



SHAPING THE AIR TO YOUR NEED

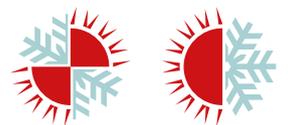


VRV® SYSTEMS

R-410A



www.daikin.eu



BENEFITS FOR BUILDING OWNERS

With Daikin's proprietary inverter technology and cutting-edge control technology for refrigerant, the VRV®III air conditioning system operates with outstanding efficiency. This contributes to high energy savings, which **GREATLY REDUCES YOUR RUNNING COSTS** and facilitates better building management.

BENEFITS FOR CONSULTANT AND DESIGN OFFICES

Daikin's VRV® systems include indoor and outdoor units available in a wide range of models for various building sizes and installation conditions. Long refrigerant piping lengths and other features put few restrictions on design for **GREAT FLEXIBILITY** in meeting needs of the building.

BENEFITS FOR INSTALLERS

Daikin offers a compact design for VRV® outdoor units by further optimising equipment functions, exceeding the norm for air conditioning systems. Compact units **FACILITATE INSTALLATION** in limited areas, such as rooftops, and take up less effective space. Easier installation work realises **FAST COMPLETION** with time to spare.

BENEFITS FOR END USERS

To provide a **COMFORTABLE AIR ENVIRONMENT**, Daikin offers air treatment systems beyond mere air conditioning. As well as bringing air to a comfortable temperature, the air quality can be improved with ventilation, humidification, and other processes. **EASE OF USE** is realised through advanced, centralised control systems.



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Daikin Europe N.V.

ABOUT DAIKIN

Daikin has a worldwide reputation based on almost 85 years' experience in the successful manufacture of high quality air conditioning equipment for industrial, commercial and residential use.

Daikin quality

Daikin's much envied quality quite simply stems from the close attention paid to design, production and testing as well as aftersales support. To this end, every component is carefully selected and rigorously tested to verify its contribution to product quality and reliability.

ENVIRONMENTAL AWARENESS

Air Conditioning and the Environment

Air conditioning systems provide a significant level of indoor comfort, making **optimum working and living conditions** possible in the most extreme climates.

In recent years, motivated by a global awareness of the need to reduce the burdens on the environment, Daikin has invested enormous efforts in limiting the negative effects associated with the production and the operation of air conditioners.

Hence, models with **energy saving** features and improved **eco-production** techniques have seen the light of day, making a significant contribution to limiting the impact on the environment.



This sign highlights features where Daikin has invested into technologies to reduce the impact of air conditioning on the environment.

This sign can be found on pages: p 7, 22, 23, 27, 30, 34, 42, 46



VRV®

AN ENERGY EFFICIENT APPROACH

Widely acknowledged as the **most advanced system** of its type on the market, VRV® represents a powerful combination of advanced inverter and heat pump technologies. As a reverse cycle heat pump, it can provide a **complete indoor environment** obviating the need for a separate heating system and offering output efficiency gains of up to 4:1 compared to fossil fuel based heating systems.

VRV® can switch from cooling to heating or supply both at the same time to different parts of a building. In its **heat recovery** format, heat exhausted from indoor units in the cooling cycle is merely transferred to units in areas requiring heat, **maximising energy efficiency**, reducing electricity costs and leading to **partload efficiencies up to 9***.

Cutting edge performance figures such as these are achieved primarily as a result of the system's **inverter** controlled compressor, which modulates refrigerant flow to match required cooling and heating loads at any time. This enables system start up time to set point temperature to be reduced by about 33% and evens out room temperature fluctuations. It also reduces stop/start cycles and regulates power input and operating capacity to suit outdoor temperature variations. In short, it enhances energy efficiency and user comfort, **cuts CO₂ emissions** and returns **energy savings** some 30% greater than can be achieved with fixed speed control systems**.

With the environment in mind

Daikin's well known environmentally aware credentials and strict adherence to 'F' Gas regulations are also reflected in the VRV® capacity for **refrigerant containment** during both charging and system operation. This important facility enables the amount of additional refrigerant charging during commissioning to be controlled automatically. An electronic containment check can also be activated manually by an HVAC technician in less than 30 minutes to ascertain whether any refrigerant has escaped since the previous maintenance check. This ensures against losses in efficiency and resultant increases in consumption and CO₂ emissions.

Leakage prevention is supported by the use of **brazed joints** in place of flanged and flared connections before the shut off valves as well as by brazed pressure sensors and electronic gauges instead of sensors and gauge ports. There is also on average, **10% less refrigerant content** in VRV®III compared to similar sized VRV®II systems.

Finally, considerable attention has been afforded to RoHS regulations concerning phasing out the use of lead, cadmium, hexavalent chromium, mercury, PBBs and PBDEs, including their use in components sourced from outside suppliers.

* REYQ8P8 50% cooling – 50% heating load. Conditions: outdoor temperature 11°CDB, indoor temperature: 18°CWB, 22°CDB.

** Case study Daikin on Sky Air inverter versus non-inverter.

2009

Daikin has extended the VRV[®] range with the re-engineered water cooled VRV[®]-WIII, which is available in 9 different outdoor combinations from 8 to 30HP.

A **geothermal** version is also now available.

This system uses geothermal heat as a **renewable energy** source and can operate down to **-10°C** in heating mode.



2005



Daikin has extended the operational scope of its acclaimed VRV[®]II inverter driven dx air conditioning system, with a new **water cooled** version, VRV[®]-WII. Available in 10, 20 and 30HP models, the system operates on R-410A refrigerant and is available in both **heat pump** and **heat recovery** versions.

2006-2007



Daikin has announced the third generation of its much acclaimed VRV[®] range with the extensively re engineered **VRV[®]III**. Available in heat recovery, heat pump and cooling versions, VRV[®]III incorporates all the best features of earlier VRV[®] systems. However, it also possesses a considerable number of new design, installation and maintenance refinements as **automatic charging and testing**.

Up to **64 indoor units** can be connected to one system.



2008



Daikin introduces a new heat pump range optimised for heating (VRV[®]III-C). This new range has an **extended operation range down to -25°C** and has a greatly improved COP in low ambient temperatures, with the newly developed 2-stage compressor system.





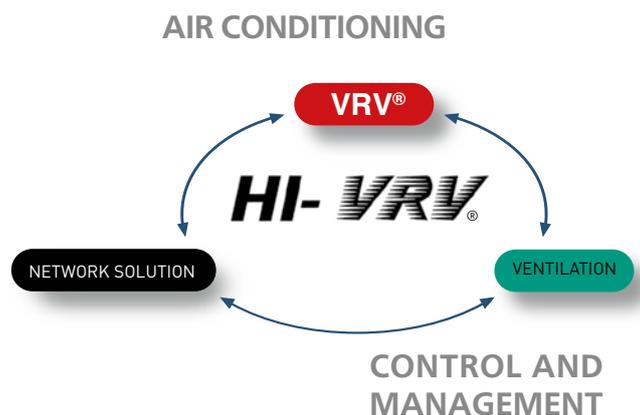
WHAT IS **Hi-VRV**® ?

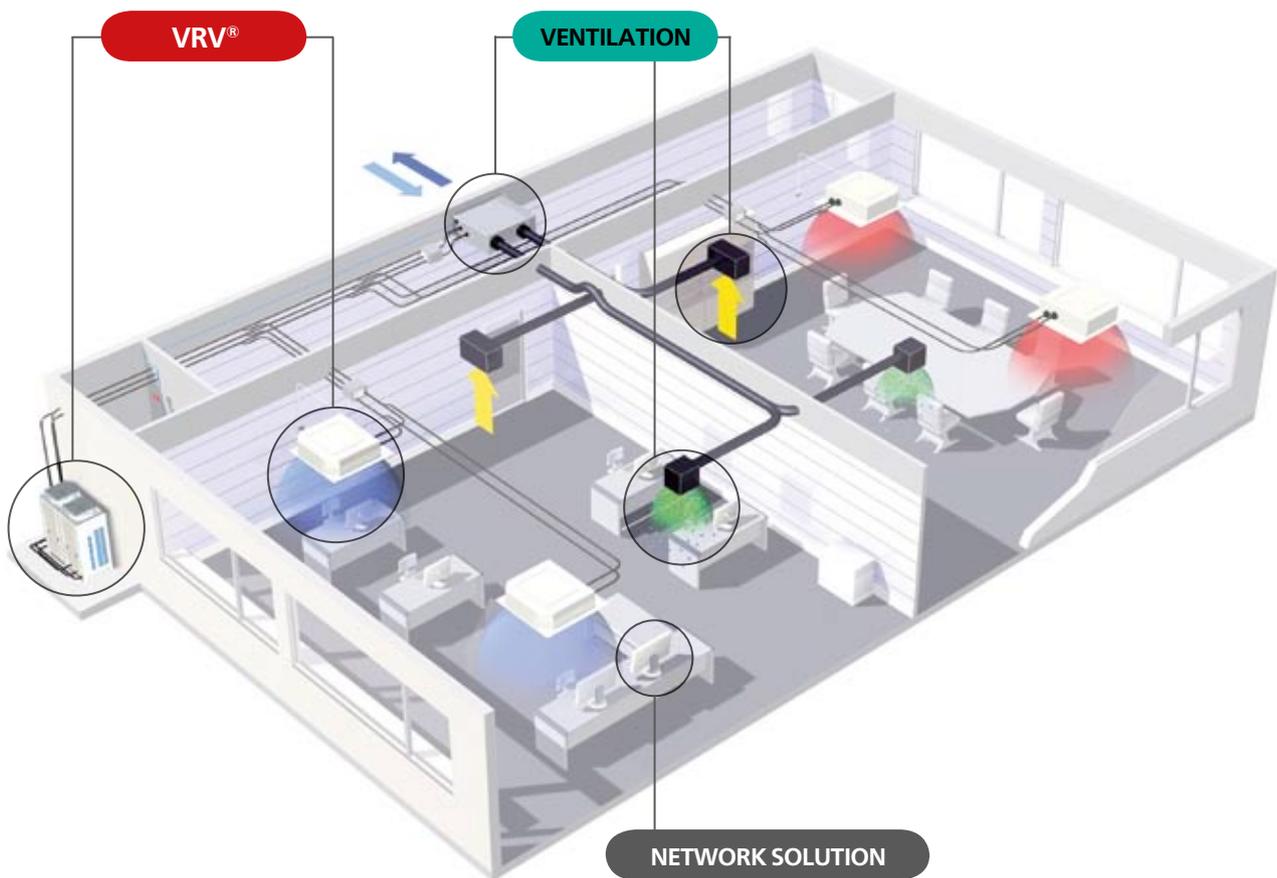
In recent years, design styles for intelligent buildings such as hotels, banks and offices etc. have increasingly featured large areas of glazing with attendant high solar heat gains that can only be dissipated by means of air conditioning. Not surprisingly therefore, air conditioning has grown in importance and is now widely accepted as an integral component of most modern architectural concepts.

The increasing use of electronic office equipment raises thermal loadings still further to a point whereby, even in winter, internal temperatures can reach uncomfortable levels. The demand for cooling or heating can also vary considerably throughout the day depending on the number and occupation of personnel on the premises. But end users have come to expect far more than just cooling and heating from their air conditioning.

The ideal modern system must be energy efficient, easy to install, flexible, reliable and user friendly. Fresh air must be supplied without increasing energy consumption and the role of central management facilities should also be considered in this respect for medium to large sized buildings. The Daikin Hi-VRV® system meets all these demands.

The innovative Hi-VRV® selection programme, Daikin's flagship software package, enables you to exploit the system's possibilities to the max and guarantees the end user a perfect service. From now on you can fully plan your Daikin air-conditioning project on a step-by-step basis without difficulty.





VARIABLE REFRIGERANT VOLUME

- › Available in heat recovery and heat pump formats.
- › A rapid response system in which up to 64 indoor units can operate on the same refrigerant circuit.
- › An inverter driven compressor enables the output of the outdoor unit to be modulated in accordance with the cooling/heating demand of the zone keeps which it controls.
- › The ability to control each conditioned zone keeps VRV® running costs to an absolute minimum.

VENTILATION

Daikin offers a variety of solutions for the provision of fresh air ventilation to offices, hotels, stores and other commercial outlets – each one complementary to and as flexible as the VRV® system itself.

Available systems:

- › Heat reclaim ventilation
- › Outdoor air processing unit
- › VRV® air handling applications

NETWORK SOLUTION

DS-net

Basic solution for control and management of up to 2,000 indoor units (Sky Air and VRV®).

Intelligent touch Controller

Allows detailed and easy monitoring and operation of VRV® systems (maximum 2 x 64 control groups).

Intelligent Manager

The ideal solution for full control and management of maximum 1,024 VRV® indoor units.

DMS-IF

Open network integration of VRV® monitoring and control functions into LonWorks® networks.

BACnet Gateway

Integrated control system for seamless connection between VRV® and BMS systems.

WHICH VRV® OUTDOOR SYSTEM OFFERS ME THE BEST SOLUTION?

AIR COOLED OUTDOOR SYSTEMS

VRV® HEAT RECOVERY:



- › For simultaneous heating and cooling from one system
- › Heat exhausted from indoor units in the cooling cycle is merely transferred to units in areas requiring heat, maximising energy efficiency, reducing electricity costs and leading to high partload efficiencies (up to 9¹).
- › Operation range in cooling down to -20°C (technical cooling)

HIGH COP COMBINATION

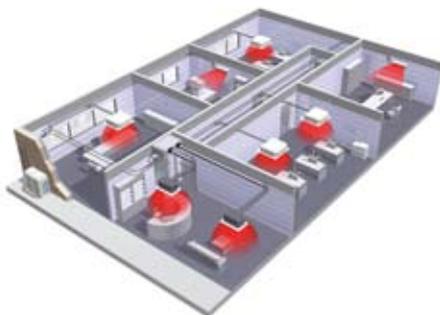
- › Top energy efficiency in Daikin heat recovery range

SMALL FOOTPRINT COMBINATION

- › Optimized footprint within heat recovery range

¹ REYQ8P8 50% cooling – 50% heating load. Conditions: outdoor temperature 11°CDB, indoor temperature 18°CWB, 22°CDB.

VRV® HEAT PUMP:



- › For either heating or cooling operation from one system

HIGH COP COMBINATION

- › Top energy efficiency in Daikin heat pump range

VRV® HEAT PUMP OPTIMISED FOR HEATING

- › First system in the industry developed for heating operation at low ambient conditions.
- › Extended operation range for heating down to -25°C
- › Stable heating capacity and high efficiencies at low ambient temperatures (COP > 3 at -10°C outdoor temperature)

SMALL FOOTPRINT COMBINATION

- › Optimized footprint within heat pump range

VRV® HEAT PUMP WITH CONNECTION TO STYLISH INDOOR UNITS

- › Innovative VRV® technology combined with stylish and silent indoor units

VRV® III-S HEAT PUMP

- › Especially designed for small capacities
- › Space saving design

WATER COOLED OUTDOOR SYSTEMS

- › Allows heat recovery within the total building, thanks to the storage of energy in the water circuit.
- › Compact design and stacked configuration possible.
- › Suitable for multi-storey and large buildings because of the hardly unlimited possibilities of water piping.

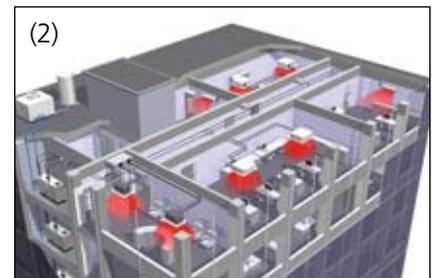
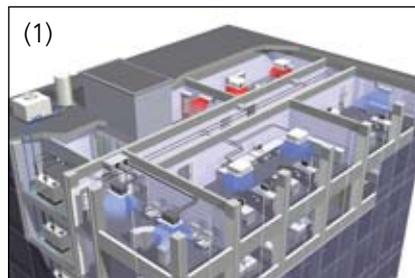
STANDARD SERIES:

VRV®-W HEAT RECOVERY (1):

- › For simultaneous heating and cooling from one refrigerant system

VRV®-W HEAT PUMP (2):

- › For either heating or cooling operation from one refrigerant system



NEW >>>

GEOHERMAL SERIES:

- › No need for an external heating or cooling source
- › Heating with ground sourced water as a renewable energy source
- › Extension of the operation range of inlet water temperature down to -10°C in heating mode
- › Available in heat recovery and heat pump format



OVERVIEW OUTDOOR UNIT RANGE

System	Type	Product name		4	5	6	8	10	12	14	16	18	
AIR COOLED	HEAT RECOVERY	REYHQ-P High COP combination											
		REYQ-P8/P9 Small footprint combination											
	HEAT PUMP	RXYHQ-P8 High COP combination											
		RTSYQ-P Heat pump optimised for heating											
		RXYQ-P(A)/P8(A) Small footprint combination											
		RXYQ-PR Heat pump with connection to stylish indoor units											
		RXYSQ-PAV VRV®III-S (Single phase)											
		RXYSQ-PAY VRV®III-S (Three phase)											
	Cooling capacity (kW) ¹				11.2	14.0	15.5	22.4	28.0	33.5	40.0	45.0	49.0
	Heating capacity (kW) ²				12.5	16.0	18.0	25.0	31.5	37.5	45.0	50.0	56.5
WATER COOLED	STANDARD SERIES H/R - H/P	RWEYQ-P											
	GEOHERMAL SERIES H/R - H/P	NEW ^{3,4} RWEYQ-PR											
Cooling capacity (kW) ³							22.4	26.7			44.8	49.1	
Heating capacity (kW) ⁴							25.0	31.5			50.0	56.5	

1 Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, inlet water temperature : 30°C, equivalent refrigerant piping : 7.5m, level difference : 0m.

2 Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference : 0m.

