



Cooling Only 50 Hz

R-410A



VRV

A SERIES

Exceeding Boundari Innovative Energy Sa



New

First launched in Japan in 1982, the Daikin VRV by world markets for over 35 years. Now, Daikin the new VRV X and A series. By combining the tec VRV, VRT and VAV, we have attained both energy comfortable air conditioning.

VRV+VRT

VRV
X SERIES / A SERIES



VRV
X series / A series
movie

Energy savings

Uniting VRV, VRT and VAV technologies

Automatic refrigerant charge function

- Optimised operation efficiency
- Higher installation quality
- Easier installation

es with vings

system has been embraced
proudly introduces
hologies of
savings and

+VAV

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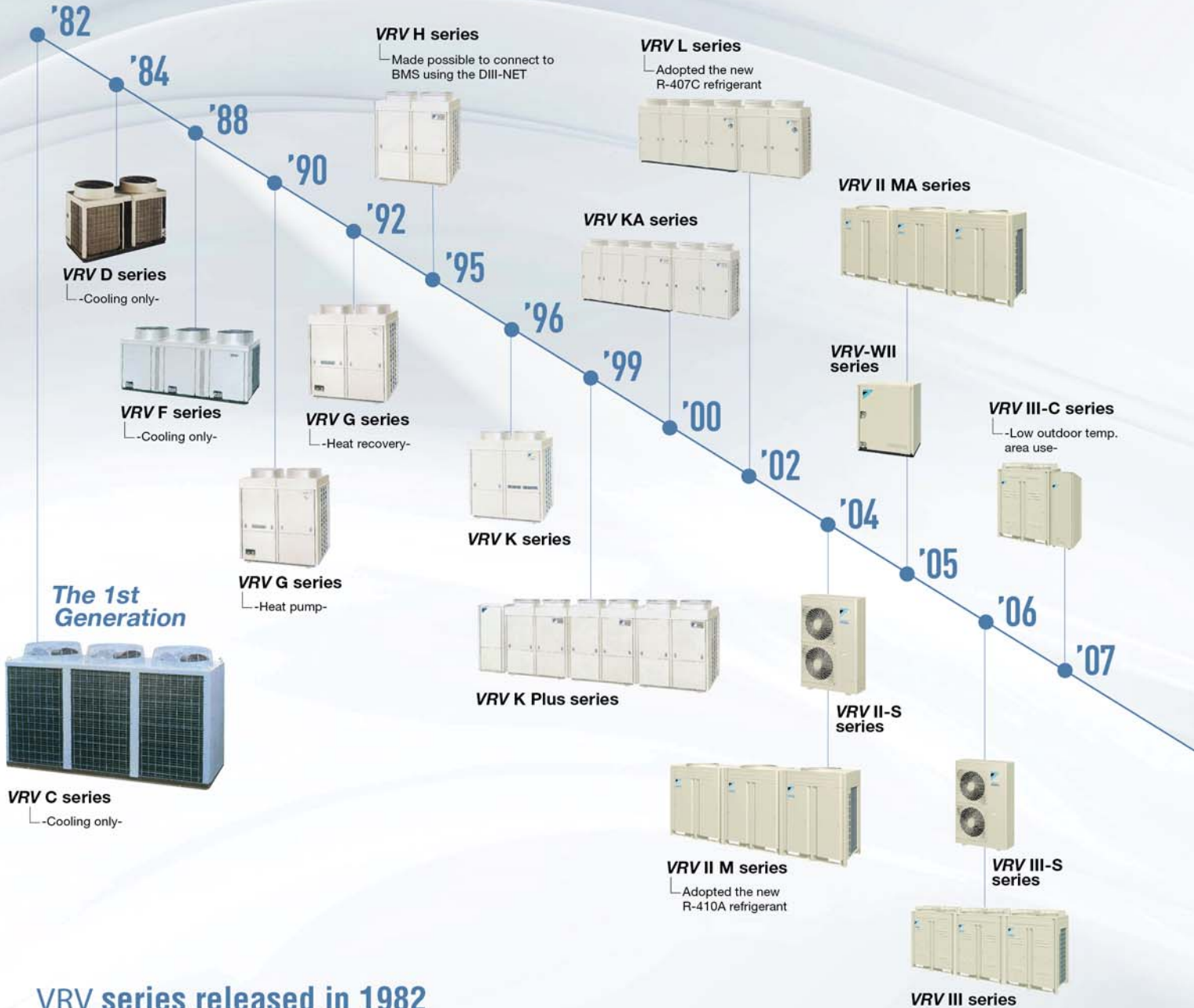
High reliability

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

• VRV is a trademark of Daikin Industries, Ltd.

Development history

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



VRV series released in 1982

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

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



* VRF is a trademark of Daikin Industries, Ltd.

Expansion of the country of sale

Sales is undergoing in more than 70 countries



VRV Multi function series

-Cooling/heating, hot water supply-



VRV A series

-Cooling only-



VRV A MAX

-Heavy anti-corrosion-



VRV X MAX

-Heavy anti-corrosion-



VRV-WIII series



VRV III Connection to residential indoor unit series



VRV IV

-Heat recovery-



VRV IV W series

-Water cooled system-



VRV X series

-Cooling only-



VRV IV Q series

-Replacement use-



VRV IV S series



VRV WS series

-Water cooled system-



VRV III Q series

-Replacement use-



VRV IV

-Cooling only / Heat pump-



VRV IV Heat Recovery Hot Water System



'08

'10

'11

'12

'14

'15

'16

'17

'18

'19

VRV User Benefits

For property
OWNERS

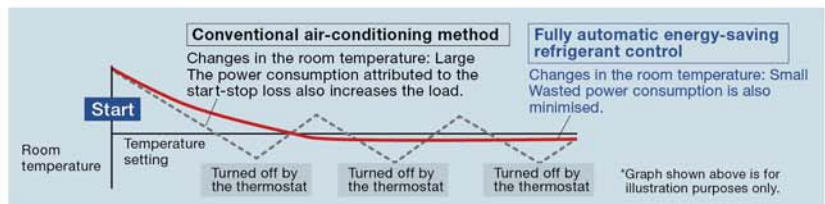
First launched in 1982, the Daikin **VRV** system has been providing comfort and reliability to building owners and their tenants for over 35 years. Leveraging the latest in energy-saving technology, Daikin has further improved energy savings while reducing space requirements. This added value is one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

Energy saving & comfortable environment

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

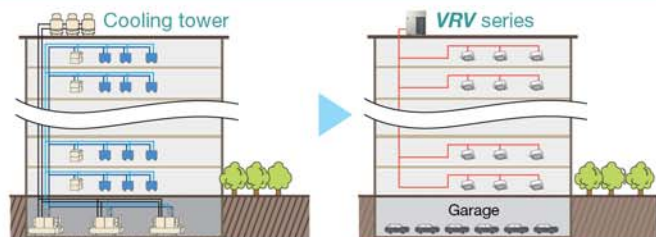


While optimally operating at low load, it maintains a comfortable indoor environment.



Efficient space utilisation

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



High reliability

Double backup operation

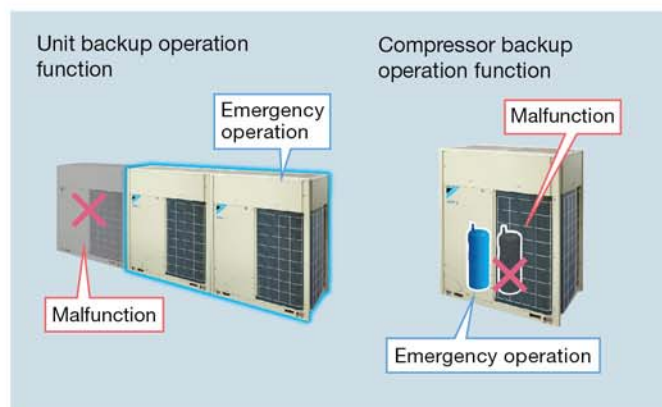
Daikin **VRV** outdoor unit goes beyond just highly reliable compressors with a backup system that ensures continued operation.

