DAIKIN

Perfecting the Air

**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.

**Notice**

- About harmonics, since this product is equipped with an inverter, harmonics will be generated. If local laws require the suppression of harmonics on the building, please take harmonic suppression measures on the electrical equipment side. Please contact your local sales company for details.
- If you have any enquiries, please contact your local importer, distributor and/or retailer.

**AUTHORIZED DEALER**

**Cautions on product corrosion**

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
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.



**0800 1 081 081**
***DAIKIN CONTACT CENTER***

**Jam Beroperasi:**
Senin - Jumat: 07:00 - 19:00 WIB
Sabtu - Minggu & Libur Nasional: 07:00 - 17:00 WIB

***PT. DAIKIN AIRCONDITIONING INDONESIA***
Menara Astra 7th & 8th Floor, Jl. Jenderal Sudirman Kav. 5-6,
Kel. Karet Tengsin, Kec.Tanah Abang, Jakarta Pusat, DKI Jakarta - 10220
Telp : +6221 8665 6886 I Website : www.daikin.co.id

• **SERVICE CENTER : Jakarta Selatan**, Telp. : 021-2782 5545 I **Samarinda**, Telp. : 0541-252 2889 • **WORKSHOP: Cirebon**, Telp. : 0231-8817 512 I **Banjarmasin**, Tlp. : 0511-6776 838 I **Aceh**, Tlp. : 0651-7318 036 I **Lombok**, Tlp. : 0370-7843 231 I **Jambi**, Tlp. : 0741-3066 790 I **Padang**, Tlp. : 0751-896 2684 • **TRAINING CENTER : Sunter**, Telp. : 021-650 5030 • **BRANCH : Bekasi**, Telp. :021-2945 0585 I **Tangerang**, Telp. : 021-5314 1195 I **Bandung**, Telp. : 022-522 5150 I **Semarang**, Telp. : 024-7660 3221 I **Yogyakarta**, Telp. : 0274-551 321 I **Surabaya**, Telp. : 031-503 1138 I **Denpasar**, Telp. : 0361-900 5514 I **Makassar**, Telp. : 0411-805 2691 I **Palembang**, Telp. : 0711-573 2282 I **Pekanbaru**, Telp. : 0761-561 139 I **Medan**, Telp. : 061-4200 8866 I **Manado**, Telp. : 0431-719 1199 I **Batam,** Tlp. : 0778-4171 445



DAIKIN

VRV

General Catalogue

DAIKIN

DIDPCTVID2401

VRV

R-410A

Cooling Only 50 Hz

Cooling Only 50 Hz

# Offers a wide variety of new functions that benefit everyone involved

First launched in Japan in 1982, the Daikin ***VRV*** system has been embraced by world markets for over 40 years. Daikin proudly introduces the advanced ***VRV*** system. We provide higher benefits to various users related to air conditioning systems, for example, building owners, consultants, installers and even building management.

For **OWNERS**

**Lifecycle Cost & Comfort**

For **INSTALLERS**

**Easy Installation**

For **CONSULTANTS**

**Flexible Design & Engineering Supports**

For **BUILDING MANAGEMENTS**

**Reliability & Comfort**

## Contents

# Improving air quality with technology

## Introducing Streamer technology to a wide variety of indoor units

Daikin Streamer technology enhances maximum efficiency in cleaning, which uses powerful decomposition properties to decompose substances captured by filter for better air quality.

STREAMER

## Built-in inside the indoor unit

Round Flow Cassette with Sensing and Streamer

**FXFTQ-A**

Round Flow Cassette with Streamer

**FXFRQ-A**


Streamer filter clean unit built-in inside the indoor unit

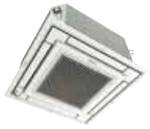
## Option for the indoor unit

Ceiling Suspended



**FXHQ-B**

Compact Multi Flow Cassette



**FXZQ-B**

Double Flow Cassette



**FXCQ-B**


## Option for ducted units

Streamer Duct Chamber

**Duct Type Indoor Unit**

**Heat Reclaim Ventilator**

**Outdoor-Air Processing Unit**


Presentation Movie

## Streamer Technology

Equipped with decomposition technology, Streamer is a type of plasma discharge that eliminates allergens such as pollen, mould, and mites, as well as, deodorises anti-bacterial dust filters so you can breathe with ease.

STREAMER

### Mechanism of decomposition by Streamer

Streamer emits high-speed electrons.


The electrons collide and combine with nitrogen and oxygen in the air to form four kinds of decomposing elements with decomposition power.

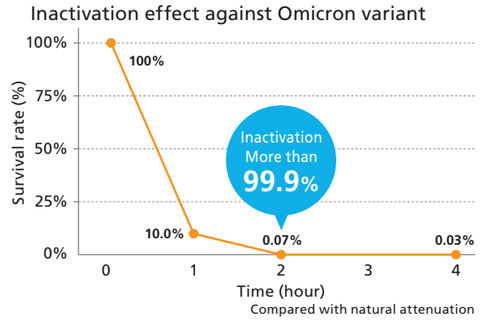
The decomposing elements provide decomposition power.



## 99.93% Inactivation of Omicron variant in 2 hours

### Experimental Results

Irradiation with Streamer discharge for two hours inactivated 99.93%, and for four hours inactivated 99.97% of the Omicron variant of Coronavirus (SARS-CoV-2), when compared to without Streamer discharge.




### Test Method

DAIKIN Streamer Research Institute

hCoV-19/Japan/ TY38-873/2021 strain (Omicron variant) was used. Two acrylic boxes of about 31L were placed in a safety cabinet in the BSL-3 facility, and Streamer discharge device was installed in one of the acrylic boxes. Seesaw shakers with a 6-well plate were placed in both boxes, and 0.5 mL of virus solution was placed in each well of the plate. Streamer irradiation was performed on one 6-well plate while stirring with a seesaw shaker. After 1, 2, and 4 hours, the virus solution was collected, and the virus titer was measured by the TCID50 method using Vero E6/TMPRSS2 cells.

### Test Organization

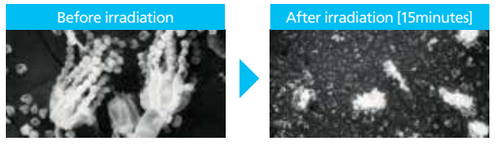
Professor Tatsuo Shioda, Department of Virus Infections, Research Institute for Microbial Diseases, Osaka University

*This result was obtained by using a Streamer discharge device for testing in lab conditions.
The effect of products equipped with Streamer technology or results in actual use environments may differ.

## Streamer decomposes mould and mites (feces and carcasses) and suppresses the causes of allergies.

### Demonstration of mould

Picture of mould




### Test Method

"Moulds" were placed on the electrodes of a Streamer discharge unit where they were exposed to Streamer dischage for 15 minutes and photographed with an electron microscope.

### Test Organization

Demonstration test was performed at Wakayama Medical University.

## Why Daikin Streamer?

Recognized as clean technology by public bodies

Winner of the 2005 Progress Award, Institute of Electrostatics Japan

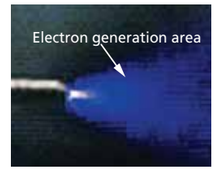
Awarded for the development of a domestic air purifier which uses DC Streamer discharge.

105 Patents Acquired

Patents acquired relating to Streamer technology

Streamer, a type of plasma discharge, decomposes hazardous chemical substances. The decomposition power is comparable to thermal energy of about 100,000°C.*

Note:
*Comparison of oxidation decomposition.
This does not mean temperature will become high.




## MARUTTO

### Cloud-based HVAC management service

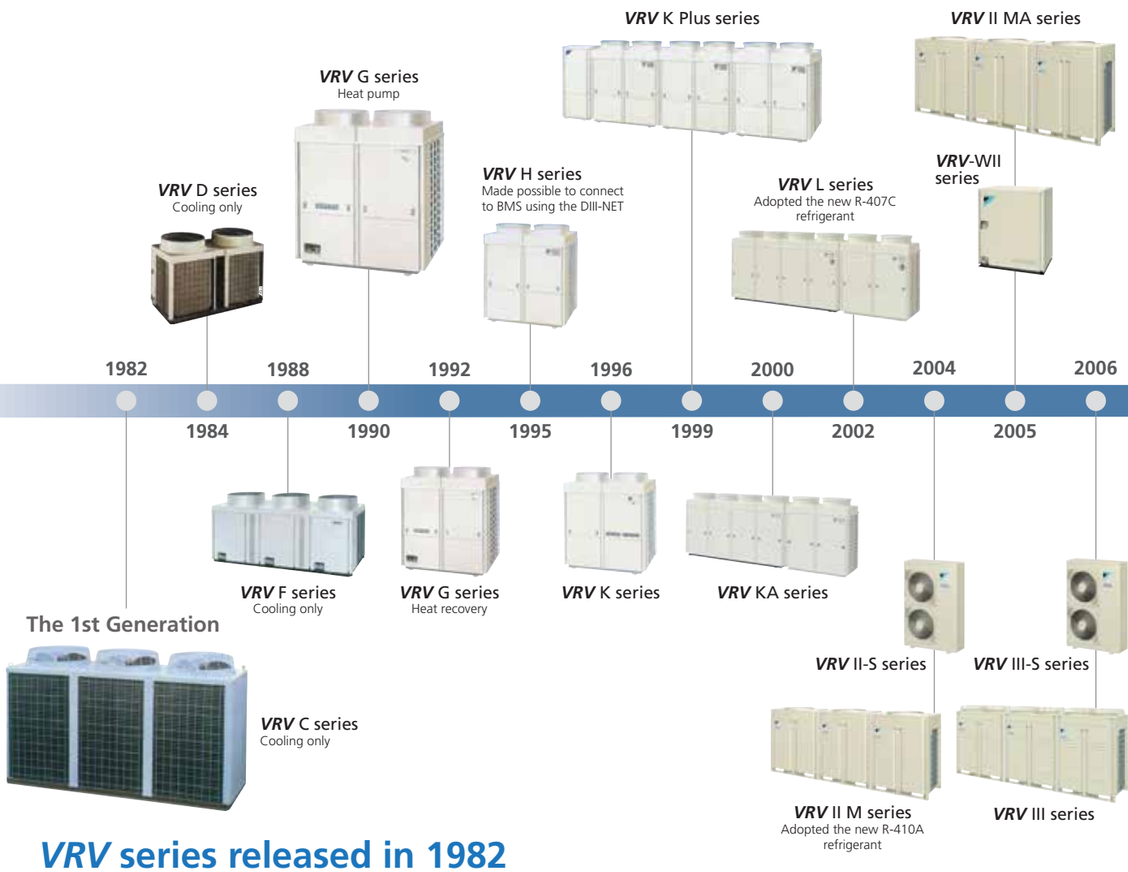
- ✓ Easy operation from a remote location improves work efficiency
- ✓ Analysis of operation data supports energy and power savings
- ✓ Easy daily management with convenient functions
- ✓ Balancing for both energy savings and comfort through precise control
- ✓ Minimize downtime with reliable service

Promotion Movie

MARUTTO edge
DGE601A51

# *VRV* Development History

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




## *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

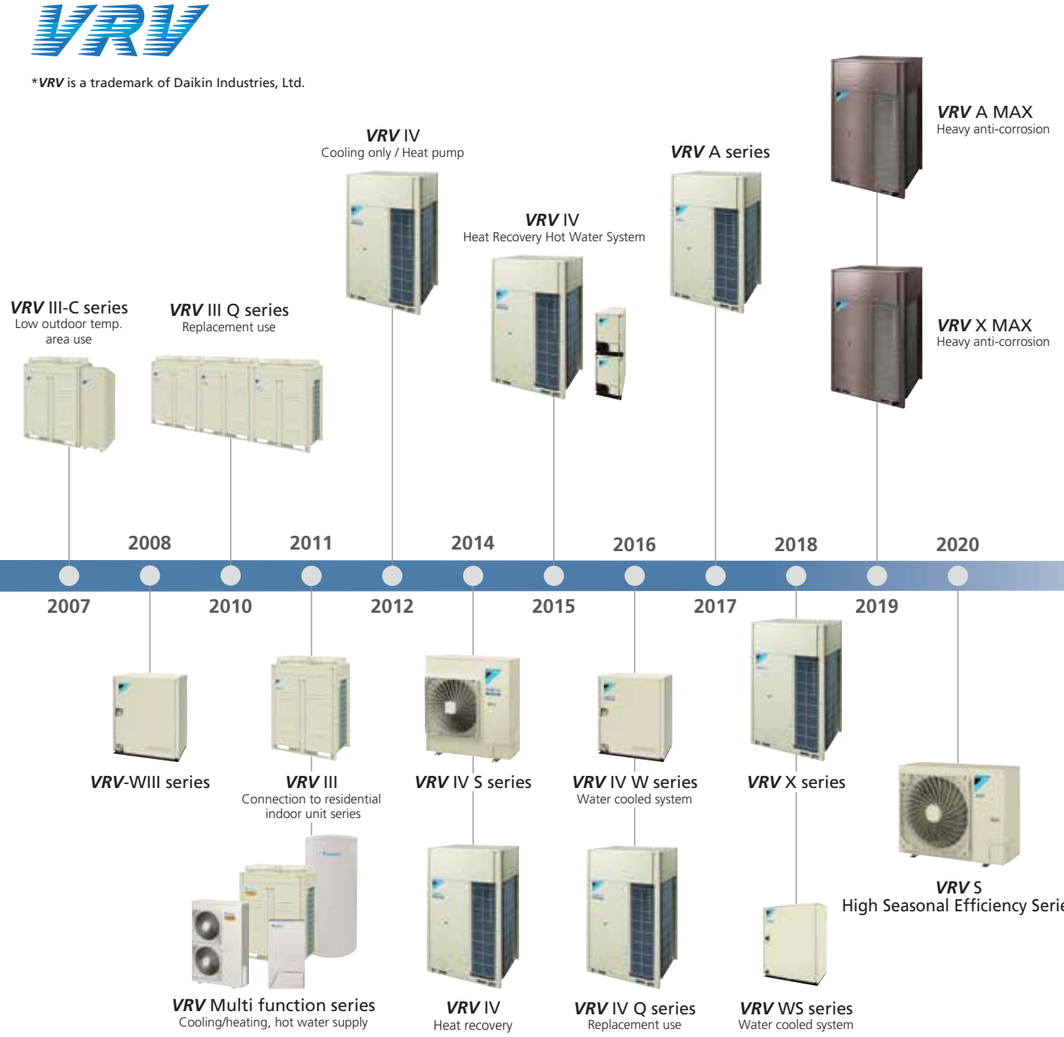
## Expansion of the country of sale

# Sales companies well established in more than 70 countries



*VRV






## For OWNERS

# Lifecycle Cost & Comfort

### Large-capacity Single Module

- Installation space and cost are reduced by large–capacity casing for max. 20 HP.

### Energy Saving Technology

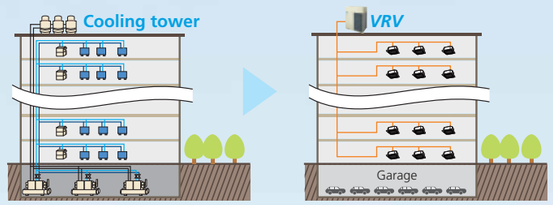
- Further improvement of energy saving by high efficiency compressor and VRT Smart control.
- Achieves high energy efficiency, that reduces running cost.


### Comfort

- VRT Smart operation maintains the indoor temperature and ensures a comfortable environment.
- The nighttime quiet operation function automatically suppresses the nighttime operating sound to maintain the quiet environment.

### Efficient Space Utilisation

- When construct a large-scale air conditioning system on a single refrigerant system, space for air conditioning is drastically reduced.
- Even with a 20-storey building all of the outdoor units can be installed on the rooftop.





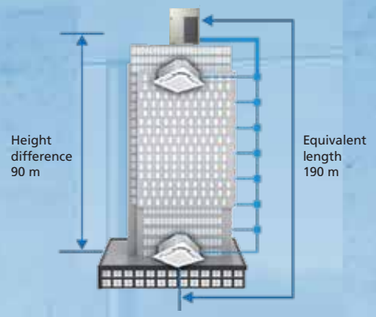



## For CONSULTANTS

# Flexible Design & Engineering Supports

### Long Refrigerant Piping

- Equivalent length extension max. 190 m
- Height difference extension max. 90 m
- By applying for both extensions at the same time, supports a wide range of applications.



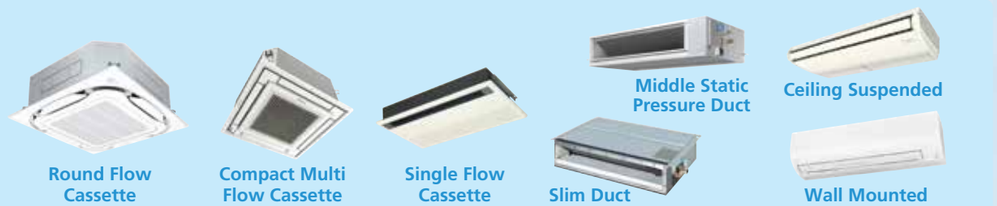

### Engineering Support Software

- Strongly supports for facility design, offering model selection assistance, energy saving and IEQ simulations, drawing support, etc.

Model Selection
Drawing Supports
Analysis and Simulation

### Varied Lineup of Indoor Units

- With various types of indoor units available, comfortable airflow is ensured in every space.



# For INSTALLERS

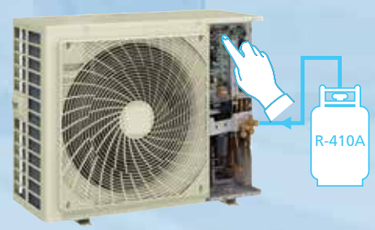
## Easy Installation

### Slimmer Main Piping

- For gas pipe of up to 20 HP, the main piping diameter size can be reduced from standard size. It enables lowering installation cost.

### Automatic Refrigerant Charge Function

- Automates the charging of proper refrigerant amount to contribute to optimised operation efficiency, higher quality and easier installation.




### Lightweight and compact large-capacity single units

- 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.





# For BUILDING MANAGEMENTS

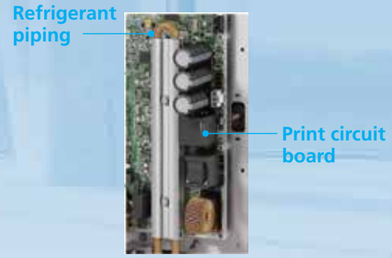
## Reliability & Comfort

### Heavy Anti-Corrosion Model

- The heavy anti-corrosion models can provide durable operation at humid and seaside areas. Also, outdoor unit can be installed from 0 m from coastline.

### Refrigerant Piping Cooling System

- Refrigerant cooling circuit enables operation in high outdoor temperatures.

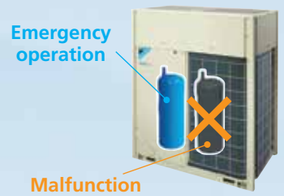



### Double Backup Operation Functions

- Unit backup & Compressor backup ensure continuous operation.

Unit backup operation function


Compressor backup operation function



# 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.

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

Page 15

## VRV X

Heavy anti-corrosion model
VRV X MAX
RXUQ-AW

### 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 | | | | | | | ● | ● | | | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

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

Page 31

## VRV A

Heavy anti-corrosion model
VRV A MAX
RXQ-AW

### Saves space and delivers excellent performance

The ***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 | | | | | | | | | | | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

**RSUQ-A**
4-6 HP: 1-phase, 220-240 V, 50 Hz
7-9 HP: 3-phase, 380-415 V, 50 Hz

Page 47

## VRV S *High Seasonal Efficiency SERIES*

### Especially designed for residential houses, small office and shops

New ***VRV*** S High Seasonal Efficiency series achieves higher energy efficiency with a variety of function for comfort and high performance. A wide range of options for installation location and application are easily achieved by the low height casing, long piping length and other features.

Lineup

| HP | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|
| Cooling Only | ● | ● | ● | ● | ● | ● |

**RXMQ-A/B**
4 HP: 1-phase, 220 V, 50 Hz
5-6 HP: 1-phase, 220-240 V, 50 Hz

Page 59

## VRV IV S SERIES

### 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 to suit your needs.

Lineup

| HP | 4 | 5 | 6 |
|---|---|---|---|
| Cooling Only | ● | ● | ● |

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

Page 65

## VRV IV Q SERIES

### 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 | | | | | | | ● | ● | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

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

Page 79

## VRV IV W SERIES

### Water cooled system suitable for tall multi-storied buildings

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

Lineup

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

**RWHQ-T / HWHQ30A**
3-phase 4-wire system,
380-415 V, 50 Hz

Page 99

## VRV IV HEAT RECOVERY HOT WATER SYSTEM

### 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
# Create Comfortable Airflow

## Wide variety of indoor units

New lineup

| Category | Type | Model Name | Capacity Range | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 140 | 200 | 250 | 400 | 500 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 0.8 HP | 1 HP | 1.25 HP | 1.6 HP | 2 HP | 2.5 HP | 3.2 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 Cassette with Sensing and Streamer | New **FXFTQ-AV4** | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Streamer | New **FXFRQ-AV4** | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Sensing | FXFSQ-AV4 | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette | FXFQ-AV4 | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Compact Multi Flow Cassette | New **FXZQ-BVM4** | | ● | ● | ● | ● | ● | | | | | | | | | |
| | Double Flow Cassette | New **FXCQ-BVM4** | | ● | ● | ● | ● | ● | ● | ● | | ● | | | | | |
| | Single Flow Cassette | FXKQ-MAVE4 | | | ● | ● | ● | | ● | | | | | | | | |
| | Ceiling Mounted Cassette Duct | FXFDQ-AV4 | | | | | | | ● | ● | ● | ● | | | | | |
| Ceiling Concealed Duct | Bedroom Duct | FXDBQ-AVM4 | | | | | ● | ● | ● | ● | | | | | | | |
| | Slim Duct (Standard) | FXDQ-PDVE4 (with drain pump) | (700 mm width type) | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-PDVT4 (without drain pump) | | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-NDVE4 (with drain pump) | (900/1,100 mm width type) | | | | ● | ● | ● | | | | | | | | |
| | | FXDQ-NDVT4 (without drain pump) | | | | | ● | ● | ● | | | | | | | | |
| | Slim Duct (Compact) | FXDQ-SPV14 | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Middle Static Pressure Duct | FXSQ-PAV4 | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Middle-High Static Pressure Duct | FXMQ-PAV4 | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | High Static Pressure Duct | FXMQ-PVM | | | | | | | | | | | | ● | ● | | |
| | Outdoor-Air Processing Unit | FXMQ-MFV7 | | | | | | | | | | ● | | ● | ● | | |
| | | New **FXMQ-BFV24** | | | | | | | | ● | | | ● | ● | ● | | |
| Ceiling Suspended | Ceiling Suspended | FXHQ-MAV7 | | | | ● | | | ● | | ● | | | | | | |
| | | New **FXHQ-BVM4** | | | | | | | | | | ● | ● | | | | |
| Wall Mounted | | FXAQ-AVM4 | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| Floor Standing | 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 with DX-Coil | | VKM-GCVE | Airflow rate 500-950 m³/h | | | | | | | | | | | | | | |
| Heat Reclaim Ventilator | | VAM-HVE | Airflow rate 150-2000 m³/h | | | | | | | | | | | | | | |
| Air Handling Unit | | AHUR | 6–120 HP | | | | | | | | | | | | | | |

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








# VRV X

## New Heights in Energy Efficiency During Actual Operation

**Cooling Only**
**6 HP (16 kW) – 60 HP (168 kW)**

Single outdoor units
**RXUQ6-20AY14(W)**

Double outdoor units
**RXUQ12-40AMY14(W)**

Triple outdoor units
**RXUQ18-20AM1Y14(W)**
**RXUQ42-60AMY14(W)**

*(W): Heavy anti-corrosion model





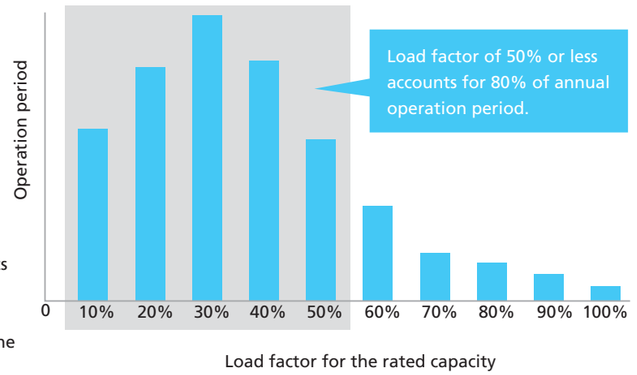
VRV X Series

## Greater energy savings during low-load operation

Daikin's ***VRV*** X series raised the standard of energy efficiency.

**The key to innovative energy savings**

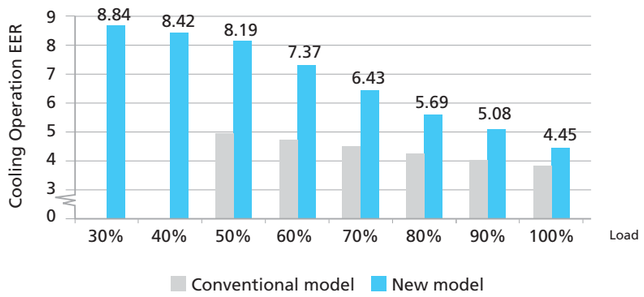
**Increased efficiency during low-load operation.**




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

## Higher Energy Efficiency Ratio (EER) 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)

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

# Advanced Technologies

## Advanced technologies for greater energy savings

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.

### Software technology VRT Smart Control

Variable Refrigerant Temperature

Fully Automatic Energy-saving Refrigerant Control

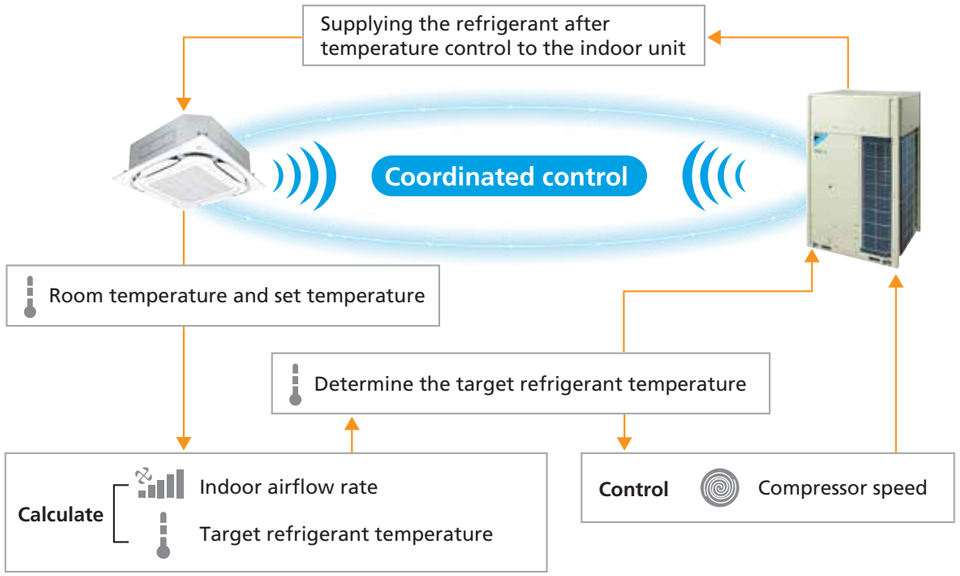
VRT Smart Control Function movie

### Hardware technology New Scroll Compressor

New Scroll Compressor movie

## ■ Optimally supply only for the needed capacity of indoor units

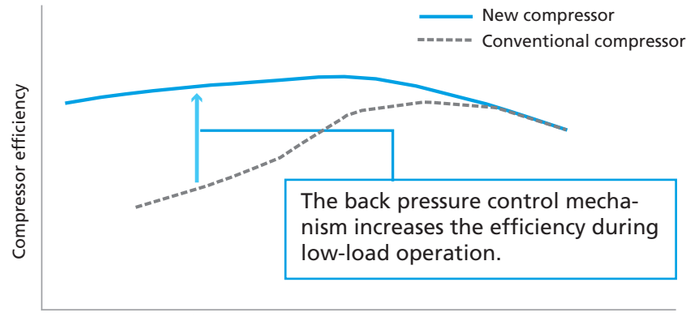
- Reduces compressor load and minimizes operation loss so it is energy saving
- Controls capacity according to load to ensure a constant room temperature for greater comfort.




* For the classification of indoor units (VRT smart control and VRT control), refer to the indoor unit lineup.

## ■ Refrigerant leakage is minimized during low-load operation

- Refrigerant leakage is minimized by a back pressure control mechanism that increases the efficiency during low-load operation.

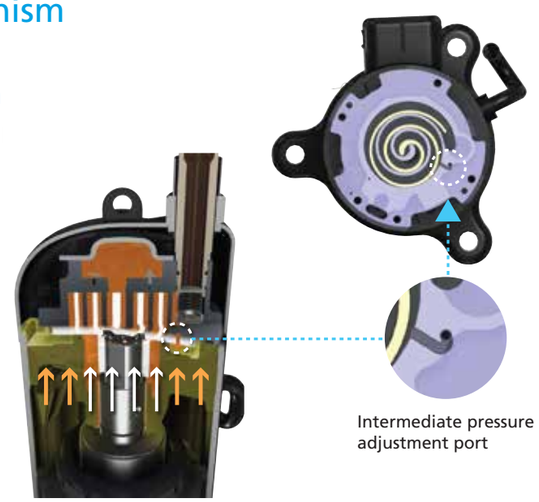



* Graph shown above is for illustration purposes only.

## ■ Back pressure control mechanism

### New intermediate pressure mechanism

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



# Advanced Technologies

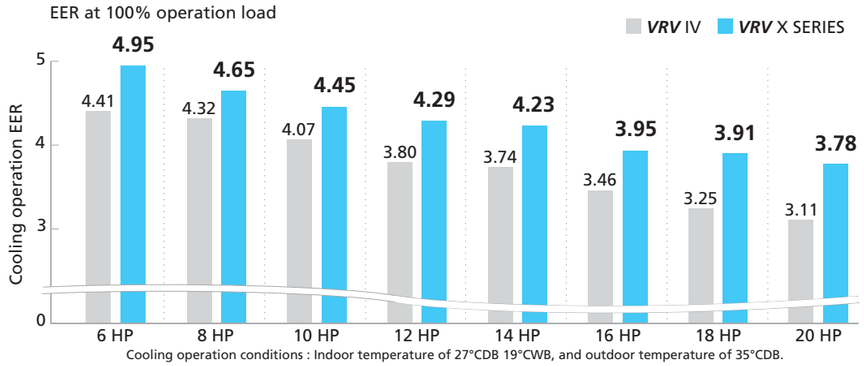
## Advanced oil temperature control

Standby power needed for preheating refrigerator oil was **reduced up to 65.4%** to save energy when the air conditioner is stopped.

**65.4%**
**Reduction**

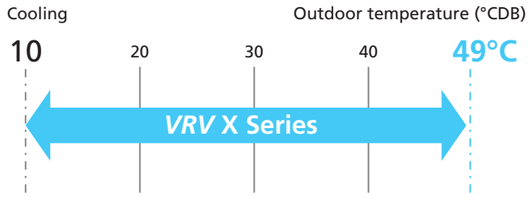
* Operation calculation conditions: ***VRV*** X series 14 HP
Location: Singapore
Operation time: 08:00–18:00 on weekdays

## Higher efficiency is provided during rated operation




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

## Extended operation range up to 49°C

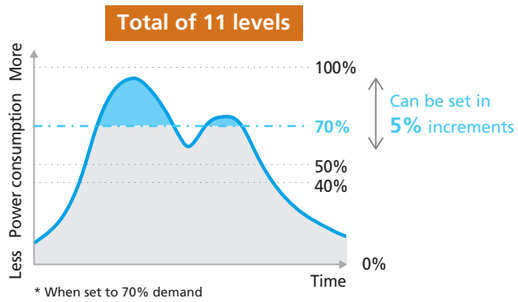



Note: When outdoor temperature falls below 10°C, the thermostat shuts OFF, the outdoor unit stops, and operation switches from cooling to fan operation.

## I-demand function

Peak power limit can be accomplished according to each user situation.

* Set on the PCB of the outdoor unit.




* When set to 70% demand

## High external static pressure

***VRV*** X series outdoor unit has been achieved high external static pressure up to **78.4 Pa**.

## Active Filter Unit (Option)

Daikin's Active Filter unit can drastically reduce harmonics, preventing damages from harmonics and extending equipment lifespan.



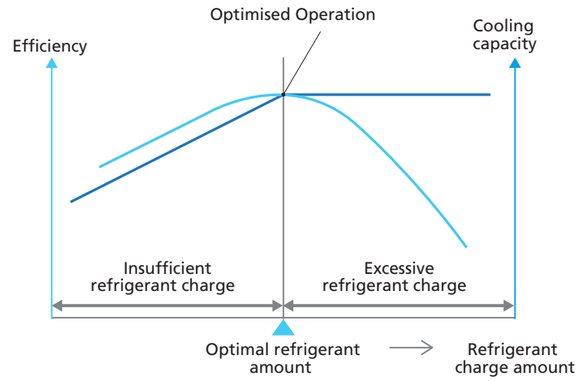
# Automatic refrigerant charge function

Contribute to optimised operation efficiency, higher quality and easier installation.

## Optimised operation efficiency

This function prevents a capacity shortage or energy loss due to excessive or insufficient refrigerant.

Automatic Refrigerant Charge Function movie



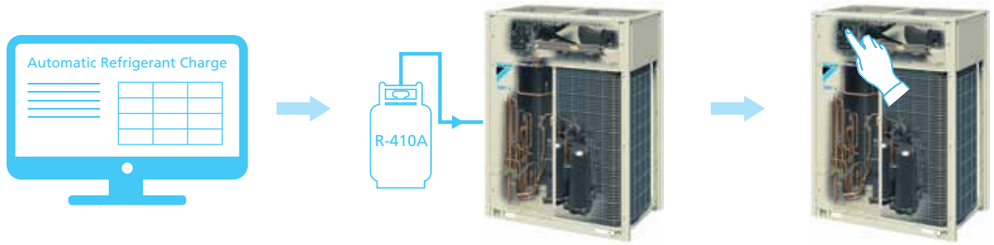

## Higher quality and easier installation

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.

**1** Calculation of necessary refrigerant amount from design drawing

**2** Pre-charge of refrigerant

**3** 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

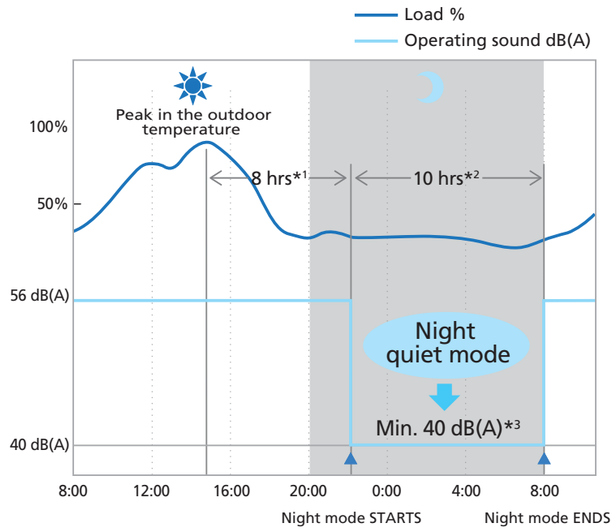
* There are conditions in the range of ambient temperature in which the automatic refrigerant charge can be used. Refer to the installation manual for details.
* The refrigerant amount that can be automatically charged may differ from the additional refrigerant amount that is provided from calculations,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

# Comfort & Reliability

## Comfort

### Nighttime quiet operation function

The nighttime quiet operation function automatically suppresses the nighttime operating sound by reducing operation capacity to maintain the quiet environment of the neighborhood.
Three selectable modes are available depending on the required level.

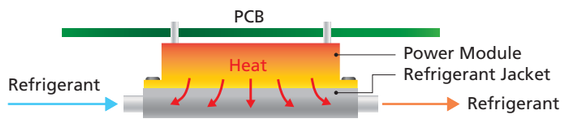



*1. Initial setting is 8 hours. Can be selected from 6, 8 and 10 hours.
*2. Initial setting is 9 hours. Can be selected from 8, 9 and 10 hours.
*3. In case of 10 HP outdoor unit.

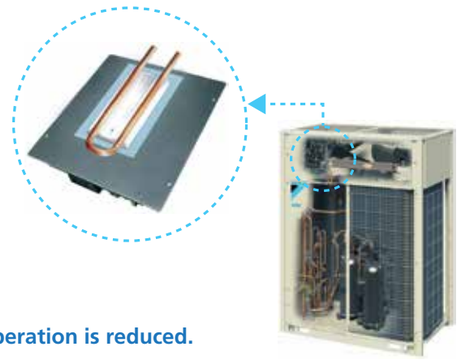
Notes: • This function is available in setting at site.
• The operating sound in quiet operation mode is the actual value measured by our company.
• The relationship of outdoor temperature (load) and time shown above is just an example.

## Reliable and stable technology

### High reliability at high ambient temperature




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.**

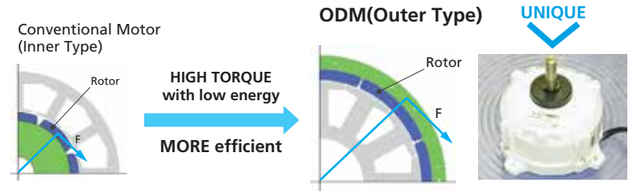
This enables

- Suitability for high ambient temperatures
- Miniaturization of electronic components



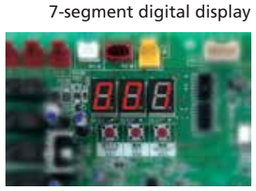
### Outer rotor DC motor (ODM)

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




### Function of information display by luminous digital tube

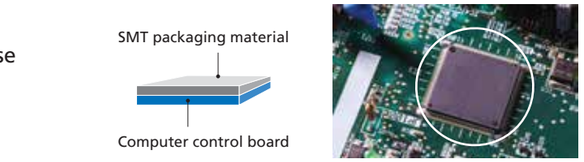
***VRV*** X series utilises a bright 7-segment digital display to convey operational status and facilitate simple installation and after-sales service.



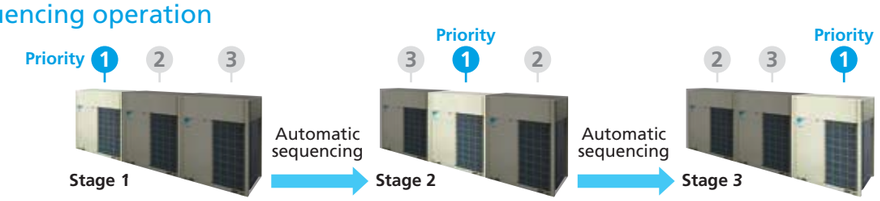

### SMT* packaging technology

- Improves the anti-clutter performance.
- Protects your computer boards from the adverse effects of sandy climates and humid weather.

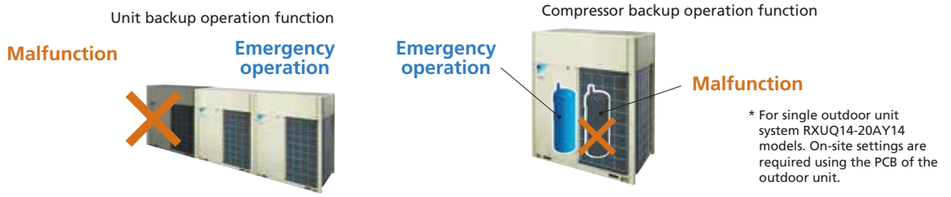
*SMT: Surface mounted technology




### Automatic sequencing operation




### Double backup operation functions

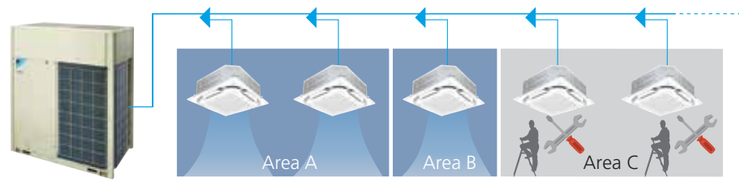



* For single outdoor unit system RXUQ14-20AY14 models. On-site settings are required using the PCB of the outdoor unit.

### Ease of maintenance

Can provide maintenance feature* without shutting down the whole ***VRV*** system.

* Field setting is required.

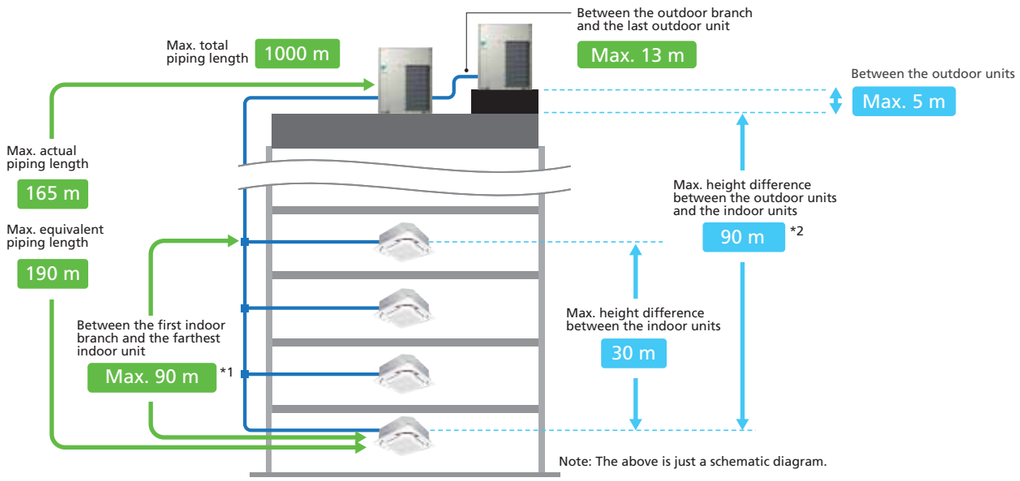


# Flexible System Design

## More options for installation location

### Long piping length

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




| | | |
|---|---|---|
| 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 height 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 height 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%**

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

Conditions of ***VRV*** indoor unit connection capacity

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

*1 For the FXF(S)(T)(R)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 27 for outdoor unit combination details.

# Anti-corrosion Technology

## Heavy anti-corrosion model

VRV X MAX

**RXUQ6-20AY14W**
**RXUQ12-60AM(1)Y14W**

**Built for Seaside**

## Maximize anti-corrosion and performance

### Outer casing

**Multi coating for extreme durability**

The hot-dip Zinc-Aluminum-Magnesium alloy coated sheet is optimised for even greater durability with an additional four-layer coating combination.

**4-layer coating**

- Top clear special coating
- Top coat metallic special coating
- Powder middle coating
- Primer base coating
- Hot-dip zinc-aluminum-magnesium alloy coated steel sheet

**Anti-corrosion verification by accelerated test**

Although the previous anti-corrosion model is rusted, the ***VRV*** X MAX outer casing shows no signs of corrosion in either test.

* The cross cut was made in order to simulate a severe case of coating damage and corrosion (not from regular usage).

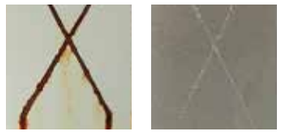
**Salt Spray Test**

Previous model | VRV X MAX

✕: Corrosion ✔: No corrosion

**CASS Test**

Previous model | VRV X MAX



✕: Corrosion ✔: No corrosion

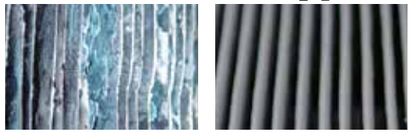
### Heat exchanger (Fin)

**Anti-corrosion technology**

The aluminum fins on ***VRV*** X MAX are manufactured with thicker anti-corrosion layer including an additional two-layer coating.

**CASS Test**

Standard model | VRV X MAX



✕: Corrosion ✔: No corrosion

- Corrosion resistance coating*
- Primer base coating*
- High corrosion resistance aluminium fin
- Aluminium fin

* outside area only

**High performance technology**

New aluminum fins are 21% thicker to maintain performance.

**Achieves both anti-corrosion and high efficiency**

**Automated fin coating line**

To prevent differences in coating thickness caused by manual application, the additional fin coatings are performed on the latest automated assembly line, maintaining high precision and quality.



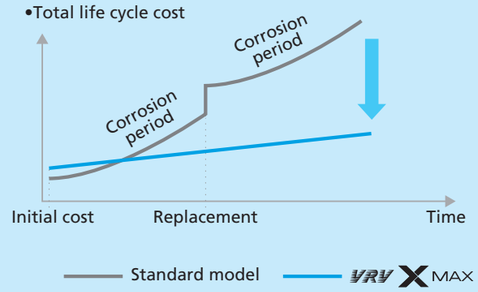
## Maximize lifespan

A third party tested the corrosion resistance (ISO 9227: salt spray tests) of the reinforced fins and casing for ISO 12944: 2018 Category C5 and confirmed them to be at very high (VH) levels.

| | |
|---|---|
| ISO 12944-6:2018 | : Paints and varnishes – Corrosion protection of steel structures by protective paint systems |
| Category C5 | : Industrial areas with high humidity and aggressive atmosphere and coastal areas with high salinity |
| Level VH | : Very high (equivalent to an expected life of 25 years *) |
| ISO 9227 | : Corrosion test in artificial atmospheres-Salt spray tests |

* This number of years is not the warranty period of the product. Product life depends on installation location and operating conditions.

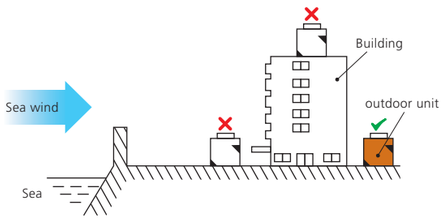
The new model resists corrosion by salt, maintains performance, and greatly reduces life cycle costs.




VRV X MAX

## Built for seaside

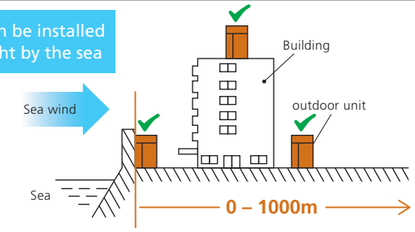
**Previous model:** Anti-corrosion




Must be installed at least 300 m away from the sea in a location not in direct contact with sea wind.

300 - 1,000 m

**VRV X MAX : Heavy Anti-corrosion**




Must be installed where the unit does not get into contact with seawater.

**0 – 1,000 m**

## Specifications of anti-corrosion model

| Item | Parts | | Standard model | VRV X MAX |
|---|---|---|---|---|
| 1 | Sheet metal casing | Outer casing | Hot dip zinc coated sheet + powder coating | Hot-dip zinc-aluminum-magnesium alloy-coated steel sheet + Primer base coating + Powder middle coating + Top coat metallic special coating (metallic brown) + Top clear special coating |
| 2 | Discharge grille • Protection net | | Low Density Polyethylene (LDPE) coating | |
| 3 | Fasteners | | SWCH + zinc-nickel plating | SUS410 + zinc-nickel plating |
| 4 | Heat exchanger | | Copper tube + Standard aluminum fin | Copper tube + Anti-corrosion aluminum fin |
| 5 | Aluminum fin | | Aluminum fin + Hydrophilic anti-corrosion | Aluminum fin + High corrosion resistance aluminum fin + Primer base coating (outside area only) + Corrosion resistance coating (outside area only) |
| 6 | Heat exchanger end plate | | Hot-dip zinc-aluminum-magnesium alloy-coated steel sheet without coating | Hot dip zinc coated sheet + corrosion resistance polyurethane coating |
| 7 | Fan motor stand • Electric box • Inner casing sheet metal | | Galvanized iron sheet | Hot dip zinc coated sheet + corrosion resistance polyurethane coating |
| 8 | Fan • Fan motor | | Resin fan + resin casing motor | |
| 9 | Pressure vessel (oil separator) | | Hot rolled sheet steel + painting | Hot rolled sheet steel + Double rust inhibitor coating with additional touch-up paint |
| 10 | Printed circuit board | | Both side resin coating | Expanded both side resin coating |

# Outdoor Unit Lineup

## *VRV* X Series

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

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 | | | | | | | ● | ● | | | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

## Outdoor unit combinations

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

Notes: *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 24 for notes on connection capacity of indoor units.



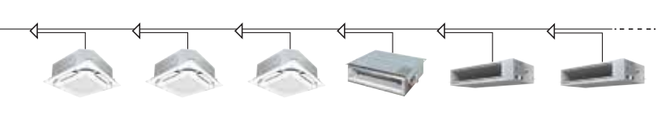
# Indoor Unit Lineup



## Enhanced range of choices

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

| Category | 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 Cassette with Sensing and Streamer | New **FXFTQ-AV4** | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Streamer | New **FXFRQ-AV4** | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Sensing | FXFSQ-AV4 | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette | FXFQ-AV4 | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Compact Multi Flow Cassette | New **FXZQ-BVM4** | VRT smart | | ● | ● | ● | ● | ● | | | | | | | | | |
| | Double Flow Cassette | New **FXCQ-BVM4** | VRT smart | | ● | ● | ● | ● | ● | ● | ● | | ● | | | | | |
| | Single Flow Cassette | FXKQ-MAVE4 | VRT | | | ● | ● | ● | | ● | | | | | | | | |
| | Ceiling Mounted Cassette Duct | FXFDQ-AV4 | VRT smart | | | | | | | ● | ● | ● | ● | | | | | |
| Ceiling Concealed Duct | Bedroom Duct | FXDBQ-AVM4 | VRT smart | | | | | ● | ● | ● | ● | | | | | | | |
| | Slim Duct (Standard) | FXDQ-PDVE4 (with drain pump) | VRT smart | (700 mm width type) | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-PDVT4 (without drain pump) | VRT smart | (700 mm width type) | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-NDVE4 (with drain pump) | VRT smart | (900/1,100 mm width type) | | | | ● | ● | ● | | | | | | | | |
| | | FXDQ-NDVT4 (without drain pump) | VRT smart | (900/1,100 mm width type) | | | | ● | ● | ● | | | | | | | | |
| | Slim Duct (Compact) | FXDQ-SPV14 | VRT | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Middle Static Pressure Duct | FXSQ-PAV4 | VRT smart | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Middle-High Static Pressure Duct | FXMQ-PAV4 | VRT smart | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | High Static Pressure Duct | FXMQ-PVM | VRT smart | | | | | | | | | | | | ● | ● | | |
| | Outdoor-Air Processing Unit | FXMQ-MFV7 | | | | | | | | | | | ● | | ● | ● | | |
| | | New **FXMQ-BFV24** | VRT | | | | | | | | ● | | | ● | ● | ● | | |
| Ceiling Suspended | Ceiling Suspended | FXHQ-MAV7 | VRT | | | | ● | | | ● | | ● | | | | | | |
| | | New **FXHQ-BVM4** | VRT | | | | | | | | | | ● | ● | | | | |
| Wall Mounted | | FXAQ-AVM4 | VRT smart | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| Floor Standing | 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 with DX-Coil | | VKM-GCVE | | Airflow rate 500-950 m³/h | | | | | | | | | | | | | | |
| Heat Reclaim Ventilator | | VAM-HVE | | Airflow rate 150-2000 m³/h | | | | | | | | | | | | | | |
| Air Handling Unit | | AHUR | | 6–120 HP | | | | | | | | | | | | | | |



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 (FXMQ-MF series) and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.

# Outdoor Units

## *VRV* X Series

## Specifications

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL | | | RXUQ6AY14(W) | RXUQ8AY14(W) | RXUQ10AY14(W) | RXUQ12AY14(W) | RXUQ14AY14(W) | RXUQ16AY14(W) | RXUQ18AY14(W) | RXUQ20AY14(W) | | RXUQ12AMY14(W) | RXUQ14AMY14(W) | RXUQ16AMY14(W) | RXUQ18AMY14(W) | RXUQ20AMY14(W) | RXUQ18AM1Y14(W) | RXUQ20AM1Y14(W) | RXUQ22AMY14(W) | RXUQ24AMY14(W) | RXUQ26AMY14(W) |
| Combination units | | | — | — | — | — | — | — | — | — | | RXUQ6AY14(W) | RXUQ6AY14(W) | RXUQ8AY14(W) | RXUQ8AY14(W) | RXUQ8AY14(W) | RXUQ6AY14(W) | RXUQ6AY14(W) | RXUQ10AY14(W) | RXUQ12AY14(W) | RXUQ12AY14(W) |
| | | | — | — | — | — | — | — | — | — | | RXUQ6AY14(W) | RXUQ8AY14(W) | RXUQ8AY14(W) | RXUQ10AY14(W) | RXUQ12AY14(W) | RXUQ6AY14(W) | RXUQ6AY14(W) | RXUQ12AY14(W) | RXUQ12AY14(W) | RXUQ14AY14(W) |
| | | | — | — | — | — | — | — | — | — | | — | — | — | — | — | RXUQ6AY14(W) | RXUQ8AY14(W) | — | — | — |
| 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) (Metallic brown ★1) | | | | | | | | | Ivory white (5Y7.5/1) (Metallic brown ★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 | 297 | | 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 (195 ★1) | | 215 (235 ★1) | | 275 (295 ★1) | | 291 (316 ★1) | | | 185+185 (195+195 ★1) | | | 185+215 (195+235 ★1) | | 185+185+185 (195+195+195 ★1) | | 215+215 (235+235 ★1) | | 215+275 (235+295★1) |
| 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 | 8.3 | 8.5 | 9.7 | 9.8 | 11.7 | | | 6.4+6.4 | 6.4+6.6 | 6.6+6.6 | 6.6+8.3 | 6.6+8.5 | 6.4+6.4+6.4 | 6.4+6.4+6.6 | 8.3+8.5 | 8.5+8.5 | 8.5+9.7 |
| 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(W) | RXUQ30AMY14(W) | RXUQ32AMY14(W) | RXUQ34AMY14(W) | RXUQ36AMY14(W) | RXUQ38AMY14(W) | RXUQ40AMY14(W) | | RXUQ42AMY14(W) | RXUQ44AMY14(W) | RXUQ46AMY14(W) | RXUQ48AMY14(W) | RXUQ50AMY14(W) | RXUQ52AMY14(W) | RXUQ54AMY14(W) | RXUQ56AMY14(W) | RXUQ58AMY14(W) | RXUQ60AMY14(W) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination units | | | RXUQ12AY14(W) | RXUQ12AY14(W) | RXUQ12AY14(W) | RXUQ14AY14(W) | RXUQ16AY14(W) | RXUQ18AY14(W) | RXUQ20AY14(W) | | RXUQ12AY14(W) | RXUQ12AY14(W) | RXUQ12AY14(W) | RXUQ12AY14(W) | RXUQ12AY14(W) | RXUQ12AY14(W) | RXUQ14AY14(W) | RXUQ16AY14(W) | RXUQ18AY14(W) | RXUQ20AY14(W) |
| | | | RXUQ16AY14(W) | RXUQ18AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | | RXUQ12AY14(W) | RXUQ12AY14(W) | RXUQ14AY14(W) | RXUQ16AY14(W) | RXUQ18AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) |
| | | | — | — | — | — | — | — | — | | RXUQ18AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) | RXUQ20AY14(W) |
| 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) (Metallic brown ★1) | | | | | | | | Ivory white (5Y7.5/1) (Metallic brown ★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)+(4.2×1) | (5.2×1)+(3.4×1)+(3.9×1)+(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 | 191+297 | 218+297 | | 268+297 | 297+297 | | 191+191+268 | 191+191+297 | 191+218+297 | | 191+268+297 | 191+297+297 | 218+297+297 | | 268+297+297 | 297+297+297 |
| Dimensions (H×W×D) | | mm | (1,657×1,240×765)+(1,657×1,240×765) | | | | | | | | (1,657×1,240×765)+(1,657×1,240×765)+(1,657×1,240×765) | | | | | | | | | |
| Machine weight | | kg | 215+275 (235+295★1) | 215+291 (235+316 ★1) | | 275+291 (295+316 ★1) | | 291+291 (316+316 ★1) | | | 215+215+291 (235+235+316 ★1) | 215+275+291 (235+295+316 ★1) | | | 215+291+291 (235+316+316 ★1) | | 275+291+291 (295+316+316 ★1) | | 291+291+291 (316+316+316 ★1) | |
| 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 | 8.5+9.8 | 8.5+11.7 | | 9.7+11.7 | 9.8+11.7 | 11.7+11.7 | | | 8.5+8.5+11.7 | 8.5+9.7+11.7 | 8.5+9.8+11.7 | 8.5+11.7+11.7 | | | 9.7+11.7+11.7 | 9.8+11.7+11.7 | 11.7+11.7+11.7 | |
| Piping connections | Liquid | mm | ϕ19.1 (Brazing) | | | | | | | | ϕ19.1 (Brazing) | | | | | | | | | |
| | Gas | mm | ϕ34.9 (Brazing) | | | | ϕ41.3 (Brazing) | | | | ϕ41.3 (Brazing) | | | | | | | | | |

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

Note: ★1. Models with (W) are the outdoor units with anti-corrosion specifications. For details, refer to pages 25 - 26 for more information.

# VRV A

## Saves Space and Delivers Excellent Performance

**Cooling Only**
**6 HP (16 kW) – 60 HP (168 kW)**

Single Outdoor units
**RXQ6-20AY14(W)**

Double Outdoor units
**RXQ18-40AMY14(W)**

Triple Outdoor units
**RXQ42-60AMY14(W)**

*(W): Heavy anti-corrosion model



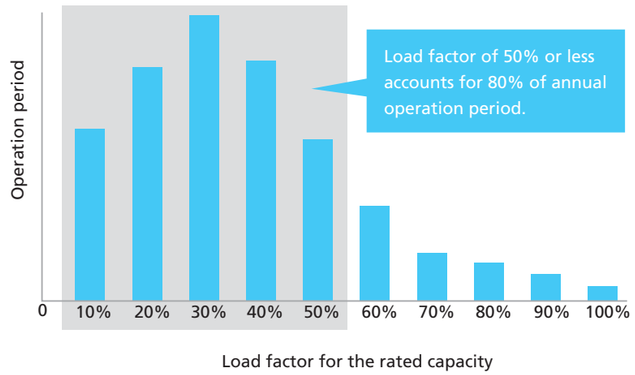


## Greater energy savings during low-load operation

Daikin's ***VRV*** A series raised the standard of energy efficiency.

**The key to innovative energy savings**

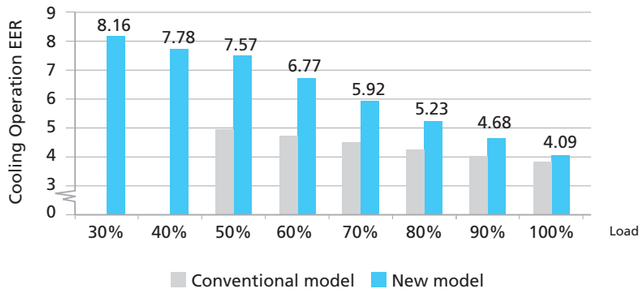
**Increased efficiency during low-load operation.**




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

## Higher Energy Efficiency Ratio (EER) 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)

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

# Advanced Technologies

## Advanced technologies for greater energy savings

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.

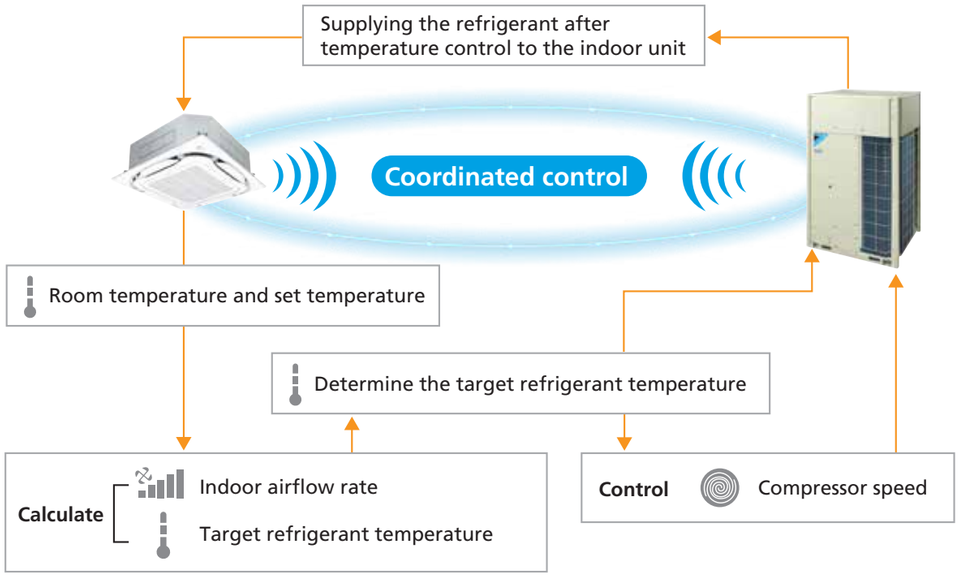
**Software technology** VRT Smart Control

Fully Automatic Energy-saving Refrigerant Control

VRT Smart Control Function movie

### Optimally supply only for the needed capacity of indoor units

- Reduces compressor load and minimizes operation loss so it is energy saving
- Controls capacity according to load to ensure a constant room temperature for greater comfort.