3 Nominal cooling capacities are based on: indoor temperature : 27°CDB, 19°CWB, inlet water temperature : 30°C, equivalent refrigerant piping : 7.5m, level difference : 0m

4 Nominal heating capacities are based on: indoor temperature : 20°CDB, inlet water temperature : 20°C, equivalent refrigerant piping : 7.5m, level difference : 0m



																Capacity (HP)	
20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
[Red Bar]																	
[Red Bar]																	
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55.9	61.5	67.0	71.4	77.0	82.5	89.0	94.0	98.0	105.0	111.0	116.0	120.0	126.0	132.0	138.0	143.0	147.0
62.5	69.0	75.0	81.5	88.0	94.0	102.0	107.0	113.0	119.0	126.0	132.0	138.0	145.0	151.0	158.0	163.0	170.0
[Red Bar]		[Red Bar]															
53.4		67.2	71.5	75.8	80.1												
63.0		75.0	81.5	88.0	94.5												

OVERVIEW INDOOR UNIT RANGE

VRV® air conditioning brings summer freshness and winter warmth to offices, hotels, department stores and many other commercial premises. It enhances the indoor environment and creates a basis for increased business prosperity and whatever the air conditioning requirement, a Daikin indoor unit will provide the answer. VRV® air conditioning can be supplied via **26 different indoor unit models in a total of 110 variations.**

NEW „„

				Capacity															
Type	Model	Product name		20	25	32	40	50	63	71	80	100	125	200	250				
CEILING MOUNTED CASSETTE	Roundflow ceiling mounted cassette	FXFQ-P8		[Red bar]							[Red bar]								
	4-way blow ceiling mounted cassette	FXZQ-M9		[Red bar]									[Red bar]						
	2-way blow ceiling mounted cassette	FXCQ-M8		[Red bar]										[Red bar]		[Red bar]			
	Ceiling mounted corner cassette	FXKQ-MA		[Red bar]			[Red bar]				[Red bar]		[Red bar]						
CONCEALED CEILING	Small concealed ceiling unit	FXDQ-M9		[Red bar]			[Red bar]												
	Slim concealed ceiling unit	FXDQ-PB		[Red bar]						[Red bar]									
	Slim concealed ceiling unit	FXDQ-NB		[Red bar]						[Red bar]									
	Inverter driven concealed ceiling unit	FXSQ-P		[Red bar]										[Red bar]					
	Inverter driven concealed ceiling unit	FXMQ-P		[Red bar]						[Red bar]									
	Large concealed ceiling unit	FXMQ-MA ³		[Red bar]												[Red bar]			
	WALL MOUNTED	Wall mounted unit	FXAQ-MV		[Red bar]														
CEILING SUSPENDED	Ceiling suspended unit	FXHQ-MA		[Red bar]			[Red bar]				[Red bar]		[Red bar]						
	4-way blow ceiling suspended unit	FXUQ-MA		[Red bar]									[Red bar]		[Red bar]				
FLOOR STANDING	Floor standing unit	FXLQ-MA		[Red bar]															
	Concealed floor standing unit	FXNQ-MA		[Red bar]															
Cooling capacity (kW) ¹				2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	22.4	28.0				
Heating capacity (kW) ²				2.5	3.2	4.0	5.0	6.3	8.0	9.0	10.0	12.5	16.0	25.0	31.5				

¹ Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m.

² Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m.

³ Not connectable to VRV®III-S (RXYSQ-PAV, RXYSQ-PAY)

⁴ The indoor units in the table above are not connectable to RXYQ-PR



Capacity

Type	Model	Product name		20	25	35	42	50	60	71
CEILING MOUNTED CASSETTE	Roundflow ceiling mounted cassette	FCQ-C								
	4-way blow ceiling mounted cassette	FFQ-B								
CONCEALED CEILING	Small concealed ceiling unit	FDBQ-B								
	Slim concealed ceiling unit	FDXS-E/C								
	Inverter driven concealed ceiling unit	FBQ-C								
WALL MOUNTED	Wall mounted unit	FTXG-E CTXG-E								
	Wall mounted unit	FTXS-G								
	Wall mounted unit	FTXS-F								
CEILING SUSPENDED	Ceiling suspended unit	FHQ-B								
FLOOR STANDING	Floor standing unit	FVXS-F								
	Flexi type unit	FLXS-B								

¹ The indoor units in the table above are only connectable to RXYQ-PR



OVERVIEW VENTILATION RANGE

Type	name	Components of indoor air quality	Image	Air flow rate (m³/h)											
				0	200	400	600	800	1,000	1,500	2,000	5,000	10,000	15,000	
HEAT RECLAIM VENTILATION ¹	VAM-FA	1 Ventilation		[Bar from 200 to 2,000]											
	VKM-GM	1 Ventilation 2 Humidification 3 Air processing		[Bar from 400 to 600]											
	VKM-G	1 Ventilation 3 Air processing		[Bar from 400 to 600]											
OUTDOOR AIR PROCESSING UNIT ²	FXMQ-MF	1 Ventilation 3 Air processing		[Bar from 1,000 to 1,500]											
VRV [®] AIR HANDLING APPLICATIONS ³	RXQ-P(A) + EXV-kit	1 Ventilation 3 Air processing		[Bar from 5,000 to 15,000]											

¹ VKM-GM and VKM-G are not connectable to RXYQ-PR
² Not connectable to RXYQ-PR and VRV[®]III-S (RXYSQ-PAV, RXYSQ-PAY)
³ Only for cooling only outdoor unit (RXQ-P(A))
⁴ Air processing refers to active cooling or heating of fresh air
⁵ The ventilation range is not connectable to RXYQ-PR

OVERVIEW NETWORK SOLUTIONS

	Control				Monitoring				Options				Other control functions													
	Basic control functions: ON/OFF, temp. Setting, air flow settings	Automatic changeover	Weekly schedule control	Fire emergency stop control	Basic monitoring functions: ON/OFF status, operation mode, set point temp.	Indication filter replacement	Malfunction code	Password security	Touch screen	Daily/monthly/yearly reports	Communication via gsm	Graphical report	Visualisation	Ppd	Web acces & control	Http option	Eco mode	Pre cooling / heating	0°Δ Between cooling & heating	Power limit control	Sliding t° avoids overcooling via sensor	Free cooling changeover	ACMSS connection air conditioning network service system	Scheduling presets (programs)	User friendliness	Max. Indoors groups
DS-NET													+												+	4x10
INTELLIGENT TOUCH CONTROLLER													++											8	+++	2x64
INTELLIGENT MANAGER													+++											128	+++	1024
DMS-IF ¹																										64
BACNET ²																										4x64

¹ Gateway for Lonworks networks

² Gateway for BACnet networks



POWERFUL SELECTION PROGRAMMES

1. VRV® PRO, DESIGN TOOL

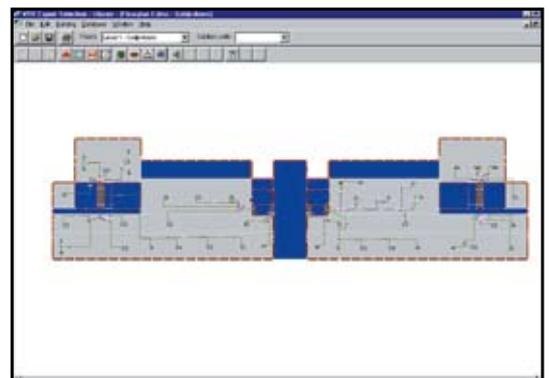
FEATURES:

The VRV® Pro selection programme is a true VRV® design tool. The programme enables VRV® air conditioning systems to be engineered in a precise and economical way, taking into account the complex piping rules. Moreover, it ensures optimum operating cycles and maximum energy efficiency. In this way, it gives the designer the possibility to make accurate selections and get competitive quotations for each project. The programme offers two separate modes, Quick and Expert, according to the project information that is already available.

1. VRV® Pro Quick: With a limited number of building properties, this mode allows to design the piping system using the available load calculation that was obtained from another party.

2. VRV® Pro Expert: To be able to make an accurate load calculation, a more extensive number of building properties is needed. After this calculation, the appropriate units are selected and a temperature simulation can be done. Next to the detailed report, there is a lot of additional, valuable information in the programme about energy consumption, related electricity expenses and behaviour of the VRV® System.

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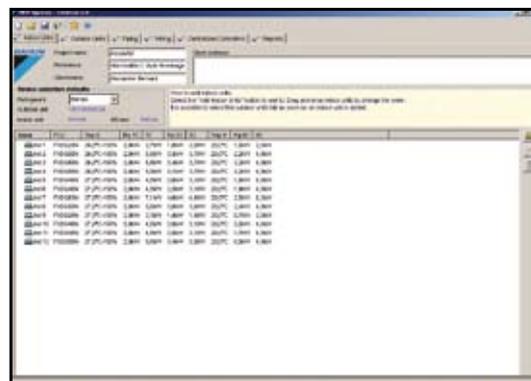




2. VRV® XPRESS, QUICK QUOTATION TOOL

VRV® Xpress is a software tool that allows creating on the spot quotations for a Daikin VRV® System. It provides a result in 7 steps to enable a professional budget quotation:

1. Select indoor units
2. Connect outdoor units to indoor units
3. Automatic generation of piping diagram with joints
4. Automatic generation of wiring diagram
5. Select possible centralised control systems
6. Visualise result in MS Word, MS Excel and AutoCAD
7. Save project



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The Daikin Europe Academy offers specialised training courses to teach designers how to work with VRV® Pro. After this training, all attendees receive a renewable licence for 1 year. For more information about these trainings and to get your free copy of VRV® Xpress, please contact the local Daikin representative or go to the Daikin Europe Extranet.

AIR COOLED VRV® OUTDOOR SYSTEMS

Air cooled VRV® air conditioning was introduced to Europe by Daikin in 1987 and since then has undergone considerable development in performance, capacity, energy efficiency and environmental acceptability. Internationally regarded as one of the most **SOPHISTICATED AND VERSATILE** system of its type on the market, VRV® has in fact, become the benchmark for technologically advanced, high efficiency commercial and industrial air conditioning.

Available in third generation, heat recovery, heat pump, cold climate and mini versions, the VRV® system is **EXTREMELY FLEXIBLE** with an operational capacity range of 5 to 54HP (heat pump small footprint combination) and 8 to 48HP (heat recovery small footprint combination) in capacity increments of just 2HP. VRV® system versatility is also underlined by its operating temperature ranges of -5°C to 46°C in cooling (VRV®III-S) and -25°C to 15°C in heating (VRV®III-C).



VRV® HEAT RECOVERY -
HIGH COP AND SMALL FOOTPRINT COMBINATION



VRV® HEAT PUMP
WITH CONNECTION TO STYLISH INDOOR UNITS



VRV® HEAT PUMP HIGH COP COMBINATION



VRV®III-S HEAT PUMP



VRV® HEAT PUMP OPTIMISED FOR HEATING

BENEFITS

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ADVANCED VRV® TECHNOLOGIES

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VRV® HEAT RECOVERY -
HIGH COP AND SMALL FOOTPRINT COMBINATION

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VRV® HEAT PUMP HIGH COP COMBINATION

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VRV® HEAT PUMP OPTIMISED FOR HEATING

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VRV® HEAT PUMP SMALL FOOTPRINT COMBINATION

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VRV® HEAT PUMP
WITH CONNECTION TO STYLISH INDOOR UNITS

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VRV® HEAT PUMP SMALL FOOTPRINT COMBINATION

VRV®III-S HEAT PUMP

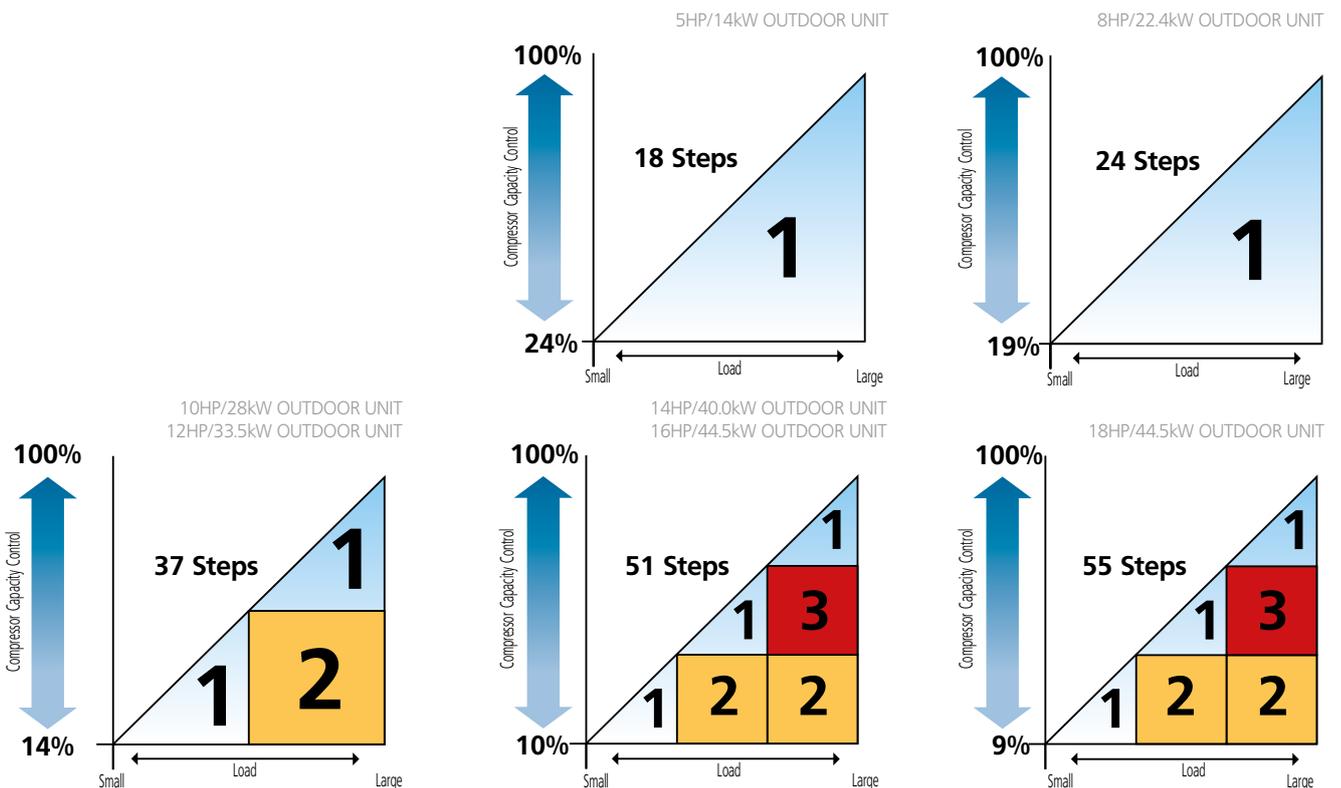
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BENEFITS FOR BUILDING OWNERS

INVERTER TECHNOLOGY

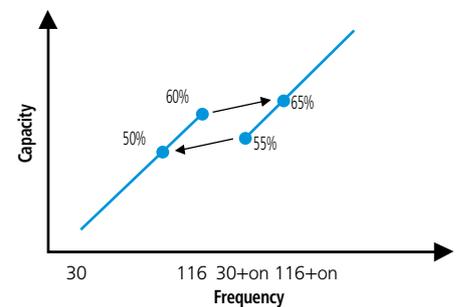
The linear VRV® system makes use of a variable Proportional Integral (PI) control system which uses refrigerant pressure sensors to give added control over inverter and ON/OFF control compressors in order to abbreviate control steps into smaller units to provide precise control in both small and larger areas. This in turn enables individual control of up to 64 indoor units of different capacity and type at a ratio of 50~130 % in comparison with outdoor units capacity. 5HP outdoor units use inverter control compressors only. VRV® systems have low running costs because it permits each zone to be controlled individually. That is, only those rooms that require air conditioning will be heated or cooled, while the system can be shut down completely in rooms where no air conditioning is required.





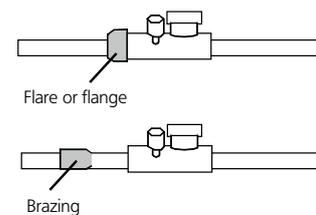
LESS FREQUENT START/STOP CYCLE

- › The technique adopted by Daikin, of regulating the capacity using multiple compressors clearly results in minimum switching losses and power surges because of the overlap in capacity and frequency.
- › Since Daikin utilises small 5HP inverter compressors, the influence of harmonics is less than that generated by a single large compressor
- › The use of multiple compressors by Daikin also ensures a 50% standby facility.
- › Smaller compressors are cheaper and faster to replace.



ONLY BRAZED CONNECTIONS

All flare and flare connections inside the unit have been replaced by brazing connections to ensure improved refrigerant containment. Also the connection of the outdoor in the main pipe is brazed.



ROHS COMPLIANCE

Restriction of Hazardous Substances in electrical and electronic equipment (2002/95/EC).

Hazardous substances include Lead (Pb), Cadmium (Cd), Hexavalent Chromium (Cr6+), Mercury (Hg), Polybrominated biphenyls (PBB), Polybrominated diphenylether (PBDE).

Although RoHS regulations are only applicable to small and large household equipment, Daikin environmental policy nevertheless ensures that VRV® will be totally in line with RoHS.

ANTI CORROSION TREATMENT

Special anti corrosion treatment of the heat exchanger provides 5 to 6 times greater resistance against acid rain and salt corrosion. The provision of rust proof steel sheet on the underside of the unit gives additional protection.



Improvement in corrosion resistance

Corrosion resistance rating

	Non-treated	Anti-corrosion treated
Salt corrosion	1	5 to 6
Acid rain	1	5 to 6

Performed tests:

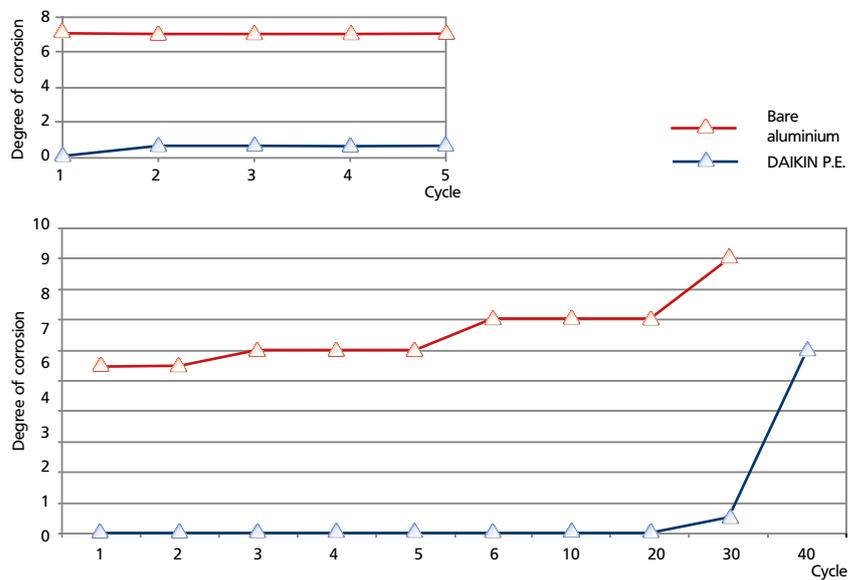
VDA Wechseltest

Contents of 1 cycle (7 days):

- › 24 hours salt spray test SS DIN 50021
- › 96 hours humidity cycle test KFW DIN 50017
- › 48 hours room temperature & room humidity testing period: 5 cycles

Kesternich test (SO₂)

- › contents of 1 cycle (48 hours) according to DIN50018 (0.21)
- › testing period : 40 cycles



DUTY CYCLING

The cyclical start-up sequence of multiple outdoor units systems equalized compressor duty and extends operating life.

