



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.

DAIKIN 

## ooling Only 5 0

**General Catalogue** 

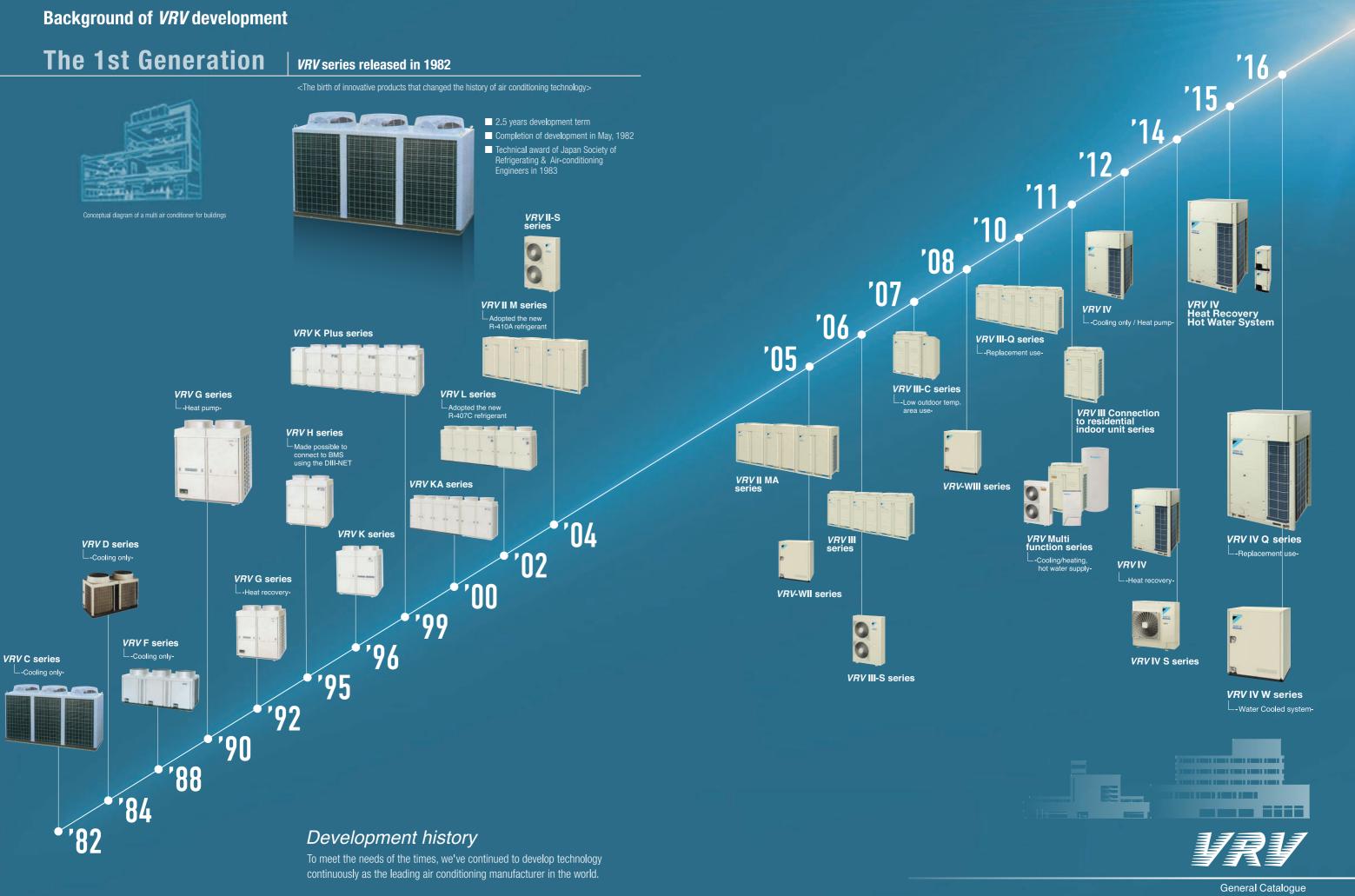




**General Catalogue** 

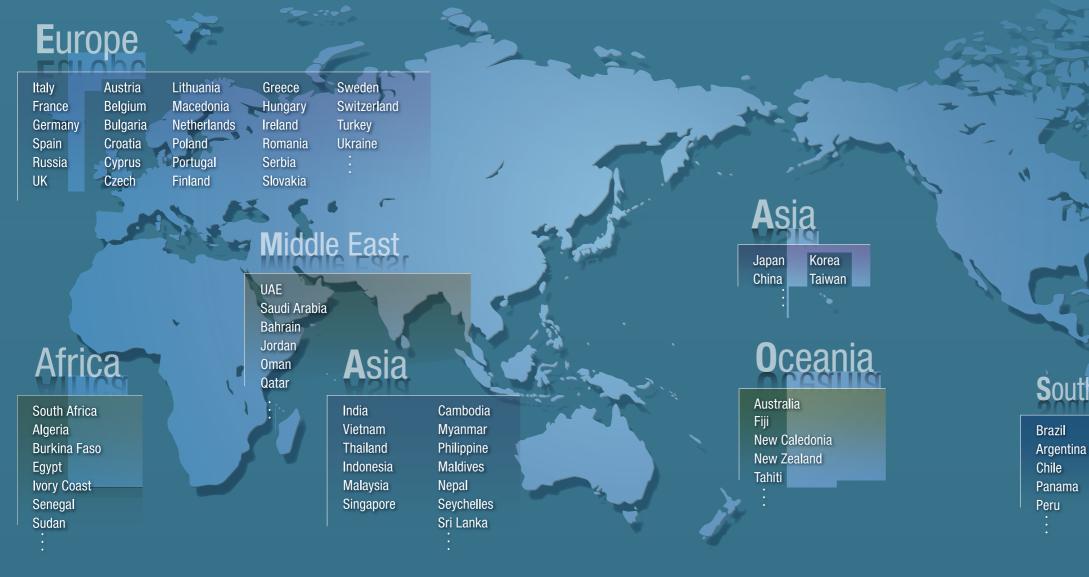




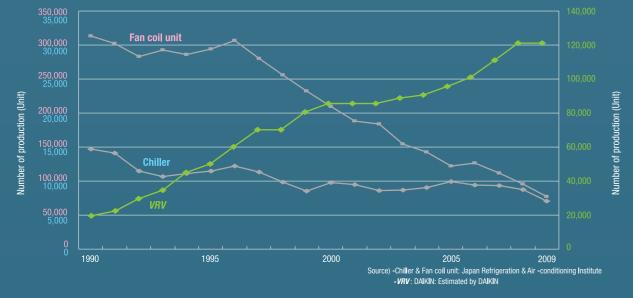


\* VRV is a trademark of Daikin Industries, Ltd.

Sales is undergoing in more than 70 countries



#### The influence of *VRV* - Central system market in Japan



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## North America

USA Mexico Canada Puerto Rico

## South America

## Wide variety of series models to supply total air solutions

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





#### Achieves excellent performance to meet the needs in various buildings

Next generation VRV IV series offers better energy savings, comfort, and ease of installation to meet an ever wider variety of needs.

It also enables a mixed combination of stylish and quiet VRV indoor units and residential indoor units in one system.

residential, small offices

VRV IV S series aims to provide sufficient

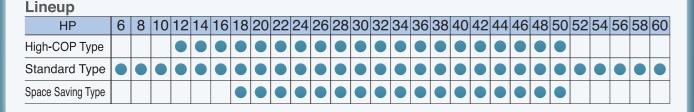
offer 5 models to suit your needs.

capacity, along with the compact size required by

residential, small offices and shops. Outdoor units

are designed to be slim and space saving, and

and shops

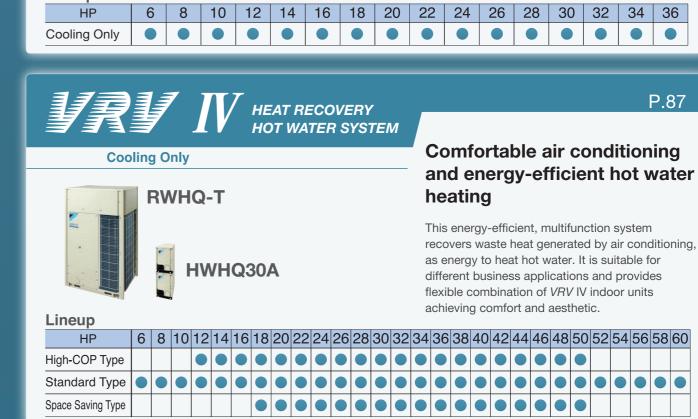




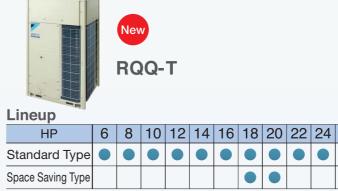


#### Lineup HP 9 6 8 Cooling Only

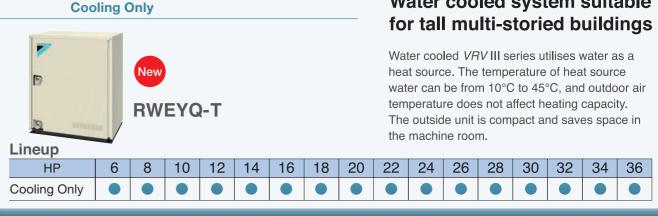
P.09



## **VRV W** Q SERIES **Cooling Only**



## **YRY** IV W SERIES



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P.65

#### For quick & high quality replacement use

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 guickly and smoothly.

This minimises inconveniences to activities and users in the building.

26	28	30	32	34	36	38	40	42	44	46	48



## Water cooled system suitable

recovers waste heat generated by air conditioning,

## Wide range indoor unit lineup creating

## various comfortable airflow

## **VRV** indoor units

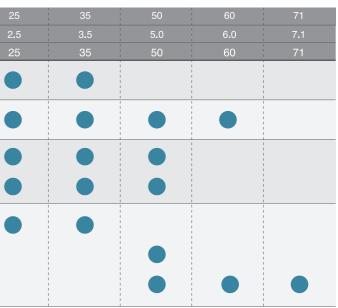
			20	25	32	40	50	63	71	80	100	125	140	200	250	400	500
Туре	Model Name		0.8HP	1HP	1.25HP	1.6HP	2HP	2.5HP	3HP	3.2HP	4HP	5HP	6HP	8HP	10HP	16HP	20HP
Calling Mounted		Capacity Index	20	25	31.25	40	50	62.5	71	80	100	125	140	200	250	400	500
Ceiling Mounted Cassette(Round Flow with Sensing)	FXFQ-SVM								1 1 1 1						1 1 1 1 1	1 1 1 1 1	
Ceiling Mounted Cassette (Round Flow)	FXFQ-LUV1																
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE										I I I I I I	1 1 1 1 1 1					
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE																
Ceiling Mounted Cassette Corner	FXKQ-MAVE								- 			- - - - - -			- - - - - -		
	FXDQ-PBVE (with drain pump)								1 1 1 1		       	1 1 1 1 1		1 1 1 1	       	1 1 1 1	
Slim Ceiling	FXDQ-PBVET (without drain pump)	(700 mm width type)															
Mounted Duct (Standard Series)	FXDQ-NBVE (with drain pump)											I I I I I					
	FXDQ-NBVET (without drain pump)	(900/1,100 mm width type)															
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV1																
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PVE																
Ceiling Mounted	FXMQ-PVE																
Duct	FXMQ-MAVE											1 1 1 1 1					
Outdoor-Air Processing Unit	FXMQ-MFV1								-       		     		1			-       	
4-Way Flow Ceiling Suspended	FXUQ-AVEB																
Ceiling Suspended	FXHQ-MAVE	-															
Wall Mounted	FXAQ-PVE									       							
Floor Standing	FXLQ-MAVE										     	1 1 1 1			     		
Concealed Floor Standing	FXNQ-MAVE										       						
Floor Standing	FXVQ-NY1										1						
Duct	FXVQ-NY16 (high static pressure type)						1		I I I I		I I I I	1 1 1 1	1		I I I I	1 1 1 1	
Clean Room	FXBQ-PVE								1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	       	1 1 1 1	1 1 1 1 1		1 1 1 1
Air Conditioner	FXBPQ-PVE										       				1 1 1 1		
Air Handling Unit	AHUR	L												6	- 120 H	ΙP	
Heat Reclaim Ventilator with DX-Coil and Humidifier	VKM-GA(M)V1		Airfl	ow ra	te 500-	1000	m³/h										
Heat Reclaim Ventilator	VAM-GJVE	001	Airfl	ow ra	te 150-	2000	m³/h										

## Residential indoor units with connection to BP units

Туре	Model Name	Rated Capacity (kW)
		Capacity Index
Slim Ceiling Mounted Duct	FDKS-EAVMB	(700 mm width type)
Mounted Duct	FDKS-C(A)VMB	(900/1,100 mm width type)
	FTKJ-NVMW	
	FTKJ-NVMS	
Wall Mounted	FTKS-DVM	
	FTKS-BVMA	
	FTKS-FVM	

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





#### **Excellent Operational** VRV IV

## Performance

Energy saving

**Higher Coefficient of Performance (COP)** 

\_3.80 \_\_3.74\_

14 HP

12 HP

3.46

16 HP 18 HP

-5.47-5.13

-3.25



## **Enhanced Lineup to 3 types**





- Enables further energy saving
- 12 HP(32 kW)-50 HP(140 kW) with 4 new models lineup

	VRV III	VRV	IV
COP during cooling operation	3.94	>4.39	11% Increas
Installation Space	1.66 m <sup>2</sup>	2.13 m <sup>2</sup>	
Product Weight	490 kg	<b>555 kg</b>	

# (55.9 kW)

- Offers higher capacity of up to 60 HP
- 6 HP(16 kW)-60 HP(168 kW) with 3 new models lineup

		VRV III	VRV IV	
•	COP during cooling	3.94	3 99	C
e	operation	0.04	0.00	C
	Installation Space	1.66 m <sup>2</sup>	>1.42 m <sup>2</sup>	
	Product Weight	490 kg 🖡	> 380 kg < 22%	

## Lineup

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



- New series with compact & lightweight design
- 18 HP(50 kW)-50 HP(140 kW) with 17 new models lineup

		VRV 🎞	VRV	IV
	COP during cooling operation	3.94	3.11	
4% erease	Installation Space	1.66 m <sup>2</sup> )	>0.95 m²	43% Decrease
2% rease	Product Weight	490 kg	> 320 kg •	35% Decrease

#### 6.02 5.92 8 HP 10 HP 12 HP 14 HP 16 HP 18 HP COP for 10 HP

COP at 50% operation load

8 HP

6.83

COP at 100% operation load

ß

4.5

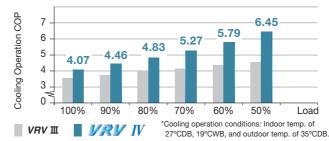
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3.5

4.32\_4.07

10 HP

-6.45-



#### Comfort Lower operation sound

Improves heat exchanger efficiency, helps to reduce operation sound.



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

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



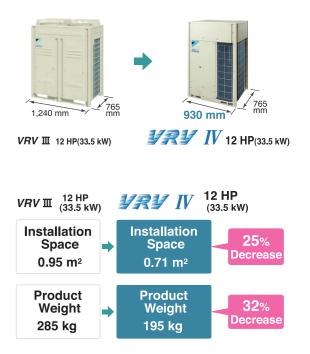


VRVIV cooling Only

## Ease of installation

**Compact & lightweight design** 

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



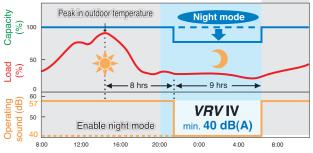
#### Sound level (dB(A))

	12 HP	10 HP	8 HP	6 HP
	60	58	57	57
1~2 dB(A) less than conventional mode	59	57	56	55

#### Nighttime quiet operation function

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

\*1 8 h is the initial setting with 6 h or 10 h also available. \*29 h is the initial setting with 8 h or 10 h also available.



Notes: . This function is available in setting at site.

The operating sound in guiet operation mode is the actual value measured by our company.

The relationship of outdoor temperature (load) and time shown above is just an example.

## Technologies

## Realising compact technology with performance



**VRV** II 20 HP

As a leading global innovator, Daikin advanced from the conventional 2 module combination to a single module for 20 HP model. This allows the installation area to reduce by 43% as compared to the previous VRV III 20 HP model.

#### **Design considerations**

- 1. Increase surface area of heat exchanger for better performance
- 2. Easy maintenance



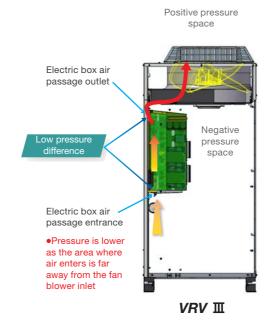
#### VRV IV 20 HP

With this unbridled passion for high quality and advanced technology solutions, the new 20 HP is designed with the following considerations:

#### Sufficient cooling for electrical component

The new 20 HP model is designed with the electrical box strategically located between a region of positive and negative pressure. This design allows a larger air flow from negative pressure to positive pressure due to the higher pressure difference.

The small holes created in the electric box are now close to the fan blower inlet, thus a significant pressure difference can still be achieved unlike that of VRV II.



#### 3. Sufficient cooling for electrical component

4. Eliminate suction resistance issue to enhance air flow volume.

#### Increase surface area of heat exchanger

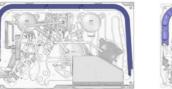
The unique 4-sided all round heat exchanger ensure sufficient surface area for the heat exchanger as oppose to conventional 3-sided heat exchanger. This improves the heat exchanger performance without increasing the footprint.

#### **Easy maintenance**

In previous VRV III design, the electrical component is usually situated on the front surface which requires the whole electrical component to be removed before maintenance can be carried out.

With the new design, the electrical component is strategically located on the top which ease the maintenance process.

Moreover, the heat exchanger on the front side can be extended to take up the previous space used for the electrical component and improve its performance.



VRV II



## Electrical component

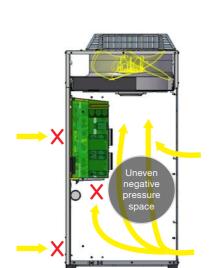


**VRV** III



VRV IV

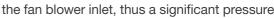


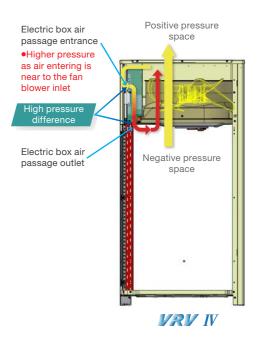


Eliminate suction resistance issue

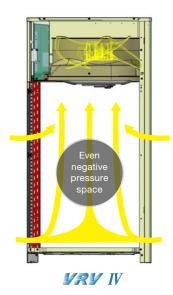








Without affecting the fan volume, the electric component is re-designed to the top and free up the dead space that existed in previous VRV III models. This eliminates the problem of suction resistance.



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## VRT-Variable Refrigerant Temperature

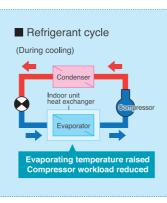
### State-of-the-art energy saving technology for *VRV* system Customise your *VRV* system for optimal annual efficiency

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

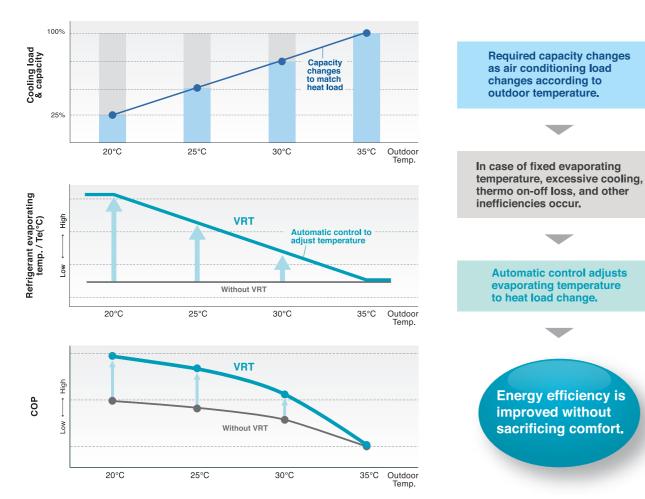
#### How is energy reduced?

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



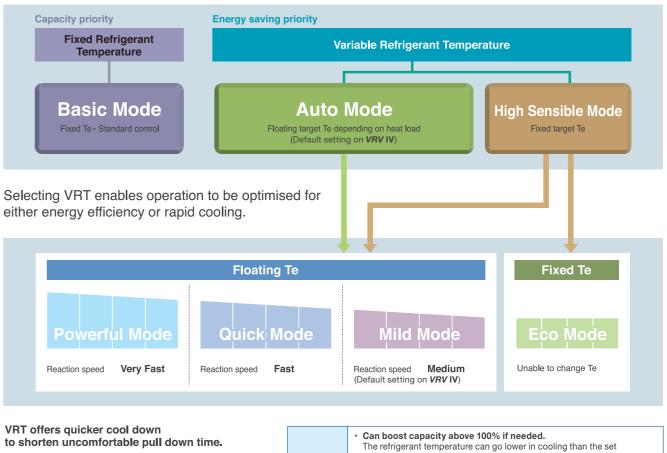


■ Typical changes in evaporating temperature and COP depending on changing indoor load

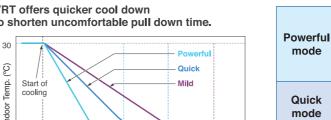


#### New system, saving more energy

Basic mode is selected to maintain optimal comfort. VRT is selected to save energy and prevent excessive cooling.



minimum



## Set temperature Very Fast Fast Medium Quick mode Mild mode

#### **Recommended to use in these situations**

Cooling only areas with different daily temperature.

25

VRT is particularly effective at night when temperatures are low.

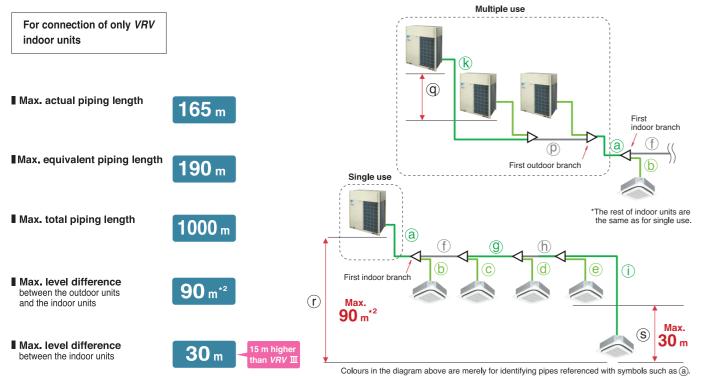


- Gives priority to very fast reaction speed. The refrigerant temperature goes down fast to keep the room setpoint stable.
- Gives priority to fast reaction speed. The refrigerant temperature goes down fast to keep the room setpoint stable.
- Gives priority to efficiency. The refrigerant temperature goes down gradually giving priority to the efficiency of the system instead of the reaction speed.

## More Flexible System Design

### More options for installation location Long piping length

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



		Actual piping length	Example	Equivalent piping length
	Refrigerant piping length	165 m	a+f+g+h+i	190 m
Maximum allowable	Total piping length	1000 m	a+b+c+d+e+f+g+h+i	-
piping length	Between the first indoor branch and the farthest indoor unit	90 m*1	f+g+h+i	-
	Between the outdoor branch and the last outdoor unit	10 m	k+p	13 m

			Level Difference	Example
	Between the outdoor units (Mu	Itiple use)	<b>5</b> m	q
Maximum allowable	Between the indoor units		<b>30</b> m	s
level difference	Between the outdoor units	If the outdoor unit is above.	90 m*²	r
	and the indoor units	If the outdoor unit is below.	90 m*2	r

С

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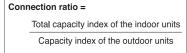
\*1. No special requirements up to 40 m. The maximum actual piping length can be 90 m, depending on conditions. Various conditions and requirements have to be met to allow utilisation of 90 m piping length. Be sure to refer to the Engineering Data Book for details of these conditions and requirements.

\*2. When level differences 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%.

Conne	ction ratio
50%-	-200%

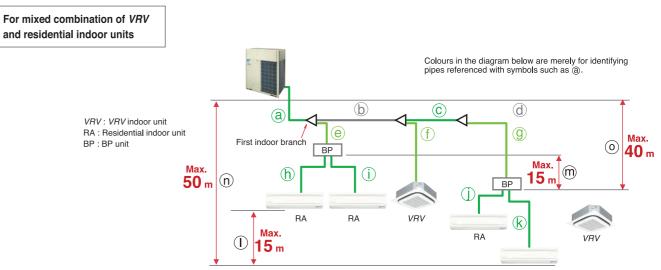


oor unit connection capacity	
FXDQ, FXSQ, FXMQ-P, FXAQ, FXB(P)Q models	Other VRV indoor unit models*1
	200%
200%	160%
	130%
	FXDQ, FXSQ, FXMQ-P, FXAQ, FXB(P)Q models

\*1 For the FXFQ25LU, FXFQ25S and FXVQ models, maximum connection ratio is 130% for the entire range of outdoor units.

Note: If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the indoor units.

\*Refer to page 23-24 for outdoor unit combination details.



When a mixed combination of VRV and residential indoor units is connected or

or when only residential inc	loor units are connected	Actual piping length	Example		
	Refrigerant piping length		<b>100</b> m	a+b+c+g+k, a+b+c+d	
	Total piping length		<b>250</b> m	a+b+c+d+e+f+g+h+i+j+k	
Marianum allanualda		If indoor unit capacity index < 60.	2 m–15 m		
Maximum allowable piping length	Between BP unit and indoor unit	If indoor unit capacity index is 60.	2 m–12 m	h, i, j, k	
		If indoor unit capacity index is 71.	2 m–8 m		
		nch and the farthest BP unit or nch and the farthest <i>VRV</i> indoor unit	<b>50</b> m <sup>*1</sup>	b+c+g, b+c+d	
Minimum allowable piping length	Between outdoor unit and th	ne first indoor branch	<b>5</b> m	а	

			Level Difference	Example
	Between the indoor units		<b>15</b> m	I
	Between BP units		<b>15</b> m	m
Maximum allowable level difference	Between the outdoor unit	If the outdoor unit is above.	<b>50</b> m	n
	and the indoor unit	If the outdoor unit is below.	<b>40</b> m	n
	Between the outdoor unit an	nd the BP unit	<b>40</b> m	0

\*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.

\*When a mixed combination of VRV and residential indoor units is connected or when only residential indoor units are connected, connection ratio must be 50% to 130%. Refer to page 24 for outdoor unit combination details.

#### High external static pressure

VRV IV 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.

1







## **Reliable and Stable System**

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

#### Efficient automatic test operation

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

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

## Simplified commissioning and after-sales service

#### **Function of information display** by luminous digital tube

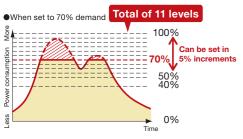
VRV IV system utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.

#### **VRV** configurator

- The VRV configurator is an advanced software solution that allows for easy system configuration and commissioning.
- Less time is required on the roof for outdoor unit configuration.
- Multiple systems at different sites can be managed in the exact same way, thus offering simplified commissioning for key accounts.
- Initial settings on the outdoor unit can be retrieved easily

## 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.





#### 7-segment digital display Display operatio directly

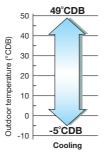


Conventional LED display

## Simplified commissioning **Retrieve initial** system settings

## Wide operation temperature range

The versatile operation range of the VRV IV system works to reduce limitations on installation locations. The operation temperature range for cooling can be performed with outdoor temperatures as high as 49°C.



## Outdoor unit sequencing technology

#### Automatic sequencing operation

During start-up, Daikin VRV IV unit sequencing operation will be automatically enabled to ensure balance 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 IV system 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

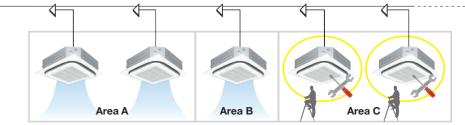
If malfunction occurs in an outdoor unit... Emergency operation can be conveniently set and enabled by the remote controller of indoor units (for systems composed of two or more outdoor units).



## **Ease of Maintenance**

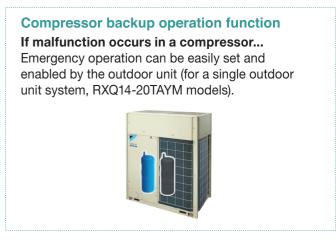
VRV IV provides maintenance feature\* which allows the shutdown of FCU without shutting down the whole VRV system. This feature comes in handy during maintenance period as the remaining indoor units continue to operate.





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



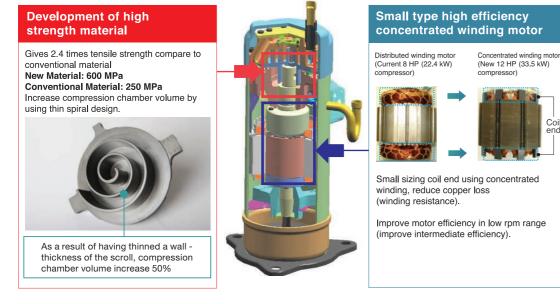


## Advanced Technologies Achieve

## **Excellent Performance**

## Large capacity all DC inverter compressor in compact casing

Large capacity all DC inverter compressor using high tension strength material, resulting in 12 HP (33.5 kW) compressor using 8 HP (22.4 kW) casing.



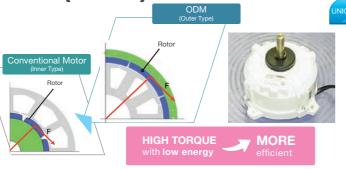
## **Outer Rotor DC Motor (ODM)**

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

#### Advantages of ODM

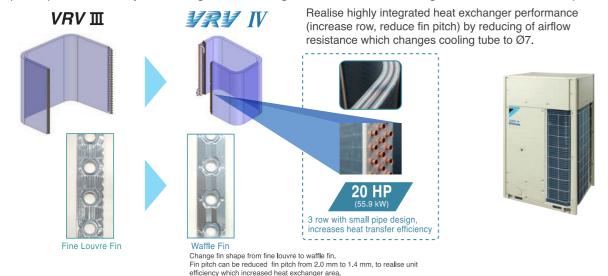
Thanks to large diameter of the rotor,

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



## Highly integrated heat exchanger

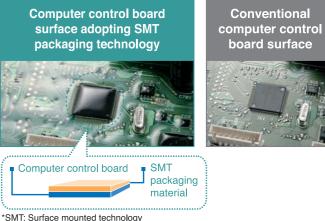
Improve performance by increasing heat exchanger area while maintaining the same installation space.



## 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.



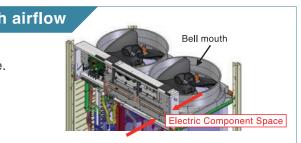
Roof terrace temperature in summer is over 40 °C. seriously affecting inverter cooling efficiency, resulting in decline of inverter operating speed. Finally device parts response speed is reduced.

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 rate.





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Control board failure ratio at stable operation is reduced.

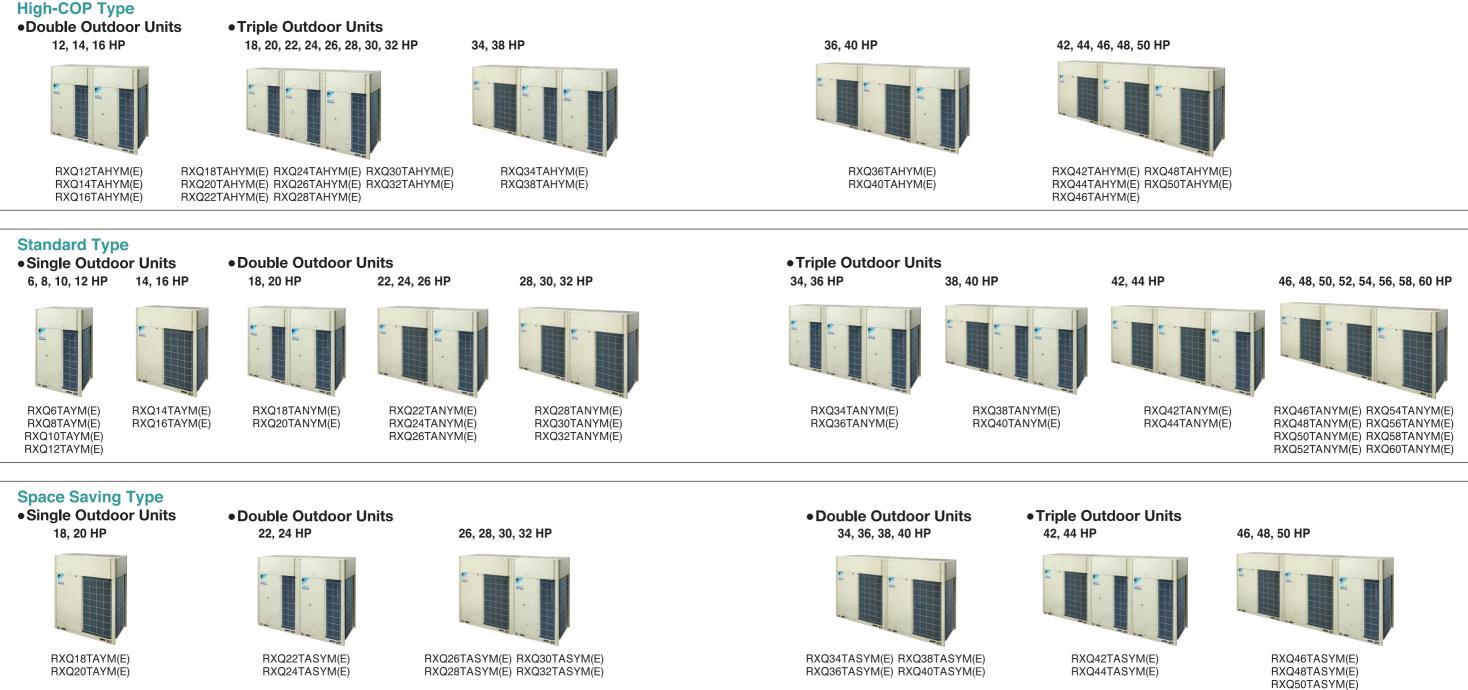
## **Outdoor Unit Lineup**

## Outdoor Units

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

- VRV IV outdoor unit offers a higher capacity of up to 60 HP, responding to the needs of large-sized building.
- The single outdoor unit has only 2 different shapes and dimensions, not only simplifying the design process, but also bringing the system flexibility to a new level.
- With the outdoor unit capacity increased in increment of 2 HP, customers' needs can be precisely met.
- Outdoor units with anti-corrosion specifications (-E type on request) are designed specifically for use in areas which are subject to salt damage and atmospheric pollution.

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





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## For connection of only *VRV* indoor units

#### High-COP Type

HP	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit*1	Total capacity index of connectable indoor units*2	Maximum number of connectable indoor units*2
12	300	RXQ12TAH	RXQ6TA x 2		150 to 390 (480)	19 (24)
14	350	RXQ14TAH	RXQ6TA + RXQ8TA	BHFP22P100	175 to 455 (560)	22 (28)
16	400	RXQ16TAH	RXQ8TA x 2		200 to 520 (640)	26 (32)
18	450	RXQ18TAH	RXQ6TA x 3		225 to 585 (585)	29 (29)
20	500	RXQ20TAH	RXQ6TA x 2 + RXQ8TA		250 to 650 (650)	32 (32)
22	550	RXQ22TAH	RXQ6TA + RXQ8TA x 2		275 to 715 (715)	35 (35)
24	600	RXQ24TAH	RXQ8TA x 3		300 to 780 (780)	39 (39)
26	650	RXQ26TAH	RXQ8TA x 2 + RXQ10TA		325 to 845 (845)	42 (42)
28	700	RXQ28TAH	RXQ8TA x 2 + RXQ12TA		350 to 910 (910)	45 (45)
30	750	RXQ30TAH	RXQ8TA + RXQ10TA + RXQ12TA		375 to 975 (975)	48 (48)
32	800	RXQ32TAH	RXQ8TA + RXQ12TA x 2		400 to 1,040 (1,040)	52 (52)
34	850	RXQ34TAH	RXQ8TA + RXQ12TA + RXQ14TA	BHFP22P151	425 to 1,105 (1,105)	55 (55)
36	900	RXQ36TAH	RXQ8TA + RXQ14TA x 2		450 to 1,170 (1,170)	58 (58)
38	950	RXQ38TAH	RXQ12TA x 2 + RXQ14TA		475 to 1,235 (1,235)	61 (61)
40	1,000	RXQ40TAH	RXQ12TA + RXQ14TA x 2		500 to 1,300 (1,300)	
42	1,050	RXQ42TAH	RXQ14TA x 3		525 to 1,365 (1,365)	
44	1,100	RXQ44TAH	RXQ14TA x 2 + RXQ16TA		550 to 1,430 (1,430)	64 (64)
46	1,150	RXQ46TAH	RXQ14TA + RXQ16TA x 2		575 to 1,495 (1,495)	04 (04)
48	1,200	RXQ48TAH	RXQ16TA x 3		600 to 1,560 (1,560)	
50	1,250	RXQ50TAH	RXQ16TA x 2 + RXQ18TA		625 to 1,625 (1,625)	

Notes: \*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 15 for notes on connection capacity of indoor units.

#### **Space Saving Type**

HP	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit*1	Total capacity index of connectable indoor units*2	Maximum number of connectable indoor units*2
18	450	RXQ18TA	RXQ18TA	-	225 to 585 (900)	29 (45)
20	500	RXQ20TA	RXQ20TA	-	250 to 650 (1,000)	32 (50)
22	550	RXQ22TAS	RXQ10TA + RXQ12TA		275 to 715 (880)	35 (44)
24	600	RXQ24TAS	RXQ12TA x 2		300 to 780 (960)	39 (48)
26	650	RXQ26TAS	RXQ8TA + RXQ18TA		325 to 845 (1,040)	42 (52)
28	700	RXQ28TAS	RXQ12TA + RXQ16TA		350 to 910 (1,120)	45 (56)
30	750	RXQ30TAS	RXQ12TA + RXQ18TA	BHFP22P100	375 to 975 (1,200)	48 (60)
32	800	RXQ32TAS	RXQ12TA + RXQ20TA	BHFP22P100	400 to 1,040 (1,280)	52 (64)
34	850	RXQ34TAS	RXQ16TA + RXQ18TA		425 to 1,105 (1,360)	55 (64)
36	900	RXQ36TAS	RXQ18TA x 2		450 to 1,170 (1,440)	58 (64)
38	950	RXQ38TAS	RXQ18TA + RXQ20TA		475 to 1,235 (1,520)	61 (64)
40	1,000	RXQ40TAS	RXQ20TA x 2		500 to 1,300 (1,600)	
42	1,050	RXQ42TAS	RXQ12TA x 2 + RXQ18TA		525 to 1,365 (1,365)	
44	1,100	RXQ44TAS	RXQ12TA x 2 + RXQ20TA		550 to 1,430 (1,430)	64 (64)
46	1,150	RXQ46TAS	RXQ12TA + RXQ16TA + RXQ18TA	BHFP22P151	575 to 1,495 (1,495)	64 (64)
48	1,200	RXQ48TAS	RXQ12TA + RXQ18TA x 2	]	600 to 1,560 (1,560)	]
50	1,250	RXQ50TAS	RXQ12TA + RXQ18TA + RXQ20TA		625 to 1,625 (1,625)	

Notes: \*1 For multiple connection of 22 HP 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 15 for notes on connection capacity of indoor units.

#### **Standard Type**

HP	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*2
6	150	RXQ6TA	RXQ6TA	—	75 to 195 (300)	9 (15)
8	200	RXQ8TA	RXQ8TA	—	100 to 260 (400)	13 (20)
10	250	RXQ10TA	RXQ10TA	—	125 to 325 (500)	16 (25)
12	300	RXQ12TA	RXQ12TA	—	150 to 390 (600)	19 (30)
14	350	RXQ14TA	RXQ14TA	—	175 to 455 (700)	22 (35)
16	400	RXQ16TA	RXQ16TA	—	200 to 520 (800)	26 (40)
18	450	RXQ18TAN	RXQ8TA + RXQ10TA		225 to 585 (720)	29 (36)
20	500	RXQ20TAN	RXQ8TA + RXQ12TA		250 to 650 (800)	32 (40)
22	550	RXQ22TAN	RXQ8TA + RXQ14TA		275 to 715 (880)	35 (44)
24	600	RXQ24TAN	RXQ10TA + RXQ14TA	BHFP22P100	300 to 780 (960)	39 (48)
26	650	RXQ26TAN	RXQ12TA + RXQ14TA	DHFP22P100	325 to 845 (1,040)	42 (52)
28	700	RXQ28TAN	RXQ14TA × 2		350 to 910 (1,120)	45 (56)
30	750	RXQ30TAN	RXQ14TA + RXQ16TA		375 to 975 (1,200)	48 (60)
32	800	RXQ32TAN	RXQ14TA + RXQ18TA		400 to 1,040 (1,280)	52 (64)
34	850	RXQ34TAN	RXQ10TA + RXQ12TA × 2		425 to 1,105 (1,105)	55 (55)
36	900	RXQ36TAN	RXQ12TA × 3		450 to 1,170 (1,170)	58 (58)
38	950	RXQ38TAN	RXQ8TA + RXQ12TA + RXQ18TA		475 to 1,235 (1,235)	61 (61)
40	1,000	RXQ40TAN	RXQ12TA × 2 + RXQ16TA		500 to 1,300 (1,300)	
42	1,050	RXQ42TAN	RXQ12TA + RXQ14TA + RXQ16TA		525 to 1,365 (1,365)	
44	1,100	RXQ44TAN	RXQ12TA + RXQ16TA × 2		550 to 1,430 (1,430)	
46	1,150	RXQ46TAN	RXQ14TA × 2 + RXQ18TA	BHFP22P151	575 to 1,495 (1,495)	
48	1,200	RXQ48TAN	RXQ14TA + RXQ16TA + RXQ18TA		600 to 1,560 (1,560)	
50	1,250	RXQ50TAN	RXQ14TA + RXQ18TA × 2		625 to 1,625 (1,625)	64 (64)
52	1,300	RXQ52TAN	RXQ16TA + RXQ18TA × 2		650 to 1,690 (1,690)	
54	1,350	RXQ54TAN	RXQ18TA × 3		675 to 1,755 (1,755)	
56	1,400	RXQ56TAN	RXQ18TA × 2 + RXQ20TA		700 to 1,820 (1,820)	
58	1,450	RXQ58TAN	RXQ18TA + RXQ20TA × 2		725 to 1,885 (1,885)	
60	1,500	RXQ60TAN	RXQ20TA × 3		750 to 1,950 (1,950)	

Notes: \*1 For multiple connection of 18 HP 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 15 for notes on connection capacity of indoor units.

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

			0 11	Total capacit	y index of connectable		
Model name <sup>*1</sup>	kW	HP	Capacity index		Combination (%) <sup>2</sup>		Maximum number of connectable indoor units
			index	50%	100%		
RXQ6TAYM	16.0	6	150	75	150	195	9
RXQ8TAYM	22.4	8	200	100	200	260	13
RXQ10TAYM	28.0	10	250	125	250	325	16
RXQ12TAYM	33.5	12	300	150	300	390	19
RXQ14TAYM	40.0	14	350	175	350	455	22
RXQ16TAYM	45.0	16	400	200	400	520	26
RXQ18TAYM	50.0	18	450	225	450	585	29
RXQ20TAYM	56.0	20	500	250	500	650	32

Notes: \*1 Only single outdoor unit (RXQ6-20TAYM) can be connected. \*2 Total capacity index of connectable indoor units must be 50%-130% of the capacity index of the outdoor unit.

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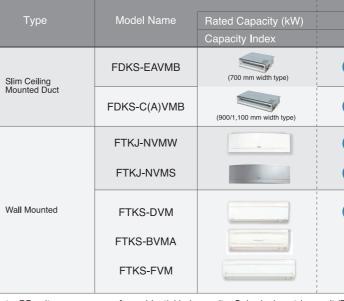
## Enhanced range of choices

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

#### **VRV** indoor units

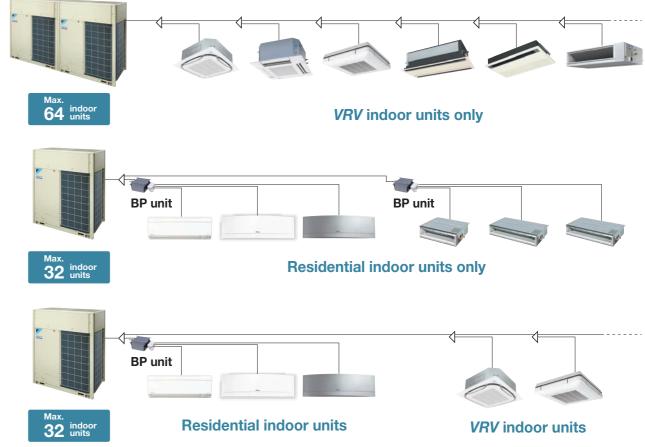
Туре	Model Name	Capacity Range	20 0.8 HP	25 1 HP	32 1.25 HP	40 1.6 HP	50 2 HP	63 2.5 HP	71 3 HP	80 3.2 HP	100 4 HP	125 5 HP	140 6 HP	200 8 HP	250 10 HP	400 16 HP	500 20 HP
		Capacity Index	20		31.25	40	50	62.5	71	80	100	125	140	200	250	400	500
Ceiling Mounted Cassette(Round Flow with Sensing)	FXFQ-SVM																
Ceiling Mounted Cassette (Round Flow)	FXFQ-LUV1												1 1 1 1 1				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVE																
Ceiling Mounted Cassette (Double Flow)	FXCQ-MVE												1 1 1 1 1 1				
Ceiling Mounted Cassette Corner	FXKQ-MAVE																
	FXDQ-PBVE (with drain pump)										     	     	I I I I				
Slim Ceiling Mounted Duct	FXDQ-PBVET (without drain pump)	(700 mm width type)							1	1	     	-       	I I I				
(Standard Series)	FXDQ-NBVE (with drain pump)		     	     	1 1 1 1				-       	-     	     	1 1 1 1	1 1 1 1	1			
	FXDQ-NBVET (without drain pump)	(900/1,100 mm width type)											1 1 1 1				
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV1																
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PVE																
Ceiling Mounted	FXMQ-PVE								1					1			
Duct	FXMQ-MAVE		       	1	1				1	1	1	1	1 1 1 1				
Outdoor-Air Processing Unit	FXMQ-MFV1		       						1	- - - - - - - - - - - - - - - - - - -							
4-Way Flow Ceiling Suspended	FXUQ-AVEB		         														
Ceiling Suspended	FXHQ-MAVE																
Wall Mounted	FXAQ-PVE																
Floor Standing	FXLQ-MAVE																
Concealed Floor Standing	FXNQ-MAVE																
Floor Standing	FXVQ-NY1			     	1 1 1			1	1 1 1	     	1 1 1						
Duct	FXVQ-NY16 (high static pressure type)		     	     	     						     	     	1 1 1 1				
Clean Room	FXBQ-PVE			   	   				   	-     	   	   					
Air Conditioner	FXBPQ-PVE		     	     													
Air Handling Unit	AHUR	L												6	-120	HP	
Heat Reclaim Ventilator with DX-Coil and Humidifier	VKM-GA(M)V1		Ai	rflow	rate 50	00-100	00 m <sup>3</sup>	/h									
Heat Reclaim Ventilator	VAM-GJVE	001	Ai	rflow I	rate 1	50-200	00 m <sup>3</sup>	/h									

#### Residential indoor units with connection to BP units



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

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



\*Refer to page 23-24 for the maximum number of connectable indoor units.



25	35	50	60	71
2.5	3.5	5.0	6.0	7.1
05	25	50	60	71

## **VRV IV Outdoor Units Cooling Only RXQ-TA**

### High-COP Type

MODEL			RXQ12TAHYM(E)	RXQ14TAHYM(E)	RXQ16TAHYM(E)	RXQ18TAHYM(E)	RXQ20TAHYM(E)	RXQ22TAHYM(E)	RXQ24TAHYM(E)					
			RXQ6TAYM(E)	RXQ6TAYM(E)	RXQ8TAYM(E)	RXQ6TAYM(E)	RXQ6TAYM(E)	RXQ6TAYM(E)	RXQ8TAYM(E)					
Combination units			RXQ6TAYM(E)	RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ6TAYM(E)	RXQ6TAYM(E)	RXQ8TAYM(E)	RXQ8TAYM(E)					
						RXQ6TAYM(E)	RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ8TAYM(E)					
Power supply				3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz										
		kca <b>l</b> /h	27,500	33,000	38,500	41,300	46,800	52,300	57,800					
Cooling capacity		Btu/h	109,000	131,000	153,000	164,000	186,000	207,000	229,000					
		kW	32.0	38.4	44.8	48.0	54.4	60.8	67.2					
Power consumption	Cooling	kW	7.26	8.81	10.4	10.9	12.4	14.0	15.5					
Capacity control		%	%         10-100         10-100         10-100         7-100         7-100					7-100	7-100					
Casing colour		•				Ivory white (5Y7.5/1)								
	Туре		Hermetically Sealed Scroll Type											
Compressor	Motor output	kW	(2.4x1)+ (2.4x1)	(2.4x1)+ (3.4x1)	(3.4x1)+ (3.4x1)	(2.4x1)+ (2.4x1)+ (2.4x1)	(2.4x1)+ (2.4x1)+ (3.4x1)	(2.4×1)+ (3.4×1)+ (3.4×1)	(3.4x1)+ (3.4x1)+ (3.4x1)					
Airflow rate		ℓ/s	1,983+1,983	1,983+2,616	2,616+2,616	1,983+1,983+1,983	1,983+1,983+2,616	1,983+2,616+2,616	2,616+2,616+2,616					
Allilow rate		m³/min	119+119	119+157	157+157	119+119+119	119+119+157	119+157+157	157+157+157					
Dimensions (HxWxD)		mm	(1,657	x930x765)+(1,657x93	0×765)	(1,65	7x930x765)+(1,657x§	930x765)+(1,657x930	x765)					
Machine weight		kg	185+185	185+185	185+185	185+185+185	185+185+185	185+185+185	185+185+185					
Sound level		dB(A)	58	59	59	60	60	60	61					
Operation range	Cooling	°CDB				-5 to 49								
Type						R-410A								
Refrigerant	Charge	kg	5.9+5.9	5.9+5.9	5.9+5.9	5.9+5.9+5.9	5.9+5.9+5.9	5.9+5.9+5.9	5.9+5.9+5.9					
Piping	Liquid	mm	¢12.7(Brazing)			$\phi$ 15.9(Brazing)			$\phi$ 15.9(Brazing)					
connections	Gas	mm	¢28.6(Brazing)	¢28.6(Brazing)	¢28.6(Brazing)	¢28.6(Brazing)	¢28.6(Brazing)	¢28.6(Brazing)	¢34.9(Brazing)					

MODEL			RXQ42TAHYM(E)	RXQ44TAHYM(E)	RXQ46TAHYM(E)	RXQ48TAHYM(E)	RXQ50TAHYM(E)						
			RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ16TAYM(E)	RXQ16TAYM(E)						
Combination units			RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ16TAYM(E)	RXQ16TAYM(E)	RXQ16TAYM(E)						
			RXQ14TAYM(E)	RXQ16TAYM(E)	RXQ16TAYM(E)	RXQ16TAYM(E)	RXQ18TAYM(E)						
Power supply				3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz									
		kca <b>l</b> /h	103,000	108,000	112,000	116,000	120,000						
Cooling capacity		Btu/h	409,000	427,000	440,000	461,000	478,000						
		kW	120	125	130	135	140						
Power consumption	Cooling	kW	32.1	34.4	36.7	39.0	41.4						
Capacity control		%	4-100	3-100	3-100	3-100	3-100						
Casing colour			Ivory white (5Y7.5/1)										
Туре				ŀ	ermetically Sealed Scroll Typ	e							
Compressor	Motor output	kW	(2.9x1)+(3.3x1)+ (2.9x1)+(3.3x1)+ (2.9x1)+(3.3x1)	(2.9x1)+(3.3x1)+ (2.9x1)+(3.3x1)+ (3.6x1)+(3.7x1)	(2.9x1)+(3.3x1)+ (3.6x1)+(3.7x1)+ (3.6x1)+(3.7x1)	(3.6x1)+(3.7x1)+ (3.6x1)+(3.7x1)+ (3.6x1)+(3.7x1)	(3.6x1)+(3.7x1)+ (3.6x1)+(3.7x1)+ (4.4x1)+(4.0x1)						
		l/s	3,883+3,883+3,883	3,883+3,883+3,883	3,883+3,883+3,883	3,883+3,883+3,883	3,883+3,883+3,883						
Airflow rate		m³/min	233+233+233	233+233+233	233+233+233	233+233+233	233+233+233						
Dimensions (HXWXD)		mm		(1,657×1,240×	765)+(1,657×1,240×765)+(1,6	57x1,240x765)							
Machine weight		kg	285+285+285	285+285+285	285+285+285	285+285+285	285+285+285						
Sound level		dB(A)	65	65	65	66	66						
Operation range	Cooling	°CDB			-5 to 49								
Refrigerant	Туре				R-410A								
nenigerant	Charge	kg	10.3+10.3+10.3	10.3+10.3+10.4	10.3+10.4+10.4	10.4+10.4+10.4	10.4+10.4+10.5						
Piping	Liquid	mm	∲19.1(Brazing)										
connections	Gas	mm	¢41.3(Brazing)	¢41.3(Brazing)	¢41.3(Brazing)	¢41.3(Brazing)	¢41.3(Brazing)						

RXQ26TAHYM(E)	RXQ28TAHYM(E)	RXQ30TAHYM(E)	RXQ32TAHYM(E)	RXQ34TAHYM(E)	RXQ36TAHYM(E)	RXQ38TAHYM(E)	RXQ40TAHYM(E)
RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)
RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ10TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ14TAYM(E)	RXQ12TAYM(E)	RXQ14TAYM(E)
RXQ10TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E)
			3-phase 4-wire system, 3	380-415 V/380 V, 50/60 Hz	7		
62,600	67,300	72,200	76,900	82,500	87,700	92,000	98,000
248,000	267,000	286,000	305,000	327,000	348,000	365,000	389,000
72.8	78.3	83.9	89.4	95.9	102	107	114
17.2	19.2	20.9	22.8	24.7	26.6	28.3	30.2
6-100	6-100	5-100	5-100	5-100	4-100	4-100	4-100
			Ivory white	e (5Y7.5/1)			
			Hermetically Se	ealed Scroll Type	-	-	
(3.4×1)+ (3.4×1)+ (4.1×1)	(3.4×1)+ (3.4×1)+ (5.2×1)	(3.4×1)+ (4.1×1)+ (5.2×1)	(3.4×1)+ (5.2×1)+ (5.2×1)	(3.4x1)+(5.2x1)+ (2.9x1)+(3.3x1)	(3.4x1)+(2.9x1)+ (3.3x1)+(2.9x1)+ (3.3x1)	(5.2x1)+(5.2x1)+ (2.9x1)+(3.3x1)	(5.2×1)+(2.9×1)+ (3.3×1)+(2.9×1)+ (3.3×1)
2,616+2,616+2,749	2,616+2,616+2,966	2,616+2,749+2,966	2,616+2,966+2,966	2,616+2,966+3,883	2,616+3,883+3,883	2,966+2,966+3,883	2,966+3,883+3,883
157+157+165	157+157+178	157+165+178	157+178+178	157+178+233	157+233+233	178+178+233	178+233+233
(	1,657×930×765)+(1,657×§	930x765)+(1,657x930x765	5)	(1,657×930×765)+ (1,657×930×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×1,240×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×1,240×765)	(1,657x930x765)+ (1,657x1,240x765)+ (1,657x1,240x765)
185+185+195	185+185+195	185+195+195	185+195+195	185+195+285	185+285+285	195+195+285	195+285+285
61	62	62	63	63	64	64	64
			-5 t	o 49			
			R-4	10A			
5.9+5.9+6.0	5.9+5.9+6.3	5.9+6.0+6.3	5.9+6.3+6.3	5.9+6.3+10.3	5.9+10.3+10.3	6.3+6.3+10.3	6.3+10.3+10.3
$\phi$ 19.1(Brazing)	$\phi$ 19.1(Brazing)	$\phi$ 19.1(Brazing)	$\phi$ 19.1(Brazing)	¢19.1(Brazing)	$\phi$ 19.1(Brazing)		¢19.1(Brazing)
$\phi$ 34.9(Brazing)	$\phi$ 34.9(Brazing)	¢34.9(Brazing)	¢34.9(Brazing)	¢34.9(Brazing)	¢41.3(Brazing)		¢41.3(Brazing)

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

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.

