF *		
2	Sealing material of air discharge outlet [4]		For usage of 3-, 4-way flow	KDBH551C160		
			For usage of 2-way flow	KDBH552C160		
3	Panel spacer			KDBP55H160FA		
4	Fresh air intake kit	Chamber type [5,6]	Without T-duct joint	KDDP55B160 (Components: KDDP55C160-1, KDDP55B160-2) [8]		
			With T-duct joint	KDDP55B160K (Components: KDDP55C160-1, KDDP55B160K2) [8]		
		Direct installation type [7]		KDDP55X160A		
5	High-efficiency filter unit [9] (Including filter chamber)		(Colorimetric method 65%)	KAFP556C80		KAFP556C160
			(Colorimetric method 90%)	KAFP557C80		KAFP557C160
6	Replacement high-efficiency filter [9,10]		(Colorimetric method 65%)	KAFP552B80		KAFP552B160
			(Colorimetric method 90%)	KAFP553B80		KAFP553B160
7	Filter chamber			KDDFP55C160		
8	Replacement long-life filter			KAFP551K160		
9	Replacement long-life filter (Auto grille panel)			KAFP551H160		
10	Ultra long-life filter unit (Including filter chamber) [9]			KAFP55C160		
11	Replacement ultra long-life filter [9,10]			KAFP55H160H		
12	Branch duct chamber [4]			KDJP55C80		KDJP55C160
13	Insulation kit for high humidity [9,11]			KDTP55K80		KDTP55K160

Ceiling Mounted Cassette (Round Flow) Type

No.	Item \ Type			FXFQ25A FXFQ32A FXFQ40A	FXFQ50A FXFQ63A FXFQ80A	FXFQ100A FXFQ125A FXFQ140A
1	Decoration panel	Standard panel	Fresh white	BYCQ125EAF *		
			Black	BYCQ125EAK *		
		Designer panel [1]	Fresh white	BYCQ125EAPF *		
		Auto grille panel [2,3]	Fresh white	BYCQ125EASF *		
2	Sealing material of air discharge outlet [4]		For usage of 3-, 4-way flow	KDBH551C160		
			For usage of 2-way flow	KDBH552C160		
3	Panel spacer			KDBP55H160FA		
4	Fresh air intake kit	Chamber type [5,6]	Without T-duct joint	KDDP55B160 (Components: KDDP55C160-1, KDDP55B160-2) [8]		
			With T-duct joint	KDDP55B160K (Components: KDDP55C160-1, KDDP55B160K2) [8]		
		Direct installation type [7]		KDDP55X160A		
5	High-efficiency filter unit [9] (Including filter chamber)		(Colorimetric method 65%)	KAFP556C80		KAFP556C160
			(Colorimetric method 90%)	KAFP557C80		KAFP557C160
6	Replacement high-efficiency filter [9,10]		(Colorimetric method 65%)	KAFP552B80		KAFP552B160
			(Colorimetric method 90%)	KAFP553B80		KAFP553B160
7	Filter chamber			KDDFP55C160		
8	Replacement long-life filter			KAFP551K160		
9	Replacement long-life filter (Auto grille panel)			KAFP551H160		
10	Ultra long-life filter unit (Including filter chamber) [9]			KAFP55C160		
11	Replacement ultra long-life filter [9,10]			KAFP55H160H		
12	Branch duct chamber [4]			KDJP55C80		KDJP55C160
13	Insulation kit for high humidity [9,11]			KDTP55K80		KDTP55K160