Multiple outdoor units systems



SEQUENTIAL START

Up to 3 outdoor units can be connected to 1 power supply and can be turned on sequentially. This allows the number of breakers and their capacities to remain small and simplifies wiring (for models of 10HP or less).



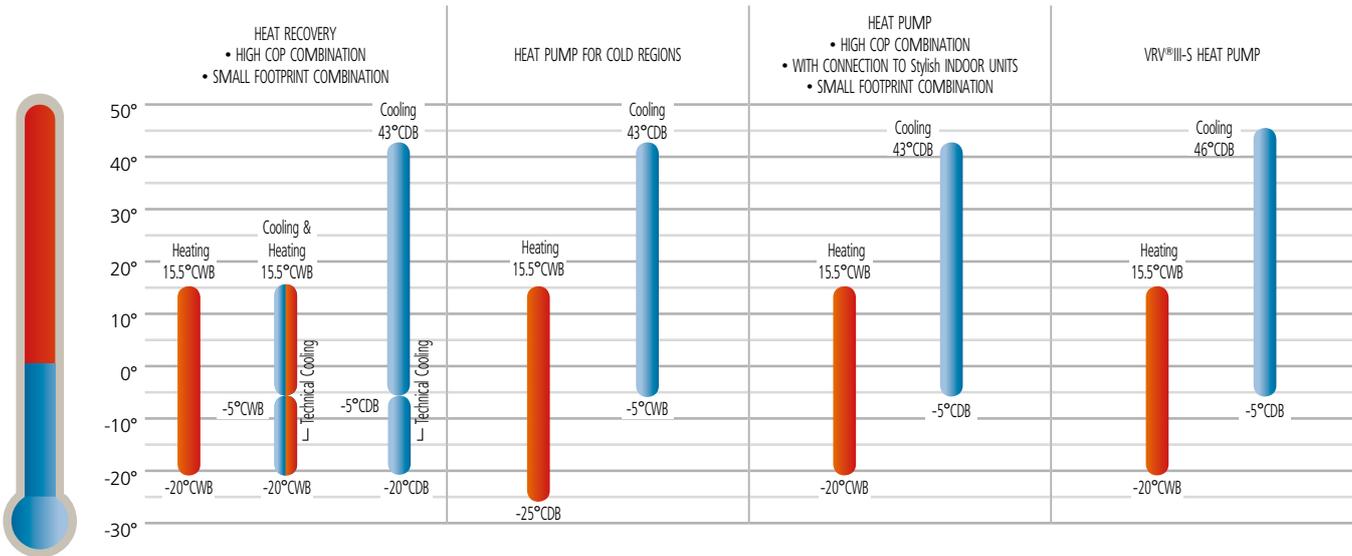
BENEFITS FOR DESIGN OFFICES AND CONSULTANTS

WIDE OPERATION RANGE

The VRV® system can be installed practically anywhere.

Advanced PI control of the outdoor unit enables VRV® series to operate at outdoor ambients up to 43°C (VRV®III-S up to 46°C) in cooling mode and down to -20°C (VRV®III-C down to -25°C) in heating mode.

With the technical cooling function the operation range in cooling of the heat recovery system is extended from -5°C to -20°C¹.



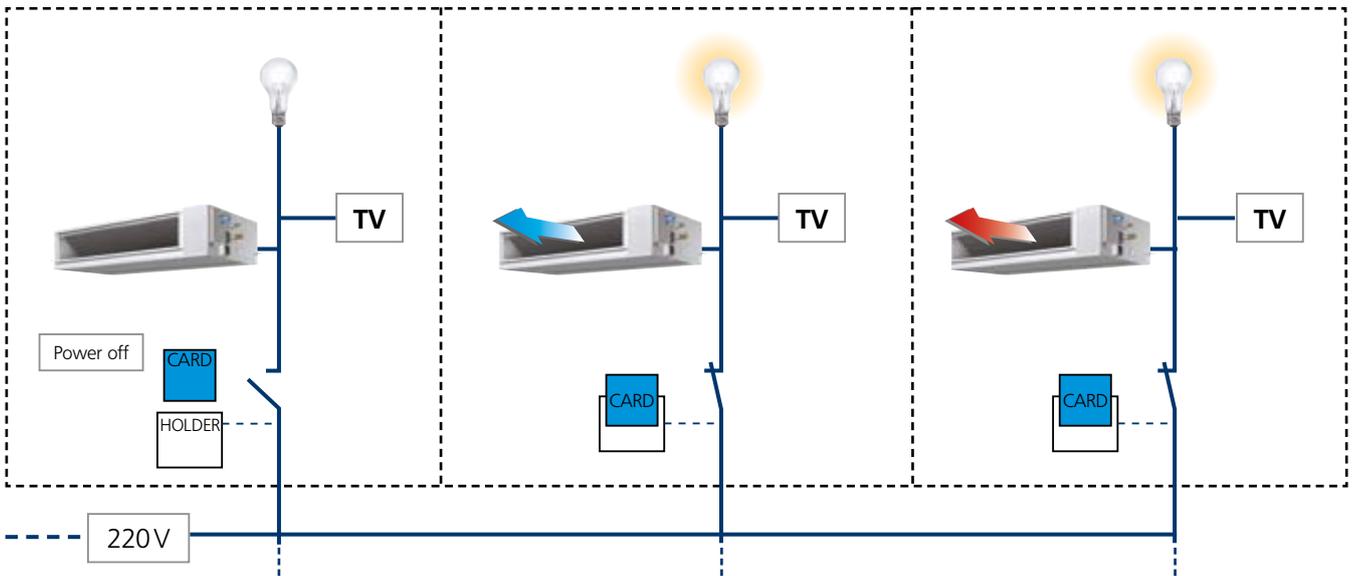
¹ Contact your local dealer for more information and restrictions

MULTI TENANT FUNCTION

This function ensures that the entire VRV® system does not shut down when the main power supply of an indoor is switched off. This means that the indoor unit's main fuse can be turned off when leaving a hotel room, when a part of the office building is on holidays, ...

* This option is available on the following indoor units: FXFQ-P8, FXZQ-M9, FXDQ-M9, FXDQ-PB, FXDQ-NB, FXSQ-P, FXMQ-P, FXAQ-MV
Consult the accessories table of the indoor units on necessary options.

Typical hotel application



NO STRUCTURAL REINFORCEMENT NECESSARY

Thanks to the vibration-free and sufficient light (max. 585kg for a 18HP unit) construction of the outdoor units, floors do not need to be reinforced, reducing the overall cost of the building.





BENEFITS FOR INSTALLERS



REFRIGERANT CONTAINMENT CHECK ¹

The refrigerant volume of the complete system is calculated from the following data:

- › outdoor temperature
- › reference system temperatures
- › reference pressure temperatures
- › refrigerant density
- › types and number of indoor units

When activating the refrigerant containment check, the unit switches into cooling mode and duplicates certain reference conditions based on memory data. The result indicates whether or not refrigerant leakage has occurred.

¹ Not available on VRV® heat pump with connection to stylish indoor units and VRV®III-S



REFRIGERANT RECOVERY FUNCTION

The refrigerant recovery function enables all expansion valves to be opened. In this way the refrigerant can be drained from the piping system.

SHORT INSTALLATION TIME

Thanks to small refrigerant pipes and REFNET piping options, the VRV® piping system can be installed very easily and quickly.

Installation of the VRV® system can also be implemented floor by floor, so that sections of the building can be put into use very quickly, or enabling the air conditioning system to be commissioned and operated in stages, rather than on final completion of the project.

AUTOMATIC CHARGE FUNCTION

Conventional Way:

1. calculation of additional refrigerant charging volume
2. charging the unit with additional refrigerant
3. measuring the weight of the cylinder
4. judgment based on pressure (test operation)



VRV®

With VRV® however, these 4 steps are omitted since the VRV® unit can be charged automatically with the necessary amount of refrigerant via a push button on the PCB. Automatic charging will cease once the appropriate amount of refrigerant has been transferred.

If temperature drops below 20°C* manual charging is necessary. After having switched to heating and once the indoor temperature rises above 20°C*, push the auto charge button to activate auto charge function. Refrigerant containment is only available after performing the automatic charge function.

*10°C for heat pump for cold regions

*Function not available on VRV® heat pump with connection to stylish indoor units

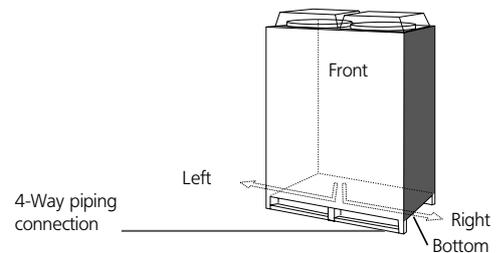
AUTOMATIC TEST

When refrigerant charging has ceased, pushing the test operation button on the PCB will initiate a check on the wiring, shut off valves, sensors and refrigerant volume. This test ceases automatically when completed.

REFRIGERANT PIPING

4-way piping connection

VRV® series not only offer the possibility to run piping from the front, but also from the left, right or bottom, thus providing greater freedom of layout.



UNIFIED REFNET PIPING



REFNET joint



Attached insulators for REFNET joint



REFNET header



Attached insulators for REFNET header



REFNET joint

T-joint

The unified Daikin REFNET piping system is especially designed for simple installation.

The use of REFNET piping in combination with electronic expansion valves, results in a dramatic reduction in imbalance in refrigerant flowing between indoor units, despite the small diameter of the piping.

REFNET joints and headers (both accessories) can cut down on installation work and increase system reliability.

Compared to regular T-joints, where refrigerant distribution is far from optimal, the Daikin REFNET joints have specifically been designed to optimise refrigerant flow.

MODULAR DESIGN

Modular design enables units to be joined together in rows with an outstanding degree of uniformity. The design of the outdoor units is sufficiently compact to allow them to be taken up to the top of a building in a commercial elevator, overcoming site transportation problem, particularly when outdoor units need to be installed on each floor.

“SUPER WIRING” SYSTEM

Simplified wiring

A Super Wiring system is used to enable the shared use of wiring between indoor units, outdoor units and the centralised remote control.

This system makes it easy for the user to retrofit the existing system with a centralised remote control, simply by connecting it to the outdoor units.

Thanks to a non polarity wiring system, incorrect connections become impossible and installation time is reduced.

Furthermore, outdoor units have power connection outlets on side and front, resulting in easier installation and maintenance and saving space when rows of units are connected together.



Cross wiring check

The cross wiring check facility available on the VRV® is the first of its type in the industry to warn operatives of connection errors in inter unit wiring and piping. This function identifies and alerts system errors by means of on/off LEDs on the outdoor unit's PC boards.

Auto Address Setting Function

Allows wiring between indoor and outdoor units, as well as group control wiring of multiple indoor units, to be performed without the bothersome task of manually setting each address.

EASY MAINTENANCE

Self Diagnostic Function

This function operated via push button on the PCB, speeds up troubleshooting and should be used for start-up and maintenance. Disconnected thermistors, faulty solenoid valves or motor operated valves, compressor malfunctions, communication errors, etc can be diagnosed quickly.

Automatic Information Storage

During unit operation, storage of data from the last 5 minutes occurs automatically. In cases of malfunction, analysis of data from the last 5 minutes will be carried out to identify the location of the problem and cause of malfunction. Measures to eliminate the cause of malfunction then be implemented.

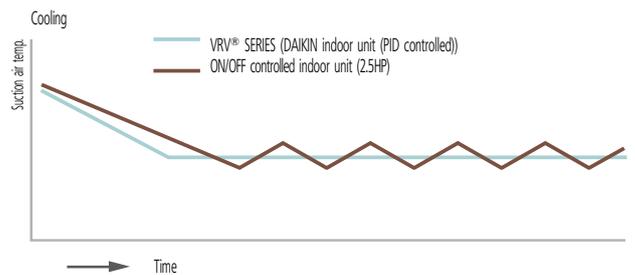




BENEFITS FOR END USERS

SMART CONTROL BRINGS COMFORT

An electronic expansion valve, using PID control, continuously adjusts the refrigerant volume in response to load variations of the indoor units. The VRV® system thus maintains comfortable room temperatures at a virtually constant level, without the temperature variations typical of conventional ON/OFF control systems.



Note: the graph shows the data, measured in a test room assuming actual heating load.

The thermostat can control stable room temperature at $\pm 0.5^{\circ}\text{C}$ from set point.

BACK-UP FUNCTION

In the event of a compressor malfunction, the remotely controlled or field set back-up function in the outdoor unit in question (and also between different outdoor units) will allow emergency operation of another compressor in order to maintain 8 hour maximum interim capacity.

*only possible in case the system has multiple compressors



LOW INDOOR UNIT OPERATION SOUND LEVEL

- › Continuous research by Daikin into reducing operation sound levels has resulted in the development of a purpose designed inverter scroll compressor and fan.
- › Daikin indoor units have very low sound operation levels, down to 25dB(A).

dB(A)	Perceived loudness	Sound
0	Threshold of hearing	-
20	Extremely soft	Rustling leaves
40	Very soft	Quiet room
60	Moderately loud	Normal conversation
80	Very loud	City traffic noise
100	Extremely loud	Symphonic orchestra
120	Threshold of feeling	Jet taking off

Daikin indoor units

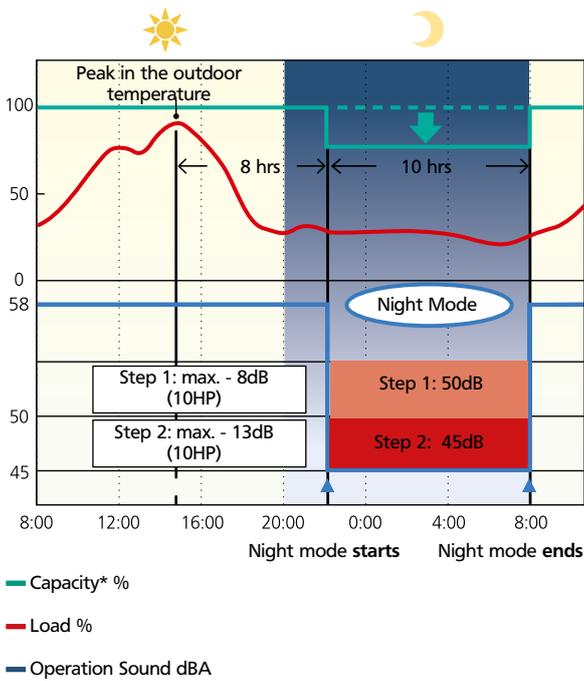
SILENT MODE

Outdoor Units

Quietness is another important feature. To reduce noise and ensure comfortable operation, the latest technologies and features have been applied to the outdoor units.

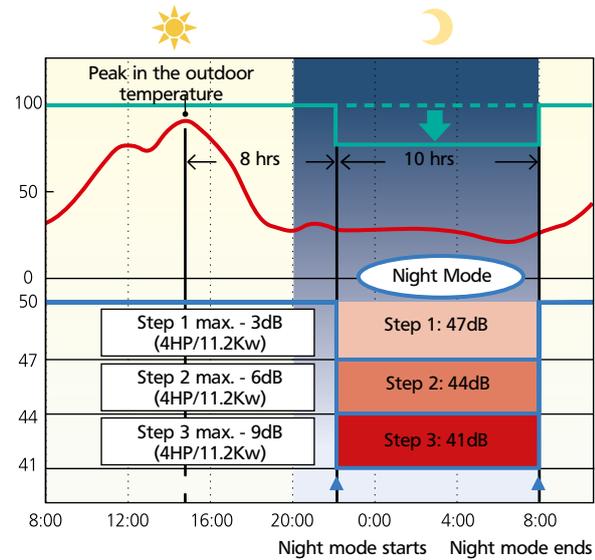
VRV® air cooled units

Night quiet function (max. -8dBA)



VRV®III-S air cooled units

Daikin indoor units operate at sound levels as low as 25 dBA
Night quiet function (max. -8dBA)



During the night the sound level of the outdoor unit can be reduced for a certain period: starting time and ending time can be put in 2 modes¹ with low sound level at night:

> Mode 1 Automatic mode

Set on the outdoor PCB. Time of maximum temperature is memorised. The low operating mode will become active 8 hours² after the peak temperature in the daytime and operation will return to normal after 10 hours³.

> Mode 2 Customized mode

Starting and ending times can be put in. (External control adapter for outdoor unit, DTA104A61 or DTA104A62 and a separately ordered timer are necessary.)

Notes:

¹ Determine which mode to select depending on the climatic characteristics of each country.

² Initial setting. Can be selected from 6, 8 and 10 hours.

³ Initial setting. Can be selected from 8, 9 and 10 hours.

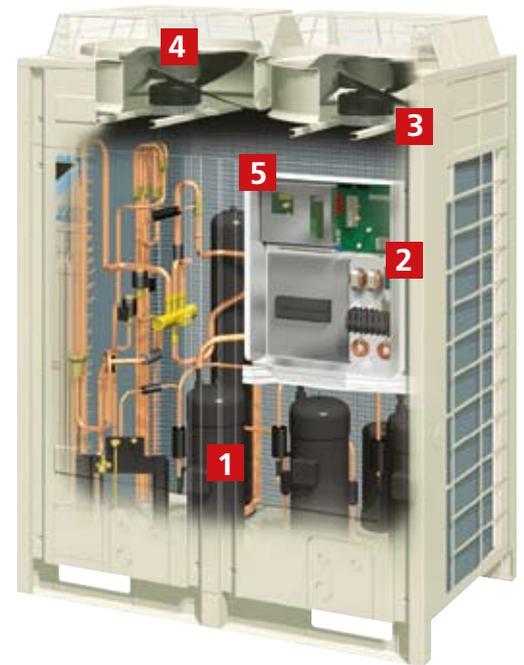
Effect on capacity (cooling) when using silent mode

	Soundlevel		5HP	8HP	10HP	12HP	14HP	16HP	18HP
Step 1	50dB	Capacity (kW)	14.7	19.9	19.9	20.9	19.9	20.1	20.2
			100%	98%	78%	69%	55%	49%	44%
Step 2	45dB	Capacity (kW)	11.9	15.1	15.1	15.6	15.5	15.6	15.6
			93%	74%	59%	51%	43%	38%	34%

* Data applicable for standard air cooled units



ADVANCED AIR COOLED VRV® TECHNOLOGIES:

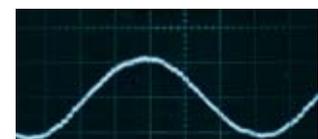


1 RELUCTANCE BRUSHLESS DC COMPRESSOR

- › The reluctance brushless DC motor provides significant increases in efficiency compared to conventional AC inverter motors, simultaneously using 2 different forms of torque (normal and reluctance torque) to produce extra power from small electric currents.
- › **The motor comprises powerful neodymium magnets**, that efficiently generate high torque. These magnets make a major contribution to the energy saving characteristics of the motor.
- › **High thrust mechanism (VRV® heat pump)**
By introducing high pressure oil, the reactive force from the fixed scroll is added to the internal force, thereby reducing thrust losses. This results in improved efficiency and suppressed sound level.