## VRV IV Outdoor Units Cooling Only RXQ-TA

#### Standard Type

MODEL			RXQ6TAYM(E)	RXQ8TAYM(E)	RXQ10TAYM(E)	RXQ12TAYM(E)	RXQ14TAYM(E)	RXQ16TAYM(E)	
Combination units			_	—	_	_	—		
Power supply				3-	phase 4-wire system, 38	0-415 V/380 V, 50/60 Hz			
		kcal/h	13,800	19,300	24,100	28,800	34,400	38,700	
Cooling capacity		Btu/h	54,600	76,400	95,500	114,000	136,000	154,000	
	[	kW	16.0	22.4	28.0	33.5	40.0	45.0	
Power consumption	on Cooling kW 3.63 5.18 6.88 8.82 10.7						10.7	13.0	
Capacity control		%	20-100	20-100	16-100	15-100	11-100	10-100	
Casing colour				Ivory white (5Y7.5/1)					
	Туре				Hermetically Se	aled Scroll Type			
Compressor	Motor output	kW	2.4×1	3.4×1	4.1×1	5.2×1	(2.9x1)+(3.3x1)	(3.6x1)+(3.7x1)	
Airflow rate		ℓ/s	1,983	2,616	2,749	2,966	3,883	3,883	
Airtiow rate		m³/min	119	157	165	178	233	233	
Dimensions (HXWXD)		mm		1,657x	930x765		1,657x1,	240x765	
Machine weight		kg	185	185	195	195	285	285	
Sound level		dB(A)	55	56	57	59	60	61	
Operation range Cooling °CDB -5 to 49									
Refrigerant	Туре				R-4	10A			
Charge kg			5.9	5.9	6.0	6.3	10.3	10.4	
Piping	Liquid	mm		∮9.5(Brazing)			¢12.7(Brazing)		
connections	Gas	mm	¢19.1(I	Brazing)	¢22.2(Brazing)				

MODEL			RXQ34TANYM(E)	RXQ36TANYM(E)	RXQ38TANYM(E)	RXQ40TANYM(E)	RXQ42TANYM(E)	RXQ44TANYM(E)					
			RXQ10TAYM(E)	RXQ12TAYM(E)	RXQ8TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)					
Combination units			RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ14TAYM(E)	RXQ16TAYM(E)					
			RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ18TAYM(E)	RXQ16TAYM(E)	RXQ16TAYM(E)	RXQ16TAYM(E)					
Power supply				3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz									
		kcal/h	81,700	86,900	91,200	96,300	102,000	107,000					
Cooling capacity		Btu/h	324,000	345,000	362,000	382,000	406,000	423,000					
		kW	95.0	101	106	112	119	124					
Power consumption	Cooling	kW	24.5	24.5 26.5 29.4 30.6 32.5									
Capacity control		%	5-100	5-100	4-100	4-100	4-100	4-100					
Casing colour				Ivory white (5Y7.5/1)									
	Туре			Hermetically Sealed Scroll Type									
Compressor	Motor output	kW	(4.1x1)+(5.2x1)+ (5.2x1)	(5.2x1)+(5.2x1)+ (5.2x1)	(3.4x1)+(5.2x1)+ (4.4x1)+(4.0x1)	(5.2x1)+(5.2x1)+ (3.6x1)+(3.7x1)	(5.2x1)+(2.9x1)+ (3.3x1)+(3.6x1)+ (3.7x1)	(5.2x1)+(3.6x1)+ (3.7x1)+(3.6x1)+ (3.7x1)					
A: () .		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	2,966+3,883+3,883					
Airflow rate		m³/min	165+178+178	178+178+178	157+178+233	178+178+233	178+233+233	178+233+233					
Dimensions (H×W×D)	1	mm	(1,657x930x765)+ (1,657x9	(1,657x930x765)+ 930x765)	(1,657x930x765)+ (1,657x1,			1,657x1,240x765)+ 240x765)					
Machine weight		kg	195+195+195	195+195+195	185+195+285	195+195+285	195+285+285	195+285+285					
Sound level		dB(A)	63	64	64	65	65	65					
Operation range	Cooling	°CDB				-5 to 49							
Туре						R-410A							
Refrigerant	Charge	kg	6.0+6.3+6.3	6.3+6.3+6.3	5.9+6.3+10.5	6.3+6.3+10.4	6.3+10.3+10.4	6.3+10.4+10.4					
Piping	Liquid	mm		∲19.1(Brazing)		∮19.1(Brazing)							
connections	Gas	mm	\$\$\phi_34.9(Brazing)\$\$	\$\$\phi41.3(Brazing)\$\$	¢41.3(Brazing)	¢41.3(Brazing)	¢41.3(Brazing)	¢41.3(Brazing)					

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

Specifications are based on the following conditions;
 Cooling: Indoor temp: 27°CDB, 19°CWB, Outdoor temp: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

RXQ18TANYM(E)	RXQ20TANYM(E)	RXQ22TANYM(E)	RXQ24TANYM(E)	RXQ26TANYM(E)	RXQ28TANYM(E)	RXQ30TANYM(E)	RXQ32TANYM
RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ8TAYM(E)	RXQ10TAYM(E)	RXQ12TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E
RXQ10TAYM(E)	RXQ12TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ16TAYM(E)	RXQ18TAYM(
			3-phase 4-wire system, 3	80-415 V/380 V, 50/60 H	z		
43,300	48,100	53,700	58,500	63,200	68,800	73,100	77,400
172,000	191,000	213,000	232,000	251,000	273,000	290,000	307,000
50.4	55.9	62.4	68.0	73.5	80.0	85.0	90.0
12.1	14.0	15.9	17.6	19.5	21.4	23.7	26.1
8-100	8-100	7-100	6-100	6-100	5-100	5-100	5-100
			Ivory white	e (5Y7.5/1)			
			Hermetically Se	aled Scroll Type			
(3.4×1)+ (4.1×1)	(3.4x1)+ (5.2x1)	(3.4x1)+ (2.9x1)+ (3.3x1)	(4.1×1)+ (2.9×1)+ (3.3×1)	(5.2x1)+ (2.9x1)+ (3.3x1)	(2.9x1)+(3.3x1)+ (2.9x1)+(3.3x1)	(2.9x1)+(3.3x1)+ (3.6x1)+(3.7x1)	(2.9x1)+(3.3x (4.4x1)+(4.0x
2,616+2,749	2,616+2,966	2,616+3,883	2,749+3,883	2,966+3,883	3,883+3,883	3,883+3,883	3,883+3,883
157+165	157+178	157+233	165+233	178+233	233+233	233+233	233+233
(1,657x930x765)	+(1,657x930x765)	(1,657	7x930x765)+(1,657x1,240	) x765)	(1,657)	(1,240x765)+(1,657x1,24	0x765)
185+195	185+195	185+285	195+285	195+285	285+285	285+285	285+285
60	61	61	62	63	63	64	64
			-5 ti	o 49			
			R-4	10A			
5.9+6.0	5.9+6.3	5.9+10.3	6.0+10.3	6.3+10.3	10.3+10.3	10.3+10.4	10.3+10.5
$\phi$ 15.9(Brazing)	$\phi$ 15.9(Brazing)	$\phi$ 15.9(Brazing)	¢15.9(Brazing)	¢19.1(Brazing)	¢19.1(Brazing)		¢19.1(Brazing
$\phi$ 28.6(Brazing)			\$\$\phi_34.9(Brazing)\$\$	\$\$\phi_34.9(Brazing)			¢34.9(Brazino

DVO46TANVM(E)			DVO50TANVM/E)				DVOCOTANIVM/E)
RXQ46TANYM(E)	RXQ48TANYM(E)	RXQ50TANYM(E)	RXQ52TANYM(E)	RXQ54TANYM(E)	RXQ56TANYM(E)	RXQ58TANYM(E)	RXQ60TANYM(E)
RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ14TAYM(E)	RXQ16TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ20TAYM(E)
RXQ14TAYM(E)	RXQ16TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ20TAYM(E)	RXQ20TAYM(E)
RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ20TAYM(E)	RXQ20TAYM(E)	RXQ20TAYM(E)
			3-phase 4-wire system, 3	80-415 V/380 V, 50/60 Hz	1		
112,000	116,000	120,000	125,000	129,000	134,000	139,000	144,000
444,000	461,000	478,000	495,000	512,000	532,000	553,000	573,000
130	135	140	145	150	156	162	168
36.8	39.1	41.5	43.8	46.2	48.8	51.4	54.0
3-100	3-100	3-100	3-100	3-100	3-100	3-100	3-100
			Ivory white	e (5Y7.5/1)			
			Hermetically Se	aled Scroll Type			
(2.9x1)+(3.3x1)+	(2.9x1)+(3.3x1)+	(2.9x1)+(3.3x1)+	(3.6x1)+(3.7x1)+	(4.4x1)+(4.0x1)+	(4.4x1)+(4.0x1)+	(4.4x1)+(4.0x1)+	(4.6x1)+(5.5x1)+
(2.9x1)+(3.3x1)+	(3.6x1)+(3.7x1)+	(4.4x1)+(4.0x1)+	(4.4x1)+(4.0x1)+	(4.4x1)+(4.0x1)+	(4.4x1)+(4.0x1)+	(4.6x1)+(5.5x1)+	(4.6x1)+(5.5x1)+
(4.4x1)+(4.0x1)	(4.4x1)+(4.0x1)	(4.4x1)+(4.0x1)	(4.4x1)+(4.0x1)	(4.4x1)+(4.0x1)	(4.6x1)+(5.5x1)	(4.6x1)+(5.5x1)	(4.6x1)+(5.5x1)
3,883+3,883+3,883	3,883+3,883+3,883	3,883+3,883+3,883	3,883+3,883+3,883	3,883+3,883+3,883	3,883+3,883+4,466	3,883+4,466+4,466	4,466+4,466+4,466
233+233+233	233+233+233	233+233+233	233+233+233	233+233+233	233+233+268	233+268+268	268+268+268
		(1,65	57x1,240x765)+(1,657x1,	240x765)+(1,657x1,240x	(765)		
285+285+285	285+285+285	285+285+285	285+285+285	285+285+285	285+285+320	285+320+320	320+320+320
66	66	66	66	67	68	69	70
			-5 te	o 49			
			R-4	10A			
10.3+10.3+10.5	10.3+10.4+10.5	10.3+10.5+10.5	10.4+10.5+10.5	10.5+10.5+10.5	10.5+10.5+11.8	10.5+11.8+11.8	11.8+11.8+11.8
$\phi$ 19.1(Brazing)	∮19.1(Brazing)	∮19.1(Brazing)	∲19.1(Brazing)	∮19.1(Brazing)	$\phi$ 19.1(Brazing)	∮19.1(Brazing)	∲19.1(Brazing)
$\phi$ 41.3(Brazing)	$\phi$ 41.3(Brazing)	$\phi$ 41.3(Brazing)	$\phi$ 41.3(Brazing)	$\phi$ 41.3(Brazing)	¢41.3(Brazing)	$\phi$ 41.3(Brazing)	¢41.3(Brazing)



## VRV IV Outdoor Units Cooling Only RXQ-TA

#### Space Saving Type

MODEL			RXQ18TAYM(E)	RXQ20TAYM(E)	RXQ22TASYM(E)	RXQ24TASYM(E)	RXQ26TASYM(E)
Combination units					RXQ10TAYM(E)	RXQ12TAYM(E)	RXQ8TAYM(E)
Combination units				_	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ18TAYM(E)
Power supply				3-phase 4-	wire system, 380-415 V/380	V, 50/60 Hz	•
		kca <b>l</b> /h	43,000	48,200	52,900	57,600	62,300
Cooling capacity	[	Btu/h	171,000	191,000	210,000	229,000	247,000
	kW		50.0	56.0	61.5	67.0	72.4
Power consumption	Cooling	kW	15.4	18.0	15.7	17.6	20.6
Capacity control		%	10-100	8-100	8-100	8-100	7-100
Casing colour					Ivory white (5Y7.5/1)		
	Туре			F	ermetically Sealed Scroll Typ	De	
Compressor	Motor output	kW	(4.4x1)+(4.0x1)	(4.6x1)+(5.5x1)	(4.1×1)+(5.2×1)	(5.2x1)+(5.2x1)	(3.4x1)+(4.4x1)+ (4.0x1)
Airflow rate	_	ℓ/s	3,883	4,466	2,749+2,966	2,966+2,966	2,616+3,883
Airtiow rate	[	m³/min	233	268	165+178	178+178	157+233
Dimensions (HxWxD)		mm	1,657x1,	240×765	(1,657×930×765)	+(1,657x930x765)	(1,657×930×765)+ (1,657×1,240×765)
Machine weight		kg	285	320	195+195	195+195	185+285
Sound level		dB(A)	62	65	61	62	63
Operation range	Cooling	°CDB			-5 to 49		•
Туре				R-410A			
Refrigerant	Charge	kg	10.5	11.8	6.0+6.3	6.3+6.3	5.9+10.5
Piping	Liquid	mm	¢15.9(Brazing)	$\phi$ 15.9(Brazing)	∲15.9(Brazing)	¢15.9(Brazing)	¢15.9(Brazing)
connections	Gas	mm	¢28.6(Brazing)			\$\$\p\$	¢34.9(Brazing)

MODEL			RXQ42TASYM(E)	RXQ44TASYM(E)	RXQ46TASYM(E)	RXQ48TASYM(E)	RXQ50TASYM(E)					
			RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)					
Combination units			RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ16TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)					
			RXQ18TAYM(E)	RXQ20TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ20TAYM(E)					
Power supply			3-phase 4-wire system, 380-415 V/380 V, 50/60 Hz									
		kca <b>l</b> /h	101,000	106,000	115,000	120,000						
Cooling capacity		Btu/h	399,000	420,000 440,000		457,000	478,000					
		kW	117	123	129	134	140					
Power consumption	Cooling	kW	33.0	35.6	37.2	39.6	42.2					
Capacity control		%	4-100	4-100	4-100	4-100	3-100					
Casing colour					Ivory white (5Y7.5/1)							
	Туре			Hermetically Sealed Scroll Type								
Compressor	Motor output	kW	(5.2x1)+(5.2x1)+ (4.4x1)+(4.0x1)	(5.2x1)+(5.2x1)+ (4.6x1)+(5.5x1)	(5.2x1)+(3.6x1)+ (3.7x1)+(4.4x1)+ (4.0x1)	(5.2x1)+(4.4x1)+ (4.0x1)+(4.4x1)+ (4.0x1)	(5.2x1)+(4.4x1)+ (4.0x1)+(4.6x1)+ (5.5x1)					
		ℓ/s	2,966+2,966+3,883	2,966+2,966+4,466	2,966+3,883+3,883	2,966+3,883+3,883	2,966+3,883+4,466					
Airflow rate		m³/min	178+178+233	178+178+268	178+233+233	178+233+233	178+233+268					
Dimensions (HXWXD)		mm	(1,657x930x765)+(1,657x93	30x765)+(1,657x1,240x765)	(1,657x930x7	65)+(1,657x1,240x765)+(1,6	57x1,240x765)					
Machine weight		kg	195+195+285	195+195+320	195+285+285	195+285+285	195+285+320					
Sound level		dB(A)	65	67	66	66	67					
Operation range	Cooling	°CDB			-5 to 49							
Туре					R-410A							
Refrigerant	Charge	kg	6.3+6.3+10.5	6.3+6.3+11.8	6.3+10.4+10.5	6.3+10.5+10.5	6.3+10.5+11.8					
Piping	Liquid	mm	¢19.1(Brazing)	$\phi$ 19.1(Brazing)	$\phi$ 19.1(Brazing)	∲19.1(Brazing)	$\phi$ 19.1(Brazing)					
connections	Gas	mm	¢41.3(Brazing)	\$\$\phi41.3(Brazing)\$\$	¢41.3(Brazing)	¢41.3(Brazing)	¢41.3(Brazing)					

RXQ28TASYM(E)	RXQ30TASYM(E)	RXQ32TASYM(E)	RXQ34TASYM(E)	RXQ36TASYM(E)	RXQ38TASYM(E)	RXQ40TASYM(E		
RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ12TAYM(E)	RXQ16TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ20TAYM(E)		
RXQ16TAYM(E)	RXQ18TAYM(E)	RXQ20TAYM(E)	RXQ18TAYM(E)	RXQ18TAYM(E)	RXQ20TAYM(E)	RXQ20TAYM(E)		
		3-phase 4	-wire system, 380-415 V/380	V, 50/60 Hz				
67,500	71,800	77,000	81,700	86,000	91,200	96,300		
268,000	285,000	305,000	324,000	341,000	362,000	382,000		
78.5	83.5	89.5	95.0	100	106	112		
21.8	24.2	26.8	28.4	30.8	33.4	36.0		
6-100	6-100	5-100	5-100	5-100	4-100	4-100		
	•		Ivory white (5Y7.5/1)		·			
			Hermetically Sealed Scroll Typ	)e				
(5.2x1)+(3.6x1)+ (3.7x1)	(5.2x1)+(4.4x1)+ (4.0x1)	(5.2x1)+(4.6x1)+ (5.5x1)	(3.6x1)+(3.7x1)+ (4.4x1)+(4.0x1)	(4.4x1)+(4.0x1)+ (4.4x1)+(4.0x1)	(4.4x1)+(4.0x1)+ (4.6x1)+(5.5x1)	(4.6x1)+(5.5x1)+ (4.6x1)+(5.5x1)		
2,966+3,883	2,966+3,883	2,966+4,466	3,883+3,883	3,883+3,883	3,883+4,466	4,466+4,466		
178+233	178+233	178+268	233+233	233+233	233+268	268+268		
(1,	657x930x765)+(1,657x1,240x	765)		(1,657×1,240×765)+(1,657×1,240×765)				
195+285	195+285	195+320	285+285	285+285	285+320	320+320		
63	64	66	65	65	67	68		
	•		-5 to 49					
			R-410A					
6.3+10.4	6.3+10.5	6.3+11.8	10.4+10.5	10.5+10.5	10.5+11.8	11.8+11.8		
$\phi$ 19.1(Brazing)					∲19.1(Brazing)	¢19.1(Brazing)		
$\phi$ 34.9(Brazing)		\$\$\phi_34.9(Brazing)\$	¢34.9(Brazing)	¢41.3(Brazing)	¢41.3(Brazing)			

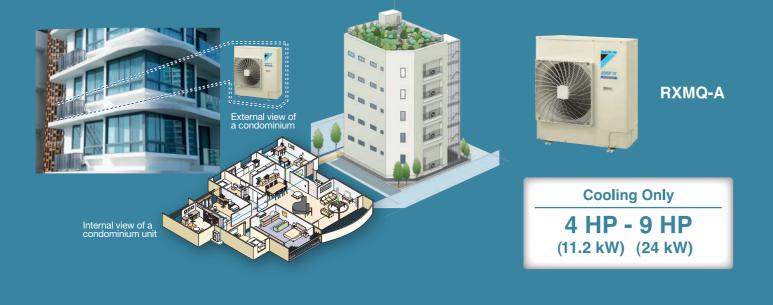
Notes: 1. Models with (E) are the outdoor units with anti-corrosion specifications. Please refer to Engineering Data Book for details.

Secifications are based on the following conditions;
 Specifications are based on the following conditions;
 Cooling: Indoor temp.: 27°COB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.



## **VRV IV S** SERIES

## The Ideal Air Conditioning



## **Compact & Lightweight Design**

The new design has been optimised for the VRV IV S series, with the height of 4 HP and 5 HP models reduced to only 990 mm. This design gives the building a sleek look externally and provides the occupants with a clear, unobstructed view of the scenery. The VRV IV S series is now slim and compact, with outdoor units that require minimal installation space.



**URU IV S SERIES URU** IV <sup>8</sup> HP (22.4 kW) VRV IV 8 HP





## System for Residential, Small Offices and Shops **VRV** IV S SERIES

## Enhanced lineup

To suit a variety of room sizes, VRV IV S series expands the range to 8 HP and 9 HP.

#### **VRV** IV S SERIES



\*Mo/C represents Model Change

#### Linoun

Lineup					5 models		
Model Name	RXMQ4AVE	RXMQ5AVE	RXMQ6AVE	RXMQ8AY1	RXMQ9AY1		
Power Supply	1-phas	se, 220-230 V/220 V, 50	3-phase, 380–415 V, 50 Hz				
Capacity Range	4 HP (11.2 kW)	5 HP (14.0 kW)	6 HP (16.0 kW)	8 HP (22.4 kW)	9 HP (24.0 kW)		
Capacity Index	100	125	150	200	215		

## Wide variety of indoor units

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

#### **Elegant appearance with European style**







FTKJ-N series indoor unit

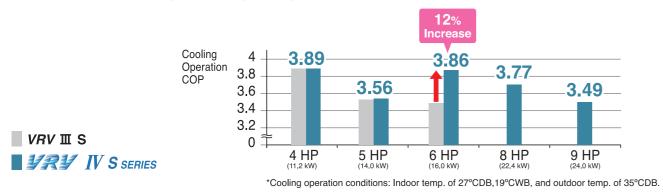
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### Energy saving **Higher Coefficient of Performance (COP)**

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



## 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

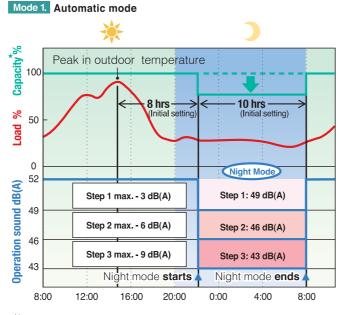
#### Mode 2. Manual mode

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



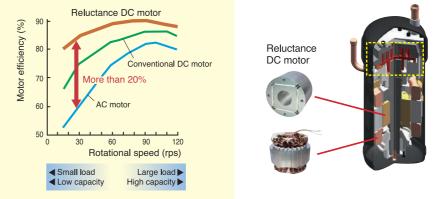
Note: . This function is available in setting at site

- . 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

#### 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<sup>\*1</sup> and reluctance torque<sup>\*2</sup>. 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

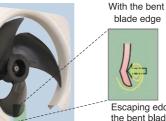
#### >> Swing compressor

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.



#### **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.



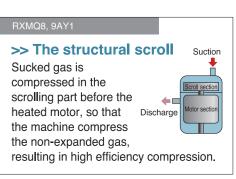


Escaping eddies are sucked in by the bent blade edges, reducing overall turbulence





wave DC ir





#### **3** DC fan motor

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

DC fan motor structure





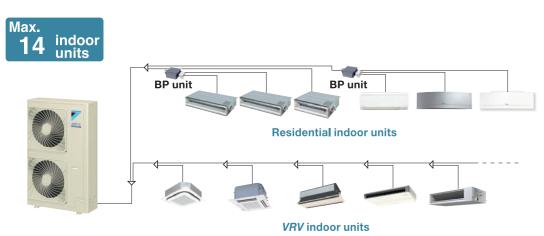
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## Design Flexibility and Simplified Installation

## Connectable up to 14 indoor units

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

Note: Total capacity index of connectable indoor units must be 50-130% of the capacity index of the outdoor unit. Refer to page 42 for the maximum number of connectable indoor unit.



## Automatic test operation

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

## Simple wiring and piping connection

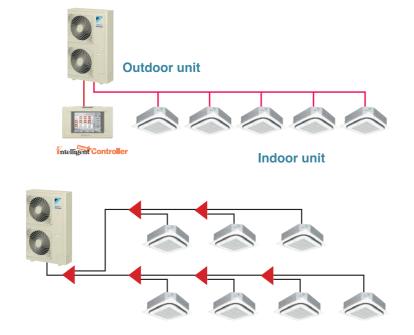
Unique piping and wiring systems make it possible to install a VRV IV S series quickly and easily.

#### >> Super wiring system

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

#### >> REFNET piping system

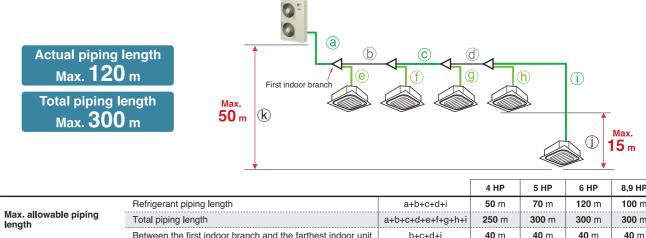
Daikin's advanced REFNET piping system makes installation easy. Only two main refrigerant lines are required in any one system. REFNET greatly reduces the imbalances in refrigerant flow between units, while using small-diameter piping.



## Makes the long piping design possible

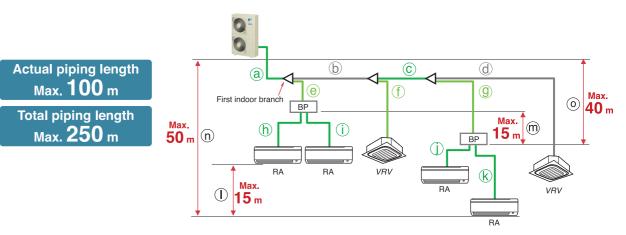
Long piping length offers flexibility in the choice of installation positions, and simplifies system planning.

#### When only VRV indoor units are connected



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

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



				4 HP	5 HP	6-9 HP
	Refrigerant piping length		a+b+c+g+k, a+b+c+d	<b>50</b> m	<b>70</b> m	<b>100</b> m
Max. allowable piping	Total piping length		a+b+c+d+e+f+g+h+i+j+k	<b>250</b> m	<b>250</b> m	<b>250</b> m
length	The first indoor branch - th	e farthest BP or VRV indoor unit	b+c+g, b+c+d	<b>40</b> m	70 m       250 m       40 m       2 m–15 m       2 m–12 m       2 m–8 m       5 m       15 m       30 m       30 m	<b>40</b> m
Max. & min. allowable piping ength		If indoor unit capacity index < 60		2 m–15 m	2 m–15 m	2 m–15 m
	BP unit - indoor unit	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
Min. allowable piping length	Outdoor unit - the first indo	oor branch	а	<b>5</b> m	<b>5</b> m	<b>5</b> m
	Between the indoor units		I	<b>10</b> m	<b>15</b> m	<b>15</b> m
	Between BP units		m	<b>10</b> m	<b>15</b> m	<b>15</b> m
Max. allowable level difference	Outdoor unit - the indoor	If the outdoor unit is above	n	<b>30</b> m	<b>30</b> m	<b>50</b> m
	unit	If the outdoor unit is below	n	<b>30</b> m	<b>30</b> m	<b>40</b> m
	Outdoor unit - the BP unit		0	<b>30</b> m	<b>30</b> m	<b>40</b> m

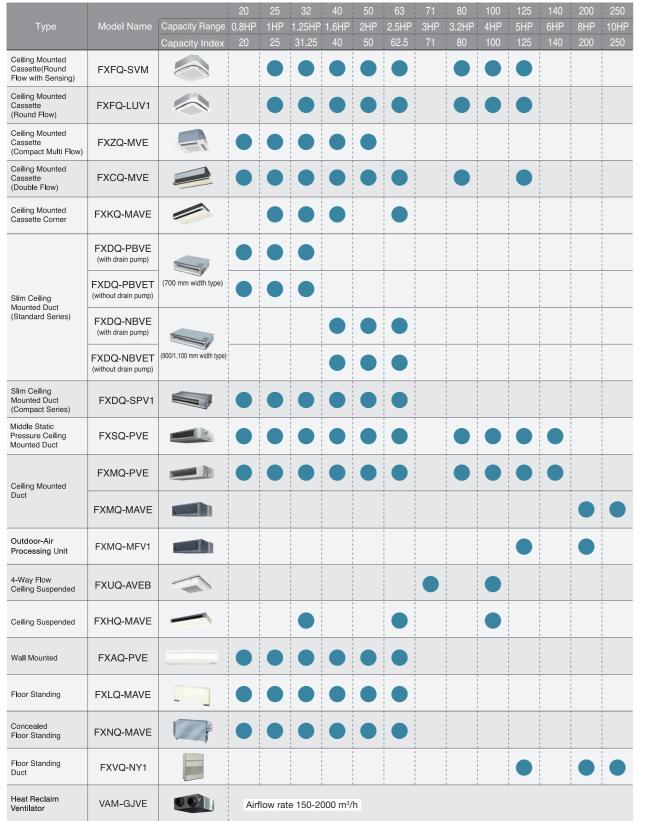
**VRV IV S** SERIES

/RV IV S SERIES

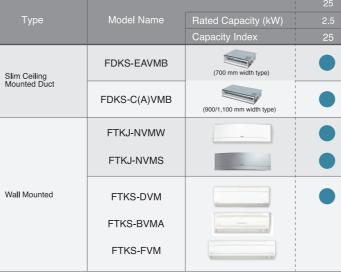
## Enhanced range of choices

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

#### **VRV** indoor units



#### Residential indoor units with connection to BP units



Note: BP units are necessary for residential indoor units.

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



\*Refer to page 42 for the maximum number of connectable indoor units.

**VRV IV S** SERIES

35	50	60	71
3.5	5.0	6.0	7.1
35	50	60	71



## ■ *VRV* IV S series

**Cooling Only** 

## Outdoor unit combinations

MODEL			RXMQ4AVE	RXMQ5AVE	RXMQ6AVE	RXMQ8AY1	RXMQ9AY1
kW	kW			14.0	16.0	22.4	24.0
HP			4	5	6	8	9
Capacity index			100	125	150	200	215
Total capacity index		50%	50	62.5	75	100	107.5
of connectable	Combination (%)	100%	100	125	150	200	215
indoor units		130%	130	162.5	195	260	280
Maximum number of connectable indoor units			6	8	9	13	14

МС	DEL		RXMQ4AVE	RXMQ5AVE	RXMQ6AVE	RXMQ8AY1	RXMQ9AY1				
Power supply			1-pha	se, 220-230 V/220 V, 5	0/60 Hz	3-phase, 380–415 V, 50 Hz					
		kcal/h	9,600	12,000	13,800	19,300	20,600				
Cooling capacity		Btu/h	38,200	47,800	54,600	76,400	81,900				
		kW	11.2	14.0	16.0	22.4	24.0				
Power consumption	on Cooling	kW	2.88	3.93	4.14	5.94	6.88				
Capacity control		%	24 to 100	16 to	p 100	20 to	o 100				
Casing colour				Ivory white (5Y7.5/1)							
Туре			Her	metically sealed swing	Hermetically se	ealed scroll type					
Compressor	Motor output		1.92	3.0	3.8	4.8					
Airflow rate		m³/min	7	6	14	40					
Dimensions (H×W	/×D)	mm	990×94	40×320	1,345×900×320	1,430×940×320					
Machine weight		kg	71	80	102	1:	31				
Sound level (Cool	ing)	dB(A)	52	53	55	57	58				
Operation range	Cooling	°CDB		I	-5 to 46	I	1				
	Туре				R-410A						
Refrigerant	Charge	kg	2.9	3.4	3.6	5	.8				
Dising source the	Liquid	mm		∮9.5 (Flare)		∮9.5 (E	Brazing)				
Piping connections Gas			¢15.9	(Flare)	∲19.1 (Flare)						

Specifications are based on the following conditions;
 Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 Refrigerant charge is required.

**VRV IV S** SERIES

VRV IV S SERIES

## VRV VQ SERIES For quick & high

## quality replacement use VRV IV Q SERIES





**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.

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

## **Quick & High Quality** replacement

**Enhanced lineup** 

2 types up 48 HP

### **Energy** saving

Higher COP and VRT technology

### Variety of indoor unit

Multiple functions for greater comfort

## **Convenient control system**

Advanced energy-saving management







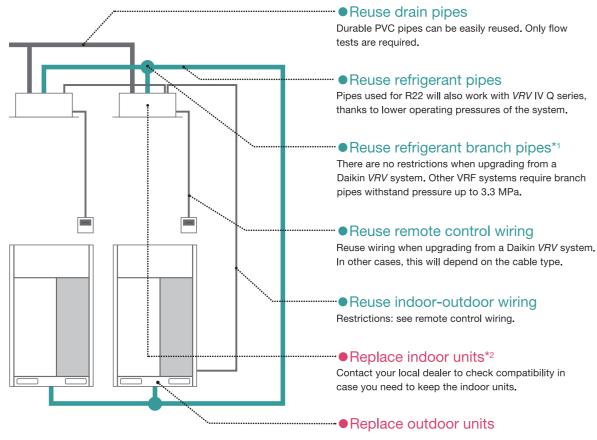
## **Quick, Quality and Economical**

## Reuse

#### Simple use of existing refrigerant piping.

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

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



\*1 For reuse of existing refrigerant piping, it is possible to use piping or branched piping capable of handling 3.3 MPa or more. Heat insulation is necessary for liquid piping and gas piping.

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

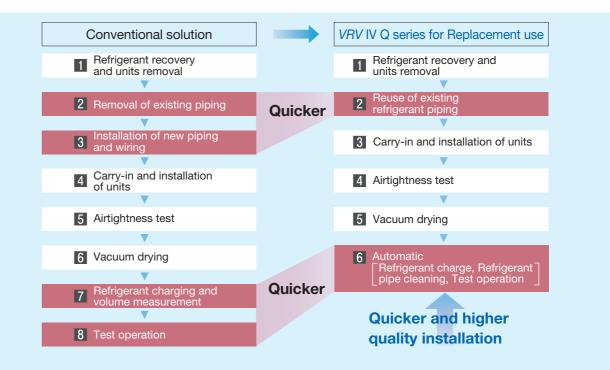
## Automatic

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

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

## Time saving

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



## Cost saving

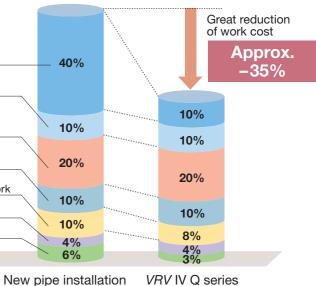
Work costs for pipe removal, installation and insulation account for much of the total cost. By the reuse of existing piping, 35% of cost down can be realized compared to installing new pipes.

Piping Equipment installation Duct Refrigerant charge Removal work Curing Overheads

URU NO SERIES

## VRV IV Q SERIES

#### Cost details (10 HP example)

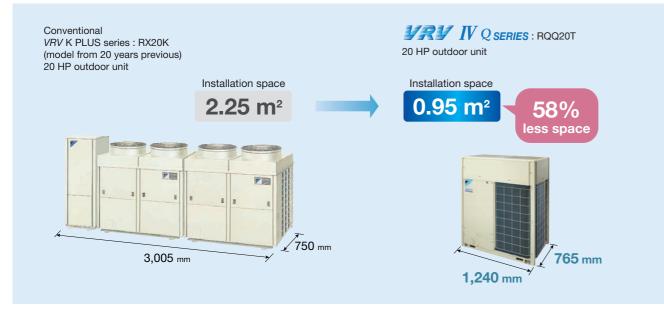


## Benefits of system replacement

## Design flexibility

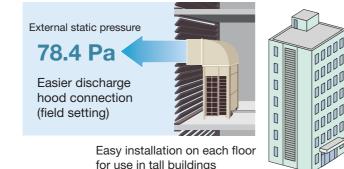
Significantly more compact outdoor unit enables the effective use of limited space!

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



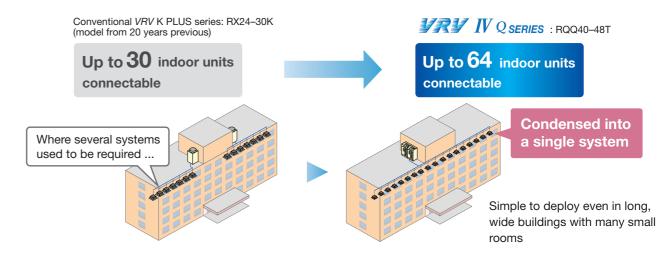
Can be transported easily by elevator

## System flexibility

An increased number of connectable indoor units in a single system

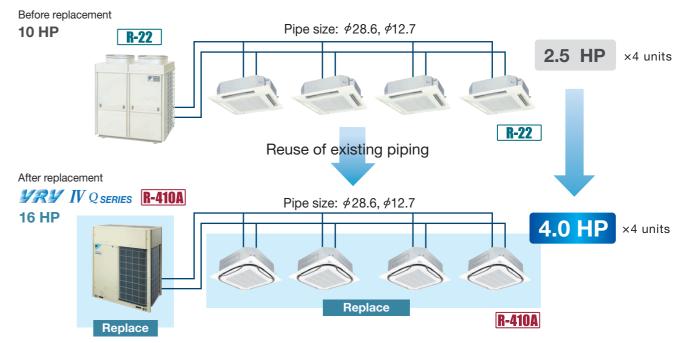
#### More indoor units can be connected in a single system, enabling consolidation of existing piping!

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 HP VRV IV Q series using the refrigerant piping of an 10 HP 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. Heat insulation is necessary for liquid piping and gas piping.

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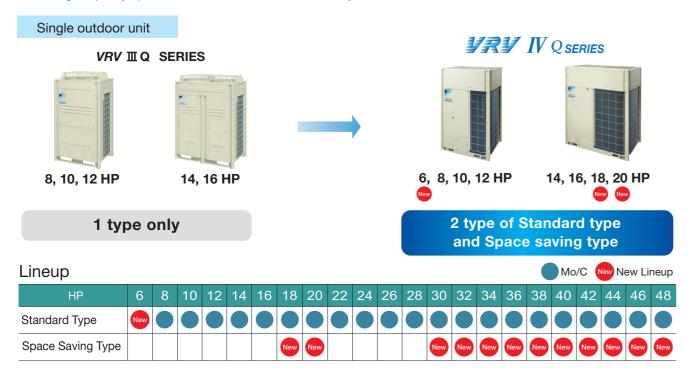
/RV IV Q SERIES

## Enhanced Lineup

## **Energy Saving**

## 2 types up to 48 HP

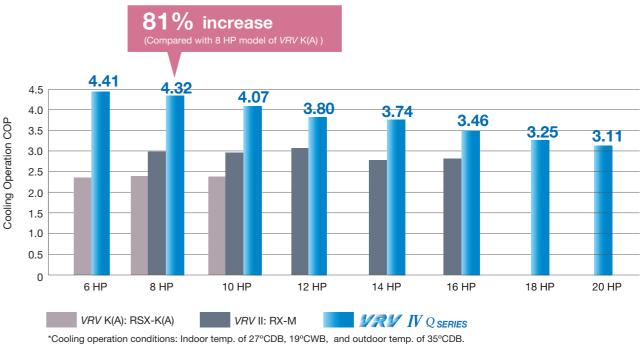
With its enhanced lineup of 2 types and Standard and Space saving types, VRV IV Q series outdoor units offer a high capacity up to 48 HP to meet an ever wider variety of needs.



## Higher Coefficient of Performance (COP)

COP at 100% operation load

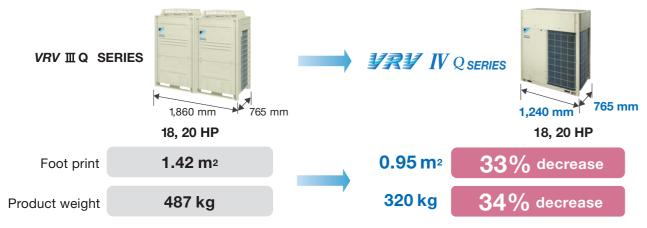
VRV IV Q series delivers highly efficient performance, contributing to high energy savings.



## **Compact & Light Weight Design**

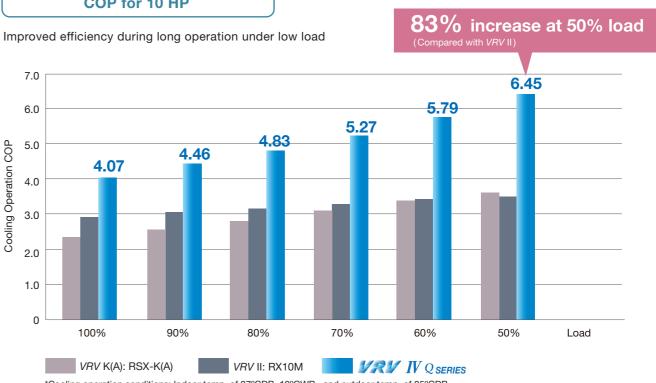
## New Space Saving type with refined design

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



COP for 10 HP

Improved efficiency during long operation under low load



VRV IV Q SERIES

**/RV IV Q SERIES** 

## VRT-Variable Refrigerant Temperature

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

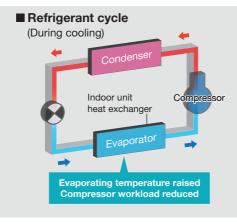
#### Customise your VRV system for optimal annual efficiency

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.

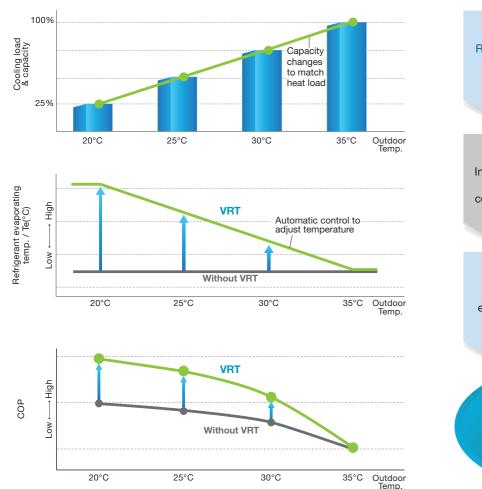
#### How is energy reduced?

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





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



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

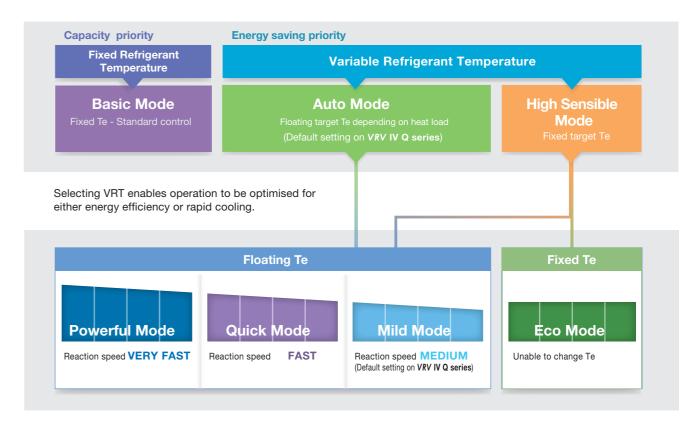
In case of fixed evaporating temperature, excessive cooling, thermo on-off loss, and other inefficiencies occur.

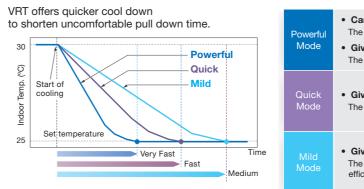
Automatic control adjusts evaporating temperature to heat load change.

**Energy efficiency is** improved without sacrificing comfort.

#### New system more energy saving

Basic mode is selected to maintain optimal comfort. VRT is selected to save energy and prevent excessive cooling.

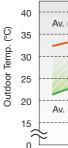




#### Recommended for use in these situations

Cooling only regions having differences in daily temperature.

VRT is particularly effective at night when ambient temperatures are low.



VRV VQ SERIES

#### Can boost capacity above 100% if needed.

The refrigerant temperature can go lower in cooling than the set minimum.

#### Gives priority to very fast reaction speed.

The refrigerant temperature goes down fast to keep the room setpoint stable.

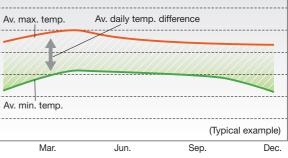
#### Gives priority to fast reaction speed.

The refrigerant temperature goes down fast to keep the room setpoint stable.

#### Gives priority to efficiency.

The refrigerant temperature goes down gradually giving priority to the efficiency of the system instead of the reaction speed





VRV IV Q SERIES

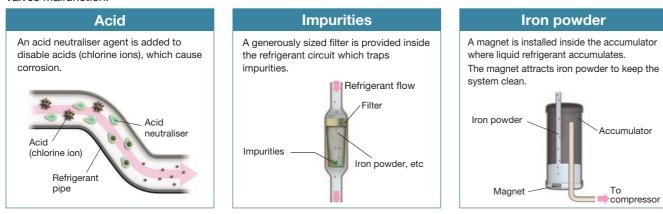
## Advanced Technologies Achieve

## Excellent Performance VRV IV Q SERIES

#### New technology that enables use of existing piping VRV IV Q series

#### New tested contamination collection method

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



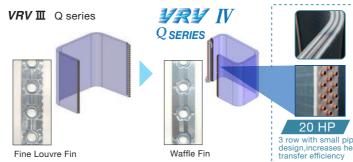
## Large capacity all DC inverter compressor in compact casing

Large capacity all DC inverter compressor using high tension strength material, realise 12 HP compressor using 8 HP casing.



## Highly integrated heat exchanger

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



## Various advanced control main PC board

#### SMT\* packaging technology

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



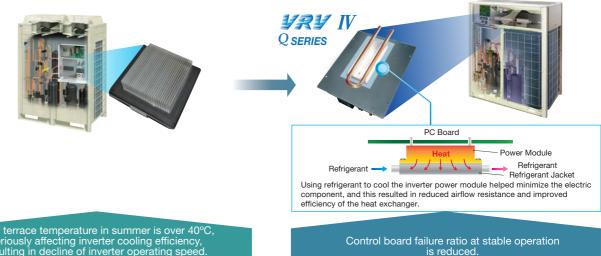
\*SMT: Surface mounted technology

#### 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



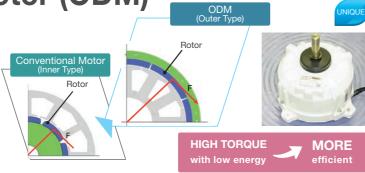
Roof terrace temperature in summer is over 40°C seriously affecting inverter cooling efficiency, resulting in decline of inverter operating speed Finally device parts response speed is reduced

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.

#### **Advantages of ODM**

Thanks to large diameter of the rotor,

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



Only





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

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



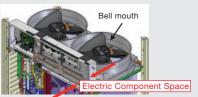
Computer control board surface adopting SMT packaging technoloav



Conventional computer control board surface





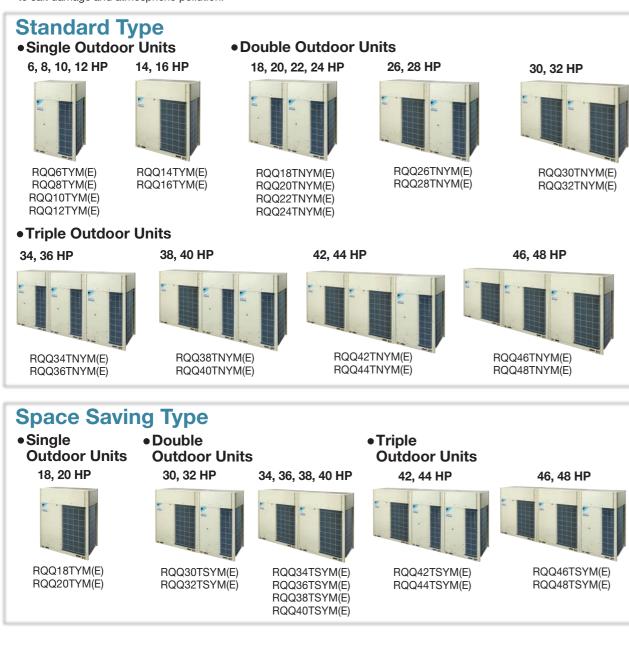


## Outdoor Unit Lineup

## Indoor Unit Lineup

## Enhanced lineup to 2 types

- With its enhanced lineup of 2 types and Standard and Space Saving types, VRV IV Q series outdoor units offer a high capacity up to 48 HP to meet an ever wider variety of needs.
- The single outdoor unit has only 2 different shapes and dimensions, not only simplifying the design process, but also bringing the system flexibility to a new level.
- With the outdoor unit capacity increased in increment of 2 HP, customers' needs can be precisely met.
- Outdoor units with anti-corrosion specifications (-E type on request) are designed specifically for use in areas which are subject to salt damage and atmospheric pollution.



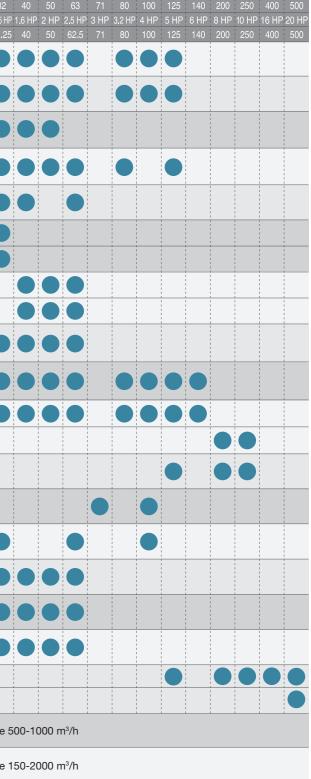
Lineup Mo/C New Lineu											ineup											
HP	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
Standard Type	New																					
Space Saving Type							New	New					New									

## Variety of indoor unit

Туре	Model Name	Capacity Range	20 0.8 HP	25 1 HP	32 1.25 F
		Capacity Index	20	25	31.2
Ceiling Mounted Cassette Round Flow with Sensing)	FXFQ-SVM	6			
Ceiling Mounted Cassette Round Flow)	FXFQ-LUV1				
Ceiling Mounted Cassette Compact Multi Flow)	FXZQ-MVE	9			
Ceiling Mounted Cassette Double Flow)	FXCQ-MVE				
Ceiling Mounted Cassette Corner	FXKQ-MAVE				
	FXDQ-PBVE (with drain pump)				
Slim Ceiling	FXDQ-PBVET (without drain pump)	(700 mm width type)			
Nounted Duct Standard Series)	FXDQ-NBVE (with drain pump)				
	FXDQ-NBVET (without drain pump)	(900/1,100 mm width type)			
Slim Ceiling Mounted Duct Compact Series)	FXDQ-SPV1		•		
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PVE				
Ceiling Mounted	FXMQ-PVE				
Duct	FXMQ-MAVE				
Outdoor-Air Processing Unit	FXMQ-MFV1				
1-Way Flow Ceiling Suspended	FXUQ-AVEB				
Ceiling Suspended	FXHQ-MAVE	-			
Wall Mounted	FXAQ-PVE				
Floor Standing	FXLQ-MAVE				
Concealed Floor Standing	FXNQ-MAVE				
-loor Standing	FXVQ-NY1				
Duct	FXVQ-NY16 (high static pressure type)				
Heat Reclaim Ventilator with DX-Coil and Humidifier	VKM-GA(M)V1		Air	flow i	rate
Heat Reclaim Ventilator	VAM-GJVE	001	Air	flow i	rate

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

VRV IV Q SERIES



## VRV IV Q SERIES

## Outdoor Unit Combinations VRV IV Q SERIES

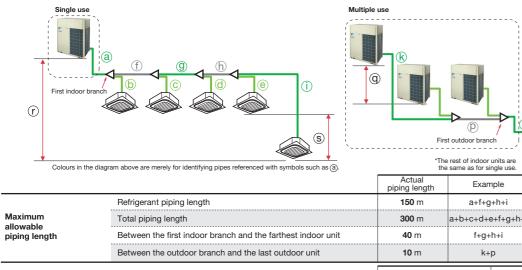
## Piping limits for reuse of existing piping

Equivalen

piping length

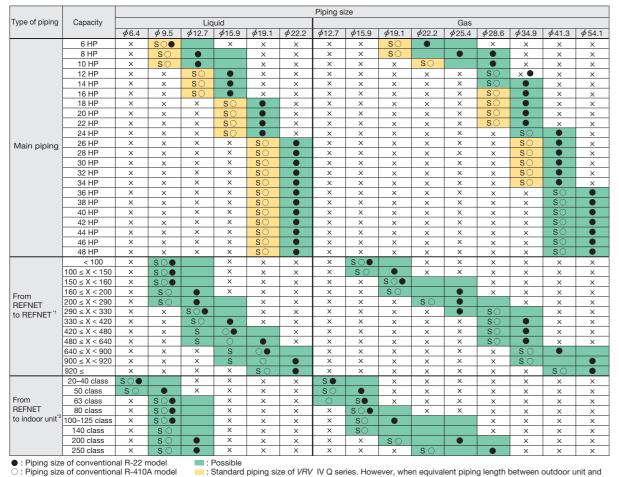
**175** m

13 m



					-		
			Level Differe	ence		Example	
	Between the outdoor units (Multip	le use)	<b>5</b> m		q		
Maximum allowable	Between the indoor units		<b>15</b> m			s	
level difference	Between the outdoor units	If the outdoor unit is above.	<b>50</b> m		r		
	and the indoor units	If the outdoor unit is below.	<b>40</b> m			r	

#### Reusability of existing piping for VRV IV Q series



S : Standard piping size of VRV IV Q series

Standard piping size of VRV IV Q series. However, when equivalent piping length between outdoor unit and indoor unit is 90 m or more, size of main piping must be increased. × : Not possible

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

## Outdoor Unit Combinations

#### **Standard Type**

HP	kW	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit*1	Total capacity index of connectable indoor units*3	Maximum number of connectable indoor units*2
6	16.0	150	RQQ6T	RQQ6T	_	75 to 195	9
8	22.4	200	RQQ8T	RQQ8T	_	100 to 260	13
10	28.0	250	RQQ10T	RQQ10T	_	125 to 325	16
12	33.5	300	RQQ12T	RQQ12T	—	150 to 390	19
14	40.0	350	RQQ14T	RQQ14T	_	175 to 455	22
16	45.0	400	RQQ16T	RQQ16T	—	200 to 520	26
18	50.4	450	RQQ18TN	RQQ8T + RQQ10T		225 to 585	29
20	55.9	500	RQQ20TN	RQQ8T + RQQ12T		250 to 650	32
22	61.5	550	RQQ22TN	RQQ10T + RQQ12T		275 to 715	35
24	67.0	600	RQQ24TN	RQQ12T × 2	BHFP22P100	300 to 780	39
26	73.5	650	RQQ26TN	RQQ12T + RQQ14T	BHFP22P100	325 to 845	42
28	78.5	700	RQQ28TN	RQQ12T + RQQ16T		350 to 910	45
30	85.0	750	RQQ30TN	RQQ14T + RQQ16T		375 to 975	48
32	90.0	800	RQQ32TN	RQQ14T + RQQ18T		400 to 1,040	52
34	95.0	850	RQQ34TN	RQQ10T + RQQ12T × 2		425 to 1,105	55
36	101	900	RQQ36TN	RQQ12T × 3		450 to 1,170	58
38	106	950	RQQ38TN	RQQ8T + RQQ12T + RQQ18T		475 to 1,235	61
40	112	1,000	RQQ40TN	RQQ12T × 2 + RQQ16T	BHFP22P151	500 to 1,300	
42	119	1,050	RQQ42TN	RQQ12T + RQQ14T + RQQ16T		525 to 1,365	
44	124	1,100	RQQ44TN	RQQ12T + RQQ16T × 2		550 to 1,430	64
46	130	1,150	RQQ46TN	RQQ14T × 2 + RQQ18T		575 to 1,495	
48	135	1,200	RQQ48TN	RQQ14T + RQQ16T + RQQ18T		600 to 1,560	

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

#### **Space Saving Type**

HP	kW	Capacity index	Model name	Combination	Outdoor unit multi connection piping kit*1	Total capacity index of connectable indoor units*3	Maximum number of connectable indoor units*2
18	50.0	450	RQQ18T	RQQ18T	-	225 to 585	29
20	56.0	500	RQQ20T	RQQ20T	-	250 to 650	32
30	83.5	750	RQQ30TS	RQQ12T + RQQ18T		375 to 975	48
32	89.5	800	RQQ32TS	RQQ12T + RQQ20T		400 to 1,040	52
34	95.0	850	RQQ34TS	RQQ16T + RQQ18T	BHFP22P100	425 to 1,105	55
36	100	900	RQQ36TS	RQQ18T x 2	DHIFZZFIUU	450 to 1,170	58
38	106	950	RQQ38TS	RQQ18T + RQQ20T		475 to 1,235	61
40	112	1,000	RQQ40TS	RQQ20T x 2		500 to 1,300	
42	117	1,050	RQQ42TS	RQQ12T x 2 + RQQ18T		525 to 1,365	
44	123	1,100	RQQ44TS	RQQ12T x 2 + RQQ20T	BHFP22P151	550 to 1,430	64
46	129	1,150	RQQ46TS	RQQ12T + RQQ16T + RQQ18T	DHFF22P131	575 to 1,495	
48	134	1,200	RQQ48TS	RQQ12T + RQQ18T x 2	1	600 to 1,560	1

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



/RV IV Q

## Outdoor Units

#### Standard Type

MODEL			RQQ6TYM(E)	RQQ8TYM(E)	RQQ10TYM(E)	RQQ12TYM(E)	RQQ14TYM(E)	RQQ16TYM(E)	
Combination	units		_	_	_	_	_	_	
Power supply	/			3 phase 4-	wire system, 38	0-415V/ 380V, 5	0Hz/ 60Hz		
		kcal/h	13,800	19,300	24,100	28,800	34,400	38,700	
Cooling capa	icity	Btu/h	54,600	76,400	95,500	114,000	136,000	154,000	
		kW	16.0	22.4	28.0	33.5	40.0	45.0	
Power consu	mption	kW	3.63	5.18	6.88	8.82	10.7	13.0	
Capacity con	itrol	%	20-100	20-100	16-100	15-100	11-100	10-100	
Casing colou	r		Ivory white (5Y7.5/1)						
	Туре		Hermetically Sealed Scroll Type						
Compressor	Motor output	kW	2.4X1	3.4×1	4.1X1	5.2X1	(2.9X1)+(3.3X1)	(3.6X1)+(3.7X1)	
Airflow rate		m³/min	119	157	165	178	233	233	
Dimensions (	Dimensions (HxWxD) mm		1,657x930x765	1,657×930×765	1,657×930×765	1,657x930x765	1,657X1,240X765	1,657x1,240x765	
Machine weig	ght	kg	185	185	195	195	285	285	
Sound level		dB(A)	55	56	57	59	60	61	
Operation rai	nge	°CDB	-5 to 49						
Refrigerant	Туре				R-4	10A			
nemgerant	Charge	kg	5.9	5.9	6.0	6.3	10.3	10.4	
Piping	Liquid	mm		∮ 9.5 (Brazing)					
connections	Gas	mm	-	φ19.1         φ22.2           (Brazing)         (Brazing)					

Notes: 1. Models with (E) are the outdoor units with anti-corrosion specifications. Please refer to Engineering Data Book for details. 2. Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, 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.