Note: 1. When installing designer panel, body height (ceiling required dimension) is 42 mm higher than standard panel. Designer panel cannot operate 2 and 3 way flow.
2. A dedicated wireless remote controller (BRC16A2) for the auto grille panel is included for lowering and raising the suction grille.
3. When installing auto grille panel, body height (ceiling required dimension) is 55 mm higher than standard panel.
4. Circulation airflow is not available with this option.
5. When installing a fresh air intake kit (chamber type), two air outlet corners are closed.
6. It is recommended that the volume of outdoor air introduced through the kit is limited to 10% of the maximum airflow rate of the indoor unit. Introducing higher quantities will increase the operating sound and may also influence temperature sensing.
7. The volume of fresh air for direct installation type is approximately 1% of the indoor unit airflow. The chamber type is recommended when more fresh air is necessary.
8. Please order using the names of both components instead of set name.
9. This option cannot be installed to designer panel and auto grille panel.
10. Filter chamber is required.
11. Please use in case temperature/humidity inside ceiling may get over 30°C, 80% RH.
*These panels do not contain the sensing function.

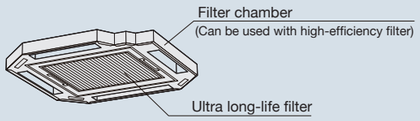
VRV Indoor Units

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

Options required for specific operating environments

Ultra long-life filter unit

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



Dusty area: annual filter change

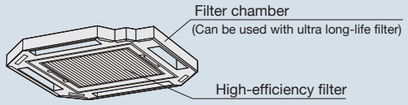
*For dust concentration of 0.3 mg/m³ (Requires separately sold Air purifier.)
1 year (Approx. 5,000 hr) ≒15 hr/day x 28 day/month x 12 month/year

Ordinary store or office: filter change every 4 years

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

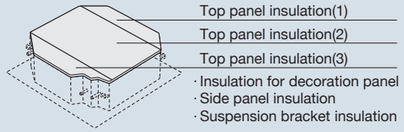
High-efficiency filter unit

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



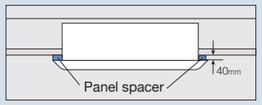
Insulation kit for high humidity

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



Panel spacer

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



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

Sealing material of air discharge outlet

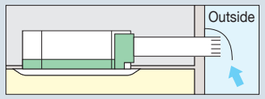
Sealing material block air discharge openings not used in 2-way or 3-way blow.

Branch duct chamber

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

Fresh air intake kit Note 1.2

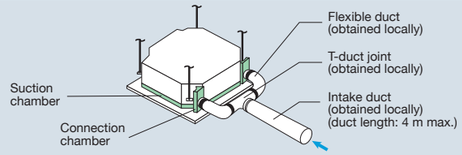
Using this kit, a duct can be connected to take in outdoor air. There are two chamber types that have intake in two places: with T-duct joint and without T-duct joint.



The units can be installed in the following different ways

Chamber type (without T-duct joint) Note 3.4.5

KDDP55B160

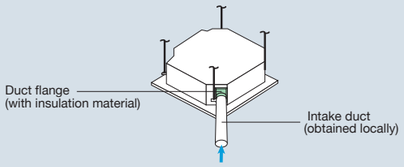


Chamber type (with T-duct joint) Note 3.4.5

KDDP55B160K

Direct installation type Note 6

KDDP55X160A



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

Ceiling Mounted Cassette (Compact Multi Flow) Type

No.	Item \ Type		FXZQ20M	FXZQ25M	FXZQ32M	FXZQ40M	FXZQ50M
1	Decoration panel		BYFQ60B3W1				
2	Sealing material of air discharge outlet		KDBH44BA60				
3	Panel spacer		KDBQ44BA60A				
4	Replacement long-life filter		KAFQ441BA60				
5	Fresh air intake kit	Direct installation type	KDDQ44XA60				

Ceiling Mounted Cassette (Double Flow) Type

No.	Item \ Type		FXCQ20M FXCQ25M FXCQ32M	FXCQ40M FXCQ50M	FXCQ63M	FXCQ80M FXCQ125M
1	Decoration panel		BYBC32G-W1	BYBC50G-W1	BYBC63G-W1	BYBC125G-W1
2	Filter related	High efficiency filter 65% ★1	KAFJ532G36	KAFJ532G56	KAFJ532G80	KAFJ532G160
		High efficiency filter 90% ★1	KAFJ533G36	KAFJ533G56	KAFJ533G80	KAFJ533G160
		Filter chamber bottom suction	KDDFJ53G36	KDDFJ53G56	KDDFJ53G80	KDDFJ53G160
		Long life replacement filter	KAFJ531G36	KAFJ531G56	KAFJ531G80	KAFJ531G160

