

**DAIKIN**

PCVAU1809A

**VRV**

Heat Pump / Heat Recovery 50 Hz

**R-410A**

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



New

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

**VRV**  
**H SERIES / R SERIES**

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# Background of VRF development

## The 1st Generation

### VRF series released in 1982

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



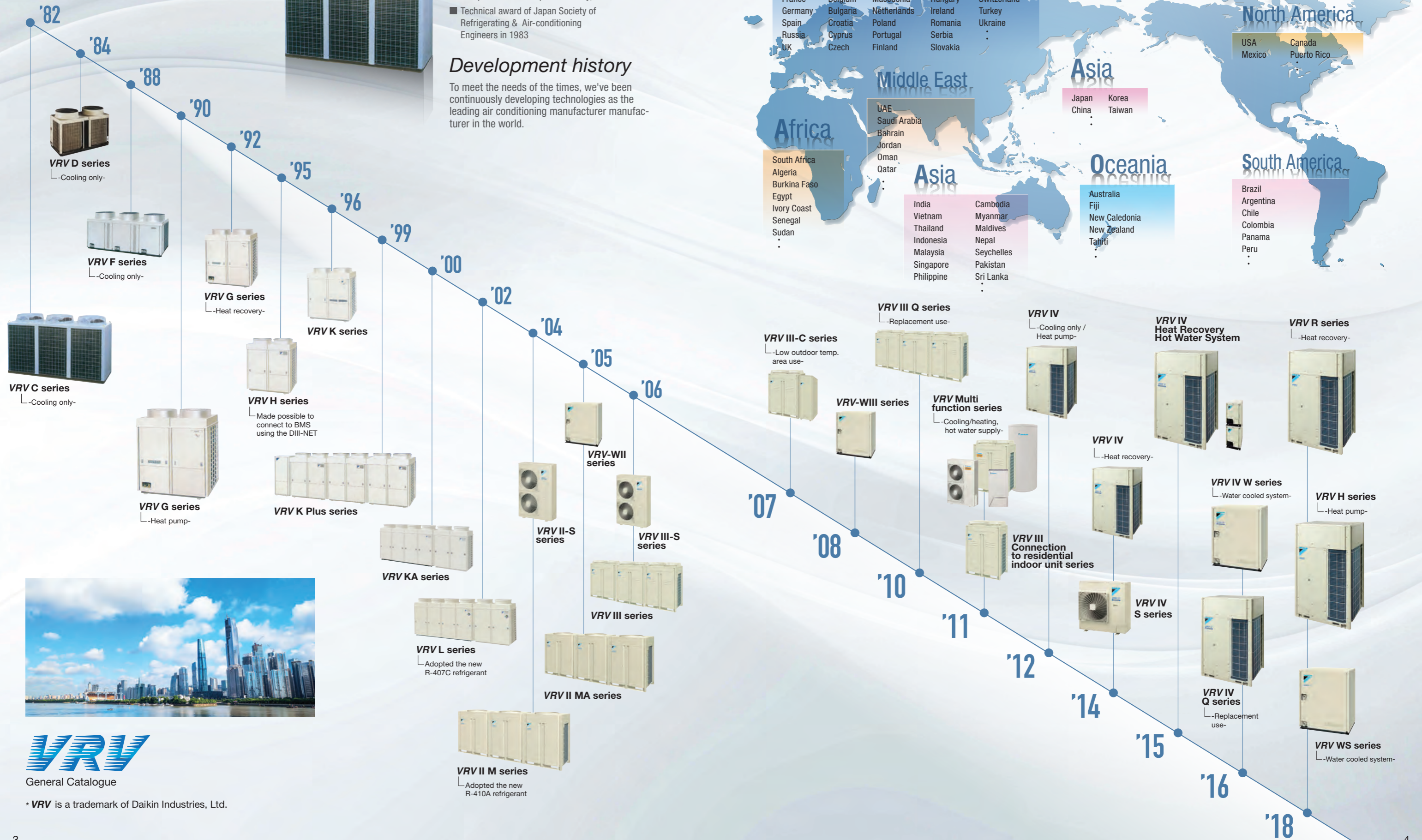
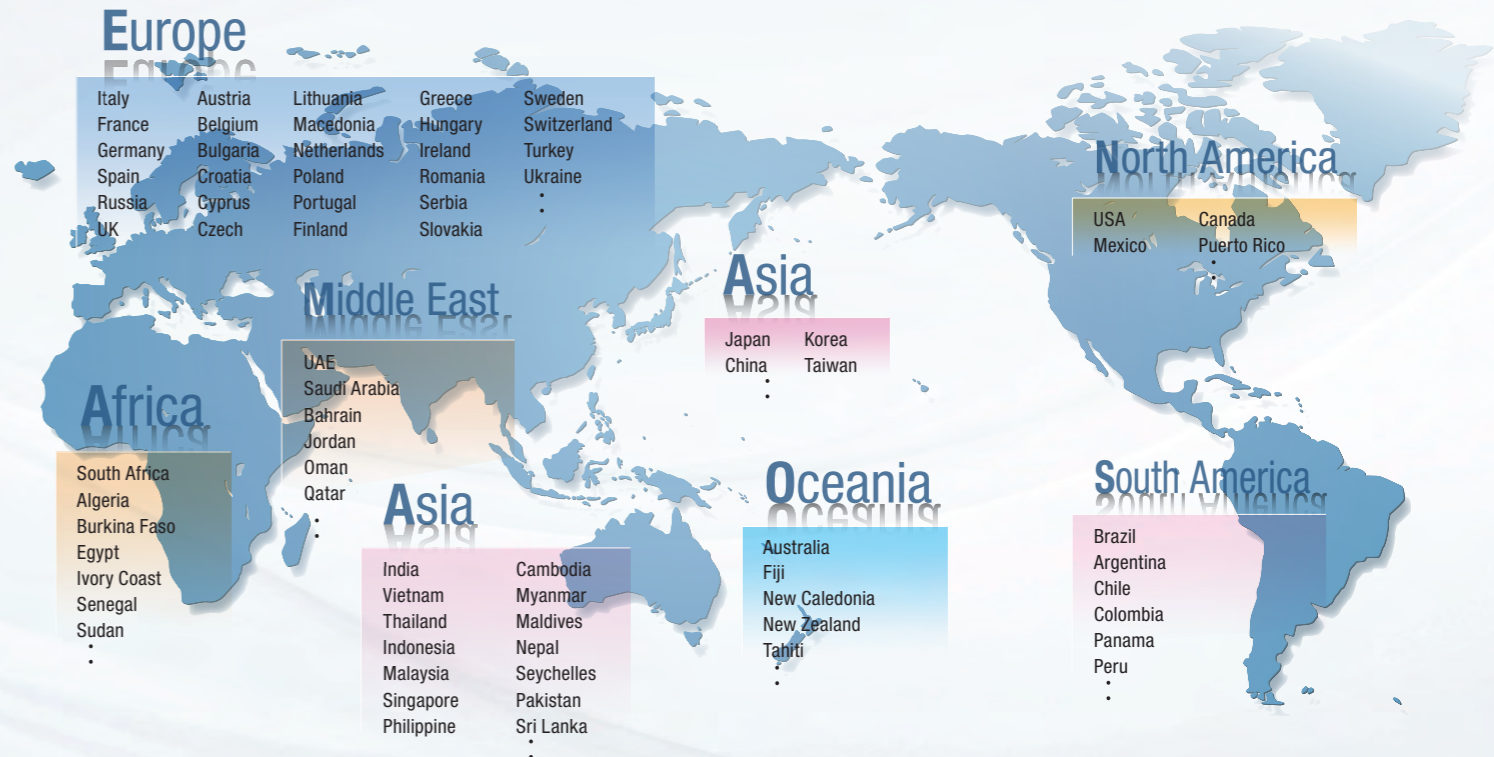
- 2.5-year development term
- Completion of development in May, 1982
- Technical award of Japan Society of Refrigerating & Air-conditioning Engineers in 1983

### Development history

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

# Expansion of the country of sale

Sales is undergoing in more than 70 countries



General Catalogue  
 \* VRF is a trademark of Daikin Industries, Ltd.

# VRV User Benefits

## For property OWNERS

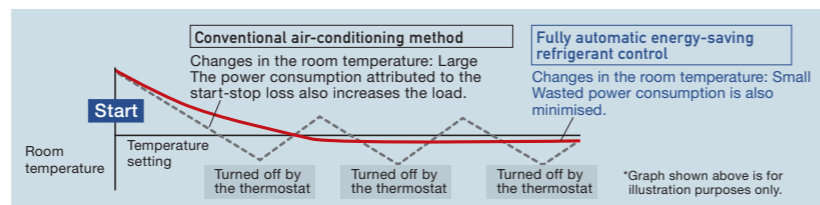
First launched in 1982, the Daikin VRV system has been providing comfort and reliability to building owners and their tenants for over 35 years. Leveraging the latest in energy-saving technology, Daikin has further improved energy savings while reducing space requirements. This added value is one reason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

### Energy saving & comfortable environment

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

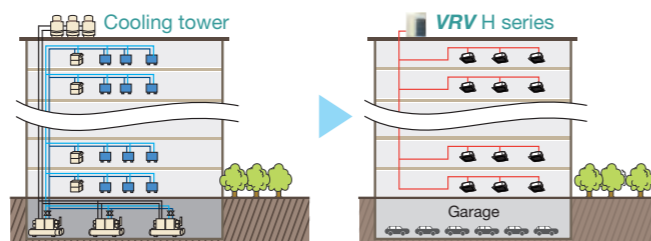


While optimally operating at low load, it maintains a comfortable indoor environment.



### Efficient space utilisation

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



### High reliability

#### Double backup operation

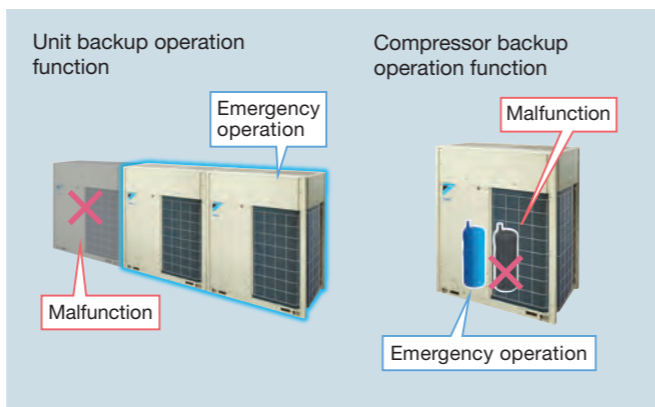
Daikin VRV outdoor unit goes beyond just highly reliable compressors with a backup system that ensures continued operation.

#### Unit backup

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

#### Compressor backup

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



## For USERS

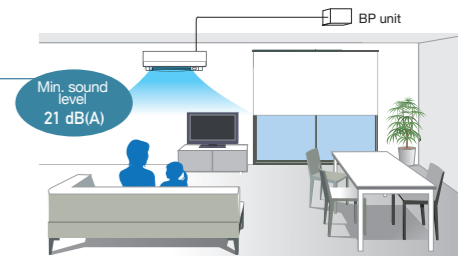
### Comfortable environment

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



### Residential indoor units

Because indoor units developed for residential use can be connected, it is possible to realise quiet operation. You can include indoor units that operate at min. 21 dB(A), and to reduce the noise of refrigerant passing through the piping by remotely installing an BP unit.



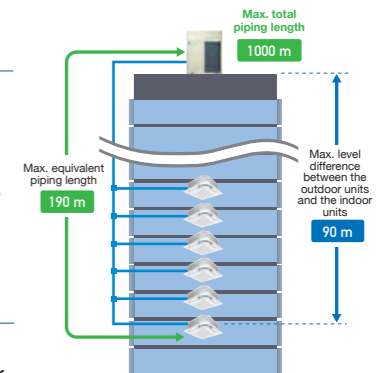
## For CONSULTANT and DESIGN OFFICES

### Varied lineup of models

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

### Long piping provides more flexible system design

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



### Compatible with engineering software

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

### Energy efficient

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



## For INSTALLERS

### Lightweight and compact large-capacity single units

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



### Simple piping, easy wiring

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

# Wide variety of series models to supply total air solutions

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

## VRV H SERIES

P.11

Heat Pump



New

RXYQ-A

Lineup

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

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

**Saves space and delivers excellent performance**

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

## VRV R SERIES

P.29

Heat Recovery



New

REYQ-TA

Lineup

class	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	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

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

**Maximum comfort via simultaneous cooling and heating**

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

## VRV IV S SERIES

P.51

Heat Pump



RXYMQ-A

Lineup

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

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

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

**Especially designed for residential houses, small offices and shops**

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

## VRV IV Q SERIES

P.61

Heat Pump



VRV IV Q series Heat Pump RQYQ-T

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



VRV III Q series Heat Recovery RQCEQ-P

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

Lineup

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

**For quick & high quality replacement use**

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

## VRV IV W SERIES

P.79

Heat Pump / Heat Recovery



RWEYQ-T

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

**Water cooled system suitable for tall multi-storey buildings**

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

Lineup

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

## VRV WS SERIES

P.103

Heat Pump



New

RWXYQ-A

1-phase, 220-240 V, 50 Hz

**Water cooled system suitable for residential houses**

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

Lineup

		class	3	4	5	6
Heat Pump		●	●	●	●	

# Wide range indoor unit lineup creating

# various comfortable airflow

## VRV indoor units

● New lineup

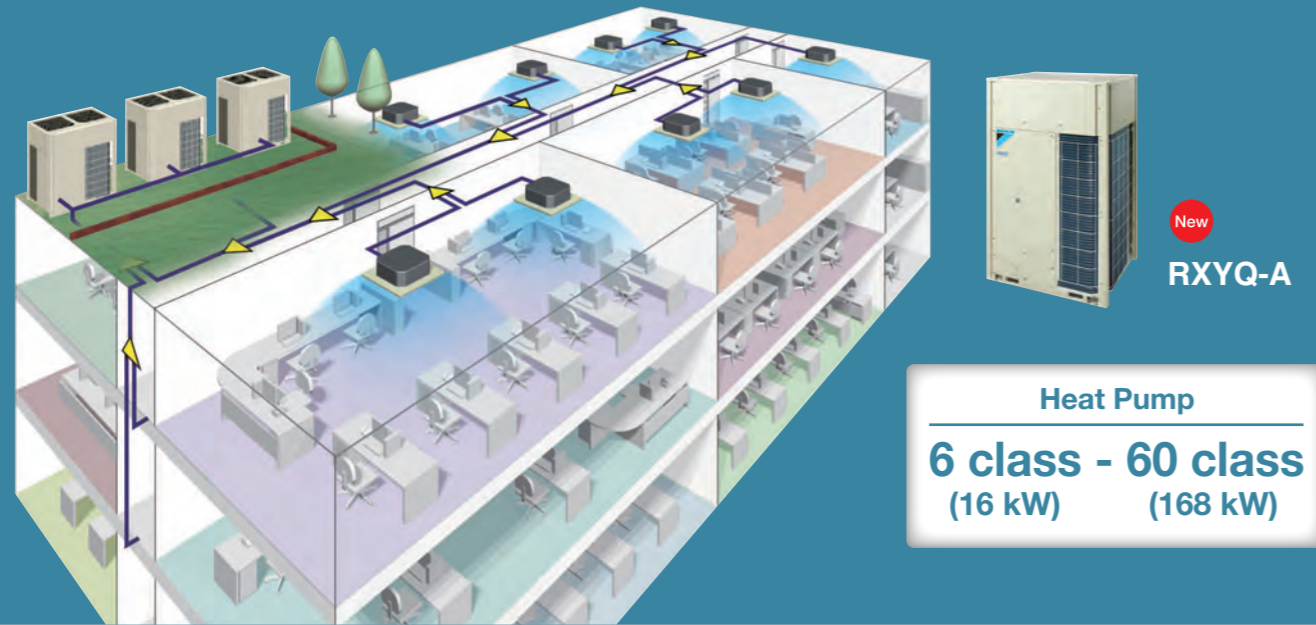
Type	Model Name	Capacity Range(kW)	20	25	32	40	50	63	71	80	100	125	140	145	160	180	200	250
			2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	16.2	18	20	22.4	28
			Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	145	160	180	200
Ceiling Mounted Cassette (Round Flow with Sensing)	<b>New</b> FXFSQ-AVM		●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

## Residential indoor units with connection to BP units

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

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



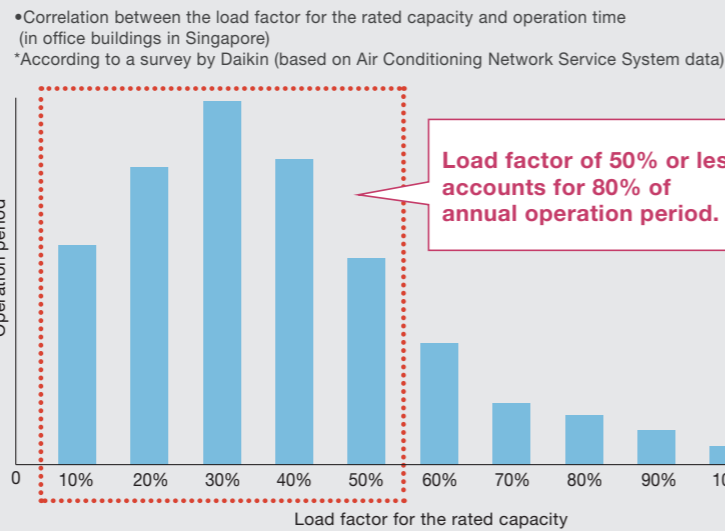


**Heat Pump**  
**6 class - 60 class**  
 (16 kW) (168 kW)

## Greater energy savings during low-load operation

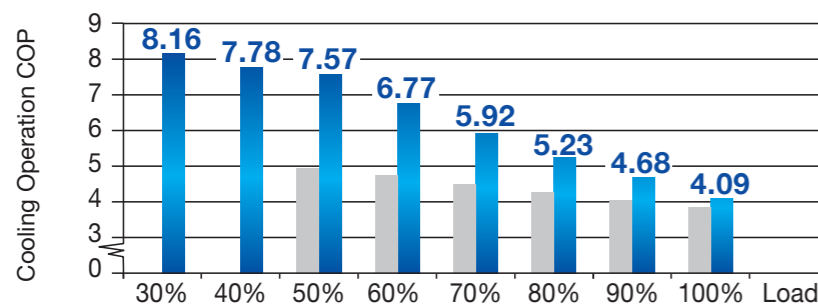
**The key to innovative energy savings is to increase efficiency during low-load operation.**

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



## Higher Coefficient of Performance (COP)

**COP for 10 class**



**Annual power consumption 14%\* lower**

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



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

## Advanced technologies for greater energy savings

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

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

Software technology

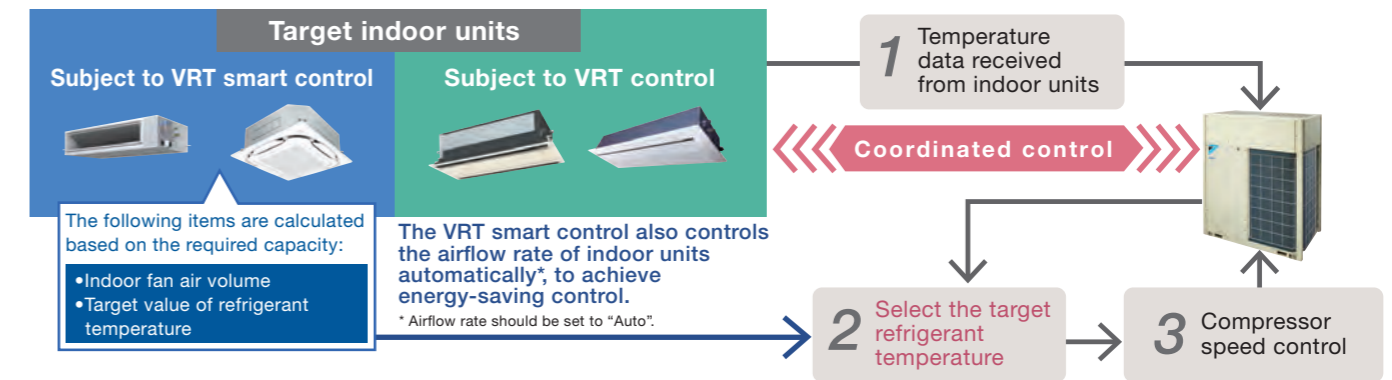
Daikin's VRT Smart technology takes comfort and energy performance to the next level. Building on our variable refrigerant temperature technology which enables the evaporating temperature to adjust to meet the varying load, VRT Smart is now also able to automatically adjust the indoor unit airflow rate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



VRT Smart Control Function movie

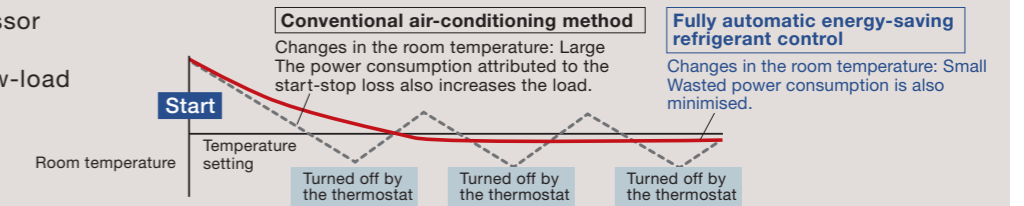
#### •Overview of the control (system control flow)

Different automatic energy-saving refrigerant control applies depending on the indoor units connected.



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

#### •Changes in the room temperature during low-load operation\*



Note:

- For the classification of indoor units (VRT smart control and VRT control), refer to pages 23-24.
- If a system has indoor units subject to both VRT smart and VRT control, the system is operated under VRT control.
- If a system has both outdoor-air processing air conditioners and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.

### Optimum utilisation of VRT Smart Control and VRT Control

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

#### •When selecting indoor units

Indoor units are installed in a system so that they operate largely under the same conditions. Energy efficiency decreases for the installation patterns indicated below.

Example:

- 1) A load imbalance occurs because an indoor unit on the same system is installed near the perimeter of the room or in the vicinity of a room entrance.
- 2) Different operating hours for indoor units.
- 3) Energy efficiency decreases when the set temperature of a specified indoor unit is set to an extreme during cooling operation. E.g. 18°C

## New Scroll Compressor\*

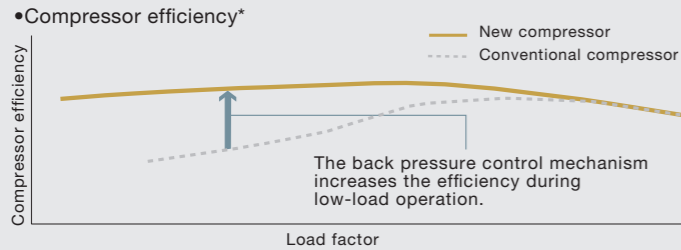
Hardware technology

### Refrigerant leakage is minimised during low-load operation.

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



New Scroll Compressor movie

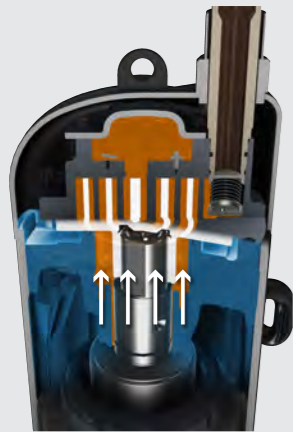


\*Graph shown above is for illustration purposes only.

### Back pressure control mechanism

#### Conventional mechanism

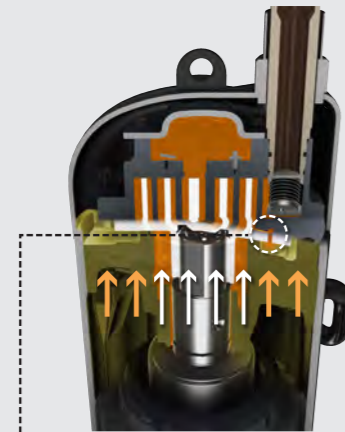
The orbiting scroll is engaged by the pressure difference between high and low pressures. The force engaging the orbiting scroll decreases during low-load operation, resulting in compression leakage from movable parts.



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

#### New intermediate pressure mechanism

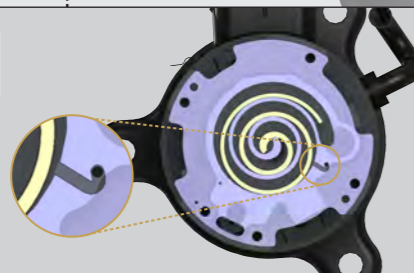
The pressure on the orbiting scroll is optimised according to operating conditions. As a result, the orbiting scroll has been stabilised to increase efficiency during low-load operation.



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

#### Intermediate pressure adjustment port

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



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

## Advanced oil temperature control

### Standby power consumption is reduced

The advanced oil temperature control reduces standby power consumption by up to 82.7%\* annually compared to conventional models. Standby power needed for preheating refrigerator oil, which consumed substantial standby power, was reduced to save energy when the air conditioner is stopped.

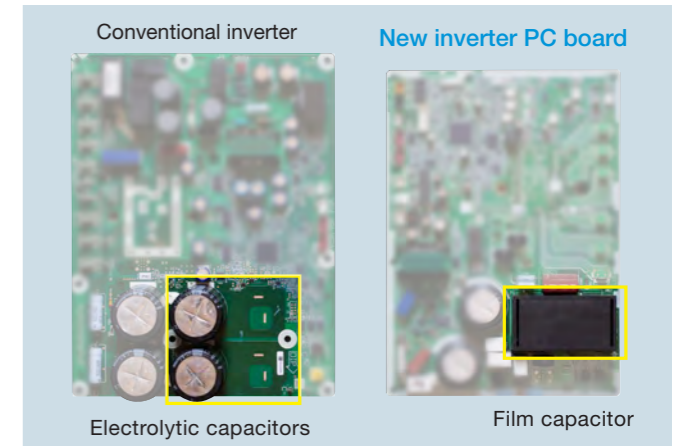
\* Operation calculation conditions: VRV H series 14 class  
Location: Singapore  
Operation time: 08:00-18:00 on weekdays.

## High reliability

### New inverter PC board

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

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





## ■ Comfort

### Low operation sound

High efficiency heat exchanger helps to achieve low operation sound.


	Sound level(dB(A))			
	6/8 class	10 class	12 class	14/16 class
<b>VRV H SERIES</b>	56	57	59	60

### Large airflow, high static pressure and quiet technology

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

**Streamlined air grille**

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



**Streamlined scroll fan**

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



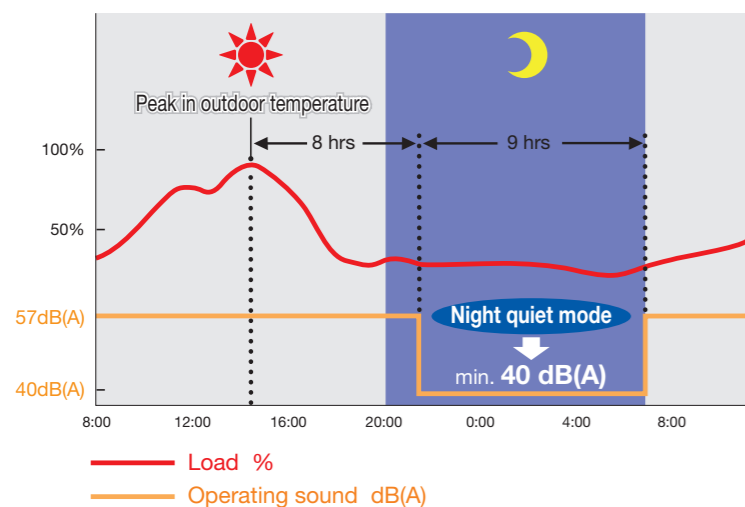


### Nighttime quiet operation function

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

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

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



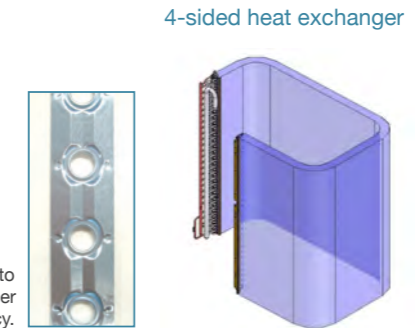
Note:  
· The night quiet mode lowers operating sound by reducing capacity. This function is available in setting at site.  
· The operating sound in quiet operation mode is the actual value measured by our company. Because priority is given to protection mode, such as for oil recovery, the operating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

## ■ Compact design with high performance

### Highly integrated heat exchanger

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

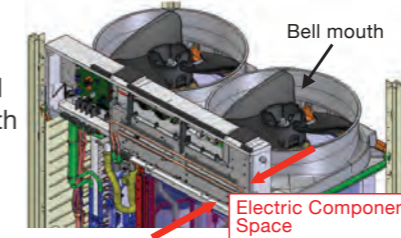
**Waffle Fin**  
A waffled-shaped fin with fin pitch of 1.4 mm was adopted to realise sufficient heat exchanger area for optimum unit efficiency.



High efficiency heat exchanger is realised by reducing airflow resistance with adoption of small cooling tubes with a diameter of  $\Phi 7$ .

### Optimised inner design to ensure smooth airflow

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



### Easy maintenance

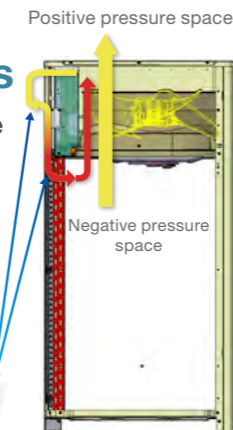
The electrical components are strategically located on the top which eases the maintenance process. Moreover, the heat exchanger on the front side can be used effectively to improve its performance.



### Sufficient cooling for electrical components

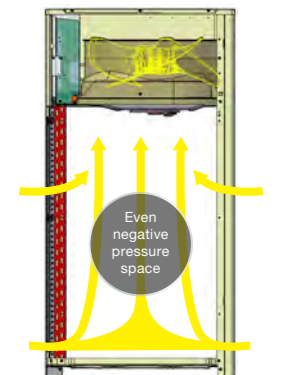
The VRV H series is designed with the electrical box strategically positioned between a region of positive and negative pressure. This design allows large airflow from negative pressure to positive pressure due to the high pressure difference.

• High pressure since air enters near the fan blower inlet



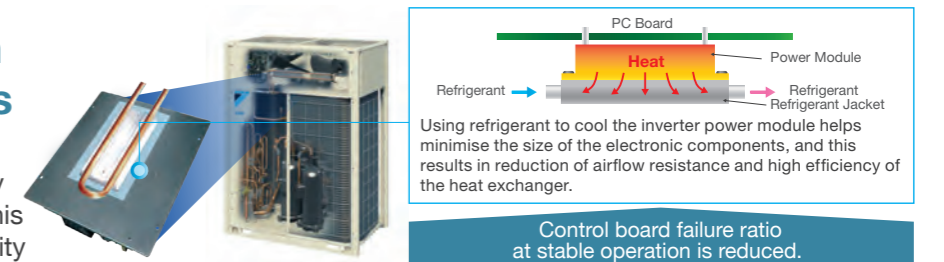
### Eliminate suction resistance issue

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



### High reliability at high ambient temperatures

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

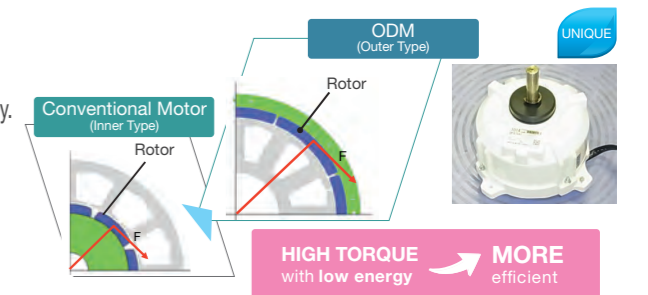


### Outer Rotor DC Motor (ODM)

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

#### Advantages of ODM

- ① Large torque with same electromagnetic force
- ② Stable rotation in all ranges and can be operated with small number of rotations

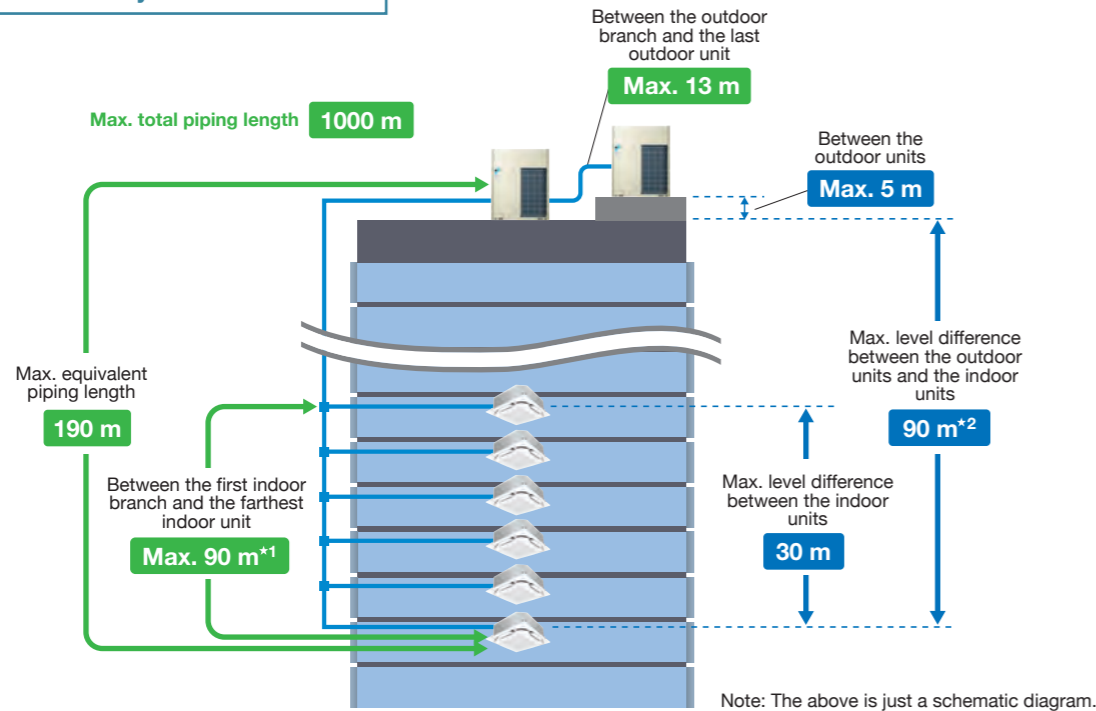


## More options for installation location

### Long piping length

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

#### For connection of only VRV indoor units



<b>Maximum allowable piping length</b>	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
<b>Maximum allowable level difference</b>	Between the outdoor units (Multiple use)	5 m
	Between the indoor units	30 m
	Between the outdoor units and the indoor units	90 m*2

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

## Connection ratio

Connection capacity at maximum is 200%.

Connection ratio  
**50%–200%**

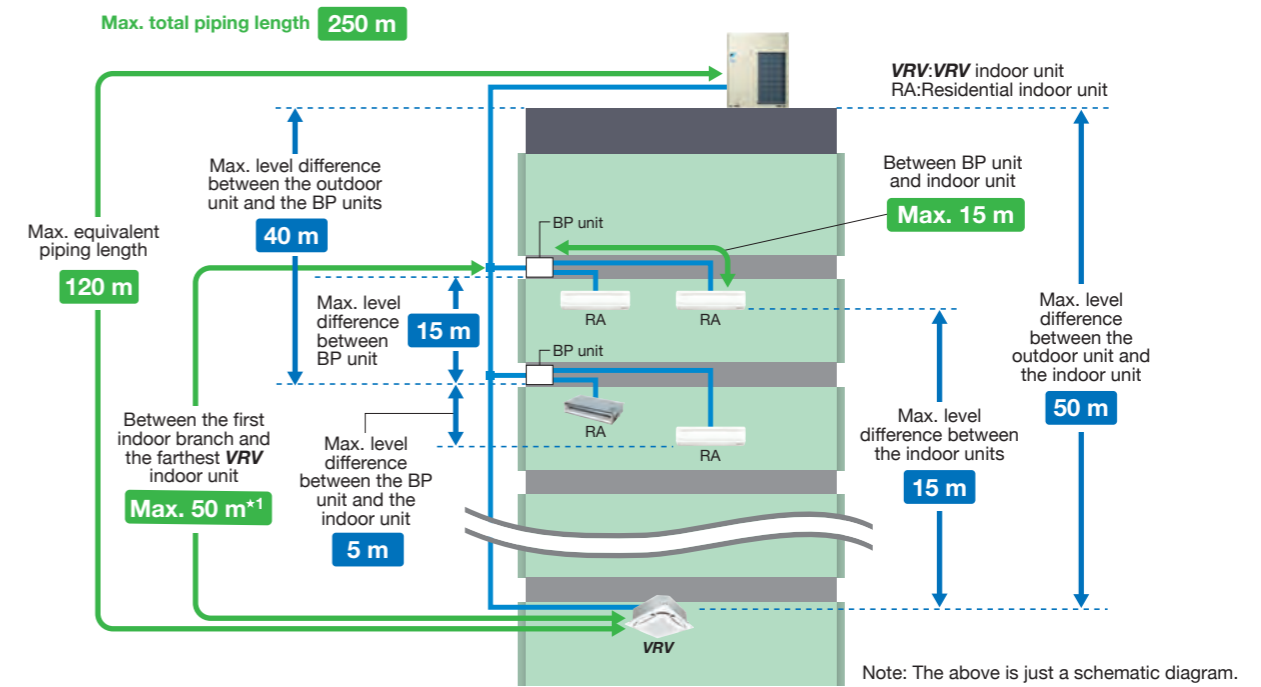
$$\text{Connection ratio} = \frac{\text{Total capacity index of the indoor units}}{\text{Capacity index of the outdoor units}}$$

#### Conditions of VRV indoor unit connection capacity

Applicable VRV indoor units	FXDQ, FXSQ, FXMQ-PA, FXAQ models	Other VRV indoor unit models*1
Single outdoor units	<b>200%</b>	
Double outdoor units		
Triple outdoor units		

\*1 For the FXF(S)Q25 models, maximum connection ratio is 130% for the entire range of outdoor units.  
Note: If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the indoor units.  
\*Refer to page 22 for outdoor unit combination details.

#### For mixed combination of VRV and residential indoor units



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

<b>Maximum allowable piping length</b>	Actual piping length (Equivalent)	100 m (120 m)
	Total piping length	250 m
	Between BP unit and indoor unit	If indoor unit capacity index < 60. 2 m–15 m If indoor unit capacity index is 60. 2 m–12 m If indoor unit capacity index is 71. 2 m–8 m
<b>Maximum allowable level difference</b>	Between the first indoor branch and the farthest BP unit or between the first indoor branch and the farthest VRV indoor unit	50 m*1
	Between outdoor unit and the first indoor branch	5 m
	Between the indoor units	15 m
<b>Maximum allowable level difference</b>	Between BP units	15 m
	Between the outdoor unit and the indoor unit	If the outdoor unit is above. 50 m If the outdoor unit is below. 40 m
	Between the outdoor unit and the BP unit	40 m
	Between the BP unit and the indoor unit	5 m

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

\*When a mixed combination of VRV and residential indoor units is connected or when only residential indoor units are connected, connection ratio must be 80% to 130%. Refer to page 22 for outdoor unit combination details.

## High external static pressure

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

**78.4 Pa**

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

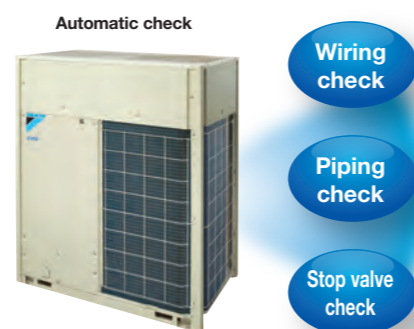


## More accurate test operation and stable system

### Efficient automatic test operation

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

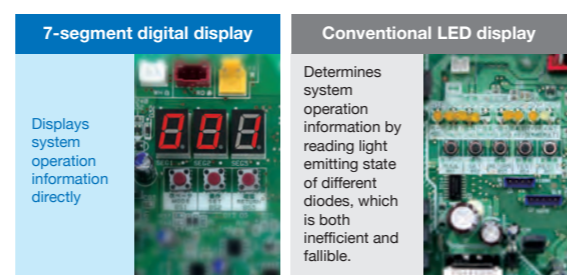
- Automatically checks the wiring between outdoor units and indoor units to confirm whether there is defective wiring.
- Confirms piping length to optimise operation.
- Automatically checks whether the stop valve in each outdoor unit is functioning normally to ensure the smooth operation of air conditioning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



## Simplified commissioning and after-sales service

### Function of information display by luminous digital tube

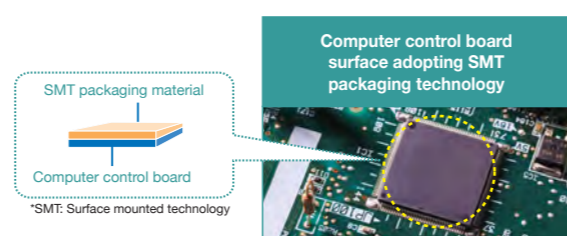
**VRV H** series utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.



## Advanced control main PC board

### SMT\* packaging technology

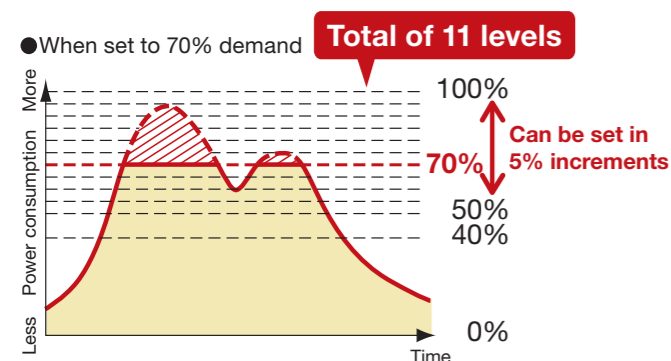
- SMT packaging technology adopted by the computer control panel improves the anti-clutter performance.
- Protects your computer boards from the adverse effects of sandy climates and humid weather.



## I-demand function

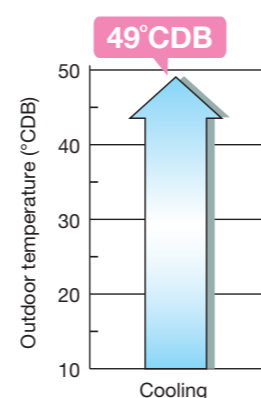
Limit to power consumption can be set precisely to one of 11 levels. Peak power cut-off can be accomplished according to each user situation.

\*Set on the circuit board of the outdoor unit.



## Wide operation temperature range up to 49°C

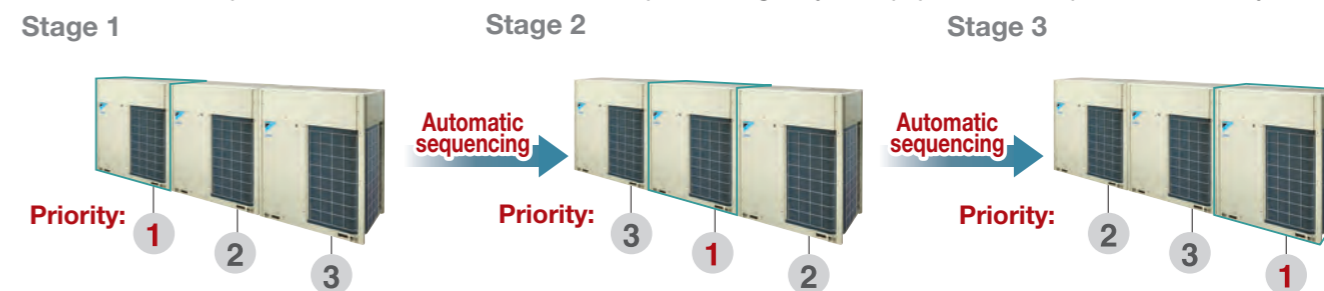
The versatile operation range of the **VRV H** series works to reduce limitations on installation locations. The operation temperature range for cooling can be performed with outdoor temperatures as high as 49°C. This enables reliable operation even under high temperature conditions.



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

## Automatic sequencing operation

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



## Double backup operation functions

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

### Unit backup operation function

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

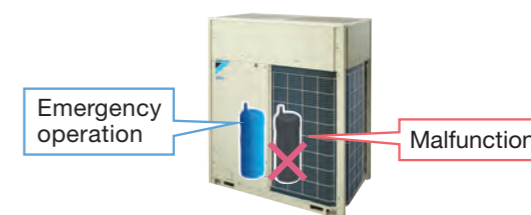
\* For systems composed of two or more outdoor units.



### Compressor backup operation function

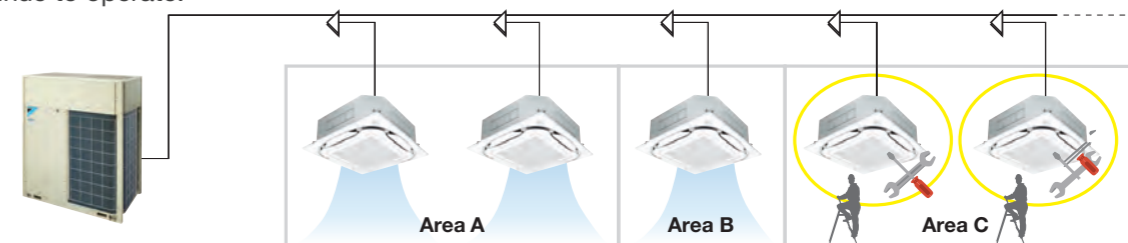
The outdoor unit is equipped with two compressors. Even if one compressor malfunctions, the other compressor provides emergency operation, reducing the risk of air conditioning shutdown due to compressor failure. (Capacity is saved during backup operation.)

\* For single outdoor unit system RXYQ14-16AYM models. On-site settings are required using the printed circuit board of the outdoor unit.



## Ease of maintenance

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



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

## VRV H Series Outdoor Units Heat Pump New

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

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

### Lineup

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

### High-COP Type

•Double Outdoor Units  
12, 14, 16, 18, 20 class



RXYQ12AHYMA RXYQ18AHYMA  
RXYQ14AHYMA RXYQ20AHYMA  
RXYQ16AHYMA

•Triple Outdoor Units  
22, 24, 26, 28, 30, 32, 34, 36 class



RXYQ22AHYMA RXYQ30AHYMA  
RXYQ24AHYMA RXYQ32AHYMA  
RXYQ26AHYMA RXYQ34AHYMA  
RXYQ28AHYMA RXYQ36AHYMA

### Standard Type

•Single Outdoor Units  
6, 8, 10, 12 class 14, 16, 18, 20 class



RXYQ6AYM RXYQ14AYM  
RXYQ8AYM RXYQ16AYM  
RXYQ10AYM RXYQ18AYM  
RXYQ12AYM RXYQ20AYM

•Double Outdoor Units  
22, 24 class 26, 28, 30 class 32, 34, 36 class



RXYQ22AYMA RXYQ26AYMA RXYQ32AYMA  
RXYQ24AYMA RXYQ28AYMA RXYQ34AYMA  
RXYQ30AYMA RXYQ36AYMA

•Triple Outdoor Units  
38, 40 class 42, 44 class 46, 48, 50, 52, 54, 56, 58, 60 class



RXYQ38AYMA RXYQ42AYMA RXYQ46AYMA RXYQ54AYMA  
RXYQ40AYMA RXYQ44AYMA RXYQ48AYMA RXYQ56AYMA  
RXYQ50AYMA RXYQ58AYMA  
RXYQ52AYMA RXYQ60AYMA

## Outdoor Unit Combinations

For connection of only VRV indoor units

### High-COP Type

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

### Standard Type

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

Note: \*1. For multiple connection, the outdoor unit multi connection piping kit (separately sold) is required.

\*2. Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units. Refer to page 17 for notes on connection capacity of indoor units.

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

Model name <sup>*1</sup>	kW	class	Capacity index	Total capacity index of connectable indoor units <sup>*2</sup>			Maximum number of connectable indoor units
				Combination (%)			
				80%	100%	130%	
RXYQ6AYM	16.0	6	150	120	150	195	9
RXYQ8AYM	22.4	8	200	160	200	260	13
RXYQ10AYM	28.0	10	250	200	250	325	16
RXYQ12AYM	33.5	12	300	240	300	390	19
RXYQ14AYM	40.0	14	350	280	350	455	22
RXYQ16AYM	45.0	16	400	320	400	520	26
RXYQ18AYM	50.0	18	450	360	450	585	29
RXYQ20AYM	56.0	20	500	400	500	650	32

Note: \*1. Only single outdoor unit (RXYQ6-20AYM) can be connected.

\*2. Total capacity index of connectable indoor units must be 80%~130% of the capacity index of the outdoor unit.

## Enhanced range of choices

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

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

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

### Residential indoor units with connection to BP units

Type	Model Name	Rated Capacity (kW)	20	25	35	50	60	71
			2.0	2.5	3.5	5.0	6.0	7.1
Capacity Index			20	25	35	50	60	71
Ceiling Mounted Cassette (Compact Multi Flow)	FFQ-BV1B							
Slim Ceiling Mounted Duct	FDXS-CVMA							
Wall Mounted	CTXG-PVMAW							
	CTXG-PVMAS							
	FTXS-KVMA							
	FTXS-KAVMA							

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

### VRV indoor unit type combinations

#### VRV indoor unit system



Max. 64 indoor units

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

#### Mixed residential and VRV indoor unit system



Max. 32 indoor units

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

#### Residential indoor unit only system



Max. 32 indoor units

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

## VRV H Series Outdoor Units Heat Pump RXYQ-A

High-COP Type

Model		RXYQ12AHYMA	RXYQ14AHYMA	RXYQ16AHYMA	RXYQ18AHYMA	RXYQ20AHYMA	RXYQ22AHYMA
Combination units		RXYQ6AYM	RXYQ6AYM	RXYQ8AYM	RXYQ8AYM	RXYQ8AYM	RXYQ8AYM
Power supply		3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz			3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz		
Cooling capacity	Btu/h	109,000	131,000	153,000	172,000	191,000	207,000
	kW	32.0	38.4	44.8	50.4	55.9	60.8
Heating capacity	Btu/h	123,000	147,000	171,000	193,000	213,000	232,000
	kW	36.0	43.0	50.0	56.5	62.5	68.0
Power consumption	Cooling kW	6.76	8.55	10.3	12.0	13.9	13.7
	Heating kW	7.46	9.40	11.3	12.9	14.6	15.1
Capacity control	%	12-100	11-100	10-100	7-100		
Casing colour		Ivory white (5Y7.5/1)			Ivory white (5Y7.5/1)		
Compressor	Type	Hermetically sealed scroll type					
	Motor output kW	(2.4×1)+(2.4×1)	(2.4×1)+(3.4×1)	(3.4×1)+(3.4×1)	(3.4×1)+(4.5×1)	(3.4×1)+(5.5×1)	(2.4×1)+(3.4×1)+(3.4×1)
Airflow rate	l/s	1,983+1,983	1,983+2,967	2,967+2,967	2,967+2,967	2,967+3,183	1,983+2,967+2,967
	m³/min	119+119	119+178	178+178	178+178	178+191	119+178+178
Dimensions (H×W×D)	mm	(1,657×930×765)+(1,657×930×765)			(1,657×930×765)+(1,657×930×765)		(1,657×930×765)+(1,657×930×765)+(1,657×930×765)
Machine weight	kg	185+185			185+200		185+185+185
Sound level	dB(A)	59			60	61	
Sound power	dB(A)	80			81	82	
Operation range	Cooling °CDB	-5 to 49			-5 to 49		
	Heating °CWB	-20 to 15.5			-20 to 15.5		
Refrigerant	Type	R-410A					
	Charge kg	6.9+6.9	6.9+7.0	7.0+7.0	7.0+7.4	7.0+7.6	6.9+7.0+7.0
Piping connections	Liquid mm	φ12.7 (Brazing)			φ15.9 (Brazing)		φ15.9 (Brazing)
	Gas mm	φ28.6 (Brazing)			φ28.6 (Brazing)		

Model		RXYQ24AHYMA	RXYQ26AHYMA	RXYQ28AHYMA	RXYQ30AHYMA	RXYQ32AHYMA	RXYQ34AHYMA	RXYQ36AHYMA
Combination units		RXYQ8AYM	RXYQ8AYM	RXYQ8AYM	RXYQ8AYM	RXYQ8AYM	RXYQ10AYM	RXYQ12AYM
Power supply		3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz			3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz			
Cooling capacity	Btu/h	229,000	248,000	267,000	286,000	305,000	324,000	345,000
	kW	67.2	72.8	78.3	83.9	89.4	95.0	101
Heating capacity	Btu/h	256,000	278,000	299,000	321,000	341,000	365,000	386,000
	kW	75.0	81.5	87.5	94.0	100	107	113
Power consumption	Cooling kW	15.5	17.2	19.0	20.7	22.6	24.2	26.1
	Heating kW	17.0	18.6	20.3	21.8	23.5	25.1	26.7
Capacity control	%	7-100	5-100		5-100		4-100	
Casing colour		Ivory white (5Y7.5/1)			Ivory white (5Y7.5/1)			
Compressor	Type	Hermetically sealed scroll type						
	Motor output kW	(3.4×1)+(3.4×1)+(3.4×1)	(3.4×1)+(3.4×1)+(4.5×1)	(3.4×1)+(3.4×1)+(5.5×1)	(3.4×1)+(4.5×1)+(5.5×1)	(3.4×1)+(5.5×1)+(5.5×1)	(4.5×1)+(5.5×1)+(5.5×1)	(5.5×1)+(5.5×1)+(5.5×1)
Airflow rate	l/s	2,967+2,967+2,967			2,967+2,967+3,183		2,967+3,183+3,183	
	m³/min	178+178+178			178+178+191		178+191+191	
Dimensions (H×W×D)	mm	(1,657×930×765)+(1,657×930×765)+(1,657×930×765)						
Machine weight	kg	185+185+185	185+185+200		185+200+200		200+200+200	
Sound level	dB(A)	61		62	63		64	
Sound power	dB(A)	82		83	84		85	
Operation range	Cooling °CDB	-5 to 49						
	Heating °CWB	-20 to 15.5						
Refrigerant	Type	R-410A						
	Charge kg	7.0+7.0+7.0	7.0+7.0+7.4	7.0+7.0+7.6	7.0+7.4+7.6	7.0+7.6+7.6	7.4+7.6+7.6	7.6+7.6+7.6
Piping connections	Liquid mm	φ15.9 (Brazing)		φ19.1 (Brazing)		φ19.1 (Brazing)		
	Gas mm	φ34.9 (Brazing)		φ34.9 (Brazing)			φ41.3 (Brazing)	

Note: Specifications are based on the following conditions;

- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.

•Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.

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

When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

## VRV H Series Outdoor Units Heat Pump RXYQ-A

### Standard Type

Model		RXYQ6AYM	RXYQ8AYM	RXYQ10AYM	RXYQ12AYM	RXYQ14AYM	RXYQ16AYM	RXYQ18AYM	RXYQ20AYM	RXYQ22AYMA	RXYQ24AYMA	RXYQ26AYMA	RXYQ28AYMA	RXYQ30AYMA	RXYQ32AYMA	
Combination units		—	—	—	—	—	—	—	—	RXYQ10AYM	RXYQ12AYM	RXYQ12AYM	RXYQ12AYM	RXYQ12AYM	RXYQ16AYM	
Power supply		3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz						3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz								
Cooling capacity	Btu/h	54,600	76,400	95,500	114,000	136,000	154,000	171,000	191,000	210,000	229,000	251,000	268,000	285,000	307,000	
	kW	16.0	22.4	28.0	33.5	40.0	45.0	50.0	56.0	61.5	67.0	73.5	78.5	83.5	90.0	
Heating capacity	Btu/h	61,400	85,300	107,000	128,000	154,000	171,000	191,000	215,000	235,000	256,000	281,000	299,000	319,000	341,000	
	kW	18.0	25.0	31.5	37.5	45.0	50.0	56.0	63.0	69.0	75.0	82.5	87.5	93.5	100	
Power consumption	Cooling kW	3.38	5.17	6.84	8.70	10.7	12.9	15.3	17.7	15.5	17.4	19.4	21.6	24.0	25.8	
	Heating kW	3.73	5.67	7.23	8.91	11.0	12.6	14.9	17.1	16.1	17.8	19.9	21.5	23.8	25.2	
Capacity control	%	25-100	20-100	13-100	12-100	11-100	10-100	10-100	7-100	6-100			5-100			
Casing colour		Ivory white (5Y7.5/1)						Ivory white (5Y7.5/1)								
Compressor	Type	Hermetically sealed scroll type						Hermetically sealed scroll type								
	Motor output kW	2.4x1	3.4x1	4.5x1	5.5x1	(2.9x1)+(3.3x1)	(3.6x1)+(3.7x1)	(4.1x1)+(4.0x1)	(3.7x1)+(6.3x1)	(4.5x1)+(5.5x1)	(5.5x1)+(5.5x1)	(5.5x1)+(2.9x1)+(3.3x1)	(5.5x1)+(3.6x1)+(3.7x1)	(5.5x1)+(4.1x1)+(4.0x1)	(3.6x1)+(3.7x1)+(3.6x1)+(3.7x1)	
Airflow rate	l/s	1,983	2,967		3,183	4,283		4,200	4,950	2,967+3,183		3,183+3,183		3,183+4,283		4,283+4,283
	m³/min	119	178		191	257		252	297	178+191		191+191		191+257		257+257
Dimensions (HxWxD)	mm	1,657x930x765				1,657x1,240x765		1,657x1,240x765		(1,657x930x765)+(1,657x930x765)		(1,657x930x765)+(1,657x1,240x765)			(1,657x1,240x765)+(1,657x1,240x765)	
Machine weight	kg	185	200		285		305	325	200+200		200+285		200+305	285+285		
Sound level	dB(A)	56	57		59	60	61	65	61		62	63		84		
Sound power	dB(A)	77	78		80	81	82	86	82		83	84				
Operation range	Cooling °CDB	-5 to 49						-5 to 49								
	Heating °CWB	-20 to 15.5						-20 to 15.5								
Refrigerant	Type	R-410A						R-410A								
	Charge kg	6.9	7.0	7.4	7.6	9.1	9.3	11.8		7.4+7.6	7.6+7.6	7.6+9.1	7.6+9.3	7.6+11.8	9.3+9.3	
Piping connections	Liquid mm	φ9.5 (Brazeing)			φ12.7 (Brazeing)			φ15.9 (Brazeing)			φ19.1 (Brazeing)			φ19.1 (Brazeing)		
	Gas mm	φ19.1 (Brazeing)			φ22.2 (Brazeing)			φ28.6 (Brazeing)			φ28.6 (Brazeing)			φ34.9 (Brazeing)		

Model		RXYQ34AYMA	RXYQ36AYMA	RXYQ38AYMA	RXYQ40AYMA	RXYQ42AYMA	RXYQ44AYMA	RXYQ46AYMA	RXYQ48AYMA	RXYQ50AYMA	RXYQ52AYMA	RXYQ54AYMA	RXYQ56AYMA	RXYQ58AYMA	RXYQ60AYMA
Combination units		RXYQ16AYM	RXYQ16AYM	RXYQ12AYM	RXYQ12AYM	RXYQ10AYM	RXYQ12AYM	RXYQ14AYM	RXYQ16AYM	RXYQ16AYM	RXYQ16AYM	RXYQ18AYM	RXYQ18AYM	RXYQ18AYM	RXYQ20AYM
Power supply		3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz						3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz							
Cooling capacity	Btu/h	324,000	345,000	365,000	382,000	403,000	423,000	444,000	461,000	478,000	495,000	512,000	532,000	553,000	573,000
	kW	95.0	101	107	112	118	124	130	135	140	145	150	156	162	168
Heating capacity	Btu/h	362,000	386,000	409,000	427,000	450,000	471,000	495,000	512,000	532,000	553,000	573,000	597,000	621,000	645,000
	kW	106	113	120	125	132	138	145	150	156	162	168	175	182	189
Power consumption	Cooling kW	28.2	30.6	28.1	30.3	32.6	34.5	36.5	38.7	41.1	43.5	45.9	48.3	50.7	53.1
	Heating kW	27.5	29.7	28.8	30.4	32.4	34.1	36.2	37.8	40.1	42.4	44.7	46.9	49.1	51.3
Capacity control	%	5-100	4-100				3-100				2-100				
Casing colour		Ivory white (5Y7.5/1)						Ivory white (5Y7.5/1)							
Compressor	Type	Hermetically sealed scroll type						Hermetically sealed scroll type							
	Motor output kW	(3.6x1)+(3.7x1)+(4.1x1)+(4.0x1)	(3.6x1)+(3.7x1)+(3.7x1)+(6.3x1)	(5.5x1)+(5.5x1)+(2.9x1)+(3.3x1)	(5.5x1)+(5.5x1)+(3.6x1)+(3.7x1)	(4.5x1)+(3.6x1)+(3.7x1)+(3.6x1)+(3.7x1)	(5.5x1)+(3.6x1)+(3.7x1)+(3.6x1)+(3.7x1)	(2.9x1)+(3.3x1)+(3.6x1)+(3.6x1)+(3.7x1)+(3.6x1)+(3.7x1)	(3.6x1)+(3.7x1)+(3.6x1)+(3.6x1)+(3.7x1)+(3.6x1)+(3.7x1)+(4.0x1)	(3.6x1)+(3.7x1)+(3.6x1)+(3.6x1)+(3.7x1)+(4.0x1)+(4.0x1)+(4.1x1)+(4.0x1)	(4.0x1)+(4.1x1)+(4.0x1)+(4.0x1)+(4.1x1)+(4.1x1)+(4.0x1)	(4.0x1)+(4.1x1)+(4.0x1)+(4.0x1)+(3.7x1)+(6.3x1)	(4.1x1)+(4.0x1)+(4.1x1)+(4.1x1)+(4.0x1)+(3.7x1)+(6.3x1)	(4.1x1)+(4.0x1)+(3.7x1)+(6.3x1)+(6.3x1)+(3.7x1)+(6.3x1)	(3.7x1)+(6.3x1)+(3.7x1)+(6.3x1)+(3.7x1)+(6.3x1)
Airflow rate	l/s	4,283+4,200	4,283+4,950	3,183+3,183+4,283		2,967+4,283+4,283		4,283+4,283+4,283		4,283+4,283+4,200		4,200+4,200+4,200		4,200+4,200+4,950	
	m³/min	257+252	257+297	191+191+257		178+257+257		191+257+257		257+257+257		257+252+252		252+252+297	
Dimensions (HxWxD)	mm	(1,657x1,240x765)+(1,657x1,240x765)		(1,657x930x765)+(1,657x930x765)+(1,657x1,240x765)		(1,657x930x765)+(1,657x1,240x765)+(1,657x1,240x765)		(1,657x1,240x765)+(1,657x1,240x765)+(1,657x1,240x765)							
Machine weight	kg	285+305	285+325	200+200+285		200+285+285		285+285+285		285+285+305	285+305+305	305+305+305	305+305+325	305+325+325	325+325+325
Sound level	dB(A)	64	66	64		85		65		66		68	69	70	
Sound power	dB(A)	85	87	85		86		87		89		90	91		
Operation range	Cooling °CDB	-5 to 49						-5 to 49							
	Heating °CWB	-20 to 15.5						-20 to 15.5							
Refrigerant	Type	R-410A						R-410A							
	Charge kg	9.3+11.8		7.6+7.6+9.1	7.6+7.6+9.3	7.4+9.3+9.3	7.6+9.3+9.3	9.1+9.3+9.3	9.3+9.3+9.3	9.3+9.3+11.8	9.3+11.8+11.8	11.8+11.8+11.8			
Piping connections	Liquid mm	φ19.1 (Brazeing)						φ19.1 (Brazeing)							
	Gas mm	φ41.3 (Brazeing)						φ41.3 (Brazeing)							

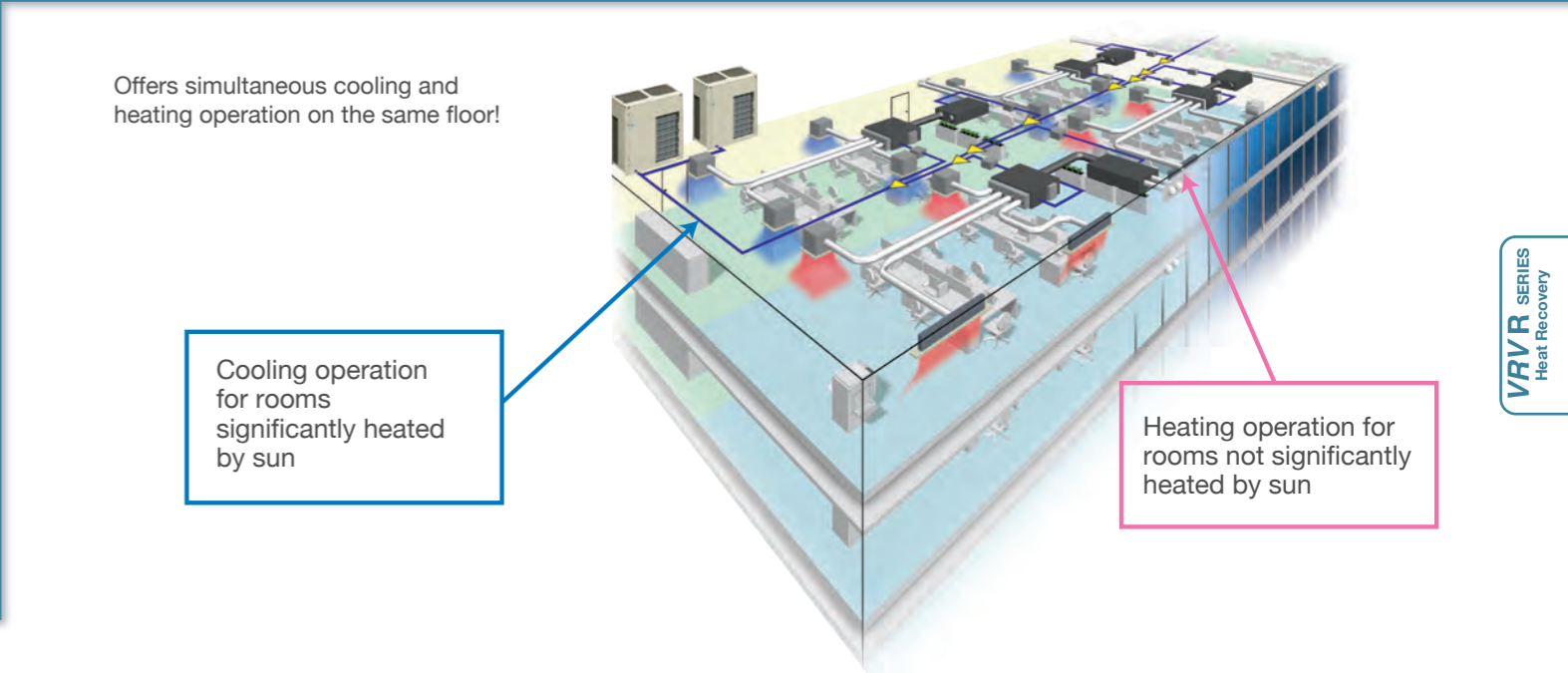
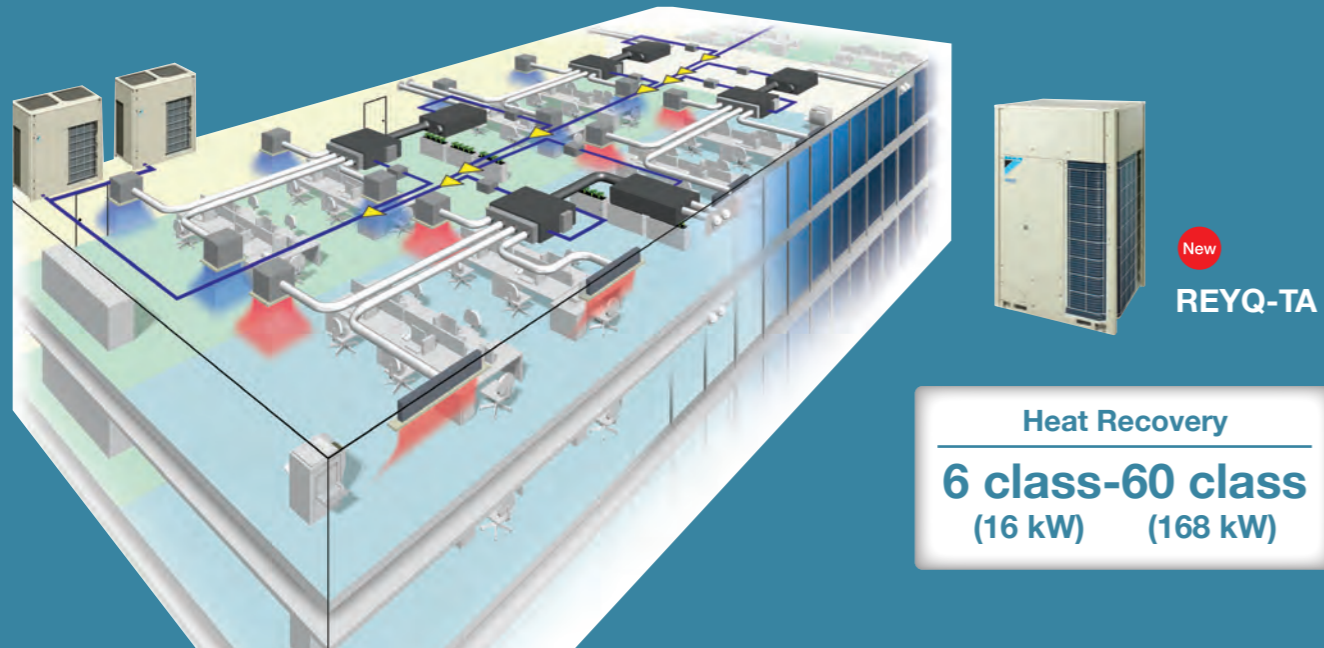
Note: Specifications are based on the following conditions;

- Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
- Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.

•Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.

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

When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

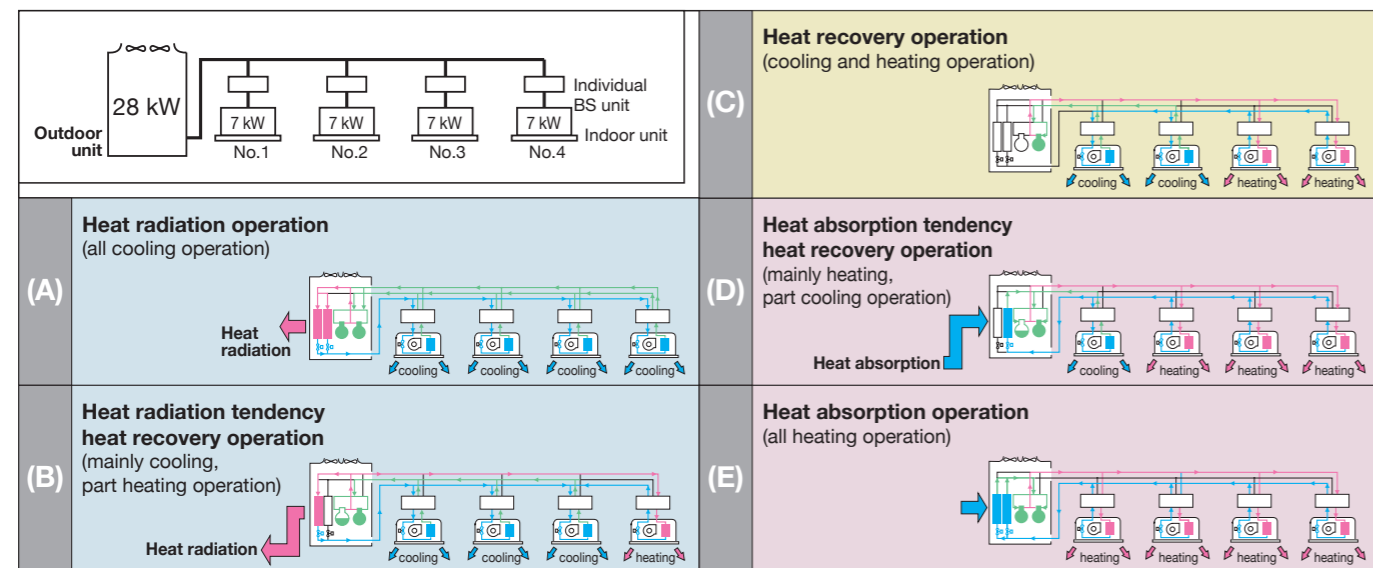


## What is Heat Recovery Air Conditioner?

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

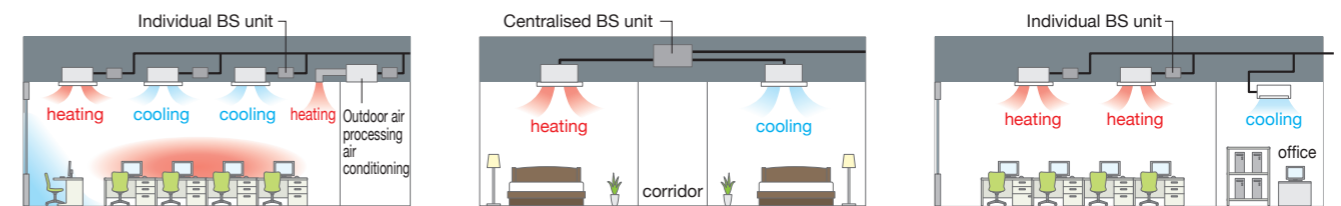
## Operation mode

### Heat recovery operation mode



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

## Increasing demand for simultaneous cooling and heating needs



### Winter season (Office Building)

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

### Winter season (Hotel)

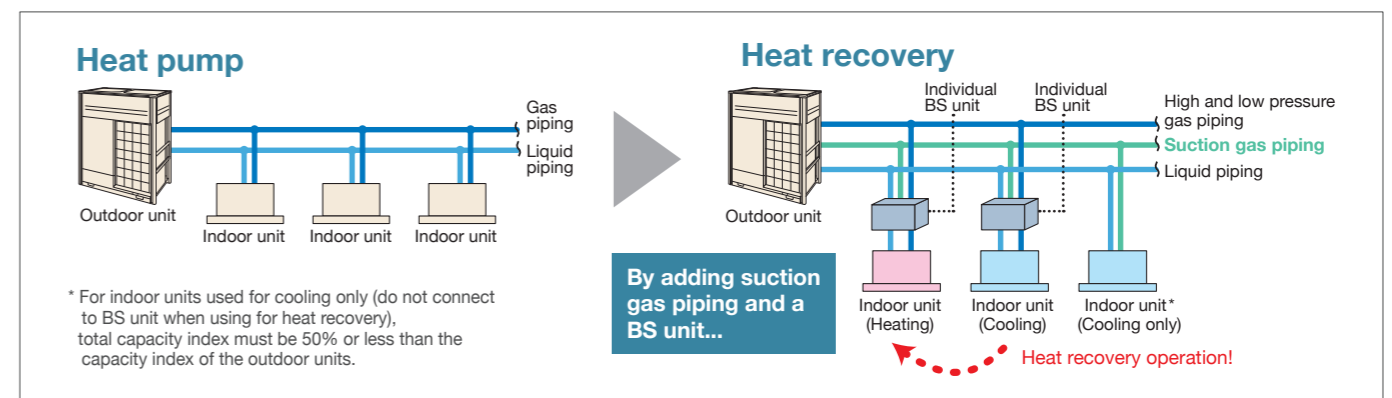
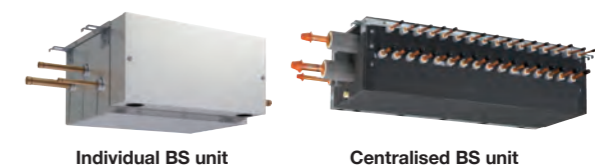
- Able to cater to individual heating and cooling requirement

### Individual office

- Provides heating and annual cooling depending on space area

## BS unit (Individual type/Centralised type)

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



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



## Advanced technologies for greater energy savings

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

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

Software technology

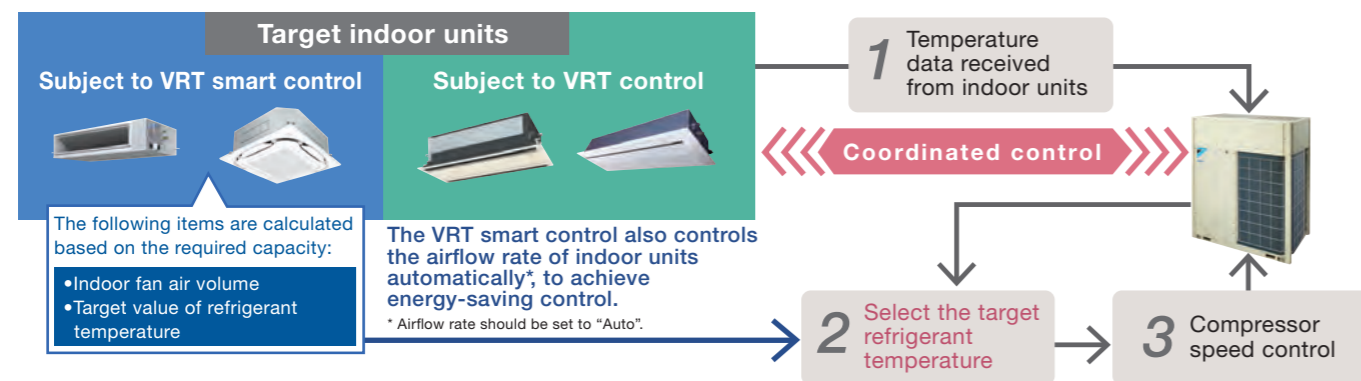
Daikin's VRT Smart technology takes comfort and energy performance to the next level. Building on our variable refrigerant temperature technology which enables the evaporating temperature to adjust to meet the varying load, VRT Smart is now also able to automatically adjust the indoor unit airflow rate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



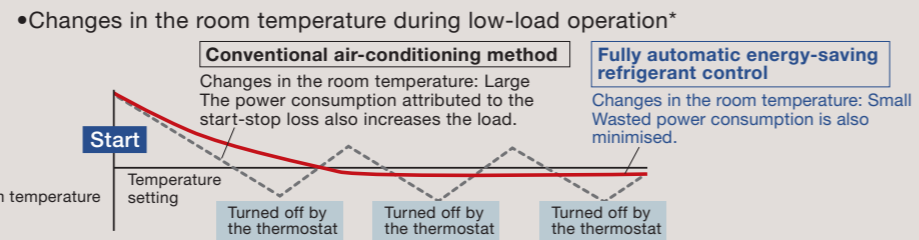
VRT Smart Control Function movie

#### Overview of the control (system control flow)

Different automatic energy-saving refrigerant control applies depending on the indoor units connected.



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



Note:  
 • For the classification of indoor units (VRT smart control and VRT control), refer to pages 45-46.  
 • If a system has indoor units subject to both VRT smart and VRT control, the system is operated under VRT control.  
 • If a system has both outdoor-air processing air conditioners and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled only available during either all cooling operation or all heating operation.

### Optimum utilisation of VRT Smart Control and VRT Control

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

#### When selecting indoor units

Indoor units are installed in a system so that they operate largely under the same conditions.

Energy efficiency decreases for the installation patterns indicated below.

Example:

- 1) A load imbalance occurs because an indoor unit on the same system is installed near the perimeter of the room or in the vicinity of a room entrance.
- 2) Different operating hours for indoor units.
- 3) Energy efficiency decreases when the set temperature of a specified indoor unit is set to an extreme during cooling operation. E.g. 18°C

## Enhanced lineup

### Wider capacity range from 6 to 60 class

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

#### Single Outdoor Unit

##### VRV III



8, 10, 12, 14, 16 class

From 8 to 16 class

##### VRV R SERIES



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

From 6 to 20 class

#### Multiple Outdoor Units

##### VRV III



From 18 to 48 class

1 type only

##### VRV R SERIES



From 12 to 60 class

2 types of High-COP type and Standard type

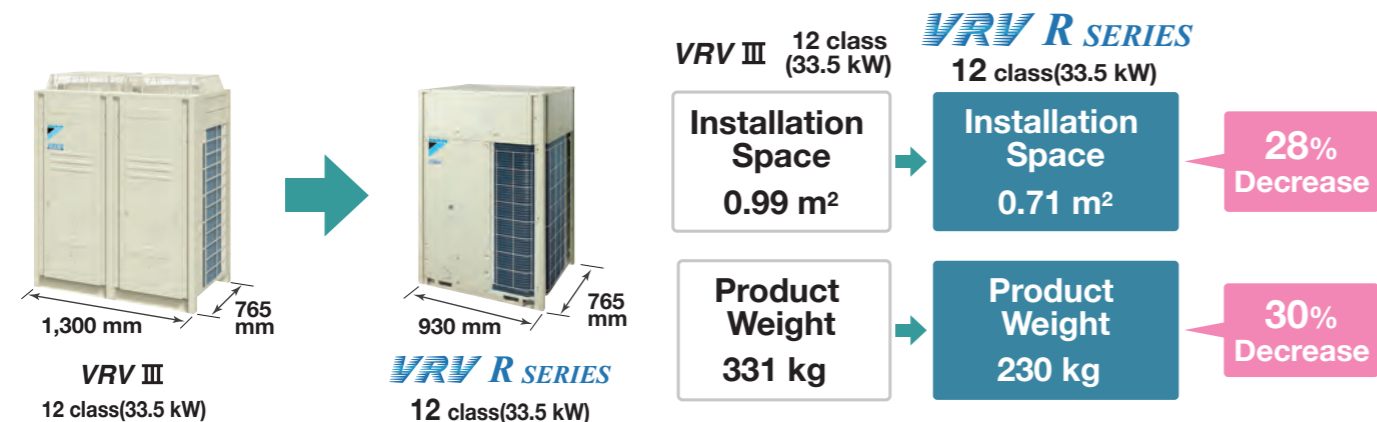
### Lineup

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

## Ease of installation

### Compact & lightweight design

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



## Comfort

### Lower operation sound

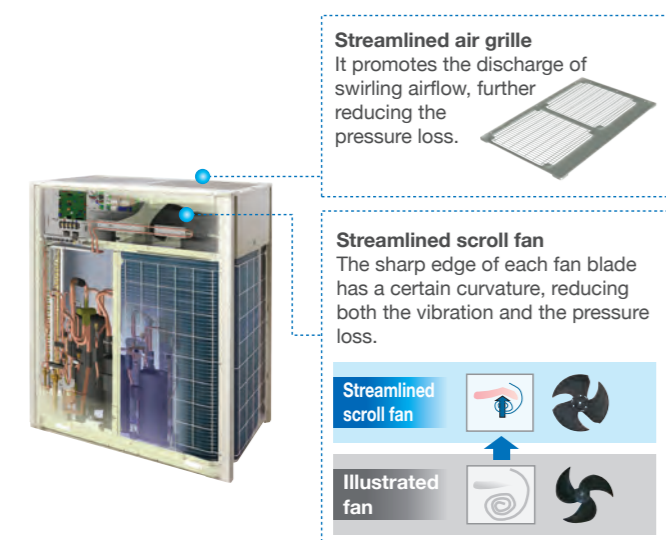
Improve heat exchanger efficiency, helps to reduced operation sound.

	Sound level(dB(A))				
	6/8 class	10 class	12 class	14 class	16 class
VRV III	58	58	60	62	63
VRV R SERIES	56	57	59	60	61

1-2 dB(A) reduction than conventional model

### Large airflow, high static pressure and quiet technology

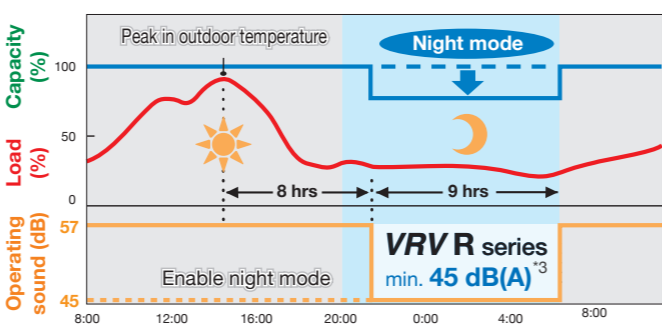
Without increasing operation sound, advanced analytical technologies are utilised to optimise fan design and increase airflow rate and high external static pressure.



### Nighttime quiet operation function

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

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

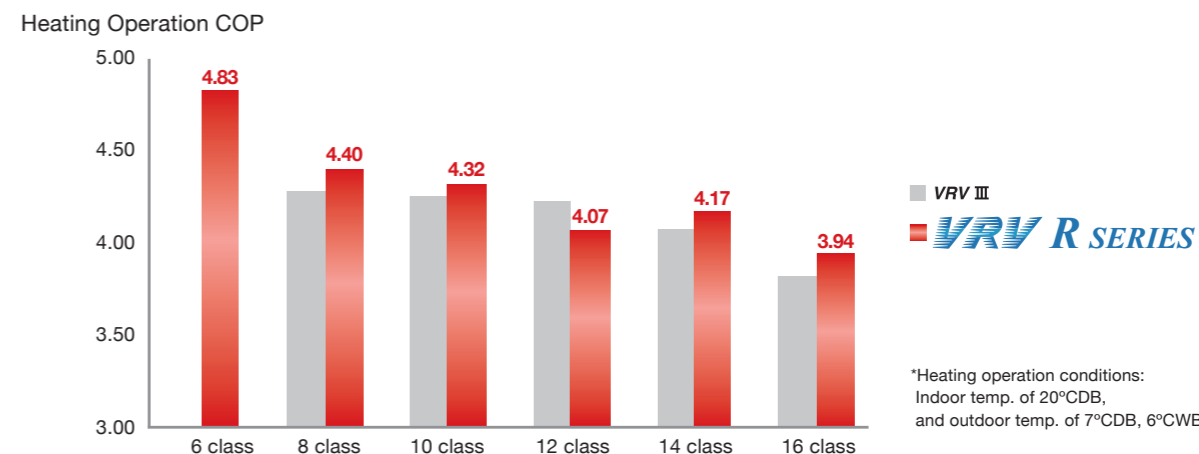
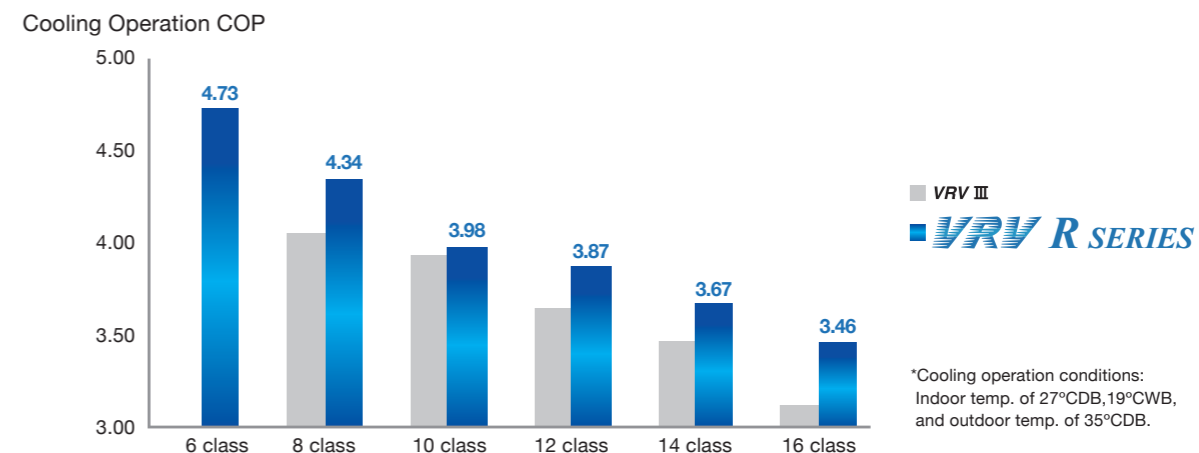


Note: · This function is available in setting at site.  
· The operating sound in quiet operation mode is the actual value measured by our company.  
· The relationship of outdoor temperature (load) and time shown above is just an example.

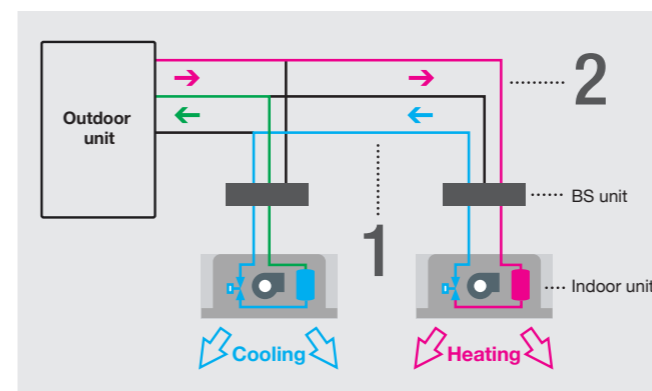
## Energy saving

### Higher Coefficient of Performance (COP)

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



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



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

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

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


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

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

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

**Conventional model (VRV III)**

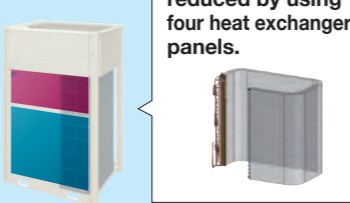
Two heat exchanger panels are used. Heat radiation loss from the condenser is high.



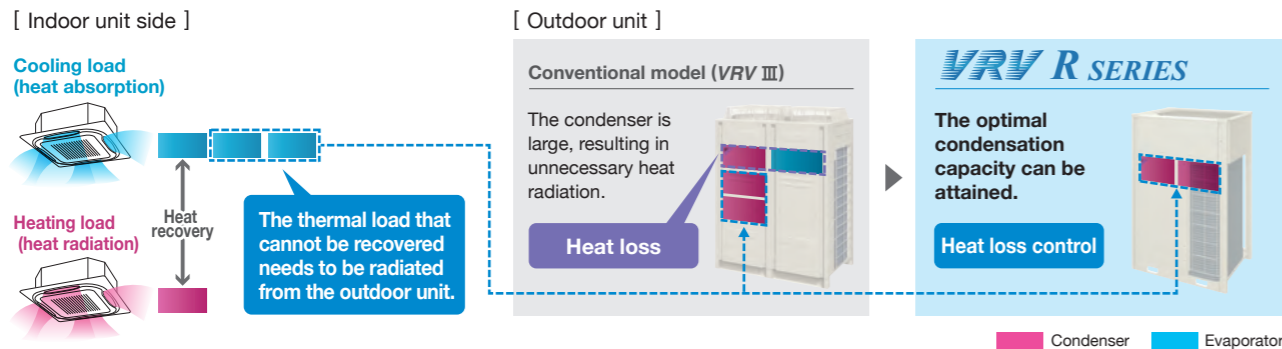
**VRV R SERIES**

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

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

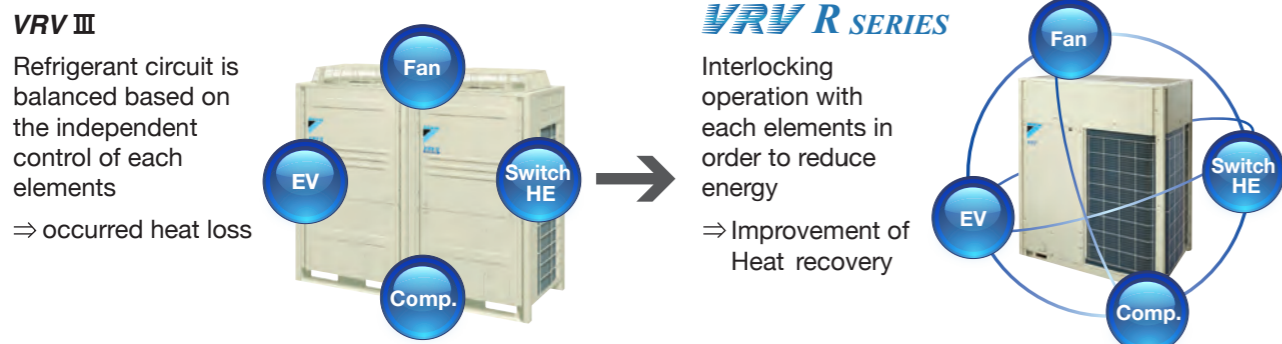


#### Indoor and outdoor heat balance (conceptual image)



### Heat Recovery Link control to reduce the heat loss

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



## Advanced technologies achieve excellent performance

### Highly integrated heat exchanger

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

**VRV III**

Fine Louvre Fin

**VRV R SERIES**

Waffle Fin

18,20 class (50,56 kW)

3 row with small pipe design, increases heat transfer efficiency

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

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

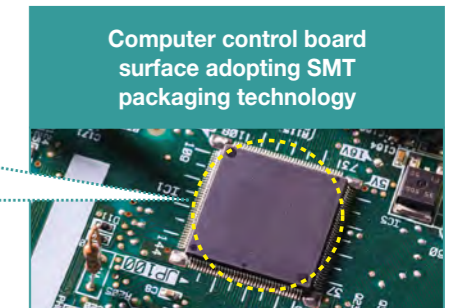
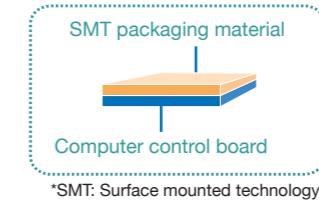
	Heat exchanger area	Contribution of COP (cooling)
16 class (45 kW)	24%UP	108.5%

### Various advanced control main PC board

#### SMT\* packaging technology

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

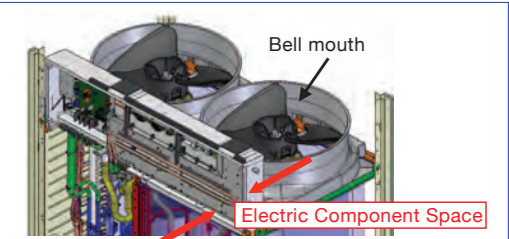
Protects your computer boards from the adverse effect of sandy and humid weather.



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

#### Improved inner design to increase smooth airflow

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



**VRV III**

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

**VRV R SERIES**

Control board failure ratio at stable operation is reduced.

#### Improve reliability at high ambient temperature

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

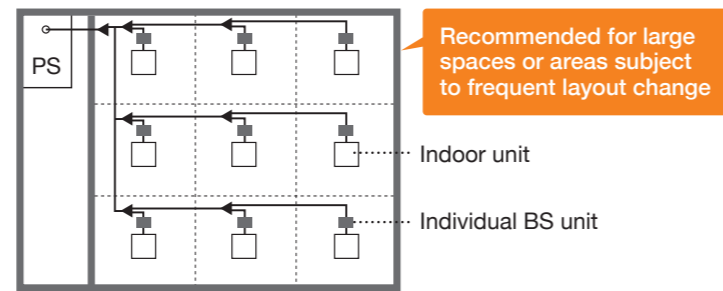
## Individual and centralised BS unit allow greater design flexibility.

### Individual BS unit



BSQ100AV1  
BSQ160AV1  
BSQ250AV1

- Compact and flexible installation
- Flexible design
- Low noise



### Centralised BS unit



BS4Q14AV1  
BS6Q14AV1  
BS8Q14AV1  
BS10Q14AV1  
BS12Q14AV1  
BS16Q14AV1

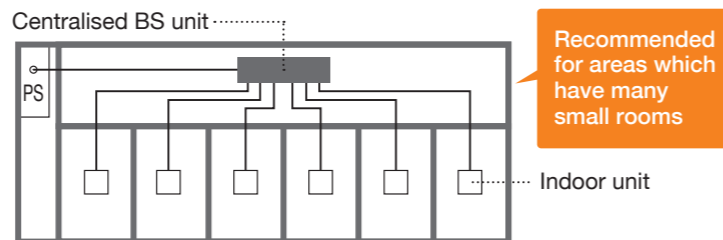
### Enhanced Line up

No. of branches	4	6	8	10	12	16
Conventional Centralised BS Unit	●	●				
<b>Centralised BS Unit</b>	●	●	●	●	●	●

### Compact and lightweight design

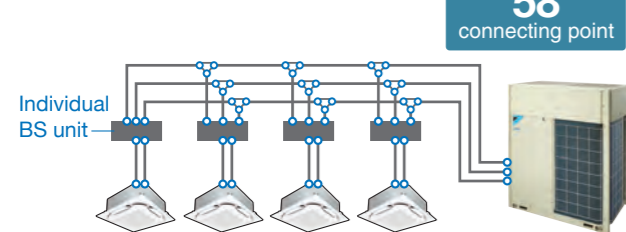
Compared to conventional BS unit (6 branch)

BS unit size **reduced by 65%**      BS unit weight **reduced by 73%**

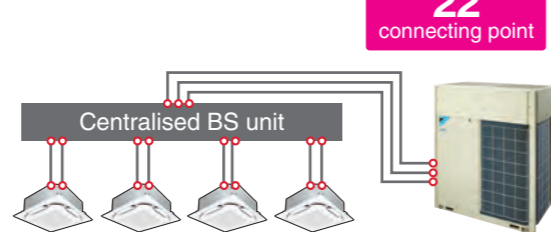


## Installation and maintenance work have been made easier through the integration of multiple BS units.

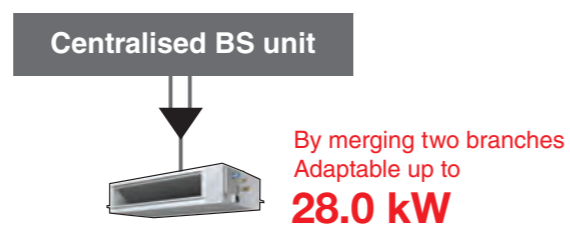
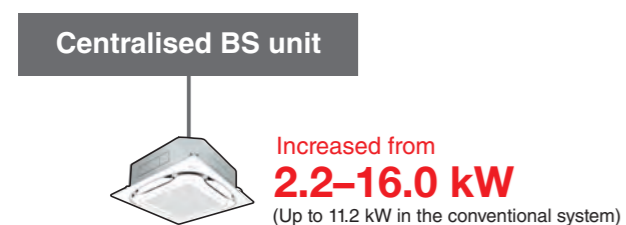
### Individual BS unit



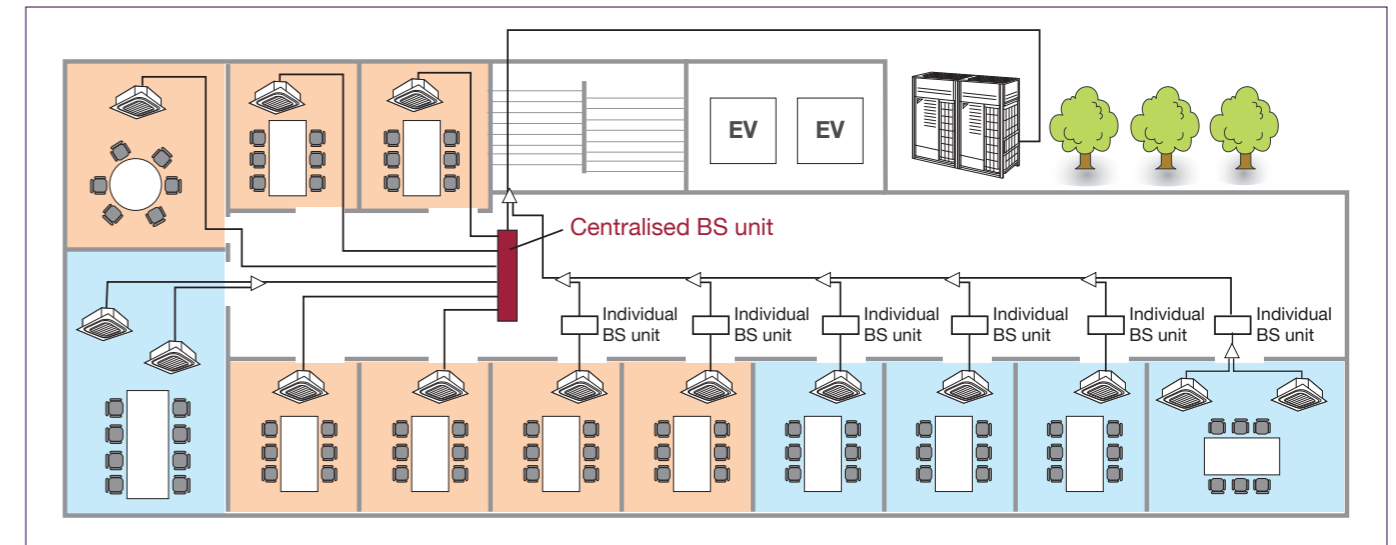
### Centralised BS unit



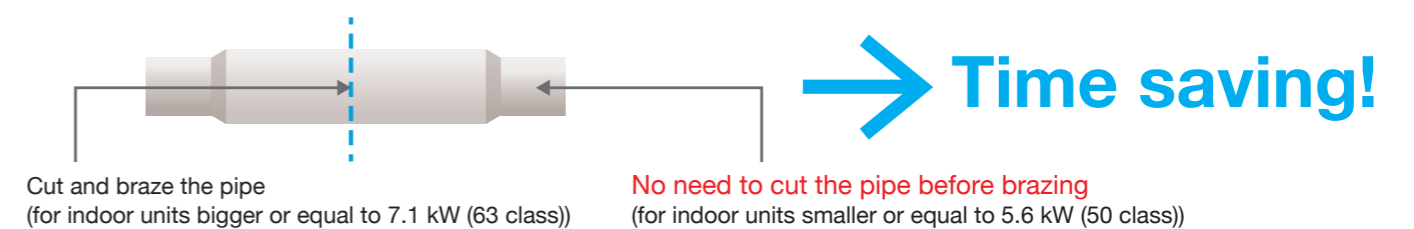
## Greater design flexibility achieved by increasing the connection capacity range



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



## Faster installation of centralised BS unit thanks to open connection



## Lower transient sound

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

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

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

## More options for equipment placement

### Long piping length

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

Max. actual piping length

**165 m**

Max. equivalent piping length

**190 m**

Max. total piping length

**1000 m**

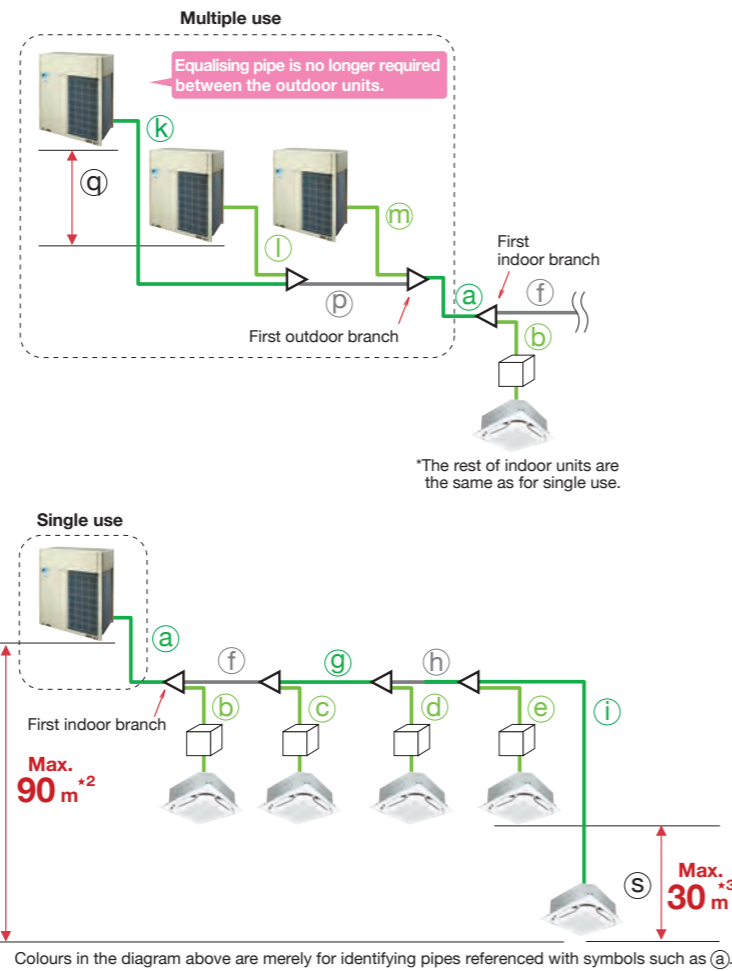
Max. level difference between the outdoor units and the indoor units

**90 m<sup>\*2</sup>**

Max. level difference between the indoor units

**30 m<sup>\*3</sup>**

15 m higher than VRV III



Maximum allowable piping length	Actual piping length		Equivalent piping length	
	Refrigerant piping length	165 m		190 m
	Total piping length	1000 m		—
	Between the first indoor branch and the farthest indoor unit	90 m <sup>*1</sup>		—
Maximum allowable level difference	Between the outdoor branch and outdoor unit	10 m	13 m	
	Level Difference		Example	
	Between the outdoor units (Multiple use)	5 m	q	
	Between the indoor units	30 m	s	
Maximum allowable level difference	Between the outdoor units and the indoor units	If the outdoor unit is above.	90 m <sup>*2</sup>	r
		If the outdoor unit is below.	90 m <sup>*2</sup>	r

\*1. No special requirements up to 40 m. The maximum actual piping length can be 90 m, depending on conditions. Various conditions and requirements have to be met to allow utilisation of 90 m piping length. Be sure to refer to the Engineering Data Book for details of these conditions and requirements.  
\*2. When level differences above 50 m if the outdoor unit is above the indoor unit and 40 m if the outdoor unit is below the indoor unit, a dedicated setting on the outdoor unit is required. Refer to the Engineering Data Book and contact your local dealer for more information.  
\*3. When level differences are 15 m or more, maximum actual piping length must be 120 m.

## Connection ratio

Connection capacity at maximum is 200%.

Connection ratio  
**50%–200%**

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

Conditions of VRV indoor unit connection capacity

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

\*1 For the FXF(S)Q25 models, maximum connection ratio is 130% for the entire range of outdoor units.  
Note: If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the indoor units.  
\*Refer to page 44 for outdoor unit combination details.

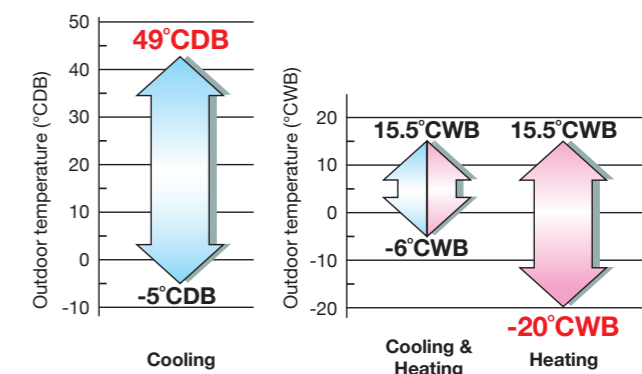
## High external static pressure

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



## Wide operation temperature range

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

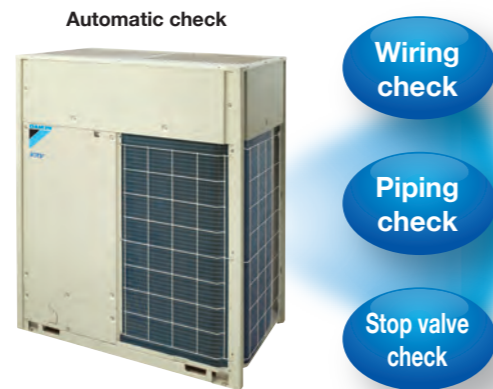


## Multiple advanced features ensuring more accurate test operation and stable system

### Efficient automatic test operation

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

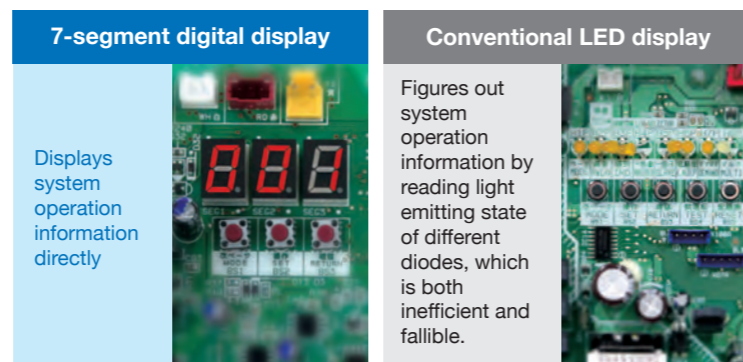
- Automatically checks the wirings between outdoor units and indoor units to confirm whether there is a defective wiring.
- Optimises operations to suit field piping lengths.
- Automatically check whether the stop valve in each outdoor unit is in normal status to ensure the smooth operation of air conditioning system.



## Simplified commissioning and after-sales service

### Function of information display by luminous digital tube

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



## Compliant with the RoHS Directive\*

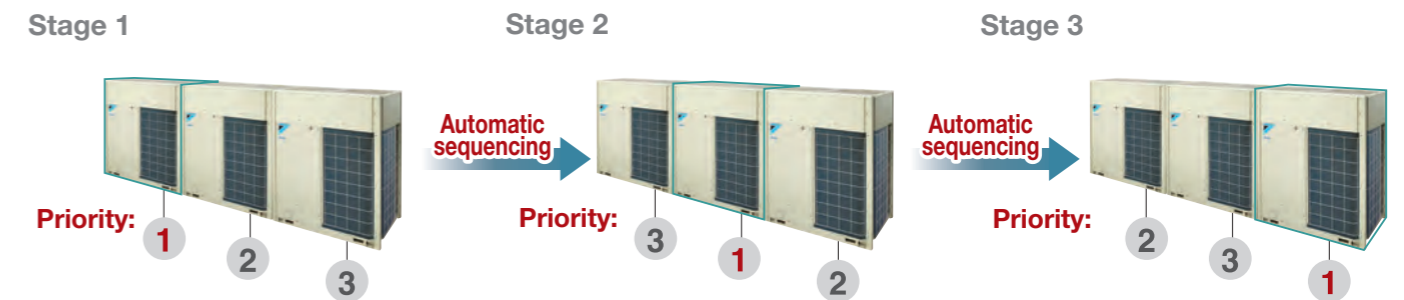
We have been making efforts to facilitate the transition to using RoHS Directive\*-compliant materials for system parts.

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

## Outdoor unit sequencing technology

### Automatic sequencing operation

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



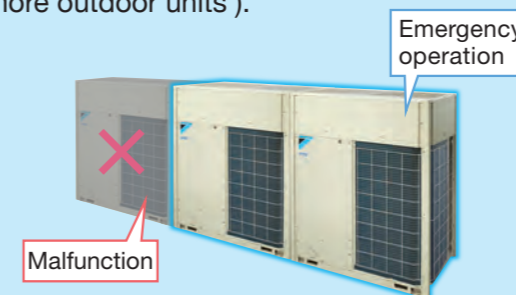
## Double backup operation functions responding resiliently to various unexpected situations

### Double backup operation functions

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

#### Unit backup operation function

**If malfunction occurs in an outdoor unit...**  
Emergency operation can be conveniently set and enabled by the remote controller for indoor unit (for systems composed of two or more outdoor units).



#### Compressor backup operation function

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



## VRV R Series Outdoor Units Heat Recovery New

### Wider capacity range from 6 to 60 class

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

#### High-COP Type

##### • Double Outdoor Units

12, 14, 16, 18, 20 class



REYQ12TAHY1 REYQ18TAHY1  
REYQ14TAHY1 REYQ20TAHY1  
REYQ16TAHY1

##### • Triple Outdoor Units

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



REYQ22TAHY1 REYQ30TAHY1  
REYQ24TAHY1 REYQ32TAHY1  
REYQ26TAHY1 REYQ34TAHY1  
REYQ28TAHY1 REYQ36TAHY1

#### Standard Type

##### • Single Outdoor Units

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



REYQ6TAY1  
REYQ8TAY1  
REYQ10TAY1  
REYQ12TAY1



REYQ14TAY1  
REYQ16TAY1  
REYQ18TAY1  
REYQ20TAY1

##### • Double Outdoor Units

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



REYQ22TAY1  
REYQ24TAY1



REYQ26TAY1  
REYQ28TAY1  
REYQ30TAY1



REYQ32TAY1  
REYQ34TAY1  
REYQ36TAY1

##### • Triple Outdoor Units

38, 40 class 42, 44 class 46, 48, 50, 52, 54, 56, 58, 60 class



REYQ38TAY1  
REYQ40TAY1



REYQ42TAY1  
REYQ44TAY1



REYQ46TAY1 REYQ52TAY1 REYQ58TAY1  
REYQ48TAY1 REYQ54TAY1 REYQ60TAY1  
REYQ50TAY1 REYQ56TAY1

#### Lineup

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

## Outdoor Unit Combinations

### High-COP Type

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

Note: \*1. The outdoor unit multi connection piping kit (separately sold) is required for multiple connection.  
\*2. Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units. Refer to page 40 for note on connection capacity of indoor units.





























### Standard Type

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

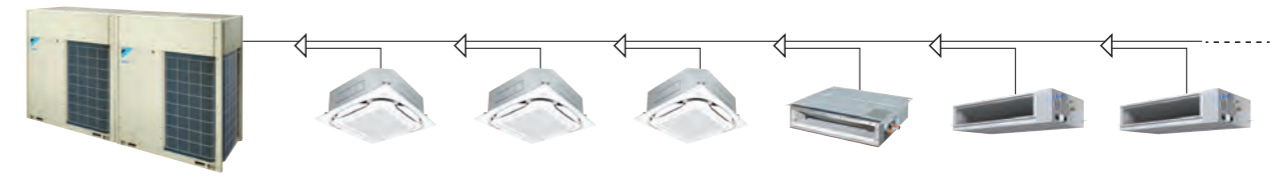
Note: \*1. For multiple connection of 22 class systems and above, the outdoor unit multi connection piping kit (separately sold) is required.  
\*2. Values inside brackets are based on connection of indoor units rated at maximum capacity, 200% for single outdoor units, 160% for double outdoor units, and 130% for triple outdoor units. Refer to page 40 for note on connection capacity of indoor units.

## Enhanced range of choices

● New lineup  Indoor units subject to VRT smart control

Type	Model Name	Capacity Range(kW)	20	25	32	40	50	63	71	80	100	125	140	145	160	180	200	250	
			Capacity Index	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16	16.2	18	20	22.4	28
			Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	145	160	180	200	250
Ceiling Mounted Cassette (Round Flow with Sensing) 	<b>New</b> FXFSQ-AVM 			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ceiling Mounted Cassette (Round Flow)	FXFQ-PVE			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-A2VEB		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
4-Way Flow Ceiling Suspended	FXUQ-AVEB								●		●								
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ceiling Mounted Cassette (Single Flow) 	<b>New</b> FXEQ-AV36		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Slim Ceiling Mounted Duct (Compact Series) 	<b>New</b> FXDQ-TV1B(A)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Slim Ceiling Mounted Duct (Standard Series)	<b>New</b> FXDQ-PDVE 	 <small>(700mm width type)</small>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	<b>New</b> FXDQ-NDVE 	 <small>(900 / 1100mm width type)</small>				●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ceiling Concealed Duct	FXDYQ-MAV1									●	●	●	●	●	●	●	●	●	●
Middle Static Pressure Ceiling Mounted Duct 	<b>New</b> FXSQ-PAVE		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ceiling Mounted Duct 	<b>New</b> FXMQ-PAVE		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	<b>New</b> FXMQ-PV1A															●	●	●	●
Outdoor-Air Processing Unit	FXMQ-MFV1																		●
Ceiling Suspended	FXHQ-MAVE				●						●								
Wall Mounted	FXAQ-PVE		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Floor Standing	FXLQ-MAVE		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Concealed Floor Standing	FXNQ-MAVE		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat Reclaim Ventilator with DX-Coil and Humidifier	VKM-GA(M)V1		Airflow rate 500-1000 m <sup>3</sup> /h																
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m <sup>3</sup> /h																

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



Max. 64 indoor units

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





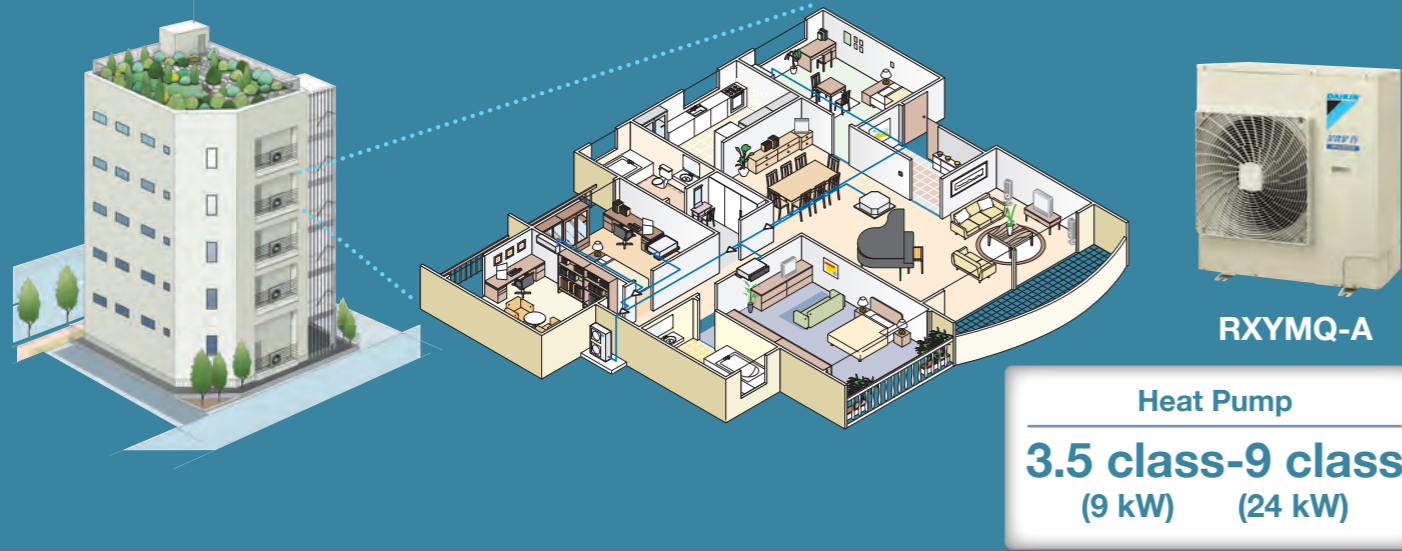
## VRV R Series Outdoor Units Heat Recovery REYQ-TA High-COP Type

Model		REYQ12TAHY1	REYQ14TAHY1	REYQ16TAHY1	REYQ18TAHY1	REYQ20TAHY1	REYQ22TAHY1	REYQ24TAHY1	REYQ26TAHY1	REYQ28TAHY1	REYQ30TAHY1
Combination units		REYQ6TAY1	REYQ6TAY1	REYQ8TAY1	REYQ8TAY1	REYQ8TAY1	REYQ6TAY1	REYQ8TAY1	REYQ8TAY1	REYQ8TAY1	REYQ8TAY1
		REYQ6TAY1	REYQ8TAY1	REYQ8TAY1	REYQ10TAY1	REYQ12TAY1	REYQ8TAY1	REYQ8TAY1	REYQ10TAY1	REYQ12TAY1	REYQ12TAY1
Power supply		3-phase 4-wire system, 380-415 V, 50 Hz					3-phase 4-wire system, 380-415 V, 50 Hz				
Cooling capacity	Btu/h	109,000	131,000	153,000	172,000	191,000	207,000	229,000	248,000	267,000	286,000
	kW	32.0	38.4	44.8	50.4	55.9	60.8	67.2	72.8	78.3	83.9
Heating capacity	Btu/h	123,000	147,000	171,000	193,000	213,000	232,000	256,000	278,000	299,000	321,000
	kW	36.0	43.0	50.0	56.5	62.5	68.0	75.0	81.5	87.5	94.0
Power consumption	Cooling	kW	6.76	8.54	10.3	12.2	13.8	15.1	17.0	18.7	20.6
	Heating	kW	7.46	9.41	11.4	13.0	14.9	15.1	17.0	18.7	20.6
Capacity control	%	10-100			8-100		7-100		6-100		5-100
Casing colour		Ivory white (5Y7.5/1)					Ivory white (5Y7.5/1)				
Compressor	Type	Hermetically sealed scroll type					Hermetically sealed scroll type				
	Motor output	kW	(2.3x1)+(2.3x1)	(2.3x1)+(3.3x1)	(3.3x1)+(3.3x1)	(3.3x1)+(4.0x1)	(3.3x1)+(4.9x1)	(2.3x1)+(3.3x1)+(3.3x1)	(3.3x1)+(3.3x1)+(3.3x1)	(3.3x1)+(3.3x1)+(4.0x1)	(3.3x1)+(3.3x1)+(4.9x1)
Airflow rate	ℓ/s	1,983+1,983	1,983+2,633	2,633+2,633	2,633+2,800	2,633+3,000	1,983+2,633+2,633	2,633+2,633+2,633	2,633+2,633+2,800	2,633+2,633+3,000	2,633+2,800+3,000
	m³/min	119+119	119+158	158+158	158+168	158+180	119+158+158	158+158+158	158+158+168	158+158+180	158+168+180
Dimensions (HxWxD)	mm	(1,657x930x765)+(1,657x930x765)					(1,657x930x765)+(1,657x930x765)				
Machine weight	kg	215+215		215+230			215+215+215		215+215+230		215+230+230
Sound level	dB(A)	59			60	61	61			62	
Sound power	dB(A)	80			81	82	82			83	
Operation range	Cooling	°CDB					-5 to 49				
	Heating	°CWB					-20 to 15.5				
	Cooling & Heating	°CWB					-6 to 15.5				
Refrigerant	Type	R-410A					R-410A				
	Charge	kg	9.7+9.7		9.7+9.8		9.7+9.9		9.7+9.7+9.8		9.7+9.7+9.9
Piping connections	Liquid	mm			φ12.7 (Brazing)		φ15.9 (Brazing)		φ15.9 (Brazing)		φ19.1 (Brazing)
	Gas	mm			φ28.6 (Brazing)		φ28.6 (Brazing)		φ34.9 (Brazing)		φ28.6 (Brazing)
	High and low pressure gas	mm			φ19.1 (Brazing)		φ22.2 (Brazing)		φ28.6 (Brazing)		φ28.6 (Brazing)

Model		REYQ32TAHY1	REYQ34TAHY1	REYQ36TAHY1	
Combination units		REYQ8TAY1	REYQ10TAY1	REYQ12TAY1	
		REYQ12TAY1	REYQ12TAY1	REYQ12TAY1	
Power supply		3-phase 4-wire system, 380-415 V, 50 Hz			
Cooling capacity	Btu/h	305,000	324,000	345,000	
	kW	89.4	95.0	101	
Heating capacity	Btu/h	341,000	365,000	386,000	
	kW	100	107	113	
Power consumption	Cooling	kW	22.5	24.4	26.0
	Heating	kW	24.1	25.7	27.7
Capacity control	%	5-100			
Casing colour		Ivory white (5Y7.5/1)			
Compressor	Type	Hermetically sealed scroll type			
	Motor output	kW	(3.3x1)+(4.9x1)+(4.9x1)	(4.0x1)+(4.9x1)+(4.9x1)	(4.9x1)+(4.9x1)+(4.9x1)
Airflow rate	ℓ/s	2,633+3,000+3,000	2,800+3,000+3,000	3,000+3,000+3,000	
	m³/min	158+180+180	168+180+180	180+180+180	
Dimensions (HxWxD)	mm	(1,657x930x765)+(1,657x930x765)+(1,657x930x765)			
Machine weight	kg	215+230+230		230+230+230	
Sound level	dB(A)	63		64	
Sound power	dB(A)	84		85	
Operation range	Cooling	°CDB			
	Heating	°CWB			
	Cooling & Heating	°CWB			
Refrigerant	Type	R-410A			
	Charge	kg	9.7+9.9+9.9	9.8+9.9+9.9	9.9+9.9+9.9
Piping connections	Liquid	mm			
	Gas	mm			
	High and low pressure gas	mm			

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

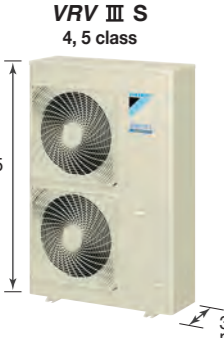


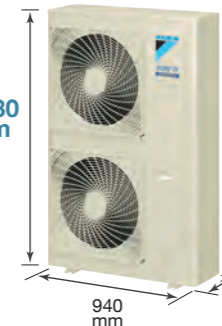




Heat Pump  
**3.5 class-9 class**  
 (9 kW) (24 kW)

### Compact & lightweight design

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

 <p>VRV III S 4, 5 class</p> <p>1,345 mm</p> <p>320 mm</p>	 <p>VRV IV S SERIES 3.5, 4, 5 class</p> <p>990 mm</p> <p>320 mm</p>	<p>VRV III S 4 class (11.2 kW)</p> <p>Height 1,345 mm</p> <p>Product Weight 125 kg</p>	<p>VRV IV S SERIES 4 class (11.2 kW)</p> <p>Height 990 mm <b>26% Decrease</b></p> <p>Product Weight 71 kg <b>43% Decrease</b></p>
 <p>VRV IV 8 class</p> <p>1,657 mm</p> <p>930 mm</p> <p>765 mm</p>	 <p>VRV IV S SERIES 8 class</p> <p>1,430 mm</p> <p>940 mm</p> <p>320 mm</p>	<p>VRV IV 8 class (22.4 kW)</p> <p>Height 1,657 mm</p> <p>Product Weight 185 kg</p> <p>Footprint 0.71 m<sup>2</sup></p>	<p>VRV IV S SERIES 8 class (22.4 kW)</p> <p>Height 1,430 mm <b>14% Decrease</b></p> <p>Product Weight 138 kg <b>25% Decrease</b></p> <p>Footprint 0.30 m<sup>2</sup> <b>58% Decrease</b></p>

### Enhanced lineup

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

#### VRV IV S SERIES



#### Lineup

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

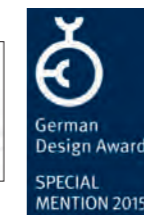
### Wide variety of indoor units

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

#### Elegant appearance with European style



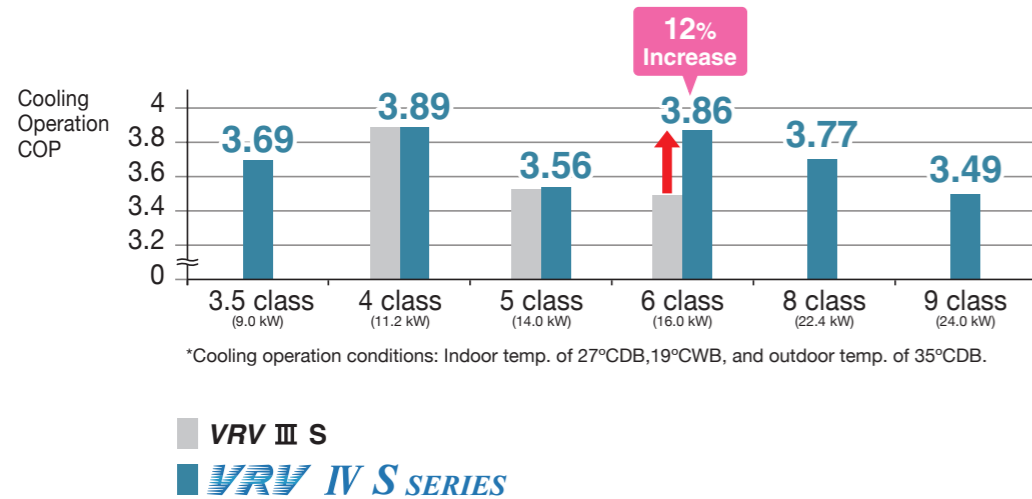
CTXG-P series indoor unit



## Energy saving

### Higher Coefficient of Performance (COP)

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



## Quiet operation

### Nighttime quiet operation function

Operation sound level selectable from 3 steps for the night mode

#### Mode 1. Automatic mode

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

#### Mode 2. Manual mode

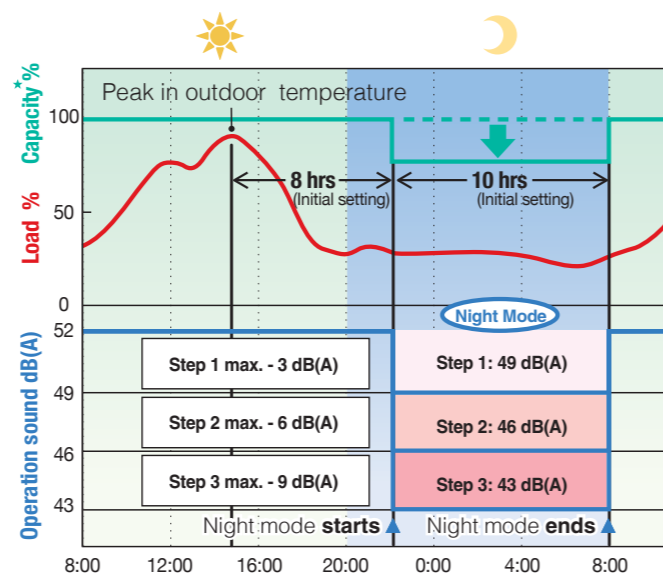
Starting time and ending time can be input. (An external control adaptor for outdoor unit, DTA104A53/61/62, and a locally obtained timer are necessary.)

#### Mode 3. Combined mode

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

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

#### Mode 1. Automatic mode



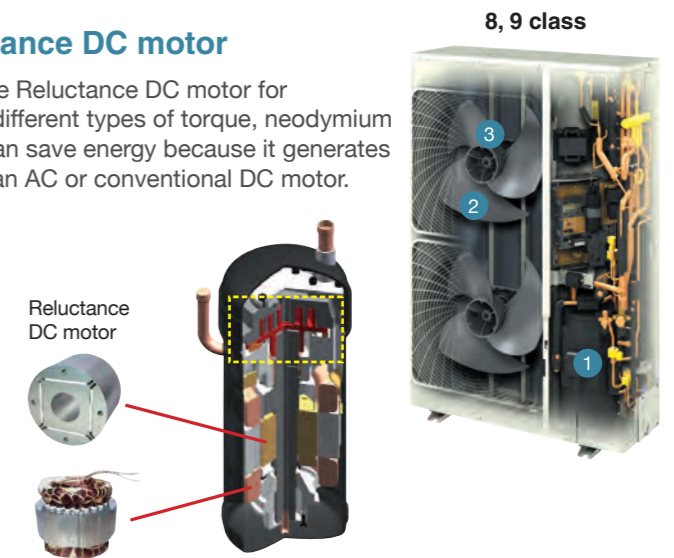
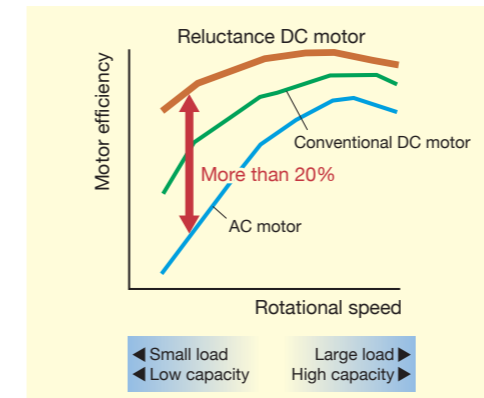
Note: • This function is available in setting at site.  
• The relationship of outdoor temperature (load) and time shown in the graph is just an example.  
\* The capacity reduction rate differs depending on the operation sound level step selected.

## Collection of cutting-edge technologies realises efficient and quiet operation

### The high efficiency compressor to achieve a higher COP

#### 1 Compressor equipped with Reluctance DC motor

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



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

\*1 A neodymium magnet is approximately 10 times stronger than a standard ferrite magnet.  
\*2 The torque created by the change in power between the iron and magnet parts.