RQQ18TNYM(E)	RQQ20TNYM(E)	RQQ22TNYM(E)	RQQ24TNYM(E)	RQQ26TNYM(E)	RQQ28TNYM(E)	RQQ30TNYM(E)	RQQ32TNYM(E)
RQQ8TYM(E)	RQQ8TYM(E)	RQQ10TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ14TYM(E)	RQQ14TYM(E)
RQQ10TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ14TYM(E)	RQQ16TYM(E)	RQQ16TYM(E)	RQQ18TYM(E)
					—		
		3 phase 4-	wire system, 380	)-415V/ 380V, 50	Hz/ 60Hz		
43,300	48,100	52,900	57,600	63,200	67,500	73,100	77,400
172,000	191,000	210,000	229,000	251,000	268,000	290,000	307,000
50.4	55.9	61.5	67.0	73.5	78.5	85.0	90.0
12.1	14.0	15.7	17.6	19.5	21.8	23.7	26.1
8-100	8-100	8-100	8-100	6-100	6-100	5-100	5-100
		ŀ		e (5Y7.5/1) aled Scroll Typ	e		
(3.4X1)+ (4.1X1)	(3.4X1)+ (5.2X1)	(4.1×1)+ (5.2×1)	(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)
157+165	157+178	165+178	178+178	178+233	178+233	233+233	233+233
(1,657×930×765)+ (1,657×930×765)	(1,657X930X765)+ (1,657X930X765)	(1,657X930X765)+ (1,657X930X765)	(1,657X930X765)+ (1,657X930X765)	(1,657X930X765)+ (1,657X1,240X765)	(1,657X930X765)+ (1,657X1,240X765)	(1,657X1,240X765)+ (1,657X1,240X765)	(1,657×1,240×765)+ (1,657×1,240×765)
185+195	185+195	195+195	195+195	195+285	195+285	285+285	285+285
60	61	61	62	63	63	64	64
			-5 te	o 49			
			R-4	10A			
5.9+6.0	5.9+6.3	6.0+6.3	6.3+6.3	6.3+10.3	6.3+10.4	10.3+10.4	10.3+10.5
∮15.9 (Brazing)	∮15.9 (Brazing)		∮15.9 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)
∳28.6 (Brazing)	∳28.6 (Brazing)	∳28.6 (Brazing)	∳34.9 (Brazing)	∳34.9 (Brazing)	∳34.9 (Brazing)	∳34.9 (Brazing)	∳34.9 (Brazing)

**VRV IV** Q SERIES

VRV IV Q SERIES

## Outdoor Units

#### **Standard Type**

MODEL			RQQ34TNYM(E)	RQQ36TNYM(E)	RQQ38TNYM(E)	RQQ40TNYM(E)	RQQ42TNYM(E)	RQQ44TNYM(E)	
			RQQ10TYM(E)	RQQ12TYM(E)	RQQ8TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	
Combination	units		RQQ12TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ14TYM(E)	RQQ16TYM(E)	
			RQQ12TYM(E)	RQQ12TYM(E)	RQQ18TYM(E)	RQQ16TYM(E)	RQQ16TYM(E)	RQQ16TYM(E)	
Power supply	y			3 phase 4-w	ire system, 38	0-415V/ 380V,	50Hz/ 60Hz		
		kcal/h	81,700	86,900	91,200	96,300	102,000	107,000	
Cooling capa	acity	Btu/h	324,000	345,000	362,000	382,000	406,000	423,000	
		kW	95.0	101	106	112	119	124	
Power consu	Imption	kW	24.5	26.5	29.4	30.6	32.5	34.8	
Capacity cor	ntrol	%	5-100	5-100	4-100	4-100	4-100	4-100	
Casing colou	ir		Ivory white (5Y7.5/1)						
	Туре		Hermetically Sealed Scroll Type						
Compressor	Motor output	kW	(4.1X1)+(5.2X1)+ (5.2X1)	(5.2X1)+(5.2X1)+ (5.2X1)	(3.4X1)+(5.2X1)+ (4.4X1)+(4.0X1)	(5.2X1)+(5.2X1)+ (3.6X1)+(3.7X1)	(5.2X1)+(2.9X1)+ (3.3X1)+(3.6X1)+ (3.7X1)	(5.2X1)+(3.6X1)+ (3.7X1)+(3.6X1)+ (3.7X1)	
Airflow rate		m³/min	165+178+178	178+178+178	157+178+233	178+178+233	178+233+233	178+233+233	
Dimensions (	Dimensions (HxWxD) 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)+ (1,657×930×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×1,240×765)+ (1,657×1,240×765)	(1,657X930X765)+ (1,657X1,240X765)+ (1,657X1,240X765)	
Machine wei	ght	kg	195+195+195	195+195+195	185+195+285	195+195+285	195+285+285	195+285+285	
Sound level		dB(A)	63	64	64	65	65	65	
Operation rai	nge	°CDB			-5 te	o 49			
Defrigerent	Туре				R-4	10A			
Refrigerant	Charge	kg	6.0+6.3+6.3	6.3+6.3+6.3	5.9+6.3+10.5	6.3+6.3+10.4	6.3+10.3+10.4	6.3+10.4+10.4	
Piping	Liquid	mm	$\phi$ 19.1 (Brazing)	$\phi$ 19.1 (Brazing)					
connections	Gas	mm	∳34.9 (Brazing)	$\phi$ 41.3 (Brazing)		∮41.3 (Brazing)	∮41.3 (Brazing)	∮41.3 (Brazing)	

Notes: 1. Models with (E) are the outdoor units with anti-corrosion specifications. Please refer to Engineering Data Book for details. 2. Specifications are based on the following conditions;

•Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, 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.

#### RQQ46TNYM(E) RQQ48TNYM(E) RQQ14TYM(E) RQQ14TYM(E) RQQ14TYM(E) RQQ16TYM(E) RQQ18TYM(E) RQQ18TYM(E) 3 phase 4-wire system, 380-415V/ 380V, 50Hz/ 60Hz 112,000 116,000 444,000 461,000 130 135 36.8 39.1 3-100 3-100 Ivory white (5Y7.5/1) Hermetically Sealed Scroll Type (2.9×1)+(3.3×1)+ (2.9×1)+(3.3×1)+ (2.9×1)+(3.3×1)+ (3.6×1)+(3.7×1)+ (4.4×1)+(4.0×1) (4.4×1)+(4.0×1) 233+233+233 233+233+233 (1,657×1,240×765)+ (1,657×1,240×765)+ (1,657×1,240×765)+ (1,657×1,240×765)+ (1,657×1,240×765) (1,657×1,240×765) 285+285+285 285+285+285 66 66 -5 to 49 R-410A 10.3+10.3+10.5 10.3+10.4+10.5 *∲*19.1 ¢19.1 (Brazing) (Brazing) **∮**41.3 *ϕ*41.3 (Brazing) (Brazing)

#### **Space Saving Type**

MODEL			RQQ18TYM(E)	RQQ20TYM(E)		
Combination	units		-	_		
Power supply	y		3 phase 4-wire system, 38	⊔ 0-415V/ 380V, 50Hz/ 60H		
		kcal/h	43,000	48,200		
Cooling capacity		Btu/h	171,000	191,000		
		kW	50.0	56.0		
Power consu	Imption	kW	15.4	18.0		
Capacity cor	ntrol	%	10-100	8-100		
Casing colou	ır		Ivory white (5Y7.5/1)			
	Туре		Hermetically Sealed Scroll Type			
Compressor	Motor output	kW	(4.4X1)+(4.0X1)	(4.6X1)+(5.5X1)		
Airflow rate		m³/min	233	268		
Dimensions (	(H×W×D)	mm	1,657×1,240×765	1,657×1,240×765		
Machine wei	ght	kg	285	320		
Sound level		dB(A)	62	65		
Operation rai	nge	°CDB	-5 to	o 49		
Defiinement	Туре		R-410A			
Refrigerant	Charge	kg	10.5	11.8		
Piping	Liquid	mm	∳15.9 (Brazing)	∳15.9 (Brazing)		
connections	Gas	mm	<i>∳</i> 28.6 (Brazing)	<i>∳</i> 28.6 (Brazing)		

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.

VRV IV Q SERIES

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

VRV IV Q SERIES

## Outdoor Units

#### Space Saving Type

MODEL			RQQ30TSYM(E)	RQQ32TSYM(E)	RQQ34TSYM(E)	RQQ36TSYM(E)		
			RQQ12TYM(E)	RQQ12TYM(E)	RQQ16TYM(E)	RQQ18TYM(E)		
Combination	units		RQQ18TYM(E)	RQQ20TYM(E)	RQQ18TYM(E)	RQQ18TYM(E)		
			—		—			
Power supply	у		3 pha	se 4-wire system, 38	0-415V/ 380V, 50Hz/	60Hz		
		kcal/h	71,800	77,000	81,700	86,000		
Cooling capa	acity	Btu/h	285,000	305,000	324,000	341,000		
		kW	83.5	89.5	95.0	100		
Power consu	Imption	kW	24.2	26.8	28.4	30.8		
Capacity cor	ntrol	%	6-100	5-100	5-100	5-100		
Casing colou	ır		Ivory white (5Y7.5/1)					
	Туре		Hermetically Sealed Scroll Type					
Compressor	Motor output	kW	(5.2X1)+(4.4X1)+ (4.0X1)	(5.2X1)+(4.6X1)+ (5.5X1)	(3.6X1)+(3.7X1)+ (4.4X1)+(4.0X1)	(4.4X1)+(4.0X1)+ (4.4X1)+(4.0X1)		
Airflow rate		m³/min	178+233	178+268	233+233	233+233		
Dimensions (	Dimensions (HxWxD)		(1,657x930x765)+ (1,657x1,240x765)	(1,657x930x765)+ (1,657x1,240x765)	(1,657×1,240×765)+ (1,657×1,240×765)	(1,657×1,240×765)+ (1,657×1,240×765)		
Machine wei	ght	kg	195+285	195+320	285+285	285+285		
Sound level		dB(A)	64	66	65	65		
Operation ra	nge	°CDB		-5 to	o 49	1		
Defiin	Туре			R-4	10A			
Refrigerant	Charge	kg	6.3+10.5	6.3+11.8	10.4+10.5	10.5+10.5		
Piping	Liquid	mm	∮19.1 (Brazing)	∳19.1 (Brazing)	∮19.1 (Brazing)	∳19.1 (Brazing)		
connections	Gas	mm	∳34.9 (Brazing)	∳34.9 (Brazing)	∳34.9 (Brazing)	<pre></pre>		

Notes: 1. Models with (E) are the outdoor units with anti-corrosion specifications. Please refer to Engineering Data Book for details. 2. Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, 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.

RQQ38TSYM(E)	RQQ40TSYM(E)	RQQ42TSYM(E)	RQQ44TSYM(E)	RQQ46TSYM(E)	RQQ48TSYM(E)				
RQQ18TYM(E)	RQQ20TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)				
RQQ20TYM(E)	RQQ20TYM(E)	RQQ12TYM(E)	RQQ12TYM(E)	RQQ16TYM(E)	RQQ18TYM(E)				
_	—	RQQ18TYM(E)	RQQ20TYM(E)	RQQ18TYM(E)	RQQ18TYM(E)				
	3 phas	e 4-wire system, 38	0-415V/ 380V, 50Hz	z/ 60Hz					
91,200	96,300	101,000	106,000	111,000	115,000				
362,000	382,000	399,000	420,000	440,000	457,000				
106	112	117	123	129	134				
33.4	36.0	33.0	35.6	37.2	39.6				
4-100	4-100	4-100	4-100	4-100	4-100				
		Ivory white Hermetically Se	, ,						
(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)	(5.2×1)+(3.6×1)+ (3.7×1)+(4.4×1)+ (4.0×1)	(5.2×1)+(4.4×1)+ (4.0×1)+(4.4×1)+ (4.0×1)				
233+268	268+268	178+178+233	178+178+268	178+233+233	178+233+233				
(1,657×1,240×765)+ (1,657×1,240×765)	(1,657×1,240×765)+ (1,657×1,240×765)	(1,657x930x765)+ (1,657x930x765)+ (1,657x1,240x765)	(1,657x930x765)+ (1,657x930x765)+ (1,657x1,240x765)	(1,657x930x765)+ (1,657x1,240x765)+ (1,657x1,240x765)	(1,657×930×765)+ (1,657×1,240×765)+ (1,657×1,240×765)				
285+320	320+320	195+195+285	195+195+320	195+285+285	195+285+285				
67	68	65	67	66	66				
		-5 t	o 49						
R-410A									
10.5+11.8	11.8+11.8	6.3+6.3+10.5	6.3+6.3+11.8	6.3+10.4+10.5	6.3+10.5+10.5				
	∳19.1 (Brazing)	∳19.1 (Brazing)	$\phi$ 19.1 (Brazing)	$\phi$ 19.1 (Brazing)	∳19.1 (Brazing)				
∕41.3 (Brazing)	∳41.3 (Brazing)	∳41.3 (Brazing)	$\phi$ 41.3 (Brazing)	<i>∲</i> 41.3 (Brazing)	∕41.3 (Brazing)				

VRV IV Q SERIES

VRV IV Q SERIES

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## **VRV IV W** SERIES

Water Cooled

## **Inverter Series**

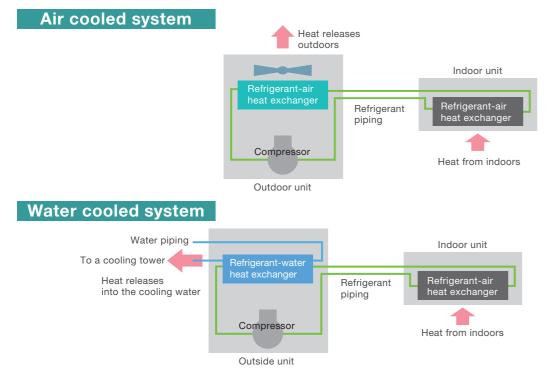


The VRV IV W series combines the characteristics of a water cooled system with the VRV system.

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

#### What is a water cooled system?

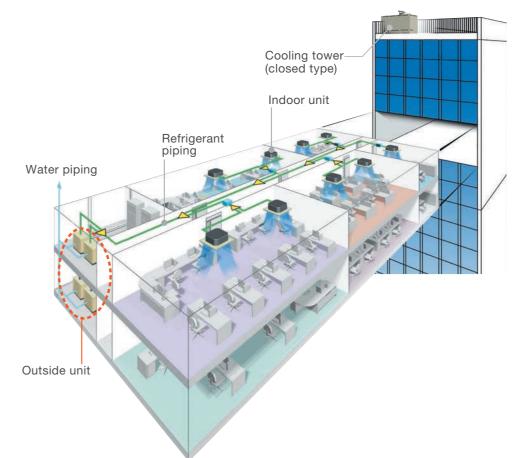
While an air cooled air conditioning system is designed to exchange heat recovered from indoors with outdoor air, a water cooled air conditioning system is designed for heat exchange with water.



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.

#### $\rightarrow$ High installation flexibility

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



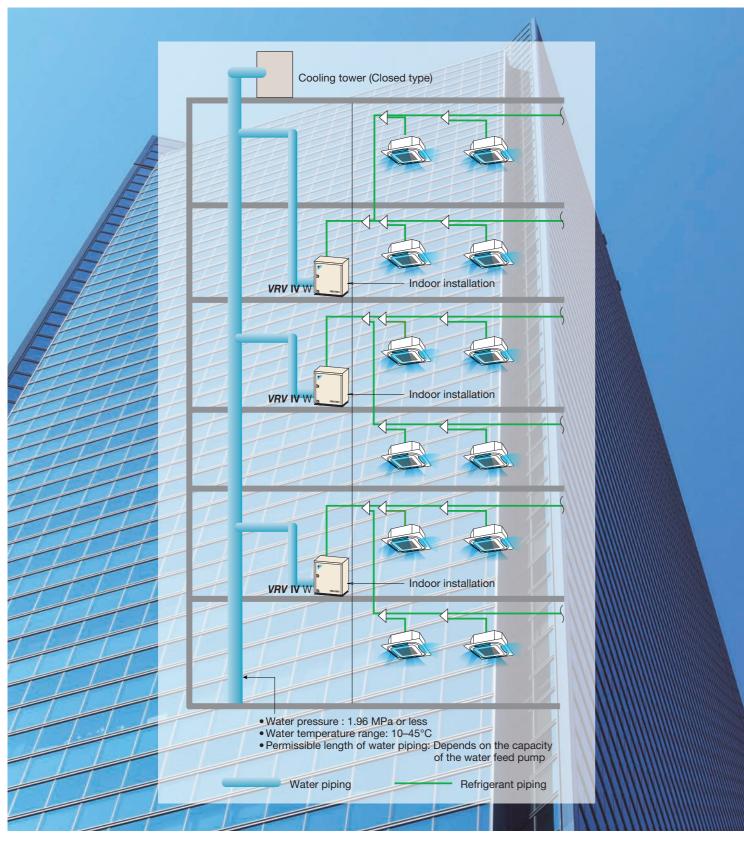
- Individual air conditioning is achieved via on-demand operation in each room.
- Outside units can be installed anywhere in a building if they can be connected with water piping.
- The length of the refrigerant piping can be minimized by installing outside units in proximity to indoor units. [The system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

**VRV IV** W SERIES

RV IV W SERIES

## Design Flexibility

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

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 exchanging with outdoor air is not required.

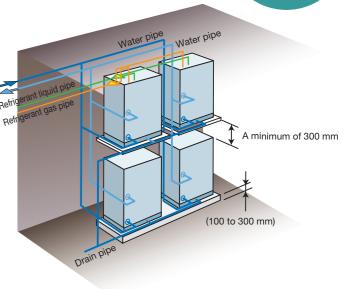
#### Also recommended for condominiums and detached houses

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

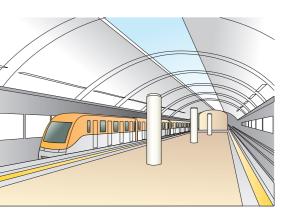
**VRV** IV W SERIES

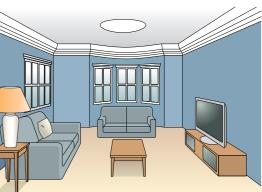
No balcony required

/RV IV W



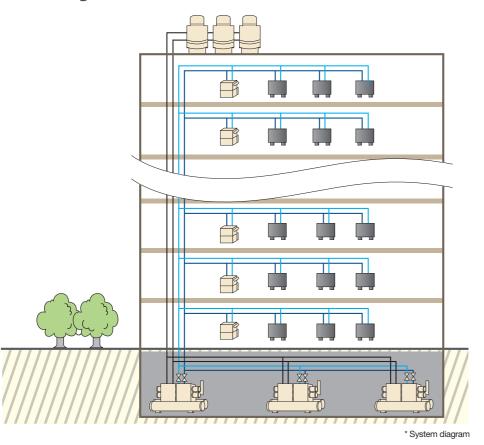
\* Only for the purpose of illustration.





## **Renovation of an Air Conditioning System**

Rising problems for old, conventional water system



#### Why is renovation necessary?

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

#### Troublesome issues in renovation?

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

### A Flexible System, Convenient for Expansion/Renovation

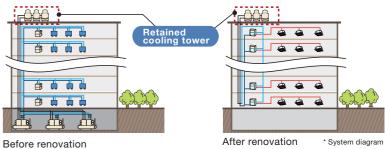
#### Problems with existing water systems can be solved with minimal construction work.

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

The outside units of the water cooled VRV IV W series don't have necessity to direct heat exchanging with outdoor air. This feature makes it possible to place the outside unit inside the building, which greatly extends design flexibility and makes it easier to adapt to different types of buildings and open to various kinds of creative building exteriors.

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

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

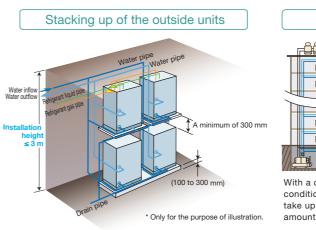


#### **3** The compact outside units facilitate the renovation process and saves space for the outside unit area

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

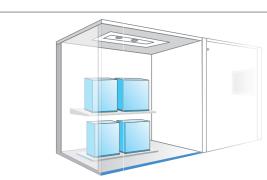


• The modular design featured by the water cooled VRV IV W series enables a free and flexible configuration of the outside units. Outside units can be arranged with one on top of another, saving space for other purposes.



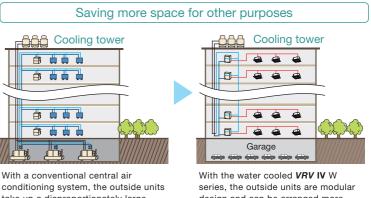
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## /RV IV W





take up a disproportionately large amount of space for installation

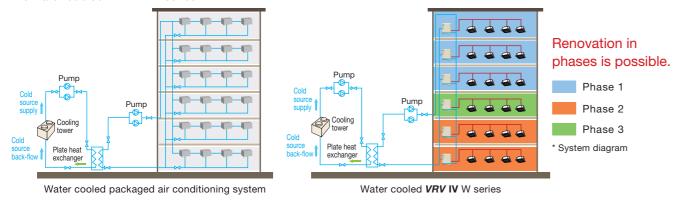
design and can be arranged more freely and flexibly, saving part of the outside unit room for purposes such as business or car parking.

\* System diagram

# Renovation of an Air Conditioning System

### 4 Floor by floor renovation without disturbing other tenants

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



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

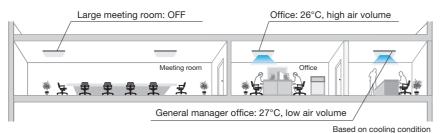
The outside units and indoor units of the water cooled *VRV* IV W series are connected by refrigerant pipes. As the *VRV* indoor units and the diameter of refrigerant pipes are significantly smaller than duct and water pipes, less ceiling space is occupied and more floor height is saved. Less work is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



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

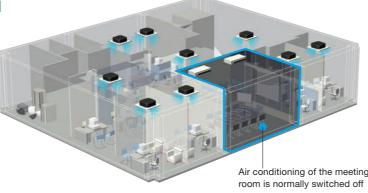
#### Independent control provides greater comfort and convenience

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

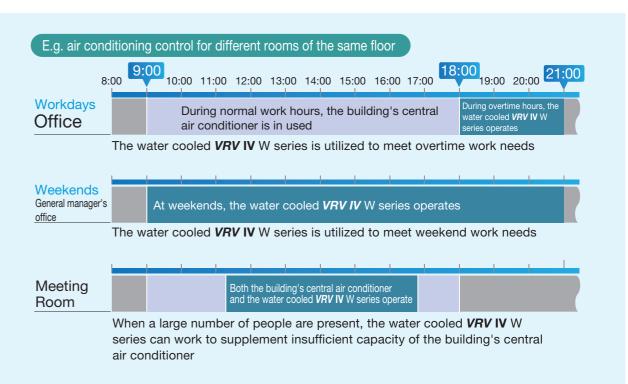
In actual operation, an air conditioning system's load may vary due to external climate change or variation of indoor unit operation rate, making the air conditioning system work in a partial load operation most of the time. By virtue of Daikin's advanced DC inverter technology and advanced refrigerant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



Actual conditions of the floor

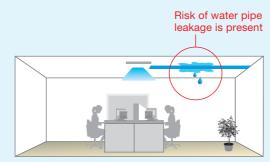
## 3 Flexibly satisfies conditions for working overtime and times of insufficient load

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



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

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



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

**VRV** IV W SERIES

 Inconvenient transportation procedures are eliminated, and the tenants' daily air conditioning costs decrease.

 Based on actual schedules, operation for each indoor unit can be precisely and individually set.



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

# **Easy Installation**

# **Energy Saving**

# 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 HP(8 HP+8 HP+8 HP)



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



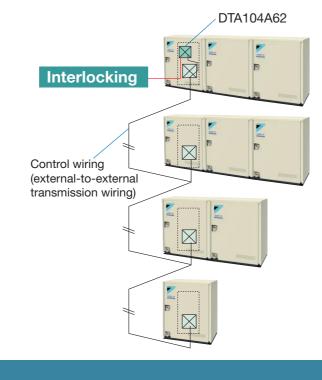
 Footprint	1.29 m <sup>2</sup>	-	0.86 m²	33% Decrease	
Product Weight	447 kg	-	294 kg 🔫	34% Decrease	

## Enhanced usability

## **Centralised interlocking function**

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

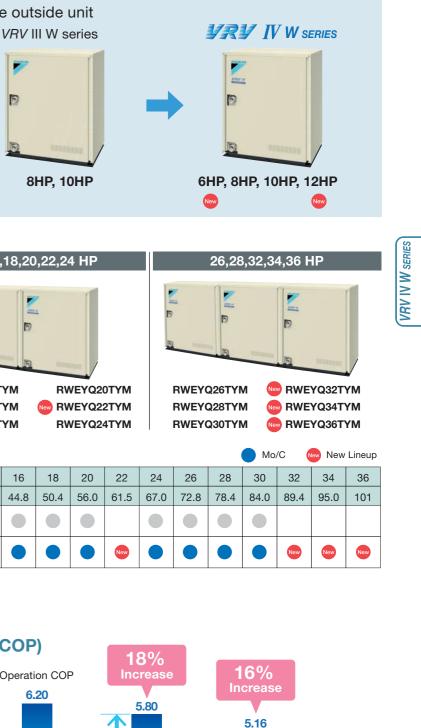
Using one external control adaptor circuit board makes centralised interlocking input to multiple units within the same water system possible.



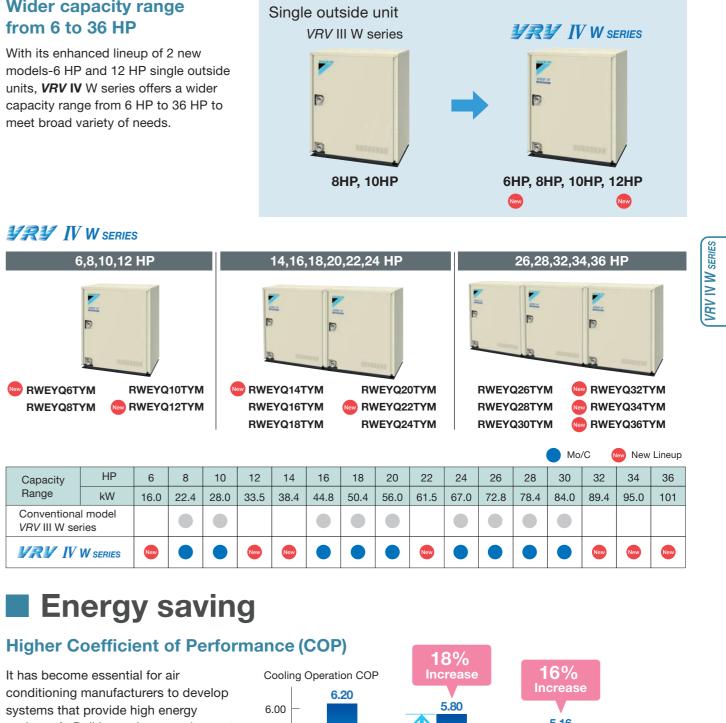
# Enhanced lineup

### Wider capacity range from 6 to 36 HP

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



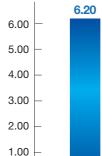
## **VRV** IV W SERIES



Capacity	HP	6	8	10	12	14	16	1
Range	kW	16.0	22.4	28.0	33.5	38.4	44.8	50
Conventional model VRV III W series								
VRV IV W SERIES		New			New	New		

## 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. VRV III W series VRV IV W SERIES



4.93

6 HP

**VRV** IV W SERIES



4.43

4.57

# VRT-Variable Refrigerant Temperature

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

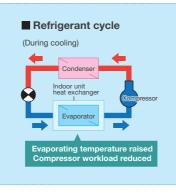
### Customise your VRV for optimal annual efficiency

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.

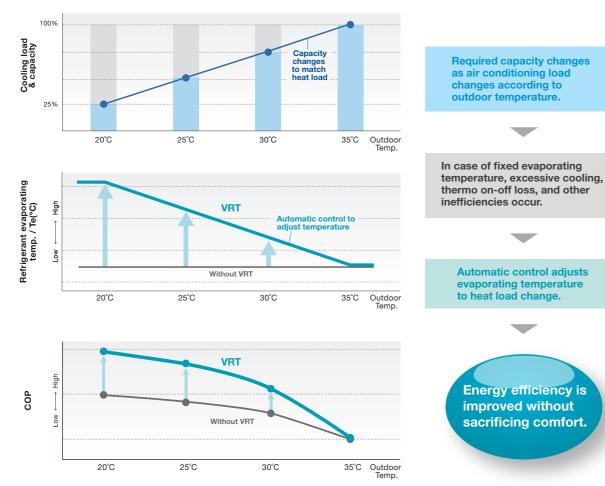
### How is energy reduced?

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

## Variable Refrigerant **T**emperature

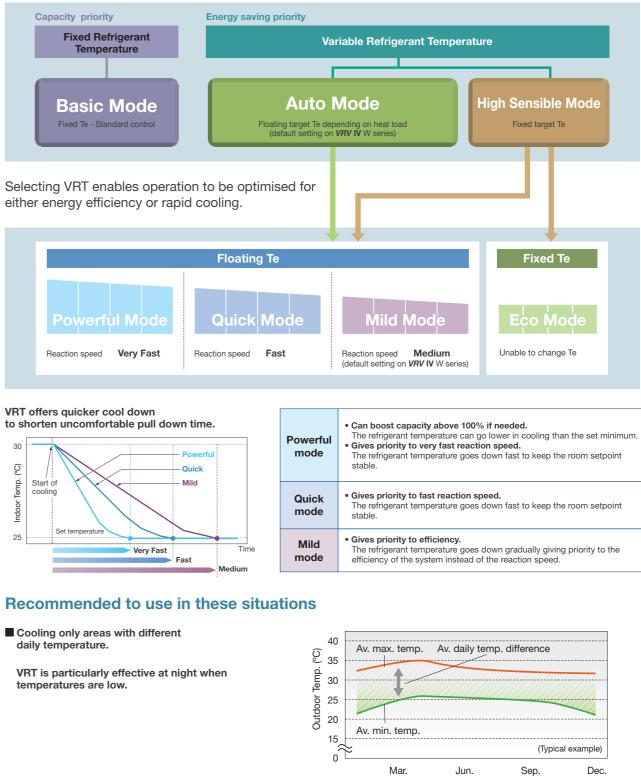


#### Typical changes in evaporating temperature and COP depending on changing indoor load

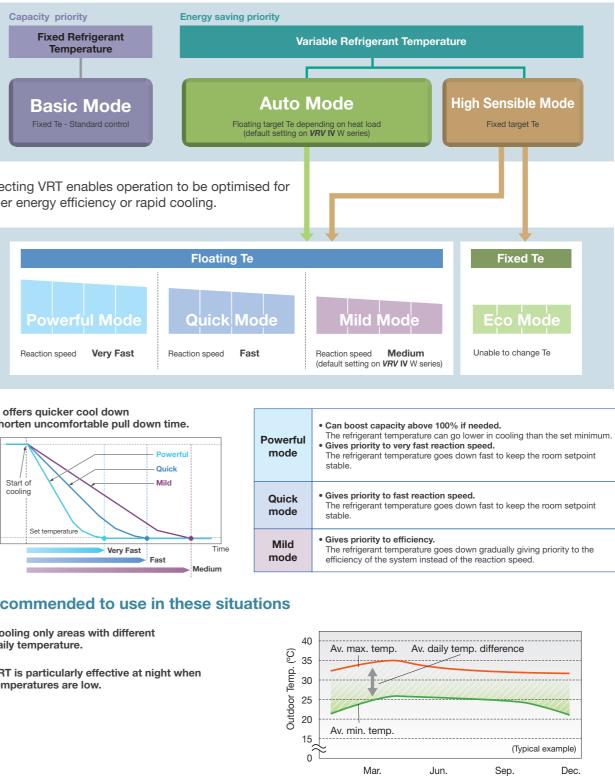


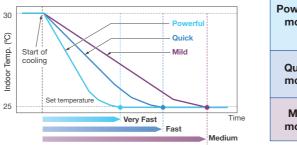
### Fine control to match user preference available through mode selection

Basic mode is selected to maintain optimal comfort. VRT is selected to save energy and prevent excessive cooling.

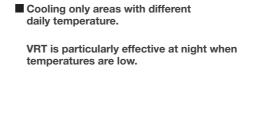


either energy efficiency or rapid cooling.





#### Recommended to use in these situations



**VRV** IV W SERIES

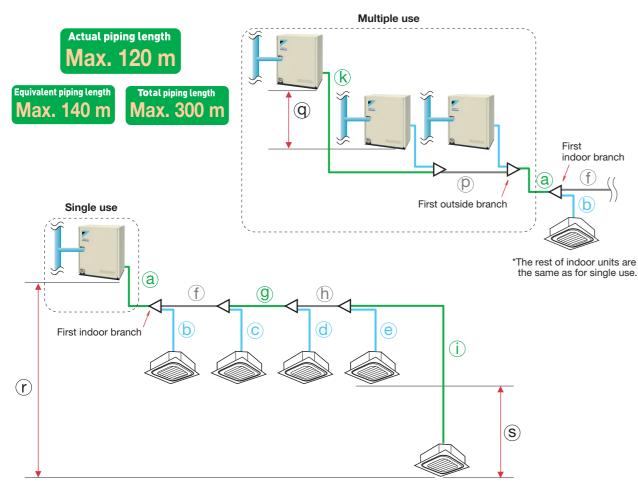
/RV IV W SERIES

# More Flexible System Design

# 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.

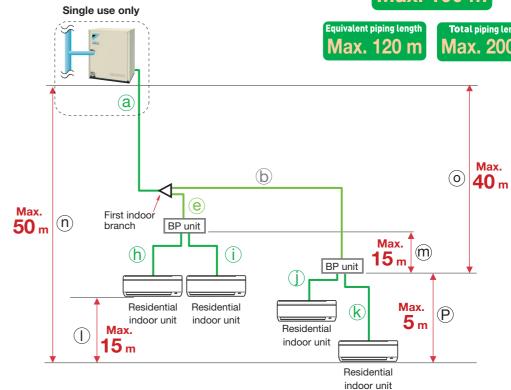


 $^{*}$  Colours in the diagram above are merely for identifying pipes referenced with symbols such as(a).

			Actual piping length	Example	Equivalent piping length
	Refrigerant piping length		120 m	a+f+g+h+i	140 m
Max.	Total piping length	300 m	a+b+c+d+e+f+g+h+i	_	
allowable piping length	Between the first indoor bra	90 m* <sup>1</sup>	f+g+h+i	_	
	Between the first outside be	10 m	k+p	13 m	
	Between the outside units (	2 m	q	_	
Max. allowable	Between the indoor units	Between the indoor units			_
level difference	Between the outside units	If the outside unit is above.	50 m	r	_
	and the indoor units If the outside unit is below.		40 m	r	_

\*1 No special requirements up to 40 m. The maximum actual piping length can be 90 m, depending on conditions. 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.

## For connection of only residential indoor units.

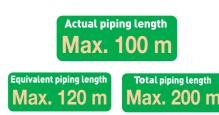


 $^{*}$  Colours in the diagram above are merely for identifying pipes referenced with symbols such as (a).

			Actual piping length	Example	Equivalent Example piping length
Max.	Refrigerant piping length		100 m	a+b+k	120 m
allowable	Total piping length		200 m	a+b+e+h+j+k	—
piping length	Between the first indoor branc	h and the farthest indoor unit	50 m* <sup>1</sup>	b+k	—
Max. and min.		If indoor unit capacity index < 60	2 m - 15 m	h,i,j,k	—
allowable	Between BP unit and indoor unit	If indoor unit capacity index is 60	2 m - 12 m	h,i,j,k	—
piping length		If indoor unit capacity index is 71	2 m - 8 m	h,i,j,k	—
	Between the outside unit and the indoor unit	If the outside unit is above.	50 m	n	—
		If the outside unit is below.	40 m	n	—
Max. allowable	Between the indoor units	15 m	I	—	
level difference	Between the outside unit and	40 m	0	—	
	Between BP units		15 m	m	_
	Between the BP unit and the in	ndoor unit	5 m	р	_

\*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.

**VRV** IV W SERIES



	SERIES
	-
	-
I	
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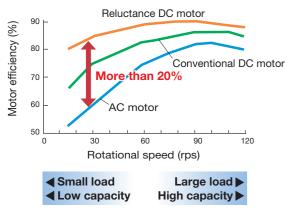
# Advanced Technologies Achieve

# Excellent Performance VRV IV W SERIES

## 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<sup>\*2</sup>. This motor can save energy because it generates more power with a smaller electric power than an AC or conventional DC motor.

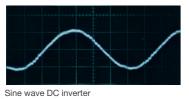


Note: Data are based on studies conducted under controlled conditions at a Daikin laboratory using Daikin products.

- \*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

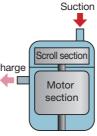
Use of an optimised sine wave smoothes motor rotation, further improving operating efficiency.





#### Scroll compressor

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



## Advanced control main PC board

#### SMT\* packaging technology

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

\*SMT: Surface mounted technology

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## 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.

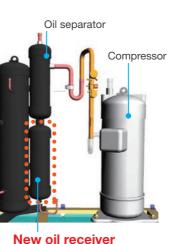
#### Conventional VRV III W series

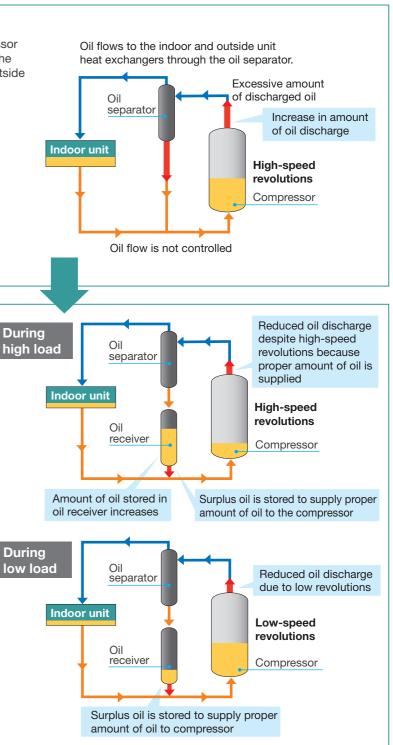
Refrigeration oil discharged from the compressor circulates in the refrigerant cycle and lowers the heat transfer capabilities of the indoor and outside unit heat exchangers.



## **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.





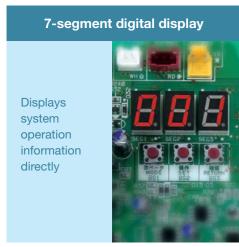


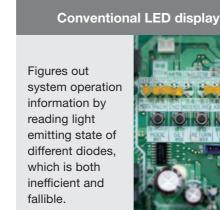
# **Reliable and Stable System**

## 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.

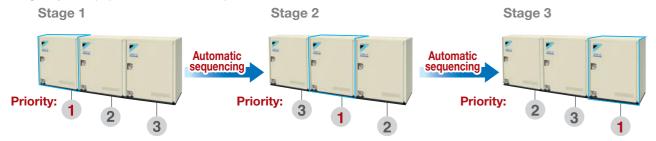




# Outside unit sequencing technology

#### 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

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

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

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

## More stable operation

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

### More efficient operation

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

# Outside Unit Combinations

### For connection of only VRV indoor units

HP	kW	Capacity index	Model	Combination	Total capacity index of connectable indoor units*2	Maximum number of connectable indoor units
6	16.0	150	RWEYQ6T	RWEYQ6T × 1	75 to 195	9
8	22.4	200	RWEYQ8T	RWEYQ8T × 1	100 to 260	13
10	28.0	250	RWEYQ10T	RWEYQ10T × 1	125 to 325	16
12	33.5	300	RWEYQ12T	RWEYQ12T × 1	150 to 390	19
14	38.4	350	RWEYQ14T <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 HP systems and above. \*2. Total capacity index of connectable indoor units must be 50%-130% of the capacity index of the outside units.

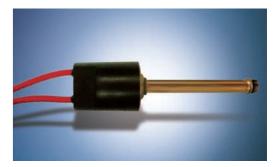
### For connection of only residential indoor units

Model name <sup>*1</sup>	kW	HP	Capacity	- ' '	idex of connecta Combination (%)	ble indoor units <sup>*2</sup>	Maximum number of
		index	50% <sup>*2</sup>	100%	130%	connectable indoor units	
RWEYQ6T	16.0	6 HP	150	75	150	195	9
RWEYQ8T	22.4	8 HP	200	100	200	260	13
RWEYQ10T	28.0	10 HP	250	125	250	325	16
RWEYQ12T	33.5	12 HP	300	150	300	390	19

\*1. Only single outdoor unit (RWEYQ6-12T) can be connected.

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

**VRV** IV W SERIES

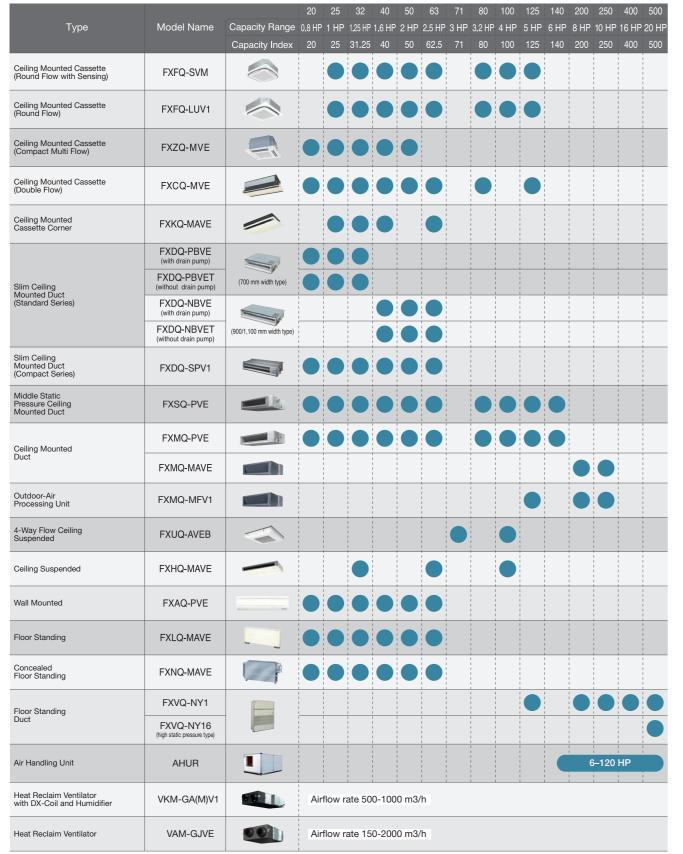




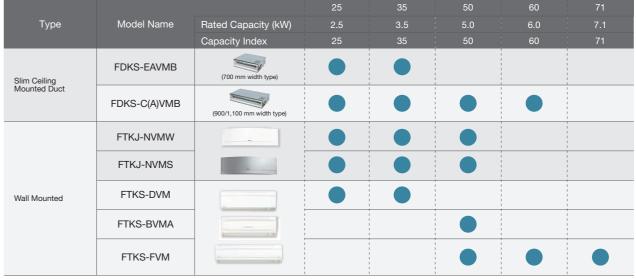
## Enhanced range of choices

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

#### **VRV** indoor units



Residential indoor units with connection to BP units



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



\*Refer to page 82 for the maximum number of connectable indoor units.

**VRV** IV W SERIES

/RV IV W SERIES

## Outside Units

### **Cooling Only**

				B			
MODEL			RWEYQ6TYM	RWEYQ8TYM	RWEYQ10TYM	RWEYQ12TYM	
			-	-	-	-	
Combination u	units		-	-	-	-	
			-	-	-	-	
Power supply				3-phase 4-wire system, 3	80-415 V/380 V, 50/60 Hz	1	
		kcal/h	13,800	19,300	24,100	28,800	
Cooling capacity		Btu/h	54,600	76,400	95,500	114,000	
	- · ·		16.0	22.4	28.0	33.5	
Power consumpt	ion	kW	2.58	3.86	5.43	7.33	
Casing colour			Ivory white (5Y7.5/1)				
Dimensions (H×V	V×D)	mm	1,000 × 780 × 550				
0	Туре		Hermetically sealed scroll type				
Compressor	Motor output	kW	1.9	2.8	3.7	4.7	
Refrigerant piping	Liquid			∮ 9.5 (Flare)			
connections	Suction gas *1	mm	∮19.1 (E	Brazing)	\$ 22.2 (Brazing)		
connections	High and low pressure gas	1	∮19.1 (Br	azing) *2	φ 22.2 (Br	azing) *2	
	Water inlet		· · · · ·	PT1 1/4B in	tenal thread		
Water piping connections	Water outlet		PT1 1/4B intenal thread				
Drain outlet				PS1/2B int	enal thread		
Machine weight (Operating weight) kg		kg	146	(148)	147	(149)	
Sound level		dB(A)	49	50	51	53	
Operation range (Inlet water temp.) °C		°C		10 t	o 45		
Capacity control		%	23-	100	19-	100	
Refrigerant	Туре			R-4	10A		
charge	Charge	kg	3	.5	4	.2	

MODEL			RWEYQ26TYM	RWEYQ28TYM	RWEYQ30TYM		
			RWEYQ8TYM	RWEYQ8TYM	RWEYQ10TYM		
Combination u	units		RWEYQ8TYM	RWEYQ10TYM	RWEYQ10TYM		
			RWEYQ10TYM	RWEYQ10TYM	RWEYQ10TYM		
Power supply			3-phase	4-wire system, 380-415 V/380 V, 5	50/60 Hz		
		kcal/h	62,600	67,400	72,200		
Cooling capacity		Btu/h	248,000	268,000	287,000		
		kW	72.8	78.4	84.0		
Power consumpt	ion	kW	13.2	14.7	16.3		
Casing colour			Ivory white (5Y7.5/1)				
Dimensions (H×V	V×D)	mm	(1,000 × 780 × 550) × 3				
0	Туре		Hermetically sealed scroll type				
Compressor	Motor output	kW	2.8 × 2 + 3.7	2.8 + 3.7 × 2	3.7 × 3		
Refrigerant piping	Liquid						
connections	Suction gas *1	mm					
connections	High and low pressure gas	1	¢ 34.9 (Brazing) *2				
\	Water inlet		(PT1 1/4B) × 3 intenal thread				
Water piping connections	Water outlet			(PT1 1/4B) × 3 intenal thread			
connections	Drain outlet		(PS1/2B) × 3 intenal thread				
Machine weight (	Operating weight)	kg	146 × 2 + 147 (148 × 2 + 149)	146 + 147 × 2 (148 + 149 × 2)	147 × 3 (149 × 3)		
Sound level		dB(A)	55	50	6		
Operation range (Inlet water temp.) °C			10 to 45				
Capacity control		%	21-100	20-100	19-100		
Refrigerant	Туре			R-410A			
charge	Charge	kg	3.5 + 3.5 + 4.2	3.5 + 4.2 + 4.2	4.2 + 4.2 + 4.2		

Notes: 1. Specifications are based on the following conditions;
 Cooling: Indoor temp.: 27°CDB, 19°CWB/inlet water temp.: 30°C, Equivalent piping length: 7.5 m, Level difference: 0 m.
 2. 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 HP/hour, 0.58 kW/10-12 HP/hour.
 Connectable to closed type cooling tower only.
 \*1: In the case of cooling only system, suction gas pipe is not used.
 \*2: In the case of cooling only system.