Unit backup

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

Compressor backup

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



For
USERS

Comfortable environment

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



Residential Indoor Units

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



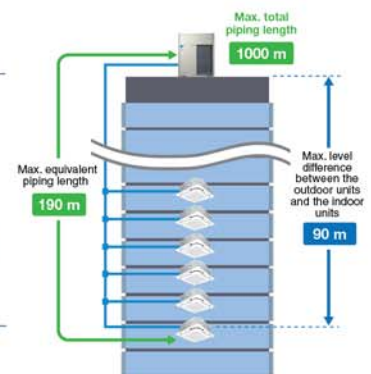
For
**CONSULTANT
and DESIGN
OFFICES**

Varied lineup of models

System applications range from family residences to large commercial buildings. With 26 types of indoor unit available, comfortable airflow is ensured in every space.

Long piping provides more flexible system design

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

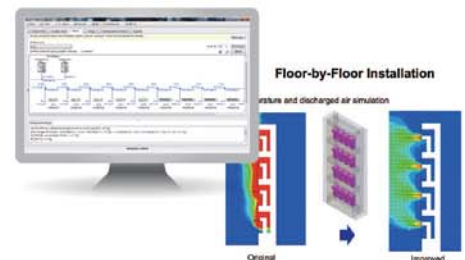


Compatible with engineering software

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

Energy efficient

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



For
INSTALLERS

Automatic Refrigerant Charge Function

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

Lightweight and compact large-capacity single units

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

Simple piping, easy wiring

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





RXQ-A

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

Greater energy savings during low-load operation

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

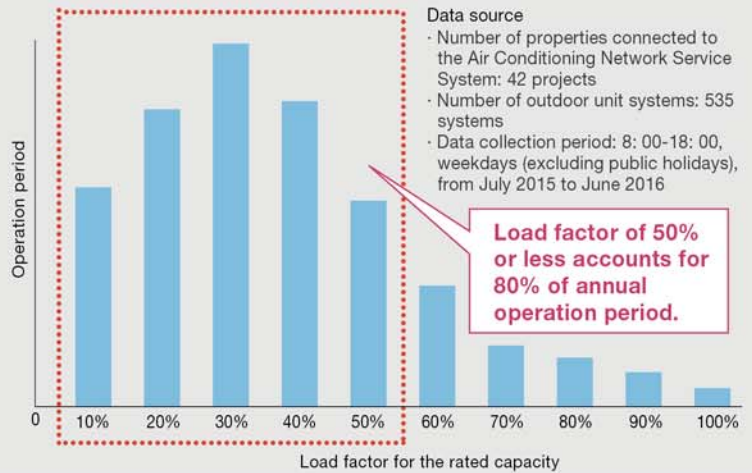
Using data gathered from actual operation, Daikin discovered that air conditioning systems operate at a load factor of 50% or less for 80% of their annual operation period.*

This inspired us to develop new technologies to enhance energy efficiency during low-load operation.

Utilising these technologies, Daikin's new **VRV A** series raises the standard of energy efficiency.

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

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

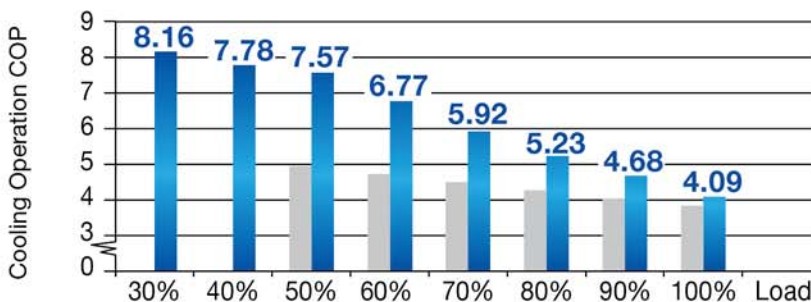


Data source
 • Number of properties connected to the Air Conditioning Network Service System: 42 projects
 • Number of outdoor unit systems: 535 systems
 • Data collection period: 8:00-18:00, weekdays (excluding public holidays), from July 2015 to June 2016

Load factor of 50% or less accounts for 80% of annual operation period.

Higher Coefficient of Performance (COP)

COP for 10 HP



Annual power consumption
14%* lower

- * Simulation conditions :
- Location : Bangkok, Thailand
- System : Outdoor unit (10 HP) x 1
Indoor unit (2 HP, Round Flow with Sensing type) x 5
- Operation time : 8:00-20:00 5 days/week
- Outdoor units :

■ **VRV IV (RXQ10T)**

■ **VRV A SERIES**

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

Advanced technologies for greater energy savings

VRV+VRT+VAV

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

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

Software technology

Optimally supply only for the needed capacity of indoor units

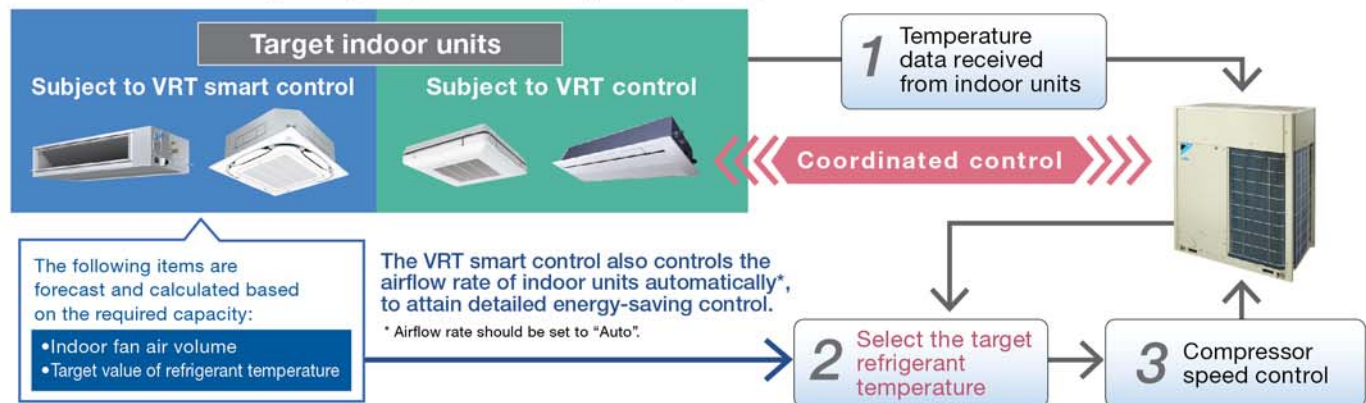
Daikin developed VRT smart control by combining air volume control (VAV: Variable Air Volume) for indoor units with conventional VRT control, which optimises compressor speed by calculating the required load for the entire system and optimal target refrigerant temperature based on data sent from each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



VRT Smart Control Function movie

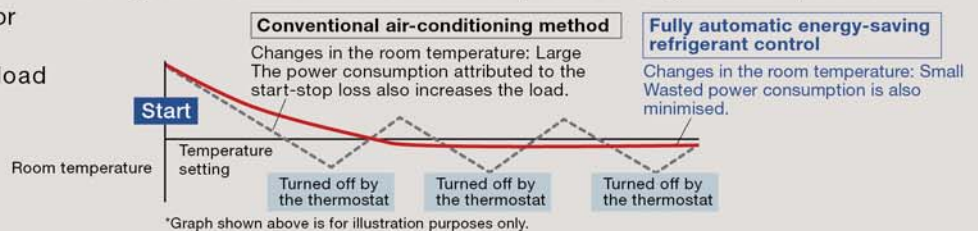
•Overview of the control (system control flow)

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



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

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



Note:

- For the classification of indoor units (VRT smart control and VRT control), refer to page 47-48.
- If a system has indoor units subject to both VRT smart and VRT control, the system is operated under VRT control.
- If a system has both outdoor-air processing air conditioners and outdoor-air processing type indoor units, VRT smart control and VRT control are disabled.

Optimum utilisation of VRT Smart Control and VRT Control

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

•When selecting indoor units

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

Example:

- 1) A load imbalance occurs because an indoor unit in the same system is installed near the perimeter of the room or in the vicinity of a room entrance.
- 2) Different operating hours for indoor units.

•Time of Use

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

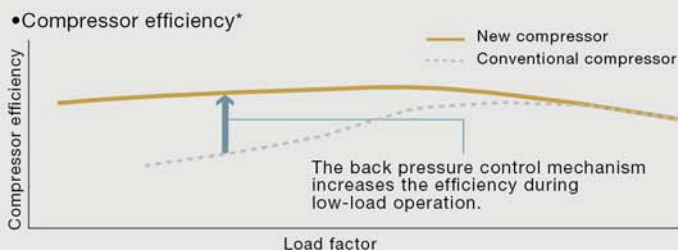
Achieves Space Saving & Excellent Performance

New Scroll Compressor*

Hardware technology

Refrigerant leakage is minimised during low-load operation.