* For the classification of indoor units (VRT smart control and VRT control), refer to the indoor unit lineup.

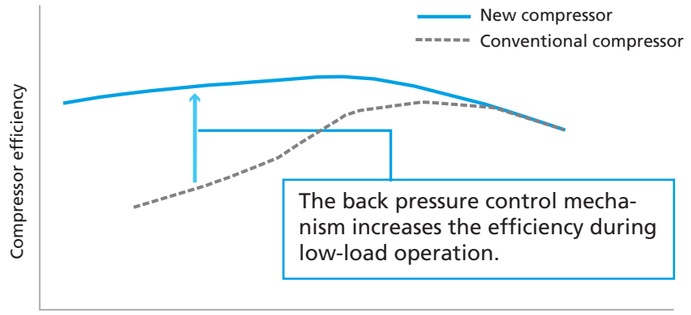
VRV +VRT+VAV

**Hardware technology** New Scroll Compressor

New Scroll Compressor movie

### Refrigerant leakage is minimized during low-load operation

- Refrigerant leakage is minimized by a back pressure control mechanism that increases the efficiency during low-load operation.



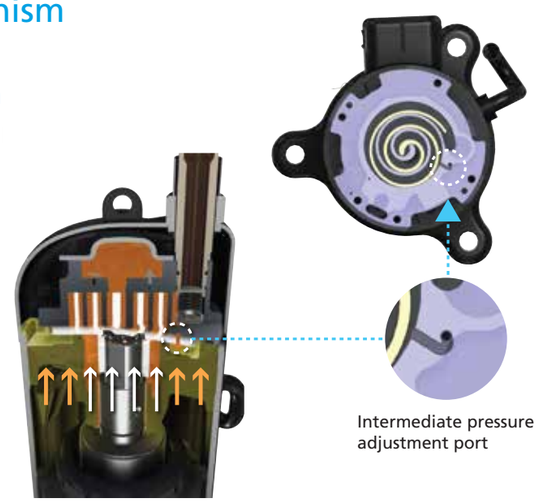

* Graph shown above is for illustration purposes only.

### Back pressure control mechanism

#### New intermediate pressure mechanism

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

* The new mechanism is used in RXQ10,12,14 and 20A models.



# Advanced Technologies

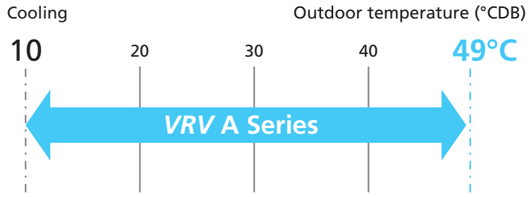
## Advanced oil temperature control

Standby power needed for preheating refrigerator oil was **reduced up to 82.7%** to save energy when the air conditioner is stopped.

**82.7%**
**Reduction**

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

## Extended operation range up to 49°C



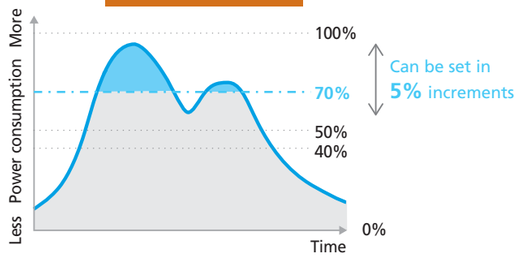

Note: When outdoor temperature falls below 10°C, the thermostat shuts OFF, the outdoor unit stops, and operation switches from cooling to fan operation.

## I-demand function

Peak power limit can be accomplished according to each user situation.

* Set on the PCB of the outdoor unit.

**Total of 11 levels**




* When set to 70% demand

## High external static pressure

***VRV*** A series outdoor unit has been achieved high external static pressure up to **78.4 Pa**.

## Active Filter Unit (Option)

Daikin's Active Filter unit can drastically reduce harmonics, preventing damages from harmonics and extending equipment lifespan.

**BACF22E5**

**Front view** **Side view**

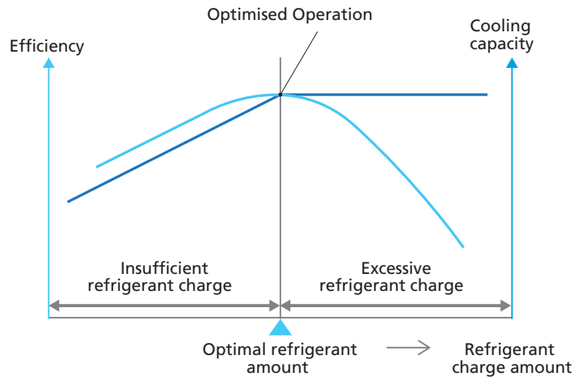
# Automatic refrigerant charge function

Contribute to optimised operation efficiency, higher quality and easier installation.

## Optimised operation efficiency

This function prevents a capacity shortage or energy loss due to excessive or insufficient refrigerant.

Automatic Refrigerant Charge Function movie



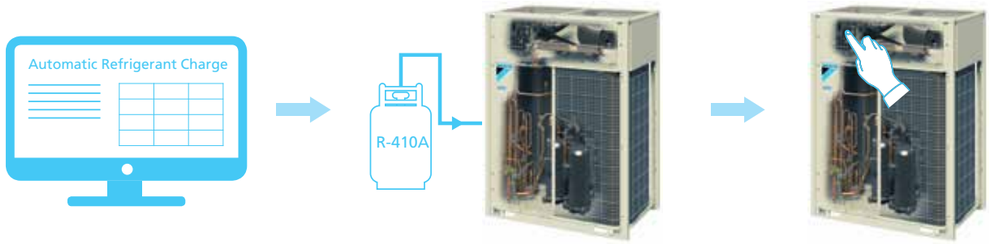

## Higher quality and easier installation

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.

**1** Calculation of necessary refrigerant amount from design drawing

**2** Pre-charge of refrigerant

**3** 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

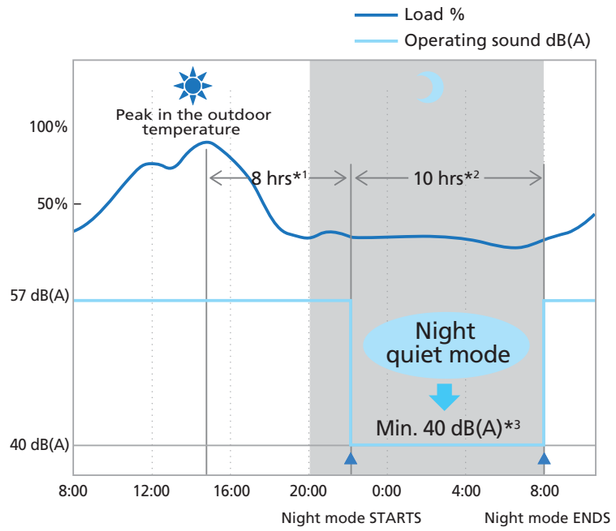
* There are conditions in the range of ambient temperature in which the automatic refrigerant charge can be used. Refer to the installation manual for details.
* The refrigerant amount that can be automatically charged may differ from the additional refrigerant amount that is provided from calculations,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

# Comfort & Reliability

## Comfort

### Nighttime quiet operation function

The nighttime quiet operation function automatically suppresses the nighttime operating sound by reducing operation capacity to maintain the quiet environment of the neighborhood.
Three selectable modes are available depending on the required level.

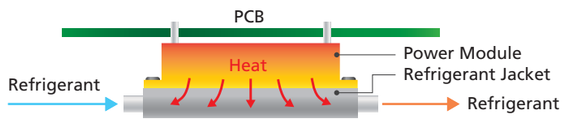



*1. Initial setting is 8 hours. Can be selected from 6, 8 and 10 hours.
*2. Initial setting is 9 hours. Can be selected from 8, 9 and 10 hours.
*3. In case of 10 HP outdoor unit.

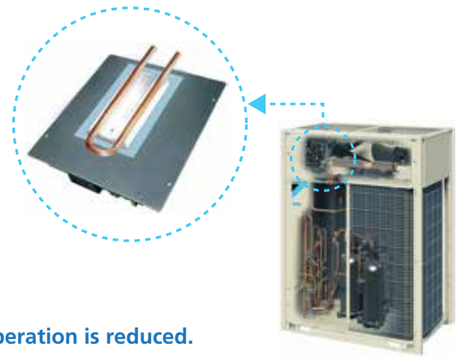
Notes: • This function is available in setting at site.
• The operating sound in quiet operation mode is the actual value measured by our company.
• The relationship of outdoor temperature (load) and time shown above is just an example.

## Reliable and stable technology

### High reliability at high ambient temperature




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.**

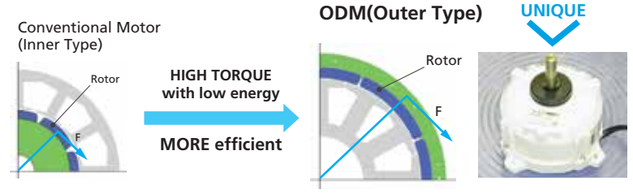
This enables

- Suitability for high ambient temperatures
- Miniaturization of electronic components



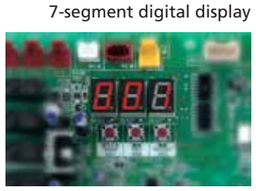
### Outer rotor DC motor (ODM)

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




### Function of information display by luminous digital tube

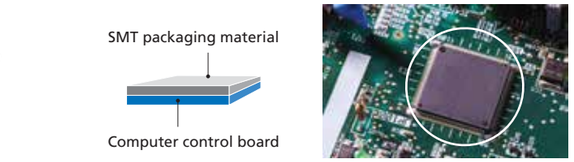
***VRV*** A series utilises a bright 7-segment digital display to convey operational status and facilitate simple installation and after-sales service.



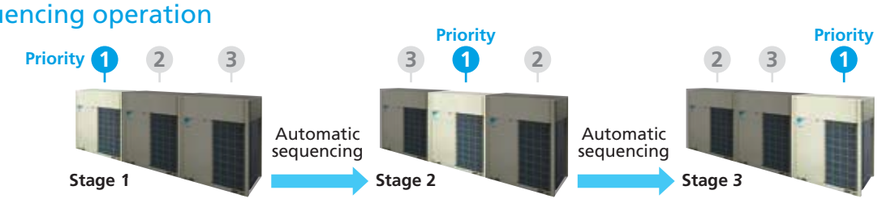

### SMT* packaging technology

- Improves the anti-clutter performance.
- Protects your computer boards from the adverse effects of sandy climates and humid weather.

* SMT: Surface mounted technology




### Automatic sequencing operation



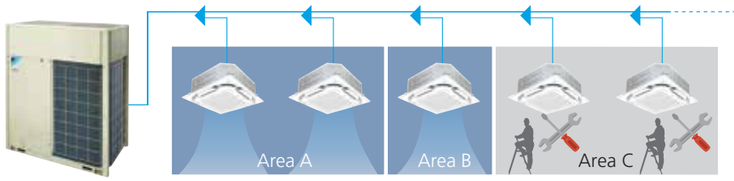

### Double backup operation functions


* For single outdoor unit system RXQ16-20AY14 models. On-site settings are required using the PCB of the outdoor unit.

### Ease of maintenance

Can provide maintenance feature* without shutting down the whole ***VRV*** system.

* Field setting is required.

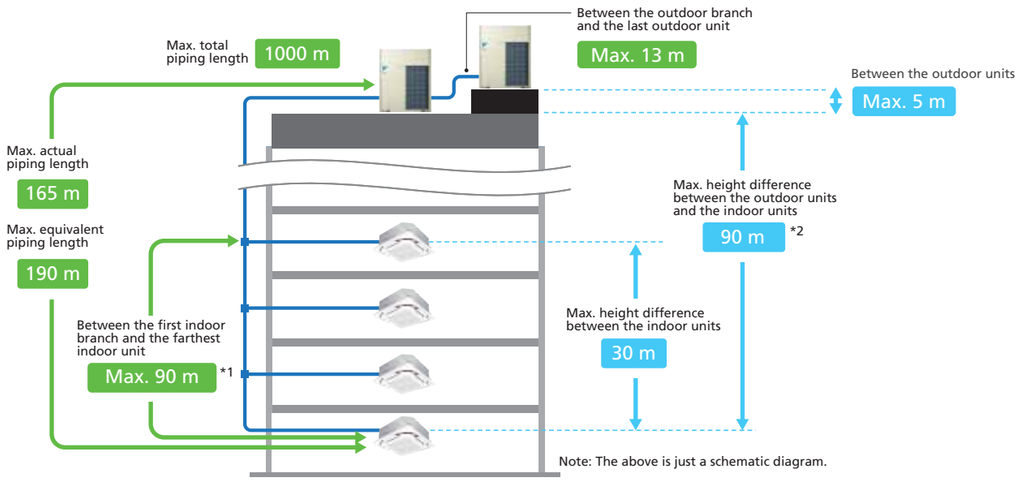


# Flexible System Design

## More options for installation location

### Long piping length

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




| | | |
|---|---|---|
| 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 height 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 height 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%**

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

Conditions of ***VRV*** indoor unit connection capacity

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

*1 For the FXF(S)(T)(R)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 43 for outdoor unit combination details.

# Anti-corrosion Technology

## Heavy anti-corrosion model

VRV A MAX

**RXQ6-20AY14W**
**RXQ18-60AMY14W**

Built for **Seaside**

## Maximize anti-corrosion and performance

### Outer casing

**Multi coating for extreme durability**

The hot-dip Zinc-Aluminum-Magnesium alloy coated sheet is optimised for even greater durability with an additional four-layer coating combination.

**4-layer coating**

- Top clear special coating
- Top coat metallic special coating
- Powder middle coating
- Primer base coating
- Hot-dip zinc-aluminum-magnesium alloy coated steel sheet

**Anti-corrosion verification by accelerated test**

Although the previous anti-corrosion model is rusted, the ***VRV*** A MAX outer casing shows no signs of corrosion in either test.

* The cross cut was made in order to simulate a severe case of coating damage and corrosion (not from regular usage).

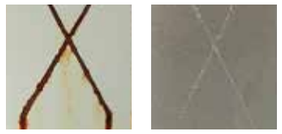
**Salt Spray Test**

Previous model | VRV A MAX

✕: Corrosion ✔: No corrosion

**CASS Test**

Previous model | VRV A MAX



✕: Corrosion ✔: No corrosion

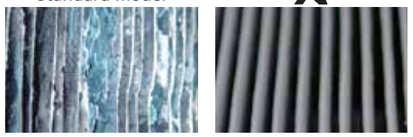
### Heat exchanger (Fin)

**Anti-corrosion technology**

The aluminum fins on ***VRV*** A MAX are manufactured with thicker anti-corrosion layer including an additional two-layer coating.

**CASS Test**

Standard model | VRV A MAX



✕: Corrosion ✔: No corrosion

- Corrosion resistance coating*
- Primer base coating*
- High corrosion resistance aluminium fin
- Aluminium fin

* outside area only

**High performance technology**

New aluminum fins are 21% thicker to maintain performance.

**Achieves both anti-corrosion and high efficiency**

**Automated fin coating line**

To prevent differences in coating thickness caused by manual application, the additional fin coatings are performed on the latest automated assembly line, maintaining high precision and quality.



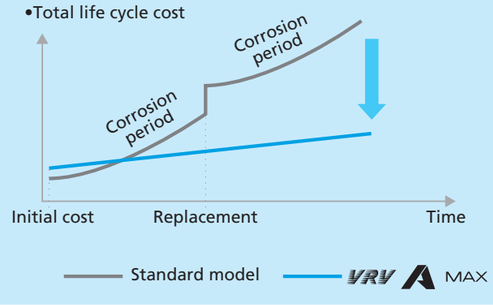
## Maximize lifespan

A third party tested the corrosion resistance (ISO 9227: salt spray tests) of the reinforced fins and casing for ISO 12944: 2018 Category C5 and confirmed them to be at very high (VH) levels.

| | |
|---|---|
| ISO 12944-6:2018 | : Paints and varnishes – Corrosion protection of steel structures by protective paint systems |
| Category C5 | : Industrial areas with high humidity and aggressive atmosphere and coastal areas with high salinity |
| Level VH | : Very high (equivalent to an expected life of 25 years *) |
| ISO 9227 | : Corrosion test in artificial atmospheres-Salt spray tests |

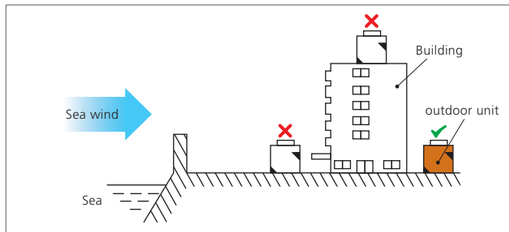
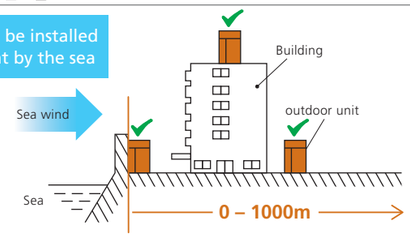
* This number of years is not the warranty period of the product. Product life depends on installation location and operating conditions.

The new model resists corrosion by salt, maintains performance, and greatly reduces life cycle costs.




VRV A MAX

## Built for seaside

| Previous model: Anti-corrosion | VRV A MAX : Heavy Anti-corrosion |
|---|---|
|   |   |
| Must be installed at least 300 m away from the sea in a location not in direct contact with sea wind. | Must be installed where the unit does not get into contact with seawater. |
| 300 - 1,000 m | **0 – 1,000 m** |

## Specifications of anti-corrosion model

| Item | Parts | | Standard model | VRV A MAX |
|---|---|---|---|---|
| 1 | Sheet metal casing | Outer casing | Hot dip zinc coated sheet + powder coating | Hot-dip zinc-aluminum-magnesium alloy-coated steel sheet + Primer base coating + Powder middle coating + Top coat metallic special coating (metallic brown) + Top clear special coating |
| 2 | Discharge grille • Protection net | | Low Density Polyethylene (LDPE) coating | |
| 3 | Fasteners | | SWCH + zinc-nickel plating | SUS410 + zinc-nickel plating |
| 4 | Heat exchanger | | Copper tube + Standard aluminum fin | Copper tube + Anti-corrosion aluminum fin |
| 5 | Aluminum fin | | Aluminum fin + Hydrophilic anti-corrosion | Aluminum fin + High corrosion resistance aluminum fin + Primer base coating (outside area only) + Corrosion resistance coating (outside area only) |
| 6 | Heat exchanger end plate | | Hot-dip zinc-aluminum-magnesium alloy-coated steel sheet without coating | Hot dip zinc coated sheet + corrosion resistance polyurethane coating |
| 7 | Fan motor stand • Electric box • Inner casing sheet metal | | Galvanized iron sheet | Hot dip zinc coated sheet + corrosion resistance polyurethane coating |
| 8 | Fan • Fan motor | | Resin fan + resin casing motor | |
| 9 | Pressure vessel (oil separator) | | Hot rolled sheet steel + painting | Hot rolled sheet steel + Double rust inhibitor coating with additional touch-up paint |
| 10 | Printed circuit board | | Both side resin coating | Expanded both side resin coating |

# Outdoor Unit Lineup

## *VRV* A Series

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

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 | | | | | | | | | | | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

## Outdoor unit combinations

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

Notes: *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 40 for notes on connection capacity of indoor units.



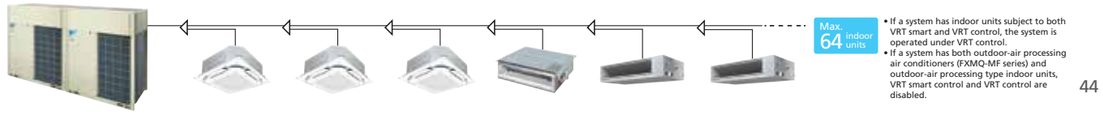


# Indoor Unit Lineup

## Enhanced range of choices

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

| Category | 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 Cassette with Sensing and Streamer | New **FXFTQ-AV4** | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Streamer | New **FXFRQ-AV4** | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Sensing | FXFSQ-AV4 | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette | FXFQ-AV4 | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Compact Multi Flow Cassette | New **FXZQ-BVM4** | VRT smart | | ● | ● | ● | ● | ● | | | | | | | | | |
| | Double Flow Cassette | New **FXCQ-BVM4** | VRT smart | | ● | ● | ● | ● | ● | ● | ● | | ● | | | | | |
| | Single Flow Cassette | FXKQ-MAVE4 | VRT | | | ● | ● | ● | | ● | | | | | | | | |
| | Ceiling Mounted Cassette Duct | FXFDQ-AV4 | VRT smart | | | | | | | ● | ● | ● | ● | | | | | |
| Ceiling Concealed Duct | Bedroom Duct | FXDBQ-AVM4 | VRT smart | | | | | ● | ● | ● | ● | | | | | | | |
| | Slim Duct (Standard) | FXDQ-PDVE4 (with drain pump) | VRT smart | (700 mm width type) | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-PDVT4 (without drain pump) | VRT smart | | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-NDVE4 (with drain pump) | VRT smart | (900/1,100 mm width type) | | | | ● | ● | ● | | | | | | | | |
| | | FXDQ-NDVT4 (without drain pump) | VRT smart | | | | | ● | ● | ● | | | | | | | | |
| | Slim Duct (Compact) | FXDQ-SPV14 | VRT | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Middle Static Pressure Duct | FXSQ-PAV4 | VRT smart | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Middle-High Static Pressure Duct | FXMQ-PAV4 | VRT smart | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | High Static Pressure Duct | FXMQ-PVM | VRT smart | | | | | | | | | | | | ● | ● | | |
| | Outdoor-Air Processing Unit | FXMQ-MFV7 | | | | | | | | | | | ● | | ● | ● | | |
| | | New **FXMQ-BFV24** | VRT | | | | | | | | ● | | | ● | ● | ● | | |
| Ceiling Suspended | Ceiling Suspended | FXHQ-MAV7 | VRT | | | | ● | | | ● | | ● | | | | | | |
| | | New **FXHQ-BVM4** | VRT | | | | | | | | | | ● | ● | | | | |
| Wall Mounted | | FXAQ-AVM4 | VRT smart | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| Floor Standing | 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 with DX-Coil | | VKM-GCVE | | Airflow rate 500-950 m³/h | | | | | | | | | | | | | | |
| Heat Reclaim Ventilator | | VAM-HVE | | Airflow rate 150-2000 m³/h | | | | | | | | | | | | | | |
| Air Handling Unit | | AHUR | | 6–120 HP | | | | | | | | | | | | | | |




- 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 (FXMQ-MF series) and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.

# Outdoor Units

## *VRV* A Series

## Specifications

| MODEL | | | RXQ6AY14(W) | RXQ8AY14(W) | RXQ10AY14(W) | RXQ12AY14(W) | RXQ14AY14(W) | RXQ16AY14(W) | RXQ18AY14(W) | RXQ20AY14(W) | RXQ18AMY14(W) | RXQ20AMY14(W) | RXQ22AMY14(W) | RXQ24AMY14(W) | RXQ26AMY14(W) | RXQ28AMY14(W) | RXQ30AMY14(W) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination units | | | — | — | — | — | — | — | — | — | RXQ8AY14(W) | RXQ8AY14(W) | RXQ10AY14(W) | RXQ12AY14(W) | RXQ12AY14(W) | RXQ12AY14(W) | RXQ12AY14(W) |
| | | | — | — | — | — | — | — | — | — | RXQ10AY14(W) | RXQ12AY14(W) | RXQ12AY14(W) | RXQ12AY14(W) | RXQ14AY14(W) | RXQ16AY14(W) | RXQ18AY14(W) |
| 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) (Metallic brown *1) | | | | | | | | Ivory white (5Y7.5/1) (Metallic brown *1) | | | | | | |
| Compressor | Type | | Hermetically sealed scroll type | | | | | | | | Hermetically sealed scroll type | | | | | | |
| | 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 (180 *1) | | 185 (195 *1) | | 215 (235 *1) | 260 (280 *1) | | 285 (310 *1) | 175+185 (180+195 *1) | | 185+185 (195+195 *1) | | 185+215 (195+235*1) | 185+260 (195+280 *1) | |
| 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 | | | | | | |
| | 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) | | |
| | Gas | mm | ϕ19.1 (Brazing) | | ϕ22.2 (Brazing) | ϕ28.6 (Brazing) | | | | ϕ28.6 (Brazing) | | | ϕ34.9 (Brazing) | | | | |

| MODEL | | | RXQ32AMY14(W) | RXQ34AMY14(W) | RXQ36AMY14(W) | RXQ38AMY14(W) | RXQ40AMY14(W) | RXQ42AMY14(W) | RXQ44AMY14(W) | RXQ46AMY14(W) | RXQ48AMY14(W) | RXQ50AMY14(W) | RXQ52AMY14(W) | RXQ54AMY14(W) | RXQ56AMY14(W) | RXQ58AMY14(W) | RXQ60AMY14(W) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination units | | | RXQ14AY14(W) | RXQ16AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ20AY14(W) | RXQ12AY14(W) | RXQ12AY14(W) | RXQ14AY14(W) | RXQ14AY14(W) | RXQ14AY14(W) | RXQ16AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ20AY14(W) |
| | | | RXQ18AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ20AY14(W) | RXQ20AY14(W) | RXQ12AY14(W) | RXQ12AY14(W) | RXQ14AY14(W) | RXQ16AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ20AY14(W) | RXQ20AY14(W) |
| | | | — | — | — | — | — | RXQ18AY14(W) | RXQ20AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ18AY14(W) | RXQ20AY14(W) | RXQ20AY14(W) | RXQ20AY14(W) |
| 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) (Metallic brown *1) | | | | | | | Ivory white (5Y7.5/1) (Metallic brown *1) | | | | | | | |
| Compressor | Type | | Hermetically sealed scroll type | | | | | | | Hermetically sealed scroll type | | | | | | | |
| | 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)+(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 (235+280*1) | 260+260 (280+280 *1) | | 260+285 (280+310*1) | 285+285 (310+310*1) | 185+185+260 (195+195+280 *1) | 185+185+285 (195+195+310*1) | 215+215+260 (235+235+280*1) | 215+260+260 (235+280+280 *1) | | 260+260+260 (280+280+280 *1) | | 260+260+285 (280+280+310*1) | 260+285+285 (280+310+310 *1) | 285+285+285 (310+310+310 *1) |
| 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 | | | | | | | |
| | 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) | | | | | | | |
| | Gas | mm | ϕ34.9 (Brazing) | | ϕ41.3 (Brazing) | | | | | ϕ41.3 (Brazing) | | | | | | | |

Notes: Specifications are based on the following conditions;
- •Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height 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.

Note: *1. Models with (W) are the outdoor units with anti-corrosion specifications. For details, refer to pages 41 - 42 for more information.

# VRV S High Seasonal Efficiency SERIES

## The Ideal Air Conditioning System for Residential Houses, Small Offices and Shops

**Cooling Only**
**4 HP – 9 HP**
(11.2 kW) (24 kW)

Presentation Movie

**RSUQ4-6AVM4**
**RSUQ7-9AYM4**







## The *VRV* S High Seasonal Efficiency Series concept

New ***VRV*** S High Seasonal Efficiency Series achieves higher energy efficiency with a variety of function for comfort and high performance. A wide range of options for installation location and application are easily achieved by the low height casing, long piping length and other features.

**Energy savings & comfort**

**High performance & reliability**

**Design flexibility of installation**

### Energy savings & comfort

- ✓ Higher energy efficiency
- ✓ VRT Smart Control
- ✓ Quiet operation

### High performance & reliability

- ✓ Extended operation range up to 52°C
- ✓ High voltage shield PCB
- ✓ Automatic refrigerant charge function

### Design flexibility of installation

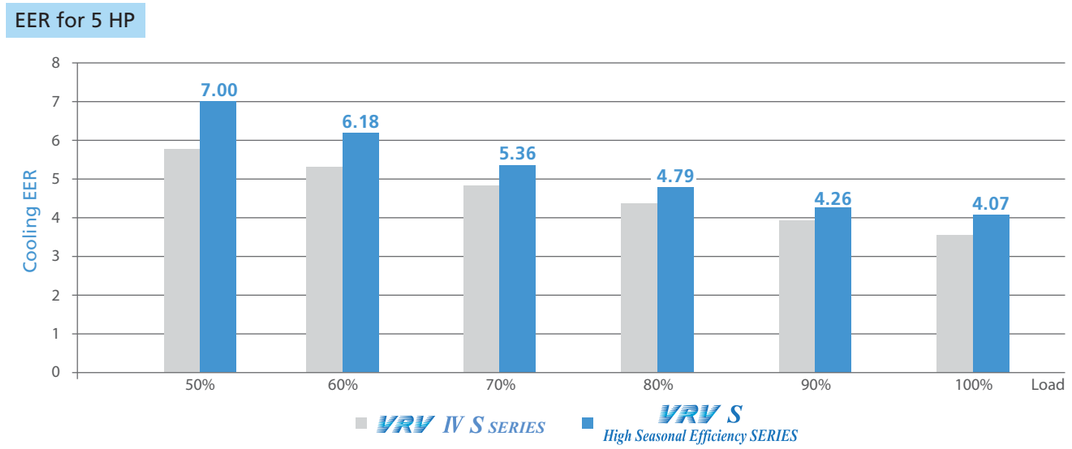
- ✓ The high external static pressure of 40 Pa enables installation in small installation spaces where the airflow direction needs to be diverted to avoid short circuits.
- ✓ Low height casing design
- ✓ Increased actual piping length up to 120 m

# Energy Savings & Comfort

## Energy savings

### High seasonal efficiency

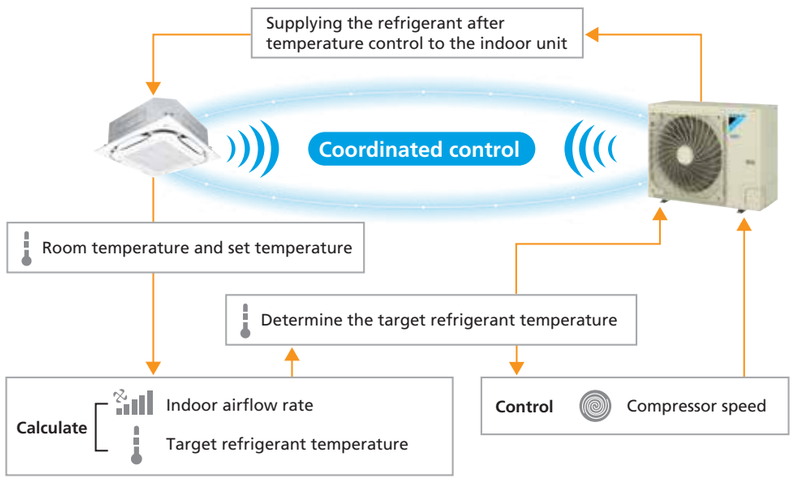
The VRT Smart Control enables improvements on efficiency during low load operation, achieving high seasonal efficiency.




### VRT Smart Control

VRT Smart function is available in the ***VRV*** S High Seasonal Efficiency Series for the first time. Coordination between indoor and outdoor units minimizes energy consumption by optimising capacity to meet actual operation load.

Variable Refrigerant Temperature




Notes: • For the classification of indoor units (VRT smart control and VRT control), refer to the indoor unit lineup.
• 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 (FXMQ-MF series) and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.



## Comfort

### Quiet operation

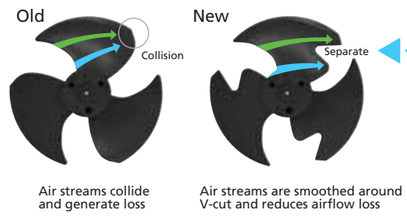
#### Low operation sound

New fan and bell mouth help enable low operation sound.

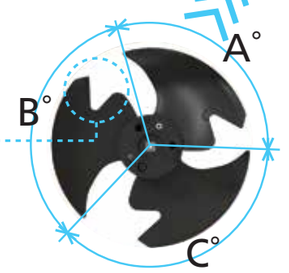
dB(A)

| Cooling | 4 HP | 5 HP | 6 HP | 7 HP | 8 HP | 9 HP |
|---|---|---|---|---|---|---|
| New | 51 | 51 | 52 | 58 | 59 | 60 |

#### V-cut & irregular pitch propeller fan




The fan's V-cut enables streamlined and effective airflow.



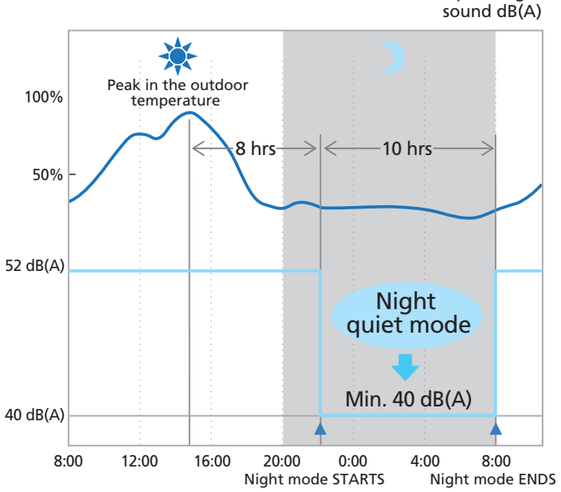

Irregular blade pitch also contributes to reduced airflow noise.

A°< B°< C°

#### Nighttime quiet operation function

The nighttime quiet operation function automatically suppresses the nighttime operating sound by reducing operation capacity to maintain the quiet environment of the neighborhood. Three selectable modes are available depending on the required level.
This function is suitable for use in residential areas.

| Cooling | Night Quiet Mode |
|---|---|
| RSUQ4/5/6A | Min. 40 dB(A) |
| RSUQ7/8/9A | Min. 45 dB(A) |



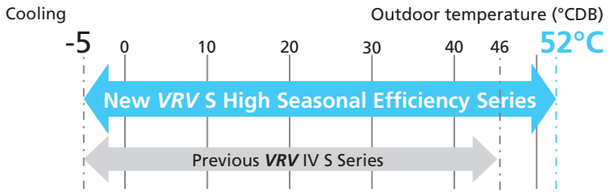

Notes: • This function is available in setting at site.
• The operating sound in quiet operation mode is the actual value measured by our company.
• The relationship of outdoor temperature (load) and time shown above is just an example.
• In case of 4-6 HP outdoor unit

# High Performance & Reliability

## High temperature operation

### Extended operation range up to 52°C

The outdoor operation temperature range is now extended to 52ºC.
This enables reliable operation even under high temperature conditions and a wider choice of installation locations.



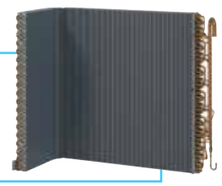

The refrigerant-cooled PCB and large 3-row heat exchanger raise the maximum cooling outdoor operation temperature from 46°C to 52°C.

**Refrigerant cooled PCB**

Daikin's unique refrigerant cooling helps maintain high cooling capacity even during high outdoor temperatures.

**New heat exchanger**

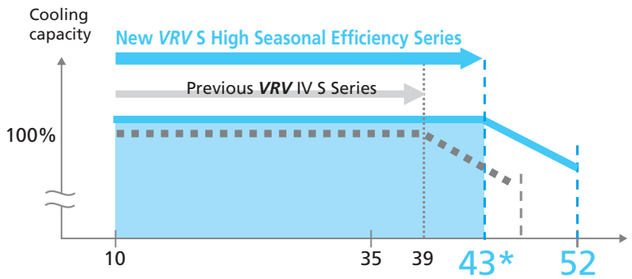
- 2-sided 3-row
- Heat exchanger area **68%UP** (4,5 HP model only)



### Keep rated cooling capacity in high outdoor temperature up to 43°C*

Rated cooling capacity can be maintained even when outdoor temperature is up to 43°C*.

*Rated cooling capacity for 9 HP is up to 42°C.



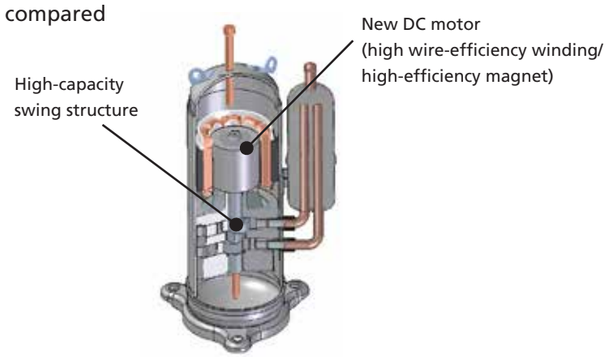

The large heat exchanger ensures sufficient cooling capacity even in high ambient temperatures.



## New swing compressor

### High efficiency, high capacity DC inverter swing compressor

The new compressors offer higher performance compared to that of conventional scroll compressors.




#### Improved performance

The new DC motor designed with small-diameter bearing and improved efficiency during low-speed operation has improved seasonal efficiency.

## High voltage shield PCB (4-6 HP model only)

The high voltage shield PCB protects the electrical parts and prevents malfunctions at the highest voltage of 440 V.

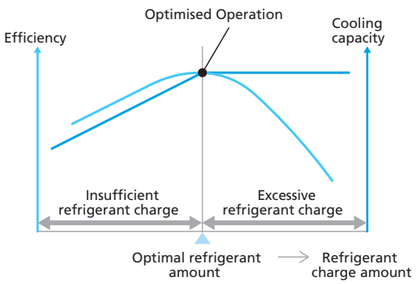

* Continuous operation range is 198 to 264 V.

## Automatic refrigerant charge function

Contribute to optimised operation efficiency, higher quality and easier installation.

### Optimised operation efficiency

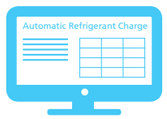
This function prevents a capacity shortage or energy loss due to excessive or insufficient refrigerant.




### Higher quality and easier installation

The automatic refrigerant charge function automates the charging of the proper refrigerant amount and easy start by pressing one button.

**1** Calculation of necessary refrigerant amount from design drawing




**2** 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

* Must use automatic refrigerant charge function. Refer to installation manual for details.

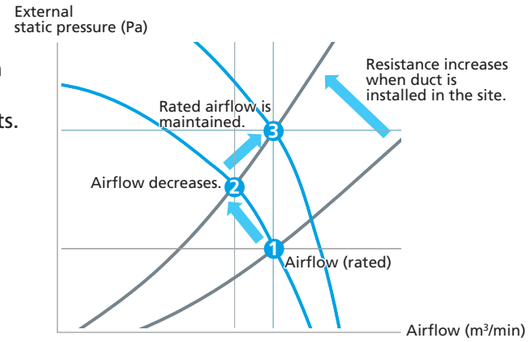
# Design Flexibility of Installation

## No short circuits

### High external static pressure up to 40 Pa and automatic adjustment of external static pressure

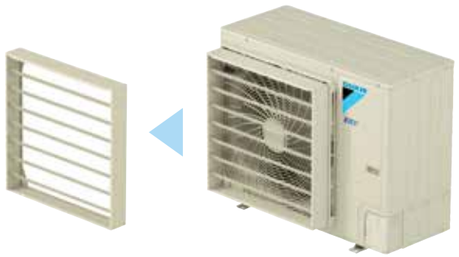
The new ***VRV*** S High Seasonal Efficiency Series outdoor unit has been achieved high external static pressure up to 40 Pa, realizing stable operation in small installation sites where the air direction adjustment grille or duct is used to avoid short circuits.

The external static pressure automatic adjustment function maintains rated airflow and capacity by automatically adjusting the external static pressure during the test operation to suit the resistance of the installation site.



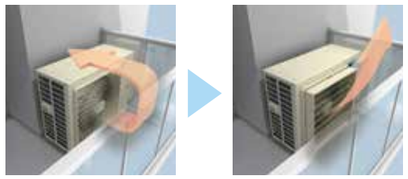

### Optimum airflow direction with the optional air direction adjustment grille

When discharged air is blocked by some obstacle, the optional air direction adjustment grille can divert the airflow to one of 4 directions (up, down, left or right) to avoid the obstacle.

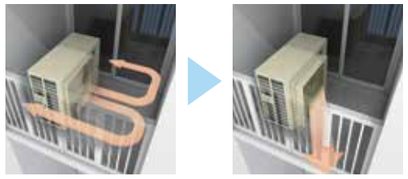


Air direction adjustment grille (option)

Wind is diverted upwards.

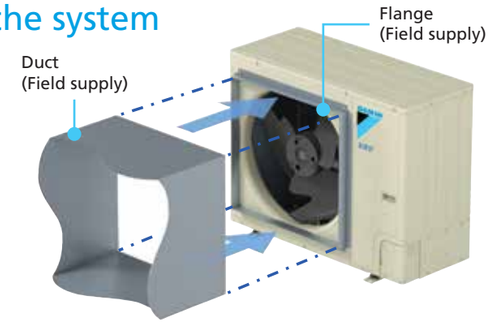


Wind is diverted sideways.



### Duct installation to stabilize the system

When the obstacle is not avoidable by the air direction adjustment grille, installing a field-supplied duct can bypass the obstacle. In this way, installation of the outdoor unit is possible in places like behind an advertising board.

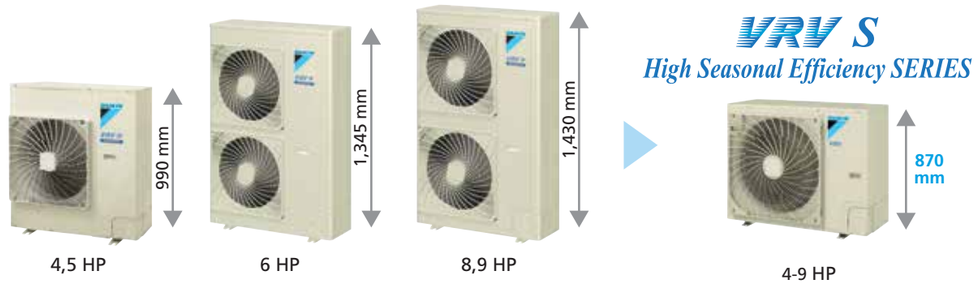





## Low height casing design

The new design has been optimised for the ***VRV*** S High Seasonal Efficiency Series with the height of all models reduced to only 870 mm. This low height casing design provides occupants with a clear, unobstructed view of the scenery.

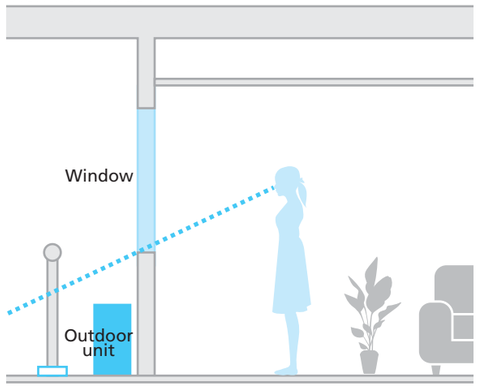
Previous ***VRV*** IV S series




- Ideal solution that minimises both visual and sound impact
- Can be installed in a wide variety of locations and applications
- No space required for multiple outdoor units

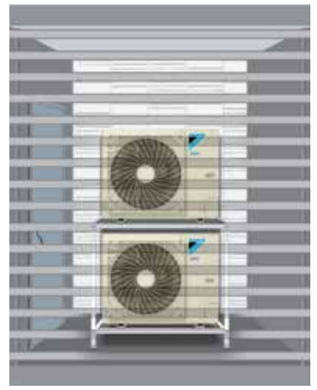
View from outside

View from inside




### Double-stacking installation possible

The low height casing design allows for compact double-stacking of outdoor units to maximize utilization of installation space.



# Design Flexibility of Installation

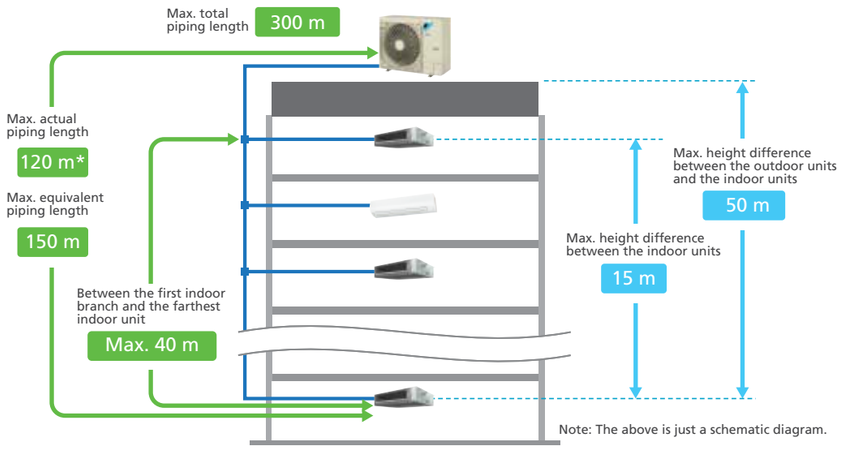
## Increased actual piping length up to 120 m*

Actual piping length increased by 20% allows for various installation!

Previous ***VRV*** IV S series

100 m ▶ **VRV S** *High Seasonal Efficiency SERIES* **120 m***

Installation on the rooftop of residential apartments




Note: The above is just a schematic diagram.

| | | | 4 HP | 5-9 HP |
|---|---|---|---|---|
| Maximum allowable piping length | Actual piping length (Equivalent) | | 120 m* (150 m) | 120 m* (150 m) |
| | Total piping length | | 300 m | 300 m |
| | Between the first indoor branch and the farthest indoor unit | | 40 m | 40 m |
| Maximum allowable height difference | Between the indoor units | | 10 m | 15 m |
| | Between the outdoor units and the indoor units | If the outdoor unit is above. | 50 m | 50 m |
| | | If the outdoor unit is below. | 40 m | 40 m |

* Must use automatic refrigerant charge function.
Refer to installation manual for details.

Installation on balconies of residential apartments

One outdoor unit can provide comfort for the whole house



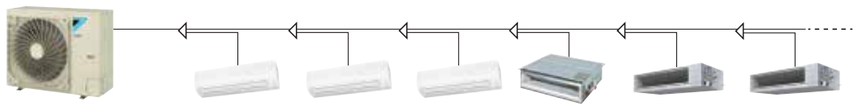
# Indoor Unit Lineup



## Wide variety of indoor units

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

| Category | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Capacity Index | 20 | 25 | 31.25 | 40 | 50 | 62.5 | 80 | 100 | 125 | 140 | 200 | 250 |
| Ceiling Mounted Cassette | Round Flow Cassette with Sensing and Streamer | New **FXFTQ-AV4** | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | |
| | Round Flow Cassette with Streamer | New **FXFRQ-AV4** | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | |
| | Round Flow Cassette with Sensing | FXFSQ-AV4 | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | |
| | Round Flow Cassette | FXFQ-AV4 | VRT smart | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | |
| | Compact Multi Flow Cassette | New **FXZQ-BVM4** | VRT smart | | ● | ● | ● | ● | ● | | | | | | | |
| | Double Flow Cassette | New **FXCQ-BVM4** | VRT smart | | ● | ● | ● | ● | ● | ● | ● | | ● | | | |
| | Single Flow Cassette | FXKQ-MAVE4 | VRT | | | ● | ● | ● | | ● | | | | | | |
| | Ceiling Mounted Cassette Duct | FXFDQ-AV4 | VRT smart | | | | | | | ● | ● | ● | ● | | | |
| Ceiling Concealed Duct | Bedroom Duct | FXDBQ-AVM4 | VRT smart | | | | | ● | ● | ● | ● | | | | | |
| | Slim Duct (Standard) | FXDQ-PDVE4 (with drain pump) | VRT smart | (700 mm width type) | ● | ● | ● | | | | | | | | | |
| | | FXDQ-PDVT4 (without drain pump) | VRT smart | (700 mm width type) | ● | ● | ● | | | | | | | | | |
| | | FXDQ-NDVE4 (with drain pump) | VRT smart | 900/1,100 mm width type | | | | ● | ● | ● | | | | | | |
| | | FXDQ-NDVT4 (without drain pump) | VRT smart | 900/1,100 mm width type | | | | ● | ● | ● | | | | | | |
| | Slim Duct (Compact) | FXDQ-SPV14 | VRT | | ● | ● | ● | ● | ● | ● | | | | | | |
| | Middle Static Pressure Duct | FXSQ-PAV4 | VRT smart | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | |
| | Middle-High Static Pressure Duct | FXMQ-PAV4 | VRT smart | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | |
| | High Static Pressure Duct | FXMQ-PVM | VRT smart | | | | | | | | | | | | ● | ● |
| | Outdoor-Air Processing Unit | FXMQ-MFV7 | | | | | | | | | | | ● | | ● | |
| | | New **FXMQ-BFV24** | VRT | | | | | | | | ● | | | ● | ● | ● |
| Ceiling Suspended | Ceiling Suspended | FXHQ-MAV7 | VRT | | | | ● | | | ● | | ● | | | | |
| | | New **FXHQ-BVM4** | VRT | | | | | | | | | | ● | ● | | |
| Wall Mounted | | FXAQ-AVM4 | VRT smart | | ● | ● | ● | ● | ● | ● | | | | | | |
| Floor Standing | 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-HVE | | Airflow rate 150-2000 m³/h | | | | | | | | | | | | |



Max. 14 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 (FXMQ-MF series) and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.

# Outdoor Units

## *VRV* S High Seasonal Efficiency Series

### Specifications

| MODEL | | | RSUQ4AVM4 | RSUQ5AVM4 | RSUQ6AVM4 | RSUQ7AYM4 | RSUQ8AYM4 | RSUQ9AYM4 |
|---|---|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 Hz | | | 3-phase, 380-415 V, 50 Hz | | |
| Cooling capacity | | Btu/h | 38,200 | 47,800 | 54,600 | 68,200 | 76,400 | 81,900 |
| | | kW | 11.2 | 14.0 | 16.0 | 20.0 | 22.4 | 24.0 |
| Power consumption | | kW | 2.49 | 3.44 | 4.10 | 5.46 | 6.61 | 7.21 |
| Capacity control | | % | 23 to 100 | 16 to 100 | | 9 to 100 | | |
| Casing colour | | | Ivory white (5Y7.5/1) | | | | | |
| Compressor | Type | | Hermetically sealed swing type | | | | | |
| | Motor output | kW | 2.0 | 3.1 | 3.5 | 1.9 | 3.2 | 3.8 |
| Airflow rate | | $m^3$/min | 87 | 84 | 87 | 123 | | 137 |
| Dimensions (H×W×D) | | mm | 870×1,100×460 | | | | | |
| Machine weight | | kg | 95 | 98 | | 115 | | |
| Sound level | | dB(A) | 51 | | 52 | 58 | 59 | 60 |
| Operation range | | °CDB | -5 to 52 | | | | | |
| Refrigerant | Type | | R-410A | | | | | |
| | Charge | kg | 4.0 | 4.2 | | 5.4 | | |
| Piping connections | Liquid | mm | ϕ 9.5 (Flare) | | | | | |
| | Gas | mm | ϕ 15.9 (Flare) | | ϕ 19.1 (Brazing) | | | ϕ 22.2 (Brazing) |

Note: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height 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 | | | RSUQ4AVM4 | RSUQ5AVM4 | RSUQ6AVM4 | RSUQ7AYM4 | RSUQ8AYM4 | RSUQ9AYM4 |
|---|---|---|---|---|---|---|---|---|
| kW | | | 11.2 | 14.0 | 16.0 | 20.0 | 22.4 | 24.0 |
| HP | | | 4 | 5 | 6 | 7 | 8 | 9 |
| Capacity index | | | 100 | 125 | 150 | 175 | 200 | 215 |
| Total capacity index of connectable indoor units | Combination(%) | 50% | 50 | 62.5 | 75 | 87.5 | 100 | 107.5 |
| | | 100% | 100 | 125 | 150 | 175 | 200 | 215 |
| | | 130% | 130 | 162.5 | 195 | 227.5 | 260 | 280 |
| Maximum number of connectable indoor units | | | 6 | 8 | 9 | 11 | 13 | 14 |

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

# *VRV* IV S SERIES

## The Ideal Air Conditioning System for Residential Houses, Small Offices and Shops

**Cooling Only**
**4 HP – 6 HP**
(11.2 kW) (16.0 kW)

**RXMQ4AVE4**
**RXMQ5-6BVM4**





## Compact & lightweight design

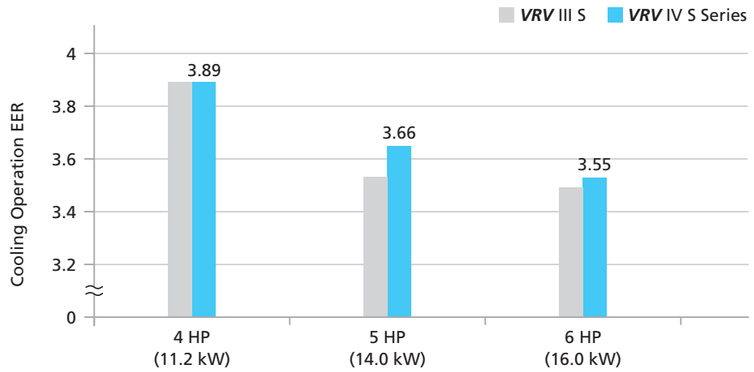
The ***VRV*** IV S series is slim and compact, with outdoor units that require minimal installation space.


| | 4 HP | 5 HP | 6 HP |
|---|---|---|---|
| Height | 990 mm | 990 mm | 990 mm |
| Product Weight | 71 kg | 76 kg | 78 kg |
| Footprint | 0.30 $m^2$ | 0.30 $m^2$ | 0.30 $m^2$ |

## Energy saving

### High Energy Efficiency Ratio (EER)

***VRV*** IV S series provides greater energy saving as compared to ***VRV*** III S series.



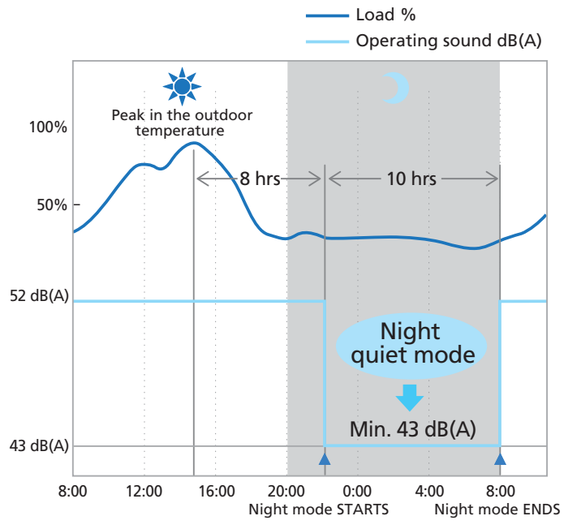

*Cooling operation conditions: Indoor temp. of 27° CDB,19° CWB, and outdoor temp. of 35° CDB.

# Comfort and Simplified Installation

## Quiet operation

### Nighttime quiet operation function

The nighttime quiet operation function automatically suppresses the nighttime operating sound by reducing operation capacity to maintain the quiet environment of the neighborhood.
Three selectable modes are available depending on the required level.
This function is suitable for use in residential areas.

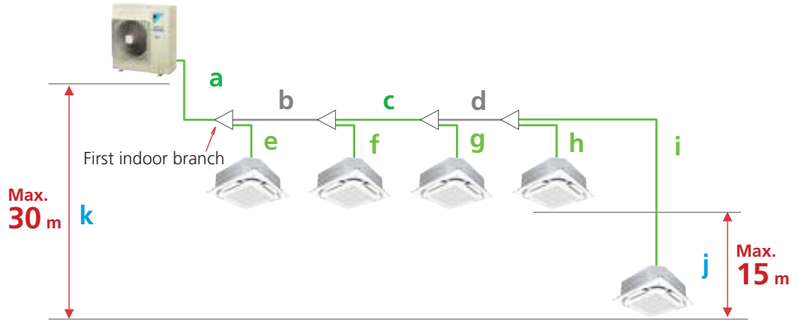



Notes: • This function is available in setting at site.
• The operating sound in quiet operation mode is the actual value measured by our company.
• The relationship of outdoor temperature (load) and time shown above is just an example.
• In case of 4 HP outdoor unit

## Makes the long piping design possible

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

Actual piping length
**Max. 70 m**
Equivalent piping length
**Max. 90 m**
Total piping length
**Max. 300 m**

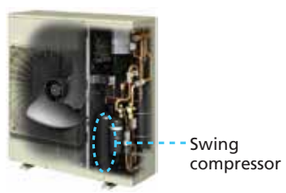



| | | | 4 HP | 5,6 HP |
|---|---|---|---|---|
| Max. allowable piping length | Actual refrigerant piping length (Equivalent) | a+b+c+d+i | 50 m (65 m) | 70 m (90 m) |
| | Total piping length | a+b+c+d+e+f+g+h+i | 250 m | 300 m |
| | Between the first indoor branch and the farthest indoor unit | b+c+d+i | 40 m | 40 m |
| Max. allowable height difference | Between the indoor units | j | 10 m | 15 m |
| | Between the outdoor unit and the indoor unit — If the outdoor unit is above | k | 30 m | 30 m |
| | Between the outdoor unit and the indoor unit — If the outdoor unit is below | k | 30 m | 30 m |

## Technologies for efficient and quiet operation

### 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.




### Smooth air inlet bell mouth and aero spiral fan

The smooth air inlet bell mouth and the aero spiral fan work to minimize turbulence in the airflow and reduce sound.

### DC fan motor

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

# Indoor Unit Lineup

## Enhanced range of choices

New lineup

| Category | Type | | Model Name | Capacity Range | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 140 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 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 |
| | | | | Capacity Index | 20 | 25 | 31.25 | 40 | 50 | 62.5 | 80 | 100 | 125 | 140 |
| Ceiling Mounted Cassette | Round Flow Cassette with Sensing and Streamer | New | **FXFTQ-AV4** | | | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | Round Flow Cassette with Streamer | New | **FXFRQ-AV4** | | | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | Round Flow Cassette with Sensing | | FXFSQ-AV4 | | | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ |
| | Round Flow Cassette | | FXFQ-AV4 | | | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ |
| | Compact Multi Flow Cassette | New | **FXZQ-BVM4** | | ● | ● | ● | ● | ● | | | | | |
| | Double Flow Cassette | New | **FXCQ-BVM4** | | ● | ● | ● | ● | ● | ● | ● | | ● | |
| | Single Flow Cassette | | FXKQ-MAVE4 | | | ◉ | ◉ | ◉ | | ◉ | | | | |
| | Ceiling Mounted Cassette Duct | | FXFDQ-AV4 | | | | | | | ◉ | ◉ | ◉ | ◉ | |
| Ceiling Concealed Duct | Bedroom Duct | | FXDBQ-AVM4 | | | | | ◉ | ◉ | ◉ | ◉ | | | |
| | Slim Duct (Standard) | | FXDQ-PDVE4 (with drain pump) | (700 mm width type) | ◉ | ◉ | ◉ | | | | | | | |
| | | | FXDQ-PDVT4 (without drain pump) | | ◉ | ◉ | ◉ | | | | | | | |
| | | | FXDQ-NDVE4 (with drain pump) | (900/1,100 mm width type) | | | | ◉ | ◉ | ◉ | | | | |
| | | | FXDQ-NDVT4 (without drain pump) | | | | | ◉ | ◉ | ◉ | | | | |
| | Slim Duct (Compact) | | FXDQ-SPV14 | | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | | | | |
| | Middle Static Pressure Duct | | FXSQ-PAV4 | | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ |
| | Middle-High Static Pressure Duct | | FXMQ-PAV4 | | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ |
| | Outdoor-Air Processing Unit | | FXMQ-MFV7 | | | | | | | | | | ◉ | |
| | | New | **FXMQ-BFV24** | | | | | | | | ● | | | ● |
| Ceiling Suspended | Ceiling Suspended | | FXHQ-MAV7 | | | | ◉ | | | ◉ | | ◉ | | |
| | | New | **FXHQ-BVM4** | | | | | | | | | | ● | ● |
| Wall Mounted | | | FXAQ-AVM4 | | ◉ | ◉ | ◉ | ◉ | ◉ | ◉ | | | | |
| Floor Standing | 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-HVE | | Airflow rate 150-2000 m³/h | | | | | | | | | |

Max. 9 indoor units



# Outdoor Units



## *VRV* IV S Series

## Specifications

| MODEL | | | RXMQ4AVE4 | RXMQ5BVM4 | RXMQ6BVM4 |
|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220 V, 50 Hz | 1-phase, 220-240 V, 50 Hz | |
| Cooling capacity | | Btu/h | 38,200 | 47,800 | 54,600 |
| | | kW | 11.2 | 14.0 | 16.0 |
| Power consumption | | kW | 2.88 | 3.83 | 4.51 |
| Capacity control | | % | 24 to 100 | 15 to 100 | |
| Casing colour | | | Ivory white (5Y7.5/1) | | |
| Compressor | Type | | Hermetically sealed swing type | | |
| | Motor output | kW | 1.92 | 3.2 | 3.7 |
| Airflow rate | | m³/min | 76 | 81 | 80 |
| Dimensions (H×W×D) | | mm | 990×940×320 | | |
| Machine weight | | kg | 71 | 76 | 78 |
| Sound level | | dB(A) | 52 | 53 | 55 |
| Operation range | | °CDB | -5 to 46 | | |
| Refrigerant | Type | | R-410A | | |
| | Charge | kg | 2.9 | 3.4 | 4.0 |
| Piping connections | Liquid | mm | ϕ9.5 (Flare) | | |
| | Gas | | ϕ15.9 (Flare) | | 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, Height 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 | RXMQ5BVM4 | RXMQ6BVM4 |
|---|---|---|---|---|---|
| kW | | | 11.2 | 14.0 | 16.0 |
| HP | | | 4 | 5 | 6 |
| Capacity index | | | 100 | 125 | 150 |
| Total capacity index of connectable indoor units | Combination (%) | 50% | 50 | 62.5 | 75 |
| | | 100% | 100 | 125 | 150 |
| | | 130% | 130 | 162.5 | 195 |
| Maximum number of connectable indoor units | | | 6 | 8 | 9 |

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

**Cooling Only**
**6 HP (16 kW) – 48 HP (135 kW)**

**Standard Type**

Single outdoor units
**RQQ6-16TY14(E)**

Double outdoor units
**RQQ18-32TNY14(E)**

Triple outdoor units
**RQQ34-48TNY14(E)**

**Space Saving Type**

Single outdoor units
**RQQ18-20TY14(E)**

Double outdoor units
**RQQ30-40TSY14(E)**

Triple outdoor units
**RQQ42-48TSY14(E)**

* (E) : anti-corrosion model





## The *VRV* IV Q Series concept

**Reusing existing refrigerant piping minimizes installation time and cost**

**An automatic refrigerant charge function enables high quality installation**

**Improvement in capacity and greater number of indoor units**

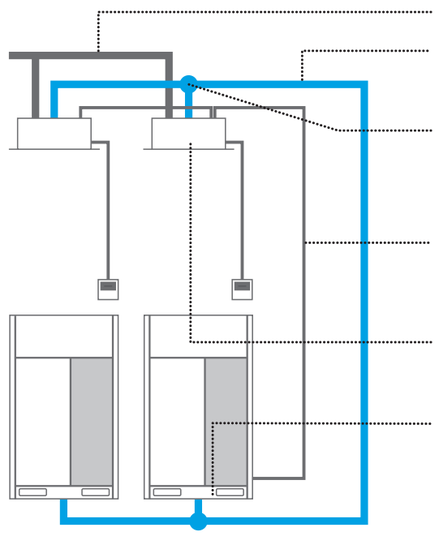
## Quick, quality and economical replacement

### Reuse

#### Simple use of existing refrigerant piping

Special equipment and work is no longer required to clean pipes. 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**

**Reuse refrigerant pipes**
Pipes used for R-22 will also work with ***VRV*** IV Q series.

**Reuse refrigerant branch pipes**
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 and indoor-outdoor wiring**
Reuse wiring when upgrading from a Daikin ***VRV*** system. In other cases, this will depend on the cable type.