RWEYQ14TYM	RWEYQ16TYM	RWEYQ18TYM	RWEYQ20TYM	RWEYQ22TYM	RWEYQ24TYN	
RWEYQ6TYM	RWEYQ8TYM	RWEYQ8TYM	RWEYQ10TYM	RWEYQ10TYM	RWEYQ12TYN	
RWEYQ8TYM	RWEYQ8TYM	RWEYQ10TYM	RWEYQ10TYM	RWEYQ12TYM	RWEYQ12TYN	
-	-	-	-	-	-	
		3-phase 4-wire system, 38	80-415 V/380 V, 50/60 Hz	<u> </u>		
33,000	38,500	43,300	48,200	52,900	57,600	
131,000	153,000	172,000	191,000	210,000	229,000	
38.4	44.8	50.4	56.0	61.5	67.0	
6.44	7.72	9.29	10.9	12.8	14.7	
		lvory white (1,000 × 780 Hermetically se	) × 550) × 2			
1.9 + 2.8	2.8 × 2	2.8 + 3.7	3.7 × 2	3.7 + 4.7	4.7 × 2	
¢ 12.7	(Flare)	¢ 15.9 (	(Flare)	¢ 19.1	(Flare)	
		¢ 28.6 (B ¢ 28.6 (Br	0/		· · ·	
		(PT1 1/4B) × 2	intenal thread			
		(PT1 1/4B) × 2	intenal thread			
		(PS1/2B) × 2	intenal thread			
146 × 2 (148 × 2)         146 + 147 (148 + 149)         147 × 2 (149 × 2)						
53 54 55 56						
		10 to	o 45			
23-100 20-100 19-100						
		R-4	10A			
3.5	+ 3.5	3.5 + 4.2		4.2 + 4.2		

RWEYQ32TYM	RWEYQ34TYM	RWEYQ36TYM				
RWEYQ10TYM	RWEYQ10TYM	RWEYQ12TYM				
RWEYQ10TYM	RWEYQ12TYM	RWEYQ12TYM				
RWEYQ12TYM	RWEYQ12TYM	RWEYQ12TYM				
3-phase	4-wire system, 380-415 V/380 V, 5	50/60 Hz				
77,000	81,700	86,900				
305,000	324,000	345,000				
89.5	95.0	101				
18.2	20.1	22.0				
	lvory white (5Y7.5/1)					
	(1,000 × 780 × 550) × 3					
	Hermetically sealed scroll type					
3.7 × 2 + 4.7	3.7 + 4.7 × 2	4.7 × 3				
	(PT1 1/4B) × 3 intenal thread					
	(PT1 1/4B) × 3 intenal thread					
	(PS1/2B) × 3 intenal thread					
	147 × 3 (149 × 3)					
Ę	57	58				
	10 to 45					
	19-100					
	R-410A					
	4.2 + 4.2 + 4.2					

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

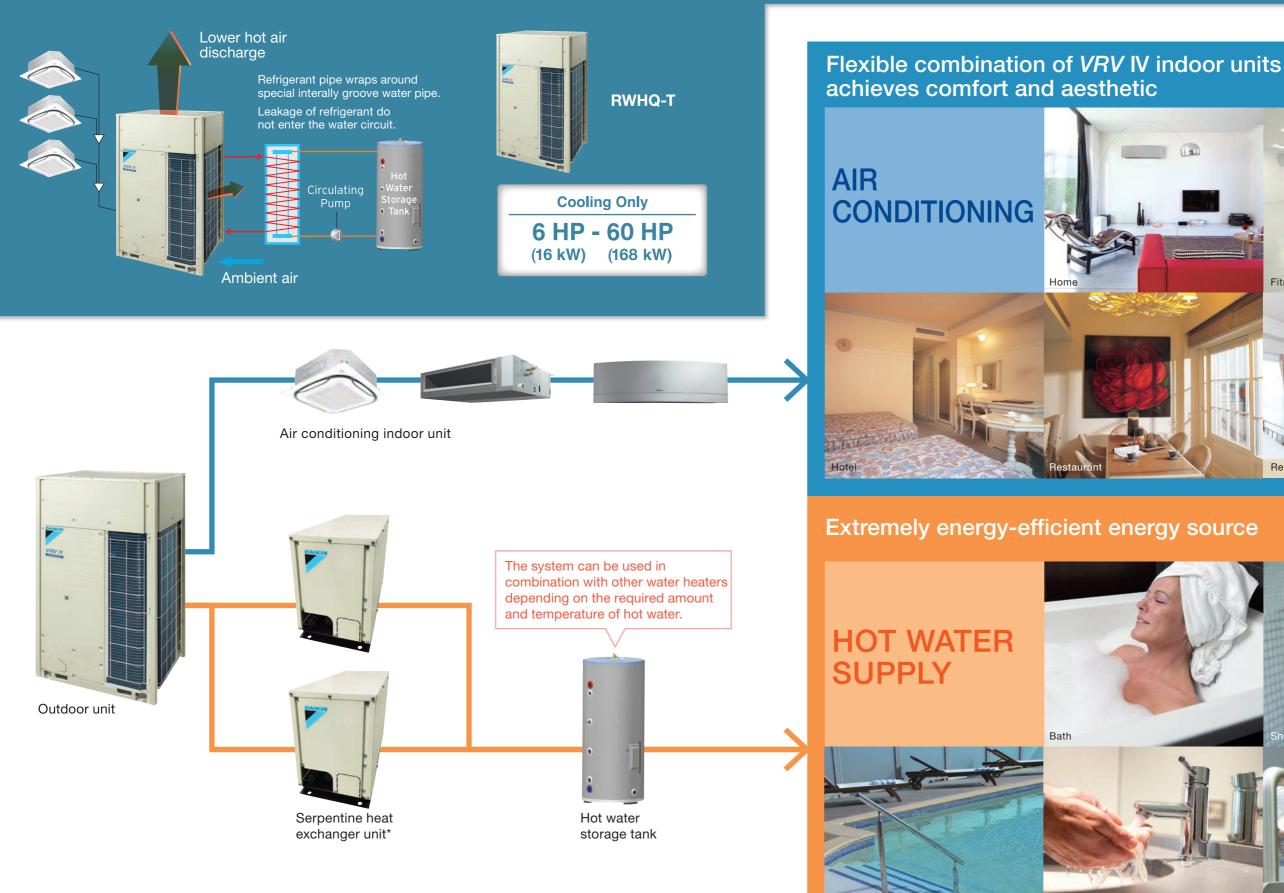
**VRV** IV W SERIES

SERIES	
$ \geq $	
$\geq$	
<u>N</u>	

# **URV** HEAT RECOVERY HOT WATER SYSTEM

# Suitable for

# different business applications **URV** IN HEAT RECOVERY HOT WATER SYSTEM









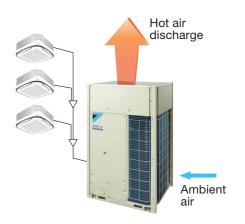
# VRV IV Heat Recovery Hot Water System

# The energy-efficient system recovers waste heat

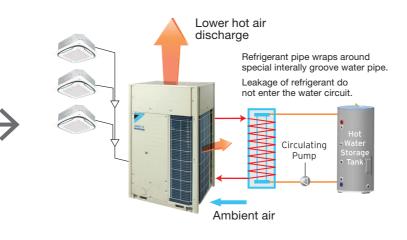
# as energy to heat hot water. **VRV** IN HEAT RECOVERY HOT WATER SYSTEM

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

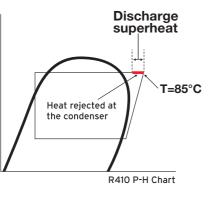
In a conventional system, waste heat from air conditioning is released into the ambience.



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



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



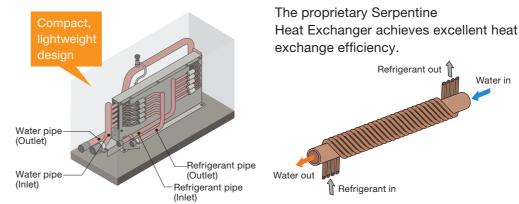
Air conditioning combined with hot water supply Compact system

Energy to supply hot water Cost-effective

Hot water temperature Up to 65 °C

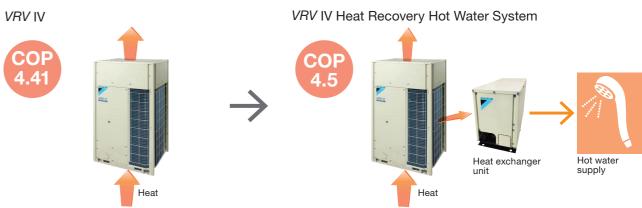
Can be used in combination with other water heaters depending on the required amount and temperature of hot water.

## The Serpentine Heat Exchanger Unit recovers heat.



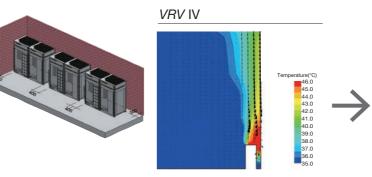
## Increased energy efficiency of the outdoor unit

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



## Reducing short circuits

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





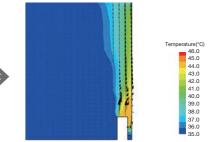
The high-temperature, high-pressure refrigerant pipe is coiled around the water pipe.



Refrigerant leakage does not contaminate ater.

\* Comparison of air conditioning using a 6 HP outdoor unit

#### VRV IV Heat Recovery Hot Water System



\* Comparison of air conditioning using a 6 HP outdoor unit

# Innovative and reliable system

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

Family composition

3 adults 3 children

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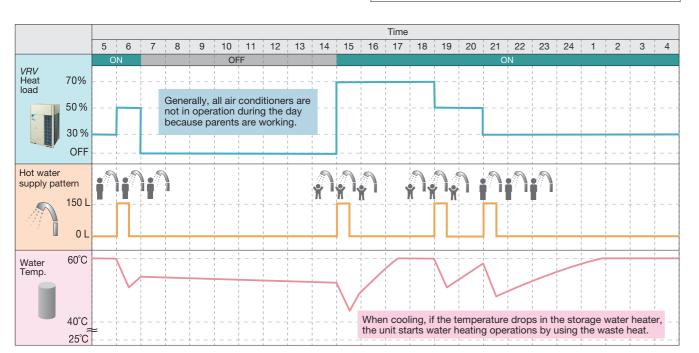
2 showers/person/day

= 12 showers (600 L (39°C))

50 L 50 L

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



Air conditioner load conditions Operation time: 16 hours/day

Water-heating load

Tank capacity: 200 L

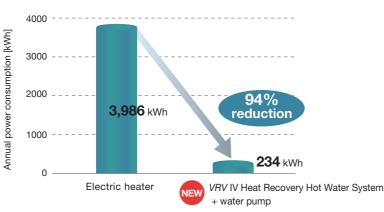
Boiling temperature: 25°C to 60°C (tap water)

Amount of hot water per person per time (standard): 50 L/shower (30°C) (water dispensed: 10 L/min.; shower time: 5 min./shower) Amount of water required in tank to dispense 39°C hot water

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

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

No electric heater consumption (Water heating by the use of waste heat)



# VRV IV Heat Recovery Hot Water Controller

### Features

#### **Convertible Remote Controller**

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

#### Anti-Bacteria

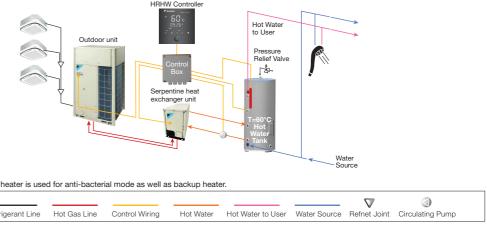
By default, this would be activated every Monday morning at 2am, heating storage water up to 60°C for 10 minutes.

#### Vacation Mode

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

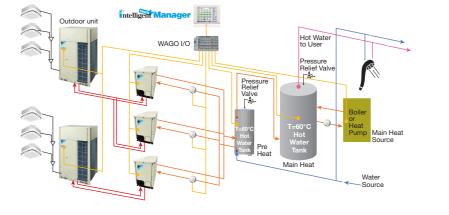
# VRV IV Heat Recovery Hot Water System overview

#### **Schematic Diagram For Residential Application**



\*Remarks: Electric heater is used for anti-bacterial mode as well as backup heate Legend Refrigerant Line Hot Gas Line Control Wiring

#### **Schematic Diagram For Commercial Application**



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

Legend							$\nabla$	٢	-
Legenu		Hot Gas Line	Control Wiring	Hot Water	Hot Water to User	Water Source	Refnet Joint	Circulating Pump	
One of the Pro	posed Commerci	al Schematic Dia	arame						

One of the Proposed Commercial Schem

## VRU IV HEAT RECOVERY HOT WATER SYSTEM



### **Auto Restart**

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

#### **Safety-Error Code**

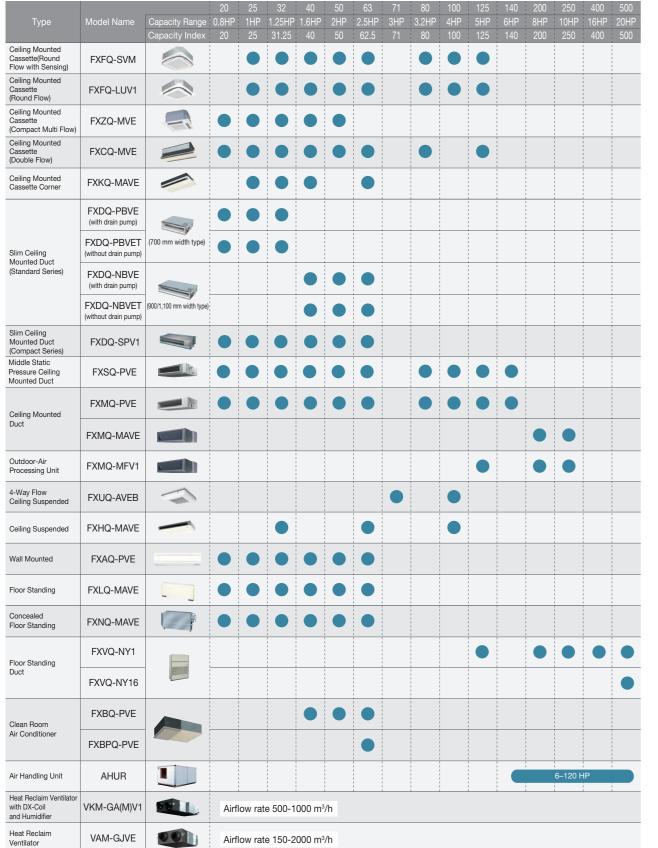
If thermistors or communication line are faulty, as a safety precaution, operation of the electric heater is disabled.

_	
Recovery	System
eat	ater
-	
$\geq$	$\leq$
<sup>B</sup>	혁

## Enhanced range of choices

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

#### **VRV** indoor units



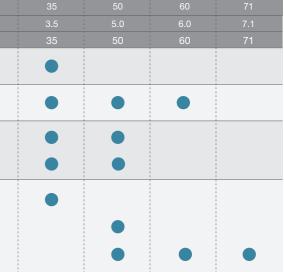
#### Residential indoor units with connection to BP units

Туре	Model Name	Rated Capacity (kW)	2.5
		Capacity Index	25
Slim Ceiling	FDKS-EAVMB	(700 mm width type)	
Mounted Duct	FDKS-C(A)VMB	(900/1,100 mm width type)	
	FTKJ-NVM(M)(V)W		
	FTKJ-NVM(M)(V)S		
Wall Mounted	FTKS-DVM		
	FTKS-BVMA		
	FTKS-FVM		



Note: BP units (BPMKS967A2/3) are necessary for residential indoor units. \*Some model names might differ and some products might not be available depending on the country of sale. For further information, please contact one of our sales companies.

## **VRV** IV HEAT RECOVERY HOT WATER SYSTEM





## Outdoor Units

## High-COP Type

MODEL			RWHQ12THYM	RWHQ14THYM	RWHQ16THYM	RWHQ18THYM	RWHQ20THYM	RWHQ22THYM	RWHQ24THYM			
			RWHQ6TYM	RWHQ6TYM	RWHQ8TYM	RWHQ6TYM	RWHQ6TYM	RWHQ6TYM	RWHQ8TYM			
Combination	Combination units		RWHQ6TYM	RWHQ8TYM	RWHQ8TYM	RWHQ6TYM	RWHQ6TYM	RWHQ8TYM	RWHQ8TYM			
			—	—	—	RWHQ6TYM	RWHQ8TYM	RWHQ8TYM	RWHQ8TYM			
Power supply	/			3-phas	se 4-wire sys	stem, 380–4	15/380 V, 50	/60 Hz				
		kcal/h	27,500	33,000	38,500	41,300	46,800	52,300	57,800			
Cooling capa	city	Btu/h	109,000	131,000	153,000	164,000	186,000	207,000	229,000			
		kW	32.0	38.4	44.8	48.0	54.4	60.8	67.2			
Power consu	mption	kW	7.10	8.68	10.3	10.7	12.2	13.8	15.4			
Capacity con	trol	%	10-100	10-100	10-100	7-100	7-100	7-100	7-100			
Casing colou	r			Ivory white (5Y7.5/1)								
	Туре		Hermetically Sealed Scroll Type									
Compressor	Motor output	kW	(2.4x1)+ (2.4x1)	(2.4X1)+ (3.4X1)	(3.4X1)+ (3.4X1)	(2.4X1)+ (2.4X1)+ (2.4X1)	(2.4X1)+ (2.4X1)+ (3.4X1)	(2.4X1)+ (3.4X1)+ (3.4X1)	(3.4X1)+ (3.4X1)+ (3.4X1)			
Airflow rate		m³/min	119+119	119+157	157+157	119+119+119	119+119+157	119+157+157	157+157+157			
Dimensions (	H×W×D)	mm	(1,657×930×765)+ (1,657×930×765)	(1,657X930X765)+ (1,657X930X765)	(1,657X930X765)+ (1,657X930X765)	(1,657X930X765)+ (1,657X930X765)+ (1,657X930X765)	(1,657X930X765)+ (1,657X930X765)+ (1,657X930X765)		(1,657X930X765)+ (1,657X930X765)+ (1,657X930X765)			
Machine weig	ght	kg	185+185	185+185	185+185	185+185+185	185+185+185	185+185+185	185+185+185			
Sound level		dB(A)	58	59	59	60	60	60	61			
Operation rai	nge	°CDB				15 to 49						
Defrierent	Туре					R-410A						
Refrigerant	Charge	kg	6.4+6.4	6.4+6.4	6.4+6.4	6.4+6.4+6.4	6.4+6.4+6.4	6.4+6.4+6.4	6.4+6.4+6.4			
Piping connections	Liquid	mm	∳12.7 (Brazing)	∮12.7 (Brazing)	∮12.7 (Brazing)	∮15.9 (Brazing)	∮15.9 (Brazing)	∮15.9 (Brazing)	∮15.9 (Brazing)			
(Indoor unit)	Gas	mm	∕¢28.6 (Brazing)	∕≠28.6 (Brazing)	∕ \$28.6 (Brazing)	∮28.6 (Brazing)	∮28.6 (Brazing)	∕Ø28.6 (Brazing)	∕≠34.9 (Brazing)			
Piping connections /Heat	Inlet pipe	mm	φ	9.1(Brazing)	x2)							
exchanger unit	Outlet pipe	mm	$\phi$ 1	9.1(Brazing)	×2)		¢19.1(Bi	razingx3)				

Note: Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

RWHQ26THYM	RWHQ28THYM	RWHQ30THYM	RWHQ32THYM	RWHQ34THYM	RWHQ36THYM	RWHQ38THYM	RWHQ40THYM				
RWHQ8TYM	RWHQ8TYM	RWHQ8TYM	RWHQ8TYM	RWHQ8TYM	RWHQ8TYM	RWHQ12TYM	RWHQ12TYM				
RWHQ8TYM	RWHQ8TYM	RWHQ10TYM	RWHQ12TYM	RWHQ12TYM	RWHQ14TYM	RWHQ12TYM	RWHQ14TYM				
RWHQ10TYM	RWHQ12TYM	RWHQ12TYM	RWHQ12TYM	RWHQ14TYM	RWHQ14TYM	RWHQ14TYM	RWHQ14TYM				
		3-phase 4	-wire system, 3	380–415/380 V	50/60 Hz						
62,600	67,300	72,200	76,900	82,500	87,700	92,000	98,000				
248,000	267,000	286,000	305,000	327,000	348,000	365,000	389,000				
72.8	78.3	83.9	89.4	95.9	102	107	114				
17.5	19.2	21.3	23.0	24.9	26.7	28.7	30.5				
6-100	6-100	5-100	5-100	5-100	4-100	4-100	4-100				
			Ivory white	e (5Y7.5/1)							
		ŀ	lermetica <b>ll</b> y Se	aled Scroll Typ	e						
(3.4X1)+ (3.4X1)+ (4.1X1)	(3.4X1)+ (3.4X1)+ (5.2X1)	(3.4X1)+ (4.1X1)+ (5.2X1)	(3.4X1)+ (5.2X1)+ (5.2X1)	(3.4X1)+(5.2X1)+ (2.9X1)+(3.3X1)	(3.4×1)+(2.9×1)+ (3.3×1)+(2.9×1)+ (3.3×1)	(5.2X1)+(5.2X1)+ (2.9X1)+(3.3X1)	(5.2X1)+(2.9X1)+ (3.3X1)+(2.9X1)+ (3.3X1)				
157+157+165	157+157+178	157+165+178	157+178+178	157+178+233	157+233+233	178+178+233	178+233+233				
(1,657X930X765)+ (1,657X930X765)+ (1,657X930X765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×930×765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×930×765)	(1,657X930X765)+ (1,657X930X765)+ (1,657X930X765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×1,240×765)+ (1,657×1,240×765)	(1,657X930X765)+ (1,657X930X765)+ (1,657X1,240X765)	(1,657×930×765)+ (1,657×1,240×765)+ (1,657×1,240×765)				
185+185+200	185+185+200	185+200+200	185+200+200	185+200+285	185+285+285	200+200+285	200+285+285				
61	62	62	63	63	64	64	64				
			15 te	o 49							
			R-4	10A							
6.4+6.4+6.5	6.4+6.4+6.8	6.4+6.5+6.8	6.4+6.8+6.8	6.4+6.8+10.3	6.4+10.3+10.3	6.8+6.8+10.3	6.8+10.3+10.3				
∮19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	$\phi$ 19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	$\phi$ 19.1 (Brazing)				
∮34.9 (Brazing)	∮34.9 (Brazing)	∮34.9 (Brazing)	∳34.9 (Brazing)	∳34.9 (Brazing)	∮41.3 (Brazing)	∮41.3 (Brazing)	∮41.3 (Brazing)				
			¢19.1(B	razingx3)							

**URV** IN HEAT RECOVERY HOT WATER SYSTEM

VRV IV Heat Recovery Hot Water System

## Outdoor Units

## High-COP Type

MODEL			RWHQ42THYM	RWHQ44THYM	RWHQ46THYM	RWHQ48THYM	RWHQ50THYM							
			RWHQ14TYM	RWHQ14TYM	RWHQ14TYM	RWHQ16TYM	RWHQ16TYM							
Combination	units		RWHQ14TYM	RWHQ14TYM	RWHQ16TYM	RWHQ16TYM	RWHQ16TYM							
			RWHQ14TYM	RWHQ14TYM RWHQ16TYM RWHQ16TYM RWHQ16TYM RWHQ18TY										
Power supply	у			3-phase 4-wire	system, 380–415	/380 V, 50/60 Hz								
		kcal/h	103,000	108,000	112,000	116,000	120,000							
Cooling capa	ooling capacity Btu/h		409,000	427,000	444,000	461,000	478,000							
	kW		120	125	130	135	140							
Power consu	Imption	kW	32.4	34.5	36.6	38.7	41.1							
Capacity cor	ntrol	%	4-100	3-100	3-100	3-100	3-100							
Casing colou	ır			lv	ory white (5Y7.5/	1)								
	Туре		Hermetically Sealed Scroll Type											
Compressor	Motor output kW		(2.9X1)+(3.3X1)+ (2.9X1)+(3.3X1)+ (2.9X1)+(3.3X1)	(2.9X1)+(3.3X1)+ (2.9X1)+(3.3X1)+ (3.6X1)+(3.7X1)	(2.9x1)+(3.3x1)+ (3.6x1)+(3.7x1)+ (3.6x1)+(3.7x1)	(3.6X1)+(3.7X1)+ (3.6X1)+(3.7X1)+ (3.6X1)+(3.7X1)	(3.6X1)+(3.7X1)+ (3.6X1)+(3.7X1)+ (4.4X1)+(4.0X1)							
Airflow rate		m³/min	233+233+233	233+233+233	233+233+233	233+233+233	233+233+233							
Dimensions (	(H×W×D)	mm	(1,657x1,240x765)+ (1,657x1,240x765)+ (1,657x1,240x765)	(1,657×1,240×765)+ (1,657×1,240×765)+ (1,657×1,240×765)	(1,657×1,240×765)+ (1,657×1,240×765)+ (1,657×1,240×765)	(1,657×1,240×765)+ (1,657×1,240×765)+ (1,657×1,240×765)	(1,657X1,240X765)+ (1,657X1,240X765)+ (1,657X1,240X765)							
Machine wei	ght	kg	285+285+285	285+285+285	285+285+285	285+285+285	285+285+285							
Sound level		dB(A)	65	65	65	66	66							
Operation ra	nge	°CDB			15 to 49									
Defiinement	Туре				R-410A									
Refrigerant	Charge	kg	10.3+10.3+10.3	10.3+10.3+10.4	10.3+10.4+10.4	10.4+10.4+10.4	10.4+10.4+10.5							
Piping connections	Liquid	mm	∳19.1 (Brazing)	∮19.1 (Brazing)	∳19.1 (Brazing)	∕≠19.1 (Brazing)	∮19.1 (Brazing)							
(Indoor unit)		mm	∳41.3 (Brazing)	∳41.3 (Brazing)	∳41.3 (Brazing)	∕≠41.3 (Brazing)	<pre></pre>							
Piping connections / Heat	Inlet pipe	mm												
exchanger	Outlet pipe	mm			¢19.1(BrazingX3)	)								

Note: Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

## **Standard Type**

MODEL			RWHQ6TYM	RWHQ8TYM	RWHQ10TYM	RWHQ12TYM	RWHQ14TYM	RWHQ16TYM			
Combination units			_	_	_	_	_	_			
Power supply	/			3-phase 4	-wire system,	380–415/380 \	/, 50/60 Hz				
		kcal/h	13,800	19,300	24,100	28,800	34,400	38,700			
Cooling capacity Btu/h		54,600	76,400	95,500	114,000	136,000	154,000				
kW		kW	16.0	22.4	28.0	33.5	40.0	45.0			
Power consu	mption	kW	3.55	5.13	7.22	8.93	10.8	12.9			
Capacity con	itrol	%	20-100	20-100	16-100	15-100	11-100	10-100			
Casing colou	r			Ivory white (5Y7.5/1)							
	Туре		Hermetically Sealed Scroll Type								
Compressor	Motor output	kW	2.4X1	3.4X1	4.1×1	5.2X1	(2.9X1)+(3.3X1)	(3.6X1)+(3.7X1)			
Airflow rate		m³/min	119	157	165	178	233	233			
Dimensions (	H×W×D)	mm	1,657x930x765	1,657X930X765	1,657x930x765	1,657x930x765	1,657x1,240x765	1,657x1,240x765			
Machine weig	ght	kg	185	185	200	200	285	285			
Sound level		dB(A)	55	56	57	59	60	61			
Operation rar	nge	°CDB			15 t	o 49					
Refrigerant	Туре				R-4	10A					
neingerant	Charge	kg	6.4	6.4	6.5	6.8	10.3	10.4			
Piping Liquid mm				∮ 9.5 (Brazing)			$\phi$ 12.7 (Brazing)				
connections (Indoor unit)	Gas	mm	∳1 (Bra	9.1 zing)	∳22.2 (Brazing)		∳28.6 (Brazing)				
Piping connections /Heat	Inlet pipe	mm			¢19.1(E	Brazing)					
(exchanger) unit	Outlet pipe	mm			¢19.1(E	Brazing)					

Note: Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

**URU** IV HEAT RECOVERY HOT WATER SYSTEM

## Outdoor Units

## **Standard Type**

MODEL			RWHQ18TNYM	RWHQ20TNYM	RWHQ22TNYM	RWHQ24TNYM	RWHQ26TNYM	RWHQ28TNYM	RWHQ30TNYM	
			RWHQ8TYM	RWHQ8TYM	RWHQ8TYM	RWHQ10TYM	RWHQ12TYM	RWHQ14TYM	RWHQ14TYM	
Combination	units		RWHQ10TYM	RWHQ12TYM	RWHQ14TYM	RWHQ14TYM	RWHQ14TYM	RWHQ14TYM	RWHQ16TYM	
				—	—	—	—		—	
Power supply	y			3-phas	se 4-wire sys	stem, 380–4	15/380 V, 50	/60 Hz		
		kcal/h	43,300	48,100	53,700	58,500	63,200	68,800	73,100	
Cooling capa	acity	Btu/h	172,000	191,000	213,000	232,000	251,000	273,000	290,000	
		kW	50.4	55.9	62.4	68.0	73.5	80.0	85.0	
Power consu	mption	kW	12.4	14.1	15.9	18.0	19.7	21.6	23.7	
Capacity cor	ntrol	%	8-100	8-100	7-100	6-100	6-100	5-100	5-100	
Casing colou	ır				lvory	/ white (5Y7.	5/1)			
	Туре		Hermetically Sealed Scroll Type							
Compressor	Motor output	kW	(3.4X1)+ (4.1X1)	(3.4x1)+ (5.2x1)	(3.4X1)+ (2.9X1)+ (3.3X1)	(4.1X1)+ (2.9X1)+ (3.3X1)	(5.2X1)+ (2.9X1)+ (3.3X1)	(2.9X1)+(3.3X1)+ (2.9X1)+(3.3X1)	(2.9X1)+(3.3X1)+ (3.6X1)+(3.7X1)	
Airflow rate		m³/min	157+165	157+178	157+233	165+233	178+233	233+233	233+233	
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)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×1,240×765)	(1,657×1,240×765)+ (1,657×1,240×765)	(1,657X1,240X765)+ (1,657X1,240X765)	
Machine wei	ght	kg	185+200	185+200	185+285	200+285	200+285	285+285	285+285	
Sound level		dB(A)	60	61	61	62	63	63	64	
Operation rai	nge	°CDB		1		15 to 49		1		
<b>D</b> ( )	Туре					R-410A				
Refrigerant	Charge	kg	6.4+6.5	6.4+6.8	6.4+10.3	6.5+10.3	6.8+10.3	10.3+10.3	10.3+10.4	
Piping connections	Liquid	mm	∳15.9 (Brazing)	∳15.9 (Brazing)	∮15.9 (Brazing)	∮15.9 (Brazing)	∮19.1 (Brazing)		∮19.1 (Brazing)	
(Indoor unit)	Gas	mm	∮28.6 (Brazing)	∕¢28.6 (Brazing)	∳28.6 (Brazing)	∮34.9 (Brazing)	∳34.9 (Brazing)	∳34.9 (Brazing)	∮34.9 (Brazing)	
Piping connections / Heat \	Inlet pipe	mm			¢1	9.1(Brazing)	(2)			
exchanger unit	Outlet pipe	mm			¢1	9.1(Brazing)	<2)			

Note: Specifications are based on the following conditions;

•Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m. •Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

RWHQ32TNYM	RWHQ34TNYM	RWHQ36TNYM	RWHQ38TNYM	RWHQ40TNYM	RWHQ42TNYM	RWHQ44TNYM	RWHQ46TNYM		
RWHQ14TYM	RWHQ10TYM	RWHQ12TYM	RWHQ8TYM	RWHQ12TYM	RWHQ12TYM	RWHQ12TYM	RWHQ14TYM		
RWHQ18TYM	RWHQ12TYM	RWHQ12TYM	RWHQ12TYM	RWHQ12TYM	RWHQ14TYM	RWHQ16TYM	RWHQ14TYM		
_	RWHQ12TYM	RWHQ12TYM	RWHQ18TYM	RWHQ16TYM	RWHQ16TYM	RWHQ16TYM	RWHQ18TYM		
		3-	phase 4-wire s	ystem, 380–41	5/380 V, 50/60	Hz			
77,400	81,700	86,900	91,200	96,300	102,000	107,000	112,000		
307,000	324,000	345,000	362,000	382,000	406,000	423,000	444,000		
90.0	95.0	101	106	112	119	124	130		
26.1	25.1	26.8	29.4	30.8	32.6	34.7	36.9		
5-100	5-100	5-100	4-100	4-100	4-100	4-100	3-100		
			Ivo	ry white (5Y7.5	/1)				
			Hermetic	cally Sealed Sc	roll Type				
(2.9X1)+(3.3X1)+ (4.4X1)+(4.0X1)	(4.1X1)+(5.2X1)+ (5.2X1)	(5.2X1)+(5.2X1)+ (5.2X1)	(3.4X1)+(5.2X1)+ (4.4X1)+(4.0X1)	(5.2X1)+(5.2X1)+ (3.6X1)+(3.7X1)	(5.2X1)+(2.9X1)+ (3.3X1)+(3.6X1)+ (3.7X1)	(5.2X1)+(3.6X1)+ (3.7X1)+(3.6X1)+ (3.7X1)	(2.9X1)+(3.3X1)+ (2.9X1)+(3.3X1)+ (4.4X1)+(4.0X1)		
233+233	165+178+178	178+178+178	157+178+233	178+178+233	178+233+233	178+233+233	233+233+233		
(1,657×1,240×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×930×765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×930×765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×1,240×765)	(1,657X930X765)+ (1,657X1,240X765)+ (1,657X1,240X765)	(1,657X930X765)+ (1,657X1,240X765)+ (1,657X1,240X765)	(1,657×1,240×765)+ (1,657×1,240×765)+ (1,657×1,240×765)		
285+285	200+200+200	200+200+200	185+200+285	200+200+285	200+285+285	200+285+285	285+285+285		
64	63	64	64	65	65	65	66		
			15 t	o 49					
			R-4	10A					
10.3+10.5	6.5+6.8+6.8	6.8+6.8+6.8	6.4+6.8+10.5	6.8+6.8+10.4	6.8+10.3+10.4	6.8+10.4+10.4	10.3+10.3+10.		
$\phi$ 19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)	∮19.1 (Brazing)		
$\phi$ 34.9 (Brazing)	∳34.9 (Brazing)	∳41.3 (Brazing)	<i> </i>	<i> </i>		∮41.3 (Brazing)	<i> </i>		
∮19.1 (Brazingx2)									
			\$	919.1(BrazingX	3)				

## **VRV** IV HEAT RECOVERY HOT WATER SYSTEM

VRV IV Heat Recovery Hot Water System

## Outdoor Units

## **Standard Type**

MODEL			RWHQ48TNYM	RWHQ50TNYM	RWHQ52TNYM	RWHQ54TNYM	RWHQ56TNYM	RWHQ58TNYM	RWHQ60TNYM		
			RWHQ14TYM	RWHQ14TYM	RWHQ16TYM	RWHQ18TYM	RWHQ18TYM	RWHQ18TYM	RWHQ20TYM		
Combination	units		RWHQ16TYM	RWHQ18TYM	RWHQ18TYM	RWHQ18TYM	RWHQ18TYM	RWHQ20TYM	RWHQ20TYM		
			RWHQ18TYM	RWHQ18TYM	RWHQ18TYM	RWHQ18TYM	RWHQ20TYM	RWHQ20TYM	RWHQ20TYM		
Power supply	/			3-pha	se 4-wire sys	stem, 380–4	15/380 V, 50	/60 Hz			
		kcal/h	116,000	120,000	125,000	129,000	134,000	139,000	144,000		
Cooling capacity B		Btu/h	461,000	478,000	495,000	512,000	532,000	553,000	573,000		
		kW	135	140	145	150	156	162	168		
Power consu	mption	kW	39.0	41.4	43.5	45.9	48.5	51.1	53.7		
Capacity con	trol	%	3-100	3-100	3-100	3-100	3-100	3-100	3-100		
Casing colou	r				lvor	y white (5Y7	.5/1)				
	Туре			Hermetically Sealed Scroll Type							
Compressor	Motor output	kW	(2.9X1)+(3.3X1)+ (3.6X1)+(3.7X1)+ (4.4X1)+(4.0X1)	(2.9X1)+(3.3X1)+ (4.4X1)+(4.0X1)+ (4.4X1)+(4.0X1)	(3.6X1)+(3.7X1)+ (4.4X1)+(4.0X1)+ (4.4X1)+(4.0X1)	(4.4X1)+(4.0X1)+ (4.4X1)+(4.0X1)+ (4.4X1)+(4.0X1)	(4.4X1)+(4.0X1)+ (4.4X1)+(4.0X1)+ (4.6X1)+(5.5X1)	(4.4X1)+(4.0X1)+ (4.6X1)+(5.5X1)+ (4.6X1)+(5.5X1)	(4.6X1)+(5.5X1)+ (4.6X1)+(5.5X1)+ (4.6X1)+(5.5X1)		
Airflow rate		m³/min	233+233+233	233+233+233	233+233+233	233+233+233	233+233+268	233+268+268	268+268+268		
Dimensions (	H×W×D)	mm	(1,657X1,240X765)+ (1,657X1,240X765)+ (1,657X1,240X765)	(1,657x1,240x765)+ (1,657x1,240x765)+ (1,657x1,240x765)	(1,657x1,240x765)+ (1,657x1,240x765)+ (1,657x1,240x765)	(1,657×1,240×765)+ (1,657×1,240×765)+ (1,657×1,240×765)	(1,657X1,240X765)+ (1,657X1,240X765)+ (1,657X1,240X765)	(1,657x1,240x765)+ (1,657x1,240x765)+ (1,657x1,240x765)	(1,657x1,240x765)+ (1,657x1,240x765)+ (1,657x1,240x765)		
Machine weig	ght	kg	285+285+285	285+285+285	285+285+285	285+285+285	285+285+320	285+320+320	320+320+320		
Sound level		dB(A)	66	66	66	67	68	69	70		
Operation rar	nge	°CDB		1		15 to 49		1	1		
D ( )	Туре					R-410A					
Refrigerant	Charge	kg	10.3+10.4+10.5	10.3+10.5+10.5	10.4+10.5+10.5	10.5+10.5+10.5	10.5+10.5+11.8	10.5+11.8+11.8	11.8+11.8+11.8		
Piping connections	Liquid	mm	∳19.1 (Brazing)	∮19.1 (Brazing)	<pre></pre>	∮19.1 (Brazing)	<pre></pre>	∮19.1 (Brazing)	∮19.1 (Brazing)		
(Indoor unit)	Gas	mm	<i> </i>	<pre></pre>	<pre></pre>	<pre></pre>	<pre></pre>	∮41.3 (Brazing)	<pre></pre>		
Piping connections /Heat	Inlet pipe	mm			¢1	9.1(Brazing)	(3)				
exchanger unit	Outlet pipe	mm			¢1	9.1(Brazing)	<b>x</b> 3)				

Note: Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

## Space Saving Type

MODEL			RWHQ18TYM	RWHQ20TYM	RWHQ22TSYM	RWHQ24TSYM				
					RWHQ10TYM	RWHQ12TYM				
Combination	units		—	—	RWHQ12TYM	RWHQ12TYM				
					—	—				
Power supply kcal/h			3-р	hase 4-wire system,	380–415/380 V, 50/60	) Hz				
		kcal/h	43,000	48,200	52,900	57,600				
Cooling capa	icity	Btu/h	171,000	191,000	210,000	229,000				
		kW	50.0	56.0	61.5	67.0				
Power consu	mption	kW	15.3	17.9	16.2	17.9				
Capacity con	itrol	%	10-100	8-100	8-100	8-100				
Casing colou	ır		Ivory white (5Y7.5/1)							
	Туре			Hermetically Sealed Scroll Type						
Compressor	Motor output	kW	(4.4X1)+(4.0X1)	(4.6X1)+(5.5X1)	(4.1×1)+(5.2×1)	(5.2X1)+(5.2X1)				
Airflow rate		m³/min	233	268	165+178	178+178				
Dimensions (	H×W×D)	mm	1,657x1,240x765 1,657x1,240x765		(1,657X930X765)+ (1,657X930X765)	(1,657×930×765)+ (1,657×930×765)				
Machine weig	ght	kg	285	320	200+200	200+200				
Sound level		dB(A)	62	65	61	62				
Operation rai	nge	°CDB		15 t	o 49	1				
	Туре			R-4	10A					
Refrigerant	Charge	kg	10.5	11.8	6.5+6.8	6.8+6.8				
Piping	Liquid	mm			∮15.9 (Brazing)	∮15.9 (Brazing)				
connections (Indoor unit)	Gas	mm	<i>∲</i> 28.6 (Brazing)	<i>∲</i> 28.6 (Brazing)	<i>∳</i> 28.6 (Brazing)	∮34.9 (Brazing)				
Piping connections	Inlet pipe	mm	∲19.1(E	Brazing)	<i>∳</i> 19.1(B	razingX2)				
(Heat exchanger unit	Outlet pipe	mm	∳19.1(E	Brazing)	∳19.1(B	razingx2)				

Note: Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

**URU IV** HEAT RECOVERY HOT WATER SYSTEM

VRV IV Heat Recovery Hot Water System

## Outdoor Units

## Space Saving Type

MODEL			RWHQ26TSYM	RWHQ28TSYM	RWHQ30TSYM	RWHQ32TSYM	RWHQ34TSYM	RWHQ36TSYM		
			RWHQ8TYM	RWHQ12TYM		RWHQ12TYM		RWHQ18TYM		
Combination	units		RWHQ18TYM	RWHQ16TYM	RWHQ18TYM	RWHQ20TYM	RWHQ18TYM	RWHQ18TYM		
					—	—	_	—		
Power supply				3-phase 4-	wire system, 3	380–415/380 V	/, 50/60 Hz			
		kcal/h	62,300	67,500	71,800	77,000	81,700	86,000		
Cooling capa	acity	Btu/h	247,000	268,000	285,000	305,000	324,000	341,000		
		kW	72.4	78.5	83.5	89.5	95.0	100		
Power consu	Imption	kW	20.4	21.8	24.2	26.8	28.2	30.6		
Capacity cor	ntrol	%	7-100	6-100	6-100	5-100	5-100	5-100		
Casing colou	ır				lvory white	e (5Y7.5/1)				
	Туре		Hermetically Sealed Scroll Type							
Compressor	Motor output	kW	(3.4X1)+(4.4X1)+ (4.0X1)	(5.2X1)+(3.6X1)+ (3.7X1)	(5.2X1)+(4.4X1)+ (4.0X1)	(5.2X1)+(4.6X1)+ (5.5X1)	(3.6X1)+(3.7X1)+ (4.4X1)+(4.0X1)	(4.4X1)+(4.0X1)+ (4.4X1)+(4.0X1)		
Airflow rate		m³/min	157+233	178+233	178+233	178+268	233+233	233+233		
Dimensions (	(H×W×D)	mm	(1,657×930×765)+ (1,657×1,240×765)	(1,657X930X765)+ (1,657X1,240X765)	(1,657X930X765)+ (1,657X1,240X765)	(1,657X930X765)+ (1,657X1,240X765)	(1,657X1,240X765)+ (1,657X1,240X765)	(1,657X1,240X765)+ (1,657X1,240X765)		
Machine wei	ght	kg	185+285	200+285	200+285	200+320	285+285	285+285		
Sound level		dB(A)	63	63	64	66	65	65		
Operation ra	nge	°CDB			15 to	o 49	1	1		
	Туре				R-4	10A				
Refrigerant	Charge	kg	6.4+10.5	6.8+10.4	6.8+10.5	6.8+11.8	10.4+10.5	10.5+10.5		
Piping	Liquid	mm	∳19.1 (Brazing)			$\phi$ 19.1 (Brazing)	∳19.1 (Brazing)	∳19.1 (Brazing)		
connections (Indoor unit)	Gas	mm	∳34.9 (Brazing)	$\phi$ 34.9 (Brazing)		$\phi$ 34.9 (Brazing)	∳34.9 (Brazing)	<i> </i>		
Piping connections	connections				∳19.1(Br	azingx2)				
(Heat exchanger unit	Outlet pipe	mm			∳19.1(Br	azingx2)				

Note: Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

		4								
RWHQ38TSYM	RWHQ40TSYM	RWHQ42TSYM	RWHQ44TSYM	RWHQ46TSYM	RWHQ48TSYM	RWHQ50TSYM				
RWHQ18TYM	RWHQ20TYM	RWHQ12TYM	RWHQ12TYM	RWHQ12TYM	RWHQ12TYM	RWHQ12TYM				
RWHQ20TYM	RWHQ20TYM	RWHQ12TYM	RWHQ12TYM	RWHQ16TYM	RWHQ18TYM	RWHQ18TYM				
_		RWHQ18TYM	RWHQ20TYM	RWHQ18TYM	RWHQ18TYM	RWHQ20TYM				
3-phase 4-wire system, 380–415/380 V, 50/60 Hz										
91,200	96,300	101,000	106,000	111,000	115,000	120,000				
362,000	382,000	399,000	420,000	440,000	457,000	478,000				
106	112	117	123	129	134	140				
33.2	35.8	33.2	35.8	37.1	39.5	42.1				
4-100	4-100	4-100	4-100	4-100	4-100	3-100				
		lv	ory white (5Y7.5/	1)						
		Hermet	ically Sealed Scr	oll Type						
(4.4X1)+(4.0X1)+ (4.6X1)+(5.5X1)	(4.6X1)+(5.5X1)+ (4.6X1)+(5.5X1)	(5.2X1)+(5.2X1)+ (4.4X1)+(4.0X1)	(5.2X1)+(5.2X1)+ (4.6X1)+(5.5X1)	(5.2X1)+(3.6X1)+ (3.7X1)+(4.4X1)+ (4.0X1)	(5.2X1)+(4.4X1)+ (4.0X1)+(4.4X1)+ (4.0X1)	(5.2X1)+(4.4X1)+ (4.0X1)+(4.6X1)+ (5.5X1)				
233+268	268+268	178+178+233	178+178+268	178+233+233	178+233+233	178+233+268				
(1,657×1,240×765)+ (1,657×1,240×765)	(1,657x1,240x765)+ (1,657x1,240x765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×930×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×1,240×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×1,240×765)+ (1,657×1,240×765)	(1,657×930×765)+ (1,657×1,240×765)+ (1,657×1,240×765)				
285+320	320+320	200+200+285	200+200+320	200+285+285	200+285+285	200+285+320				
67	68	65	67	66	66	67				
			15 to 49							
			R-410A							
10.5+11.8	11.8+11.8	6.8+6.8+10.5	6.8+6.8+11.8	6.8+10.4+10.5	6.8+10.5+10.5	6.8+10.5+11.8				
∮19.1 (Brazing)	∳19.1 (Brazing)	∳19.1 (Brazing)	∳19.1 (Brazing)	∳19.1 (Brazing)	∳19.1 (Brazing)	$\phi$ 19.1 (Brazing)				
<pre></pre>	∳41.3 (Brazing)	∕¢41.3 (Brazing)	∕¢41.3 (Brazing)	∕¢41.3 (Brazing)	∕¢41.3 (Brazing)	$\phi$ 41.3 (Brazing)				
¢19.1(B	razingX2)			¢19.1(BrazingX3)	)					
∳19.1(B	razingx2)			¢19.1(Brazingx3)	)					

**VRV** IV HEAT RECOVERY HOT WATER SYSTEM





## Serpentine Heat Exchanger Unit (HWHQ30A)

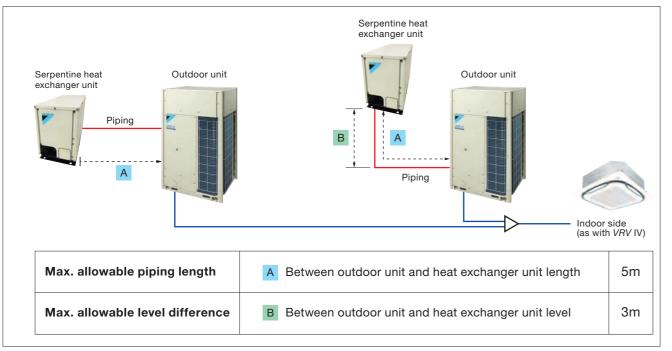
				Sinę	gle Heat E	xchanger	Unit			
New Model Name ( RWHQ-TYM, HWHQ30A )	1	RWHQ6TYM +HWHQ30A	RWHQ8TYM +HWHQ30A	RWHQ10TYM +HWHQ30A	RWHQ12TYM +HWHQ30A	RWHQ14TYM +HWHQ30A	RWHQ16TYM +HWHQ30A	RWHQ18TYM +HWHQ30A	RWHQ20TYM +HWHQ30A	
Rated inlet temperature	°C	40								
Rated water flow	L/min				1	0				
Range of inlet temperature	°C				20	-65				
Range of water flow	L/min				5-	20				
Rated Hot-water capacity *1	kW	3.2	3.3	3.3	3.5	3.7	4.0	4.2	4.4	
Machine weight	kg	27								
Diameter of Refrigerant pipe (Gas)	mm				φ19.1	(Braze)				
Diameter of Refrigerant pipe (Liquid)	mm				φ19.1	(Braze)				
Diameter of water pipe (Inlet)	mm				φ25.4 (	Screw)				
Diameter of water pipe (Outlet)	mm				φ25.4 (	Screw)				
Piping length (max)	m				2	(5)				
Design pressure (Water side)	MPa				0	.5				
Loss of Head *2	m	0.2								
Casing colour		Ivory white (5Y7.5/1)								
Dimensions (H×W×D)	mm				446 × 30	06 × 765				

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

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

\*2: Water flow 10L/min.

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



				Dou	ble Heat E	xchanger	Unit		
New Model Name ( RWHQ-TYM, HWHQ30A )		RWHQ6TYM +HWHQ30Ax2	RWHQ8TYM +HWHQ30Ax2	RWHQ10TYM +HWHQ30Ax2	RWHQ12TYM +HWHQ30Ax2	RWHQ14TYM +HWHQ30Ax2	RWHQ16TYM +HWHQ30Ax2	RWHQ18TYM +HWHQ30Ax2	
Rated inlet temperature	°C				4	0	1		
Rated water flow	L/min				20 (1	0 × 2)			
Range of inlet temperature	°C				20	-65			
Range of water flow	L/min		10-40 (5-20 × 2)						
Rated Hot-water capacity *1	kW	5.4	5.6	5.6	5.9	6.2	6.8	7.1	7.4
Machine weight	kg				54 (2	7 × 2)		ł	ł
Diameter of Refrigerant pipe (Gas)	mm				φ19.1 (B	raze) × 2			
Diameter of Refrigerant pipe (Liquid)	mm				φ19.1 (B	raze) × 2			
Diameter of water pipe (Inlet)	mm				φ25.4 (Se	crew) × 2			
Diameter of water pipe (Outlet)	mm				φ25.4 (Se	crew) × 2			
Piping length (max)	m				2	(5)			
Design pressure (Water side)	MPa				0	.5			
Loss of Head *2	m	0.2							
Casing colour					Ivory white	e (5Y7.5/1)			
Dimensions (H×W×D)	mm			(446 × 3	06 × 765) -	+ (446 × 30	)6 × 765)		

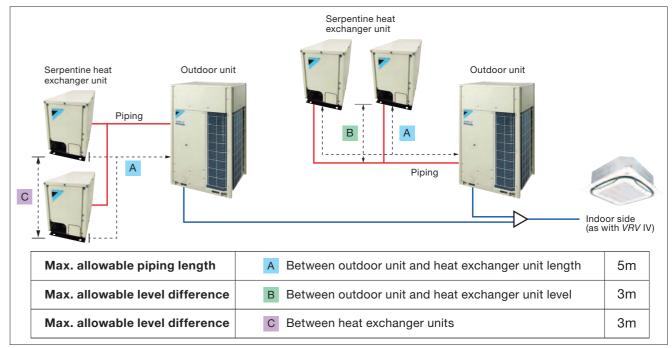
Notes: It is necessary to satisfy the water standard of Daikin for the water that is used. In the case that the water standard is not satisfied, special measures are required. Please contact your local sales office for details.

\*1: [Cooling ] Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Inlet water temperature 40°C, Water flow 10L/min,

Indoor load 100%, Outdoor-Heat Exchanger Unit 2m.

\*2: Water flow 10L/min.

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





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) Type

#### FXFQ-LUV1



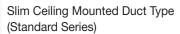
360 airflow improves temperature distribution and offers a comfortable living environment

**Ceiling Mounted Cassette** (Double Flow) Type



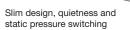


Thin, lightweight, and easy to install in narrow ceiling spaces





FXDQ-NBVE(T)



Middle Static Pressure Ceiling Mounted Duct Type



Middle external static pressure and slim design allow flexible installations



Processing Unit



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



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

Ceiling Mounted Cassette

Ceiling Mounted Cassette (Compact Multi Flow) Type



Quiet, compact, and designed for user comfort

Ceiling Mounted Cassette Corner Type





Slim design for flexible installation

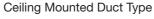
Slim Ceiling Mounted Duct Type (Compact Series)





Slim and compact design for easy and flexible installation









High external static pressure allows flexible installations





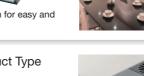
This slim and stylish indoor unit achieves optimum air distribution, and can be installed without the need for ceiling cavity





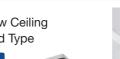




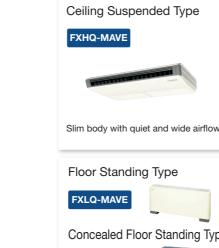












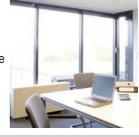




Suitable for perimeter zone air

conditioning

spaces

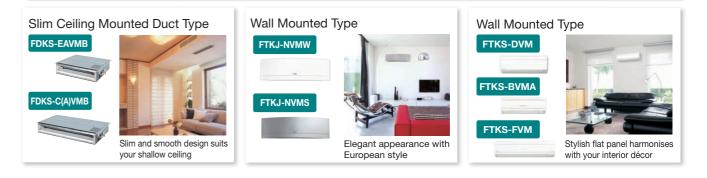


Clean Room	Air Conditione
FXBQ-PVE	
	a a fe a
FXBPQ-PVE	

Suitable for hospitals and other clean



**Residential indoor units with connection to BP units** 



## **Air Treatment Equipment**

Heat Reclaim Ventilator with DX-Coil and Humidifier

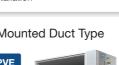
VKM-GA(M)



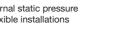




















Large airfiow type for large spaces Flexible interior design for each tena

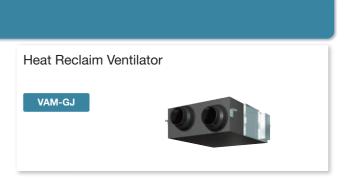
Air Handling Unit

Wall Mounted Type



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



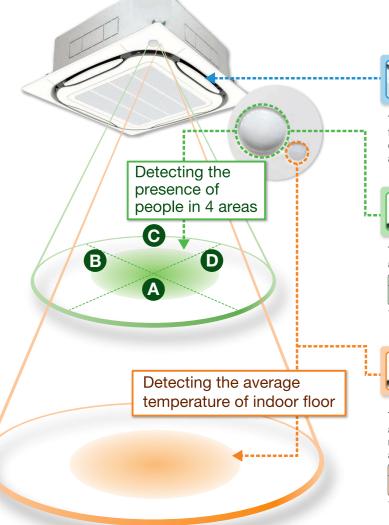




## Ceiling Mounted Cassette (Round Flow with Sensing) Type

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





## **Individual airflow** direction control

Thanks to the individual airflow direction control function, airflow direction can be individually adjusted for each air discharge outlet to prevent uncomfortable drafts and to deliver optimal air distribution.



The sensor detects human presence and adjusts the airflow direction automatically to prevent drafts.

Ceiling height	2.7m	3.5m	4.0m
Detection range (diameter)*1	approx. 8.5m	approx. 11.5m	approx. 13.5m
*1. The infrared presence sensor	detects 80	) cm above	e the floor.



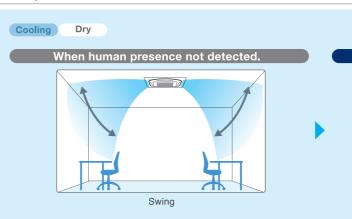
The sensor detects the floor temperature and automatically adjusts operation of the indoor unit to reduce the temperature difference between the ceiling and the floor.

Ceiling height	2.7m	3.5m	4.0m
Detection range (diameter)*2	approx. 11m	approx. 14m	approx. 16m
*2 The infrared floor sensor dete	ects at the	floor surfac	<u>`</u> e

The infrared floor sensor detects at the floor su

#### Sensing function

#### Draft prevention function (default: OFF) \*1\*2



- With the Auto airflow direction mode, flaps are controlled to deliver optimal air distribution for both cooling and heating operations when the room is empty.
- When a person is not detected for 5 minutes, the unit automatically returns to controlling the flaps for an unoccupied room.

\*1. Airflow direction shoud be set to Auto. \*2. Draft prevention function is OFF in the initial setting. It can be set ON using the remote controller.

#### Comfort and Energy saving preventing over Cooling \*1\*2

Cooling Floor temperature is detected, preventing the over cooling. Without sensing function 30°C near cei Room temperature is detected as 30°C. 20°C near floo Area around feet gets too cold because air conditioner continues until the temperature near the ceiling reaches the set temperature.

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

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

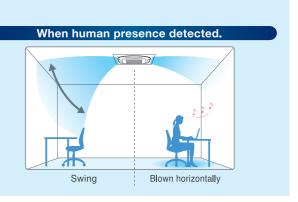
When there is a large difference between the ceiling and floor temperatures, the airflow rate is automatically increased. When the difference becomes small, the airflow rate is automatically reduced.

\*1. Both airflow direction and airflow rate shoud be set to Auto. \*2. Draft prevention function is set OFF in the initial setting.