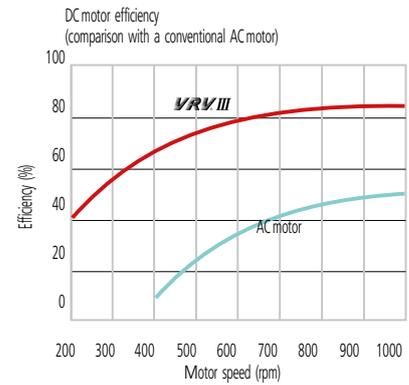
2 SINE WAVE DC INVERTER

Optimizing the sine wave curve, results in smoother motor rotation and improved motor efficiency.



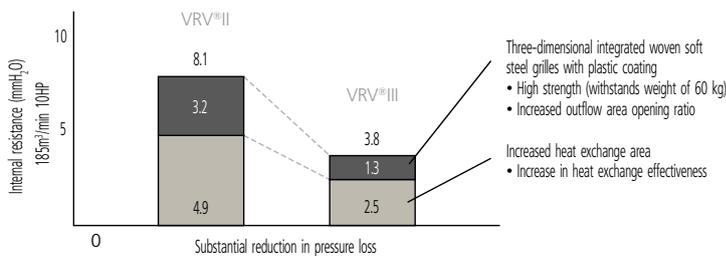
3 DC FAN MOTOR

The use of a DC fan motor offers substantial improvements in operating efficiency compared to conventional AC motors, especially during low speed rotation.



4 DUAL DC FANS ¹

- › Maximum 10% increase in airflow (16HP) due to dual DC fans
- › Increased output and reduced pressure loss together with increased external static pressure and reduced rated fan input.



- Three-dimensional integrated woven soft steel grilles with plastic coating
- High strength (withstands weight of 60 kg)
- Increased outflow area opening ratio
- Increased heat exchange area
- Increase in heat exchange effectiveness

10 HP: 3 blades, ø700
 -> 4 blades, ø680
 blade area increased by 25%,
 uneven pitch: No NZ noise



18 HP: ø700 -> ø540 x 2
 blade area increased by 20%,
 sound reduced by 0.7 dB

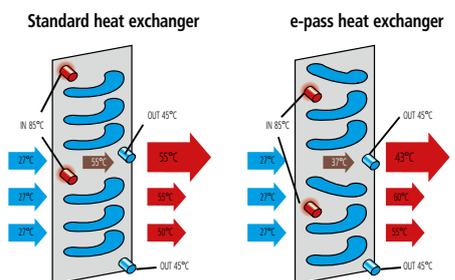


Fans optimized for their casings
 (increased air flow without sound increase)

¹ Not applicable for VRV[®]III-S

5 E-PASS HEAT EXCHANGER

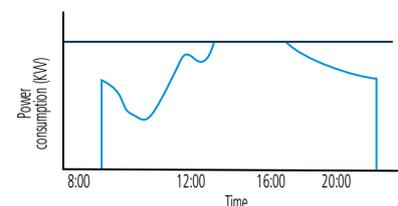
Optimization of the path layout of the heat exchanger prevents heat transferring from the overheated gas section towards the sub cooled liquid section - a more efficient use of the heat exchanger.



In cooling mode, the heat exchanger of the condenser is improved. This means an improvement of COP by 3%.

6 I-DEMAND FUNCTION

The newly introduced current sensor minimizes the difference between the actual power consumption and the predefined power consumption.





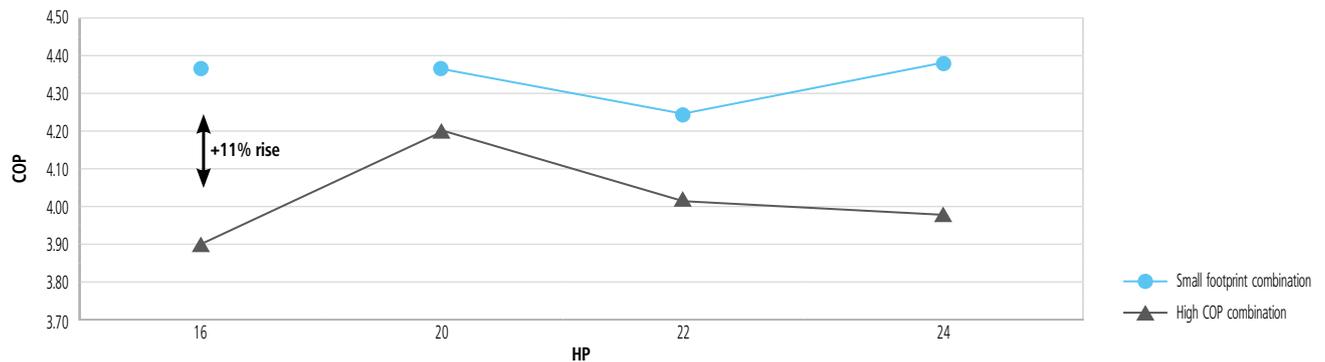
VRV® HEAT RECOVERY

HIGH COP AND SMALL FOOTPRINT COMBINATION

> BENEFITS

TOP ENERGY EFFICIENCY

The high COP combination has a top energy efficiency within the Daikin heat recovery range. It is up to 11% more efficient, compared to the small footprint combination.



HP		16	20	22	24
High COP combination	combination	8 + 8	8 + 12	10 + 12	12 + 12
	COP	4.36	4.36	4.24	4.37
	EER	4.29	4.04	3.84	3.89
Small footprint combination	combination	16	8 + 12	10 + 12	12 + 12
	COP	3.90	4.12	4.03	3.97
	EER	3.19	3.77	3.61	3.49

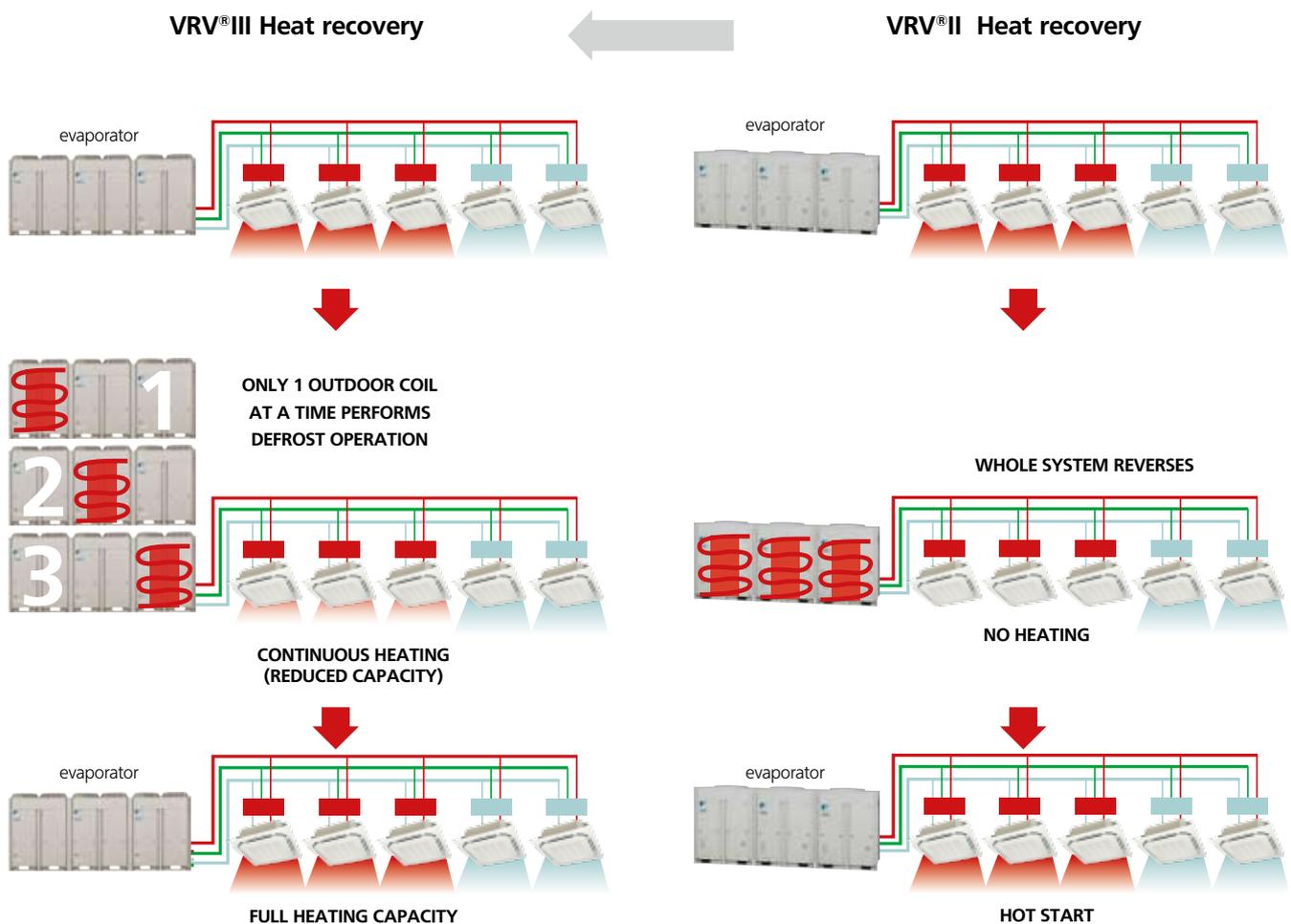
CONTINUOUS HEATING DURING DEFROST

Ensuring the highest comfort level during defrost and oil return

Benefits of the system

- › High comfort
 - No cold draft during defrost & oil return
 - No big temperature fluctuations in the room
- › Higher integrated heating capacity (indoor units continue to deliver heating)
 - Continuous heating during defrost results in a higher integrated heating capacity and much higher comfort levels for the users.

* Only available for multi combination heat recovery systems (REYQ18-48P8/9, REYHQ16-24P)



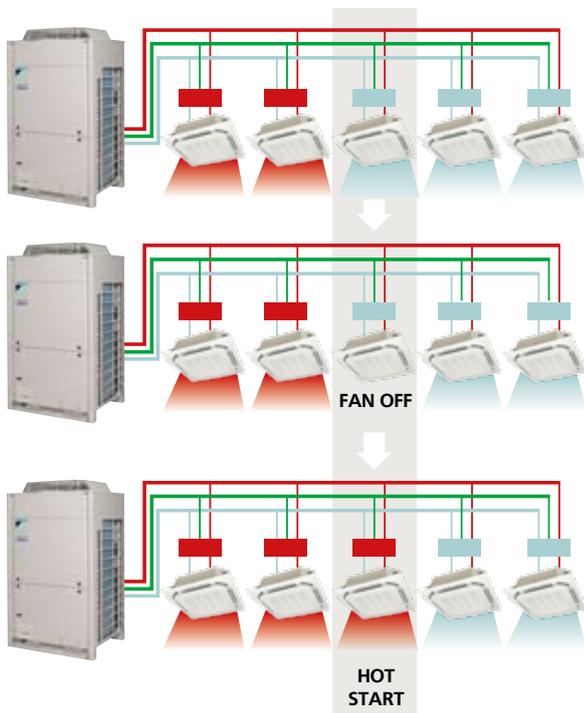
IMPROVED COMFORT THANKS TO VRV®III BS BOX

Individual change over from cooling to heating or vice versa of the indoor units is possible. This means that all indoor units who do not change over continue to provide optimum comfort for the users during this process.



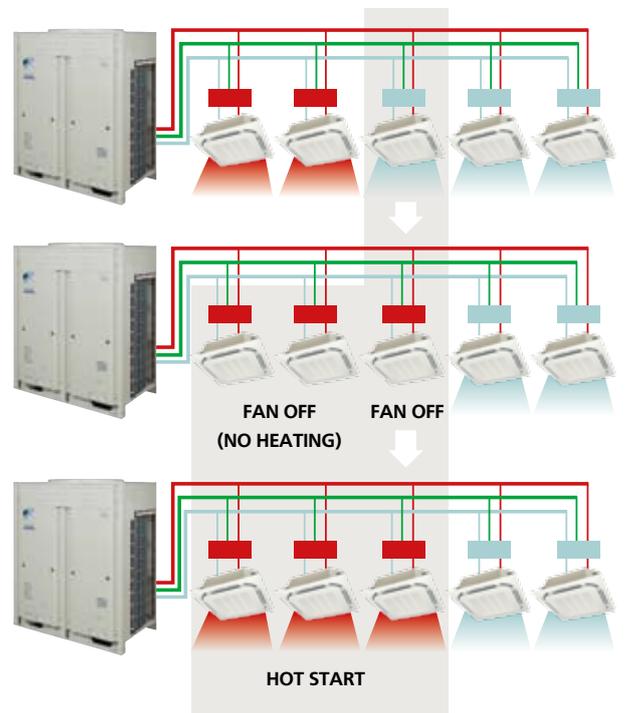
VRV®III

With the VRV®III BS box, the other indoor units can keep heating while the target indoor units are switched from cooling to heating.



VRV®II

When switching from cooling to heating with the conventional BS box, the other indoor units performing heating operations also had to be stopped until the changeover for the target indoor unit had been completed.



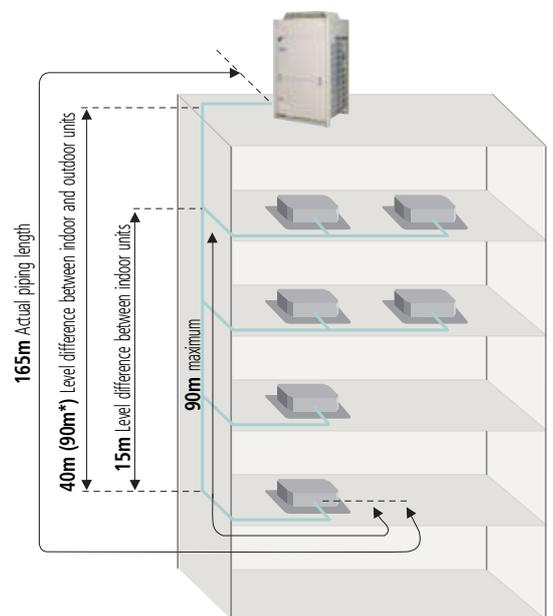
FLEXIBLE PIPING DESIGN

VRV® offers an extended piping length of 165m (190m equivalent piping length) with a total system piping length of 1,000m.

In case the outdoor unit is located above the indoor unit the height difference is 50m standard. It can be extended to 90m*.

In case the outdoor unit is located below the indoor unit, the height difference is 40m standard. Height differences up to maximum 90m are possible*.

After the first branch, the difference between the longest piping length and the shortest piping length can be maximum 40m, provided that the longest piping length amounts to maximum 90m.



* For more information, please contact your local Daikin dealer.

► SPECIFICATIONS

VRV® Heat recovery - High COP combination

REYHQ-P				16	20	22	24
Outdoor unit				REMQ8P9	REMQ8P9	REMQ10P8	REMHQ12P8
				REMQ8P9	REMHQ12P8	REMHQ12P8	REMHQ12P8
Nominal capacity	cooling	kW	45.0	56.0	61.5	67.0	
	heating	kW	50.0	62.5	69.0	75.0	
COP	heating		4.36	4.36	4.24	4.37	
EER	cooling		4.29	4.04	3.84	3.89	
Capacity range		HP	16	20	22	24	
Max n° of indoor units to be connected				26	32	35	39
Indoor index connection	minimum		200	250	275	300	
	maximum (130%)		520	650	715	780	
Casing	colour		Dakin white				
	material		Painted galvanised steel				
Power input (nominal) (50Hz)	cooling	kW	10.5	13.9	16.0	17.2	
	heating	kW	11.5	14.3	16.3	17.2	
PED category				Category 2			
Heat Exchanger	dimensions	length	mm	1,778 + 1,778	1,778 + 2,088	1,778 + 2,088	2,088 + 2,088
		nr of rows		54	54	54	54
		fin pitch	mm	2			
		nr of passes		18 + 18	18 + 21	18 + 21	21 + 21
		face area	m²	2,112 + 2,112	2,112 + 2,481	2,112 + 2,481	2,481 + 2,481
		nr of stages		2			
	tube type		Hi-XSS (8)				
	fin	fin type		Non-symmetric waffle louvre			
		treatment		Hydrophilic and anti corrosion resistant			
	Fan	type		Propeller			
quantity			2	3	3	4	
Air flow rate (nominal at 230V)		cooling	m³/min	180 + 180	180 + 230	180 + 230	230 + 230
			cfm	180 + 180	180 + 230	180 + 230	230 + 230
external static pressure		Pa	78 Pa in high static pressure				
discharge direction			Vertical				
motor		quantity		2	3	3	4
		model		Brushless DC			
	output motor	W	750 + 750	750 + 750	750 + 2x350	2x350 + 2x350	
Compressor	quantity		2	3	4	4	
	motor	quantity		2			
		model		Inverter			
		type		Hermetically sealed scroll compressor			
		speed	rpm	7,980 + 7,980	7,980 + 6,300	6,300 + 6,300	6,300 + 6,300
		motor output	kW	4.7 + 4.7	4.7 + 3.5	2.2 + 3.5	3.5 + 3.5
		crankcase heater	W	33			
		quantity		0	1	1 + 1	1 + 1
		model		-		ON - OFF	
		type		Hermetically sealed scroll compressor			
		speed	rpm	-	2,900	2,900 + 2,900	2,900 + 2,900
	motor output	kW	-	4.5	4.5 + 4.5	4.5 + 4.5	
	crankcase heater	W	-	33	33	33	
Operation range	cooling	min.	°CDB	-5			
		max.	°CDB	43			
	heating	min.	°CWB	-20			
		max.	°CWB	15			
Sound level	cooling	sound power (nominal)	dB(A)	82	85	85	87
		sound power (nominal)	dB(A)	62	64	64	66

Notes:

Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.
 Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference : 0m
 Sound power level is an absolute value that a sound source generates.
 Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to sound level drawings.
 Sound values are measured in a semi-anechoic room.