**Replace indoor units**

**Replace outdoor units**

# Benefits of System Replacement

## Automatic

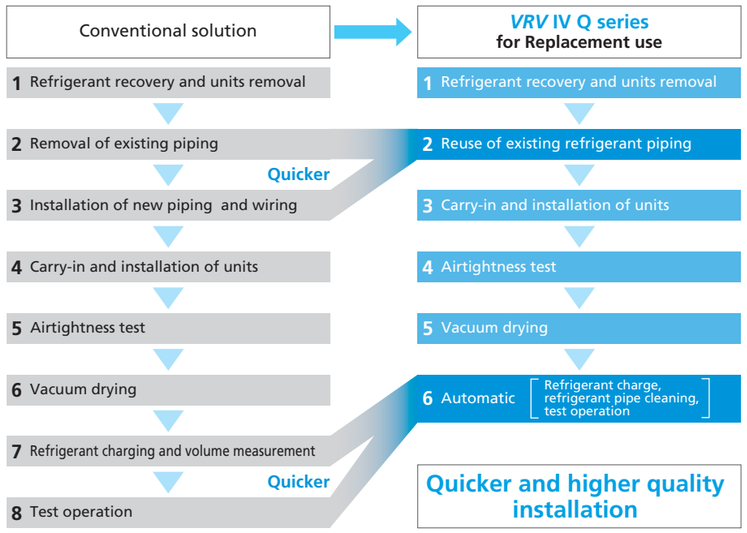
### Refrigerant charging, cleaning and test operation done with just a single switch.

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.
Furthermore, there is no need to clean inside piping as this is handled automatically by the ***VRV*** IV Q unit.

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

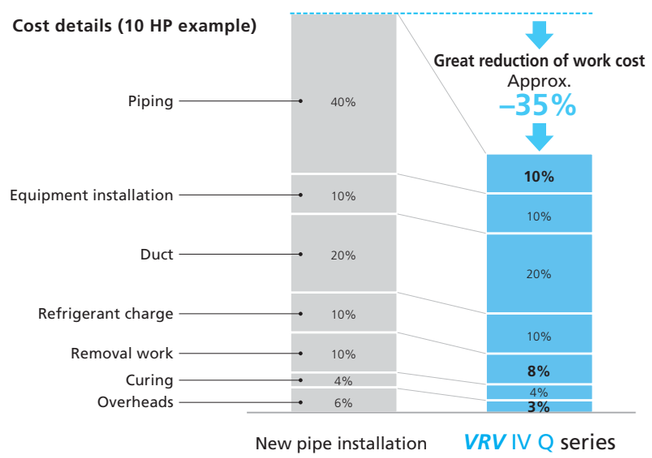
## Time saving

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




## Cost saving

By the reuse of existing piping, 35% of cost down can be realized compared to installing new pipes.

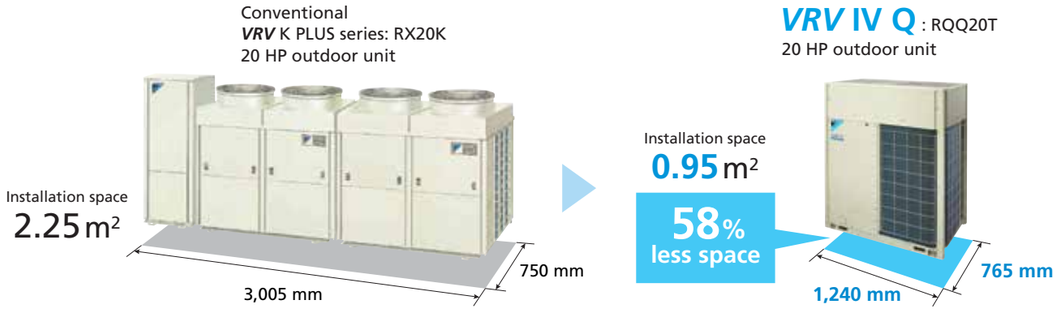




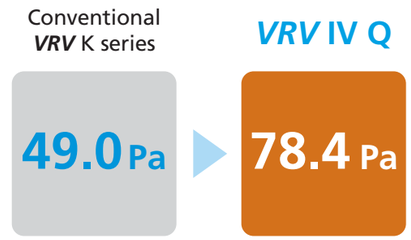

## Design flexibility

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



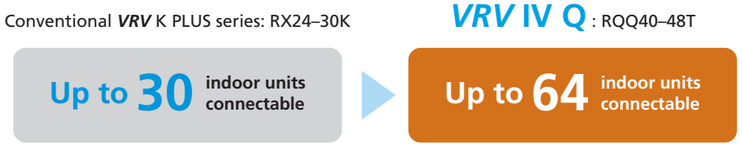

## High external static pressure 78.4 Pa




## System flexibility

An increased number of connectable indoor units in a single system

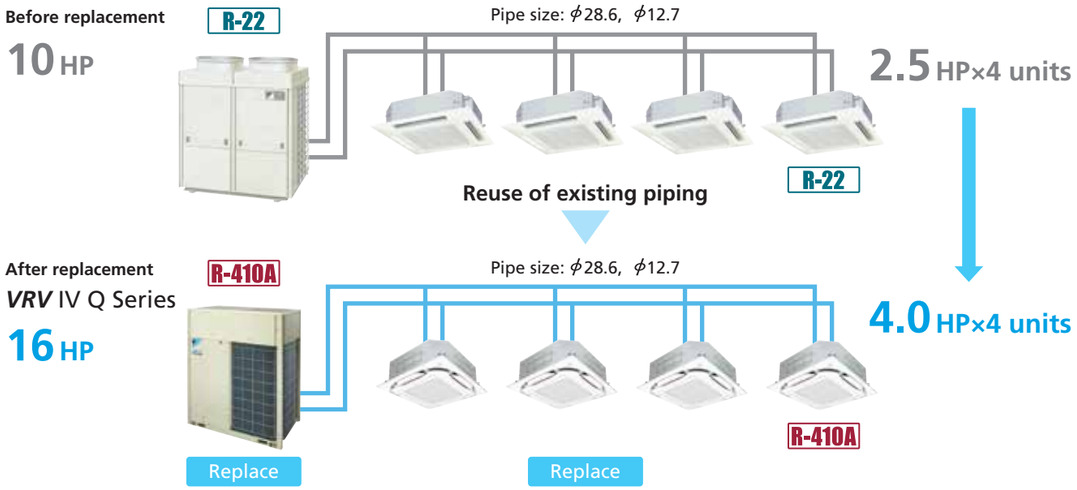
### More indoor units can be connected in a single system, enabling consolidation of existing piping!



# Benefits of System Replacement

## Enables increased capacity

***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 a 10 HP R-22 system.

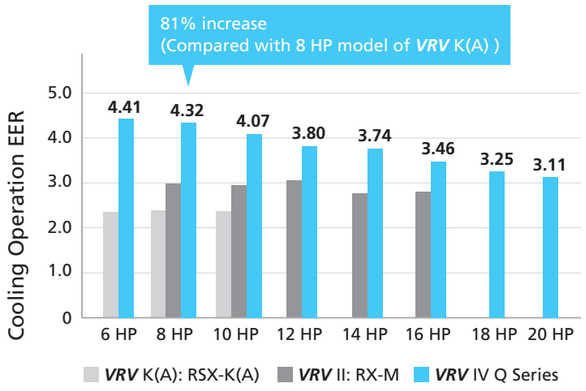



## Energy saving

### Higher Energy Efficiency Ratio (EER)

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

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




### VRT Control for optimal annual efficiency

VRT automatically adjusts refrigerant temperature to individual building and climate requirement, thus further improving annual energy efficiency and maintaining comfort.

Variable Refrigerant Temperature



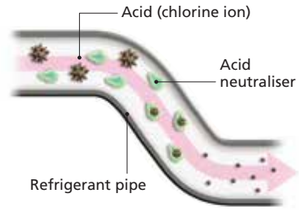
## New technology that enables use of existing piping

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

***VRV*** IV Q series only

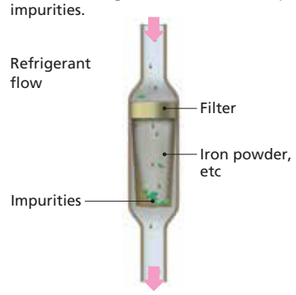
### Acid

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



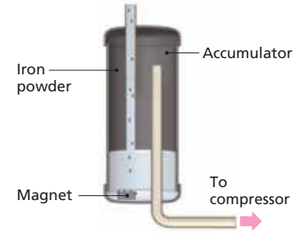

### Impurities

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



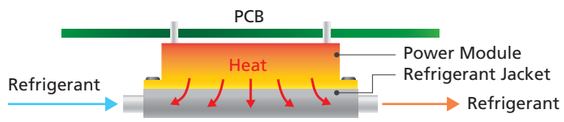

### Iron powder

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

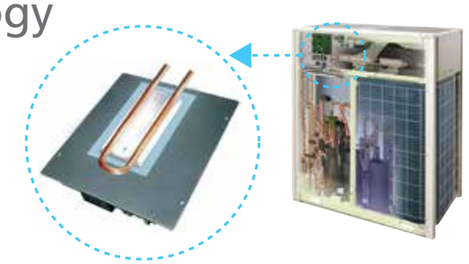



## Reliable and stable technology

### High reliability at high ambient temperatures




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.**

This enables

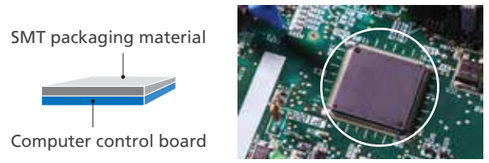
- Suitability for high ambient temperatures
- Miniaturization of electronic components

### SMT* packaging technology

- Improves the anti-clutter performance.
- Protects your computer boards from the adverse effects of sandy climates and humid weather.

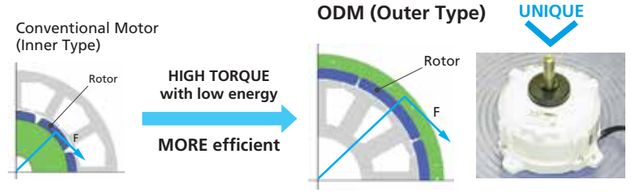
*SMT: Surface mounted technology

Computer control board surface adopting SMT packaging technology




### Outer Rotor DC Motor (ODM)

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



# Guidelines for Reuse of Existing Refrigerant Piping

## Piping limits for reuse of existing piping

Actual piping length

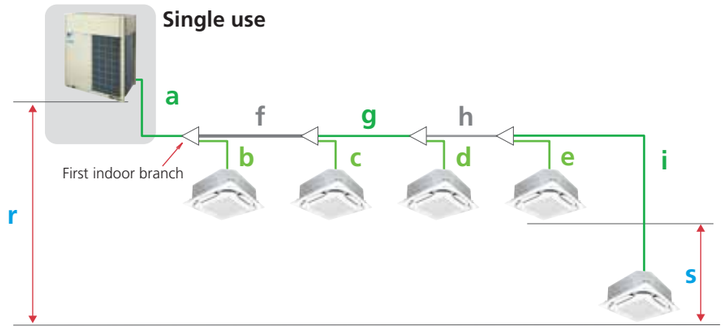
**Max. 150 m**

Equivalent piping length

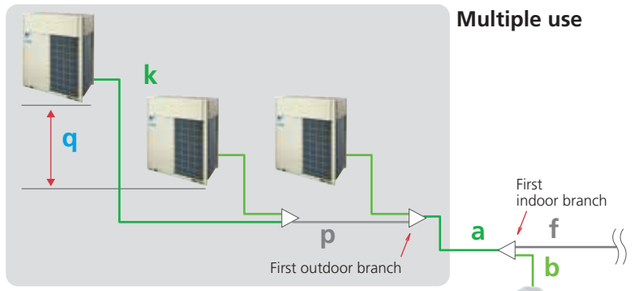
**Max. 175 m**

Total piping length

**Max. 300 m**




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




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

| | | | Piping length | Example |
|---|---|---|---|---|
| Maximum allowable piping length | Actual refrigerant piping length (Equivalent) | | 150 m (175 m) | a+f+g+h+i |
| | 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 (Equivalent) | | 10 m (13 m) | k+p |

| | | | Height difference | Example |
|---|---|---|---|---|
| Maximum allowable height 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 | X | S○● | | | X | X | X | X | S○ | ● | | | X | X | X |
| | 8 HP | X | S○ | ● | | X | X | X | X | S○ | | ● | ● | X | X | X |
| | 10 HP | X | S○ | ● | | X | X | X | X | X | S○ | | ● | X | X | X |
| | 12 HP | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● | X | X |
| | 14 HP | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● | X | X |
| | 16 HP | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● | X | X |
| | 18 HP | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | ● | X | X |
| | 20 HP | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | ● | X | X |
| | 22 HP | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | ● | X | X |
| | 24 HP | X | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● | X |
| | 26 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | ● | X |
| | 28 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | ● | X |
| | 30 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | ● | X |
| | 32 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | ● | X |
| | 34 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | ● | X |
| | 36 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● |
| | 38 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● |
| | 40 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● |
| | 42 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● |
| | 44 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● |
| | 46 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● |
| | 48 HP | X | X | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● |
| From REFNET to REFNET *1 | < 100 | X | S○● | | X | X | X | X | S○● | | X | X | X | X | X | X |
| | 100 ≤ X < 150 | X | S○● | | X | X | X | X | S○ | ● | X | X | X | X | X | X |
| | 150 ≤ X < 160 | X | S○● | | X | X | X | X | X | S○● | | | X | X | X | X |
| | 160 ≤ X < 200 | X | S○ | ● | X | X | X | X | X | S○ | ● | | X | X | X | X |
| | 200 ≤ X < 290 | X | S○ | ● | | X | X | X | X | X | S○ | ● | | X | X | X |
| | 290 ≤ X < 330 | X | X | S○● | | X | X | X | X | X | X | ● | S○ | | X | X |
| | 330 ≤ X < 420 | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● | X | X |
| | 420 ≤ X < 480 | X | X | X | S○● | | X | X | X | X | X | X | S○ | ● | X | X |
| | 480 ≤ X < 640 | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | ● | X | X |
| | 640 ≤ X < 900 | X | X | X | X | S○● | | X | X | X | X | X | X | S○ | ● | |
| | 900 ≤ X < 920 | X | X | X | X | S○ | ● | X | X | X | X | X | X | S○ | | ● |
| | 920 ≤ | X | X | X | X | S○ | ● | X | X | X | X | X | X | X | S○ | ● |
| From REFNET to indoor unit*2 | 20–40 class | S○● | | X | X | X | X | S● | | X | X | X | X | X | X | X |
| | 50 class | S○ | ● | X | X | X | X | S○ | ● | X | X | X | X | X | X | X |
| | 63-80 class | X | S○● | | X | X | X | X | S○● | | X | X | X | X | X | X |
| | 100–125 class | X | S○● | | X | X | X | X | S○ | ● | | | X | X | X | X |
| | 140 class | X | S○ | | X | X | X | X | S○ | | | | X | X | X | X |
| | 200 class | X | S○ | ● | X | X | X | X | X | S○ | | ● | | X | X | X |
| | 250 class | X | S○ | ● | X | X | X | X | X | X | S○ | | ● | X | X | X |
| | 400 class | X | X | S○ | | X | X | X | X | X | X | X | S○ | | X | X |
| | 500 class | X | X | S○ | | | X | X | X | X | X | X | S○ | | X | X |

● : 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.
X : 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 Lineup

## *VRV* IV Q Series

### Enhanced lineup to 2 types

Lineup

| | HP | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *VRV* IV Q Series | Standard Type | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | Space Saving Type | | | | | | | ● | ● | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

### 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 | |

Notes: *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 | |

Notes: *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%.



# Indoor Unit Lineup



### Wide variety of indoor units

● New lineup

| Category | Type | Model Name | Capacity Range | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 140 | 200 | 250 | 400 | 500 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 0.8 HP | 1 HP | 1.25 HP | 1.6 HP | 2 HP | 2.5 HP | 3.2 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 Cassette with Sensing and Streamer | New **FXFTQ-AV4** | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Streamer | New **FXFRQ-AV4** | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Sensing | FXFSQ-AV4 | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette | FXFQ-AV4 | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Compact Multi Flow Cassette | New **FXZQ-BVM4** | | ● | ● | ● | ● | ● | | | | | | | | | |
| | Double Flow Cassette | New **FXCQ-BVM4** | | ● | ● | ● | ● | ● | ● | ● | | ● | | | | | |
| | Single Flow Cassette | FXKQ-MAVE4 | | | ● | ● | ● | | ● | | | | | | | | |
| | Ceiling Mounted Cassette Duct | FXFDQ-AV4 | | | | | | | ● | ● | ● | ● | | | | | |
| Ceiling Concealed Duct | Bedroom Duct | FXDBQ-AVM4 | | | | | ● | ● | ● | ● | | | | | | | |
| | Slim Duct (Standard) | FXDQ-PDVE4 (with drain pump) | (700 mm width type) | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-PDVT4 (without drain pump) | | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-NDVE4 (with drain pump) | (900/1,100 mm width type) | | | | ● | ● | ● | | | | | | | | |
| | | FXDQ-NDVT4 (without drain pump) | | | | | ● | ● | ● | | | | | | | | |
| | Slim Duct (Compact) | FXDQ-SPV14 | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Middle Static Pressure Duct | FXSQ-PAV4 | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Middle-High Static Pressure Duct | FXMQ-PAV4 | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | High Static Pressure Duct | FXMQ-PVM | | | | | | | | | | | | ● | ● | | |
| | Outdoor-Air Processing Unit | FXMQ-MFV7 | | | | | | | | | | ● | | ● | ● | | |
| | | New **FXMQ-BFV24** | | | | | | | | ● | | | ● | ● | ● | | |
| Ceiling Suspended | Ceiling Suspended | FXHQ-MAV7 | | | | ● | | | ● | | ● | | | | | | |
| | | New **FXHQ-BVM4** | | | | | | | | | | ● | ● | | | | |
| Wall Mounted | | FXAQ-AVM4 | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| Floor Standing | Floor Standing | FXLQ-MAVE4 | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Concealed Floor Standing | FXNQ-MAVE4 | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Floor Standing Duct | FXVQ-NY14 | | | | | | | | | | ● | | ● | ● | ● | ● |
| Heat Reclaim Ventilator with DX-Coil | | VKM-GCVE | | Airflow rate 500-950 m³/h | | | | | | | | | | | | | |
| Heat Reclaim Ventilator | | VAM-HVE | | Airflow rate 150-2000 m³/h | | | | | | | | | | | | | |

# Outdoor Units

## VRV IV Q Series

## Specifications

### Standard Type

| MODEL | | | RQQ6TY14(E) | RQQ8TY14(E) | RQQ10TY14(E) | RQQ12TY14(E) | RQQ14TY14(E) | RQQ16TY14(E) |
|---|---|---|---|---|---|---|---|---|
| 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 | 3.63 | 5.18 | 6.88 | 8.82 | 10.7 | 13.0 |
| Capacity control | | % | 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 (H×W×D) | | mm | 1,657x930x765 | | | | 1,657x1,240x765 | |
| Machine weight | | kg | 185 | | 195 | | 285 | |
| Sound level | | dB(A) | 55 | 56 | 57 | 59 | 60 | 61 |
| Operation range | | °CDB | -5 to 49 | | | | | |
| Refrigerant | Type | | R-410A | | | | | |
| | Charge | kg | 5.9 | | 6.0 | 6.3 | 10.3 | 10.4 |
| Piping connections | Liquid | mm | ϕ9.5(Brazing) | | | ϕ12.7(Brazing) | | |
| | Gas | mm | ϕ19.1(Brazing) | | ϕ22.2(Brazing) | ϕ28.6(Brazing) | | |

| MODEL | | | 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 | | | | | | | |
| Cooling capacity | | Btu/h | 172,000 | 191,000 | 210,000 | 229,000 | 251,000 | 268,000 | 290,000 | 307,000 |
| | | kW | 50.4 | 55.9 | 61.5 | 67.0 | 73.5 | 78.5 | 85.0 | 90.0 |
| Power consumption | | kW | 12.1 | 14.0 | 15.7 | 17.6 | 19.5 | 21.8 | 23.7 | 26.1 |
| Capacity control | | % | 8-100 | | | | 6-100 | | 5-100 | |
| Casing colour | | | Ivory white (5Y7.5/1) | | | | | | | |
| Compressor | Type | | Hermetically Sealed Scroll Type | | | | | | | |
| | Motor output | kW | (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 | 157+165 | 157+178 | 165+178 | 178+178 | 178+233 | | 233+233 | |
| Dimensions (H×W×D) | | mm | (1,657x930x765)+(1,657x930x765) | | | | (1,657x930x765)+(1,657x1,240x765) | | (1,657x1,240x765)+(1,657x1,240x765) | |
| Machine weight | | kg | 185+195 | | 195+195 | | 195+285 | | 285+285 | |
| Sound level | | dB(A) | 60 | 61 | | 62 | 63 | | 64 | |
| Operation range | | °CDB | -5 to 49 | | | | | | | |
| Refrigerant | Type | | R-410A | | | | | | | |
| | Charge | kg | 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 | ϕ15.9(Brazing) | | | | ϕ19.1(Brazing) | | | |
| | Gas | mm | ϕ28.6(Brazing) | | | ϕ34.9(Brazing) | | | | |

| MODEL | | | RQQ34TNY14(E) | RQQ36TNY14(E) | RQQ38TNY14(E) | RQQ40TNY14(E) | RQQ42TNY14(E) | RQQ44TNY14(E) |
|---|---|---|---|---|---|---|---|---|
| Combination units | | | RQQ10TY14(E) | RQQ12TY14(E) | RQQ8TY14(E) | RQQ12TY14(E) | RQQ12TY14(E) | RQQ12TY14(E) |
| | | | RQQ12TY14(E) | RQQ12TY14(E) | RQQ12TY14(E) | RQQ12TY14(E) | RQQ14TY14(E) | RQQ16TY14(E) |
| | | | RQQ12TY14(E) | RQQ12TY14(E) | RQQ18TY14(E) | RQQ16TY14(E) | RQQ16TY14(E) | RQQ16TY14(E) |
| Power supply | | | 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 |
| | | kW | 95.0 | 101 | 106 | 112 | 119 | 124 |
| Power consumption | | kW | 24.5 | 26.5 | 29.4 | 30.6 | 32.5 | 34.8 |
| Capacity control | | % | 5-100 | | 4-100 | | | |
| Casing colour | | | Ivory white (5Y7.5/1) | | | | | |
| Compressor | Type | | Hermetically Sealed Scroll Type | | | | | |
| | Motor output | kW | (4.1X1)+(5.2X1)+(5.2X1) | (5.2X1)+(5.2X1)+(5.2X1) | (3.4X1)+(5.2X1)+(4.4X1)+(4.0X1) | (5.2X1)+(5.2X1)+(3.6X1)+(3.7X1) | (5.2X1)+(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1) | (5.2X1)+(3.6X1)+(3.7X1)+(3.6X1)+(3.7X1) |
| Airflow rate | | m³/min | 165+178+178 | 178+178+178 | 157+178+233 | 178+178+233 | 178+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)+(1,657x1,240x765) | |
| Machine weight | | kg | 195+195+195 | 195+195+195 | 185+195+285 | 195+195+285 | 195+285+285 | |
| Sound level | | dB(A) | 63 | 64 | | | 65 | |
| Operation range | | °CDB | -5 to 49 | | | | | |
| Refrigerant | Type | | R-410A | | | | | |
| | 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 |
| Piping connections | Liquid | mm | ϕ19.1(Brazing) | | | | | |
| | Gas | mm | ϕ34.9(Brazing) | ϕ41.3(Brazing) | | | | |

| MODEL | | | RQQ46TNY14(E) | RQQ48TNY14(E) |
|---|---|---|---|---|
| Combination units | | | RQQ14TY14(E) | RQQ14TY14(E) |
| | | | RQQ14TY14(E) | RQQ16TY14(E) |
| | | | RQQ18TY14(E) | RQQ18TY14(E) |
| Power supply | | | 3-phase 4-wire system, 380-415 V, 50 Hz | |
| Cooling capacity | | Btu/h | 444,000 | 461,000 |
| | | kW | 130 | 135 |
| Power consumption | | kW | 36.8 | 39.1 |
| Capacity control | | % | 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)+(4.4X1)+(4.0X1) | (2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)+(4.4X1)+(4.0X1) |
| Airflow rate | | m³/min | 233+233+233 | |
| Dimensions (H×W×D) | | mm | (1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765) | |
| Machine weight | | kg | 285+285+285 | |
| Sound level | | dB(A) | 66 | |
| Operation range | | °CDB | -5 to 49 | |
| Refrigerant | Type | | R-410A | |
| | Charge | kg | 10.3+10.3+10.5 | 10.3+10.4+10.5 |
| Piping connections | Liquid | mm | ϕ19.1(Brazing) | |
| | Gas | mm | ϕ41.3(Brazing) | |

### 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 | |
| | Motor output | kW | (4.4X1)+(4.0X1) | (4.6X1)+(5.5X1) |
| Airflow rate | | m³/min | 233 | 268 |
| Dimensions (H×W×D) | | mm | 1,657x1,240x765 | |
| Machine weight | | kg | 285 | 320 |
| Sound level | | dB(A) | 62 | 65 |
| Operation range | | °CDB | -5 to 49 | |
| Refrigerant | Type | | R-410A | |
| | Charge | kg | 10.5 | 11.8 |
| Piping connections | Liquid | mm | ϕ15.9(Brazing) | |
| | Gas | mm | ϕ28.6(Brazing) | |

Notes: 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, Height 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.

# Outdoor Units

## *VRV* IV Q Series

## Specifications

### 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 | | | 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 | (5.2×1)+(4.4×1)+(4.0×1) | (5.2×1)+(4.6×1)+(5.5×1) | (3.6×1)+(3.7×1)+(4.4×1)+(4.0×1) | (4.4×1)+(4.0×1)+(4.4×1)+(4.0×1) | (4.4×1)+(4.0×1)+(4.6×1)+(5.5×1) | (4.6×1)+(5.5×1)+(4.6×1)+(5.5×1) | (5.2×1)+(5.2×1)+(4.4×1)+(4.0×1) | (5.2×1)+(5.2×1)+(4.6×1)+(5.5×1) | (5.2×1)+(3.6×1)+(3.7×1)+(4.4×1)+(4.0×1) | (5.2×1)+(4.4×1)+(4.0×1)+(4.4×1)+(4.0×1) |
| Airflow rate | | m³/min | 178+233 | 178+268 | 233+233 | | 233+268 | 268+268 | 178+178+233 | 178+178+268 | 178+233+233 | |
| Dimensions (H×W×D) | | mm | (1,657×930X765)+(1,657×1,240X765) | | (1,657×1,240×765)+(1,657×1,240×765) | | (1,657×1,240×765)+(1,657×1,240×765) | | (1,657×930×765)+(1,657×930×765)+(1,657×1,240×765) | | (1,657×930×765)+(1,657×1,240×765)+(1,657×1,240×765) | |
| Machine weight | | kg | 195+285 | 195+320 | 285+285 | | 285+320 | 320+320 | 195+195+285 | 195+195+320 | 195+285+285 | |
| Sound level | | dB(A) | 64 | 66 | 65 | | 67 | 68 | 65 | 67 | 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) | | | | | |
| | Gas | mm | ϕ34.9(Brazing) | | | ϕ41.3(Brazing) | ϕ41.3(Brazing) | | | | | |

Notes: 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, Height 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 W SERIES

## Water Cooled System Suitable for Tall Multi-Storied Buildings

**Cooling Only**
**6 HP (16 kW) – 36 HP (101 kW)**

Single outside units
**RWEYQ6-12TY14**

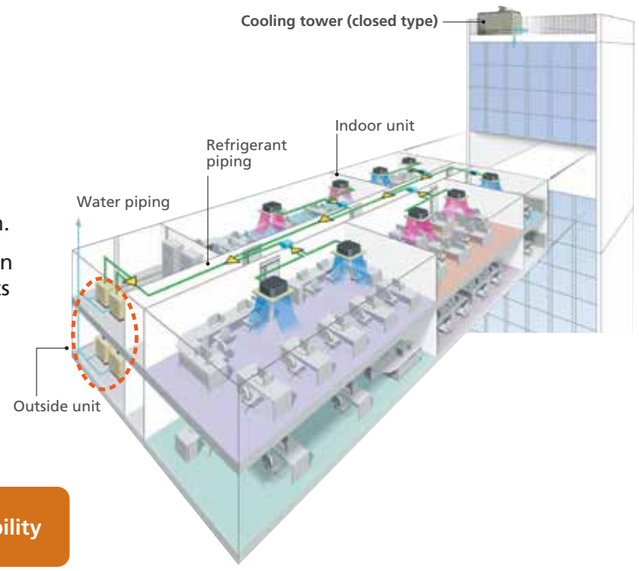
Double outside units
**RWEYQ14-24TY14**

Triple outside units
**RWEYQ26-36TY14**





- Water cooled system does not require to exchange heat with outdoor air
  - Outside units can be installed indoors.
  - The air conditioning operation is stable even when the outdoor air temperature is high
- Individual air conditioning is achieved via on-demand operation in each room.
- The length of the refrigerant piping can be minimized by installing outside units in proximity to indoor units.
- As refrigerant piping is connected to indoor units, it reduces the risks of indoor water leakage.




**High installation flexibility**

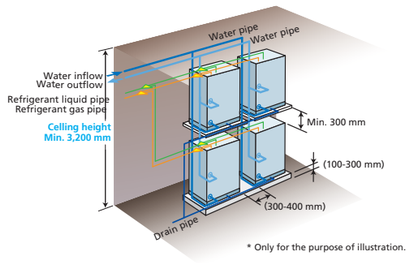
**Design flexibility**

## Design flexibility

### High-rise buildings

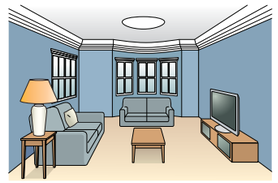
Compact outside units can be easily installed in the machine rooms on each floor. It is adaptable to high-rise buildings.

**No balcony required**



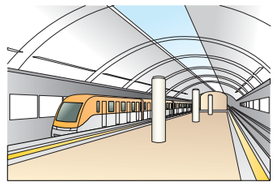

### Condominiums and detached houses

We offer an extensive lineup of small capacity outside units.



### Underground shopping malls and subway

As heat exchanging with outdoor air is not required, individual air conditioning can be easily provided.



# Water Cooled *VRV* IV as a Retrofit Solution

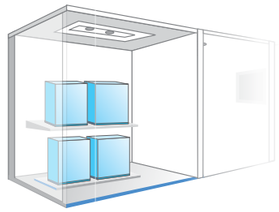
## A flexible system convenient for expansion/renovation

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

**Easy Installation**

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

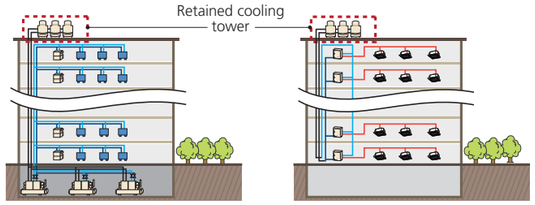
It is possible to place the outside unit inside the building, it makes easier to adapt to different type of buildings and open to various kinds of creative building exteriors.



### Part of the old system can be retained

**Cost Saving**

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

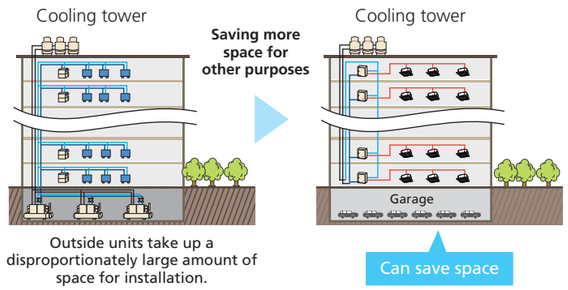



*System diagram

### The compact outside units facilitate the renovation process

**Space Saving**

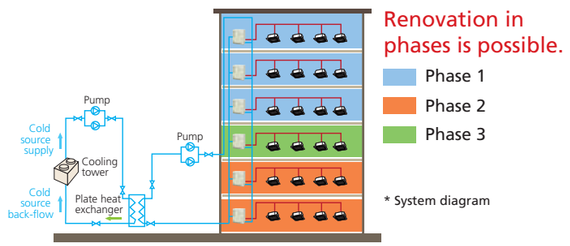
- The outside units are conveniently compact so transport by elevator is possible. It also effectively simplifies installation. This also saves a great deal of time and labor.
- The modular design enables a free and flexible configuration of the outside units. Also can save space for other purposes.




### Floor by floor renovation without disturbing other tenants

**Flexible Renovation**

Because equipment can be replaced in phases, installation adapts to the renovation plans of the customers and ensures that work performed on some floors and zones will not affect other tenants.




* System diagram

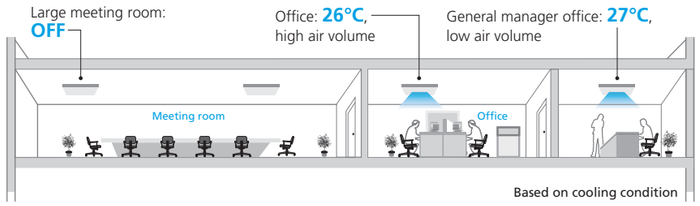
Water cooled ***VRV*** IV W series



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

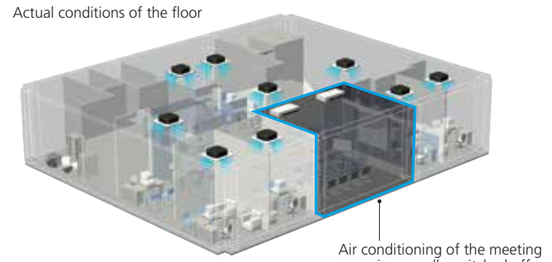
### Independent control provides greater comfort and convenience.

Each indoor unit can be independently controlled and adjusted according to each tenant's individual needs for temperature and air volume.




### Higher efficiency with partial load

During actual operation, the load of an air conditioning system changes according to variations in weather conditions outside and indoor unit operation rates. Daikin's advanced DC inverter technology and advanced refrigerant control technology boasts a higher efficiency under partial load than in the rated operating conditions.

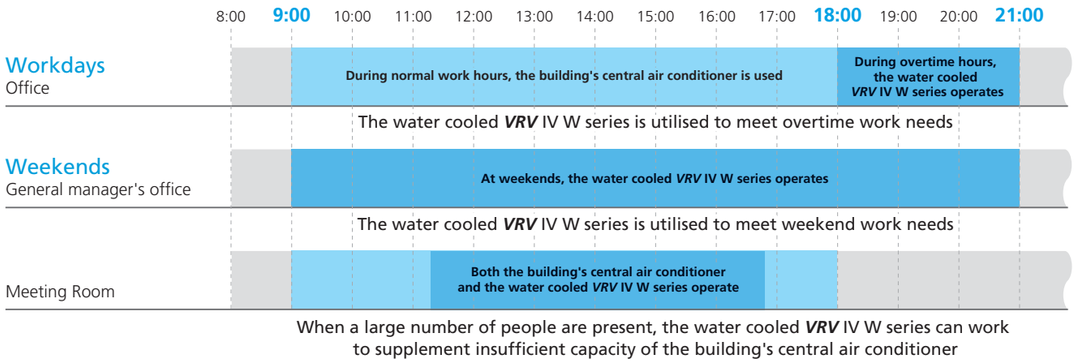



### Flexibly satisfies conditions for working overtime and times of insufficient load

Each indoor unit can be independently controlled and adjusted according to each tenant's individual needs for temperature and air volume.

- Inconvenient transportation procedures are eliminated.
- Operation for each indoor unit can be precisely and individually set.

Example of air conditioning control for different rooms of the same floor




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

# Easy Installation & Energy Saving

## Compact and lightweight

*VRV* IV W SERIES

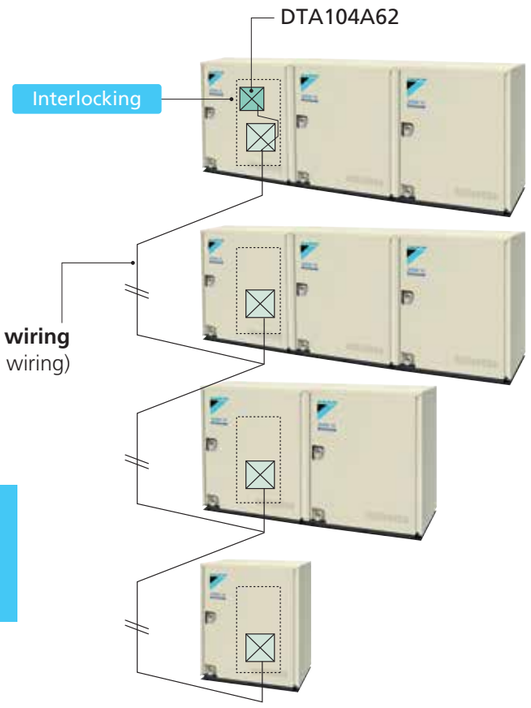
Footprint : **0.43** m²

Product Weight : (*For 6 HP, 8 HP) **146** kg


## 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

*VRV* IV W SERIES

Wider capacity range from **6** to **36** HP

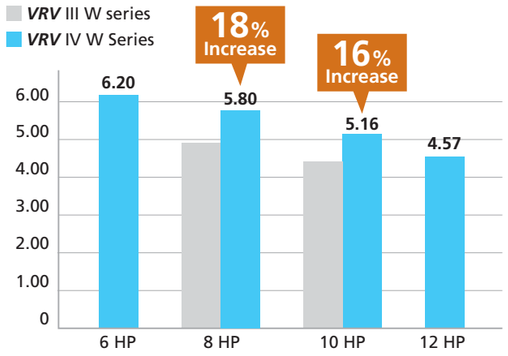
6 HP, 8 HP, 10 HP, 12 HP

| 6, 8, 10, 12 HP | 14, 16, 18, 20, 22, 24 HP | 26, 28, 30, 32, 34, 36 HP |
|---|---|---|
|  |  |  |
| RWEYQ6TY14<br>RWEYQ8TY14 | RWEYQ10TY14<br>RWEYQ12TY14 | RWEYQ14TY14<br>RWEYQ16TY14<br>RWEYQ18TY14 | RWEYQ20TY14<br>RWEYQ22TY14<br>RWEYQ24TY14 | RWEYQ26TY14<br>RWEYQ28TY14<br>RWEYQ30TY14 | RWEYQ32TY14<br>RWEYQ34TY14<br>RWEYQ36TY14 |

## Energy saving

### Higher Energy Efficiency Ratio (EER)

Cooling Operation EER




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

### VRT control for optimal annual efficiency

VRT automatically adjusts refrigerant temperature to individual building and climate requirement, thus further improving annual energy efficiency and maintaining comfort.

Variable Refrigerant Temperature

# Flexible System Design

## Long piping length

Actual piping length

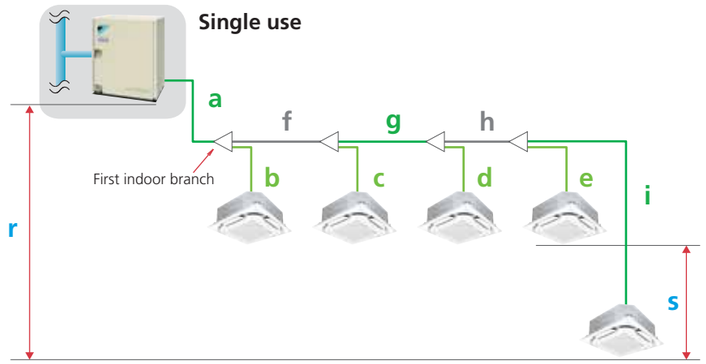
**Max. 120 m**

Equivalent piping length

**Max. 140 m**

Total piping length

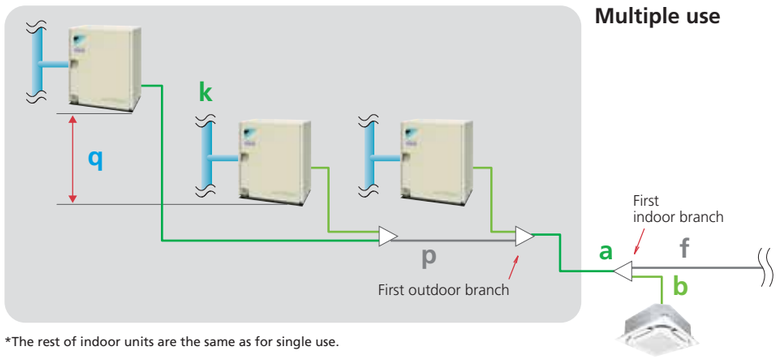
**Max. 300 m**




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

| | | | 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 height 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.




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

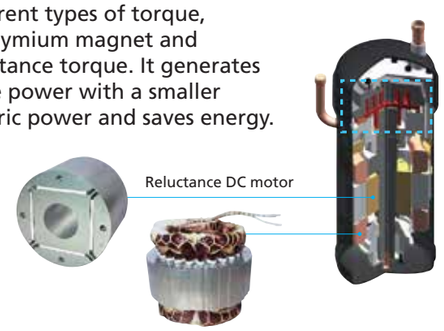


# Advanced Technologies



## High efficiency compressor to achieve a high performance

The reluctance DC motor uses 2 different types of torque, neodymium magnet and reluctance torque. It generates more power with a smaller electric power and saves energy.

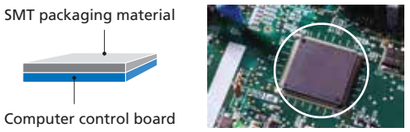



## SMT* packaging technology

- Improves the anti-clutter performance.
- Protects your computer boards from the adverse effects of sandy climates and humid weather.

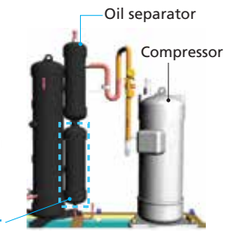
*SMT: Surface mounted technology

Computer control board surface adopting SMT packaging technology




## Minimize performance degradation from refrigeration oil in all stages of operation

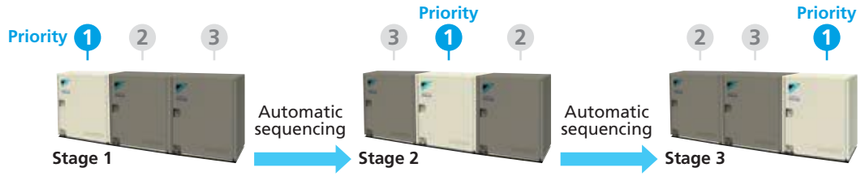
Surplus oil is stored in the receiver and automatically controls the amount of refrigeration oil in the refrigerant cycle.
This prevents a reduction in performance for heat exchanger.




## Function of information display by luminous digital tube

***VRV*** IV W series utilises a bright 7-segment digital display to convey operational status and facilitate simple installation and after-sales service.


## Automatic sequencing operation




## Auto-restart technology

Power interruption during normal operation → Keep a record of the operating mode adopted → power supply recovers → Restore itself back into the recorded operating status

## Refrigerant pressure detection technology

- Utilizes temperature sensors to detect the system's operating status.
- Employs high and low pressure sensors to carry out quick, comprehensive and accurate detection of the refrigerant status.

# Outside Unit Lineup

## *VRV* IV W Series

### Lineup

| 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 | 89.5 | 95.0 | 101 |
| ***VRV* IV W SERIES** | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

### Outside unit combinations

| 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.



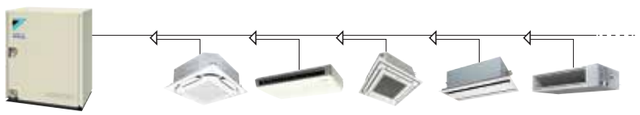
# Indoor Unit Lineup



### Enhanced range of choices

● New lineup

| Category | Type | Model Name | | Capacity Range | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 140 | 200 | 250 | 400 | 500 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0.8 HP | 1 HP | 1.25 HP | 1.6 HP | 2 HP | 2.5 HP | 3.2 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 Cassette with Sensing and Streamer | New | **FXFTQ-AV4** |  | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Streamer | New | **FXFRQ-AV4** |  | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Sensing | | FXFSQ-AV4 |  | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette | | FXFQ-AV4 |  | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Compact Multi Flow Cassette | New | **FXZQ-BVM4** |  | ● | ● | ● | ● | ● | | | | | | | | | |
| | Double Flow Cassette | New | **FXCQ-BVM4** |  | ● | ● | ● | ● | ● | ● | ● | | ● | | | | | |
| | Single Flow Cassette | | FXKQ-MAVE4 |  | | ● | ● | ● | | ● | | | | | | | | |
| | Ceiling Mounted Cassette Duct | | FXFDQ-AV4 |  | | | | | | ● | ● | ● | ● | | | | | |
| Ceiling Concealed Duct | Bedroom Duct | | FXDBQ-AVM4 |  | | | | ● | ● | ● | ● | | | | | | | |
| | Slim Duct (Standard) | | FXDQ-PDVE4 (with drain pump) | (700 mm width type) | ● | ● | ● | | | | | | | | | | | |
| | | | FXDQ-PDVT4 (without drain pump) | | ● | ● | ● | | | | | | | | | | | |
| | | | FXDQ-NDVE4 (with drain pump) | (900/1,100 mm width type) | | | | ● | ● | ● | | | | | | | | |
| | | | FXDQ-NDVT4 (without drain pump) | | | | | ● | ● | ● | | | | | | | | |
| | Slim Duct (Compact) | | FXDQ-SPV14 |  | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Middle Static Pressure Duct | | FXSQ-PAV4 |  | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Middle-High Static Pressure Duct | | FXMQ-PAV4 |  | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | High Static Pressure Duct | | FXMQ-PVM |  | | | | | | | | | | | ● | ● | | |
| | Outdoor-Air Processing Unit | | FXMQ-MFV7 |  | | | | | | | | | ● | | ● | ● | | |
| | | New | **FXMQ-BFV24** |  | | | | | | | ● | | | ● | ● | ● | | |
| Ceiling Suspended | Ceiling Suspended | | FXHQ-MAV7 |  | | | ● | | | ● | | ● | | | | | | |
| | | New | **FXHQ-BVM4** |  | | | | | | | | | ● | ● | | | | |
| Wall Mounted | | | FXAQ-AVM4 |  | ● | ● | ● | ● | ● | ● | | | | | | | | |
| Floor Standing | Floor Standing | | FXLQ-MAVE4 |  | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Concealed Floor Standing | | FXNQ-MAVE4 |  | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Floor Standing Duct | | FXVQ-NY14 |  | | | | | | | | | ● | | ● | ● | ● | ● |
| Heat Reclaim Ventilator with DX-Coil | | | VKM-GCVE |  | Airflow rate 500-950 m³/h | | | | | | | | | | | | | |
| Heat Reclaim Ventilator | | | VAM-HVE |  | Airflow rate 150-2000 m³/h | | | | | | | | | | | | | |
| Air Handling Unit | | | AHUR |  | 6–120 HP | | | | | | | | | | | | | |



Max. 58 indoor units

# Outside Units

## *VRV* IV W Series

### Specifications

| 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 | ϕ 9.5 (Flare) | | | ϕ 12.7 (Flare) | ϕ 12.7 (Flare) | | ϕ 15.9 (Flare) | | ϕ 19.1 (Flare) | |
| | Suction gas *1 | | ϕ 19.1 (Brazing) | | ϕ 22.2 (Brazing) | | ϕ 28.6 (Brazing) | | | | | |
| | High and low pressure gas | | ϕ 19.1*2 (Brazing) | | ϕ 22.2*2 (Brazing) | | ϕ 28.6*2 (Brazing) | | | | | |
| 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 | 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 | ϕ 19.1 (Flare) | | | ϕ 19.1 (Flare) | | |
| | Suction gas *1 | | ϕ 34.9 (Brazing) | | | ϕ 34.9 (Brazing) | | |
| | High and low pressure gas | | ϕ 34.9*2 (Brazing) | | | ϕ 34.9*2 (Brazing) | | |
| 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 | 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 | | |

Notes:
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, Height 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

## Comfortable Air Conditioning and Energy-efficient Hot Water Heating

**Cooling Only**
**6 HP – 60 HP**
(16 kW) (168 kW)



**High-COP Type**

Double outdoor units
**RWHQ12-16THY14**

Triple outdoor units
**RWHQ18-50THY14**

**Standard Type**

Single outdoor units
**RWHQ6-16TY14**

Double outdoor units
**RWHQ18-32TNY14**

Triple outdoor units
**RWHQ34-60TNY14**

**Space Saving Type**

Single outdoor units
**RWHQ18-20TY14**

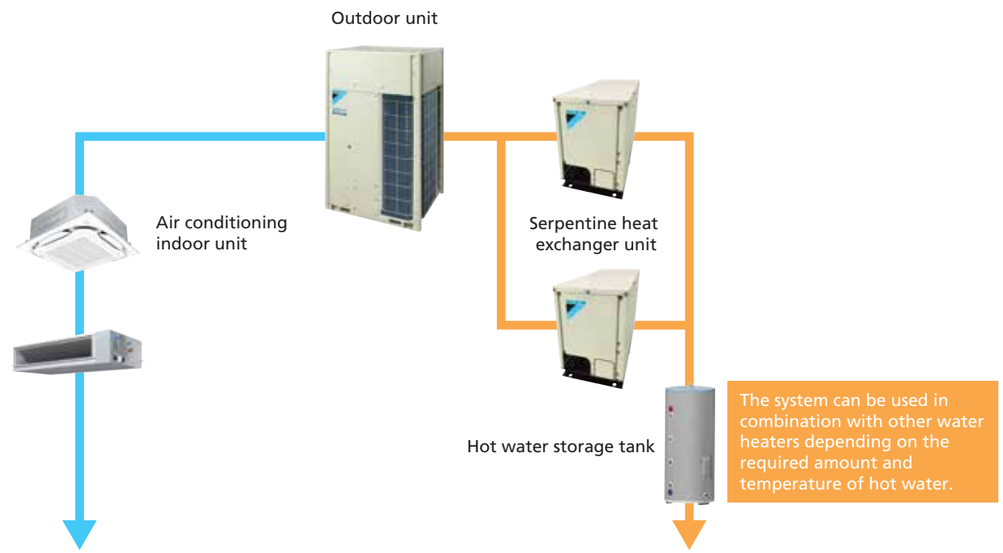
Double outdoor units
**RWHQ22-40TSY14**

Triple outdoor units
**RWHQ42-50TSY14**





# Air conditioning combined with hot water supply – Compact system




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

AIR CONDITIONING

## Extremely energy-efficient energy source

HOT WATER SUPPLY

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

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

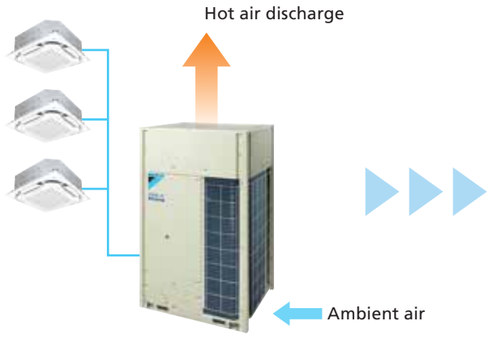
**Can be used in combination with other water heaters depending on the required amount and temperature of hot water.**

# Innovative and Reliable System

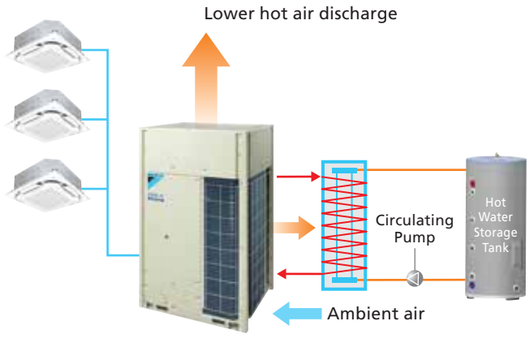
## The energy-efficient system recovers waste heat as energy to heat water

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

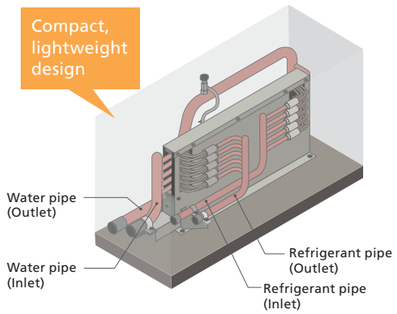
In a conventional system, waste heat from air conditioning is released into the ambience.



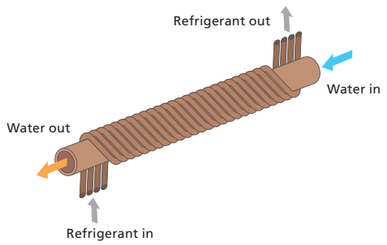

This system recovers waste heat from air conditioning to heat water.




### 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. The EER for ***VRV*** IV Heat Recovery Hot Water has increased from 4.41 to 4.50, compared with the conventional ***VRV*** IV.

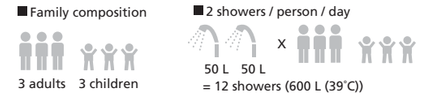
### Reducing short circuits

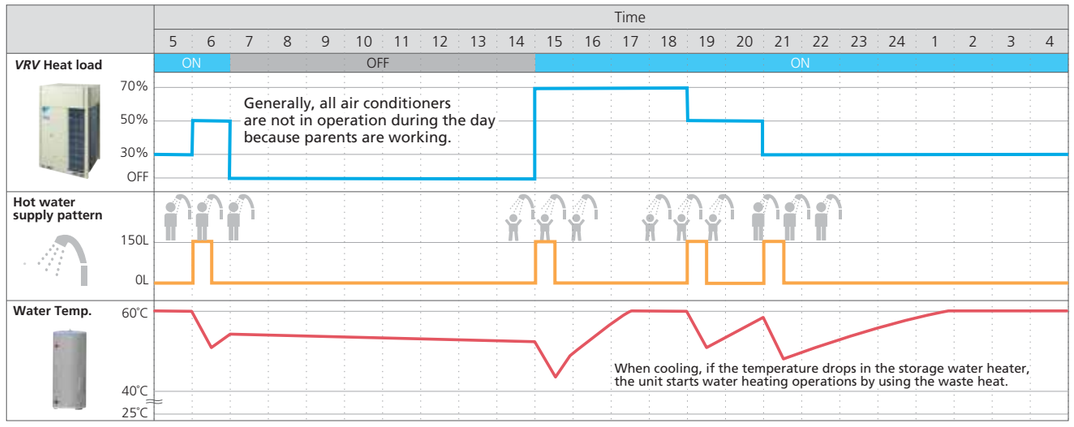
The temperature of exhaust heat from the outdoor unit is lower, minimising in ambient temperature increase. In the event of a short circuit, capacity reduction is minimised.



### 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.

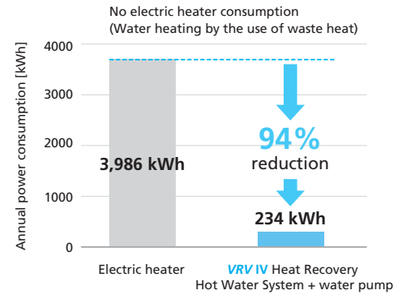



Air conditioner load conditions / Operation time: 16 hours/day
**Water-heating load**
Tank capacity: 200 L
Boiling temperature: 25˚C to 60˚C (tap water)
Amount of hot water per person per time (standard): 50 L/shower (39˚C) (water dispensed: 10 L/min.; shower time: 5 min./shower)
Amount of water required 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

**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 disables 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.


BRCS82

# Indoor Unit Lineup

## Enhanced range of choices

● New lineup

| Category | 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 Cassette with Sensing and Streamer | New **FXFTQ-AV4** | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Streamer | New **FXFRQ-AV4** | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette with Sensing | FXFSQ-AV4 | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Round Flow Cassette | FXFQ-AV4 | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Compact Multi Flow Cassette | New **FXZQ-BVM4** | | ● | ● | ● | ● | ● | | | | | | | | | |
| | Double Flow Cassette | New **FXCQ-BVM4** | | ● | ● | ● | ● | ● | ● | ● | | ● | | | | | |
| | Single Flow Cassette | FXKQ-MAVE4 | | | ● | ● | ● | | ● | | | | | | | | |
| | Ceiling Mounted Cassette Duct | FXFDQ-AV4 | | | | | | | ● | ● | ● | ● | | | | | |
| Ceiling Concealed Duct | Bedroom Duct | FXDBQ-AVM4 | | | | | ● | ● | ● | ● | | | | | | | |
| | Slim Duct (Standard) | FXDQ-PDVE4 (with drain pump) | (700 mm width type) | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-PDVT4 (without drain pump) | | ● | ● | ● | | | | | | | | | | | |
| | | FXDQ-NDVE4 (with drain pump) | (900/1,100 mm width type) | | | | ● | ● | ● | | | | | | | | |
| | | FXDQ-NDVT4 (without drain pump) | | | | | ● | ● | ● | | | | | | | | |
| | Slim Duct (Compact) | FXDQ-SPV14 | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| | Middle Static Pressure Duct | FXSQ-PAV4 | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | Middle-High Static Pressure Duct | FXMQ-PAV4 | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| | High Static Pressure Duct | FXMQ-PVM | | | | | | | | | | | | ● | ● | | |
| | Outdoor-Air Processing Unit | FXMQ-MFV7 | | | | | | | | | | ● | | ● | ● | | |
| | | New **FXMQ-BFV24** | | | | | | | | ● | | | ● | ● | ● | | |
| Ceiling Suspended | Ceiling Suspended | FXHQ-MAV7 | | | | ● | | | ● | | ● | | | | | | |
| | | New **FXHQ-BVM4** | | | | | | | | | | ● | ● | | | | |
| Wall Mounted | | FXAQ-AVM4 | | ● | ● | ● | ● | ● | ● | | | | | | | | |
| Floor Standing | 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 with DX-Coil | | VKM-GCVE | | Airflow rate 500-950 m³/h | | | | | | | | | | | | | |
| Heat Reclaim Ventilator | | VAM-HVE | | Airflow rate 150-2000 m³/h | | | | | | | | | | | | | |
| Air Handling Unit | | AHUR | | | | | | | | | | | | | 6–120 HP | | |

# Outdoor Units

## *VRV* IV Heat Recovery Hot Water System

### Specifications

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 | | | 7-100 | | | | 6-100 | | 5-100 | | | 4-100 | | |
| Casing colour | | | Ivory white(5Y7.5/1) | | | | | | | Ivory white (5Y7.5/1) | | | | | | | |
| Compressor | Type | | Hermetically Sealed Scroll Type | | | | | | | Hermetically Sealed Scroll Type | | | | | | | |
| | Motor output | kW | (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)+(1,657x1,240x765) | (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+200 | | 185+200+200 | | 185+200+285 | 185+285+285 | 200+200+285 | 200+285+285 |
| Sound level | | dB(A) | 58 | 59 | | 60 | | | 61 | 61 | 62 | | 63 | | 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+6.5 | 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) | | | ϕ15.9(Brazing) | | | | ϕ19.1(Brazing) | | | | | | | |
| | Gas | mm | ϕ28.6(Brazing) | | | | | | ϕ34.9(Brazing) | ϕ34.9(Brazing) | | | | | ϕ41.3(Brazing) | | |
| Piping connections (Heat exchanger unit) | Inlet pipe | mm | ϕ19.1(Brazing x 2) | | | ϕ19.1(Brazing x 3) | | | | ϕ19.1(Brazing x 3) | | | | | | | |
| | Outlet pipe | mm | ϕ19.1(Brazing x 2) | | | ϕ19.1(Brazing x 3) | | | | ϕ19.1(Brazing x 3) | | | | | | | |

| 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 | | | |
| 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 | | | | |
| Dimensions (H×W×D) | | mm | (1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765) | | | | |
| Machine weight | | kg | 285+285+285 | | | | |
| Sound level | | dB(A) | 65 | | | 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) | | | | |
| | Gas | mm | ϕ41.3(Brazing) | | | | |
| Piping connections (Heat exchanger unit) | Inlet pipe | mm | ϕ19.1(Brazing x 3) | | | | |
| | Outlet pipe | mm | ϕ19.1(Brazing x 3) | | | | |

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

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 | | 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 | |
| Dimensions (H×W×D) | | mm | 1,657x930x765 | | | | 1,657x1,240x765 | |
| Machine weight | | kg | 185 | | 200 | | 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 | | 6.5 | 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) | | | | | |

•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.