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



*Graph shown above is for illustration purposes only.



New Scroll Compressor movie

Back pressure control mechanism

Conventional mechanism

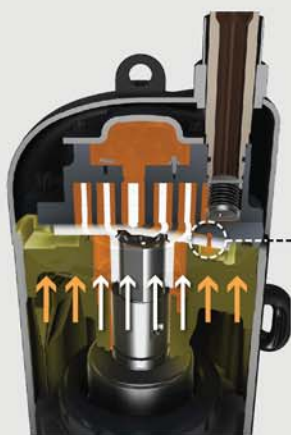
The orbiting scroll is engaged by the pressure difference between high and low pressures. The force engaging the orbiting scroll decreases during low-load operation, resulting in compression leakage from movable parts.



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

New intermediate pressure mechanism

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



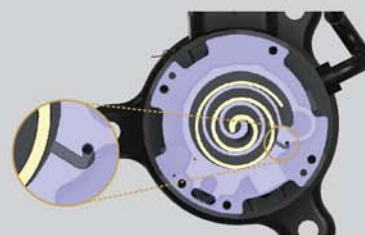
The intermediate pressure maintains pressure on the orbiting scroll during low-load operation.

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



Intermediate pressure adjustment port

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



Advanced oil temperature control

Standby power consumption is reduced

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

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

Automatic refrigerant charge function

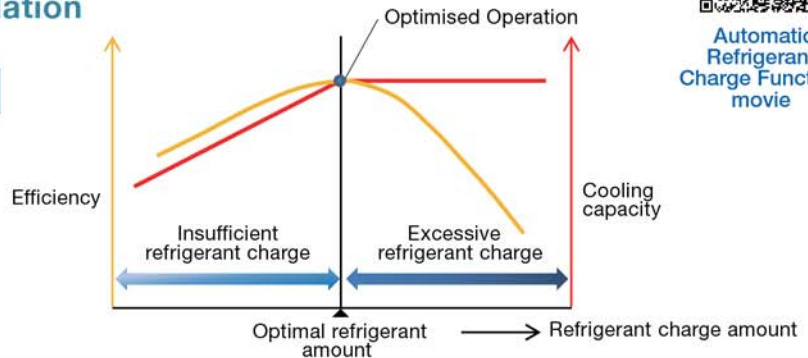
Contribute to optimised operation efficiency, higher quality and easier installation



Automatic Refrigerant Charge Function movie

Optimised operation efficiency

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



Higher quality and easier installation

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

VRV IV

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

VRV A SERIES

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

Automatic completion by proper refrigerant amount

Monitoring refrigerant charging is unnecessary

No recalculation of charge amounts due to minor design changes locally

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

*There are conditions in the range of ambient temperature in which the automatic refrigerant charge can be used. Refer to the installation manual for details.

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

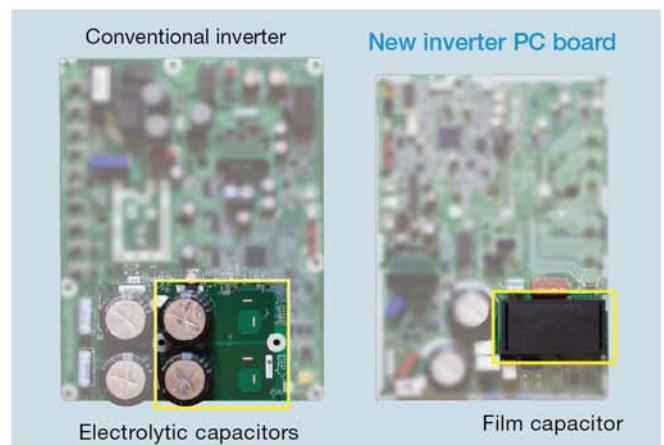
*The refrigerant amount that can be automatically charged may differ from the additional refrigerant amount that is provided from calculations, but there are no problems in performance and quality.

High reliability

New inverter PC board

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

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



Excellent Operational Performance

■ Comfort

Low operation sound

High efficiency heat exchanger helps to achieve low operation sound.

	Sound level(dB(A))			
	6/8 HP	10 HP	12 HP	14/16 HP
VRV A SERIES	56	57	59	60

Large airflow, high static pressure and quiet technology

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

Streamlined air grille

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





Streamlined scroll fan

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

Streamlined scroll fan



↑

Illustrated fan

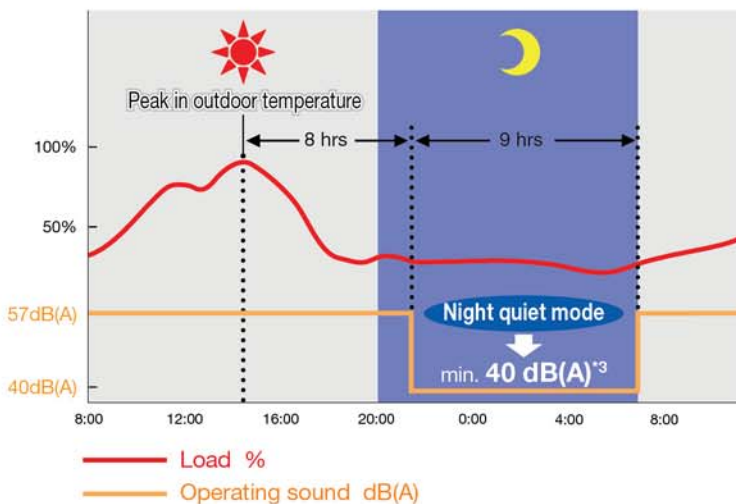


Nighttime quiet operation function

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

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

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



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

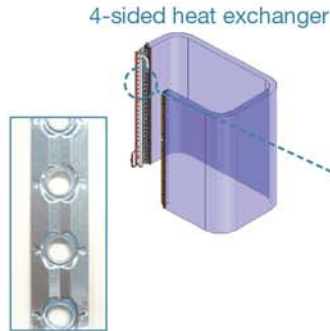
Compact design with high performance

Highly integrated heat exchanger

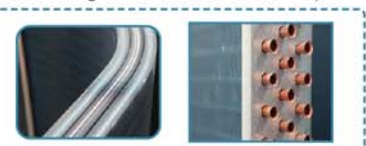
The unique 4-sided all round heat exchanger ensures sufficient surface area for the heat exchanger. This improves the heat exchanger performance without increasing the footprint.

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

4-sided heat exchanger



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

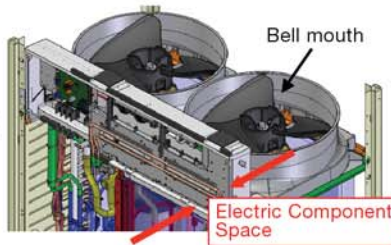


20 HP
3-row small pipe design increases heat transfer efficiency.

VRV A SERIES

Optimised inner design to ensure smooth airflow

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



Easy maintenance

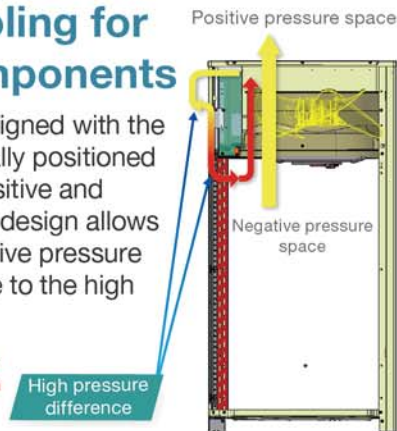
The electrical components are strategically located on the top which eases the maintenance process. Moreover, the heat exchanger on the front side can be used effectively to improve its performance.



Sufficient cooling for electrical components

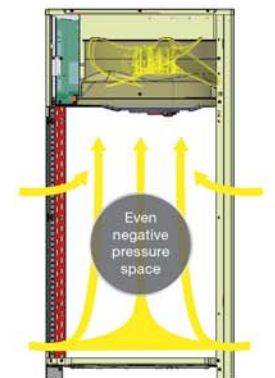
The VRV A series is designed with the electrical box strategically positioned between a region of positive and negative pressure. This design allows large airflow from negative pressure to positive pressure due to the high pressure difference.