VRV® Heat recovery - Small footprint combination

REYQ-P8/P9			8	10	12	14	16	18	20	22	24	26	28		
Modules	REYQ8P9		1												
	REYQ10P8			1											
	REYQ12P9				1						Not Applicable				
	REYQ14P8					1									
	REYQ16P8						1								
Modules	REMQ8P9							1	1						
	REMQ10P8							1		1		1			
	REMQ12P8				Not Applicable					1	1	2		1	
	REMQ14P8														
	REMQ16P8												1	1	
Nominal capacity	cooling	kW	22.4	28	33.5	40	45	50.4	55.9	61.5	67.0	73.0	78.5		
	heating	kW	25.0	31.5	37.5	45	50	56.5	62.5	69	75	81.5	87.5		
COP	heating		4.38	4.24	4.20	4.10	3.90	4.20	4.12	4.03	3.97	3.96	3.92		
EER	cooling		4.31	3.84	3.69	3.51	3.19	3.99	3.77	3.61	3.49	3.38	3.3		
Number of outdoor units			1	1	1	1	1	2	2	2	2	2	2		
Capacity range			HP	8	10	12	14	16	18	20	22	24	26	28	
Max. number of connectable indoor units				13	16	19	22	26	29	32	35	39	42	45	
Indoor index connection	minimum		100	125	150	175	200	225	250	275	300	325	350		
	maximum (130%)		260	325	390	455	520	585	650	715	780	845	910		
Casing	colour		Ivory white												
	material		Painted galvanised steel												
Dimensions	unit	height	mm	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	
		width	mm	1,300	1,300	1,300	1,300	1,300	930 + 930	930 + 930	930 + 930	930 + 930	930 + 1,240	930 + 1,240	
		depth	mm	765	765	765	765	765	765	765	765	765	765	765	
Weight			kg	331	331	331	339	339	204 + 254	204 + 254	254 + 254	254 + 254	254 + 334	254 + 334	
Fan	type		Propeller fan												
	air flow rate (nominal at 230V)		m ³ /min	190	190	210	235	240	180 + 185	180 + 200	185 + 200	200 + 200	185 + 230	200 + 230	
Compressor	type		Hermetically sealed scroll compressor												
	starting method		Soft start												
	n°			2	2	2	2	2	3	3	4	4	5	5	
Operation range	cooling		°CDB		-5 ~ 43										
	heating		°CWB		-20 ~ 15.5										
Sound level (nominal)	cooling	sound pressure	dB(A)	58	58	60	62	63	61	62	62	63	62	63	
		sound power	dB(A)	*	*	*	*	*	81.0	82.0	82.0	83.0	82.0	83.0	
Refrigerant	type		R-410A												
	charge	kg	10.3	10.6	10.8	11.1	11.1	8.2 + 9.0	8.2 + 9.1	9.0 + 9.1	9.1 + 9.1	9.0 + 11.7	9.1 + 11.7		
Refrigerant oil	control		Electronic expansion valve												
	type		Synthetic ether oil												
	charge	l	*	*	*	*	*	8.2	8.4	10.4	10.6	12.6	12.8		
Piping connections	liquid	mm	9.52	9.52	12.7	12.7	12.7	15.9	15.9	15.9	15.9	19.1	19.1		
	gas	mm	19.1	22.2	28.6	28.6	28.6	28.6	28.6	28.6	34.9	34.9	34.9		
	discharge gas	mm	15.9	19.1	19.1	22.2	22.2	22.2	28.6	28.6	28.6	28.6	28.6		
	pressure equalizer tube	mm	None	None	None	None	None	19.1	19.1	19.1	19.1	19.1	19.1		
Capacity steps				30	37	37	26	26	31	31	38	38	41	41	
Safety devices			HPS, fan motor overcurrent protector, inverter overload protector, overcurrent relay, PC board fuse												
Power supply			W1	3 ~, 50Hz, 380-415V											

*Information was not available at time of publication

REYQ-P8/P9			30	32	34	36	38	40	42	44	46	48	
Modules	REYQ8P9												
	REYQ10P8												
	REYQ12P9						Not Applicable						
	REYQ14P8												
	REYQ16P8												
Modules	REMQ8P9				1	1							
	REMQ10P8				1		1		1				
	REMQ12P8					1	1	2		1			
	REMQ14P8		1									1	
	REMQ16P8		1	2	1	1	1	1	2	2	2	2	3
Number of outdoor units			2	2	3	3	3	3	3	3	3	3	
Nominal capacity	cooling	kW	85.0	90.0	95.4	101.0	107.0	112.0	118.0	124.0	130.0	135.0	
	heating	kW	95	100	107	113	119	125	132	138	145	150	
COP	heating		3.93	3.88	4.04	4.02	3.97	3.93	3.94	3.92	3.91	3.88	
EER	cooling		3.2	3.17	3.56	3.48	3.43	3.35	3.3	3.26	3.19	3.17	
Capacity range		HP	30	32	34	36	38	40	42	44	46	48	
Max. number of connectable indoor units			48	52	55	58	61	64	64	64	64	64	
Indoor index connection	minimum		375	400	425	450	475	500	525	550	575	600	
	maximum (130 %)		975	1,040	1,105	1,170	1,235	1,300	1,365	1,430	1,495	1,560	
Capacity steps			46	46	36	36	41	41	46	46	51	51	
Casing	colour		Ivory white										
	material		Painted galvanised steel										
Dimensions	height	mm	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	
	width	mm	1,240 + 1,240	1,240 + 1,240	930 + 930 + 1,240	930 + 930 + 1,240	930 + 930 + 1,240	930 + 930 + 1,240	930 + 1,240 + 1,240	930 + 1,240 + 1,240	1,240 + 1,240 + 1,240	1,240 + 1,240 + 1,240	
	depth	mm	765	765	765	765	765	765	765	765	765	765	
Weight		kg	334 + 334	334 + 334	204 + 254 + 334	204 + 254 + 334	254 + 254 + 334	254 + 254 + 334	254 + 334 + 334	254 + 334 + 334	334 + 334 + 334	334 + 334 + 334	
Fan	type		Propeller fan										
	air flow rate		230 + 230	230 + 230	180 + 185 + 230	180 + 200 + 230	185 + 200 + 230	200 + 200 + 230	185 + 230 + 230	200 + 230 + 230	230 + 230 + 230	230 + 230 + 230	
Compressor	type		Hermetically sealed scroll compressor										
	starting method		Soft start										
	n°		6	6	6	6	7	8	8	8	9	9	
Operation range	cooling	°CDB	-5 ~ 43										
	heating	°CWB	-20 ~ 15.5										
Sound level	cooling	sound power	dB(A)	83.0	83.0	83.0	84.0	84.0	85.0	84.0	85.0	85.0	85.0
		sound pressure	dB(A)	63	63	63	64	64	65	64	65	65	65
Refrigerant	name		R-410A										
	charge	kg	11.7 + 11.7	11.7 + 11.7	8.2 + 9.0 + 11.7	8.2 + 9.1 + 11.7	9.0 + 9.1 + 11.7	9.1 + 9.1 + 11.7	9.0 + 11.7 + 11.7	9.1 + 11.7 + 11.7	11.7 + 11.7 + 11.7	11.7 + 11.7 + 11.7	
	control		Electronic expansion valve										
Refrigerant oil	type		Synthetic ether oil										
	charge	l	14.9	15.0	15.7	15.9	17.9	18.1	20.1	20.3	22.4	22.5	
Piping connections	liquid	mm	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	
	gas	mm	34.9	34.9	34.9	41.3	41.3	41.3	41.3	41.3	41.3	41.3	
	discharge gas	mm	28.6	28.6	28.6	28.6	34.9	34.9	34.9	34.9	34.9	34.9	
	pressure equalizer tube	mm	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	
Capacity steps			46	46	36	36	41	41	46	46	51	51	
Safety devices			HPS, fan motor overcurrent protector, inverter overload protector, overcurrent relay, PC board fuse										
Power supply		W1	3 ~, 50Hz, 380-415V										

Notes: Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 7.5m • level difference: 0m
Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB/6°CWB • equivalent refrigerant piping: 7.5m • level difference: 0m

BS Box for heat recovery system

BS BOX			BSVQ100P8B			BSVQ160P8B			BSVQ250P8B		
Total capacity of connectable indoor units			x ≤ 100			100 < x ≤ 160			160 < x ≤ 250		
Maximum number of connectable indoor units			5			8			5		
Casing			galvanised steel plate								
Dimensions	HxWxD		mm		207x388x326						
Weight			kg		14		14		15		
Piping connections	indoor unit	liquid/gas	mm		9.5/15.9		9.5/15.9		9.5/22.2		
	outdoor unit	liquid/suction gas/discharge gas	mm		9.5/15.9/12.7		9.5/15.9/12.7		9.5/22.2/19.1		
Safety devices			PCB fuse								
Cool/heat selector			KRC19-26A								
Fixing box			KJB111A								
PCB for multi tenant			DTA114A61								

➤ ACCESSORIES

VRV® Heat recovery Stand alone combinations		REYQ8P9 REYQ10P8	REYQ12P9 REYQ14-16P8
REFNET header		-	KHRQ23M29H KHRQ23M64H KHRQ23M75H
REFNET joint		-	KHRQ23M20T KHRQ23M29T9 KHRQ23M64T
Central drain pan kit (see note 2)			KWC25C450
Digital pressure gauge kit (see note 3)			BHGP26A1
BS Box for H/R			BSVQ100P8B BSVQ160P8B BSVQ250P8B
Central BS Box for H/R			BSV4Q100P8B
Sound reduction kit for BSVQ Box (note 4)			EKBSVQLNP
Wind cover (note 5)	Full set		KPS25C450
	Top/Discharge		KPS25C450T
	Rear/Suction		KPS25C450B
	Left/Suction		KPS26C504L
	Right/Suction		KPS26C504R

VRV® Heat recovery Multi combinations (Combinations of REMQ8-16P8/P9 and REMHQ12P)		REMQ8P9 REMQ10P8	REMQ12P9	REMHQ12P9 REMQ14-16P8	REYQ18-48P8/P9 REYHQ16-24P
REFNET header		-	-	KHRQ23M29H KHRQ23M64H	KHRQ23M75H
REFNET joint		-	-	KHRQ23M20T KHRQ23M29T9 KHRQ23M64T	KHRQ23M75T
Outdoor unit multi piping connection kit	for 2 outdoor units		-	-	BHFQ23P907
	for 3 outdoor units		-	-	BHFQ23P1357
Central drain pan kit (see note 2)		KWC26C280			KWC26C450
Digital pressure gauge kit (see note 3)				BHGP26A1	
BS Box for H/R				BSVQ100P8B BSVQ160P8B BSVQ250P8B	
Central BS Box for H/R				BSV4Q100P8B	
Sound reduction kit for BSVQ Box (note 4)				EKBSVQLNP	
Wind cover (note 5)	Full set	KPS26C280		KPS26C504	-
	Top/Discharge	KPS26C280T		KPS26C504T	-
	Rear/Suction	KPS26C280B		KPS26C504B	-
	Left/Suction		KPS26C504L		-
	Right/Suction		KPS26C504R		-

- Notes:
- 1 All options are kits
 - 2 Central drain pan kit shall be combined based on the outdoor multi connection table
 - 3 Only 1 option per installation is needed
 - 4 Only available for standard BSVQ boxes (not possible for central BSVQ). Allows to reduce operating sound of BSVQ box (requires 1 sound kit per BSVQ box)
 - 5 Only required for technical cooling (outdoor temperature < 5°C). For more information contact your local dealer





VRV® HEAT PUMP

HIGH COP COMBINATION

► BENEFITS

TOP ENERGY EFFICIENCY

The high COP combination has a top energy efficiency within the Daikin heat pump range. It is up to 16% more efficient compared to the small footprint combination.

HP		12	16	18	20	22	24	26	28	30	32	34	36
High COP combination	combination	12	8 + 8	8 + 10	8 + 12	10 + 12	8 + 8 + 8	8 + 8 + 10	8 + 8 + 12	8 + 10 + 12	8 + 12 + 12	10 + 12 + 12	12 + 12 + 12
	COP	4.37	4.50	4.27	4.42	4.24	4.50	4.34	4.44	4.31	4.40	4.29	4.37
	EER	3.89	4.29	4.00	4.05	3.84	4.29	4.09	4.12	3.96	3.99	3.85	3.89
Small footprint combination	combination	12	16	18	8 + 12	10 + 12	12 + 12	8 + 18	10 + 18	12 + 18	14 + 18	16 + 18	18 + 18
	COP	3.97	3.88	3.69	4.18	4.04	3.97	3.94	3.83	3.81	3.83	3.79	3.69
	EER	3.48	3.17	3.02	3.80	3.62	3.49	3.41	3.26	3.20	3.11	3.09	3.02

+16%

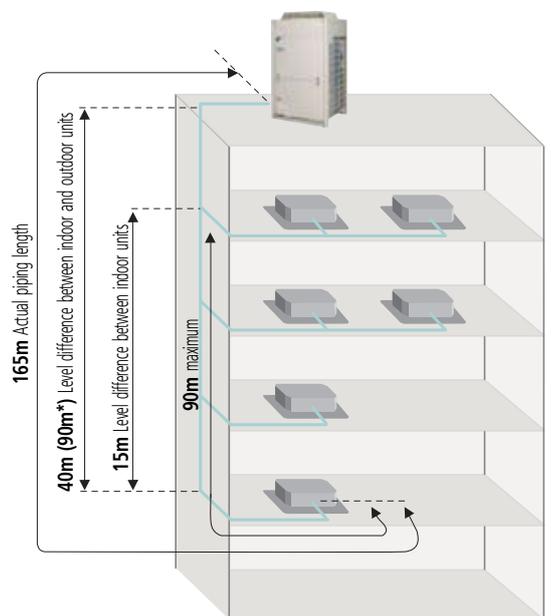
FLEXIBLE PIPING DESIGN

VRV®III offers an extended piping length of 165m (190m equivalent piping length) with a total system piping length of 1,000m.

In case the outdoor unit is located above the indoor unit the height difference is 50m standard. It can be extended to 90m*.

In case the outdoor unit is located below the indoor unit, the height difference is 40m standard. Height differences up to maximum 90m are possible*.

After the first branch, the difference between the longest piping length and the shortest piping length can be maximum 40m, provided that the longest piping length amounts to maximum 90m.



* For more information, please contact your local Daikin dealer.

► SPECIFICATIONS

VRV® Heat pump - High COP combination

RXYHQ-P8				12	16	18	20	22	24	
Modules	RXYQ8P8				2	1	1		3	
	RXYQ10P					1		1		
	RXYHQ12P8			1			1	1		
Nominal capacity	cooling	kW		33.5	45.0	49.0	55.9	61.5	67.0	
	heating	kW		37.5	50.0	56.5	62.5	69.0	75.0	
COP	heating			4.37	4.50	4.27	4.42	4.24	4.29	
EER	cooling			3.89	4.29	4.00	4.05	3.84	4.50	
Capacity range	HP			12	16	18	20	22	24	
Max n° of indoor units to be connected				19	26	29	32	35	39	
Indoor index connection	minimum			150	200	225	250	275	300	
	maximum			390	520	585	650	715	780	
Casing	colour			Daikin White						
	material			Painted galvanised steel						
Dimensions	unit	height	mm	1,680	-	-	-	-	-	
		width	mm	1,240	-	-	-	-	-	
		depth	mm	765	-	-	-	-	-	
Weight	unit	kg		281	-	-	-	-	-	
Fan	type			Propeller						
	air flow rate (nominal at 230V)	cooling	m³/min	233	171 + 171	171 + 185	171 + 233	185 + 233	171 + 171 + 171	
		heating	m³/min	233	171 + 171	171 + 185	171 + 233	185 + 233	171 + 171 + 171	
external static pressure (MAX)			Pa						78Pa in high static pressure	
Compressor	type			Hermetically sealed scroll compressor						
	n°			2	1 + 1	1 + 2	1 + 2	2 + 2	3	
Operation range	cooling	minimum	°CDB	-5.0						
		maximum	°CDB	43.0						
	heating	minimum	°CWB	-20.0						
		maximum	°CWB	15.0						
Refrigerant	type			R-410A						
	charge	kg		10	7.7 + 7.7	7.7 + 8.4	7.7 + 10	8.4 + 10	7.7 + 7.7 + 7.7	
	control			Expansion valve (electronic type)						
Maximum total refrigerant charge in the system				kg						Less than 100 (calculated charge less than 95)
Refrigerant Oil	type			Synthetic (ether) oil						
	charged Volume			l	4.8	2.1 + 2.1	2.1 + 4.3	2.1 + 4.8	4.3 + 4.8	2.6 + 2.6 + 2.6
Piping Connections	liquid	type		Braze connection						
		diameter (OD)	mm	12.7	12.7	15.9	15.9	15.9	15.9	
	gas	type		Braze connection						
		diameter (OD)	mm	28.6	28.6	28.6	28.6	28.6	34.9	
heat insulation			Both liquid and gas pipes							
max. total length			m						1,000	
Defrost method				Reversed cycle						
Defrost control				Sensor for outdoor heat exchanger temperature						
Capacity control method				Inverter controlled						
Capacity control [%]				~ 100						
Safety devices				HPS, fan motor driver overload protector, overcurrent relay, inverter overload protector, PC board fuse						
Power supply	name			W1						
	phase			3N~						
	frequency			Hz						50
	voltage			V						400

Notes: Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.
 Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference : 0m
 Sound level of a multi system is determined by the individual outdoor unit and installation condition
 The refrigerant charge of the system must be less than 100 kg. This means that in case the calculated refrigerant charge is equal to or more than 95 kg, you must divide your multiple outdoor system into smaller independent systems, each containing less than 95 kg refrigerant charge.
 For factory charge, refer to the nameplate of the unit.