# Outdoor Units

## *VRV* IV Heat Recovery Hot Water System

## Specifications

### Standard Type

| MODEL | | | RWHQ18TNY14 | RWHQ20TNY14 | RWHQ22TNY14 | RWHQ24TNY14 | RWHQ26TNY14 | RWHQ28TNY14 | RWHQ30TNY14 |
|---|---|---|---|---|---|---|---|---|---|
| Combination units | | | RWHQ8TY14 | RWHQ8TY14 | RWHQ8TY14 | RWHQ10TY14 | RWHQ12TY14 | RWHQ14TY14 | RWHQ14TY14 |
| | | | RWHQ10TY14 | RWHQ12TY14 | RWHQ14TY14 | RWHQ14TY14 | RWHQ14TY14 | RWHQ14TY14 | RWHQ16TY14 |
| | | | — | — | — | — | — | — | — |
| Power supply | | | 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 |
| | | kW | 50.4 | 55.9 | 62.4 | 68.0 | 73.5 | 80.0 | 85.0 |
| Power consumption | | kW | 12.4 | 14.1 | 15.9 | 18.0 | 19.7 | 21.6 | 23.7 |
| Capacity control | | % | 8-100 | | 7-100 | 6-100 | | 5-100 | |
| Casing colour | | | Ivory white (5Y7.5/1) | | | | | | |
| Compressor | 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) |
| Airflow rate | | m³/min | 157+165 | 157+178 | 157+233 | 165+233 | 178+233 | 233+233 | |
| Dimensions (HxWxD) | | mm | (1,657x930x765)+(1,657x930x765) | | (1,657x930x765)+(1,657x1,240x765) | | | (1,657x1,240x765)+(1,657x1,240x765) | |
| Machine weight | | kg | 185+200 | | 185+285 | 200+285 | | 285+285 | |
| Sound level | | dB(A) | 60 | 61 | | 62 | 63 | | 64 |
| Operation range | | °CDB | 15 to 49 | | | | | | |
| Refrigerant | Type | | 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 |
| Piping connections (Indoor unit) | Liquid | mm | ϕ15.9(Brazing) | | | | ϕ19.1(Brazing) | | |
| | Gas | mm | ϕ28.6(Brazing) | | | ϕ34.9(Brazing) | | | |
| Piping connections (Heat exchanger unit) | Inlet pipe | mm | ϕ19.1(Brazing x 2) | | | | | | |
| | Outlet pipe | mm | ϕ19.1(Brazing x 2) | | | | | | |

| MODEL | | | RWHQ32TNY14 | RWHQ34TNY14 | RWHQ36TNY14 | RWHQ38TNY14 | RWHQ40TNY14 | RWHQ42TNY14 | RWHQ44TNY14 | RWHQ46TNY14 |
|---|---|---|---|---|---|---|---|---|---|---|
| Combination units | | | RWHQ14TY14 | RWHQ10TY14 | RWHQ12TY14 | RWHQ8TY14 | RWHQ12TY14 | RWHQ12TY14 | RWHQ12TY14 | RWHQ14TY14 |
| | | | 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 | | | | | | | |
| Cooling capacity | | Btu/h | 307,000 | 324,000 | 345,000 | 362,000 | 382,000 | 406,000 | 423,000 | 444,000 |
| | | kW | 90.0 | 95.0 | 101 | 106 | 112 | 119 | 124 | 130 |
| Power consumption | | kW | 26.1 | 25.1 | 26.8 | 29.4 | 30.8 | 32.6 | 34.7 | 36.9 |
| Capacity control | | % | 5-100 | | | 4-100 | | | | 3-100 |
| Casing colour | | | Ivory white (5Y7.5/1) | | | | | | | |
| Compressor | Type | | Hermetically Sealed Scroll Type | | | | | | | |
| | Motor output | kW | (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 | 233+233 | 165+178+178 | 178+178+178 | 157+178+233 | 178+178+233 | 178+233+233 | | 233+233+233 |
| Dimensions (HxWxD) | | mm | (1,657x1,240x765)+(1,657x1,240x765) | (1,657x930x765)+(1,657x930x765)+(1,657x930x765) | | (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 | 285+285 | 200+200+200 | | 185+200+285 | 200+200+285 | 200+285+285 | | 285+285+285 |
| Sound level | | dB(A) | 64 | 63 | 64 | | 65 | | | 66 |
| Operation range | | °CDB | 15 to 49 | | | | | | | |
| Refrigerant | Type | | R-410A | | | | | | | |
| | Charge | kg | 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 | ϕ19.1(Brazing) | | | | | | | |
| | Gas | mm | ϕ34.9(Brazing) | | ϕ41.3(Brazing) | | | | | |
| Piping connections (Heat exchanger unit) | Inlet pipe | mm | ϕ19.1(Brazing x 2) | ϕ19.1(Brazing x 3) | | | | | | |
| | Outlet pipe | mm | ϕ19.1(Brazing x 2) | ϕ19.1(Brazing x 3) | | | | | | |

### 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 | | | | | | |
| 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 | | m³/min | 233+233+233 | | | | 233+233+268 | 233+268+268 | 268+268+268 |
| Dimensions (HxWxD) | | mm | (1,657x1,240x765)+(1,657X1,240x765)+(1,657x1,240x765) | | | | | | |
| Machine weight | | kg | 285+285+285 | | | | 285+285+320 | 285+320+320 | 320+320+320 |
| Sound level | | dB(A) | 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) | | | | | | |
| | Gas | mm | ϕ41.3(Brazing) | | | | | | |
| Piping connections (Heat exchanger unit) | Inlet pipe | mm | ϕ19.1(Brazing x 3) | | | | | | |
| | Outlet pipe | mm | ϕ19.1(Brazing x 3) | | | | | | |

### 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 | | |
| 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 | | m³/min | 233 | 268 | 165+178 | 178+178 |
| Dimensions (HxWxD) | | mm | 1,657x1,240x765 | | (1,657x930x765)+(1,657x930x765) | |
| Machine weight | | kg | 285 | 320 | 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) | | | |
| | Gas | mm | ϕ28.6(Brazing) | | | ϕ34.9(Brazing) |
| Piping connections (Heat exchanger unit) | Inlet pipe | mm | ϕ19.1(Brazing) | | ϕ19.1(Brazing x 2) | |
| | Outlet pipe | mm | ϕ19.1(Brazing) | | ϕ19.1(Brazing x 2) | |

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

# Outdoor Units

## *VRV* IV Heat Recovery Hot Water System

### Specifications

Space Saving Type





| MODEL | | | RWHQ26TSY14 | RWHQ28TSY14 | 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 | | 5-100 | | | 4-100 | | | | | | 3-100 |
| Casing colour | | | Ivory white (5Y7.5/1) | | | | | | Ivory white (5Y7.5/1) | | | | | | |
| Compressor | Type | | Hermetically Sealed Scroll Type | | | | | | Hermetically Sealed Scroll Type | | | | | | |
| | Motor output | kW | (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+268 | 233+233 | | 233+268 | 268+268 | 178+178+233 | 178+178+268 | 178+233+233 | | 178+233+268 |
| Dimensions (HxWxD) | | mm | (1,657x930x765)+(1,657x1,240x765) | | | | (1,657x1,240x765)+(1,657x1,240x765) | | (1,657x1,240x765)+(1,657x1,240x765) | | (1,657x930x765)+(1,657x930x765)+(1,657x1,240x765) | | (1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765) | | |
| Machine weight | | kg | 185+285 | 200+285 | | 200+320 | 285+285 | | 285+320 | 320+320 | 200+200+285 | 200+200+320 | 200+285+285 | | 200+285+320 |
| Sound level | | dB(A) | 63 | | 64 | 66 | 65 | | 67 | 68 | 65 | 67 | 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) | | | | | | |
| | Gas | mm | ϕ34.9(Brazing) | | | | | ϕ41.3(Brazing) | ϕ41.3(Brazing) | | | | | | |
| Piping connections (Heat exchanger unit) | Inlet pipe | mm | ϕ19.1(Brazing x 2) | | | | | | ϕ19.1(Brazing x 2) | | ϕ19.1(Brazing x 3) | | | | |
| | Outlet pipe | mm | ϕ19.1(Brazing x 2) | | | | | | ϕ19.1(Brazing x 2) | | ϕ19.1(Brazing x 3) | | | | |

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

# Outdoor Units

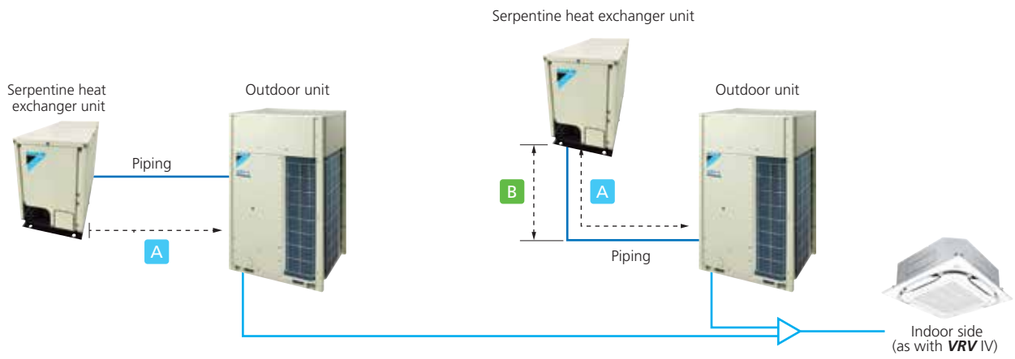
## *VRV* IV Heat Recovery Hot Water System

### Serpentine heat exchanger unit (HWHQ30A)

| 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 | | | | | | | |

Notes: 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



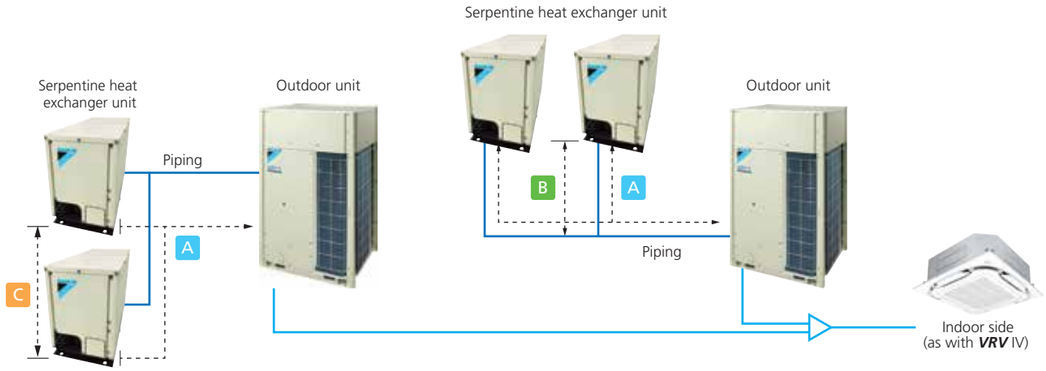

| | | |
|---|---|---|
| Max. allowable piping length | A Between outdoor unit and heat exchanger unit length | 5 m |
| Max. allowable height difference | B Between outdoor unit and heat exchanger unit level | 3 m |



| 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) | | | | | | | |

Notes: 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 | 5 m |
| Max. allowable height difference | B Between outdoor unit and heat exchanger unit level | 3 m |
| Max. allowable height difference | C Between heat exchanger units | 3 m |

# INDOOR UNIT LINEUP

Daikin offers a wide range of indoor units responding to variety of needs of our customers that require air-conditioning solutions.

## *VRV* indoor units

### Round Flow Cassette with Sensing and Streamer Type

Comfort, energy savings by sensing functions and enhanced maximum efficiency in cleaning

New FXFTQ-AV4

### Round Flow Cassette with Streamer Type

360° airflow for improved comfort and enhanced maximum efficiency in cleaning

New FXFRQ-AV4

### Round Flow Cassette with Sensing Type

Comfort and energy savings by sensing functions

FXFSQ-AV4

### Round Flow Cassette Type

360° airflow for improved comfort

FXFQ-AV4

### Compact Multi Flow Cassette Type

Quiet, compact, and designed for user comfort

New FXZQ-BVM4

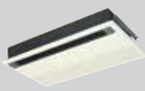
### Double Flow Cassette Type

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

New FXCQ-BVM4

### Single Flow Cassette Type

Slim design for flexible installation



FXKQ-MAVE4

### Ceiling Mounted Cassette Duct Type

Unprecedented flexibility with Revolutionary air blow concept

FXFDQ-AV4

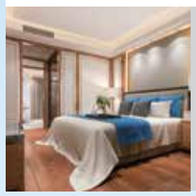
### Slim Duct (Compact) Type

Slim and compact design for easy and flexible installation

FXDQ-SPV14

### Bedroom Duct Type

Suitable for close living spaces such as hotels and condominiums



FXDBQ-AVM4

### Slim Duct (Standard) Type

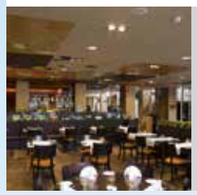
Slim design, quietness and ideal for drop-ceilings

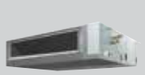
FXDQ-PDVE(T)4

FXDQ-NDVE(T)4

### Middle Static Pressure Duct Type

Middle static pressure and slim design allow flexible installations.





FXSQ-PAV4



### Middle-High Static Pressure Duct Type

Middle and high static pressure allows for flexible duct design.

FXMQ-PAV4

### High Static Pressure Duct Type

High static pressure allows for flexible duct design.

FXMQ-PVM

### Ceiling Suspended Type

Slim body with quiet and wide airflow.

FXHQ-MAV7

New FXHQ-BVM4

### Outdoor-Air Processing Unit

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

FXMQ-MFV7

### Outdoor-Air Processing Unit

Improve IAQ with fresh air ventilation and precise room temperature control

New FXMQ-BFV24

### Floor Standing Duct Type

Large airflow type for large spaces.

FXVQ-NY14

### Wall Mounted Type

Stylish flat panel design harmonised with your interior décor.

FXAQ-AVM4

### Floor Standing Type / Conceal Floor Standing Type

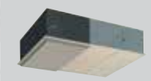
Suitable for perimeter zone air conditioning

FXLQ-MAVE4

FXNQ-MAVE4

### Clean Room Air Conditioner

Suitable for hospitals and other clean spaces



FXBQ-PVE4
FXBPQ-PVE4

### Air Handling Unit

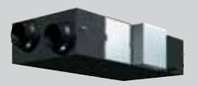
Integrate your air handling unit in a total solution for large size spaces such as factories and large stores.

AHUR

## Air treatment equipment

### Heat Reclaim Ventilator with DX-Coil

Air quality improvement by introducing fresh outdoor air in the room



VKM-GCVE

### Heat Reclaim Ventilator

Daikin VAM series ensures fresh air intake and energy savings

VAM-HVE

# Round Flow Cassette with Sensing and Streamer Type

New **FXFTQ-A**

**Comfort, energy savings by sensing functions and enhanced maximum efficiency in cleaning**

## Introducing Streamer technology to *VRV* Indoor unit

**Daikin Streamer Technology enhances maximum efficiency in cleaning, which uses powerful decomposition properties to decompose substances captured by filter for better air quality.**

FXFTQ-AVM

STREAMER Technology

Streamer filter clean unit irradiates Streamer when the fan and air conditioning operation are stopped. Streamer fumigates the cabin and sterilizes the filter.

New

Streamer Filter Clean Unit built-in inside the indoor unit

**Remarks:**

1) Only the remote controller BRC1H63W(K) can be connected for ON/OFF operation of the streamer.
2) The Streamer function operates only when the fan and air conditioning operation are stopped. The maximum operation of streamer is 180 minutes per day. (This function is available only when the remote controller BRC1H63W(K) is connected.)


**Stylish Remote Controller BRC1H63W/K**

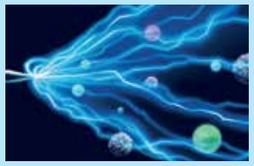

Streamer ON/OFF setting and status icon are available.



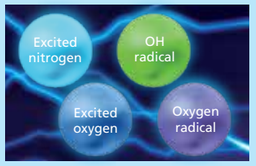
## Streamer Technology

Equipped with decomposition technology, Streamer is a type of plasma discharge that eliminates allergens such as pollen, mould, and mites, as well as, deodorises anti-bacterial dust filters so you can breathe with ease.

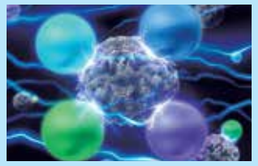
### Mechanism of decomposition by Streamer



Streamer emits high-speed electrons.




The electrons collide and combine with nitrogen and oxygen in the air to form four kinds of decomposing elements with decomposition power.



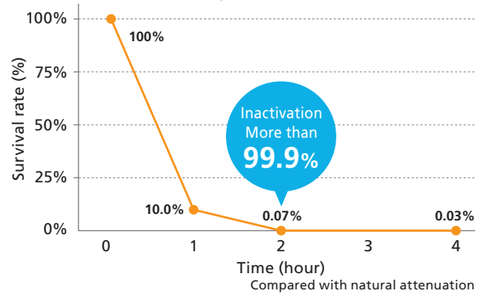
The decomposing elements provide decomposition power.

### 99.93% Inactivation of Omicron variant in 2 hours

#### Experimental Results

Irradiation with Streamer discharge for two hours inactivated 99.93%, and for four hours inactivated 99.97% of the Omicron variant of Coronavirus (SARS-CoV-2), when compared to without Streamer discharge.

Inactivation effect against Omicron variant




Compared with natural attenuation

#### Test Method

DAIKIN Streamer Research Institute

hCoV-19/Japan/ TY38-873/2021 strain (Omicron variant) was used. Two acrylic boxes of about 31L were placed in a safety cabinet in the BSL-3 facility, and Streamer discharge device was installed in one of the acrylic boxes. Seesaw shakers with a 6-well plate were placed in both boxes, and 0.5 mL of virus solution was placed in each well of the plate. Streamer irradiation was performed on one 6-well plate while stirring with a seesaw shaker. After 1, 2, and 4 hours, the virus solution was collected, and the virus titer was measured by the TCID50 method using Vero E6/TMPRSS2 cells.

#### Test Organization

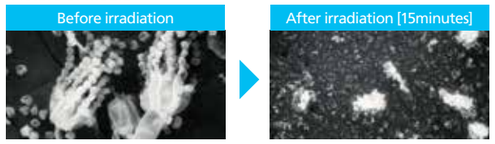
Professor Tatsuo Shioda, Department of Virus Infections, Research Institute for Microbial Diseases, Osaka University

*This result was obtained by using a Streamer discharge device for testing in lab conditions.
The effect of products equipped with Streamer technology or results in actual use environments may differ.

### Streamer decomposes mould and mites (feces and carcasses) and suppresses the causes of allergies.

#### Demonstration of mould

Picture of mould




#### Test Method

"Moulds" were placed on the electrodes of a Streamer discharge unit where they were exposed to Streamer dischage for 15 minutes and photographed with an electron microscope.

#### Test Organization

Demonstration test was performed at Wakayama Medical University.

### Why Daikin Streamer?

Recognized as clean technology by public bodies

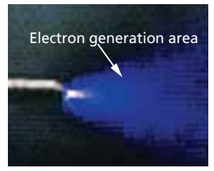
**Winner of the 2005 Progress Award, Institute of Electrostatics Japan**

Awarded for the development of a domestic air purifier which uses DC Streamer discharge.

**105 Patents Acquired**

Patents acquired relating to Streamer technology

Streamer, a type of plasma discharge, decomposes hazardous chemical substances. The decomposition power is comparable to thermal energy of about 100,000°C.*



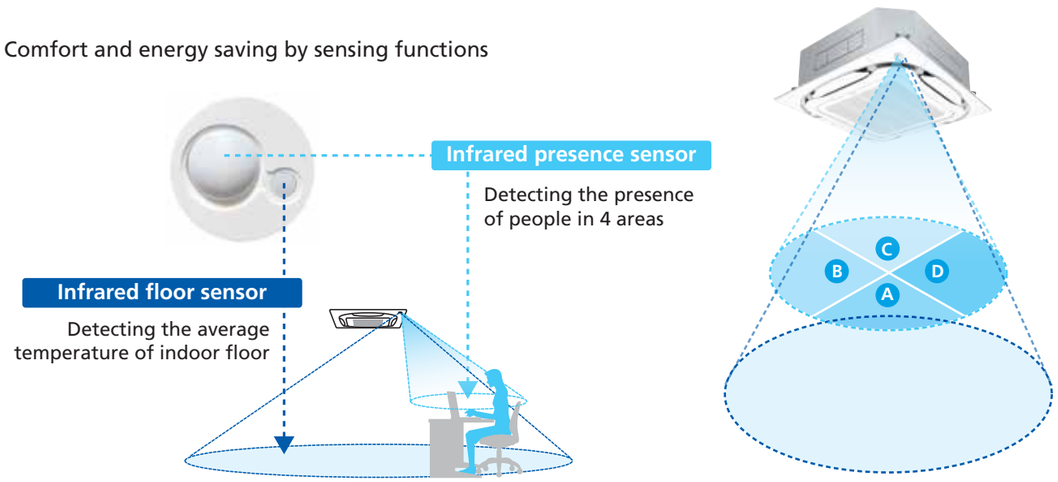

Note:
*Comparison of oxidation decomposition.
This does not mean temperature will become high.

# Round Flow Cassette with Sensing and Streamer Type

## Daikin advanced sensing technology dual sensors

**Round flow with sensing**

Comfort and energy saving by sensing functions



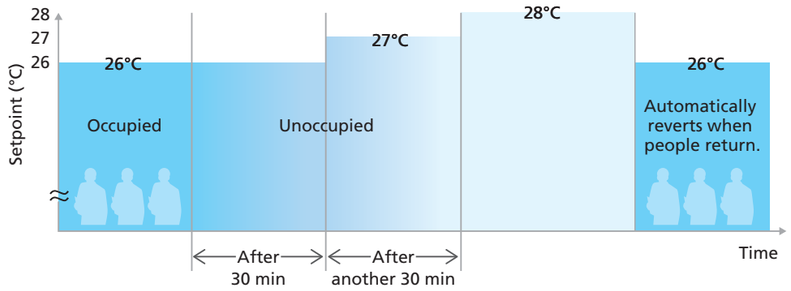

## ■ Sensing sensor mode **Energy saving**

### Sensing sensor low mode (default: OFF)

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

Example

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




### Sensing sensor stop mode (default: OFF)

Based on preset user conditions, the system automatically stops operation if the room is unoccupied.

*Adjustment is possible for shift time and set temperature by local setting.



## Individual airflow direction control

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

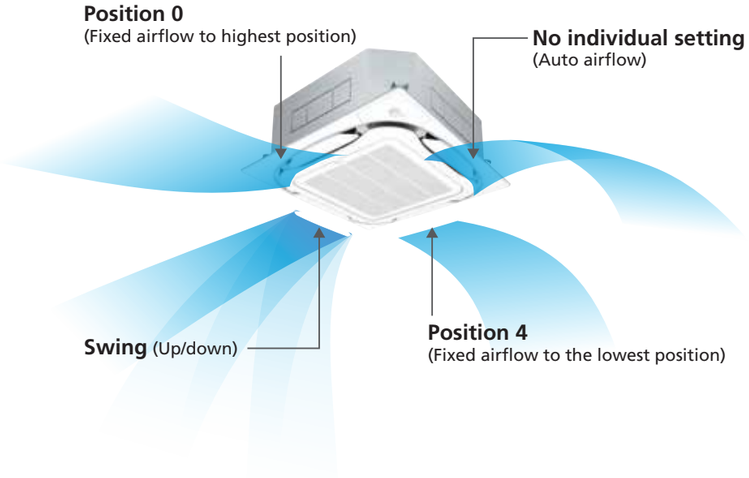
#### Easy setting is possible with a wired remote controller

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

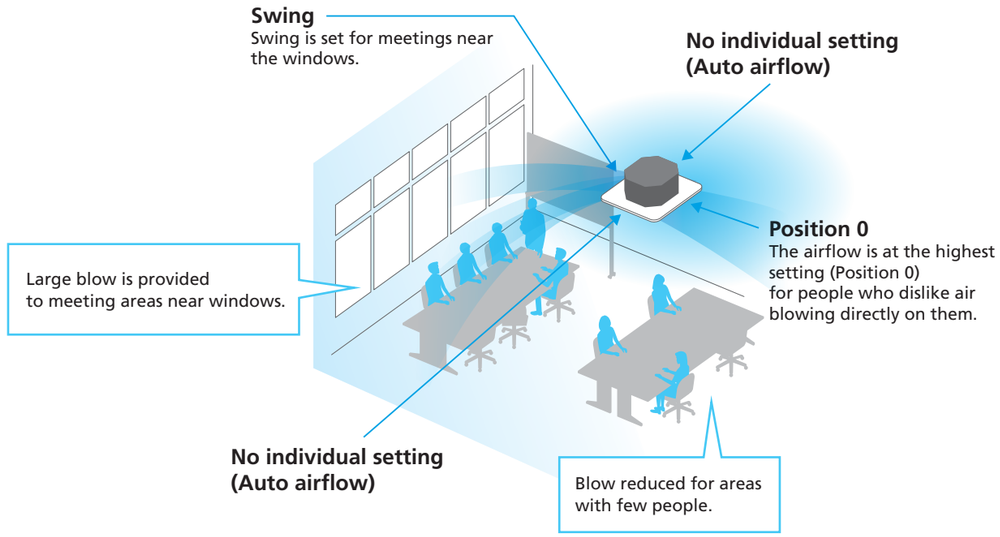
**Individual airflow settings**

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.




#### Comfort is provided to the entire room by individual setting corresponding to 4-way flow conditions.



# Round Flow Cassette with Sensing and Streamer Type

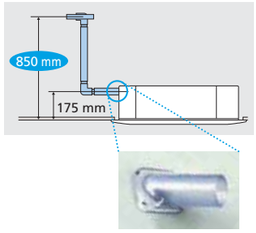
## Other functions

### Quick and easy installation

#### Installable in tight ceiling spaces

Min. of 261 mm* ceiling space when using standard panel.

* For FXFTQ25-80A models.




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

### Easy maintenance

#### Drain pan and drain water check

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

**Just open the suction grille!**


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

### Cleanliness

#### Silver ion anti-bacterial drain pan

Prevents the growth of slime, bacteria, and mould that cause odours and clogging.

* Drain pan should be changed once every two to three years.

#### Filter has anti-mould and antibacterial treatment

#### High Performance Prefilter (MERV 8) (Option)

This filter can catch more harmful substances in the air such as PM2.5.

BAF552A160

### Panel (Option)

**Standard panel with sensing**
BYCQ125EEF (Fresh White)

**Standard panel with sensing**
BYCQ125EEK (Black)

### Specifications

| MODEL | | FXFTQ25AV4 | FXFTQ32AV4 | FXFTQ40AV4 | FXFTQ50AV4 | FXFTQ63AV4 | FXFTQ80AV4 | FXFTQ100AV4 | FXFTQ125AV4 | FXFTQ140AV4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Power supply | | 1-phase, 220 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 |
| | | 0.026 | | 0.034 | 0.056 | 0.060 | 0.092 | 0.144 | 0.159 | 0.183 |
| Casing | | Galvanised steel plate | | | | | | | | |
| Airflow rate (H/HM/M/ML/L) | 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 | | | | |
| | Gas (Flare) | | ϕ12.7 | | | ϕ15.9 | | | | |
| | Drain | | VP25 (External Dia. 32/Internal Dia. 25) | | | | | | | |

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

### Panel (Option)

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

### Function List

| | |
|---|---|
| Wired remote controller | BRC1H63W(K) |
| Streamer function unit | ○ |
| Dual sensors *1 | ○ |
| Auto airflow function (Draft prevention) *1 | ○ |
| Sensing sensor low mode *1 | ○ |
| Sensing sensor stop mode *1 | ○ |
| Individual airflow direction control | ○ |
| Switchable 5 step fan speed | ○ |
| Auto airflow rate | ○ |
| Auto swing | ○ |
| High ceiling application | ○ |

*1. Applicable when sensing panel is installed.

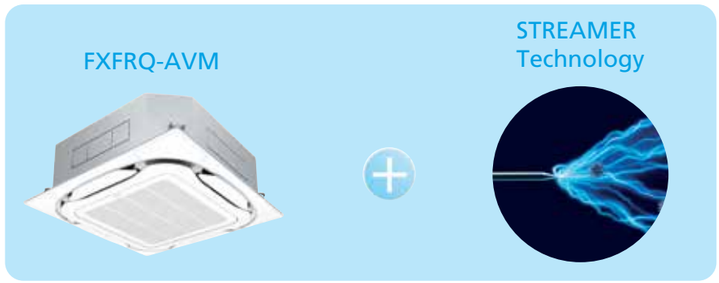
# Round Flow Cassette with Streamer Type

New **FXFRQ-A**

**360° airflow for improved comfort and enhanced maximum efficiency in cleaning**

## Introducing Streamer technology to *VRV* Indoor unit

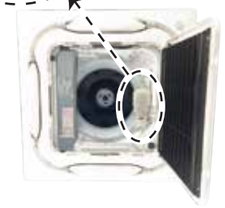
**Daikin Streamer Technology enhances maximum efficiency in cleaning, which uses powerful decomposition properties to decompose substances captured by filter for better air quality.**




Streamer filter clean unit irradiates Streamer when the fan and air conditioning operation are stopped. Streamer fumigates the cabin and sterilizes the filter.

New

Streamer Filter Clean Unit built-in inside the indoor unit



**Remarks:**

1) Only the remote controller BRC1H63W(K) can be connected for ON/OFF operation of the streamer.
2) The Streamer function operates only when the fan and air conditioning operation are stopped. The maximum operation of streamer is 180 minutes per day. (This function is available only when the remote controller BRC1H63W(K) is connected.)


**Stylish Remote Controller BRC1H63W/K**

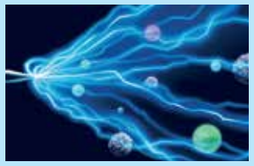

Streamer ON/OFF setting and status icon are available.



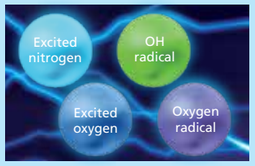
## Streamer Technology

Equipped with decomposition technology, Streamer is a type of plasma discharge that eliminates allergens such as pollen, mould, and mites, as well as, deodorises anti-bacterial dust filters so you can breathe with ease.

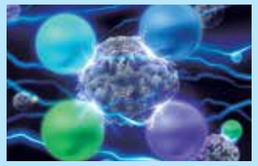
### Mechanism of decomposition by Streamer



Streamer emits high-speed electrons.




The electrons collide and combine with nitrogen and oxygen in the air to form four kinds of decomposing elements with decomposition power.

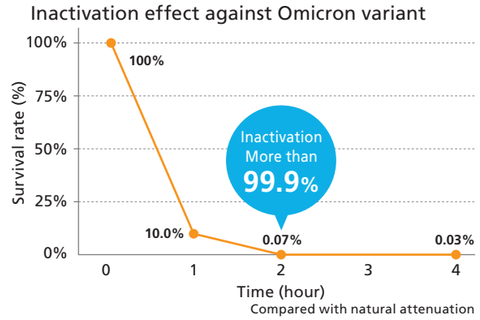


The decomposing elements provide decomposition power.

### 99.93% Inactivation of Omicron variant in 2 hours

#### Experimental Results

Irradiation with Streamer discharge for two hours inactivated 99.93%, and for four hours inactivated 99.97% of the Omicron variant of Coronavirus (SARS-CoV-2), when compared to without Streamer discharge.




Compared with natural attenuation

#### Test Method

DAIKIN Streamer Research Institute

hCoV-19/Japan/ TY38-873/2021 strain (Omicron variant) was used. Two acrylic boxes of about 31L were placed in a safety cabinet in the BSL-3 facility, and Streamer discharge device was installed in one of the acrylic boxes. Seesaw shakers with a 6-well plate were placed in both boxes, and 0.5 mL of virus solution was placed in each well of the plate. Streamer irradiation was performed on one 6-well plate while stirring with a seesaw shaker. After 1, 2, and 4 hours, the virus solution was collected, and the virus titer was measured by the TCID50 method using Vero E6/TMPRSS2 cells.

#### Test Organization

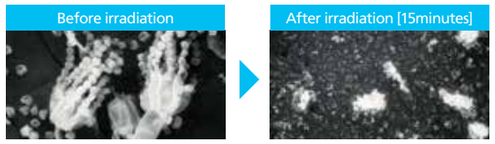
Professor Tatsuo Shioda, Department of Virus Infections, Research Institute for Microbial Diseases, Osaka University

*This result was obtained by using a Streamer discharge device for testing in lab conditions.
The effect of products equipped with Streamer technology or results in actual use environments may differ.

### Streamer decomposes mould and mites (feces and carcasses) and suppresses the causes of allergies.

#### Demonstration of mould

Picture of mould




#### Test Method

"Moulds" were placed on the electrodes of a Streamer discharge unit where they were exposed to Streamer dischage for 15 minutes and photographed with an electron microscope.

#### Test Organization

Demonstration test was performed at Wakayama Medical University.

### Why Daikin Streamer?

Recognized as clean technology by public bodies

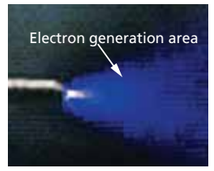
**Winner of the 2005 Progress Award, Institute of Electrostatics Japan**

Awarded for the development of a domestic air purifier which uses DC Streamer discharge.

**105 Patents Acquired**

Patents acquired relating to Streamer technology

Streamer, a type of plasma discharge, decomposes hazardous chemical substances. The decomposition power is comparable to thermal energy of about 100,000°C.*




Note:
*Comparison of oxidation decomposition.
This does not mean temperature will become high.

# Round Flow Cassette with Streamer Type

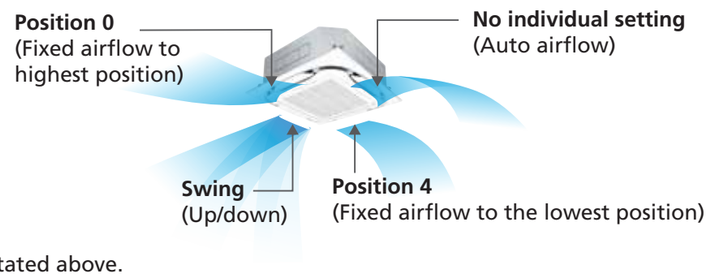
## Individual airflow direction control

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

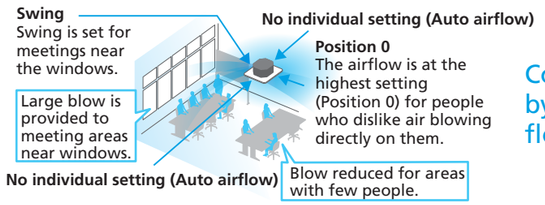
#### Easy setting is possible with a wired remote controller

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

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.




Comfort is provided to the entire room by individual setting corresponding to 4-way flow conditions.

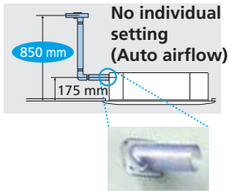
## Other functions

### Quick and easy installation

#### Installable in tight ceiling spaces

Min. of 261 mm* ceiling space when using standard panel.

* For FXFRQ25-80A models.

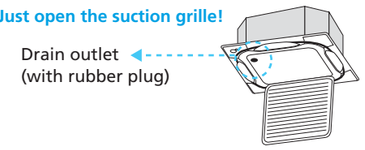



Drain pump is equipped as standard accessory with 850 mm lift.

### 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.




### Cleanliness

#### Silver ion anti-bacterial drain pan

Prevents the growth of slime, bacteria, and mould that cause odours and clogging.

* Drain pan should be changed once every two to three years.

#### Filter has anti-mould and antibacterial treatment

#### High Performance Prefilter (MERV 8) (Option)

This filter can catch more harmful substances in the air such as PM2.5.

BAF552A160



### Decoration Panel (Option)

#### Standard panel

**Standard panel**
BYCQ125EAF (Fresh White)

**Standard panel**
BYCQ125EAK (Black)

#### New designer panel

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

**Designer panel**
BYCQ125EAPF (Fresh White)

**Close to ideal styling**
**New designer panel**

**FLAT**
Flatter styling: Suction panel grid texture smoothed.

**CLEAN**
Clean-cut form: Soiling is hard to see on smart-looking panel.

**ROUND**
Subtle distinction: around suction inlets silvering is a tasteful touch.

#### Auto grille panel

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 is included.


Grille panel can be lowered to a maximum of 3.9 m.
BYCQ125EBSF (Fresh White)

### Specifications

| MODEL | | FXFRQ25AV4 | FXFRQ32AV4 | FXFRQ40AV4 | FXFRQ50AV4 | FXFRQ63AV4 | FXFRQ80AV4 | FXFRQ100AV4 | FXFRQ125AV4 | FXFRQ140AV4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Power supply | | 1-phase, 220 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 |
| | | 0.027 | | 0.036 | 0.040 | 0.063 | 0.096 | 0.150 | 0.166 | 0.191 |
| 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) | | | | | | | | |

Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height difference: 0 m.
- Capacity of indoor unit is only for reference. The 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.

### Panel (Option)

| | | | |
|---|---|---|---|
| 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 | | BYCQ125EBSF (Fresh White) |
| | Dimensions(H×W×D) | mm | 105×950×950 |
| | Weight | kg | 8 |

### Function List

| | |
|---|---|
| Wired remote controller | BRC1H63W(K) |
| Streamer function unit | ○ |
| Individual airflow direction control | ○ |
| Switchable 5 step fan speed | ○ |
| Auto airflow rate | ○ |
| Auto swing | ○ |
| High ceiling application | ○ |

# Round Flow Cassette with Sensing Type

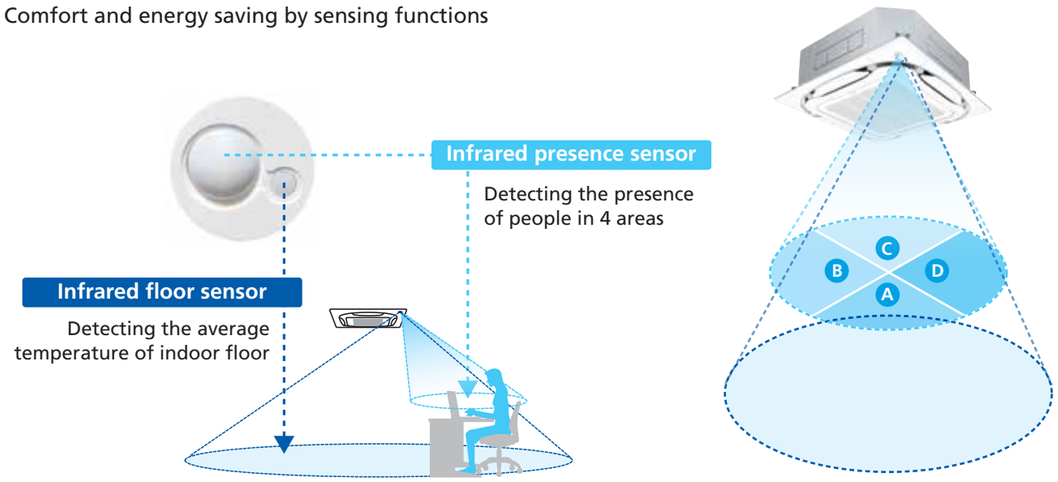
**FXFSQ-A**

**Comfort and energy saving by sensing functions**

## Daikin advanced sensing technology dual sensors

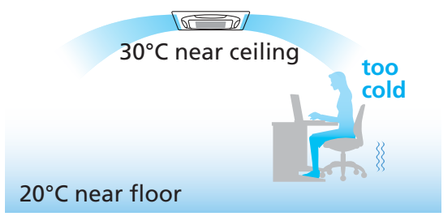
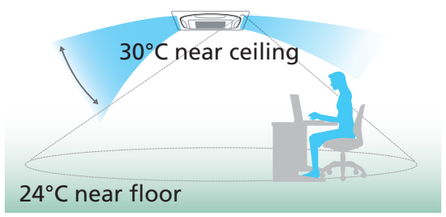
**Round flow with sensing**

Comfort and energy saving by sensing functions




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

Sensors detecting human presence and temperatures near the floor provide comfortable spaces without uneven temperatures.

| Without sensing function | **With sensing function** |
|---|---|
| **Cooling** | |
|  |  |
| Even when room temperature is detected at 30°C, the floor temperature may be as low as 20°C, causing the feet area to be cold. | To prevent an excessive drop in temperature, room temperature is calculated at 27°C when people are in the vicinity. |



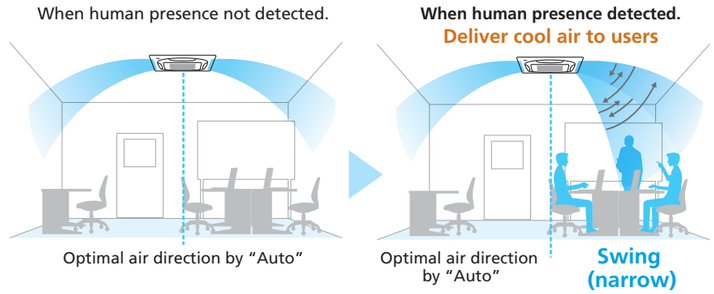


## Auto airflow function **Comfort**

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

### Direct Airflow (default: OFF)

Cooling Dry



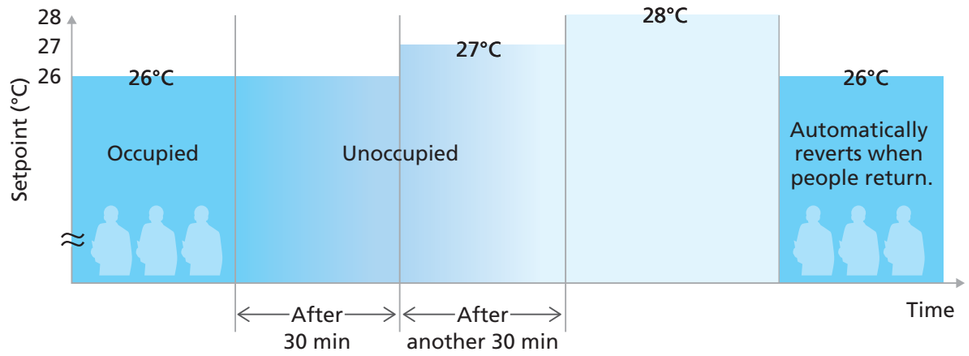

## Sensing sensor mode **Energy saving**

### Sensing sensor low mode (default: OFF)

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

Example

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




### Sensing sensor stop mode (default: OFF)

Based on preset user conditions, the system automatically stops operation if the room is unoccupied.

*Adjustment is possible for shift time and set temperature by local setting.

# Round Flow Cassette with Sensing Type

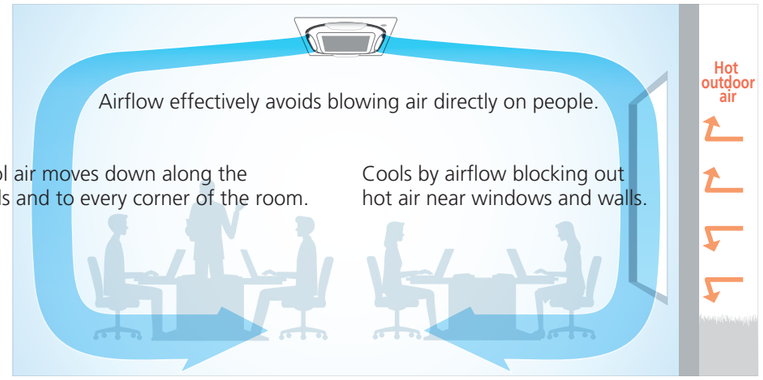
## Circulation airflow*

### Configurations of circulation airflow

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

Cooling

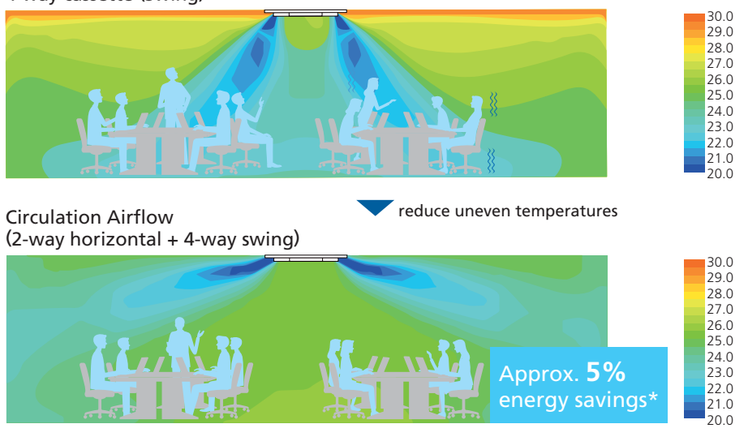
During 2-way horizontal flow




**Comfort without cold air pockets at floor level.**

**Comparison Conditions**
Room size: Width 7.5m x depth 7.5m x height 2.6m
Indoor unit capacity: 71 class
Outdoor air temperature: 35°C
Airflow rate and air direction: high / swing

4-way cassette (Swing)



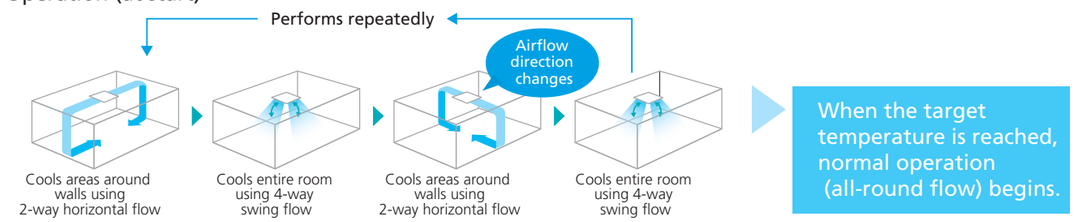

reduce uneven temperatures

Circulation Airflow
(2-way horizontal + 4-way swing)




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

Operation (at start)






## Individual airflow direction control

* Applicable when wired remote controller BRC1E63 or BRC1H63W(K) is used.

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

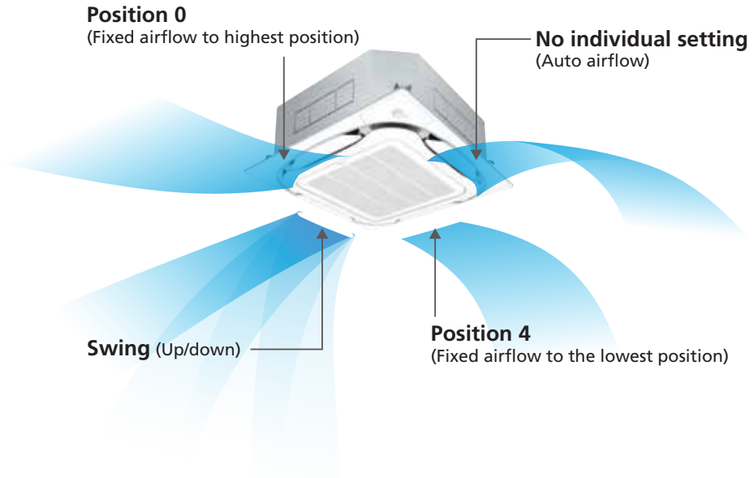
#### Easy setting is possible with a wired remote controller

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

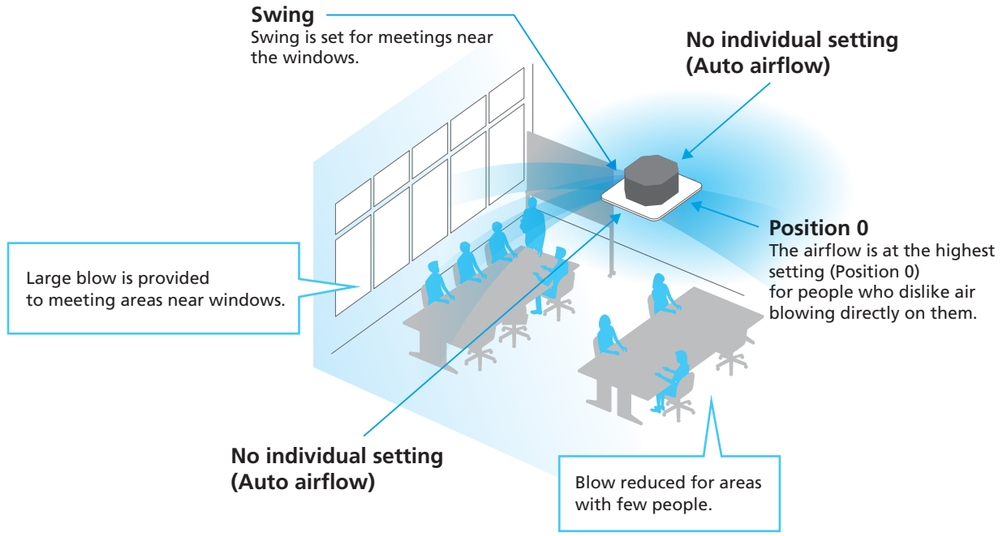
**Individual airflow settings**

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.




Comfort is provided to the entire room
by individual setting corresponding to 4-way flow conditions.



# Round Flow Cassette with Sensing Type

## Other functions

## Comfort

### From All-round flow to 2-way flow, various airflow patterns available.

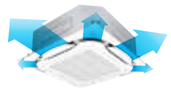
**All-round flow**

(E.g., installed in middle of ceiling)
4-way flow also possible.

**3-way flow**

(E.g., installed near a wall)

**L-shaped 2-way flow**



(E.g., installed in a corner)

**Opposite 2-way flow**

(E.g., installed in a long room)

* 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.

### Suitable for high ceilings

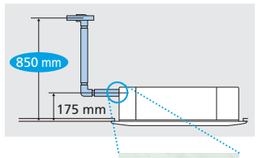
Even in spaces with high ceilings, a comfortable airflow is carried down to the floor level.

## Quick and easy installation

### Installable in tight ceiling spaces

Min. of 261 mm* ceiling space when using standard panel.

* For FXFSQ25-80A models.




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

## Easy maintenance

### Drain pan and drain water check

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

**Just open the suction grille!**

Drain outlet
(with rubber plug)

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

## Cleanliness

### Silver ion anti-bacterial drain pan

Prevents the growth of slime, bacteria, and mould that cause odours and clogging.

* Drain pan should be changed once every two to three years.

### Filter has anti-mould and antibacterial treatment

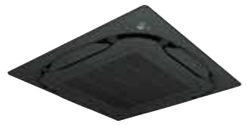
### High Performance Prefilter (MERV 8) (Option)

This filter can catch more harmful substances in the air such as PM2.5.

BAF552A160

## Panel (Option)

**Standard panel with sensing**
BYCQ125EEF (Fresh White)



**Standard panel with sensing**
BYCQ125EEK (Black)

### Specifications

| MODEL | | FXFSQ25AV4 | FXFSQ32AV4 | FXFSQ40AV4 | FXFSQ50AV4 | FXFSQ63AV4 | FXFSQ80AV4 | FXFSQ100AV4 | FXFSQ125AV4 | FXFSQ140AV4 |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 | | | | |
| | Gas (Flare) | | ϕ12.7 | | | ϕ15.9 | | | | |
| | Drain | | VP25 (External Dia. 32/Internal Dia. 25) | | | | | | | |

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

### Panel (Option)

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

### Function List

| Remote controller | Wired | | Wireless |
|---|---|---|---|
| | BRC1E63 | BRC1H63W(K) | BRC7M635F(K) |
| Dual sensors *1 | ○ | ○ | — |
| Auto airflow function (Direct airflow) *1 | ○ | — | — |
| Auto airflow function (Draft prevention) *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 | ○ | ○ | ○ |
| Selectable airflow pattern | ○ | — | ○ |
| High ceiling application | ○ | ○ | — |

*1. Applicable when sensing panel is installed.

# Round Flow Cassette Type

**FXFQ-A**

**360° airflow for improved comfort**

ROUND FLOW

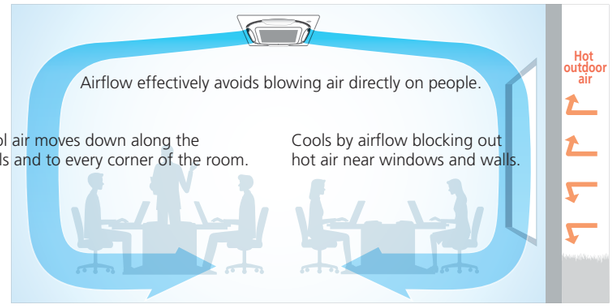
## Circulation airflow*

### Configurations of circulation airflow

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

Cooling

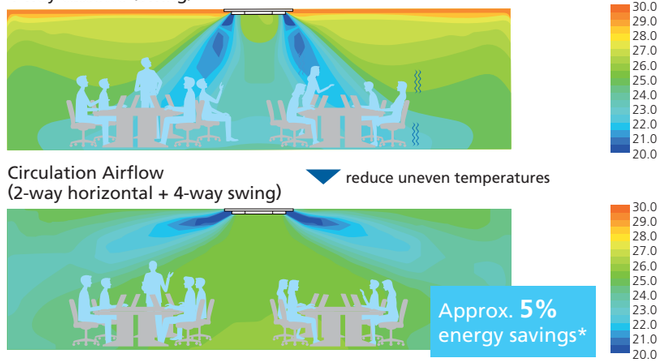
During 2-way horizontal flow




**Comfort without cold air pockets at floor level.**

**Comparison Conditions**
Room size: Width 7.5m x depth 7.5m x height 2.6m
Indoor unit capacity: 71 class
Outdoor air temperature: 35°C
Airflow rate and air direction: high / swing

4-way cassette (Swing)




Circulation Airflow
(2-way horizontal + 4-way swing)

reduce uneven temperatures

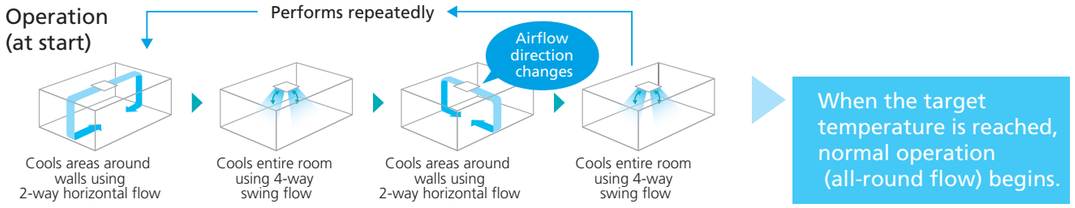



Approx. **5%** energy savings*

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

Operation (at start)

Performs repeatedly




When the target temperature is reached, normal operation (all-round flow) begins.



## Individual airflow direction control

* Applicable when wired remote controller BRC1E63 or BRC1H63W(K) is used.

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

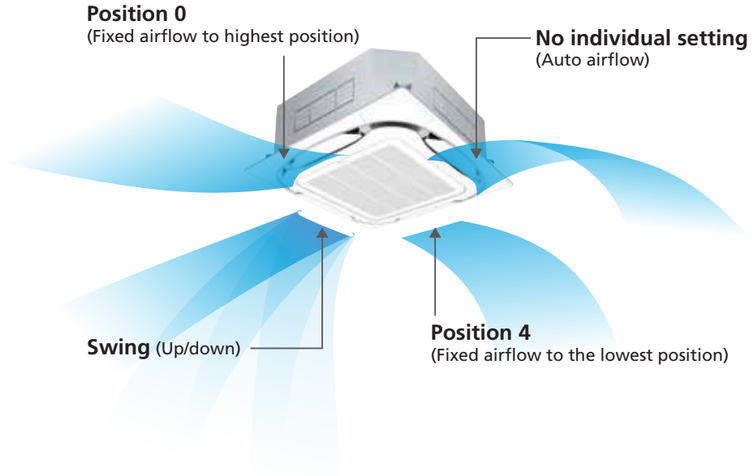
Easy setting is possible with a wired remote controller

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

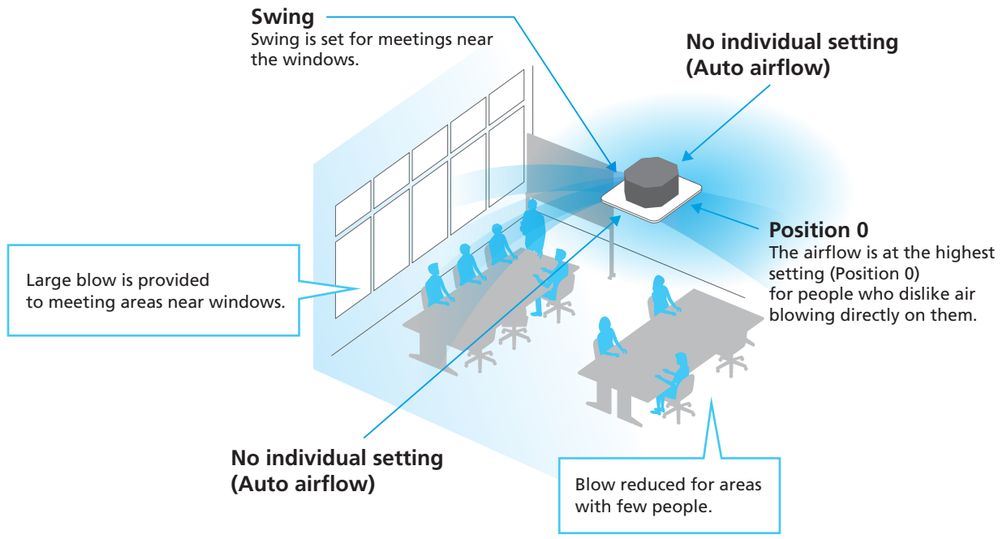
**Individual airflow settings**

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.




Comfort is provided to the entire room
by individual setting corresponding to 4-way flow conditions.



# Round Flow Cassette Type

## Other functions

## Comfort

### From All-round flow to 2-way flow, various airflow patterns available.

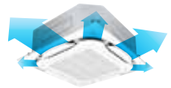
**All-round flow**

(E.g., installed in middle of ceiling)
4-way flow also possible.

**3-way flow**

(E.g., installed near a wall)

**L-shaped 2-way flow**



(E.g., installed in a corner)

**Opposite 2-way flow**

(E.g., installed in a long room)

* 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.

### Suitable for high ceilings

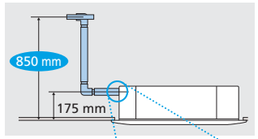
Even in spaces with high ceilings, a comfortable airflow is carried down to the floor level.

## Quick and easy installation

### Installable in tight ceiling spaces

Min. of 261 mm* ceiling space when using standard panel.

* For FXFQ25-80A models.




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

## Easy maintenance

### Drain pan and drain water check

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

**Just open the suction grille!**

Drain outlet
(with rubber plug)

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

## Cleanliness

### Silver ion anti-bacterial drain pan

Prevents the growth of slime, bacteria, and mould that cause odours and clogging.

* Drain pan should be changed once every two to three years.

### Filter has anti-mould and antibacterial treatment

### High Performance Prefilter (MERV 8) (Option)

This filter can catch more harmful substances in the air such as PM2.5.