• High pressure since air enters near the fan blower inlet



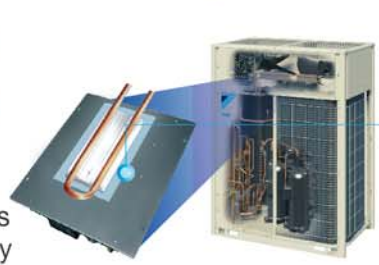
Eliminate suction resistance issue

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



High reliability at high ambient temperatures

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



PC Board

Heat

Power Module

Refrigerant

Refrigerant Refrigerant Jacket

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

Control board failure ratio at stable operation is reduced.

Outer Rotor DC Motor (ODM)

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

Advantages of ODM

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

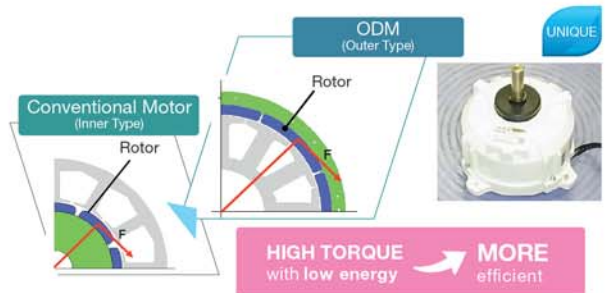
UNIQUE

ODM (Outer Type)

Conventional Motor (Inner Type)

Rotor

Rotor



HIGH TORQUE with low energy

MORE efficient

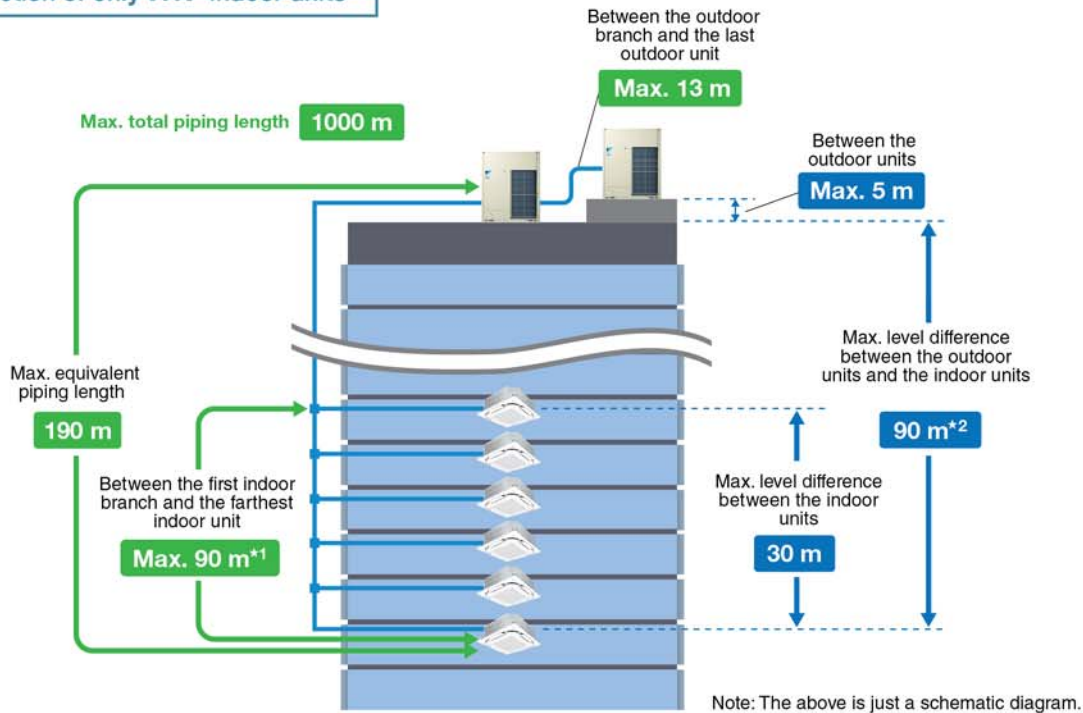
Flexible System Design

More options for installation location

Long piping length

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

For connection of only VRV indoor units



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

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

Connection ratio

Connection capacity at maximum is 200%.

Connection ratio
50%–200%

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

Conditions of VRV indoor unit connection capacity

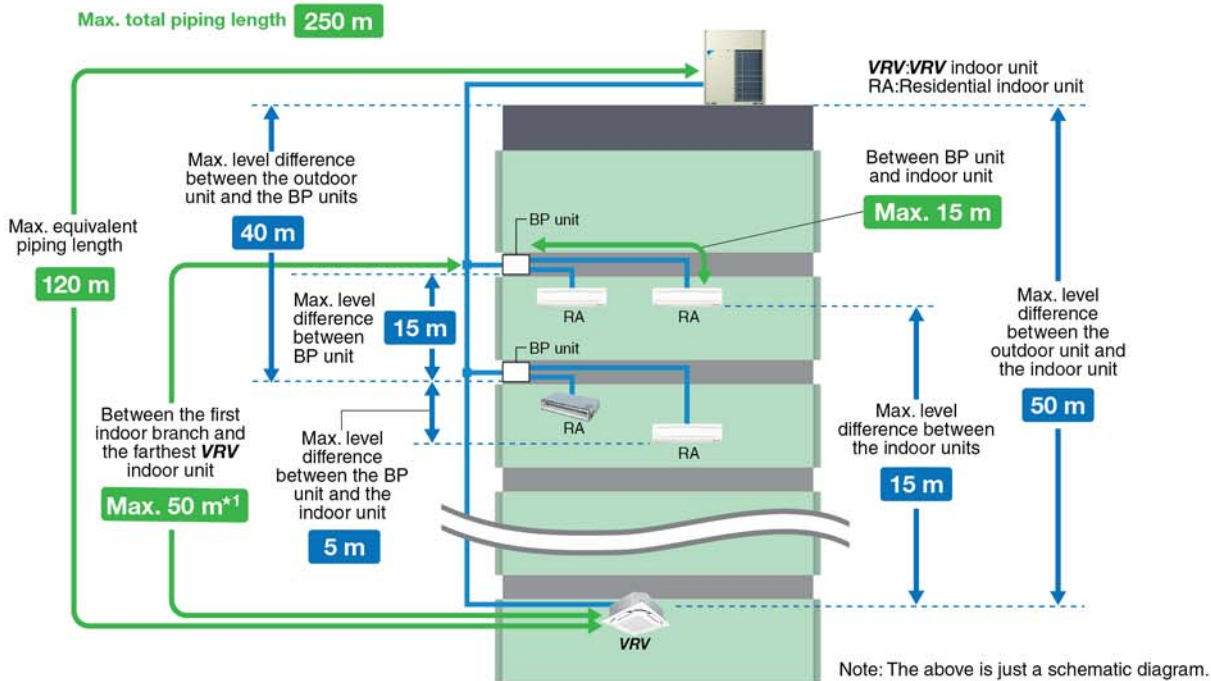
Applicable VRV indoor units	Other VRV indoor unit models*1
Single outdoor units	200%
Double outdoor units	160%
Triple outdoor units	130%

*1 For the FXF(S)Q2 and FXVQ models, maximum connection ratio is 130% for the entire range of outdoor units.

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

*Refer to page 40 for outdoor unit combination details.

For mixed combination of VRV and residential indoor units



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

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

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

*When a mixed combination of VRV and residential indoor units is connected or when only residential indoor units are connected, connection ratio must be 50% to 130%. Refer to page 40 for outdoor unit combination details.