RXYHQ-P8				26	28	30	32	34	36
Modules	RXYQ8P8			2	1	1	1		
	RXYQ10P			1	2	1		1	
	RXYHQ12P8					1	2	2	3
Nominal capacity	cooling	kW		71.4	77.0	82.5	89.0	94.0	98.0
	heating	kW		81.5	88.0	94.0	102.0	107.0	113.0
COP	heating			4.09	4.12	3.96	3.99	3.85	3.89
EER	cooling			4.34	4.44	4.31	4.40	4.29	4.37
Capacity range			HP	26	28	30	32	34	36
Max n° of indoor units to be connected				42	45	48	52	55	58
Indoor index connection	minimum			325	350	375	400	425	450
	maximum			845	910	975	1,040	1,105	1,170
Casing	colour			Daikin White					
	material			Painted galvanised steel					
Dimensions	unit	height	mm	-	-	-	-	-	-
		width	mm	-	-	-	-	-	-
		depth	mm	-	-	-	-	-	-
Weight	unit			kg	-	-	-	-	-
Fan	type			Propeller					
	air flow rate (nominal at 230V)	cooling	m³/min	171 + 171 + 185	171 + 185 + 185	185 + 185 + 233	171 + 233 + 233	185 + 233 + 233	233 + 233 + 233
		heating	m³/min	171 + 171 + 185	171 + 185 + 185	185 + 185 + 233	171 + 233 + 233	185 + 233 + 233	233 + 233 + 233
	external static pressure (MAX)		Pa	78Pa in high static pressure					
Compressor	type			Hermetically sealed scroll compressor					
	n°			4	5	6	5	6	6
Operation range	cooling	minimum	°CDB	-5.0					
		maximum	°CDB	43.0					
	heating	minimum	°CWB	-20.0					
		maximum	°CWB	15.0					
Refrigerant	type			R-410A					
	charge	kg	7.7 + 7.7 + 8.4	7.7 + 8.4 + 8.4	7.7 + 8.4 + 10	7.7 + 10 + 10	8.4 + 10 + 10	10 + 10 + 10	
	control			Expansion valve (electronic type)					
Maximum total refrigerant charge in the system			kg	Less than 100 (calculated charge less than 95)					
Refrigerant Oil	type			Synthetic (ether) oil					
	charged volume		l	2.6 + 2.6 + 4.3	2.6 + 4.3 + 4.3	2.6 + 4.3 + 4.8	2.6 + 4.8 + 4.8	4.3 + 4.8 + 4.8	4.8 + 4.8 + 4.8
Piping Connections	liquid	type		Braze connection					
		diameter (OD)	mm	19.1	19.1	19.1	19.1	19.1	19.1
	gas	type		Braze connection					
		diameter (OD)	mm	34.9	34.9	34.9	34.9	34.9	41.3
heat insulation		Both liquid and gas pipes							
max. total length				1,000					
Defrost method	Reversed cycle								
Defrost control	Sensor for outdoor heat exchanger temperature								
Capacity control method	Inverter controlled								
Capacity control [%]	~ 100								
Safety devices	HPS, fan motor driver overload protector, overcurrent relay, inverter overload protector, PC board fuse								
Power supply	name		W1						
	phase		3N~						
	frequency	Hz	50						
	voltage	V	400						

Notes: Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.
 Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference : 0m
 Sound level of a multi system is determined by the individual outdoor unit and installation condition
 The refrigerant charge of the system must be less than 100 kg. This means that in case the calculated refrigerant charge is equal to or more than 95 kg, you must divide your multiple outdoor system into smaller independent systems, each containing less than 95 kg refrigerant charge. For factory charge, refer to the namplate of the unit.

➤ ACCESSORIES

VRV® HEAT PUMP		12	16-36
Cool/heat selector			KRC19-26A6
Fixing box			KJB111A
REFNET header			KHRQ22M29H
			KHRQ22M64H
		-	KHRQ22M75H
REFNET joint			KHRQ22M20T
			KHRQ22M29T9
			KHRQ22M64T
		-	KHRQ22M75T
Outdoor unit multi connection kit	for 2 outdoor units	-	BHFQ22P1007
	for 3 outdoor units	-	BHFQ22P1517
Central drain pan kit		KWC26B450	see note 2
Digital pressure gauge kit		BHGP26A1	see note 3
Increase height difference between indoor & outdoor to 90m (see note 5)		EKLD90P12	see note 4

1 All options are kits

2 Central drain pan kit shall be combined based on the outdoor unit combination table

3 Only 1 option per installation is needed

4 1 option per module is required

5 The option should be installed inside the outdoor unit, only needed in case outdoor unit is installed above indoor



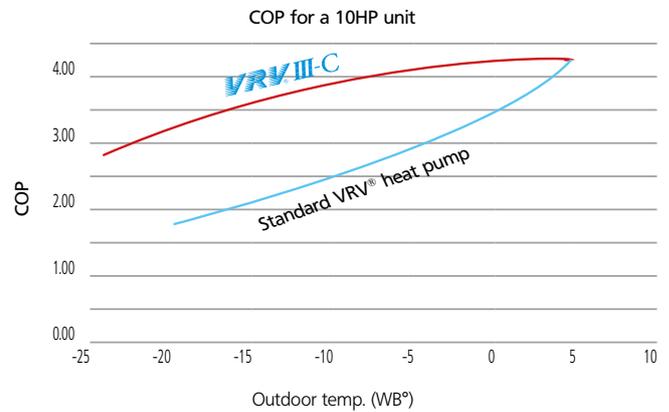
VRV® HEAT PUMP OPTIMISED FOR HEATING (VRV®III-C)

➤ BENEFITS



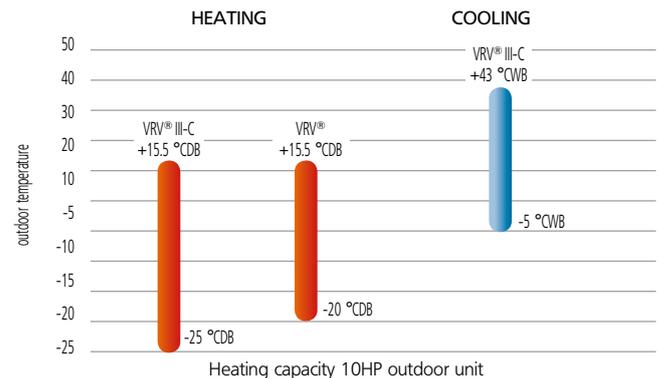
HIGH COP AT LOW AMBIENTS

The use of two stage compression technology results in improved energy saving performance at low ambients, with a COP of more than 3.0 at -10°C outdoor ambient. Annual power costs are therefore, considerably lower than those of the standard heat pump.



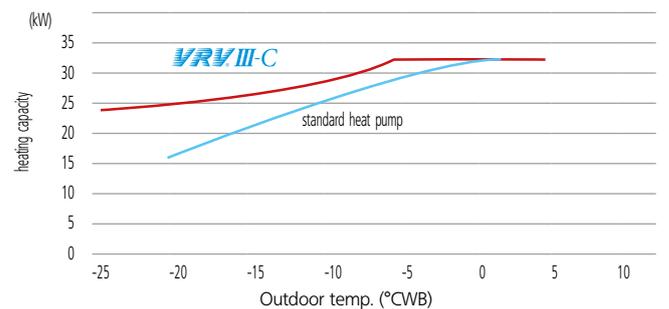
WIDE HEATING OPERATION RANGE

VRV®III-C is the first system on the market with a standard operation range down to -25°C outdoor ambient in heating and can also provide cooling down to -5°C outdoor ambient



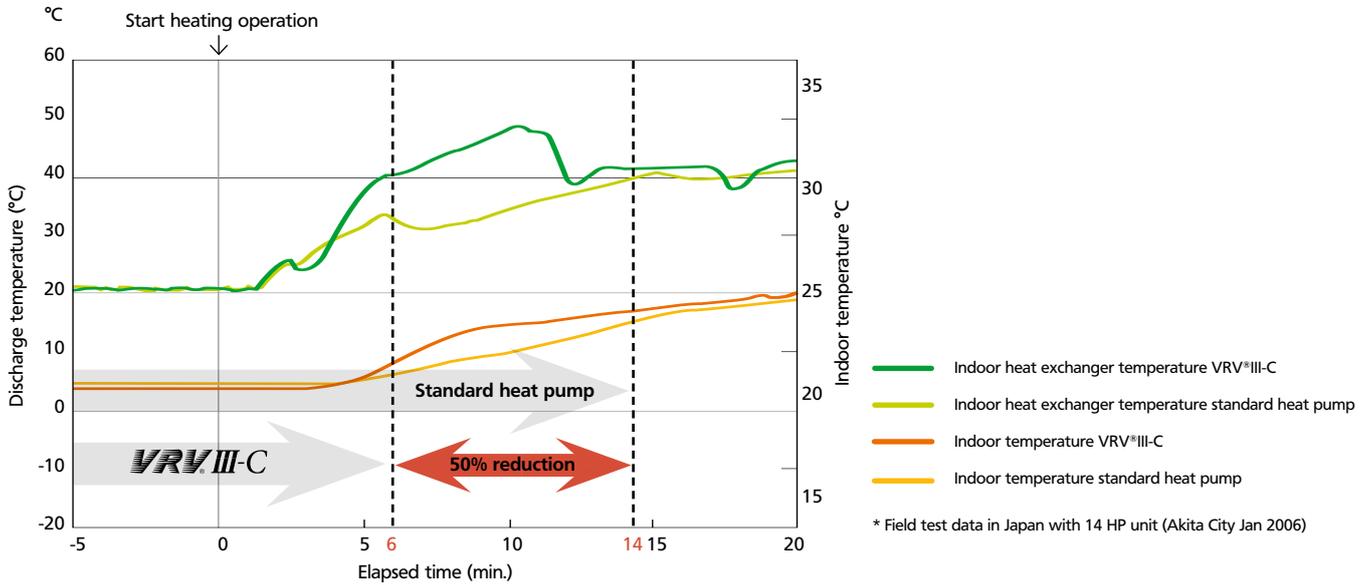
STABLE HEATING CAPACITY

VRV®III-C has a stable heating capacity, even in low ambients, making it suitable for single source heating. The heating capacity is 130% in comparison with the standard VRV® heating capacity under similar conditions



HIGH HEAT UP SPEED

Heat up time is dramatically reduced, particularly under low ambient conditions. The required time for discharge temperature to reach 40°C has been reduced by 50%.



SHORT DEFROST TIME

The time required for defrost is reduced to 4 minutes – less than half that of the standard VRV®III system (10 minutes), leading to a more stable interior indoor temperature and considerably improved comfort levels.

* Field test data in Japan with 10 HP unit (Akita City Jan 2006)

FLEXIBLE PIPING DESIGN

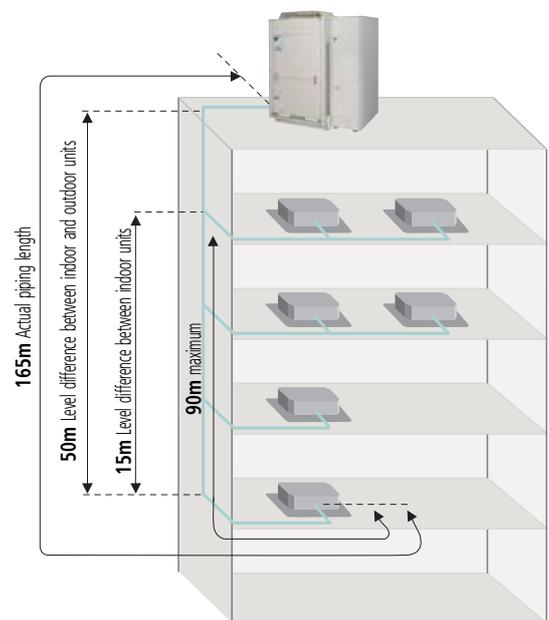
VRV®III-C offers an extended piping length of 165m (190m equivalent piping length) with a total system piping length of 500m.

If the outdoor unit is located above the indoor unit, the height difference is 50m.

If the outdoor unit is located below the indoor unit, the height difference is 40m.

The distance between the outdoor unit and the function unit should be a maximum of 10m (13m equivalent piping length).

After the first branch, the difference between the longest piping length and the shortest piping length can be a maximum 40m, provided that the longest piping length amounts to a maximum of 90m.



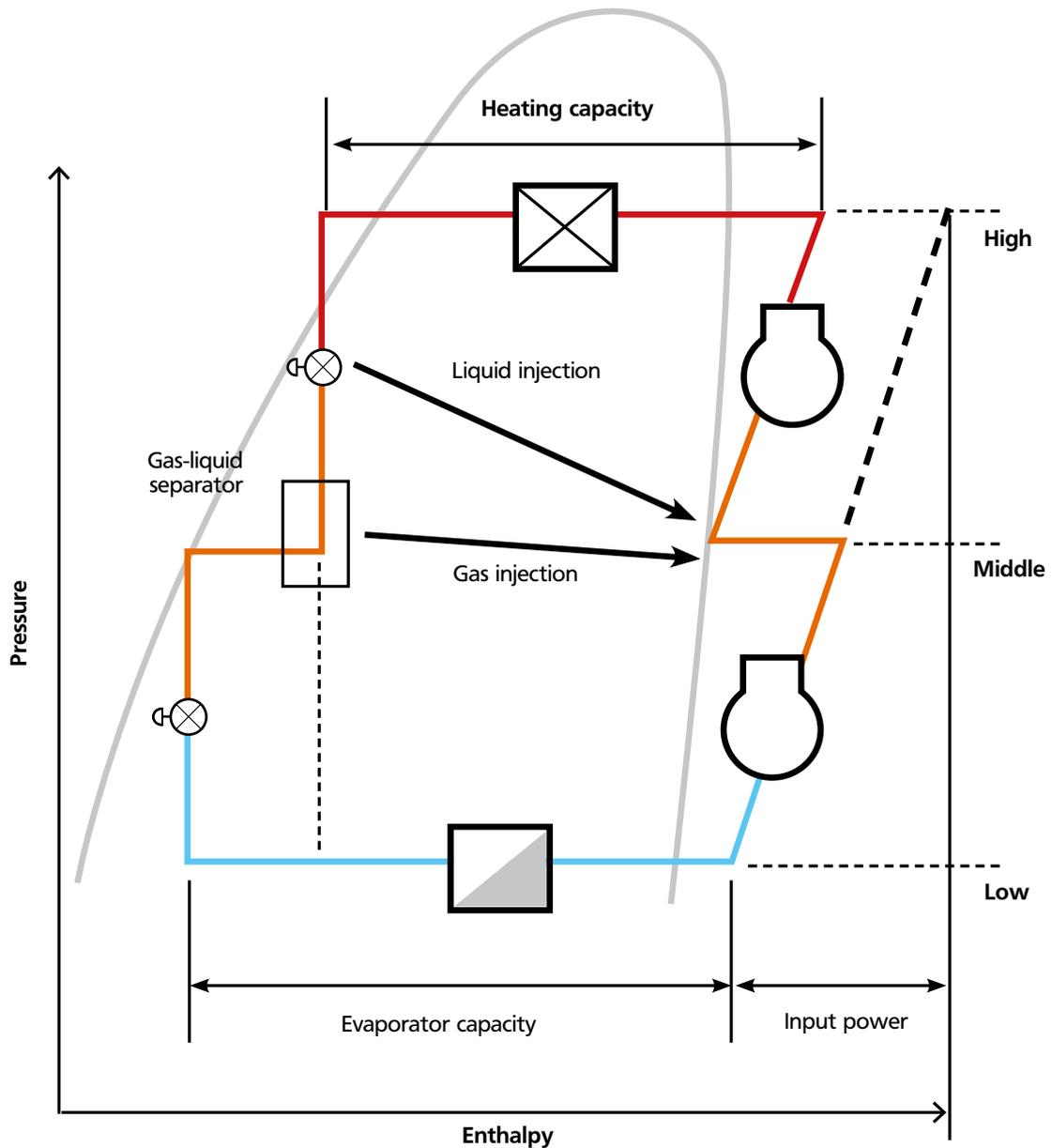
UNIQUE TECHNOLOGIES

TWO STAGE COMPRESSION

Two stage compression technology enables the system to create higher pressures resulting in a higher heating capacity under low ambient conditions.

The second inverter compressor (located in the function unit) is specially designed to provide higher pressures.

After heat is exchanged in the indoor unit, gas and liquid are separated at the gas-liquid separator. This enables the refrigerant in gas condition to be recovered and transmitted direct to the high pressure compressor.



➤ SPECIFICATIONS

VRV® Heat pump optimised for heating

System			RTSYQ10P	RTSYQ14P	RTSYQ16P	RTSYQ20P	
Outdoor Unit			RTSQ10P	RTSQ14P	RTSQ16P	RTSQ8P	
Outdoor Unit						RTSQ12P	
Function unit			BTSQ20P	BTSQ20P	BTSQ20P	BTSQ20P	
Capacity	Cooling	kW	28.0	40.0	45.0	56.0	
	Heating (outdoor temp. 7°CDB/6°CWB)	kW	31.5	45.0	50.0	63.0	
	Heating (outdoor temp. -10°CWB)	kW	28.0	40.0	45.0	56.0	
Casing			Ivory white (5Y7,5/1)				
Dimensions	Unit	Height	1,680				
		Width	930	1,24	1,24	930 + 930	
		Depth	765				
	Function unit	Height	1,570				
		Width	460				
		Depth	765				
Weight	Unit	kg	257	338	344	205 + 257	
	Function unit	kg	110				
Heat Exchanger			Cross fin coil				
Fan			Propeller				
Piston displacement			m	(13.72+10.53) + 16.9	(13.72+10.53+10.53)+16.9	(13.72+10.53+10.53) + 16.9	16.9+(13.72+10.53)+16.9
Air Flow Rate (nominal at 230V)	Cooling	m³/min	185	233	239	(185+200)	
	Heating	m³/min	185	233	239	(185+200)	
Motor			Direct drive				
Output motor			W	0.75x1	0.35x2	0.75x2	(0.75)+ (0.75)
Compressor			Hermetically sealed scroll compressor				
Sound level			Soft start				
Cooling	Starting method		Soft start				
	Sound Pressure (Maximum)	dB(A)	62	63	65	65	
	Sound Pressure (Nominal)	dB(A)	60	61	63	63	
Starting Method			Soft start				
Refrigerant			R-410A				
Charge			kg	10.5	11.7	11.7	9.4+10.9
Control			Expansion valve (electronic type)				
Piping connections			Braze connection				
Liquid (OD)	Type						
	Diameter (OD)	mm	9.52	12.7	12.7	15.9	
Gas	Type						
	Diameter (OD)	mm	22.2	28.6	28.6	28.6	
Oil equalizing	Type						
	Diameter (OD)	mm	-	-	-	Braze connection 19.1	
Defrost Method			Deicer				
Capacity Control			9 to 100	7 to 100	7 to 100	6 to 100	
Safety devices			HPS - Fan motor driver overload protector - Over current relay - Inverter overload protector				
Power Supply			Name, Phase, Frequency, Voltage Y1, 3~, 50, 380-415				

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB; outdoor temperature 35°CDB; equivalent piping length: 7.5m; level difference 0m; function unit length: 6m
 Nominal heating capacities are based on: indoor temperature: 20°CDB; outdoor temperature 7°CDB,6°CWB; equivalent piping length: 7.5m; level difference 0m; function unit length: 6m
 Nominal heating capacities are based on: indoor temperature: 20°CDB; outdoor temperature -10°CWB; equivalent piping length: 7.5m; level difference 0m; function unit length: 6m
 RTSYQ10P combined with 5x FXFQ50P, RTSYQ14P combined with 7x FXFQ50P, RTSYQ16P combined with 8x FXFQ50P, RTSYQ20P combined with 10x FXFQ50P

➤ ACCESSORIES

		RTSYQ10P	RTSQ14P RTSYQ16P	RTSYQ20P
Distributive piping	Refnet header	-	KHRQ22M29H (max.4 branch) KHRQ22M29H (max.8 branch) ¹	KHRQ22M64H (max.8 branch)
		-	KHRQ22M20T KHRQ22M29T9	KHRQ22M64T
	Refnet joint	-	-	KHRQ22M75T
		-	-	KPS26C280*
Snowbreak hood ²	Kit (inlet + outlet)	KPS26C280	KPS26C504	KPS26C280T*
	Air outlet	KPS26C280T	KPS26C504T	KPS26C504L*
	Left side air inlet	KPS26C504L	KPS26C504R	KPS26C504R*
	Right side air inlet	KPS26C504R	KPS26C504B	KPS26C280B*
	Back side air inlet	KPS26C280B	-	BHFQ22P1007
Outdoor unit multi connection piping kit		-	-	BHFQ22P1007

Note:
 1 ø25.4 gas pipe in KHRQ22M29H is not available for DENVrefnet. This is only required for the 10HP model using size up AND with an indoor connection ratio of less than 80%
 2 Snowbreak hoods are field supply. For technical drawings and more information contact your local Daikin dealer.
 Snowbreak hoods are advised to be installed when regular snowfall occurs.