BAF552A160



## Decoration Panel (Option)

### Standard panel

**Standard panel**
BYCQ125EAF (Fresh White)

**Standard panel**
BYCQ125EAK (Black)

### New designer panel

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

**Designer panel**
BYCQ125EAPF (Fresh White)

**Close to ideal styling**
**New designer panel**

**FLAT**
Flatter styling:
Suction panel grid texture smoothed.

**CLEAN**
Clean-cut form:
Soiling is hard to see on smart-looking panel.

**ROUND**
Subtle distinction:
around suction inlets silvering is a tasteful touch.

### Auto grille panel

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 is included.
Operation is not possible using other remote controllers.

Grille panel can be lowered to a maximum of 3.9 m.
BYCQ125EBSF (Fresh White)

Wireless Remote Controller

### Specifications

| 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) | | $m^3$/min | 13/12.5/11.5/11/10 | | 17/13.5/13/12/11 | 18/17/13.5/12.5/11 | 21/20/16/15/13.5 | 22.5/21.5/21/20/15 | 32/29/26/23/21 | 33/30.5/28/25.5/21 | 35.5/32.5/29.5/26.5/23 |
| | | cfm | 459/441/406/388/353 | | 600/477/459/424/388 | 635/600/477/441/388 | 741/706/565/530/477 | 794/759/741/706/530 | 1,130/1,024/918/812/741 | 1,165/1,077/888/900/741 | 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 | | | | |
| | Gas (Flare) | | ϕ12.7 | | | | ϕ15.9 | | | | |
| | Drain | | VP25 (External Dia. 32/Internal Dia. 25) | | | | | | | | |

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

### Decoration Panel (Option)

| | | | |
|---|---|---|---|
| Standard panel | 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 | | BYCQ125EBSF (Fresh White) |
| | Dimensions(H×W×D) | mm | 105×950×950 |
| | Weight | kg | 8 |

### Function List

| Remote controller | Wired | | Wireless |
|---|---|---|---|
| | BRC1E63 | BRC1H63W(K) | BRC7M635F(K) |
| Circulation airflow | ○ | — | — |
| Individual airflow direction control | ○ | ○ | — |
| Switchable 5 step fan speed | ○ | ○ | ○ |
| Auto airflow rate | ○ | ○ | ○ |
| Auto swing | ○ | ○ | ○ |
| Selectable airflow pattern | ○ | ○ | ○ |
| High ceiling application | ○ | ○ | — |

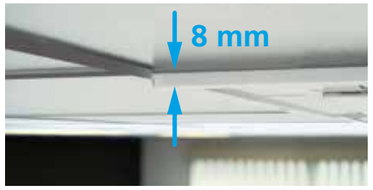
# Compact Multi Flow Cassette Type

New **FXZQ-B**

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

## Compact & elegant design

- Fully-flat integration in standard architectural ceiling tiles, leaving only 8 mm
- Remarkable blend of iconic design and engineering excellence with an elegant finish in white
- The newly designed panel integrates fully within one ceiling tile enabling lights, speakers and sprinklers to be installed in the adjoining ceiling tiles.




## Efficiency & comfort

### Dual sensors (Option)

- Two optional intelligent sensors improve energy efficiency and comfort.
- An optional presence and floor sensor kit can be fitted to the cassette for draught prevention, energy-saving operation and to provide optimal control of airflow.

### Individual airflow direction control*

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

*Applicable when wired remote controller BRC1E63 or BRC1H63W(K) is used.

### Auto swing (up/down)

- Possibility to select automatic vertical moving of the air discharge flaps for efficient air and temperature distribution throughout the room.

## Cleanliness

### New Streamer filter clean unit (Option) See page 3-4

Daikin Streamer technology enhances maximum efficiency in cleaning, which uses powerful decomposition properties to decompose substances captured by the filter for better air quality.

Remarks:
1) Only the stylish remote controller BRC1H63W(K) can be connected for ON/OFF operation of the streamer.
2) The Streamer function operates only when the fan and air conditioning operation are stopped. The maximum operation of Streamer is 180 minutes per day.

STREAMER

BAPW55A61

### Ceiling soiling prevention

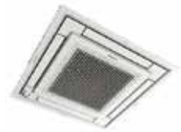
- Prevents air from blowing against the ceiling to prevent ceiling stains.

### Specifications

| MODEL | | FXZQ20BVM4 | FXZQ25BVM4 | FXZQ32BVM4 | FXZQ40BVM4 | FXZQ50BVM4 |
|---|---|---|---|---|---|---|
| Power supply | | 1 phase, 220-240V, 50 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 | 0.043 | | 0.045 | 0.059 | 0.092 |
| Casing | | Galvanised steel plate | | | | |
| Airflow rate (H/M/L) | m³/min | 8.7/7.5/6.5 | 9.0/8.0/6.5 | 10.0/8.5/7.0 | 11.5/9.5/8.0 | 14.5/12.5/10.0 |
| | cfm | 307/265/229 | 318/282/229 | 353/300/247 | 406/335/282 | 512/441/353 |
| Sound level (H/M/L) | dB(A) | 32.0/29.5/25.5 | 33.0/30.0/25.5 | 33.5/30.0/26.0 | 37.0/32.0/28.0 | 43.0/40.0/33.0 |
| Sound power (H) | dB(A) | 49 | 50 | 51 | 54 | 60 |
| Dimensions (H×W×D) | mm | 260×575×575 (For depth add 63 mm for electrical box) | | | | |
| Machine weight | kg | 15.5 | | 16.5 | | 18.5 |
| Piping connections | Liquid (Flare) | mm | ϕ6.4 | | | |
| | Gas (Flare) | | ϕ12.7 | | | |
| | Drain | | VP20 (External Dia. 26/Internal Dia. 20) | | | |

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

### Panel (Option)

| Panel type | | Grid ceiling panel | Decoration panel |
|---|---|---|---|
| Appearance | |  |  |
| Model | | BYFQ60CAW | BYFQ60B3W1 |
| Colour | | White (N9.5) | White (6.5Y9.5/0.5) |
| Dimensions (H×W×D) | mm | 46×620×620 | 55×700×700 |
| Weight | kg | 2.8 | 2.7 |

# Double Flow Cassette Type

New **FXCQ-B**

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

## Stylish design

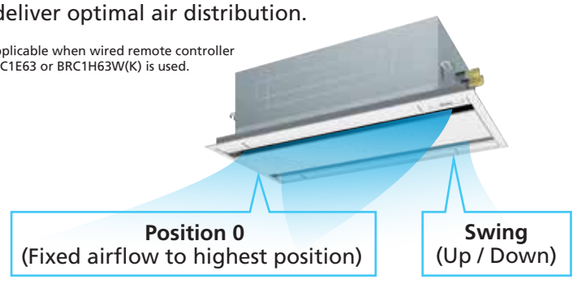
- Stylish unit blends easily with any interior.
- The flat flaps close entirely when the unit is not operating and there are no air intake grilles visible.
- Depth of all units is 620 mm, ideal for narrow spaces

## Comfort

### Individual airflow direction control*

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

*Applicable when wired remote controller BRC1E63 or BRC1H63W(K) is used.




**Individual airflow settings**

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

Individual settings are possible as stated above.

### 5-step & auto airflow control

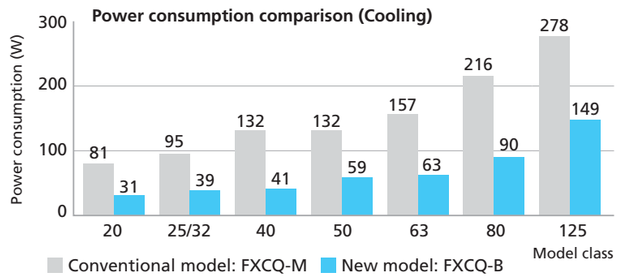
- Control of airflow rate has been improved from 3-step to 5-step. Auto airflow rate is newly available.

### Suitable for high ceilings

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

## Energy saving

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



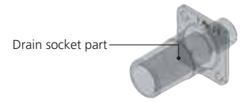



## Easy maintenance

- The flap parts are easy to clean because it is hard to condensate and get dirty.
- Check contamination in drain pan by simply removing suction grille and panel.
- Adjuster pockets mount at four corners of the unit enable to adjust the main unit without removing the panel.


## Flexible installation

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




## Cleanliness

New **Streamer filter clean unit (Option)** See page 3-4

Daikin Streamer technology enhances maximum efficiency in cleaning, which uses powerful decomposition properties to decompose substances captured by the filter for better air quality.

Remarks:
1) Only the stylish remote controller BRC1H63W(K) can be connected for ON/OFF operation of the streamer.
2) The Streamer function operates only when the fan and air conditioning operation are stopped. The maximum operation of Streamer is 180 minutes per day.

BAPW55A61

### Silver ion anti-bacterial drain pan

- Prevents the growth of slime, bacteria, and mould that cause odours and clogging.

* Drain pan should be changed once every two to three years.

### Filter has anti-mould and antibacterial treatment

### Specifications

| MODEL | | | FXCQ20BVM4 | FXCQ25BVM4 | FXCQ32BVM4 | FXCQ40BVM4 | FXCQ50BVM4 | FXCQ63BVM4 | FXCQ80BVM4 | FXCQ125BVM4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240V, 50 Hz | | | | | | | |
| Cooling capacity | | Btu/h | 7,500 | 9,600 | 12,300 | 15,400 | 19,100 | 24,200 | 30,700 | 47,800 |
| | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 | 9.0 | 14.0 |
| Power consumption | | kW | 0.031 | 0.039 | | 0.041 | 0.059 | 0.063 | 0.090 | 0.149 |
| Casing | | | Galvanised steel plate | | | | | | | |
| Airflow rate (H/HM/M/ML/L) | | $m^3$/min | 10.5/9.5/9/8/7.5 | 11.5/10.5/9.5/8.5/8 | | 12/11/10.5/9.5/8.5 | 15/14/13/11.5/10.5 | 16/15/14/12.5/11.5 | 26/24/22.5/20.5/18.5 | 32/29.5/27.5/25/22.5 |
| | | cfm | 371/335/318/282/265 | 406/371/335/300/282 | | 424/388/371/335/300 | 530/494/459/406/371 | 565/530/494/441/406 | 918/847/794/724/653 | 1,130/1,041/971/883/794 |
| Sound level (H/HM/M/ML/L) | | dB(A) | 32/31/30/29/28 | 34/33/31/30/29 | 34/33/32/31/30 | 36/35/33/32/31 | 37/36/35/33/31 | 39/38/37/35/32 | 42/40/38/36/33 | 46/44/42/40/38 |
| Dimensions (H × W × D) | | mm | 305×775×620 | | | | 305×990×620 | | 305×1,445×620 | |
| Machine weight | | kg | 19 | | | | 22 | 25 | 33 | 38 |
| Piping connections | Liquid (Flare) | mm | $\phi$6.4 | | | | | | $\phi$9.5 | |
| | Gas (Flare) | | $\phi$12.7 | | | | | | $\phi$15.9 | |
| | Drain | | External Dia. 32/Internal Dia. 25 | | | | | | | |
| Panel (Option) | Model | | BYBCQ40CF | | | | BYBCQ63CF | | BYBCQ125CF | |
| | Colour | | Fresh white (6.5Y 9.5/0.5) | | | | | | | |
| | Dimensions (HxWxD) | mm | 55×1,070×700 | | | | 55×1,285×700 | | 55×1,740×700 | |
| | Weight | kg | 10 | | | | 11 | | 13 | |

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

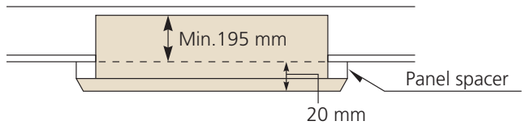
# Single Flow Cassette Type

**FXKQ-MA**

**Slim design for flexible installation**

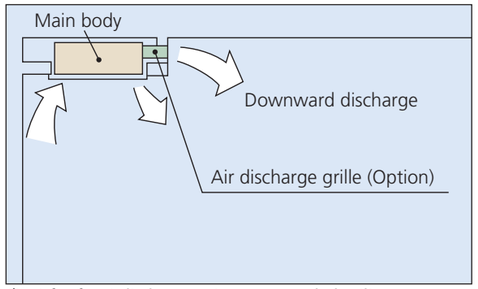
## Slim design

- 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.

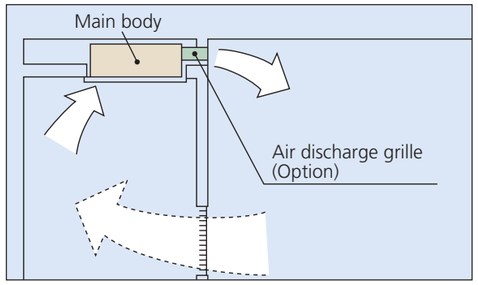



## Flexible installation

- 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).

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

## Specifications

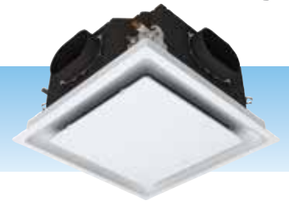
| MODEL | | | FXKQ25MAVE4 | FXKQ32MAVE4 | FXKQ40MAVE4 | FXKQ63MAVE4 |
|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 Hz | | | |
| Cooling capacity | | Btu/h | 9,600 | 12,300 | 15,400 | 24,200 |
| | | kW | 2.8 | 3.6 | 4.5 | 7.1 |
| Power consumption | | kW | 0.066 | | 0.076 | 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 | ϕ6.4 | | | ϕ9.5 |
| | Gas (Flare) | | ϕ12.7 | | | ϕ15.9 |
| | 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 |

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

# Ceiling Mounted Cassette Duct Type

**FXFDQ-A**

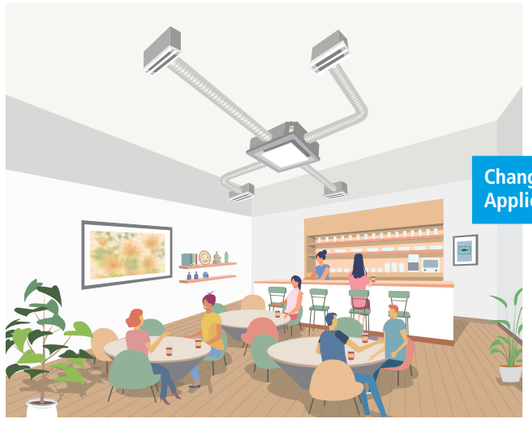
**Unprecedented flexibility with revolutionary air blow concept**



## Design flexibility

### Easier renovations for new tenants

- The airflow outlets can be easily moved and repositioned as desired. This makes the unit a perfect fit for any commercial space which requires frequent interior changes.




**Cafe:** Three airflow outlets are located in the customer area with one above the counter.

**Office:** Four airflow outlets are equally positioned throughout the office area.

### Creation of a sophisticated environment

- Ultra-slim profile where only the smooth flat panel is visible on the ceiling.
- Sleek finish creates a sophisticated, modern atmosphere.

## Comfort

### Elimination of temperature fluctuations

- Up to four airflow outlets can be added as desired, reducing the temperature fluctuations.

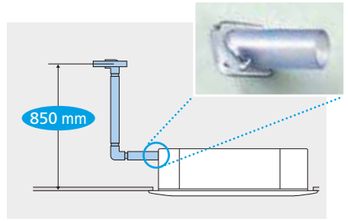
### 5-step & auto airflow control

- Control of airflow rate can be selected from 5-step and Auto to provide comfortable airflow.



## Easy design & installation

- Save design cost by using flexible ducts, that require simpler calculations and installation.
- Airflow outlets can quickly be connected to the new indoor unit.
  * The required flexible ducts and diffusers should be obtained locally.
- Drain pump is equipped as standard accessory with 850 mm lift.




## Easy maintenance

- Maintenance staff can access the air filter and heat exchanger immediately by removing the flat panel. This streamlines servicing and cuts the time needed.

## Cleanliness

### Silver ion anti-bacterial drain pan

- Prevents the growth of slime, bacteria, and mould that cause odours and clogging.

* Drain pan should be changed once every two to three years.

### Specifications

| Model name | | | FXFDQ63AV4 | FXFDQ80AV4 | FXFDQ100AV4 | FXFDQ125AV4 |
|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220 V, 50 Hz | | | |
| Cooling capacity | | Btu/h | 24,200 | 30,700 | 38,200 | 47,800 |
| | | kW | 7.1 | 9.0 | 11.2 | 14.0 |
| Power consumption*1 | | kW | 0.063 | 0.096 | 0.158 | 0.178 |
| Casing | | | Galvanised steel plate | | | |
| Airflow rate (H/HM/M/ML/L)*1 | | $m^3$/min | 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 |
| | | cfm | 741/706/565/530/477 | 794/759/741/706/530 | 1,130/1,024/918/812/741 | 1,165/1,077/988/900/741 |
| External static pressure | | Pa | 20 to 40 (Rated 30)*2 | | | |
| Sound level (H/HM/M/ML/L)*1 | | dB (A) | 40/38.5/37/35.5/34 | 43/41.5/40/38.5/37 | 46.5/45/43.5/42/40.5 | 48/46.5/45/43.5/42 |
| Dimensions (HxWxD) | | mm | 298x840x840 | | | |
| Machine weight | | kg | 26 | | | |
| Piping connections | Liquid (Flare) | mm | ϕ9.5 | | | |
| | Gas (Flare) | | ϕ15.9 | | | |
| | Drain | | VP25 (External dia. 34/Internal dia. 25) | | | |
| Panel (Option) | Model | | BYCDQ125APF | | | |
| | Colour | | White (N9.5) | | | |
| | Dimensions (HxWxD) | mm | 110x950x950 | | | |
| | Weight | kg | 7 | | | |

Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height 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 besed on conditions of rated external static pressure (30 Pa).
*2. External static pressure is changeable to set by the remote controller. (Factory setting is 30 Pa.)

# Bedroom Duct Type

**FXDBQ-A**

**Suitable for close living spaces such as hotels and condominiums**

## Installation flexibility

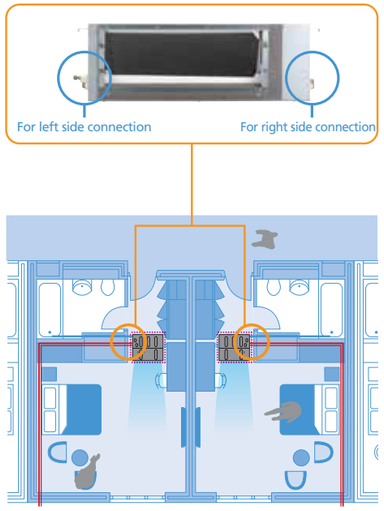
### Only 700 mm width

- Installation is possible even in narrow entrance ways at hotels and condominiums.


*1,000 mm in width for the FXDBQ63/80 model.

### Mirror piping

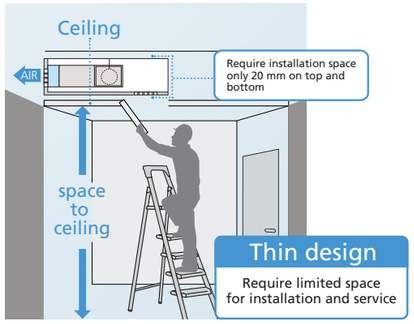
- Allows pipe installation from either side of indoor unit, simplified design process and installation.




## Easy maintenance

### 1-stop service space

- Requires minimum spaces for installation and maintenance can be done from only one inspection access.

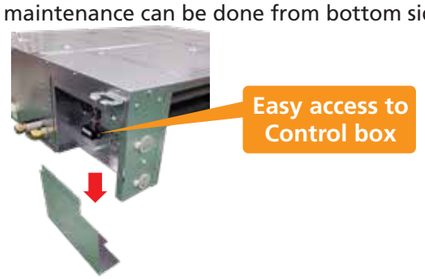



### Easier and faster cleaning

- In conventional model, the parts need to be removed one by one in order. However in new model, the integrated fan motor can be removed and reinstalled in one time.


### Easy access to control box from bottom side

- All wiring is simplified to control box, so maintenance can be done from bottom side.




## Energy efficiency & comfort

- Control of airflow rate can be selected from 5-step and Auto to provide comfortable airflow.
- Quiet operation 27 dB(A) in L tap for the FXDBQ40/63

Specifications

| MODEL | | | FXDBQ40AVM4 | FXDBQ50AVM4 | FXDBQ63AVM4 | FXDBQ80AVM4 |
|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 Hz | | | |
| Cooling capacity | | Btu/h | 15,400 | 19,100 | 24,200 | 30,700 |
| | | kW | 4.5 | 5.6 | 7.1 | 9.0 |
| Power consumption*1 | | kW | 0.062 | 0.080 | 0.090 | 0.120 |
| Casing | | | Galvanized steel plate | | | |
| Airflow rate (H/HM/M/ML/L) | | $m^3$/min | 13.3/12/10.5/10/8.5 | 14.8/13/11.5/10.5/9 | 22/19/18/16/14.5 | 25/22/20/18/16 |
| | | cfm | 470/424/371/353/300 | 522/459/406/371/318 | 777/671/635/565/512 | 883/777/706/635/565 |
| External static pressure | | Pa | 15-50 (15)*2 | | | |
| Sound level (H/HM/M/ML/L)*1 | | dB(A) | 35/33/31/29/27 | 37/36/33/31/28 | 35/33/31/29/27 | 37/35/34/32/30 |
| Dimensions (HxWxD) | | mm | 245×700×800 | | 245×1,000×800 | |
| Machine weight | | kg | 26 | | 36 | |
| Piping connections | Liquid (Flare) | mm | ϕ6.4 | | ϕ9.5 | |
| | Gas (Flare) | | ϕ12.7 | | ϕ15.9 | |
| | Drain | | VP25 (External Dia. 32/Internal Dia.25) | | | |

Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height difference: 0 m.
- Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

*1: Power consumption values are based on conditions of rated external static pressure.
*2: External static pressure is changeable to set by the remote controller. These values indicate the lowest and highest possible static pressures. The rated static pressure is 15 Pa.

# Slim Duct (Standard) Type

**FXDQ-PD / ND**

**Slim design, quietness and ideal for drop-ceilings**

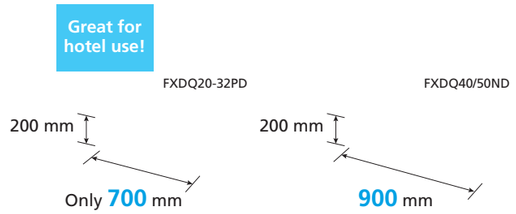
## Comfort

- 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.
- Low operation sound level: down to 23 dB(A)

## Installation flexibility

- 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/NDVT4:** without a drain pump




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

### 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, 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 (FXDQ-PD/NDVE4) *1 | kW | 0.086 | | 0.089 | 0.160 | 0.165 | 0.181 |
| Power consumption (FXDQ-PD/NDVT4) *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 |
| Piping connections: Gas (Flare) | mm | ϕ12.7 | | | | | ϕ15.9 |
| Piping connections: Drain | mm | VP20 (External Dia. 26/Internal Dia. 20) | | | | | |

Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height 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).





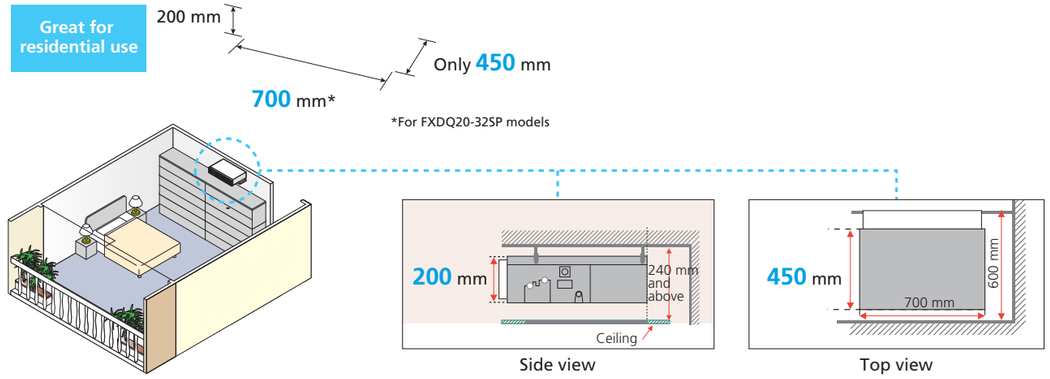
# Slim Duct (Compact) Type

**FXDQ-SP**

**Slim and compact design for easy and flexible installation**

## Installation flexibility

- Slim and compact design with a height of only 200 mm and the depth of only 450 mm which is suitable to install in limited spaces.




- 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) | mm | ϕ12.7 | | | | | ϕ15.9 |
| Piping connections: Drain | mm | VP20 (External Dia. 26/Internal Dia. 20) | | | | | |

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

*1: Values are based on the following conditions: FXDQ20-32SP: external static pressure of 10 Pa; FXDQ40-63SP: external static pressure of 20 Pa.
*2: External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard".
(Factory setting is 10 Pa for FXDQ20-32SP models and 20 Pa for FXDQ40-63SP models.)
*3: The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB(A).

# Middle Static Pressure Duct Type

**FXSQ-PA**

**Middle static pressure and slim design allow flexible installations**

## Installation flexibility

### Slim design

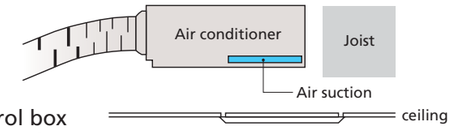
- With a height of only 245 mm, installation is possible even in buildings with narrow ceiling spaces.


### Standard DC drain pump

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

### Bottom suction possible

- Bottom suction is possible which facilitates 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.




## 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.

**Adjustable external static pressure**

**30 Pa*** — **150 Pa**

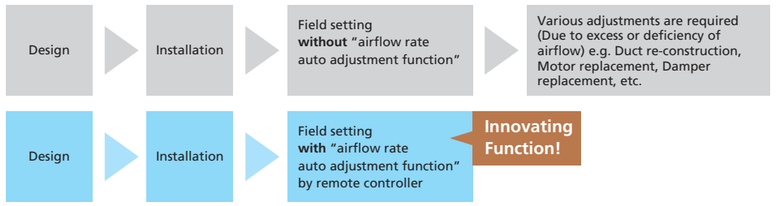
* 30 Pa–150 Pa for FXSQ20-40PAV4
50 Pa–150 Pa for FXSQ50-125PAV4
50 Pa–140 Pa for FXSQ140PAV4

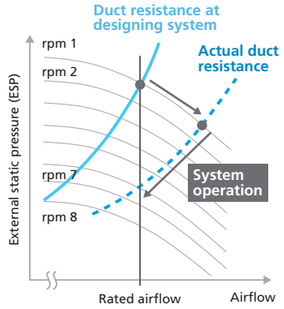
## Easy installation

### "Airflow rate auto adjustment function" at field setting

(local setting by remote controller)

*This function can only be set via wired remote controller.




<Mechanism>
1. During field setting, power input of DC fan is detected.
2. External static pressure is estimated from power input of DC fan because PCB of FXSQ-PA has table of external static pressure vs. power input of DC fan.
3. Actual duct resistance is calculated according to 1 and 2.
4. Fan speed is automatically adjusted to produce rated airflow.

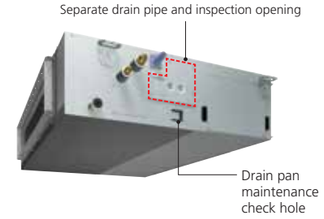
Notes: "Airflow rate auto adjustment function" can be adjusted within ±10% of rated airflow. (Refer to Engineering Data Book for details)
"Airflow rate auto adjustment function" should be used at field setting only.

## Comfort

- Control of the airflow rate can be selected from 3-step control. Auto airflow rate control can be selected with wired remote controller.
- Lower sound level: down to 28 dB(A)

## Easy maintenance

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




## Cleanliness

### Silver ion anti-bacterial drain pan

- Prevents the growth of slime, bacteria, and mould that cause odours and clogging.

* Drain pan should be changed once every two to three years.

### Filter has anti-mould and antibacterial treatment

### Specifications

| MODEL | | | FXSQ20PAV4 | FXSQ25PAV4 | FXSQ32PAV4 | FXSQ40PAV4 | FXSQ50PAV4 |
|---|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 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, 50 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) | | | | |

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

# Middle-High Static Pressure Duct Type

**FXMQ-PA**

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

## Design flexibility

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**

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

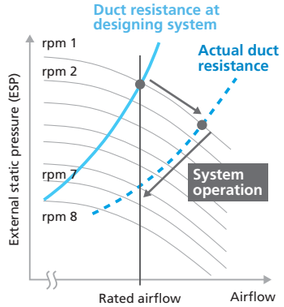
## Easy installation

### "Airflow rate auto adjustment function" at field setting
(local setting by remote controller)

*This function is not available with FXMQ140PAV4.
*This function can only be set via wired remote controller.

Design → Installation → Field setting **without** "airflow rate auto adjustment function" → Various adjustments are required (Due to excess or deficiency of airflow) e.g. Duct re-construction, Motor replacement, Damper replacement, etc.

Design → Installation → Field setting **with** "airflow rate auto adjustment function" by remote controller — **Innovating Function!**




<Mechanism>
1. During field setting, power input of DC fan is detected.
2. External static pressure is estimated from power input of DC fan because PCB of FXMQ-PA has table of external static pressure vs. power input of DC fan.
3. Actual duct resistance is calculated according to 1 and 2.
4. Fan speed is automatically adjusted to produce rated airflow.

Notes: "Airflow rate auto adjustment function" can be adjusted within ±10% of rated airflow. (Refer to Engineering Data Book for details)
"Airflow rate auto adjustment function" should be used at field setting only.

- 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.

## Comfort

- 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.
- Low operation sound level: down to 29 dB(A)

## Energy saving

- DC fan motor is used to realise energy-saving operation.

## Easy maintenance

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


## Cleanliness

### Silver ion anti-bacterial drain pan

Prevents the growth of slime, bacteria, and mould that cause odours and clogging.
*Drain pan should be changed once every two to three years.

### Filter has anti-mould and antibacterial treatment

Specifications

| MODEL | | | FXMQ20PAV4 | FXMQ25PAV4 | FXMQ32PAV4 | FXMQ40PAV4 | FXMQ50PAV4 |
|---|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 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) | | m³/min | 9/7.5/6.5 | | 9.5/8/7 | 16/13/11 | 18/16.5/15 |
| | | cfm | 318/265/230 | | 335/282/247 | 565/459/388 | 635/582/530 |
| External static pressure | | Pa | 30-100 (50) *2 | | | 30-160 (100) *2 | 50-200 (100) *2 |
| Sound level (HH/H/L) | | dB(A) | 33/31/29 | | 34/32/30 | 39/37/35 | 41/39/37 |
| Dimensions (H×W×D) | | mm | 300x550x700 | | | 300x700x700 | 300x1,000x700 |
| Machine weight | | kg | 25 | | | 27 | 35 |
| Piping connections | Liquid (Flare) | mm | ϕ6.4 | | | | |
| | Gas (Flare) | | ϕ12.7 | | | | |
| | Drain | | VP25 (External Dia. 32/Internal Dia. 25) | | | | |

| MODEL | | | FXMQ63PAV4 | FXMQ80PAV4 | FXMQ100PAV4 | FXMQ125PAV4 | FXMQ140PAV4 |
|---|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 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) | | m³/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) | | | | |

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

# High Static Pressure Duct Type

**FXMQ-P**

**High static pressure allows for flexible duct design.**

## Design flexibility

### Adjustable external static pressure

- Using a DC fan motor, the external static pressure can be controlled within a range of 50 Pa to 250 Pa.

**Adjustable external static pressure**

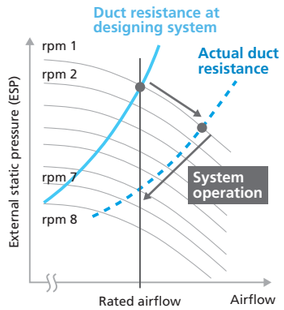
**50 Pa** — **250 Pa**

## Easy installation

### "Airflow rate auto adjustment function" at field setting
(local setting by remote controller)

*This function can only be set via wired remote controller.

| | | | |
|---|---|---|---|
| Design | Installation | Field setting **without** "airflow rate auto adjustment function" | Various adjustments are required (Due to excess or deficiency of airflow) e.g. Duct re-construction, Motor replacement, Damper replacement, etc. |
| Design | Installation | Field setting **with** "airflow rate auto adjustment function" by remote controller | **Innovating Function!** |

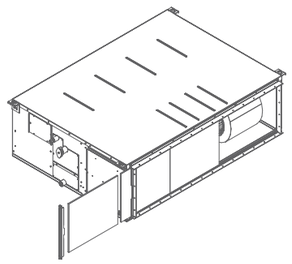



<Mechanism>
1. During field setting, power input of DC fan is detected.
2. External static pressure is estimated from power input of DC fan because PCB of FXMQ-P has table of external static pressure vs. power input of DC fan.
3. Actual duct resistance is calculated according to 1 and 2.
4. Fan speed is automatically adjusted to produce rated airflow.

Notes: "Airflow rate auto adjustment function" can be adjusted within ±10% of rated airflow. (Refer to Engineering Data Book for details)
"Airflow rate auto adjustment function" should be used at field setting only.

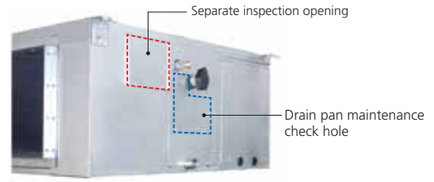
### Built-in pre-filter slot

- To cater for easy installation of filter at site, a filter rail is available at the return flange.

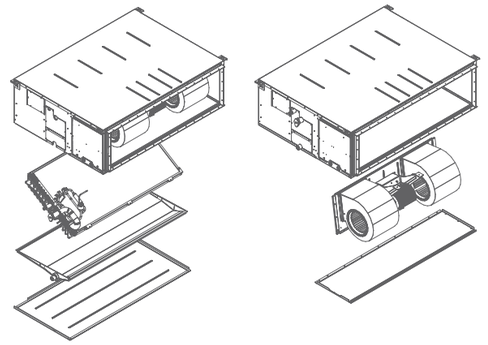


## Easy maintenance

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




- Heat exchanger, drain pan and fan deck can be easily accessed and removed from bottom for maintenance.



## Specifications

| MODEL | | | FXMQ200PVM | FXMQ250PVM |
|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 Hz | |
| Cooling capacity | | Btu/h | 76,400 | 95,500 |
| | | kW | 22.4 | 28.0 |
| Power consumption | | kW | 0.55 *1 | 0.67 *1 |
| Casing | | | Galvanised steel plate | |
| Airflow rate (HH/H/L) | | $m^3$/min | 74/61/50 | 84/71/58 |
| | | cfm | 2,612/2,153/1,765 | 2,965/2,506/2,047 |
| External static pressure | | Pa | 50-250 (150) *2 | 50-250 (150) *2 |
| Sound level (HH/H/L) | | dB(A) | 42/38/35 | 44/40/37 |
| Dimensions (H × W × D) | | mm | 470×1,490×1,100 | 470×1,490×1,100 |
| Machine weight | | kg | 95 | 105 |
| Piping connections | Liquid (Flare) | mm | ϕ9.5 | |
| | Gas (Flange) | | ϕ19.1 | ϕ22.2 |
| | Drain | | BSP1" | |

Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height 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 fifteen levels of control. These values indicate the lowest and highest possible static pressures. The standard static pressure is 150 Pa.

# Ceiling Suspended Type

## New FXHQ-MA / B

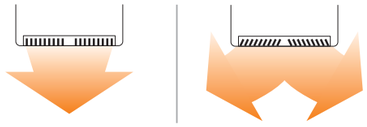
**Slim body with quiet and wide airflow**

FXHQ32 / 63 / 100MA

New FXHQ125 / 140B

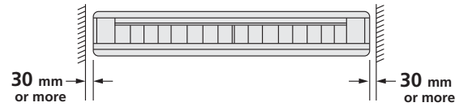
## Comfort

- Auto swing (up and down) and louvers (left and right by hand) bring comfort to the room.
- Louver manually adjusts for straight or wide angle airflow.

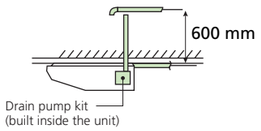


## Installation flexibility

- Flexible installation
  The unit fits more snugly into tight spaces.
- Drain pump kit (option) can be easily incorporated.
  Drain pipe connection can be done inside the unit.
  Refrigerant and drain pipe outlets are at the same opening.
- All wiring and internal servicing can be done from under the unit.

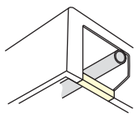



*Water used in the test-run can be drained from the air discharge opening rather than from the side as was formerly the case.




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

- The technology of the DC fan motor, wide sirocco fan, and large heat exchanger combine for greater airflow and quiet operation.
- Sophisticated design: Flap neatly closes when not in use.
- Suitable for high ceilings: maximum 4.3 m
- Control of the airflow rate can be selected from 3-step control.
- Drain pump kit (option) includes a silver ion antibacterial agent that assists in preventing the growth of slime, bacteria, and mould that cause smells and clogging.
- The rear side removable frame allows ease of access for piping work.



Easier piping work

## Cleanliness

### New Streamer filter clean unit (Option) for new 125 / 140 models

See page 3-4

Daikin Streamer technology enhances maximum efficiency in cleaning, which uses powerful decomposition properties to decompose substances captured by the filter for better air quality.

STREAMER

BAPW55A61

Remarks:
1) Only the stylish remote controller BRC1H63W(K) can be connected for ON/OFF operation of the streamer.
2) The Streamer function operates only when the fan and air conditioning operation are stopped. The maximum operation of Streamer is 180 minutes per day.



## Specifications

| MODEL | | | FXHQ32MAV7 | FXHQ63MAV7 | FXHQ100MAV7 | FXHQ125BVM4 | FXHQ140BVM4 |
|---|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 Hz | | | | |
| Cooling capacity | | Btu/h | 12,300 | 24,200 | 38,200 | 48,000 | 52,900 |
| | | kW | 3.6 | 7.1 | 11.2 | 14.1 | 15.5 |
| Power consumption | | kW | 0.111 | 0.115 | 0.135 | 0.168 | 0.181 |
| Casing | | | White (10Y9/0.5) | | | Sheet Metal / White | |
| Airflow rate (H/M/L) | | $m^3$/min | 12/-/10 | 17.5/-/14 | 25/-/19.5 | 34/26/20 | 36/27/20 |
| | | cfm | 424/-/353 | 618/-/494 | 883/-/688 | 1,200/918/706 | 1,271/953/706 |
| Sound level (H/M/L) | | dB(A) | 36/-/31 | 39/-/34 | 45/-/37 | 46/41/37 | 48/42/37 |
| Dimensions (H × W × D) | | mm | 195×960×680 | 195×1,160×680 | 195×1,400×680 | 235×1,590×690 | |
| Machine weight | | kg | 24 | 28 | 33 | 41 | |
| Piping connections | Liquid (Flare) | mm | ϕ6.4 | ϕ9.5 | | | |
| | Gas (Flange) | | ϕ12.7 | ϕ15.9 | | | |
| | Drain | | VP20 (External Dia. 26/Internal Dia. 20) | | | | |

Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height 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-A**

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

## Comfort

### Higher airflow

**An invisible air intake at the top of the unit**

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

### Lower sound level

- Whisper quiet in operation, with sound levels as low as 28.5 dB(A)*

  *Sound level for FXAQ20-32A

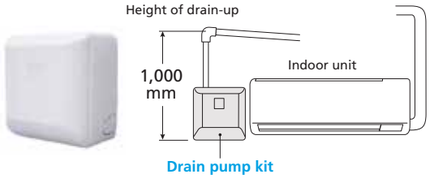
- An ideal solution for a wide range of commercial spaces, including individual office spaces.

## Stylish design and cleanliness

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

## Flexible installation

- Drain pipe can be fitted to from either left or right sides.
- Drain pump kit is available as optional accessory, which lifts the drain 1,000 mm from the bottom of the unit.




### Specifications

| MODEL | | FXAQ20AVM4 | FXAQ25AVM4 | FXAQ32AVM4 | FXAQ40AVM4 | FXAQ50AVM4 | FXAQ63AVM4 |
|---|---|---|---|---|---|---|---|
| Power supply | | 1-phase, 220 V, 50 Hz | | | | | |
| Cooling capacity | Btu/h | 7,500 | 9,600 | 12,300 | 15,400 | 19,100 | 24,200 |
| | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| Power consumption | kW | 0.040 | 0.040 | 0.040 | 0.050 | 0.060 | 0.100 |
| Casing | | Resin / White N9.5 | | | | | |
| Airflow rate (H/L) | $m^3$/min | 9.1/7.0 | 9.4/7.0 | 9.8/7.0 | 12.2/9.7 | 15.0/12.0 | 19.0/14.0 |
| | cfm | 321/247 | 332/247 | 346/247 | 431/342 | 530/424 | 671/494 |
| Sound level (H/L) | dB(A) | 33.0/28.5 | 35.0/28.5 | 37.5/28.5 | 37.0/33.5 | 41.0/35.5 | 46.5/38.5 |
| Dimensions (H × W × D) | mm | 290×795×266 | | | 290×1,050×269 | | |
| Machine weight | kg | 12 | | | 15 | | |
| Piping connections | Liquid (Flare) | mm | ϕ6.4 | | | | ϕ9.5 |
| | Gas (Flange) | | ϕ12.7 | | | | ϕ15.9 |
| | Drain | | VP13 (External Dia. 18/Internal Dia. 15) | | | | |

Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height 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/m³

Specifications

| MODEL | | | FXLQ20MAVE4 | FXLQ25MAVE4 | FXLQ32MAVE4 | FXLQ40MAVE4 | FXLQ50MAVE4 | FXLQ63MAVE4 |
|---|---|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 Hz | | | | | |
| Cooling capacity | | Btu/h | 7,500 | 9,600 | 12,300 | 15,400 | 19,100 | 24,200 |
| | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| Power consumption | | kW | 0.049 | | 0.090 | | 0.110 | |
| Casing | | | Ivory white (5Y7.5/1) | | | | | |
| Airflow rate (H/L) | | m³/min | 7/6 | | 8/6 | 11/8.5 | 14/11 | 16/12 |
| | | cfm | 247/212 | | 282/212 | 388/300 | 494/388 | 565/424 |
| Sound level (H/L) | 220 V | dB(A) | 35/32 | | | 38/33 | 39/34 | 40/35 |
| | 240 V | | 37/34 | | | 40/35 | 41/36 | 42/37 |
| Dimensions (H × W × D) | | mm | 600×1,000×222 | | 600×1,140×222 | | 600×1,420×222 | |
| Machine weight | | kg | 25 | | 30 | | 36 | |
| Piping connections | Liquid (Flare) | mm | ϕ6.4 | | | | | ϕ9.5 |
| | Gas (Flare) | | ϕ12.7 | | | | | ϕ15.9 |
| | Drain | | 21O.D. | | | | | |

Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height 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.
- A long-life filter (maintenance free up to one year*) is equipped as standard accessory.

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

Specifications

| MODEL | | | FXNQ20MAVE4 | FXNQ25MAVE4 | FXNQ32MAVE4 | FXNQ40MAVE4 | FXNQ50MAVE4 | FXNQ63MAVE4 |
|---|---|---|---|---|---|---|---|---|
| Power supply | | | 1-phase, 220-240 V, 50 Hz | | | | | |
| Cooling capacity | | Btu/h | 7,500 | 9,600 | 12,300 | 15,400 | 19,100 | 24,200 |
| | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| Power consumption | | kW | 0.049 | | 0.090 | | 0.110 | |
| Casing | | | Galvanised steel plate | | | | | |
| Airflow rate (H/L) | | m³/min | 7/6 | | 8/6 | 11/8.5 | 14/11 | 16/12 |
| | | cfm | 247/212 | | 282/212 | 388/300 | 494/388 | 565/424 |
| Sound level (H/L) | 220 V | dB(A) | 35/32 | | | 38/33 | 39/34 | 40/35 |
| | 240 V | | 37/34 | | | 40/35 | 41/36 | 42/37 |
| Dimensions (H × W × D) | | mm | 610×930×220 | | 610×1,070×220 | | 610×1,350×220 | |
| Machine weight | | kg | 19.0 | | 23.0 | | 27.0 | |
| Piping connections | Liquid (Flare) | mm | ϕ6.4 | | | | | ϕ9.5 |
| | Gas (Flare) | | ϕ12.7 | | | | | ϕ15.9 |
| | Drain | | 21O.D. | | | | | |

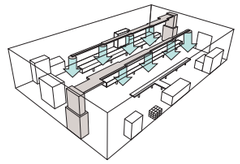
Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height difference: 0 m.
- Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See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

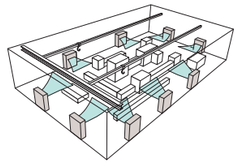
**FXVQ-N**

**Large airflow type for large spaces**

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



Duct connection airflow type



Direct airflow type

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

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

- The belt drive system allows for use of air discharge outlets in various shapes as well as long ducts.

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

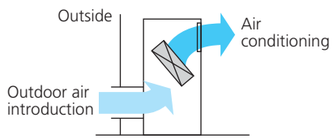
  *8 hr/day, 26 day/month. For dust concentration of 0.15 mg/m$^3$

- A wide range of optional accessories are available such as high-efficiency filters.

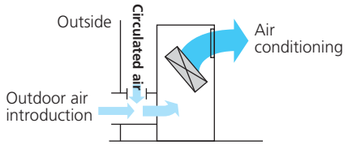
- Outdoor air intake mode is useable as an outdoor-air processing air conditioner.

  *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 | | | | |

Notes: Specifications are based on the following conditions;
- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Height 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**

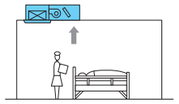
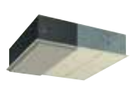
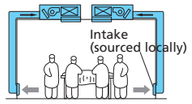
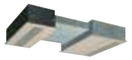
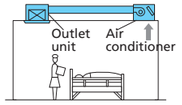
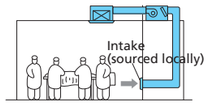
## Easily provides the high cleanliness environment required by various industries

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 | | 1.0 m/s or higher | Approximately 0.5 m/s |
| Blow method | Integrated outlet unit model | • Concentrated air conditioning centered directly under the unit<br>• Easy installation<br>   <br>Applications: Surgery prep rooms, recovery rooms, nurse stations, etc. | • Total air conditioning with an emphasis on cleanliness<br>   <br>Applications: Operating theatres, delivery rooms, etc. |
| | Separate outlet unit model | • Somewhat concentrated air conditioning centered directly under the outlet<br>• Can provide air conditioning in rooms with irregular shapes<br>   <br>Applications: CCU*2, sterile rooms, etc. | • Total air conditioning with an emphasis on cleanliness<br>• Maintenance possible from a different room<br>   <br>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.

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

The floor-level intake system has a low flow speed of approximately 0.5 m/s.

## 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.

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



## Antibacterial

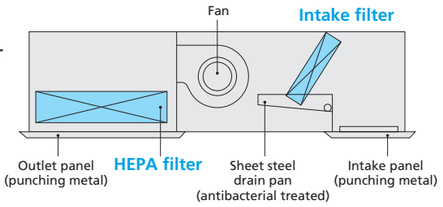
### Suppresses the propagation of bacteria in the duct with a proprietary antibacterial coating

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

### Antibacterial fiber used in the intake filter

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

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




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, 50 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 |

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

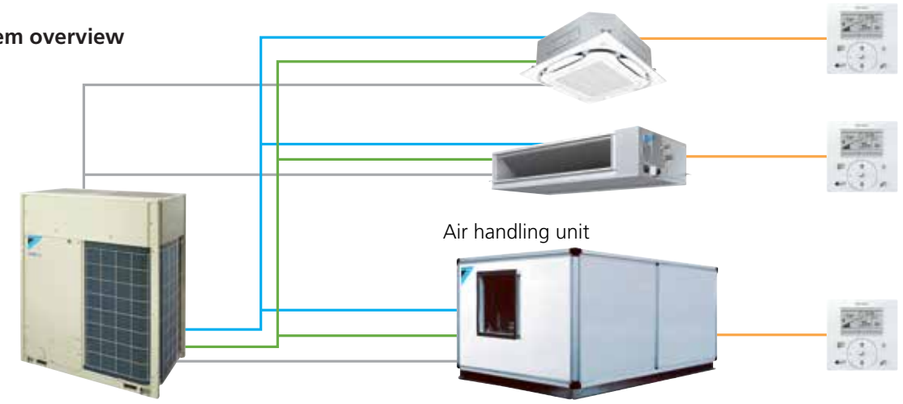
# Air Handling Unit

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

- 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

AHUR
Capacity range : 6 – 120 HP

**System overview**



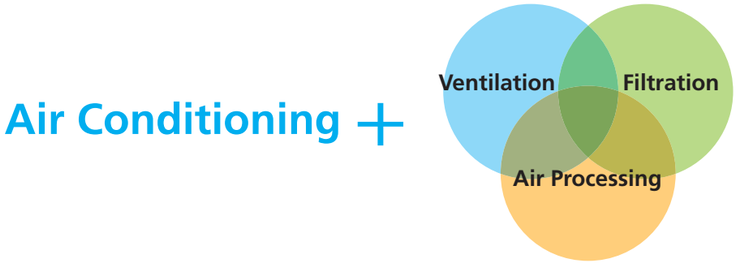

Daikin air handling units can be connected to ***VRV*** systems.
This combination can be built to order as a system. Outdoor air series is also possible. Please contact your local sales office for details.



# Air Treatment Equipment

## Daikin's air treatment systems creating a higher IAQ

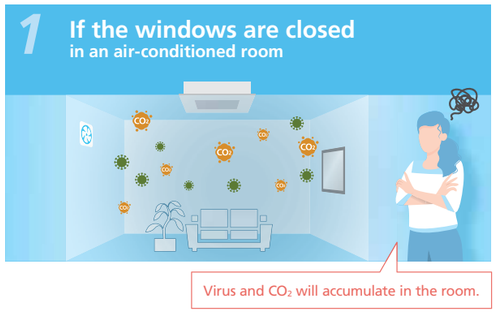
Components of indoor air quality

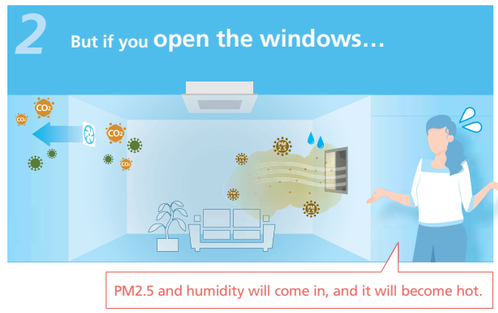


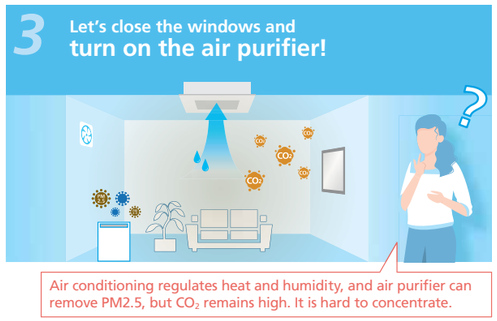

A recent trend rapidly gaining popularity is for air treatment to be required as well as air conditioning.
Daikin has a lineup of 3 products that provide adequate IAQ, according to the client's needs.

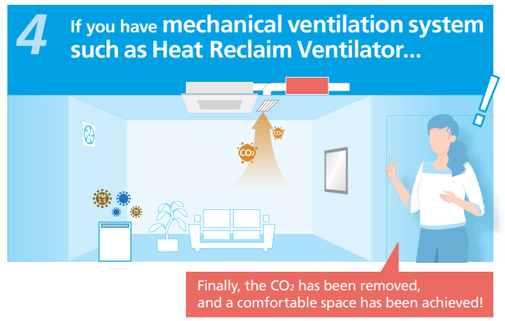
## Our Solutions for Indoor Air Quality Problems

You may think cool and comfortable air-conditioned room is enough, but...

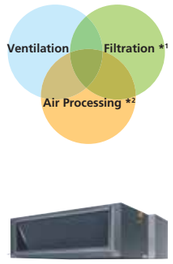
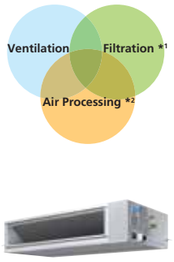
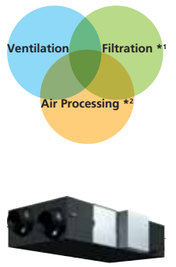
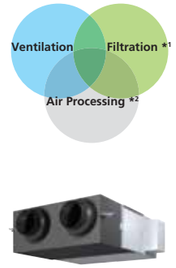


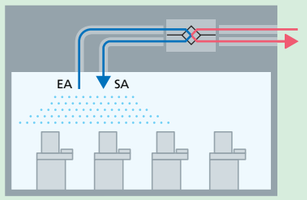
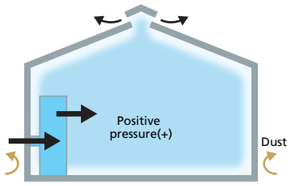
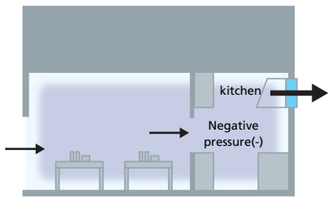




## Ventilation equipment can be selected according to suit purpose and circumstances

| | | Outdoor Air Processing Unit | | Heat Reclaim Ventilator | |
|---|---|---|---|---|---|
| | | FXMQ-MF series | FXMQ-BF series | VKM-GC series | VAM-H series |
| | |   |   |   |   |
| Connections with ***VRV*** systems | Refrigerant Piping | Connectable | Connectable | Connectable | Not connectable |
| | Wiring | Connectable | Connectable | Connectable | Connectable |
| | After-cool & After-heat Control | Available | Available | Available | Not available |
| Ventilation class | | Class 2 | Class 2 | Class 1 | Class 1 |
| | | Air supply only | Air supply only | Air supply & air exhaust | Air supply & air exhaust |
| Heat Exchange Element | | — | — | Energy savings obtained | Energy savings obtained |
| High Efficiency Filter (Option) | | Available | — | Available | Available |
| PM2.5 Filter (Option) | | — | — | Available | Available |
| MERV8/14 Filter (Option) | | — | Available | — | — |
| Airflow Rate | | 1,080 - 2,100 m³/h | 690 - 2,160 m³/h | 500 - 950 m³/h | 150 - 2,000 m³/h |

*1. Optional filter is necessary. Refer to option list for details.
*2. Refers to bringing outdoor air to near indoor temperature and delivering to a room.

## Ventilation class

| **Class 1 Ventilation** | Class 2 Ventilation | Class 3 Ventilation |
|---|---|---|
| Installing a Heat Reclaim Ventilator enables mechanical ventilation to control both air supply and air exhaust while ensuring continuous room comfort through the supply of temperature-controlled air. | Mechanical ventilation is used for air supply, and natural ventilation is used for air exhaust. This prevents dirty outdoor air from entering and maintains a clean environment even for large spaces. | Natural ventilation is used for air supply, and mechanical ventilation is used for air exhaust. Odours and steam generated indoors are eliminated before spreading to other areas. |
|   |   |   |

# Air Treatment Equipment

## Outdoor-Air Processing Unit (Discharge Air Temperature Control Type)

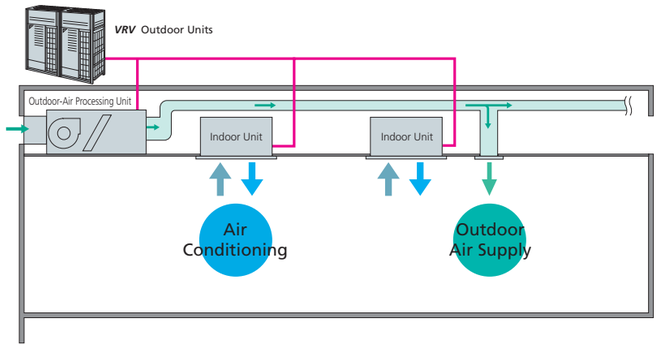
## FXMQ-MF Series

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

Fresh air treatment and air conditioning can be achieved with a single system. ***VRV*** indoor units for air conditioning and an outdoor-air processing unit can be connected to the same refrigerant line.

Lineup

| Model Name | FXMQ125MFV7 | FXMQ200MFV7 | FXMQ250MFV7 |
|---|---|---|---|
| Capacity index | 125 | 200 | 250 |
| Airflow rate | 1,080 m³/h | 1,680 m³/h | 2,100 m³/h |

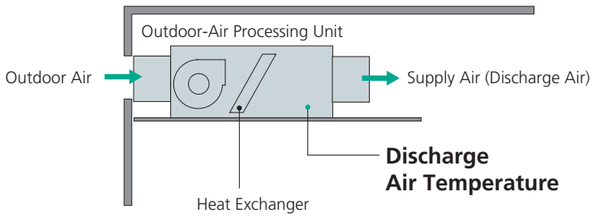



### Connection Conditions

- Outdoor-air processing units can be used without indoor units. 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 combined, 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 even when the capacity index of outdoor-air processing units exceeds 30% of the capacity index of the outdoor units, contact your local distributor.

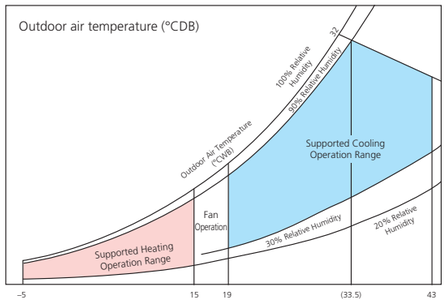
## Outdoor-air processing / Discharge air temperature control

The unit supplies outdoor fresh air controlling discharge air temperature from the unit.




* The default setting of the discharge air temperature is 18°C for cooling operation, and 25°C for heating operation.
* While in unit protection mode and depending on outdoor air conditions, discharge air temperature may not be at the set temperature.
* The fan stops in defrosting, oil returning and hot start operations due to mechanical protection control.

## Operation range




Applicable to outdoor air temperature range from –5 to 43°C.
In cooling operation, 19 to 43°C is adoptable.

Notes: 1. The operation range shown in the graph is under the following conditions. Equivalent piping length: 7.5 m, Height difference: 0 m.
2. The system will not operate in fan mode when the outdoor air temperature is 5°C or below.



### Precautions for use of FXMQ-MF series

1. This unit is intended for the treatment of outdoor air only. Not to be used for maintaining indoor air temperature. Be sure that the discharge airflow will not blow on people directly.
2. Group control of the product and standard indoor units is not supported. A separate remote controller should be connected to individual unit.
3. If the unit is utilised to operate 24 hours a day, maintenance (part replacement, etc.) must be performed periodically.
4. Temperature setting and Power Proportional Distribution (PPD) are not possible evenif the intelligent Touch Controller or the intelligent Touch Manager is installed.
5. 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.

## Specifications

| Type | | | Ceiling Mounted Duct Type | | |
|---|---|---|---|---|---|
| MODEL | | | FXMQ125MFV7 | FXMQ200MFV7 | FXMQ250MFV7 |
| Power supply | | | 1-phase 220-240 V, 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 (H × W × D) | | mm | 470 × 744 × 1,100 | 470 × 1,380 × 1,100 | |
| Fan | Motor output | kW | 0.380 | | |
| | Airflow rate | m³/min | 18 | 28 | 35 |
| | | cfm | 635 | 988 | 1,236 |
| | External static pressure 220 V/240 V | Pa | 185/225 | 225/275 | 205/255 |
| Air filter | | | *2 | | |
| Refrigerant piping | Liquid | mm | ϕ9.5 (Flare) | | |
| | Gas | mm | ϕ15.9 (Flare) | ϕ19.1 (Brazing) | ϕ22.2 (Brazing) |
| | Drain | mm | PS1B female thread | | |
| Machine weight | | kg | 86 | 123 | |
| Sound level *3 | 220 V/240 V | 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) | | | 19 to 43°C | | |
| Range of the discharge temperature *5 | | | 13 to 25°C | | |

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

*2. An intake filter is not supplied, so be sure to install the optional long-life filter or high-efficiency filter.
*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

| | MODEL | | FXMQ125MFV7 | FXMQ200MFV7 | FXMQ250MFV7 |
|---|---|---|---|---|---|
| Operation/control | Operation remote controller | | BRC1H63W(K) / BRC1E63 / BRC2E61 | | |
| | Central remote controller | | DCS302CA61 | | |
| | Unified ON/OFF controller | | DCS301BA61 | | |
| | Schedule timer | | DST301BA61 | | |
| | Wiring adaptor for electrical appendices (2) | | KRP4AA51 | | |
| Filters | Long-life replacement filter | | KAF371N140 | KAF371N280 | |
| | High-efficiency filter | Colourimetric method 65% | KAF372M140 | KAF372M280 | |
| | | Colourimetric method 90% | KAF373M140 | KAF373M280 | |
| | Filter chamber * | | KDJ3705L140 | KDJ3705L280 | |
| Streamer duct chamber | | | BDEZ500A140VE | BDEZ500A510VE | |
| Drain pump kit | | | KDU30L250VE | | |
| Adaptor for wiring | | | KRP1B61 | | |

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

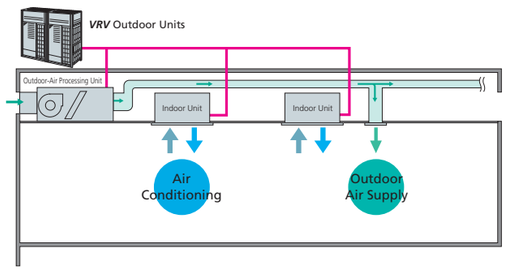
# Air Treatment Equipment

## Outdoor-Air Processing Unit (Room Temperature Control Type)

### New FXMQ-BF Series

**Improve IAQ with fresh air ventilation and precise room temperature control**

Fresh air treatment and air conditioning can be achieved with a single system. ***VRV*** indoor units for air conditioning and an outdoor-air processing unit can be connected to the same refrigerant line.