High external static pressure

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

78.4 Pa

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



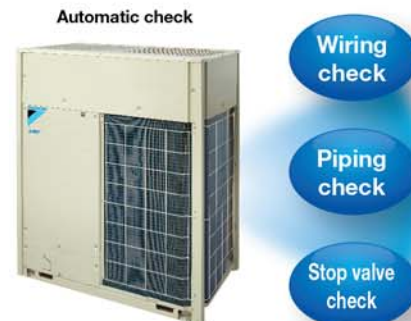
Reliable and Stable System

More accurate test operation and stable system

Efficient automatic test operation

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

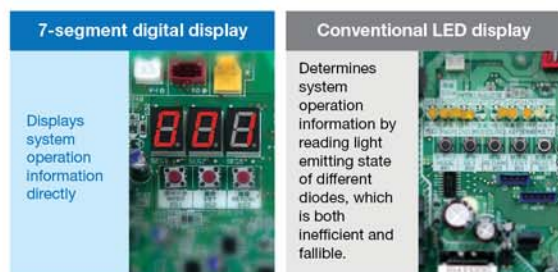
- Automatically checks the wiring between outdoor units and indoor units to confirm whether there is defective wiring.
- Confirms piping length to optimise operation.
- Automatically checks whether the stop valve in each outdoor unit is functioning normally to ensure the smooth operation of air conditioning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



Simplified commissioning and after-sales service

Function of information display by luminous digital tube

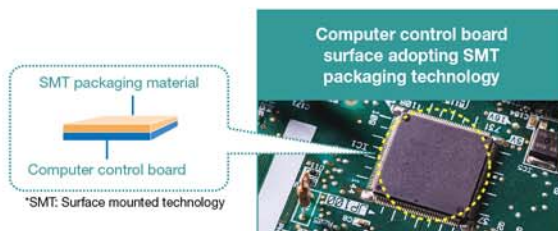
VRV A series utilises 7-segment luminous digital tubes to display system operation information, enabling the operational state to be visually displayed whilst facilitating simplified commissioning and after-sales service.



Advanced control main PC board

SMT* packaging technology

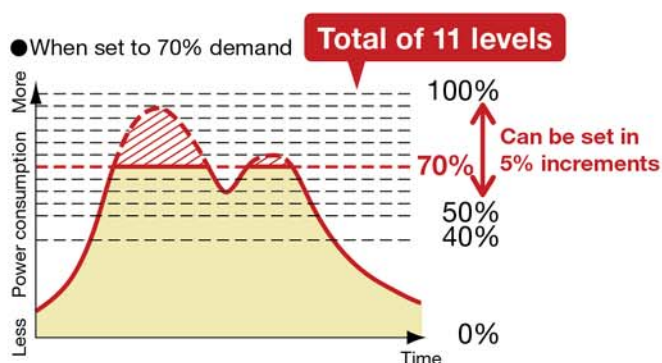
- SMT packaging technology adopted by the computer control panel improves the anti-clutter performance.
- Protects your computer boards from the adverse effects of sandy climates and humid weather.



I-demand function

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

*Set on the circuit board of the outdoor unit.

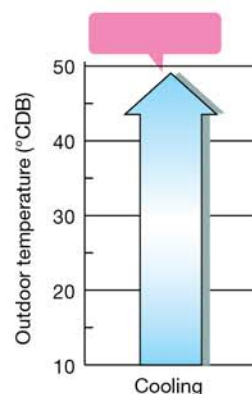


Wide operation temperature range up to 49°C

The versatile operation range of the **VRV** A series works to reduce limitations on installation locations.

The operation temperature range for cooling can be performed with outdoor temperatures as high as 49°C.

This enables reliable operation even under high temperature conditions.



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

Automatic sequencing operation

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



VRV A SERIES

Double backup operation functions

Daikin VRV A series outdoor unit boasts double backup operation functions, which can secure the use of air conditioners in this area to the greatest extent in an emergency by enabling double backup operation functions even if failure occurs in a set of air conditioning equipment.

In the event of a failure, emergency operation can be conveniently enabled to allow the remaining system to operate in a limited fashion.

Unit backup operation function

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

* For systems composed of two or more outdoor units.



Compressor backup operation function

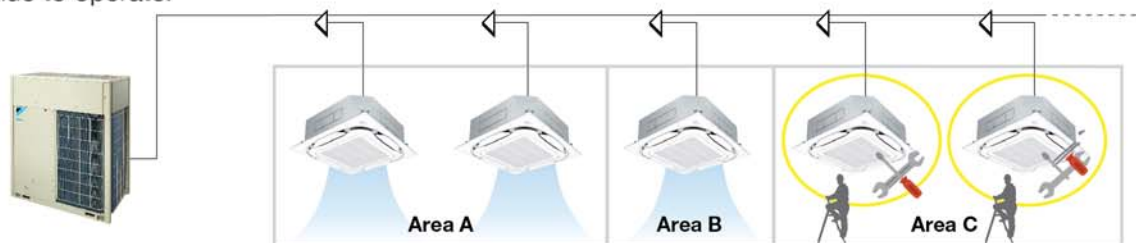
The outdoor unit is equipped with two compressors. Even if one compressor malfunctions, the other compressor provides emergency operation, reducing the risk of air conditioning shutdown due to compressor failure. (Capacity is saved during backup operation.)

* For single outdoor unit system RXQ16-20AY1S models. On-site settings are required using the printed circuit board of the outdoor unit.



Ease of maintenance

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



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

Reliable and Stable System

Heavy anti-corrosion model

New **VRV A MAX**

RXQ6-20AY1SW

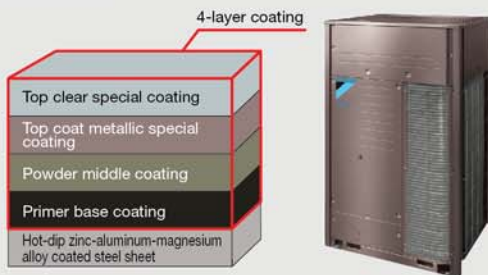
RXQ18-60AMY1SW



Maximize anti-corrosion and performance Outer casing

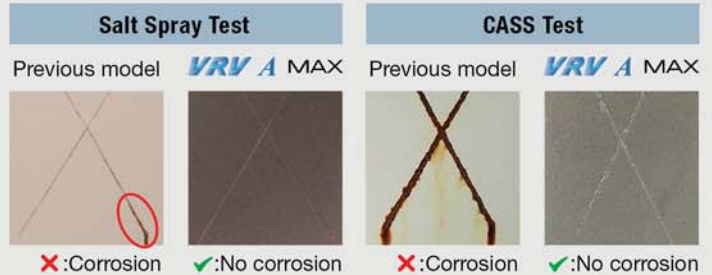
Multi coating for extreme durability

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



Anti-corrosion verification by accelerated test

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



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

Heat exchanger (Fin)

Anti-corrosion technology

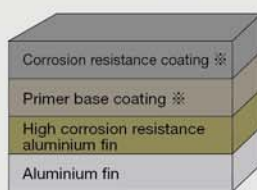
The aluminum fins on **VRV A MAX** are manufactured with thicker anti-corrosion layer including an additional two-layer coating.



✗:Corrosion



✓:No corrosion

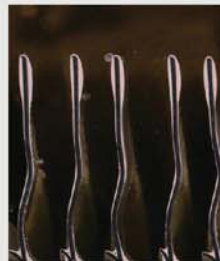


※ (outside area only)

High performance technology

21% thicker aluminum fins

New aluminum fins are 21% thicker to maintain performance.



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

Automated fin coating line

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

Maximize lifespan

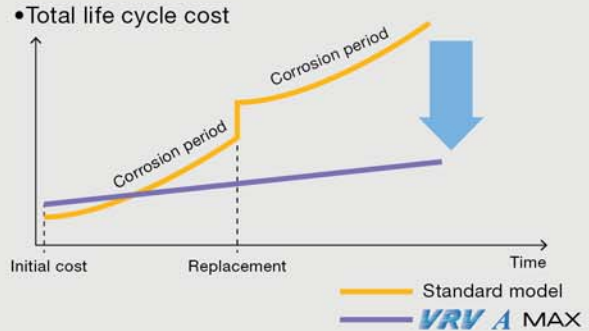
Only outer casing and fins are certified by a 3rd party for their durability.

Anti-corrosion test obtained UL certification

Certified as high durability for corrosivity category C5 as defined in ISO 12944-6:2018.