#### >> Smooth sine wave DC inverter

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



RXYMQ3, 4, 5, 6AV4A

#### >> Swing compressor

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

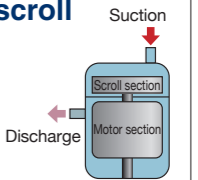
3.5, 4, 5 class



RXYMQ8, 9AY1

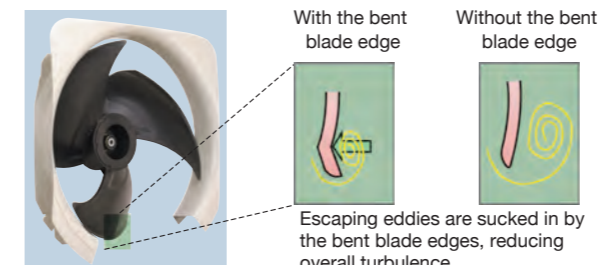
#### >> The structural scroll

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



#### 2 Smooth Air Inlet Bell Mouth and Aero Spiral Fan

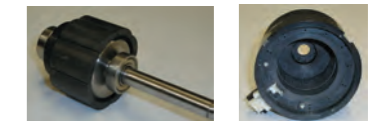
These two features work to reduce sound. Guides are added to the bell mouth intake to reduce turbulence in the airflow generated by fan suction. The Aero Spiral Fan features fan blades with the bent blade edges, further reducing turbulence.



#### 3 DC fan motor

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

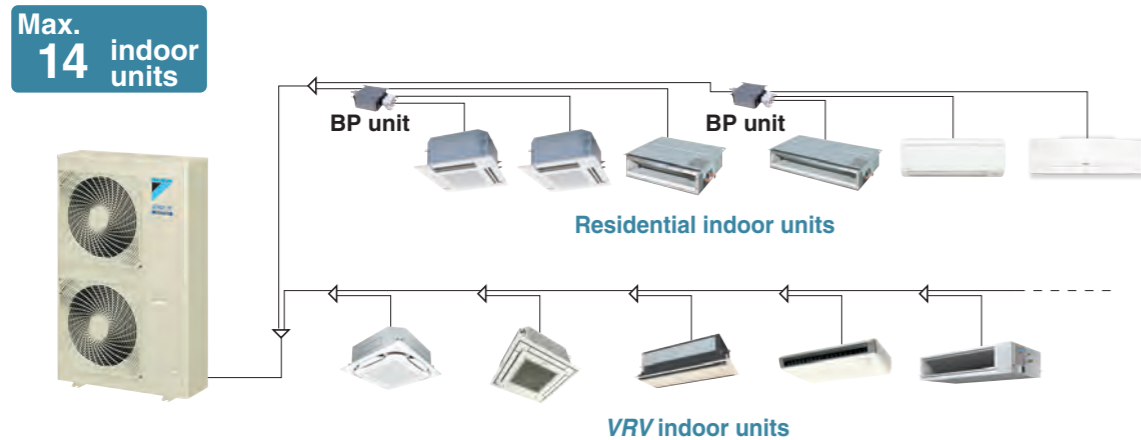
DC fan motor structure



## Connectable up to 14 indoor units

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

Note: Refer to page 59 for the maximum number of connectable indoor unit.



## Automatic test operation

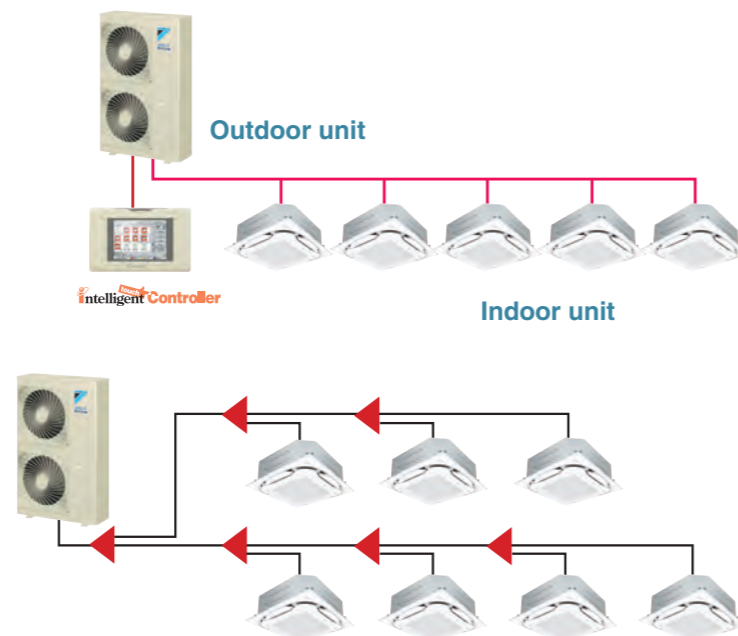
Simply press the test operation button and the unit performs an automatic system check, including wiring, stop valves, piping, and refrigerant charging amount. The results are returned automatically after the check finishes.

## Simple wiring and piping connection

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

### >> Super wiring system

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



### >> REFNET piping system

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

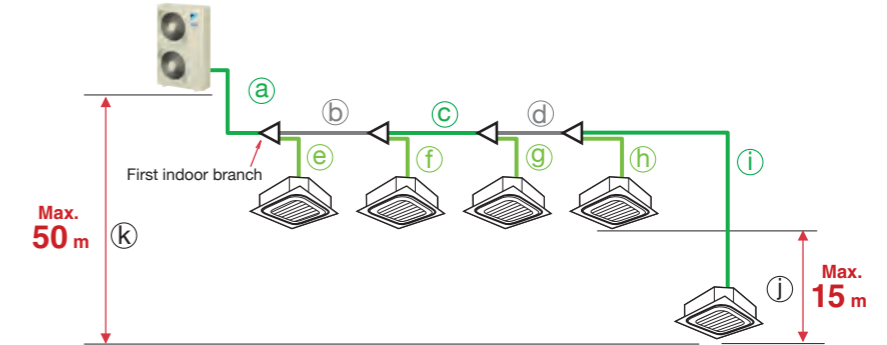
## Long piping design possible

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

### When only VRV indoor units are connected

**Actual piping length**  
Max. 120 m

**Total piping length**  
Max. 300 m

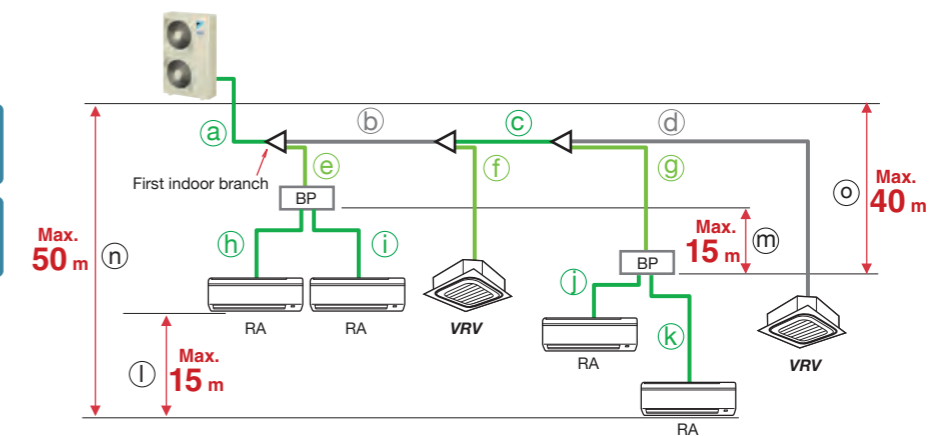


			3.5,4 class	5 class	6 class	8,9 class
<b>Max. allowable piping length</b>	Refrigerant piping length	a+b+c+d+i	70 m	70 m	120 m	100 m
	Equivalent piping length		90 m	90 m	150 m	130 m
	Total piping length	a+b+c+d+e+f+g+h+i	250 m	300 m	300 m	300 m
	Between the first indoor branch and the farthest indoor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

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

**Actual piping length**  
Max. 100 m

**Total piping length**  
Max. 250 m



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

## Enhanced range of choices

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

● New lineup

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

## Residential indoor units with connection to BP units

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

Note: BP units are necessary for residential indoor units.

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



\*Refer to page 59 for the maximum number of connectable indoor units.

## VRV IV S Series Outdoor Units Heat Pump RXYMQ-A

MODEL			RXYMQ3AV4A	RXYMQ4AV4A	RXYMQ5AV4A	RXYMQ6AV4A	RXYMQ8AY1	RXYMQ9AY1	
Power supply			1-phase, 230-240 V, 50 Hz				3-phase, 380-415 V, 50 Hz		
Cooling capacity		Btu/h	30,700	38,200	47,800	54,600	76,400	81,900	
		kW	9.0	11.2	14.0	16.0	22.4	24.0	
Heating capacity		Btu/h	34,100	42,700	47,800	61,400	85,300	88,700	
		kW	10.0	12.5	14.0	18.0	25.0	26.0	
Power consumption	Cooling	kW	2.44	2.88	3.93	4.14	5.94	6.88	
	Heating	kW	2.28	2.60	3.04	4.07	6.25	6.82	
Capacity control		%	24 to 100		16 to 100		20 to 100		
Casing colour			Ivory white (5Y7.5/1)						
Compressor	Type	Hermetically sealed swing type				Hermetically sealed scroll type			
	Motor output	kW	1.92	3.0	3.5	3.8	4.8		
Airflow rate		ℓ/s	1,267			1,766	2,333		
		m³/min	76			106	140		
Dimensions (H x W x D)		mm	990 x 940 x 320			1,345 x 900 x 320	1,430 x 940 x 320		
Machine weight		kg	71		82	104	138		
Sound level (Cooling/Heating)		dB(A)	51/52	52/54	53/54	55/56	57/58	58/59	
Sound power		dB(A)	69	70	71	73	75	76	
Operation range		Cooling	°CDB -5 to 46						
		Heating	°CWB -20 to 15.5						
Refrigerant		Type	R-410A						
		Charge	kg	2.9	3.4	3.6	5.8		
Piping connections		Liquid	φ 9.5 (Flare)				φ 9.5 (Brazing)		
		Gas	φ 15.9 (Flare)		φ 19.1 (Flare)	φ 19.1 (Brazing)	φ 22.2 (Brazing)		

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

## VRV III S Series Outdoor Units Heat Pump RXYMQ-P

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

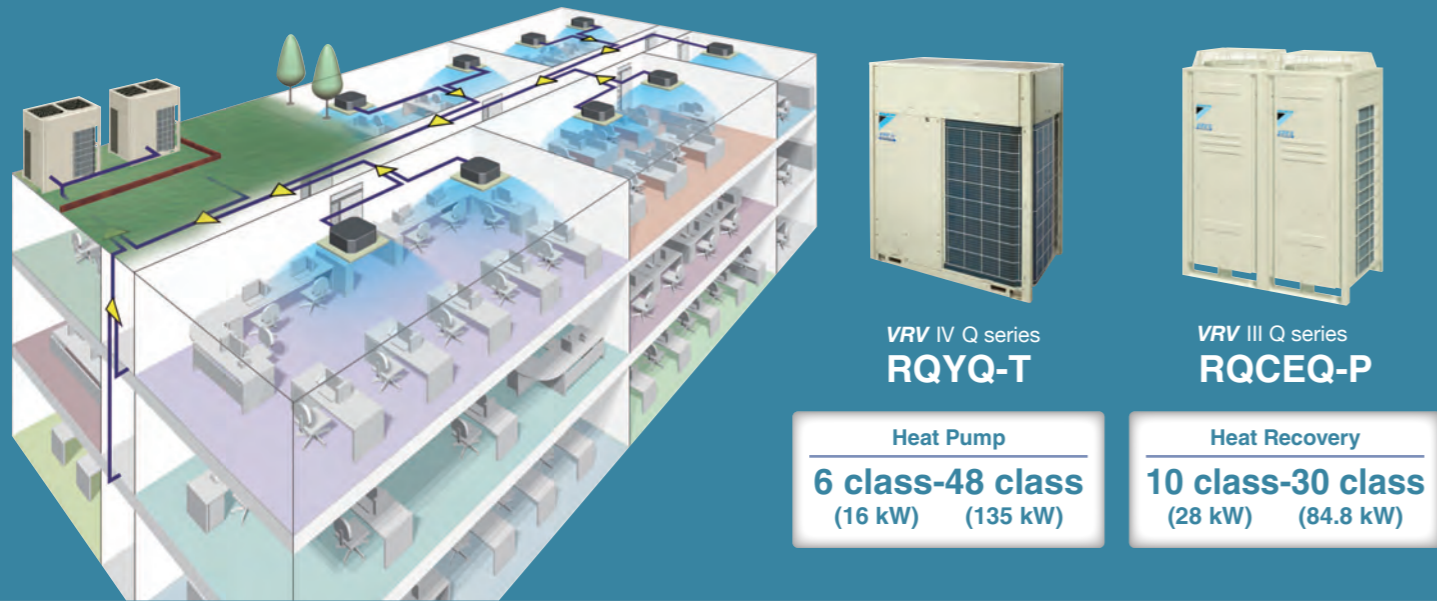
**Note:** Specifications are based on the following conditions:  
 • Cooling: Indoor temp.: 27°CDB, 19.5°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.  
 • Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: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

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

## Outdoor Unit Combinations

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

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



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

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

## The VRV IV Q SERIES concept

### Reusing existing refrigerant piping minimizes:

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

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

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

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

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

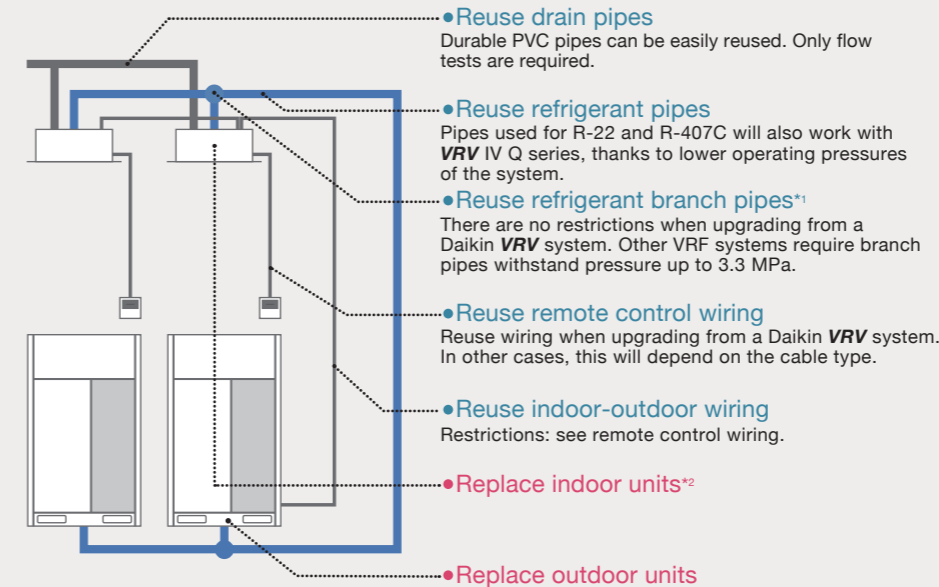
## Quick, Quality and Economical

### Reuse

#### Simple use of existing refrigerant piping.

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

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



\*1 For reuse of existing refrigerant piping, it is possible to use piping or branched piping capable of handling 3.3 MPa or more (In case of using φ 41.3 pipe, the design pressure must be 3.1 MPa or more). Heat insulation is necessary for liquid piping and gas piping.

\*2 It is not possible to combine old R-22 and new R-410A indoor units in one system due to incompatibility of communication. It is not possible to keep R-407C indoor units.

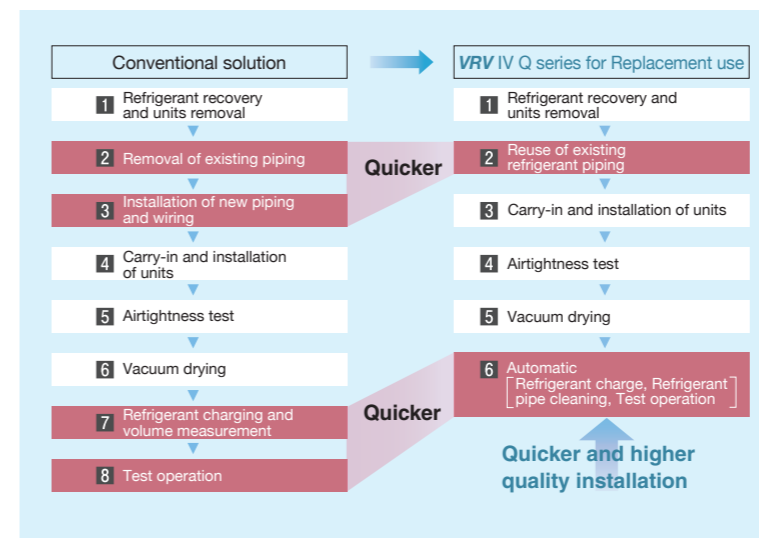
### Automatic

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

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

### Time saving

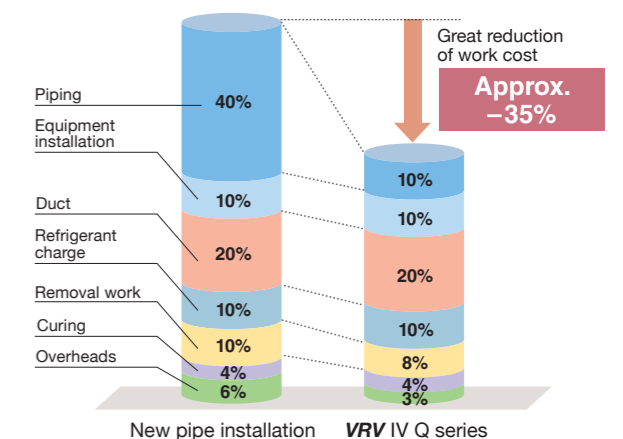
Enables smooth replacement of air conditioning with less effect on operations and users in the building.



### Cost saving

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

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

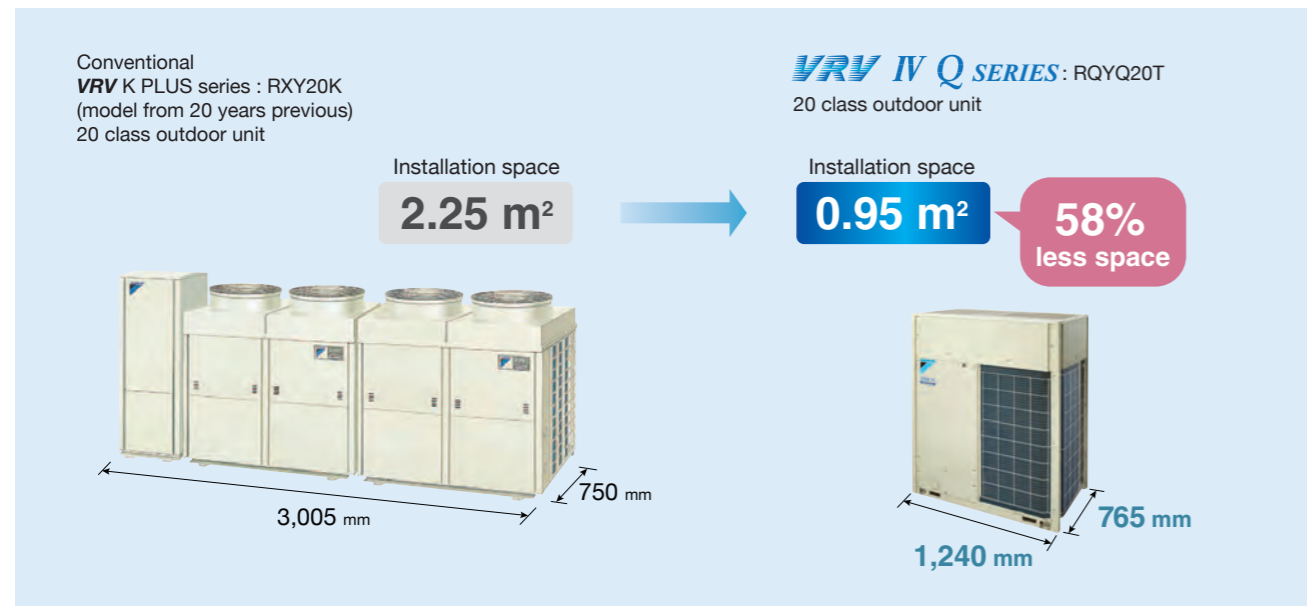




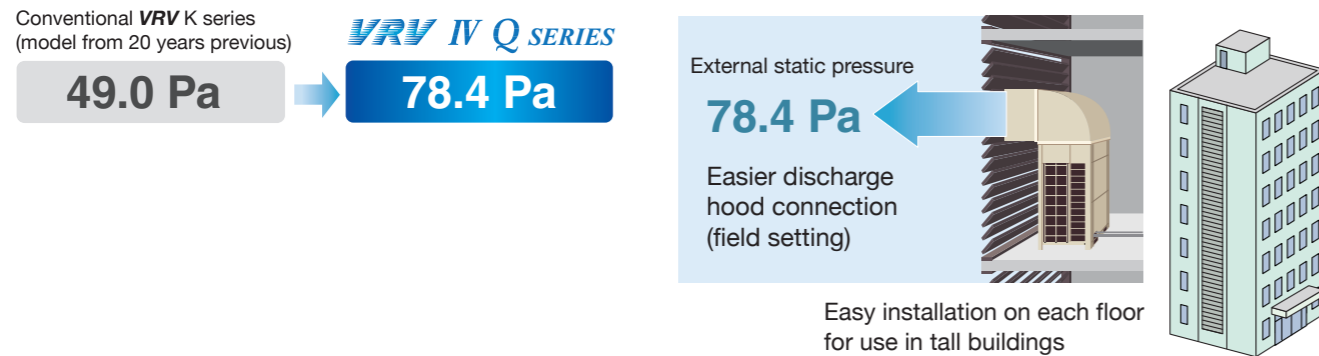
## Design flexibility

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

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



## High external static pressure 78.4 Pa



## Small and light, significantly reducing constraints during carry-in



Can be carried on a cart



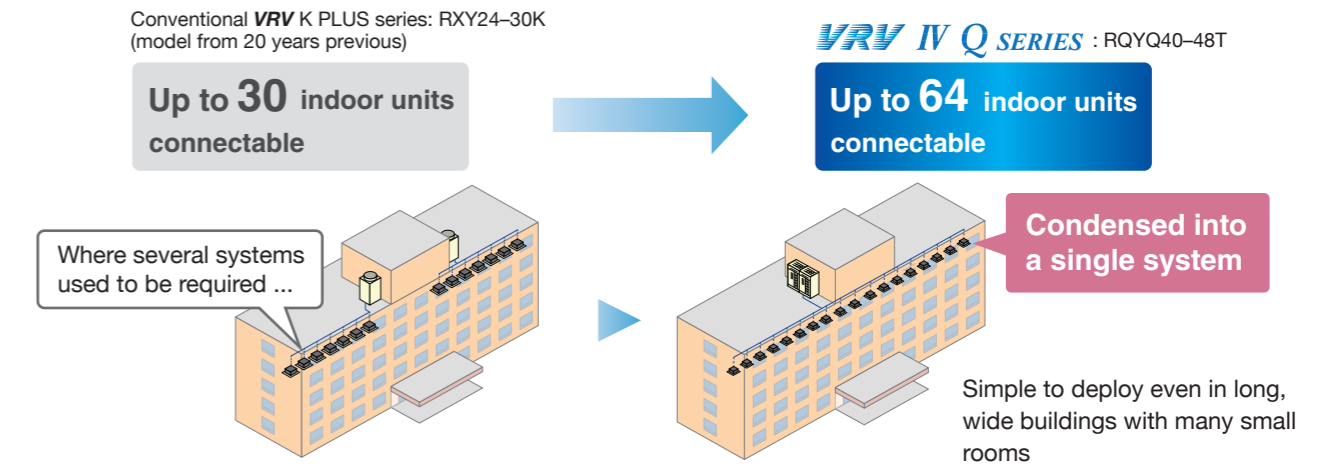
Can be transported easily by elevator

## System flexibility

An increased number of connectable indoor units in a single system

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

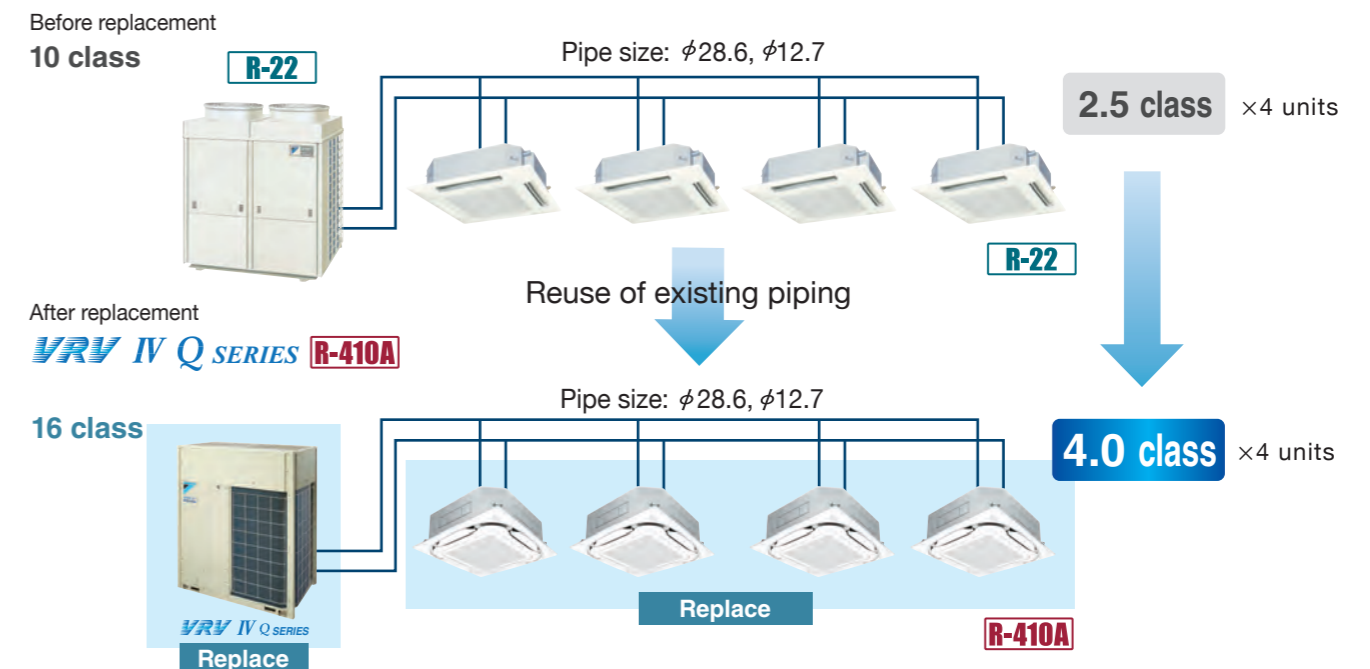
The number of connectable indoor units has been drastically increased from 30 to 64.



## Enables increased capacity

System can be upgraded using existing piping

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

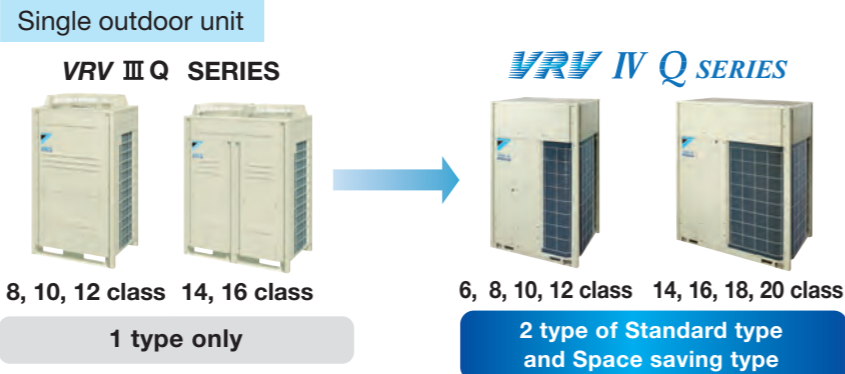


\* For reuse of existing refrigerant piping, it is possible to use piping or branched piping capable of handling 3.3 MPa or more (In case of using  $\phi 41.3$  pipe, the design pressure must be 3.1 MPa or more). Heat insulation is necessary for liquid piping and gas piping.

## Enhanced lineup

### 2 types up to 48 class

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



### Lineup

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

## Compact & light weight design

### New Space Saving type with refined design

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

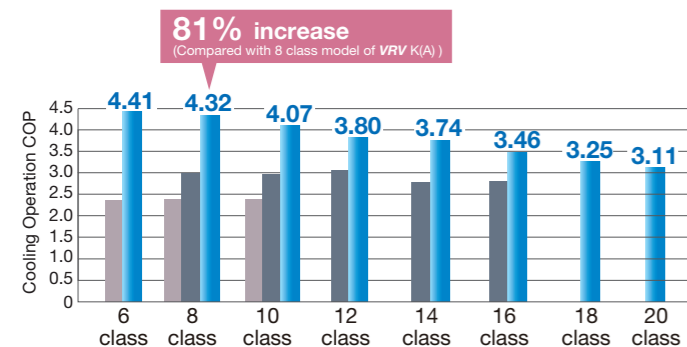


## Energy saving

### Higher Coefficient of Performance (COP)

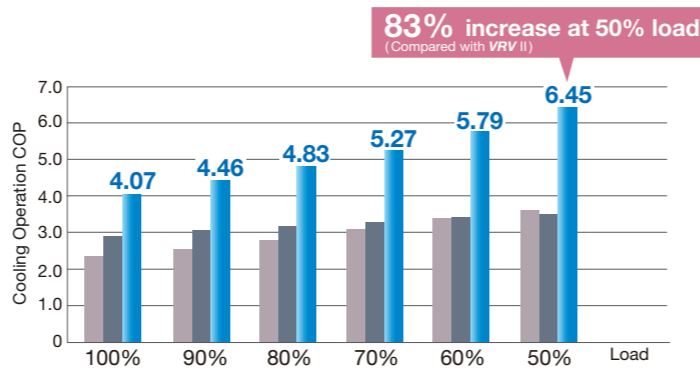
#### COP at 100% operation load

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



#### COP for 10 class

Improved efficiency during long operation under low load



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

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

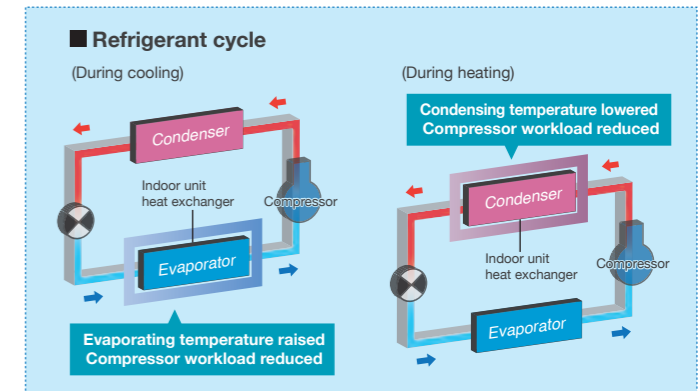
### Customise your VRV system for optimal annual efficiency

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

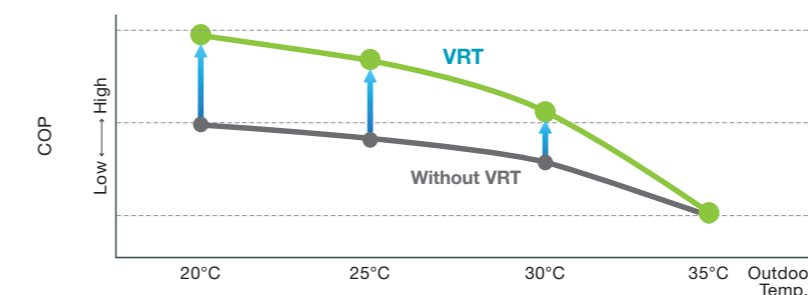
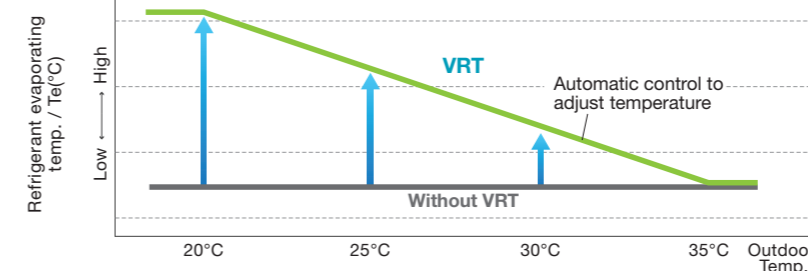
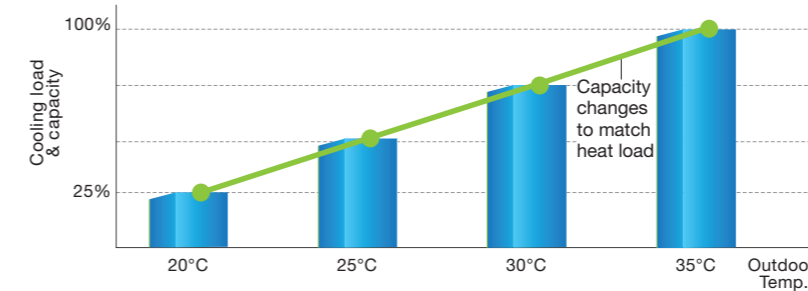


### How is energy reduced?

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



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



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

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

Automatic control adjusts evaporating temperature to heat load change.

Energy efficiency is improved without sacrificing comfort.

## 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.



**Acid**

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

**Impurities**

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

**Iron powder**

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

## Outer Rotor DC Motor (ODM)

Only Daikin adapted ODM with feature of stable rotation and volumetric efficiency

### Advantages of ODM

Thanks to large diameter of the rotor,

- ① Large torque with same electromagnetic force
- ② Stable rotation in all range, and can be operated with small number of rotations



**Conventional Motor (Inner Type)**

**ODM (Outer Type)**

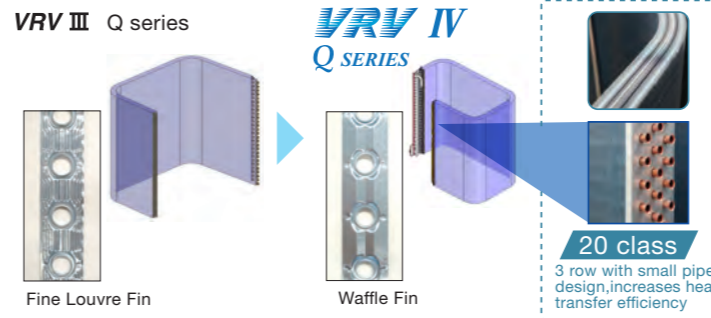


**HIGH TORQUE** with low energy → **MORE efficient**

## Highly integrated heat exchanger

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

VRV III Q series



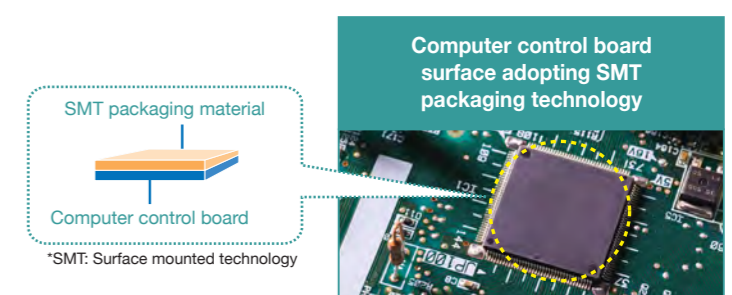
Realise highly integrated heat exchanger performance (increase row, reduce fin pitch) by reducing of airflow resistance which changes cooling tube to  $\varnothing 7$ .

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

## Advanced control main PC board

### SMT\* packaging technology

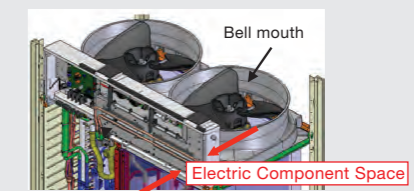
- SMT packaging technology adopted by the whole computer control panel improves the anti-clutter performance.
- Protects your computer boards from the adverse effect of sandy and humid weather.



## Refrigerant cooling technology, ensures stability of PCB temperature

### Improved inner design to increase smooth airflow

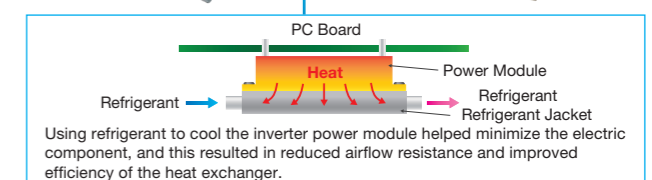
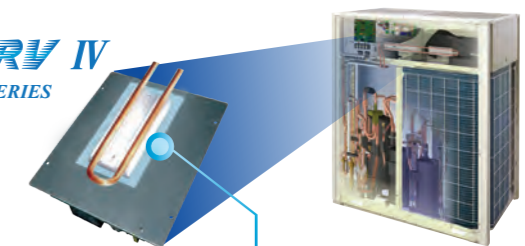
Downsize electric component, re-locate to dead space of bell mouth side to decrease airflow resistance.



VRV III Q series



VRV IV Q SERIES



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

Control board failure ratio at stable operation is reduced.

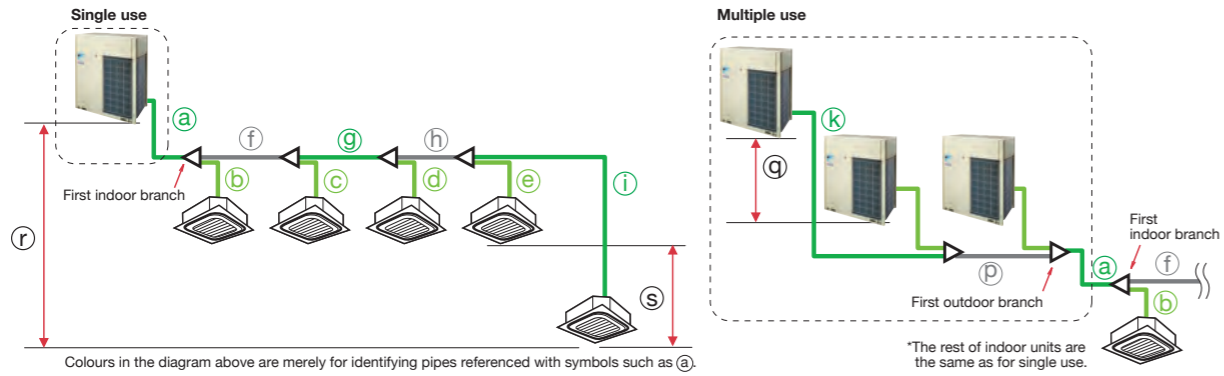
### Improve reliability at high ambient temperature

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

VRV IV Q SERIES Heat Pump

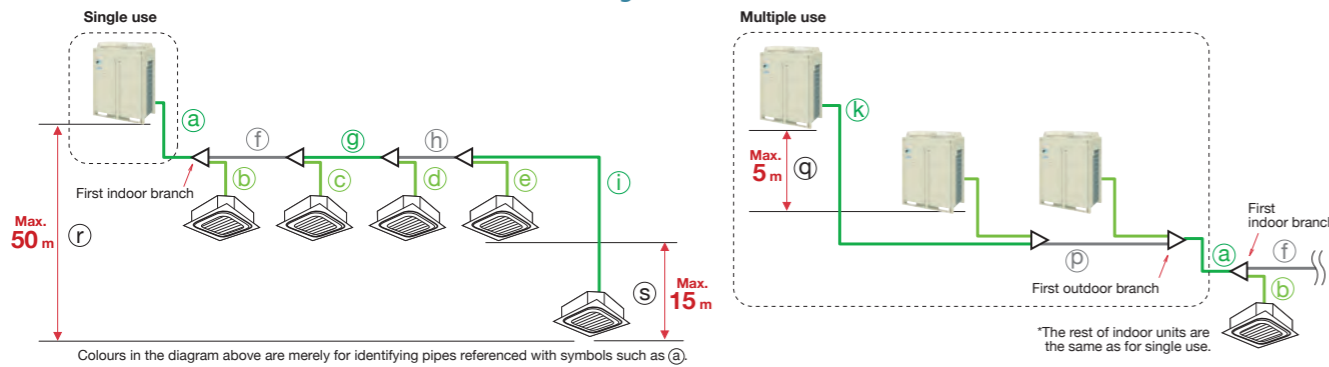
## Piping limits for reuse of existing piping

### VRV IV Q Series Heat Pump



Maximum allowable piping length	Refrigerant piping length		Actual piping length	Example	Equivalent piping length
		Total piping length	150 m	a+f+g+h+i	175 m
	Between the first indoor branch and the farthest indoor unit	40 m	f+g+h+i	—	—
	Between the outdoor branch and the last outdoor unit	10 m	k+p	13 m	—
Maximum allowable level difference	Level Difference		Example		
	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 If the outdoor unit is below, 40 m	r		

## VRV III Q Series Heat Recovery



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

## Reusability of existing piping

### VRV IV Q Series Heat Pump

Type of piping	Capacity	Piping size														
		Liquid							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 class	x	S	●	●	●	●	x	x	x	x	●	●	●	x	x
	8 class	x	S	●	●	●	●	x	x	x	x	S	●	●	x	x
	10 class	x	S	●	●	●	●	x	x	x	x	S	●	●	x	x
	12 class	x	x	S	●	●	●	x	x	x	x	x	S	●	●	x
	14 class	x	x	S	●	●	●	x	x	x	x	x	S	●	●	x
	16 class	x	x	S	●	●	●	x	x	x	x	x	S	●	●	x
	18 class	x	x	x	S	●	●	x	x	x	x	x	S	●	●	x
	20 class	x	x	x	S	●	●	x	x	x	x	x	S	●	●	x
	22 class	x	x	x	S	●	●	x	x	x	x	x	S	●	●	x
	24 class	x	x	x	S	●	●	x	x	x	x	x	S	●	●	x
	26 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x
	28 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x
	30 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x
	32 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x
	34 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x
	36 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x
38 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x	
40 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x	
42 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x	
44 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x	
46 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x	
48 class	x	x	x	x	S	●	x	x	x	x	x	S	●	●	x	
From REFNET to REFNET <sup>1</sup>	< 100	x	S	●	●	●	x	x	x	S	●	●	●	x	x	x
	100 ≤ X < 150	x	S	●	●	●	x	x	x	S	●	●	●	x	x	x
	150 ≤ X < 160	x	S	●	●	●	x	x	x	S	●	●	●	x	x	x
	160 ≤ X < 200	x	S	●	●	●	x	x	x	S	●	●	●	x	x	x
	200 ≤ X < 290	x	S	●	●	●	x	x	x	S	●	●	●	x	x	x
	290 ≤ X < 330	x	x	S	●	●	x	x	x	x	●	●	●	x	x	x
	330 ≤ X < 420	x	x	S	●	●	x	x	x	x	●	●	●	x	x	x
	420 ≤ X < 480	x	x	x	S	●	●	x	x	x	x	●	●	●	x	x
	480 ≤ X < 640	x	x	x	x	S	●	●	x	x	x	x	●	●	●	x
	640 ≤ X < 900	x	x	x	x	S	●	●	x	x	x	x	●	●	●	x
900 ≤ X < 920	x	x	x	x	S	●	●	x	x	x	x	●	●	●	x	
920 ≤ X	x	x	x	x	S	●	●	x	x	x	x	●	●	●	x	
From REFNET to indoor unit <sup>2</sup>	20-40 class	S	●	●	●	x	x	x	x	S	●	●	●	x	x	x
	50 class	S	●	●	●	x	x	x	x	S	●	●	●	x	x	x
	63-80 class	x	S	●	●	x	x	x	x	S	●	●	●	x	x	x
	100-125 class	x	S	●	●	x	x	x	x	S	●	●	●	x	x	x
	140-145 class	x	S	●	●	x	x	x	x	S	●	●	●	x	x	x
	180 class	x	S	●	●	x	x	x	x	S	●	●	●	x	x	x
	200 class	x	S	●	●	x	x	x	x	S	●	●	●	x	x	x
250 class	x	S	●	●	x	x	x	x	S	●	●	●	x	x	x	

● : Piping size of conventional R-22, R-407C model  
○ : Piping size of conventional R-410A model  
S : Standard piping size of VRV IV Q series  
x : Not possible

● : 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.

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

## VRV III Q Series Heat Recovery

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

● : Piping size of conventional R-22, R-407C model  
○ : Piping size of conventional R-410A model  
S : Standard piping size of VRV III Q series  
x : Not possible

● : Possible  
○ : Standard piping size of VRV III Q. However, when equivalent piping length between outdoor unit and indoor unit is 90 m or more, size of main piping must be increased.

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

## System lineup for replacement use

### VRV IV Q Series Outdoor Units Heat Pump

### Outdoor Unit Combinations

#### Standard Type

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

Note: <sup>\*1</sup> For multiple connection of 18 class systems and above, the outdoor unit multi connection piping kit (separately sold) is required.  
<sup>\*2</sup> Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outdoor units.  
<sup>\*3</sup> When outdoor-air processing units and standard indoor units are connected, the total connection capacity index of the outdoor-air processing units must not exceed 30% of the capacity index of the outdoor units. And the connection ratio must not exceed 100%.

#### Space Saving Type

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

Note: <sup>\*1</sup> For multiple connection of 30 class and above the outdoor unit multi connection piping kit (separately sold) is required.  
<sup>\*2</sup> Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outdoor units.  
<sup>\*3</sup> 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%.

#### Standard Type

##### • Single Outdoor Units

6, 8, 10, 12 class



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

14, 16 class



RQYQ14TY1A(E)  
RQYQ16TY1A(E)

##### • Double Outdoor Units

18, 20, 22, 24 class



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

26, 28 class



RQYQ26TNY1A(E)  
RQYQ28TNY1A(E)

30, 32 class



RQYQ30TNY1A(E)  
RQYQ32TNY1A(E)

##### • Triple Outdoor Units

34, 36 class



RQYQ34TNY1A(E)  
RQYQ36TNY1A(E)

38, 40 class



RQYQ38TNY1A(E)  
RQYQ40TNY1A(E)

42, 44 class



RQYQ42TNY1A(E)  
RQYQ44TNY1A(E)

46, 48 class



RQYQ46TNY1A(E)  
RQYQ48TNY1A(E)

#### Space Saving Type

##### • Single Outdoor Units

18, 20 class



RQYQ18TSY1A(E)  
RQYQ20TSY1A(E)

##### • Double Outdoor Units

30, 32 class



RQYQ30TSY1A(E)  
RQYQ32TSY1A(E)

34, 36, 38, 40 class



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

##### • Triple Outdoor Units

42, 44 class



RQYQ42TSY1A(E)  
RQYQ44TSY1A(E)

46, 48 class



RQYQ46TSY1A(E)  
RQYQ48TSY1A(E)

#### Lineup

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



## VRV IV Q Series Outdoor Units Heat Pump RQYQ-T

### Standard Type

MODEL		RQYQ6TY1A(E) RQYQ8TY1A(E) RQYQ10TY1A(E) RQYQ12TY1A(E) RQYQ14TY1A(E) RQYQ16TY1A(E)						RQYQ18TY1A(E) RQYQ20TY1A(E) RQYQ22TY1A(E) RQYQ24TY1A(E)				RQYQ26TY1A(E) RQYQ28TY1A(E)		RQYQ30TY1A(E) RQYQ32TY1A(E)			
Combination units		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Power supply		3-phase 4-wire system, 380-415 V, 50 Hz						3-phase 4-wire system, 380-415 V, 50 Hz				3-phase 4-wire system, 380-415 V, 50 Hz		3-phase 4-wire system, 380-415 V, 50 Hz			
Cooling capacity	Btu/h	54,600	76,400	95,500	114,000	136,000	154,000	172,000	191,000	210,000	229,000	251,000	268,000	290,000	307,000		
	kW	16.0	22.4	28.0	33.5	40.0	45.0	50.4	55.9	61.5	67.0	73.5	78.5	85.0	90.0		
Heating capacity	Btu/h	61,400	85,300	107,000	128,000	154,000	171,000	193,000	213,000	235,000	256,000	281,000	299,000	324,000	345,000		
	kW	18.0	25.0	31.5	37.5	45.0	50.0	56.5	62.5	69.0	75.0	82.5	87.5	95.0	101		
Power consumption	Cooling	3.63	5.21	7.29	9.01	10.9	13.0	12.5	14.2	16.3	18.0	19.9	22.0	23.9	26.3		
	Heating	3.99	5.69	7.29	9.06	11.1	12.8	13.0	14.8	16.4	18.1	20.2	21.9	23.9	26.2		
Capacity control	%	20-100						8-100				6-100		5-100			
Casing colour		Ivory white (5Y7.5/1)						Ivory white (5Y7.5/1)				Ivory white (5Y7.5/1)		Ivory white (5Y7.5/1)			
Compressor	Type	Hermetically Sealed Scroll Type						Hermetically Sealed Scroll Type				Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type			
	Motor output	kW	2.4X1	3.4X1	4.1X1	5.2X1	(2.9X1)+(3.3X1)	(3.6X1)+(3.7X1)	(3.4X1)+(4.1X1)	(3.4X1)+(5.2X1)	(4.1X1)+(5.2X1)	(5.2X1)+(5.2X1)	(5.2X1)+(2.9X1)+(3.3X1)	(5.2X1)+(3.6X1)+(3.7X1)	(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)	(2.9X1)+(3.3X1)+(4.4X1)+(4.0X1)	
Airflow rate	ℓ/s	1,983	2,616	2,749	2,966	3,883		2,616+2,749	2,616+2,966	2,749+2,966	2,966+2,966	2,966+3,883		3,883+3,883			
	m³/min	119	157	165	178	233		157+165	157+178	165+178	178+178	178+233		233+233			
Dimensions (HXWXD)	mm	1,657X930X765						1,657X1,240X765				(1,657X930X765)+(1,657X930X765)		(1,657X1,240X765)+(1,657X1,240X765)			
Machine weight	kg	185			195			285		185+195		195+195		195+285		285+300	
Sound level	dB(A)	55	56	57	59	60	61	60	61	61	62	63	63	64	64		
Sound power	dB(A)	75	76	78	79	80	83	80	81	82	82	84	84	85	85		
Operation range	Cooling	-5 to 49						-5 to 49				-5 to 49		-5 to 49			
	Heating	-20 to 15.5						-20 to 15.5				-20 to 15.5		-20 to 15.5			
Refrigerant	Type	R-410A						R-410A				R-410A		R-410A			
	Charge	kg	5.9	6.0	6.3	10.3	10.4	5.9+6.0	5.9+6.3	6.0+6.3	6.3+6.3	6.3+10.3	6.3+10.4	10.3+10.4	10.3+11.7		
Piping connections	Liquid	φ 9.5 (Brazeing)						φ 12.7 (Brazeing)				φ 15.9 (Brazeing)		φ 19.1 (Brazeing)			
	Gas	φ 19.1 (Brazeing)			φ 22.2 (Brazeing)			φ 28.6 (Brazeing)		φ 28.6 (Brazeing)		φ 28.6 (Brazeing)		φ 34.9 (Brazeing)			

MODEL		RQYQ34TNY1A(E) RQYQ36TNY1A(E) RQYQ38TNY1A(E) RQYQ40TNY1A(E) RQYQ42TNY1A(E) RQYQ44TNY1A(E)						RQYQ46TNY1A(E) RQYQ48TNY1A(E)	
Combination units		RQYQ10TY1A(E) RQYQ12TY1A(E) RQYQ12TY1A(E)	RQYQ12TY1A(E) RQYQ12TY1A(E) RQYQ12TY1A(E)	RQYQ8TY1A(E) RQYQ12TY1A(E) RQYQ18TY1A(E)	RQYQ12TY1A(E) RQYQ12TY1A(E) RQYQ16TY1A(E)	RQYQ12TY1A(E) RQYQ14TY1A(E) RQYQ16TY1A(E)	RQYQ12TY1A(E) RQYQ12TY1A(E) RQYQ16TY1A(E)	RQYQ14TY1A(E) RQYQ14TY1A(E) RQYQ18TY1A(E)	RQYQ14TY1A(E) RQYQ16TY1A(E) RQYQ18TY1A(E)
Power supply		3-phase 4-wire system, 380-415 V, 50 Hz						3-phase 4-wire system, 380-415 V, 50 Hz	
Cooling capacity	Btu/h	324,000	345,000	362,000	382,000	406,000	423,000	444,000	461,000
	kW	95.0	101	106	112	119	124	130	135
Heating capacity	Btu/h	365,000	386,000	406,000	427,000	454,000	471,000	498,000	515,000
	kW	107	113	119	125	133	138	146	151
Power consumption	Cooling	25.3	27.0	29.6	31.0	32.9	35.0	37.2	39.3
	Heating	25.4	27.2	29.9	30.9	33.0	34.7	37.3	39.0
Capacity control	%	5-100			4-100			3-100	
Casing colour		Ivory white (5Y7.5/1)						Ivory white (5Y7.5/1)	
Compressor	Type	Hermetically Sealed Scroll Type						Hermetically Sealed Scroll Type	
	Motor output	kW	(4.1X1)+(5.2X1)+(5.2X1)	(5.2X1)+(5.2X1)+(5.2X1)	(3.4X1)+(5.2X1)+(4.4X1)+(4.0X1)	(5.2X1)+(5.2X1)+(3.6X1)+(3.7X1)	(5.2X1)+(2.9X1)+(3.3X1)+(3.6X1)+(3.7X1)	(5.2X1)+(3.6X1)+(3.7X1)+(3.6X1)+(3.7X1)	(2.9X1)+(3.3X1)+(2.9X1)+(3.3X1)+(4.4X1)+(4.0X1)
Airflow rate	ℓ/s	2,749+2,966+2,966	2,966+2,966+2,966	2,616+2,966+3,883	2,966+2,966+3,883	2,966+3,883+3,883		3,883+3,883+3,883	
	m³/min	165+178+178	178+178+178	157+178+233	178+178+233	178+233+233		233+233+233	
Dimensions (HXWXD)	mm	(1,657X930X765)+(1,657X930X765)		(1,657X930X765)+(1,657X930X765)		(1,657X930X765)+(1,657X1,240X765)		(1,657X1,240X765)+(1,657X1,240X765)	
Machine weight	kg	195+195+195		185+195+300		195+195+285		285+285+300	
Sound level	dB(A)	63	64	64	65	65	66	66	66
Sound power	dB(A)	83	84	86	87	87	87	87	87
Operation range	Cooling	-5 to 49						-5 to 49	
	Heating	-20 to 15.5						-20 to 15.5	
Refrigerant	Type	R-410A						R-410A	
	Charge	kg	6.0+6.3+6.3	6.3+6.3+6.3	5.9+6.3+11.7	6.3+6.3+10.4	6.3+10.3+10.4	6.3+10.4+10.4	10.3+10.3+11.7
Piping connections	Liquid	φ 19.1 (Brazeing)						φ 19.1 (Brazeing)	
	Gas	φ 34.9 (Brazeing)			φ 41.3 (Brazeing)			φ 41.3 (Brazeing)	

**Note:** 1. Models with (E) are the outdoor units with anti-corrosion specifications. Please refer to Engineering Data Book for details.  
 2. Specifications are based on the following conditions:  
 •Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.  
 •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.  
 •Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.  
 During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode.  
 When there is concern for noise the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

VRV IV Q SERIES Heat Pump

## VRV IV Q Series Outdoor Units Heat Pump RQYQ-T

Space Saving Type

MODEL		Combination units	RQYQ18TY1A(E)	RQYQ20TY1A(E)	RQYQ30TSY1A(E)	RQYQ32TSY1A(E)	RQYQ34TSY1A(E)	RQYQ36TSY1A(E)	RQYQ38TSY1A(E)	RQYQ40TSY1A(E)	RQYQ42TSY1A(E)	RQYQ44TSY1A(E)	RQYQ46TSY1A(E)	RQYQ48TSY1A(E)	
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz						3-phase 4-wire system, 380-415 V, 50 Hz						
Cooling capacity		Btu/h	171,000	191,000	285,000	305,000	324,000	341,000	362,000	382,000	399,000	420,000	440,000	457,000	
		kW	50.0	56.0	83.5	89.5	95.0	100	106	112	117	123	129	134	
Heating capacity		Btu/h	191,000	215,000	319,000	345,000	362,000	382,000	406,000	430,000	447,000	471,000	491,000	512,000	
		kW	56.0	63.0	93.5	101	106	112	119	126	131	138	144	150	
Power consumption		Cooling	15.4	18.0	24.4	27.0	28.4	30.8	33.4	36.0	33.4	36.0	37.4	39.8	
		Heating	15.1	17.5	24.2	26.6	27.9	30.2	32.6	35.0	33.2	35.6	37.0	39.3	
Capacity control		%	10-100	8-100	6-100		5-100				4-100				
Casing colour			Ivory white (5Y7.5/1)						Ivory white (5Y7.5/1)						
Compressor		Type	Hermetically Sealed Scroll Type						Hermetically Sealed Scroll Type						
		Motor output	kW	(4.4X1)+(4.0X1)	(4.6X1)+(5.5X1)	(5.2X1)+(4.4X1)+(4.0X1)	(5.2X1)+(4.6X1)+(5.5X1)	(3.6X1)+(3.7X1)+(4.4X1)+(4.0X1)	(4.4X1)+(4.0X1)+(4.6X1)+(5.5X1)	(4.6X1)+(5.5X1)+(4.6X1)+(5.5X1)	(5.2X1)+(5.2X1)+(4.4X1)+(4.0X1)	(5.2X1)+(5.2X1)+(4.6X1)+(5.5X1)	(5.2X1)+(3.6X1)+(3.7X1)+(4.4X1)+(4.0X1)	(5.2X1)+(4.4X1)+(4.0X1)+(4.4X1)+(4.0X1)	
Airflow rate		ℓ/s	3,883	4,466	2,966+3,883	2,966+4,466	3,883+3,883	3,883+4,466	4,466+4,466	2,966+2,966+3,883	2,966+2,966+4,466	2,966+3,883+3,883	2,966+3,883+3,883		
		m <sup>3</sup> /min	233	268	178+233	178+268	233+233	233+268	268+268	178+178+233	178+178+268	178+233+233	178+233+233		
Dimensions (HXWXD)		mm	1,657X1,240X765		(1,657X930X765)+(1,657X1,240X765)		(1,657X1,240X765)+(1,657X1,240X765)		(1,657X1,240X765)+(1,657X1,240X765)		(1,657X930X765)+(1,657X930X765)+(1,657X1,240X765)		(1,657X930X765)+(1,657X1,240X765)+(1,657X1,240X765)		
Machine weight		kg	300	320	195+300	195+320	285+300	300+300	300+320	320+320	195+195+300	195+195+320	195+285+300	195+300+300	
Sound level		dB(A)	62	65	64	66	65	65	67	68	65	67	66	66	
Sound power		dB(A)	84	87	85	88	87	87	89	90	86	88	87	88	
Operation range		Cooling	-5 to 49						-5 to 49						
		Heating	-20 to 15.5						-20 to 15.5						
Refrigerant		Type	R-410A						R-410A						
		Charge	kg	11.7	11.8	6.3+11.7	6.3+11.8	10.4+11.7	11.7+11.7	11.7+11.8	11.8+11.8	6.3+6.3+11.7	6.3+6.3+11.8	6.3+10.4+11.7	6.3+11.7+11.7
Piping connections		Liquid	φ 15.9(Brazing)		φ 19.1(Brazing)		φ 19.1(Brazing)		φ 19.1(Brazing)		φ 19.1(Brazing)		φ 19.1(Brazing)		
		Gas	φ 28.6(Brazing)		φ 34.9(Brazing)		φ 41.3(Brazing)		φ 41.3(Brazing)		φ 41.3(Brazing)		φ 41.3(Brazing)		

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

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

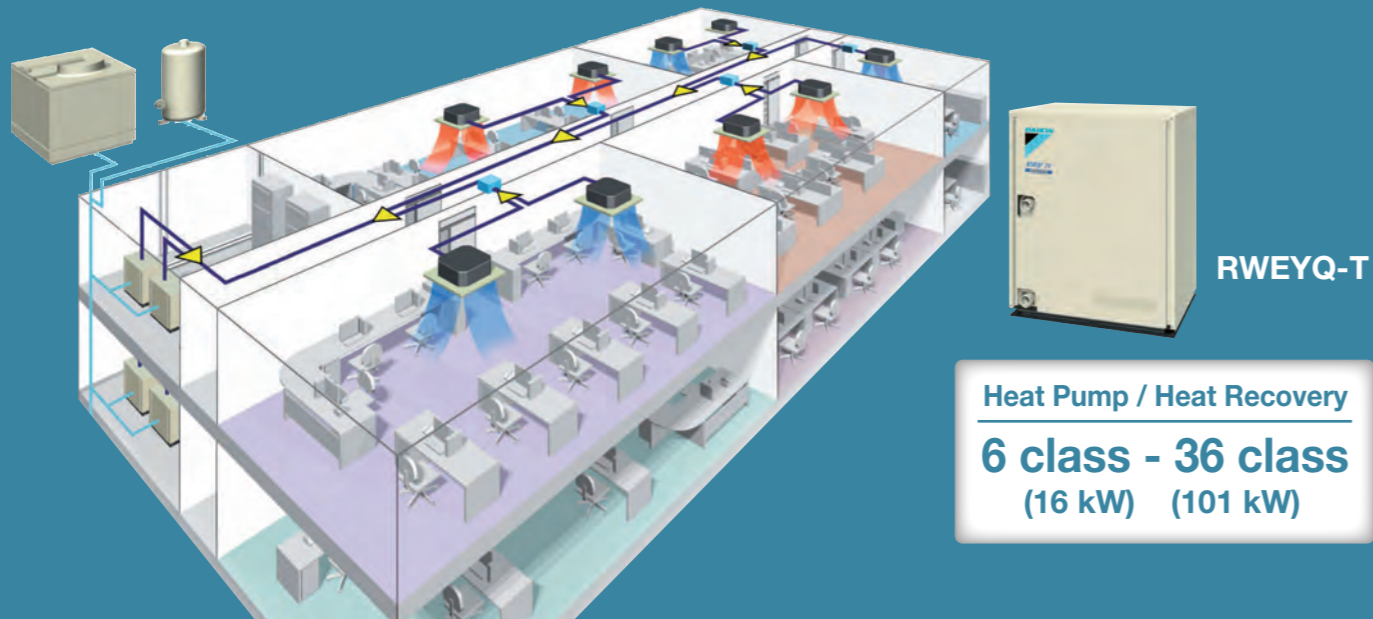
## VRV III Q Series Outdoor Units Heat Recovery RQCEQ-P

MODEL		Combination units	RQCEQ280PY1	RQCEQ360PY1	RQCEQ460PY1	RQCEQ500PY1	RQCEQ540PY1	RQCEQ636PY1	RQCEQ712PY1	RQCEQ744PY1	RQCEQ816PY1	RQCEQ848PY1		
Power supply			3-phase 4-wire system, 380-415 V, 50 Hz						3-phase 4-wire system, 380-415 V, 50 Hz					
Cooling capacity (*1) (*2)		Btu/h(*1)	96,200	124,000	158,000	172,000	186,000	218,000	245,000	256,000	280,000	291,000		
		kW(*1)	28.2	36.3	46.3	50.4	54.4	64.0	71.7	74.9	82.2	85.4		
		(*2)	28.0	36.0	46.0	50.0	54.0	63.6	71.2	74.4	81.6	84.8		
Heating capacity		Btu/h	109,000	136,000	177,000	191,000	205,000	229,000	268,000	276,000	298,000	306,000		
		kW	32.0	40.0	52.0	56.0	60.0	67.2	78.4	80.8	87.2	89.6		
Power consumption		Cooling(*2)	7.04	10.3	12.2	13.9	15.5	21.9	21.2	23.3	27.1	29.2		
		Heating	8.00	10.7	13.4	14.7	16.1	17.7	20.7	21.2	23.1	23.6		
Capacity control		%	13-100	10-100	8-100		7-100			5-100				
Casing colour			Ivory white (5Y7.5/1)						Ivory white (5Y7.5/1)					
Compressor		Type	Hermetically sealed scroll type						Hermetically sealed scroll type					
		Motor output	kW	2.8X2	3.3X2	2.8X2+3.3	2.8+3.3X2	3.3X3	3.6X3	2.8+3.3X2+3.6	2.8+3.3+3.6X2	3.3+3.6X3	3.6X4	
Airflow rate		ℓ/s	1583+1583	1833+1833	1583+1583+1833	1583+1833+1833	1833+1833+1833	1833+1833+1833	1583+1833+1833+1833	1583+1833+1833+1833	1833+1833+1833+1833	1833+1833+1833+1833		
		m <sup>3</sup> /min	95+95	110+110	95+95+110	95+110+110	110+110+110	110+110+110	95+110+110+110	95+110+110+110	110+110+110+110	110+110+110+110		
Dimensions (HXWXD)		mm	(1,680X635X765)+(1,680X635X765)		(1,680X635X765)+(1,680X635X765)		(1,680X635X765)+(1,680X635X765)		(1,680X635X765)+(1,680X635X765)+(1,680X635X765)		(1,680X635X765)+(1,680X635X765)+(1,680X635X765)			
Machine weight		kg	175+175		175+175+175		179+179+179		175+175+175+179		175+179+179+179			
Sound level		dB(A)	57	61	61	62	63	65	64	65	66	66		
Operation range		Cooling	-5 to 43						-5 to 43					
		Heating	-20 to 15.5						-20 to 15.5					
		Cooling & Heating	-6 to 15.5						-6 to 15.5					
Refrigerant		Type	R-410A						R-410A					
		Charge	kg	10.3+10.3	10.6+10.6	10.3+10.3+10.6	10.3+10.6+10.6	10.6+10.6+10.6	11.2+11.2+11.2	10.3+10.6+10.6+11.2	10.3+10.6+11.2+11.2	10.6+11.2+11.2+11.2	11.2+11.2+11.2+11.2	
Piping connections		Liquid	φ 9.5 (Brazing)		φ 12.7 (Brazing)		φ 15.9 (Brazing)		φ 15.9 (Brazing)		φ 19.1 (Brazing)			
		Suction gas	φ 22.2 (Brazing)		φ 25.4 (Brazing)		φ 28.6 (Brazing)		φ 28.6 (Brazing)		φ 34.9 (Brazing)			
		High and low pressure gas	φ 19.1 (Brazing)		φ 19.1 (Brazing)		φ 22.2 (Brazing)		φ 25.4 (Brazing)		φ 28.6 (Brazing)			

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

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



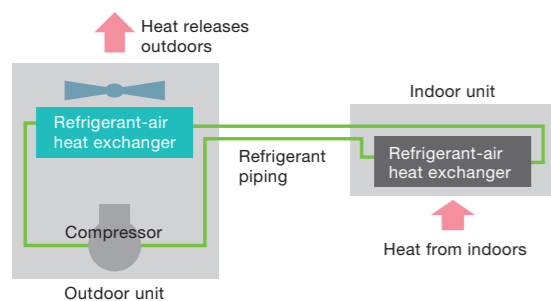


A water cooled intelligent individual air conditioning system suitable for tall multi-storey buildings.