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

Ceiling Mounted Cassette Corner Type

No.	Item \ Type		FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA
1	Panel related	Decoration panel	BYK45FJW1			BYK71FJW1
		Panel spacer	KPBJ52F56W			KPBJ52F80W
2	Air inlet and air discharge outlet related	Long life replacement filter	KAFJ521F56			KAFJ521F80
		Air discharge blind panel	KDBJ52F56W			KDBJ52F80W
		Flexible duct (with shutter)	KFDJ52FA56			KFDJ52FA80

Slim Ceiling Mounted Duct Type (Standard Series)

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

Middle Static Pressure Ceiling Mounted Duct Type

No.	Item \ Type		FXSQ20PA FXSQ25PA FXSQ32PPA	FXSQ40PA	FXSQ50PA FXSQ63PA FXSQ80PA	FXSQ100PA FXSQ125PA	FXSQ140PA
1	High efficiency filter *1	65%	KAFP632B36	KAFP632B56	KAFP632B80	KAFP632B160	KAF632B160B
		90%	KAFP633B36	KAFP633B56	KAFP633B80	KAFP633B160	KAF633B160B
2	Filter chamber (for rear suction) *1		KDDFP63B36	KDDFP63B56	KDDFP63B80	KDDFP63B160	KDDF63B160B
3	Long-life filter *1		KAFP631B36	KAFP631B56	KAFP631B80	KAFP631B160	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 \ Type		FXMQ20PA FXMQ25PA FXMQ32PA	FXMQ40PA	FXMQ50PA FXMQ63PA FXMQ80PA	FXMQ100PA FXMQ125PA FXMQ140PA	FXMQ200M FXMQ250M
1	Drain pump kit		–				KDU30L250VE
2	High efficiency filter	65%	KAF372AA36	KAF372AA56	KAF372AA80	KAF372AA160	KAFJ372L280
		90%	KAF373AA36	KAF373AA56	KAF373AA80	KAF373AA160	KAFJ373L280
3	Filter chamber		KDDF37AA36	KDDF37AA56	KDDF37AA80	KDDF37AA160	KDJ3705L280
4	Long life replacement filter		KAF371AA36	KAF371AA56	KAF371AA80	KAF371AA160	KAFJ371L280
5	Long life filter chamber kit		KAF375AA36	KAF375AA56	KAF375AA80	KAF375AA160	
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	

Option List

VRV Indoor Units

Ceiling Suspended Type

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

Wall Mounted Type

No.	Item \ Type	FXAQ20P	FXAQ25P	FXAQ32P	FXAQ40P	FXAQ50P	FXAQ63P
1	Drain pump kit	K-KDU572EVE					

Floor Standing Type

No.	Item \ Type	FXLQ20MA	FXLQ25MA	FXLQ32MA	FXLQ40MA	FXLQ50MA	FXLQ63MA
1	Long life replacement filter	KAFJ361K28		KAFJ361K45		KAFJ361K71	

Concealed Floor Standing Type

No.	Item \ Type	FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
1	Long life replacement filter	KAFJ361K28		KAFJ361K45		KAFJ361K71	