Lineup

| Model Name | FXMQ80BFV24 | FXMQ140BFV24 | FXMQ200BFV24 | FXMQ250BFV24 |
|---|---|---|---|---|
| Capacity index | 80 | 140 | 200 | 250 |
| Airflow rate | 690 m³/h | 1,230 m³/h | 1,740 m³/h | 2,160 m³/h |

| Type of connected indoor units | Conncetion ratio | FXMQ-BF connection ratio |
|---|---|---|
| FXMQ-BF only | 50%-130% | |
| Mixed combination (FXMQ-BF and standard ***VRV*** indoor units) | 120%-130% | ≤10% |
| | 110%-120% | ≤20% |
| | 100%-110% | ≤30% |
| | 50%-100% | ≤40% |

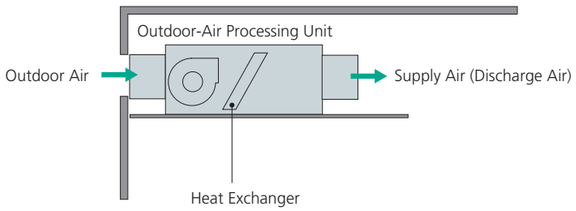
$$\text{Connection ratio} = \frac{\text{Total capacity index of the indoor units}}{\text{Capacity index of the outdoor units}}$$

### Larger connection ratio

Maximum connection ratio increased from 100% to 130%.
When outdoor-air processing units and standard ***VRV*** indoor units are combined, the total connection capacity index of the outdoor-air processing units must not exceed 40% of the capacity index of the outdoor units.

## Outdoor-air processing / Room temperature control

### The unit improves IAQ with fresh air ventilation and precise room temperature control.




Set point temperature can be selected similar to standard ***VRV*** indoor unit. Maintains comfortability and precise temperature control in large areas with the remote sensor option BRCS01A-6.

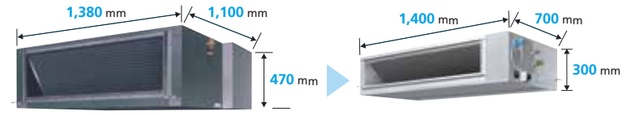
* This unit cannot be used to handle internal heat loads.
* The discharge air temperature changes depending on the air conditioning load, outside air temperature, and operation of the protective device.
When the protection function is activated, unprocessed outside air maybe sent directly.
* The fan stops in defrosting, oil returning and hot start operations due to mechanical protection control.

### 3-step airflow control

Control of the airflow rate has been improved from 1-step to 3-step control, which enhance usage and design flexibility.

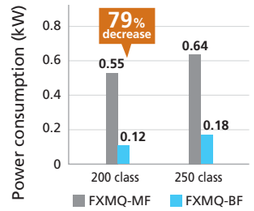
### Slim & compact design

Only 300 mm in height and 700 mm in depth, the new casing comes with smaller footprint and with 59% reduction* in unit size.
* Reduction in size compared to conventional FXMQ200/250MF series




### Lower power consumption

The change from AC motor to DC motor resulted in lower power consumption and more energy efficiency.
The new FXMQ200BF requires 79% less power consumption making it the perfect choice for small commercial applications.




### VRT control

With the VRT* control feature, higher efficiency can be achieved.
* Default setting is VRT off and field setting is required.

Variable Refrigerant Temperature

### New small capacity model

The new 9 kW capacity model is the perfect fit for smaller business such as small/medium-sized shops and convenience stores.

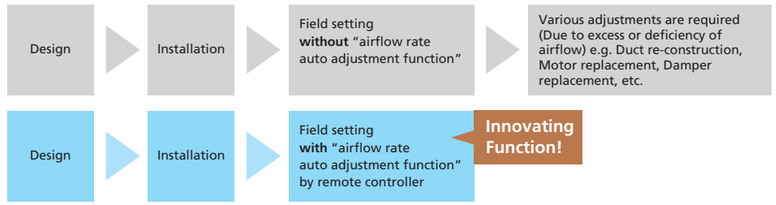
### Adjustable external static pressure

Using a DC fan motor, the external static pressure can be controlled within a range of 50 Pa to 200 Pa.

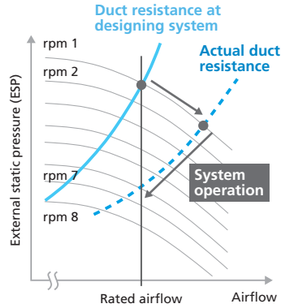

### "Airflow rate auto adjustment function" at field setting

(local setting by remote controller)

*This function can only be set via wired remote controller.




<Mechanism>
1. During field setting, power input of DC fan is detected.
2. External static pressure is estimated from power input of DC fan because PCB of FXMQ-BF has table of external static pressure vs. power input of DC fan.
3. Actual duct resistance is calculated according to 1 and 2.
4. Fan speed is automatically adjusted to produce rated airflow.



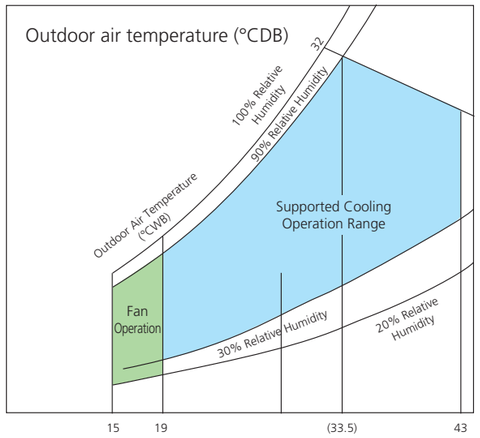

Notes: "Airflow rate auto adjustment function" can be adjusted within ±10% of rated airflow. (Refer to Engineering Data Book for details)
"Airflow rate auto adjustment function" should be used at field setting only.

# Air Treatment Equipment

## Outdoor-Air Processing Unit (Room Temperature Control Type)

### Extended operation range

The outdoor operation temperature range extended from 19 to 15°CDB*.
This enables reliable operation even under wider temperature conditions.




Extended operation range:
Cooling: 15°CDB to 43°CDB

* Thermo-off (fan) operation starts automatically when cooling 19°CDB or less.
Operation range can be extended to 15°CDB by field setting.

* Thermo-off (fan) operation starts automatically when cooling 19°CDB or less.
Operation range can be extended to 15°CDB by field setting.

### High efficiency filter (MERV8/MERV14) (Option)

The filter options of MERV8 and MERV14 are available.
The high efficiency filter can help remove infectious aerosol in the air.

**MERV8 filter**

**MERV14 filter**

## Specifications

| Model | | | FXMQ80BFV24 | FXMQ140BFV24 | FXMQ200BFV24 | FXMQ250BFV24 |
|---|---|---|---|---|---|---|
| Power supply | | | 1 phase, 220 V, 50 Hz | | | |
| Cooling capacity *1 | | Btu/h | 30,700 | 54,600 | 76,400 | 95,500 |
| | | kW | 9.0 | 16.0 | 22.4 | 28.0 |
| Power consumption | | kW | 0.080 | 0.100 | 0.115 | 0.180 |
| Casing | | | Galvanised steel plate | | | |
| Dimensions (H×W×D) | | mm | 300×700×700 | 300×1,000×700 | 300×1,400×700 | |
| Fan | Motor output | kW | 0.140 | 0.350 | | |
| | Airflow rate (H/M/L) | m³/min | 11.5/8.6/5.8 | 20.5/15.4/10.3 | 29.0/21.8/14.5 | 36.0/27.0/18.0 |
| | | cfm | 406/304/205 | 724/544/364 | 1,024/770/512 | 1,271/953/635 |
| | External static pressure | Pa | Rated 100 (200-50) | | | |
| Air filter | | | *2 | | | |
| Refrigerant piping | Liquid | mm | ϕ9.5 (Flare) | | | |
| | Gas | | ϕ15.9 (Flare) | | ϕ19.1 (Brazing) | ϕ22.2 (Brazing) |
| | Drain | | VP25 (External dia. 32, Internal dia. 25) | | | |
| Machine weight | | kg | 29 | 37 | 47 | 48 |
| Sound level (H/M/L) *3 | | dB(A) | 37.5/30/23 | 41/34/25 | 42/35/26 | 44/36/27 |
| Operation range *4 | | °CDB | 15 to 43 | | | |

Notes:
*1. The capacity is the maximum value under the following conditions:
- Cooling: Indoor temp. of 33°CDB, 28°CWB, Outdoor temp. of 33°CDB.
- Equivalent reference piping length: 7.5 m (0 m horizontal)
- The rated external static pressure and air volume are set in ().

*2. An intake filter is not supplied, so be sure to install the optional filter.
*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. The operation range can be extended to 15°C by field setting.
When fresh air intake mode is enabled, operation range cannot be extended. (limit at 19 to 43°C)

## Options

| Model | | FXMQ80BFV24 | FXMQ140BFV24 | FXMQ200BFV24 | FXMQ250BFV24 |
|---|---|---|---|---|---|
| Operation/control | Wired remote controller | BRC1H63W(K) / BRC1E63 / BRC2E61 | | | |
| | Wireless remote controller | BRC4C66 | | | |
| | Remote sensor (for indoor temperature) | BRCS01A-6 | | | |
| | Central remote controller | DCS302CA61 | | | |
| | Unified ON/OFF controller | DCS301BA61 | | | |
| | Schedule timer | DST301BA61 | | | |
| Filters | MERV8 filter | BAF376B56 | BAF376B80 | BAF376B160 | |
| | MERV14 filter | BAF377B56 | BAF377B80 | BAF377B160 | |
| | Filter chamber for MERV8/14 filter | KDDF37AB56 | KDDF37AB80 | KDDF37AB160 | |
| | Long life replacement filter | KAF371B56 | KAF371B80 | KAF371B160 | |
| Streamer duct chamber | | BDEZ500A140VE | BDEZ500A140VE<br>BDEZ500A510VE | BDEZ500A510VE | |
| Service panel | | KTBJ25K56F | KTBJ25K80F | KTBJ25K160F | |
| Air discharge adaptor | | KDAJ25K56A | KDAJ25K71A | KDAJ25K140A | |
| Adaptor for wiring (operation status output) | | ★ BRP11B62 | | | |
| Wiring adaptor for electrical appendices (1) | | ★ KRP2A61 | | | |
| Wiring adaptor for electrical appendices (2) | | ★ KRP4AA51 | | | |
| Installation box for adaptor PCB ☆ *1 | | ★ KRP4A96 *2, 3 | | | |
| External control adaptor for outdoor unit | | ★ DTA104A61 | | | |
| Adaptor for multi tenant (24V type) | | ★ DTA114A61 | | | |
| Multi tenant unit for indoor (24V free type) | | ★ BRP114A61 | | | |
| Multi tenant unit Booster (24V free type) | | ★ BRP114A63 | | | |
| Digital input adaptor for hotel application | | ★ BRP7A53 | | | |

Notes:
*1. Installation Box ☆ is necessary for each adaptor marked ★.
*2. Up to 2 adaptors can be fixed for each installation box.
*3. Only one installation box can be installed for each indoor unit.
*4. Remote sensor is necessary when using wireless remote controller.

# Air Treatment Equipment

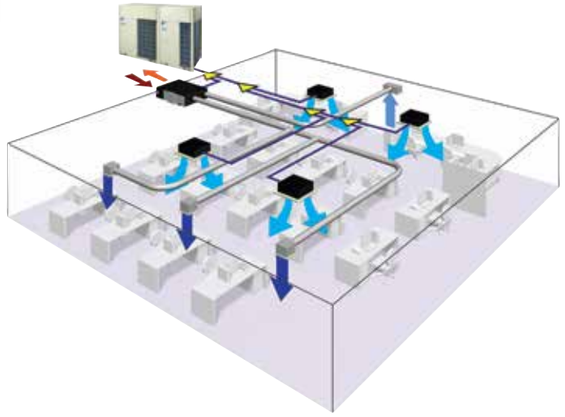
## Heat Reclaim Ventilator with DX-coil

## VKM-GC Series

**Air quality improvement by introducing fresh outdoor air in the room**

Lineup

| Model | VKM50GCVE | VKM80GCVE | VKM100GCVE |
|---|---|---|---|
| Capacity Index | 31.25 | 50 | 62.5 |
| Airflow rate | 500 $m^3/h$ | 750 $m^3/h$ | 950 $m^3/h$ |



### IAQ improvement by fresh air

Maintains comfortable indoor air quality (IAQ) by adding fresh outdoor air having nearly the same temperature and humidity conditions as the indoor air.

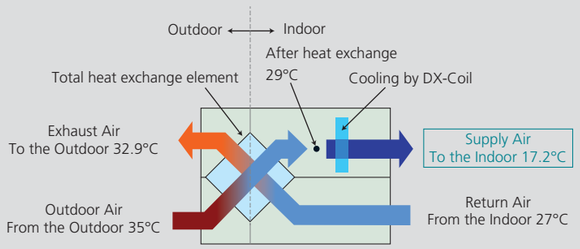
This energy-saving heat reclaim ventilator further reduces air conditioning load.

### Heat reclaim ventilator + Heat exchanger → Comfortable air supply

Equipped with a heat reclaim ventilator and a heat exchanger, the new VKM series minimizes room temperature fluctuations.

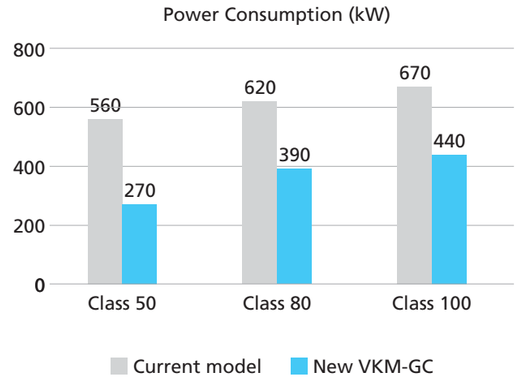
The supply air is cooled from 29°C to 17.2°C with DX-coil.

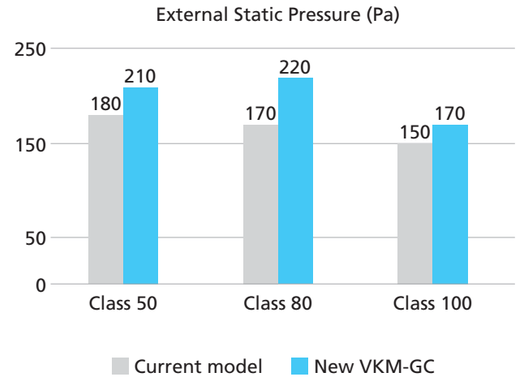
Structure of VKM series




### Equipped with DC fan motor

- Energy saving: Power consumption reduced by up to 51% (Class 50)
- Flexible installation due to high external static pressure: Increase of up to +50 Pa (Class 80)




### $CO_2$ sensor control (Option)

When $CO_2$ sensor is installed, it detects the concentration of $CO_2$ in the indoor air and the ventilation rate is controlled appropriately, reducing the air conditioning load due to ventilation.

### PM2.5 filter (Option)

Removes PM2.5 particulate matter present in the outdoor air, as well as sulfur oxides and nitrogen oxides, providing clean fresh air to the indoor ambient.

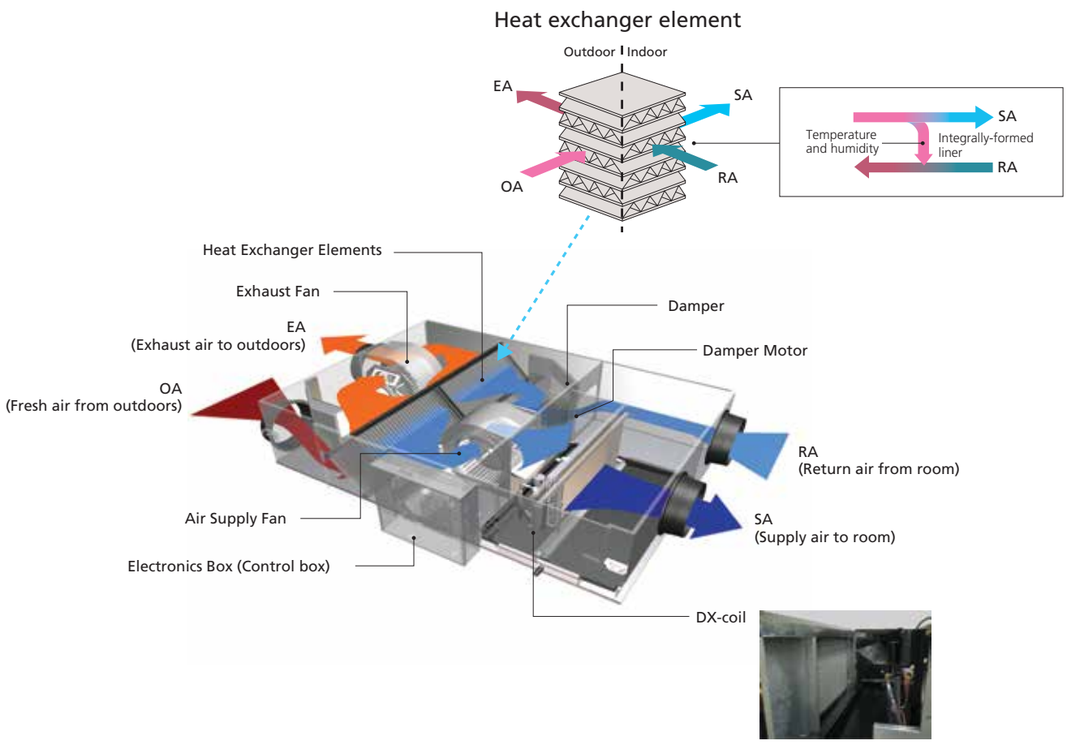
- PM2.5 filter: Removes 99% or more of 2.5 μm particulate matter.
- Activated Carbon filter: Removes sulfur oxides and nitrogen oxides

### Other characteristics

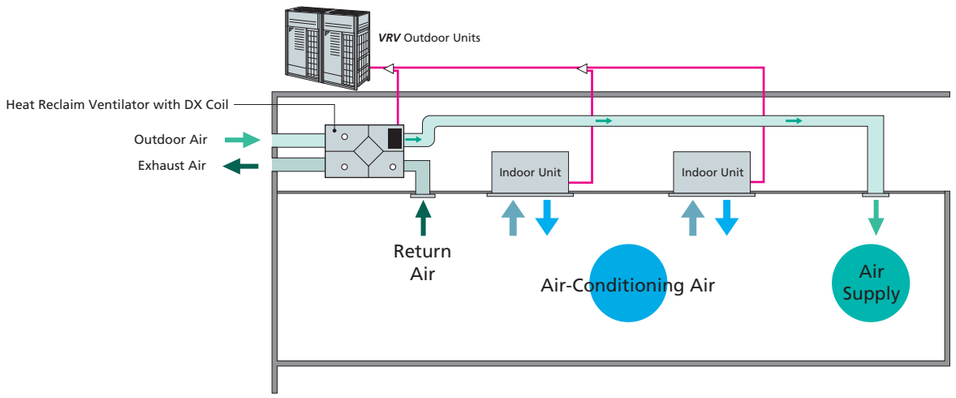
- Nighttime free cooling operation
- Stainless drain pan
- High-efficiency filter (Option)

# Air Treatment Equipment

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




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




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

## Specifications

| MODEL | | | VKM50GCVE | VKM80GCVE | VKM100GCVE |
|---|---|---|---|---|---|
| Refrigerant | | | R-410A | | |
| Power Supply | | | 1-phase, 220-240 V, 50 Hz | | |
| Airflow Rate & External Static Pressure (Ultra-high / High / Low) (Note 4) | Airflow | $m^3/h$ | 500/500/440 | 750/750/640 | 950/950/820 |
| | Static pressure | Pa | 210/170/140 | 220/180/125 | 170/120/90 |
| Power Consumption (Ultra-high / High / Low) | Heat exchange mode | W | 270/230/170 | 390/335/220 | 440/370/260 |
| | Bypass mode | W | 305/260/200 | 390/335/220 | 440/370/260 |
| Fan Type | | | Sirocco Fan | | |
| Motor Output | | kW | 0.21×2 | | |
| Sound Level (Note 3) (Ultra-high / High / Low) | Heat exchange mode | dB | 43/40.5/39 | 41.5/39/37 | 41/39/36.5 |
| | Bypass mode | dB | 43/41/39 | 41.5/39/37 | 41/39/36.5 |
| Temp. Exchange Efficiency (Ultra-high / High / Low) | | % | 76/76/77.5 | 78/78/79 | 74/74/76.5 |
| Enthalpy Exchange Efficiency (Ultra-high / High / Low) | Cooling | % | 64/64/67 | 66/66/68 | 62/62/66 |
| | Heating | % | 67/67/69 | 71/71/73 | 65/65/69 |
| Heat Exchanging System | | | Air to Air Cross Flow Total Heat (Sensible + Latent Heat) Exchange | | |
| Heat Exchanger Element | | | Specially Processed Non flammable Paper | | |
| Air Filter | | | Multidirectional Fibrous Fleeces | | |
| DX-coil Capacity (Cooling / Heating) (Note 1) (Note 2) | | kW | 2.8 / 3.2 | 4.5 / 5.0 | 5.6 / 6.3 |
| Dimensions (Height×Width×Depth) | | mm | 387 × 1,764 × 832 | 387 × 1,764 × 1,214 | |
| Piping Connection | Liquid | mm | ϕ6.4 (Flare) | | |
| | Gas | mm | ϕ12.7 (Flare) | | |
| | Drain | | PT3/4 External Thread | | |
| Machine Weight | | kg | 92 | 113 | 115 |
| Unit Ambient Condition | Around Unit | | 0°C–40°CDB, 80%RH or less | | |
| | OA (Note 5) | | -15°C–40°CDB, 80%RH or less | | |
| | RA (Note 5) | | 0°C–40°CDB, 80%RH or less | | |

Notes: 1. Indoor temperature: 27°CDB, 19°CWB, Outdoor temperature: 35°CDB
2. Indoor temperature: 20°CDB, Outdoor temperature: 7°CDB, 6°CWB
3. The operating sound measured at the point 1.5 m below the centre of the unit is converted to that measured in an anechoic chamber built in accordance with the JIS C 1502 conditions. The actual operating sound varies depending on the surrounding conditions (near running unit's sound, reflected sound and so on) and is normally higher than this value.
For operation in a quiet room, it is required to take measures to lower the sound.
For details, refer to the Engineering Data.
4. Airflow rate can be changed over to Low mode or High mode.
5. OA: fresh air from outdoor. RA: return air from room.
6. Temperature exchange efficiency is the mean value for Cooling and Heating. Efficiency is measured under the following condition: Ratio of rated external static pressure outdoor to indoor is kept constant at 7 to 1.

## Options

| Item \ Type | | | | VKM50GCVE | VKM80GCVE | VKM100GCVE |
|---|---|---|---|---|---|---|
| Controlling device | Remote controller *1 | | | BRC1H63W(K) / BRC1E63 | | |
| | PCB Adaptor | Wiring adaptor for electrical appendices | | KRP2A61 | | |
| | | For heater control kit | | BRP4A50A | | |
| Additional function | Silencer | | | — | KDDM24B100 | |
| | | Nominal pipe diameter | mm | — | ϕ250 | |
| | High efficiency filter | | | KAF242J80M | KAF242J100M | |
| | Air filter for replacement | | | KAF241G80M | KAF241G100M | |
| Flexible duct | | | 1 m | K-FDS201E | K-FDS251E | |
| | | | 2 m | K-FDS202D | K-FDS252E | |
| $CO_2$ Sensor | | | | BRYC24B50M | BRYC24B100M | |
| PM2.5 filtration unit *2 | | | | BAF249A500 | BAF429A20A | |
| PM2.5 with activated carbon filtration unit *2 | | | | BAF249A500C | BAF429A20AC | |
| Streamer duct chamber | | | | BDEZ500A60VE BDEZ500A140VE | BDEZ500A140VE | |

*1. Necessary when operating a Heat Reclaim Ventilator (VKM) independently. When operating interlocked with other air conditioners, use the remote controllers of the air conditioners.
*2. Refer to pages 186 - 188 for details.
• Please inquire concerning optional accessories not listed above.

# Air Treatment Equipment

## Heat Reclaim Ventilator

### VAM-H Series

**Daikin VAM series ensures fresh air intake and energy savings**

| Lineup | | |
|---|---|---|
| VAM150HVE | VAM250HVE | VAM350HVE |
| VAM500HVE | VAM650HVE | VAM800HVE |
| VAM1000HVE | VAM1500HVE | VAM2000HVE |

Airflow rate: 150-2,000 m³/h

BRC1H63W BRC1H63K

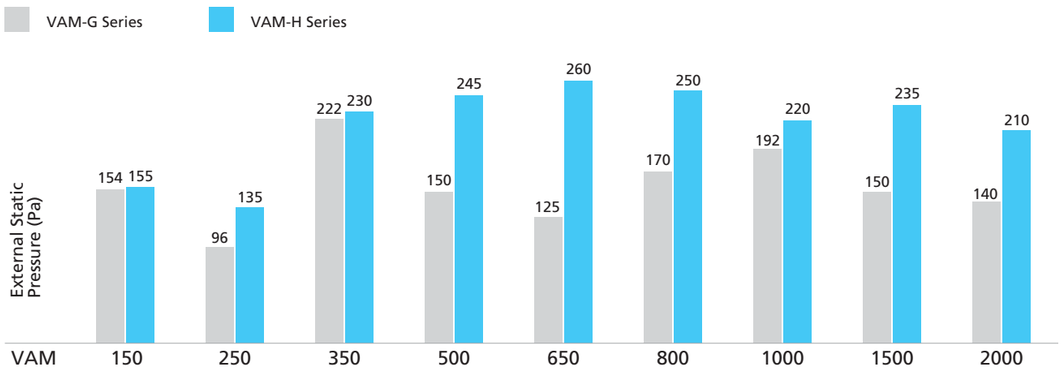
## New features

### Design flexibility

**By significantly improving external static pressure, support for a variety of duct layouts is possible, and installation flexibility has been improved.**

**The 1000-2000 class model has become more compact, and ease of installation has improved.**

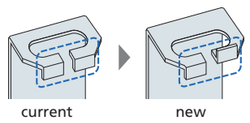
■ Comparison of external static pressure




### Improvement of installation workability

**Improved workability by changing dimensions and shape of lifting lug**

The structure that prevents nut slippage eliminates the need to replace the lifting lug even when installed upside down.

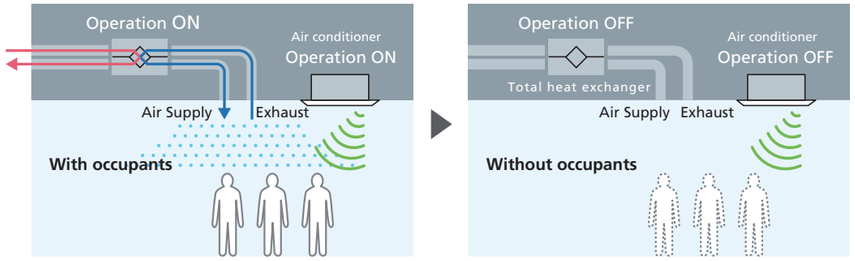



### Energy saving

**Sensing sensor stop mode**

In situation of no human occupancy is detected, the operation is turned off.

When the "Sensing sensor" installed on the air conditioner detects no occupancy in the room, the ventilation system and air conditioner system is turned off automatically to reduce energy wastage.




* During group controlling of air conditioner, no occupancy stop mode cannot be used.
* During 24-hours ventilation mode is turned on, the normal operation mode is changed to 24-hours ventilation mode.
* Once the absence is detected and stopped, the operation will not be performed automatically again.

**Humidity sensor (Option)**

**A humidity sensor (option) can be installed for greater comfort and energy-saving ventilation.**

Conditions of low temperature and high humidity... Example, a rainy day, etc.

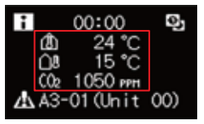
| When the humidity sensor is not installed | When the humidity sensor is installed |
|---|---|
| Outdoor air with high humidity enters through normal ventilation. | When outdoor air with high humidity is detected, the system automatically switches to ventilation mode and prevents the humid outdoor air from entering. |
| • **Discomfort increases.**<br>• **Air conditioning load and inefficiency increase.** | • **Air conditioning load is reduced.**<br>• **Comfort greatly improves.**<br>• **Energy savings are also increased.**<br>• **Moreover, ventilation amount is also controlled according to humidity conditions.** |

**Stylish remote controller**

**NEW Stylish Remote Controller BRC1H63W (K) combining many VAM-dedicated functions**

- Sensor results can be displayed up to 3 item on the information screen.
- Sensor results can be shared to the remote controller group.
- New icons such as 24-Hour Ventilating, Fresh Up, Nighttime Free Cooling Operation (Night Purge) have been added to the Information screen.

Sensor view of the Information screen




Note:
3 items selected by remote controller setting.

# Air Treatment Equipment

## Heat Reclaim Ventilator

## ■ Energy saving / Heat recovery functions

**Air conditioner and ventilation system can be interlocked to provide even greater comfort and energy saving.**

The system can be interlocked with Daikin air conditioners to provide energy saving ventilation solution for various situation.


### Pre-cool, Pre-heat control

**Intentional delay of the start-up time**

When the air conditioner is started up, the ventilation start-up is delayed to reduce load caused by the outside air. This reduces power consumption of air conditioners.

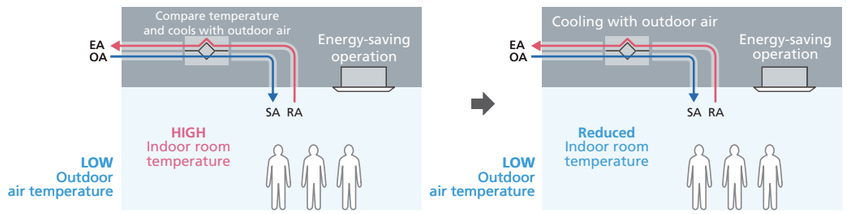



* The delay time can be changed using field settings.

### Auto-ventilation mode changeover switching

**Automatically determine the appropriate ventilation for each situation**

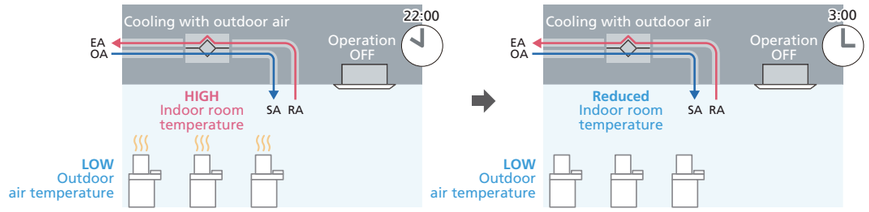
Indoor temperature and the outdoor temperature are detected, and the system automatically switches to the ventilation mode which has higher energy-saving effect.




### Nighttime free cooling operation

**Efficient use of outdoor air at night.**

Rise in indoor temperature is avoided by automatically cooling the outdoor air at night, thus reducing air conditioning load at the start of cooling operation on the next morning.




*The system is automatically controlled by the set temperature of the ***VRV*** indoor unit.

### $CO_2$ sensor control (Option)

When $CO_2$ sensor is installed, it detects the concentration of $CO_2$ in the indoor air and the Ventilation rate is controlled appropriately, reducing the air conditioning load due to ventilation.

## ■ Improvement of IEQ (Indoor Environmental Quality)

### PM2.5 filter (Option)

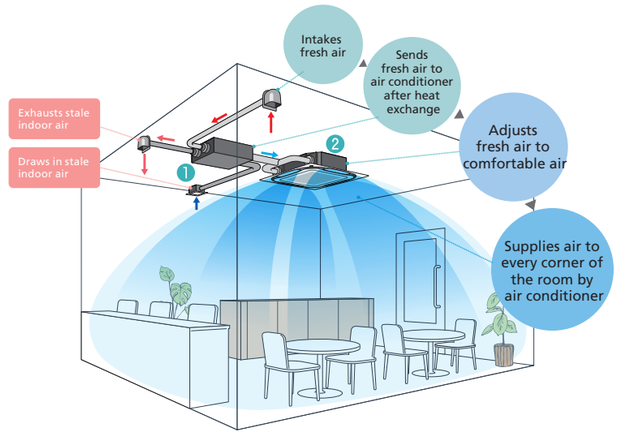
Removes PM2.5 particulate matter present in the outdoor air, as well as sulfur oxides and nitrogen oxides, providing clean fresh air to the indoor ambient.

- PM2.5 filter: Removes 99% or more of 2.5 µm particulate matter.
- Activated Carbon filter: Removes sulfur oxides and nitrogen oxides.

### Fresh Air Comfort

Round Flow Cassette indoor units can be connected to a duct to provide fresh outdoor air for comfortable air from the air conditioner. Installation is also possible for existing indoor units.

**① Heat Reclaim Ventilator**
**+**
**② Round Flow Cassette (including with sensing type)**



# Air Treatment Equipment

## Heat Reclaim Ventilator

## ■ Specifications

| Model | | | | VAM150HVE | VAM250HVE | VAM350HVE | VAM500HVE | VAM650HVE | VAM800HVE | VAM1000HVE | VAM1500HVE | VAM2000HVE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Power Supply | | | | Single phase, 220-240 V, 50 Hz | | | | | | | | |
| Temperature exchange efficiency (50/60 Hz) | For Cooling | Ultra-High | % | 66.0/66.0 | 60.5/60.5 | 65.0/65.0 | 61.5/61.5 | 59.5/59.5 | 61.5/61.5 | 58.0/58.0 | 61.5/61.5 | 58.5/58.5 |
| | | High | | 66.0/66.0 | 60.5/60.5 | 65.0/65.0 | 61.5/61.5 | 59.5/59.5 | 61.5/61.5 | 58.0/58.0 | 61.5/61.5 | 58.5/58.5 |
| | | Low | | 69.0/69.5 | 65.0/65.5 | 70.0/70.0 | 63.0/64.0 | 62.5/63.0 | 64.0/65.0 | 61.5/62.0 | 65.5/66.0 | 65.5/65.5 |
| Enthalpy exchange efficiency (50/60 Hz) | For Cooling | Ultra-High | % | 63.5/63.5 | 60.0/60.0 | 62.5/62.5 | 62.5/62.5 | 60.0/60.0 | 63.0/63.0 | 60.0/60.0 | 63.0/63.0 | 60.0/60.0 |
| | | High | | 63.5/63.5 | 60.0/60.0 | 62.5/62.5 | 62.5/62.5 | 60.0/60.0 | 63.0/63.0 | 60.0/60.0 | 63.0/63.0 | 60.0/60.0 |
| | | Low | | 66.0/66.5 | 61.5/62.0 | 64.5/65.0 | 64.0/65.0 | 62.5/63.0 | 64.5/65.5 | 62.0/62.5 | 65.5/66.0 | 64.5/64.5 |
| Power Consumption (50/60 Hz) | Heat exchange mode | Ultra-High | W | 96-103/132 | 126-141/172 | 178-193/231 | 296-326/390 | 381-426/472 | 664-684/829 | 683-736/883 | 1,274-1,353/1,645 | 1,365-1,471/1,763 |
| | | High | | 90-93/118 | 114-123/144 | 163-170/207 | 248-261/329 | 307-319/413 | 603-612/712 | 621-656/763 | 1,207-1,225/1,423 | 1,241-1,311/1,526 |
| | | Low | | 68-73/67 | 75-83/79 | 132-142/145 | 223-233/268 | 264-276/332 | 504-544/562 | 539-569/594 | 1,008-1,089/1,125 | 1,079-1,138/1,188 |
| | Bypass mode | Ultra-High | W | 96-103/132 | 126-141/172 | 178-193/231 | 296-326/390 | 381-426/472 | 664-684/829 | 683-736/883 | 1,274-1,353/1,645 | 1,365-1,471/1,763 |
| | | High | | 90-93/118 | 114-123/144 | 163-170/207 | 248-261/329 | 307-319/413 | 603-612/712 | 621-656/763 | 1,207-1,225/1,423 | 1,241-1,311/1,526 |
| | | Low | | 68-73/67 | 75-83/79 | 132-142/145 | 223-233/268 | 264-276/332 | 504-544/562 | 539-569/594 | 1,008-1,089/1,125 | 1,079-1,138/1,188 |
| Sound Level (50/60 Hz) | Heat exchange mode | Ultra-High | dB(A) | 33.0-34.0/34.0 | 33.0-34.0/33.5 | 32.0-33.0/34.5 | 36.0-37.0/38.5 | 37.5-38.0/38.0 | 41.5-42.5/41.0 | 42.0-43.0/42.5 | 43.0-44.0/44.0 | 43.5-44.0/44.5 |
| | | High | | 30.5-32.0/28.0 | 31.5-32.5/28.0 | 30.0-31.5/27.5 | 35.0-36.0/35.0 | 36.0-36.5/37.0 | 39.5-41.0/37.0 | 40.0-41.0/38.0 | 41.0-42.5/39.0 | 41.5-43.0/40.0 |
| | | Low | | 23.0-25.5/20.0 | 23.0-25.5/21.0 | 26.5-28.5/22.0 | 32.0-34.0/31.0 | 34.0-35.0/32.5 | 36.0-38.5/33.0 | 38.0-39.5/34.5 | 38.0-40.5/35.0 | 39.0-41.0/36.5 |
| | Bypass mode | Ultra-High | dB(A) | 33.5-34.0/36.0 | 33.0-34.0/34.5 | 32.5-33.5/34.5 | 36.0-37.0/38.5 | 39.5-40.0/42.0 | 41.5-42.5/41.0 | 42.0-43.0/42.5 | 43.0-44.0/44.0 | 43.5-44.0/44.5 |
| | | High | | 31.5-33.0/28.5 | 31.0-32.5/29.0 | 31.0-32.0/27.5 | 35.0-36.0/35.0 | 38.0-38.5/39.0 | 39.5-41.0/37.0 | 40.0-41.0/38.0 | 41.0-42.5/39.0 | 41.5-43.0/40.0 |
| | | Low | | 23.0-25.5/20.5 | 23.5-25.5/21.5 | 27.0-29.0/23.0 | 32.0-34.0/31.0 | 35.5-36.5/33.5 | 36.0-38.5/33.0 | 38.0-39.5/34.5 | 38.0-40.5/35.0 | 39.0-41.0/36.5 |
| Casing | | | | Galvanised steel plate | | | | | | | | |
| Insulation Material | | | | Self-extinguishable polyurethane foam | | | | | | | | |
| Dimensions (H × W × D) | | | mm | 278 × 551 × 810 | | 306 × 800 × 879 | 338 × 832 × 973 | | 387 × 1,012 × 1,110 | | 785 × 1,012 × 1,110 | |
| Machine Weight | | | kg | 22 | | 31 | 41 | 43 | 63 | | 133 | |
| Heat Exchange System | | | | Specially processed nonflammable paper | | | | | | | | |
| Heat Exchange Element Material | | | | 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 | | 100/80 | 165/145 | 275/235 | 470/420 | 570/495 | 720/610 | 880/835 | 1,350/1,250 | 1,650/1,580 |
| | External static pressure (50/60 Hz) | Ultra-High | Pa | 125-140/155 | 115-130/135 | 170-185/230 | 165-190/245 | 185-190/260 | 210-235/250 | 205-225/220 | 195-215/235 | 190-210/210 |
| | | High | | 100-120/100 | 80-90/60 | 145-165/80 | 140-175/180 | 140-155/210 | 170-215/140 | 155-195/100 | 150-180/125 | 140-180/85 |
| | | Low | | 44-80/28 | 35-75/20 | 90-102/36 | 124-155/127 | 108-119/122 | 138-174/81 | 115-150/70 | 123-146/88 | 96-123/53 |
| | Motor Output | | kW | 0.030 × 2 | | 0.060 × 2 | 0.100 × 2 | 0.170 × 2 | 0.190 × 2 | | 0.190 × 4 | |
| Effective ventilation rate | | Ultra-High | % | 90 | | | | | | | | |
| Connection duct diameter | | Indoor side | mm | ϕ100 | ϕ150 | | ϕ200 | | ϕ250 | | ϕ250 × 4 | |
| | | Outdoor side | mm | | | | | | | | □(680 × 290) × 2 | |
| Unit ambient condition | | | | -15°C to 50°CDB, 80%RH or less | | | | | | | | |

Notes:
1. Airflow rate can be changed over to Low mode or High mode.
2. Temperature Exchange Efficiency is the mean value between cooling and heating.
3. 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.
4. 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.

## ■ Remote controller function for Heat Reclaim Ventilator

| Function | Detail | BRC1H63W(K) | BRC1E63 | BRC2E61 |
|---|---|---|---|---|
| | |  |  |  |
| Air conditioner interlock | Interlock Heat Reclaim Ventilator with air conditioner by one remote controller | ● | ● | ● |
| Ventilation mode | Switch the ventilation mode (Automatic, Heat exchange, Bypass) | ● | ● | — |
| Ventilation airflow rate | When using $CO_2$ sensor, ventilation volume can be changed | ● | ● | ● |
| Fresh up indication | Indicates that fresh up operation is being carried out | ● | — | — |
| $CO_2$ indication | Indicates value of $CO_2$ sensor | ○ | — | — |
| Outdoor temperature indication | Indicates outdoor air temperature (OA) | ○ | — | — |
| Nighttime free cooling indication | Indicates that night purge operation is set | ○ | — | — |
| 24 hour ventilating indication | Indicates that 24 hour ventilating operation is set | ○ | — | — |
| Ventilating operation indication | Indicates that ventilating operation is being carried out even when night purge operation and 24 hour ventilating operation is being carried out | ● | ● | — |
| Ventilating standby indication | Indicates that ventilating operation has been stopped temporarily during pre-cool / pre-heat control | ○ | — | — |
| Sharing $CO_2$ data | Share the $CO_2$ data to submit from main unit with in the group | ○ | — | — |

○ : New functions / ● : Installed functions

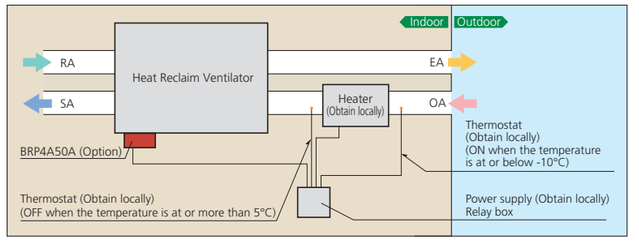
## ■ Options

| Item \ MODEL | | | VAM150HVE | VAM250HVE | VAM350HVE | VAM500HVE | VAM650HVE | VAM800HVE | VAM1000HVE | VAM1500HVE | VAM2000HVE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Additional function | Silencer | | — | | | KDDM24B100 | | | | KDDM24B100 × 2 | |
| | Nominal pipe | mm | — | | | ϕ200 | | ϕ250 | | | |
| | High efficiency filter | | KAF242J25M | | KAF242J50M | KAF242J65M | | KAF242K100M | | KAF242K100M × 2 | |
| | Air filter for replacement | | KAF241L25M | | KAF241L35M | KAF241L65M | | KAF241L100M | | KAF241L100M × 2 | |
| Flexible duct (1m) | | | K-FDS101E | K-FDS151E | | K-FDS201E | | K-FDS251E | | | |
| Flexible duct (2m) | | | K-FDS102E | K-FDS152E | | K-FDS202E | | K-FDS252E | | | |
| $CO_2$ sensor*2 | | | BRYC24A25M | | BRYC24A35M | BRYC24A65M | | BRYC24A100M | | | |
| Humidity sensor | | | BRYH241A100 (for RA) / BRYH242A100 (for OA) | | | | | | | | |
| PM2.5 filtration unit*3 | | | BAF249A150 | BAF249A300 | BAF249A350 | BAF249A500 | — | BAF429A20A | | | |
| PM2.5 with activated carbon filtration unit*3 | | | BAF249A150C | BAF249A300C | BAF249A350C | BAF249A500C | — | BAF429A20AC | | | |
| Streamer duct chamber | | | BDEZ500A60VE | | | BDEZ500A60VE BDEZ500A140VE | BDEZ500A140VE | | | BDEZ500A510VE | |
| Wired remote controller | | | BRC1H63W (White) / BRC1H63K (Black) / BRC1E63 / BRC2E61 | | | | | | | | |
| Controlling device | Centralised controlling device | Residential central remote controller | DCS303A51*1 | | | | | | | | |
| | | Central remote controller | DCS302CA61 | | | | | | | | |
| | | Unified ON/OFF controller | DCS301BA61 | | | | | | | | |
| | | Schedule timer | DST301BA61 | | | | | | | | |
| | PCB Adaptor | Wiring adaptor for electrical appendices | KRP2A62 | | | | | | | | |
| | | Installation box for adaptor PCB | KRP1C18A90 | | | | | | | | |
| | | For heater control kit | BRP4A50A | | | | | | | | |
| | | PCB adaptor for wiring | KRP1C18 | | | | | | | | |

Notes:*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.
*2. Refer to pages 185 for details. *3. Refer to pages 186 - 188 for details.

## ■ PCB adaptor for heater control kit [BRP4A50A] (Option)

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.



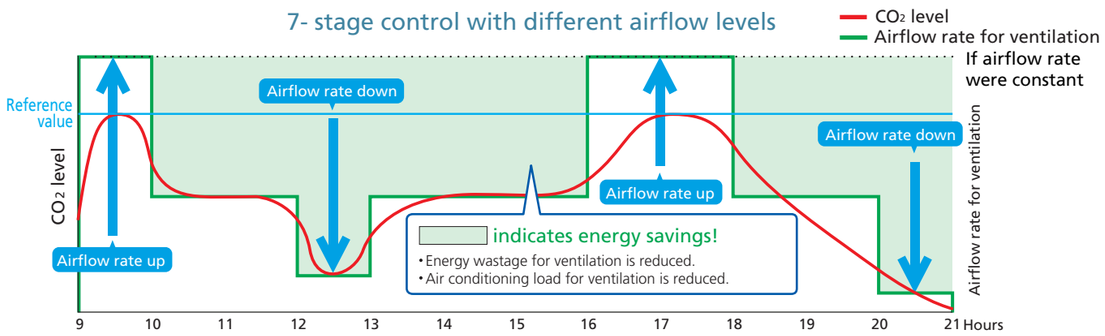

Notes when installing :
- Examine fully an installation place and specification for using the electric heater based on the standard and regulation of each country.
- Supply the electric heater and safety production devices such as a relay and a thermostat, etc of which qualities satisfy the standard 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.

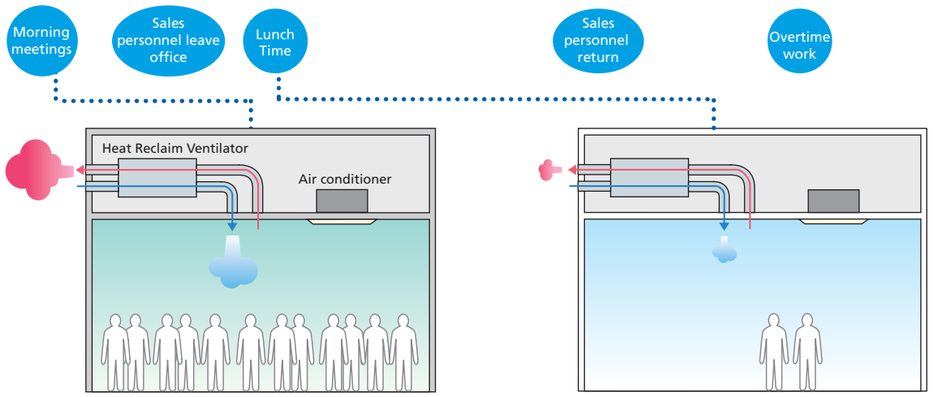
# Air Treatment Equipment

## Airflow rate control with $CO_2$ sensor (Option) for VAM / VKM series

The $CO_2$ sensor controls airflow rate so that it best matches the changes of $CO_2$ level in the room. 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:




## PM2.5 filtration unit (Option) for VAM / VKM series

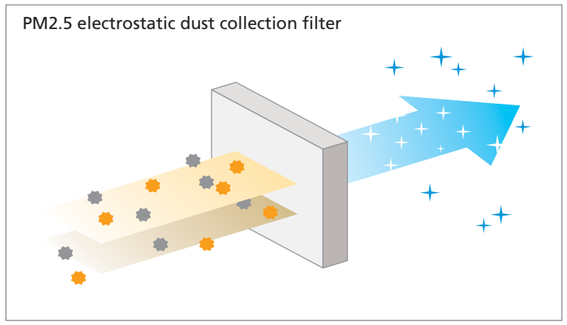
Rapid urbanization has increased industrial and automobile emissions, resulting in higher PM2.5 levels. This has become the source of respiratory diseases and poses a serious threat to a long term health issue. As the air quality has worsened, research has shown the harmful effects of PM2.5 on the health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


### Filtering PM2.5 efficiently for healthier and more comfortable environments

This filter removes 99% or more of 2.5 μm particulate matter.




**PM2.5**
**Removal Rate**
**99%**

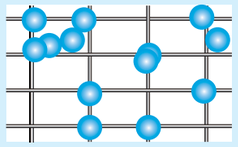
*Test results by the Heating, Ventilation and Air Conditioning Lab at Tongji University
Test environment: temperature 25-26°CDB, humidity 58-60%RH

# Air Treatment Equipment

## 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.

**Daikin Electrostatic Dust Collecting Filtration**



With the capturing effect of static electricity, particles are adsorbed on the filter fabric.

The filter is not blocked and therefore continuous Supply Air is guaranteed.

Long-lasting highly efficient dust collection capacity

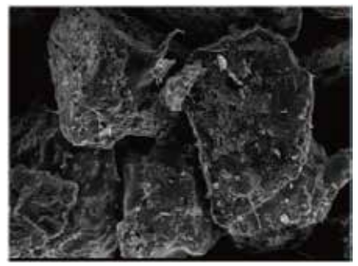
## PM2.5 with activated carbon filtration unit (Option) for VAM / VKM series

### 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.

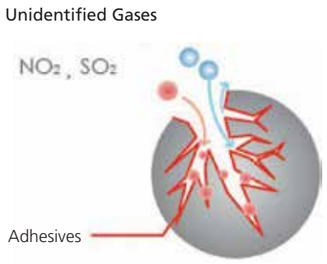
Notes: Surface area of active carbon: 700 $m^2/g$
Given a newspaper page of 40.6 cm wide by 54.6 cm long, each gram of active carbon has a surface area of 3,000 newspaper pages.

**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.




## Specifications

### PM2.5 filtration unit

| MODEL | | | BAF249A150 | BAF249A300 | BAF249A350 | BAF249A500 | BAF429A20A |
|---|---|---|---|---|---|---|---|
| Dimensions (H x W x 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 |

Notes: 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

| MODEL | | | BAF249A150C | BAF249A300C | BAF249A350C | BAF249A500C | BAF429A20AC |
|---|---|---|---|---|---|---|---|
| Dimensions (H x W x 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 |
| Total Initial Pressure Drop for PM2.5 with Activated Carbon Filtration Unit | | Pa | 37 | 35 | 36 | 51 | less than 50 |
| 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 |

Notes: 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.

# Control Systems

## Individual control systems for ***VRV*** systems

## Stylish remote controller (Option) New

Special Site

White
BRC1H63W

Black
BRC1H63K

### A complete redesigned controller focused to enhance user experience

reddot design award

### Sleek and stylish design

- Combines refinement and simplicity
- Echoes the distinct blue circle and simplicity of design
- Two attractive colours to match any interior
- Compact, measures only 85 x 85 mm

### User-friendly interface

- Just three buttons and a large-figure display
- Customisable display
- Direct access to basic functions (ON/OFF, Operation mode, Temperature setting, Airflow rate, Airflow direction)
- Timer functions (OFF timer, Weekly schedule timer)
- Simple screen for hotel display


### Easy setting via smartphone application using Bluetooth® wireless technology (for Installer/Facility manager)

## Keep hotel room comfortable

- Improved setback function by setting the lower temperature limit in cooling and higher temperature in heating mode.
- Window/door contact interlock function is available via optional Digital Input Adaptor BRP7A*.

<App screen image>

## Shorter installation time

- Easy to create multiple remote control and field settings via App
- Prepare a setting in advance at the office and immediately send it to the on-site remote controller
- Save and reuse settings
- Remote update function (OTA: Over The Air)



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

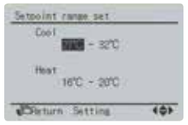
BRC1E63

### A series of user friendly functions that can be individually selected

### Energy saving

**Setpoint range set**

- Avoids excessive cooling by limiting the min. and max. set temperature.
- Convenient for use at a place where any number of people may operate it.




**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.


**Off timer**

- Period can be preset from 30 to 180 minutes in 10-minute increments.

### Convenience

**Setback (default: OFF)**

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

**Weekly schedule**

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


**Auto display off**

- Period can be preset from 10, 30, 60 minutes, and OFF. Initial setting is 30 minutes.

### Comfort

**Individual airflow direction**

- Airflow direction can be individually adjusted for each air discharge outlet.

**5-step airflow control**

- Airflow rate can be selected from 5-step control.

**Auto airflow rate**

- Airflow rate is automatically controlled.

# Control Systems

## Individual control systems for ***VRV*** systems

## Simplified remote controller (Option)

BRC2E61

### Easy operation with new intuitive design

#### Simple operation

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

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

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

#### Intuitive design

- By using pictograms, the user-friendly interface enables convenient and easy operation.

#### Compact size

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

## Wireless remote controller (Option)

BRC-M series

Signal receiver unit (Installed type)

BRC-C, E series

Signal receiver unit (Separate 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.

- Backlight LCD of new wireless remote controller

Pressing the backlight button helps operating in dark rooms.

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

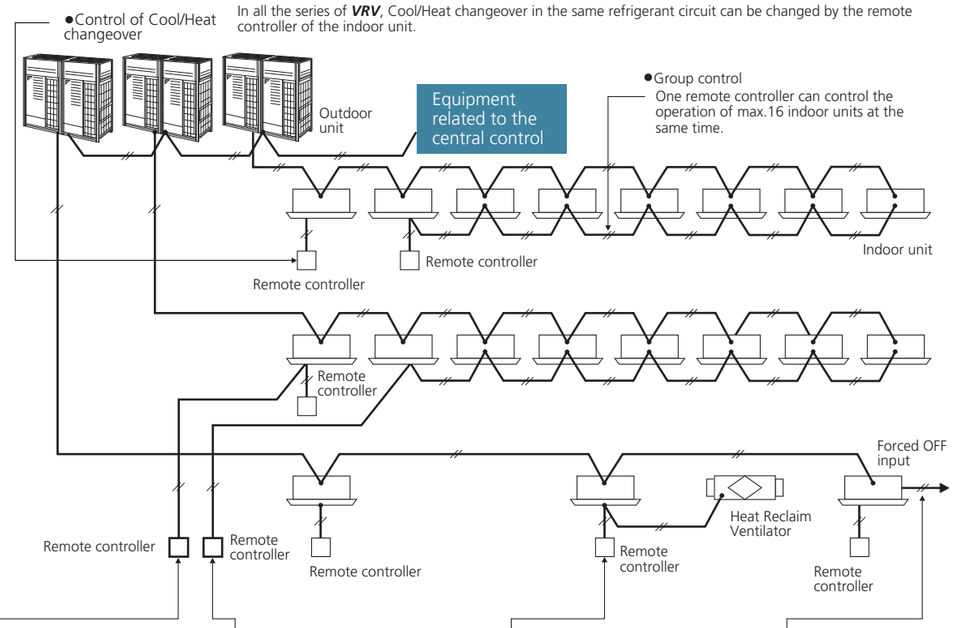
* Wireless remote controller and signal receiver unit are sold as a set



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

| MODEL | FXFTQ | FXFRQ | FXFSQ | FXFQ | FXZQ | FXCQ | FXKQ | FXDFQ | FXDBQ | FXDQ | FXSQ | FXMQ | FXHQ | FXAQ | FXL(N)Q | FXVQ | FXB(P)Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stylish remote controller (BRC1H63W / BRC1H63K) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Navigation remote controller (BRC1E63) | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Simplified remote controller (BRC2E61) | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Wireless remote controller* (Installed type signal receiver unit) | | | ● | ● | ● | ● | | | | | | | ● | ● | | | |
| Wireless remote controller* (Separate type signal receiver unit) | | | | | | | ● | ● | ● | ● | ● | ● | | | ● | | ● |

### The wired remote controller supports a wide range of control functions




**1 Control by two remote controllers**

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

**2 Remote control**

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

**3 Control for the combined operation**

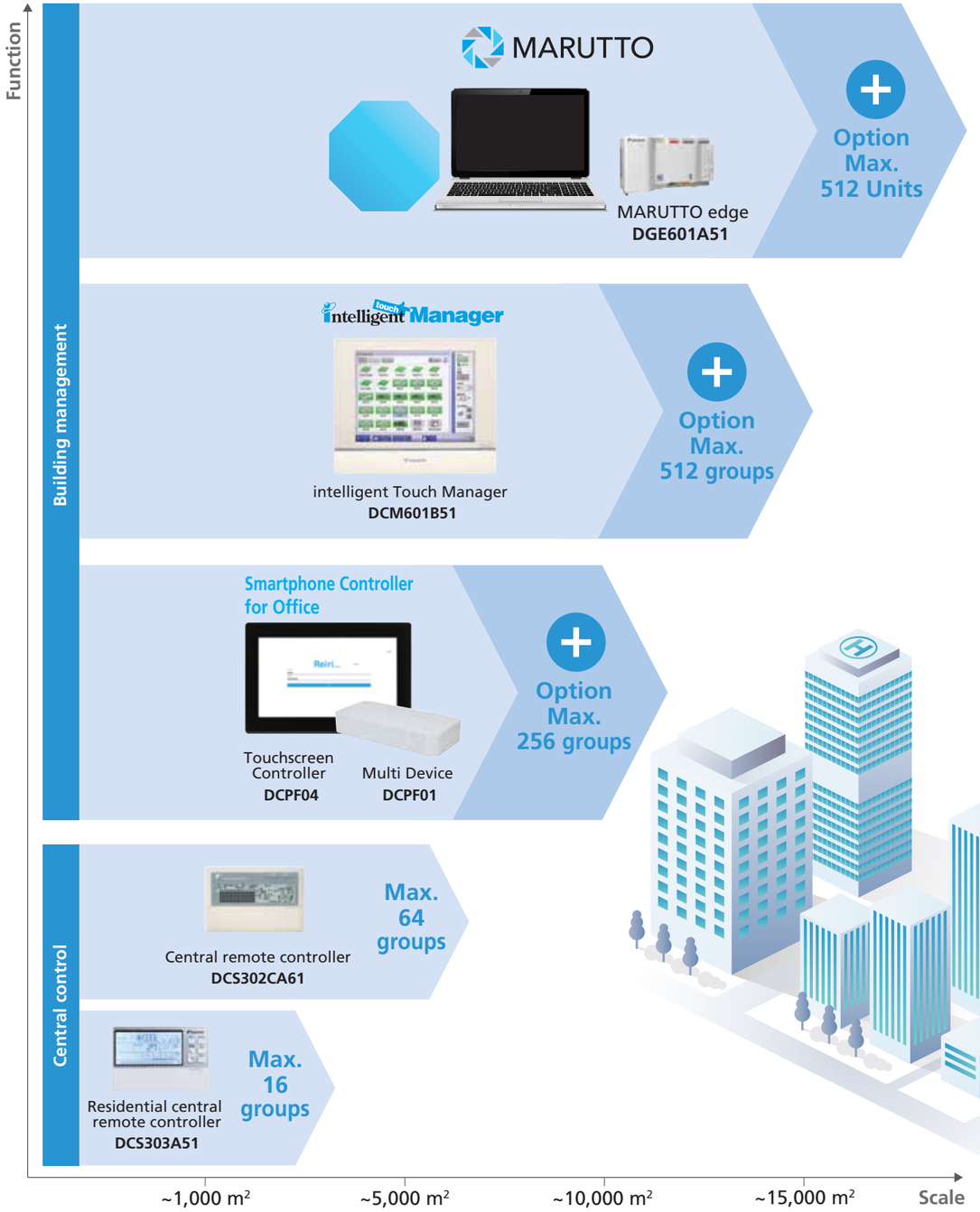
The operation of Heat Reclaim Ventilator can be controlled by the remote controller of the indoor unit. Of course, the remote controller can display the time to clean the filter.