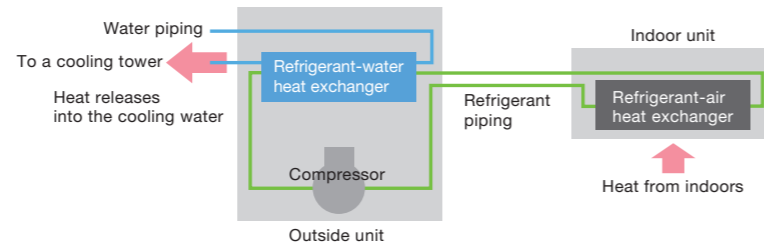
## What is a water cooled system?

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

### Air cooled system



### Water cooled system

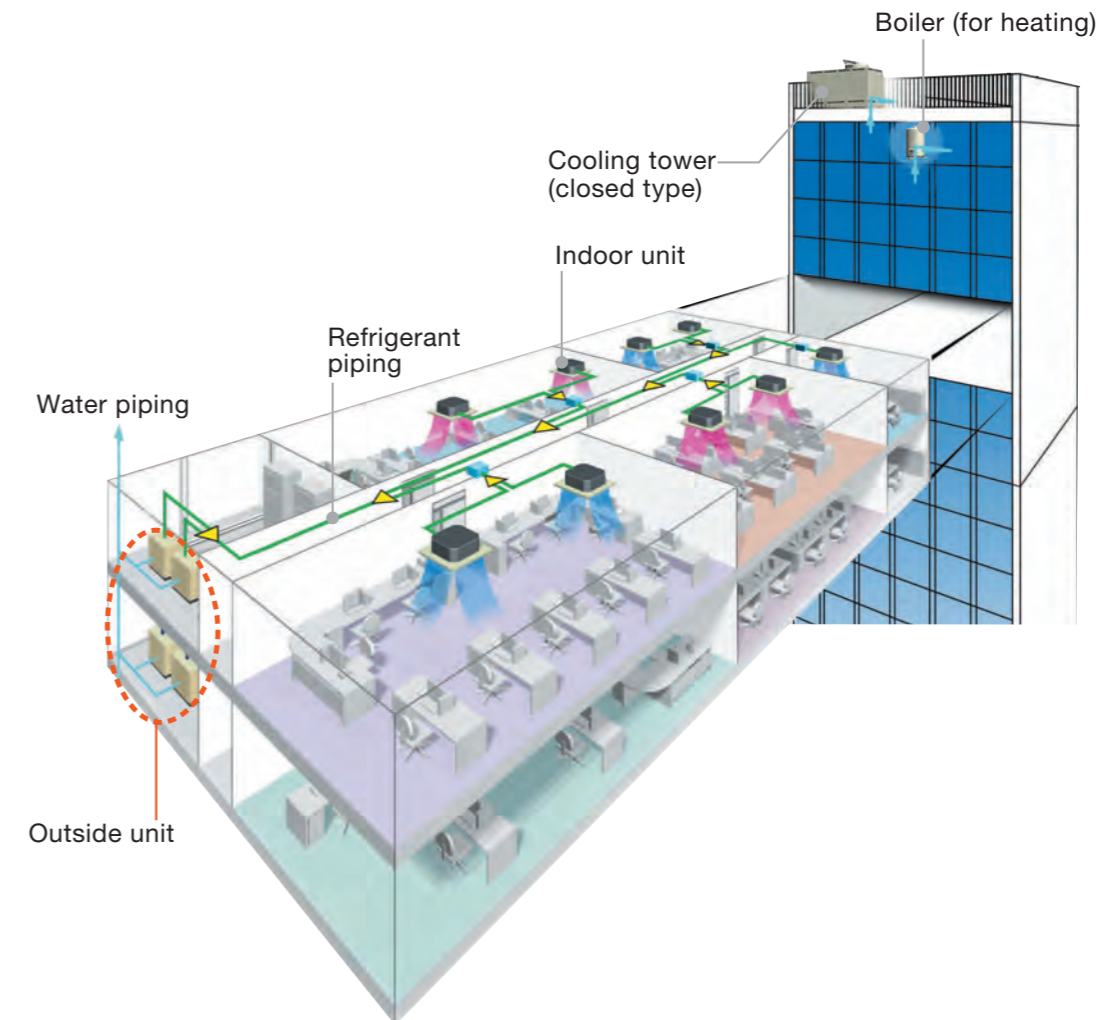


As a water cooled system does not require to exchange heat with outdoor air,

- Outside units can be installed indoors, for example, on basement floors.  
→ **High installation flexibility**

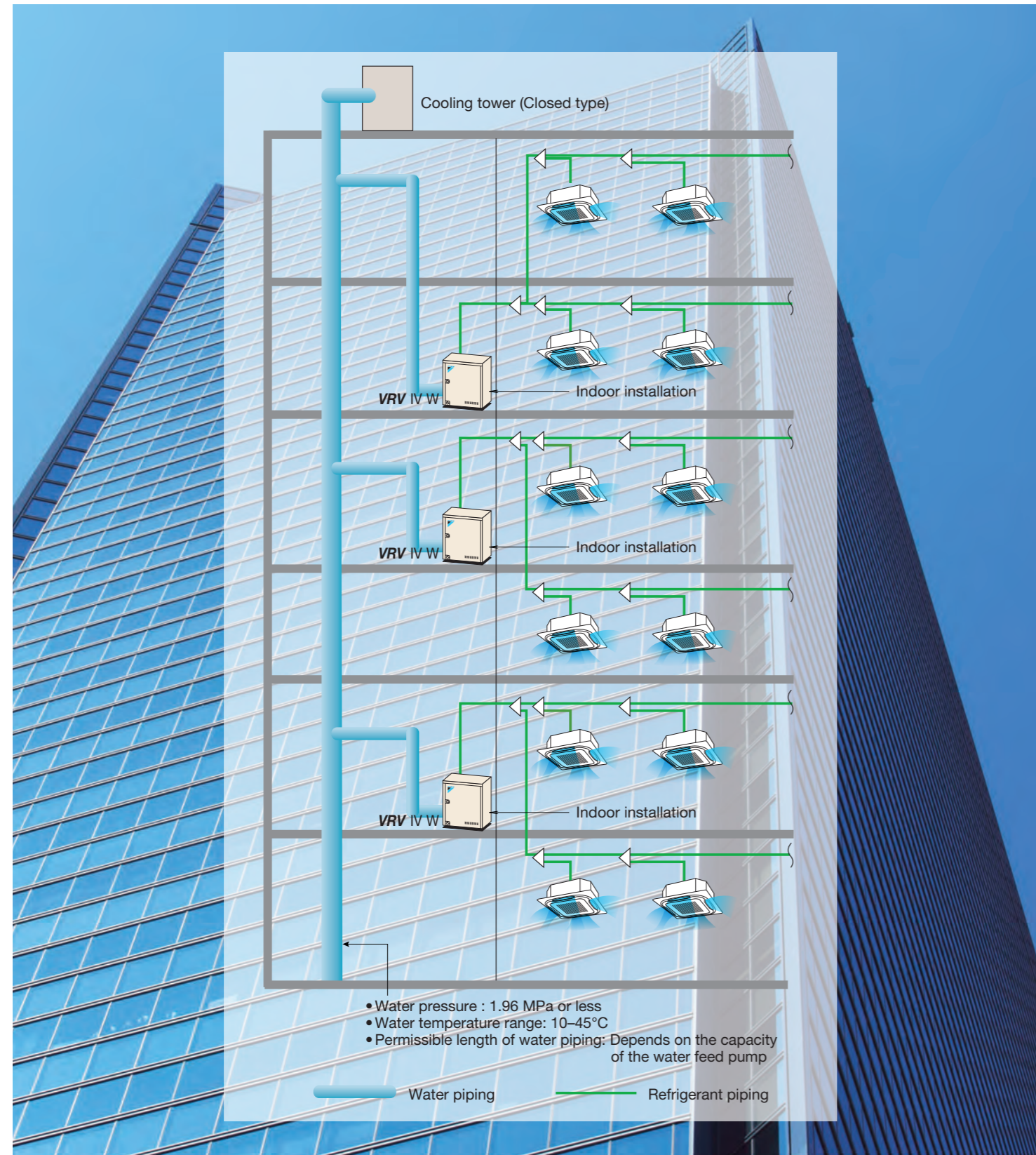
- The air conditioning operation is stable even when the outdoor air temperature is high.  
→ **Improved comfort**

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



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

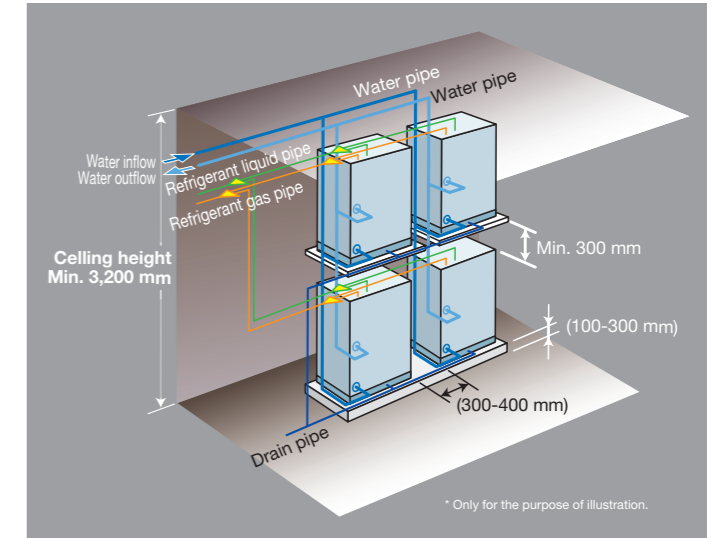
The **VRV IV W** series can meet various air conditioning needs by taking full advantage of the characteristics of a water cooled system.



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

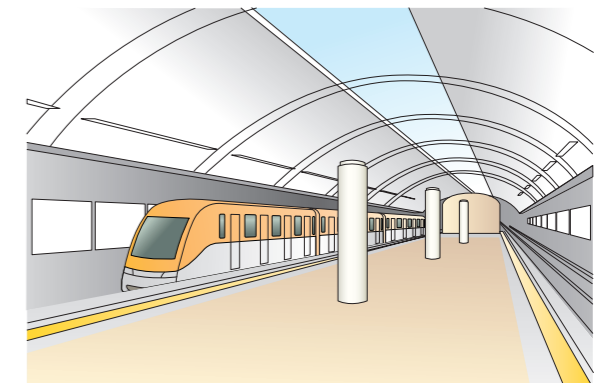
No balcony required

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



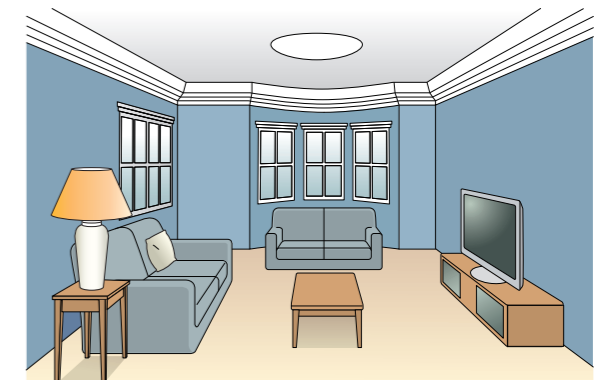
## Easy to install in underground shopping malls and subway systems

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

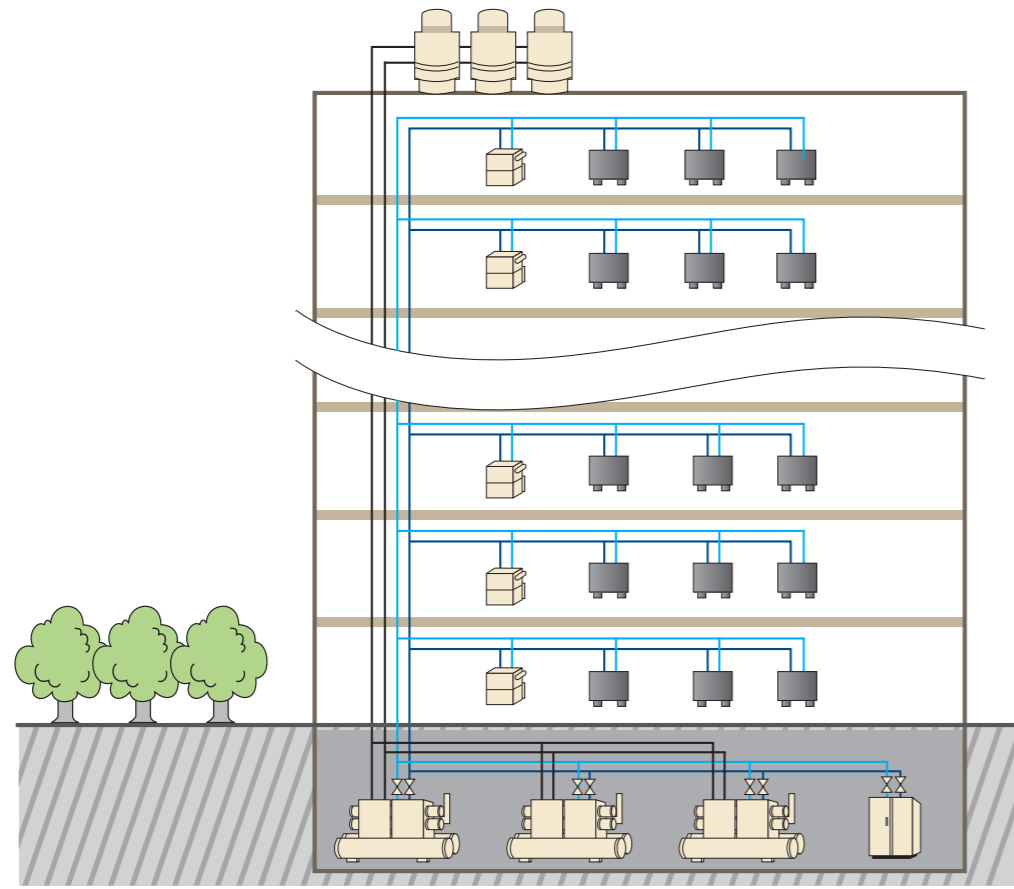


## Suitable for high rise residential development

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



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



\* System diagram

### Why is a Retrofit Solution Necessary?

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



### Issues to consider in a retrofit project

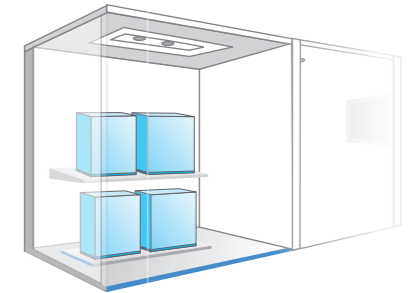
- 1 How to avoid damaging the building structure?
- 2 How to reduce the impact on tenants during renovation?
- 3 How to bring the renovation costs down to lowest level possible?
- 4 How to securely transport the air conditioning outside unit without incident?
- 5 How to simplify maintenance of the air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



## A Flexible System Convenient for Expansion / Retrofit Benefits of Water Cooled VRV IV System

### 1 Outdoor unit located internally

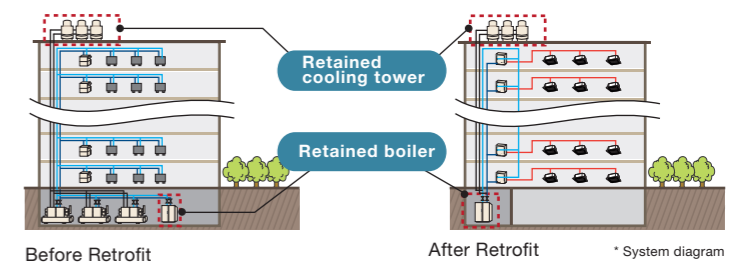
The outside units of the water cooled VRV IV W series negates the need of direct heat exchange with outdoor air. This feature makes it possible to place the outside unit room inside the building, which greatly extends design flexibility and makes it easier to adapt to different types of buildings and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



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

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

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



Before Retrofit

After Retrofit

\* System diagram

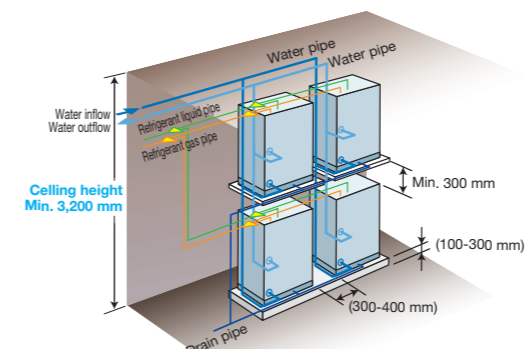
### 3 Minimal plant room space

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



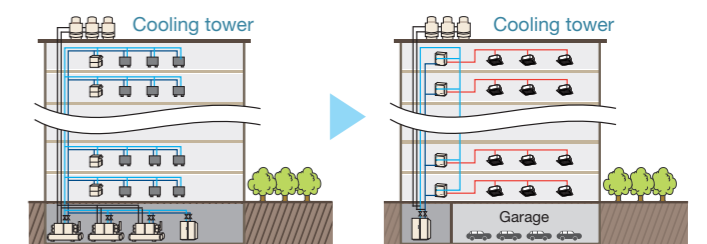
- The modular design featured by the water cooled VRV IV W series enables a free and flexible configuration of the outside units. Outside units may be double stacked to minimize plant space.

#### Stacking up of the outside units



\* Only for the purpose of illustration.

#### Saving more space for other purposes



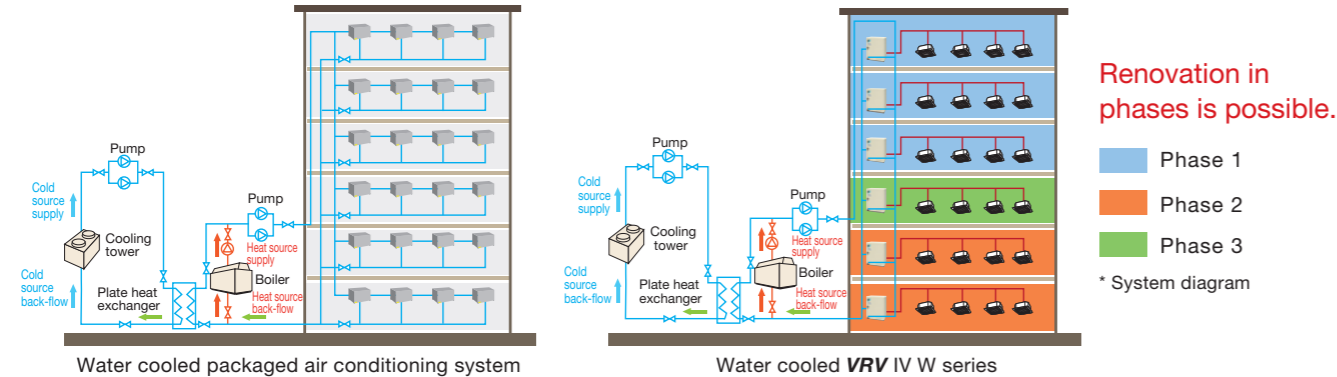
With a conventional central air conditioning system, the outside units take up a disproportionately large amount of space for installation.

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

\* System diagram

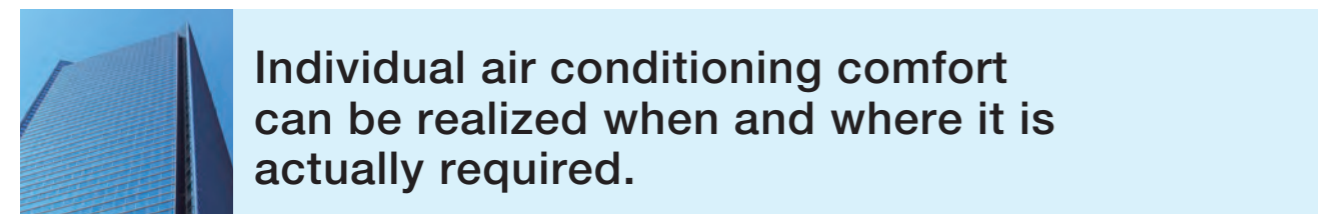
## 4 Floor by floor retrofit without interrupting

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



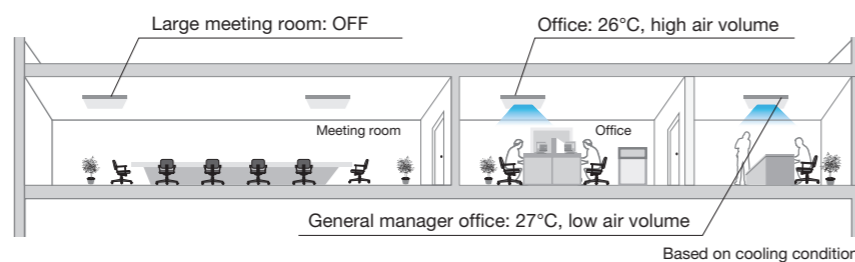
## 5 Compact refrigerant pipes and VRV indoor units help to free up ceiling space

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



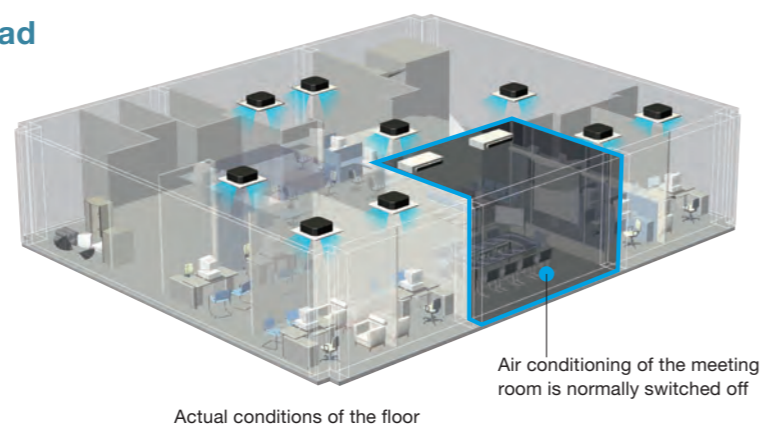
## 1 Independent control provides greater comfort and convenience

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



## 2 Higher efficiency with partial load

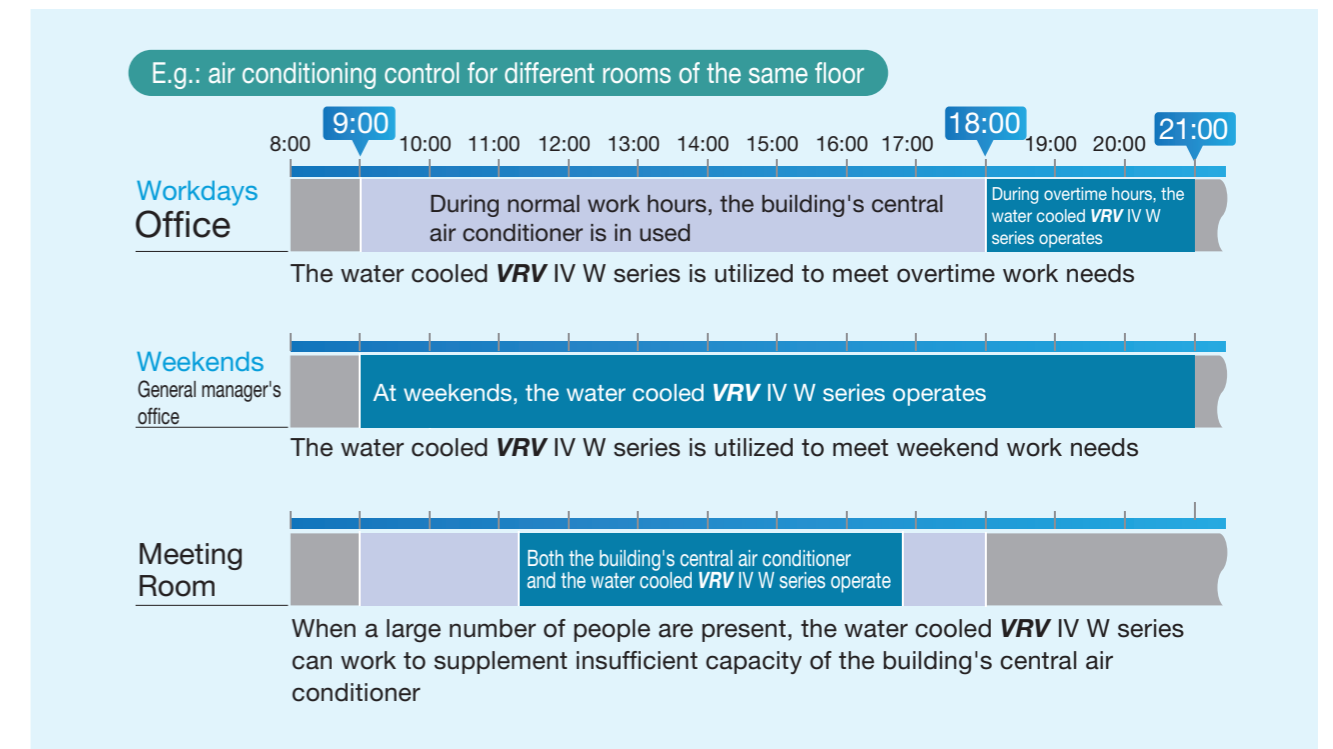
An air-conditioning plant operates at partial load for most of the year given the changing nature of both the external and internal loads. By incorporating advanced DC Inverter, Refrigerant Control technology and VRT, Daikin's VRV IV W series is able to deliver superior partial load performances.



## 3 Suitable as a low load or supplementary system

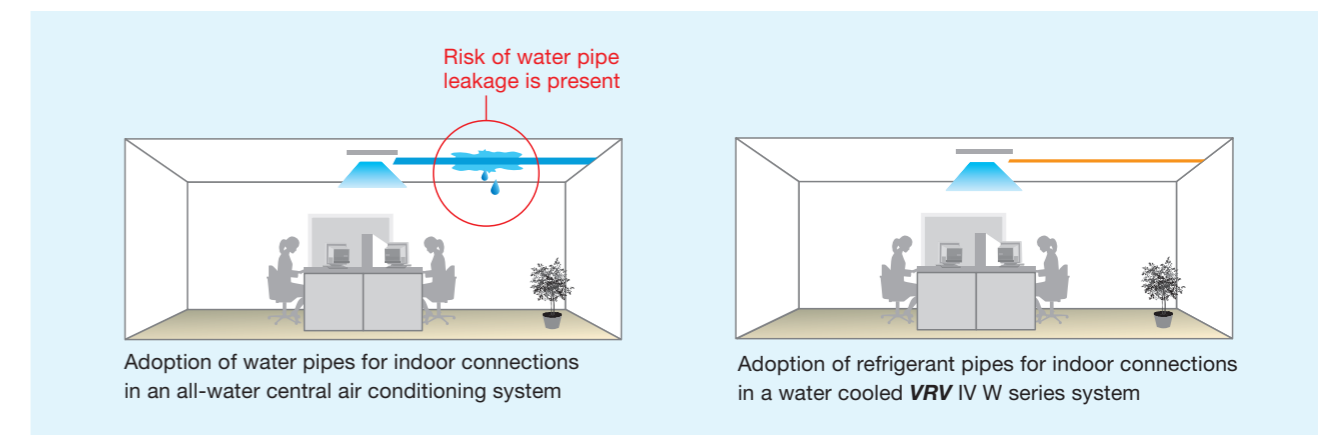
When combined up with a conventional central air conditioning system, the water cooled VRV IV W series can easily handle the air conditioning needs for after-hours work while the building's central air conditioner can be utilized during normal work hours. The water cooled VRV IV W series can be added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

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



## 4 Connection using refrigerant pipes eliminate the risk of water leakage

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



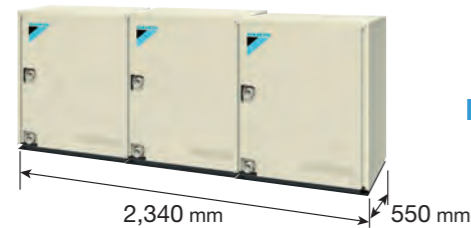
## Compact and lightweight

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

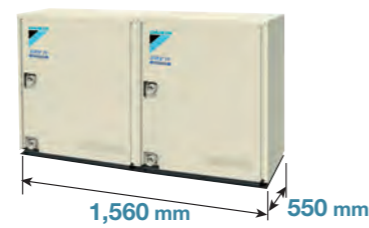
\* The unit is designed for indoor installation only.



**VRV III W series**  
24 class(8 class+8 class+8 class)



**VRV IV W SERIES**  
24 class(12 class+ 12 class)



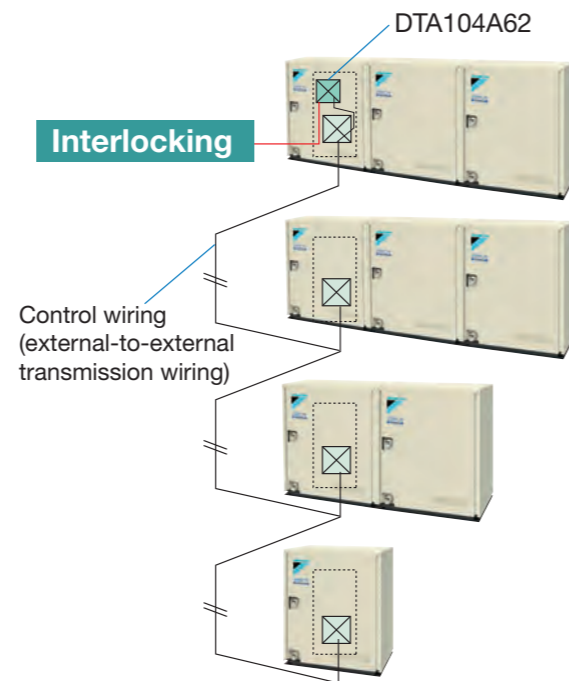
Footprint	1.29 m <sup>2</sup>	→	0.86 m <sup>2</sup>	33% Decrease
Product Weight	447 kg	→	294 kg	34% Decrease

## Enhanced usability

### Centralised interlocking function

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

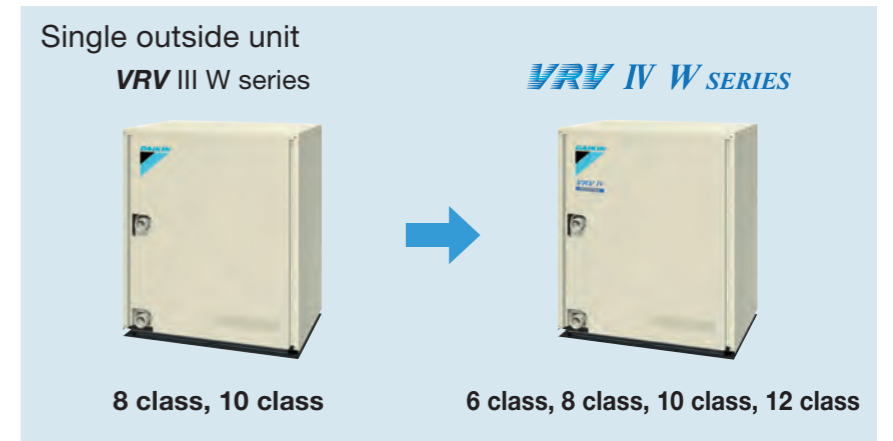
Using one external control adaptor circuit board makes centralised interlocking input to multiple units within the same water system possible.



## Enhanced lineup

### Wider capacity range from 6 to 36 class

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



### VRV IV W SERIES

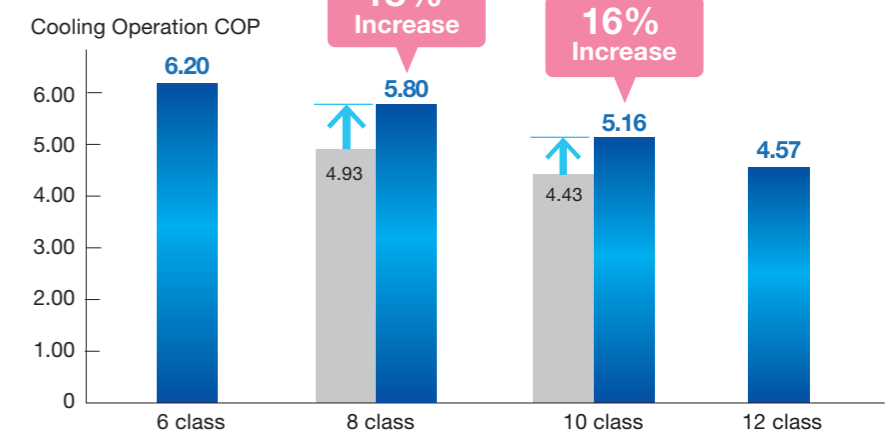
6,8,10,12 class	14,16,18,20,22,24 class	26,28,32,34,36 class
RWEYQ6TYM RWEYQ8TYM	RWEYQ10TYM RWEYQ12TYM	RWEYQ14TYM RWEYQ16TYM RWEYQ18TYM
	RWEYQ20TYM RWEYQ22TYM RWEYQ24TYM	RWEYQ26TYM RWEYQ28TYM RWEYQ30TYM
		RWEYQ32TYM RWEYQ34TYM RWEYQ36TYM

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

## Energy saving

### Higher Coefficient of Performance (COP)

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



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

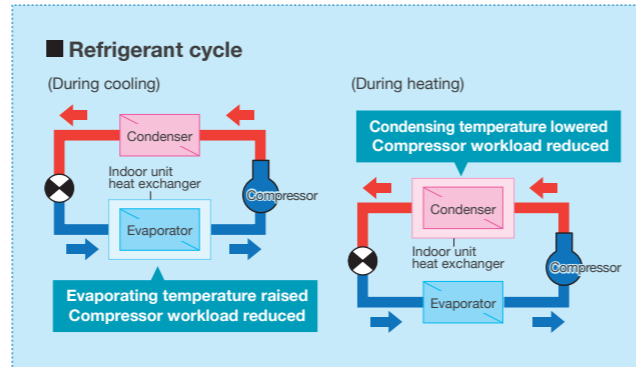
## State-of-the-art energy saving technology

### Customise your VRV system for optimal annual efficiency

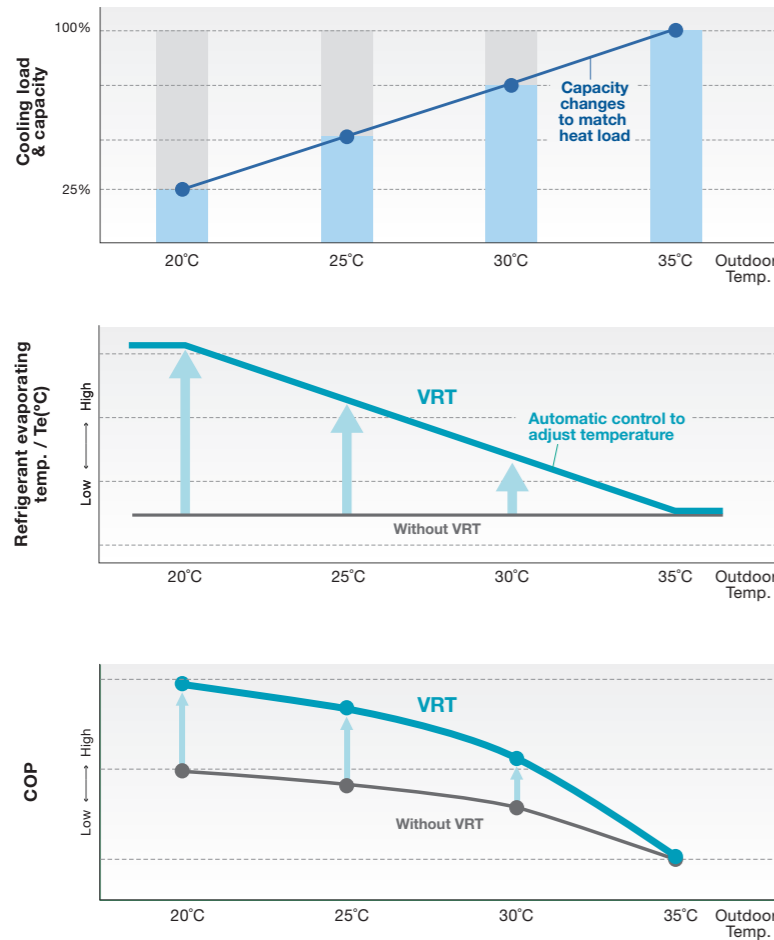
The new **VRV IV W** series now features VRT technology. VRT automatically adjusts refrigerant temperature to individual building and climate requirement, thus further improving annual energy efficiency and maintaining comfort. With this excellent technology, running costs are reduced.

### How is energy reduced?

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



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



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

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

Automatic control adjusts evaporating temperature to heat load change.

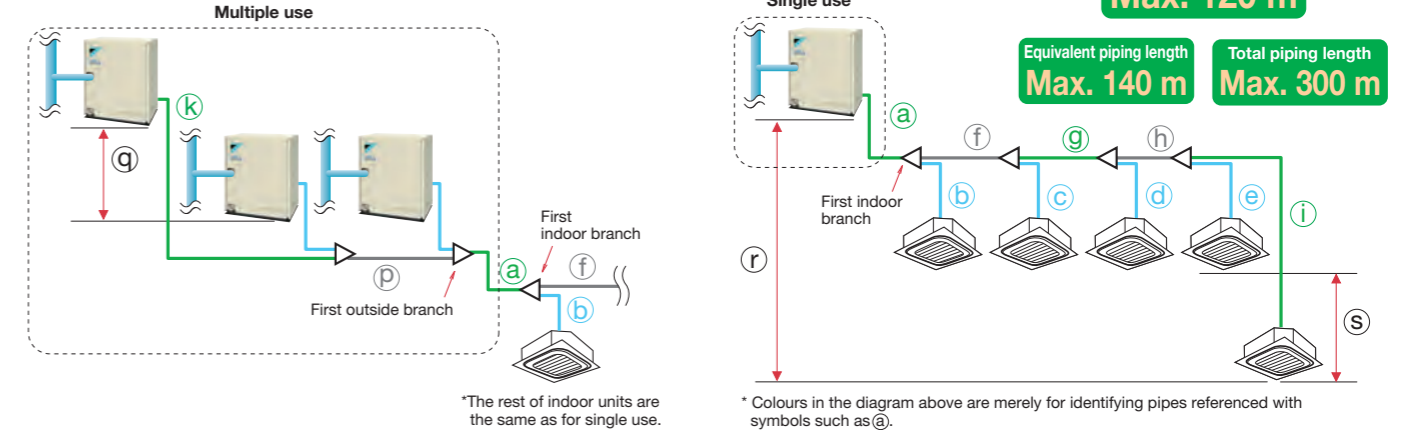
Energy efficiency is improved without sacrificing comfort.

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

## Long refrigerant piping length

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

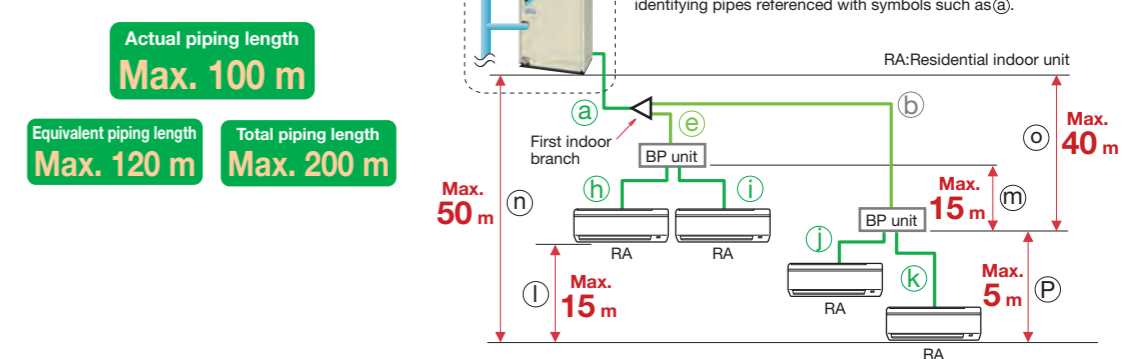
### For connection of only VRV indoor units.



		Actual piping length	Example	Equivalent piping length
<b>Max. allowable piping length</b>	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 <sup>*1</sup>	f+g+h+i	—
	Between the first outside branch and the last outside unit	10 m	k+p	13 m
<b>Max. allowable level difference</b>	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. If the outside unit is below.	r r	— —
		50 m 40 m		

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

### For connection of only residential indoor units.



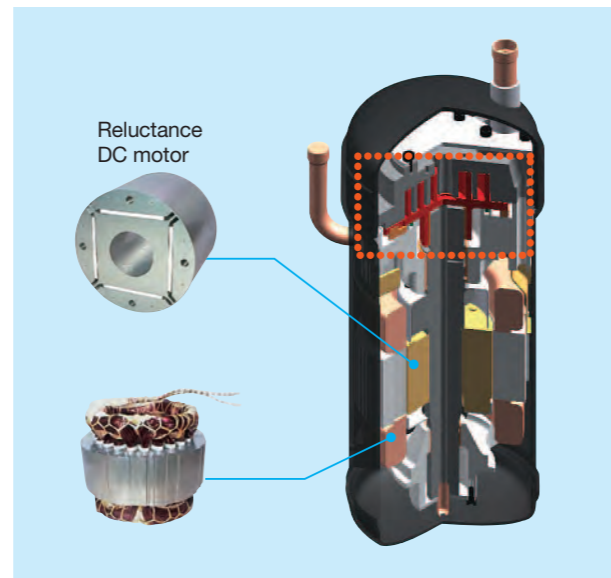
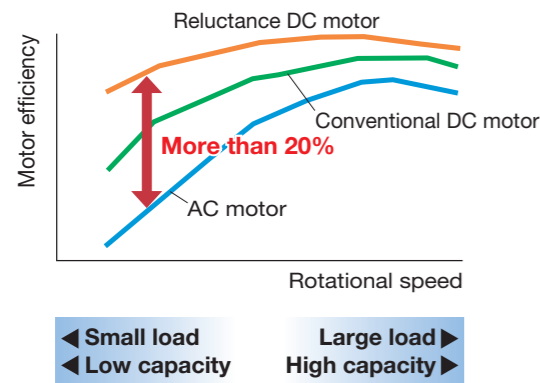
		Actual piping length	Example	Equivalent piping length
<b>Max. allowable piping length</b>	Refrigerant piping length	100 m	a+b+k	120 m
	Total piping length	200 m	a+b+e+h+j+k	—
	Between the first indoor branch and the farthest indoor unit	50 m <sup>*1</sup>	b+k	—
<b>Max. and min. allowable piping length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

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

## High efficiency compressor to achieve a high COP

### Compressor equipped with Reluctance DC motor

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



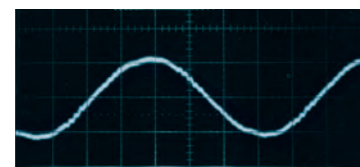
Note: Data are based on studies conducted under controlled conditions at a Daikin laboratory using Daikin products.

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

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

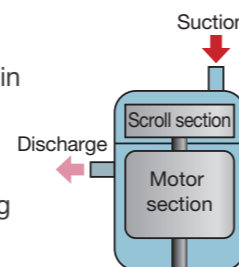
### Smooth sine wave DC inverter

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



### Scroll compressor

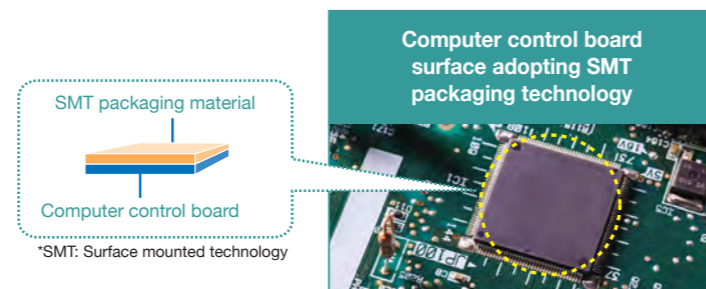
Sucked gas is compressed in the scrolling part before the heated motor, so that the machine compresses the non-expanded gas, resulting in high efficiency compression.



## Advanced control main PC board

### SMT\* packaging technology

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



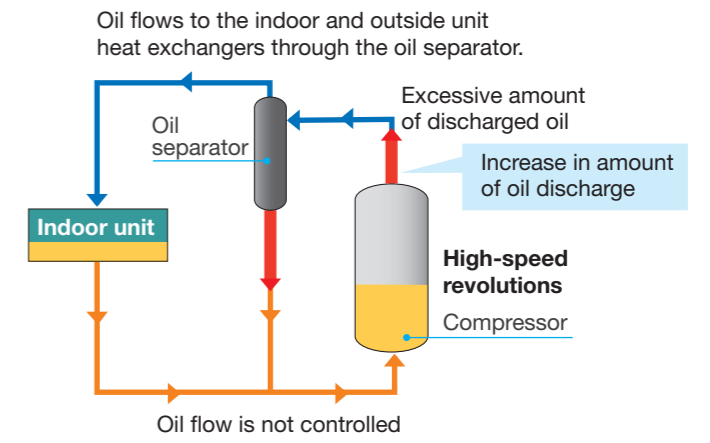
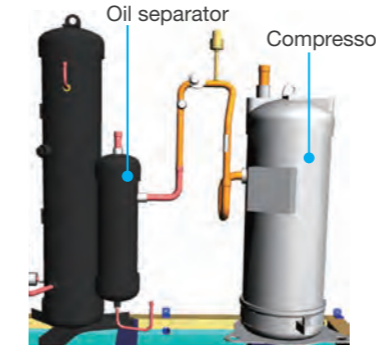
## Minimize performance degradation from refrigeration oil in all stages of operation

### Newly designed oil receiver

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

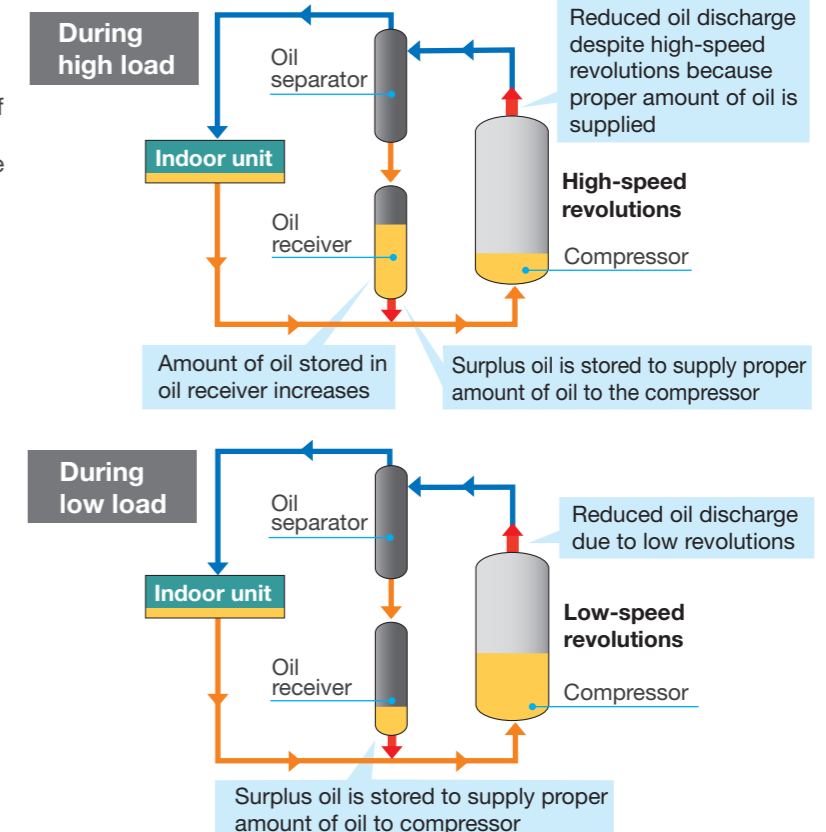
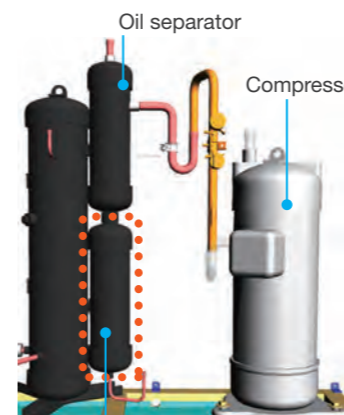
#### Conventional VRV III W series

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



#### VRV IV W SERIES

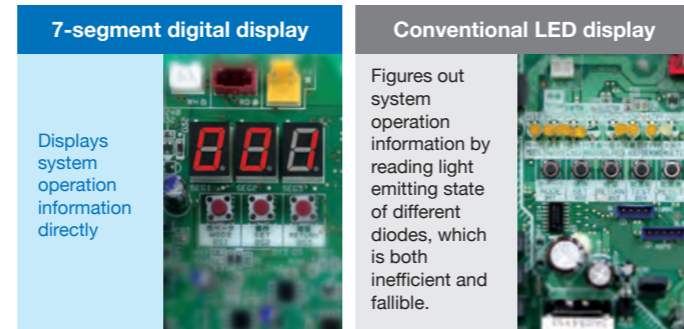
Surplus oil is stored in the oil receiver and automatically controls the amount of refrigeration oil in the refrigerant cycle. This prevents a reduction in performance for heat exchanger.



## Simplified commissioning and after-sales service

### Function of information display by luminous digital tube

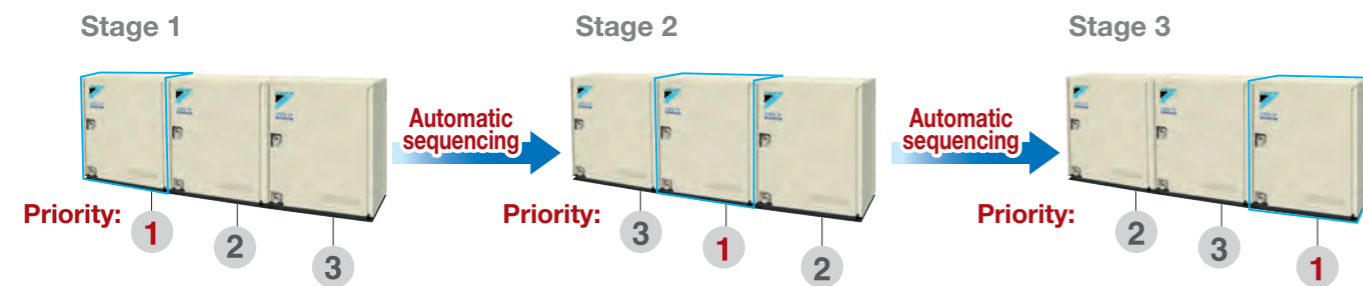
VRV IV W series utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.



## Outside unit sequencing technology

### Automatic sequencing operation

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



## Reliable and convenient air conditioning system

### Auto-restart technology after power interruption

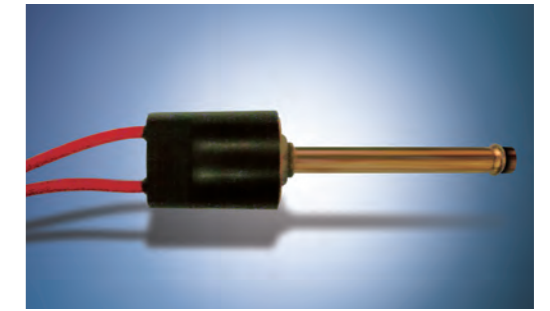
No matter whether the indoor or outside unit accidentally experiences a power interruption during normal operation, the system will keep a record of the operating mode adopted before the power interruption. When the power supply recovers, the air conditioning system will then restore itself back into the recorded operating status, simplifying the operation after an accidental power interruption.

### Refrigerant pressure detection technology makes system operation more stable and efficient

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

### More stable operation

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



- High pressure protection: the system can also keep the compressor from being affected by instantaneous high pressure changes.

### More efficient operation

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

## Outside Unit Combinations

### For connection of only VRV indoor units

class	kW	Capacity index	Model	Combination	Total capacity index of connectable indoor units <sup>*2</sup>	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 <sup>-1</sup>	RWEYQ6T + RWEYQ8T	175 to 455	22
16	44.8	400	RWEYQ16T <sup>-1</sup>	RWEYQ8T × 2	200 to 520	26
18	50.4	450	RWEYQ18T <sup>-1</sup>	RWEYQ8T + RWEYQ10T	225 to 585	29
20	56.0	500	RWEYQ20T <sup>-1</sup>	RWEYQ10T × 2	250 to 650	32
22	61.5	550	RWEYQ22T <sup>-1</sup>	RWEYQ10T + RWEYQ12T	275 to 715	35
24	67.0	600	RWEYQ24T <sup>-1</sup>	RWEYQ12T × 2	300 to 780	39
26	72.8	650	RWEYQ26T <sup>-1</sup>	RWEYQ8T × 2 + RWEYQ10T	325 to 845	42
28	78.4	700	RWEYQ28T <sup>-1</sup>	RWEYQ8T + RWEYQ10T × 2	350 to 910	45
30	84.0	750	RWEYQ30T <sup>-1</sup>	RWEYQ10T × 3	375 to 975	48
32	89.5	800	RWEYQ32T <sup>-1</sup>	RWEYQ10T × 2 + RWEYQ12T	400 to 1,040	52
34	95.0	850	RWEYQ34T <sup>-1</sup>	RWEYQ10T + RWEYQ12T × 2	425 to 1,105	55
36	101	900	RWEYQ36T <sup>-1</sup>	RWEYQ12T × 3	450 to 1,170	58

\*1. An outside unit multi connection piping kit (option) is necessary for multiple connections of 14 class systems and above.

\*2. Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outside units.

### For connection of only residential indoor units

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

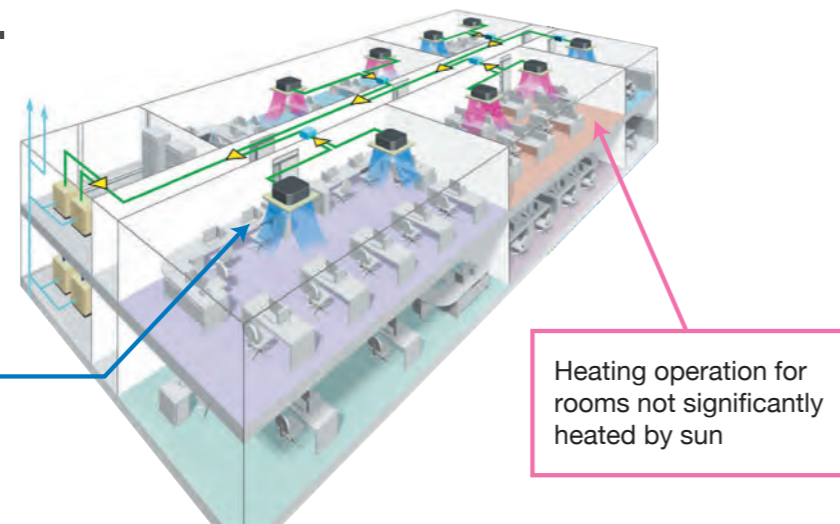
\*1. Only single outside unit (RWEYQ6-12T) heat pump type can be connected.

\*2. Total capacity index of connectable indoor units must be 80%–130% of the capacity index of the outside unit.

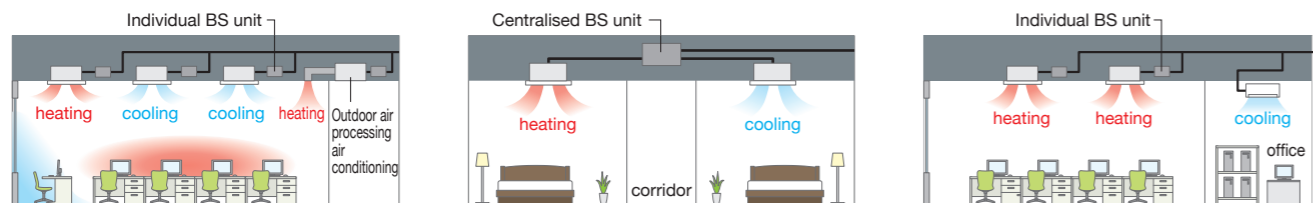


## Easily responds to simultaneous heating and cooling needs.

Offers simultaneous cooling and heating operation on the same floor!



## Increasing demand for simultaneous cooling and heating needs



### Winter season (Office Building)

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

### Winter season (Hotel)

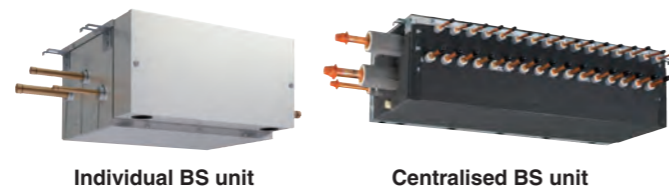
- Able to cater to individual heating and cooling requirement

### Individual office

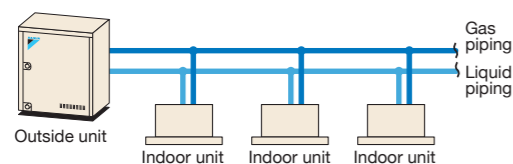
- Provides heating and annual cooling depending on space area

## BS unit (Individual type/Centralised type)

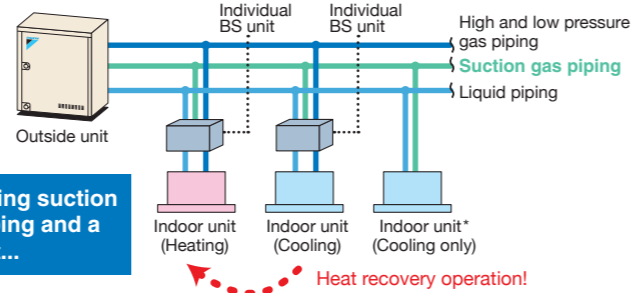
By adding suction gas piping and a BS unit (sold separately), simultaneous cooling and heating operation can be provided by a single system.



### Heat pump



### Heat recovery



By adding suction gas piping and a BS unit...

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

## 2-stage heat recovery operation improves energy efficiency

Daikin offers 2-stage heat recovery operation.

The first stage of heat recovery operation is within the refrigerant system.

By controlling the BS unit that switches cooling and heating, simultaneous cooling and heating operation is made possible, with heat recovery performed between indoor units.

The second stage of heat recovery operation is within the water loop, where heat recovery is performed between the VRV IV W systems.

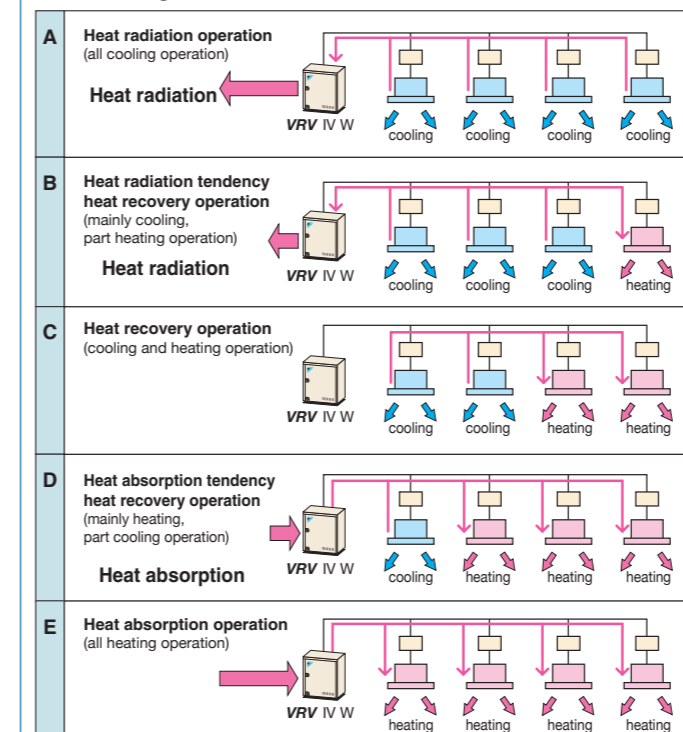
This 2-stage heat recovery operation substantially improves energy efficiency and makes the system the ideal solution to the requirements of modern office buildings, where some areas may require cooling even in winter, depending on the amount of sunshine received and the number of people in the room.