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



VRV A SERIES

VRV A MAX: Built for seaside

	Previous model	VRV A MAX
Type	Anti-corrosion	Heavy Anti-corrosion for ASEAN
Installation example	<p>The previous generation of anti-corrosion model must be installed at least 300 m away from the sea in a location not in direct contact with sea wind.</p>	<p>VRV A MAX can be installed right by the sea, as long as the unit does not get into contact with seawater, allowing for more flexibility in installation.</p>
Distance	300 - 1,000 m	1,000 m or less

Specifications of anti-corrosion model

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

Outdoor Unit Lineup

VRV A Series Outdoor Units New

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

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

Lineup

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

•Single Outdoor Units

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



RXQ6AY1S
RXQ8AY1S
RXQ10AY1S
RXQ12AY1S



RXQ14AY1S
RXQ16AY1S
RXQ18AY1S
RXQ20AY1S

•Double Outdoor Units

18, 20, 22, 24 HP 26, 28, 30 HP



RXQ18AMY1S
RXQ20AMY1S
RXQ22AMY1S
RXQ24AMY1S



RXQ26AMY1S
RXQ28AMY1S
RXQ30AMY1S



RXQ32AMY1S
RXQ34AMY1S
RXQ36AMY1S
RXQ38AMY1S
RXQ40AMY1S

•Triple Outdoor Units

42, 44 HP



RXQ42AMY1S
RXQ44AMY1S

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



RXQ46AMY1S RXQ54AMY1S
RXQ48AMY1S RXQ56AMY1S
RXQ50AMY1S RXQ58AMY1S
RXQ52AMY1S RXQ60AMY1S

Outdoor Unit Combinations

For connection of VRV indoor units

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

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

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

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

Model name ^{*1}	kW	HP	Capacity index	Total capacity index of connectable indoor units ^{*2}			Maximum number of connectable indoor units
				Combination (%) ^{*2}			
				50%	100%	130%	
RXQ6AY1S	16.0	6	150	75	150	195	9
RXQ8AY1S	22.4	8	200	100	200	260	13
RXQ10AY1S	28.0	10	250	125	250	325	16
RXQ12AY1S	33.5	12	300	150	300	390	19
RXQ14AY1S	40.0	14	350	175	350	455	22
RXQ16AY1S	45.0	16	400	200	400	520	26
RXQ18AY1S	50.0	18	450	225	450	585	29
RXQ20AY1S	56.0	20	500	250	500	650	32

Note: *1. Only single outdoor unit (RXQ6-20AY1S) can be connected.

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

Indoor Unit Lineup

Enhanced range of choices

VRV indoor units

New lineup

VRT smart

Indoor units subject to VRT smart control

VRT

Indoor units subject to VRT control

Type	Model Name	Capacity Range	Capacity Index															
			20	25	31.25	40	50	62.5	71	80	100	125	140	200	250	400	500	
			0.8 HP	1 HP	1.25 HP	1.6 HP	2 HP	2.5 HP	3 HP	3.2 HP	4 HP	5 HP	6 HP	8 HP	10 HP	16 HP	20 HP	
Ceiling Mounted Cassette (Round Flow with Sensing)	FXFSQ-AVS			●	●	●	●	●			●	●	●	●				
Ceiling Mounted Cassette (Round Flow)	FXFQ-AVS			●	●	●	●	●			●	●	●	●				
Ceiling Mounted Cassette (Compact Multi Flow)	FXZQ-MVES		●	●	●	●	●											
4-Way Flow Ceiling Suspended	FXUQ-AVEB									●		●						
Ceiling Mounted Cassette (Double Flow)	FXCQ-AVMS		●	●	●	●	●	●			●		●					
Ceiling Mounted Cassette (Single Flow)	FXEQ-AV36		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (3D Airflow with Sensing)	FXDSQ-AVM		●	●	●	●	●	●										
Slim Ceiling Mounted Duct (Standard Series)	FXDQ-PDV2S (with drain pump)	(700mm width type)	●	●	●													
	FXDQ-PDVTS (without drain pump)		●	●	●													
	FXDQ-NDV2S (with drain pump)	(900 / 1100mm width type)				●	●	●										
	FXDQ-NDVTS (without drain pump)					●	●	●										
Slim Ceiling Mounted Duct (Compact Series)	FXDQ-SPV1		●	●	●	●	●	●										
Middle Static Pressure Ceiling Mounted Duct	FXSQ-PAVS		●	●	●	●	●	●			●	●	●	●				
Ceiling Mounted Duct	FXMQ-PAVS		●	●	●	●	●	●			●	●	●	●				
	FXMQ-MVES													●	●			
	FXMQ-PVM													●	●			
Outdoor-Air Processing Unit	FXMQ-MFV1											●	●	●	●			
Ceiling Suspended	FXHQ-MAVS				●				●			●						
	FXHQ-AVMS												●	●				
Wall Mounted	FXAQ-AVMS		●	●	●	●	●	●										
Floor Standing	FXLQ-MAVE		●	●	●	●	●	●										
Concealed Floor Standing	FXNQ-MAVE		●	●	●	●	●	●										
Floor Standing Duct	FXVQ-NY1											●		●	●	●		
	FXVQ-NY16 (high static pressure type)																●	
Clean Room Air Conditioner	FXBQ-PVE					●	●	●										
	FXBPQ-PVE								●									
Heat Reclaim Ventilator with DX-Coil	VKM-GAV1		Airflow rate 500-1000 m³/h															
Heat Reclaim Ventilator	VAM-GJVE		Airflow rate 150-2000 m³/h															
Air Handling Unit	AHUR																	

Residential indoor units with connection to BP units

Type	Model Name	Rated Capacity (kW)	Capacity Index	09	12	18	24	28
				2.5	3.5	5.0	6.0	7.1
				25	35	50	60	71
Slim Ceiling Mounted Duct	FDKS-EAVMS VRT	 (700 mm width type)	●	●				
	FDKS-C(A)VMS VRT	 (900/1,100 mm width type)	●	●	●	●		
Wall Mounted	FTKS-DVMS VRT		●	●				
	FTKS-FVMS VRT				●	●	●	

Note: BP units are necessary for residential indoor units. Only single outdoor unit (RXQ6-20AY1S(W)) can be connected.

VRV A SERIES

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

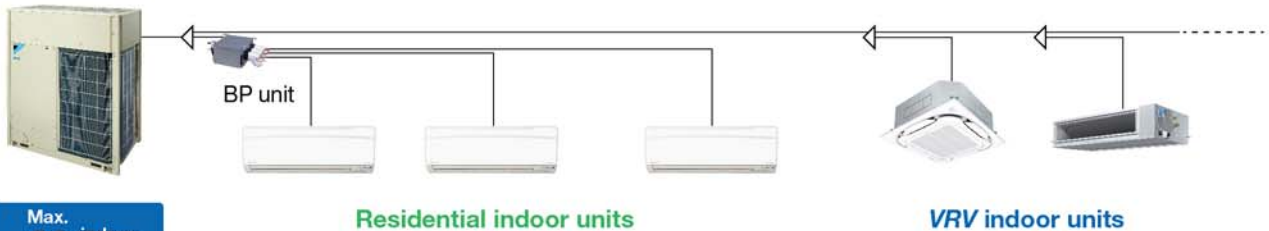
VRV indoor unit only system



Max. **64** indoor units

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

Residential indoor unit and VRV indoor unit mix system



Max. **32** indoor units

- BP units are necessary for residential indoor units. Only single outdoor unit (RXQ6-20AY1S(W)) can be connected.
- If a system has both residential indoor units and VRV indoor units, the system is operated under VRT control.

Residential indoor unit only system





Max. **32** indoor units

- BP units are necessary for residential indoor units. Only single outdoor unit (RXQ6-20AY1S(W)) can be connected.
- If a system has only residential indoor units, the system is operated under VRT control.