## VRV Indoor Units

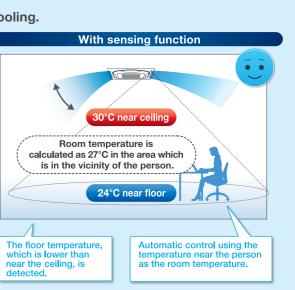
## FXFQ-S

#### Auto airflow direction mode



#### • When a person is detected, drafts are prevented by making the flap horizontal.



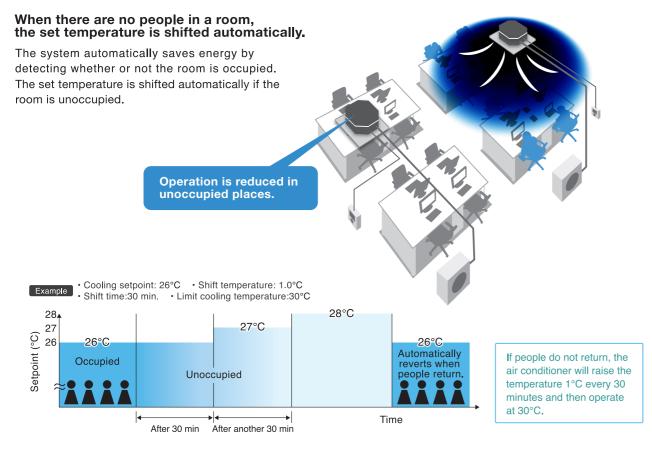




## Ceiling Mounted Cassette (Round Flow with Sensing) Type

#### Sensing sensor mode\*1\*2





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 the room is empty, the system stops automatically.\*3

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.

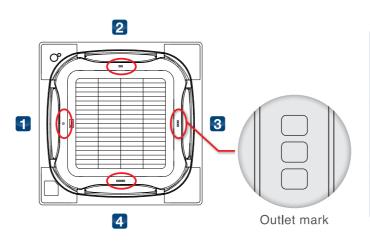
\*1. These functions are not available when using the group control system.

\*2. User can set these functions with remote controller. \*3. Please note that upon re-entering the room, air conditioner will not switch on automatically.

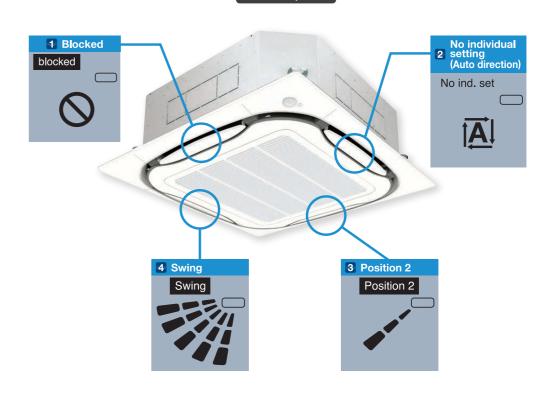
#### Individual airflow direction control

#### Individual airflow setting

Airflow direction of each of the four air outlets can be controlled individually. (Positions 0 to 4, Swing, Blocked, and No individual setting are selectable.)







## VRV Indoor Units



Individual s	setting list	
Unit1		
Outletmark	Air direc.	Indiv.
	blocked	ON
	Auto	OFF
	Position 2	ON
	Swing	ON
<b>€</b> □Return		\$



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

#### Airflow block function\*1

Total comfort by individual airflow direction control and "airflow block function"

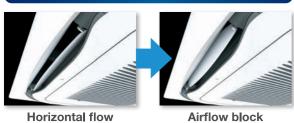
The system automatically saves energy by detecting whether or not the room is occupied. The set temperature is shifted automatically if the room is unoccupied.

• Airflow block function prevents uncomfortable drafts by reducing air velocity.

It can be set using the BRC1E62 remote controller. There is no need for sealing material of air discharge outlet (option).

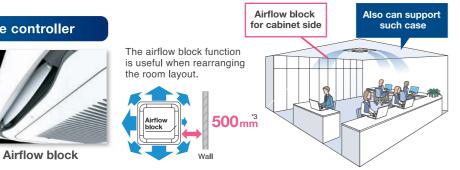
• This function only works when all-round flow is used. It cannot be used when sealing material is used in the air discharge outlet (option).







Airflow block function prevents uncomfortable drafts by reducing air velocity to approx. 0.3m/s.\*2



\*2. In case of FXFQ63S type (Data is based on Daikin research.) When using FXFQ80S type or higher, if the airflow rate is set to High, airflow will be on the high side. Under actual conditions, however, the airflow value may differ depending on the effect of surrounding conditions and the way in which the temperature was adjusted.

- \*3. A gap of 1500 mm is required if the air block function is not used.
- Indoor unit offers 360° airflow discharges air in all directions with more uniform temperature distribution.

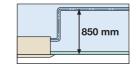


• Improved energy efficiency due to the new heat exchanger

63 80

100

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



• Selectable airflow rate: 3 steps and Auto. (Auto airflow rate is available when BRC1E62 is used.)

with smaller tubes, DC fan motor, and DC drain pump 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 125 on the usage environment, but should be 30/28.5/27 31/29/27 36/32/28 38/33/28 38/35/31 44/38/32 45/40/35 changed once every two to three years.)



## **Specifications**

1	MODEL		FXFQ25SVM	FXFQ32SVM	FXFQ40SVM	FXFQ50SVM	FXFQ63SVM	FXFQ80SVM	FXFQ100SVM	FXFQ125SVM			
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz										
		kcal/h	2,400	3,100	3,900	4,800	6,100	7,700	9,600	12,000			
Cooling capac	city	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			
Power consum	nption Cooling	kW	0.0	0.031 0.041 0.08				95	0.194	0.219			
Casing						Galvanised	l steel plate						
m		m³/min	12.5/11.5/10.0	12.5/11.5/10.0	14.5/13.0/11.0	22.0/17.5/13.5	23.5/18.5/13.5	23.5/19.5/15.0	33.0/26.0/19.0	34.5/27.5/21.0			
Airflow rate (	п/IVI/L)	cfm	441/406/353		512/459/388	777/618/477	830/653/477	830/688/530	1,165/918/671	1,218/971/741			
Sound level (I	H/M/L)	dB(A)	30/28	3.5/27	31/29/27	36/32/28	38/33/28	38/35/31	44/38/32	45/40/35			
Dimensions (I	H×W×D)	mm	246×840×840 288×840×840										
Machine weig	ht	kg		19			23		26				
	Liquid (Flare)			\$6	5.4		¢9.5						
Piping connections	Gas (Flare)	mm		¢1	2.7		¢15.9						
0011100010110	Drain				VP2	5 (External Dia	32/Internal Dia	, 25)					
	Model					BYCQ1	25B-W1						
Panel Colour						Fresh	white						
(Option)	Dimensions(H×W×D)	mm				50×95	0×950						
	Weight	kg				5	.5						

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



motor.

FXFQ-S

Sound leve (H/M/L)

•Low operation sound level

25/32 40 50

## FXFQ-S

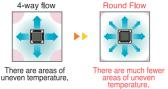


<sup>\*1.</sup> Works in one direction only

#### **Ceiling Mounted Cassette (Round Flow) Type FXFQ-LU**

## 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 FXFQ25-50LU models makes installation easy.
- Drain pump is equipped as a standard accessory with a 850 mm lift.

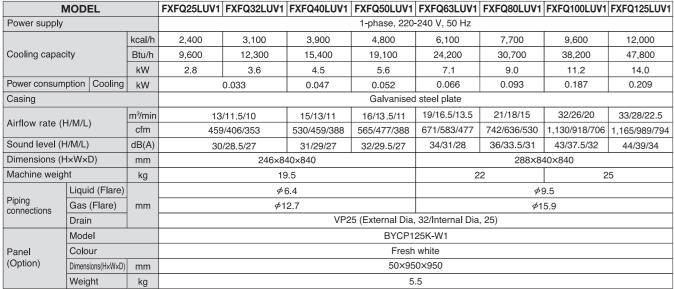


• A modern sophisticated decoration panel has been applied, with a panel surface that has been treated with a dirt-repellant coating.



- Control of the airflow rate can be selected from 3-step control.
- Low operation sound level

## **Specifications**



Note: Specifications are based on the following conditions:

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

Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. During actual operation, these values are normally somewhat higher as a result of ambient conditions



- 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 horizontal louvres prevent dew condensation. The 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.



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.

	NODEL		I AI GLOLOVI	I AI GOLLOVI	I AI GHOLOVI	I A GOULOVI	I AI GOOLOVI	I AI GOULOVI	I A GIOCEOVI					
ower supply						1-phase, 220-	-240 V, 50 Hz							
		kcal/h	2,400	3,100	3,900	4,800	6,100	7,700	9,600	12,000				
ooling capad	city	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				
ower consum	ption Cooling	kW		0.033		0.052	0.066	0.093	0.187	0.209				
asing						Galvanised	steel plate							
rflow rate (H/M/L)		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				
		cfm			530/459/388	565/477/388	671/583/477	742/636/530	1,130/918/706	1,165/989/794				
ound level (H	H/M/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				
imensions (H	H×W×D)	mm		246×84	40×840			288×84	40×840					
achine weig	ht	kg		19	9.5		22 25			5				
	Liquid (Flare)			¢	6.4		¢9.5							
ping nnections	Gas (Flare)	mm		¢1	2.7		¢15.9							
1110000113	Drain		VP25 (External Dia, 32/Internal Dia, 25)											
	Model			BYCP125K-W1										
anel Colour						Fresh	white							
Option)	Dimensions(H×W×D)	mm				50×95	0×950							
	Weight	kg				5	.5							
		/												

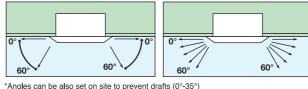
## Ceiling Mounted Cassette (Compact Multi Flow) Туре FXZQ-M

Quiet, compact, and designed for user comfort

#### Comfortable airflow

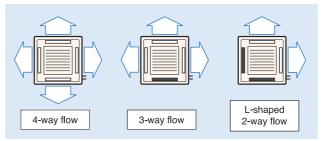
Wide discharge angle: 0° to 60°

 Auto swing Fixed angles: 5 levels



or soiling of the ceiling (25° 60°), other than standard setting (0° 60°)

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



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

## **Specifications**

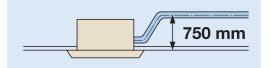
N	IODEL		FXZQ20MVE	FXZQ25MVE	FXZQ32MVE	FXZQ40MVE	FXZQ50MVE			
Power supply				1-phas	se, 220-240 V/220 V, 50	/60 Hz				
		kcal/h	1,900 2,400		3,100	3,900	4,800			
Cooling capacity		Btu/h	7,500 9,600		12,300	15,400	19,100			
			2.2	2.8	3.6	4.5	5.6			
Power consumption	Cooling	kW	0.0	73	0.076	0.089	0.115			
Casing	1				Galvanised steel plate	L	1			
Airflow rate (H/L)		m³/min	9/	7	9.5/7.5	11/8	14/10			
AIIIOW Tale (II/L)		cfm	318/	247	335/265	388/282	493/353			
Sound level (H/L)	230 V, 50 Hz- 240 V, 50 Hz	dB(A)	30/25-	32/26	32/26-34/28	36/28-37/29	41/33-42/35			
Dimensions (H×W	×D)	mm	286×575×575							
Machine weight		kg	18							
	Liquid (Flare)		\$ 6.4							
Piping connections	Gas (Flare)	mm			¢12.7					
Connections	Drain		VP20 (External Dia, 26/Internal Dia, 20)							
	Model		BYFQ60B3W1							
Panel Colour					White (6.5Y9.5/0.5)					
(Option)	Dimensions(H×W×D)	mm			55×700×700					
	Weight	kg			2.7					

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

## VRV Indoor Units



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



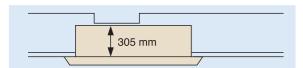


## Ceiling Mounted Cassette (Double Flow) Туре FXCQ-м

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

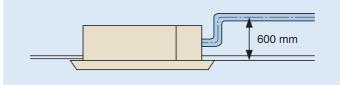


•The thin unit (only 305 mm high) can be installed in a ceiling space as narrow as 350 mm. All models feature a compact design with a depth of only 600 mm.



- (When a high-efficiency filter is attached, the unit's height is 400 mm.)
- Low operation sound level
- •Designed with higher airflow suitable for high ceiling application up to 3 metres.
- Providing 2 different settings of standard and ceiling soiling prevention, the auto swing mechanism realises even distribution of airflow and room temperature.

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

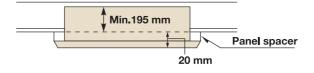


- •Two types of optional high-efficiency filter are available (65% and 95%, colourimetric method).
- •A long-life filter (maintenance free up to one year\*) is equipped as standard accessory. \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m3
- Major maintenance work can be performed by removing the panel. A flat-type suction grille and a detachable blade make cleaning easy.

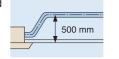
## **Ceiling Mounted Cassette Corner Type**

## Slim design for flexible installation

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



- Single-flow type allows effective air discharge from corner or from drop-ceiling.
- Drain pump is equipped as standard accessory with 500 mm lift.



- A long-life filter (maintenance free up to one year\*) is equipped as standard accessory.
- \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m3

## **Specifications**

	N	IODEL		FXCQ20MVE	FXCQ25MVE	FXCQ32MVE	FXCQ40MVE	FXCQ50MVE	FXCQ63MVE	FXCQ80MVE	FXCQ125MVE
Power supp	oly					1-phas	e, 220-240 V/2	20 V, 50/60 Hz			
			kcal/h	1,900	2,400	3,100	3,900	4,800	6,100	7,700	12,000
Cooling cap	pacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	30,700	47,800
			kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	14.0
Power consur	mption	Cooling	kW	0.077	0.092	0.092	0.130	0.130	0.161	0.209	0.256
Casing							Galvanised ste	el plate			
Airflow rate	、/IJ/I)		m³/min	7/5	9/6.5	9/6.5	12/9	12/9	16.5/13	26/21	33/25
Annow rate	; (⊓/∟)		cfm	247/177	318/230	318/230	424/318	424/318	582/459	918/741	1,165/883
Sound level	(1/1)	220 V	dB(A)	32/27	34/28	34/28	34/29	34/29	37/32	39/34	44/38
Sound level		240 V		34/29	36/30	36/30	37/32	37/32	39/34	41/36	46/40
Dimensions	s (H×W>	(D)	mm	305×775×600	305×775×600	305×775×600	305×990×600	305×990×600	305×1,175×600	305×1,665×600	305×1,665×600
Machine we	eight		kg	26.0	26.0	26.0	31.0	32.0	35.0	47.0	48.0
	Liquid	(Flare)		¢6.4	¢6.4	¢6.4	¢6.4	¢6.4	\$9.5 ¢	¢9.5	¢9.5
Piping connections	Gas (F	lare)	mm	¢12.7	¢12.7	¢12.7	¢12.7	¢12.7	¢15.9	¢15.9	¢15.9
connections	Drain					VP25 (E	xternal Dia, 32/	Internal Dia, 2	5)		
	Model			B	(BC32G-W1			BYBC50G-W1		BYBC63G-W1	BYBC125G-W1
Panel	Colour					White (10Y9	9/0.5)				
(Option)	Dimen	sions (H×W×D)	mm	53×1,030×680	53×1,030×680	53×1,030×680	53×1,245×680	53×1,245×680	53×1,430×680	53×1,920×680	53×1,920×680
	Weigh	t	kg	8.0	8.0	8.0	8.5	8.5	9.5	12.0	12.0

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

## **Specifications**

	MOD	DEL		FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE			
Power supply	,				1-phase, 220-240	V/220 V, 50/60 Hz				
			kcal/h	2,400	3,100	3,900	6,100			
Cooling capa	city		Btu/h	9,600	12,300	15,400	24,200			
kW			kW	2.8	3.6	4.5	7.1			
Power consump	tion Cooling		kW	0.066	0.066	0.076	0.105			
Casing					Galvanised	steel plate				
Airflow rate (H/L)			m³/min	11/9	11/9	13/10	18/15			
		cfm	388/318 388/318 459/353		459/353	635/530				
O a constal la const //	1/1.)	220 V		38/33	38/33	40/34	42/37			
Sound level (H	1/L)	240 V	dB(A)	40/35	40/35	42/36	44/39			
Dimensions (	H×W×D)		mm	215×1,110×710	215×1,110×710	215×1,110×710	215×1,310×710			
Machine weig	jht		kg	31	31	31	34			
	Liquid (	(Flare)		φ 6.4	<i>\phi</i> 6.4	φ 6.4	<i>\phi</i> 9.5			
Piping connections	Gas (Fl	are)	mm	φ 12.7	φ 12.7 φ 12.7		¢ 15.9			
connections	Drain			VP25 (External Dia, 32/Internal Dia, 25)						
	Model				BYK45FJW1		BYK71FJW1			
Panel Colour					White (1	0Y9/0.5)				
(Option)	Dimensio	ons (H×W×D)	mm	70×1,240×800	70×1,240×800	70×1,240×800	70×1,440×800			
	Weight		kg	8.5	8.5	8.5	9.5			

Note: Specifications are based on the following conditions:

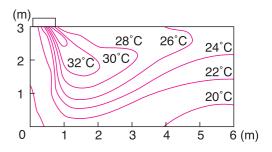
Specifications are based on the following conductors,
 Cooling: 10<sup>o</sup>Cording: 27<sup>o</sup>CDB, 91<sup>o</sup>CWB, Outdoor temp.: 35<sup>o</sup>CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
 Sound level: (FXKO-MA) 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.

## VRV Indoor Units

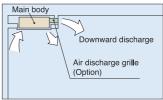
**FXKQ-MA** 

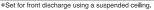


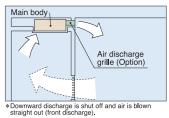
• Providing 3 different settings of standard, draft prevention and ceiling soiling prevention, the auto swing mechanism realises even distribution of airflow and room temperature.



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



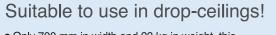




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#### Slim Ceiling Mounted Duct Type (Standard Series) FXDQ-PB / NB

## Slim design, quietness and static pressure switching



• 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 has been improved from 2-step to 3-step control.
- 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-PB models 15 Pa-44 Pa/factory set: 15 Pa for FXDQ-NB models

## **Specifications**

MODEL	with drain p	bump	FXDQ20PBVE	FXDQ25PBVE	FXDQ32PBVE	FXDQ40NBVE	FXDQ50NBVE	FXDQ63NBVE		
MODEL	without drai	n pump	FXDQ20PBVET	FXDQ25PBVET	FXDQ32PBVET	FXDQ40NBVET	FXDQ50NBVET	FXDQ63NBVET		
Power supply	· · ·			1-phase, 220-240 V/220 V, 50/60 Hz						
		kcal/h	1,900	2,400	3,100	3,900	4,800	6,100		
Cooling capacity		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200		
		kW	2.2	2.8	3.6	4.5	5.6	7.1		
Power consumption (FXDQ-PBVE) *1	Cooling	kW	0.086	0.086	0.089	0.160	0.165	0.181		
Power consumption (FXDQ-PBVET)*1	Cooling	kW	0.067	0.067	0.070	0.147	0.152	0.168		
Casing	1		Galvanised steel plate							
A:	1.0.1.0. \	m³/min	8.0/7.2/6.4	8.0/7.2/6.4	8.0/7.2/6.4	10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0		
Airflow rate (HF	1/H/L)	cfm	282/254/226	282/254/226	282/254/226	371/335/300	441/388/353	583/512/459		
External static pre	essure	Pa		30-10 <sup>*2</sup>			44-15 <sup>*2</sup>			
Sound level (HH/	'H/L)*1*3	dB(A)	28/2	6/23	28/26/24	30/28/26	33/30/27	33/31/29		
Dimensions (H×V	V×D)	mm	200×700×620	200×700×620	200×700×620	200×900×620	200×900×620	200×1,100×620		
Machine weight		kg	23.0	23.0	23.0	27.0	28.0	31.0		
	Liquid (Flare)		¢6.4	\$ 6.4	\$ 6.4	¢6.4	¢6.4	\$ 9.5		
Piping connections	Gas (Flare)	mm	¢12.7	¢12.7	¢12.7	¢12.7	¢12.7	¢15.9		
	Drain				VP20 (External Dia, 26/Internal Dia, 20)					

Notes: Specifications are based on the following conditions;

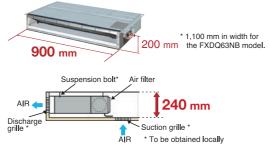
Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
 Sound level: Anechoic chamber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

During actual operation, these values are normally somewhat higher as a result of ambient conditions. \*1 : Values are based on the following conditions: FXDQ-PB: external static pressure of 10 Pa; FXDQ-NB: external static pressure is the two the two the mode controller. This pressure means "High static pressure - Standard". (Factory setting is 10 Pa for FXDQ-PB models and 15 Pa for FXDQ-NB 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).

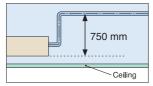


• Only 200 mm in height, this model can be installed in rooms with as little as 240 mm in height for the ceiling space between the drop-ceiling and ceiling slab.



•FXDQ-PB and FXDQ-NB models are available in two types to suit different installation conditions.

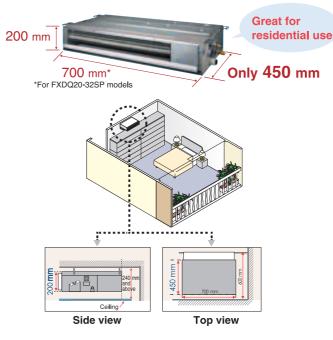
FXDQ-PB/NBVE: with a drain pump (750 mm lift) as a standard accessory FXDQ-PB/NBVET: without a drain pump



## Slim Ceiling Mounted Duct Type (Compact Series)

## Slim and compact design for easy and flexible installation

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



## **Specifications**

	MODEL		FXDQ20SPV1	FXDQ25SPV1	FXDQ32SPV1	FXDQ40SPV1	FXDQ50SPV1	FXDQ63SPV1	
Power supply			1-phase, 220-240 V, 50 Hz						
		kcal/h	1,900	2,400	3,100	3,900	4,800	6,100	
Cooling capacity Btu/h		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	
		kW	2.2	2.8	3.6	4.5	5.6	7.1	
Power consumpt	tion *1 Cooling	kW	0.072	0.075	0.078	0.180	0.180	0.196	
Casing				Galvanised steel plate					
Airflow rate (HH		m³/min	8.7/7.6/6.5	9.0/8.0/7.0	10.0/9.0/8.0	15.0/13.0/10.5		20.0/16.0/12.5	
AIMOW Tate (HH	1/F1/L)	cfm	307/268/229	318/282/247	353/318/282	530/459/371		706/565/441	
External static pr	essure	Pa	30-10 * <sup>2</sup>			50-20 * <sup>2</sup>		40-20 * <sup>2</sup>	
Sound level (HH	/H/L)*1*3	dB(A)	33/31/29 34/32/30		34/32/30	35/33/31		37/35/33	
Dimensions (H×	W×D)	mm		200×700×450	1	200×9	00×450	200×1,100×450	
Machine weight		kg		17		:	20	23	
	Liquid (Flare)		¢6.4					<i>∲</i> 9.5	
Piping connections	Gas (Flare)	mm				¢12.7		¢ 15.9	
001110010113	Drain	1	VP20 (External Dia,			, 26/Internal Dia, 20)			

Notes: Specifications are based on the following conditions;
 Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Capacity of indoor unit is only for reference: Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
 Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
 \*1 : Values are based on the following conditions: FXDQ20-32SP: external static pressure of 10 Pa; FXDQ40-63SP: external static pressure of 20 Pa.
 \*2 : External static pressure is changeable to set by the remote controller. This pressure means

\*2 : External static pressure is changeable to set by the remote controller. This pressure means "High static pressure - Standard". (Factorysetting is 10 Pa for FXDQ20-32SP models and 20 Pa for FXDQ40-63SP models.)

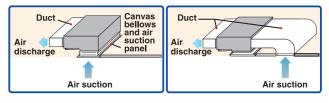
\*3 : The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB(A).

## VRV Indoor Units

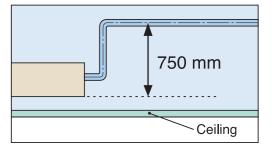
## **FXDQ-SP**



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



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



door Unit Lineup
L



## Middle Static Pressure Ceiling Mounted Duct Type

Middle external static pressure and slim design allow flexible installations

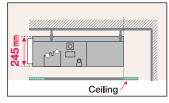


## Installation flexibility

#### Slim design

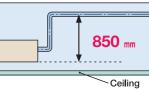
• With a height of only 245 mm, installation is possible even in buildings with narrow ceiling spaces.





#### Standard DC drain pump

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

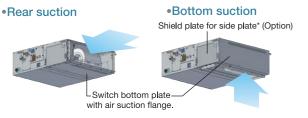


#### Bottom suction possible

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



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



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

## **Design flexibility**

#### Adjustable external static pressure

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



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

\*30 Pa-150 Pa for FXSQ20-40PVE 50 Pa-150 Pa for FXSQ50-125PVE 50 Pa-140 Pa for FXSQ140PVE

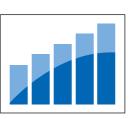
## Comfort

#### 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 BRC1E62



#### Low operation sound level

							(dB(A))
FXSQ-PVE	20/25	32	40		50		63
Sound level (H/M/L)	33/30/28	34/32/30	4/32/30 36/33		34/32/2	29	36/32/29
FXSQ-PVE	80	100	)		125		140
Sound level (H/M/L)	37.5/34/30	39/35/32		42/38.5/35		43/40/36	



## **Easy installation**

#### Airflow rate auto adjustment function

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

## **Specifications**

	MODEL		FXSQ20PVE	FXSQ25PVE	FXSQ32PVE	FXSQ40PVE	FXSQ50PVE		
Power supp	bly			1-phase,	220-240 V/220 V,	50/60 Hz			
		kcal/h	1,900	2,400	3,100	3,900	4,800		
Cooling cap	pacity	Btu/h	7,500	9,600	12,300	15,400	19,100		
		kW	2.2	2.8	3.6	4.5	5.6		
Power consur	nption Cooling	kW	0.058 *1	0.058 *1	0.066 *1	0.101*1	0.075*1		
Casing				G	alvanised steel pla	te			
Airflow rate		m³/min	9/7.5/6.5	9/7.5/6.5	9.5/8/7	15/12.5/10.5	17/14.5/11.5		
AIMOW Fale	( ( ( / / / / / L )	cfm	318/265/230	318/265/230	335/282/247	530/441/371	600/512/406		
External sta	tic pressure	Ра		30-15	0 (50)*2		50-150 (50)* <sup>2</sup>		
Sound level	(H/M/L)	dB(A)	33/3	0/28	34/32/30	36/33/30	34/32/29		
Dimensions	s (H×W×D)	mm		245X550X800		245X700X800	245×1,000×800		
Machine we	eight	kg		25		27	35		
	Liquid (Flare)		¢ 6.4						
Piping connections	Gas (Flare)	mm		φ 12.7					
CONNECTIONS	Drain			VP25 (Ext	ernal Dia, 32/Intern	al Dia, 25)			
	MODEL		FXSQ63PVE	FXSQ80PVE	FXSQ100PVE	FXSQ125PVE	FXSQ140PVE		
Power supp	oly		1-phase, 220-240 V/220 V, 50/60 Hz						
		kcal/h	6,100	7,700	9,600	12,000	13,800		
Cooling cap	Oneline energity		24,200	20 700	38,200	47,800	= 1 000		
		Btu/h	24,200	30,700	30,200	+7,000	54,600		
	bacity	kW	7.1	9.0	11.2	14.0	54,600 16.0		
Power consu	mption Cooling		-		-	,			
Power consul Casing		kW	7.1	9.0 0.126 *1	11.2	14.0 0.206 *1	16.0		
Casing	mption Cooling	kW	7.1	9.0 0.126 *1	11.2 0.151*1	14.0 0.206 *1	16.0		
	mption Cooling	kW kW	7.1 0.106 *1	9.0 0.126 *1 G	11.2 0.151 *1 alvanised steel pla	14.0 0.206 *1 te	16.0 0.222 *1		
Casing Airflow rate	mption Cooling	kW kW m³/min	7.1 0.106 *1 21/17.5/14.5	9.0 0.126 *1 G 23/19.5/16 812/688/565	11.2 0.151*1 alvanised steel pla 32/27/22.5	14.0 0.206 *1 te 37/31.5/26	16.0 0.222*1 39/33.5/28		
Casing Airflow rate	mption Cooling	kW kW m³/min cfm	7.1 0.106 *1 21/17.5/14.5	9.0 0.126 *1 G 23/19.5/16 812/688/565	11.2 0.151*1 alvanised steel pla 32/27/22.5 1,130/953/794	14.0 0.206 *1 te 37/31.5/26	16.0 0.222*1 39/33.5/28 1,377/1,183/988		
Casing Airflow rate External sta	mption Cooling e (H/M/L) atic pressure (H/M/L)	kW kW m³/min cfm Pa	7.1 0.106 *1 21/17.5/14.5 741/618/512 36/32/29	9.0 0.126 *1 G 23/19.5/16 812/688/565 50-15	11.2 0.151*1 alvanised steel pla 32/27/22.5 1,130/953/794 i0 (50)* <sup>2</sup> 39/35/32	14.0 0.206 *1 te 37/31.5/26 1,306/1,112/918	16.0 0.222 *1 39/33.5/28 1,377/1,183/988 50-140 (50)* <sup>2</sup>		
Casing Airflow rate External sta Sound level	mption Cooling (H/M/L) atic pressure (H/M/L) s (H×W×D)	kW kW m³/min cfm Pa dB(A)	7.1 0.106 *1 21/17.5/14.5 741/618/512 36/32/29	9.0 0.126 *1 G 23/19.5/16 812/688/565 50-15 37.5/34/30	11.2 0.151*1 alvanised steel pla 32/27/22.5 1,130/953/794 i0 (50)* <sup>2</sup> 39/35/32	14.0 0.206 *1 te 37/31.5/26 1,306/1,112/918 42/38.5/35	16.0 0.222*1 39/33.5/28 1,377/1,183/988 50-140 (50)* <sup>2</sup> 43/40/36		
Casing Airflow rate External sta Sound level Dimensions Machine we	mption Cooling (H/M/L) atic pressure (H/M/L) s (H×W×D)	kW kW m³/min cfm Pa dB(A) mm	7.1 0.106 *1 21/17.5/14.5 741/618/512 36/32/29 245×1,0	9.0 0.126 *1 G 23/19.5/16 812/688/565 50-15 37.5/34/30 000×800	11.2 0.151*1 alvanised steel pla 32/27/22.5 1,130/953/794 i0 (50)* <sup>2</sup> 39/35/32 245×1,4	14.0 0.206 *1 te 37/31.5/26 1,306/1,112/918 42/38.5/35 400×800	16.0 0.222*1 39/33.5/28 1,377/1,183/988 50-140 (50)*2 43/40/36 245×1,550×800		
Casing Airflow rate External sta Sound level Dimensions	mption Cooling (H/M/L) atic pressure (H/M/L) s (H×W×D) eight Liquid (Flare) Coo (Flare)	kW kW m³/min cfm Pa dB(A) mm	7.1 0.106 *1 21/17.5/14.5 741/618/512 36/32/29 245×1,0	9.0 0.126 *1 G 23/19.5/16 812/688/565 50-15 37.5/34/30 000×800	11.2 0.151*1 alvanised steel pla 32/27/22.5 1,130/953/794 i0 (50)* <sup>2</sup> 39/35/32 245×1,4 46	14.0 0.206 *1 te 37/31.5/26 1,306/1,112/918 42/38.5/35 400×800	16.0 0.222*1 39/33.5/28 1,377/1,183/988 50-140 (50)*2 43/40/36 245×1,550×800		

## VRV Indoor Units

## **FXSQ-P**

## **Easy maintenance**

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



Separate drain pipe and inspection opening

Drain pan maintenance check hole

- The drain pan can be detached for easy cleaning. 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.
- 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.)



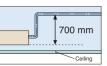


- Notes: Specifications are based on the following conditions: ·Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp : 35°CDB, Equivalent piping
  - length: 7.5 m, Level difference: 0 m. Capacity of indoor unit is only for reference. Actual
  - capacity of indoor unit is based on the total capacity index. (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 value are based on conditions of rated external static pressure.
  - ★2: External static pressure can be modified using a remote controller that offers thirteen (FXSQ20-40P), eleven (FXSQ50-125P) or ten (FXSQ140P) levels of control. These values indicate the lowest and highest possible static pressures. The rated static pressure is 50 Pa.

## **Ceiling Mounted Duct Type**

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

- A DC fan motor increases the external static pressure capacity range to include middle to high static pressures, thus increasing design flexibility. 30 Pa-100 Pa for FXMQ20P-32P 30 Pa-160 Pa for FXMQ40P
- 50 Pa-200 Pa for FXMQ50P-125P 50 Pa-140 Pa for FXMQ140P
- •All models are only 300 mm in height, an improvement from the 390 mm height of the
- conventional models. The weight of the FXMQ40P has been reduced from 44 kg to 28 kg.
- •Drain pump is equipped as standard accessory with 700 mm lift.



- •Control of the airflow rate has been improved from 2-step to 3-step control.
- •Low operation sound level

#### Energy-efficient

• The adopted DC fan motor is much more efficient than the conventional AC motor, yielding an approximate 20% decrease in energy consumption (FXMQ125P).

#### Improved ease of installation

•Airflow rate can be controlled using a remote controller during test operation. With the conventional model, the airflow rate was controlled from the PC board. It is automatically adjusted to the range between approximately ±10% of the rated HH tap airflow for FXMQ20P-125P.





- Improved ease of maintenance
- •The drain pan can be detached for easy cleaning. 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.
- •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

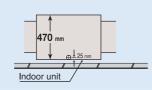


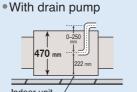
should be changed once every two to three years.)



•Built-in Drain Pump (Option) Housing the drain pump inside the unit reduces the space required for installation.

Without drain pump





#### Indoor unit

## **Specifications**

	MODEL		FXMQ20PVE	FXMQ25PVE	FXMQ32PVE	FXMQ40PVE	FXMQ50PVE	
Power supply				1-phase,	220-240 V/220 V, 50/60	Hz		
		kcal/h	1,900	2,400	3,100	3,900	4,800	
Cooling capaci	ty	Btu/h	7,500	9,600	12,300	15,400	19,100	
		kW	2.2	2.2 2.8 3.6		4.5	5.6	
Power consumption	on Cooling	kW	0.056 *1	0.056 *1	0.060 *1	0.151*1	0.128*1	
Casing					Galvanised steel plate			
Airflow rate (H		m³/min	9/7.5/6.5	9/7.5/6.5	9.5/8/7	16/13/11	18/16.5/15	
AIMOW Tate (H	n/n/L)	cfm	318/265/230	318/265/230	335/282/247	565/459/388	635/582/530	
External static	oressure	Pa	30-100 (50)* <sup>2</sup>	30-100 (50)* <sup>2</sup>	30-100 (50)* <sup>2</sup>	30-160 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	
Sound level (HF	I/H/L)	dB(A)	33/31/29	33/31/29	34/32/30	39/37/35	41/39/37	
Dimensions (H	×W×D)	mm	300X550X700	300X550X700	300X550X700	300X700X700	300×1,000×700	
Machine weigh	t	kg	25	25	25	28	36	
	Liquid (Flare)		\$ 6.4	<i>ϕ</i> 6.4	\$ 6.4	<i>¢</i> 6.4	<i>ф</i> 6.4	
Piping connections	Gas (Flare)	mm	¢12.7	¢12.7	¢ 12.7	¢ 12.7	¢12.7	
	Drain			VP25 (	External Dia, 32/Internal	Dia, 25)		
	MODEL		FXMQ63PVE	FXMQ80PVE	FXMQ100PVE	FXMQ125PVE	FXMQ140PVI	
Power supply			1-phase, 220-240 V/220 V, 50/60 Hz					
		kcal/h	6,100	7,700	9,600	12,000	13,800	
Cooling capaci	ty	Btu/h	24,200	30,700	38,200	47,800	54,600	
		kW	7.1	9.0	11.2	14.0	16.0	
Power consumption	on Cooling	kW	0.138 *1	0.185 *1	0.215*1	0.284 *1	0.405 *1	
Casing		1			Galvanised steel plate			
Airflow roto (II		m³/min	19.5/17.5/16	25/22.5/20	32/27/23	39/33/28	46/39/32	
Airflow rate (H	H/H/L)	cfm	688/618/565	883/794/706	1,130/953/812	1,377/1,165/988	1,624/1,377/1,13	
External static	oressure	Pa	50-200 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	50-200 (100)* <sup>2</sup>	50-140 (100)*2	
Sound level (HF	I/H/L)	dB(A)	42/40/38	43/41/39	43/41/39	44/42/40	46/45/43	
Dimensions (H	×W×D)	mm	300×1,000×700	300×1,000×700	300×1,400×700	300×1,400×700	300×1,400×700	
Machine weigh	t	kg	36	36	46	46	47	
	Liquid (Flare)		<i>\$</i> 9.5	\$ 9.5	¢ 9.5	¢ 9.5	¢ 9.5	
Piping connections	Gas (Flare)	mm	¢15.9	<i>¢</i> 15.9	¢ 15.9	¢ 15.9	¢ 15.9	
connections	Drain		VP25 (External Dia, 32/Internal Dia, 25)					

- Čooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m. - Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.) - Sound level: Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. During actual operation, these values are normally somewhat higher as a result of ambient conditions. \* 1: Power consumption values are based on conditions of rated external static pressure. \*2: External static pressure can be modified using a remote controller that offers seven (FXMQ20-32P), thirteen (FXMQ40P), fourteen (FXMQ50-125P) or ten (FXMQ140P) levels of control. These values indicate the lowest and highest possible static pressures. The standard static pressure is 50 Pa for FXMQ20-32P and 100 Pa for FXMQ40-140P.

	MODEL		FXMQ200MAVE	FXMQ250MAVE				
Power supp	ly		1-phase, 220-240	V/220 V, 50/60 Hz				
		kcal/h	19,300	24,100				
Cooling cap	acity	Btu/h	76,400	95,500				
		kW	22.4	28.0				
Power consum	nption Cooling	kW	1.294*1	1.465 *1				
Casing			Galvanised	Galvanised steel plate				
Airflow rate	(4/1)	m³/min	58/50	72/62				
Annow rate	(11/2)	cfm	2,047/1,765	2,542/2,189				
External stat	tic pressure	Ра	132-221 <sup>*2</sup>	191-270 * <sup>2</sup>				
0	220 V		48/45	48/45				
Sound level	(H/L) 240 V	dB(A)	49/46	49/46				
Dimensions	(H×W×D)	mm	470×1,380×1,100	470×1,380×1,100				
Machine we	ight	kg	137	137				
	Liquid (Flare)		\$ 9.5	\$ 9.5				
Piping connections	Gas (Brazing)	mm	\$ 19.1	φ 22.2				
	Drain		PS1B					

Specifications are based on the tollowing conditions;
 Cooling: Indoor temp: 27°CDB, 9°CUB, 0utdoor temp: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Capacity of indoor temp: 27°CDB, 9°CUB, 0utdoor temp: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.)
 Sound level: (FXMQ-MA) Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre. During actual operation, these values are normally somewhat higher as a result of ambient conditions
 \*1: Power consumption values are based on conditions of standard external static pressure.
 \*2: External static pressure is changeable to change over the connectors inside electrical box, this pressure means "Standard-High static pressure".

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

## VRV Indoor Units

## FXMQ-P / MA

## 4-way Flow Ceiling Suspended Type

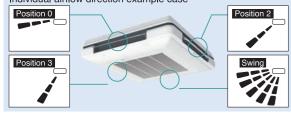
**FXUQ-A** 

## **Ceiling Suspended Type**

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

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

Individual airflow direction example case



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



## **Specifications**



- 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.
- 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.)

	MODEL		FXUQ71AVEB	FXUQ100AVEB			
Power supply			1-phase, 220-240 V/220-230 V, 50/60 Hz				
kcal/h			6,900	9,600			
Cooling capacity Btu/		Btu/h	27,300	38,200			
			8.0	11.2			
Power consumpt	ion Cooling	kW	0.090	0.200			
Casing			Fresh white				
Airflow rate (H		m³/min	22.5/19.5/16	31/26/21			
Annow rate (i	(//V//L)	cfm	794/688/565	1,094/918/741			
Sound level (H	1/M/L)	dB(A)	40/38/36	47/44/40			
Dimensions (H	l×W×D)	mm	198×95	50×950			
Machine weigl	ht	kg	26	27			
	Liquid (Flare)		<i>φ</i> 9	.5			
Piping connections	Gas (Flare)	mm	¢1:	\$15.9			
Drain		1	VP20 (External Dia, 26/Internal Dia, 20)				

Notes: Specifications are based on the following conditions; • Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, 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: (FXUQ-A) Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward.

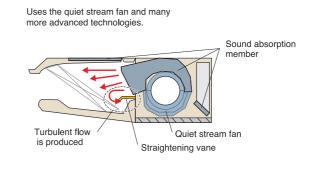
During actual operation, these values are normally somewhat higher as a result of ambient conditions

\*1: Power consumption values are based on conditions of standard external static pressure

\*2: External static pressure is changeable to change over the connectors inside electrical box, this pressure means "Standard-High static pressure"

## Slim body with quiet and wide airflow

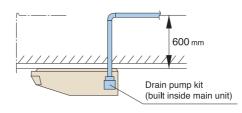
#### Adoption of QUIET STREAM FAN



Low operation sound level

#### Installation is easy

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



## **Specifications**

	MODEL		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE			
Power supp	ly			1-phase, 220-240 V/220 V, 50/60 Hz				
		kcal/h	3,100	6,100	9,600			
Cooling cap	acity	Btu/h	12,300	24,200	38,200			
		kW	3.6	7.1	11.2			
Power consum	nption Cooling	kW	0.111	0.115	0.135			
Casing			White (10Y9/0.5)					
Airflow rate		m³/min	12/10	17.5/14	25/19.5			
AIIIIOW Tale	(П/С)	cfm	424/353	618/494	883/688			
Sound level (	(H/L)	dB(A)	36/31	39/34	45/37			
Dimensions	(H×W×D)	mm	195×960×680	195×1,160×680	195×1,400×680			
Machine we	ight	kg	24.0	28.0	33.0			
	Liquid (Flare)		¢6.4	¢9.5	¢9.5			
Piping connections	Gas (Flare)	mm	¢12.7	¢15.9	¢15.9			
	Drain		VP20 (External Dia, 26/Internal Dia, 20)					

Note: Specifications are based on the following conditions

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

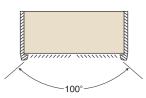
Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward During actual operation, these values are normally somewhat higher as a result of ambient conditions

## VRV Indoor Units

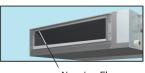
## **FXHQ-MA**



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



- Maintenance is easy
- Non-dew Flap with no implanted bristles
- Bristle-free Flap minimises contamination and makes cleaning simpler.



Non-dew Flan

- 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>



## Wall Mounted Type

## Stylish flat panel design harmonised with your interior décor

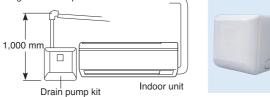
- •Stylish flat panel design creates a graceful harmony that enhances any interior space.
- Flat panel can be cleaned with only the single pass of a cloth across their smooth surface. Flat panel can also be easily removed and washed for more thorough cleaning.
- Low operation sound level
- •Drain pan and air filter can be kept clean by mould-proof polystyrene.
- •Vertical auto-swing realises efficiency of air distribution. The louvre closes automatically when the unit stops.
- •5 steps of discharge angle can be set by remote controller.



**FXAQ-P** 

- •Discharge angle is automatically set at the same angle as the previous operation when restarting. (Initial setting: 10° for cooling)
- Flexible installation • Drain pipe can be fitted to from either left or right sides.
- Drain pump kit is available as optional accessory, which lifts the drain 1,000 mm from the bottom of the unit.

Height of drain-up



## Floor Standing Type

## Suitable for perimeter zone air conditioning

- Floor Standing types can be hung on the wall for easier cleaning. Running the piping from the back allows the unit to be hung on walls. Cleaning under the unit, where dust tends to accumulate, is considerably easier.
- The adoption of a fibre-less discharge grille featuring an original design to prevent condensation also helps prevent staining and makes cleaning easier.
- •A long-life filter (maintenance free up to one year\*) is equipped as standard accessory. \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m3

## **Specifications**

I	MODE	EL		FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE	FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE		
Power supply				1-phase, 220-240 V/220 V, 50/60 Hz							
			kcal/h	1,900	2,400	3,100	3,900	4,800	6,100		
Cooling capacity			Btu/h	7,500	9,600	12,300	15,400	19,100	24,200		
			kW	2.2	2.8	3.6	4.5	5.6	7.1		
Power consumpt	ion	Cooling	kW	0.049	0.049	0.090	0.090	0.110	0.110		
Casing					Ivory white (5Y7.5/1)						
Airflow rate (H/L)	\		m³/min	7/6	7/6	8/6	11/8.5	14/11	16/12		
AIIIIOW Tale (H/L)	,		cfm	247/212	247/212	282/212	388/300	494/388	565/424		
Sound level (H/L)		220 V		35/32	35/32	35/32	38/33	39/34	40/35		
Sound level (H/L)	[	240 V	dB(A)	37/34	37/34	37/34	40/35	41/36	42/37		
Dimensions (H×W×D)			mm	600×1,000×222	600×1,000×222	600×1,140×222	600×1,140×222	600×1,420×222	600×1,420×222		
Machine weight			kg	25.0	25.0	30.0	30.0	36.0	36.0		
	Liqui	id (Flare)		\$ 6.4	¢6.4	¢6.4	¢6.4	¢6.4	¢9.5		
Piping connections	Gas	(Flare)	mm	¢12.7	¢12.7	¢12.7	<i>¢</i> 12.7	¢12.7	<i>¢</i> 15.9		
	Drair	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. · 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

## **Specifications**

	MODEL		FXAQ20PVE	FXAQ25PVE	FXAQ32PVE	FXAQ40PVE	FXAQ50PVE	FXAQ63PVE	
Power supply				1-phase, 220-240 V/220 V, 50/60 Hz					
	kcal/h			2,400	3,100	3,900	4,800	6,100	
Cooling capacity Btu/h			7,500	9,600	12,300	15,400	19,100	24,200	
		kW	2.2	2.8	3.6	4.5	5.6	7.1	
Power consum	ption Coolir	g kW	0.019	0.028	0.030	0.020	0.033	0.050	
Casing			White (3.0Y8.5/0.5)						
Airflow rate (H/	(1)	m³/min	7.5/4.5	8/5	8.5/5.5	12/9	15/12	19/14	
Annow rate (n/	L)	cfm	265/159	282/177	300/194	424/318	530/424	671/494	
Sound level (H/I	L)	dB(A)	35/31	36/31	38/31	39/34	42/37	47/41	
Dimensions (H×	(W×D)	mm	290×795×238	290×795×238	290×795×238	290×1,050×238	290×1,050×238	290×1,050×238	
Machine weight	:	kg	11.0	11.0	11.0	14.0	14.0	14.0	
	Liquid (Flare	)	¢6.4	\$ 6.4	¢6.4	¢6.4	\$\$6.4	¢9.5	
Piping connections	Gas (Flare)	mm	¢12.7	¢12.7	¢12.7	¢12.7	¢12.7	¢15.9	
	Drain			VP13 (E	External Dia, 18/Inte	rnal Dia, 13)		-	

Note: Specifications are based on the following conditions;

•Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m. · Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.

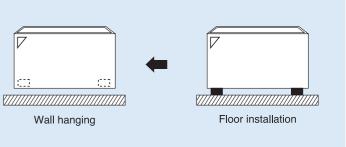
(See Engineering Data Book for details.)

•Sound level: Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions

## VRV Indoor Units

## **FXLQ-MA**





Indoor Unit Lineup

## **Concealed Floor Standing Type**

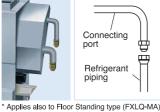
**FXNQ-MA** 

**Designed to be concealed** in the perimeter skirting-wall



• The unit is concealed in skirting-wall of perimeter, that enables to create high class interior design.

•The connecting port faces downward, greatly facilitating on-site piping work.



• A long-life filter (maintenance free up to one year\*) is equipped as standard accessory. \* 8 hr/day, 25 day/month. For dust concentration of 0.15 mg/m3

## **Specifications**

	MOD	EL		FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE	
Power supply					1-phase, 220-240 V/220 V, 50/60 Hz					
			kcal/h	1,900	2,400	3,100	3,900	4,800	6,100	
Cooling capacity	,		Btu/h	7,500	9,600	12,300	15,400	19,100	24,200	
			kW	2.2	2.8	3.6	4.5	5.6	7.1	
Power consump	otion	Cooling	kW	0.049	0.049	0.090	0.090	0.110	0.110	
Casing						Galvanised	steel plate			
Airflow rate (H/I	`		m³/min	7/6	7/6	8/6	11/8.5	14/11	16/12	
Annow rate (n/i	_)		cfm	247/212	247/212	282/212	388/300	494/388	565/424	
Sound level (H/L	`	220 V		35/32	35/32	35/32	38/33	39/34	40/35	
Sound level (H/L	.)	240 V	dB(A)	37/34	37/34	37/34	40/35	41/36	42/37	
Dimensions (H×W×D)			mm	610×930×220	610×930×220	610×1,070×220	610×1,070×220	610×1,350×220	610×1,350×220	
Machine weight			kg	19.0	19.0	23.0	23.0	27.0	27.0	
	Liqu	id (Flare)		\$\$ 6.4	¢6.4	\$ 6.4	¢6.4	¢6.4	¢9.5	
Piping connections	Gas	(Flare)	mm	¢12.7	<i>φ</i> 12.7	¢12.7	¢12.7	¢12.7	¢15.9	
00111001010	Drai	n	1			210	D.D.			

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

(See Engineering Data Book for details.) • Sound level: Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m.

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

## Floor Standing Duct Type

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

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

#### Duct connection airflow type

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

#### Direct airflow type

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

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

All-fresh (using outdoor air only) system Outdoor a \*When using the unit as an outdoor-air processing unit, there are some restrictions. Strictly follow the restrictions specified in the Engineering Data Book.

## **Specifications**

MODEL			FXVQ125NY1	FXVQ200NY1	FXVQ250NY1	FXVQ400NY1	FXVQ500NY1	FXVQ500NY16
Power supp	ly		3-phase 4-wire system, 380–415 V, 50 Hz					
kcal/h		kcal/h	12,000	19,300	24,100	38,700 48,200		200
Cooling cap	acity	Btu/h	47,800	76,400	95,500	154,000	191	,000
		kW	14.0	22.4	28.0	45.0	56	6.0
Power consun	nption Cooling	kW	0.53	1.33	1.61	3.97	2.62	4.70
Casing colour					Ivory white	e (5Y7.5/1)		•
Dimensions	(H×W×D)	mm	1,670×750×510	1,670×950×510	1,670×1,170×510	1,900×1,170×720	1,900×1	,470×720
Machine we	Machine weight kg		118	144	169	236	281	306
Sound level *1	l	dB(A)	52	56	60	65	62	66
	Liquid	mm				φ12.7 (Brazing) φ15.9 (Brazing)		Brazing)
Piping connections	Gas	mm	¢15.9 (Brazing)	¢15.9 (Brazing) ¢19.1 (Brazing) ¢22.2 (Brazing) ¢28.6		¢28.6 (Brazing)	28.6 (Brazing)	
	Drain	mm			Rp1 (PS 1B ir	iternal thread)		
Air filter	Туре				Long-life filter (an	ti-mould resin net)		
	Motor output	kW	0.75	1	.5	3	.7	5.5
		m <sup>3</sup> /min	43	69	86	134	165	172
Fan	Airflow rate	cfm	1,518	2,436	3,036	4,730	5,825	6,072
	External static pressure *2	Pa	152	217	281	420	142	390
	Drive system				Belt driv	e system		

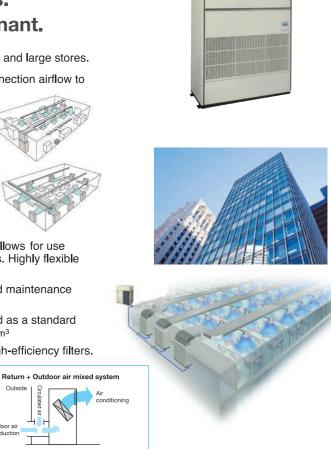
Notes: Specifications are based on the following conditions;

· Cooling: Indoor temp.: 27°CDB, 19°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m. · Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index. (See Engineering Data Book for details.) \*1: Sound level : measured when the air discharge outlet duct (2 m) is attached (anechoic chamber conversion value).

It increases by approximately 5 dB(A) when the plenum chamber is installed to deliver direct airflow. \*2: The value is the external static pressure with standard pulley.

## VRV Indoor Units

## FXVQ-N





## **Clean Room Air Conditioner**

## Suitable for hospitals and other clean spaces



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

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

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

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

#### Instances of installation by type (for a hospital)

Ту	pe	Ceiling intake (high speed contracted flow/hi		Floor-level intake type (gentle wind distribution/high cleanness class model)		
Feat	ures	Construction work is simple and a ceiling instal Dust filtering and air-conditioning can be starte		Easy to increase the cleanness and air-conditioning effect. A low flow speed prevents drying of the affected part and the experience of drafts.		
Cleannes	ss class*1	100,000 to 10,0	000	10,000	D	
Wind	speed	1.0m/s or high	er	Approximatel	y 0.5m/s	
	Integrated outlet unit model	<ul> <li>Concentrated air conditioning centered directly under the unit</li> <li>Easy installation</li> </ul>	prooms, recovery rooms, nurse stations, etc.	Total air conditioning with an emphasis on cleanliness     Application	intake (sourced locally)	
method	Separate outlet unit model	Somewhat concentrated air conditioning centered directly under the outlet     Can provide air conditioning in rooms with irregular shape	Outlet Air unit conditioner	Ordal air conditioning with an emphasis on cleanliness     Maintenance possible from a different room     Applications: Premature	e nurseries, newborn nurseries, ICU**, etc.	