### Stage 1

#### Simultaneous heating and cooling operation within the refrigerant system.

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

#### The first stage: Between indoor units

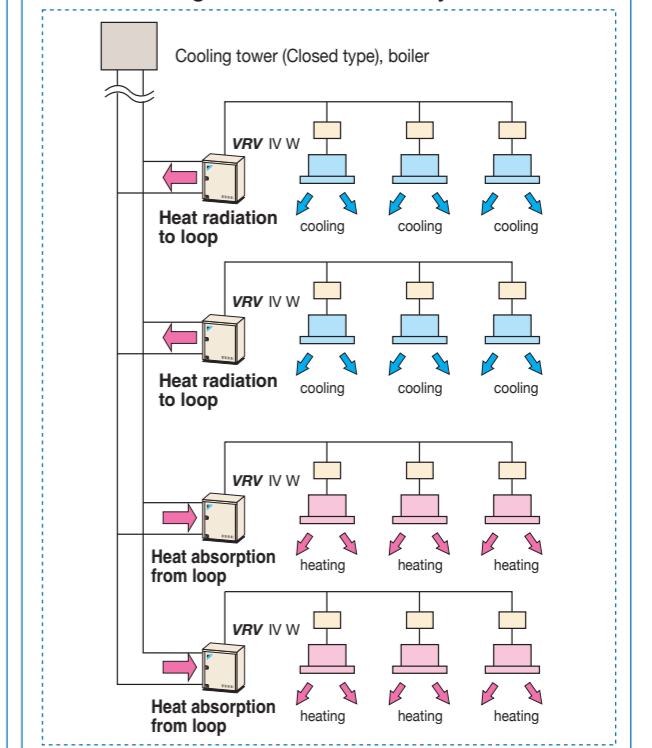


### Stage 2

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

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

#### The second stage: Between VRV IV W systems



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

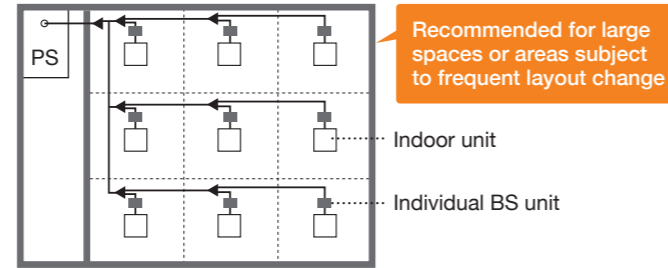
## Individual and centralised BS unit allow greater design flexibility

### Individual BS unit



BSQ100AV1  
BSQ160AV1  
BSQ250AV1

- Compact and flexible installation
- Flexible design
- Low noise



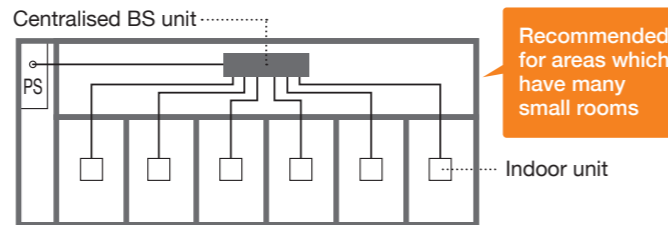
### Centralised BS unit



BS4Q14AV1  
BS6Q14AV1  
BS8Q14AV1  
BS10Q14AV1  
BS12Q14AV1  
BS16Q14AV1

#### Enhanced Line up

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

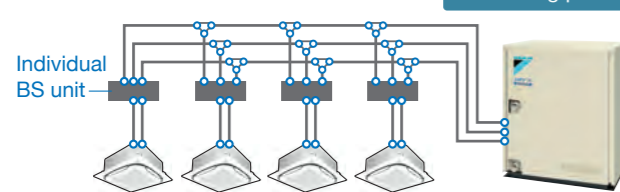


- Compact and lightweight design  
Compared to conventional BS unit (6 branch)

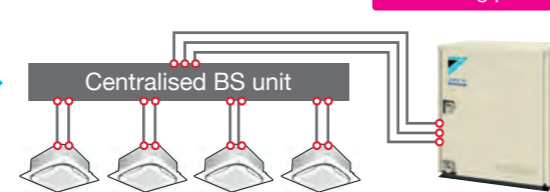
BS unit size **reduced by 65%**  
BS unit weight **reduced by 73%**

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

### Individual BS unit



### Centralised BS unit



\*Centralised BS unit requires drain pipe

Greater design flexibility achieved by increasing the connection capacity range

### Centralised BS unit

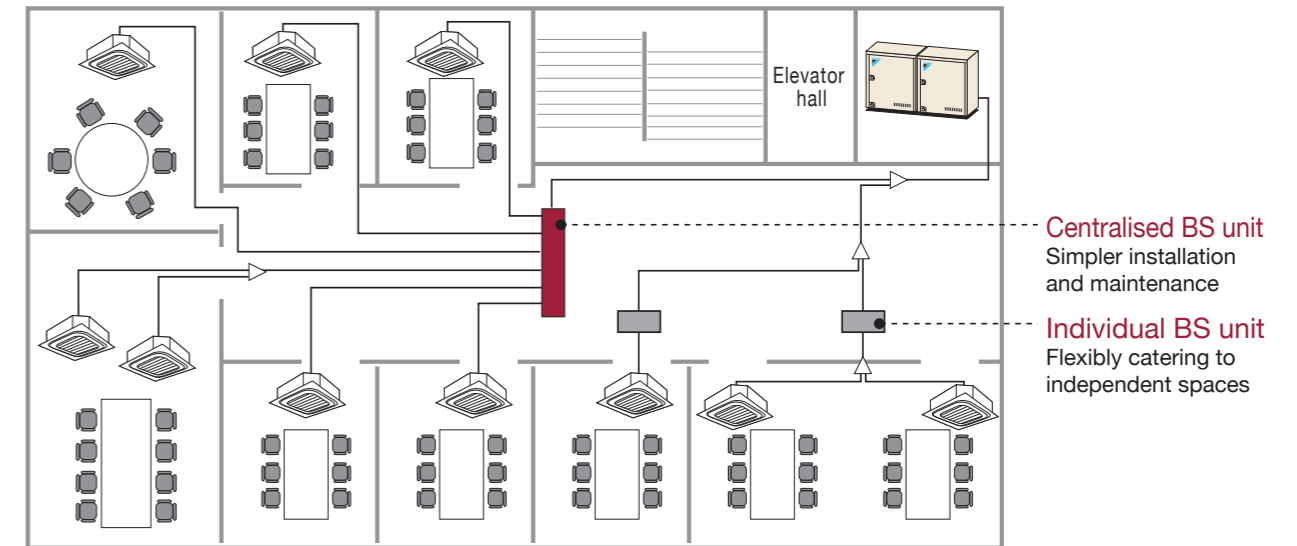
Increased from **2.2–16.0 kW**  
(Up to 11.2 kW in the conventional system)

### Centralised BS unit

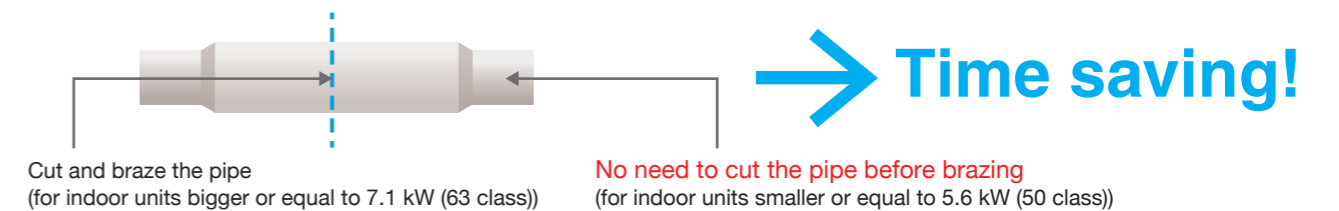
By merging two branches  
Adaptable up to **28.0 kW**

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

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



Faster installation of centralised BS unit thanks to open connection



Lower transient sound

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

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

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

## Enhanced range of choices

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

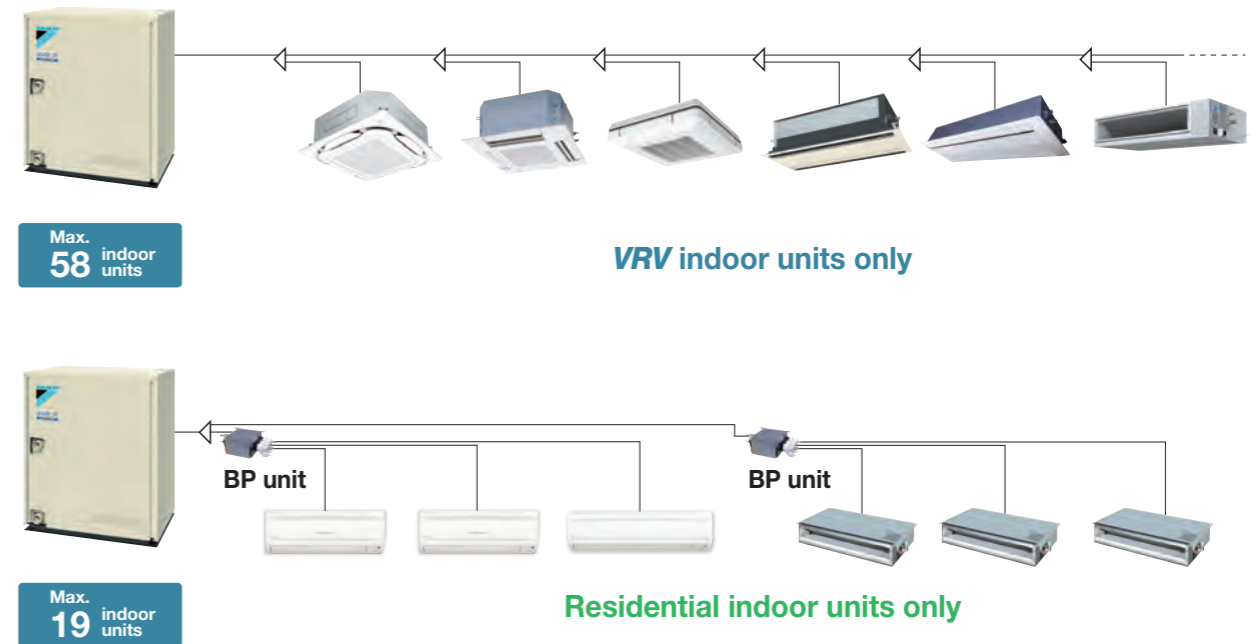
● New lineup

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

## Residential indoor units with connection to BP units

Type	Model Name	Rated Capacity (kW)	20	25	35	50	60	71	
			Capacity Index	2.0	2.5	3.5	5.0	6.0	7.1
			Capacity Index	20	25	35	50	60	71
Ceiling Mounted Cassette (Compact Multi Flow)	FFQ-BV1B			●	●	●	●		
Slim Ceiling Mounted Duct	FDXS-CVMA			●	●	●	●		
Wall Mounted	CTXG-PVMAW			●	●	●			
	CTXG-PVMAS			●	●	●			
	FTXS-KVMA		●	●	●				
	FTXS-KAVMA					●	●	●	

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







\*Refer to page 94 for the maximum number of connectable indoor units.

## VRV IV W Series Outside Units

## RWEYQ-T

### Heat Pump / Heat Recovery

													
MODEL			RWEYQ6TYM	RWEYQ8TYM	RWEYQ10TYM	RWEYQ12TYM	RWEYQ14TYM	RWEYQ16TYM	RWEYQ18TYM	RWEYQ20TYM	RWEYQ22TYM	RWEYQ24TYM	
Combination units			-	-	-	-	-	-	-	-	-	-	
Power supply			3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz				3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz						
Cooling capacity	Btu/h		54,600	76,400	95,500	114,000	131,000	153,000	172,000	191,000	210,000	229,000	
	kW		16.0	22.4	28.0	33.5	38.4	44.8	50.4	56.0	61.5	67.0	
Heating capacity	Btu/h		61,400	85,300	107,000	128,000	147,000	171,000	193,000	215,000	235,000	256,000	
	kW		18.0	25.0	31.5	37.5	43.0	50.0	56.5	63.0	69.0	75.0	
Power consumption	Cooling	kW	2.58	3.86	5.43	7.33	6.44	7.72	9.29	10.9	12.8	14.7	
	Heating	kW	2.69	3.98	5.60	7.87	6.67	7.96	9.58	11.2	13.5	15.7	
Casing colour			Ivory white (5Y7.5/1)				Ivory white (5Y7.5/1)						
Dimensions (HxWxD)			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)						
	Suction gas *1	mm	φ 19.1 (Brazing)				φ 28.6 (Brazing)						
	High and low pressure gas	mm	φ 19.1*2, φ 22.2*3 (Brazing)				φ 22.2*2, φ 28.6*3 (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			RWEYQ26TYM	RWEYQ28TYM	RWEYQ30TYM	RWEYQ32TYM	RWEYQ34TYM	RWEYQ36TYM
Combination units			RWEYQ8TYM	RWEYQ8TYM	RWEYQ10TYM	RWEYQ10TYM	RWEYQ10TYM	RWEYQ12TYM
Power supply			3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz			3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz		
Cooling capacity	Btu/h		248,000	268,000	287,000	305,000	324,000	345,000
	kW		72.8	78.4	84.0	89.5	95.0	101
Heating capacity	Btu/h		278,000	300,000	322,000	345,000	365,000	386,000
	kW		81.5	88.0	94.5	101	107	113
Power consumption	Cooling	kW	13.2	14.7	16.3	18.2	20.1	22.0
	Heating	kW	13.6	15.2	16.8	19.1	21.3	23.6
Casing colour			Ivory white (5Y7.5/1)			Ivory white (5Y7.5/1)		
Dimensions (HxWxD)			(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	mm	φ 34.9 (Brazing)			φ 34.9 (Brazing)		
	High and low pressure gas	mm	φ 28.6*2, φ 34.9*3 (Brazing)			φ 28.6*2, φ 34.9*3 (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	
Refrigerant	Type		R-410A			R-410A		
	Charge	kg	3.5 + 3.5 + 4.2			3.5 + 4.2 + 4.2		

Note :

- Specifications are based on the following conditions ;
  - Cooling : Indoor temp. : 27°CDB, 19°CWB / inlet water temp. : 30°C, Equivalent piping length : 7.5 m, Level difference : 0 m.
  - Heating : Indoor temp. : 20°CDB / inlet water temp. : 20°C, Equivalent piping length : 7.5 m, Level difference : 0 m.
  - Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions and oil recovery mode. When there is concern for noise to the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.
- This unit cannot be installed in the outdoors. Install indoors (Machine room, etc).
- Hold ambient temperature at 0 - 40°C and humidity at 80%RH or less. Heat rejection from the casing : 0.51 kW / 6 - 8 class / hour, 0.58 kW / 10 - 12 class / hour.
- Connectable to closed type cooling tower only.
  - \*1 : In the case of heat pump system, suction gas pipe is not used.
  - \*2 : In the case of heat recovery system.
  - \*3 : In the case of heat pump system.

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



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

## Easy installation & servicing

### Compact and lightweight

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

\* The unit is designed for indoor installation only.

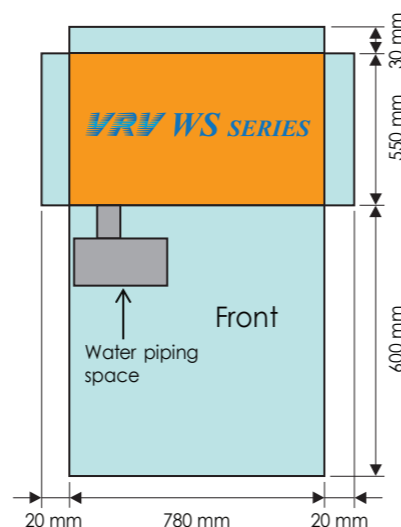
- Small footprint & lightweight
- Minimal service & installation space required
- Stackable flat top design



### Service space (Single installation)

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

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



## Single phase electric power supply

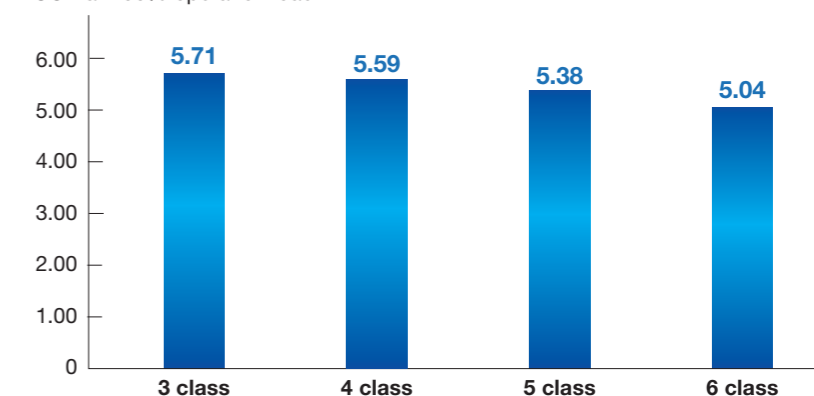
Single phase power supply enables simplified installation in residential applications.

## Energy saving

### High Coefficient of Performance (COP)

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

COP at 100% operation load

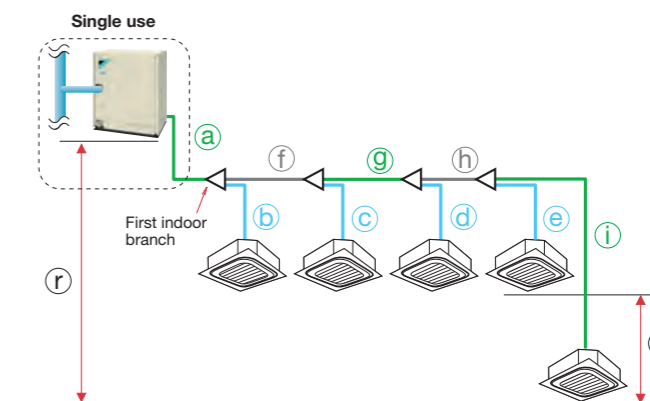


\*Cooling : Indoor temp.: 27°CDB, 19°CWB/inlet water temp.: 30°C, Equivalent piping length: 7.5 m, Level difference: 0 m.

## Long refrigerant piping length

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

- Actual piping length  
Max. 120 m
- Equivalent piping length  
Max. 140 m
- Total piping length  
Max. 300 m

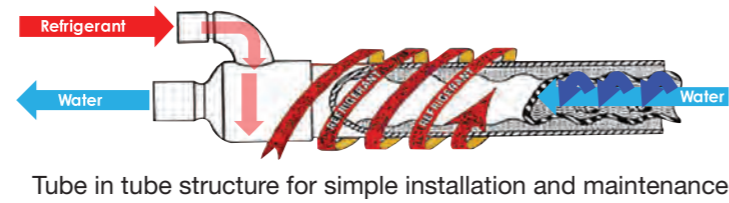


\* Colours in the diagram above are merely for identifying pipes referenced with symbols such as @.

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

## ■ Tube-in-Tube Type Heat Exchanger

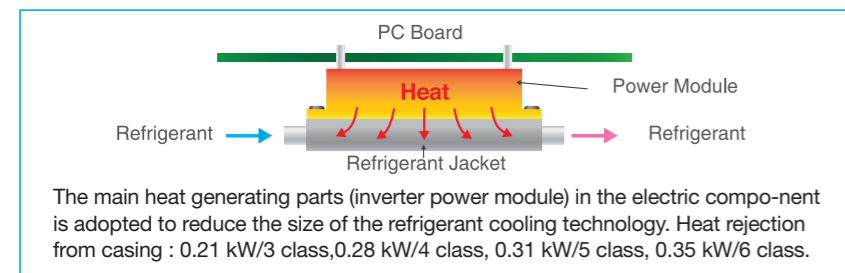
The Tube-in-Tube type heat exchanger with refrigerant lines spiraling around the water circuit in a counter flow design delivers superior heat exchange. While the inner groove structure of the water circuit lowers risk of blockage and delivers optimal performance.



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

## ■ Refrigerant cooling technology

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



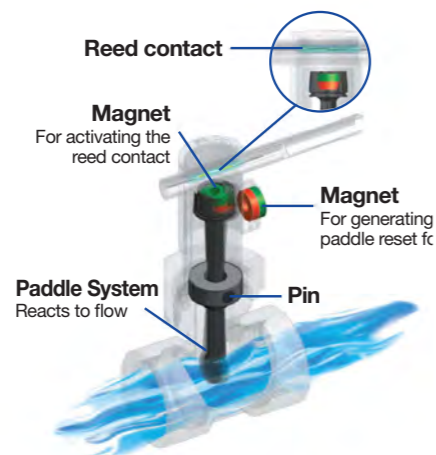
## ■ Easy maintenance

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



## ■ Built in water flow switch

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



## ■ Standard water strainer

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



## ■ Enhanced range of choices

● New lineup

Type	Model Name	Capacity Range(kW)	20	25	32	40	50	63	71	80	100	125	140	145	160	180
			Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	145	160
Ceiling Mounted Cassette (Round Flow with Sensing)	<b>New</b> FXFSQ-AVM			●	●	●	●	●		●	●	●	●	●		
Ceiling Mounted Cassette (Round Flow)	FXFQ-PVE			●	●	●	●	●		●	●	●				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-A2VEB		●	●	●	●	●									
4-Way Flow Ceiling Suspended	FXUQ-AVEB								●		●					
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE		●	●	●	●	●	●		●		●				
Ceiling Mounted Cassette (Single Flow)	<b>New</b> FXEQ-AV36		●	●	●	●	●	●								
Slim Ceiling Mounted Duct (Compact Series)	<b>New</b> FXDQ-TV1B(A)		●	●	●	●	●	●								
	<b>New</b> FXDQ-PDVE (700mm width type)		●	●	●											
Slim Ceiling Mounted Duct (Standard Series)	<b>New</b> FXDQ-NDVE (900 / 1100mm width type)					●	●	●								
	FXDYQ-MAV1									●	●	●	●			
Middle Static Pressure Ceiling Mounted Duct	<b>New</b> FXSQ-PAVE		●	●	●	●	●	●		●	●	●	●			
Ceiling Mounted Duct	<b>New</b> FXMQ-PAVE		●	●	●	●	●	●		●	●	●	●			
	<b>New</b> FXMQ-PV1A														●	●
Ceiling Suspended	FXHQ-MAVE			●			●			●						
Wall Mounted	FXAQ-PVE		●	●	●	●	●	●								
Floor Standing	FXLQ-MAVE		●	●	●	●	●	●								
Concealed Floor Standing	FXNQ-MAVE		●	●	●	●	●	●								

## VRV WS Series Outside Units

### RWXYQ-A

#### Heat Pump

MODEL		RWXYQ3AV1	RWXYQ4AV1	RWXYQ5AV1	RWXYQ6AV1	
Power supply		1-Phase, 220-240 V, 50 Hz				
Cooling capacity	Btu/h	27,300	38,200	47,800	54,600	
	kW	8.0	11.2	14.0	16.0	
Heating capacity	Btu/h	30,700	42,700	54,600	61,400	
	kW	9.0	12.5	16.0	18.0	
Power consumption	Cooling	kW	1.40	2.00	2.60	3.17
	Heating	kW	1.60	2.10	2.60	2.80
Casing colour		Ivory white (5Y7.5/1)				
Dimensions (HxWxD)		mm 1,000x780x550				
Compressor	Type	Hermetically sealed swing type				
	Motor output	kW 1.92				
Refrigerant piping connections	Liquid	mm $\phi$ 9.5 (Flare)				
	Suction gas	mm $\phi$ 15.9 (Flare)				
Water piping connections	Water inlet	PT1B external thread		PT1 1/4B external thread		
	Water outlet	PT1B external thread		PT1 1/4B external thread		
	Drain outlet	PS1/2B internal thread				
Machine weight	kg	90	94	99		
Sound level	dB(A)	48	50	68		
Sound power	dB(A)	66	68			
Operation range (Inlet water temp.)	°C	15 to 45 (Range for continuous operation)				
Capacity control	%	20-100				
Refrigerant	Type	R-410A				
	Charge	kg	2.2	2.4	2.7	
Rated water flow (Range of water flow)	L/min	30 (15 to 45)	40 (20 to 60)	50 (25 to 75)	57 (28.5 to 85.5)	

Note :1. Specifications are based on the following conditions ;

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

·Heating : Indoor temp. : 20°CDB / inlet water temp. : 20°C, Equivalent piping length : 7.5 m, Level difference : 0 m.

·Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m.

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

When there is concern for noise to the surrounding area such as residences, we recommend investigating the installation location and taking soundproofing measures.

2. This unit cannot be installed in the outdoors. Install indoors (Machine room, etc).

3. Hold ambient temperature at 0-40°C and humidity at 80% RH or less.

Heat rejection from the casing: 0.21 kW/3 class /hour, 0.28 kW/4 class /hour, 0.31 kW/5 class /hour, 0.35 kW/6 class /hour



## Outside Unit Combinations

Model name	kW	class	Capacity index	Total capacity index of connectable indoor units <sup>*1</sup>			Maximum number of connectable indoor units
				Combination (%) <sup>*1</sup>			
				50% <sup>*1</sup>	100% <sup>*3</sup>	130%	
<b>RWXYQ3A</b>	8.0	3	75	37.5	75	97.5	4
<b>RWXYQ4A</b>	11.2	4	100	50	100	130	6
<b>RWXYQ5A</b>	14.0	5	125	62.5	125	162.5	8
<b>RWXYQ6A</b>	16.0	6	150	75	150	195	9

\*1. Total capacity index of connectable indoor units must be 50%–130% of the capacity index of the outside unit.

# Indoor Unit Lineup

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

## VRV indoor units

Ceiling Mounted Cassette (Round Flow with Sensing) Type **P.111**

**New** FXFSQ-AVM



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



Ceiling Mounted Cassette (Round Flow) Type **P.121**

FXFQ-PVE

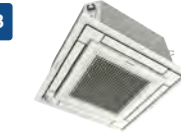


360° airflow improves temperature distribution and offers a comfortable living environment

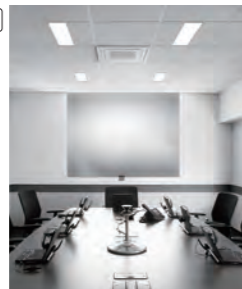


Ceiling Mounted Cassette (Compact Multi Flow) Type **P.122**

FXZQ-A2VEB



Quiet, compact, and designed for user comfort



4-Way Flow Ceiling Suspended Type **P.123**

FXUQ-AVEB

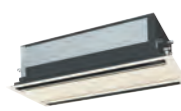


This slim and stylish indoor unit achieves optimum air distribution, and can be installed without the need for ceiling cavity



Ceiling Mounted Cassette (Double Flow) Type **P.124**

FXCQ-MVE



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



FXDQ-TV1B(A) Ceiling Mounted Cassette (Single Flow) Type **P.125**

**New** FXEQ-AV36



Slim design for flexible installation



Slim Ceiling Mounted Duct Type (Compact Series) **P.127**

**New** FXDQ-TV1B(A)



Slim and compact design for easy and flexible installation



Slim Ceiling Mounted Duct Type (Standard Series) **P.129**

**New** FXDQ-PDVE



Slim design, quietness and static pressure switching



Ceiling Concealed (Duct) Type **P.130**

FXDYQ-MAV1



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



Middle Static Pressure Ceiling Mounted Duct Type **P.131**

**New** FXSQ-PAVE



Middle external static pressure and slim design allow flexible installations



Ceiling Mounted Duct Type **P.133**

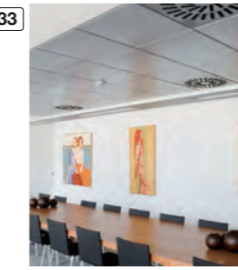
**New** FXMQ-PAVE



**New** FXMQ-PV1A



High external static pressure allows flexible installations

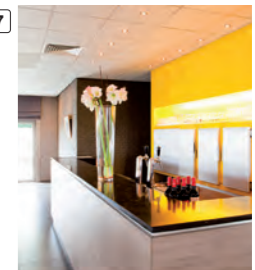


Outdoor-Air Processing Unit **P.147**

FXMQ-MFV1



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



Ceiling Suspended Type **P.135**

FXHQ-MAVE



Slim body with quiet and wide airflow

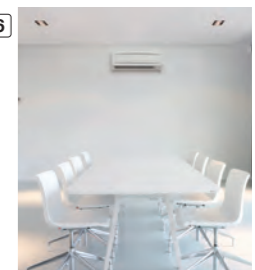


Wall Mounted Type **P.136**

FXAQ-PVE



Stylish flat panel design harmonised with your interior décor



Floor Standing Type **P.137**

FXLQ-MAVE



Suitable for perimeter zone air conditioning

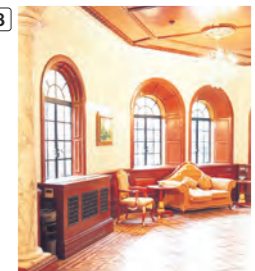


Concealed Floor Standing Type **P.138**

FXNQ-MAVE



Designed to be concealed in the perimeter skirting-wall



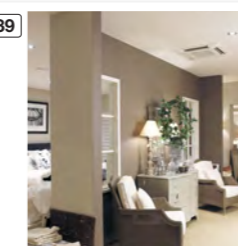
## Residential indoor units with connection to BP units

Ceiling Mounted Cassette (Compact Multi Flow) Type **P.139**

FFQ-BV1B

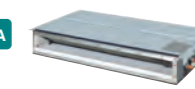


Quiet, compact, and designed for user comfort

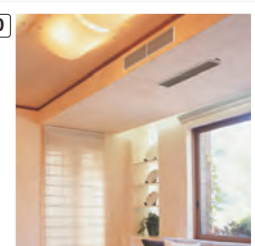


Slim Ceiling Mounted Duct Type **P.140**

FDXS-CVMA



Slim and smooth design suits your shallow ceiling



Wall Mounted Type **P.141**

CTXG-PVMAW



CTXG-PVMAS



Elegant appearance with European style



Wall Mounted Type **P.142**

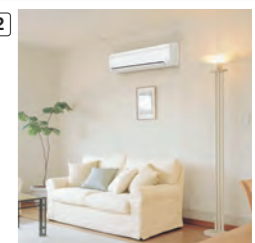
FTXS-KVMA



FTXS-KAVMA



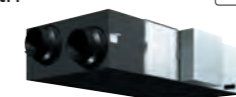
Stylish flat panel harmonises with your interior décor



## Air treatment equipment

Heat Reclaim Ventilator with DX-Coil and Humidifier **P.151**

VKM-GA(M)V1



Heat Reclaim Ventilator **P.155**

VAM-GJVE



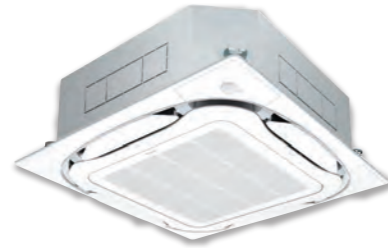




### Ceiling Mounted Cassette (Round Flow with Sensing) Type

New FXFSQ-A

Round flow  
with sensing



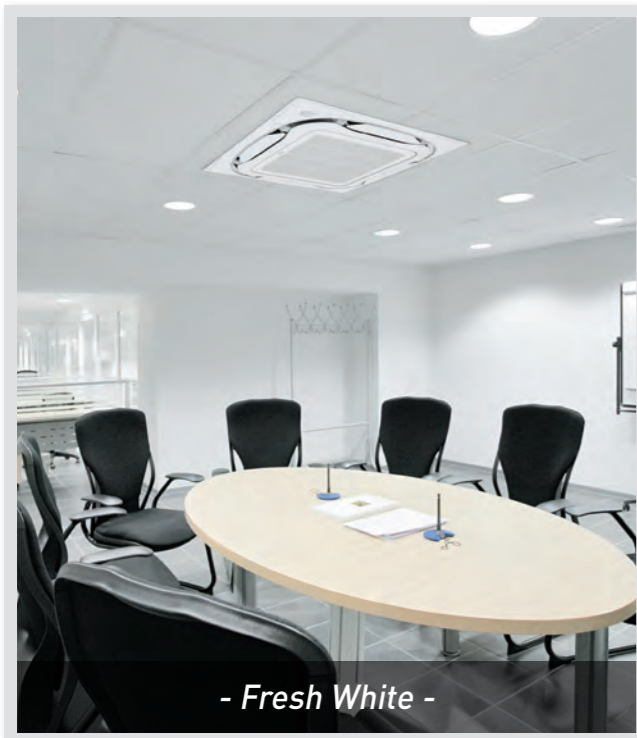
New Panel variations (Option)



Standard panel with sensing  
BYCQ125EEF (Fresh White)



Standard panel with sensing  
BYCQ125EEK (Black)



### Specifications

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

MODEL		FXFSQ25AVM	FXFSQ32AVM	FXFSQ40AVM	FXFSQ50AVM	FXFSQ63AVM	FXFSQ80AVM	FXFSQ100AVM	FXFSQ125AVM	FXFSQ140AVM
Power supply		1-phase, 220-240 V/220-230 V, 50/60 Hz								
Cooling capacity	Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800	54,600
	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0
Heating capacity	Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	42,700	54,600	
	kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	
Power consumption	Cooling	0.028		0.035	0.056	0.061	0.092	0.164	0.170	0.194
	Heating	0.026		0.034	0.056	0.060	0.092	0.144	0.159	0.183
Casing		Galvanised steel plate								
Airflow rate (H/HM/M/ML/L)	l/s	217/208/192/183/167		283/225/208/200/183	383/342/317/242/183	392/350/333/267/225	408/367/342/333/250	558/508/450/392/350	575/525/475/425/383	592/542/492/442/383
	m <sup>3</sup> /min	13/12.5/11.5/11/10		17/13.5/12.5/12/11	23/20.5/19/14.5/11	23.5/21/20/16/13.5	24.5/22/20.5/20/15	33.5/30.5/27/23.5/21	34.5/31.5/28.5/25.5/23	35.5/32.5/29.5/26.5/23
Sound level (H/HM/M/ML/L)	dB(A)	30/29.5/28.5/28/27		35/29.5/29/28/27	38/35/34.5/29.5/27	38/36/35.5/31.5/28	39/37/36/35.5/31	44/41/38/35/33	45/42.5/39.5/37/35	46/43.5/40.5/38/35
Dimensions (HxWxD)	mm	256x840x840						298x840x840		
Machine weight	kg	19		24	22		25		26	
Piping connections	Liquid (Flare)	φ 6.4				φ 9.5				
	Gas (Flare)	φ 12.7				φ 15.9				
	Drain	VP25 (External Dia, 32/Internal Dia, 25)								

Note: Specifications are based on the following conditions:

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

#### Decoration Panel (Option)

Standard panel with sensing	Model	BYCQ125EEF (Fresh White) / BYCQ125EEK (Black)
	Dimensions(HxWxD)	mm 50x950x950
	Weight	kg 5.5

#### Function List

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



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

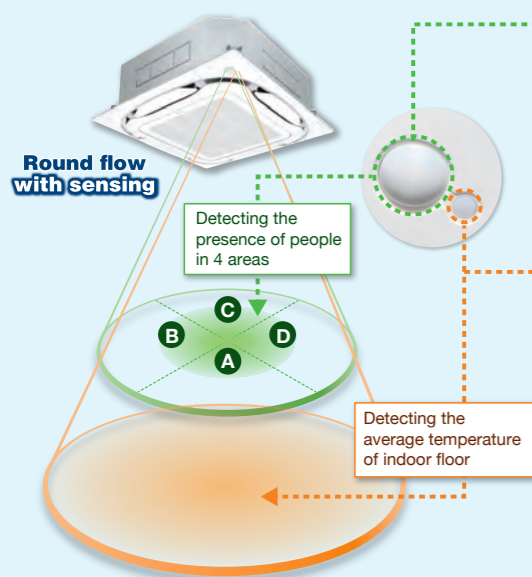
New FXFSQ-A

## Daikin Advanced Sensing Functions\*1

### Dual sensors\*1

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

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



#### Infrared presence sensor

The 4 sensors detect human presence.

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

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

#### Infrared floor sensor

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

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

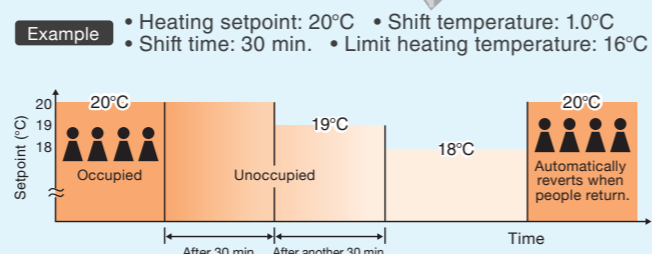
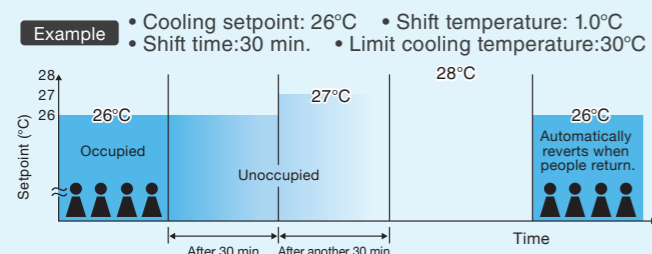
\*3. The infrared floor sensor detects at the floor surface.

### Sensing sensor functions\*4\*5

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

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

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



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

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

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

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

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

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

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

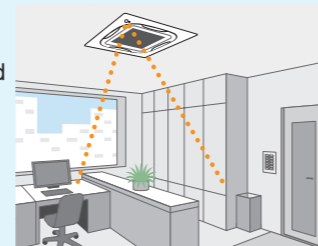
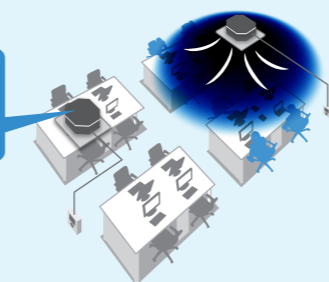
\*4. These functions are not available when using the group control system.

\*5. User can set these functions with remote controller.

\*6. Please note that upon re-entering the room, air conditioner will not switch on automatically.

\*7. To protect the machine, the standby system may operate temporarily.

Operation is reduced in places where there are no people.

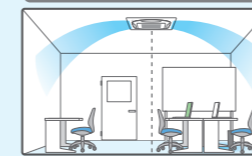


### Auto airflow function\*8

\*8. Airflow direction should be set to "Auto".

#### Direct Airflow (default: OFF) Cooling Dry

When human presence not detected.



Optimal air direction by "Auto"

When human presence detected.



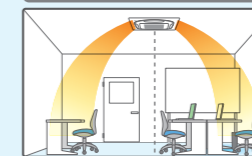
Optimal air direction by "Auto" Swing (narrow)

• With Auto airflow direction mode, flaps are controlled to deliver optimal airflow when the room is unoccupied.

• When human is detected, air direction is set to "Swing (narrow)" to deliver cool air to users.

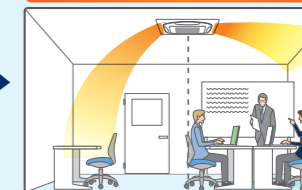
#### Draft prevention function (default: OFF) Heating

When human presence not detected.



Blown downward

When human presence detected.



Blown downward Blown horizontally

• With Auto airflow direction mode, flaps are controlled to deliver optimal airflow when the room is unoccupied.

• When human is detected, drafts are prevented by making the flap horizontal.

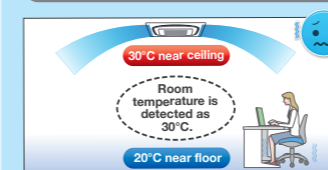
• When human is not detected for 5 minutes, the unit automatically returns to controlling the flaps for an unoccupied room.

### Comfort and energy saving preventing over cooling/heating\*9

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

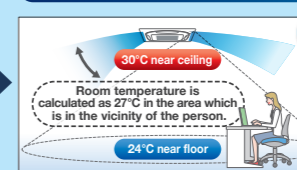
#### Floor temperature is detected and over cooling prevented. Cooling

##### Without sensing function



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

##### With sensing function



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

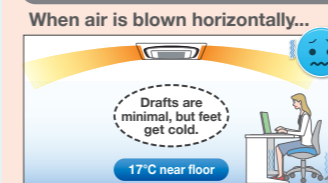
Automatic control using the temperature near the person as the room temperature.

Energy savings

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

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

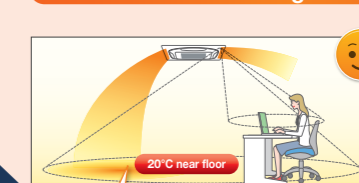
##### Without sensing function



Feet get cold, because warm air collects near the ceiling. Area near floor doesn't reach set temperature and feet feel cold.

For this reason, we end up raising the temperature setting.

##### With sensing function



In order to reduce drafts, air is blown horizontally where a person is located.\*10



Uncomfortable draft occurs, because air is blown downward.

To avoid draft, air direction is changed to horizontal and feet get cold.

The floor temperature, which is lower, is detected and warm air is blown downward where no person is present.

Comfortable because draft is reduced and area around feet is warm.

Energy savings

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

To increase comfort, Auto airflow rate mode controls the airflow in accordance with the difference between floor and ceiling temperatures. When there is a large difference between the ceiling and floor temperatures, the airflow rate is automatically increased. When the difference becomes small, the airflow rate is automatically reduced.

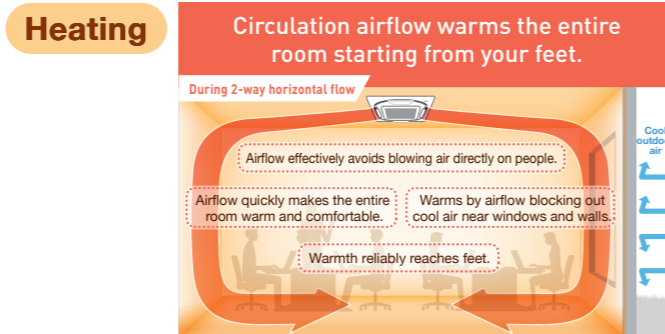
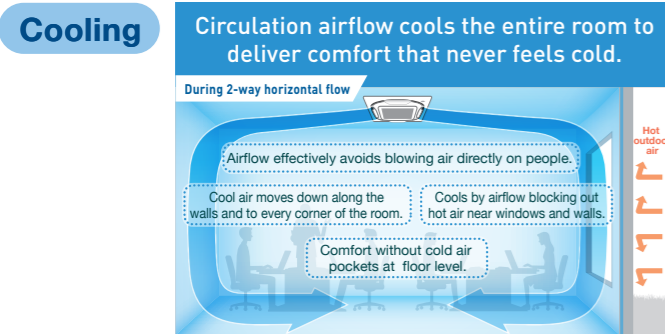
\*10. Draft prevention function is set OFF in the initial setting.

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

New FXFSQ-A

#### New Circulation Airflow<sup>\*1,2</sup>

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



Cooling Heating Comfort to the entire room with even temperatures and no cold air pockets at floor level

**Cooling**

4-way cassette (Swing)

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

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

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

Approx. 5% energy savings by reducing uneven temperatures<sup>\*3</sup>

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

Full comfort is provided with no cold feet.

**Heating**

4-way cassette (Down blow)

Comparison Conditions

- Room size: Width 7.5m x depth 7.5m x height 2.6m
- Indoor unit capacity: 71 class
- Outdoor air temperature: 5°C
- Airflow rate and air direction: high / Down blow

Areas around walls and feet are cold.

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

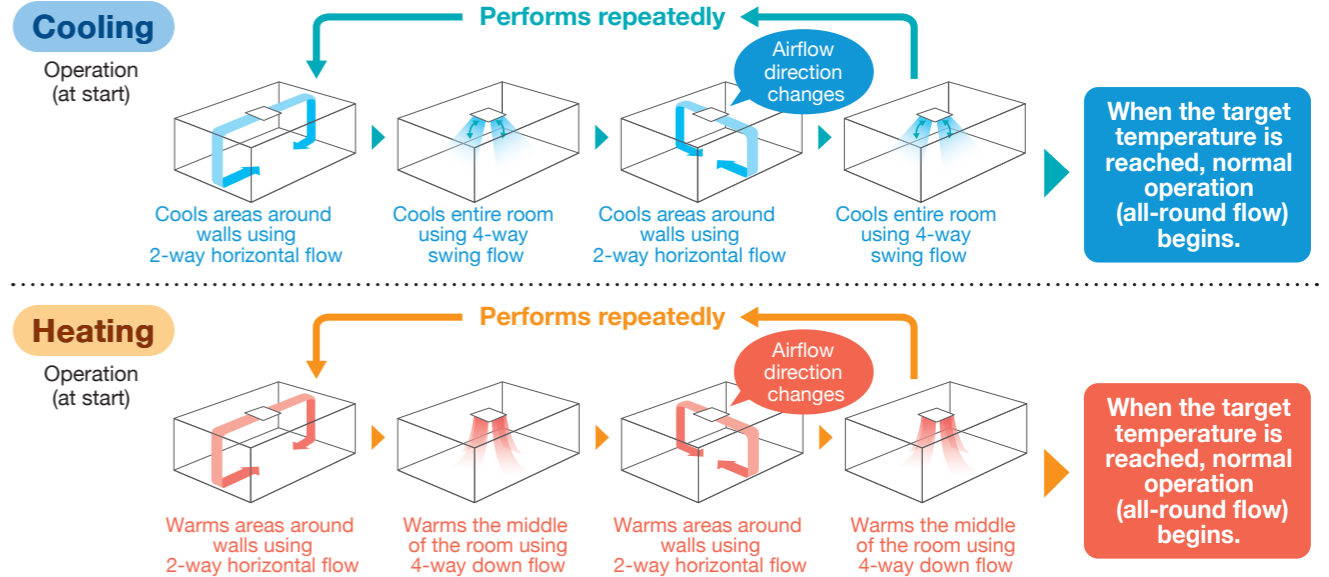
Approx. 15% energy savings by reducing uneven temperatures<sup>\*4</sup>

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

Areas around walls and feet are warm.

#### Configurations of Circulation Airflow

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



#### Three Technologies That Achieved Circulation Airflow

**1 Use of new wide flaps (Straight)** (Straight)

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

Conventional flap<sup>\*5</sup>

New wide flap

\*5. FXFQ-S model

Approx. doubled

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

**2 Optimizing airflow angle (Horizontally)** (Horizontally)

The airflow angle was made more horizontal.

Conventional flap<sup>\*5</sup>

\*5. FXFQ-S model

30° air direction

Cannot blow more than 30° horizontal.

When set to 20° the airflow route gets narrow.

New wide flap

20° horizontal flow

20° air direction

Even at 20°, the airflow route is sufficiently maintained.

A more horizontal 20° flow is realized.

Velocity 10% increase!

**3 Increased velocity in 2-way flow (Strongly)** (Strongly)

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

All-round flow

Two-way flow

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

#### Things to remember when using circulation airflow

Main points for use

- Effectiveness may differ according to room conditions, room size, and distance to walls.
- Circulation airflow functions during connection with wired remote controller (BRC1E63). However, use is not possible for the following conditions:
  - When a sealing material of air discharge outlet and branch ducts are used;
  - When individual airflow setting is selected;
  - When using group control other than round flow.

Installation conditions

Round flow

Distance to wall [Table 1]

Minimum distance between indoor units [Table 2]

1.8m or more above floor surface

Wall surface

Floor surface

Table 1

Indoor unit capacity	FXFSQ 25-50	FXFSQ 63/80	FXFSQ 100-140
Maximum distance	1.5m-4m	1.5m-5m	1.5m-7m

Table 2

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



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

New FXFSQ-A

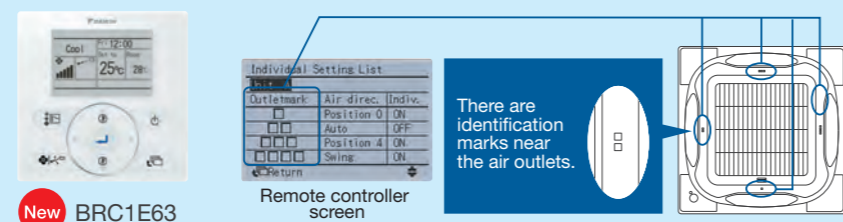
## Individual Airflow Direction Control<sup>\*1</sup>

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

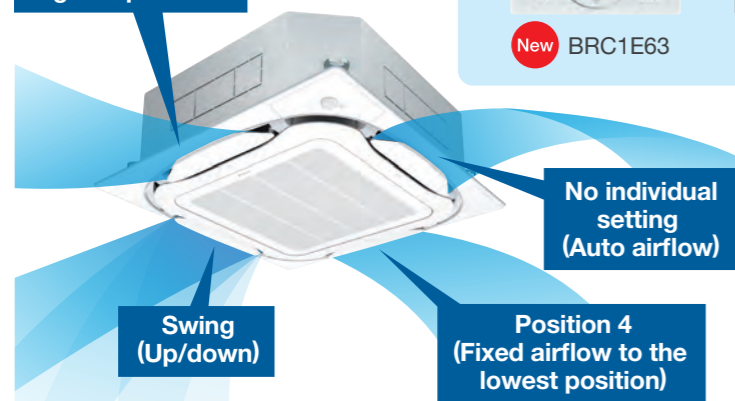
### Comfortable air conditioning for all room layouts and conditions

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

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



Position 0  
(Fixed airflow to highest position)



No individual setting  
(Auto airflow)

Position 4  
(Fixed airflow to the lowest position)

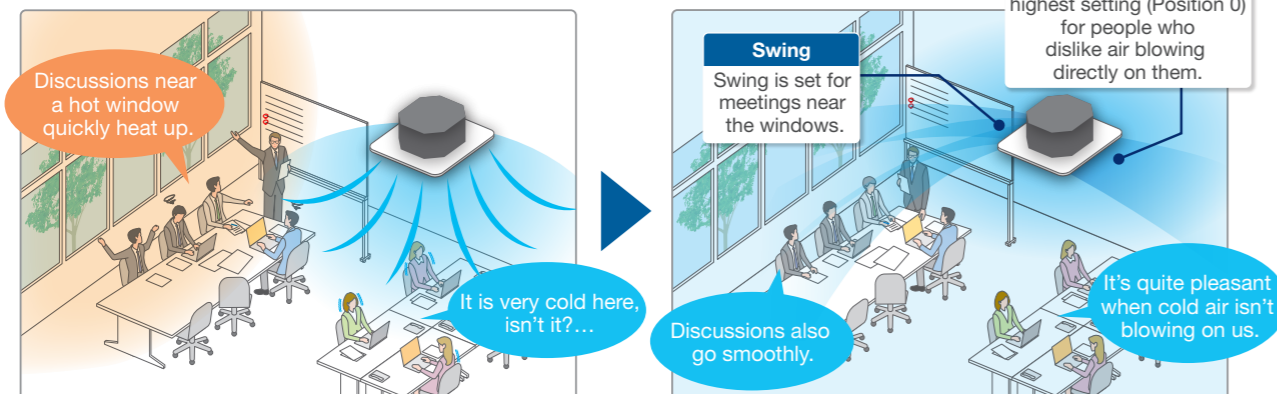
#### Individual airflow settings

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

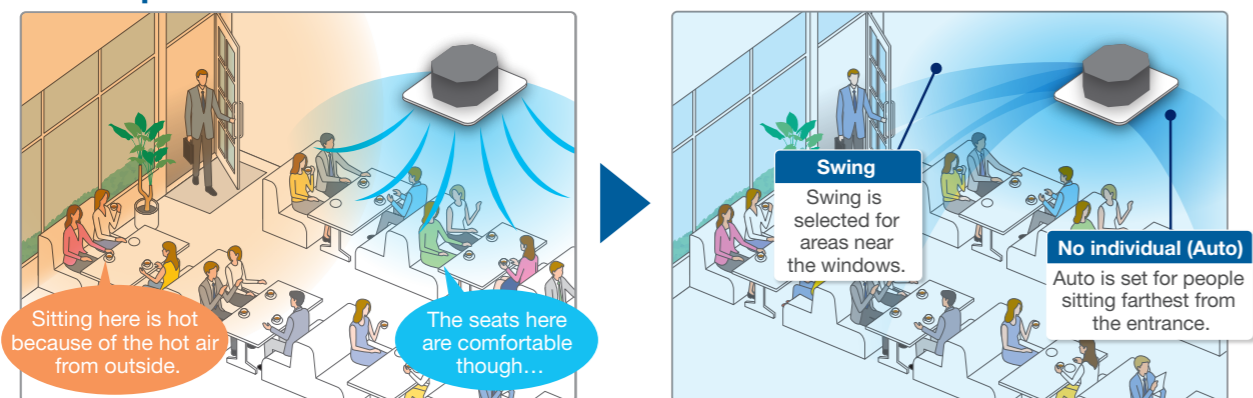
Individual settings are possible as stated above.

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

#### For offices



#### For shops and restaurant



## Other Functions

### Comfort

#### 360° Airflow & Selectable Airflow Pattern

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

#### Typical flow patterns

There are a total of 18 flow patterns.

#### All-round flow



(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

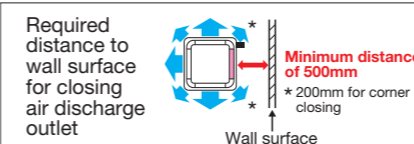


(E.g., installed in a corner)

#### Opposite 2-way flow



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



Note:  
- Whatever the discharge direction, the same type of panel is used. If installing for other than all-round flow, an air discharge outlet sealing material (option) must be used to close each unused outlet.  
- Operation sound increases when using 2-way or 3-way flow.

### Optimal comfort and convenience assured by 3 air discharge modes

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

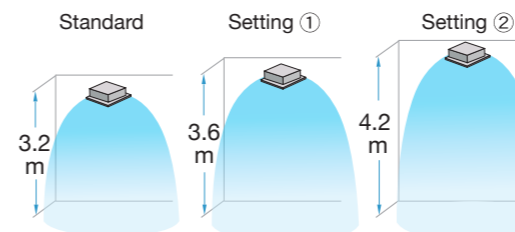
Note:  
<sup>1</sup>Air direction is set to the standard position when the unit is shipped from the factory. The position can be changed from the remote controller.  
<sup>2</sup>Closing of the corner discharge outlets is recommended.

### Switchable fan speed: 5 steps and Auto

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

### Suitable for high ceilings

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



When all round flow is selected, ceilings up to 4.2 m in height can be accommodated. (FXFSQ100-140A)

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

Ceiling height	Standard	Number of air discharge outlets used							
		FXFSQ25-80A				FXFSQ100-140A			
		All round flow	4-way flow	3-way flow	2-way flow	All round flow	4-way flow	3-way flow	2-way flow
Standard	2.7 m	3.1 m	3.0 m	3.5 m	3.2 m	3.4 m	3.6 m	4.2 m	
High ceiling ①	3.0 m	3.4 m	3.3 m	3.8 m	3.6 m	3.9 m	4.0 m	4.2 m	
High ceiling ②	3.5 m	4.0 m	3.5 m	—	4.2 m	4.5 m	4.2 m	—	

Note:  
• Factory settings are for standard ceiling height and all-round flow.  
• High ceiling settings (1) and (2) are set with the remote controller by field setting.  
• High-efficiency filters are not available for high ceiling applications.

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

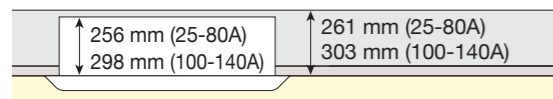
New FXFSQ-A

### Quick and Easy Installation

#### Lightweight

All models can be installed without using a lifter.

#### Installable in tight ceiling spaces



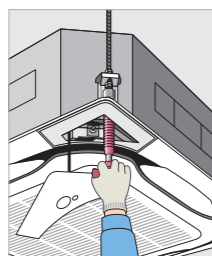
#### Easy removal of corner cover

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



#### Easy height adjustment

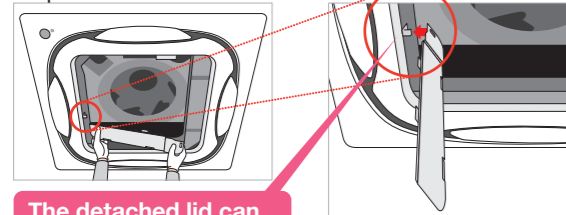
Each corner of the unit has an adjuster pocket that lets you easily adjust the unit's suspended height.



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

#### Temporary placement of control box lid

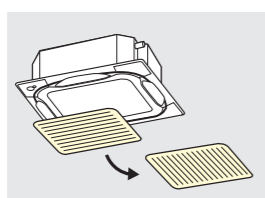
Because the control box lid can be temporarily hung on the unit, there is no need to climb down the stepladder to retrieve it.



The detached lid can be hung on a hook.

#### Installed in any direction

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



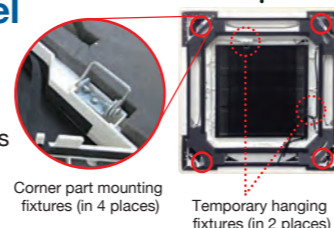
#### Easy hanging

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



#### Ease in temporary hanging of decoration panel

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

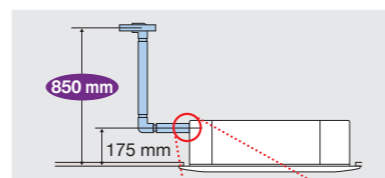


Corner part mounting fixtures (in 4 places)

Temporary hanging fixtures (in 2 places)

#### Drain pump

Equipped as standard accessory with 850 mm lift.

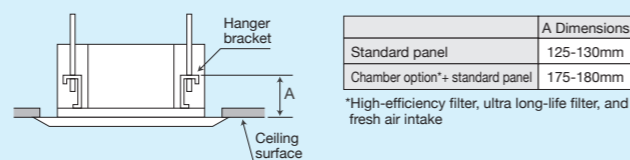


#### Transparent drain socket



#### Hanging height adjustment

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



	A Dimensions
Standard panel	125-130mm
Chamber option* + standard panel	175-180mm

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

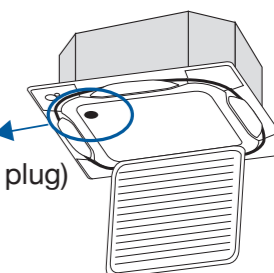
### Easy Maintenance

#### Drain pan and drain water check

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

Just open the suction grille!

Drain outlet (with rubber plug)



#### 24 mm diameter drain outlet

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



#### Ultra long-life filter (option)

See page 182

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

### Cleanliness

#### Silver ion anti-bacterial drain pan

A built-in antibacterial treatment that uses silver ion in the drain pan prevents the growth of slime, bacteria, and mould that cause odours and clogging.

(The lifespan of a silver ion cartridge depends on the usage environment, but should be changed once every two to three years.)



#### Non-flocking flaps

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



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

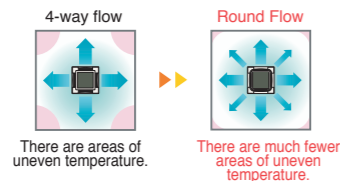
Prevents mould and microorganisms growing out of the dust and moisture that adheres to the filters.

## Ceiling Mounted Cassette (Round Flow) Type FXFQ-P

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



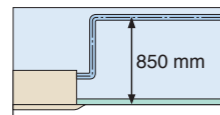
- The industry's first\* Round Flow Ceiling Mounted Cassette type offers 360° airflow with improved temperature distribution.



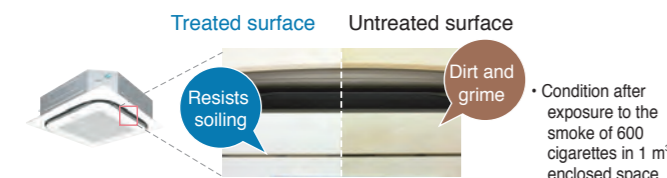
\* As of April 2004, the release date for Japan.

- The light weight unit at 19.5 kg for FXFQ25-50P models makes installation easy.

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



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



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

- The horizontal louvres prevent dew condensation. Their non-flocking surfaces, which repel dirt, are easy to clean.

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



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

- Example of airflow patterns:

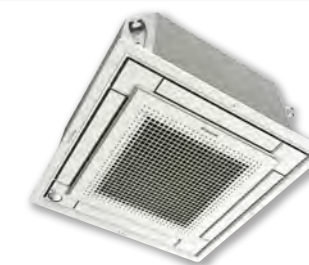
All-round flow is available, as well as 2-way to 4-way flows, so you can choose the most suitable airflow pattern depending on location or room layout.



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

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

Quiet, compact, and designed for user comfort

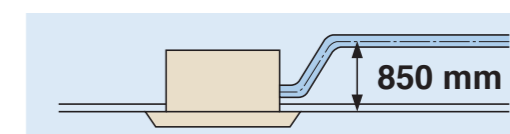


- The newly designed panel integrates fully within one ceiling tile enabling lights, speakers and sprinklers to be installed in the adjoining ceiling tiles.



- Dimensions correspond with 600 mm X 600 mm architectural module ceiling design specifications.

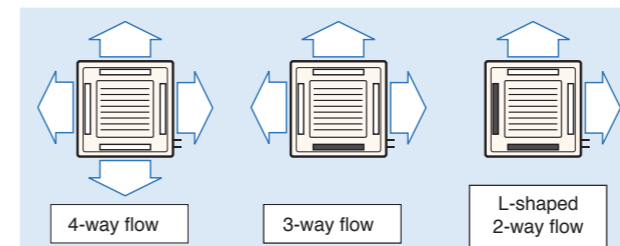
- Drain pump is equipped as standard accessory with 850 mm lift.



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



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



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

## Specifications

MODEL		FXFQ25PVE	FXFQ32PVE	FXFQ40PVE	FXFQ50PVE	FXFQ63PVE	FXFQ80PVE	FXFQ100PVE	FXFQ125PVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz							
Cooling capacity	Btu/h	9,600	12,300	15,400	19,100	24,200	30,700	38,200	47,800
	kW	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0
Heating capacity	Btu/h	10,900	13,600	17,100	21,500	27,300	34,100	42,700	54,600
	kW	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0
Power consumption	Cooling kW	0.033		0.047	0.052	0.066	0.093	0.187	0.209
	Heating kW	0.027		0.034	0.038	0.053	0.075	0.174	0.200
Casing		Galvanised steel plate							
Airflow rate (HH/H/L)	ℓ/s	216/191/166		250/216/183	266/225/183	316/275/225	350/300/250	533/433/333	550/466/375
	m³/min	13/11.5/10		15/13/11	16/13.5/11	19/16.5/13.5	21/18/15	32/26/20	33/28/22.5
Sound level (HH/H/L)	dB(A)	30/28.5/27		31/29/27	32/29.5/27	34/31/28	36/33.5/31	43/37.5/32	44/39/34
Sound power (HH/H/L)	dB(A)	48/46.5/45		49/47/45	50/47.5/45	52/49/46	53/51.5/49	60/54.5/50	61/56/52
Dimensions (HxWxD)	mm	246x840x840						288x840x840	
Machine weight	kg	19.5			22			25	
Piping connections	Liquid (Flare)	φ6.4			φ9.5			φ15.9	
	Gas (Flare)	φ12.7			φ15.9			φ15.9	
	Drain	VP25 (External Dia, 32/Internal Dia, 25)							
Panel (Option)	Model	BYCP125K-W1							
	Colour	Fresh white							
	Dimensions(HxWxD)	50X950X950							
	Weight	5.5							

Note: Specifications are based on the following conditions:

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

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

## Specifications

MODEL		FXZQ20A2VEB	FXZQ25A2VEB	FXZQ32A2VEB	FXZQ40A2VEB	FXZQ50A2VEB
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100
	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity	Btu/h	8,500	10,900	13,600	17,100	21,500
	kW	2.5	3.2	4.0	5.0	6.3
Power consumption	Cooling kW	0.043		0.045	0.059	0.092
	Heating kW	0.036		0.038	0.053	0.086
Casing		Galvanised steel plate				
Airflow rate (H/M/L)	ℓ/s	145/125/108	150/133/108	167/142/117	192/158/133	242/208/167
	m³/min	8.7/7.5/6.5	9/8/6.5	10/8.5/7	11.5/9.5/8	14.5/12.5/10
Sound level (H/M/L)	dB(A)	32/29.5/25.5		33/30/25.5	33.5/30/26	37/32/28
Sound power (H)	dB(A)	49		50	51	54
Dimensions (HxWxD)	mm	260x575x575 (For depth add 63mm for electrical box)				
Machine weight	kg	15.5		16.5		18.5
Piping connections	Liquid (Flare)	φ6.4				
	Gas (Flare)	φ12.7				
	Drain	VP20 (External Dia, 26/Internal Dia, 20)				
Panel (Option)	Model	BYFQ60C2W1W				
	Colour	White (N9.5)				
	Dimensions(HxWxD)	46x620x620				
	Weight	2.8				

Note: Specifications are based on the following conditions:

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

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

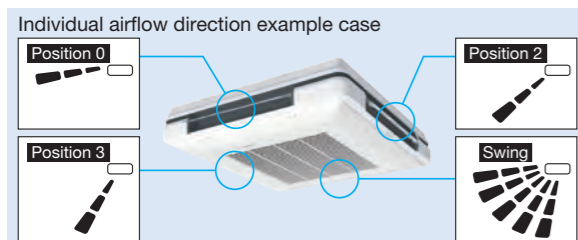
## 4-way Flow Ceiling Suspended Type

FXUQ-A

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

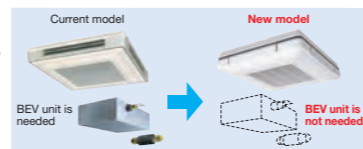


- Unit body and suction panel adopted round shapes and realised a slim appearance design. The unit can be used for various locations such as the ceilings with no cavity and bare ceilings.
- Flaps close automatically when the unit stops, which gives a simple appearance.
- Unified slim height of 198 mm for all models that gives the unified impression even when models with different capacities are installed in the same area.
- With adoption of the individual flap control, airflow direction adjustment can be individually set for each air outlet. 5 directions of airflow and auto-swing can be selected with wired remote controller BRC1E62, which realises the optimum air distribution.



- Control of the airflow rate has been improved from 2-step to 3-step control. Auto airflow rate control can be selected with wired remote controller BRC1E62.

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



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



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



## Specifications

MODEL		FXUQ71AVEB	FXUQ100AVEB
Power supply		1-phase, 220-240 V/220-230 V, 50/60 Hz	
Cooling capacity	Btu/h	27,300	38,200
	kW	8.0	11.2
Heating capacity	Btu/h	30,700	42,700
	kW	9.0	12.5
Power consumption	Cooling kW	0.090	0.200
	Heating kW	0.073	0.179
Casing		Fresh white	
Airflow rate (H/M/L)	ℓ/s	375/325/267	517/433/350
	m³/min	22.5/19.5/16	31/26/21
Sound level (H/M/L)	dB(A)	40/38/36	47/44/40
Sound power (H/M/L)	dB(A)	58/56/54	65/62/58
Dimensions (H×W×D)	mm	198×950×950	
Machine weight	kg	26	27
Piping connections	Liquid (Flare)	φ9.5	
	Gas (Flare)	φ15.9	
	Drain	VP20 (External Dia, 26/Internal Dia, 20)	

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

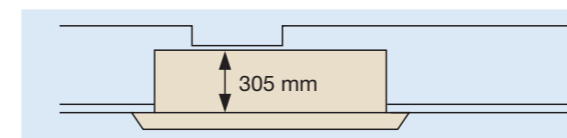
## Ceiling Mounted Cassette (Double Flow) Type

FXCQ-M

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



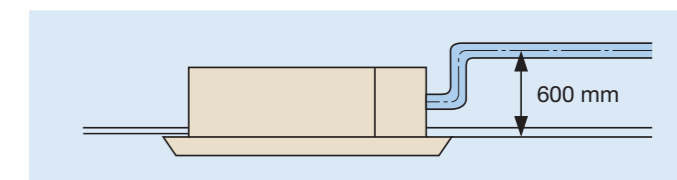
- The thin unit (only 305 mm high) can be installed in a ceiling space as narrow as 350 mm. All models feature a compact design with a depth of only 600 mm.



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

- Designed with higher airflow suitable for high ceiling application up to 3 metres.
- Providing 2 different settings of standard and ceiling soiling prevention, the auto swing mechanism realises even distribution of airflow and room temperature.

- Drain pump is equipped as standard accessory with 600 mm lift.



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

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

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

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

## Specifications

MODEL		FXCQ20MVE	FXCQ25MVE	FXCQ32MVE	FXCQ40MVE	FXCQ50MVE	FXCQ63MVE	FXCQ80MVE	FXCQ125MVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz							
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	30,700	47,800
	kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	14.0
Heating capacity	Btu/h	8,500	10,900	3,600	17,100	21,500	27,300	34,100	54,600
	kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	16.0
Power consumption	Cooling kW	0.077	0.092		0.130		0.106	0.209	0.256
	Heating kW	0.044	0.059		0.097		0.126	0.176	0.223
Casing		Galvanised steel plate							
Airflow rate (H/L)	ℓ/s	116/83	150/108		200/150		275/216	433/350	550/416
	m³/min	7/5	9/6.5		12/9		16.5/13	26/21	33/25
Sound level (H/L)	240 V dB(A)	34/29	36/30		37/32		39/34	41/36	46/40
Dimensions (H×W×D)	mm	305×775×600			305×990×600		305×1,175×600	305×1,665×600	
Machine weight	kg	26.0			31.0	32.0	35.0	47.0	48.0
Piping connections	Liquid (Flare)				φ6.4		φ9.5		
	Gas (Flare)				φ12.7		φ15.9		
	Drain	VP25 (External Dia, 32/Internal Dia, 25)							
Panel (Option)	Model	BYBC32G-W1		BYBC50G-W1		BYBC63G-W1		BYBC125G-W1	
	Colour	White (10Y9/0.5)							
	Dimensions(H×W×D)	53×1,030×680		53×1,245×680		53×1,430×680		53×1,920×680	
	Weight	8.0		8.5		9.5		12.0	

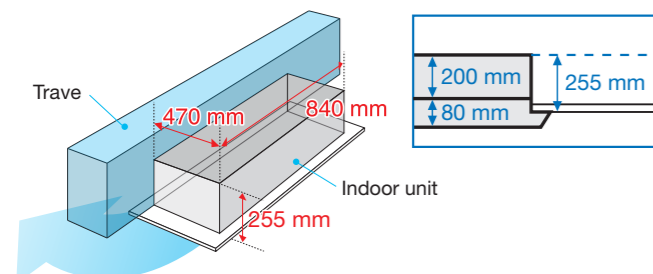
Note: Specifications are based on the following conditions:  
 ●Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.  
 ●Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.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

## Ceiling Mounted Cassette (Single Flow) Type

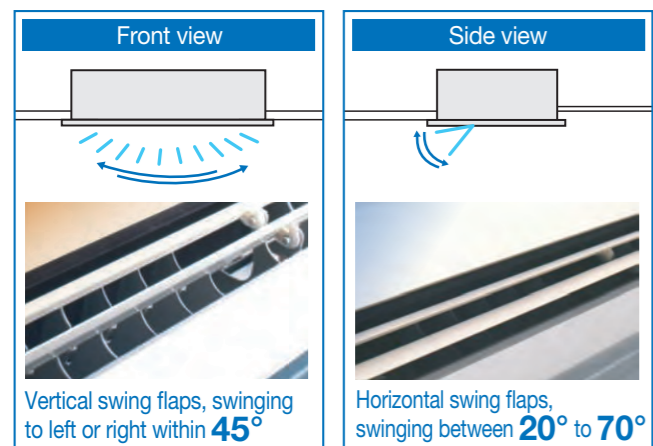
New **FXEQ-A**

### Slim design for flexible installation

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



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



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

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

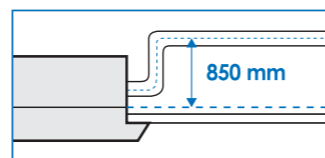
- While creating a cozy indoor environment, the unit can prevent the suspended ceiling from being soiled by adjusting its louvre angle.