Specifications

VRV A Series Outdoor Units





RXQ-A

									
MODEL			RXQ6AY1S(W)	RXQ8AY1S(W)	RXQ10AY1S(W)	RXQ12AY1S(W)	RXQ14AY1S(W)	RXQ16AY1S(W)	RXQ18AY1S(W)
Combination units			—	—	—	—	—	—	—
Power supply			3 phase 4-wire system, 380-415V/ 380V, 50Hz/ 60Hz						
Cooling capacity	Btu/h		54,600	76,400	95,500	114,000	136,000	154,000	171,000
	Btu/h*		54,900	76,900	96,200	115,000	137,300	154,600	171,800
	kW		16.0/16.1*	22.4/22.6*	28.0/28.2*	33.5/33.7*	40.0/40.3*	45.0/45.3*	50.0/50.4*
COP			4.73	4.33	4.09	3.85	3.74	3.49	3.27
Power consumption	kW		3.38	5.17	6.84	8.70	10.7	12.9	15.3
Capacity Control	%		25-100	20-100	13-100	12-100	11-100	10-100	10-100
Casing colour			Ivory white (5Y7.5/1)						
Compressor	Type		Hermetically sealed scroll type						
	Motor Outputx Number of Units	kW	2.3x1	3.4x1	4.5x1	5.6x1	6.4x1	(3.5x1)+(3.5x1)	(4.0x1)+(4.0x1)
Airflow rate	m ³ /min		119	178		191	257		
Dimensions (HxWxD)	mm		1,657x930x765				1,657x1,240x765		
Machine weight	kg		175		185		215	260	
Sound level	dB(A)		56		57	59	60		61
Operation range	°CDB		10 to 49						
Refrigerant	Type		R-410A						
	Charge	kg	5.9		6.7	6.8	7.4	8.2	8.4
Piping connections	Liquid	mm	φ9.5 (Brazing)			φ12.7 (Brazing)			φ15.9 (Brazing)
	Gas	mm	φ19.1 (Brazing)		φ22.2 (Brazing)		φ28.6 (Brazing)		

									
MODEL			RXQ32AMYS(W)	RXQ34AMYS(W)	RXQ36AMYS(W)	RXQ38AMYS(W)	RXQ40AMYS(W)	RXQ42AMYS(W)	RXQ44AMYS(W)
Combination units			RXQ14AY1S(W)	RXQ16AY1S(W)	RXQ18AY1S(W)	RXQ18AY1S(W)	RXQ20AY1S(W)	RXQ12AY1S(W)	RXQ12AY1S(W)
			RXQ18AY1S(W)	RXQ18AY1S(W)	RXQ18AY1S(W)	RXQ20AY1S(W)	RXQ20AY1S(W)	RXQ12AY1S(W)	RXQ12AY1S(W)
			—	—	—	—	—	RXQ18AY1S(W)	RXQ20AY1S(W)
Power supply			3 phase 4-wire system, 380-415V/ 380V, 50Hz/ 60Hz						
Cooling capacity	Btu/h		307,000	324,000	341,000	362,000	382,000	399,000	420,000
	Btu/h*		309,100	326,400	342,900	363,400	383,900	402,600	423,100
	kW		90.0/90.6*	95.0/95.7*	100/100.5*	106/106.5*	112/112.5*	117/118*	123/124*
COP			3.46	3.37	3.27	3.21	3.16	3.58	3.5
Power consumption	kW		26.0	28.2	30.6	33.0	35.4	32.7	35.1
Capacity Control	%		5-100	5-100	5-100	4-100	3-100	4-100	3-100
Casing colour			Ivory white (5Y7.5/1)						
Compressor	Type		Hermetically sealed scroll type						
	Motor Outputx Number of Units	kW	(6.4x1)+(4.0x1) +(4.0x1)	(3.5x1)+(3.5x1) +(4.0x1)+(4.0x1)	(4.0x1)+(4.0x1) +(4.0x1)+(4.0x1)	(4.0x1)+(4.0x1) +(3.8x1)+(6.3x1)	(3.8x1)+(6.3x1) +(3.8x1)+(6.3x1)	(5.6x1)+(5.6x1) +(4.0x1)+(4.0x1)	(5.6x1)+(5.6x1) +(3.8x1)+(6.3x1)
Airflow rate	m ³ /min		257+257			257+297	297+297	191+191+257	191+191+297
Dimensions (HxWxD)	mm		(1,657x1,240x765)+(1,657x1,240x765)				(1,657x930x765)+(1,657x930x765)+ (1,657x1,240x765)		
Machine weight	kg		215+260	260+260		260+285	285+285	185+185+260	185+185+285
Sound level	dB(A)		64			66	68	65	67
Operation range	°CDB		10 to 49						
Refrigerant	Type		R-410A						
	Charge	kg	7.4+8.4	8.2+8.4	8.4+8.4	8.4+11.8	11.8+11.8	6.8+6.8+8.4	6.8+6.8+11.8
Piping connections	Liquid	mm	φ19.1 (Brazing)						
	Gas	mm	φ34.9 (Brazing)			φ41.3 (Brazing)			

Note: Specifications are based on the following conditions;

- Cooling: Indoor temp.: 27°CDB, 19°CWB, ; *27°CDB, 19.5°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.

								
RXQ20AY1S (W)	RXQ18AMYS (W)	RXQ20AMYS (W)	RXQ22AMYS (W)	RXQ24AMYS (W)	RXQ26AMYS (W)	RXQ28AMYS (W)	RXQ30AMYS (W)	
—	RXQ8AY1S (W)	RXQ8AY1S (W)	RXQ10AY1S (W)	RXQ12AY1S (W)	RXQ12AY1S (W)	RXQ12AY1S (W)	RXQ12AY1S (W)	
—	RXQ10AY1S (W)	RXQ12AY1S (W)	RXQ12AY1S (W)	RXQ12AY1S (W)	RXQ14AY1S (W)	RXQ16AY1S (W)	RXQ18AY1S (W)	
3 phase 4-wire system, 380-415V/ 380V, 50Hz/ 60Hz								
191,000	172,000	191,000	210,000	229,000	251,000	268,000	285,000	
192,300	173,200	191,900	211,200	230,100	252,500	269,500	286,800	
56.0/56.4*	50.4/50.8*	55.9/56.3*	61.5/61.9*	67.0/67.5*	73.5/74.0*	78.5/79.0*	83.5/84.1*	
3.16	4.2	4.02	3.97	3.85	3.79	3.63	3.48	
17.7	12.0	13.9	15.5	17.4	19.4	21.6	24.0	
7-100	7-100	7-100	6-100	6-100	6-100	5-100	5-100	
Ivory white (5Y7.5/1)								
Hermetically sealed scroll type								
(3.8×1)+(6.3×1)	(3.4×1)+(4.5×1)	(3.4×1)+(5.6×1)	(4.5×1)+(5.6×1)	(5.6×1)+(5.6×1)	(5.6×1)+(6.4×1)	(5.6×1)+(3.5×1) +(3.5×1)	(5.6×1)+(4.0×1) +(4.0×1)	
297	178+178	178+191		191+191	191+257			
1,657×1,240×765	(1,657×930×765)+(1,657×930×765)				(1,657×930×765)+(1,657×1,240×765)			
285	175+185		185+185		185+215	185+260		
65	60	61		62	63			
10 to 49								
R-410A								
11.8	5.9+6.7	5.9+6.8	6.7+6.8	6.8+6.8	6.8+7.4	6.8+8.2	6.8+8.4	
φ15.9 (Brazing)				φ19.1 (Brazing)				
φ28.6 (Brazing)				φ34.9 (Brazing)				
								
RXQ46AMYS (W)	RXQ48AMYS (W)	RXQ50AMYS (W)	RXQ52AMYS (W)	RXQ54AMYS (W)	RXQ56AMYS (W)	RXQ58AMYS (W)	RXQ60AMYS (W)	
RXQ14AY1S (W)	RXQ14AY1S (W)	RXQ14AY1S (W)	RXQ16AY1S (W)	RXQ18AY1S (W)	RXQ18AY1S (W)	RXQ18AY1S (W)	RXQ20AY1S (W)	
RXQ14AY1S (W)	RXQ16AY1S (W)	RXQ18AY1S (W)	RXQ18AY1S (W)	RXQ18AY1S (W)	RXQ18AY1S (W)	RXQ20AY1S (W)	RXQ20AY1S (W)	
RXQ18AY1S (W)	RXQ18AY1S (W)	RXQ18AY1S (W)	RXQ18AY1S (W)	RXQ18AY1S (W)	RXQ20AY1S (W)	RXQ20AY1S (W)	RXQ20AY1S (W)	
3 phase 4-wire system, 380-415V/ 380V, 50Hz/ 60Hz								
444,000	461,000	478,000	495,000	512,000	532,000	553,000	573,000	
447,000	464,000	481,100	498,200	515,200	535,700	556,200	576,600	
130/131*	135/136*	140/141*	145/146*	150/151*	156/157*	162/163*	168/169*	
3.54	3.47	3.39	3.33	3.27	3.23	3.2	3.16	
36.7	38.9	41.3	43.5	45.9	48.3	50.7	53.1	
3-100	3-100	3-100	3-100	3-100	3-100	2-100	2-100	
Ivory white (5Y7.5/1)								
Hermetically sealed scroll type								
(6.4×1)+(6.4×1) +(4.0×1)+(4.0×1)	(6.4×1)+(3.5×1)+(3.5×1) +(4.0×1)+(4.0×1)	(6.4×1)+(4.0×1)+(4.0×1) +(4.0×1)+(4.0×1)	(3.5×1)+(3.5×1)+(4.0×1) +(4.0×1)+(4.0×1)+(4.0×1)	(4.0×1)+(4.0×1)+(4.0×1) +(4.0×1)+(4.0×1)+(4.0×1)	(4.0×1)+(4.0×1)+(4.0×1) +(4.0×1)+(3.8×1)+(6.3×1)	(4.0×1)+(4.0×1)+(3.8×1) +(6.3×1)+(3.8×1)+(6.3×1)	(3.8×1)+(6.3×1)+(3.8×1) +(6.3×1)+(3.8×1)+(6.3×1)	
257+257+257					257+257+297	257+297+297	297+297+297	
(1,657×1,240×765)+(1,657×1,240×765)+(1,657×1,240×765)								
215+215+260	215+260+260		260+260+260		260+260+285	260+285+285	285+285+285	
	65			66	68	69	70	
10 to 49								
R-410A								
7.4+7.4+8.4	7.4+8.2+8.4	7.4+8.4+8.4	8.2+8.4+8.4	8.4+8.4+8.4	8.4+8.4+11.8	8.4+11.8+11.8	11.8+11.8+11.8	
φ19.1 (Brazing)								
φ41.3 (Brazing)								