\*1. Cleanliness class. A scale expressing the cleanliness of air established by NASA (National Aeronautics and Space Administration). Class 10,000 represents a state of less than 10,000 minute particles of diameter under 0.5 µm per cubic foot

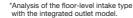
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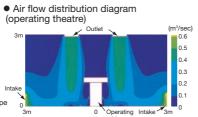
#### Can be easily installed in existing buildings

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

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

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





#### Filtration

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

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

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



\*It may not be possible to maintain cleanliness in rooms with low air tightnes

#### **Antibacterial**

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

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

#### Antibacterial fiber used in the intake filter

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

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

#### Labor-saving

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

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

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

#### Quiet

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

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

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

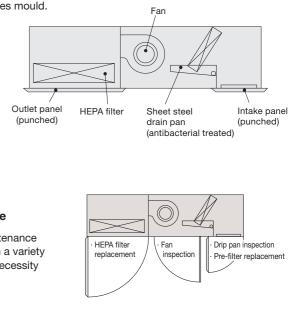
## VRV Indoor Units

## **FXBQ-P**





Installation example (in a medical facility)





## **Clean Room Air Conditioner**

**FXBQ-P** 

## **Specifications**

Туре				Intergrated outlet unit mode	1	Separate outlet unit model	
	Indoor unit		FXBQ40PVE	FXBQ50PVE	FXBQ63PVE	FXBPQ63PVE	
MODEL	Outlet unit		Integrated with the indoor unit		it	BAF82A63	
Power supp	у			1-phase, 220-240	) V/220 V, 50/60 Hz		
		kcal/h	3,900	4,800	6,100	6,100	
Cooling cap	acity	Btu/h	15,400	19,100	24,200	24,200	
		kW	4.5	5.6	7.1	7.1	
Power consum	ption Cooling	kW	0.31	0.31	0.45	0.45	
Intake filter e	efficiency *1			70% by grav	imetric method		
Outlet HEPA	filter efficiency *2			99.97% by D	OOP method *5		
Indoor unit weight kg		140 *3		185 *3	120 *6		
Casing			Galvanised steel plate				
Airflow rate		m³/min	19.5/	(17.5	26/	22.5	
Annowrate	(11/ )	cfm	688/	618	918/794		
Sound level	(H/L) *4	dB(A)	44/42				
Dimensions	(H×W×D)	mm	492×1,788×1,000		492×1,788×1,300	492×1,078×1,300	
Outlet unit w	eight	kg			-	65 *3	
	Liquid (Flare)		$\phi$ 6	5.4	¢9.5		
Piping connections	Piping connections Gas (Flare)		<i>ф</i> 1:	2.7	¢15.9		
Drain			P	T1B			
Filter(Option)	HEPA filter		BAFH	82A50	BAFH	82A63	
Panel	Ceiling intake type	Model	BYB82	2A50C	BYB82A63C	BYB82A63CP	
(Option)	Floor-level intake type		BYB82	2A50W	BYB82A63W	BYB82A63WP	

Notes: Specifications are based on the following conditions;

Cooling: Indoor temp.: 27°CDB, 9°CWB, Outdoor temp.: 35°CDB, Equivalent piping length: 7.5 m, Level difference: 0 m.
 Capacity of indoor unit is only for reference. Actual capacity of indoor unit is based on the total capacity index.

(See Engineering Data Book for details.) \*1: An intake air filter is only attached to the ceiling intake type.

\*2: HEPA filter sold separately. The dust collection efficiency of HEPA filter is 99.97%. However, air may slightly leak around the filter when installing.

\*3: Weight including HEPA filter and panel.

\*4: Anechoic chamber conversion value under JIS B 8616 test conditions. Value usually increases slightly in practice due to surrounding conditions

- \*5: The clean air conditioner does not support DOP testing (leak test) based on GMP standards (Standards for Manufacturing Control and Quality Control for Medical Devices ) due to slight leakage at time of product installation
- \*6: Weight including panel.

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



Warning

#### • Because the ceiling intake type provides concentrated air conditioning that blows directly under the outlet. Accordingly, please be aware of the following.

Sufficient heating may not be achieved near the floor or at locations far from the outlet

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

#### Use the floor-level intake type in the following kind of locations.

- Locations in which heating of the lower part or the entire room is
- important. · Locations necessitating a particularly high cleanliness
- factor and in which there are many people.

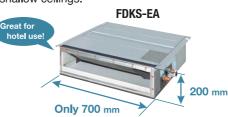


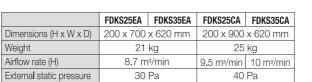




## Slim and smooth design suits your shallow ceiling

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







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

## **Specifications**

MODEL			FDKS25EAVMB	FDKS35EAVMB	FDKS25CAVMB	FDKS35CAVMB	FDKS50CVMB	FDKS60CVMB	
Power supply					1-phase, 220-240 V	/220-230 V, 50/60 Hz			
Airflow rates (H	ł)	m3/min (cfm)	8.7 (	(307)	9.5 (335)	10.0 (353)	12.0 (424)	16.0 (565)	
Sound levels (	H/L/SL)*	dB (A)		35/3	31/29		37/33/31	38/34/32	
Fan speed					5 steps, quiet	and automatic			
Temperature c	ontrol		Microcomputer control						
Dimensions (H	×W×D)	mm	200×700×620 200×900×620			200×1,100×620			
Machine weigh	t	kg	21		25		27	30	
	Liquid (Flare)				φ.	¢6.4			
Piping connections	Gas (Flare)	mm	¢9.5			¢12.7			
connections	Drain	1		VP20 (External Dia. 26/Internal Dia. 20)					
Heat insulation	Heat insulation			Both liquid and gas pipes					
External static pressure Pa			3	30 40					

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

## FDKS-EA/C(A)



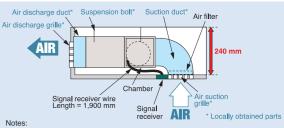
Standard accessory Note: Remote controllers other than the standard accessory wireless remote controller cannot be used

•	Low operation	sound level		(H/L/SL)
	FDKS25	FDKS35	FDKS50	FDKS60
	35/31/29 dB (A)	35/31/29 dB (A)	37/33/ <mark>31</mark> dB (A)	38/34/32 dB (A)

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

\* Home Leave Operation can set to any temperature from 18 to 32°C for cooling operation.

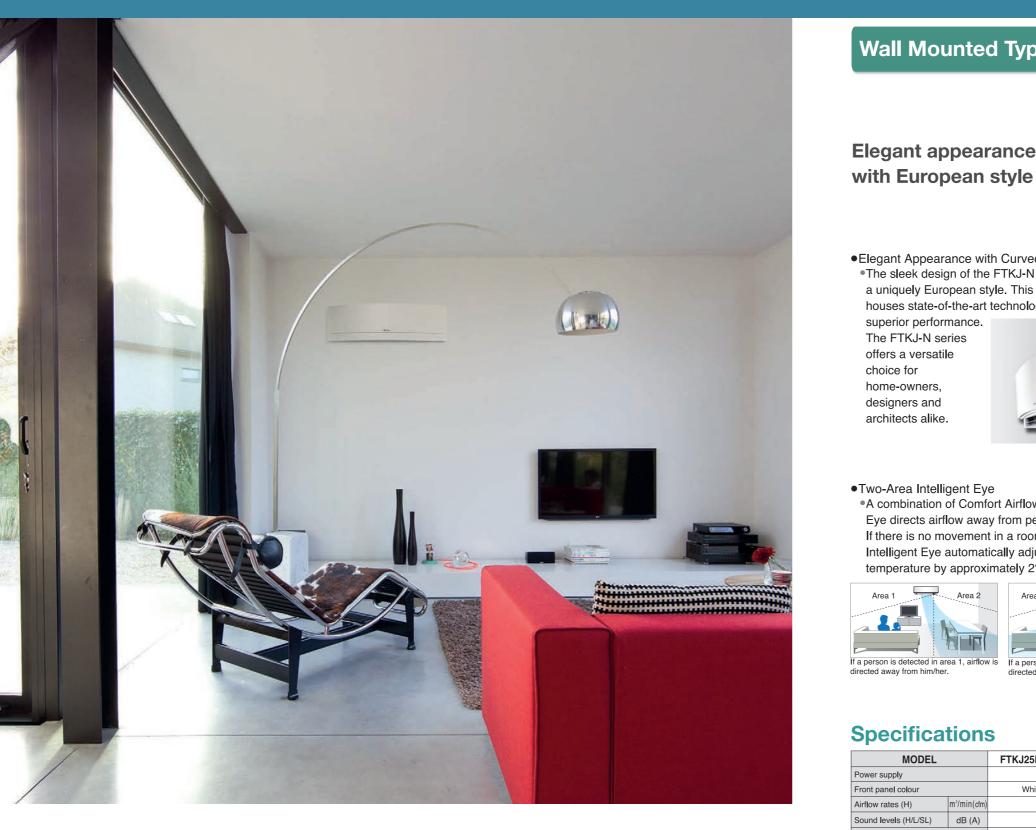
\* Home Leave Operation function must be set by using the remote controller when going to sleep or leaving the house, and after waking up or returning home.



1. To prevent an increase of the 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.

3. The signal receiver unit must be located near the air suction inlet, because the unit includes a sensor that detects room temperature.







## Wall Mounted Type

**Elegant appearance** 



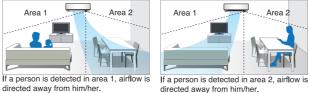
• Elegant Appearance with Curved Panel •The sleek design of the FTKJ-N indoor unit features a uniquely European style. This elegant body houses state-of-the-art technology which delivers

superior performance. The FTKJ-N series offers a versatile choice for home-owners, designers and architects alike.



•Two-Area Intelligent Eye

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



directed away from him/her.

## **Specifications**

	MODEL		FTKJ25NVMW	FTKJ25NVMS	FTKJ
Power supply					1-pha
Front pane	el colour		White	Silver	,
Airflow rate	es (H)	m³/min(cfm)	8.9 (	313)	
Sound levels (H/L/SL) dB (A)		dB (A)	38/2	5/19	
Fan speed	I				
Temperatu	ure control				
Dimension	is (H×W×D)	mm			
Machine w	/eight	kg			
	Liquid (Flare)				
Piping connections Gas (Flare) mm Drain		mm		φ	9.5
Heat insulation					

## Residential Indoor Units with connection to BP units

## **FTKJ-N**









#### •Comfort Airflow Mode

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



#### •3D Airflow

•3D Airflow combines Vertical and Horizontal Auto-Swing to reduce indoor temperature fluctuation. This function circulates air to every part of a room for uniform cooling,

even for large spaces. To start 3D Airflow,

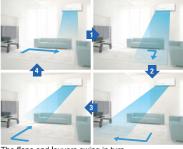
push both the Vertical

and Horizontal

Auto-Swing buttons.

The flaps and louvers

swing in turn.





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

J35NVMW	FTKJ35NVMS	FTKJ50NVMW	FTKJ50NVMS		
nase, 220-240 V/	220-230 V, 50/60 Hz				
White	Silver	White	Silver		
	10.	9 (385)			
45/2	6/20	46/3	5/29		
5 steps, quiet	and automatic				
Microcomp	uter control				
303x99	98x212				
1	2				
\$6	5.4				
¢12.7					
<i>φ</i> 1	8.0				
Both liquid a	nd gas pipes				

# **BP** Units

## Wall Mounted Type



## FTKS25D / FTKS35D Standard accessory\* FTKS50B Standard accessory\* Standard accessory\* FTKS50F / FTKS60F / FTKS71F Standard accessory\* \* Remote controllers other than the standard accessory\*

FTKS-D/B/F

## Stylish flat panel harmonises with your interior décor

Wall Mounted indoor units achieve quiet sound levels of 22 dB (A). (H/L/SL)

FTKS25D FTKS35D FTKS50F FTKS60F FTKS71F

37/25/22 dB (A) 39/26/23 dB (A) 43/34/31 dB (A) 45/36/33 dB (A) 46/37/34 dB (A)

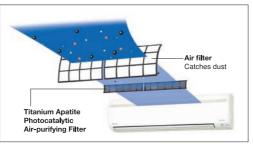
 Intelligent Eye with its infrared sensor automatically controls air conditioner operation according to human movement in a room. When there is no movement, it adjusts the temperature by 2°C for energy savings.



When you are in the room

- •3-D Airflow combines Vertical and Horizontal Auto-Swing to circulate air to every part of a room for uniform cooling of even large spaces.
- \* This function is available for FTKS50/60/71F.
- When you go out

• Titanium apatite is a photocatalytic material with high adsorption power. Titanium apatite also effectively adsorbs and decomposes bacteria across its entire surface. The photocatalyst is activated simply by exposure to light.



These filters are not medical devices. Benefits such as the adsorption and decomposition of bacteria are only effective for substances that are collected on and in direct contact with the Titanium Apatite Photocatalytic Air-Purifying Filter.

Bacteria Removal Test Testing method: dropping method Result certificate: No. 012553-1 and 012553-2 Testing organisation: Japan Spinners Inspecting Foundation

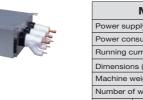


## **Specifications**

MODEL		FTKS25DVM	FTKS35DVM	FTKS50BVMA	FTKS50FVM	FTKS60FVM	FTKS71FVM		
Power sup	pply				1-phase, 220-240 V/2	220-230 V, 50/60 Hz			
Front pan	el colour				Wh	ite			
Airflow rat	tes (H)	m3/min (cfm)	8.7 (307)	8.9 (314)	11.4 (402)	14.7 (519)	16.2 (572)	17.4 (614)	
Sound lev	/els (H/L/SL)	dB (A)	37/25/22	39/26/23	44/35/32	43/34/31	45/36/33	46/37/34	
Fan speed 5 steps, quiet and automatic									
Temperat	ure control				Microcompu	uter control			
Dimensio	ns (H×W×D)	mm	283×80	00×195	290×795×238		290×1,050×238		
Machine v	weight	kg	9 12						
	Liquid (Flare)				ø6	ø6.4			
Piping connections Gas (Flare) mm Drain		mm	ø۹	0.5	ø12	ø12.7 ø15.9		5.9	
		] [	ø18.0						
Heat insu	lation			Both liquid and gas pipes					

# BP Units For Connection To Residential Indoor Units

## **Specifications**





MODEL				BPMKS967A3	BPMKS967A2	
Power sup	oply			1-phase, 220-240 V/220-230 V, 50/60 Hz		
Power co	nsumpt	ion	W	1	0	
Running c	urrent		А	0.	05	
Dimensior	ns (HXV	V×D)	mm	180×294 (+	356*) ×350	
Machine v	veight		kg	8	7.5	
Number o	f wiring	connec	tions	3 for power supply (including earth wiring), 2 for interunit wiring	(outdoor unit-BP, BP-BP), 4 for interunit wiring (BP-indoor unit)	
	Liquid	Main	mm	φ9.	5x1	
Piping connections	Branch		φ6.4×3	φ6.4×2		
(Brazing)	Gas	As Main mm	¢19.1×1			
	Gas	Branch		¢15.9x3	¢15.9×2	
Heat insul	ation			Both liquid a	nd gas pipes	
Connecta	ble indo	or units		2.0 kW class to 7.1 kW class		
Min. rated capacity of kW connectable indoor units		kW	2.0			
Max. rated capacity of kW kW		kW	20.8 14.2			

Note: \* Total auxiliary piping length.



# VRV AHU System

### **VRV AHU Introduction**

Daikin released 2 series of VRV AHU, standard series model AHUR-DBV/CBV and outdoor air series model AHUR-DBL/CBL. It is a DX AHU that is specially designed to operate with the VRVIV outdoor unit. This enabled the users to reduce maintenance costs and enjoy more space savings.

Daikin VRV AHU improves the indoor air quality caused by haze, pollutants, etc with options of pre-filers and primary filters. This is the only total AHU solutions provided and manufactured completely by Daikin.





## What is *VRV*?

Daikin VRV system is a multi-split type air conditioner for commercial buildings that uses variable refrigerant flow control invented by Daikin.



It enables long piping length up to 165m and maximum level difference (between outdoor and indoor units) of 90m to provide more design flexibility which can match even large-sized buildings.

It allows one touch selection control using intelligent Touch Manager and includes options to link with BACnet® to enhance the Building Management System (BMS).

## **VRV** AHU Application

From small to large commercial spaces, Daikin offers a wide range of R-410A inverter condensing units for use in conjunction with Air Handling Units (AHU) from 6 HP to 120 HP.

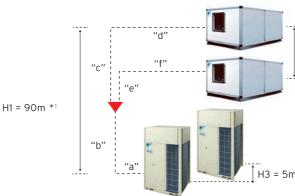
AHU provides large air volumes and high ESP (External Static Pressure) enabling the use of extensive ductworks. The refrigerant flows through the copper pipes using R-410A and operates like a large VRV fan coil unit.

Daikin AHU represents the ideal solution for large storage places, atrium, lobby, banquet halls, showrooms, exhibition halls, shopping malls, etc.

It also has the options to customize the specifications such as the filtration type, direction of air in-take and discharge, service access door and blower type (backward or forward curves and plug fan).



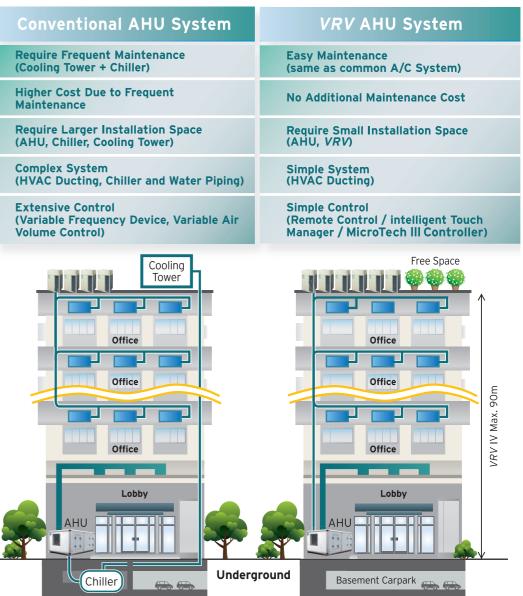
## VRV AHU System Structure



\* 1 When level differences are 50m 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. Please contact Daikin's Sale Office for more information.

#### Comparison Table and Diagram for Conventional AHU System and VRV AHU System

Conventional AHU System	
Require Frequent Maintenance (Cooling Tower + Chiller)	E (
Higher Cost Due to Frequent Maintenance	1
Require Larger Installation Space (AHU, Chiller, Cooling Tower)	F (
Complex System (HVAC Ducting, Chiller and Water Piping)	9(
Extensive Control (Variable Frequency Device, Variable Air Volume Control)	9



**Conventional AHU System** 

H2 = 15m

- 1. Longest Pipe Length = a + b + c + d =165m
- 2. Longest Pipe Length after First Refnet = c + d = 40m
- 3. Total Pipe Length = a + b + c + d + e + f = 1,000m

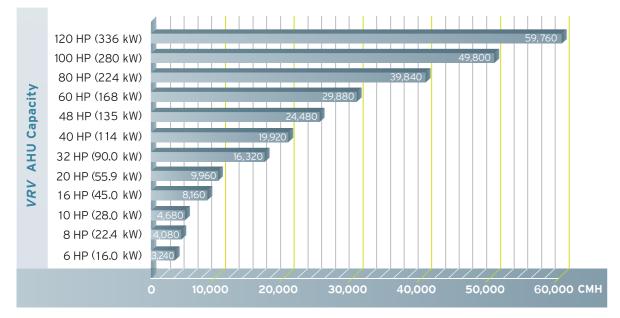
VRV AHU System



# **VRV** AHU System

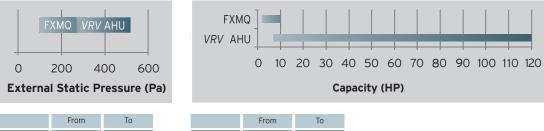
## **VRV AHU Standard Series**

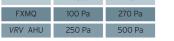
The VRV AHU standard series are available from the capacity range of 6 HP to 120 HP, also with airflow ranging from 3,240 CMH - 59,760 CMH.



#### Expanded Line Up for Daikin VRV Indoor Series

Comparison for External Static Pressure and Capacity between VRV AHU and Duct Typed Unit VRV AHU offers higher ESP and Capacity as compared to duct typed unit.





emperature Range

\*For ESP more than 500Pa, please contact Daikin's Sales Office

#### **VRV** AHU Operation Range

VRV AHU AHUR-DBV/CBV operation is similar as other VRV indoor unit. Following table is the list of operation range for AHU unit.

			Cooling
Entering Air Tem	perature	Minimum	14°C WB
to VRV AH		Maximum	35°C DB / 25°C WB
Outdoor Unit	VRVIV	Minimum	-5°C DB
		Maximum	49°C DB
		Minimum	-5°C DB
Expansion Valve		Maximum	46°C DB
Standard series F		Minimum	-10°C DB
		Maximum	40°C DB

# VRV AHU Standard Series

**Possibility Z (Ts/Tr control):** Using Daikin wired remote controller (BRC1E62 - optional) Set point can be fixed via standard Daikin wired remote controller. Remote ON/OFF can be achieved by an optional adapter KRP4AA51.

No additional external controller is required. The cooling load is determined from the air suction temperature and set point on the Daikin remote controller.

### VRV AHU Standard Series Evaporator Coil, Expansion Valve and Standard series PCB

AHUR-DBV/CBV standard series model use DX coil. Each DX coil will be connected to one external expansion valve (EKEXV) and controlled by one standard series PCB (EKEQMCBA).

VRV AHU Standard Series Evaporator Coils

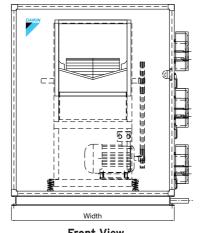
- 5 capacities of Evaporator Coils
- 6HP used on 6HP AHU unit
- 8HP used on 8HP AHU unit
- 10HP used on 10HP AHU unit
- 16HP used on 16HP, 32HP, 48HP AHU unit
- 20HP used on 20HP, 40HP, 60HP, 80HP, 100HP, 120HP AHU unit

VRV AHU Expansion Valve (EKEXV)

- 5 capacities of AHU Expansion Valve
- EKEXV140 for 6HP Coil
- EKEXV200 for 8HP Coil
- EKEXV250 for 10HP Coil
- EKEXV400 for 16HP Coil
- EKEXV500 for 20HP Coil

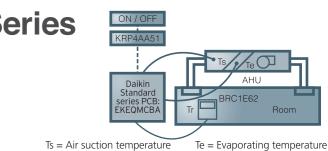
#### **VRV** AHU Expansion Valve

				EKEXV140	EKEXV200	EKEXV250	EKEXV400	EKE)		
	Casing	Colour		Ivory white						
	ousing	Material		Metal						
	Dimensions	Unit	H x W x D mm	401 x 215 x 78						
	Weight	Unit	it Kg			2.9				
	Operation Range	Cooling	Min. ~ Max. °CDB	-5.0 ~ 46.0						
	Refrigerant	Туре	R-410A							
	Piping connections	Liquid	Туре		Braze connection					
			OD mm		9.52		12.7	15		
		Gas	Туре	Braze connection						
			OD mm	9.52						
		Heat Insulation		Both inlet and outlet						



Front View





Tr = Room temperature

AHU = Air Handling Unit

VRV AHU Standard series PCB (EKEQMCBA)

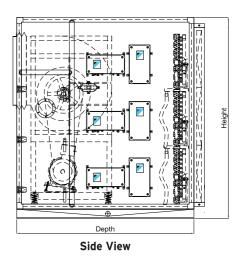




#### **VRV** AHU Standard series PCB

Application			Multi		
Outdoor Unit			VRV IV		
Casing	Colour Material		White grey Resin		
Dimensions	Unit	H x W x D mm	132 x 400 x 200		
Weight	Unit	Kg	3.6		
Operation Range	Cooling	Min. ~ Max. $^\circ \text{CDB}$	<del>-</del> 10.0 ~ 40.0		
	Phase		1		
Power Supply	Frequency	Hz	50/60		
	Voltage	V	230/220		





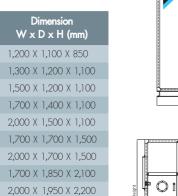
# **VRV AHU Standard Series**

## AHU SPECIFICATION (AHUR-DBV/CBV)

	CASING/INSULATION (DB SERIES)	50mm Thickness Double Skinned Panel 0.5mm Thickness White Colourbond Steel Sheet 50mm Thickness Polyurethane Foam 40Kg/m³ Density
1	CASING / INSULATION (CB SERIES)	25mm Thickness Double Skinned Panel 0.5mm Thickness White Colourbond Steel Sheet 0.5mm Thickness Galvanized Steel Sheet 25mm Thickness PU Foam 40Kg/m <sup>3</sup>
2	CASING-FRAME (DB SERIES)	Steel With Black Epoxy Paint
2	CASING-FRAME (CB SERIES)	Extruded Aluminium Pentapost Profile
	COIL	DX Coil
	TUBE	Copper Tube
3	FIN	Aluminum Slit
3	HEADER	Copper Tube
	FRAME	Galvanized Steel
	WORKING PRESSURE	10Kg/cm <sup>2</sup>
	FAN	(Brand = Kruger)
	ТҮРЕ	Double Width Double Inlet Forward Curved Centrifugal Belt Drive Fan
4	WHEEL	Galvanized Steel
	HOUSING	Galvanized Steel
	FRAME	Steel With Polyester Powder Coating
5	MOTOR	(Brand = Teco) Three-Phrase Induction Motor Totally Enclosed Fan-Cooled Type Protection = IP55 Insulation Class = F
6	VIBRATION ISOLATOR	Spring Isolator
	DRAIN PAN (DB SERIES)	1.2mm (SUS 304) Beneath The Drain Pan is Covered With PU Insulation 40Kg/m <sup>3</sup> Density
7		
	DRAIN PAN (CB SERIES)	1.6mm (Steel Sheet With Epoxy Coated) Beneath The Drain Pan is Covered With PU Insulation 40Kg/m <sup>3</sup> Density
		(Brand = AAF)
8	AIR FILTER	Type = R29 Class = G3 (AFI = 80-85%) Synthetic washable Size = Full (24" x 24" x 2") Half (12" x 24" x 2")

## **Drawings and Dimension of AHU**

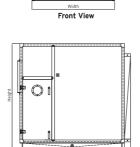
Model	Dimension W x D x H (mm)	Model
AHUR06DBV	1,300 X 1,200 X 1,200	AHUR06CBV
AHUR08DBV	1,300 X 1,400 X 1,200	AHUR08CBV
AHUR10DBV	1,500 X 1,400 X 1,200	AHUR10CBV
AHUR16DBV	1,800 X 1,500 X 1,200	AHUR16CBV
AHUR20DBV	2,100 X 1,600 X 1,200	AHUR20CBV
AHUR32DBV	1,800 X 1,800 X 1,600	AHUR32CBV
AHUR40DBV	2,100 X 1,800 X 1,600	AHUR40CBV
AHUR48DBV	1,800 X 1,950 X 2,300	AHUR48CBV
AHUR60DBV	2,100 X 1,950 X 2,300	AHUR60CBV
AHUR80DBV	4,000 X 1,800 X 1,600	AHUR80CBV
AHUR100DBV	4,000 X 1,950 X 2,300	AHUR100CBV
AHUR120DBV	4,000 X 1,950 X 2,350	AHUR120CBV



3,900 X 1,700 X 1,500

3,900 X 1,850 X 2,200

3,900 X 1,950 X 2,200



Side View

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\* Dimension does not include Standard series PCB, Expansion Valve and Pre-filter

# **VRV AHU Standard Series**

	Model			60bv/dbvh 6cbv/cbvh		URO8D URO8C					10DBV, 10CBV,						/dbvh /cbvh				SV/DB\ SV/CB\					/dbvh /cbvh	
Total Cooling Capacity	(	NET (KW) *1	16.4 16.3	16.2 16.0 15.9	22.9 2	22.8 22	2.7 2.	2.4 22.3	28.4	28.3	28.2	28.0	27.8	45.7	45.5	45.3	45.0 4	4.6 50	5.8 56	.6 56.3	3 56.0	55.7	91.4	91.0	90.6	90.0 89.2	
Total Sensible Cooling	Capacity	INET (KVV)	11.9 11.8	11.7 11.5 11.4	16.8	16.7 18	6.6 10	5.3 16.2	20.9	20.8	20.7	20.5	20.3	33.5	33.3	33.1	32.6 3	2.4 4	1.8 41	.6 41.3	3 40.9	40.7	67.0	66.6	66.2	65.3 64.8	
Total Cooling Capacity	(	GROSS (KW) "2		17.6		24	4.0				29.8				· · · · ·	48.3			59.4					96.6			
Sensible Cooling Capa	acity	GROSS (KVV) -		13.1		17	7.9			22.3 36.2 44					44.3	3		72.4									
Air Flow		CMH		3,240		4,0	080		4,680					8,160					9,960				16,320				
Ent. Temp.		°CDB/°CWB		27/19		27,	/19		27/19							27/19			27/19				27/19				
Lea. Temp.		°CDB/°CWB	1	4.7/13.3		13.6,	/12.7			1	2.5/12.	4			13	3.5/12	7			13.4/1	12.6		13.5/12.7				
Coil Type		<u>.</u>				DX.CO	OIL (R	410A) 8	mm. V	VAVE S	SLIT SUR	RFACE 8	STRA	GHT EDC	E												
Coil Face Area		m <sup>2</sup>		0.491		0.4	443				0.54					0.78				0.99				1.56			
Coil Face Vel.		m/s		1.83		2.	.56				2.41					2.91				2.79	2				2.91		
Air PD.In Coil		Pa		100		10	00				100					100				100	)				100		
Air PD.In Pre Filter "3		Pa		80		8	30				80					80			80						80		
Air Filter Size 12"X24X2	2" *3	PCS.		1			1				-					1			-				2				
Air Filter Size 24"X24X2	2" *3	PCS.		1			1				2					2			3				4				
Air PD.In Casing		Pa		30	30			30					30				30			30							
ESPJnitial		Pa	250 300	350 450 500	250	300 33	50 4	50 500	250	300	350	450	500	250	300	350	450 5	20 2	50 30	0 350	450	500	250	300	350	450 500	
Total Statics Pressure		Pa	460 510	560 660 710	460	510 5	60 6	50 710	460	510	560	660	710	460	510	560	660 7	10 4	50 51	0 560	660	710	460	510	560	660 710	
Fan Type		<u>.</u>										FC	DRWAR	D CUR	WE .										·······		
Model			FD	A200CM		FDA2	250T/M		FDA250TM				FDA315TM					FDA355TM					FE	A450T)	N		
r		KW	1.5	2.2	1.5	1.5 2.2		2.2			3.0	3.0 4.0		3.0 4.0		)	5.5	5	5.5		7.5						
Fan Motor		POLE		4			4				4					4				4		<u> </u>			4		
Power Supply (50Hz/ć	50Hz)	Volt/Ph./Hz.									380	-415/	3/50,	/ 380-	415/3/	60											
FLA		amp.	3.64	5.28	3.64	1	5.	28		5	.28		6.58	6.58		8.9	92	6.	58	8.92	2	12.0	13	2.0		15.4	
Machine Weight (DBV)	)	kg	545	550	550		5	50		6	00		610	765		77	75	8	90	900	)	920	1,0	090		1,110	
Machine Weight (CBV)	)	kg	480	485	480		4	35		5	30		540	740		75	50	8	50	860	)	880	9	90		1,010	
Sound Pressure Level (	SPL)	dBA	60 61	62 63 64	54	56 5	57 5	9 60	54	56	57	59	60	62	63	64	66 (	7 6	51 6	1 62	64	65	62	63	64	65 66	
Standard series PCB		Model/PCS.	EKEQM	CBAV3 / 1 pc.	EKE	EQMCB/	AV3 /	1 pc.	EK	KEQN	NCBAV3	/ 1 p	с.	E	KEQMO	CBAV3	/ 1 pc.		EKEG	MCBA\	/3 / 1 p	ic.	E	KEQM	CBAV3	/ 2 pcs.	
Expansion Valve		Model/PCS.	EKEX	/140 / 1 pc.	E	KEXV20	0/1	x.		EKEX	V250 /	1 pc.			EKEXV	400 /	1 pc.		EKI	XV500	/ 1 рс.			EKEXV	400 /	2 pcs.	
	Liquid pipes	mm	9.5 (Bra	zing connection)	9.5	(Brazing	g conne	ction)	9.	5 (Bro	azing cor	nectio	n)	12	2.7 (Bra.	zing co	nnection)		15.9 (	Brazing	connecti	on)	12.7	7 (Brazi	ng conr	nection) x 2	
Piping	Gas pipes "4	mm	15.9 (Bro	izing connection)	19.1	l (Brazin	g conn	ection)	22	.2 (Br	azing co	nnectio	on)	28	8.6 (Bra	zing co	onnection)		28.6 (	Brazing	connecti	on)	28.0	5 (Brazi	ng conr	nection) x 2	
Connections	Drain pipes	mm		32		3	32				32					32				32					32		
Refrigerant Control			Electronic	expansion value	Elec	tronic exp	pansion	valve	Ele	ctronic	c expans	ion va	ve	Ele	ectronic	expan:	sion valve		Electro	nic expo	ansion vo	lve	Eŀ	ectronic	expans	sion valve	
Panel												[	Double	Skinned	d												
Capacity Index				140		20	00		250				400				500				800						
																	_										

	Model		AHUR40DB\ AHUR40CB\			18DBV/DBVH 18CBV/CBVH	AHUR60DBV/DBVH AHUR60CBV/CBVH	AHUR80DB\ AHUR80CB\			r100dbv/db r100cbv/cb			IUR120DB IUR120CB		
Total Cooling Capa	city	NET (KW) *1	113.6 113.2 112.7	112.0 111.3	137.1 136.6	136.0 135.0 133.7	170.4 169.7 169.0 168.0 167.0	227.2 226.3 225.4	224.0 222.6	284.0 28	2.9 281.7 280.0	278.3	340.8	339.5 338.0	336.0 334.0	
Total Sensible Cooli	ng Capacity	NET (KVV)	83.6 83.2 82.7	81.8 81.3	100.5 100.0	99.4 97.9 97.1	125.4 124.7 124.0 122.7 122.0	167.2 166.3 165.4	209.0 20	7.9 206.7 204.5	5 203.3	250.8	250.8 249.5 248.0 245.4 244			
Total Cooling Capa	city		118.8			144.9	178.2	237.6			297.0		356.4			
Sensible Cooling Co	apacity	GROSS (KW) *2	88.6			108.6	132.9	177.2			221.5			265.8		
Air Flow		CMH	19,920	)		24,480	29,880	39,840	)		49,800			59,760	)	
Ent. Temp.		°CDB/°CWB	27/19	)		27/19	27/19	27/19	>		27/19			27/19		
lea. Temp.		°CDB/°CWB	13.4/12	2.6	1:	3.5/12.7	13.4/12.6	13.4/12	2.6		13.4/12.6			13.4/12	.6	
Coil Type							DX.COIL (R410A) 8mm. WAVE	SLIT SURFACE & STRA	IGHT EDGE							
Coil Face Area		m <sup>2</sup>	1.98			2.34	2.97	3.96			4.95			5.94		
Coil Face Vel.		m/s	2.79			2.91	2.79	2.79			2.79			2.79		
Air PD.In Coil		Pa	100			100	100	100		100				100		
Air PD.In Pre Filter *3		Pa	80			80	80	80			80			80		
Air Filter Size 12'X2	4X2" *3	PCS.	-			3	-	-		-						
Air Filter Size 24"X2	4X2" *3	PCS.	6			6	9	12			18		18			
Air PD.In Casing		Pa	30			30	30	30			30			30		
ESPInitial		Pa	250 300 350	450 500	250 300	350 450 500	250 300 350 450 500	250 300 350	450 500	250 300 350 450 500		500	250	300 350	450 500	
Total Statics Pressure		Pa	460 510 560	660 710	460 510	560 660 710	460 510 560 660 710	460 510 560	660 710	460 5	10 560 660	710	460	510 560	660 710	
Fan Type			FORWARD CURVE													
Model			FDA500	M	FC	DA560TM	FDA630TM	FDA500T	FDA560T2M				FDA630T	2M		
		KW	7.5	11.0	7.5	11.0	11.0	15.0	18.5	15.0	18.5	22.0	18.5	22.0	30.0	
Fan Motor		POLE	4			4	4	4			4		<u> </u>	4		
Power Supply (50Hz	z/60Hz)	Volt/Ph./Hz.					380-415/3/50	/ 380-415/3/60								
FLA		amp.	15.4	22.1	15.4	22.1	22.1	29.9	36.6	29.9	36.6	44.3	36.6	44.3	58.1	
Machine Weight (D	BV)	kg	1,260	1,300	1,400	1,440	1,640	2,160	2,195	2,580	2,615	2,630	2,830	2,845	2,925	
Machine Weight (C	BV)	kg	1,120	1,160	1,250	1,290	1,480	1,885	1,920	2,280	2,315	2,330	2,470	2,485	2,565	
Sound Pressure Leve	al (SPL)	dBA	61 62 63	65 65	64 65	65 66 67	62 63 64 65 66	67 67 68	70 71	68 6	9 70 71	72	69	69 70	71 73	
Standard series PCE	3	Model/PCS.	EKEQ/MCBAV3	/ 2 pcs.	EKEQM	CBAV3 / 3 pcs.	EKEQMCBAV3 / 3 pcs.	EKEQMCBAV3	/ 4 pcs.	EKEC	QMCBAV3 / 5 p	DCS.	Ek	EQ/VCBAV3	/ 6 pcs.	
Expansion Valve		Model/PCS.	EKEXV500 /	2 pcs.	EKEXV	/400 / 3 pcs.	EKEXV500 / 3 pcs.	EKEXV500 /	4 pcs.	EK	EXV500 / 5 pcs	i.		EKEXV500 /	6 pcs.	
	Liquid pipes	mm	15.9 (Brazing con	nection) x 2	12.7 (Brazi	ing connection) x 3	15.9 (Brazing connection) x 3	15.9 (Brazing con	inection) x 4	15.9 (B	razing connection	n) x 5	15.9	(Brazing con	nection) x 6	
Piping Connections	Gas pipes *4	mm	28.6 (Brazing con	nection) x 2	28.6 (Brazi	ing connection) x 3	28.6 (Brazing connection) x 3	28.6 (Brazing con	inection) x 4	28.6 (B	razing connectio	n) x 5	28.6 (Brazing connection) x 6			
	Drain pipes	mm	32			32	32	32		32			32			
Refrigerant Control			Electronic expan	sion valve	Electronic	: expansion valve	Electronic expansion valve	Electronic expar	ision valve	Electronic expansion valve				Electronic expansion valve		
Panel					·		Double	Skinned								
Capacity Index			1,000			1,200	1,500	2,000	)	2,500			3,000			

### Notes:

 Net capacity includes indoor fan heat.
 Gross capacity does not include indoor fan heat.
 With pre filter, AAF synthetic R29 & class G3 (Washable) eff 80-85%. 4. It is necessary to reduce piping size by reducer when connection (19.1 → 15.9, 22.2 → 19.1, 28.6 → 22.2, 34.9 → 28.6)

■Connection ratio System Pattern VRV DX Indoor unit Only AHU (Pair AHU

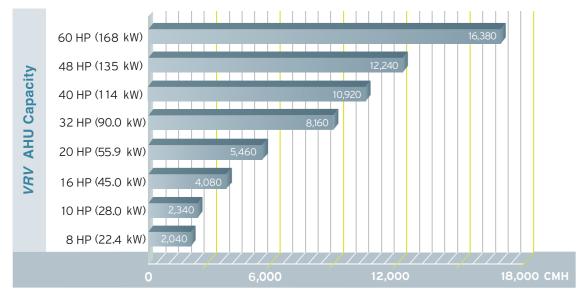
	Total CR	VRV Indoor	AHU
t(s) + AHU	50 <b>-</b> 110%	0-110%	0 <b>-</b> 60%
J & Multi AHU)	90-110%	-	50 <b>-</b> 110%

kcal/h=kWx860 Btu/h=kWx3412 cfm=m<sup>3</sup>/minx35.3



# VRV AHU Outdoor Air Series

The VRV AHU outdoor air series are available from the capacity range of 8 HP to 60 HP, also with airflow ranging from 2,040 CMH – 16,380 CMH.



## Comparison for ESP and Capacity between *VRV* AHU, Ceiling Mounted Duct Type and Floor Standing Duct Type.

FXMQ-V1

VRV AHU

FXVQ

0 1000 2000 3000 4000 5000 6000 7000 8000 16000 17000

Temperature Range

Airflow Rate (CMH)

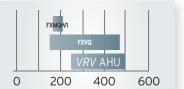
om (CMH) To (CMH)

2,040 16,380

1.518

2,100 6,072

VRV AHU offers higher ESP and airflow rate as compared to duct type units.





	From	То		Fr
FXMQ-V1	185 Pa	205 Pa	FXMQ-V1	
FXVQ	150 Pa	480 Pa	FXVQ	
VRV AHU	250 Pa	500 Pa	VRV AHU	

\*For ESP more than 500Pa, please contact Daikin's Sales Office

## **VRV AHU Operation Range**

*VRV* AHU AHUR-DBL/CBL operation is similar as other *VRV* indoor unit. Following table is the list of operation range for AHU unit.

for Ario unit.			Cooling
Entering Air Temp	perature	Minimum	14°C WB
to VRV ĂHU		Maximum	32°C WB
Outdoor Unit	VRV IV	Minimum	-5°C DB
Outdoor Onit		Maximum	49°C DB
		Minimum	-5°C DB
Expansion Valve		Maximum	46°C DB
		Minimum	-10°C DB
Outdoor air series		Maximum	40°C DB

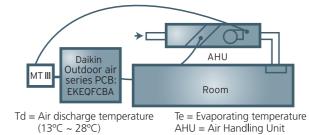
# VRV AHU Outdoor Air Series

## Possibility X (Td/Tr control):

Precise air temperature control via MicroTech III (MT III) controller (option)

Room temperature is controlled as a function of the air handling unit suction or discharge air (customer selection). The MT III controller translates the temperature difference between set point and air suction temperature (or air discharge temperature or room temperature) into a reference voltage (O-10V) which is transferred to the Daikin Outdoor air series PCB (EKEQFCBA).

This reference voltage will be used as the main input value for the compressor frequency control.



## MicroTech III controller (option)



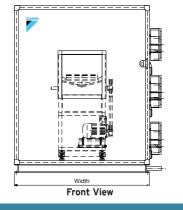
MT III controller is recommended for Outdoor air series AHU controlling, switching and monitoring functions.

This controller is programmed to optimize the performance and efficiency of *VRV* AHU automatically.

It can also communicate with Daikin's intelligent Touch Manager via BACnet protocol easily.

## VRV AHU Expansion Valve

			EKEXV200	EKEXV250	EKEXV400	EKEXV500				
Casing	Colour			Ivory	white					
Casiliy	Material			Me	tal					
Dimensions	Unit	H x W x D mm		401 x 2	15 x 78					
Weight	Unit	Kg		2.	.9					
Operation Range	Cooling	Min. ~ Max. °CDB		-5.0 ~ 46.0						
Refrigerant	Туре		R-410A							
	Liquid	Туре		Braze co	nnection					
Piping	Liquiu	OD mm	9.5	52	12.7	15.9				
connections	Gas	Туре		Braze co	nnection					
	005	OD mm		9.5	52					
	Heat Insulation			Both inlet	and outlet					



## VRV AHU Outdoor Air Series Evaporator Coil, Expansion Valve and Outdoor Air Series PCB

AHUR-DBL/CBL Outdoor air series use DX coil. Each DX coil will be connected to one external expansion valve (EKEXV) and controlled by one Outdoor air series PCB (EKEQFCBA). VRV AHU Outdoor air Series Evaporator Coil

• 4 capacities of Evaporator Coil

- 8HP used on 8HP AHU unit
- 10HP used on 10HP AHU unit
- 16HP used on 16HP, 32HP, 48HP AHU unit
- 20HP used on 20HP, 40HP, 60HP AHU unit

VRV AHU Expansion Valve (EKEXV)

- 4 capacities of AHU Expansion Valve
- EKEXV200 for 8HP Coil
- EKEXV250 for 10HP Coil
- EKEXV400 for 16HP Coil
- EKEXV500 for 20HP Coil

VRV AHU Outdoor air series PCB (EKEQFCBA)



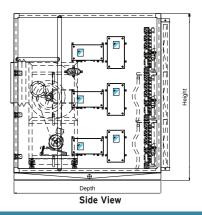
Installation of AHU Outdoor air series PCB should be positioned under a shaded area. Alternatively, a panel should be provided at the Outdoor air series PCB to block off direct sunlight.

Direct sunlight will increase the temperature inside the Outdoor air series PCB and may reduce its lifetime and influence its operation.

Operating temperature of the Outdoor air series PCB is between -10°C and 40°C.

## **VRV** AHU Outdoor Air Series PCB

			EKEQFCBA
Application			Multi
Outdoor Unit			VRV IV
Casing	Colour Material		White grey Resin
Dimensions	Unit	H x W x D mm	132 x 400 x 200
Weight	Unit	Kg	3.9
Operation Range	Cooling	Min. ~ Max. $^\circ \text{CDB}$	-10.0 ~ 40.0
	Phase		1
Power Supply	Frequency	Hz	50/60
	Voltage	V	230/220





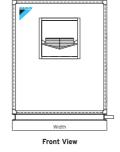
## AHU SPECIFICATION (AHUR-DBL/CBL)

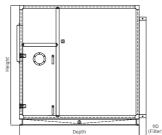
	CASING / INSULATION (DBL SERIES)	50mm Thickness Double Skinned Panel (Thermal Break) 0.5mm Thickness White Colourbond Steel Sheet 50mm Thickness Polyurethane Foam 40Kg/m³ Density							
1	WEATHER PROOF ROOF	SUS 304							
	CASING / INSULATION (CBL SERIES)	25mm Thickness Double Skinned Panel 0.5mm Thickness White Colourbond Steel Sheet 0.5mm Thickness Galvanized Steel Sheet 25mm Thickness Polyurethane Foam 40Kg/m <sup>3</sup> Density							
2	CASING-FRAME (DBL SERIES)	Steel With Black Epoxy Paint							
	CASING-FRAME (CBL SERIES)	Extruded Aluminium Profile							
	COIL	DX Coil							
	TUBE	Copper Tube							
3	FIN	Aluminum Slit Type							
	HEADER	Copper Tube-Connect							
	FRAME	Galvanized Steel							
	WORKING PRESSURE	10Kg/cm <sup>2</sup>							
	FAN	(Brand = Kruger)							
	TYPE WHEEL	Double Width Double Inlet Forward Curved Centrifugal Belt Drive Fan Galvanized Steel Sheet							
4	HOUSING	Galvanized Steel Sheet							
	FRAME	Steel With Polyester Powder Coating							
5	MOTOR	(Brand = Teco) Three-Phrase Induction Motor Totally Enclosed Fan-Cooled Type Protection = IP55 Insulation Class = F, IE1							
6	VIBRATION ISOLATOR	Spring Isolator							
	DRAIN PAN (DBL SERIES)	1.2mm (SUS 304) The Drain Pan is Covered With PU Insulation 40Kg/m³ Density							
7	DRAIN PAN (CBL SERIES)	1.6mm (Steel Sheet With Epoxy Coated) Beneath The Drain Pan is Covered With PU Insulation 40Kg/m³ Density							
8	AIR FILTER	(Brand = AAF) Type = R29 Class = G3 (AFI = 80-85%) Synthetic Washable Size = Full (24" x 24" x 2") Half (12" x 24" x 2")							

## **Drawings and Dimension of AHU**

Model	Dimension W x D x H (mm)	Model	Dimension W x D x H (mm)
AHUR08DBL	1,300 x 1,400 x 1,200	AHUR08CBL	1,300 x 1,200 x 1,100
AHUR10DBL	1,500 x 1,400 x 1,200	AHUR10CBL	1,500 x 1,200 x 1,100
AHUR16DBL	1,800 x 1,500 x 1,200	AHUR16CBL	1,700 x 1,400 x 1,100
AHUR20DBL	2,100 x 1,600 x 1,200	AHUR20CBL	2,000 x 1,500 x 1,100
AHUR32DBL	1,800 x 1,800 x 1,600	AHUR32CBL	1,700 x 1,700 x 1,500
AHUR40DBL	2,100 x 1,800 x 1,600	AHUR40CBL	2,000 x 1,700 x 1,500
AHUR48DBL	1,800 x 1,950 x 2,200	AHUR48CBL	1,700 x 1,850 x 2,100
AHUR60DBL	2,100 x 1,950 x 2,200	AHUR60CBL	2,000 x 1,950 x 2,200

\* Dimension does not include Outdoor air series PCB, Expansion Valve and Pre-filter





# **VRV AHU Outdoor Air Series**

	Model				JRO8DBL 108DBLH					JR10DBL	and the second sec				JR16DBL 16DBLH					ir20dbl, 20dblh,		
Total Cooling Capacity		NET (KW) *1	22.8	22.8	22.7	22.6	22.5	28.3	28.3	28.2	28.1	28.0	45.3	45.2	45.1	44.9	44.7	56.7	56.6	56.5	56.2	56.1
Total Sensible Cooling C	Capacity	INET (KVV)	10.9	10.9	10.8	10.7	10.6	13.2 13.2 13.1 13.0 12.9						21.6	21.5	21.3	21.1	27.6	27.5	27.4	27.1	27.0
Total Cooling Capacity		CDOCC (1414) *2			23.3			28.9							46.3					58.4		
Sensible Cooling Capaci	ity	GROSS (KW) *2			11.4					13.8			22.7					29.3				
Air Flow		CMH			2,040					2,340			4,080					5,460				
Ent. Temp.		°CDB/°CWB			33/28					33/28					33/28					33/28		
Lea. Temp.		°CDB/°CWB			19.4/18.9				18.4/18 19.3/19.0										19.9/19.6	)		
Coil Type									1	DX.COL (R	410A) 8mr	n. WAVE S	SLIT SURFAC	CE & STRA	IGHT EDG	ε		·				
Coil Face Area		m <sup>2</sup>			0.443					0.54					0.784					0.99		
Coil Face Vel.		m/s		1.28						1.20					1.45					1.53		
Air PD.In Coil		Pa		50						50			1		50			1		50		
Air PD.In Pre Filter *3		Pa			80					80			1		80			1		80		
Air Filter Size 12"X24X2"	*3	PCS.	1						- 1						1			-				
Air Filter Size 24"X24X2"	PCS.			1			2						2					3				
Air PD.In Casing	ir PD.In Casing Pa				30			30						30						30		
ESP.Initia		Pa	250	300	350	450	500	250	300	350	450	500	250	300	350	450	500	250	300	350	450	500
Total Statics Pressure		Pa	410	460	510	610	660	410	460	510	610	660	410	460	510	610	660	410	460	510	610	660
Fan Type			FORWARD CURVE																			
Model			FSA280CM							FSA280CA	Л		FDA250TM							FDA250T/v	١	
5 11 .		KW		0.75		1	.1	0.75 1.1					1.5 2.2					2.2				3.0
Fan Motor		POLE			4	·				4			4					4				
Power Supply (50Hz/60	Hz)	Volt/Ph./Hz.									380-4	15/3/50	/ 380-415	/3/60								
FLA		amp.		2.05		2.	82	2.05		2	.82			3.64		5.	.28		5.28		6	.58
Machine Weight (DBL)		kg		545		5	50	605		6	10			700		7	10		815		8	325
Machine Weight (CBL)		kg		475		4	30	520		5	25			670		6	80		775		7	785
Sound Pressure Level (SPI	L)	dBA	56	58	60	62	63	56	57	58	60	62	55	56	57	58	59	55	56	57	58	59
Outdoor Air series PCB		Model/PCS.		EKEG	FCBAV3 /	1 pc.			EKEG	FCBAV3 /	/ 1 pc.			EKEG	FCBAV3 /	'1 pc.			EKEQ	FCBAV3 /	1 pc.	
Expansion Valve		Model/PCS.		EKE	XV200 / 1	pc.			EKE	XV250 /	1 pc.		1	EKE	XV400 / 1	l pc.		1	EKE	XV500 / 1	pc.	
	Liquid pipes	mm		9.5 (B	razing con	nection)			9.5 (B	razing con	nection)			12.7 (B	lrazing cor	nection)			15.9 (B	razing cor	nection)	
Piping	Gas pipes *4	mm		19.1 (B	lrazing con	nection)			22.2 (B	lrazing cor	nnection)			28.6 (B	krazing cor	nection)		28.6 (Brazing connection)				
Connections	Drain pipes	mm			32					32					32					32		
Refrigerant Control				Electron	iic expansi	on valve			Electron	iic expansi	on valve			Electron	ic expansi	on valve			Electron	ic expansio	on valve	
Panel	0											Double	uble Skinned					•				
Capacity Index	acity Index				200	-				250		-	400					500				

Model				JR32DBL 132DBLH					JR40DBL R40DBLH					JR48DBL 148DBLH								
Total Cooling Capacity		NET (KW) *1	90.3	90.1	89.9	89.5	89.3	114.4	114.2	114.0	113.5	113.2	136.0	135.8	135.6	135.1	134.8	171,7	171.4	171.0	170.3	170.0
Total Sensible Cooling (	Capacity	INET (KVV)	43.1	42.9	42.7	42.3	42.1	56.2	56.0	55.8	55.3	55.0	65.2	65.0	64.8	64.3	64.0	84.4	84.1	83.7	83.0	82.7
Total Cooling Capacity		00000 4444 *1		92.6		1		116.8					138.9					175.2				
Sensible Cooling Capac	ity	GROSS (KW) *2			45.4			1	58.6 68.1				87.9									
Air Flow CMH		8,160		1		10,920					12,240			İ		16,380						
Ent. Temp.		°CDB/°CWB			33/28			1		33/28					33/28			İ	33/28			
Lea. Temp.		°CDB/°CWB			19.3/19.0					19.9/19.0	5				19.3/19.0	)		İ		19.9/19.6		
Coil Type										DX.COIL (R	410A) 8mr	n. WAVE S	SUT SURFAG	CE & STRA	IGHT EDG	E						
Coil Face Area		m <sup>2</sup>			1.568					1.98					2.35					2.97		
Coil Face Vel.		m/s			1.45					1.53					1.45			İ 👘		1.53		
Air PD.In Coil Pa				50					50			1		50				50				
Air PD.In Pre Filter *3 Pa				80			1		80			1		80					80			
Air Filter Size 12'X24X2' <sup>*3</sup> PCS.				2			1		-			1		3			-					
Air Filter Size 24"X24X2" *3 PCS.				4			6			6			9									
Air PD.In Casing Pa				30			30			30			30									
ESP.Initia		Pa	250	300	350	450	500	250	300	350	450	500	250	300	350	450	500	250	300	350	450	500
Total Statics Pressure		Pa	410	460	510	610	660	410	460	510	610	660	410	460	510	610	660	410	460	510	610	660
Fan Type												FORWAR	RD CURVE									
Model					FDA315TA	1				FDA400TA	Λ				FDA400TA	١				FDA500TA	1	
F 44.5		KW	3	3.0 4.0			3.0 4.0 5.5			4.0 5.5			4.0		5.5		7.5					
Fan Motor		POLE			4					4					4					4		·
Power Supply (50Hz/60	)Hz)	Volt/Ph./Hz.									380-4	15/3/50	/ 380-415	/3/60								
FLA		amp.	6.	58		8.92		6.58		8.92		12.0	8.92		12.0		8.92 12.0		15.4			
Machine Weight (DBL)		kg	9	85		1,005		1,1	175	1,	180	1,185		1,280		1,3	285	1,615		1,625		1,645
Machine Weight (CBL)		kg	8	70		890		9	75	9	80	985		1,075		1,0	080	1,265		1,275		1,295
Sound Pressure Level (SP	L)	dBA	63	64	65	66	67	60	61	62	63	64	60	61	62	63	64	61	62	63	64	65
Outdoor Air series PCB		Model/PCS.		EKEQ	FCBAV3 /	2 pcs.			EKEG	FCBAV3 /	2 pcs.			EKEQ	FCBAV3 /	3 pcs.			EKEQI	CBAV3 /	3 pcs.	
Expansion Valve		Model/PCS.		EKE	KV400 / 2	pcs.			EKE	XV500 / 2	2 pcs.			EKE	(V400 / 3	pcs.			EKE)	(V500 / 3	pcs.	
-	liquid pipes	kg         985         1,005         1,175         1,180         1,285         1,285         1,285         1,185           kg         870         890         975         980         985         1,075         1,080         1,           dBA         63         64         65         66         67         60         61         62         63         64         60         61         62         63         64         63         64         60         61         62         63         64         60         61         62         63         64         60         61         62         63         64         65         64         65         66         67         60         61         62         63         64         63         64         60         61         62         63         64         65         64         65         66         67         60         61         62         63         64         63         64         63         64         63         64         63         64         65         64         65         66         65         60         61         62         63         64         63         64			15.9 (Bra	zing conne	ection) x 3															
Piping Gas pipes *4		mm		28.6 (Bro	izing conne	ection) x 2		1	28.6 (Bro	zing conn	ection) x 2			28.6 (Bro	izing conne	ection) x 3			28.6 (Bra	zing conne	ection) x 3	
Connections	Drain pipes	mm			32			1	32			32			32							
Refrigerant Control				Electron	iic expansi	on valve			Electro	nic expansi	on valve			Electron	iic expansi	on valve			Electron	ic expansi	on valve	
Panel												Double	Skinned									
Capacity Index					800					1,000					1,200					1,500		

## Notes:

 Notes:
 ■ Connection ratio

 1. Net capacity includes indoor fan heat.
 System Pattern

 2. Gross capacity do not include indoor fan heat.
 System Pattern

 3. With pre filter, AAF synthetic R29 & class G3 (Washable) eff 80-85%.
 Only AHU (Pair AHU)

 4. It is necessary to reduce piping size by reducer when connection (19.1 → 15.9, 22.2 → 19.1, 28.6 - 5. Air temperature control via an external MT III controller (option).
 Subscience of the synthetic R29 & Context of the syntheti

■Connection ratio

VRV AHU System
-------------------

	Total CR	VRV Indoor	AHU
HU)	50 <b>-</b> 110%	-	50 <b>-</b> 110%
$16 \rightarrow 222 3/19 =$	28 6)		

kcal/h=kWx860 Btu/h=kWx3412 cfm=m<sup>3</sup>/minx35.3

# Air Treatment Equipment Lineup

## MicroTech III Controller (Option)

MicroTech III consists of 4 components in a fixed configuration.