SMALL FOOTPRINT COMBINATION

> BENEFITS

COMPACT COMBINATIONS PROVIDE THE SMALLEST FOOTPRINT

Compact combinations from 5 to 54 HP provide the smallest footprint. Up to 33% less installation space needed compared to the high COP combination.

HP	12	16	18	20	22	24	26	28	30	32	34	36
Small footprint combination Footprint [m ²]	0.71	0.95	0.95	1.42	1.42	1.42	1.66	1.66	1.66	1.90	1.90	1.90
High COP combination Footprint [m ²]	0.95	1.42	1.42	1.66	1.66	2.13	2.13	2.13	2.37	2.61	2.61	2.85
Footprint ratio	75%	67%	67%	86%	86%	67%	78%	78%	70%	73%	73%	67%

33% less space needed

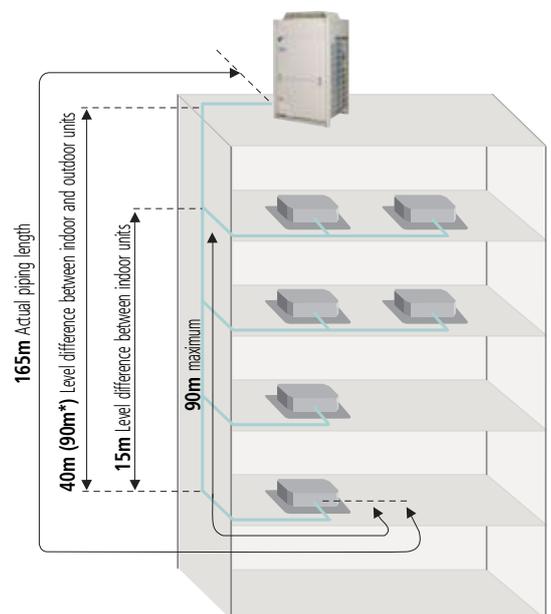
FLEXIBLE PIPING DESIGN

VRV® offers an extended piping length of 165m (190m equivalent piping length) with a total system piping length of 1,000m.

In case the outdoor unit is located above the indoor unit the height difference is 50m standard. It can be extended to 90m*.

In case the outdoor unit is located below the indoor unit, the height difference is 40m standard. Height differences up to maximum 90m are possible*.

After the first branch, the difference between the longest piping length and the shortest piping length can be maximum 40m, provided that the longest piping length amounts to maximum 90m.



* For more information, please contact your local Daikin dealer.

► SPECIFICATIONS

VRV® Heat pump - Small footprint combination

RXYQ-P(A)/P8(A)				5	8	10	12	14	16	18
Nominal capacity	cooling	kW		14.0	22.4	28.0	33.5	40.0	45.0	49.0
	heating	kW		16.0	25.0	31.5	37.5	45.0	50.0	56.5
COP	heating			4.00	4.50	4.09	3.97	3.98	3.88	3.69
EER	cooling			3.98	4.29	3.77	3.48	3.23	3.17	3.02
Capacity range		HP		5	8	10	12	14	16	18
Max n° of indoor units to be connected				8	13	16	19	23	26	29
Indoor index connection	minimum			62.5	100	125	150	175	200	225
	maximum (130%)			162.5	260	325	390	455	520	585
Casing	colour			Daikin White						
	material			Painted galvanised steel						
Dimensions	unit	height	mm	1,680	1,680	1,680	1,680	1,680	1,680	1,680
		width	mm	635	930	930	930	1,240	1,240	1,240
		depth	mm	765	765	765	765	765	765	765
Weight	unit	kg		159	187	240	240	316	316	324
Fan	type			Propeller						
	air flow rate (nominal at 230V)	cooling	m³/min	95	171	185	196	233	233	239
		heating	m³/min	95	171	185	196	233	233	239
Compressor	external static pressure (MAX)	Pa		78Pa in high static pressure						
Operation range	cooling	minimum	°CDB	-5.0						
		maximum	°CDB	43.0						
	heating	minimum	°CWB	-20.0						
		maximum	°CWB	15.0						
Sound level (nominal)	cooling	sound power	dB(A)	72	78	78	80	80	80	83
		sound pressure	dB(A)	54	57	58	60	60	60	63
Refrigerant	type			R-410A						
	charge	kg		6.2	7.7	8.4	8.6	11.3	11.5	11.7
	control			Expansion valve (electronic type)						
Refrigerant Oil	type			Synthetic (ether) oil						
	charged Volume	l		1.7	2.1	3.9	3.9	5.7	5.7	5.8
Piping Connections	liquid	type		Braze connection						
		diameter (OD)	mm	9.52	9.52	9.52	12.7	12.7	12.7	15.9
	gas	type		Braze connection						
		diameter (OD)	mm	15.9	19.1	22.2	28.6	28.6	28.6	28.6
heat insulation			Both liquid and gas pipes							
	max. total length	m		1,000	1,000	1,000	1,000	1,000	1,000	1,000
Defrost method				Reversed cycle						
Defrost control				Sensor for outdoor heat exchanger temperature						
Capacity control method				Inverter controlled						
Capacity control [%]				~ 100						
Safety devices				HPS, fan motor driver overload protector, overcurrent relay, inverter overload protector, PC board fuse						
Power supply	name			W1						
	phase			3N~						
	frequency	Hz		50						
	voltage	V		400						

Notes: Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference: 0m.
 Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference: 0m
 Sound power level is an absolute value that a sound source generates.
 Sound pressure level is a relative value, depending on the distance and acoustic environment.
 Sound values are measured in a semi-anechoic room.



RXYQ-P(A)/P8(A)			20	22	24	26	28	30	32	34	36	
Modules	RXYQ8P8		1			1						
	RXYQ10P			1			1					
	RXYQ12P		1	1	2				1			
	RXYQ14PA									1		
	RXYQ16PA										1	
	RXYQ18PA					1	1	1	1	1	1	2
Nominal capacity	cooling	kW	55.9	61.5	67.0	71.4	77.0	82.5	89.0	94.0	98.0	
	heating	kW	62.5	69.0	75.0	81.5	88.0	94.0	102.0	107.0	113.0	
COP	heating		4.18	4.04	3.97	3.94	3.83	3.81	3.83	3.79	3.69	
EER	cooling		3.80	3.62	3.49	3.41	3.26	3.20	3.11	3.09	3.02	
Capacity range		HP	20	22	24	26	28	30	32	34	36	
Max n° of indoor units to be connected			32	35	39	42	45	49	52	55	58	
Indoor index connection	minimum		250	275	300	325	350	375	400	425	450	
	maximum (130%)		650	715	780	845	910	975	1,040	1,105	1,170	
Casing	colour		Daikin White									
	material		Painted galvanised steel									
Dimensions	unit	height	mm	-	-	-	-	-	-	-	-	
		width	mm	-	-	-	-	-	-	-	-	
		depth	mm	-	-	-	-	-	-	-	-	
Fan	type		Propeller									
	air flow rate	cooling	m3/min	171 + 196	185 + 196	196 + 196	171 + 239	185 + 239	196 + 239	233 + 239	233 + 239	239 + 239
		(nominal at 230V)	heating	m3/min	171 + 196	185 + 196	196 + 196	171 + 239	185 + 239	196 + 239	233 + 239	233 + 239
	External static pressure (MAX)		Pa	78Pa in high static pressure								
Compressor	type		Hermetically sealed scroll compressor									
Operation range	cooling	minimum	°CDB	-5.0								
		maximum	°CDB	43.0								
	heating	minimum	°CWB	-20.0								
		maximum	°CWB	15.0								
Refrigerant	type		R-410A									
	charge	kg	7.7 + 8.6	8.4 + 8.6	8.6 + 8.6	7.7 + 11.7	8.4 + 11.7	8.6 + 11.7	11.3 + 11.7	11.5 + 11.7	11.7 + 11.7	
	control		Expansion valve (electronic type)									
Maximum total refrigerant charge in the system			kg	Less than 100 (calculated charge less than 95)								
Refrigerant Oil	type		Synthetic (ether) oil									
	charged volume			2.1 + 3.9	3.9 + 3.9	3.9 + 3.9	2.1 + 5.8	3.9 + 5.8	3.9 + 5.8	5.7 + 5.8	5.7 + 5.8	5.8 + 5.8
Piping Connections	liquid	type	Brazed connection									
			diameter (OD)	mm	15.9	15.9	15.9	19.1	19.1	19.1	19.1	19.1
	gas	type	Brazed connection									
			diameter (OD)	mm	28.6	28.6	34.9	34.9	34.9	34.9	34.9	34.9
heat insulation		Both liquid and gas pipes										
max. total length		m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Defrost method	Reversed cycle											
Defrost control	Sensor for outdoor heat exchanger temperature											
Capacity control method	Inverter controlled											
Capacity control [%]	~ 100											
Safety devices	HPS, fan motor driver overload protector, overcurrent relay, inverter overload protector, PC board fuse											
Power supply	name		W1									
	phase		3N~									
	frequency	Hz	50									
	voltage	V	400									

Notes: Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference: 0m.
 Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference: 0m
 Sound level of a multi system is determined by the individual outdoor unit and installation condition
 The refrigerant charge of the system must be less than 100 kg. This means that in case the calculated refrigerant charge is equal to or more than 95 kg, you must divide your multiple outdoor system into smaller independent systems, each containing less than 95 kg refrigerant charge. For factory charge, refer to the namplate of the unit.

RXYQ-P(A)/P8(A)			38	40	42	44	46	48	50	52	54	
Modules	RXYQ8P8		1			1						
	RXYQ10P			1			1					
	RXYQ12P		1	1	2			1				
	RXYQ14PA								1			
	RXYQ16PAA									1		
	RXYQ18PA		1	1	1	2	2	2	2	2	3	
Nominal capacity	cooling	kW	105.0	111.0	116.0	120.0	126.0	132.0	138.0	143.0	147.0	
	heating	kW	119.0	126.0	132.0	138.0	145.0	151.0	158.0	163.0	170.0	
COP	heating		3.95	3.89	3.86	3.84	3.79	3.78	3.77	3.75	3.70	
EER	cooling		3.43	3.34	3.28	3.25	3.17	3.14	3.08	3.07	3.02	
Capacity range		HP	38	40	42	44	46	48	50	52	54	
Max n° of indoor units to be connected			61	64	64	64	64	64	64	64	64	
Indoor index connection	minimum		475	500	525	550	575	600	625	650	675	
	maximum (130%)		1,235	1,300	1,365	1,430	1,495	1,560	1,625	1,690	1,755	
Casing	colour		Daikin White									
	material		Painted galvanised steel									
Dimensions	unit	height	mm	-	-	-	-	-	-	-	-	
		width	mm	-	-	-	-	-	-	-	-	
		depth	mm	-	-	-	-	-	-	-	-	
Fan	type		Propeller									
	air flow rate	cooling	m ³ /min	171 + 196 + 239	185 + 196 + 239	196 + 196 + 239	171 + 239 + 239	185 + 239 + 239	196 + 239 + 239	233 + 239 + 239	233 + 239 + 239	239 + 239 + 239
		heating	m ³ /min	171 + 196 + 239	185 + 196 + 239	196 + 196 + 239	171 + 239 + 239	185 + 239 + 239	196 + 239 + 239	233 + 239 + 239	233 + 239 + 239	239 + 239 + 239
(nominal at 230V)		external static pressure (MAX)	Pa	78 Pa in high static pressure								
Compressor	type		Hermetically sealed scroll compressor									
Operation range	cooling	minimum	°CDB	-5.0								
		maximum	°CDB	43.0								
	heating	minimum	°CWB	-20.0								
		maximum	°CWB	15.0								
Refrigerant	type		R-410A									
	charge	kg	7.7 + 86 + 117	8.4 + 86 + 117	8.6 + 86 + 117	7.7 + 117 + 117	8.4 + 117 + 117	8.6 + 117 + 117	113 + 117 + 117	115 + 117 + 117	117 + 117 + 117	
	control		Expansion valve (electronic type)									
Maximum total refrigerant charge in the system			kg	Less than 100 (calculated charge less than 95)								
Refrigerant Oil	type		Synthetic (ether) oil									
	charged Volume		l	2.9 + 3.9 + 5.8	3.9 + 3.9 + 5.8	3.9 + 3.9 + 5.8	2.1 + 5.8 + 5.8	3.9 + 5.8 + 5.8	3.9 + 5.8 + 5.8	5.7 + 5.8 + 5.8	5.7 + 5.8 + 5.8	5.8 + 5.8 + 5.8
Piping Connections	liquid	type		Brazed connection								
		diameter (OD)		mm	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
	gas	type		Brazed connection								
		diameter (OD)		mm	41.3	41.3	41.3	41.3	41.3	41.3	41.3	41.3
heat Insulation			Both liquid and gas pipes									
max. total length			m	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Defrost method			Reversed cycle									
Defrost control			Sensor for outdoor heat exchanger temperature									
Capacity control method			Inverter controlled									
Capacity control [%]			~ 100									
Safety devices			HPS, fan motor driver overload protector, overcurrent relay, inverter overload protector, PC board fuse									
Power supply	name		W1									
	phase		3N~									
	frequency	Hz	50									
	voltage	V	400									

Notes: Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping: 7.5m, level difference: 0m.
Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping: 7.5m, level difference: 0m
Sound level of a multi system is determined by the individual outdoor unit and installation condition
The refrigerant charge of the system must be less than 100 kg. This means that in case the calculated refrigerant charge is equal to or more than 95 kg, you must divide your multiple outdoor system into smaller independent systems, each containing less than 95 kg refrigerant charge. For factory charge, refer to the nameplate of the unit.



➤ ACCESSORIES

VRV® HEAT PUMP		RXYQ5P	RXYQ8P8 RXYQ10P	RXYQ12P	RXYQ14-18PA	RXYQ20-54P(A)/P8(A)
Cool/heat selector				KRC19-26A6		
Fixing box				KJB111A		
REFNET header				KHRQ22M29H		
		-	-		KHRQ22M64H	
		-	-	-	-	KHRQ22M75H
REFNET joint				KHRQ22M20T		
		-	-		KHRQ22M29T9	
		-	-		KHRQ22M64T	
Outdoor unit multi connection kit				-	-	KHRQ22M75T
	for 2 outdoor units	-	-	-	-	BHFQ22P1007
	for 3 outdoor units	-	-	-	-	BHFQ22P1517
Central drain pan kit		KWC26B160	KWC26B280	KWC26B280	KWC26B450	see note 2
Digital pressure gauge kit				BHGP26A1		see note 3
Increase height difference between indoor & outdoor to 90m (see note 5)		-	EKLD90P12	EKLD90P12	EKLD90P18	see note 4

1 All options are kits

2 Central drain pan kit shall be combined based on the outdoor unit combination table

3 Only 1 option per installation is needed

4 1 option per module is required

5 The option should be installed inside the outdoor unit, only needed in case outdoor unit is installed above indoor



VRV® HEAT PUMP WITH CONNECTION TO STYLISH INDOOR UNITS

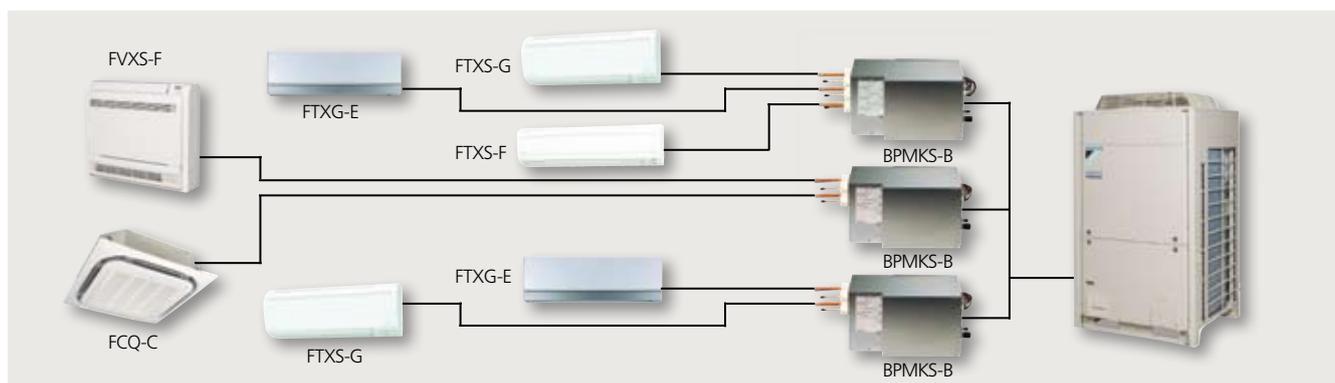
► BENEFITS

VRV® technology combined with the stylish and silent indoor units. Ideal for luxury hotels or spaces where you want to add a stylish touch to the indoor environment.