Floor Standing Duct Type

No.	Item \ Type				FXVQ125N	FXVQ200N	FXVQ250N	FXVQ400N	FXVQ500N
1	Discharge and Suction	Replacement long life filter			KAFJ261L140	KAFJ261L224	KAFJ261L280	KAFJ261M450	KAFJ261M560
2		Ultra long-life filter			–			KAFSJ9A400	KAFSJ9A560
3		Front suction filter chamber for high efficiency filter	Front suction base flange		KD-9A140	KD-9A200	KD-9A280	KD-9A400	KD-9A560
4			Suction grille		KDGF-9A140	KDGF-9A200	KDGF-9A280	KDGF-9A400	KDGF-9A560
5			Filter chamber for high efficiency filter *1, 2	Replacement long-life filter *1, 2, 3	KAF-91A140	KAF-91A200	KAF-91A280	KAF-91A400	KAF-91A560
6				Replacement high efficiency filter 65% *1, 3	KAF-92A140	KAF-92A200	KAF-92A280	KAF-92A400	KAF-92A560
7				Replacement high efficiency filter 90% *2, 3	KAF-93A140	KAF-93A200	KAF-93A280	KAF-93A400	KAF-93A560
8				Filter chamber *1, 2	KDDF-9A140	KDDF-9A200	KDDF-9A280	KDDF-9A400	KDDF-9A560
9		Plenum chamber *4			KPCJ140A	KPC5J	KPC8J	KPCJ400A	KPC15JA
10		Pulley for plenum chamber *4			KPP8JA	KPP9JA	KPP10JA	–	
11		Fresh air intake kit			KD106D10			KDFJ906A560	
12		Rear suction kit			KDFJ905A140	KDFJ905A200	KDFJ905A280	KDFJ905A400	KDFJ905A560
13		Discharge grille for plenum side			KD101A10			KD101A20	
14	Wood base				KKWJ9A140	KWF1G5P	KWF1G8P	KKWJ9A400	KWF1G15
15	Vibration isolating frame				K-ABSG1406A	K-ABSG1407A	K-ABSG1408A	K-ABSG1409A	K-ABSG1410A

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

Clean Room Air Conditioner

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

Residential Indoor Units with connection to BP units

Slim Ceiling Mounted Duct Type

No.	Item \ Type	FDKS25E	FDKS35E	FDKS25C	FDKS35C	FDKS50C	FDKS60C
1	Insulation kit for high humidity	KDT25N32		KDT25N50			KDT25N63

Wall Mounted Type

No.	Item \ Type	FTKJ25N	FTKJ35N	FTKJ50N	FTKS25D FTKS35D	FTKS50F FTKS60F FTKS71F
1	Titanium apatite deodorising filter *1	KAF970A46				KAF952B42
2	Dust collection filter (PM 2.5) with frame	BAFP046A42			–	
3	Dust collection filter (PM 2.5) without frame	BAFP046A41			–	

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

BP Units for Connection to Residential Indoor Units

No.	Item \ Type	BPMKS967A2	BPMKS967A3
1	REFNET joint	KHRP26A22T	

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

Control Systems

New Design

Remote sensor
BRCS01A-1(4)

Operation Control System Optional Accessories

For *VRV* indoor unit use

No.	Item \ Type		FXFSQ-A FXFQ-A	FXZQ-M	FXCQ-M	FXKQ-MA	FXDQ-PD FXDQ-ND	FXDQ-SP	FXSQ-PA	FXMQ-PA
1	Remote controller	Wireless	BRC7M635F (Fresh White) / BRC7M635K (Black)	BRC7E531W	BRC7C67	BRC4C63	BRC4C66			
		Wired	–	BRC1C62						
2	Navigation remote controller (Wired remote controller)		BRC1E63 Note 6	BRC1E63			BRC1E63 Note 7	BRC1E63	BRC1E63 Note 7	
3	Simplified remote controller (Exposed type)		–				BRC2C51			
4	Remote controller for hotel use (Concealed type)		–				BRC3A61			
5	Adaptor for wiring		★KRP1C11A	★KRP1BA57	★KRP1B61	KRP1B61	★KRP1B56	–	★KRP1C64	
6-1	Wiring adaptor for electrical appendices (1)		–	★KRP2A62	★KRP2A61	KRP2A61	★KRP2A53	–	★KRP2A61	
6-2	Wiring adaptor for electrical appendices (2)		★KRP4AA53		★KRP4AA51	KRP4AA51	★KRP4A54	–	★KRP4AA51	
7	Remote sensor (for indoor temperature)		KRCS01-5B	BRCS01A-1					BRCS01A-4	
8	Installation box for adaptor PCB☆		Note 2, 3 KRP1H98A	Note 4, 5 KRP1BA101	Note 2, 3 KRP1B96	–	Note 4, 5 KRP1BA101	–	Note 2, 3 KRP4A98	Note 2, 3 KRP4A97
9	External control adaptor for outdoor unit		★DTA104A62		★DTA104A61		★DTA104A53	–	★DTA104A61	
10	Adaptor for multi tenant		★DTA114A61	–					★DTA114A61	