## Features of MicroTech III

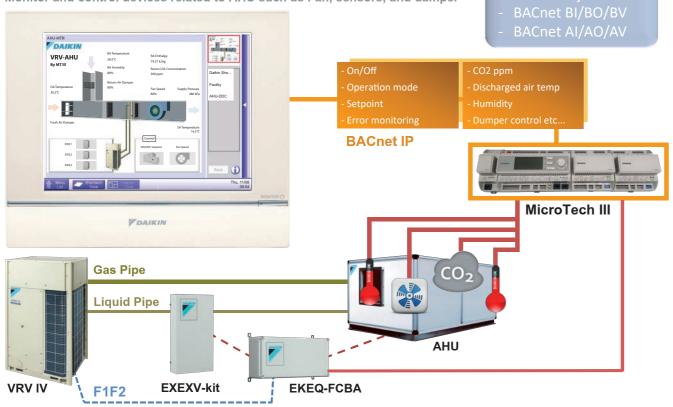
- BACnet IP Module for integration of MicroTech III AHU Controller in networks featuring the BACnet Protocol. Compatible with Daikin intelligent Touch Manager (iTM) or 3<sup>rd</sup> party BMS.
- 2. Principal Module POL 638 and Extension Module POL 955 have selected analog and digital I/O contacts programmed for control and monitoring of sensors and other related devices in a *VRV* Outdoor Air Series AHU.
- HMI screen on the Principal Module POL 638 allows easy testing and commissioning and even without a centralised controller or 3<sup>rd</sup> party BMS.

## Functions of MicroTech III

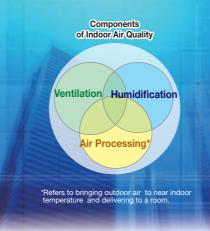
- 1. Supply air control using the supply air sensor
  - Used for temperature control.
- 2. Air quality control CO2 Levels
  - The controls of the mixing damper can be dependent on the CO2 set point.
  - User can define the CO2 set point.
  - The fresh air damper will be difference between 100% and the percentage opening of the mixing damper.
- 3. Fan airflow control
  - The fan speed control can be done through i. Direct (w/o inverters).
  - ii. DirectVar (with inverters).
  - iii. Analog controlled variable speed drive with digital release.
  - iv. Pressure control to meet the pressure set points in the duct.
- 4. Monitoring points for other features
  - i. Room humidity
  - ii. Electric heating coil
  - iii. Outside, room and return temperature iv. *VRV* alarm

## MicroTech III can connect to intelligent Touch Manager.

Monitor and control devices related to AHU such as Fan, sensors, and damper



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

		Outdoor-Air		Heat Reclai	m Ventilator		
		Processing Unit	VKM-GAM Type	VKM-GA Type	VAM-GJ Type		
		Ventilation Humidification Air Processing*	Ventilation Air	Humidification Processing*	Ventilation Humidification Air Processing*		
			00*				
	Refrigerant Piping	Connectable	Conne	ectable	Not connectable		
Connections	Wiring	Connectable	Conne	ectable	Connectable		
with <b>VRV</b> IV	After-cool & After-heat Control	Available	Available	lable	Not available		
Heat Exchar	nge Element	_	Energy savir	ngs obtained	Energy savings obtained		
Humidifier		_	Fitted	_	_		
High Efficier	ncy Filter	Option	Opt	tion	Option		
Ventilation S	System	Air supply only	Air supply 8	air exhaust	Air supply & air exhaust		
Power Supp	bly	220-240 V, 50 Hz	220-240	V, 50 Hz	220-240 V/220 V, 50 Hz/60 Hz		
Airflow Rate			500 m³/h		150 m³/h 250 m³/h 350 m³/h 500 m³/h 650 m³/h 800 m³/h		
		1080 m³/h 1680 m³/h 2100 m³/h	800 1000	m /n m³/h	800 m /h 1000 m³/h 1500 m³/h 2000 m³/h		

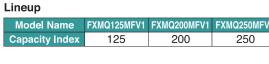
\*Refers to bringing outdoor air to near indoor temperature and delivering to a room.

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

Air Treatment quipment Lineup
----------------------------------

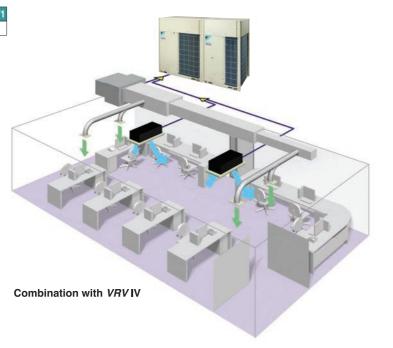
# Outdoor-Air Processing Unit

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

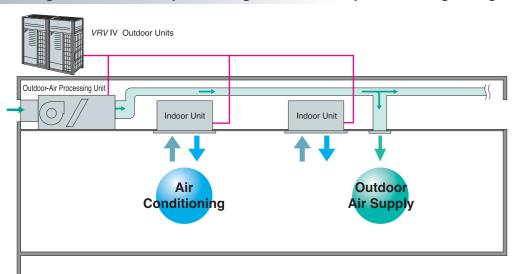




Fresh air treatment and air conditioning can be achieved with a single system by using heat pump technology—without the usual troublesome air supply and air discharge balance design. Fan coil units for air conditioning and an outdoor-air processing unit can be connected to the same refrigerant line.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



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



### Connection Conditions

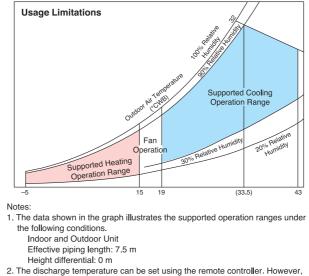
- The following restrictions must be observed in order to maintain the indoor units connected to the same system.
- When outdoor-air processing units are connected, the total connection capacity index must be 50% to 100% of the capacity index of the outdoor units.
- · When outdoor-air processing units 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.
- · Outdoor-air processing units can be used without indoor units.

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

### Airflow rate

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

- · Optional equipment includes long-life filters.
- · Compatible with outdoor temperatures from -5°C to 43°C.



- the actual temperature may not match the temperature setting under some circumstances due to the outdoor-air processing load or mechanical protection controls.
- 3. The system will not operate in fan mode when the outdoor air temperature is 5°C or below

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

· For the VRV IV system, a variety of control systems can be deployed, including remote control from distances of up to 500 m.

\* Group control is not possible between this unit and standard type indoor units. Remote controllers connect to (Wired remote controller) each unit separately.



BRC1E62 Navigation Remote Controller (option)

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

## · A central control system compatible with the VRV IV system can be installed.

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



DCS302CA61 Central remote controller (option)

• With the VRV IV system, the equipment employs the "super wiring system" so that the wiring linking the indoor and outdoor units can also be utilised for central control.

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



# STANDARD SPECIFICATIONS

## Indoor unit

	Туре				Ceiling Mounted Duct Type			
	Model			FXMQ125MFV1	FXMQ125MFV1 FXMQ200MFV1 FXMQ250MFV1			
Power su	ıpply			1-phas	), 50 Hz			
Cooling capacity *1 kcal/h Btu/h		12,000	19,300	24,100				
		Btu/h	47,800	76,400	95,500			
			kW	14.0	22.4	28.0		
Power co	nsumption		kW	0.359	0.548	0.638		
Casing					Galvanised steel plate			
Dimensio	ons (H×W×D)		mm	470X744X1,100	470X1,38	30X1,100		
Motor output kW			kW		0.380			
Fan	Airflow rate		m³/min	18	28	35		
i an			cfm	635	988	1,236		
	External static pressure 220V/240V		Ра	185/225	225/275	205/255		
Air filter					*2			
	Liquid		mm	$\phi$ 9.5 (flare)				
Refrigerant piping	Gas		mm	¢ 15.9 (flare)	\$ 19.1 (brazing)	$\phi$ 22.2 (brazing)		
6.0.4	Drain		mm	PS1B female thread				
Machine	weight		kg	86	12	23		
Sound le	vel *3	220V/240V	dB(A)	42/43	47	/48		
Connecta	able outdoor units '	4		6 HP and above	8 HP and above	10 HP and above		
Operation ra (Fan mode o	ange operation between 15 ar	d 19°C)	Cooling		19 to 43°C			
Range of temperatu	the discharge ure *5		Cooling	13 to 25°C				

Notes: \*1. Specifications are based on the following conditions;

 Cooling: Outdoor temp. of 33°CDB, 28°CWB (68% RH), and discharge temp. of 18°CDB.
 Equivalent reference piping length: 7.5 m (0 m horizontal)

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

conditions.

# **OPTIONS**

## Indoor unit

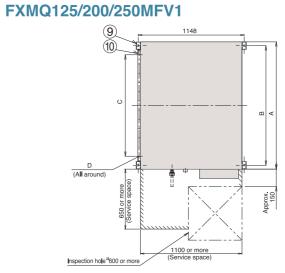
		Model	FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1			
_	Operation remo	te controller	BRC1E62/BRC1C62					
ntro	Central remote	controller	DCS302CA61					
Operation/control	Unified ON/OFF	controller	DCS301BA61					
ratio	Schedule timer DST301BA61							
Ope	Wiring adaptor fo	r electrical appendices (1)	KRP2A61					
	Wiring adaptor fo	r electrical appendices (2)	KRP4AA51					
	Long-life replac	ement filter	KAFJ371L140 KAFJ371L280					
Filters	High-efficiency	Colourimetric method 65%	KAFJ372L140	KAFJ372L280				
Ē	filter	Colourimetric method 90%	KAFJ373L140	KAFJ3	J373L280			
	Filter chamber *	'1	KDJ3705L140	KDJ370	05L280			
Dr	rain pump kit		KDU30L250VE					
Ac	daptor for wiring			KRP1B61				

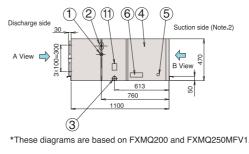
Note: \*1. Filter chamber has a suction-type flange. (Main unit does not.) Dimensions and weight of the equipment may vary depending on the options used.
 Some options may not be usable due to the equipment installation conditions, so please confirm prior to ordering. \*4. It is possible to connect to the outdoor unit if the total capacity of the indoor units is 50% to

This equipment cannot be incorporated into the remote group control of the VRV IV system.

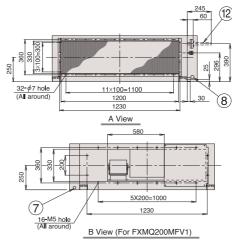
## 100% of the capacity index of the outdoor unit. \*5. Local setting mode is not displayed on the remote controller.

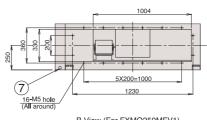
# DIMENSIONS



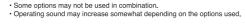


## FXMQ200/250MFV1





B View (For FXMQ250MFV1)



## Local connection piping size

Model	Gas piping diameter	Liquid piping diameter
FXMQ125MFV1	$\phi$ 15.9	<b>φ</b> 9.5
FXMQ200MFV1	$\phi$ 19.1 attached piping	φ9.5
FXMQ250MFV1	$\phi$ 22.2 attached piping	φ9.5

### Table of dimensions

Model	А	В	С	D
FXMQ125MFV1	744	685	5X100=500	20- <i>ф</i> 4.7 hole
FXMQ200MFV1	1380	1296	11X100=1100	32- $\phi$ 4.7 hole
FXMQ250MFV1	1380	1296	11X100=1100	32-φ4.7 hole

Notes:

- 1. The attached piping in the diagram is for FXMQ200MFV1 and FXMQ250MFV1 only. The gas piping connection port (2) in the diagram) has a different bore form with FXMQ125MFV1
- 2. An air filter is not supplied with this unit. Be sure to mount an air filter in the suction side. [Use a filter with dust collection efficiency of at least 50% (gravimetric method). This is available as an option.]
- 3. For outdoor ducts, be sure to provide heat insulation to prevent condensation.
- ① Liquid pipe connection
- 2 Gas pipe connection
- ③ Drain piping connection
- ④ Electric parts box⑤ Ground terminal
- Discharge companion flange
   Water supply port

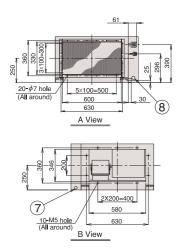
9 Hanger bracket

② Attached piping (Note. 1)

⑦ Power supply wiring connection

⑧ Transmission wiring connection

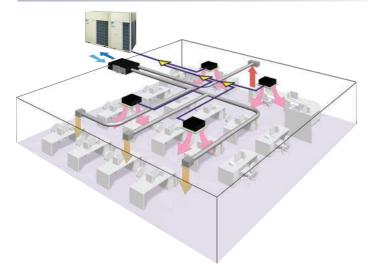
## FXMQ125MFV1



atment	ent Lineup
Air Tr	Equipm

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

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



## Efficient outdoor air introduction is possible

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



## **Humidifier**

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

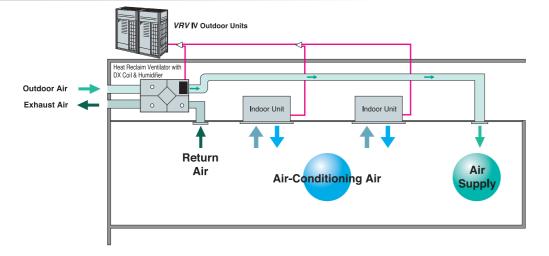
## **DX-coil**

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

## High static pressure

High external static pressure means enhanced design flexibility.

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

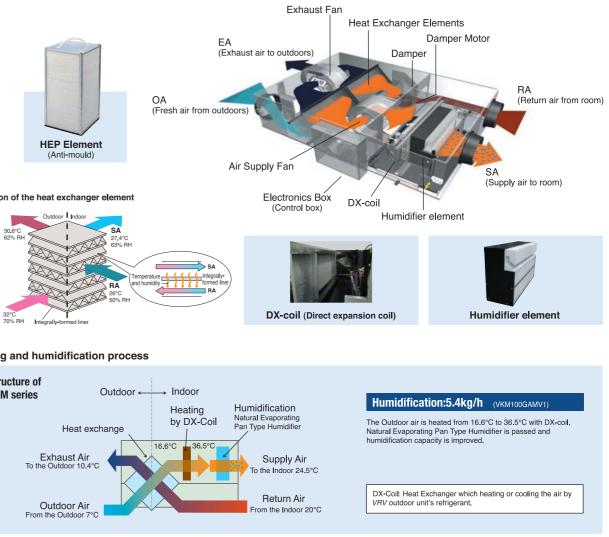


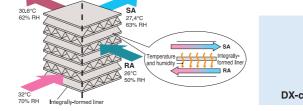
### **Connection Conditions**

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

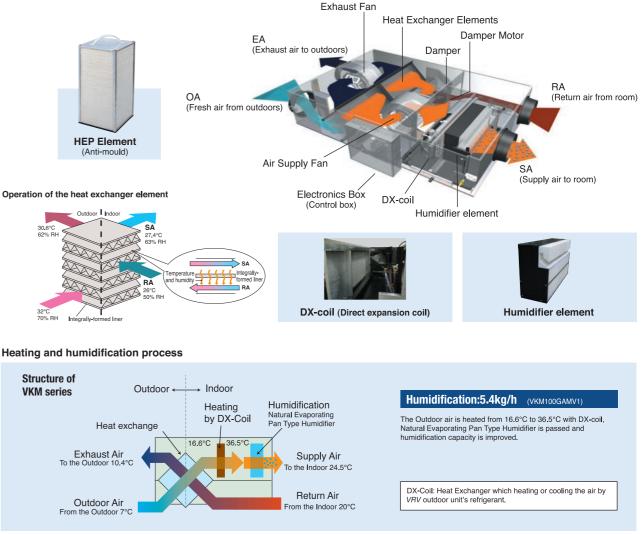
When the Heat Reclaim Ventilator VKM series units are connected, the total connection capacity index must be 50% to 130% of the capacity index of the outdoor units.

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





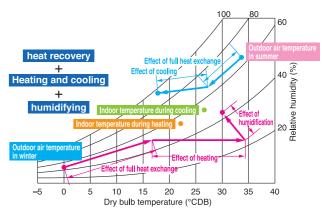
### Heating and humidification process



## 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.



# SPECIFICATIONS

r	NODEL			VKM50GAMV1*	VKM80GAMV1*	VKM100GAMV1*	VKM50GAV1	VKM80GAV1	VKM100GAV		
Refrigerant				R-410A							
Power Supply						1-phase, 220-	240 V, 50 Hz				
		Airflow rate	m³/h	500	750	950	500	750	950		
Airflow Bate & Static	Ultra-high	Static pressure	Ра	160	140	110	180	170	150		
Airflow Rate & Static	1.0.1	Airflow rate	m³/h	500	750	950	500	750	950		
Pressure (Note 7)	High	Static pressure	Ра	120	90	70	150	120	100		
		Airflow rate	m³/h	440	640	820	440	640	820		
	Low	Static pressure	Ра	100	R-410A           1-phase, 220–240 V, 50 Hz           750         950         500         750           140         110         180         170           750         950         500         750           90         70         150         120	70					
	Heat	Ultra-high		560	620	670	560	620	670		
	exchange	High	W	490	560	570	490	560	570		
	mode	Low		420	470	480	420	470	480		
Power Consumption		Ultra-high		560	620	670	560	620	670		
	Bypass mode	High	W	490	560	570	490	560	570		
	mode	Low		420	470	480	420	470	480		
Fan Type		11			1	Sirocc	o Fan	1	1		
Motor Output			kW	0.280 × 2	0.280 × 2			0.280 × 2	0.280 × 2		
	Heat	Ultra-high		37/37.5/38					40/40.5/41		
Sound Level (Note 5)	Heat exchange	High	dB(A)	35/35.5/36				37.5/38/39	38/38.5/39		
	mode	Low	. ,	32/33/34			33.5/34.5/35.5	34.5/36/37	35/36/36.5		
(220/230/240 V)	Bypass	Ultra-high	dB(A)	37/37.5/38			38/38.5/39	40/41/41.5	40/40.5/41		
		High		35/35.5/36					38/38.5/39		
	mode	Low		32/33/34					35/36/36.5		
Humidification Capacity (N	ote 4)		kg/h	2.7				_	00,00,0010		
Ultra-high				76			76	78	74		
Temp. Exchange	High		%	76					74		
Efficiency		Low		77.5					76.5		
		Ultra-high		64					62		
Enthalpy Exchange	High			64					62		
Efficiency (Cooling)	Low		%	67		-			66		
	Ultra-high			67					65		
Enthalpy Exchange	High		%			+			65		
Efficiency (Heating)	Low								69		
Casing	LOW			69	75			75	00		
Insulating Material											
Heat Exchanging System											
Heat Exchanger Element						,		, •			
Air Filter					2			er			
	Cooling (No	te 2)		2.8	4.5	5.6	2.8	4.5	5.6		
DX-coil Capacity	Heating (No		kW	3.2	5.0	6.4	3.2	5.0	6.4		
	Height	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		3.2	387	387	3.2	387	387		
Dimensions	Width		mm	1,764	1.764	1,764	1,764	1,764	1,764		
Dimensions	Depth		man	832	1,764	1,764	832	1,764	1,764		
Connection Duct Diameter			mm	032		250	φ200	,	250		
Connection Duct Diameter		Net		φ200 102	φ 120	1250	φ200 96	φ; 109	114		
Machine Weight			kg				96	109	114		
		Gross (Note 8)		107	129		0% DH or loos	_			
Linit Ambient Condition		Around Unit				0°C-40°CDB, 8					
Unit Ambient Condition OA (Note 9)				-15°C–40°CDB, 80%RH or less							

Notes: 1. Cooling and heating capacities are based on the following conditions. Fan is based on High and 12. Temperature exchange efficiency is the mean value for Cooling and Heating. Efficiency is measured

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: 5.5 kW, VKM100GAMV1/GV1: 7.0 kW
 Indoor temperature: 20°CDB, Outdoor temperature: 7°CDB, 6°CWB
 Indoor temperature: 20°CDB, Outdoor temperature: 7°CDB, 6°CWB
 Humidifying capacity is based on the following conditions: Indoor temperature: 30°CDB, SUctOor temperature: 7°CDB, 6°CWB
 The operating sound measured at the point 1.5 m below the centre of the unit is converted to that measured in an anechoic chambar built in accordance with the JIS C 1502 conditions. The actual operating sound varies depending on the surrounding conditions (near running unit's sound, reflected sound and so on) and is normally higher than this value.
 For operation in a quiet room, it is required to take measures to lower the sound. For details, refer to the Engineering Data.
 The noise level at the air discharge port is about 8–11 dB(A) or higher than the unit's operating sound.

- sound.
- For operation in a quiet room, it is required to take measures to lower the 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.

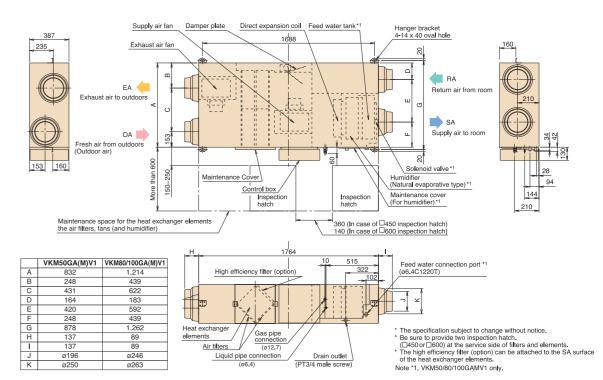
under the following condition: Ratio of rated external static pressure outdoor to indoor is kept

1. Unique 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 with directly to the duct, always use the same system on the indoor unit as with the outdoor 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

m			Туре						VKM	<b>50/80/</b> 1	00GA(	M)V1					
Re	emote c	ontro	ler						BRC	C1E62/	BRC1C	62 *1					
_		Reside	ntial central remote controller	DCS303A51 *2													
Cer	tralised [	Centr	al remote controller	DCS302CA61													
0011	a oning j	Unifie	d ON/OFF controller		DCS301BA61												
		Sche	dule timer		DST301BA61												
					KRP2A61												
2	For hum	nidifier	running ON signal output							KRP	50-2						
b	For he	ater of	control kit	BRP4A50													
Board	For wi	ring	Type (indoor unit of <i>VRV</i> )	FXFQ-S FXFQ-LU	FXZQ-M	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXSQ-P	FXMQ-P	FXMQ-MA	FXUQ-A	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	FXVQ-N	FXBQ-P FXBPQ-P
2		L		KRP1C63*	KRP1BA57★	KRP1B61*	KRP1B61	KRP1B56★	KRP1C64*	KRP1C64*	KRP1B61	KRP1C67	KRP1BA54	—	KRP1B61	KRP1C67	KRP1B61
_	Installation box for adaptor PCB*			Note 2, 3 KRP1H98A	Note 4, 5 KRP1BA101	Note 2, 3 KRP1B96	_				_	_			_	_	_
	Adaptor Adaptor	Remote c Centralised controlling device appen For hum For hum For hum For wi Q	Remote contro Centralised controlling device Wiring adag appendices For humidifier For heater of For wiring	Remote controller Residential central remote controller Centralised controlling device Wiring adaptor for electrical appendices For heater control kit For heater control kit For wiring Fo	Remote controller Residential central remote controller Centralised controlling device Wiring adaptor for electrical appendices For humidifier running ON signal output For heater control kit For wiring For wiring KRPIC65* KRPIC6	Remote controller       Residential central remote controller       Centralised controlling device       Wiring adaptor for electrical appendices       For humidifier running ON signal output       For heater control kit       For wiring       Type (indoor unit of VRV)       KRP1083* KRP18457*       KRP1083* KRP18457*	Remote controller Residential central remote controller Centralised controlling device Wiring adaptor for electrical appendices For humidifier running ON signal output For heater control kit For wiring Type (indoor unit of VRV) FXEQ-8 FXZQ-M FXCQ-M  Remote controller         Remote controller         Centralised controlling device         Wiring adaptor for electrical appendices         For humidifier running ON signal output         For humidifier running ON signal output         For wiring       Type (indoor unit of VRV)         FXFQ-S FXFQ-LU       FXZQ-M         For wiring       Type (indoor unit of VRV)         KRP1063* KRP1861*       KRP1661*         KRP1063* KRP1861*       KRP1861*	Remote controller Residential central remote controller Centralised controlling device Viring adaptor for electrical appendices For humidifier running ON signal output For heater control kit For wiring Type (indoor unit of VRV) FXFQ-S FXFQ-LU FXCQ-M FXCQ	Remote controller       BRC         Remote controller       BRC         Centralised controller       Central remote controller         Centralised controller       Central remote controller         Unified ON/OFF controller       Schedule timer         Wiring adaptor for electrical appendices       For humidifier running ON signal output         For heater control kit       For heater control kit         For wiring       Type (indoor unit of VRV)         KRP10c3x KRP1B61*       KRP1B61*         KRP10c3x KRP1B61*       KRP1B61*         KRP1B61*       KRP1B61*         KRP1B61*       KRP1B61*         KRP1B61*       KRP1B61*	Remote controller       BRC1E62/I         Centralised controller       DCS300         Centralised controller       DCS300         Unified ON/OFF controller       DCS300         Schedule timer       DCS300         Viring adaptor for electrical appendices       KRP         For humidifier running ON signal output       KRP         For humidifier running ON signal output       FXRQ-N         For wiring       Type (indoor unit of VRV)         KRP1063* (RP1B61* KRP1B61* KRP1B61* KRP1B66* (RP1064* KRP1064* KRP1064* KRP1064* KRP1064* S)         Note 2.3       Note 2.3	Remote controller Remote controller Residential central remote controller Centralised controlling device Central remote controller Central remote controller Central remote controller DCS303A51 *2 Central remote controller DCS302CA61 DCS302CA61 Schedule timer DCS301BA61 Schedule timer DCS301BA61 KRP2A61 KRP2A61 For humidifier running ON signal output For humidifier running ON signal output For heater control kit For heater control kit For wiring Type (indoor unit of VRV) FXFQ-S FXFQ-LU FXZQ-M FXCQ-M FXKQ-MA FXDQ-PB FXSQ-P FXMQ-P	Remote controller       BRC1E62/BRC1C62*1         Residential central remote controller       DCS303A51*2         Centralised 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)         KRP1063* KRP1867* KRP1861* KRP1861* KRP1864* KRP1064* KRP164* KRP1661 KRP1661         KRP1063* KRP1867* KRP1861* KRP1861* KRP1664* KRP1064* KRP1661 KRP1661	Remote controller         Remote controller         Residential central remote controller         DCS303A51*2         Central remote controller         DCS303A51*2         Central remote controller         DCS303A51*2         Central remote controller         DCS301BA61         Central remote controller         DCS301BA61         Viring adaptor for electrical appendices         For humidifier running ON signal output         For humidifier running ON signal output         For humidifier running ON signal output         FXRQ-NB       FXRQ-PB       FXRQ-P       FXMQ-PB       FXRQ-P       FXMQ-PA       FXQ-A       FXCQ-M       FXCQ-M       FXKQ-P       FXMQ-PE       FX	Note Controller         BRC1E62/BRC1C62 '1         BRC1E62/BRC1C62 '1         DCS303A51 '2         Central remote controller         DCS303A51 '2         Central remote controller         DCS303A51 '2         Central remote controller         DCS302CA61         UNified ON/OFF controller         DCS301BA61         Schedule timer         OS301BA61         Viring adaptor for electrical appendices         For humidifier running ON signal output       KRP50-2         For humidifier running ON signal output       FXRQ-M       FXQ-PB       FXQ-P       FXMQ-PE       FXMQ-	Remote controller       BRC1E62/BRC1C62*1         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)         KRP1661*       KRP1861*         KRP1664*       KRP1664*         KRP1664*       KRP1664*	Remote controller Residential central remote controller Residential central remote controller Central remote controller Central remote controller Unified ON/OFF controller DCS303A51 *2 Central remote controller DCS302CA61 CCS302CA61 CCS301BA61	

Only one installation box can be installed for each indoor unit.
 Up to 2 installation boxes can be installed for each indoor unit.

5. Installation box \* is necessary for second adaptor.

*2 For residential use of	)
the power ON/OFF,	

Ite	m	Туре	VKM50GA(M)V1	VKM80GA(M)V1 VKM100GA(M							
ы	Silencer		—	KDDM24B100							
function	Sliencer	Nominal pipe diameter mm	—	φ2	50						
			K-DGL200B	K-DG	_250B						
ona	Discharge grille	Nominal pipe diameter mm	¢200	φ2	50						
Additional	High efficiency	filter	KAF242H80M	KAF242H80M KAF242H100							
Ad	Air filter for rep	lacement	KAF241G80M	KAF241	G100M						
Fle	Flexible duct (1 m)		K-FDS201D	K-FDS	S251D						
Fle	exible duct (2 m)		K-FDS202D	K-FDS252D							

only. When connected with a Heat Reclaim Ventilator (VKM), you can only switch , it cannot be used with other central control equipment.

Air Treatment	quipment Lineup
	Б

# Heat Reclaim Ventilator — VAM series

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

### Model Names

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

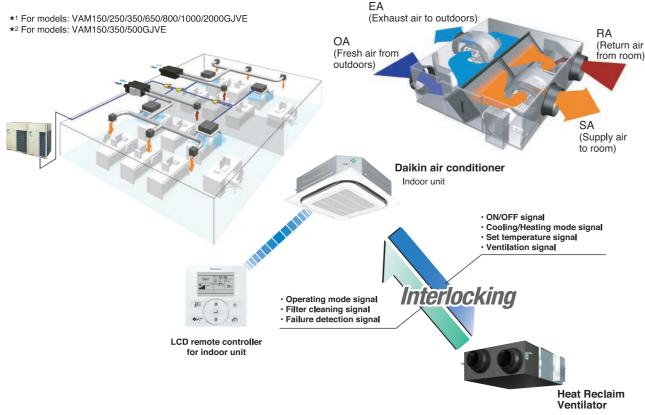
Improved Enthalpy Efficiency\*1 Higher External Static Pressure\*

**Enhanced Energy Saving Functions** 



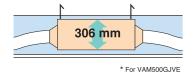
Heat Reclaim Ventilator remote controller BRC301B61 (Option) This remote controller is used in case of independent operation of Heat Reclaim Ventilator

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



### **Compact Equipment**

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

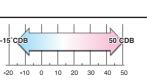


Air conditioning load reduced by approximately 31%!

## **Cold Climate Compatible**

**Energy Conservation** 

Standard operation at temperatures down to -15°C



## Air conditioning load reduced by approximately 31%!

system.

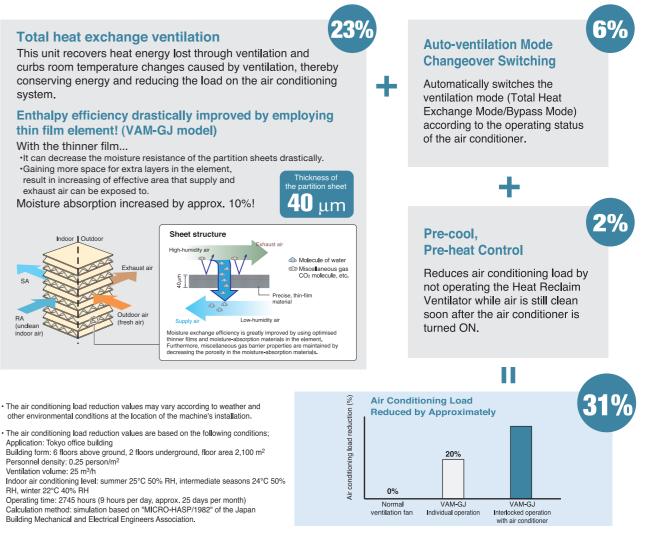
## thin film element! (VAM-GJ model)

### With the thinner film...

·It can decrease the moisture resistance of the partition sheets drastically.

result in increasing of effective area that supply and exhaust air can be exposed to.





other environmental conditions at the location of the machine's installation

. The air conditioning load reduction values are based on the following conditions;

Personnel density: 0.25 person/m

Indoor air conditioning level: summer 25°C 50% RH, intermediate seasons 24°C 50%

Operating time: 2745 hours (9 hours per day, approx. 25 days per month)

## 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 VRV systems. Nighttime free cooling operation is set to "off" in the factory settings, so if there is a need to turn on, please contact Daikin dealer

\*1 This function can be operated only when interlocked with air conditioners. \*2 Value is based on the following conditions: • Cooling operation performed from April to Octobe

· Calculated for air conditioning sensible heat load only (latent heat load not included)

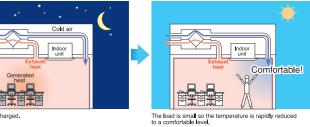
The indoor accumulated heat is discharged at night This reduces the air conditioning load the next day thereby increasing efficiency.







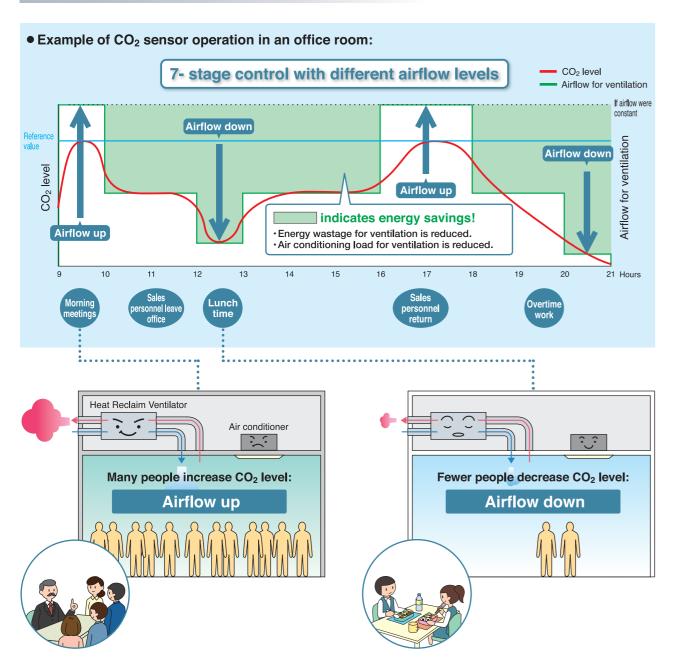




# Heat Reclaim Ventilator — VAM series

## **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.



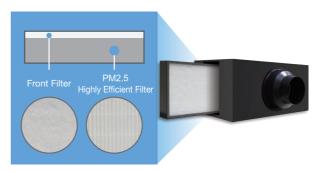
# Heat Reclaim Ventilator — PM2.5 filtration unit (Option)

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

## **Double-layered efficient filtration**

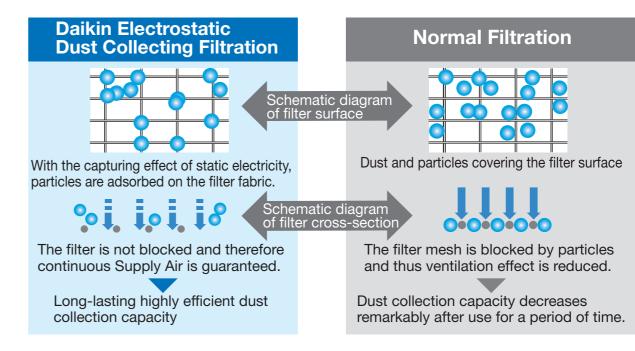
PM2.5 filters are double-layered.

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



## Electrostatic dust collection filter: more efficient and longer lasting effect

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

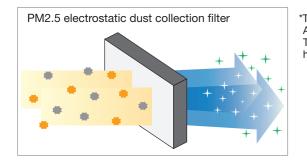




## Filtering PM2.5 efficiently for healthier and more comfortable environments

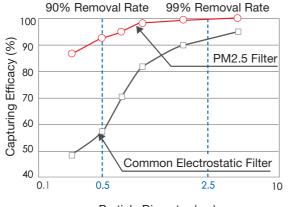
The PM2.5 filtering series heat reclaim ventilator is equipped with an electrostatic dust collection filter for PM2.5 removal.

This filter not only removes 99% or more of 2.5 µm; it also eliminates up to 90% of 0.5 µm matter!



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





### Particle Diameter (µm)

## **Extra-High Performance Filter Against Sulfur Oxides and Nitrogen Oxides**

## Effective Use of Active Carbon Material to Enlarge the Adsorption Area

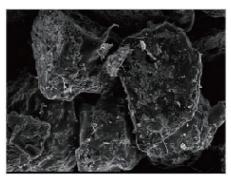
As an expert in the research and development of filters, DAIKIN has specifically selected active carbon material as the main substance to constitute the filter against sulfur oxides and nitrogen oxides. The material's usable pore surface is fully exploited, thus extending the filter's durability.

Note: Surface area of active carbon: 700 m²/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.

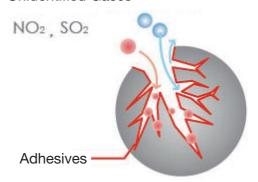
## Intelligent Identification, Super-effective Adhesion

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** 



# SPECIFICATIONS

	_															
		MODEL			VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE			
Powe	er Supp	bly						1-phase, 22	20-240 V/ 220	V, 50/60 Hz						
Temp	. Exch	ande	Ultra-High		79/79	75/75	79/79	74/74	75/75	72/72	78/78	72/72	77/77			
Effici	ency	5	High	%	79/79	75/75	79/79	74/74	75/75	72/72	78/78	72/72	77/77			
(50/6	0 Hz)		Low		84/85	79/79	82/82	80/80.5	77/77.5	74/74.5	80.5/81	75.5/76	79/81			
Entha			Ultra-High		66/66	63/63	66/66	55/55	61/61	61/61	64/64	61/61	62/62			
Excha		For Cooling	High	%	66/66	63/63	66/66	55/55	61/61	61/61	64/64	61/61	62/62			
(50/6	0 Hz)		Low		70/70.5	66/66	70/70	59/59.5	64/64.5	64/64.5	68.5/69	64/64.5	66/67			
		Heat	Ultra-High		125/134	137/141	200/226	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542			
		Exchange	High	W	111/117	120/125	182/211	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315			
Power Consu	mption	Mode	Low		57/58	60/59	122/120	128/136	196/207	435/483	476/512	835/927	966/1,039			
(50/6	0 Hz)	Dunana	Ultra-High		125/134	137/141	200/226	248/270	342/398	599/680	635/760	1,145/1,300	1,289/1,542			
		Bypass Mode	High	W	111/117	120/125	182/211	225/217	300/332	517/597	567/648	991/1,144	1,151/1,315			
			Low		57/58	60/59	122/120	128/136	196/207	435/483	476/512	835/927	966/1,039			
		Heat	Ultra-High		27-28.5/28.5	27-29/29	31.5-33/33	33-35.5/34	34-36/36	39-40.5/39.5	39.5-41.5/39.5	39.5-41.5/41.5	41.5-43.5/42			
		Exchange Mode	High	dB(A)	26-27.5/27.5	26-27.5/28	30-31.5/30	31.5-34/32	33-34.5/34	37-39.5/37.5	37.5-39.5/37.5	37.5-39.5/39.5	39-43/40			
	d Level	wode	Low		20.5-21.5/21	21-22/21	23-25/23	25-28.5/24	27.5-29.5/28	35-37.5/34	35-37.5/34.5	35-37.5/36	36-39/39			
(50/6	0 Hz)		Ultra-High		28.5-29.5/29.5	28.5-30.5/30.5	33-34.5/34.5	34.5-36/35.5	35-37.5/37.5	40.5-42/41	40.5-42.5/40.5	41-43/42.5	43-45.5/44			
		Bypass Mode	High	dB(A)	27.5-28.5/28.5	27.5-29/29.5	31.5-33/31.5	33-34.5/33.5	33-35.5/35.5	38.5-40/39	38.5-40.5/38.5	39.5-41/41.5	40.5-45/42			
			Low		22.5-23.5/22	22.5-23/22.5	24.5-26.5/24.5	25.5-28.5/25.5	27.5-30.5/29.5	36-38.5/35.5	36-38.5/35.5	36.5-38/37.5	37.5-39.5/41			
Casir	ng					Galvanised steel plate										
Insula	ation M	laterial						Self-extingu	ishable polyur	ethane foam						
Dime	nensions (HXWXD) mm			mm	278×81	278×810×551 306×879×800 338×973×832 387×1,111×832 387×1,111×1,214 785×1										
Mach	Machine Weigh				2	4	3	2	45	55	67	129	157			
Heat	Excha	Exchange System				Air to air cross flow total heat (Sensible heat + latent heat) exchange										
Heat	t Exchange Element Material								cessed nonflar							
Air Fi	Iter					Multidirectional fibrous fleeces										
	Туре								Sirocco fan							
	Airflo	w Rate	Ultra-High		150/150	250/250	350/350	500/500	650/650	800/800	1,000/1,000	1,500/1,500	2,000/2,000			
	(50/60		High	m³/h	150/150	250/250	350/350	500/500	650/650	800/800	1,000/1,000	1,500/1,500	2,000/2,000			
Fan	<u> </u>		Low		100/95	155/155	230/230	320/295	500/470	700/670	860/840	1,320/1,260	1,720/1,580			
		nal Static	Ultra-High		120/154	70/96	169/222	105/150	85/125	133/170	168/192	112/150	116/140			
	Press (50/60		High	Ра	106/131	54/65	141/145	66/52	53/67	92/85	110/86	73/72	58/32			
	<u> </u>		Low		56/60	24/20	67/30	32/18	35/38	72/61	85/60	56/50	45/45			
		r Output		kW	0.03		0.09		0.140×2	0.28		0.28				
<u> </u>		Duct Diame	eter	mm	\$\$	φ.	150	,	200 D°CDB, 80%R	,	250	φ3	350			
Notes	<ol> <li>Airfl</li> <li>Sou ope</li> <li>Sou ope</li> <li>The sou</li> <li>The with</li> <li>Terfic Rati side</li> <li>In co value</li> <li>Sou dB( 11c</li> </ol>	low rate can ind level is m ind level gen rating conditi sound level nd level. specification out notice. perature Exic iono frated exic to of rated exic to of rated exic onformance v e when one u is is transmiss discharge gr cated value ind level from A) (models w BB(A) (model	be chaineasure erally b tions, re- at the a ns, desi change asured of cternal s de = 7 f vith JIS sion sou rille. Thu when the n the dia- rith the s s with t	nged o d in an ecome filected air disc gns ar Efficiel under t static p to 1. standal verated und fro us it is ie unit scharg airflow he airfl	nd information g ncy is the mean the following cc pressure has be rds (JIS B 8628), with the value c m the main unin normal for the s is actually insta pe por causes t rate of less that low rate of 650r	le or High mode iber. his value deper pripheral noise. yout 8 dB(A) hig iven here are su value between inditions: en maintained a operating sound onverted for an a converted for an a converted for an a to an other sound to be low lled. he value to be a n 150 to 500m <sup>2</sup> , n'/h or more) gr	nding on the her than the un ubject to chang cooling and hea as follows; outdi l level is based o anechoic chamb include sound f der than the approximately 8 /h) to approxim	ma co 10. Wi (S, (S, frc it's no e so ins th	ay increase dep nsider noise co th large models A) grille is instal m the discharg ise. In such cas floor and walls stalling a large n e main unit and und level may b stalling a large n e main unit and per each other, p Jse a sound-mu rilles Decentralised in hen installing in sssroom, please m the main unit Jse of ceiling m oss) vlethods of bloc nsulating mater	ending on the c untermeasures in particular (1) ed near the ma e grille via the d es, if peripheral s, combination 1 e as much as 1 nodel, please p lease consider the discharge g lease consider filing box, flexiti stallation of dis a location with consider the fic aterials with hig king sound trar ials around the ider supplemer	when installing 500 and 2000m in unit, the nois luct, and this wi effects are incl with other equip 5 dB(A) higher rovide as much rille. If the equi countermeasur le duct and sou charge grilles particularly low allowing measu h sound insulat insmission, for e bottom of the s tary methods s	i'/h models), if the of the main ur lil result in a mail luded (such as r mment, and back than the indicat separation as p prenet and discu- es such as the te und-muffling air st background no res to avoid trar ing properties (h xample, by addi oound source.	he supply air iit may be heard ked increase in everberation of ground noise), ed value. When harge grille are following: supply/discharge lise such as a ismission sound ligh transmission			

# Air Treatment Equipment Lineup

# PM2.5 Filtration Unit

	Models		BAF249A150	BAF249A300	BAF249A350	BAF249A500		
Heat Reclaim V	entilator Models		VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE		
Dimensions (H	Dimensions (H $\times$ W $\times$ D)		220×603×366	220×603×366 220×603×366		300×623×366		
Connection Duct Diameter		mm	¢ 100	¢ 150	<i>•</i> 150	¢ 200		
Airflow Rate	Airflow Rate m		150	250	350	500		
	Initial Pressure Drop P		34	30	31	42		
PM2.5 Filter	Filter Lifetime <sup>1</sup>		1 year					
	Filtration Efficiency <sup>2</sup>			99% oi	r higher			
	Filter Material No. 3		BAF24	4A300	BAF24	44A500		

Notes: 1. Annual usage: 400 hrs/month x 12 months = 4,800 hrs

2. 99% or higher removal rate of ultra-fine particles with diameters of 2.5 µm or more; 90% or higher removal rate of ultra-fine particles with diameters of 0.5 µm.

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

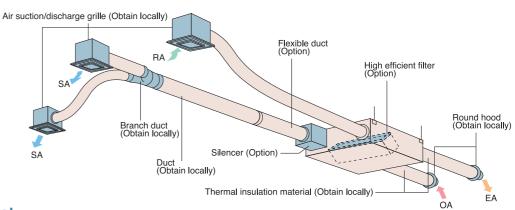
	Models		BAF249A150C	BAF249A300C	BAF249A350C	BAF249A500C			
Heat Reclaim Ver	ntilator Models		VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE			
Dimensions (H ×	$W \times D$ )	mm	220×603×366	220×603×366	300×623×366	300×623×366			
Connection Duct	Diameter	mm	¢ 100	¢ 150	<i>•</i> 150	<i>\$</i> 200			
Airflow Rate		m³/h	150	250	350	500			
	Initial Pressure Drop	Pa	34	30	31	42			
PM2.5 Filter	Filter Lifetime <sup>1</sup>			1 y	ear				
Pivi2.5 Filler	Filtration Efficiency <sup>2</sup>		99% or higher						
	Filter Material No. 3		BAF24	4A300	BAF244A500				
	Initial Pressure Drop	Pa	3	5	5	9			
Activated Carbon Filter	Filter Lifetime			1 y	ear				
Carbon Tiller	Filter Material No. 3		BAF244	4A300C	BAF244	4A500C			
Total Initial Pressure Dr	Total Initial Pressure Drop for PM2.5 with Activated Carbon Filtration Unit		37	35	36	51			

Notes: 1. Annual usage: 400 hrs/month × 12 months = 4,800 hrs.

2. 99% or higher removal rate of ultra-fine particles with diameters of 2.5 µm or more; 90% or higher removal rate of ultra-fine particles with diameters of 0.5 µm.

3. Filters come with applicable filtration units with a one-year life. They can be purchased and replaced according to their model numbers.

## OPTIONS



## **Option List**

Ite	m			Туре			V	AM150	· 250 · 3	350 · 50	0 · 650	· 800 ·	<b>1000 ·</b> 1	1500 · 2	000 GJ	VE		
	He	at Recla	im Ver	ntilator remote controller		BRC301B61												
	0	atura Era a d	Reside	ential central remote controller	DCS303A51 1													
		ntralised Itrolling	Centr	al remote controller		DCS302CA61												
	dev		Unifie	ed ON/OFF controller		DCS301BA61												
e			Sche	edule timer							DST30	1BA61						
device	Adaptor	Wiring appen		otor for electrical	KRP2A61													
		For hu	imidif	ïer							KRP	250-2						
lli	dap	Installa	ation	box for adaptor PCB		ł	(RP50-	2A90 (N	/lounted	lelectri	c compo	onent a	ssy of ⊦	leat Re	claim Ve	entilato	r)	
Itc		For he	ater	control kit	BRP4A50													
Controlling	PC Board	For wi	ring	Type (indoor unit of VRV)	FXFQ-S FXFQ-LU	FXZQ-M	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXSQ-P	FXMQ-P	FXMQ-MA	FXUQ-A	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	FXVQ-N	FXBQ-P FXBPQ-P
					KRP1C63*	KRP1BA57★	KRP1B61★	KRP1B61	KRP1B56★	KRP1C64★	KRP1C64★	KRP1B61	KRP1C67	KRP1BA54	—	KRP1B61	KRP1C67	KRP1C61
		Installa	ation I	oox for adaptor PCB☆	Note 2, 3 KRP1H98A	Note 4, 5 KRP1BA101	Note 2, 3 KRP1B96	_	Note 4, 5 KRP1BA101	Note 2, 3 KRP4A98	Note 2, 3 KRP4A96	_	_	Note 3 KRP1CA93	Note 2, 3 KRP4AA93	_	_	_

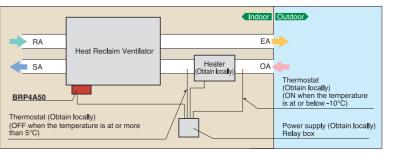
Notes:1. Installation box \* is necessary for each adaptor marked \*. 2. Up to 2 adaptors can be fixed for each installation box.

3. Only one installation box can be installed for each indoor unit 4. Up to 2 installation boxes can be installed for each indoor unit.

Item		Туре	VAM150GJVE	VAM250GJVE	VAM350GJVE	VAM500GJVE	VAM650GJVE	VAM800GJVE	VAM1000GJVE	VAM1500GJVE	VAM2000GJVE
م	Silencer			—		KDDM24B50	K	DDM24B10	0	KDDM24	B100X2
tion	Silencer	Nominal pipe diameter mm	_			φ2	00		φ 2	50	
dit	Silencer Nominal pipe diameter m High efficiency filter Air filter for replacement			2H25M	KAF24	2H50M	KAF242H65M	KAF242H80M	KAF242H100M	KAF242H80MX2	KAF242H100MX2
fu	Air filter for replacement		KAF241G25M		KAF24	1G50M	KAF241G65M	KAF241G80M	KAF241G100M	KAF241G80MX2	KAF241G100MX2
Flexibl	e duct (1 m)	)	K-FDS101D	K-FDS101D K-FDS151D			S201D		K-FDS	S251D	
Flexibl	e duct (2 m)	)	K-FDS102D	K-FDS	S152D	K-FDS	S202D		K-FDS	6252D	
Ducto	dantar		— YDFA25/								25A1
Ducia	Duct adaptor Nominal pipe diameter mn					—				¢ 2	50
CO <sub>2</sub> se	CO <sub>2</sub> sensor		- BRYMA65					BRYN	1A100	BRYMA65	BRYMA100

## 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.



 Installation box to is necessary for each adaptor.
 \*1 For residential use only. When connect with a Heat Reclaim Ventilator (VAM), you can only switch the power ON/OFF. It cannot be used with other central control equipment.

### Notes when installing

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



## Individual Control Systems for **VRV** Indoor Units

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



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

## **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

## 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.



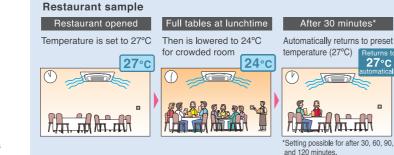
### Off timer

- · 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, it returns to the preset temperature after a preset period of time.
- Period selectable from 30 min/60 min/90 min/ 120 min.





## **Convenience**

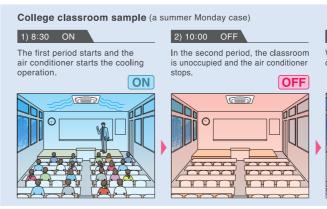
### Setback (default: OFF)

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

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

### •Weekly schedule

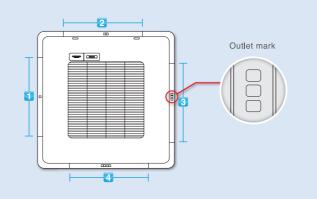
- · 5 actions per day can be scheduled for each day of the week.
- . The holiday function will disable schedule timer for the days that have been set as holiday.
- · 3 independent schedules can be set. (e.g. summer, winter, mid-season)



## Comfort

### Individual airflow direction (\*1)

Airflow direction of each of the four air outlets can be controlled individually. (Positions 0 to 4, Swing, and No individual setting are selectable.)



Auto airflow rate (\*2)

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

\*1. Only available for VRV 4-Way Flow Ceiling Suspended type FXUQ-A series and Ceiling Mounted Cassette (Round Flow with Sensing) type FXFQ-S series. \*2. Only available for VRV 4-Way Flow Ceiling Suspended type FXUQ-A series, Ceiling Mounted Cassette (Round Flow with Sensing) type FXFQ-S series and Middle Static Pressure Ceiling Mounted Duct type FXSQ-P series.