**4 Expansion of system control**

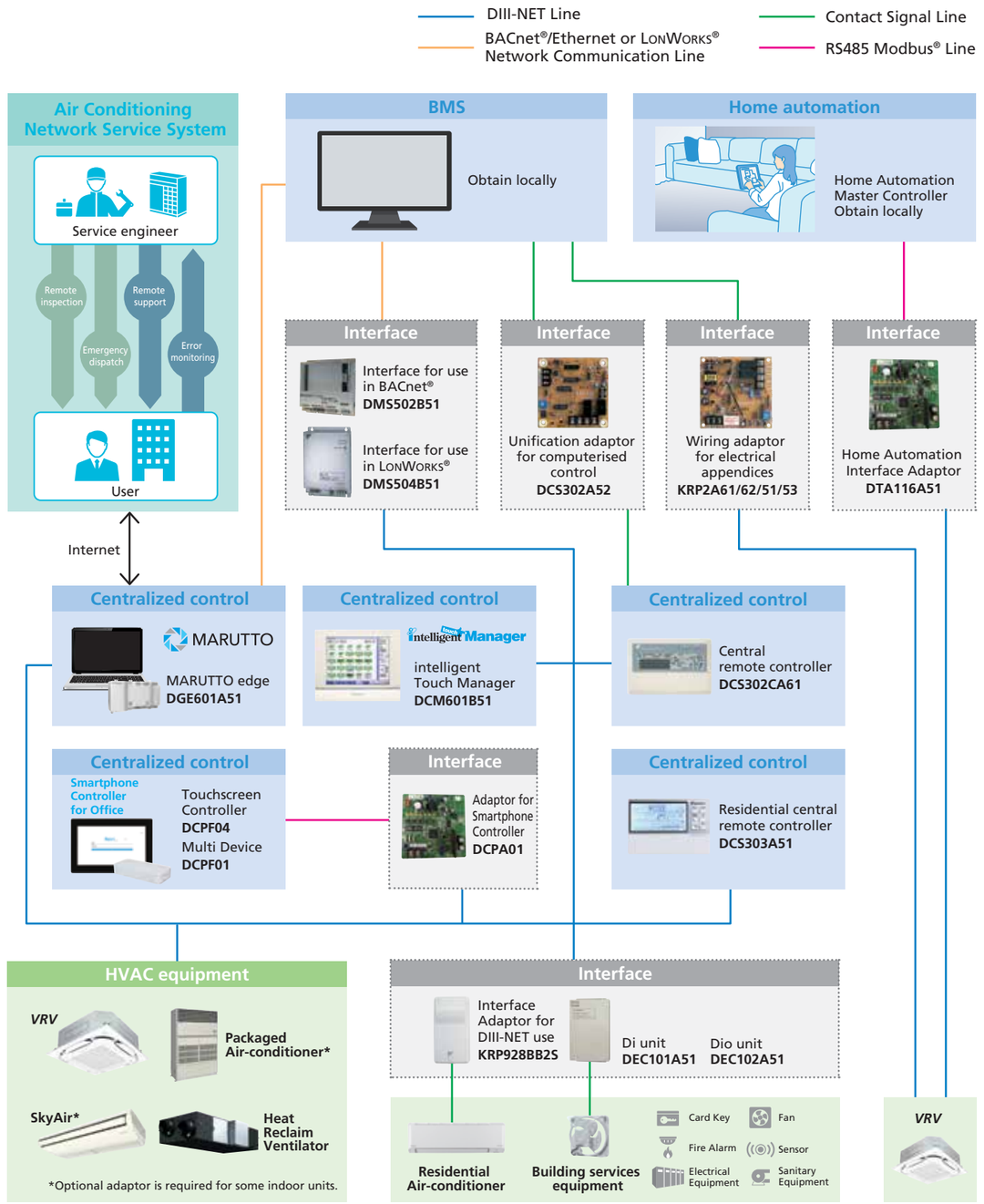
The system can be expanded to add several controllers, such as BMS, Forced OFF input and etc.

# Control Systems

## Centralized control lineup




## Integrated system overview



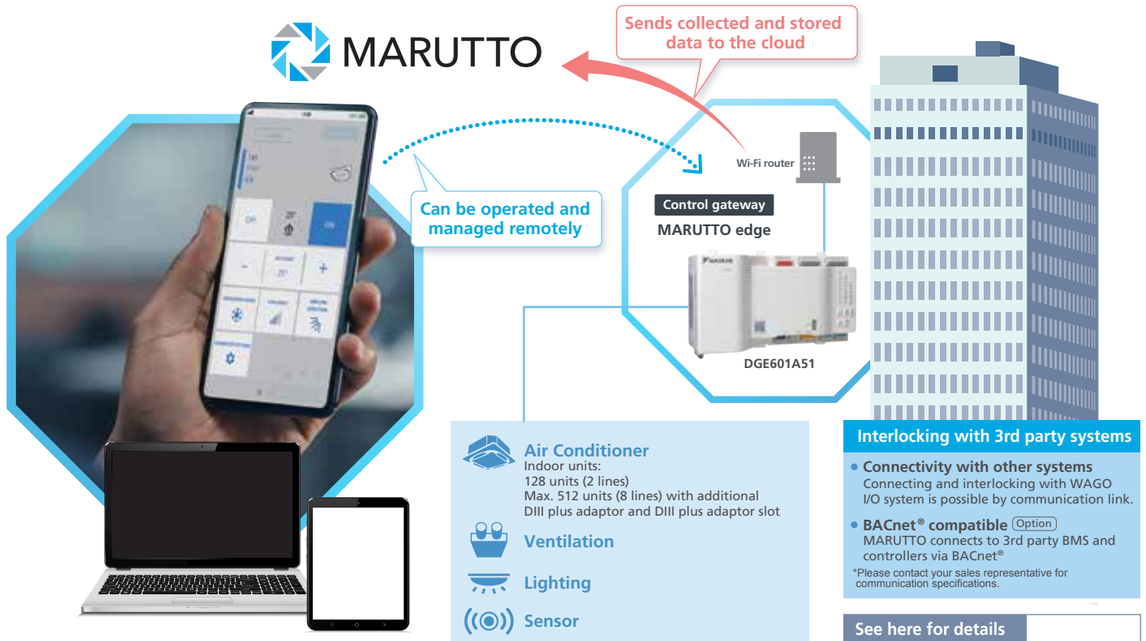

Caution: Limitation may apply to some models and functions. Please contact your local sales office for details.
Consultation is necessary before employing this control system. Please contact your local sales office before making a purchase.

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

# Control Systems

## New Cloud-based HVAC management service

MARUTTO is an all-in-one, cloud-based management service that offers real-time control and monitoring, advanced analytics, and customized support to address HVAC lifecycle concerns.




**Easily controlled from any device*1**

Note:
*1 Operation is only available when the control gateway is connected to the Internet.

**Air Conditioner**
Indoor units:
128 units (2 lines)
Max. 512 units (8 lines) with additional DIII plus adaptor and DIII plus adaptor slot

**Ventilation**

**Lighting**

**Sensor**

**Other equipment and devices**
- Security equipment
- Fire alarm
- Watt-hour meter (via I/O module)
- Applied equipment

**Interlocking with 3rd party systems**

- **Connectivity with other systems**
  Connecting and interlocking with WAGO I/O system is possible by communication link.
- **BACnet® compatible** (Option)
  MARUTTO connects to 3rd party BMS and controllers via BACnet®

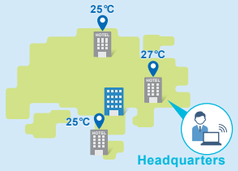
*Please contact your sales representative for communication specifications.

**See here for details**

**Video Overview of MARUTTO Services** ▶

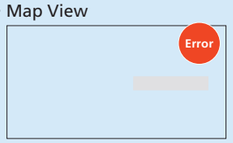
### Remote monitoring and control

- Multi-Device Support
- Multi-Site Management




- Layout View

- Map View




### Optimize energy usage

- Energy Visualization
  See page 194
- Demand Control (Option)
  See page 194
- Operation Data Output Function
- PPD Function (Option)
- Energy-Saving Simulation

### Centralized control

- Interlocking Control of Devices
- User Administration Function
- Schedule Control

### Peace of mind service maintenance

- Error Notification Email
- Social Media Support (Option)

- Remote Emergency Operation (Option)

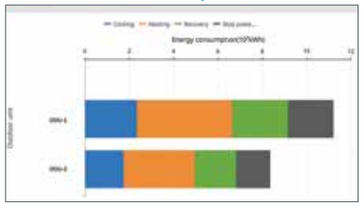


### Energy Visualization

Provides graphs of energy consumption to uncover inefficient operation

Energy consumption

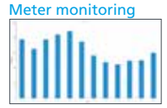
Outdoor unit consumption



Thermal environment

Operating monitoring

Meter monitoring



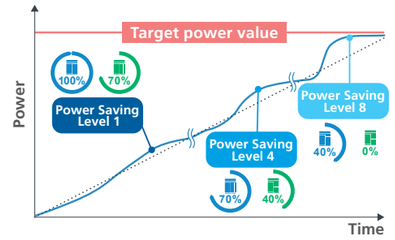
### Demand Control (Option)

Reliably cuts power peaks without sacrificing comfort

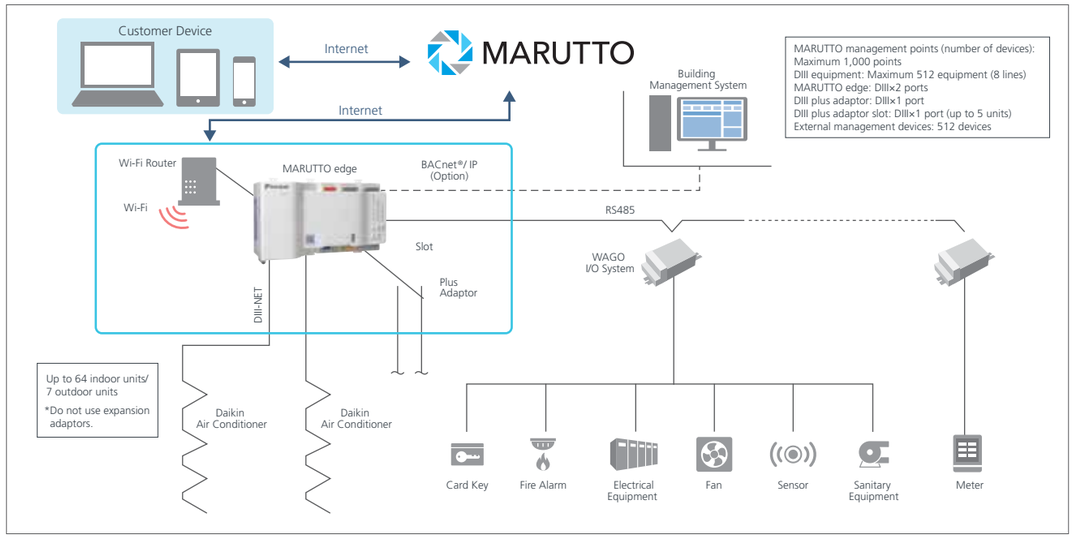
**As the power saving level increases, the power consumption reduction effect also increases.**

| | |
|---|---|
| Control power consumption with three measures | • Thermo-Off of indoor unit<br>• Set temperature shift of indoor unit<br>• Outdoor unit capacity limit |

Demand control image




### MARUTTO System Overview




### MARUTTO (standard specifications)

| Common Name | Control gateway | Plus adaptor (sold separately) | Slot (sold separately) |
|---|---|---|---|
| Item Name | MARUTTO edge | DIII plus adaptor | DIII plus adaptor slot |
| Model Name | DGE601A51 | DGE601A52 | DGE601A53 |
| Power Supply | AC100-240V 50/60Hz | AC100-240V 50/60Hz | Power supply from DIII plus adaptor |
| Power Consumption | 23W | 23W | — |
| Usage Environment | -10 to 50°C 85% or less | -10 to 50°C 85% or less | -10 to 50°C 85% or less |
| External Dimensions (Width x Height x Depth) | 230 × 146 × 81.2 (mm) | 97.2 × 146 × 81.2 (mm) | 25.2 × 146 × 64.2 (mm) |
| Weight | 0.97kg | 0.69kg | 0.13kg |

* Refer to the MARUTTO individual catalogue for details.

# Control Systems

## Advanced control systems for ***VRV*** systems

intelligent touch Manager

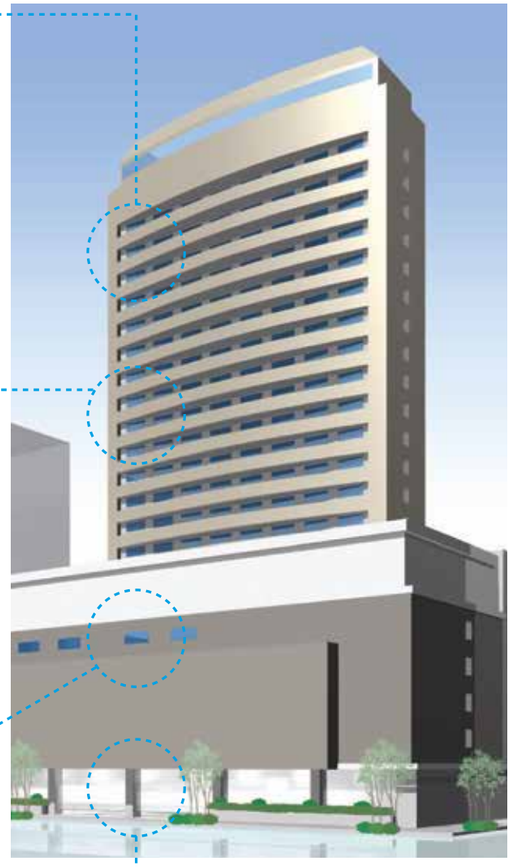
DCM601B51

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

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

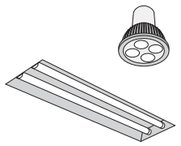
### Individual air-conditioning control

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

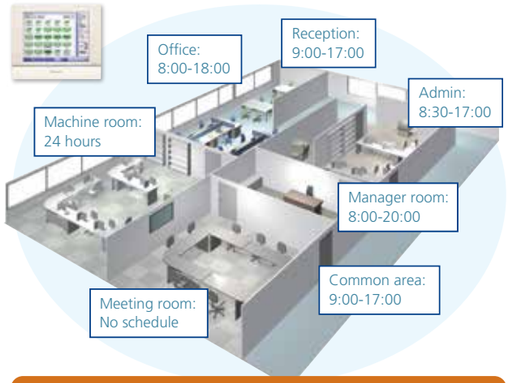
Fan

## 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.**

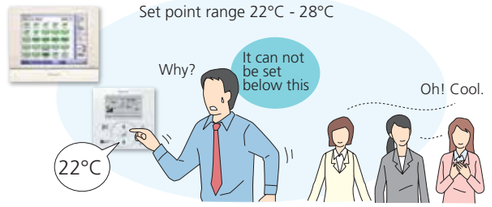



**Setting the I-demand function and nighttime quiet operation function is also possible.**

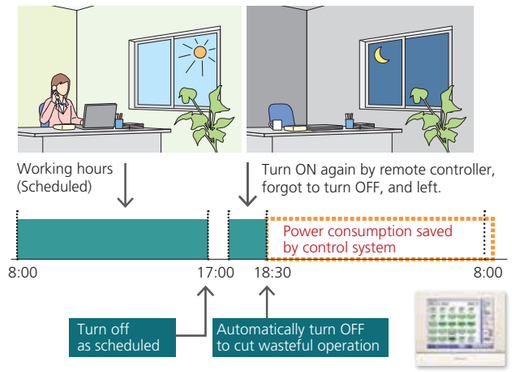
**Define the setpoint range that users can change.**

With Remote controller

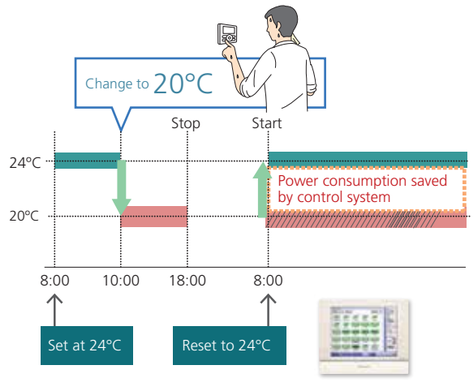

With Control System




**Turn the unit OFF if a user didn't.**



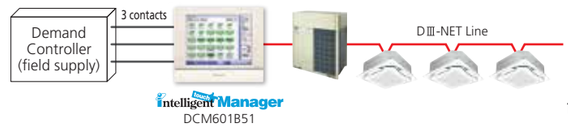

**Reset setpoint regularly.**




**External contact demand control function**

This function automatically controls outdoor and indoor unit capacity based on contact signals sent from demand controller (field supply) etc. to save power consumption during peak hours.

- You may set 3 levels that can be switched by ON/OFF signal of 3 contacts
- Control settings are pre-set for each level
- Outdoor unit: I-demand function for peak power limit
  Indoor unit: Set temperature shift, Forced thermostat OFF



# Control Systems

## Lighting control (Option)

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

**Connection to DALI-compatible lighting control system**

**DALI-compatible**

Please contact your local sales office for details.

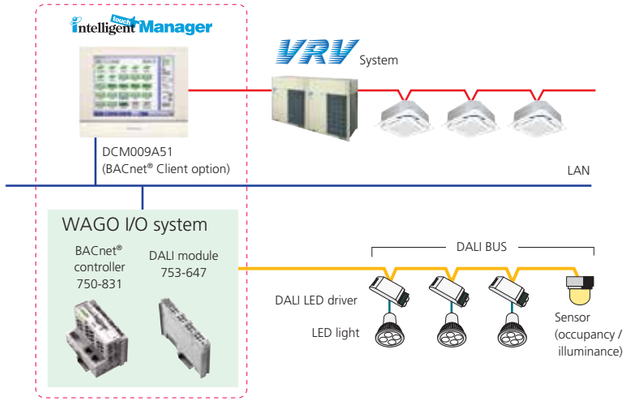
Simple wiring (daisy chain) enables management of LED lighting by the ***intelligent Touch Manager***. Various air conditioning and lighting control is enabled through the interlock with occupancy sensors and illuminance sensors.

**Lighting control achieved by the *intelligent Touch Manager***

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

**[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!



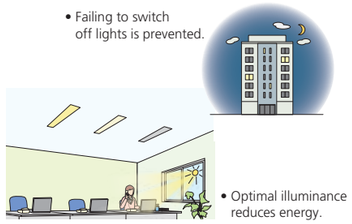

### Overview of control

- 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 BUS simplifies wiring and setting work by daisy chain wiring and automatic address setting.

### Easy maintenance and energy saving by lighting control

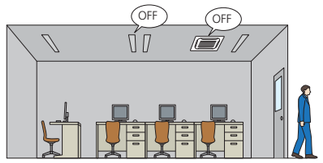
**Case 1**

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



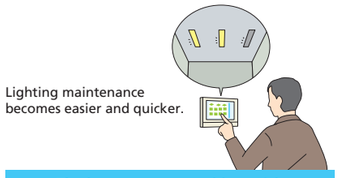

**Case 2**

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




**Case 3**

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




**The layout screen enables quick identification of specific locations.**



## Tenant management

### Reporting the power consumption of ***VRV*** system for each tenant (PPD* Option)

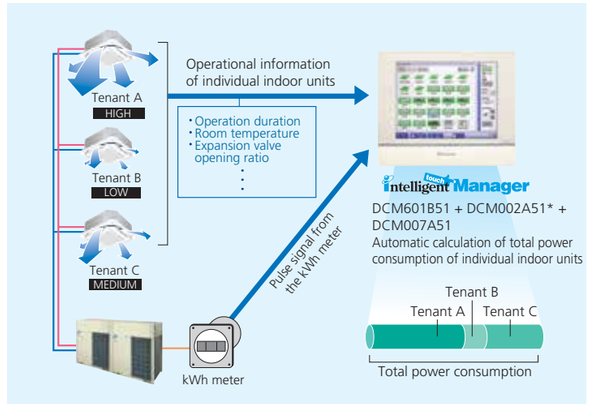
**With the PPD function, power consumption can be calculated for each indoor unit (Option)**

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.



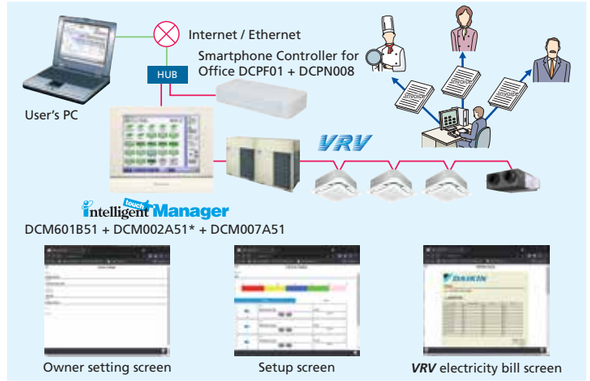

*PPD (Power Proportional Distribution) is Daikin's proprietary calculation method.

### Air conditioning bills can be issued by one click (PPD* Option)

**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)



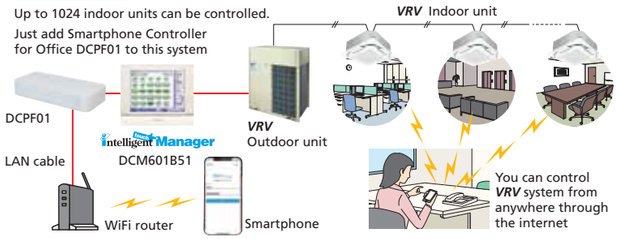

*PPD (Power Proportional Distribution) is Daikin's proprietary calculation method.

### Effective service functions offered to tenants

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

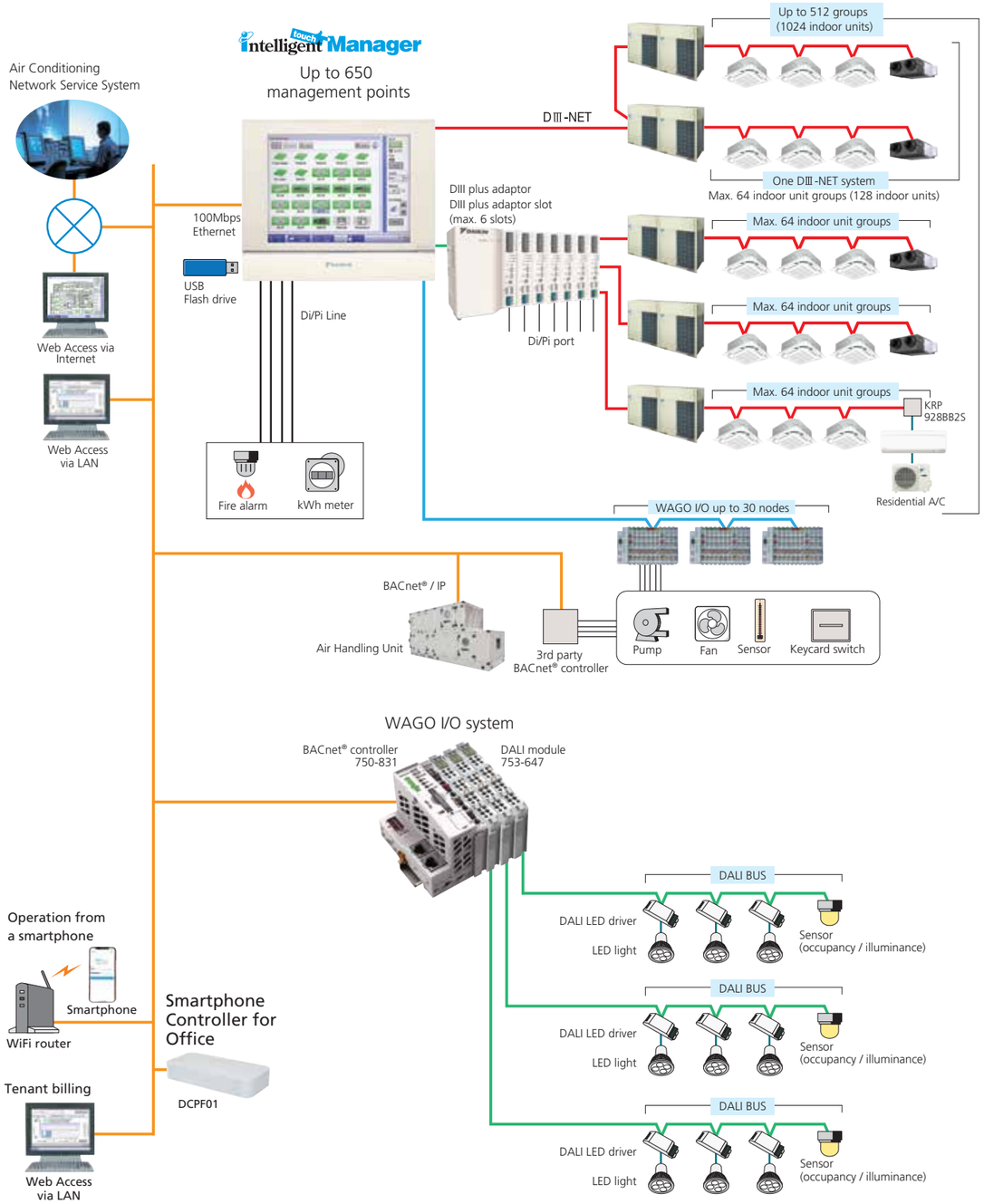
Users can operate and check the status of ***VRV*** system from their smartphones via the internet.
It is not necessary to move where a remote controller is located with this feature.
***VRV*** system in other rooms can be operated, and their status can be checked.
It is also possible to check if air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

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



# Control Systems

## *intelligent Touch Manager* system overview





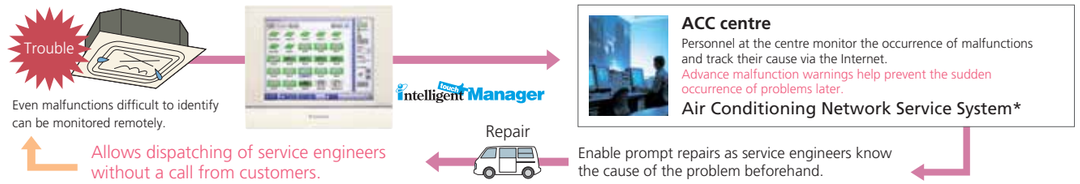

## Air conditioning network service system

### 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.




*Because of restrictions in applicable areas and release times, please consult a Daikin representative separately for details.

## Daikin offers a variety of control systems

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

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

Dedicated interfaces make Daikin air conditioners freely compatible with open networks

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

DMS502B51 (Interface for use in BACnet®)

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

DMS504B51 (Interface for use in LonWorks®)

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

## Specialised solution for office, home and hotel with Smartphone Controller Series

### Catering to different applications, ranging from 10 indoor units to 2048 indoor units


| | |
|---|---|
| For Office | Building Automation System |
| For Home | Smart Home Solution |
| For Hotel | Air Conditioning Guestroom Interlocking Management |

**Smartphone Controller for Office**
**(Touchscreen Controller)**



**Smartphone Controller**
- **for Office**
- **for Office** (Controller Extension)
- **for Office** (Multisite Extension)
- **for Home**

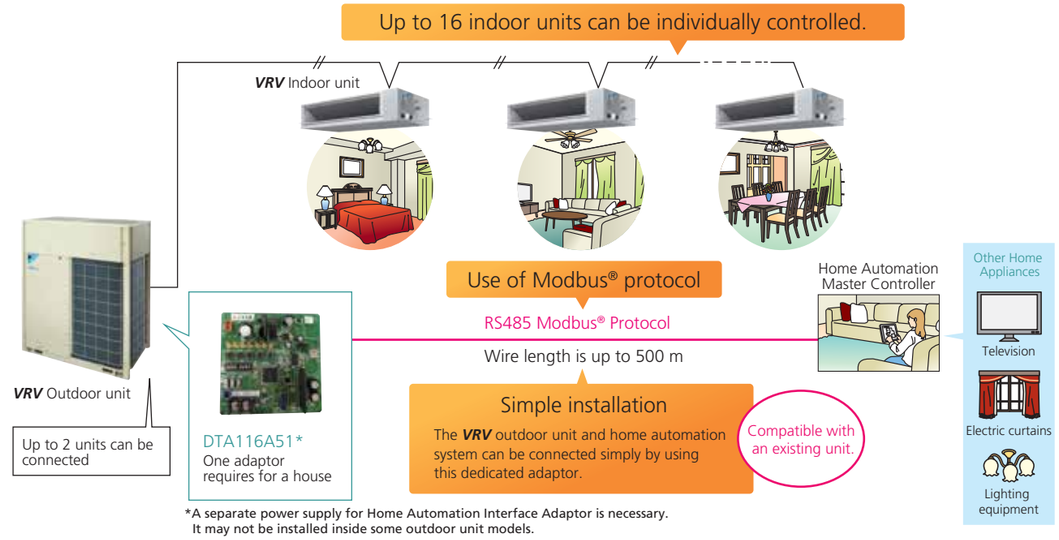
**Smartphone Controller**
- **for Home** (Lite Version)
- **for Hotel**
- **for Resort**

# Control Systems

## Home automation interface adaptor

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

Image to use home automation interface adaptor DTA116A51




*A separate power supply for Home Automation Interface Adaptor is necessary.
It may not be installed inside some outdoor unit models.

### Functions

#### Monitor

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

#### Control

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

#### Retrieve system information

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

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



## Complete control system for ***VRV*** systems

# Smartphone Controller

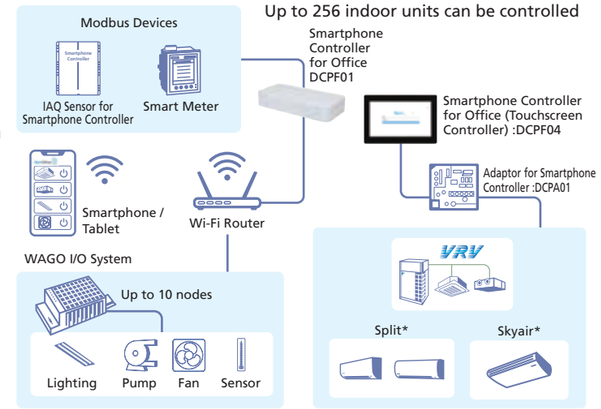
High value smart solution creation for different application

### Office Air Conditioning Solution (Smartphone Controller for Office :DCPF01 / Smartphone Controller for Office (Touchscreen Controller) :DCPF04)

A simple office buildings air conditioning solution with a secured, cloud enabled platform, allowing greater ease of control and control while being energy-efficient. The flagship model DCPF04 offers the smart control system with a dedicated touch panel.

Intelligent Building Solution

- Easy to install and configure with dedicated Configuration Mobile App for installers.
- Remote control operation through mobile App from anywhere.
- Energy management through P.P.D. billing, Energy graph and real time energy display function
- IAQ Management via real time monitoring and trend graph for keeping record.
- Effective Air conditioning usage with setpoint range limitation, set back function, remote control prohibition.




*Additional Interface Adaptors may be required.

### Specifications

| Category | Function | Description |
|---|---|---|
| Monitoring & Control | Status monitoring | On/Off, setpoint, operation mode, fan step, flap, error, error code, Room temperature |
| | Manual Operation | On/off, setpoint, operation mode, fan step, flap, scene control[1] |
| | Remote control prohibition | Individually prohibit operation of each local remote-control function |
| | Setpoint range limitation | To limit setpoint range for each indoor unit management point |
| Automatic Control functions | Automatic changeover[1] | Number of changeover groups: 100 |
| | Off timer | Off timer duration can set from 5min to 120min with every 5min interval |
| | Setback[1] | Setback setpoint can selected within 24-35°C in cooling mode and 5-20°C in heating mode. |
| | Schedule | Number of programmes: 100; Up to 20 actions can be registered per pattern. |
| | Interlock[1] | Interlock operation depending on equipment status |
| Data Management | History, Report[1] | Operation data (latest information and operation report) and error report on daily/monthly basis. |
| | Trend graph[1] , energy graph[1] | Chart on environmental changes and energy (and other meter) values. |
| | Real time energy display[1,2] | Daily/ Monthly real time energy consumption status on screen. |
| P.P.D Billing[1,2] | | Generate Bill with Power Proportional Distribution data retrieved from the system. |
| System Setting | | Language, Password setting, Account setting, Notification, Email Notification |

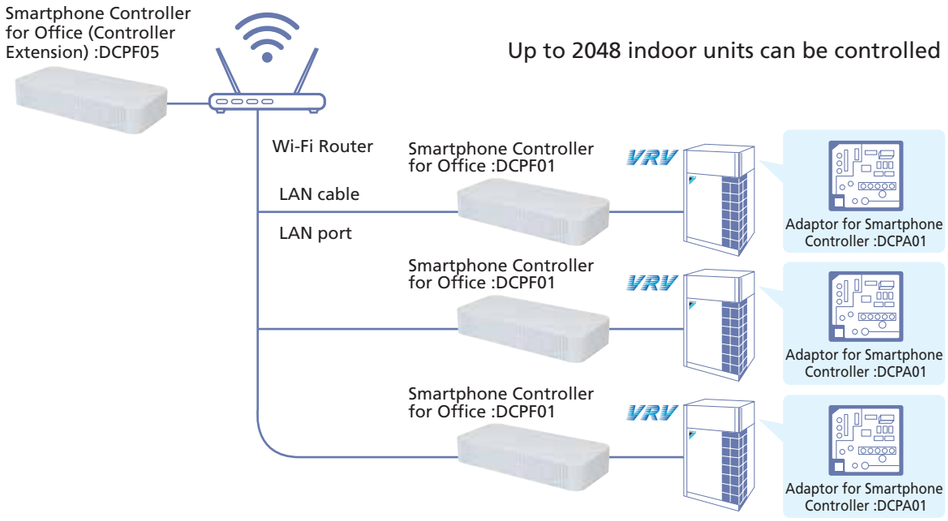
[1] Optional software for Smartphone Controller for Office, DCPF01
[2] Optional software for Smartphone Controller for Office (Touchscreen Controller), DCPF04

# Control Systems

## Office Expanded Solution (Smartphone Controller for Office (Controller Extension) :DCPF05)

A dedicated control solution for large scale office buildings through centralised control of multiple Smartphone Controller for Office controller on a single secured and cloud-enabled platform.

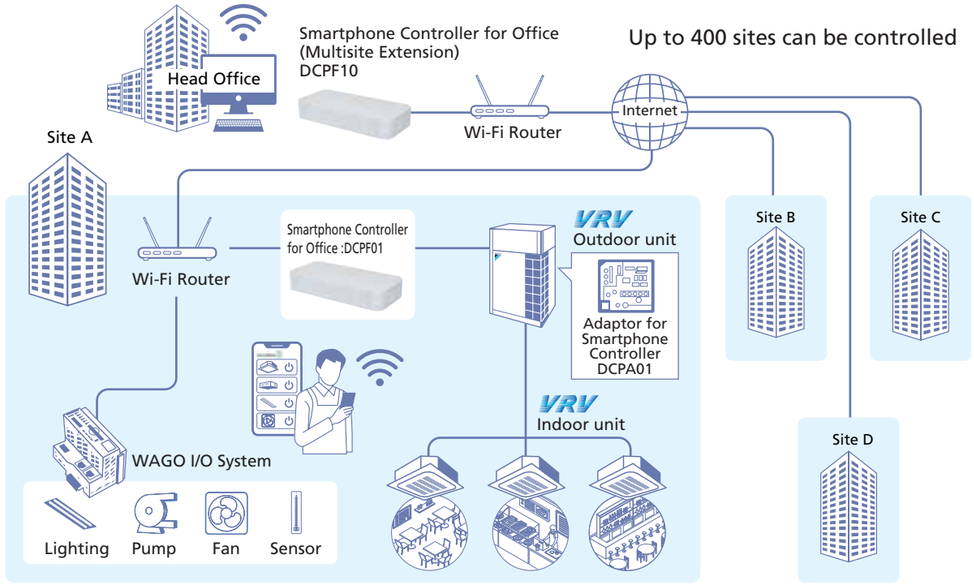
Note: P.P.D. & Tenant Billing Management and Real-Time Energy Monitoring (R.E.M.) are offered as optional software.




## Multi Site Management Solution (Smartphone Controller for Office (Multisite Extension) :DCPF10)

Centralised control and remote access for all devices in multiple buildings across different locations conveniently located on one secured platform.

Note: Multi-site Branch Expansion is offered as optional software.





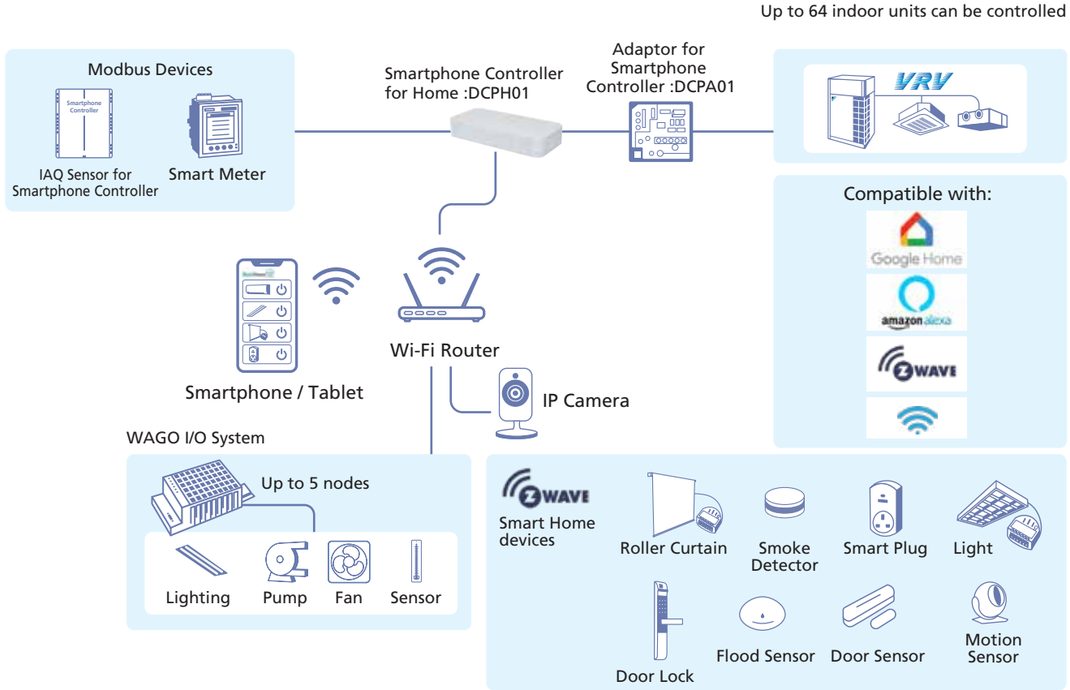

## Smart Home Solution (Smartphone Controller for Home :DCPH01)

The complete smart home air conditioning solution for every homeowners with integration capabilities to allow ease and convenience of control for almost every smart devices

**Complete Smart Home Solution**

- Supports Zwave, WAGO, Modbus, LAN communication
- Convenience & Lifestyle
- IAQ Management
- Energy Management
- Home Security Solution
- Google Home Enabled

Note: Residential automatic control and system report is offered as optional software.

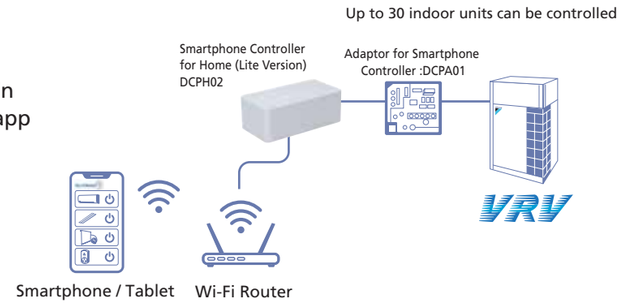



Notes: 1. Google Home and the Google Home logo are trademarks of Google LLC.
2. Amazon, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates.
3. Z-Wave® is a registered trademark of Sigma Designs and its subsidiaries in the United States and other countries.

## *VRV* Smart Centralised Control Solution (Smartphone Controller for Home (Lite Version) :DCPH02)

Designed to enhance the comfort and convenience for homeowners, offering complete control of core functions in Daikin Airconditioning system remotely through app access

Note: Residential automatic control and system report is offered as optional software.



# Control Systems

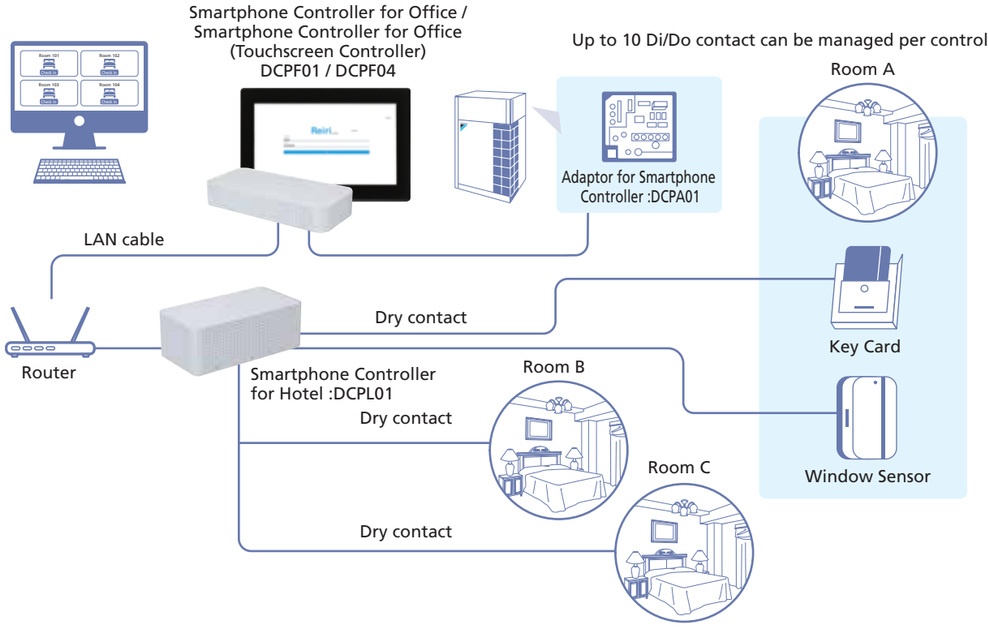
## Hotel Air Conditioning Solution (Smartphone Controller for Hotel :DCPL01)

The smart hotel air conditioning solution for effective air conditioning operation that maximize guest comfort and minimize energy consumption in a hotel

### Air Conditioning Guestroom Interlocking Management

- Automatic air conditioning control based on check in/out signal, key card signal and window open/close signal
- Guest comfort

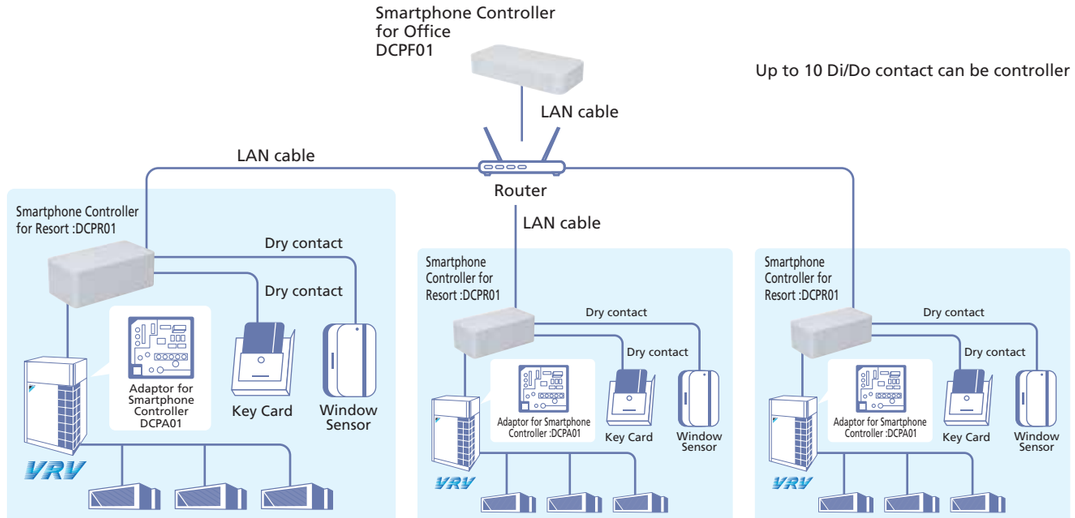
Note: The Smartphone Controller for Hotel controller has to be used with Smartphone Controller for Office / Smartphone Controller for Office (Touchscreen Controller) / Smartphone Controller for Office (Contoroller Extension) controller as building controller.




## Villa Air Conditioning Solution (Smartphone Controller for Resort :DCPR01)

Designed to enhance the comfort and convenience for each villa according to use by guests

- Automatic air conditioning control based on check in/out signal, key card signal and window open/close signal
- Guest comfort



# Streamer Duct Chamber

## New BDEZ-A Series

**Utilising Streamer technology to ducted indoor unit**

Display panel

Lineup

| Model | BDEZ500A60VE | BDEZ500A140VE | BDEZ500A510VE |
|---|---|---|---|
| Airflow range (CMH) | 80-600 | 500-1400 | 1200-5100 |

STREAMER

Presentation Movie

## Functionality Streamer Duct Chamber Internal Structure

**Dust collection filter (MERV 14) catches bacteria and viruses and prevents them from entering the room.**

### Dust Collection Filter (MERV 14)

Particulate matter as small as 2.5 µm (micrometers) can be breathed deep into the lungs. Rest assured that your air remains clean as the filter is able to remove particulate matter as small as PM2.5 with Dust Collection Filter (MERV 14) ratings in accordance to ASHRAE 52.2 Standards.

Product: Streamer Duct Chamber (Line-Up 1,2,3)
Testing Organization: Goldensea
Test Number: GS-GL-0817-2021-01/02, GS-GL-0818-2021-01
Test Method: Filter performance test based on ASHRAE 52.2-2017
Test result: The filter meets MERV 14 rating.

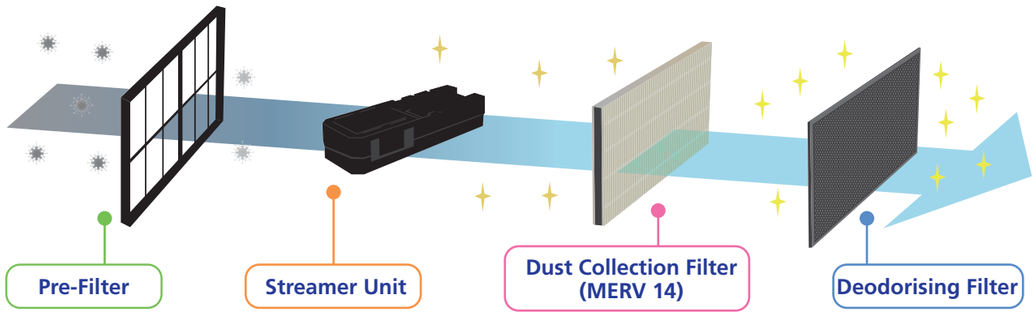
| Standard 52.2 Minimum Efficiency Reporting Value | Composite Average Particle Size Efficiency, % in Size Range, µm | | |
|---|---|---|---|
| | Range 1 (0.3-1.0) | Range 2 (1.0-3.0) | Range 3 (3.0-10.0) |
| 14 | 75% | 90% | 95% |

### Dust Collection Filter (MERV 14) Replacement Period

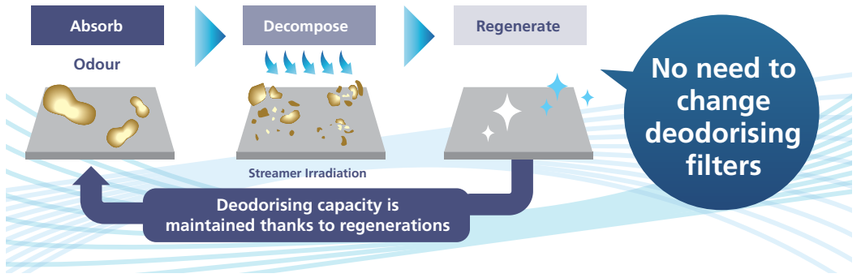
| Air Quality Condition | Dust concentration (µg/m³) | | Replacement period |
|---|---|---|---|
| | PM2.5 | PM10 | |
| Case 1 | 18.5 | 28.5 | 12 months |
| Case 2 | 35 | 65 | 6 months |

Replace with a new filter when clogging occurs. The left table shows the approximate replacement time when daily operation is 9 hours and annual operation are 240 days. It shows the calculation result for two air conditions. Adjust the replacement timing in consideration of the air environment in the area where the product is actually installed and the time and day it is operated.

## Filters Mechanism



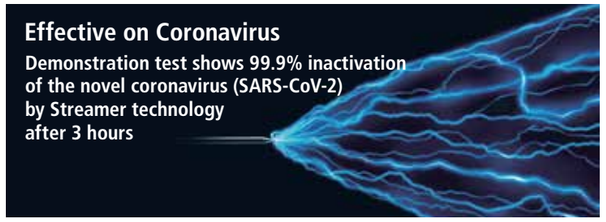

## Deodorising Filter




## Stability Streamer Technology

Streamer technology decomposes harmful substances caught by the filter. See page 3-4

Streamer technology is a unique Daikin technology that decomposes viruses, bacteria, allergens such as pollen, hazardous chemical substances such as formaldehyde, and odours with strong decomposing power.

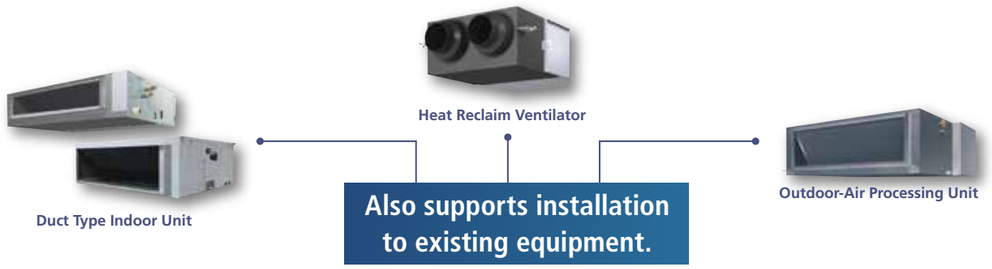



DAIKIN Streamer Research Institute

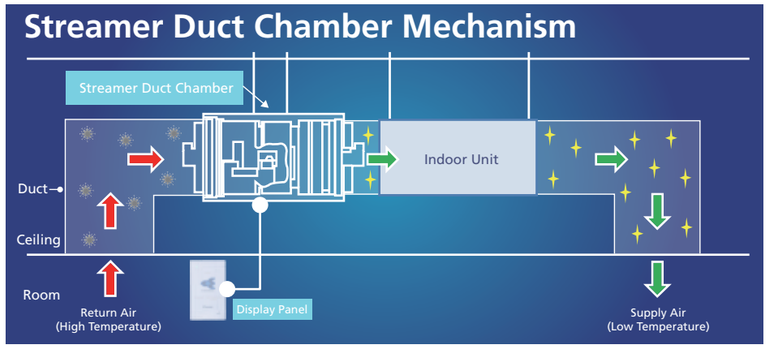
# Streamer Duct Chamber

## Flexibility Connectable Air Conditioning

### Multiple combination of ducted unit



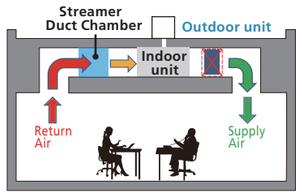

* Any ducted type indoor units except FXDSQ/FXDQ models are connectable. Refer to option list of indoor unit for details of connected models.




## Installation Conditions

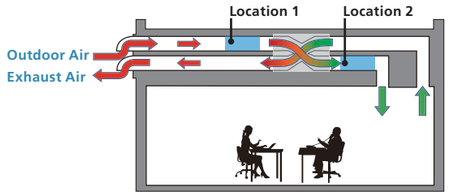
### Duct Type Indoor Unit

Streamer Duct Chamber must be installed before the air conditioner unit to avoid condensation issue due to cold air draft.



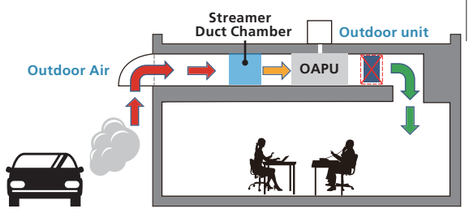

### Heat Reclaim Ventilator

Streamer Duct Chamber can be installed in either Location 1 or Location 2. However, Location 1 is highly recommended in order to avoid VAM from getting dirty with the outdoor polluted air.




### Outdoor-Air Processing Unit

Streamer Duct Chamber must be installed before the air conditioner unit to avoid condensation issue due to cold air draft. Besides, it can avoid the outdoor-air processing unit from getting dirty with the outdoor polluted air.




## Specifications

| MODEL | |  BDEZ500A60VE |  BDEZ500A140VE |  BDEZ500A510VE |
|---|---|---|---|---|
| Power supply | | 1 phase, 220-240 V, 50 Hz | | |
| Casing dimensions | H (mm) | 269 | 269 | 318 |
| | W (mm) | 419 | 819 | 1419 |
| | D (mm) | 418 | 418 | 653 |
| Operating temperature | °C | -10 to 50 | | |
| Operating humidity | % | Max. 80%RH | | |
| Airflow rate | CMH | 80 - 600 | 500 - 1400 | 1200 - 5100 |
| Initial pressure drop | Pa | 5 - 59 | 18 - 76 | 16 - 156 |
| Dust collection filter (MERV 14) lifespan | Months (based on median CMH) | 12 | 12 | 12 |
| Weight | kg | 13 | 19 | 38 |
| Power consumption | W | 6.0 | 8.5 | 11.0 |
| Sound pressure level | | No increase in Sound Pressure Level as overall system | | |
| Filters quantity | Pre-filter | 1 | 2 | 4 |
| | Dust collection filter (MERV14) | 1 | 2 | 4 |
| | Deodorising filter | 1 | 2 | 4 |
| Replacement filter dust collection filter (MERV 14) | | BAFH500A60 (1pc) | BAFH500A140 (2pcs) | BAFH500A510 (4pcs) |
| Dimensions H×W×D | mm | 221 × 392 × 50 (referring to 1pc only) | | 450 × 343 × 50 (referring to 1pc only) |
| Working method | | DP sensor | | |

# Precision Piping Method

## A smarter way to connect refrigerant piping for *VRV* installations

Using TIGHTFIT (Daikin Gas Tight Joint) ensures safety, easy connection work and quick installation. In addition, heavy equipment, such as gas cylinders used for brazing, becomes unnecessary.

TIGHTFIT

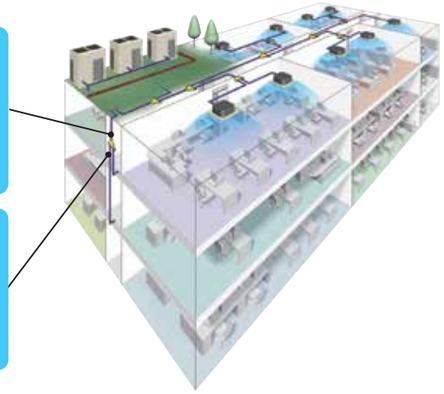
**TIGHTFIT**
**(Daikin Gas Tight Joint)**

- ✓ Easy installation by tightening with a wrench
- ✓ Metal seal to eliminate gas leaks
- ✓ Function to prevent insufficient nut tightening

Non-Brazed REFNET Joint

**Non-Brazed REFNET Joint** New

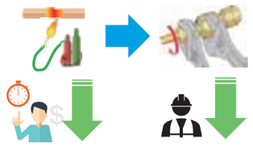
- ✓ Non-Brazed connection
- ✓ Directly connects to Tightfit
- ✓ Insulation material conforms to British Standard fire protection



## Innovative problem solving for *VRV* refrigerant piping installation

### Shorter installation time

Easy piping work significantly shortens installation time.
This makes installation possible for projects with short deadlines while reducing labor costs.

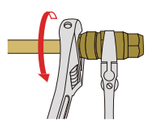


### Safety for Fire

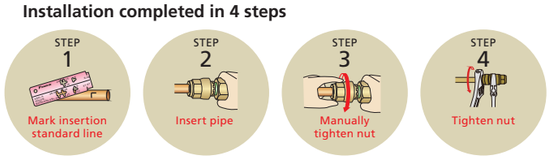
Because no brazing is involved, installation is safe with no danger of fire.
This makes it ideal for installation in renewal projects.

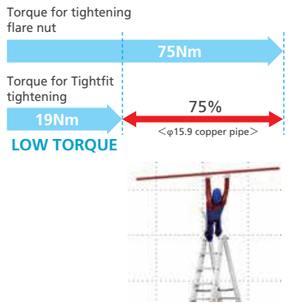
### Easy work

- Torque for tightening nut is lower than the torque of the flare nut.
- Work can be safely performed even in high locations.
- Two wrenches are used to tighten pipe connection. (No special tools required.)



**Installation completed in 4 steps**





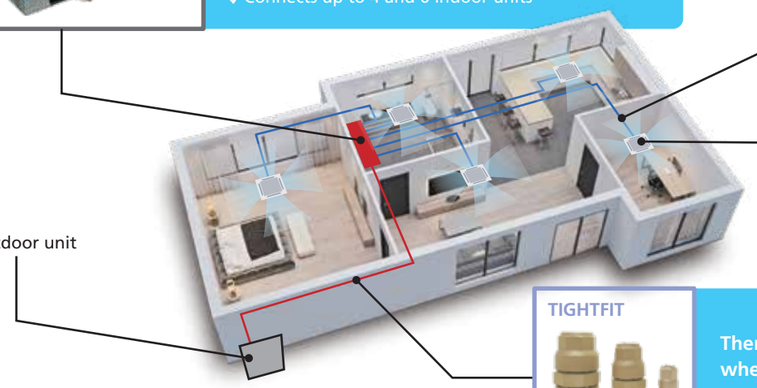

## Easy piping connection for residential installations

When installing a small-size *VRV* in a residential home, we suggest using a header pack to reduce construction and simplify installation. This also eliminates the need for heavy tools.

HEADER PACK

**HEADER PACK (Packaged Refnet Headers)**

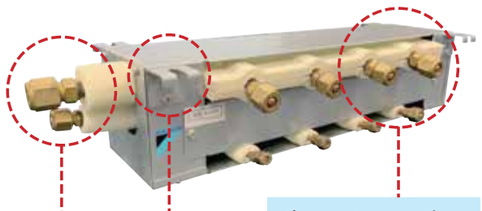
- ✓ Time Saver using Quick Flare Nut Connection
- ✓ Compact design with low height
- ✓ Connects up to 4 and 6 indoor units




TIGHTFIT

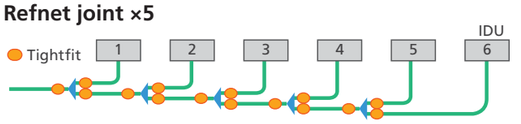
There are also cases where Tightfit is used.

## HEADER PACK

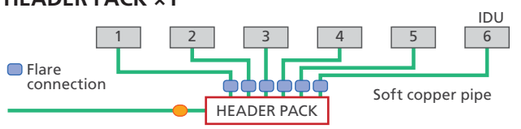



Flare nut connection

**Refnet joint ×5**

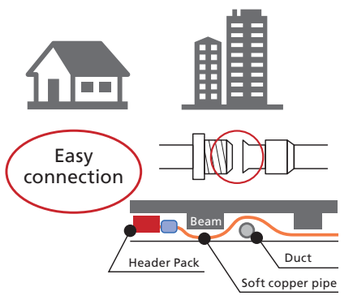



**HEADER PACK ×1**




### Benefits of Header Pack

- Ideal for small-size properties and condominiums
- Fewer piping connections
- Flare connection makes it easy to connect
- Easy installation with substantial use of soft copper pipes (Good workability in high places and narrow spaces.)