No.	Item \ Type		FXMQ-M	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	FXVQ-N	FXBQ-P FXBPQ-P
1	Remote controller	Wireless	BRC4C64	BRC7EA66	BRC7EA619	BRC4C64	–	BRC4C64
		Wired	BRC1C62				BRC1C62 Note 8	BRC1C62
2	Navigation remote controller (Wired remote controller)		BRC1E63	BRC1E63			BRC1E63 Note 9	BRC1E63
3	Simplified remote controller (Exposed type)		BRC2C51	–		BRC2C51	–	BRC2C51
4	Remote controller for hotel use (Concealed type)		BRC3A61	–		BRC3A61	–	BRC3A61
5	Adaptor for wiring		KRP1B61	KRP1BA54	–	KRP1B61	KRP1C67	KRP1B61
6-1	Wiring adaptor for electrical appendices (1)		KRP2A61	★KRP2A62	★KRP2A61	KRP2A61	KRP2A62	KRP2A61
6-2	Wiring adaptor for electrical appendices (2)		KRP4AA51	★KRP4AA52	★KRP4AA51	KRP4AA51	–	KRP4AA51
7	Remote sensor (for indoor temperature)		BRCS01A-1					
8	Installation box for adaptor PCB☆		–	Note 3 KRP1CA93	Note 2, 3 KRP4AA93	–		
9	External control adaptor for outdoor unit		DTA104A61	★DTA104A62	★DTA104A61	DTA104A61	Note 10 DTA104A62	DTA104A61
10	Adaptor for multi tenant		–		★DTA114A61	–		
11	External control adaptor for cooling/heating		–				KRP6A1 Note 10	–
12	Remote controller with key		–				KRCB37-1	–

Note: 1. Installation box☆is necessary for each adaptor marked★.
2. Up to 2 adaptors can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.
5. Installation box☆is necessary for each adaptor.
6. Some function can be set only via wired remote controller BRC1E63. Cannot be set via other remote controllers. Please refer to page 118 for function list details.
7. Auto airflow rate can be set only via wired remote controller BRC1E63. Cannot be set via other remote controllers.
8. Since the control panel is equipped as standard, use the option for 2 remote control system.
9. When using BRC1E63, be sure to remove the control panel and since BRC1E63 cannot be stored inside the indoor unit, please place it separately.
10. Remove the group control adaptor which is a standard equipment before mounting KRP6A1 and DTA104A62.
KRP6A1 and DTA104A62 cannot be mounted to the same indoor unit at the same time.

For residential indoor unit use

No.	Item \ Type		FDKS-E,C	FTKJ-N	FTKS-D,F
1	Remote controller	Wireless type	— Note 1		
2	Wiring adaptor for time clock/remote controller Note 2 (Normal open pulse contact/normal open contact)		KRP413AB1S		
3	Remote controller loss prevention chain		KKF917A4	KKF910A4	KKF917A4
4	Interface adaptor for DIII-NET use		KRP928BB2S		