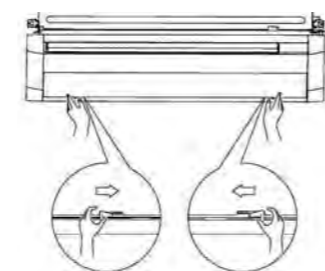
- The novel smooth panel design makes dust difficult to accumulate, thus causing the cleaning more conveniently.



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



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



### New Remote Controller (Option)

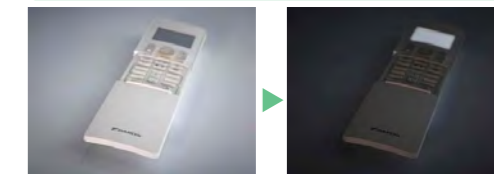
#### Wireless Remote Controller

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



BRC4M63

#### LCD Backlight



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

#### Navigation Remote Controller (Wired Remote Controller)

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



BRC1F61



### Specifications

MODEL		FXEQ20AV36	FXEQ25AV36	FXEQ32AV36	FXEQ40AV36	FXEQ50AV36	FXEQ63AV36	
Power supply		1-phase, 220-240 V, 50 Hz						
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	
	kW	2.2	2.8	3.6	4.5	5.6	7.1	
Heating capacity	Btu/h	8,500	10,900	13,600	17,100	21,500	27,300	
	kW	2.5	3.2	4.0	5.0	6.3	8.0	
Power consumption	Cooling	0.026	0.027	0.034	0.046	0.048	0.067	
	Heating	0.022	0.023	0.030	0.042	0.044	0.063	
Casing		Galvanised steel plate						
Airflow rate (H/HM/M/ML/L)	Cooling	ℓ/s	100/90/82/73/67	115/107/97/88/80	133/125/117/105/92	163/147/130/117/103	208/190/173/158/145	250/227/203/183/163
		m <sup>3</sup> /min	6.0/5.4/4.9/4.4/4.0	6.9/6.4/5.8/5.3/4.8	8.0/7.5/7.0/6.3/5.5	9.8/8.8/7.8/7.0/6.2	12.5/11.4/10.4/9.5/8.7	15.0/13.6/12.2/11.0/9.8
	Heating	ℓ/s	100/93/85/78/70	120/112/102/93/83	143/133/123/112/100	170/155/140/127/113	233/213/193/178/163	282/255/227/205/183
		m <sup>3</sup> /min	6.0/5.6/5.1/4.7/4.2	7.2/6.7/6.1/5.6/5.0	8.6/8.0/7.4/6.7/6.0	10.2/9.3/8.4/7.6/6.8	14.0/12.8/11.6/10.7/9.8	16.9/15.3/13.6/12.3/11.0
Sound level (H/HM/M/ML/L)	Cooling	30/29/28/27/26	32/31/30/29/28	35/34/33/32/30	38/37/35/33/31	38/37/35/33/31	43/41/39/37/35	
	Heating	33/31/29/28/26	35/33/31/30/28	38/36/34/33/31	41/39/37/35/33	41/39/37/36/34	46/44/42/40/38	
Dimensions (H×W×D)		200×840×470				200×1,240×470		
Machine weight		17			18		23	
Piping connections	Liquid (Flare)	φ 6.4				φ 9.5		
	Gas (Flare)	φ 12.7				φ 15.9		
	Drain	PVC26 (External Dia, 26/Internal Dia, 20)						
Panel (Option)	Model	BYEP40AW1				BYEP63AW1		
	Colour	Fresh white						
	Dimensions(H×W×D)	80×950×550				80×1,350×550		
	Weight	8.0				10.0		

Note: Specifications are based on the following conditions:

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



## Slim Ceiling Mounted Duct Type (Compact Series)

New **FXDQ-T**

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

**New DC Fan Motor / DC Drain Pump**

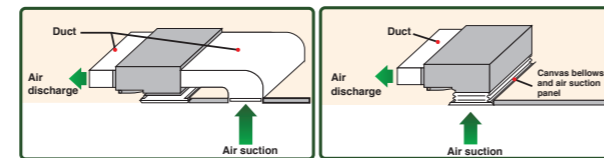
Adoption of a DC motor for both the fan motor and the drain pump has greatly reduced power consumption and also operation noise.



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



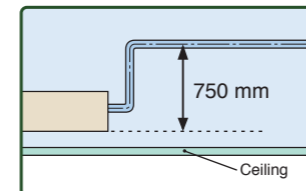
● Features rear or bottom return to suite site constraints.



**New Air filter included**

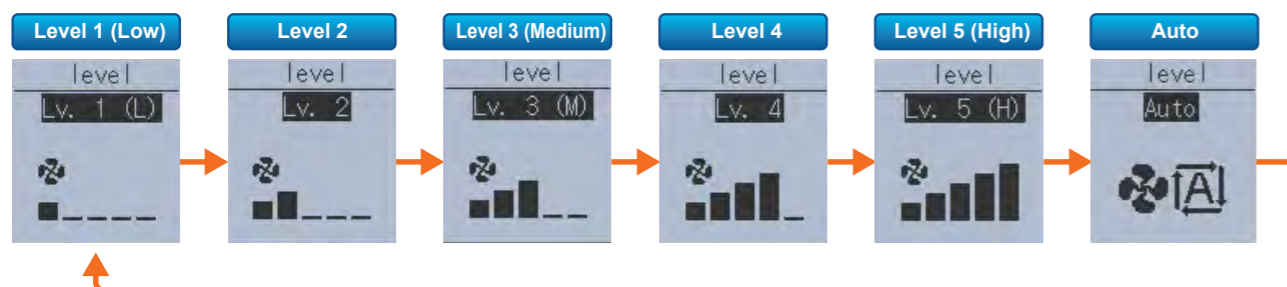
Clip-on resin net filter attached to the rear of the unit as standard.

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



**New Auto & 5-step Airflow Control**

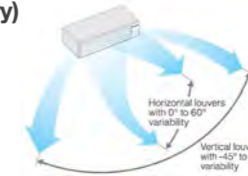
Airflow rate can be selected from 5 Steps and AUTO airflow mode. AUTO will automatically regulate the airflow rate in accordance to the difference between room temperature and set temperature.



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

**New 3-D Auto Swing Discharge Grille (Optional Accessory)**

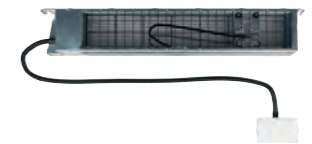
Motorised louvres provide 3-D airflow distribution for improved air circulation. Operations via BRC1E63 with functions including 3-D Auto Swing, Horizontal Auto Swing, Vertical Auto Swing & Fixed Positioning.



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

**New Auto Clean Air Filter Module (Optional Accessory)**

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



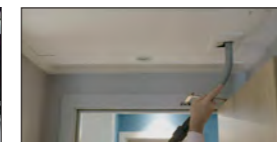
Model	Compatibility	HxWxD (mm)
BAE20A62	20-32 Class	210x840x188
BAE20A82	40-50 Class	210x1,040x188
BAE20A102	63 Class	210x1,240x188



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



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



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

**New Two Series Available**

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

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

## Specifications

MODEL		FXDQ20TV1B(A)	FXDQ25TV1B(A)	FXDQ32TV1B(A)	FXDQ40TV1B(A)	FXDQ50TV1B(A)	FXDQ63TV1B(A)
Power supply		1-phase, 220-240 V, 50 Hz					
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption*1	Cooling	0.030		0.037		0.050	
	Heating	0.025		0.032		0.045	
Casing		Galvanised steel plate					
Airflow rate	ℓ/s	135	150	210	250	325	
	m <sup>3</sup> /min	8.1	9.0	12.6	15	19.5	
External static pressure	Pa	40-10*2		50-10*2	60-10*2	45-10*2	
Sound level (HH/H/L) *1 *3	dB (A)	32/30/28		33/30.5/28	34/31.5/29	35/32.5/30	37/35/33
Dimensions (H x W x D)	mm	200x700x450			200x900x450		200x1,100x450
Machine weight	kg	18			21		24
Piping connections	Liquid (Flare)	φ 6.4					
	Gas (Flare)	φ 12.7					
	Drain	PVC26 (External Dia, 26 / Internal Dia, 20)					

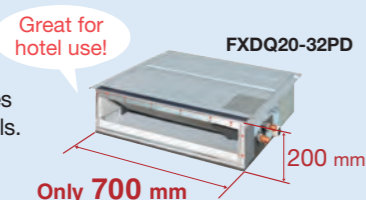
Note: Specifications are based on the following conditions:  
 ● Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 5 m, Level difference: 0 m.  
 ● Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 5 m, Level difference: 0 m.  
 ● Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)  
 ● Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.  
 During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 \*1 : Values are based on external static pressure of 10 Pa. For FXDQ-TV1BA models, +0.0005kW on top of cooling/heating power consumption values.  
 \*2 : External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard". (Factory setting is 10 Pa.)  
 \*3 : The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB(A).

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

**Slim design, quietness and static pressure switching**

**Suitable to use in drop-ceilings!**

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

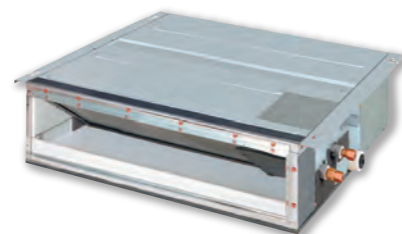


- Control of the airflow rate can be selected from 3-step control and Auto. Auto airflow rate control can be selected with wired remote controller BRC1E63.

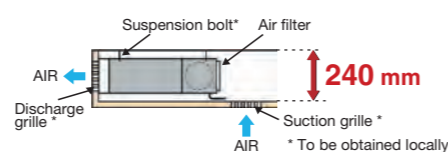
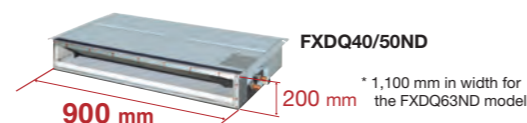
- Low operation sound level.

- External static pressure selectable by remote controller switching make this indoor unit a very comfortable and flexible model.

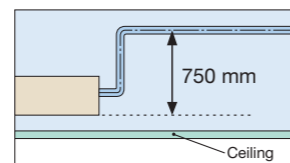
10 Pa-30 Pa/factory set:  
10 Pa for FXDQ-PD models.  
15 Pa-44 Pa/factory set:  
15 Pa for FXDQ-ND models.



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



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



## Specifications

MODEL		FXDQ20PDVE	FXDQ25PDVE	FXDQ32PDVE	FXDQ40NDVE	FXDQ50NDVE	FXDQ63NDVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption*1	Cooling	0.086		0.089	0.160	0.165	0.181
	Heating	0.067		0.070	0.147	0.152	0.168
Casing		Galvanised steel plate					
Airflow rate (HH/H/L)	ℓ/s	133/120/106		175/158/141	208/183/166	275/241/216	
	m³/min	8.0/7.2/6.4		10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0	
External static pressure	Pa	30-10*2		44-15*2			
Sound level (HH/H/L)*1*3	dB(A)	28/26/23		28/26/24	30/28/26	33/31/29	
Sound power (HH/H/L)	dB(A)	56/54/51		56/54/52	58/56/54	61/59/57	
Dimensions (HxWxD)	mm	200x700x620		200x900x620		200x1,100x620	
Machine weight	kg	23		27	28	31	
Piping connections	Liquid (Flare)	φ6.4		φ9.5			
	Gas (Flare)	φ12.7		φ15.9			
	Drain	VP20 (External Dia, 26/Internal Dia, 20)					

Note: Specifications are based on the following conditions;

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

\*1: Values are based on the following conditions: FXDQ-PD: external static pressure of 10 Pa; FXDQ-ND: external static pressure of 15 Pa.

\*2: External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard" (Factory setting is 10 Pa for FXDQ-PD models and 15 Pa for FXDQ-ND models.)

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

## Ceiling Concealed (Duct) Type

FXDYQ-MA

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



- High efficiency Hi-X heat exchanger coils that provide even more energy savings.

- High external static pressure allows comprehensive duct layout for various applications.

120 Pa for FXDYQ80MA-145MA

- Design of indoor units allows installation in limited roof spaces.

- Return air spigots included for ease of installation for FXDYQ80MA-145MA models.

- Two external static pressure settings for added flexibility.

- Quiet yet powerful supply air fan.

- High strength galvanised steel casing.

## Specifications

MODEL		FXDYQ80MAV1	FXDYQ100MAV1	FXDYQ125MAV1	FXDYQ145MAV1
Power supply		1-phase, 220-240 V, 50 Hz			
Cooling capacity	Btu/h	30,000	38,200	47,400	54,600
	kW	8.8	11.2	13.9	16.0
Heating capacity	Btu/h	33,800	42,700	54,600	62,800
	kW	9.9	12.5	16.0	18.4
Power consumption	Cooling	0.415		0.780	0.880
	Heating	0.415		0.780	0.880
Casing		Galvanised steel plate			
Airflow rate (H)	ℓ/s	510	778	852	957
	m³/min	30.6	46.7	51.1	57.4
External static pressure	Pa	120*1			
Sound level (H/L)	240 V dB(A)	45	46	48	51
Dimensions (HxWxD)	mm	360x1168x869		360x1478x899	
Machine weight	kg	50	60	65	66
Piping connections	Liquid (Flare)	φ9.5			
	Gas (Flare)	φ15.9			
	Drain	VP25 (External Dia, 32/Internal Dia, 25)			

Note: Specifications are based on the following conditions;

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

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

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

## Middle Static Pressure Ceiling Mounted Duct Type

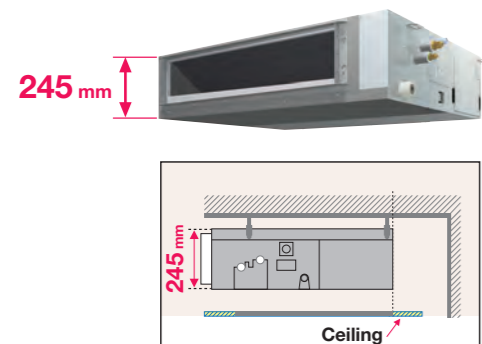
New **FXSQ-PA**

Middle external static pressure and slim design allow flexible installations



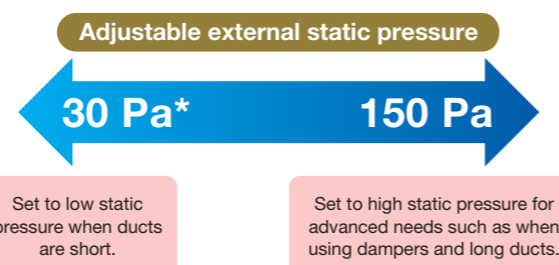
### Installation flexibility

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



### Design flexibility

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



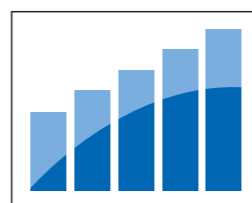
Comfortable airflow is achieved in accordance with conditions such as duct length.

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

### Comfort

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

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



### Low operation sound level (dB(A))

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

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

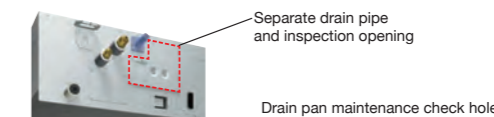


### Easy installation

- Airflow rate auto adjustment function**
- During installation, even if the external static pressure changes due to a change in the duct route, the airflow can be automatically adjusted to within the unit's external static pressure range.

### Easy maintenance

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



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



- Airflow rate can be controlled using a remote controller during test operation. It is automatically adjusted to the range between approximately ±10% of the rated H tap airflow.

### Specifications

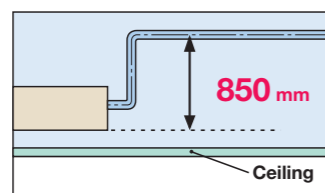
MODEL	FXSQ20PAVE	FXSQ25PAVE	FXSQ32PAVE	FXSQ40PAVE	FXSQ50PAVE	
Power supply	1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100
	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity	Btu/h	8,500	10,900	13,600	17,100	21,500
	kW	2.5	3.2	4.0	5.0	6.3
Power consumption	Cooling kW	0.058 *1		0.066 *1	0.101 *1	0.075 *1
	Heating kW	0.053 *1		0.061 *1	0.096 *1	0.070 *1
Casing	Galvanised steel plate					
Airflow rate (H/M/L)	l/s	150/125/108		158/133/116	250/208/175	283/242/192
	m <sup>3</sup> /min	9/7.5/6.5		9.5/8/7	15/12.5/10.5	17/14.5/11.5
External static pressure	Pa	30-150 (50) *2			50-150 (50) *2	
Sound level (H/M/L)	dB(A)	33/30/28		34/32/30	36/33/30	34/32/29
Sound power (H)	dB(A)	61		62	64	62
Dimensions (H×W×D)	mm	245×550×800		245×700×800	245×1,000×800	
Machine weight	kg	25		27	35	
Piping connections	Liquid (Flare)	φ 6.4				
	Gas (Flare)	φ 12.7				
	Drain	VP25 (External Dia, 32/Internal Dia, 25)				

MODEL	FXSQ63PAVE	FXSQ80PAVE	FXSQ100PAVE	FXSQ125PAVE	FXSQ140PAVE	
Power supply	1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity	Btu/h	24,200	30,700	38,200	47,800	54,600
	kW	7.1	9.0	11.2	14.0	16.0
Heating capacity	Btu/h	27,300	34,100	42,700	54,600	61,400
	kW	8.0	10.0	12.5	16.0	18.0
Power consumption	Cooling kW	0.106 *1	0.126 *1	0.151 *1	0.206 *1	0.222 *1
	Heating kW	0.101 *1	0.121 *1	0.146 *1	0.201 *1	0.217 *1
Casing	Galvanised steel plate					
Airflow rate (H/M/L)	l/s	350/292/242	383/325/267	533/450/375	617/525/433	650/558/467
	m <sup>3</sup> /min	21/17.5/14.5	23/19.5/16	32/27/22.5	37/31.5/26	39/33.5/28
External static pressure	Pa	50-150 (50) *2				50-140 (50) *2
Sound level (H/M/L)	dB(A)	36/32/29	37.5/34/30	39/35/32	42/38.5/35	43/40/36
Sound power (H)	dB(A)	64	65.5	67	70	71
Dimensions (H×W×D)	mm	245×1,000×800		245×1,400×800	245×1,550×800	
Machine weight	kg	35	37	46	47	52
Piping connections	Liquid (Flare)	φ 9.5				
	Gas (Flare)	φ 15.9				
	Drain	VP25 (External Dia, 32/Internal Dia, 25)				

Note: Specifications are based on the following conditions:  
 •Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.  
 •Heating: Indoor temp.: 20°CDB, Outdoor temp.: 7°CDB, 6°CWB, Equivalent piping length: 7.5 m, Level difference: 0 m.  
 •Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)  
 •Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 \*1: Power consumption values are based on conditions of rated external static pressure.  
 \*2: External static pressure can be modified using a remote controller that offers thirteen (FXSQ20-40PA), eleven (FXSQ50-125PA) or ten (FXSQ140PA) levels of control. These values indicate the lowest and highest possible static pressures. The rated static pressure is 50 Pa.

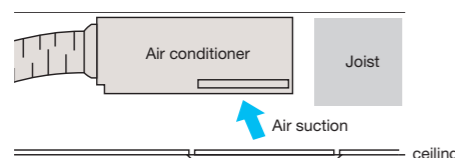
### Standard DC drain pump

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

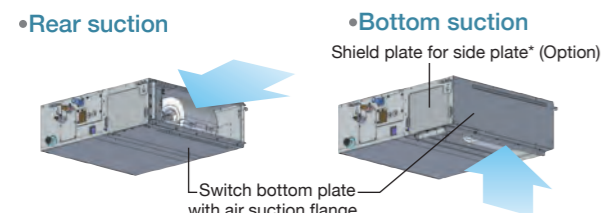


### Bottom suction possible

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



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



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

## Ceiling Mounted Duct Type

New **FXMQ-P(A)**

Middle and high static pressure allows for flexible duct design

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

FXMQ160P / FXMQ180P / FXMQ200P  
FXMQ250P



- Each model is fitted with a high efficiency DC fan motor with adjustable external static pressure to suit your duct design. The available ranges for each model are listed below:

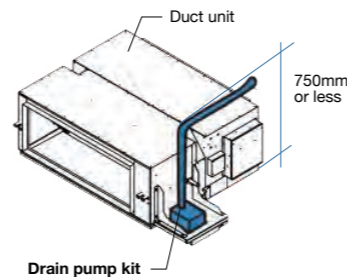
30 Pa – 100 Pa for FXMQ20-32PA  
30 Pa – 160 Pa for FXMQ40PA  
50 Pa – 200 Pa for FXMQ50-125PA  
50 Pa – 140 Pa for FXMQ140PA  
60 Pa – 217 Pa for FXMQ160P  
50 Pa – 210 Pa for FXMQ180P  
50 Pa – 250 Pa for FXMQ200-250P

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

- FXMQ20-140PA models are only 300mm in height making it ideal for use in modern commercial and medium density apartment development where ceiling spaces are tight.

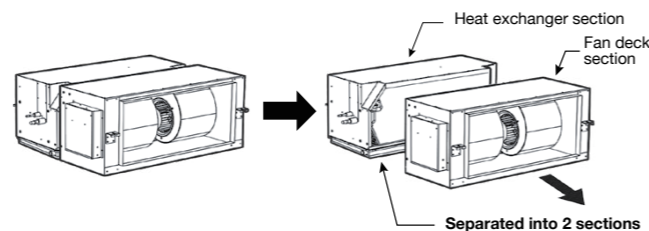
- Control of the airflow rate can be selected from 3-step control and Auto. Auto airflow rate control can be selected with wired remote controller BRC1E63 for FXMQ20-140PA models.

- A built-in drain pump with 700mm lift is equipped as a standard accessory for FXMQ20-140PA models. For FXMQ160-250P models, a 750mm drain pump kit is available as an optional accessory.



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

- To facilitate installation, the FXMQ160-250P models can be separated into 2 sections for convenient handling and easier installation through openings in the ceiling.



## Specifications

MODEL		FXMQ20PAVE	FXMQ25PAVE	FXMQ32PAVE	FXMQ40PAVE	FXMQ50PAVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100
	kW	2.2	2.8	3.6	4.5	5.6
Heating capacity	Btu/h	8,500	10,900	13,600	17,100	21,500
	kW	2.5	3.2	4.0	5.0	6.3
Power consumption *1	Cooling	0.056		0.060	0.151	0.128
	Heating	0.044		0.048	0.139	0.116
Casing		Galvanised steel plate				
Airflow rate (HH/H/L)	ℓ/s	150/125/108		158/133/116	267/216/183	300/275/250
	m <sup>3</sup> /min	9/7.5/6.5		9.5/8/7	16/13/11	18/16.5/15
External static pressure *2	Pa	30-100 (50)			30-160 (100)	50-200 (100)
Sound level (HH/H/L)	dB(A)	33/31/29		34/32/30	39/37/35	41/39/37
Sound power (H)	dB(A)	51		52	57	59
Dimensions (HxWxD)	mm	300x550x700			300x700x700	300x1,000x700
Machine weight	kg	25			27	35
Piping connections	Liquid (Flare)	φ6.4				
	Gas (Flare)	φ12.7				
	Drain	VP25 (External Dia, 32/Internal Dia, 25)				

MODEL		FXMQ63PAVE	FXMQ80PAVE	FXMQ100PAVE	FXMQ125PAVE	FXMQ140PAVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz				
Cooling capacity	Btu/h	24,200	30,700	38,200	47,800	54,600
	kW	7.1	9.0	11.2	14.0	16.0
Heating capacity	Btu/h	27,300	34,100	42,700	54,600	61,400
	kW	8.0	10.0	12.5	16.0	18.0
Power consumption *1	Cooling	0.138	0.185	0.215	0.284	0.405
	Heating	0.127	0.173	0.203	0.272	0.380
Casing		Galvanised steel plate				
Airflow rate (HH/H/L)	ℓ/s	325/292/267	417/375/333	533/450/383	650/550/466	766/649/533
	m <sup>3</sup> /min	19.5/17.5/16	25/22.5/20	32/27/23	39/33/28	46/39/32
External static pressure *2	Pa	50-200 (100)				50-140 (100)
Sound level (HH/H/L)	dB(A)	42/40/38	43/41/39		44/42/40	46/45/43
Sound power (H)	dB(A)	60	61		62	64
Dimensions (HxWxD)	mm	300x1,000x700		300x1,400x700		
Machine weight	kg	35		45		46
Piping connections	Liquid (Flare)	φ9.5				
	Gas (Flare)	φ15.9				
	Drain	VP25 (External Dia, 32/Internal Dia, 25)				

MODEL		FXMQ160PV1A	FXMQ180PV1A	FXMQ200PV1A	FXMQ250PV1A	
Power supply		1-phase, 220-240 V, 50 Hz				
Cooling capacity	Btu/h	61,400	68,200	76,400	95,500	
	kW	18.0	20.0	22.4	28.0	
Heating capacity	Btu/h	68,200	76,400	85,300	107,500	
	kW	20.0	22.4	25.0	31.5	
Power consumption *1	Cooling	0.650		0.640	0.810	
	Heating	0.650		0.640	0.810	
Casing		Galvanized steel plate				
Airflow rate (HH/H/L)	ℓ/s	1,120/955/790	1,160/995/820	1,200/1,025/850	1,400/1,200/1,000	
	m <sup>3</sup> /min	67.2/57.3/47.4	69.6/59.7/49.2	72.0/61.5/51.0	84.0/72.0/60.0	
External static pressure *2	Pa	60-217 (138)	50-210 (130)	50-250 (150)		
Sound level (HH/H/L)	dB(A)	45/41.5/38			44/40.5/37	46/42.5/39
Sound power (H)	dB(A)	73			72	74
Dimensions (HxWxD)	mm	470x1,133x919		470x1,333x919		
Machine weight	kg	70		79	85	
Piping connections	Liquid	φ9.5 (Flare)		φ9.5 (Brazing)		
	Gas	φ15.9 (Flare)		φ19.1 (Brazing)		
	Drain	BSP 3/4 internal thread (OD φ32.7)				

Note: Specifications are based on the following conditions:

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

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

•Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)

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

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

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

\*2: External static pressure can be modified using a remote controller that offers seven (FXMQ20-32PA), thirteen (FXMQ40PA), fourteen (FXMQ50-125PA),

ten (FXMQ140PA) or fifteen (FXMQ160-250P) levels of control.

These values indicate the lowest and highest possible static pressures. The rated static pressure is 50 Pa for FXMQ20-32PA 100 Pa for FXMQ40-140PA, 138 Pa for FXMQ160P,

130 Pa for FXMQ180P and 150 Pa for FXMQ200-250P.

## Ceiling Suspended Type

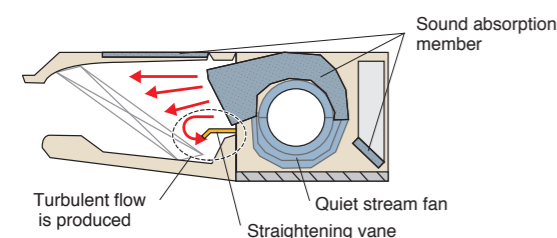
FXHQ-MA

### Slim body with quiet and wide airflow



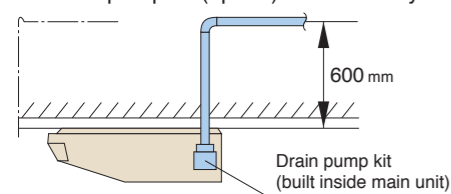
#### Adoption of QUIET STREAM FAN

Uses the quiet stream fan and many more advanced technologies.

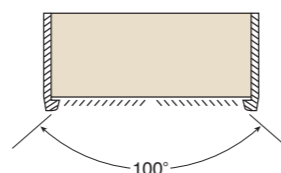


#### Installation is easy

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



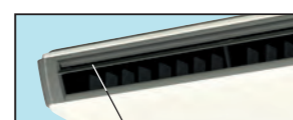
- Wide air discharge openings produce a spreading 100° airflow.



#### Maintenance is easy

- Non-dew Flap with no implanted bristles

Bristle-free Flap minimises contamination and makes cleaning simpler.



Non-dew Flap

- Easy-to-clean flat design
- Maintenance is easier because everything can be performed from below the unit.
- A long-life filter (maintenance free up to one year\*) is equipped as standard accessory.

\* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>

## Specifications

MODEL		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz		
Cooling capacity	Btu/h	12,300	24,200	38,200
	kW	3.6	7.1	11.2
Heating capacity	Btu/h	13,600	27,300	42,700
	kW	4.0	8.0	12.5
Power consumption	Cooling kW	0.111	0.115	0.135
	Heating kW	0.111	0.115	0.135
Casing		White (10Y9/0.5)		
Airflow rate (H/L)	ℓ/s	200/166	291/233	416/325
	m <sup>3</sup> /min	12/10	17.5/14	25/19.5
Sound level (H/L)	dB(A)	36/31	39/34	45/37
Dimensions (HxWxD)	mm	195x960x680	195x1,160x680	195x1,400x680
Machine weight	kg	24.0	28.0	33.0
Piping connections	Liquid (Flare)	φ6.4	φ9.5	φ9.5
	Gas (Flare)	φ12.7	φ15.9	φ15.9
	Drain	VP20 (External Dia, 26/Internal Dia, 20)		

Note: Specifications are based on the following conditions:

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

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

## Wall Mounted Type

FXAQ-P

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



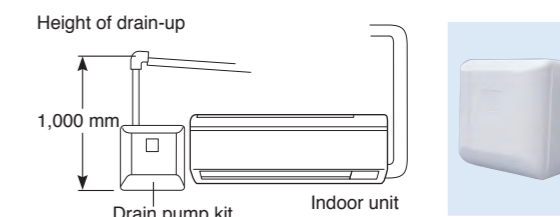
- Stylish flat panel design creates a graceful harmony that enhances any interior space.
- Flat panel can be cleaned with only the single pass of a cloth across their smooth surface. Flat panel can also be easily removed and washed for more thorough cleaning.
- Drain pan and air filter can be kept clean by mould-proof polystyrene.
- Vertical auto-swing realises efficiency of air distribution. The louvre closes automatically when the unit stops.
- 5 steps of discharge angle can be set by remote controller.

- Discharge angle is automatically set at the same angle as the previous operation when restarting. (Initial setting: 10° for cooling and 70° for heating)

#### Flexible installation

- Drain pipe can be fitted to 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		FXAQ20PVE	FXAQ25PVE	FXAQ32PVE	FXAQ40PVE	FXAQ50PVE	FXAQ63PVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	Cooling kW	0.019	0.028	0.030	0.020	0.033	0.050
	Heating kW	0.029	0.034	0.035	0.020	0.039	0.060
Casing		White (3.0Y8.5/0.5)					
Airflow rate (H/L)	ℓ/s	125/75	133/83	142/91	200/150	250/200	316/233
	m <sup>3</sup> /min	7.5/4.5	8/5	8.5/5.5	12/9	15/12	19/14
Sound level (H/L)	dB(A)	35/31	36/31	38/31	39/34	42/37	47/41
Dimensions (HxWxD)	mm	290x795x238			290x1,050x238		
Machine weight	kg	11.0			14.0		
Piping connections	Liquid (Flare)	φ6.4			φ9.5		
	Gas (Flare)	φ12.7			φ15.9		
	Drain	VP13 (External Dia, 18/Internal Dia, 13)					

Note: Specifications are based on the following conditions:

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

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

## Floor Standing Type

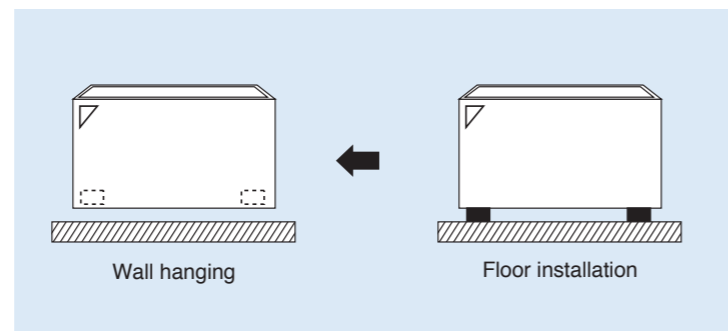
FXLQ-MA

Suitable for perimeter zone air conditioning



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

\* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>



## Specifications

MODEL		FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	Cooling kW	0.049		0.090		0.110	
	Heating kW	0.049		0.090		0.110	
Casing		FXLQ: Ivory white (5Y7.5/1)					
Airflow rate (H/L)	ℓ/s	116/100		133/100		183/141	
	m <sup>3</sup> /min	7/6		8/6		11/8.5	
Sound level (H/L)	240 V	37/34		40/35		41/36	
		37/34		40/35		41/36	
Dimensions (HxWxD)	mm	600x1,000x222		600x1,140x222		600x1,420x222	
Machine weight	kg	25.0		30.0		36.0	
Piping connections	Liquid (Flare)			φ6.4		φ9.5	
	Gas (Flare)			φ12.7		φ15.9	
	Drain	210.D.					

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

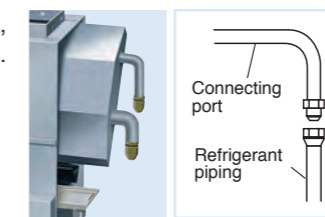
## Concealed Floor Standing Type

FXNQ-MA

Designed to be concealed in the perimeter skirting-wall



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



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

\* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m<sup>3</sup>

## Specifications

MODEL		FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE
Power supply		1-phase, 220-240 V/220 V, 50/60 Hz					
Cooling capacity	Btu/h	7,500	9,600	12,300	15,400	19,100	24,200
	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	Btu/h	8,500	10,900	13,600	17,100	21,500	27,300
	kW	2.5	3.2	4.0	5.0	6.3	8.0
Power consumption	Cooling kW	0.049		0.090		0.110	
	Heating kW	0.049		0.090		0.110	
Casing		FXNQ: Galvanised steel plate					
Airflow rate (H/L)	ℓ/s	116/100		133/100		183/141	
	m <sup>3</sup> /min	7/6		8/6		11/8.5	
Sound level (H/L)	240 V	37/34		40/35		41/36	
		37/34		40/35		41/36	
Dimensions (HxWxD)	mm	610x930x220		610x1,070x220		610x1,350x220	
Machine weight	kg	19.0		23.0		27.0	
Piping connections	Liquid (Flare)			φ6.4		φ9.5	
	Gas (Flare)			φ12.7		φ15.9	
	Drain	210.D.					

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

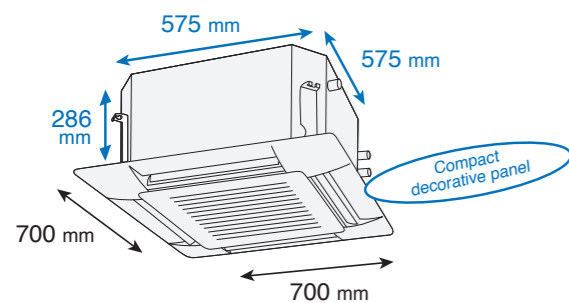
# Indoor Unit Lineup

## Ceiling Mounted Cassette (Compact Multi Flow) Type FFQ-B

Quiet, compact, and designed for user comfort



- Designed to fit 600 mm wide ceiling grids



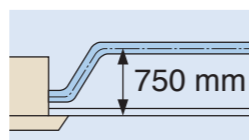
- Comfortable across all areas

Conditioned air is distributed evenly by Auto-swing operation. Adjustable airflow angle to suit all room conditions.

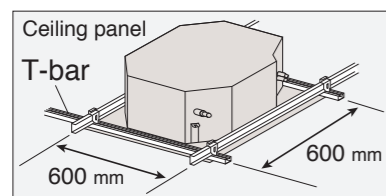
	AUTO-SWING	5 direction
Standard setting	Auto-swing between 0° and 60°	Settable to 5 different levels between 0° and 60°
Draft prevention setting (Set on site)	Auto-swing between 0° and 35°	Settable to 5 different levels between 0° and 35°
Setting to prevent soiling of ceiling (Set on site)	Auto-swing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

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

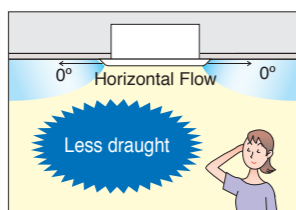
- Drain pump is equipped as standard accessory with 750 mm lift.



- T-bar grid does not need to be cut.



- Low draft performance is designed for your comfort.



## Specifications

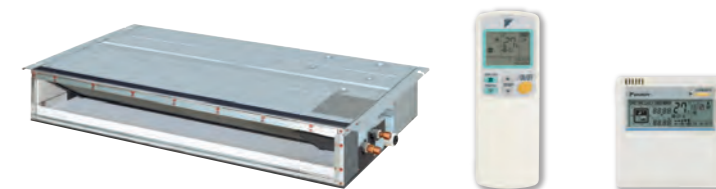
MODEL	FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B
Power supply	1-phase, 220-240 V, 50 Hz			
Airflow rate (H)	9.0 (150)	10.0 (167)	12.0 (200)	15.0 (250)
Sound level (H/L)*	29.5/24.5	32/25	36/27	41/32
Sound power level (H)	46.5	49	53	58
Fan speed	2 steps			
Temperature control	Microcomputer control			
Dimensions (HxWxD)	286x575x575			
Machine weight	17.5			
Piping connections	Liquid (Flare)	φ6.4		φ12.7
	Gas (Flare)	φ9.5		
	Drain	VP20 (External Dia. 26/Internal Dia. 20)		
Heat insulation	Both liquid and gas pipes			
Panel (Option)	Model	BYFQ60B3W1		
	Colour	White		
	Dimensions(HxWxD)	55x700x700		
	Weight	2.7		

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

# Residential Indoor Units with connection to BP units

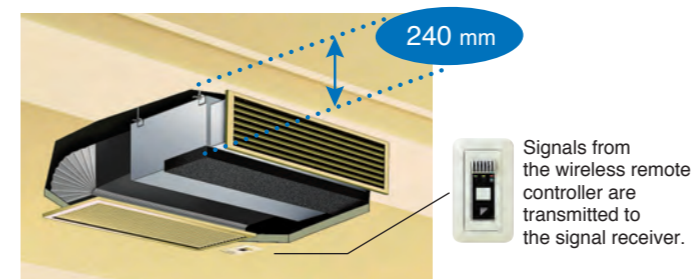
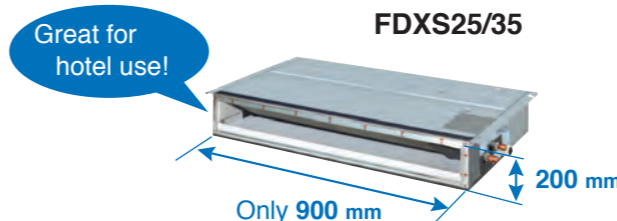
## Slim Ceiling Mounted Duct Type FDXS-C

Slim and smooth design suits your shallow ceiling



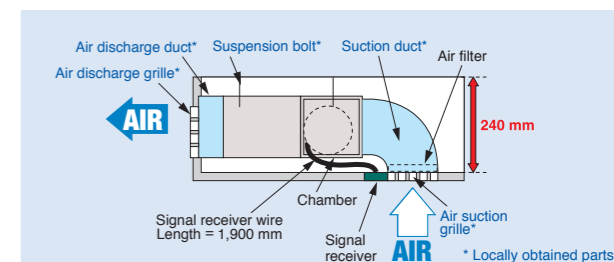
Standard accessory Option

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



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

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



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

## Specifications

MODEL	FDXS25CVMA	FDXS35CVMA	FDXS50CVMA	FDXS60CVMA
Power supply	1-phase, 220-240 V/220-230 V, 50/60 Hz			
Airflow rate (H)	9.5 (158)	10.0 (167)	12.0 (200)	16.0 (267)
Sound level (H/L/SL)*	35/31/29		37/33/31	38/34/32
Sound power (H)	53		55	56
Fan speed	5 steps, quiet and automatic			
Temperature control	Microcomputer control			
Dimensions (HxWxD)	200x900x620			200x1,100x620
Machine weight	25	27	30	
Piping connections	Liquid (Flare)	φ6.4		φ12.7
	Gas (Flare)	φ9.5		
	Drain	VP20 (External Dia. 26/Internal Dia. 20)		
Heat insulation	Both liquid and gas pipes			
External static pressure	40			

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

# Indoor Unit Lineup

## Wall Mounted Type

CTXG-P

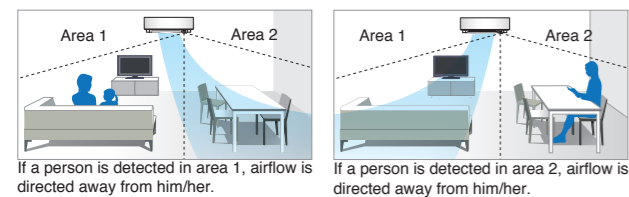
Elegant appearance with European style



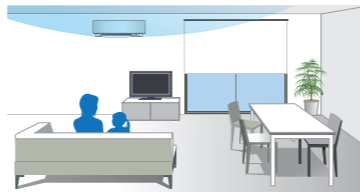
- Elegant Appearance with Curved Panel
  - The sleek design of the CTXG-P indoor unit features a uniquely European style. This elegant body houses state-of-the-art technology which delivers superior performance. The CTXG-P series offers a versatile choice for home-owners, designers and architects alike.



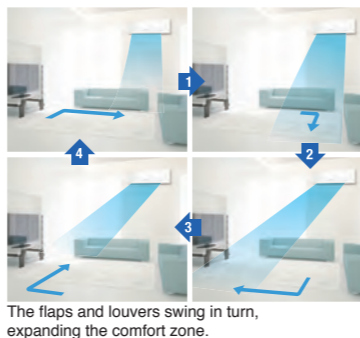
- Two-Area Intelligent Eye
  - A combination of Comfort Airflow Mode and Intelligent Eye directs airflow away from people to avoid drafts. If there is no movement in a room for 20 minutes, Intelligent Eye automatically adjusts the set temperature by approximately 2°C to save energy.



- Comfort Airflow Mode
  - Comfort Airflow Mode prevents uncomfortable drafts from blowing directly on to a person's body. During cooling operation, the flap moves upwards to prevent cold drafts. During heating operation, the flap turns vertically downwards to drive warm air to the floor.



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



## Specifications

MODEL		CTXG25PVMW	CTXG25PVMAS	CTXG35PVMW	CTXG35PVMAS	CTXG50PVMW	CTXG50PVMAS
Power supply		1-phase, 220-240 V/220-230 V, 50/60 Hz					
Front panel colour		White	Silver	White	Silver	White	Silver
Airflow rate (H)	Cooling	8.3 (138)		10.6 (177)		10.8 (180)	
	Heating	10.4 (173)		11.9 (198)		12.4 (207)	
Sound level (H/L/SL)	Cooling	38/25/21		45/26/22		46/35/32	
	Heating	41/28/21		45/29/22		47/35/32	
Sound power (H)	Cooling	54		61		62	
	Heating	57		61		63	
Fan speed		5 steps, quiet and automatic					
Temperature control		Microcomputer control					
Dimensions (HxWxD)	mm	303x998x212					
Machine weight	kg	12					
Piping connections	Liquid (Flare)	φ6.4					
	Gas (Flare)	φ9.5		φ12.7			
	Drain	φ18.0					
Heat insulation		Both liquid and gas pipes					

# Residential Indoor Units with connection to BP units

## Wall Mounted Type

FTXS-K(A)

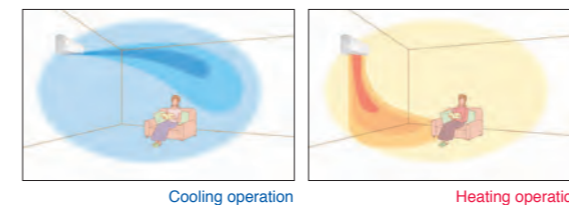
Stylish flat panel harmonises with your interior décor



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

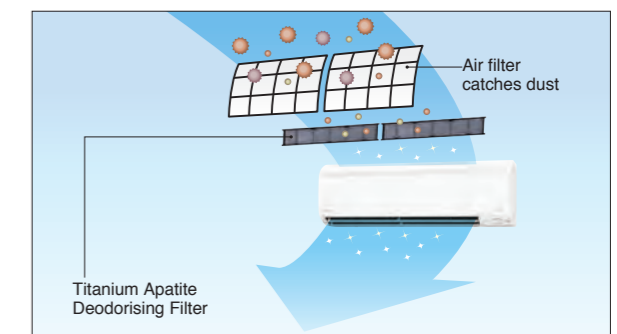


- Comfort Airflow Mode prevents uncomfortable drafts from blowing directly on to your body. With this function, when you press the COMFORT button during cooling operation, the flap moves upward to prevent direct cold drafts. During heating operation, it also moves downward to prevent direct drafts and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



### Titanium Apatite Deodorising Filter

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



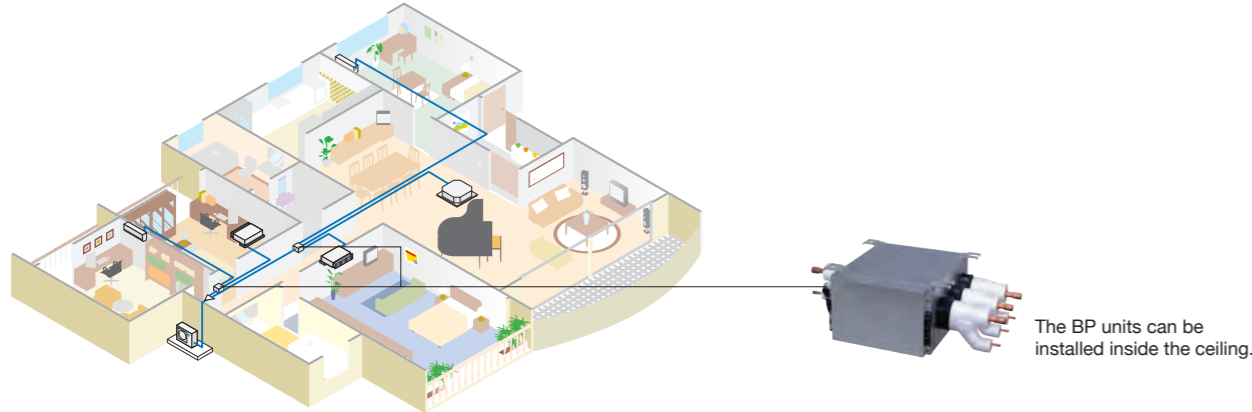
This filter is not a medical device. Benefits such as the adsorption of odours and allergens and deodorisation of odours are only effective for substances which are directly attached to the Titanium Apatite Deodorising Filter.

## Specifications

MODEL		FTXS20KVMA	FTXS25KVMA	FTXS35KVMA	FTXS50KAVMA	FTXS60KAVMA	FTXS71KAVMA
Power supply		1-phase, 220-240 V/220-230 V, 50/60 Hz					
Front panel colour		White					
Airflow rate (H)	Cooling	9.7 (161)		11.3 (188)		14.7 (245)	
	Heating	10.5 (175)		11.5 (191)		16.2 (270)	
Sound level (H/L/SL)	Cooling	38/25/22		42/26/23		44/35/32	
	Heating	39/28/25		42/29/26		44/35/32	
Sound power (H)	Cooling	54		58		60	
	Heating	55		58		60	
Fan speed		5 steps, quiet and automatic					
Temperature control		Microcomputer control					
Dimensions (HxWxD)	mm	295x800x215			290x1,050x250		
Machine weight	kg	9		10		12	
Piping connections	Liquid (Flare)	φ6.4					
	Gas (Flare)	φ9.5		φ12.7			
	Drain	I.D φ14.0xO.D φ18.0		φ18.0			
Heat insulation		Both liquid and gas pipes					



## BP Units for Connection to Residential Indoor Units



The BP units can be installed inside the ceiling.

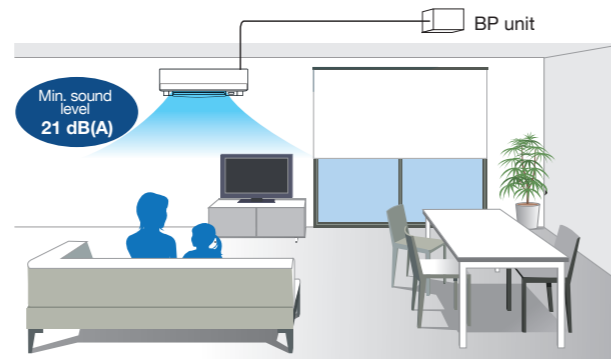
### Connectable to Residential Indoor Units

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

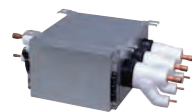


### Quiet Operating Sound

Expansion valves tend to create refrigerant passing noise. However, this noise can be reduced by installing the valves in BP units. The units can be fitted inside the ceiling or roof-space far from an indoor unit. Some Daikin residential indoor units also provide minimum sound levels of just 21 dB(A). Together these features ensure your system continues to operate as quietly as possible.



### Specifications



BPMKS967A3



BPMKS967A2

MODEL		BPMKS967A3	BPMKS967A2
Power supply		1-phase, 220-240 V/220-230 V, 50/60 Hz	
Number of ports		3 (connectable to 1-3 indoor units)	2 (connectable to 1-2 indoor units)
Power consumption		W 10	
Running current		A 0.05	
Dimensions (HxWxD)		mm 180X294 (+356*)X350	
Machine weight		kg 8	kg 7.5
Number of wiring connections		3 for power supply (including earth wiring), 2 for interunit wiring (outdoor unit-BP, BP-BP), 4 for interunit wiring (BP-indoor unit)	2 for power supply (including earth wiring), 2 for interunit wiring (outdoor unit-BP, BP-BP), 3 for interunit wiring (BP-indoor unit)
Piping connections (Brazeing)	Liquid	Main Branch	mm $\phi 9.5 \times 1$
		Branch	mm $\phi 6.4 \times 3$
	Gas	Main Branch	mm $\phi 19.1 \times 1$
		Branch	mm $\phi 15.9 \times 3$
Heat insulation		Both liquid and gas pipes	
Connectable indoor units		2.0 kW class to 7.1 kW class	
Min. rated capacity of connectable indoor units		kW 2.0	
Max. rated capacity of connectable indoor units		20.8	14.2

Note: \* Total auxiliary piping length.

## BS Units for Heat Recovery

### Specifications — Individual BS Unit



MODEL		BSQ100AV1	BSQ160AV1	BSQ250AV1	
Power supply		1-phase, 220-240 V, 50 Hz			
No. of branches		1			
Total capacity index of connectable indoor units		20 to 100	More than 100 but 160 or less	More than 100 but 250 or less	
No. of connectable indoor units		Max. 5	Max. 8	Max. 8	
Casing		Galvanised steel plate			
Dimensions (HxWxD)		mm 207x388x326			
Piping connections	Indoor Unit	Liquid	mm $\phi 9.5$ (Brazeing)* <sup>1</sup>	$\phi 9.5$ (Brazeing)	$\phi 9.5$ (Brazeing)
		Gas	mm $\phi 15.9$ (Brazeing)* <sup>1</sup>	$\phi 15.9$ (Brazeing)* <sup>2</sup>	$\phi 22.2$ (Brazeing)* <sup>3</sup>
	Outdoor Unit	Liquid	mm $\phi 9.5$ (Brazeing)	$\phi 9.5$ (Brazeing)	$\phi 9.5$ (Brazeing)
		Suction gas	mm $\phi 15.9$ (Brazeing)	$\phi 15.9$ (Brazeing)* <sup>2</sup>	$\phi 22.2$ (Brazeing)* <sup>3</sup>
	High and low pressure gas	mm $\phi 12.7$ (Brazeing)	$\phi 12.7$ (Brazeing)* <sup>2</sup>	$\phi 19.1$ (Brazeing)* <sup>3</sup>	
Machine weight		kg 11	kg 11	kg 14	
Sound level		dB(A) 35(40)* <sup>4</sup>	dB(A) 41(45)* <sup>4</sup>	dB(A) 41(45)* <sup>4</sup>	

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

### Specifications — Centralised BS Unit



4 branch



16 branch

MODEL		BS4Q14AV1	BS6Q14AV1	BS8Q14AV1	BS10Q14AV1	BS12Q14AV1	BS16Q14AV1	
Power supply		1-phase, 220-240 V, 50 Hz						
No. of branches		4	6	8	10	12	16	
Capacity index of connectable indoor units of branch		Max. 140						
Capacity index of connectable indoor units		Max. 400	Max. 600	Max. 750				
No. of connectable indoor units per branch		5						
Casing		Galvanised steel plate						
Dimensions (HxWxD)		mm 298x370x430	mm 298x580x430	mm 298x820x430		mm 298x1060x430		
Piping connections	Indoor Unit	Liquid	mm $\phi 9.5, \phi 6.4$ Brazeing* <sup>1</sup>					
		Gas	mm $\phi 15.9, \phi 12.7$ Brazeing* <sup>1</sup>					
	Outdoor Unit	Liquid	mm $\phi 9.5$ Brazeing* <sup>2</sup>	mm $\phi 12.7$ Brazeing* <sup>2</sup>	mm $\phi 12.7$ Brazeing ( $\phi 15.9$ )* <sup>2</sup>	mm $\phi 15.9$ Brazeing* <sup>2</sup>	mm $\phi 15.9$ Brazeing ( $\phi 19.1$ )* <sup>2</sup>	mm $\phi 19.1$ Brazeing* <sup>2</sup>
		Suction gas	mm $\phi 22.2$ Brazeing ( $\phi 19.1$ )* <sup>2</sup>	mm $\phi 28.6$ Brazeing* <sup>2</sup>		mm $\phi 28.6$ Brazeing ( $\phi 34.9$ )* <sup>2</sup>		mm $\phi 34.9$ Brazeing* <sup>2</sup>
	High and low pressure gas	mm $\phi 19.1$ Brazeing ( $\phi 15.9$ )* <sup>2</sup>	mm $\phi 19.1$ Brazeing ( $\phi 22.2$ )* <sup>2</sup>	mm $\phi 19.1$ Brazeing ( $\phi 22.2, 28.6$ )* <sup>2</sup>	mm $\phi 28.6$ Brazeing* <sup>2</sup>			
Machine weight		kg 17	kg 24	kg 26	kg 35	kg 38	kg 50	
Sound level		dB(A) 38(45)* <sup>3</sup>	dB(A) 39(47)* <sup>3</sup>	dB(A) 40(48)* <sup>3</sup>		dB(A) 41(49)* <sup>3</sup>		
Drain pipe size		mm VP20 (External Dia, 26/Internal Dia, 20)						

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

# Air Handling Unit

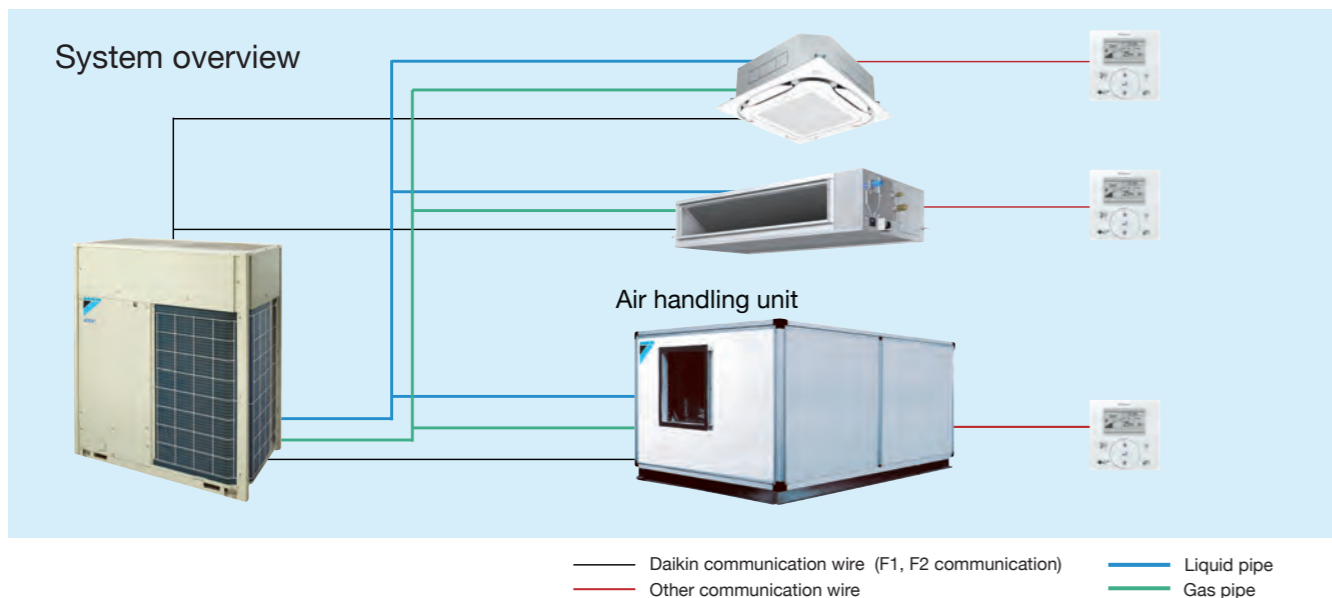
## Air Handling Unit

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

**AHUR**  
Capacity range : 6 – 60 class



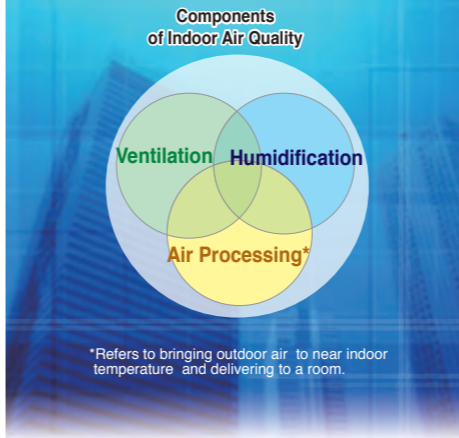
- Easy design and installation
  - The system is easy to design and install since no additional water systems such as boilers, tanks and gas connections etc are required.
- Inverter controlled units
- Control of air temperature via standard Daikin wired remote control for standard series



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

# Air Treatment Equipment Lineup

Daikin's air treatment systems creating a higher air quality environment



A recent trend rapidly gaining popularity is for air treatment to be required as well as air conditioning. Daikin's Outdoor-Air Processing Unit can combine fresh air treatment and air conditioning, supplied from a single system. It adjusts the temperature of air from outdoors using a fixed discharge temperature control. Along with Outdoor-Air Processing Units, we also offer Heat Reclaim Ventilator systems. The Heat Reclaim Ventilator VAM-GJ series units in particular have been praised for their compactness, energy conservation and extensive operation range of outdoor temperatures. This series provides higher enthalpy efficiency\*<sup>1</sup>, due to the greatly enhanced performance of the thin film element. Furthermore, improved external static pressure\*<sup>2</sup> offers more flexibility for installation. The Heat Reclaim Ventilator VKM-GAM series units, equipped with a DX-coil and a humidifier, provide further advanced features, such as temperature adjustment to suit conditions indoors and to prevent cold air from blowing on people directly during heating operation. The series also realises significant energy savings by exercising heat recovery.

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

	Outdoor-Air Processing Unit	Heat Reclaim Ventilator		
		VKM-GAM Type	VKM-GA Type	VAM-GJ Type
Connections with VRF system				
Refrigerant Piping	Connectable	Connectable	Not connectable	
Wiring	Connectable	Connectable	Connectable	
After-cool & After-heat Control	Available	Available	Not available	
Heat Exchange Element	—	Energy savings obtained	Energy savings obtained	
Humidifier	—	Fitted	—	
High Efficiency Filter	Option	Option	Option	
Ventilation System	Air supply only	Air supply & air exhaust	Air supply & air exhaust	
Power Supply	220-240 V, 50 Hz	220-240 V, 50 Hz	220-240 V/220 V, 50/60 Hz	
Airflow Rate				
				150 m <sup>3</sup> /h
				250 m <sup>3</sup> /h
				350 m <sup>3</sup> /h
		500 m <sup>3</sup> /h		500 m <sup>3</sup> /h
				650 m <sup>3</sup> /h
		800 m <sup>3</sup> /h		800 m <sup>3</sup> /h
		1000 m <sup>3</sup> /h		1000 m <sup>3</sup> /h
	1080 m <sup>3</sup> /h			1500 m <sup>3</sup> /h
	1680 m <sup>3</sup> /h			2000 m <sup>3</sup> /h
	2100 m <sup>3</sup> /h			

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

# Air Treatment Equipment Lineup

## Outdoor-Air Processing Unit

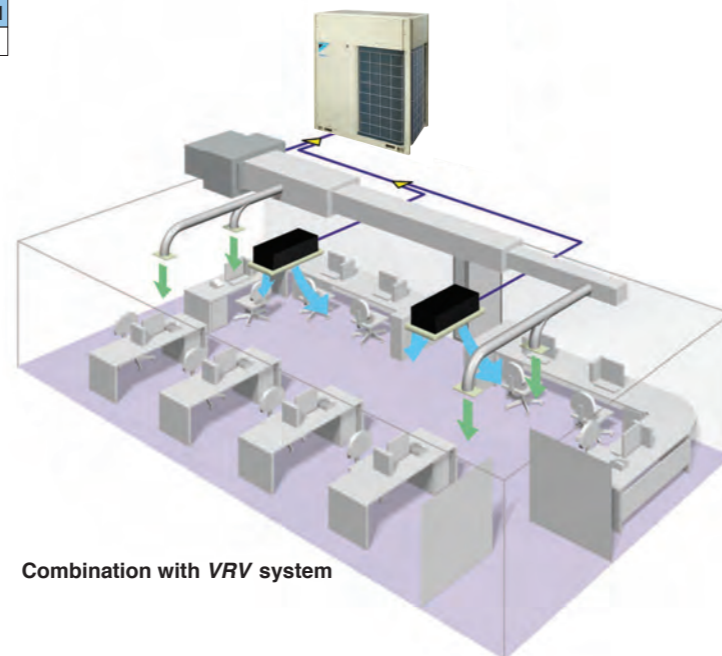
Combine fresh air treatment and air conditioning, supplied from a single system.

### Lineup

Model Name	FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
Capacity Index	125	200	250

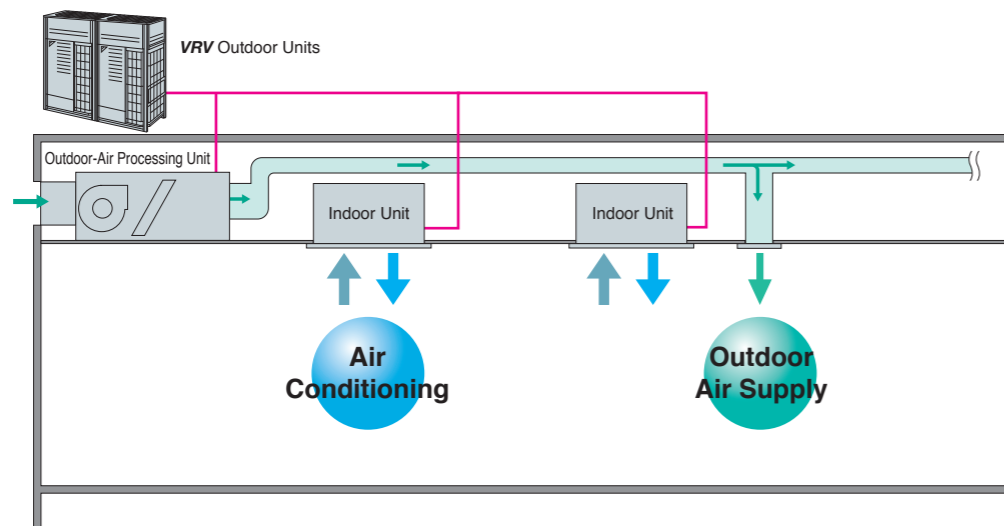


Fresh air treatment and air conditioning can be achieved with a single system by using heat pump technology—without the usual troublesome air supply and air discharge balance design. Fan coil units for air conditioning and an outdoor-air processing unit can be connected to the same refrigerant line.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



Combination with VRV system

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



### Connection Conditions

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

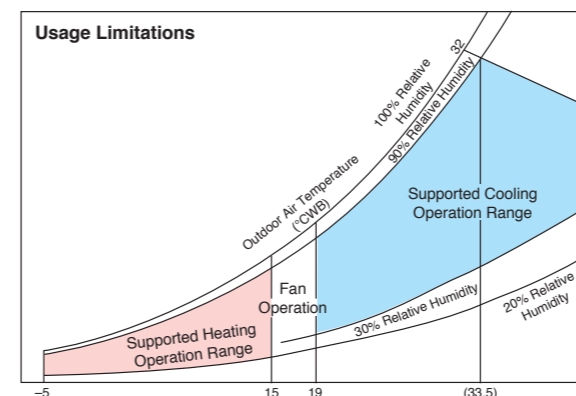
- When outdoor-air processing units are connected, the total connection capacity index must be 50% to 100% of the capacity index of the outdoor units.
- When outdoor-air processing units and standard indoor units are connected, the total connection capacity index of the outdoor-air processing units must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

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

### Airflow rate

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

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



Note:

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

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

- As with the VRV system, a variety of control systems can be deployed, including remote control from distances of up to 500 m.



BRC1E63  
"Nav Ease"  
(Wired remote controller)  
(option)

- Group control is not possible between this unit and standard type indoor units. Connect remote controllers to each unit.