# Precision Piping Method

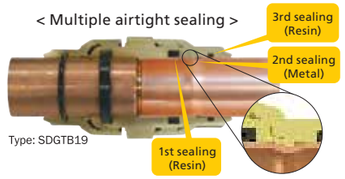
## TIGHTFIT (Daikin Gas Tight Joint)

Easy to fit, tight connection

### Quality assurance

Conforms to ISO14903

Tightness test: P=4.3MPa;
Test medium: 100% Helium, T=22˚C
Max leakage: 7.5 x 10-7 Pa·m³ /s or less.
Vacuum test: 6.5kPa in absolute

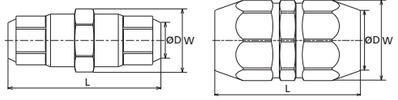



### TIGHTFIT full lineup

| Standard Joint | | Asymmetry Joint | | 90° Bend Joint | | Test Plug | |
|---|---|---|---|---|---|---|---|
|  | |  | |  | |  | |
| Size | Model name | Size | Model name | Size | Model name | Size | Model name |
| ø6.35 | SDGTB06 | ø9.52-6.35 | SDGTB0906 | - | - | ø6.35 | SDGTKB06 |
| ø9.52 | SDGTB09 | ø12.70-9.52 | SDGTB1209 | - | - | ø9.52 | SDGTKB09 |
| ø12.70 | SDGTB12 | ø15.88-12.70 | SDGTB1512 | - | - | ø12.70 | SDGTKB12 |
| ø15.88 | SDGTB15 | ø19.05-15.88 | SDGTB1915 | - | - | ø15.88 | SDGTKB15 |
| ø19.05 | SDGTB19 | ø22.22-19.05 | SDGTB2219 | - | - | ø19.05 | SDGTKB19 |
| ø22.22 | SDGTB22 | ø25.40-22.22 | SDGTB2522 | ø22.22 | SDGTLB22 | ø22.22 | SDGTKB22 |
| ø28.58 | SDGTB28 | ø28.58-25.40 | SDGTB2825 | ø28.58 | SDGTLB28 | ø28.58 | SDGTKB28 |
| ø34.92 | BDGTA34 | ø34.92-28.58 | SDGTB3428 | - | - | - | - |
| ø41.28 | BDGTA41 | - | - | - | - | - | - |

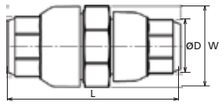
### Dimension & weight

Standard Joint



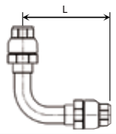

| Size | L (mm) | W (mm) | Weight (g) |
|---|---|---|---|
| ø6.35 | 50.4 | 15.0 | 43.0 |
| ø9.52 | 55.0 | 19.9 | 79.0 |
| ø12.70 | 59.0 | 23.5 | 113.0 |
| ø15.88 | 74.0 | 30.0 | 210.0 |
| ø19.05 | 76.8 | 34.6 | 273.0 |
| ø22.22 | 83.4 | 40.2 | 292.0 |
| ø28.58 | 88.0 | 46.7 | 515.0 |
| ø34.92 | 101.5 | 51.1 | 686.0 |
| ø41.28 | 103.5 | 58.3 | 881.0 |

Asymmetry Joint



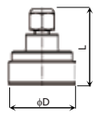

| Size | L (mm) | W (mm) | Weight (g) |
|---|---|---|---|
| ø9.52-6.35 | 52.7 | 19.9 | 67.0 |
| ø12.70-9.52 | 57.5 | 23.5 | 101.0 |
| ø15.88-12.70 | 65.0 | 30.0 | 164.0 |
| ø19.05-15.88 | 76.8 | 34.6 | 244.0 |
| ø22.22-19.05 | 81.5 | 40.2 | 358.0 |
| ø25.40-22.22 | 85.8 | 43.5 | 444.0 |
| ø28.58-25.40 | 88.1 | 46.7 | 505.0 |
| ø34.92-28.58 | 101.5 | 51.1 | 645.0 |

90° Bend Joint




| Size | L (mm) | Weight (g) |
|---|---|---|
| ø22.22 | 120.0 | 655.7 |
| ø28.58 | 145.0 | 968.4 |

Test Plug



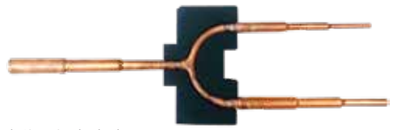

| Size | L (mm) | W (mm) | Weight (g) |
|---|---|---|---|
| ø6.35 | 43.0 | 15.0 | 53.0 |
| ø9.52 | 44.0 | 20.0 | 67.6 |
| ø12.70 | 46.0 | 23.0 | 73.4 |
| ø15.88 | 50.0 | 30.0 | 96.6 |
| ø19.05 | 52.0 | 34.0 | 111.7 |
| ø22.22 | 54.0 | 40.0 | 135.6 |
| ø28.58 | 54.0 | 46.0 | 146.0 |



## New Non-Brazed REFNET Joint

Direct connection to TIGHTFIT

This kit is designed as a refrigerant branch kit for connecting the main and branch pipes of ***VRV*** indoor units without brazing.



※ Insulation included

Lineup

| Indoor unit total capacity index | Model name | |
|---|---|---|
| | 2 pipes | 3 pipes |
| X < 290 | BHRG26A33T | BHRG25A33T |
| 290 ≤ X < 640 | BHRG26A72T | BHRG25A72T |
| 640 ≤ X | BHRG26A73T | BHRG25A73T |

Case 1: If the pipe of the REFNET joint has the same size as the field pipe, cut it at the same size and connect it to the field pipe with the standard type of Daikin Gas Tight Joint.

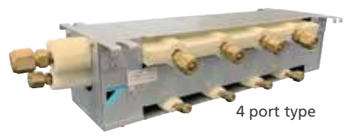
Case 2: If the pipe of the REFNET joint has not the same size as the field pipe, use the Asymmetry joint (Reducer).

## HEADER PACK (Packaged Refnet Headers)

Simple & Quick Installation

HEADER PACK Lineup

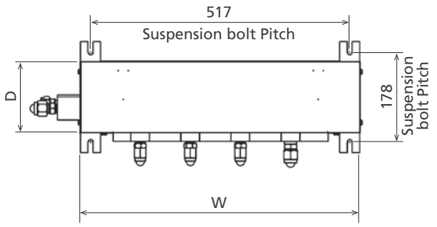
| Model name | Outdoor unit side | Indoor unit side (Flare) | | | Indoor unit total capacity index | Dimension (mm) | | |
|---|---|---|---|---|---|---|---|---|
| | Liquid / Gas (mm) | Port | | Liquid / Gas (mm) | | H | D | W |
| BHF6RHP6Z | 9.5 / 15.9 (Flare) | 4 | Large ×1 | ϕ9.5 / ϕ15.9 | ≦150 | 135 | 143 | 559 |
| | | | Small ×3 | ϕ6.4 / ϕ12.7 | | | | |
| BHF6ARHP6Z | 9.5 / 15.9 (Flare) | 6 | Large ×2 | ϕ9.5 / ϕ15.9 | ≦150 | 135 | 143 | 623 |
| | | | Small ×4 | ϕ6.4 / ϕ12.7 | | | | |
| BHF8RHP6Z | 9.5 / 19.1 (Daikin Gas Tight Joint) | 6 | Large ×3 | ϕ9.5 / ϕ15.9 | ≦200 | 135 | 143 | 623 |
| | | | Small ×3 | ϕ6.4 / ϕ12.7 | | | | |
| BHF10RHP6Z | 9.5 / 22.2 (Daikin Gas Tight Joint) | 6 | Large ×3 | ϕ9.5 / ϕ15.9 | <290 | 135 | 143 | 623 |
| | | | Small ×3 | ϕ6.4 / ϕ12.7 | | | | |
| BHF16RHP6Z | 12.7 / 28.6 (Daikin Gas Tight Joint) | 6 | Large ×3 | ϕ9.5 / ϕ15.9 | <420 | 135 | 143 | 623 |
| | | | Small ×3 | ϕ6.4 / ϕ12.7 | | | | |



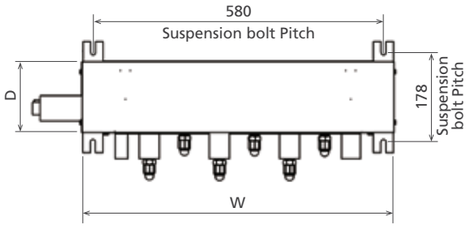
4 port type

6 port type

**BHF6RHP6Z**




**BHF6ARHP6Z,BHF8/10/16RHP6Z**



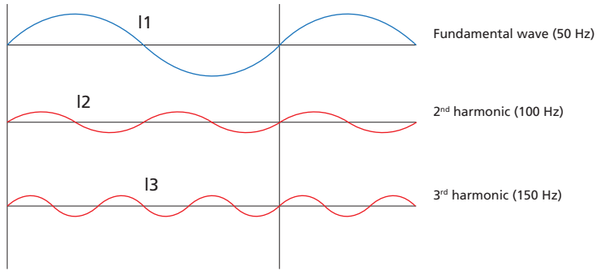
# Active Filter Unit

## BACF22E5 (Option)
## For *VRV* X (MAX) / A (MAX) series

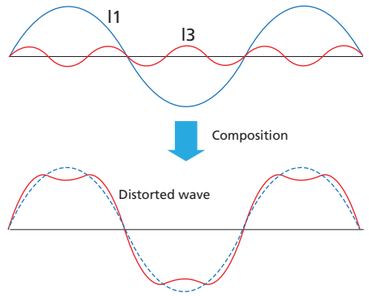
In an electric power system, a harmonic is a voltage or current that is distorted and deviate from sinusoidal waveforms. The distorted waveforms occur from the composition of a frequency that is an integer multiple of the fundamental frequency of the power supply.
Harmonics generated by power semiconductor devices can travel through wires and may have negative effects such as equipment malfunctions and damage, vibrations, strange noises, etc.

Front view

Side view




(a) Fundamental wave – harmonic wave



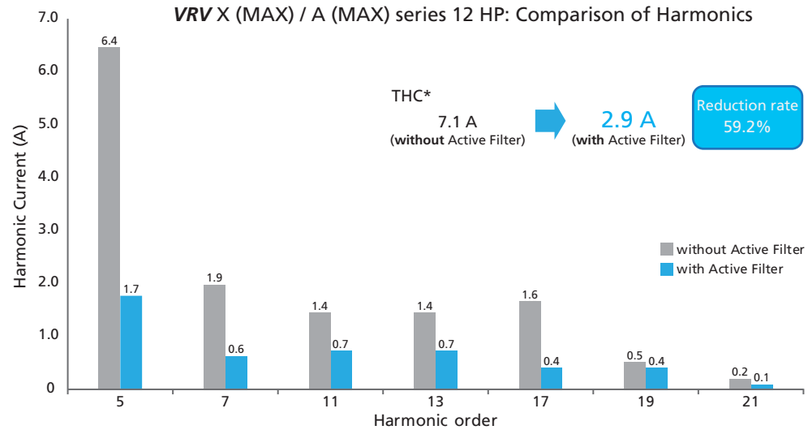

(b) Distorted wave

## Specifications

| MODEL | BACF22E5 | |
|---|---|---|
| Power supply | 3 ϕ, 380 – 415 V, 50 Hz | |
| Rated compensation capacity | 4.6 kVA | |
| Installation environment | Outdoors | |
| System | Cooling | Forced air cooling (built-in fan) |
| | Inverter | Voltage type |
| Operation | Load current: Starting 5.5 A or more, stopping 4.0 A or less | |
| Error display | Displayed on the display board when an error occurs | |
| Operation characteristics | Harmonic compensation target order: 2nd to 23rd<br>However, the residual rate changes depending on the power supply impedance. | |
| Dimensions (H×W×D) | 723 × 334 × 249 mm | |
| Weight | 22 kg | |

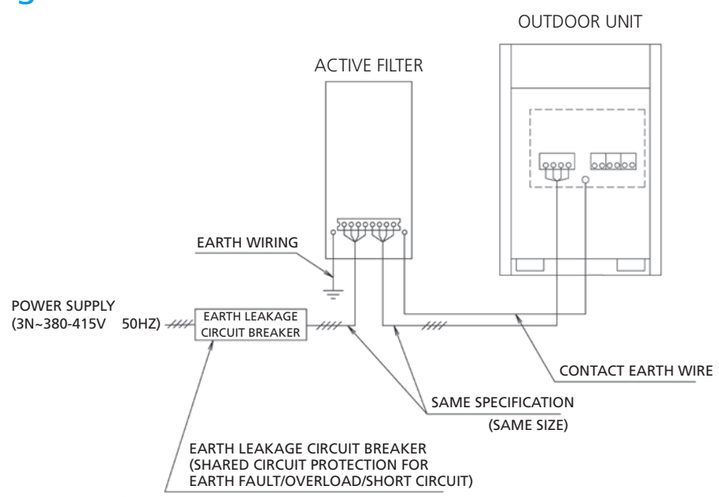
## Advantages of Active Filter

Daikin's Active Filter unit can drastically reduce harmonics, preventing damages from harmonics and extending equipment lifespan.




***Total Harmonic Current (THC)** is the accumulated currents of the orders 2 to 23 that contribute to the distortion of the current waveform. This value is particularly useful in determining the required characteristics for installation of modern active harmonic filters.

## Field Wiring




* Refer to the Engineering Data Book for details.

# Option List

## Outdoor units

### VRV X

| No. | Item | Type | RXUQ6A(W) RXUQ8A(W) RXUQ10A(W) | RXUQ12A(W) RXUQ14A(W) RXUQ16A(W) RXUQ18A(W) RXUQ20A(W) | RXUQ12AM(W) RXUQ14AM(W) RXUQ16AM(W) RXUQ18AM(W) RXUQ20AM(W) | RXUQ18AM1(W) RXUQ20AM1(W) RXUQ22AM(W) |
|---|---|---|---|---|---|---|
| 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 | | |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | | |
| 2 | Outdoor unit multi connection piping kit | | — | | BHFP22P100 | |
| 3 | Active filter unit | | BACF22E5 | | | |

| No. | Item | Type | RXUQ24AM(W) RXUQ26AM(W) RXUQ28AM(W) RXUQ30AM(W) RXUQ32AM(W) | RXUQ34AM(W) RXUQ36AM(W) RXUQ38AM(W) RXUQ40AM(W) | RXUQ42AM(W) RXUQ44AM(W) RXUQ46AM(W) RXUQ48AM(W) RXUQ50AM(W) | RXUQ52AM(W) RXUQ54AM(W) RXUQ56AM(W) RXUQ58AM(W) RXUQ60AM(W) |
|---|---|---|---|---|---|---|
| 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 | | | |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | | |
| 2 | Pipe size reducer | | KHRP26M73TP, KHRP26M73HP | | | |
| 3 | Outdoor unit multi connection piping kit | | BHFP22P100 | | BHFP22P151 | |
| 4 | Active filter unit | | BACF22E5 | | | |

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

**Non-Brazed REFNET Joint for TIGHTFIT**
(BHRG26A33/72/73T)

### Option PCB

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

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

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

### VRV A

| No. | Item | Type | RXQ6A(W) RXQ8A(W) RXQ10A(W) | RXQ12A(W) RXQ14A(W) RXQ16A(W) | RXQ18A(W) RXQ20A(W) | RXQ18AM(W) RXQ20AM(W) RXQ22AM(W) |
|---|---|---|---|---|---|---|
| 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 | | |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | | |
| 2 | Outdoor unit multi connection piping kit | | — | | | BHFP22P100 |
| 3 | Active filter unit | | BACF22E5 | | | |

| No. | Item | Type | RXQ24AM(W) RXQ26AM(W) RXQ28AM(W) RXQ30AM(W) RXQ32AM(W) | RXQ34AM(W) RXQ36AM(W) RXQ38AM(W) RXQ40AM(W) | RXQ42AM(W) RXQ44AM(W) RXQ46AM(W) RXQ48AM(W) RXQ50AM(W) | RXQ52AM(W) RXQ54AM(W) RXQ56AM(W) RXQ58AM(W) RXQ60AM(W) |
|---|---|---|---|---|---|---|
| 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 | | | |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | | |
| 2 | Pipe size reducer | | KHRP26M73TP, KHRP26M73HP | | | |
| 3 | Outdoor unit multi connection piping kit | | BHFP22P100 | | BHFP22P151 | |
| 4 | Active filter unit | | BACF22E5 | | | |

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

**Non-Brazed REFNET Joint for TIGHTFIT**
(BHRG26A33/72/73T)

### Option PCB

| No. | Item | Type | RXQ6A(W) RXQ8A(W) RXQ10A(W) RXQ12A(W) | RXQ14A(W) RXQ16A(W) RXQ18A(W) RXQ20A(W) | RXQ18AM(W) RXQ20AM(W) RXQ22AM(W) RXQ24AM(W) | RXQ26AM(W) RXQ28AM(W) RXQ30AM(W) |
|---|---|---|---|---|---|---|
| 1 | DIII-NET expander adaptor ★ | | DTA109A51 | | | |
| 2 | External control adaptor ★ | | DTA104A61 | | | |
| 3 | Home Automation Interface Adaptor ★ | | DTA116A51 | | | |
| 4 | Option plate for control adaptor | | — | BKS26A*1 | — | BKS26A*1 |

| No. | Item | Type | RXQ32AM(W) RXQ34AM(W) RXQ36AM(W) RXQ38AM(W) | RXQ40AM(W) RXQ42AM(W) RXQ44AM(W) RXQ46AM(W) | RXQ48AM(W) RXQ50AM(W) RXQ52AM(W) RXQ54AM(W) | RXQ56AM(W) RXQ58AM(W) RXQ60AM(W) |
|---|---|---|---|---|---|---|
| 1 | DIII-NET expander adaptor ★ | | DTA109A51 | | | |
| 2 | External control adaptor ★ | | DTA104A61 | | | |
| 3 | Home Automation Interface Adaptor ★ | | DTA116A51 | | | |
| 4 | Option plate for control adaptor | | BKS26A *1 | | | |

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

# Option List

## Outdoor units

### VRV S High Seasonal Efficiency SERIES

| No. | Item \ Type | RSUQ4A | RSUQ5A | RSUQ6A | RSUQ7A | RSUQ8A | RSUQ9A |
|---|---|---|---|---|---|---|---|
| 1 | Header pack | BHF6RHP6Z, BHF6ARHP6Z, BHF8RHP6Z, BHF10RHP6Z | | | | | |
| 2 | REFNET header | KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch) | | | | | |
| 3 | REFNET joint | KHRP26A22T | | | KHRP26A22T, KHRP26A33T | | |
| 4 | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | | | | |
| 5 | Drain plug | BKP082A41 | | | — | | |
| 6 | Air direction adjustment grille | KPW082A41 | | | | | |

### Option PCB

| No. | Item \ Type | RSUQ4A | RSUQ5A | RSUQ6A | RSUQ7A | RSUQ8A | RSUQ9A |
|---|---|---|---|---|---|---|---|
| 1 | DIII-NET expander adaptor ★ | DTA109A51 | | | | | |
| 2 | External control adaptor ★ | DTA104A61 | | | | | |
| 3 | Home Automation Interface Adaptor ★ | DTA116A51 | | | | | |
| 4 | Option plate for control adaptor | BKS26B*1 | | | BKS26C*1 | | |

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

### VRV IV S SERIES

| No. | Item \ Type | RXMQ4A | RXMQ5B | RXMQ6B |
|---|---|---|---|---|
| 1 | Header pack | BHF6RHP6Z, BHF6ARHP6Z, BHF8RHP6Z | | |
| 2 | REFNET header | KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch) | | |
| 3 | REFNET joint | KHRP26A22T | | |
| 4 | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | |
| 5 | Central drain plug | KKPJ5H280 | | |
| 6 | Fixture for preventing overturning | KKTP5B112 | | |

### 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | |

| 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | |
| 2 | Pipe size reducer | | — | KHRP26M73TP, KHRP26M73HP |
| 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 | | | |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | | |
| 2 | Pipe size reducer | | KHRP26M73TP, KHRP26M73HP | | | |
| 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T |

| 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 | | | |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | | |
| 2 | Pipe size reducer | | KHRP26M73TP, KHRP26M73HP | | | |
| 3 | Outdoor unit connection piping kit | | BHFP22P100 | | BHFP22P151 | |

# Option List

## Outdoor units

### VRV IV W SERIES

| No. | Item | | Type: RWEYQ6T, RWEYQ8T, RWEYQ10T, RWEYQ12T | Type: RWEYQ14T, RWEYQ16T, RWEYQ18T, RWEYQ20T, RWEYQ22T, RWEYQ24T | Type: 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG25A33T, BHRG25A72T, BHRG25A73T, BHRG26A33T, BHRG26A72T, BHRG26A73T | | |
| 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T |
| 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 | Type: RWHQ24TH, RWHQ26TH, RWHQ28TH, RWHQ30TH, RWHQ32TH, RWHQ34TH |
|---|---|---|---|---|
| 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | |
| 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) | | | |
| | | REFNET joint | KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T | | | |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | | |
| 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 Standard Type

| No. | Item | | Type: RWHQ6T, RWHQ8T, RWHQ10T | Type: 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | |
| 2 | Hot water controller box | | BRCM82 | |
| 3 | Hot water remote controller | | BRCS82 | |

| No. | Item | | Type: RWHQ18TN, RWHQ20TN, RWHQ22TN | Type: 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | |
| 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) | | | |
| | | REFNET joint | KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T | | | |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | | | |
| 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T |
| 2 | Hot water controller box | | BRCM82 |
| 3 | Hot water remote controller | | BRCS82 |

| No. | Item | | Type: RWHQ22TS | Type: 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 |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | |
| 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 | Type: 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 | |
| | | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | |
| 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

## *VRV* indoor units

### Round Flow Cassette with Sensing and Streamer Type

| No. | Item | | | Type | FXFTQ25A FXFTQ32A FXFTQ40A | FXFTQ50A FXFTQ63A FXFTQ80A | FXFTQ100A FXFTQ125A FXFTQ140A |
|---|---|---|---|---|---|---|---|
| 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 | BYCQ125EBSF * | | |
| 2 | Panel spacer | | | | KDB55J160F | | |
| 3 | Fresh air intake kit | | Chamber type [4,5] | Without T-duct joint | KDDP55C160 (Components: KDDP55C160-1, KDDP55C160-2) [7] | | |
| | | | | With T-duct joint | KDDP55C160K (Components: KDDP55C160-1, KDDP55C160K2) [7] | | |
| | | | Direct installation type [6] | | KDDP55X160A | | |
| 4 | High performance prefilter (MERV 8) [8] | | | | BAF552A160 | | |
| 5 | Replacement long-life filter | | | | KAF5511D160 | | |
| 6 | Replacement long-life filter (Auto grille panel) | | | | KAF5512D160 | | |
| 7 | Branch duct chamber | | | | KDJP55C80 | | KDJP55C160 |
| 8 | Insulation kit for high humidity [9] | | | | KDTP55K80B | | KDTP55K160B |

### Round Flow Cassette with Streamer Type

| No. | Item | | | Type | FXFRQ25A FXFRQ32A FXFRQ40A | FXFRQ50A FXFRQ63A FXFRQ80A | FXFRQ100A FXFRQ125A FXFRQ140A |
|---|---|---|---|---|---|---|---|
| 1 | Decoration panel | Standard panel | | Fresh white | BYCQ125EAF * | | |
| | | | | Black | BYCQ125EAK * | | |
| | | Designer panel [1] | | Fresh white | BYCQ125EAPF * | | |
| | | Auto grille panel [2, 3] | | Fresh white | BYCQ125EBSF * | | |
| 2 | Panel spacer | | | | KDB55J160F | | |
| 3 | Fresh air intake kit | | Chamber type [4,5] | Without T-duct joint | KDDP55C160 (Components: KDDP55C160-1, KDDP55C160-2) [7] | | |
| | | | | With T-duct joint | KDDP55C160K (Components: KDDP55C160-1, KDDP55C160K2) [7] | | |
| | | | Direct installation type [6] | | KDDP55X160A | | |
| 4 | High performance prefilter (MERV 8) [8] | | | | BAF552A160 | | |
| 5 | Replacement long-life filter | | | | KAF5511D160 | | |
| 6 | Replacement long-life filter (Auto grille panel) | | | | KAF5512D160 | | |
| 7 | Branch duct chamber | | | | KDJP55C80 | | KDJP55C160 |
| 8 | Insulation kit for high humidity [9] | | | | KDTP55K80B | | KDTP55K160B |

Notes: 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 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. 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.
7. Please order using the names of both components instead of set name.
8. This option cannot be installed to designer panel and auto grille panel.
9. Please use in case temperature/humidity inside ceiling may get over 30°C, 80% RH.
*These panels do not contain the sensing function.



### Round Flow Cassette 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 | BYCQ125EBSF * | | |
| 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 | | | | KDB55J160F | | |
| 4 | Fresh air intake kit | | Chamber type [5,6] | Without T-duct joint | KDDP55C160 (Components: KDDP55C160-1, KDDP55C160-2) [8] | | |
| | | | | With T-duct joint | KDDP55C160K (Components: KDDP55C160-1, KDDP55C160K2) [8] | | |
| | | | Direct installation type [7] | | KDDP55X160A | | |
| 5 | High-efficiency filter unit [9] (Including filter chamber) | | | (Colorimetric method 65%) | KAF556D80 | | KAF556D160 |
| | | | | (Colorimetric method 90%) | KAF557D80 | | KAF557D160 |
| 6 | Replacement high-efficiency filter [9, 10] | | | (Colorimetric method 65%) | KAF552D80 | | KAF552D160 |
| | | | | (Colorimetric method 90%) | KAF553D80 | | KAF553D160 |
| 7 | Filter chamber | | | | KDDFP55C160 | | |
| 8 | High performance prefilter (MERV 8) [9] | | | | BAF552A160 | | |
| 9 | Replacement long-life filter | | | | KAF5511D160 | | |
| 10 | Replacement long-life filter (Auto grille panel) | | | | KAF5512D160 | | |
| 11 | Ultra long-life filter unit (Including filter chamber) [9] | | | | KAF555D160 | | |
| 12 | Replacement ultra long-life filter [9, 10] | | | | KAF550D160 | | |
| 13 | Branch duct chamber [4] | | | | KDJP55C80 | | KDJP55C160 |
| 14 | Insulation kit for high humidity [9, 11] | | | | KDTP55K80B | | KDTP55K160B |

### Round Flow Cassette 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 | BYCQ125EBSF * | | |
| 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 | | | | KDB55J160F | | |
| 4 | Fresh air intake kit | | Chamber type [5,6] | Without T-duct joint | KDDP55C160 (Components: KDDP55C160-1, KDDP55C160-2) [8] | | |
| | | | | With T-duct joint | KDDP55C160K (Components: KDDP55C160-1, KDDP55C160K2) [8] | | |
| | | | Direct installation type [7] | | KDDP55X160A | | |
| 5 | High-efficiency filter unit [9] (Including filter chamber) | | | (Colorimetric method 65%) | KAF556D80 | | KAF556D160 |
| | | | | (Colorimetric method 90%) | KAF557D80 | | KAF557D160 |
| 6 | Replacement high-efficiency filter [9, 10] | | | (Colorimetric method 65%) | KAF552D80 | | KAF552D160 |
| | | | | (Colorimetric method 90%) | KAF553D80 | | KAF553D160 |
| 7 | Filter chamber | | | | KDDFP55C160 | | |
| 8 | High performance prefilter (MERV 8) [9] | | | | BAF552A160 | | |
| 9 | Replacement long-life filter | | | | KAF5511D160 | | |
| 10 | Replacement long-life filter (Auto grille panel) | | | | KAF5512D160 | | |
| 11 | Ultra long-life filter unit (Including filter chamber) [9] | | | | KAF555D160 | | |
| 12 | Replacement ultra long-life filter [9, 10] | | | | KAF550D160 | | |
| 13 | Branch duct chamber [4] | | | | KDJP55C80 | | KDJP55C160 |
| 14 | Insulation kit for high humidity [9, 11] | | | | KDTP55K80B | | KDTP55K160B |

Notes: 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 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.

# Option List

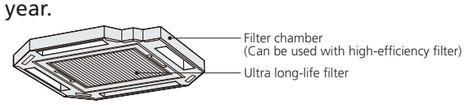
## *VRV* indoor units

Options of Round Flow Cassette with Sensing and Streamer & Round Flow Cassette with Streamer & Round Flow Cassette with Sensing & Round Flow Cassette

Options required for specific operating environments

### Ultra long-life filter unit

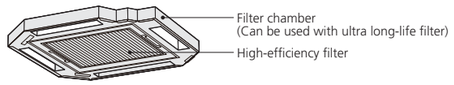
Even in dusty environments where the air conditioning is constantly operating, the ultra long-life filter only has to be cleaned once a year.




**Dusty area: annual filter change**
*For dust concentration of 0.3 mg/m³ (Requires separately sold Air purifier.)
1 year (Approx. 5,000 hr): About 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): About 8 hr/day x 25 day/month x 12 month/years x 4 years

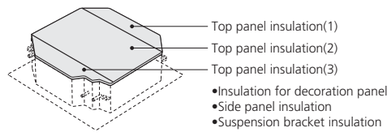
### High-efficiency filter unit

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



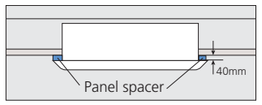

### Insulation kit for high humidity

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

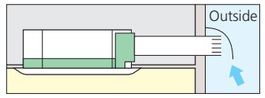
By using this option, 2-way, 3-way, or 4-way flow can be selected.

### 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 [1, 2]

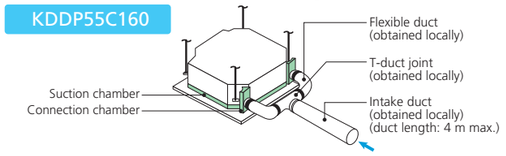
Using this kit, a duct can be connected to take in outdoor air. There are two chamber types that have intake in two places: with T-duct joint and without T-duct joint.




The units can be installed in the following different ways:

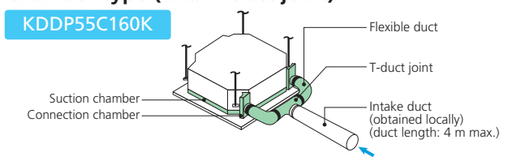
### Chamber type (without T-duct joint) [3, 4, 5]

KDDP55C160



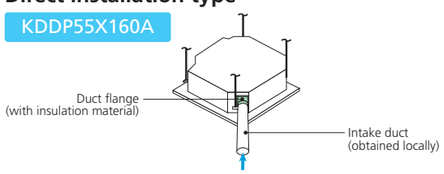

### Chamber type (with T-duct joint) [3, 4, 5]

KDDP55C160K




### Direct installation type [6]

KDDP55X160A




Notes: 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 (BRP11B62) 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.



# High Performance Prefilter (MERV 8)

## Features and Benefits

**BAF552A160**

### MERV 8 Rating

This filter is a high performance prefilter that has achieved MERV 8 rating.

### PM2.5 Filtration

This filter can catch fine particles that could not be removed by the existing prefilter, capturing 97% of 1.0-3.0 µm particles and 99% of 3.0-10 µm particles when air passes through filter 10 times.

### Filter Exchange Twice a Year

Replace the filter twice a year in order to maintain the filter's high performance.

### Chamberless Filter

Additional parts and difficult installation works are unnecessary. Just replace the existing prefilter.

### Retrofit to Existing Indoor Unit

Attachable to your current round flow cassette for IAQ improvement.

## Specifications

| | | | | |
|---|---|---|---|---|
| **Model Name** | | BAF552A160 | | |
| **Brand** | | DAIKIN | | |
| **Production Base** | | AAF Malaysia | | |
| **Performance** | | MERV 8 | | |
| **Dimensions** | mm | 526 x 523 x 35 | | |
| **Airflow rate** | $m^3$/min | 13.0 | 22.9 | 37.0 |
| **Initial Pressure Drop*2** | Pa | 18.1 | 35.8 | 81.4 |
| **Weight** | g | 520 | | |
| **Lifetime *3** | | 6 months (1,250 hours) | | |
| **Reuse** | | Non-reusable | | |

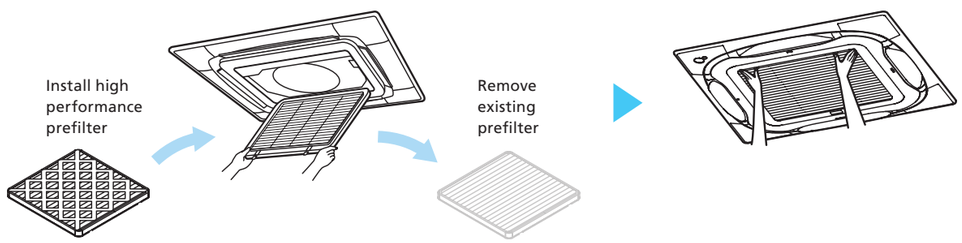
Note 1. It is necessary to set a high ceiling mode on site to prevent a decrease in air volume when installing the filter.
The setting number differs according to each model. Please refer to the installation manual.

*2. This result is based on the test of the filter only. The results may be different in the actual use environment where the filter is installed in the indoor unit.

*3. Filter lifetime may vary depending on the condition of the operating environment.
Certain instances such as high traffic areas, pets or smokers in a residence, or other situations may require more frequent changes.

## Easy Replacement

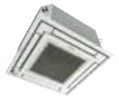
The existing prefilter can be replaced easily*.
Since it's a chamberless filter, the installer will remove the existing prefilter and replace it with the high performance prefilter.




* The filter should be fixed to the air conditioner with attached components, so consult your dealer when installing or replacing the filter.

# Option List

## *VRV* indoor units



### Compact Multi Flow Cassette Type

| No. | Item \ Type | FXZQ20B | FXZQ25B | FXZQ32B | FXZQ40B | FXZQ50B |
|---|---|---|---|---|---|---|
| 1-1 | Grid ceiling panel | BYFQ60CAW | | | | |
| 1-2 | Sensor kit for grid ceiling panel | BRYQ60AAW | | | | |
| 2-1 | Decoration panel *1 | BYFQ60B3W1 | | | | |
| 2-2 | Relay wire harness adaptor for decoration panel *1 | BER01A1 | | | | |
| 2-3 | Sealing material of air discharge outlet for decoration panel | KDBH44BA60 | | | | |
| 3 | Replacement long life filter | KAF441C60 | | | | |
| 4 | Fresh air intake kit | KDDQ44XA60 | | | | |
| 5 | Streamer filter clean unit *2 | BAPWS55A61 | | | | |

Notes: *1. Option relay wire harness adaptor (BER01A1) is necessary when installing decoration panel (BYFQ60B3W1).
*2. Available only when stylish remote controller (BRC1H63W/K) is connected.

### Double Flow Cassette Type

| No. | Item \ Type | | FXCQ20B FXCQ25B FXCQ32B FXCQ40B | FXCQ50B FXCQ63B | FXCQ80B FXCQ125B |
|---|---|---|---|---|---|
| 1 | Decoration panel | | BYBCQ40CF | BYBCQ63CF | BYBCQ125CF |
| 2 | High efficiency filter *1 | 65 % | KAF532C50 | KAF532C80 | KAF532C160 |
| | | 90 % | KAF533C50 | KAF533C80 | KAF533C160 |
| 3 | Filter chamber for bottom suction | | KDDFP53B50 | KDDFP53B80 | KDDFP53B160 |
| 4 | Long life replacement filter | | KAF531C50 | KAF531C80 | KAF531C160 |
| 5 | Streamer filter clean unit *2 | | BAPWS55A61 | | |

Notes: *1. If installing high efficiency filter, filter chamber is required.
*2. Available only when stylish remote controller (BRC1H63W/K) is connected.

### Single Flow Cassette Type

| No. | Item \ Type | | FXKQ25MA | FXKQ32MA | FXKQ40MA | FXKQ63MA |
|---|---|---|---|---|---|---|
| 1 | Panel related | Decoration panel | BYK45FJW1 | | | BYK71FJW1 |
| 2 | Air inlet and air discharge outlet related | Long life replacement filter | KAFJ521F56 | | | KAFJ521F80 |

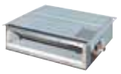
### Ceiling Mounted Cassette Duct Type

| No. | Item \ Type | FXFDQ63A | FXFDQ80A | FXFDQ100A | FXFDQ125A |
|---|---|---|---|---|---|
| 1 | Decoration panel *1 | BYCDQ125APF | | | |
| 2 | Panel spacer | KDB55J160F | | | |
| 3 | Replacement long-life filter | KAF5511D160 | | | |
| 4 | Cover plate of air discharge outlet *2 | BKCP55A160 | | | |

Notes: *1. When installing decoration panel, body height (ceiling required dimension) is 41 cm.
*2. Use this option to close the air outlet holes for the side that do not want to use.

### Bedroom Duct Type

| No. | Item \ Type | FXDBQ40A FXDBQ50A | FXDBQ63A FXDBQ80A |
|---|---|---|---|
| 1 | Streamer duct chamber | BDEZ500A140VE | BDEZ500A510VE |



### Slim Duct (Standard) Type

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



### Slim Duct (Compact) Type

| No. | Item \ Type | FXSQ20SP FXSQ25SP FXSQ32SP FXSQ40SP FXSQ50SP | FXSQ63SP |
|---|---|---|---|
| 1 | Streamer duct chamber | BDEZ500A140VE | BDEZ500A510VE |

### Middle Static Pressure Duct Type

| No. | Item \ Type | | FXSQ20PA FXSQ25PA FXSQ32PA | FXSQ40PA | FXSQ50PA | FXSQ63PA FXSQ80PA | FXSQ100PA FXSQ125PA | FXSQ140PA |
|---|---|---|---|---|---|---|---|---|
| 1 | High efficiency filter *1 | 65% | KAF632C36 | KAF632C56 | KAF632C80 | | KAF632C160 | KAF632B160B |
| | | 90% | KAF633C36 | KAF633C56 | KAF633C80 | | KAF633C160 | KAF633B160B |
| 2 | Filter chamber (for rear suction) *1 | | KDDFP63B36 | KDDFP63B56 | KDDFP63B80 | | KDDFP63B160 | KDDF63B160B |
| 3 | Long-life filter *1 | | KAF631C36 | KAF631C56 | KAF631C80 | | KAF631C160 | KAF631B160B |
| 4 | Streamer duct chamber | | BDEZ500A60VE BDEZ500A140VE | BDEZ500A140VE | | BDEZ500A140VE BDEZ500A510VE | BDEZ500A510VE | |
| 5 | Service panel (Fresh white) | | KTBJ25K36F | KTBJ25K56F | KTBJ25K80F | | KTBJ25K160F | |
| 6 | Air discharge adaptor | | KDAP25A36A | KDAP25A56A | KDAP25A71A | | KDAP25A140A | KDAP25A160A *2 |
| 7 | Shield plate for side plate | | KDBD63A160 | | | | | — |

Notes: *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.

### Middle-High Static Pressure Duct Type

| No. | Item \ Type | | FXMQ20PA FXMQ25PA FXMQ32PA | FXMQ40PA | FXMQ50PA FXMQ63PA | FXMQ80PA | FXMQ100PA FXMQ125PA FXMQ140PA |
|---|---|---|---|---|---|---|---|
| 1 | High efficiency filter | 65% | KAF372AA36 | KAF372B56 | KAF372B80 | | KAF372B160 |
| | | 90% | – | KAF373B56 | KAF373B80 | | KAF373B160 |
| 2 | Filter chamber | | – | KDDF37AB56 | KDDF37AB80 | | KDDF37AB160 |
| 3 | Long life replacement filter | | – | KAF371B56 | KAF371B80 | | KAF371B160 |
| 4 | Long life filter chamber kit | | – | KAF375C56 | KAF375C80 | | KAF375C160 |
| 5 | Streamer duct chamber | | BDEZ500A60VE BDEZ500A140VE | BDEZ500A140VE | | BDEZ500A510VE | |
| 6 | Service panel (Fresh white) | | KTBJ25K36F | KTBJ25K56F | KTBJ25K80F | | KTBJ25K160F |
| 7 | Air discharge adaptor | | KDAJ25K36A | KDAJ25K56A | KDAJ25K71A | | KDAJ25K140A |

### High Static Pressure Duct Type

| No. | Item \ Type | | FXMQ200P FXMQ250P |
|---|---|---|---|
| 1 | 8mm pre-filter | | BAFL501A250 |
| 2 | 30mm long life replacement filter | | BAFL502A250 |
| 3 | High efficiency filter | 65% | BAFM503A250 |
| | | 90% | BAFH504A250 |
| 4 | Filter chamber (long life filter, high efficiency filter) | | BDD500A250 |
| 5 | Streamer duct chamber | | BDEZ500A510VE |
| 6 | Drain pump kit | | BDU510A250VM |
| 7 | Insulation kit for high humidity | | BDT520A250 |

### Ceiling Suspended Type

| No. | Item \ Type | FXHQ32MA | FXHQ63MA | FXHQ100MA | FXHQ125B | FXHQ140B |
|---|---|---|---|---|---|---|
| 1 | Drain pump kit | KDU50N60VE | KDU50N125VE | | KDUP50P160 | |
| 2 | Replacement long-life filter | KAFJ501D56 | KAFJ501D80 | KAFJ501D112 | KAF501B160 | |
| 3 | L-type piping kit (for upward direction) | KHFP5M63 | KHFP5M160 | | KHFP5N160 | |
| 4-1 | Streamer filter clean unit *1,2 | — | | | BAPWS55A61 | |
| 4-2 | Mounting kit for streamer option | — | | | BERPW50A61 | |

Notes: *1. Mounting kit for streamer option (BERPW50A61) is necessary.
*2. Available only when stylish remote controller (BRC1H63W/K) is connected.

### Wall Mounted Type

| No. | Item \ Type | FXAQ20A FXAQ25A FXAQ32A FXAQ40A | FXAQ50A FXAQ63A |
|---|---|---|---|
| 1 | Drain pump kit | K-KDU572KVE | |

# Option List

## *VRV* indoor units

### Floor Standing Type

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

### Concealed Floor Standing Type

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

### Floor Standing Duct Type

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

Notes: *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 | | |

## Precision Piping Method

### HEADER PACK

| No. | Item \ Type | 4 port type | 6 port type |
|---|---|---|---|
| 1 | HEADER PACK | BHF6RHP6Z | BHF6ARHP6Z, BHF8RHP6Z, BHF10RHP6Z, BHF16RHP6Z |

### TIGHTFIT

| No. | Item \ Type | Standard Joint | Asymmetry Joint | 90° Bend Joint | Test Plug |
|---|---|---|---|---|---|
| 1 | TIGHTFIT | SDGTB06, SDGTB09, SDGTB12 SDGTB15, SDGTB19, SDGTB22 SDGTB28, BDGTA34, BDGTA41 | SDGTB0906, SDGTB1209, SDGTB1512 SDGTB1915, SDGTB2219, SDGTB2522 SDGTB2825, SDGTB3428 | SDGTLB22 SDGTLB28 | SDGTKB06, SDGTKB09, SDGTKB12 SDGTKB15, SDGTKB19, SDGTKB22 SDGTKB28 |

### Non-Brazed REFNET Joint for TIGHTFIT

| No. | Item \ Type | 2 pipes | 3 pipes |
|---|---|---|---|
| 1 | Non-Brazed REFNET Joint for TIGHTFIT | BHRG26A33T, BHRG26A72T, BHRG26A73T | BHRG25A33T, BHRG25A72T, BHRG25A73 |



## Control systems

### Operation control system optional accessories

Remote sensor
BRCS01A-1(4)(5)(6)

#### For *VRV* indoor unit use

| No. | Item \ Type | | FXFTQ-A FXFRQ-A | FXFSQ-A | FXFQ-A | FXZQ-B | FXCQ-B | FXKQ-A | FXKQ-MA | FXFDQ-A | FXDBQ-A | FXDQ-PD FXDQ-ND |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Stylish remote controller *5 | | BRC1H63W (White) / BRC1H63K (Black) | | | | | | | — | BRC1H63W (White) / BRC1H63K (Black) | |
| 2 | Navigation remote controller *5 | | — | BRC1E63 | | | | | | | | |
| 3 | Simplified remote controller | | — | BRC2E61 | | | | — | BRC2E61 | | | |
| 4 | Wireless remote controller | C/O | — | BRC7M635F (Fresh White) BRC7M635K (Black) | | BRC7M531W (for grid ceiling panel) BRC7E531W (for decoration panel) | BRC7M66 | BRC4M151P16 BRC4M151W16 | BRC4C63 | BRC4C66 | | |
| | | Receiver | — | | | | | BRC63AV | — | | | |
| 5-1 | Adaptor for wiring (operation status output) | | ★BRP11B62 | | | | — | | | ★BRP11B62 | | ★BRP11B61 |
| 5-2 | Adaptor for wiring | | — | | | | ★KRP1C14A | — | KRP1B61 | — | | |
| 6-1 | Wiring adaptor for electrical appendices (1) | | — | | | ★KRP2A62 | ★KRP2A51 | — | KRP2A61 | — | ★KRP2A61 | ★KRP2A53 |
| 6-2 | Wiring adaptor for electrical appendices (2) | | ★KRP4AA53 | | | | ★KRP4AA51 | — | KRP4AA51 | ★KRP4AA53 | ★KRP4AA51 | ★KRP4A54 |
| 7 | Remote sensor (for indoor temperature) | | BRCS01A-5 | | | BRCS01A-6 | | — | BRCS01A-1 | BRCS01A-5 | BRCS01A-6 | BRCS01A-1 |
| 8 | Installation box for adaptor PCB ☆ | | KRP1H98A *2, 3 | | | KRP1BB101 *4 | KRP1C96 *2, 3 | — | | KRP1H98A *2, 3 | KRP4A98 *2, 3 | KRP1BB101 *4 |
| 9 | External control adaptor for outdoor unit | | ★DTA104A62 | | | | ★DTA104A61 | — | DTA104A61 | ★DTA104A62 | ★DTA104A61 | ★DTA104A53 |
| 10 | Multi tenant unit for Indoor (24 V free type) | | ★BRP114A61 | | | | | — | | ★BRP114A61 | | — |
| 11 | Digital input adaptor | | ★BRP7A52 | | | ★BRP7A53 | ★BRP7A51 | — | BRP7A51 | — | ★BRP7A51 *9 | ★BRP7A54 |

| No. | Item \ Type | FXDQ-SP | FXSQ-PA | FXMQ-PA | FXMQ-P | FXHQ-MA | FXHQ-B | FXAQ-A | FXLQ-MA FXNQ-MA | FXVQ-N *7 | FXBQ-P FXBPQ-P |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Stylish remote controller *5 | BRC1H63W (White) / BRC1H63K (Black) | | | | | | | | | |
| 2 | Navigation remote controller *5 | BRC1E63 | | | | | | | | BRC1E63 *6 | BRC1E63 |
| 3 | Simplified remote controller | BRC2E61 | | | | | | | | | |
| 4 | Wireless remote controller | BRC4C66 | | | | BRC7EA66 | BRC7M56 | BRC7M676 | BRC4C64 | — | BRC4C64 |
| 5-1 | Adaptor for wiring (operation status output) | — | ★BRP11B62 | | — | ★BRP11B61 | BRP11B61-1 | — | BRP11B62 | — | BRP11B62 |
| 5-2 | Adaptor for wiring | — | | | KRP1C13A | — | | | | KRP1C67 | — |
| 6-1 | Wiring adaptor for electrical appendices (1) | — | ★KRP2A61 | | KRP2A61 | ★KRP2A62 | — | ★KRP2A61 | KRP2A61 | KRP2A62 *8 | KRP2A61 |
| 6-2 | Wiring adaptor for electrical appendices (2) | — | ★KRP4AA51 | | KRP4AA51 | ★KRP4AA52 | | ★KRP4AA51 | KRP4AA51 | — | KRP4AA51 |
| 7 | Remote sensor (for indoor temperature) | BRCS01A-1 | BRCS01A-4 | | BRCS01A-6 | BRCS01A-1 | BRCS01A-6 | | BRCS01A-1 | | |
| 8 | Installation box for adaptor PCB ☆ | — | KRP4A98 *2, 3 | KRP4A97 *2, 3 | — | KRP1CA93 *3 | KRP1D93A *3 | KRP4B93 *2, 3 | — | | |
| 9 | External control adaptor for outdoor unit | — | ★DTA104A61 | | DTA104A61 | ★DTA104A62 | | ★DTA104A61 | DTA104A61 | DTA104A62*8 | DTA104A61 |
| 10 | Multi tenant unit for Indoor (24 V free type) | — | ★BRP114A61 | | | — | | ★BRP114A61 | — | | |
| 11 | Digital input adaptor | — | ★BRP7A54 | ★BRP7A51 | — | ★BRP7A52 | | ★BRP7A51 | BRP7A51 | — | |
| 12 | External control adaptor for cooling / heating | — | | | | | | | | KRP6A1 *8 | — |
| 13 | Remote controller with key | — | | | | | | | | KRCB37-1 | — |

Notes: 1. Installation box☆ is necessary for each adaptor marked ★.
2. Up to 2 adaptors can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.
5. Some functions can be set only via the stylish or navigation remote controller. They cannot be set via other remote controllers. Please refer to each indoor unit and remote controller page for function details.
6. Since the control panel is equipped as standard, use the option of BRC1E63 for 2 remote control system.
7. When using BRC1H63W(K), BRC1E63 or BRC2E61, be sure to remove the control panel and since BRC1H63W(K), BRC1E63 and BRC2E61 cannot be stored inside the indoor unit, please place it separately.
8. Remove the group control adaptor which is a standard equipment before mounting KRP2A62, KRP6A1 and DTA104A62. KRP2A62, KRP6A1 and DTA104A62 cannot be mounted to the same indoor unit at the same time.
9. Only possible in combination with BRC1H63W(K).

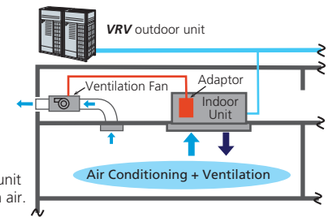
BRP11B61

BRP11B62

### Adaptor for wiring (operation status output)

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

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



# Option List

## Control systems

### System configuration

| No. | Item | Model No. | Function |
|---|---|---|---|
| 1 | Residential central remote controller | DCS303A51 *2 | • 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.<br>* 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 | ★DTA112BA51 *3 | |
| 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.<br>• Wiring restrictions (max. length: 1,000m, total wiring length: 2,000m, max. number of branches: 16) apply to each adaptor. |
| 6-1 | External control adaptor | DTA104A61 | • Demand control of individual or multiple systems.<br>• Low noise option for individual or multiple systems. |
| 6-2 | Mounting plate | BKS26A | • When installing DTA109A51, DTA104A61 into outdoor units of 10 HP (***VRV*** X) / 14 HP (***VRV*** A) or larger. |
| 7-1 | Multi tenant unit for Indoor (24 V free type) | BRP114A61 *4, 5 | • Use in multi tenant buildings where one tenant shuts off the breaker of the indoor unit.<br>• Max. length from outdoor unit to last indoor unit per 1 outdoor adaptor is 200 m.<br>• 8 indoor units can be connected per 1 outdoor adaptor. |
| 7-2 | Multi tenant unit for Outdoor (24 V free type) | BRP114A62 *4 | |
| 7-3 | Multi tenant unit Booster (24 V free type) | BRP114A63 *4 | • Use when extending transmission length with the multi tenant option.<br>• Can add Max. 3 booster units to 1 system.<br>• Total transmission length is Max. 800 m.<br>• Total connectable indoor units is Max. 32 units. |

Notes: *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.
*4. Because the maximum transmission length varies according to actual installation conditions and diameter of wiring used, please confirm by a dedicated simulator.
*5. Installation box is necessary for adaptor BRP114A61. Please refer to option list for each indoor unit.

### Building management system

| No. | Item | | | | Model No. | Function |
|---|---|---|---|---|---|---|
| 1 | MARUTTO | Basic | Hardware | MARUTTO edge | DGE601A51 | • An all-in-one, cloud-based HAVC management service that offers real-time control. Up to 128 indoor units can be connected to MARUTTO edge.<br>• To use MARUTTO, both MARUTTO edge and basic package agreement are necessary. The basic package is a monthly subscription. |
| | | | Software | Basic package | DGE801SUB | |
| 1-1 | | Option | Hardware | DIII plus adaptor | DGE601A52 | • Additional 64 indoor units can be connected to DIII plus adaptor or slot. DIII plus adaptor and Max. 5 DIII plus adaptor slots can be connected to MARUTTO edge. |
| 1-2 | | | | DIII plus adaptor slot | DGE601A53 | |
| 1-3 | | | Software | Demand control *1 | DGE803SUB | • Air conditioning power consumption is gradually suppressed to prevent it from exceeding the set target power value. |
| 1-4 | | | | PPD function *1 | DGE802SUB | • Electric power and gas consumption amounts are automatically allocated to each indoor unit according to operating conditions. |
| 1-5 | | | | Social media support *1 | DGE805SUB | • User friendly facilities management with instant error notification and remote operation. |
| 1-6 | | | | Remote emergency operation *1 | DGE804SUB | • When air conditioners break down, customers can remotely enter the emergency operation settings themselves. |
| 1-7 | | | | BACnet® client *2 | DGE901LCS | • Management of 3rd party equipment is possible via the BACnet® /IP protocol to enable remote monitoring and control. |
| 1-8 | | | | BACnet® server *2 | DGE902LCS | • The server functions as a BACnet® interface for BMS integration to enable the BMS integrator to monitor and control air conditioning. |
| 2 | intelligent Touch Manager | Basic | Hardware | intelligent Touch Manager | DCM601B51 | • Air-conditioning management system that can be controlled by touch screen. |
| 2-1 | | Option | Hardware | DIII plus adaptor | DGE601A52 | • Additional 64 groups (10 outdoor units) is possible. DIII plus adaptor and Max. 6 DIII plus adaptor slots can be connected to intelligent Touch Manager. |
| 2-2 | | | | DIII plus adaptor slot | DGE601A53 | |
| 2-3 | | | 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. |
| 2-4 | | | | iTM energy navigator | DCM008A51 | • Building energy consumption is visualised. Wasted air-conditioning energy can be found out. |
| 2-5 | | | | BACnet® client | DCM009A51 | • BACnet® equipment can be managed by intelligent Touch Manager. |
| 2-6 | | | | HTTP Interface | DCM007A51 | • Interface for intelligent Touch Manager by HTTP |

Notes: *1. This option is a monthly subscription. The purchase of a service agreement is necessary.
*2. This software is a one-time payment.

### Building management system

| No. | Item | | | | Model No. | Function |
|---|---|---|---|---|---|---|
| 3 | intelligent Touch Controller | Basic | Hardware | intelligent Touch Controller | DCS601C51 | • Air-Conditioning management system that can be controlled by a compact all-in-one unit. |
| 3-1 | | Option | Hardware | DIII-NET plus adaptor | DCS601A52 | • Additional 64 groups (10 outdoor units) is possible. |
| 3-2 | | | Software | Web software | DCS004A51 | • ***VRV*** system that is connected to intelligent Touch Controller can be operated from the user's PC via a web page. |
| 3-3 | Electrical box with earth terminal (4 blocks) | | | | KJB411A | • Wall embedded switch box. |
| 4-1 | Smartphone/ Tablet control | Basic | Hardware | Smartphone Controller for Office | DCPF01 | • ***VRV*** smart controller (website or mobile app via smart phone or tablet) for small to medium scale building |
| 4-2 | | | | Smartphone Controller for Office (Touchscreen Controller) | DCPF04 | • ***VRV*** smart controller with touch panel (website or mobile app via smartphone or tablet) for small to medium scale building |
| 4-3 | | | | Smartphone Controller for Office (Controller Extension) | DCPF05 | • ***VRV*** smart controller for large scale building |
| 4-4 | | | | Smartphone Controller for Office (Multisite Extension) | DCPF10 | • Control all ***VRV*** units via Smartphone Controller for Office on multisite |
| 4-5 | | | | Smartphone Controller for Home | DCPH01 | • ***VRV*** smart home automation and smart control solution |
| 4-6 | | | | Smartphone Controller for Home (Lite Version) | DCPH02 | • ***VRV*** smart centralised controller |
| 4-7 | | | | Smartphone Controller for Hotel | DCPL01 | • Multiple hotel room air conditioner interlocking with occupancy signal, window open/close signal and check in/out signal |
| 4-8 | | | | Smartphone Controller for Resort | DCPR01 | • Individual villa air conditioner interlocking with occupancy signal, window open/close signal and check in/out signal |
| 4-9 | | Option | Hardware | Adaptor for Smartphone Controller | DCPA01 | • Interface adaptor for Smartphone Controller |
| 4-10 | | | | | DCPA01B | • Interface adaptor for Smartphone Controller with installation box |
| 4-11 | | | | IAQ Sensor DC for Smartphone Controller | DCPE02S | • IAQ Sensor for Smartphone Controller (24V AC/DC) |
| 4-12 | | | Software (Commercial) | Commercial Automatic Control | DCPN001 | • Set back, Scene, Interlock Automatic Changeover functions for individual controller |
| 4-13 | | | | Commercial Data Analytics | DCPN002 | • Operation Report, Error Report; Trend Graph, Energy Graph functions for individual controller |
| 4-14 | | | | PPD & Tenant Billing Management | DCPN003 | • Power Proportional Distribution and billing function for individual controller |
| 4-15 | | | | Realtime Energy Monitoring (REM) | DCPN004 | • Real Time Energy Display function for individual controller |
| 4-16 | | | | Multisite Branch Expansion | DCPN005 | • To expand the multisite control limit by 1 site |
| 4-17 | | | | iTM Tenant Billing Management | DCPN008 | • Billing function for iTM Power Proportional Distribution data |
| 4-18 | | | Software (Residential) | Residential Automatic Control | DCPN006 | • Setback, Setpoint Range, Remote Control Prohibition, Automatic Changeover functions for individual controller |
| 4-19 | | | | Residential System Report | DCPN007 | • Operation Report, Error Report functions for individual controller |
| 5-1 | Di unit | | | | DEC101A51 | • 8 pairs based on a pair of ON/OFF input and abnormality input. |
| 5-2 | Dio unit | | | | DEC102A51 | • 4 pairs based on a pair of ON/OFF input and abnormality input/output. |
| 6 | Communication interface | Interface for use in BACnet® *3 | | | DMS502B51 | • Interface unit to allow communications between ***VRV*** and BMS. Operation and monitoring of air-conditioning systems through BACnet® communication. |
| 6-1 | | Optional DIII board | | | DAM411B51 | • Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently. |
| 6-2 | | Optional Di board | | | DAM412B51 | • Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently. |
| 7 | | Interface for use in LONWORKS® *4 | | | DMS504B51 | • Interface unit to allow communications between ***VRV*** and BMS. Operation and monitoring of air-conditioning systems through LonWorks® communication. |
| 8 | | 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 |
| 8-1 | | Mounting plate | | | BKS26A | • When installing DTA116A51 into outdoor units of 10 HP (***VRV*** X) / 14 HP (***VRV*** A) or larger. |
| 9 | Contact/ analogue signal | Unification adaptor for computerised control | | | ★DCS302A52 | • Interface between the central monitoring board and central control units. |

Notes: *3. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
*4. LonWorks® is a trademark of Echelon Corporation registered in the United States and other countries.
*5. Installation box for ★adaptor must be obtained locally.
*6. Modbus® is a registered trademark of Schneider Electric S.A.

# Engineering Supports

## Design assistance and sales proposal

By providing not only excellent products but also engineering software, Daikin helps consultants and architects select ***VRV*** systems more appropriately and easily to enable more efficient operation and function, and then supports the optimisation of the environment (space) where ***VRV*** systems exist.

**Model Selection**
**Drawing Supports**
**Analysis and Simulation**

### Model Selection

## *VRV* Xpress

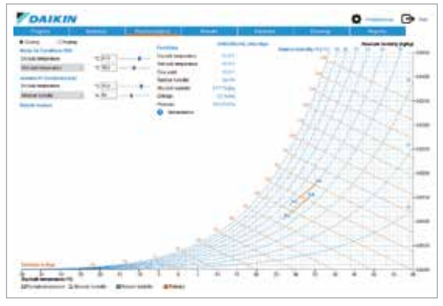
**Model Selection**

- Piping design including Tightfit, fire-free connector
- Refrigerant charge calculation

**Standard *VRV* model selection software**

The optimum system is automatically selected just by inputting the design conditions.
Refrigerant piping and additional refrigerant charge amount are automatically selected, including the selection of fire-free fitting (TightFit).
In addition, it supports the preparation of a quotation.

## Ventilation Xpress



**Model Selection for ventilation products**

**Ventilation products selection software**

Heat Reclaim Ventilator (VAM series) or Outdoor Air Processing Unit (OAPU) can be selected by inputting conditions such as ventilation volume and external static pressure.
In addition, the air temperature and humidity conditions at each point of the selected system are displayed on the psychrometric chart.

### Drawing Supports

## 3D Revit data / 2D CAD symbol

Revit data is used in BIM. It includes not only 3D CAD data but also device specification data such as airflow rate and capacity. Daikin also provides symbol data compatible with 2D CAD.



### Analysis and Simulation

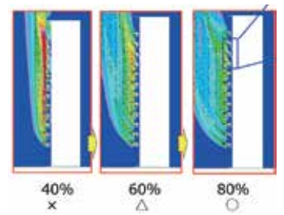
## DT-FLOW2 (Airflow simulation)

**IEQ simulation**

**Indoor air environment analysis software**

Simulates temperature and humidity, $CO_2$, dust, and air age.
Creates model of the property with Filder Cube (equipment CAD software), calculates with IconCFD (analysis software), and automatically outputs the report.

**Outoutdoor airflow simulation**

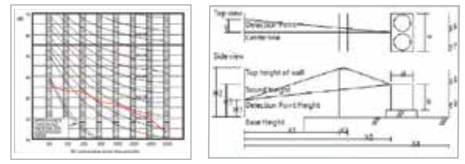



**Outdoor airflow analysis software**

Simulates the short circuit of the outdoor unit and uses it as a reference for optimal installation.
Creates model of the property with Filder Cube (equipment CAD software), calculates with IconCFD (analysis software), and automatically outputs the report.

## DACCS-NIS (Outdoor unit sound calculation)

Depending on the installation conditions of the equipment, it simulates the operating sound of the outdoor unit that can be heard at any position, which is useful for appropriate soundproofing measures on site.



## DS-HL2 (Heat load calculation)

DS-HL2 uses ASHRAE's Radiant Time Series calculation method to compute the design heating and cooling load for a structure, over a 24-hour period.
It can also evaluate the load of 12 monthly (only 24 hours per month for 12 months) or a full year (24 hours per day for 365 days).

## QSP (Energy simulation support)

A simple sales proposal software that can be relatively compared to the annual energy efficiency of each system. Based on meteorological data of cities around the world, it is possible to calculate the annual electricity bills of RA, Skyair, and ***VRV***, and promote effectively the energy saving of ***VRV***.

## *VRV* plug in for IES

***VRV*** plug-in compatible with IES energy simulation software