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

System Configuration

No.	Item	Model No.	Function
1	Residential central remote controller	Note 2 DCS303A51	• Up to 16 groups of indoor units (128 units) can be easily controlled using the large LCD panel. ON/OFF, temperature settings and scheduling can be controlled individually for indoor units.
2	Interface adaptor for residential indoor units	KRP928BB2S	• Adaptors required to connect products other than those of the ***VRV*** System to the high-speed DIII-NET communication system adopted for the ***VRV*** System. * To use any of the above optional controllers, an appropriate adaptor must be installed on the product unit to be controlled.
3	Interface adaptor for SkyAir-series	Note 3 ★DTA112BA51	
4	Central control adaptor kit | For UAT(Y)-K(A),FD-K	★DTA107A55	
5	Wiring adaptor for other air-conditioner	★DTA103A51	
6	DIII-NET expander adaptor	DTA109A51	• Up to 1024 units can be centrally controlled in 64 different groups. • Wiring restrictions (max. length: 1,000m, total wiring length: 2,000m, max. number of branches: 16) apply to each adaptor.
6-1	Mounting plate	KRP4A92	• Fixing plate for DTA109A51

Note: 1. Installation box for ★ adaptor must be obtained locally.
2. For residential use only. Cannot be used with other centralised control equipment.
3. 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*** Smart phone Control System for residence
2-7					SVMPC2	• ***VRV*** Smart Phone Remote Controller for building
2-8					*5 SVMPS1	• Tenant Billing System with PPD
2-9	***VRV*** Smart Phone Control System				SVMPR1	• ***VRV*** Smart Phone Control System for residence with DTA116A51.
2-10	***VRV*** Tablet Controller				SVMPC1	• ***VRV*** Tablet Controller for small size building with DTA116A51
2-11	Di unit				DEC101A51	• 8 pairs based on a pair of ON/OFF input and abnormality input.
2-12	Dio unit				DEC102A51	• 4 pairs based on a pair of ON/OFF input and abnormality input.
3	Communication interface	*2 Interface for use in BACnet®			DMS502B51	• Interface unit to allow communications between ***VRV*** and BMS. Operation and monitoring of air-conditioning systems through BACnet® communication.
3-1		Optional DIII board			DAM411B51	• Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently.
3-2		Optional Di board			DAM412B51	• Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.
4		*3 Interface for use in LONWORKS®			DMS504B51	• Interface unit to allow communications between ***VRV*** and BMS. Operation and monitoring of air-conditioning systems through LonWorks® communication.
5		Home Automation Interface Adaptor			DTA116A51	• Use of the Modbus protocol enables the connection of the ***VRV*** system with a variety of home automation systems from other manufacturers.
6	Contact/ analogue signal	Unification adaptor for computerised control			★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.

VRV Design and Sales Proposal Assistance

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

Design

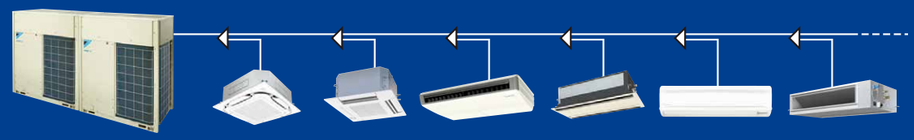
For consultants and architects

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

Sales proposals

For air conditioning engineers and dealers

- **Heat load calculation**
- **Model selection**

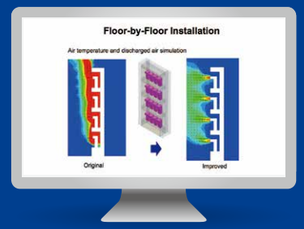


Model Selection Software — *VRV* Xpress

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

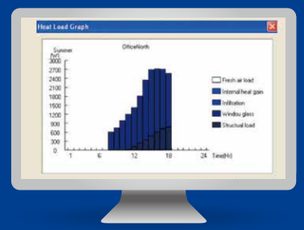
CFD Simulation to Optimise Outdoor Unit Layouts — DT FLOW II

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



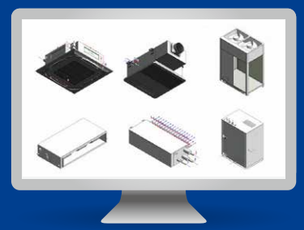
Heat Load Calculation — DACCS-HKGSG and HKGSA

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



Drawing Supports — CAD Symbols

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



MEMO