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

- A central control system compatible with the VRV system can be installed.



DCS302CA61  
Central remote controller  
(option)

- It is not possible to change the discharge air temperature settings from the central control system.
- Do not associate this equipment into zones with standard indoor units, as central control will not be possible.

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

Note:

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

# Air Treatment Equipment Lineup

## Standard Specifications

### Indoor unit

Type		Ceiling Mounted Duct Type		
Model		FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
Power supply		1-phase 220-240 V (also required for indoor units), 50 Hz		
Cooling capacity *1	Btu/h	47,800	76,400	95,500
	kW	14.0	22.4	28.0
Heating capacity *1	Btu/h	30,400	47,400	59,400
	kW	8.9	13.9	17.4
Power consumption	kW	0.359	0.548	0.638
Casing		Galvanised steel plate		
Dimensions (HxWxD)		470X744X1,100		470X1,380X1,100
Fan	Motor output	0.380		
	Airflow rate	ℓ/s	300	466
		m <sup>3</sup> /min	18	28
External static pressure	240 V Pa	225	275	255
Air filter		*2		
Refrigerant piping	Liquid	φ 9.5 (flare)		
	Gas	φ 15.9 (flare)	φ 19.1 (brazing)	φ 22.2 (brazing)
	Drain	PS1B female thread		
Machine weight	kg	86	123	
Sound level *3	240 V dB(A)	43	48	
Connectable outdoor units *4		6 class and above	8 class and above	10 class and above
Operation range (Fan mode operation between 15 and 19°C)	Cooling	19 to 43°C		
	Heating	-5 to 15°C		
Range of the discharge temperature *5	Cooling	13 to 25°C		
	Heating	18 to 30°C		

Note: \*1. Specifications are based on the following conditions:  
 • Cooling: Outdoor temp. of 33°CDB, 28°CWB (68% RH), and discharge temp. of 18°CDB.  
 • Heating: Outdoor temp. of 0°CDB, -2.9°CWB (50% RH), and discharge temp. of 25°CDB.  
 • Equivalent reference piping length: 7.5 m (0 m horizontal)  
 \*2. An intake filter is not supplied, so be sure to install the optional long-life filter or high-efficiency filter. Please mount it in the duct system of the suction side. Select a dust collection efficiency (gravity method) of 50% or more.  
 \*3. Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. These values are normally somewhat higher during actual operation as a result of ambient conditions.  
 \*4. It is possible to connect to the outdoor unit if the total capacity of the indoor units is 50% to 100% of the capacity index of the outdoor unit.  
 \*5. Local setting mode. Not displayed on the remote controller.  
 • This equipment cannot be incorporated into the remote group control of the VRV system.

## Options

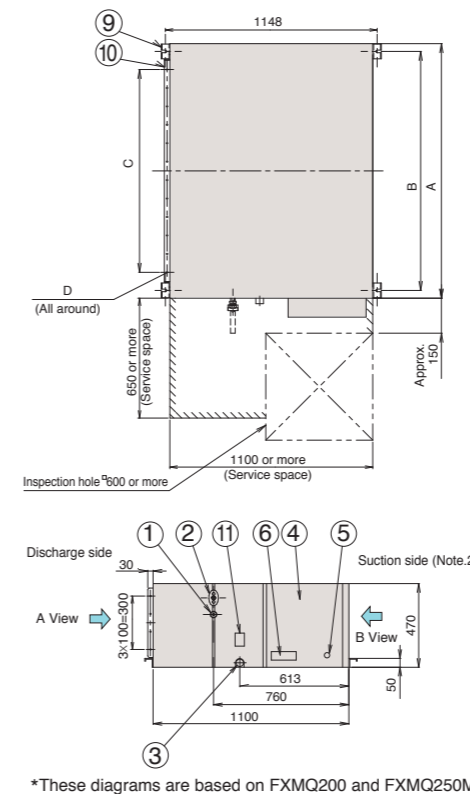
### Indoor unit

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

Note: \*1. Filter chamber has a suction-type flange. (Main unit does not.)  
 • Dimensions and weight of the equipment may vary depending on the options used.  
 • Some options may not be usable due to the equipment installation conditions, so please confirm prior to ordering.  
 \*2. Refer to page 160-162 for details.  
 • Some options may not be used in combination.  
 • Operating sound may increase somewhat depending on the options used.

## Dimensions

### FXMQ125/200/250MFV1



\*These diagrams are based on FXMQ200 and FXMQ250MFV1.

### Local connection piping size

Model	Gas piping diameter	Liquid piping diameter
FXMQ125MFV1	φ15.9	φ9.5
FXMQ200MFV1	φ19.1 attached piping	φ9.5
FXMQ250MFV1	φ22.2 attached piping	φ9.5

### Table of dimensions

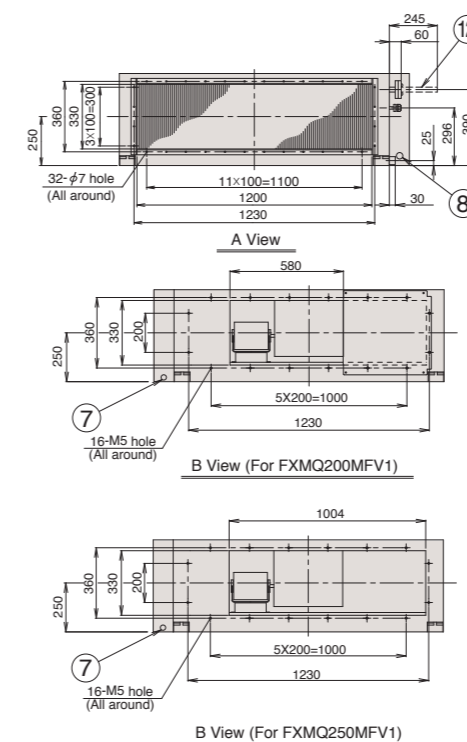
Model	A	B	C	D
FXMQ125MFV1	744	685	5X100=500	20-φ4.7 hole
FXMQ200MFV1	1380	1296	11X100=1100	32-φ4.7 hole
FXMQ250MFV1	1380	1296	11X100=1100	32-φ4.7 hole

### Note:

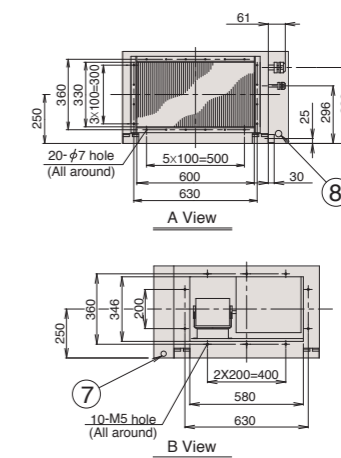
- The attached piping in the diagram is for FXMQ200MFV1 and FXMQ250MFV1 only. The gas piping connection port (2) in the diagram has a different bore form with FXMQ125MFV1.
- An air filter is not supplied with this unit. Be sure to mount an air filter in the suction side. [Use a filter with dust collection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

- ① Liquid pipe connection
- ② Gas pipe connection
- ③ Drain piping connection
- ④ Electric parts box
- ⑤ Ground terminal
- ⑥ Name plate
- ⑦ Power supply wiring connection
- ⑧ Transmission wiring connection
- ⑨ Hanger bracket
- ⑩ Discharge companion flange
- ⑪ Water supply port
- ⑫ Attached piping (Note. 1)

### FXMQ200/250MFV1



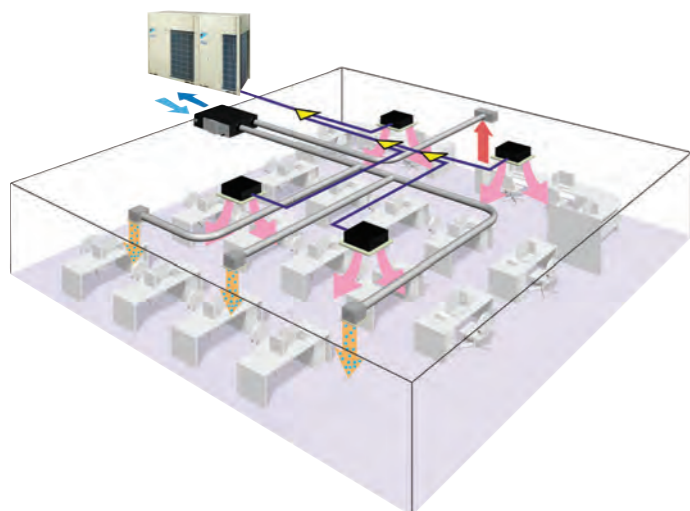
### FXMQ125MFV1



# Air Treatment Equipment Lineup

## Heat Reclaim Ventilator with DX-Coil and Humidifier – VKM series

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



### Lineup

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

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



### Humidifier

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

### DX-coil

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

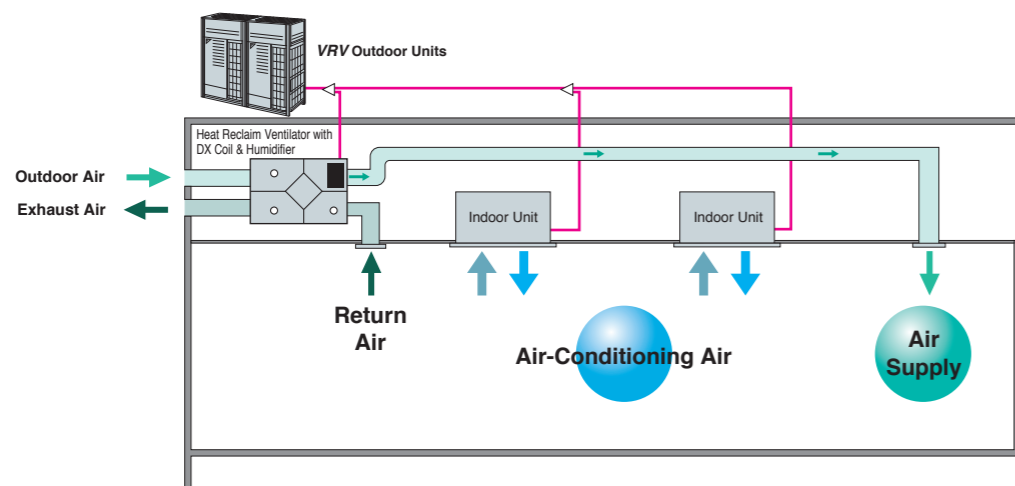
### High static pressure

High external static pressure means enhanced design flexibility.

### Efficient outdoor air introduction is possible

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

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

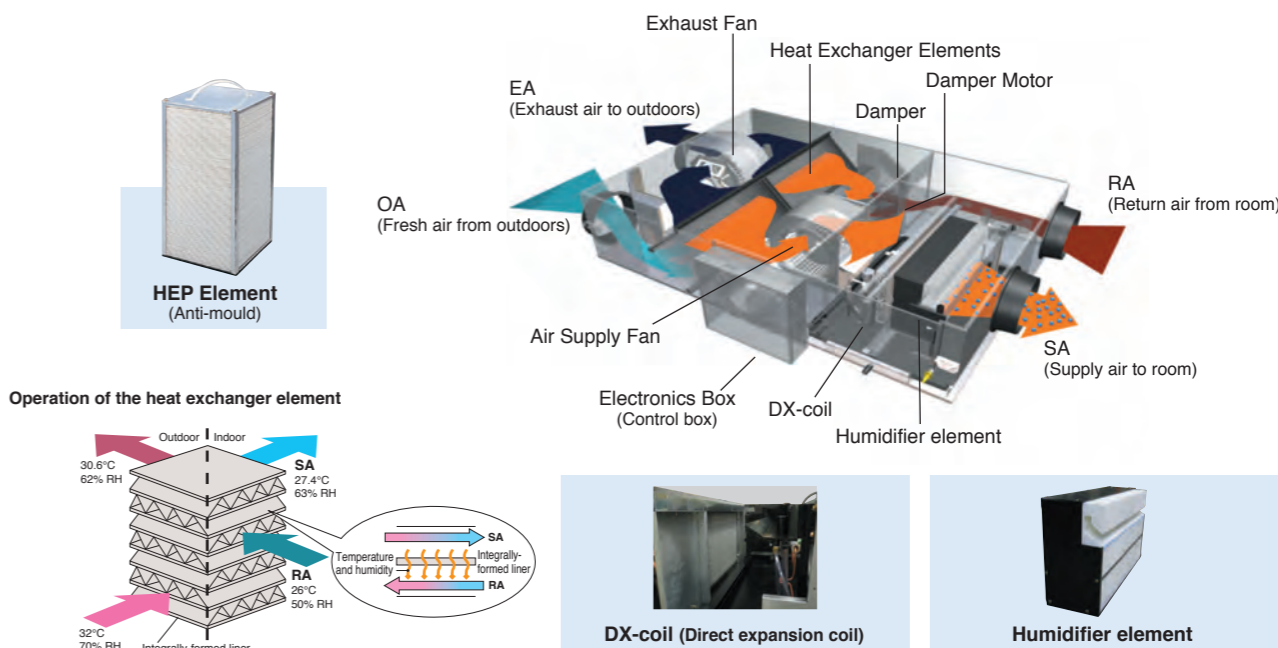


### Connection Conditions

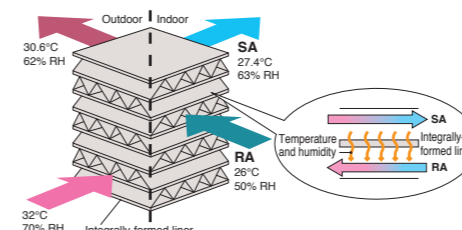
The following restrictions must be observed in order to maintain the indoor units connected to the same system.

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

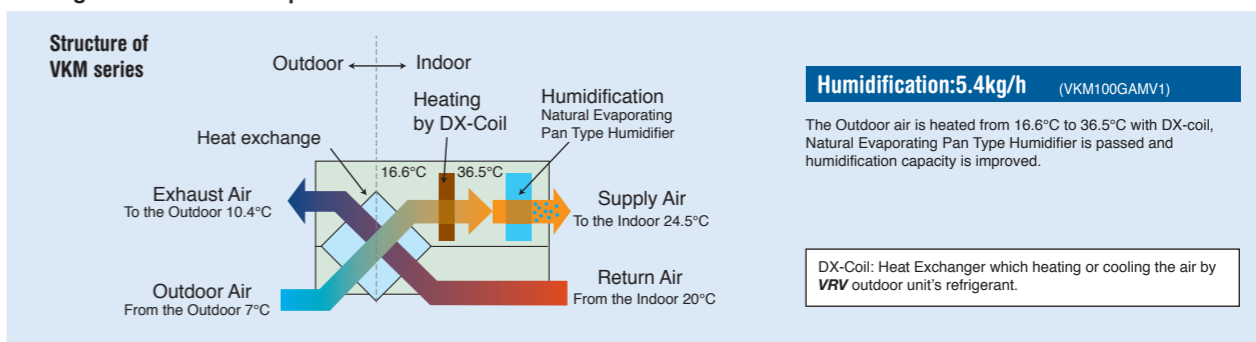
A compact unit packed with Daikin's cutting-edge technologies



### Operation of the heat exchanger element



### Heating and humidification process



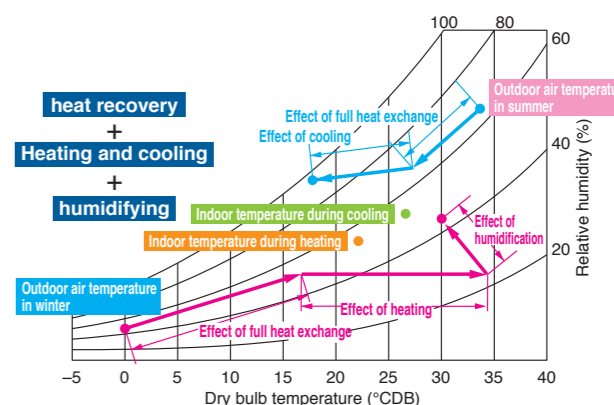
### Efficient outdoor air introduction with heat exchanger and cooling/heating operation

#### Indoor unit with outdoor air treatment

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

#### Other features

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



# Air Treatment Equipment Lineup

## Specifications

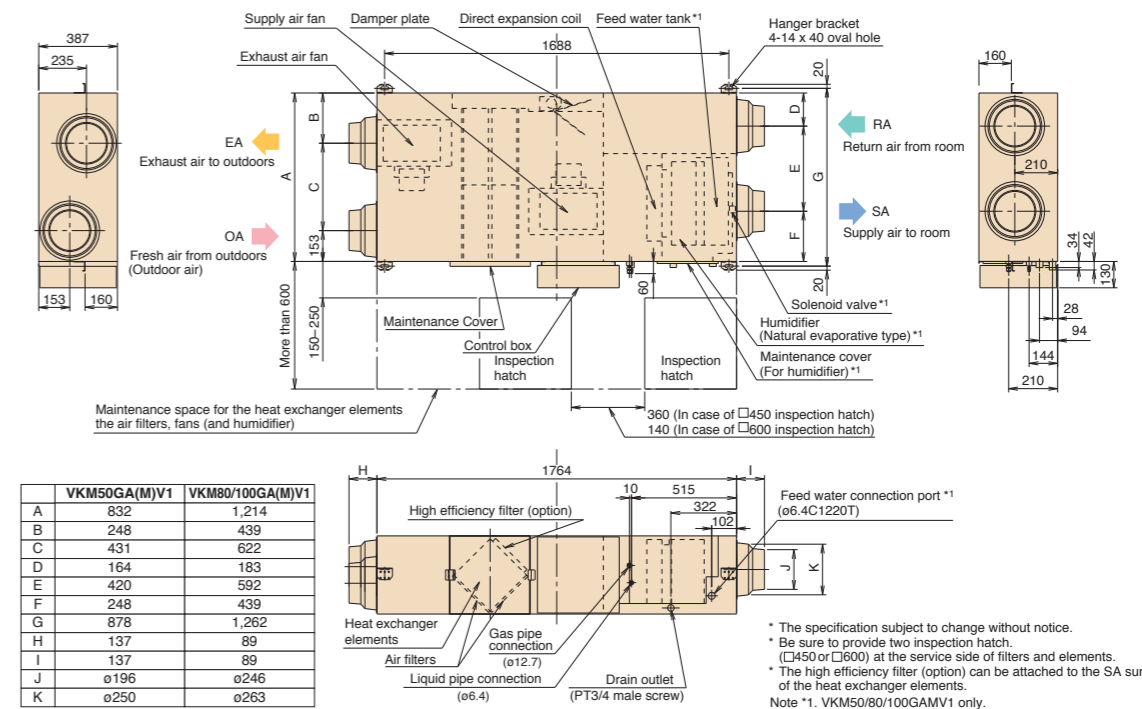
MODEL		VKM50GAMV1*	VKM80GAMV1*	VKM100GAMV1*	VKM50GAV1	VKM80GAV1	VKM100GAV1	
Refrigerant		R-410A						
Power Supply		1-phase, 220-240 V, 50 Hz						
Airflow Rate & Static Pressure (Note 7)	Ultra-high	Airflow rate (m <sup>3</sup> /h)(l/s)	500/138	750/208	950/263	500/138	750/208	950/263
		Static pressure Pa	160	140	110	180	170	150
	High	Airflow rate (m <sup>3</sup> /h)(l/s)	500/138	750/208	950/263	500/138	750/208	950/263
		Static pressure Pa	120	90	70	150	120	100
	Low	Airflow rate (m <sup>3</sup> /h)(l/s)	440/122	640/177	820/227	440/122	640/177	820/227
		Static pressure Pa	100	70	60	110	80	70
Power Consumption	Heat exchange mode	Ultra-high	560	620	670	560	620	670
		High	490	560	570	490	560	570
		Low	420	470	480	420	470	480
	Bypass mode	Ultra-high	560	620	670	560	620	670
		High	490	560	570	490	560	570
		Low	420	470	480	420	470	480
Fan Type		Sirocco Fan						
Motor Output		kW						
Sound Level (Note 5) (220/230/240 V)	Heat exchange mode	Ultra-high	0.280 x 2	0.280 x 2	0.280 x 2	0.280 x 2	0.280 x 2	0.280 x 2
		High	37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/41
		Low	32/33/34	33/34/35.5	34/34.5/35.5	33.5/34.5/35.5	34.5/36/37	35/36/36.5
	Bypass mode	Ultra-high	37/37.5/38	38.5/39/40	39/39.5/40	38/38.5/39	40/41/41.5	40/40.5/41
		High	35/35.5/36	36/37/37.5	37/37.5/38	36/36.5/37	37.5/38/39	38/38.5/39
		Low	32/33/34	33/34/35.5	34/34.5/35.5	33.5/34.5/35.5	34.5/36/37	35/36/36.5
Humidification Capacity (Note 4)		kg/h						
Temp. Exchange Efficiency	Ultra-high	76	78	74	76	78	74	
	High	76	78	74	76	78	74	
	Low	77.5	79	76.5	77.5	79	76.5	
Enthalpy Exchange Efficiency (Cooling)	Ultra-high	64	66	62	64	66	62	
	High	64	66	62	64	66	62	
	Low	67	68	66	67	68	66	
Enthalpy Exchange Efficiency (Heating)	Ultra-high	67	71	65	67	71	65	
	High	67	71	65	67	71	65	
	Low	69	73	69	69	73	69	
Casing		Galvanised Steel Plate						
Insulating Material		Self-Extinguishable Urethane Foam						
Heat Exchanging System		Air to Air Cross Flow Total Heat (Sensible + Latent Heat) Exchange						
Heat Exchanger Element		Specially Processed Nonflammable Paper						
Air Filter		Multidirectional Fibrous Fleeces						
DX-coil Capacity	Cooling (Note 2)	kW						
	Heating (Note 3)	kW						
Dimensions	Height	387	387	387	387	387	387	
	Width	1,764	1,764	1,764	1,764	1,764	1,764	
	Depth	832	1,214	1,214	832	1,214	1,214	
	Connection Duct Diameter	φ200		φ250		φ200		φ250
Machine Weight	Net	102	120	125	96	109	114	
	Gross (Note 8)	107	129	134	-	-	-	
Unit Ambient Condition		Around Unit	0°C-40°CDB, 80%RH or less					
		OA (Note 9)	-15°C-40°CDB, 80%RH or less					
		RA (Note 9)	0°C-40°CDB, 80%RH or less					

Note: 1. Cooling and heating capacities are based on the following conditions. Fan is based on High and Ultra-high.  
 When calculating the capacity as indoor units, use the following figures:  
 VKM50GAMV1/GV1: 3.5 kW, VKM80GAMV1/GV1: 5.6 kW, VKM100GAMV1/GV1: 7.0 kW  
 2. Indoor temperature: 27°CDB, 19°CWB, Outdoor temperature: 35°CDB  
 3. Indoor temperature: 20°CDB, Outdoor temperature: 7°CDB, 6°CWB  
 4. Humidifying capacity is based on the following conditions:  
 Indoor temperature: 20°CDB, 15°CWB, Outdoor temperature: 7°CDB, 6°CWB  
 5. The operating sound measured at the point 1.5 m below the centre of the unit is converted to that measured in an anechoic 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.  
 6. The noise level at the air discharge port is about 8-11 dB(A) or higher than the unit's operating sound.  
 For operation in a quiet room, it is required to take measures to lower the sound.  
 7. Airflow rate can be changed over to Low mode or High mode.  
 8. In case of holding full water in humidifier.  
 9. OA: fresh air from outdoor. RA: return air from room.  
 10. Specifications, design and information here are subject to change without notice.  
 11. Power consumption and efficiency depend on the above value of airflow rate.

12. Temperature exchange efficiency is the mean value for Cooling and Heating. Efficiency is measured under the following condition: Ratio of rated external static pressure outdoor to indoor is kept constant at 7 to 1.  
 13. In heating operation, freezing of the outdoor unit's coil increases. Heating capability decreases and the system goes into defrost operation. During defrost operation, the fans of the unit continues driving (factory setting). The purpose of this is to maintain the amount of ventilation and humidifying.  
 14. When connecting with a VRV system heat recovery outdoor unit and bringing the RA (exhaust gas intake) of this unit directly in from the ceiling, connect to a BS unit identical to the VRV indoor unit (master unit), and use group-linked operation. (See the Engineering Data for details.)  
 15. When connecting the indoor unit directly to the duct, always use the same system on the indoor unit as with the outdoor unit, perform group-linked operation, and make the direct duct connection settings from the remote controller. (Mode No. "17 (27)" - First code No. "5" - Second code No. "6.") Also, do not connect to the outlet side of the indoor unit. Depending on the fan strength and static pressure, the unit might back up.  
 \* Feed clean water (city water, tap water or equivalent). Dirty water may clog the valve or cause dirt deposits in the water container, resulting in poor humidifier performance. (Never use any cooling tower water and heating-purpose water.)  
 Also, if the supply water is hard water, use a water softener because of short life.  
 \* Life of humidifying element is about 3 years (4,000 hours) under the supply water conditions of hardness: 150 mg/l. (Life of humidifying element is about 1 year (1,500 hours) under the supply water conditions of hardness: 400 mg/l.)  
 Annual operating hours: 10 hours/day x 26 days/month x 5 months = 1,300 hours

## Dimensions

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



## Options

Item	Type	VKM50/80/100GA(M)V1
Remote controller		BRC1E63 *1
Centralised controlling device	Residential central remote controller	DCS303A51 *2
	Central remote controller	DCS302CA61
	Unified ON/OFF controller	DCS301BA61
	Schedule timer	DST301BA61
	Wiring adaptor for electrical appendices	KRP2A61
For humidifier running ON signal output		KRP50-2
	For heater control kit	BRP4A50
For wiring	Type (indoor unit of VRV)	FXFSQ-A FXFQ-P FXZQ-A2 FXCQ-M FXEQ-A FXDQ-PD FXDQ-ND FXDQ-T FXSQ-PA FXDQ-QA FXMQ-PA FXMQ-P FXUQ-A FXHQ-MA FXAQ-P FXLQ-MA FXNQ-MA
		KRP1C11A* KRP1C63* KRP1B45* KRP1B61* - KRP1B56* KRP1C64* KRP1B61 KRP1C64* KRP1C67* - KRP1BA54 - KRP1B61
Installation box for adaptor PCB ☆		Note 2, 3 KRP1H98A KRP1H98 Note 2, 3 KRP1BA101 KRP1B96 - Note 4, 5 KRP1BA101 BRP9A90 Note 2, 3 KRP4A98 - Note 2, 3 BRP9A90 KRP1BA97 Note 3 KRP1CA93 Note 2, 3 KRP4A93 -

Note: 1. Installation box ☆ is necessary for each adaptor marked ☆.  
 2. Up to 2 adaptors can be fixed for each installation box.  
 3. Only one installation box can be installed for each indoor unit.  
 4. Up to 2 installation boxes can be installed for each indoor unit.  
 5. Installation box ☆ is necessary for each adaptor.  
 6. \*1 Necessary when operating a Heat Reclaim Ventilator (VKM) independently. When operating interlocked with other air conditioners, use the remote controllers of the air conditioners.  
 \*2 For residential use only. When connected with a Heat Reclaim Ventilator (VKM), you can only switch the power ON/OFF. Cannot be used with other centralised control equipment.

Item	Type	VKM50GA(M)V1	VKM80GA(M)V1	VKM100GA(M)V1
Silencer		-	-	KDDM24B100
	Nominal pipe diameter	φ250 mm		
Air suction/ Discharge grille	White	K-DGL200B	K-DGL250B	
	Nominal pipe diameter	φ200		
High efficiency filter		KAF242H80M	KAF242H100M	
Air filter for replacement		KAF241G80M	KAF241G100M	
Flexible duct (1 m)		K-FDS201D	K-FDS251D	
Flexible duct (2 m)		K-FDS202D	K-FDS252D	

# Air Treatment Equipment Lineup

## Heat Reclaim Ventilator — VAM series

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

Model Names

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

**Improved Enthalpy Efficiency\*<sup>1</sup>**  
**Higher External Static Pressure\*<sup>2</sup>**  
**Enhanced Energy Saving Functions**

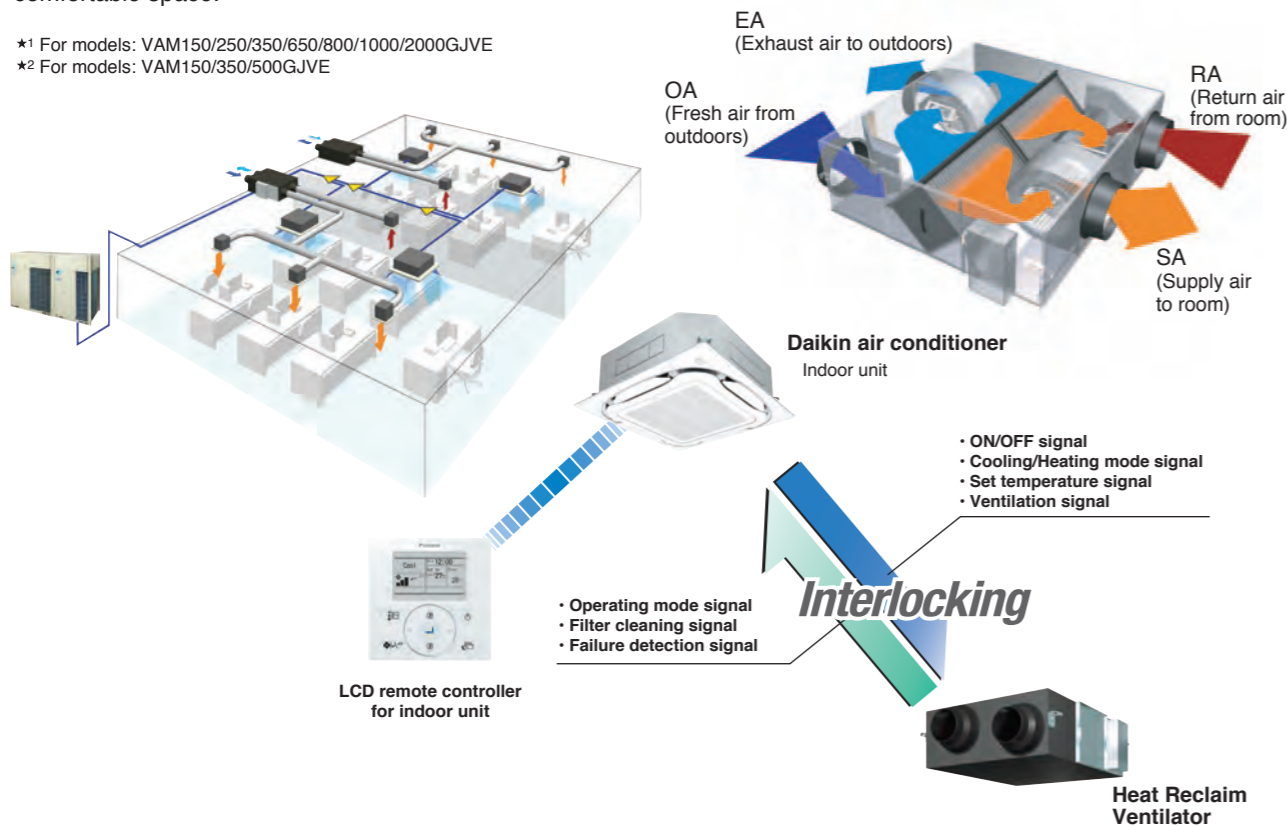


Heat Reclaim Ventilator remote controller\*  
BRC301B61 (Option)

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

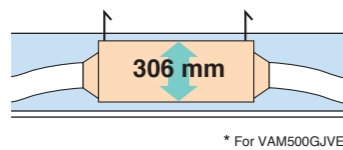
This VAM series provides higher enthalpy efficiency\*<sup>1</sup>, due to the greatly enhanced performance of the thin film element. Furthermore, improved external static pressure\*<sup>2</sup> offers more flexibility for installation. Along with these three outstanding improvements, the nighttime free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

\*<sup>1</sup> For models: VAM150/250/350/650/800/1000/2000GJVE  
\*<sup>2</sup> For models: VAM150/350/500GJVE



### Compact Equipment

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



\* For VAM500GJVE

### Energy Conservation

Air conditioning load reduced by approximately 31%!

### Cold Climate Compatible

Standard operation at temperatures down to -15°C.



## Air conditioning load reduced by approximately 31%!

### Total heat exchange ventilation

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

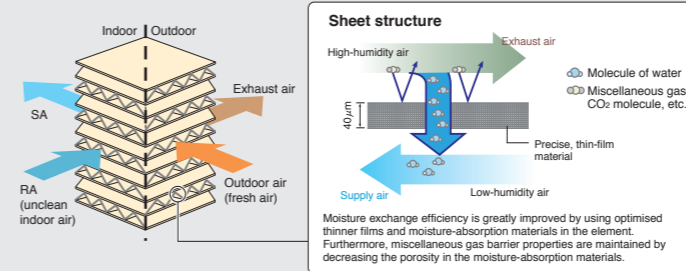
### Enthalpy efficiency drastically improved by employing thin film element! (VAM-GJ model)

Due to the thinner film...

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

Moisture absorption increased by approx. 10%!

Thickness of the partition sheet  
**40 μm**



**23%**

### Auto-ventilation Mode Changeover Switching

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

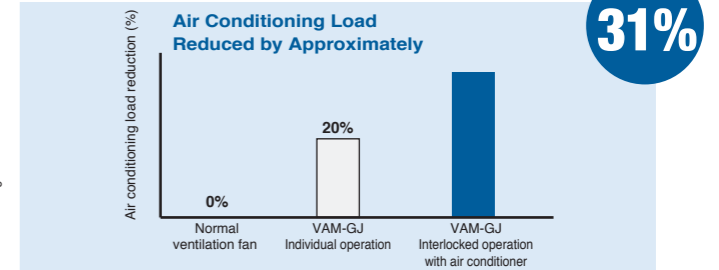
**6%**

### Pre-cool, Pre-heat Control

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

**2%**

- The air conditioning load reduction values may vary according to weather and other environmental conditions at the location of the machine's installation.
- The air conditioning load reduction values are based on the following conditions:  
Application: Tokyo office building  
Building form: 6 floors above ground, 2 floors underground, floor area 2,100 m<sup>2</sup>  
Personnel density: 0.25 person/m<sup>2</sup>  
Ventilation volume: 25 m<sup>3</sup>/h  
Indoor air conditioning level: summer 25°C 50% RH, intermediate seasons 24°C 50% RH, winter 22°C 40% RH  
Operating time: 2745 hours (9 hours per day, approx. 25 days per month)  
Calculation method: simulation based on "MICRO-HASP/1982" of the Japan Building Mechanical and Electrical Engineers Association.



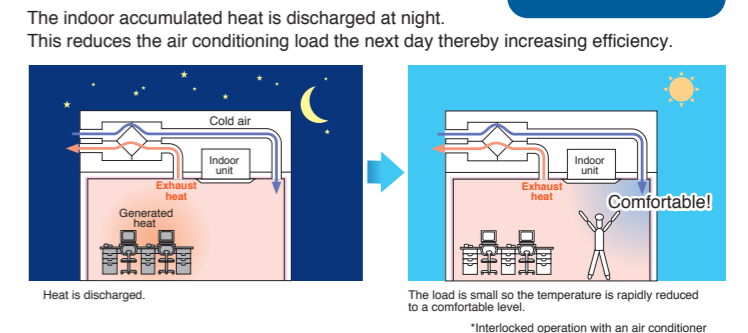
## Nighttime free cooling operation\*<sup>1</sup>

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

- Nighttime free cooling operation only works to cool and if connected to Building Multi or VAV systems.
- Nighttime free cooling operation is set to "off" in the factory settings, so if you wish to use it, request your dealer to turn it on.

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

Air conditioning sensible heat load reduced by **approx. 5%\*<sup>2</sup>**

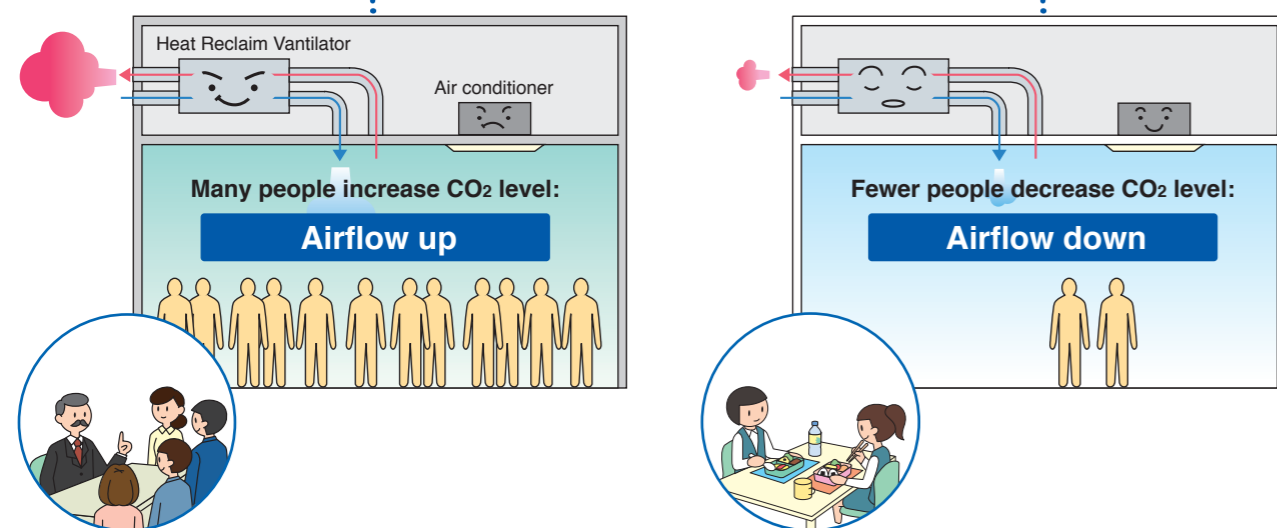
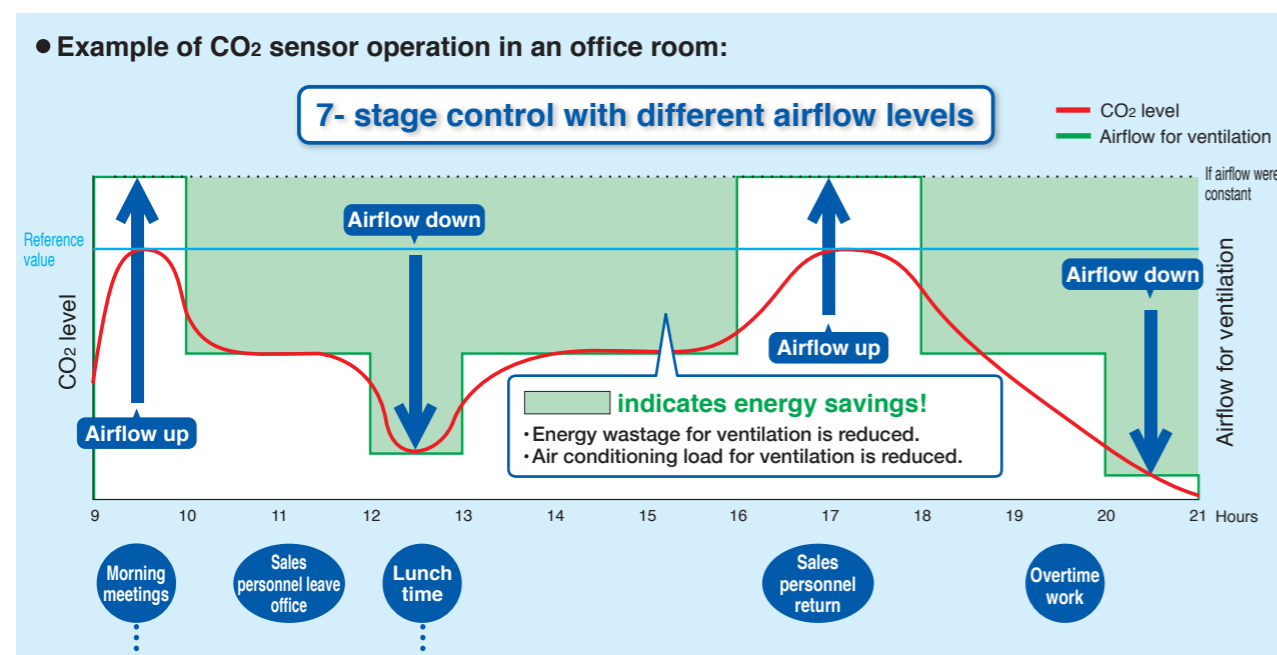


# Air Treatment Equipment Lineup

## Heat Reclaim Ventilator — VAM series

### CO<sub>2</sub> Sensor Optional Kit Connection

The CO<sub>2</sub> sensor controls airflow so that it best matches the changes in CO<sub>2</sub> level. This prevents energy losses from over-ventilation while maintaining indoor air quality with optional CO<sub>2</sub> sensor.



## Specifications

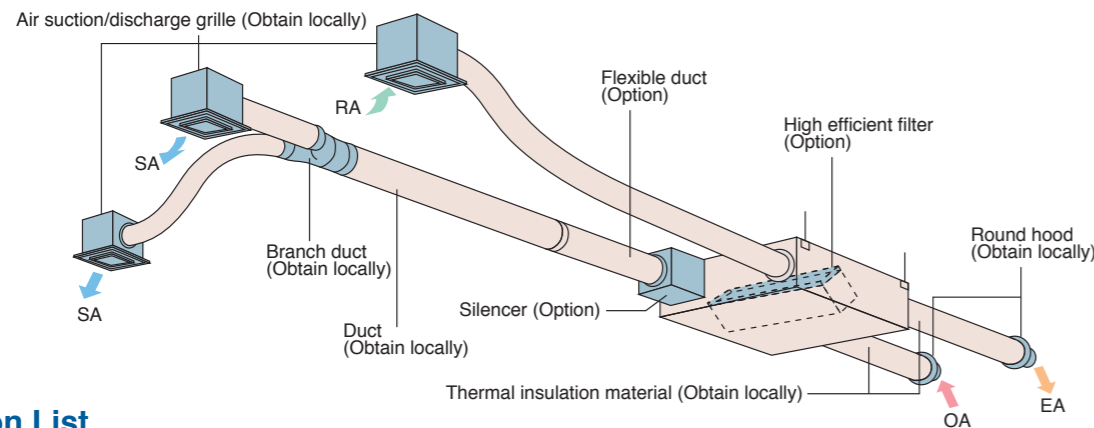
MODEL		VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE		
Power Supply		1-phase, 220-240 V/220 V, 50/60 Hz										
Temp. Exchange Efficiency	Ultra-High	79	75	79	74	75	72	78	72	77		
	High	79	75	79	74	75	72	78	72	77		
	Low	84	79	82	80	77	74	80.5	75.5	79		
Enthalpy Exchange Efficiency	For Heating	Ultra-High	72	71	70	67	67.5	65	70	65	72	
		High	72	71	70	67	67.5	65	70	65	72	
		Low	76	74	77	74	71.5	67.5	72.5	67	75	
	For Cooling	Ultra-High	66	63	66	55	61	61	64	61	62	
		High	66	63	66	55	61	61	64	61	62	
		Low	70	66	70	59	64	64	68.5	64	66	
Power Consumption	Heat Exchange Mode	Ultra-High	125	137	200	248	342	599	635	1,145	1,289	
		High	111	120	182	225	300	517	567	991	1,151	
		Low	57	60	122	128	196	435	476	835	966	
	Bypass Mode	Ultra-High	125	137	200	248	342	599	635	1,145	1,289	
		High	111	120	182	225	300	517	567	991	1,151	
		Low	57	60	122	128	196	435	476	835	966	
Sound Level	Heat Exchange Mode	Ultra-High	27-28.5	27-29	31.5-33	33-35.5	34-36	39-40.5	39.5-41.5	39.5-41.5	41.5-43.5	
		High	26-27.5	26-27.5	30-31.5	31.5-34	33-34.5	37-39.5	37.5-39.5	37.5-39.5	39-43	
		Low	20.5-21.5	21-22	23-25	25-28.5	27.5-29.5	35-37.5	35-37.5	35-37.5	36-39	
	Bypass Mode	Ultra-High	28.5-29.5	28.5-30.5	33-34.5	34.5-36	35-37.5	40.5-42	40.5-42.5	41-43	43-45.5	
		High	27.5-28.5	27.5-29	31.5-33	33-34.5	33-35.5	38.5-40	38.5-40.5	39.5-41	40.5-45	
		Low	22.5-23.5	22.5-23	24.5-26.5	25.5-28.5	27.5-30.5	36-38.5	36-38.5	36.5-38	37.5-39.5	
Casing	Galvanised steel plate											
Insulation Material	Self-extinguishable polyurethane foam											
Dimensions (HXWXD)	mm	278×810×551	306×879×800	338×973×832	387×1,111×832	387×1,111×1,214	785×1,619×832	785×1,619×1,214				
Machine Weigh	kg	24	32	45	55	67	129	157				
Heat Exchange System	Air to air cross flow total heat (Sensible heat + latent heat) exchange											
Heat Exchange Element Material	Specially processed nonflammable paper											
Air Filter	Multidirectional fibrous fleeces											
Fan	Airflow Rate	Type	Sirocco fan									
			Ultra-High	150	250	350	500	650	800	1,000	1,500	2,000
				High	150	250	350	500	650	800	1,000	1,500
		Low		100	155	230	320	500	700	860	1,320	1,720
		Ultra-High	41	69	97	138	180	222	277	416	555	
			High	41	69	97	138	180	222	277	416	555
	Low		27	43	63	88	138	194	238	366	477	
	External Static Pressure	Ultra-High	120	70	169	105	85	133	168	112	116	
		High	106	54	141	66	53	92	110	73	58	
		Low	56	24	67	32	35	72	85	56	45	
	Motor Output	kW	0.030×2	0.090×2	0.140×2	0.280×2	0.280×4					
	Connection Duct Diameter	mm	φ 100	φ 150	φ 200	φ 250	φ 350					
Unit Ambient Condition	-15°C~50°CDB, 80%RH or less											

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



# Air Treatment Equipment Lineup

## Options



### Option List

Item	Type	VAM150 · 250 · 350 · 500 · 650 · 800 · 1000 · 1500 · 2000GJVE																
Controlling device	Heat Reclaim Ventilator remote controller	BRC301B61																
	Centralised controlling device	Residential central remote controller	DCS303A51 Note 1															
		Central remote controller	DCS302CA61															
		Unified ON/OFF controller	DCS301BA61															
		Schedule timer	DST301BA61															
PC Board Adaptor	Wiring adaptor for electrical appendices	KRP2A61																
	For humidifier	KRP50-2																
	Installation box for adaptor PCB	KRP50-2A90 (Mounted electric component assy of Heat Reclaim Ventilator)																
	For heater control kit	BRP4A50																
	For wiring	Type (indoor unit of VRV)	FXFSQ-A	FXFQ-P	FXZQ-A2	FXCQ-M	FXEQ-A	FXDQ-PD	FXDQ-ND	FXDQ-T	FXSQ-PA	FXDYO-MA	FXMQ-PA	FXMQ-P	FXUQ-A	FXHQ-MA	FXAQ-P	FXLQ-MA
KRP1C11A★			KRP1C63★	KRP1B45★	KRP1B61★	-	KRP1B56★	KRP1C64★	KRP1B61	KRP1C64★	KRP1C67★	-	KRP1BA54	-	KRP1B61			
Installation box for adaptor PCB★	Type	Note 2, 3	Note 2, 3	Note 4, 5	Note 2, 3	Note 4, 5	Note 2, 3	Note 2, 3	Note 2, 3	Note 2, 3	Note 2, 3	Note 2, 3	Note 3	Note 2, 3	Note 2, 3	Note 2, 3	-	-
		KRP1H98A	KRP1H98	KRP1BA101	KRP1B96	-	KRP1BA101	BRP9A90	KRP4A98	-	KRP4A97	BRP9A90	KRP1BA97	KRP1CA93	KRP4A93	-	-	

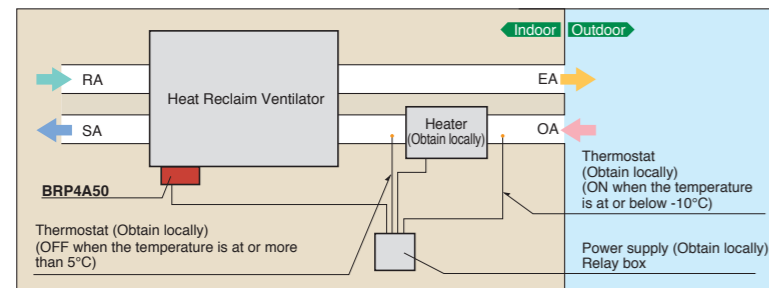
Note: 1. Installation box★ is necessary for each adaptor marked★. 2. Up to 2 adaptors can be fixed for each installation box. 3. Only one installation box can be installed for each indoor unit. 4. Up to 2 installation boxes can be installed for each indoor unit. 5. Installation box★ is necessary for each adaptor. 6. ★ Necessary when operating a Heat Reclaim Ventilator (VKM) independently. When operating interlocked with other air conditioners, use the remote controllers of the air conditioners.

Item	Type	VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE	
Additional function	Silencer	-			KDDM24B50		KDDM24B100		KDDM24B100X2		
	Nominal pipe diameter mm	-			φ 200		φ 250		φ 250		
High efficiency filter		KAF242H25M		KAF242H50M		KAF242H65M		KAF242H80M		KAF242H100M	
	Air filter for replacement	KAF241H25M		KAF241H50M		KAF241H65M		KAF241H80M		KAF241H100M	
Flexible duct (1 m)		K-FDS101D	K-FDS151D	K-FDS201D		K-FDS251D		K-FDS251D		K-FDS251D	
Flexible duct (2 m)		K-FDS102D	K-FDS152D	K-FDS202D		K-FDS252D		K-FDS252D		K-FDS252D	
Duct adaptor		-								YDFA25A1	
	Nominal pipe diameter mm	-								φ 250	
CO <sub>2</sub> sensor		BRYMA65						BRYMA100		BRYMA65	
PM2.5 filtration unit*		BAF249A150	BAF249A300	BAF249A350	BAF249A500	-		BAF429A20A		-	
PM2.5 with activated carbon filtration unit*		BAF249A150C	BAF249A300C	BAF249A350C	BAF249A500C	-		BAF429A20AC		-	

\*Refer to page 160-162 for details.

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

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



#### Note when installing

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

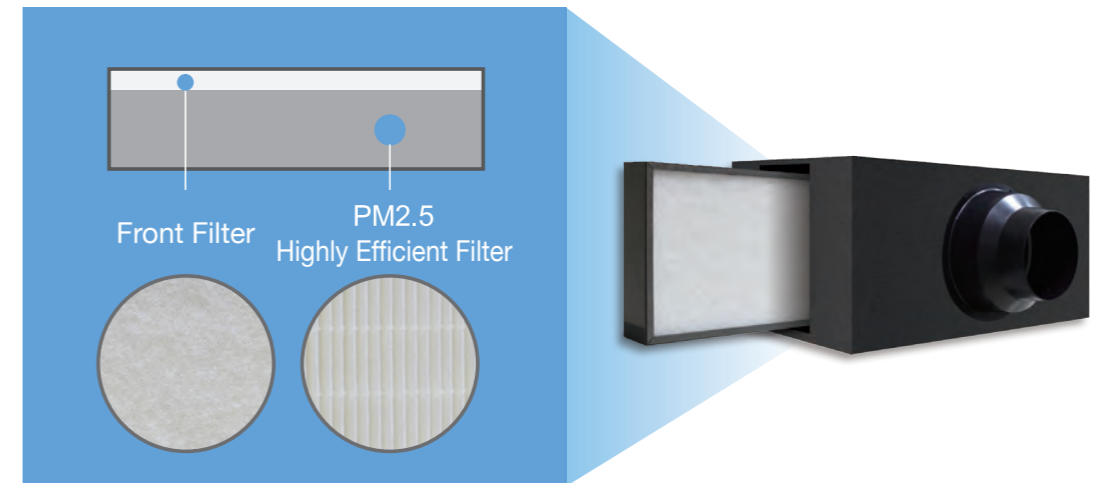
## PM2.5 filtration unit (Option) for VAM / FXMQ-MF series

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

### Double-layered efficient filtration

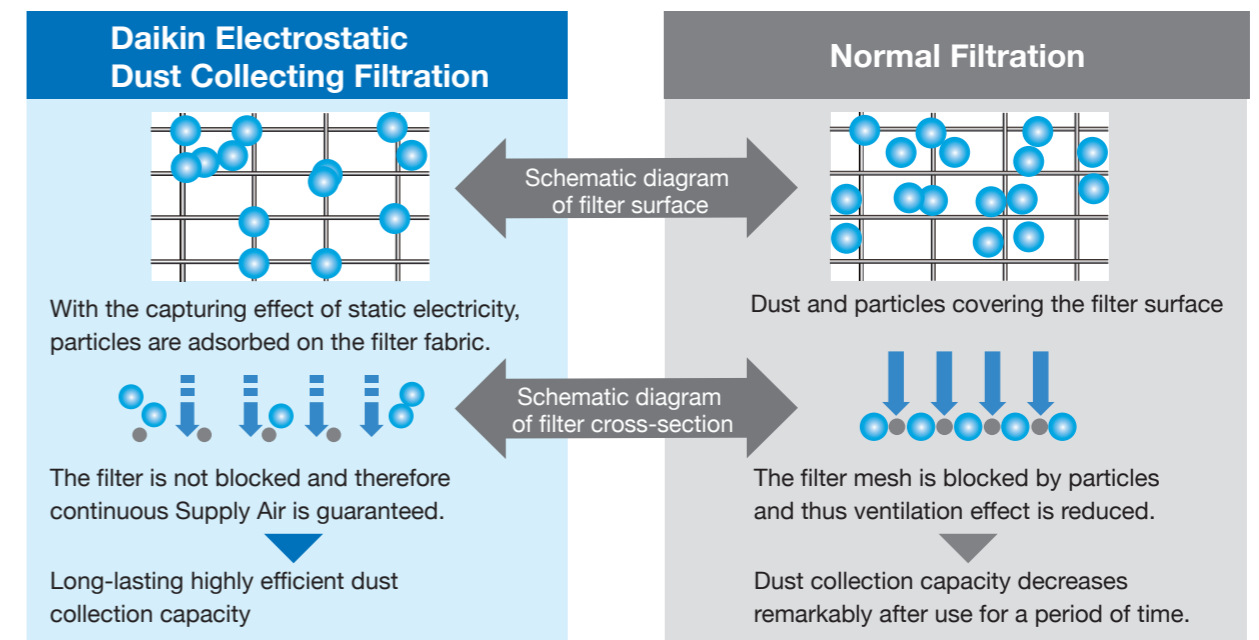
PM2.5 filters are double-layered.

- The front filter effectively removes large particles.
- The PM2.5 filter layer contains a large amount of static electricity to capture particulate matter efficiently.



### Electrostatic dust collection filter: more efficient and longer lasting effect

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

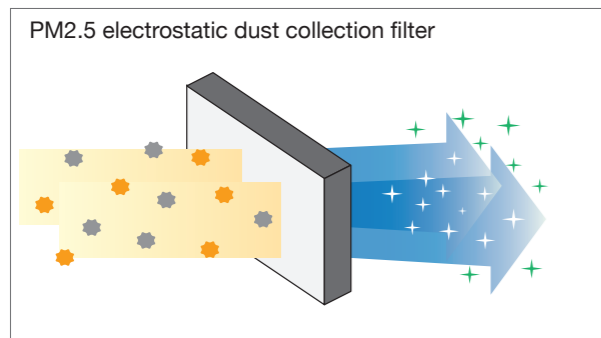


# Air Treatment Equipment Lineup

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

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

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



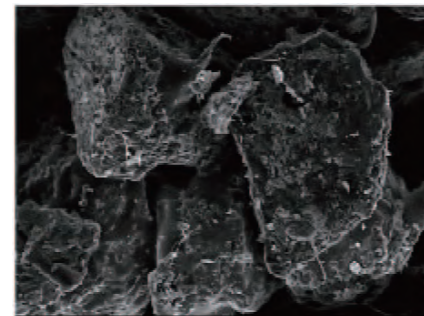
\*Test results by the Heating, Ventilation and Air Conditioning Lab at Tongji University  
Test environment: temperature 25-26°CDB, humidity 58-60%RH

### Extra-High Performance Filter Against Sulfur Oxides and Nitrogen Oxides

#### Effective Use of Active Carbon Material to Enlarge the Adsorption Area

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

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

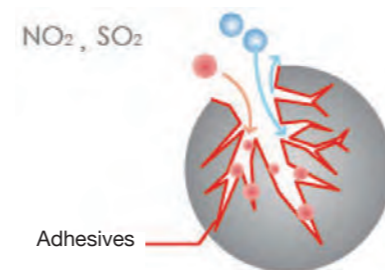


#### Intelligent Identification, Super-effective Adhesion

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

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

#### Unidentified Gases



## PM2.5 Filtration Unit

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

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

## PM2.5 with Activated Carbon Filtration Unit

Models		BAF249A150C	BAF249A300C	BAF249A350C	BAF249A500C	
Heat Reclaim Ventilator Models		VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	
Dimensions (H x W x D)	mm	220x603x366	220x603x366	300x623x366	300x623x366	
Connection Duct Diameter	mm	Ø100	Ø150	Ø150	Ø200	
Airflow Rate	m <sup>3</sup> /h	150	250	350	500	
PM2.5 Filter	Initial Pressure Drop	Pa	34	30	31	42
	Filter Lifetime <sup>1</sup>	1 year				
	Filtration Efficiency <sup>2</sup>	99% or higher				
	Filter Material No. <sup>3</sup>	BAF244A300		BAF244A500		
Activated Carbon Filter	Initial Pressure Drop	Pa	3	5	5	9
	Filter Lifetime	1 year				
	Filter Material No. <sup>3</sup>	BAF244A300C		BAF244A500C		
Total Initial Pressure Drop for PM2.5 with Activated Carbon Filtration Unit		Pa	37	35	36	51

Note: 1. Annual usage: 400 hrs / month 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.

## Individual Control Systems for VRV Indoor System

### “Nav Ease” (Wired remote controller) (Option)



New BRC1E63



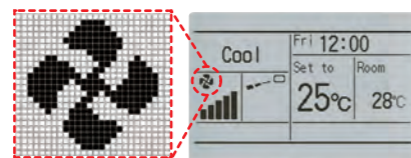
New BRC1F61 (Only for FXEQ series)

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

### Clear display

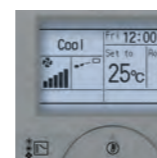
#### • Dot matrix display

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



#### • Backlight display

• Backlight display helps operating in dark rooms.



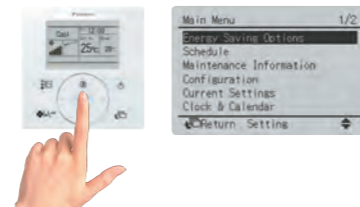
### Simple operation

#### • Large buttons and arrow keys

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

#### • Guide on display

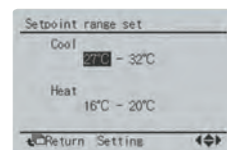
• The display gives an explanation of each setting for easy operation.



### Energy saving

#### • Setpoint range set

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

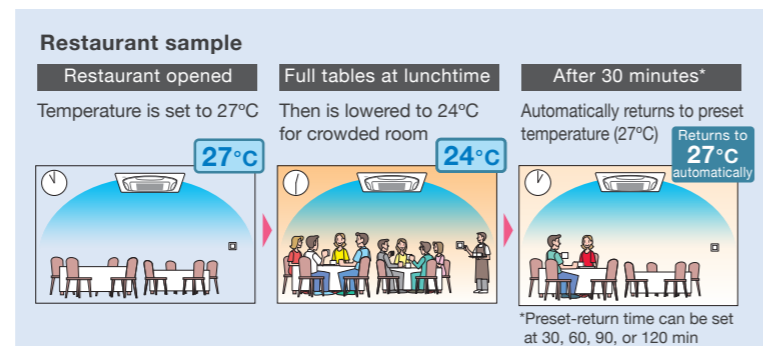
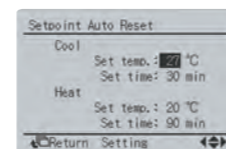


#### • Off timer

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

#### • Setpoint auto reset

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



### Convenience

#### • Setback (default: OFF)

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

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

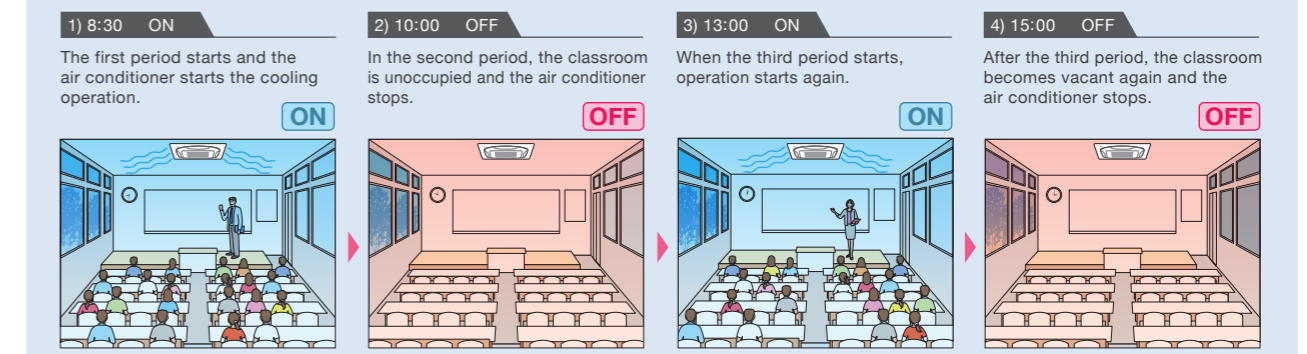
	Setback temperature	Recovery differential
Cooling	33 — 37°C	-2 — -8°C
Heating	10 — 15°C	+2 — +8°C

#### • Weekly schedule

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

Time	Act	Cool	Heat
Mon 8:30	ON	25°C	—
10:00	OFF	—	—
13:00	ON	25°C	—
15:00	OFF	—	—

#### College classroom sample (a summer Monday case)



#### New • Auto display off

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

### Comfort

#### • Individual airflow direction (\*1)

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

\*1. Only available for FXFSQ-A and FXUQ-A series.

#### New • 5-step airflow control (\*2)

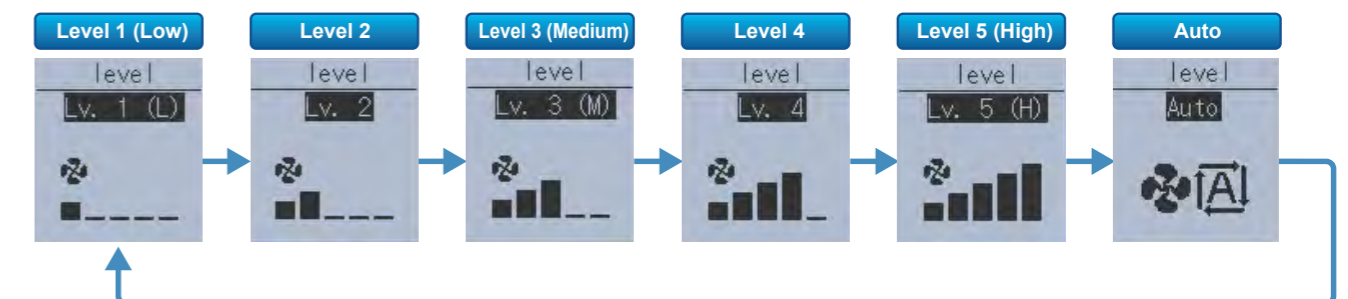
Control of airflow rate can be selected from 5-step control, which provides comfortable airflow.

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

#### • Auto airflow rate (\*3)

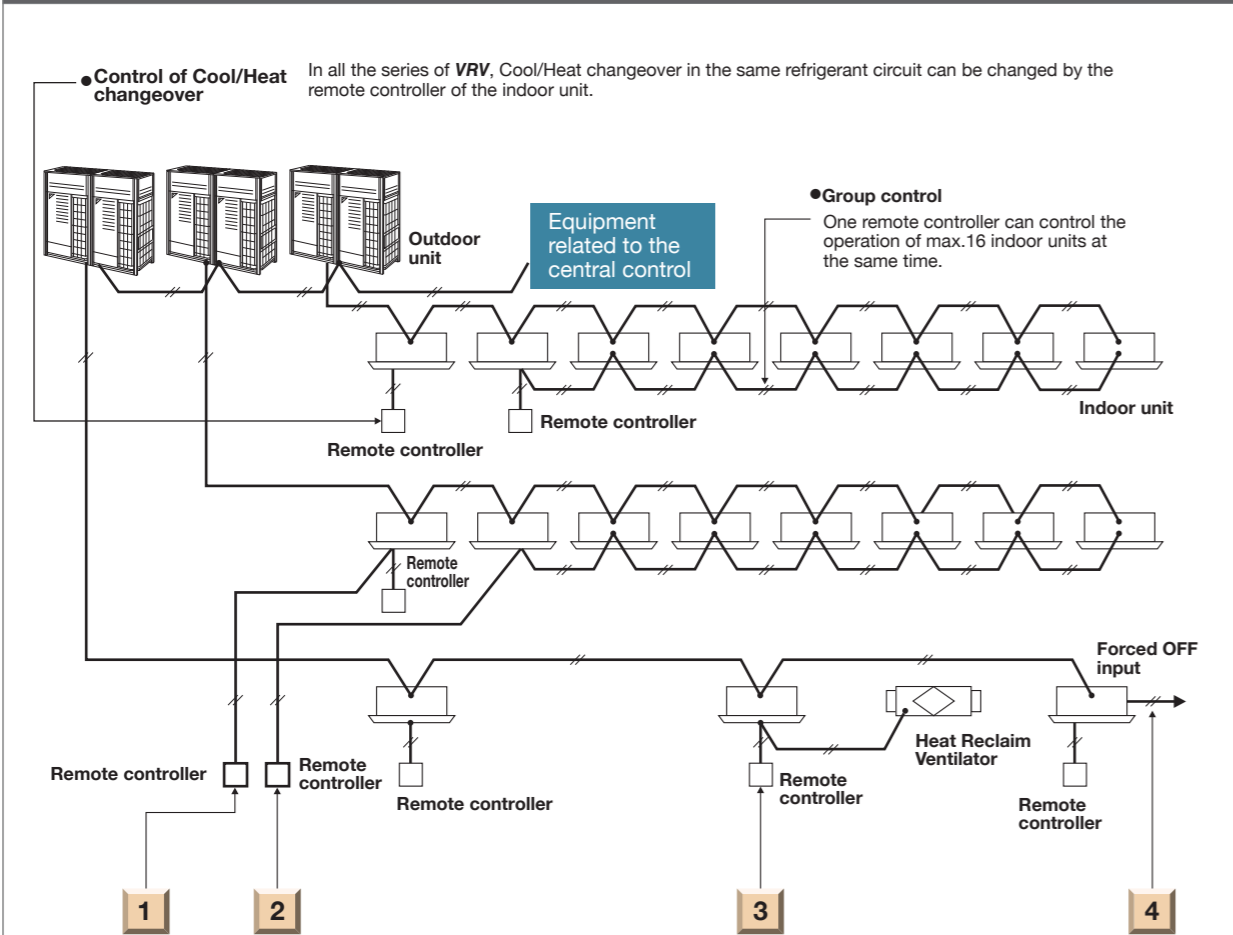
Airflow rate is automatically controlled in accordance to the difference between room temperature and set temperature.