Option List

Outdoor Units

VRV A SERIES

No.	Type		RXQ6AY1S(W)	RXQ12AY1S(W)	RXQ18AY1S(W)	RXQ18AMY1S(W)
			RXQ8AY1S(W)	RXQ14AY1S(W)	RXQ20AY1S(W)	RXQ20AMY1S(W)
Item		RXQ10AY1S(W)	RXQ16AY1S(W)			RXQ22AMY1S(W)
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H (Max. 4 branch) (Max. 8 branch)		KHRP26M22H, KHRP26M33H, KHRP26M72H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch)	
		REFNET joint	KHRP26A22T, KHRP26A33T		KHRP26A22T, KHRP26A33T, KHRP26A72T	
2	Outdoor unit multi connection piping kit		-			BHFP22P100

No.	Type		RXQ24AMY1S(W)	RXQ34AMY1S(W)	RXQ42AMY1S(W)	RXQ52AMY1S(W)
			RXQ26AMY1S(W)	RXQ36AMY1S(W)	RXQ44AMY1S(W)	RXQ54AMY1S(W)
Item		RXQ28AMY1S(W)	RXQ38AMY1S(W)	RXQ46AMY1S(W)	RXQ56AMY1S(W)	RXQ58AMY1S(W)
		RXQ30AMY1S(W)	RXQ40AMY1S(W)	RXQ48AMY1S(W)	RXQ50AMY1S(W)	
		RXQ32AMY1S(W)				
1	Distributive piping	REFNET header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)			
		REFNET joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T			
2	Pipe size reducer		KHRP26M73TP, KHRP26M73HP			
3	Outdoor unit multi connection piping kit		BHFP22P100		BHFP22P151	

Option PCB

No.	Type		RXQ6AY1S(W)	RXQ14AY1S(W)	RXQ18AMY1S(W)	RXQ26AMY1S(W)
			RXQ8AY1S(W)	RXQ16AY1S(W)	RXQ20AMY1S(W)	RXQ28AMY1S(W)
Item		RXQ10AY1S(W)	RXQ18AY1S(W)	RXQ22AMY1S(W)	RXQ30AMY1S(W)	
		RXQ12AY1S(W)	RXQ20AY1S(W)			
1	DIII-NET expander adaptor ★		DTA109A51			
2	External control adaptor ★		DTA109A61			
3	Home Automation Interface Adaptor ★		DTA116A51			
4	Option plate for control adaptor		-	BKS26A *1	-	

No.	Type		RXQ32AMY1S(W)	RXQ42AMY1S(W)	RXQ46AMY1S(W)	RXQ54AMY1S(W)
			RXQ34AMY1S(W)		RXQ48AMY1S(W)	RXQ56AMY1S(W)
Item		RXQ36AMY1S(W)	RXQ44AMY1S(W)	RXQ50AMY1S(W)	RXQ58AMY1S(W)	
		RXQ38AMY1S(W)		RXQ52AMY1S(W)	RXQ60AMY1S(W)	
		RXQ40AMY1S(W)				
1	DIII-NET expander adaptor ★		DTA109A51			
2	External control adaptor ★		DTA109A61			
3	Home Automation Interface Adaptor ★		DTA116A51			
4	Option plate for control adaptor		BKS26A *1	-	BKS26A *1	

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

Daikin Engineering Supports

■ VRV Design and Sales Proposal Assistance

Daikin provides engineering supports for **VRV** systems. It consists of design supports that can assist consultants and architects, as well as sales proposal supports for air conditioning engineers and dealers. We at Daikin provide the software, the simulation results, and drawing materials to support the business-information modeling (BIM) currently entering the mainstream in construction industries.



Design

For consultants and architects

Combines energy efficiency and comfort

Heat load calculation

CFD simulation to optimise outdoor unit layouts

Design flexibility

Heat load calculation

Model selection

Drawing materials support



Sales proposals

For air conditioning engineers and dealers

Heat load calculation

Model selection

Daikin Engineering Supports



Model Selection Software

VRV Xpress

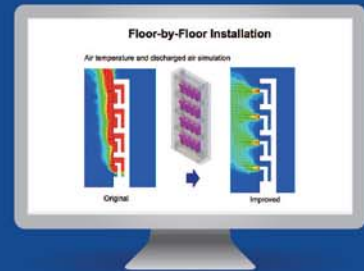
VRV Xpress is a flexible design software that optimises equipment selection. It can empower consultants and air conditioning engineers so they can fully enhance their equipment selections to design the most effective, optimum systems possible. The software also allows the choice of outdoor units based on peak loads rather than the sum of required capacities for each indoor unit. This fine-tuning feature reduces VRV system sizes and increases efficiency.



CFD Simulation to Optimise Outdoor Unit Layouts

DT FLOW II

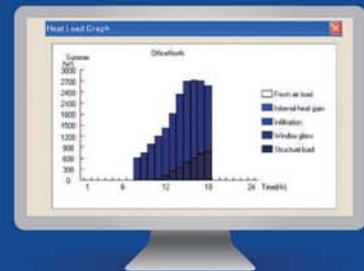
DT FLOW II is a simulation software that uses computational fluid dynamics (CFD), aiming to optimise outdoor unit layouts right at the design stage. When discharged air from the outdoor unit is drawn back into the suction vent, it can short circuit the system and lead to: decrease in efficiency of cooling operations, capacity shortages, operation cut-offs, and shorter lifetime for the outdoor unit. To avoid the need for expensive layout modifications once construction is complete, Daikin uses the CFD method at the early design stage. This can help consultants and architects optimise their outdoor unit arrangement.



Heat Load Calculation

DACCS-HKGSG and HKGSA

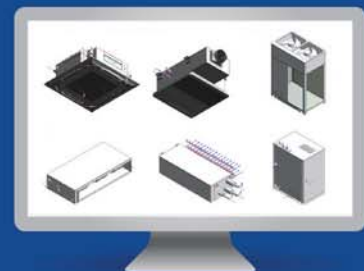
The DACCS program uses a steady-state load calculation method to compute heat load over a 24-hour period on summer and winter days. The heat load coming in through outer walls and rooftops from strong summer sunlight can be substantial, but the DACCS program applies effective temperature differences based on the effects of heat accumulated in the walls. The program also accesses 24-hour weather data for all major cities. The standard design data includes accurate weather information for 140 countries.



Drawing Supports

CAD Symbols

Users download CAD symbol drawing materials, including 2D CAD symbols and 3D Revit data, for VRV systems designing. The 3D Revit data contains specifications for Daikin products, including things like capacities and electric characteristics to support Business Information Modeling (BIM).



**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.

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VRV is a trademark of Daikin Industries, Ltd.

VRV Air Conditioning System is the world's first individual air conditioning system with variable refrigerant flow control and was commercialised by Daikin in 1982.

VRV is the trademark of Daikin Industries, Ltd., which is derived from the technology we call "variable refrigerant volume."