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

	Time	Act	Cool	Heat
Mon	8:30	ON	25°C	223
	10:00	OFF	°C	°C
	13:00	ON	25°C	
	15:00	OFF	°C	°C
Re	turn Se	ttins	6-3	40

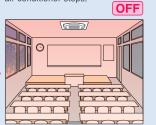
### 3) 13:00 ON

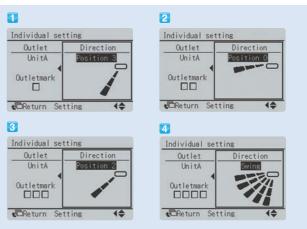
When the third period starts, operation starts again



### After the third period, the classroom becomes vacant again and the air conditioner stops.

4) 15:00 OFF







## Individual Control Systems for **VRV** Indoor Units

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

\* Individual airflow direction, auto airflow rate and sensing sensor control can be set only via wired remote controller BRC1E62. Cannot be set via other remote controllers.

## BBC1C62 The wired remote controller supports a wide range of control functions Control of Cool/Heat In all the series of VRV, Cool/Heat changeover in the same refrigerant circuit can be changed by the remote controller of the indexr unit controller of the indoor unit. Group control One remote controller can control the Equipment Outdoor operation of max.16 indoor units at the related to the same time. central control Remote controlle Remote controlle Remote controll Forced OFF input Heat Reclaim Ventilato Remote controller Remote controlle Remote controller Remote controller 3 4

## 1 Control by two remote controller

The indoor unit can be connected by the two remote controller, 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 controller is also possible.

## 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.

## 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.

## 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)

UP UP

-

2

Wireless remote

controlle

## possible.

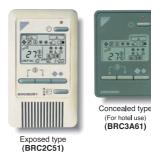
\* Individual airflow direction, auto airflow rate and sensing sensor control can be set only via wired remote controller BRC1E62. Cannot be set via other remote controllers • A compact signal receiver unit (separate type) to be mounted into a wall or ceiling

- is included.
- Signal receiver unit eparate type



\* Wireless remote controller and signal receiver unit are sold as a set. \* Refer to page 189 for the name of each model.

## Simplified remote controller (Option)



 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.

Wide variation of remote controllers for <i>VRV</i> indoor units														
		FXFQ	FXZQ	FXCQ	FXKQ	FXDQ	FXSQ	FXMQ	FXUQ	FXHQ	FXAQ	FXL(N)Q	FXVQ	FXB(P)
Navigation remote controller (Wired remote controller)	er (BRC1E62)													
Wired remote controller	(BRC1C62)													
Wireless remote controller* (Installed type signal receiver unit)														
Wireless remote controller* (Separate type signal receiver unit)														
Simplified remote controller (Exposed type)	(BRC2C51)													
Simplified remote controller (Concealed type: for Hotel use)	(BRC3A61)													

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

•The same operation modes and settings as with wired remote controllers are

· A signal receiver unit (installed type) for a Ceiling Mounted Cassette (Round Flow, Compact Multi Flow, Double Flow) type, Ceiling Suspended type and Wall Mounted type is mounted into the indoor unit.

Signal receiver unit can be tte (Round Flow) type

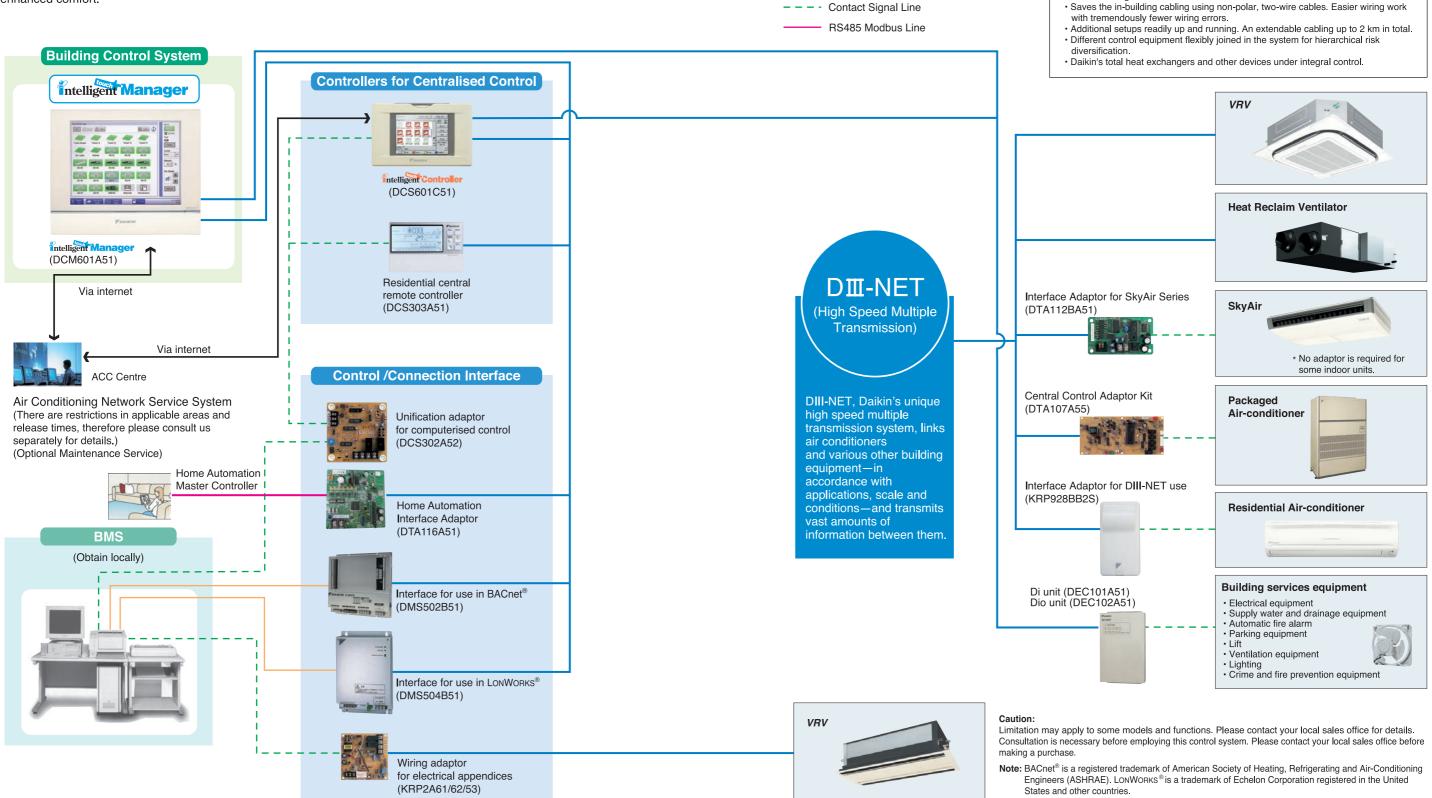


The concealed type remote controller smartly fits into a night table or console panel in a hotel room.



# 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<sup>®</sup>/Ethernet or LONWORKS<sup>®</sup>

Network Communication 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

Control Systems

# Advanced Control Systems for VRV Indoor Units

## Intelligent Manager

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



DCM009A51

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

## Individual air-conditioning control

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





## Lighting control DALI-compatible

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

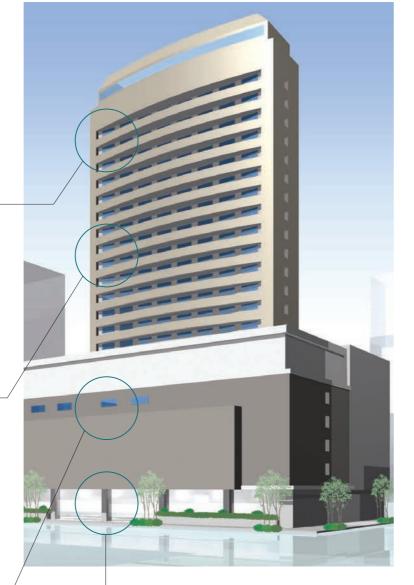


## Air-conditioning control for large spaces

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

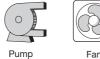






## **Building equipment control**

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

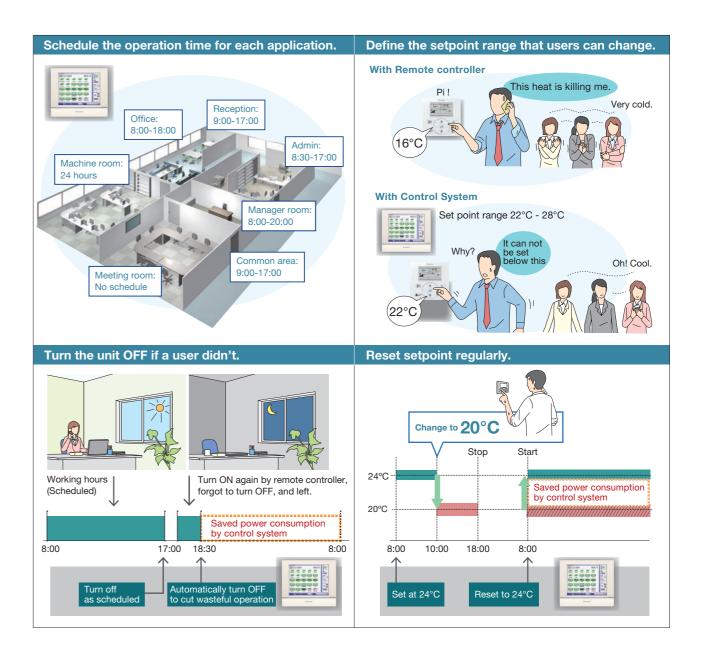


## For Energy Saving & Comfort

## intelligent Touch Manager maximises the advantages of VRV features

intelligent Touch Manager is an advanced multi-zone controller that provides the most cost-effective way to control and monitor the Daikin VRV system.

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





# Advanced Control Systems for VRV Indoor Units

Intelligent Mana

DCM009A51

WAGO I/O system

BACnet

controlle

750-831

(BACnet Client option)

DALI module

753-647

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.

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

DALI LED driver

LED light

Air conditioning and lighting for which power consumption is high can be

efficiently controlled to promote energy conservation and cost reduction!

**VRV** System

- . Up to 12 sensors (occupancy, illuminance) can be connected to a single DALI module. DALI BAS simplifies wiring and setting work by
- daisy chain wiring and automatic address setting.

## Easy maintenance and energy saving by lighting control

### Case1

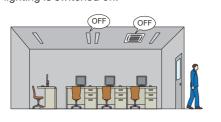
Switch-on / switch-off and illuminance are controlled based on a schedule to cut wasteful power consumption.

· Failing to switch off lights is prevented

Optimal illuminance reduces energy

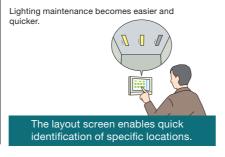
## Case2

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



## Case3

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



## Tenant Management (PPD\* Option)

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

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

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

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

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

### It is easy to output PPD data.

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

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

## Air conditioning bills can be issued by one click

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

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

### [Main functions]

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



## Effective service functions offered to tenants Smart phone will be a remote controller of VRV system (Option)

Users can operate and check the status of VRV system from their smart phones via Wi-Fi. It is not necessary to move where a remote controller is located with this feature. VRV system in other rooms can be operated, and their status can be checked.

It is also possible to check if air conditioners in other rooms remain switched on etc., helping achieve energy saving.



this system



Please contact your local sales office for details.

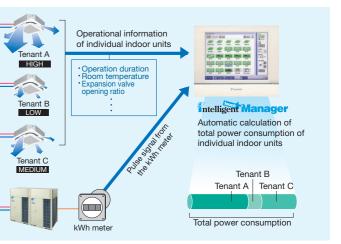
DALI BUS

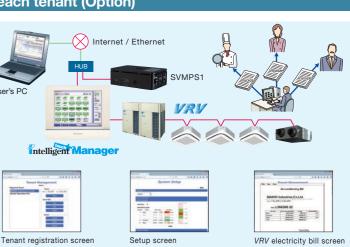
LAN

È.

Senso

occupancy

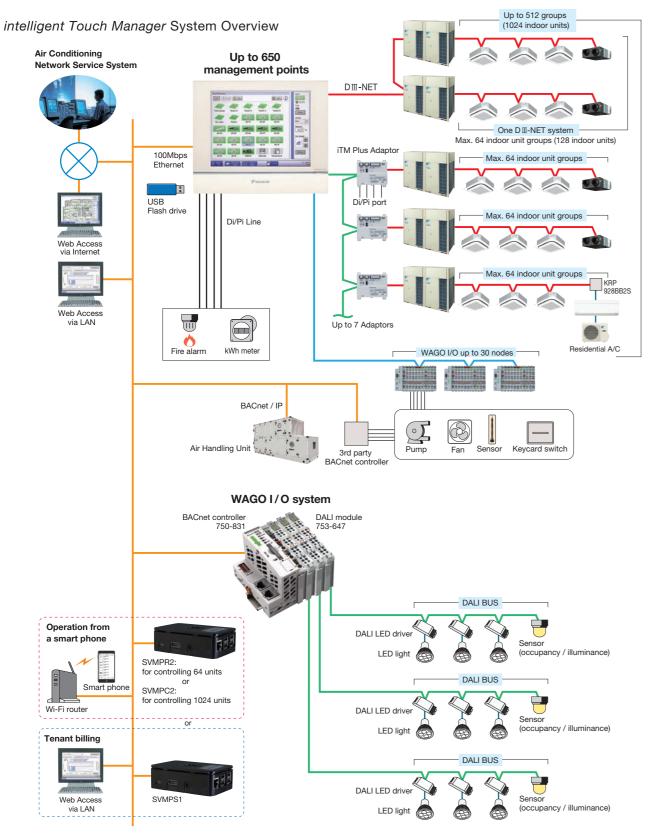






# Advanced Control Systems for VRV Indoor Units

## System structure

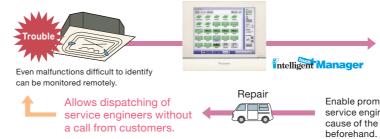


## Air Conditioning Network Service System

### **Preventive Maintenance**

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

## Enhanced convenience with link to the Air Conditioning Network Service System The intelligent Touch Manager connects seamlessly to Daikin's 24-hour Air Conditioning Network Service System.



## **Daikin Offers a Variety of Control Systems**

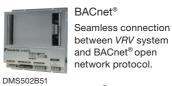
## Convenient controllers that offer more freedom to administrators



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.

## Connect VRV system to your BMS via BACnet® or LONWORKS®

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



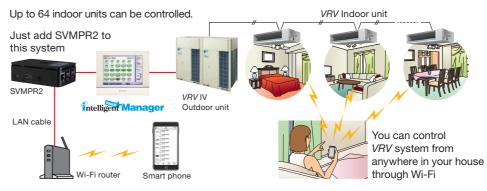
(Interface for use in BACnet<sup>®</sup>)

Air-Conditioning Engineers (ASHRAE).

Dedicated interfaces make Daikin air conditioners freely compatible with open networks

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

## For house VRV Smart Phone Control System



ACC centre Personnel at the centre monitor the occurrence of malfunctions and track their cause via the Internet. ce malfunction warnings help preven urrence of problems Air Conditioning Network Service System\*

Enable prompt repairs as service engineers know the cause of the problem



Because of restrictions in applicable areas and release times, please consult a Daikin representative separately for details.



LONWORKS<sup>®</sup> Facilitating the network integration of VRV system and LONWORKS®

DMS504B51 (Interface for use in LONWORKS<sup>®</sup>)

Notes: 1. BACnet<sup>®</sup> is a registered trademark of American Society of Heating, Refrigerating and

2. LONWORKS® is a trademark of Echelon Corporation registered in the United States and other countries





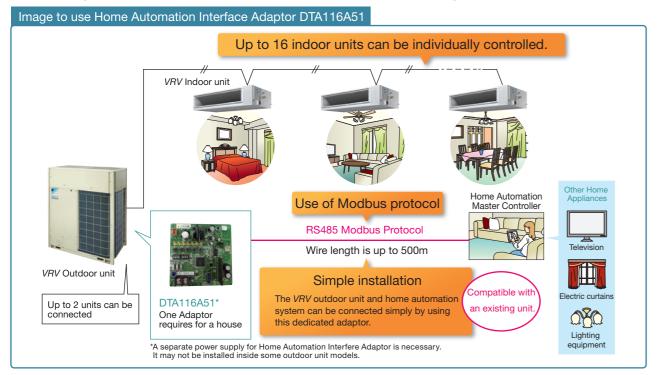




# Advanced Control Systems for VRV Indoor Units

## Home Automation Interface Adaptor

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



## Functions

Monitor		<ul> <li>Control</li> </ul>	
On/Off	On/Off status of indoor units	On/Off	On/Off control of indoor units
Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)	Operation mode	Cooling, Heating, Fan, Dry, Auto (depend on indoor unit capability)
Setpoint	Setpoint of indoor units	Setpoint	Cooling/Heating setpoint
Room temperature	Suction temperature of indoor units	Fan direction	Swing, Stop, Flap direction (depend on indoor unit capability)
Fan direction	Swing, Flap direction (depend on indoor unit capability)	Fan volume	L, M, H (depend on indoor unit capability)
Fan volume	L, M, H (depend on indoor unit capability)	Filter sign reset	Reset filter sign of indoor units
Forced off status	Forced off status of indoor units	Retrieve system i	nformation
Error	Malfunction, Warning with Error code	,	
Filter sign	Filter sign of indoor units	Connected indoor units	DIII-NET address of connected indoor units can be retrieved.
0	Communication normal/error of indoor units	indoor units Indoor unit capabilities Indoor unit capabilities such as oper fan control, setpoint HV can be retr	

## VRV Smart Phone Control System

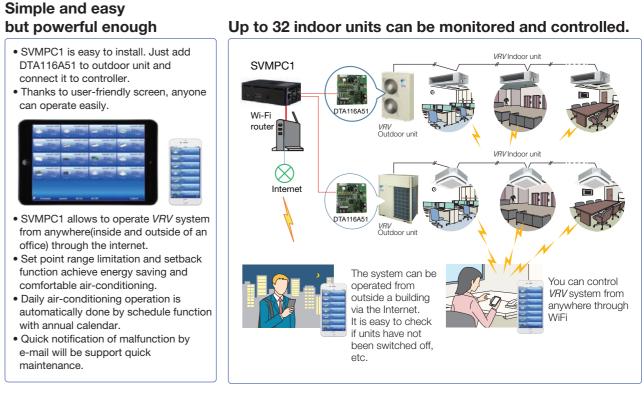
## VRV Smart Phone Control System can be realized by SVMPR1 which is a new product to utilize DTA116A51.



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

## VRV Tablet Controller : SVMPC1

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



## Functions

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	Setpoint range limitation*	Cool setpoint min/max, Heat setpoint min/max
control	Off timer*	Off timer on/off, Off timer duration(5min – 12h, every 5min)
	Setback operation*	Setback setpoint range (Cool: 24-35C, Heat: 10-20C)
	Schedule*	Action registration: Time, On/Off, Setpoint, Operation mode, Fan step, Flap, Off timer on/off, Setback
		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	Number of indoor units	Max 32 (with additional DTA116A51)
units	Number of DTA116A51	Max 2
Connectable	Number of Tablet/Smartphone	Max 20
device	Device type	iPad, iPhone, Android tablet, Android Ph
	Web browser	Firefox, Chrome, Safari

\*: only admin user can set

k setpoint

hone, Windows Tablet, Windows Phone, Windows PC, Mac



# **Option List**

# Outdoor Units

## VRV IV High-COP Type

Optional Accessories		RXQ12TAHYM(E) RXQ14TAHYM(E) RXQ16TAHYM(E)			
Distributive REFNET header piping REFNET joint			KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)		
		KHRP26A22T, KHRP26A33T, KHRP26A72T			
Outdoor unit multi connection piping kit		BHFP22P100			
Optional Accessories		RXQ18TAHYM(E) RXQ20TAHYM(E) RXQ22TAHYM(E)	RXQ24TAHYM(E) RXQ26TAHYM(E) RXQ28TAHYM(E) RXQ30TAHYM(E)	RXQ34TAHYM(E)	

		RAQ22TANTM(E)	RXQ32TAHYM(E)	
Distributive piping	REFNET header	KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch), KHRP26M72H (Max. 8 branch)		, KHRP26M72H, KHRP26M73H (Max. 8 branch) (Max. 8 branch)
	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T	KHRP26A22T, KHRP26A33T	, KHRP26A72T, KHRP26A73T
Pipe size reducer		– KHRP26M73TP, KHPR26M73HP		KHPR26M73HP
Outdoor unit multi connection piping kit			BHFP22P151	

Option	nal Accessories	RXQ36TAHYM(E)	RXQ38TAHYM(E)	RXQ40TAHYM(E)	RXQ42TAHYM(E) RXQ44TAHYM(E) RXQ46TAHYM(E) RXQ48TAHYM(E) RXQ50TAHYM(E)
Distributive	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
piping	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
Pipe size reducer		KHRP26M73TP, KHPR26M73HP			
Outdoor unit mu	Iti connection piping kit	BHFP22P151			

## **VRV** IV Standard Type

Option	al Accessories	RXQ6TAYM(E) RXQ8TAYM(E) RXQ10TAYM(E)	RXQ12TAYM(E)	RXQ14TAYM(E) RXQ16TAYM(E)
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	

Option	al Accessories	RXQ18TANYM(E) RXQ20TANYM(E)	RXQ22TANYM(E)	RXQ24TANYM(E) RXQ26TANYM(E) RXQ26TANYM(E) RXQ32TANYM		
Distributive piping	REFNET header	KHRP26M22H, I (Max. 4 branch) ( KHRP20 (Max. 8	(Max. 8 branch) 6M72H	KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H, KHRP26M73H (Max. 8 branch) (Max. 8 branch)		
	REFNET joint	KHRP26A22T, KHRP2	KHRP26A22T, KHRP26A33T, KHRP26A72T		KHRP26A33T, KHRP26A73T	
Pipe size reduce	r	-		KHRP26M73TP, KHPR26M73HP		
Outdoor unit mul	ti connection piping kit	BHFP22P100				

Optior	nal Accessories	RXQ34TANYM(E) RXQ36TANYM(E)	RXQ38TANYM(E) RXQ40TANYM(E)	RXQ42TANYM(E) RXQ44TANYM(E)	RXQ46TANYM(E) RXQ48TANYM(E) RXQ50TANYM(E) RXQ52TANYM(E) RXQ54TANYM(E) RXQ56TANYM(E) RXQ58TANYM(E) RXQ60TANYM(E)	
Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)				
piping	REFNET joint					
Pipe size reduce	ər	KHRP26M73TP, KHPR26M73HP				
Outdoor unit mu	Iti connection piping kit		BHFP22P151			

## **VRV** IV Space Saving Type

Optio	nal Accessories		
Distributive REFNET header			KHF (Ma
piping	REFNET joint		KH
Optio	nal Accessories	RXQ22TASYM(E)	RXQ24
Distributive piping	REFNET header	KHRP26M22H (Max.4 branch), KHRP26M33H (Max.8 branch), KHRP26M72H (Max.8 branch)	
	REFNET joint	KHRP26A22T, KHRP26M33T, KHRP26M72T	
Pipe size reduce	er	-	
Outdoor unit mu	Iti connection piping kit		

Optiona	I Accessories	RXQ42TASYM(E) RXQ44TASYM(E)
Distributive piping	REFNET header	KHRP26M2 (Max.4 brar
F F	REFNET joint	KHRP26A
Pipe size reducer		
Outdoor unit multi o	connection piping kit	

## VRV IV S SERIES

No.	Item Type	RXMQ4AVE	RXMQ5AVE	RXMQ6AVE	RXMQ8AY1	RXMQ9AY1
1	Fixing box		KJB111A		-	_
2	REFNET header	KHRP26M22H (Max. 4 branch)				
2	ALI NET fleader	KHRP26M33H (Max. 8 branch)				
3	REFNET joint	KHRP26A22T		KHRP26A22T,	KHRP26A33T	
4	Central drain plug	KKPJ:	5G280	KKPJ5F180	KKPJ:	5G280
5	Fixture for preventing overturning	KKTP	5B112	KPT-60B160	KKTP	5B112
6	Wire fixture for preventing overturning	-	-	K-KYZP15C		

RXQ18TAYM(E) RXQ20TAYM(E)							
P26M22H, KHRP26M33H, KHRP26M72H .4 branch) (Max.8 branch) (Max.8 branch)							
HRP26A22T, KHRP2	RP26A22T, KHRP26A33T, KHRP26A72T						
4TASYM(E)	RXQ26TASYM(E) RXQ28TASYM(E) RXQ30TASYM(E) RXQ32TASYM(E)	RXQ34TASYM(E) RXQ36TASYM(E) RXQ38TASYM(E) RXQ40TASYM(E)					
	, KHRP26M33H, KHRP26M72H, (Max.8 branch) (Max.8 branch)						
KHRP26A221	r, KHRP26A33T, KHRP26A72T,	KHRP26A73T					
	KHRP26M73TP, KHRP26M73HF	)					
BHFP2	22P100						
RXQ46TASYM(E) RXQ48TASYM(E) RXQ50TASYM(E)							
	KHRP26M72H, KHRP26M73H (Max.8 branch) (Max.8 branch)						
22T, KHRP26A33T, KHRP26A72T, KHRP26A73T							
KHRP26M73TP, KHRP26M73HP							
BHFP2	2P151						

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# **Option List**

# Outdoor Units

## **VRV** IV Q SERIES Standard Type

Optional Accessories		RQQ6TYM(E) RQQ8TYM(E) RQQ10TYM(E)	RQQ12TYM(E)	RQQ14TYM(E) RQQ16TYM(E)	
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, KHRP2	26A33T, KHRP26A72T	

Optional Accessories		RQQ18TNYM(E) RQQ20TNYM(E)	RQQ22TNYM(E)	RQQ24TNYM(E) RQQ26TNYM(E)	RQQ28TNYM(E) RQQ30TNYM(E) RQQ32TNYM(E)
Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H (Max. 4 branch) (Max. 8 branch), KHRP26M72H (Max. 8 branch)		KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H, KHRP26M73H (Max. 8 branch) (Max. 8 branch)	
	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T			, KHRP26A33T, , KHRP26A73T
Pipe size reduce	r	-		KHRP26M73TP, KHPR26M73HP	
Outdoor unit mu	Iti connection piping kit		BHFP	22P100	

Option	al Accessories	RQQ34TNYM(E) RQQ36TNYM(E)	RQQ38TNYM(E) RQQ40TNYM(E)	RQQ42TNYM(E) RQQ44TNYM(E)	RQQ46TNYM(E) RQQ48TNYM(E)
Distributive	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
pipilig	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
Pipe size reduce	r	KHRP26M73TP, KHPR26M73HP			
Outdoor unit mul	Outdoor unit multi connection piping kit		BHFP2	2P151	

## **VRV** IV Q SERIES Space Saving Type

Optional Accessories		RQQ18TYM(E) RQQ20TYM(E)
Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max.4 branch) (Max.8 branch) (Max.8 branch)
piping	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T

Optiona	I Accessories	RQQ30TSYM(E) RQQ32TSYM(E) RQQ34TSYM(E)	RQQ36TSYM(E) RQQ38TSYM(E) RQQ40TSYM(E)	RQQ42TSYM(E) RQQ44TSYM(E)	RQQ46TSYM(E) RQQ48TSYM(E)
Distributive	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max.4 branch) (Max.8 branch) (Max.8 branch) (Max.8 branch)			
piping	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
Pipe size reducer KHRP26M73TP, KHRP26M73HP		KHRP26M73HP			
Outdoor unit conne	ection piping kit	BHFP2	22P100	BHFP2	2P151

## **VRV** IV W SERIES Cooling Only

No.	Item	Туре	RWEYQ6T RWEYQ8T RWEYQ10T RWEYQ12T	RWEYQ14T RWEYQ16T RWEYQ18T RWEYQ20T RWEYQ22T RWEYQ24T	RWEYQ26T RWEYQ28T RWEYQ30T RWEYQ32T RWEYQ34T RWEYQ36T
1	Distributive piping	REFNET header	KHRP25M33H (Max. 8 branch), KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch)	KHRP25M33H (Max. 8 branch), KHRP25M72H (Max. 8 branch), KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch), KHRP26M72H (Max. 8 branch)	KHRP25M33H (Max. 8 branch), KHRP25M72H (Max. 8 branch), KHRP25M73H (Max. 8 branch), KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch), KHRP26M72H (Max. 8 branch), KHRP26M73H (Max. 8 branch)
		REFNET joint	KHRP25A22T, KHRP25A33T, KHRP26A22T, KHRP26A33T	KHRP25A22T, KHRP25A33T, KHRP25A72T, KHRP26A22T, KHRP26A33T, KHRP26A72T	KHRP25A22T,KHRP25A33T, KHRP25A72T, KHRP25A73T, KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T
2	Outside unit multi connection piping kit		_	BHFP22MA56	BHFP22MA84
3	External control adaptor		DTA104A62		
4	Strainer kit			BWU26A15, BWU26A20	

### **VRV** IV HEAT RECOVERY HOT WATER SYSTEM High-COP Type

		• • • • •		
Option	al Accessories			
Distributive	REFNET header			HRI ax.
piping	REFNET joint		<u> </u>	КH
Outdoor unit mu	ti connection piping kit			
Hot water contro				
Hot water remote	e controller			
Option	al Accessories	RWHQ18THYN RWHQ20THYN RWHQ22THYN	1	
Distributive	REFNET header	KHRP26M22H, KHRP2 (Max. 4 branch) (Max. 8 KHRP26M72H (Max. 8 branch)	branch)	
11 5	REFNET joint	KHRP26A22T,KHRP26 KHRP26A72T	A33T,	
Pipe size reduce	r	_		
Outdoor unit mu	ti connection piping kit			
Hot water control	ller box			
Hot water remote	e controller			
Option	al Accessories	RWHQ18THYM	RW	нс
Distributive piping	Distributive REFNET header (Max.		KHRP26N (Max. 4 bra	anc
REFNET joint			KHRP26	5A2
Pipe size reduce				
	ti connection piping kit			
Hot water contro				
Hot water remote	e controller			

### **VRV** IN HEAT RECOVERY HOT WATER SYSTEM Standard Type

Optional Accessories		RWHQ6TYM RWHQ8TYM RWHQ10TYM		RWHQ	12TYM	RWHQ14TYM RWHQ16TYM
Distributive	REFNET header					3H, KHRP26M72H ch) (Max. 8 branch)
piping	REFNET joint	KHRP26A22T, KHRP26A3	33T		KHRP26A22T, KHRP26A3	3T, KHRP26A72T
Hot water controll	er box			BRC	M82	
Hot water remote	controller			BRC	S82	
Optiona	al Accessories	RWHQ18TNYM RWHQ20TNYM	RW	HQ22TNYM	RWHQ24TNYM RWHQ26TNYM	
Distributive	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M22H, KHRP26 (Max. 4 branch) (Max. 8 branch) (Max. 4 branch) (Max. 8 KHRP26M72H KHRP2 (Max. 8 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8		ranch) (Max. 8 branch) M72H, KHRP26M73H		
11 5	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T KHRP26A22T, KHRP26A33T, KHRP26A73T				
Pipe size reducer		-	-		KHRP26M73T	P, KHRP26M73HP
Outdoor unit mult	i connection piping kit			BHFP2	2P100	
Hot water controll	er box			BRC	M82	
Hot water remote	controller			BRC	S82	
Optiona	al Accessories	RWHQ34TNYM RWHQ36TNYM		НQ38ТNYM HQ40TNYM	RWHQ42TNYM RWHQ44TNYM	
Distributive	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)				
	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T				
Pipe size reducer				KHRP26M73TP,		
	i connection piping kit			BHFP2		
Hot water controll				BRC	-	
Hot water remote	controller			BRC	S82	

RWHQ12THYM RWHQ14THYM RWHQ16THYM						
P26M22H, KHRP26M33H, KHRP26M72H 4 branch) (Max. 8 branch) (Max. 8 branch)						
IRP26A22T, KHRP2	RP26A22T, KHRP26A33T, KHRP26A72T					
BHFP2	2P100					
BRC	M82					
BRC	S82					
RWHQ24THYM RWHQ26THYM RWHQ28THYM RWHQ34THYM RWHQ30THYM RWHQ32THYM						
KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)						
KHRP26	6A22T, KHRP26A33T,	KHRP26A	72T, KHRP26A73T			
	KHRP26M73TP,	KHRP26M	73HP			
BHFP2						
	M82					
BRC	S82					
Q18THYM RWHQ18THYM RWHQ18THYM RWHQ20THYM RWHQ20THYM RWHQ30THYM RWHQ32THYM			RWHQ26THYM RWHQ28THYM RWHQ30THYM			
2H, KHRP26M33H, KHRP26M72H, KHRP26M73H ch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)						
22T, KHRP26A33T, KHRP26A72T, KHRP26A73T						
KHRP26M73TP, KHRP26M73HP						
BHFP22P151						
BRCM82						
BRC	S82					

# Outdoor Units

## **VRV** IV HEAT RECOVERY HOT WATER SYSTEM Space Saving Type

<b>Optional Accessories</b>		RWHQ18TYM RWHQ20TYM
Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)
F-F5	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T
Hot water controlle	er box	BRCM82
Hot water remote controller		BRCS82

Optiona	I Accessories	RWHQ22TSYM	RWHQ24TSYM	RWHQ26TSYM RWHQ28TSYM RWHQ30TSYM RWHQ32TSYM	RWHQ34TSYM RWHQ36TSYM RWHQ38TSYM RWHQ40TSYM		
Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)				
	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T				
Pipe size reducer		_		KHRP26M73TP, KHRP26M73HF	2		
Outdoor unit multi connection piping kit			BHFP2	2P100			
Hot water controller box			BRCM82				
Hot water remote of	controller	BRCS82					

Optiona	al Accessories	RWHQ42TSYM RWHQ44TSYM	RWHQ46TSYM RWHQ48TSYM RWHQ50TSYM			
Distributive			KHRP26M72H, KHRP26M73H (Max. 8 branch) (Max. 8 branch)			
piping	REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T				
Pipe size reducer		KHRP26M73TP, KHRP26M73HP				
Outdoor unit multi connection piping kit		BHFP22P151				
Hot water controller box		BRCM82				
Hot water remote	controller	BRCS82				

# **VRV** Indoor Units

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

No.	Item		Туре	FXFQ25S	FXFQ32S	FXFQ40S	FXFQ50S	FXFQ63S	FXFQ80S	FXFQ100S	FXFQ125S
1	Decoration panel			BYCQ125B-W1							
2	Sealing material of air discharge outlet						KDBHC	55B140			
3	Panel spacer						KDBP55	5H160FA			
		High efficiency filter unit 65%				KAFP5	56C80			KAFP5	56C160
		High efficiency	filter unit 90%	KAFP557C80						KAFP5	57C160
		Replacement hig	h efficiency filter 65%		KAFP552B80					KAFP5	52B160
4	Filter related	Replacement hig	h efficiency filter 90%		KAFP553B80					KAFP5	53B160
4		Filter chamber	Filter chamber				KDDFP	55C160			
		Long life replace	ement filter	KAFP551K160							
		Ultra long-life f	Iter				KAFP	55C160			
		Replacement u	ltra long-life filter				KAFP5	5H160H			
		Chambertune	Without T joint-pipe and fan		KDDQ5	5B140 (Com	ponents: KD[	DP55C160-1,	KDDQ55B14	10-2)*1	
5	Fresh air intake kit	Fresh air intake kit Chamber type Wildow 1 joint pipe without fa			KDDP5	5B160K (Con	ponents: KD	DP55C160-1	, KDDP55B1	60K2) *1	
	Direct installation type			KDDP55X160A							
6	Branch duct chamber			KDJP55B80					KDJP5	5B160	
7	Insulation kit for high humidity			KDTP55K80 KDTP55K160					5K160		

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

## Ceiling Mounted Cassette (Round Flow) Type

			Туре	FXFQ25LU	FXFQ32LU	FXFQ40LU	FXFQ50LU	FXFQ63LU	FXFQ80LU	FXFQ100LU	FXFQ125LU
2	Decoration panel			BYCP125K-W1							
	Sealing material of air dis	scharge outlet		KDBH55K160F							
3	Panel spacer						KDBP55	5H160FA			
	High efficiency filter unit 65%					KAFP5	56C80			KAFP5	56C160
		High efficiency	filter unit 90%			KAFP5	57C80			KAFP5	57C160
		Replacement hig	h efficiency filter 65%			KAFPS	52B80			KAFP5	52B160
4	Filter related	Replacement high efficiency filter 90%			KAFP553B80					KAFP5	53B160
4	Filer related	Filter chamber			KDDFP55C160						
		Long life replace	cement filter				KAFP5	51K160			
		Ultra long-life filter		KAFP55C160							
		Replacement u	Itra long-life filter				KAFP5	5H160H			
		Chamber type	Without T joint-pipe and fan	KDDP55B160 (Components: KDDP55C160-1, KDDP55B160-2) *1							
5	Fresh air intake kit	Chamber type	With T joint-pipe without fan		KDDP5	5B160K (Con	nponents: KD	DP55C160-1	, KDDP55B1	60K2) *1	
		Direct installati	on type				KDDP5	5X160A			
6	Branch duct chamber				KDJP	55B80			KDJP	55B160	
7	Chamber connection kit			KKSJ55KA160							
8	Insulation kit for high humidity			KDTP55K80 KDTP55K160							

## Ceiling Mounted Cassette (Compact Multi Flow) Type

No.	Item	Туре	FXZQ20M	FXZQ25M	FXZQ32M	FXZQ40M	FXZQ50M	
1	Decoration panel	BYFQ60B3W1						
2	Sealing material of air discha	KDBH44BA60						
3	Panel spacer		KDBQ44BA60A					
4	Replacement long-life filter		KAFQ441BA60					
5	Fresh air intake kit	Direct installation type	KDDQ44XA60					

## Ceiling Mounted Cassette (Double Flow) Type

No.	Item		Туре	FXCQ20M FXCQ25M FXCQ32M	FXCQ40M	FXCQ50M	FXCQ63M	FXCQ80M	FXCQ125M
1	Decoration panel		BYBC32G-W1	BYBC50G-W1		BYBC63G-W1	BYBC125G-W1		
		High efficiency filter 65% *1		KAFJ532G36	KAFJ5	32G56	KAFJ532G80	KAFJ53	32G160
2	Filter related	High efficiency fi	Iter 90% *1	KAFJ533G36	KAFJ5	33G56	KAFJ533G80	KAFJ53	33G160
2		Filter chamber	bottom suction	KDDFJ53G36	KDDFJ	53G56	KDDFJ53G80	KDDFJ!	53G160
		Long life replace	ment filter	KAFJ531G36	KAFJ5	31G56	KAFJ531G80	KAFJ53	31G160
Note: +1 Filter	r chamber is required if installi	ng high efficiency filte	er.						

## **Ceiling Mounted Cassette Corner Type**

No.	Item	т Туре		5MA FXKQ32MA FXK		FXKQ63MA		
1	Panel related	Decoration panel		BYK45FJW1				
'	Parlei related	Panel spacer		KPBJ52F80W				
		Long life replacement filter			KAFJ521F80			
2	Air inlet and air	Air discharge grille		K-HV7AW		K-HV9AW		
2	discharge outlet related	Air discharge blind panel	KDBJ52F56W			KDBJ52F80W		
		Flexible duct (with shutter)	KFDJ52FA56			KFDJ52FA80		



# VRV Indoor Units

## Slim Ceiling Mounted Duct Type (Standard Series)

No.	Item Type	FXDQ20PB	FXDQ25PB	FXDQ32PB	FXDQ40NB	FXDQ50NB	FXDQ63NB
1	Insulation kit for high humidity		KDT25N32		KDT2	25N50	KDT25N63

## Middle Static Pressure Ceiling Mounted Duct Type

No.	Item	Туре	FXSQ20P FXSQ25P FXSQ32P	FXSQ40P	FXSQ50P FXSQ63P FXSQ80P	FXSQ100P FXSQ125P	FXSQ140P
- 1	High efficiency filter *1	65%	KAFP632B36	KAFP632B56	KAFP632B80	KAFP632B160	KAF632B160B
1		90%	KAFP633B36	KAFP633B56	KAFP633B80	KAFP633B160	KAF633B160B
2	Filter chamber (for rear suction) *1		KDDFP63B36	KDDFP63B56	KDDFP63B80	KDDFP63B160	KDDF63B160B
3	Long life filter *1		KAFP631B36	KAFP631B56	KAFP631B80	KAFP631B160	KAF631B160B
		White	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25	5K160W
4	Service panel	Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25	5K160F
	Brown		KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	
5	Air discharge adaptor		KDAP25A36A	KDAP25A56A	KDAP25A71A	KDAP25A140A	KDAP25A160A*2
6	Shield plate for side plate			KDBD6	3A160		_

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

## **Ceiling Mounted Duct Type**

No.	ltem	Туре	FXMQ20P FXMQ25P FXMQ32P	FXMQ40P	FXMQ50P FXMQ63P FXMQ80P	FXMQ100P FXMQ125P FXMQ140P	FXMQ200MA FXMQ250MA
1	Drain pump kit			-	-		KDU30L250VE
2	High efficiency filter	65%	KAF372AA36	KAF372AA56	KAF372AA80	KAF372AA160	KAFJ372L280
2		90%	KAF373AA36	KAF373AA56	KAF373AA80	KAF373AA160	KAFJ373L280
3	Filter chamber		KDDF37AA36	KDDF37AA56	KDDF37AA80	KDDF37AA160	KDJ3705L280
4	Long life replacement filter		KAF371AA36	KAF371AA56	KAF371AA80	KAF371AA160	KAFJ371L280
5	Long life filter chamber kit		KAF375AA36	KAF375AA56	KAF375AA80	KAF375AA160	
		White	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W	
6	Service panel	Fresh white	KTBJ25K36F	KTBJ25K56F	KTBJ25K80F	KTBJ25K160F	_
		Brown	KTBJ25K36T	KTBJ25K56T	KTBJ25K80T	KTBJ25K160T	
7	Air discharge adaptor		KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A	

## 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	KAFP5	51K160			

## **Ceiling Suspended Type**

No.	Item Type	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	KHFP5	MA160

## 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	KAFJ3	61K28	KAFJ3	61K45	KAFJ3	61K71

## **Concealed Floor Standing Type**

No.	Item Type	FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
1	Long life replacement filter KAFJ361K28		KAFJ361K45		KAFJ361K71		

# VRV Indoor Units

## **Floor Standing Duct Type**

No.	lt	em			Туре	FXVQ125N	FXVQ200N	FXVQ250N	FXVQ400N	FXVQ500N	
1		Replacement long	life filter			KAFJ261L140	KAFJ261L224	KAFJ261L280	KAFJ261M450	KAFJ261M560	
2	1	Ultra long-life filter Front suction base flange					-		KAFSJ9A400	KAFSJ9A560	
3	]					KD-9A140	KD-9A200	KD-9A280	KD-9A400	KD-9A560	
4	]_		Suction grille		KDGF-9A140	KDGF-9A200	KDGF-9A280	KDGF-9A400	KDGF-9A560		
5	ctio	chamber for high	Filter	Replacement lor	ng-life filter *1, 2, 3	KAF-91A140	KAF-91A200	KAF-91A280	KAF-91A400	KAF-91A560	
6			2 efficiency filter for high 6 efficiency		Replacement high efficiency	65% *1, 3	KAF-92A140	KAF-92A200	KAF-92A280	KAF-92A400	KAF-92A560
7	and			efficiency	filter	90% *2, 3	KAF-93A140	KAF-93A200	KAF-93A280	KAF-93A400	KAF-93A560
8	harge		filter *1, 2	Filter charr	nber *1, 2	KDDF-9A140	KDDF-9A200	KDDF-9A280	KDDF-9A400	KDDF-9A560	
9	ISC	Plenum chamber *	*4			KPCJ140A	KPC5J	KPC8J	KPCJ400A	KPC15JA	
10		Pulley for plenum	chamber *4			KPP8JA	KPP9JA	KPP10JA	-	-	
11	1	Fresh air intake kit	t				KD106D10		KDFJ9	06A560	
12	1	Rear suction kit				KDFJ905A140	KDFJ905A200	KDFJ905A280	KDFJ905A400	KDFJ905A560	
13	1	Discharge grille for plenum side				KD101A10			KD101A20		
14	Wo	ood base				KKWJ9A140	KWF1G5P	KWF1G8P	KKWJ9A400	KWF1G15	
15	Vib	ration isolating fram	ne			K-ABSG1406A	K-ABSG1407A	K-ABSG1408A	K-ABSG1409A	K-ABSG1410A	

Notes: \*1. When ordering a filter chamber for high efficiency filter (65%), please order with all the respective parts.

When ordering a filter chamber for high efficiency filter (90%), please order with all the respective parts.
 When replacing with a new filter, please order the replacement filters with the corresponding filter model name.

\*4. Use the plenum chamber and pulley for plenum chamber in combination

## **Clean Room Air Conditioner**

No.	Item	Туре	FXBQ40PVE	FXBQ50PVE	FXBQ63PVE	FXBPQ63PVE
1	Outlet unit			BAF82A63		
2	Filter	HEPA filter	BAFH	82A50	BAFH	82A63
3	Ceiling intake type		BYB82	2A50C	BYB82A63C	BYB82A63CP
4	Panel	Floor-level intake type	BYB82	2A50W	BYB82A63W	BYB82A63WP
5	Outside air intake duc	t flange		KDFJ	82A80	

# Residential Indoor Units with connection to BP units

## Slim Ceiling Mounted Duct Type

No.	Item Type	FDKS25EAVMB FDKS35EAVME	FDKS25CAVMB FDKS35CAVMB FDKS50CVMB	FDKS60CVMB
1	Insulation kit for high humidity	KDT25N32	KDT25N50	KDT25N63

## Wall Mounted Type

No. Item	FTKJ25NVMW FTKJ25NVMS	FTKJ35NVMW FTKJ35NVMS	FTKJ50NVMW FTKJ50NVMS	FTKS25DVM FTKS35DVM	FTKS50BVMA	FTKS50FVM FTKS60FVM FTKS71FVM
1 Titanium apatite photocatalytic air-purifying filter			KAF970A46		KAF952A42	KAF952B42

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

## BP Units for connection to residential indoor units

No.	Item Type	BPMKS967A2	BPMKS967A3					
1	REFNET joint	KHRP	26A22T					

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.



## **Operation Control System Optional Accessories**

## For VRV indoor unit use

No.	Item			FXZQ-M	FXCQ-M	FXKQ-MA	FXDQ-PB FXDQ-NB	FXDQ-SP	FXSQ-P	FXMQ-P
-1	Remote controller	Wireless	BRC7F635F	BRC7E531W	BRC7C67	BRC4C63		BRC	4C66	
1	Wired			BRC1C62						
2	Navigation remote control				BRC1E	62 Note 7				
3	Simplified remote controller (Exposed type)			– BRC					C2C51	
4	Remote controller for hotel use (Concealed type)		-			BRC3A		3A61		
5	Adaptor for wiring		★KRP1C63	★KRP1BA57	★KRP1B61	KRP1B61	★KRP1B56	-	★KRF	1C64
6-1	Wiring adaptor for ele	ectrical appendices (1)	★KRP2A62	★KRP2A62	★KRP2A61	KRP2A61	★KRP2A53	_	★KRF	2A61
6-2	Wiring adaptor for ele	ectrical appendices (2)	★KRP4AA53	★KRP4AA53	★KRP4AA51	KRP4AA51	★KRP4A54	-	★KRP	4AA51
7	Remote sensor (for ir	ndoor temperature)	KRCS01-4B	KRCS01-1B		KRCS	01-1B		KRCS	01-4B
8	Installation box for adaptor PCB		Note 2, 3 KRP1H98A	Note 4, 6 KRP1BA101	Note 2, 3 KRP1B96	-	Note 4, 6 KRP1BA101	-	Notes 2, 3 KRP4A98	Notes 2, 3 KRP4A96
9	External control adaptor for outdoor unit		★DTA104A62	★DTA104A62	★DTA104A61	DTA104A61	★DTA104A53	-	★DTA1	04A61
10	Adaptor for multi tenant		★DTA114A61				★DTA114A61			

No.	Item	Туре	FXMQ-MA	FXUQ-A	FXHQ-MA	FXAQ-P	FXLQ-MA FXNQ-MA	FXVQ-N	FXBQ-P FXBPQ-P
-1	Remote controller	Wireless	BRC4C64	BRC7CB59	BRC7EA66	BRC7EA619	BRC4C64	-	BRC4C64
I	Wired			BRC1C62					BRC1C62
2	Navigation remote control	ler (Wired remote controller)			BRC1E62 Note	7		BRC1E62 Note 9	BRC1E62 Note 7
3	Simplified remote co	ntroller (Exposed type)	BRC2C51		-		BRC2C51	-	BRC2C51
4	Remote controller for hotel use (Concealed type)		BRC3A61		- BRC3A61			-	BRC3A61
5	Adaptor for wiring		KRP1B61	-	KRP1BA54	-	KRP1B61	KRP1C67	KRP1B61
6-1	Wiring adaptor for electrical appendices (1)		KRP2A61	-	★KRP2A62	★KRP2A61	KRP2A61	KRP2A62	KRP2A61
6-2	Wiring adaptor for el	ectrical appendices (2)	KRP4AA51	★KRP4AA53	★KRP4AA52	★KRP4AA51	KRP4AA51	-	KRP4AA51
7	Remote sensor (for i	ndoor temperature)	KRCS01-1B	KRCS01-4B			KRCS01-1B		
8	Installation box for a	daptor PCB ☆	-	KRP1BA97	Note 3 KRP1CA93	Note 2, 3 KRP4AA93	-		
9	External control adaptor for outdoor unit		DTA104A61	_	★DTA104A62	★DTA104A61	DTA104A61	Note 10 DTA104A62	DTA104A61
10	Adaptor for multi tenant			- <b>★</b> DTA114A61				-	
11	External control adap	tor for cooling/heating			-			KRP6A1 Note 10	-
12	Remote controller w	ith key						KRCB37-1	-

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 to is necessary for second adaptor.

 6. Installation box % is necessary for each adaptor.
 7. Individual airflow direction, auto airflow rate and sensing sensor control can be set only via wired remote controller BRC1E62. Cannot be set via other remote controllers. Available functions depend on the type of indoor unit. 8. Since the control panel is equipped as standard, use the option for 2 remote control system. 9. When using BRC1E62, be sure to remove the control panel and since BRC1E62 cannot be stored inside the indoor unit, please place it separately.

Remove the group control adaptor which is a standard equipment before mounting KRP6A1 and DTA104A62. KRP6A1 and DTA104A62 cannot be mounted to the same indoor unit at the same time.

## For residential indoor unit use

No.	Item	Туре	FDKS-EA, C(A)	FTKJ-N	FTKS-D,B,F			
1	Remote controller Wireless type		- Note 1					
2	Wiring adaptor for time clock/remote controller Note 2 (Normal open pulse contact/normal open contact		KRP413AB1S					
3	Remote controller loss prevention chain		KKF917A4	KKF917A4 KKF910A4				
4	Interface adaptor for DIII-NET use		KRP928BB2S					

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

## **System Configuration**

No.	Item	Туре	Model No.					
1	Residential central ren	Residential central remote controller						
2	5-room centralised controller for residential indoor units	Note 3 KRC72A	Up to 5     control					
3	Interface adaptor for re	KRP928BB2S	Adapto					
4	Interface adaptor for S	skyAir-series	Note 4 ★DTA112BA51	the hig				
5	Central control adaptor kit	For UAT(Y)-K(A),FD-K	★DTA107A55	instal				
6	Wiring adaptor for othe	er air-conditioner	★DTA103A51	inotai				
7	DIII-NET Expander Adaptor	DTA109A51	Up to 1     Wiring     numbe					
7-1	Mounting plate		KRP4A92	<ul> <li>Fixing</li> </ul>				

Notes: 1. Installation box for \* adaptor must be obtained locally.

2. For residential use only. Cannot be used with other centralised control equipment. 3. A wiring adaptor (KRP413AB1S) is also required for each indoor unit. 4. 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	<ul> <li>Air-Conditioning management system that can be controlled by a compact all-in-one unit.</li> </ul>
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	<ul> <li>Air-conditioning management system that can be controlled by touch screen.</li> </ul>
2-1		Option	Hardware	iTM plus adaptor	DCM601A52	<ul> <li>Additional 64 groups (10 outdoor units) is possible.</li> <li>Max. 7 iTM plus adaptors can be connected to intelligent Touch Manager.</li> </ul>
2-2			Software	iTM power proportional distribution	DCM002A51	<ul> <li>Power consumption of indoor units are calculated based on operation status of the indoor unit and outdoor unit power consumption measured by kWh metre.</li> </ul>
2-3				iTM energy navigator	DCM008A51	<ul> <li>Building energy consumption is visualised. Wasted air-conditioning energy can be found out.</li> </ul>
2-4				BACnet client	DCM009A51	BACnet equipment can be managed by intelligent Touch Manager.
2-5				HTTP Interface	DCM007A51	Interface for intelligent Touch Manager by HTTP
2-6			Hardware	*1 SVM series	SVMPR2	VRV Smart phone Control System for residence
2-7					SVMPC2	VRV Smart Phone Remote Controller for building
2-8					SVMPS1	Tenant Billing System with PPD
2-9	VRV Smart Phone Control System				SVMPR1	VRV Smart Phone Control System for residence with DTA116A51.
2-10	VRV Tablet Controller				SVMPC1	VRV Tablet Controller for small size building with DTA116A51
2-11	Di unit				DEC101A51	<ul> <li>8 pairs based on a pair of ON/OFF input and abnormality input.</li> </ul>
2-12	Dio unit				DEC102A51	<ul> <li>4 pairs based on a pair of ON/OFF input and abnormality input.</li> </ul>
3		*2 Interface for use in BACnet®			DMS502B51	<ul> <li>Interface unit to allow communications between VRV and BMS. Operation and monitoring of air-conditioning systems through BACnet<sup>®</sup> communication.</li> </ul>
3-1	Communication interface	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	<ul> <li>Interface unit to allow communications between VRV and BMS. Operation and monitoring of air-conditioning systems through LonWorks<sup>®</sup> communication.</li> </ul>
5		Home Automation Interface Adaptor			DTA116A51	<ul> <li>Use of the Modbus protocol enables the connection of the VRV system with a variety of home automation systems from other manufacturers.</li> </ul>
6	Contact/ analogue signal					<ul> <li>Interface between the central monitoring board and central control units.</li> </ul>

Notes: \*1. HTTP interface (DCM007A51) is also required.

\*2. BACnet<sup>®</sup> is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

LonVorks<sup>®</sup> is a trademark of Echelon Corporation registered in the United States and other countries
 \*4. Installation box for ★ adaptor must be obtained locally.

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### Function

16 groups of indoor units (128 units) can be easily controlled using the LCD panel. ON/OFF, temperature settings and scheduling can be controlled dually for indoor units.

5 indoor units can be controlled. This is a low cost system which can only of ON/OFF.

tors required to connect products other than those of the VRV System to gh-speed DIII-NET communication system adopted for the VRV System.

se any of the above optional controllers, an appropriate adaptor must be led on the product unit to be controlled.

) 1024 units can be centrally controlled in 64 different groups. g restrictions (max. length: 1,000m, total wiring length: 2,000m, max. er of branches: 16) apply to each adaptor. plate for DTA109A51