\*3. Only available for FXFSQ-A, FXDQ-T/PD/ND, FXSQ-PA, FXMQ-PA and FXUQ-A series.



## Individual Control Systems for VRV Systems

### 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.

### Wireless remote controller (Option)



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

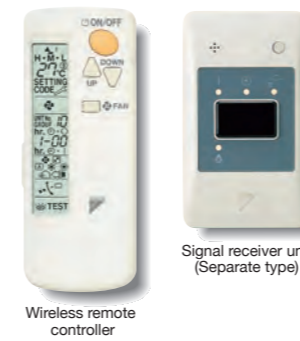
Note: The signal receiver unit shown in the photograph is for mounting inside the decoration panel of FXFSQ series.

- New** • Backlight LCD of new wireless remote controller



Pressing the backlight button helps operating in dark rooms.

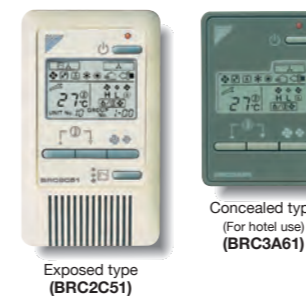
**New** BRC7M635F  
BRC7M634F  
(For FXFSQ series)



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

\* Wireless remote controller and signal receiver unit are sold as a set.  
\* Refer to page 186 for the name of each model.

### Simplified remote controller (Option)



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

- The exposed type remote controller is fitted with a thermostat sensor.



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

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

	FXF(S)Q	FXZQ	FXUQ	FXCQ	FXEQ	FXDQ	FXDYQ	FXSQ	FXMQ	FXHQ	FXAQ	FXL(N)Q	FXVQ	FXB(P)Q
"Nav Ease" (Wired remote controller) (BRC1E63)	●	●	●	●		●	●	●	●	●	●	●	●	●
"Nav Ease" (Wired remote controller) (BRC1F61)					●									
Wireless remote controller* (Installed type signal receiver unit)	●	●	●	●	●					●	●			
Wireless remote controller* (Separate type signal receiver unit)						●	●	●	●			●		●
Simplified remote controller (Exposed type) (BRC2C51)						●	●	●	●			●		●
Simplified remote controller (Concealed type: for Hotel use) (BRC3A61)						●	●	●	●			●		●

\*Refer to page 186 for the name of each model.

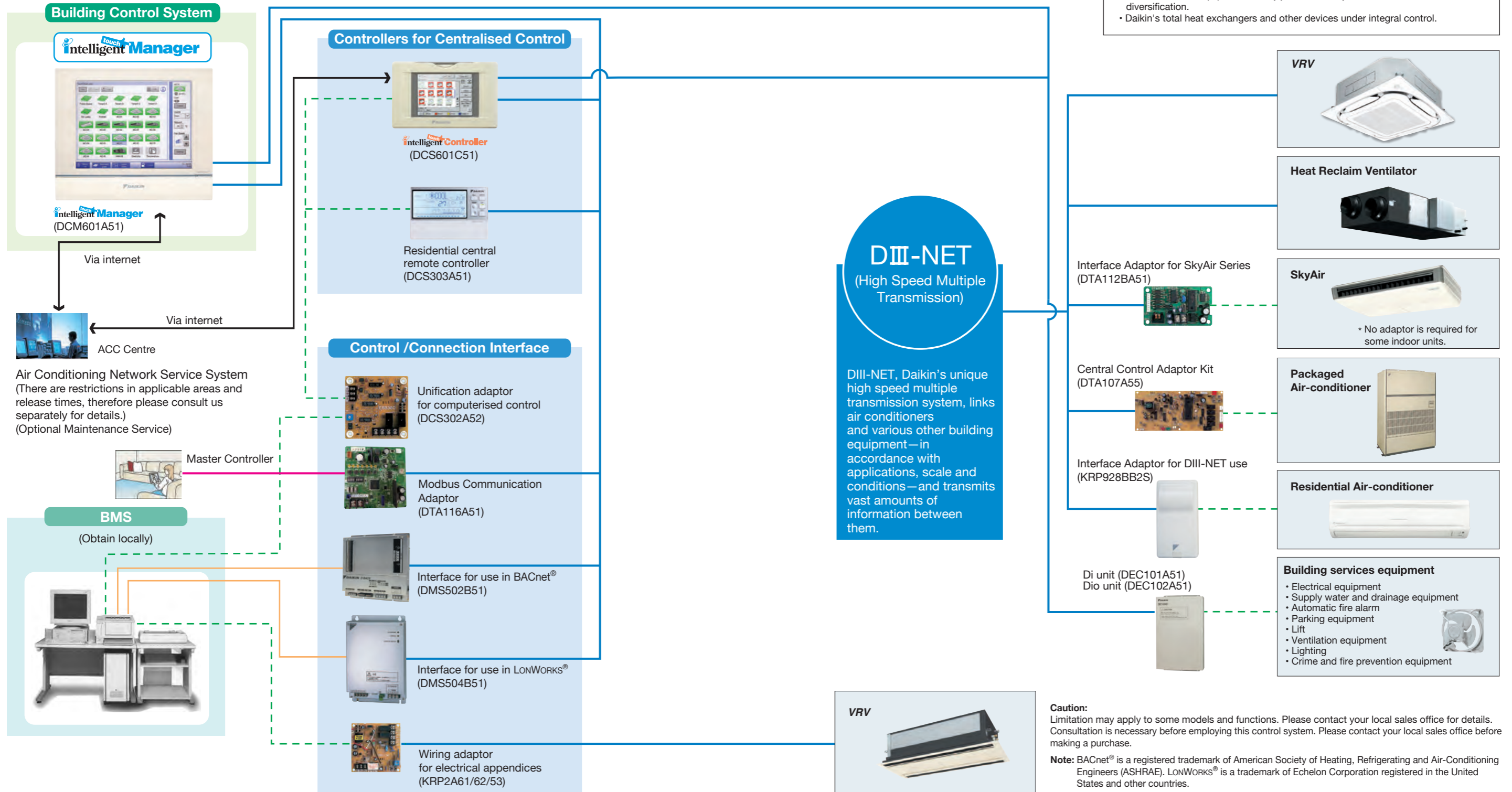
## Integrated Building Monitoring System

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

- DIII-NET Line
- BACnet®/Ethernet or LONWORKS® Network Communication Line
- - - Contact Signal Line
- RS485 Modbus Line

The DIII-NET system provides for:

- Close control and monitoring by integrating a wide variety of air-conditioners in the entire building.
- Saves the in-building cabling using non-polar, two-wire cables. Easier wiring work with tremendously fewer wiring errors.
- Additional setups readily up and running. An extendable cabling up to 2 km in total.
- Different control equipment flexibly joined in the system for hierarchical risk diversification.
- Daikin's total heat exchangers and other devices under integral control.



**Caution:**

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

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

## Advanced Control Systems for VRF Systems



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



DCM601A51

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

### Individual air-conditioning control

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



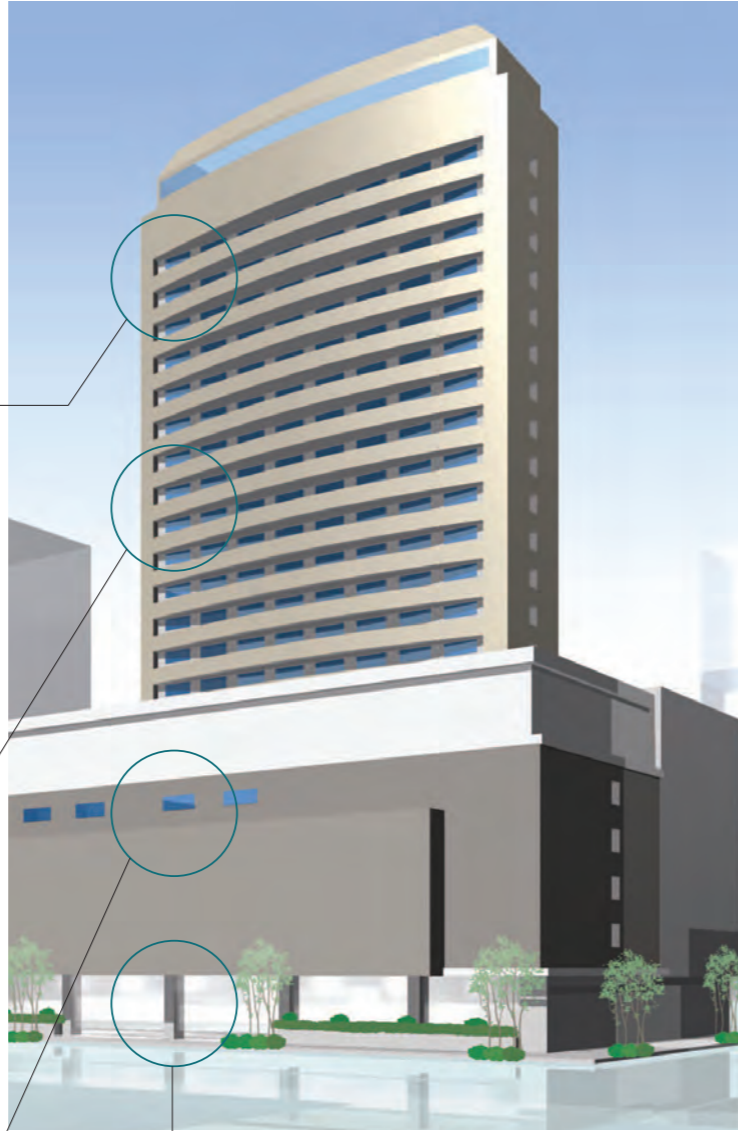
### Lighting control DALI-compatible

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



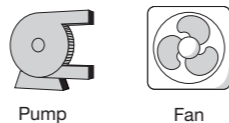
### Air-conditioning control for large spaces

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 VRF features

*intelligent Touch Manager* is an advanced multi-zone controller that provides the most cost-effective way to control and monitor the Daikin VRF system.

The 10.4" LCD touch screen is easy to use with three different screen views to include the floor plan layout view, icon view and list view and menus for system configurations.

It is also easy to use with standardized remote Web Access from your PC.

It can manage a total of 650 management points consisting of up to 512 Daikin indoor unit groups (up to 1024 indoor units) along with building equipment control / monitoring with Digital Inputs / Output (Di/Dio), Analog Inputs / Output (Ai/Ao) and Pulse input (Pi) optional devices.

Schedule the operation time for each application.	Define the setpoint range that users can change.
	<p><b>With Remote controller</b></p> <p><b>With Control System</b></p> <p>Set point range 22°C - 28°C</p>
<p><b>Turn the unit OFF if a user didn't.</b></p> <p>Working hours (Scheduled) ↓ Turn ON again by remote controller, forgot to turn OFF, and left.</p> <p>Saved power consumption by control system</p>	<p><b>Reset setpoint regularly.</b></p> <p>Change to 20°C</p> <p>Saved power consumption by control system</p>

## Advanced Control Systems for VRF Systems

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

### Lighting control (Option)

#### Connection to DALI - compatible lighting control system

Simple wiring (daisy chain) enables management of LED lighting by the *intelligent Touch Manager*.

Various air conditioning and lighting control is enabled through the interlock with occupancy sensors and illuminance sensors.

### DALI-compatible

Please contact your local sales office for details.

#### Lighting control achieved by the *intelligent Touch Manager*

##### [Operation]

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

##### [Monitoring]

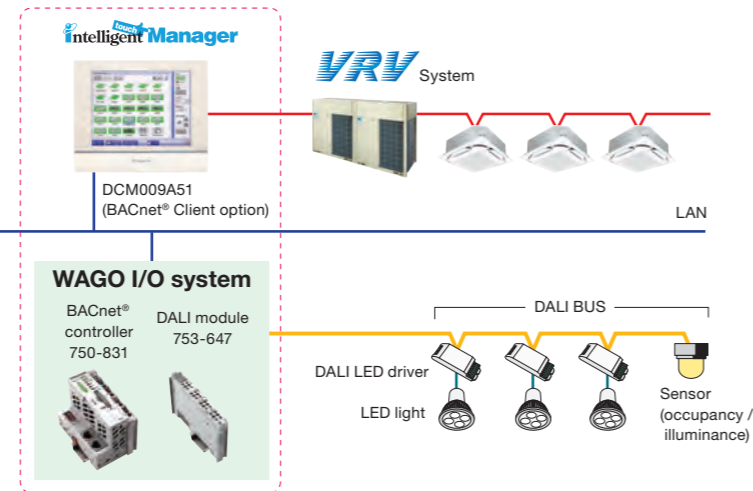
- Switch-on/switch-off status monitoring
- Lighting abnormality monitoring
- Illuminance monitoring
- DALI occupancy sensor monitoring
- DALI illuminance sensor monitoring

##### [Overview of control]

- Up to 5 DALI modules can be connected to a single BACnet® controller.
- Up to 64 DALI LED drivers (64 addresses) can be connected to a single DALI module.
- 64 DALI addresses can be freely assigned to up to 16 groups using a single DALI module. (Each group corresponds to a management point of the *intelligent Touch Manager*.)

- Up to 16 scenes can be set to a single DALI module.
- Up to 12 sensors (occupancy, illuminance) can be connected to a single DALI module.
- DALI BAS simplifies wiring and setting work by daisy chain wiring and automatic address setting.

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

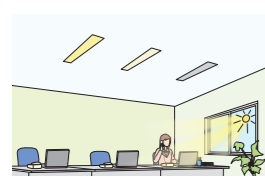


## Easy maintenance and energy saving by lighting control

### Case1

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

- Failing to switch off lights is prevented.

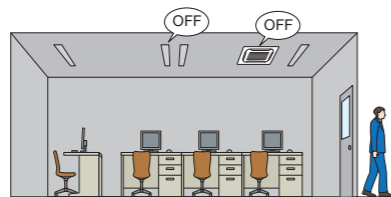


- Optimal illuminance reduces energy.

### Case2

Occupancy sensors are used to eliminate both wasteful lighting and air conditioning.

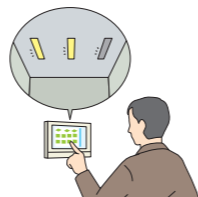
When a room is unoccupied, the air conditioning stops and the lighting is switched off.



### Case3

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

Lighting maintenance becomes easier and quicker.



The layout screen enables quick identification of specific locations.

## Tenant Management ( PPD\* Option )

### Reporting the power consumption of VRF system for each tenant

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

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

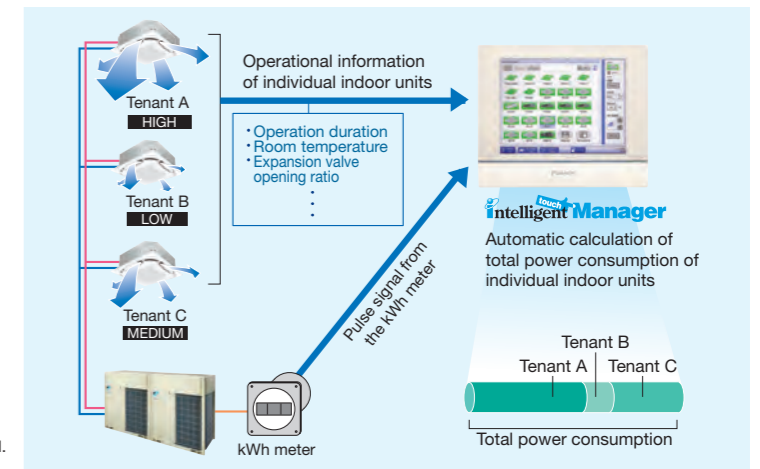
Operational information of individual indoor units are monitored, based on distribution of power consumption of outdoor units.

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

#### It is easy to output PPD data.

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

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



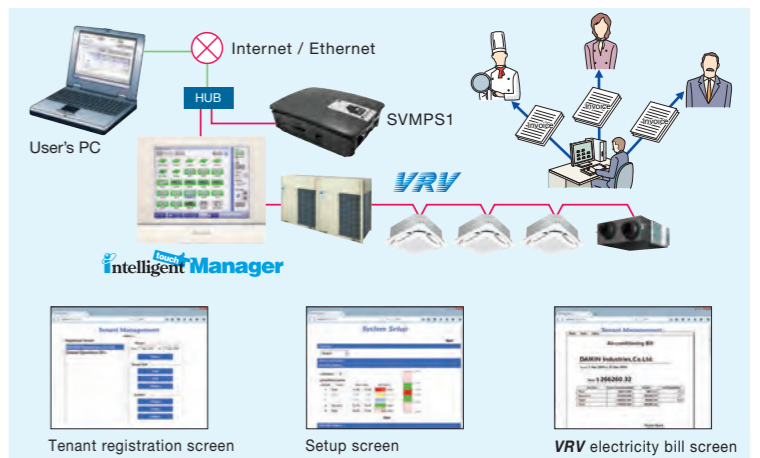
## Air conditioning bills can be issued by one click

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

The power consumption of VRF 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 VRF electricity bills.

#### [ Main functions ]

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



## Effective service functions offered to tenants

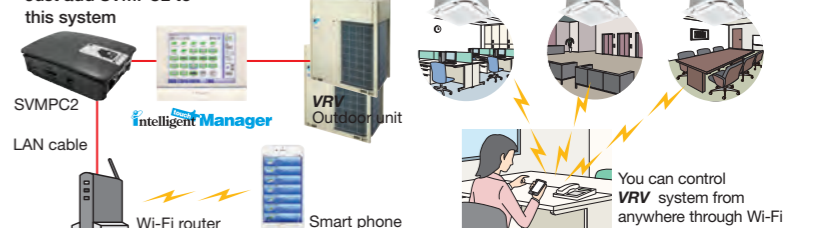
### Smart phone will be a remote controller of VRF system (Option)

Users can operate and check the status of VRF system from their smart phones via Wi-Fi. It is not necessary to move where a remote controller is located with this feature. VRF 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 VRF Smart Phone Remote Controller

Up to 1024 indoor units can be controlled.

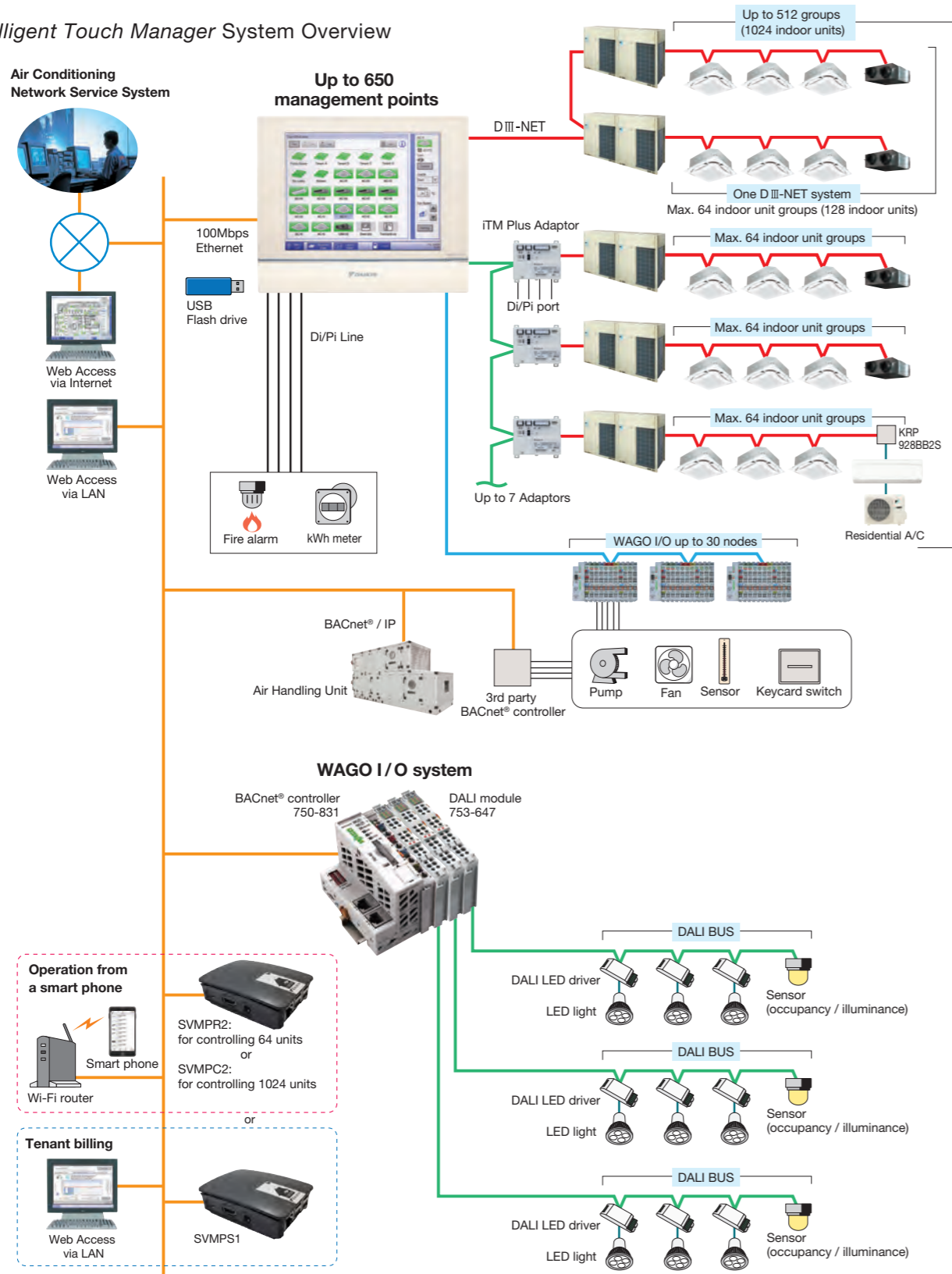
Just add SVMPC2 to this system



## Advanced Control Systems for VRF Systems

### System structure

#### intelligent Touch Manager System Overview



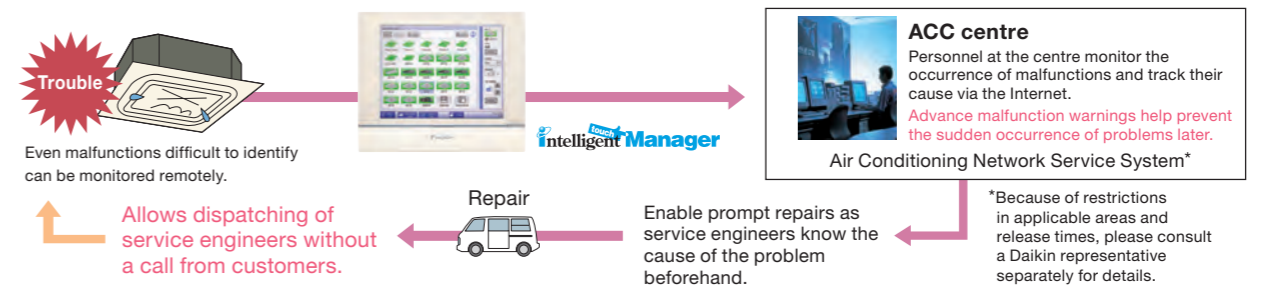
### Air Conditioning Network Service System

#### Preventive Maintenance

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

#### Enhanced convenience with link to the Air Conditioning Network Service System

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



### Daikin Offers a Variety of Control Systems

#### Convenient controllers that offer more freedom to administrators



#### Intelligent Controller

Ease of use and expanded control functions

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

DCS601C51

#### Connect VRF 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 **VRF** system and your BMS.

Dedicated interfaces make Daikin air conditioners freely compatible with open networks



DMS502B51 (Interface for use in BACnet®)

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



DMS504B51 (Interface for use in LONWORKS®)

LONWORKS®  
Facilitating the network integration of **VRF** system and LONWORKS®

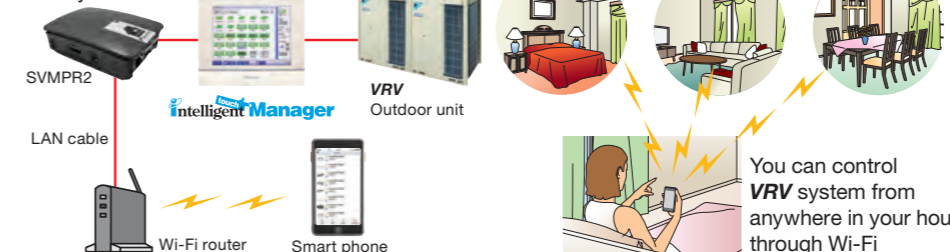
Note: 1. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).  
2. LONWORKS® is a trademark of Echelon Corporation registered in the United States and other countries.

### Smart phone will be a remote controller of VRF system (Option)

#### For house VRF Smart Phone Control System

Up to 64 indoor units can be controlled.

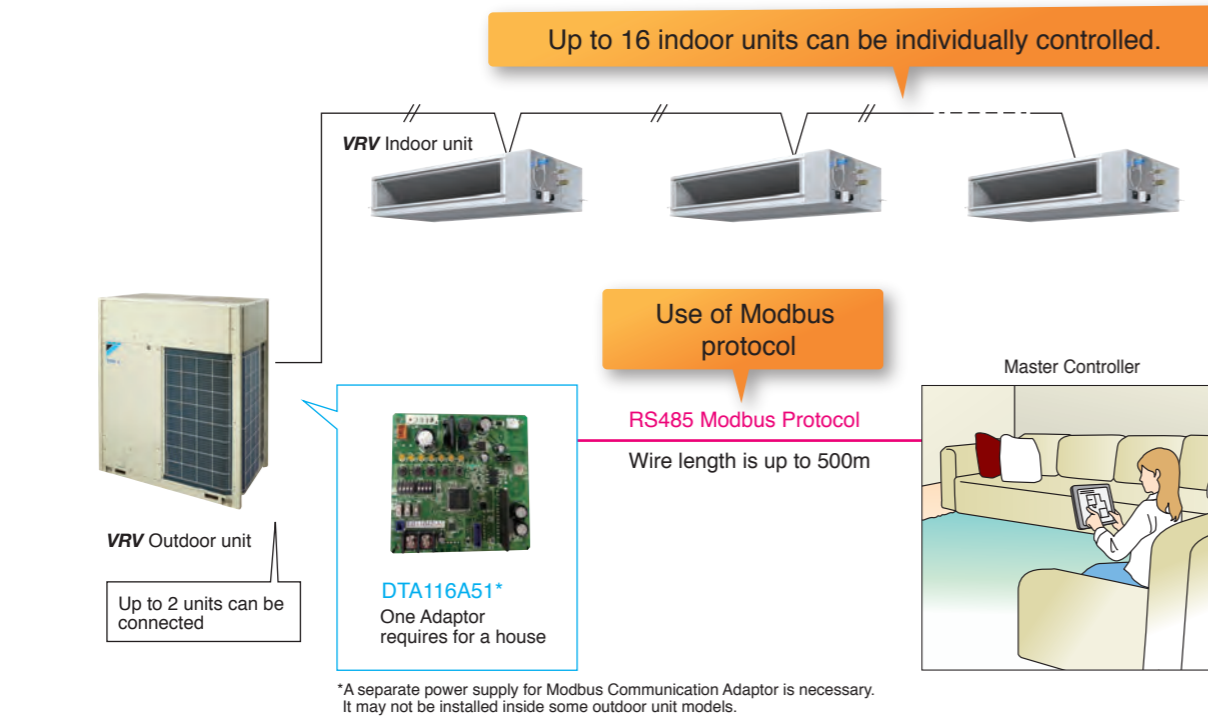
Just add SVMPS2 to this system





## Advanced Control Systems for VRF Systems

### Modbus Communication Adaptor



#### 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

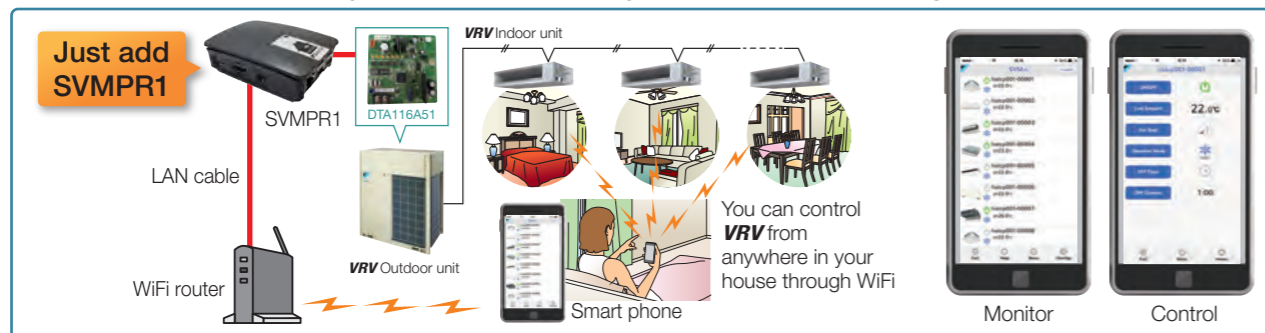
On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Cooling/Heating setpoint
Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)
Filter sign reset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

### VRF Smart Phone Control System

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



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

### VRF Tablet Controller : SVMPC1

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

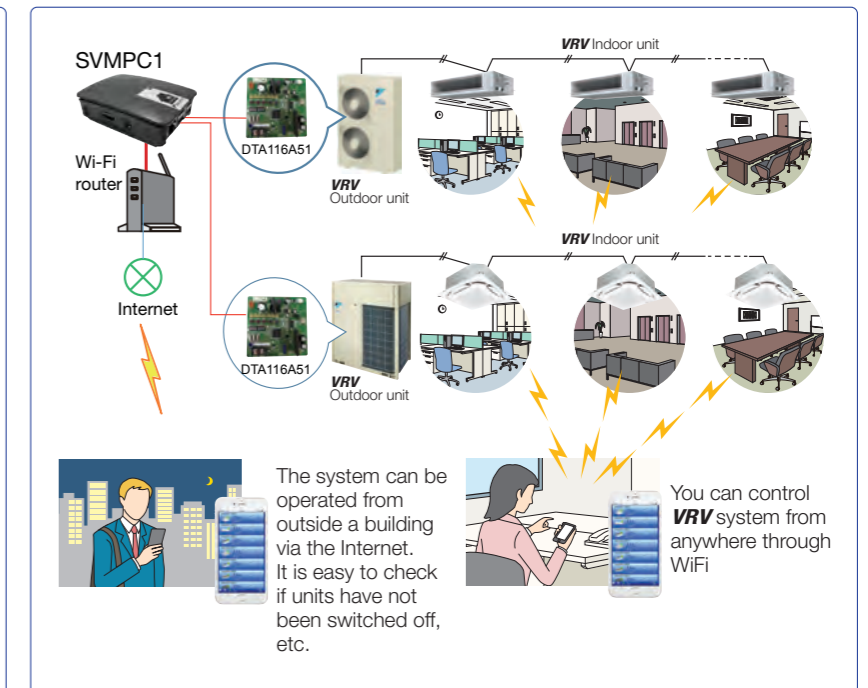
#### Simple and easy but powerful enough

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



- SVMPC1 allows to operate VRF system from anywhere (inside and outside of an office) through the internet.
- Set point range limitation and setback function achieve energy saving and comfortable air-conditioning.
- Daily air-conditioning operation is automatically done by schedule function with annual calendar.
- Quick notification of malfunction by e-mail will be support quick maintenance.

#### Up to 32 indoor units can be monitored and controlled.



#### Functions

\*: only admin user can set

Category	Function	Detail
Access security	User login	User name, password
	Device registration	Registered device (Tablet, Smartphone) can access through the internet
Main screen	Status monitoring	On/Off, Setpoint, Operation mode, Fan step, Flap, Error, Error code, Room Temperature
	Manual operation	On/Off, Setpoint, Operation mode, Fan step, Flap
Automatic control	Setpoint range limitation*	Cool setpoint min/max, Heat setpoint min/max
	Off timer*	Off timer on/off, Off timer duration (5min - 12h, every 5min)
	Setback operation*	Setback setpoint range (Cool: 24-35°C, Heat: 10-20°C)
	Schedule*	Action registration: Time, On/Off, Setpoint, Operation mode, Fan step, Flap, Off timer on/off, Setback setpoint Calendar setting: set by date or day of the week
System setting	Language	English, Spanish, Portuguese, Thai, Vietnam, Simplified Chinese, Traditional Chinese
	Password setting	
	User administration*	Add/Modify/Delete user, Set User name, Password, Accessible points
	Point setting*	Set point name, Select icon

#### Specifications

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

# Option List

## Outdoor Units

### VRV H SERIES High-COP Type

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

#### Option PCB

No.	Item		Type	RXYQ12AH RXYQ14AH RXYQ16AH	RXYQ18AH RXYQ20AH RXYQ22AH	RXYQ24AH RXYQ26AH RXYQ28AH	RXYQ30AH RXYQ32AH RXYQ34AH	RXYQ36AH
1	DIII-NET expander adaptor			DTA109A51				
2	External control adaptor			DTA109A61				
3	Modbus communication adaptor			DTA116A51				

### VRV H SERIES Standard Type

No.	Item		Type	RXYQ6A RXYQ8A RXYQ10A	RXYQ12A RXYQ14A RXYQ16A	RXYQ18A RXYQ20A	RXYQ22A
1	Distributive piping	REFNET header		KHRP26M22H, KHRP26M33H (Max. 4 branch) (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)		
		REFNET joint		KHRP26A22T, KHRP26A33T	KHRP26A22T, KHRP26A33T, KHRP26A72T		
2	Outdoor unit multi connection piping kit			BHFP22P100			
3	Cool/Heat selector			KRC19-26A			

No.	Item		Type	RXYQ24A	RXYQ26A RXYQ28A RXYQ30A RXYQ32A RXYQ34A RXYQ36A	RXYQ38A RXYQ40A RXYQ42A RXYQ44A	RXYQ46A RXYQ48A RXYQ50A RXYQ52A	RXYQ54A RXYQ56A RXYQ58A RXYQ60A
1	Distributive piping	REFNET header		KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
		REFNET joint		KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T				
2	Pipe size reducer			KHRP26M73TP, KHRP26M73HP				
3	Outdoor unit multi connection piping kit			BHFP22P100	BHFP22P151			
4	Cool/Heat selector			KRC19-26A				

#### Option PCB

No.	Item		Type	RXYQ6A RXYQ8A RXYQ10A RXYQ12A	RXYQ14A RXYQ16A RXYQ18A RXYQ20A	RXYQ22A RXYQ24A	RXYQ26A RXYQ28A RXYQ30A RXYQ32A RXYQ34A RXYQ36A	RXYQ38A RXYQ40A RXYQ42A RXYQ44A RXYQ46A RXYQ48A	RXYQ50A RXYQ52A RXYQ54A RXYQ56A RXYQ58A RXYQ60A
1	DIII-NET expander adaptor ★			DTA109A51					
2	External control adaptor ★			DTA109A61					
3	Modbus communication adaptor ★			DTA116A51					
4	Option plate for control adaptor			—	BKS26A *1	—	BKS26A *1		

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

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



### VRV R SERIES High-COP Type

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

#### Option PCB

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

### VRV R SERIES Standard Type

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

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

#### Option PCB

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

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

# Option List

## Outdoor Units

### VRV IV S SERIES Heat Pump

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

### VRV IV Q SERIES Heat Pump (Standard Type)

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

No.	Item	Type	RQYQ18TN(E) RQYQ20TN(E)	RQYQ22TN(E)	RQYQ24TN(E) RQYQ26TN(E)	RQYQ28TN(E) RQYQ30TN(E) RQYQ32TN(E)
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H (Max. 4 branch) (Max. 8 branch), KHRP26M72H (Max. 8 branch)		KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H, KHRP26M73H (Max. 8 branch)	
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T		KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T	
2	Pipe size reducer				KHRP26M73TP, KHRP26M73HP	
3	Outdoor unit multi connection piping kit				BHFP22P100	
4	Cool / Heat selector				KRC19-26A	

No.	Item	Type	RQYQ34TN(E) RQYQ36TN(E)	RQYQ38TN(E) RQYQ40TN(E)	RQYQ42TN(E) RQYQ44TN(E)	RQYQ46TN(E) RQYQ48TN(E)
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
2	Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
3	Outdoor unit multi connection piping kit		BHFP22P151			
4	Cool / Heat selector		KRC19-26A			

### VRV IV Q SERIES Heat Pump (Space Saving Type)

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

No.	Item	Type	RQYQ30TS(E)	RQYQ32TS(E)	RQYQ34TS(E)	RQYQ36TS(E)	RQYQ38TS(E)	RQYQ40TS(E)
1	Disinbutive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max.4 branch) (Max.8 branch) (Max.8 branch) (Max.8 branch)					
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T					
2	Pipe size reducer		KHRP26M73TP, KHRP26M73HP					
3	Outdoor unit connection piping kit		BHFP22P100					
4	Cool / Heat selector		KRC19-26A					

No.	Item	Type	RQYQ42TS(E)	RQYQ44TS(E)	RQYQ46TS(E)	RQYQ48TS(E)
1	Disinbutive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max.4 branch) (Max.8 branch) (Max.8 branch) (Max.8 branch)			
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
2	Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
3	Outdoor unit connection piping kit		BHFP22P151			
4	Cool / Heat selector		KRC19-26A			

### VRV III-Q Heat Recovery

No.	Item	Type	RQCEQ280P RQCEQ360P	RQCEQ460P RQCEQ500P	RQCEQ540P RQCEQ636P	RQCEQ712P RQCEQ744P RQCEQ816P RQCEQ848P
1	Distributive piping	REFNET header	KHRP25M33H (Max. 8 branch) KHRP25M72H (Max. 8 branch) KHRP26M22H (Max. 4 branch) KHRP26M33H (Max. 8 branch)	KHRP25M33H (Max. 8 branch) KHRP25M72H (Max. 8 branch) KHRP25M73H (Max. 8 branch) KHRP26M22H (Max. 4 branch) KHRP26M33H (Max. 8 branch)	KHRP25M33H (Max. 8 branch) KHRP25M72H (Max. 8 branch) KHRP25M73H (Max. 8 branch) KHRP26M22H (Max. 4 branch) KHRP26M33H (Max. 8 branch)	KHRP25M33H (Max. 8 branch) KHRP25M72H (Max. 8 branch) KHRP25M73H (Max. 8 branch) KHRP26M22H (Max. 4 branch) KHRP26M33H (Max. 8 branch) KHRP26M72H (Max. 8 branch)
		REFNET joint	KHRP25A22T (Max. 4 branch) KHRP25A33T (Max. 8 branch) KHRP25A72T (Max. 8 branch) KHRP26A22T (Max. 4 branch) KHRP26A33T (Max. 8 branch)	KHRP25A22T (Max. 4 branch) KHRP25A33T (Max. 8 branch) KHRP25A72T (Max. 8 branch) KHRP25A73T (Max. 8 branch) KHRP26A22T (Max. 4 branch) KHRP26A33T (Max. 8 branch)	KHRP25A22T (Max. 4 branch) KHRP25A33T (Max. 8 branch) KHRP25A72T (Max. 8 branch) KHRP25A73T (Max. 8 branch) KHRP26A22T (Max. 4 branch) KHRP26A33T (Max. 8 branch)	KHRP25A22T (Max. 4 branch) KHRP25A33T (Max. 8 branch) KHRP25A72T (Max. 8 branch) KHRP25A73T (Max. 8 branch) KHRP26A22T (Max. 4 branch) KHRP26A33T (Max. 8 branch) KHRP26A72T (Max. 8 branch)
2	Outdoor unit multi connection piping kit		BHFP26P36C		BHFP26P63C	BHFP26P84C
3	Digital pressure gauge kit		BHGP26A1x2		BHGP26A1x3	BHGP26A1x4

### VRV IV W SERIES Heat Pump / Heat Recovery

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

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

### VRV IV W SERIES Strainer kit specifications

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

### VRV WS SERIES

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

## VRV Indoor Units

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

No.	Item		Type	Type		
				FXFSQ25A FXFSQ32A FXFSQ40A	FXFSQ50A FXFSQ63A FXFSQ80A	FXFSQ100A FXFSQ125A FXFSQ140A
1	Decoration panel	Standard panel with sensing	Fresh white	BYCQ125EEF		
			Black	BYCQ125EEK		
2	Sealing material of air discharge outlet <sup>1</sup>		For usage of 3-, 4-way flow	KDBH551C160		
			For usage of 2-way flow	KDBH552C160		
3	Panel spacer		KDBP55H160FA			
4	Fresh air intake kit	Chamber type <sup>2,3</sup>	Without T-duct joint	KDDP55B160 (Components: KDDP55C160-1, KDDP55B160-2) <sup>5</sup>		
			With T-duct joint	KDDP55B160K (Components: KDDP55C160-1, KDDP55B160K2) <sup>5</sup>		
			Direct installation type <sup>4</sup>	KDDP55X160A		
5	High-efficiency filter unit <sup>6</sup> (Including filter chamber)		(Colorimetric method 65%)	KAFP556C80	KAFP556C160	
			(Colorimetric method 90%)	KAFP557C80	KAFP557C160	
6	Replacement high-efficiency filter <sup>6,7</sup>		(Colorimetric method 65%)	KAFP552B80	KAFP552B160	
			(Colorimetric method 90%)	KAFP553B80	KAFP553B160	
7	Filter chamber		KDDFP55C160			
8	Replacement long-life filter		KAFP551K160			
9	Ultra long-life filter unit (Including filter chamber) <sup>6</sup>		KAFP55C160			
10	Replacement ultra long-life filter <sup>6,7</sup>		KAFP55H160H			
11	Branch duct chamber <sup>1</sup>		KDJP55C80	KDJP55C160		
12	Insulation kit for high humidity <sup>6,8</sup>		KDTP55K80	KDTP55K160		

Note: 1. Circulation airflow is not available with this option.  
 2. When installing a fresh air intake kit (chamber type), two air outlet corners are closed.  
 3. It is recommended that the volume of outdoor air introduced through the kit is limited to 10% of the maximum airflow rate of the indoor unit. Introducing higher quantities will increase the operating sound and may also influence temperature sensing.  
 4. The volume of fresh air for direct installation type is approximately 1% of the indoor unit airflow. The chamber type is recommended when more fresh air is necessary.  
 5. Please order using the names of both components instead of set name.  
 6. This option cannot be installed to designer panel and auto grille panel.  
 7. Filter chamber is required.  
 8. Please use in case temperature/humidity inside ceiling may get over 30°C, 80% RH.

### Ceiling Mounted Cassette (Round Flow) Type

No.	Item		Type	Type						
				FXFQ25P	FXFQ32P	FXFQ40P	FXFQ50P	FXFQ63P	FXFQ80P	FXFQ100P
1	Decoration panel			BYCP125K-W1						
2	Sealing material of air discharge outlet			KDBH55K160F						
3	Panel spacer			KDBP55H160FA						
4	Filter related	High efficiency filter unit 65%		KAFP556C80			KAFP556C160			
		High efficiency filter unit 90%		KAFP557C80			KAFP557C160			
		Replacement high efficiency filter 65%		KAFP552B80			KAFP552B160			
		Replacement high efficiency filter 90%		KAFP553B80			KAFP553B160			
		Filter chamber		KDDFP55C160						
		Long life replacement filter		KAFP551K160						
		Ultra long-life filter unit		KAFP55C160						
5	Fresh air intake kit	Without T-duct joint	KDDP55B160 (Components: KDDP55C160-1, KDDP55B160-2) *1							
		With T-duct joint	KDDP55B160K (Components: KDDP55C160-1, KDDP55B160K2) *1							
6	Branch duct chamber	Direct installation type	KDDP55X160A							
			KDJP55B80			KDJP55B160				
7	Chamber connection kit			KKSJ55KA160						
8	Insulation kit for high humidity			KDTP55K80						

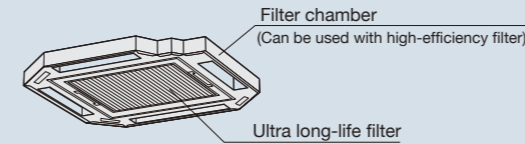
Note: \*1. Please order using the names of both components instead of set name.

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

Options required for specific operating environments

#### Ultra long-life filter unit

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

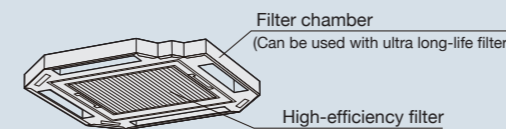


**Dusty area: annual filter change**  
 \*For dust concentration of 0.3 mg/m<sup>3</sup> (Requires separately sold Air purifier)  
 1 year (Approx. 5,000 hr) ≈ 15 hr/day x 28 day/month x 12 month/year

**Ordinary store or office: filter change every 4 years**  
 \*For dust concentration of 0.15 mg/m<sup>3</sup>  
 4 years (Approx. 10,000 hr) ≈ 8 hr/day x 25 day/month x 12 month/year x 4 years

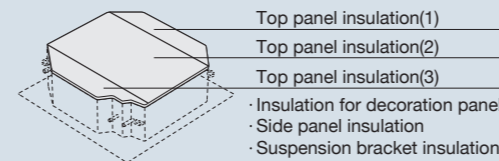
#### High-efficiency filter unit

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



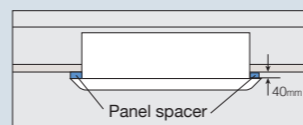
#### Insulation kit for high humidity

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



#### Panel spacer

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



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

#### Sealing material of air discharge outlet

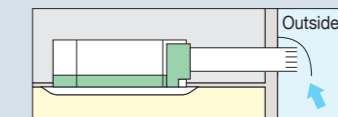
Sealing material block air discharge openings not used in 2-way or 3-way blow.

#### Branch duct chamber

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

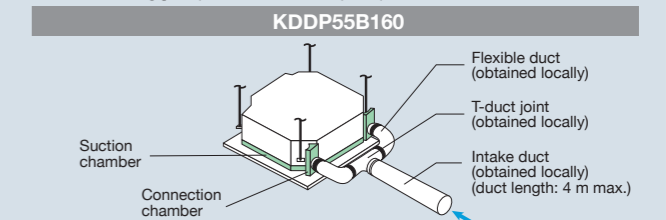
#### Fresh air intake kit Note 1.2

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

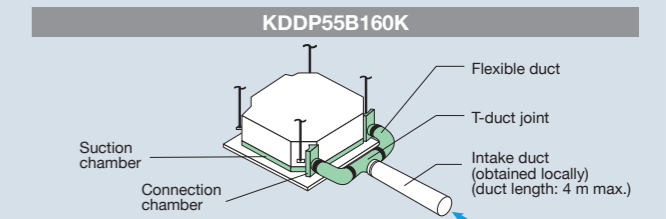


The units can be installed in the following different ways

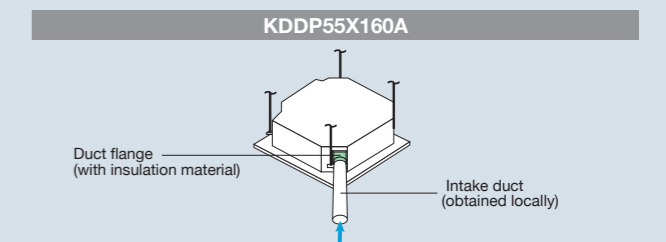
**Chamber type (without T-duct joint) Note 3.4.5**



**Chamber type (with T-duct joint) Note 3.4.5**



**Direct installation type Note 6**



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

## VRV Indoor Units

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

No.	Item	Type	FXZQ20A2	FXZQ25A2	FXZQ32A2	FXZQ40A2	FXZQ50A2
1	Decoration panel				BYFQ60C2W1W		
2	Sealing material of air discharge outlet				BDBHQ44C60		
3	Sensor kit				BRYQ60A2W		
4	Replacement long-life filter				KAFQ441BA60		
5	Fresh air intake kit	Direct installation type			KDDQ44XA60		

### 4-Way Flow Ceiling Suspended Type

No.	Item	Type	FXUQ71A	FXUQ100A
1	Sealing material of air discharge outlet			KDBHP49B140
2	Decoration panel for air discharge			KDBTP49B140
3	Replacement long-life filter			KAFP551K160

### Ceiling Mounted Cassette (Double Flow) Type

No.	Item	Type	FXCQ20M FXCQ25M FXCQ32M		FXCQ40M FXCQ50M		FXCQ63M FXCQ80M FXCQ125M	
1	Decoration panel		BYBC32G-W1	BYBC50G-W1	BYBC63G-W1	BYBC125G-W1		
2	Filter related	High efficiency filter 65% *1	KAFJ532G36	KAFJ532G56	KAFJ532G80	KAFJ532G160		
		High efficiency filter 90% *1	KAFJ533G36	KAFJ533G56	KAFJ533G80	KAFJ533G160		
		Filter chamber bottom suction	KDDFJ53G36	KDDFJ53G56	KDDFJ53G80	KDDFJ53G160		
		Long life replacement filter	KAFJ531G36	KAFJ531G56	KAFJ531G80	KAFJ531G160		

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

### Ceiling Mounted Cassette (Single Flow) Type

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

### Slim Ceiling Mounted Duct Type (Standard Series)

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

### Ceiling Concealed (Duct) Type

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

### Middle Static Pressure Ceiling Mounted Duct Type

No.	Item	Type	FXSQ20PA FXSQ25PA FXSQ32PA		FXSQ40PA		FXSQ50PA FXSQ63PA FXSQ80PA		FXSQ100PA FXSQ125PA		FXSQ140PA	
1	High efficiency filter *1	65%	KAFP632B36	KAFP632B56	KAFP632B80	KAFP632B160	KAFP632B160B					
		90%	KAFP633B36	KAFP633B56	KAFP633B80	KAFP633B160	KAFP633B160B					
2	Filter chamber (for rear suction) *1		KDDFP63B36	KDDFP63B56	KDDFP63B80	KDDFP63B160	KDDFP63B160B					
3	Long-life filter *1		KAFP631B36	KAFP631B56	KAFP631B80	KAFP631B160	KAFP631B160B					
4	Service panel	White	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W						
		Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25K160F						
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T						
5	Air discharge adaptor		KDAP25A36A	KDAP25A56A	KDAP25A71A	KDAP25A140A	KDAP25A160A *2					
6	Shield plate for side plate		KDBD63A160									

Note: \*1. If installing high efficiency filter and long-life filter to the unit, filter chamber is required.

\*2. This option is a set of KDAP25A140A and KDBHP37A160.

### Ceiling Mounted Duct Type

No.	Item	Type	FXMQ20PA FXMQ25PA FXMQ32PA		FXMQ40PA		FXMQ50PA FXMQ63PA FXMQ80PA		FXMQ100PA FXMQ125PA FXMQ140PA		FXMQ160P FXMQ180P FXMQ200P FXMQ250P		
1	Drain pump kit		-										BDU37A250
2	High efficiency filter	65%	KAF372AA36	KAF372AA56	KAF372AA80	KAF372AA160							
		90%	KAF373AA36	KAF373AA56	KAF373AA80	KAF373AA160							
3	Filter chamber		KDDF37AA36	KDDF37AA56	KDDF37AA80	KDDF37AA160							
4	Long life replacement filter		KAF371AA36	KAF371AA56	KAF371AA80	KAF371AA160							
5	Long life filter chamber kit		KAF375AA36	KAF375AA56	KAF375AA80	KAF375AA160							
6	Service panel	White	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W							
		Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25K160F							
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T							
7	Air discharge adaptor		KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A							

### Ceiling Suspended Type

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

### Wall Mounted Type

No.	Item	Type	FXAQ20P	FXAQ25P	FXAQ32P	FXAQ40P	FXAQ50P	FXAQ63P
1	Drain pump kit		K-KDU572EVE					

### Floor Standing Type

No.	Item	Type	FXLQ20MA	FXLQ25MA	FXLQ32MA	FXLQ40MA	FXLQ50MA	FXLQ63MA
1	Long life replacement filter		KAFJ361K28	KAFJ361K45		KAFJ361K71		

### Concealed Floor Standing Type

No.	Item	Type	FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
1	Long life replacement filter		KAFJ361K28	KAFJ361K45		KAFJ361K71		

### Slim Ceiling Mounted Duct Type (Compact Series)

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

## Residential Indoor Units with Connection to BP Units

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

No.	Item	Type	FFQ25B	FFQ35B	FFQ50B	FFQ60B
1	Decoration panel			BYFQ60B3W1		
2	Replacement long-life filter			KAQ441BA60		
3	Fresh air intake kit	Direct installation type		KDDQ44XA60		
4	Sealing material for air discharge outlet			KDBH44BA60		
5	Panel spacer			KDBQ44BA60A		

### Slim Ceiling Mounted Duct Type

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

### Wall Mounted Type

No.	Item	Type	CTXG25P CTXG35P CTXG50P	FTXS20K(A) FTXS25K(A) FTXS35K(A)
1	Titanium apatite deodorising filter			KAF970A46
2	Dust collection filter (PM 2.5) with frame		BAFP046A42	-
3	Dust collection filter (PM 2.5) without frame		BAFP046A41	-

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

### BP Units for Connection to Residential Indoor Units

No.	Item	Type	BPMKS967A3	BPMKS967A2
1	REFNET joint			KHRP26A22T

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

## BS Units for Heat Recovery

### Individual BS Unit

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

### Centralised BS Unit

No.	Item	Type	BS4Q14A	BS6Q14A	BS8Q14A	BS10Q14A	BS12Q14A	BS16Q14A
1	Closed pipe kit							KHFP26A100C
2	Joint kit							KHRP26A250T
3	Quiet kit		KDDN26A4	KDDN26A8		KDDN26A12		KDDN26A16

## Control Systems

### Operation Control System Optional Accessories



#### For VRV indoor unit use

No.	Item	Type	FXFSQ-A	FXFQ-P	FXZQ-A2	FXUQ-A	FXCQ-M	FXEQ-A	FXDQ-T	FXDQ-PD FXDQ-ND
1	Remote controller	Wireless	BRC7M634F (Fresh White) / BRC7M634K (Black)	BRC7F634F	BRC7F530W	BRC7CB58	BRC7C62	BRC4M61		BRC4C65
2	"Nav Ease" (Wired remote controller)		BRC1E63 Note 6	BRC1E63 Note 7	BRC1E63 Note 6,7	BRC1E63	BRC1F61			BRC1E63 Note 7
3	Simplified remote controller (Exposed type)									BRC2C51
4	Remote controller for hotel use (Concealed type)									BRC3A61
5	Adaptor for wiring		★KRP1C11A	★KRP1C63	★KRP1BA57	-	★KRP1B61	-	★KRP1C64	★KRP1B56
6-1	Wiring adaptor for electrical appendices (1)		-	★KRP2A62	★KRP2A526	-	★KRP2A61	-	★KRP2A61	★KRP2A53
6-2	Wiring adaptor for electrical appendices (2)			★KRP4AA53			★KRP4AA51	-	★KRP4AA51	★KRP4A54
7	Remote sensor (for indoor temperature)		KRCS01-5B		BRC501A-4		BRC501A-1		BRC501A-4	BRC501A-1
8	Installation box for adaptor PCB ☆		Note 2, 3 KRP1H98A	Note 2, 3 KRP1H98	Note 4, 5 KRP1BA101	KRP1BA97	Note 2, 3 KRP1B96	-	BRP9A90	Note 4, 5 KRP1BA101
9	External control adaptor for outdoor unit			★DTA104A62		-	★DTA104A61	-	★DTA104A61	★DTA104A53
10	Adaptor for multi tenant			★DTA114A61						
11	Multi tenancy kit								KRP114A3 Note 2	-

No.	Item	Type	FXDYQ-M(A)	FXSQ-PA	FXMQ-PA	FXMQ-P	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA
1	Remote controller	Wireless	BRC4C62	BRC4C65	BRC4C65	BRC7EA63W	BRC7EA618	BRC4C62	
2	"Nav Ease" (Wired remote controller)			BRC1E63 Note 7			BRC1E63		
3	Simplified remote controller (Exposed type)			BRC2C51					BRC2C51
4	Remote controller for hotel use (Concealed type)			BRC3A61					BRC3A61
5	Adaptor for wiring		KRP1B61	★KRP1C64	★KRP1C67	KRP1BA54	-		KRP1B61
6-1	Wiring adaptor for electrical appendices (1)		KRP2A61	★KRP2A61	★KRP2A62	★KRP2A62	★KRP2A61	★KRP2A61	KRP2A61
6-2	Wiring adaptor for electrical appendices (2)		KRP4AA51	★KRP4AA51	★KRP4AA52	★KRP4AA52	★KRP4AA51	★KRP4AA51	KRP4AA51
7	Remote sensor (for indoor temperature)		BRC501A-1		BRC501A-4				BRC501A-1
8	Installation box for adaptor PCB ☆		-	Note 2, 3 KRP4A98	Note 2, 3 KRP4A97	BRP9A90	Note 3 KRP1CA93	Note 2, 3 KRP4AA93	-
9	External control adaptor for outdoor unit		DTA104A61	★DTA104A61		-	★DTA104A62	★DTA104A61	DTA104A61
10	Adaptor for multi tenant				★DTA114A61			★DTA114A61	-

- Note: 1. Installation box☆ is necessary for each adaptor marked★.  
 2. Up to 2 adaptors can be fixed for each installation box.  
 3. Only one installation box can be installed for each indoor unit.  
 4. Up to 2 installation boxes can be installed for each indoor unit.  
 5. Installation box☆ is necessary for each adaptor.  
 6. Some function can be set only via wired remote controller BRC1E63. Cannot be set via other remote controllers. Please refer to page 112 for function list details.  
 7. Auto airflow rate can be set only via wired remote controller BRC1E63. Cannot be set via other remote controllers.  
 8. Only one adaptor can be fixed for installation box.

## Control Systems

### Operation Control System Optional Accessories

#### For residential indoor unit use

No.	Item	Type	FFQ-B	FDXS-C	CTXG-P FTXS-K(A)
1	Remote controller	Wired <sup>Note 1</sup>	BRC1E63	BRC944B2 <sup>Note 2</sup>	
		Wireless	BRC7E530W	- <sup>Note 3</sup>	
2	Wired remote controller cord	Length 3 m (shielded wire)	-	BRCW901A03	
		Length 8 m (shielded wire)	-	BRCW901A08	
3	Adaptor for wiring		<sup>Note 4</sup> KRP1BA57	-	
4	Wiring adaptor for electrical appendices		<sup>Note 4</sup> KRP4AA53	-	
5	Installation box for adaptor PCB		KRP1BA101	-	
6	Remote sensor (for indoor temperature)		BRC501A-1	-	
7	Wiring adaptor for time clock/remote controller <sup>Note 5</sup> (Normal open pulse contact/normal open contact)		-	KRP413AB1S	
8	Remote controller loss prevention chain		-	KKF917A4	KKF910A4
9	Interface adaptor for DIII-NET use		DTA112BA51	KRP928BB2S	

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

### System Configuration

No.	Item	Type	Model No.	Function
1	Residential central remote controller		<sup>Note 2</sup> DCS303A51	• Up to 16 groups of indoor units (128 units) can be easily controlled using the large LCD panel. ON/OFF, temperature settings and scheduling can be controlled individually for indoor units.
2	Interface adaptor for residential indoor units		KRP928BB2S	• Adaptors required to connect products other than those of the <b>VRV</b> System to the high-speed DIII-NET communication system adopted for the <b>VRV</b> System.
3	Interface adaptor for SkyAir-series		<sup>Note 3</sup> ★DTA112BA51	* To use any of the above optional controllers, an appropriate adaptor must be installed on the product unit to be controlled.
4	Central control adaptor kit   For UAT(Y)-K(A),FD-K		★DTA107A55	
5	Wiring adaptor for other air-conditioner		★DTA103A51	
6	DIII-NET Expander Adaptor		DTA109A51	• Up to 1024 units can be centrally controlled in 64 different groups. • Wiring restrictions (max. length: 1,000m, total wiring length: 2,000m, max. number of branches: 16) apply to each adaptor.
6-1	External control adaptor		DTA104A61	• Demand control of individual or multiple systems. • Low noise option for individual or multiple systems.
6-2	Mounting plate		BKS26A	• When installing DTA109A51, DTA104A61 into outdoor units of 14 class or larger.

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

### Building Management System

No.	Item			Model No.	Function			
1	intelligent Touch Controller	Basic	Hardware	intelligent Touch Controller	DCS601C51	• Air-Conditioning management system that can be controlled by a compact all-in-one unit.		
1-1		Option	Hardware	DIII-NET plus adaptor	DCS601A52	• Additional 64 groups (10 outdoor units) is possible.		
1-2	Electrical box with earth terminal (4 blocks)				KJB411A	• Wall embedded switch box.		
2	intelligent Touch Manager	Basic	Hardware	intelligent Touch Manager	DCM601A51	• Air-conditioning management system that can be controlled by touch screen.		
2-1					Hardware	iTM plus adaptor	DCM601A52	• Additional 64 groups (10 outdoor units) is possible. Max. 7 iTM plus adaptors can be connected to intelligent Touch Manager.
2-2		Option			Hardware	iTM power proportional distribution	DCM002A51	• Power consumption of indoor units are calculated based on operation status of the indoor unit and outdoor unit power consumption measured by kWh metre.
2-3					Software	iTM energy navigator	DCM008A51	• Building energy consumption is visualised. Wasted air-conditioning energy can be found out.
2-4					Software	BACnet® client	DCM009A51	• BACnet® equipment can be managed by intelligent Touch Manager.
2-5					Software	HTTP Interface	DCM007A51	• Interface for intelligent Touch Manager by HTTP
2-6		Hardware			*1 SVM series	SVMPR2	• <b>VRV</b> Smart Phone Control System for residence	
2-7						SVMPC2	• <b>VRV</b> Smart Phone Remote Controller for building	
2-8						*5 SVMPS1	• Tenant Billing System with PPD	
2-9		<b>VRV</b> Smart Phone Control System				SVMPR1	• <b>VRV</b> Smart Phone Control System for residence with DTA116A51.	
2-10	<b>VRV</b> Tablet Controller				SVMPC1	• <b>VRV</b> Tablet Controller for small size building with DTA116A51.		
2-11	Di unit				DEC101A51	• 8 pairs based on a pair of ON/OFF input and abnormality input.		
2-12	Dio unit				DEC102A51	• 4 pairs based on a pair of ON/OFF input and abnormality input.		
3	Communication interface			*2 Interface for use in BACnet®	DMS502B51	• Interface unit to allow communications between <b>VRV</b> and BMS. Operation and monitoring of air-conditioning systems through BACnet® communication.		
3-1				Optional DIII board	DAM411B51	• Expansion kit, installed on DMS502B51, to provide 2 more DIII-NET communication ports. Not usable independently.		
3-2				Optional Di board	DAM412B51	• Expansion kit, installed on DMS502B51, to provide 16 more wattmeter pulse input points. Not usable independently.		
4				*3 Interface for use in LONWORKS®	DMS504B51	• Interface unit to allow communications between <b>VRV</b> and BMS. Operation and monitoring of air-conditioning systems through LonWorks® communication.		
5				*6 Modbus Communication Adaptor	DTA116A51	• Use of the Modbus protocol enables the connection of the <b>VRV</b> system with a variety of Modbus communication systems from other manufacturers.		
5-1				Mounting plate	BKS26A	• When installing DTA116A51 into outdoor units of 14 class or larger.		
6	Contact/ analogue signal			Unification adaptor for computerised control	★DCS302A52	• Interface between the central monitoring board and central control units.		

Note: \*1. HTTP interface (DCM007A51) is also required.  
 \*2. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).  
 \*3. LonWorks® is a trademark of Echelon Corporation registered in the United States and other countries.  
 \*4. Installation box for ★ adaptor must be obtained locally.  
 \*5. PPD option (DCM002A51) for iTM is also required.  
 \*6. Cannot apply for **VRV** R series.

# Daikin Engineering Supports

## VRV Design and Sales Proposal Assistance

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



### Design assistance

For consultants and architects

Combines energy efficiency and comfort

CFD simulation to optimise outdoor unit layouts

Design flexibility

Model selection

Drawing materials support



### Sales proposals

For air conditioning engineers and dealers

Model selection



### Model Selection Software

VRV Xpress

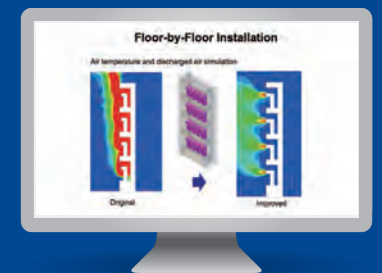
**VRV Xpress** is a flexible design software that optimises equipment selection. It can empower consultants and air conditioning engineers so they can fully enhance their equipment selections to design the most effective, optimum systems possible. The software also allows the choice of outdoor units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



### CFD Simulation to Optimise Outdoor Unit Layouts

DT FLOW II

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



### Drawing Supports

CAD Symbols

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







**Warning**



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

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

**Cautions on product corrosion**

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

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

**VRV** Air Conditioning System is the world's first individual air conditioning system with variable refrigerant flow control and was commercialised by Daikin in 1982.

**VRV** is the trademark of Daikin Industries, Ltd., which is derived from the technology we call "variable refrigerant volume."