Via the BP box (BPMKS967B2/B3) up to 29 indoor units are connectable to an 18HP outdoor unit.

CONNECTABLE INDOOR UNITS

Model	Product name	20	25	35	42	50	60	71	Capacity
Roundflow ceiling mounted cassette	FCQ-C								
4-way blow ceiling mounted cassette	FFQ-B								
Small concealed ceiling unit	FDBQ-B								
Slim concealed ceiling unit	FDXS-E/C								
Inverter driven concealed ceiling unit	FBQ-C								
Wall mounted unit	FTXG-E CTXG-E								
Wall mounted unit	FTXS-G								
Wall mounted unit	FTXS-F								
Ceiling suspended unit	FHQ-B								
Floor standing unit	FVXS-F								
Flexi type unit	FLXS-B								



¹ The indoor units in the table above are only connectable to RXYQ-PR

² Minimum - maximum connection ratio: 80 - 130%

► SPECIFICATIONS

VRV® Heat pump with connection to stylish indoor units

RXYQ-PR				8	10	12	14	16	18
Nominal capacity	cooling	kW	22.4	28.0	33.5	40.0	45.0	49.0	
	heating	kW	25.0	31.5	37.5	45.0	50.0	56.5	
Capacity range		HP	8	10	12	14	16	18	
Max n° of indoor units to be connected			13	16	19	23	26	29	
Indoor index connection	minimum		160	200	240	280	320	360	
	maximum (130%)		260	325	390	455	520	585	
Casing	colour		Daikin White						
	material		Painted galvanised steel						
Dimensions	unit	height	mm	1,680					
		width	mm	930		1,240			
		depth	mm	765					
Weight	unit	kg	187	240		316		324	
	type		Propeller						
Fan	air flow rate (nominal)	cooling	m³/min	171	185	196	233	239	
		heating	m³/min	171	185	196	233	239	
	external static pressure (max)	Pa	78 Pa in high static pressure						
Compressor	type		Hermetically sealed scroll compressor						
Operation range	cooling	minimum	°CDB	-5.0					
		maximum	°CDB	43.0					
	heating	minimum	°CWB	-20.0					
		maximum	°CWB	15.0					
Sound level (nominal)	cooling	sound power	dB(A)	78		80		83	
		sound pressure	dB(A)	57	58	60		63	
Refrigerant	type		R-410A						
	charge	kg	7.7	8.4	8.6	11.3	11.5	11.7	
Refrigerant Oil	control		Expansion valve (electronic type)						
	type		Synthetic (ether) oil						
Piping Connections	liquid	type	diameter (od)	mm	9.52		12.7		15.9
					Both liquid and gas pipes				
	gas	type	diameter (od)	mm	19.1	22.2	28.6		
					135				
heat insulation		Both liquid and gas pipes							
max. total length	m	135							
Defrost method		Reversed cycle							
Defrost control		Sensor for outdoor heat exchanger temperature							
Capacity control method		Inverter controlled							
Capacity control [%]		~ 100							
Safety devices		HPS							
		Fan motor driver overload protector							
		Over current relay							
		Inverter overload protector							
Power supply	name		W1						
	phase		3N~						
	frequency	Hz	50						
	voltage	V	400						

Notes: Nominal cooling capacities are based on : indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 7.5m, level difference: 0m.
 Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference : 0m
 Sound power level is an absolute value that a sound source generates.
 Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to sound level drawings.
 Sound values are measured in a semi-anechoic room.

BP Box for connection to stylish indoor units

BPMKS967			B2	B3
Max. n° of indoor units to be connected			2	3
Max. indoor unit connectable capacity			14.2 (7.1 + 7.1)	20.8 (6.0 + 7.1 + 7.1)
Dimensions (Height x Width x Depth)			180 x 294 x 350	
Weight			7	8

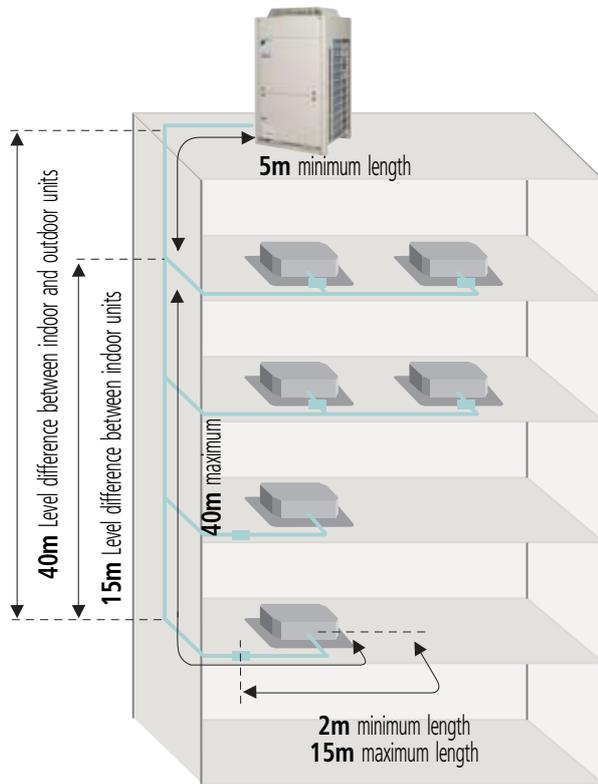
PIPING DESIGN

The VRV® heat pump with connection to stylish indoor units offers a total system piping length of 135 m. (Total main piping length ≤ 55m (between outdoor and BP box) + Total branch piping length ≤ 80m (between BP box and indoor).

The minimum piping length between the outdoor unit and the first branch is 5m. The minimum piping length between the BP box and the indoor unit is 2m, the maximum length is 15m.

After the first branch, the longest piping length is 40m.

The height difference between the outdoor and indoor unit or BP box can be maximum 40m.



➤ ACCESSORIES

VRV® HEAT PUMP	RXYQ8PR RXYQ10PR	RXYQ12PR	RXYQ14-18PR
Cool/heat selector		KRC19-26A6	
Fixing box		KJB111A	
REFNET header		KHRQ22M29H	KHRQ22M64H
REFNET joint		KHRQ22M20T KHRQ22M29T9	KHRQ22M64T
Central drain pan kit		KWC26B280	KWC26B450
Digital pressure gauge kit		BHGP26A1	
BS Box for connection to stylish indoor units		BPMKS967B2 BPMKS967B3	

1 All options are kits

2 Central drain pan kit shall be combined based on the outdoor unit combination table

3 Only 1 option per installation is needed

4 1 option per module is required

5 The option should be installed inside the outdoor unit, only needed in case outdoor unit is installed above indoor



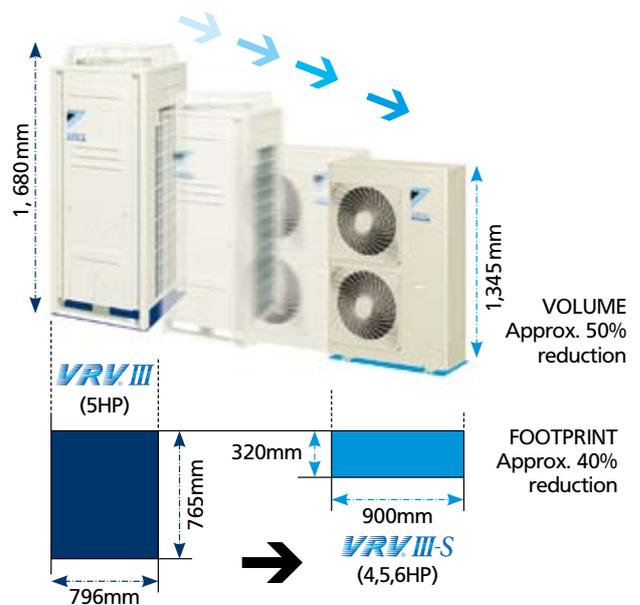


VRV®III-S HEAT PUMP

➤ BENEFITS

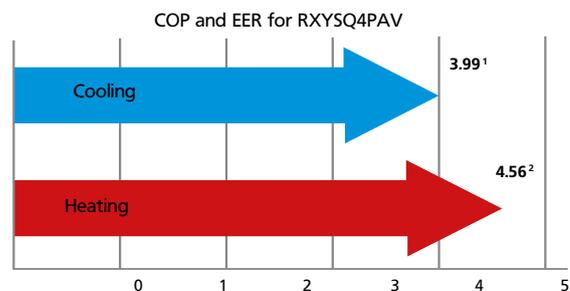
SPACE SAVING DESIGN

The VRVIII®-S is slimmer and more compact, resulting in significant savings in installation space.



HIGH COP VALUES

A major feature of VRV®III-S is its exceptional energy efficiency. The system achieves high COPs during both cooling and heating operation by the use of refined components and functions.



¹ Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°C, equivalent refrigerant piping: 5m, level difference: 0m.

² Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m

FLEXIBLE PIPING DESIGN

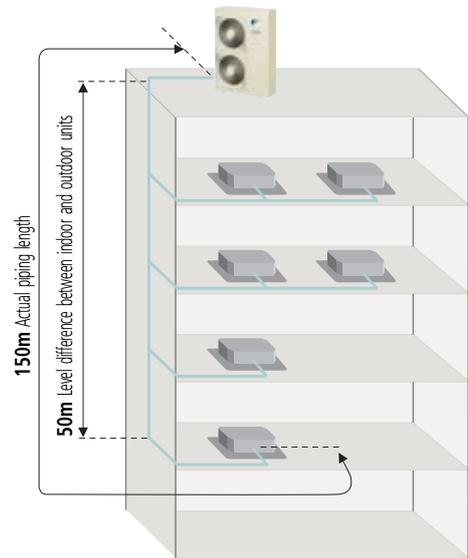
The VRV®III-S provides the long piping length possibility of 150m¹ (175m equivalent piping length), with a total piping length of 300m. If the outdoor unit is installed above the indoor units, the height difference can be up to a maximum of 50m².

These generous allowances facilitate an extensive variety of system designs.

Notes:

¹ 40 m when the outdoor unit is installed below indoor units.

² Maximum piping length between the indoor unit and the first branch is 40 m.



➤ ADVANCED TECHNOLOGIES

1 SUPER AERO GRILLE

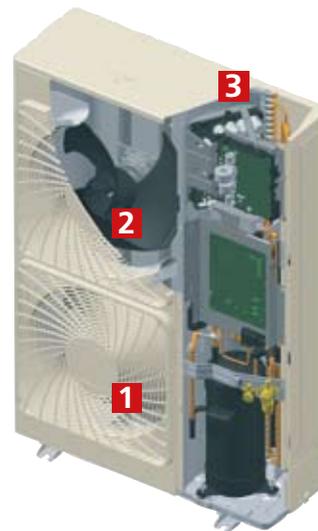
The spiral shaped ribs are aligned with the direction of discharge flow in order to minimise turbulence and reduce noise.

2 SMOOTH AIR INLET BELL MOUTH AND AERO SPIRAL FAN

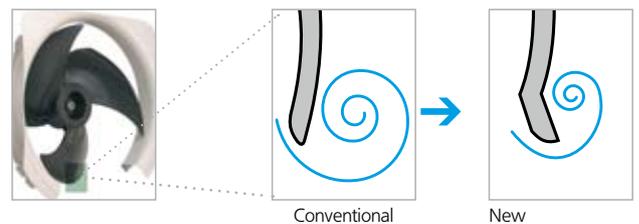
These features assist in significantly reducing noise. Guides are added to the bell mouth intake to reduce turbulence in the air flow generated by fan suction. The aero spiral fan features fan blades with bent blade edges, further reducing turbulence.

3 E-BRIDGE CIRCUIT

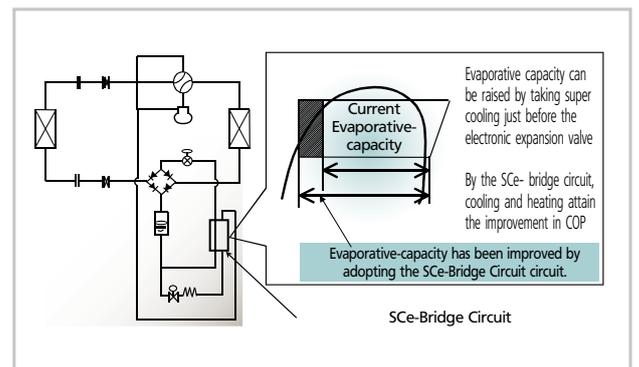
Prevents accumulation of liquid refrigerant in the condenser. This results in more efficient use of the condenser surface under all conditions and leads in turn to better energy efficiency. Increased evaporative capacity stems from the newly developed refrigeration circuit, the S_{Ce}-bridge circuit, which adds super cooling prior to the expansion cycle. By adopting this circuit, the COPs in both cooling and heating have been drastically improved.



Aero spiral fan blade tips



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



➤ SPECIFICATIONS

VRV® III-S Heat pump

RXYSQ-PAV/RXYSQ-PAY				4	5	6
Nominal capacity	cooling	kW		11.2	14.0	15.5
	heating	kW		12.5	16.0	18.0
COP	heating			4.56 / 4.43	4.15 / 4.03	3.94 / 3.83
EER	cooling			3.99 / 3.88	3.99 / 3.88	3.42 / 3.33
Capacity range		HP		4	5	6
Max n° of indoor units to be connected				6	8	9
Indoor index connection	minimum			50	62.5	70
	maximum			130	162.5	182
Casing	colour			Daikin white		
	material			Painted galvanised steel		
Power supply		V3		1 ~, 50Hz, 220-240V / 3 ~, 50Hz, 380-415V		
Dimensions	unit	height	mm	1,345		
		width	mm	900		
		depth	mm	320		
			kg	125/120		
Weight	unit			125/120		
Fan	type			Propeller		
	air Flow Rate (nominal at 230V)	cooling	m/min	106	106	106
		heating	m/min	102	105	105
Compressor	type			Hermetically sealed scroll compressor		
	starting method			Direct on line		
Operation range	cooling	minimum	°CDB	-5.0		
		maximum	°CDB	46		
	heating	minimum	°CWB	-20		
		maximum	°CWB	15.5		
Sound level (nominal)	cooling	sound power	dBA	66	67	69
		sound pressure	dBA	50	51	53
	heating	sound power	dBA	52	53	55
		sound pressure	dBA			
Refrigerant	type			R-410A		
	charge	kg		4.0		
	control			Expansion valve (electronic type)		
Refrigerant Oil	type			Daphne FVC68D		
	charged	Volume	l	1.5		
Piping Connections	liquid	diameter (OD)	mm	9.52 (Flare)	9.52 (Flare)	9.52 (Flare)
		gas	diameter (OD)	mm	15.9 (Flare)	15.9 (Flare)
	heat Insulation			Both liquid and gas pipes		
	max. total length		m	300		
Safety devices				HPS, fan motor thermal protection, inverter overload protector, PC board fuse		

Notes: Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 30°C, equivalent refrigerant piping: 7.5m, level difference: 0m.
 Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 7.5m, level difference: 0m.
 Sound power level is an absolute value that a sound source generates.
 Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to sound level drawings.
 Sound values are measured in a semi-anechoic room.

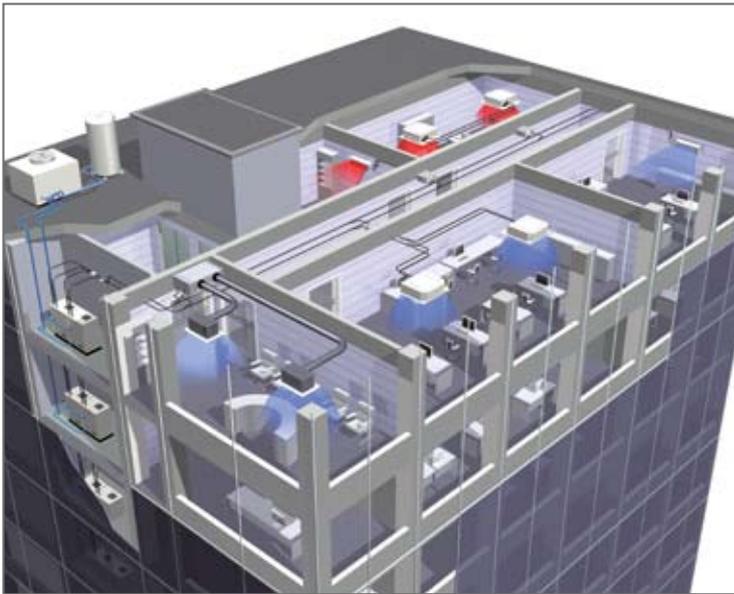
➤ ACCESSORIES

	RXYSQ4PAV/RXYSQ4PAY	RXYSQ5PAV/RXYSQ5PAY	RXYSQ6PAV/RXYSQ6PAY
Cool/heat selector		KRC19-26A6	
Fixing box		KJB111A	
Refnet header		KHRQ22M29H	
Refnet joint		KHRQ22M20T	
Central drain plug		KKPJ5F180	

WATER COOLED VRV® OUTDOOR SYSTEMS

Despite the remarkable energy efficiency and installation flexibility of the air cooled VRV®, there are some applications for which the water cooled version provides a more economic and sustainable solution. These apply primarily to **MULTI STOREY HIGH RISE COMPLEXES** in which maximum refrigerant pipe distances can sometimes invalidate the use of an air cooled system. Further situations which are ideal for water cooled VRV® use include buildings lacking adequate roof or external space for outdoor condensing units and projects with particularly stringent noise regulations.

The water cooled VRV® is now available in 9 models between 8 and 30 HP, in heat recovery, heat pump and most recently, **GEOHERMAL** variants. The fast growing geothermal sector in fact, provides an ideal opportunity for ground source heat pumps and offers considerably future potential for its use in very low carbon installations.



STANDARD SERIES



GEOHERMAL SERIES

BENEFITS

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ADVANCED VRV® TECHNOLOGIES

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VRV®-W STANDARD SERIES -
HEAT RECOVERY AND HEAT PUMP

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VRV®-W GEOHERMAL SERIES -
HEAT RECOVERY AND HEAT PUMP

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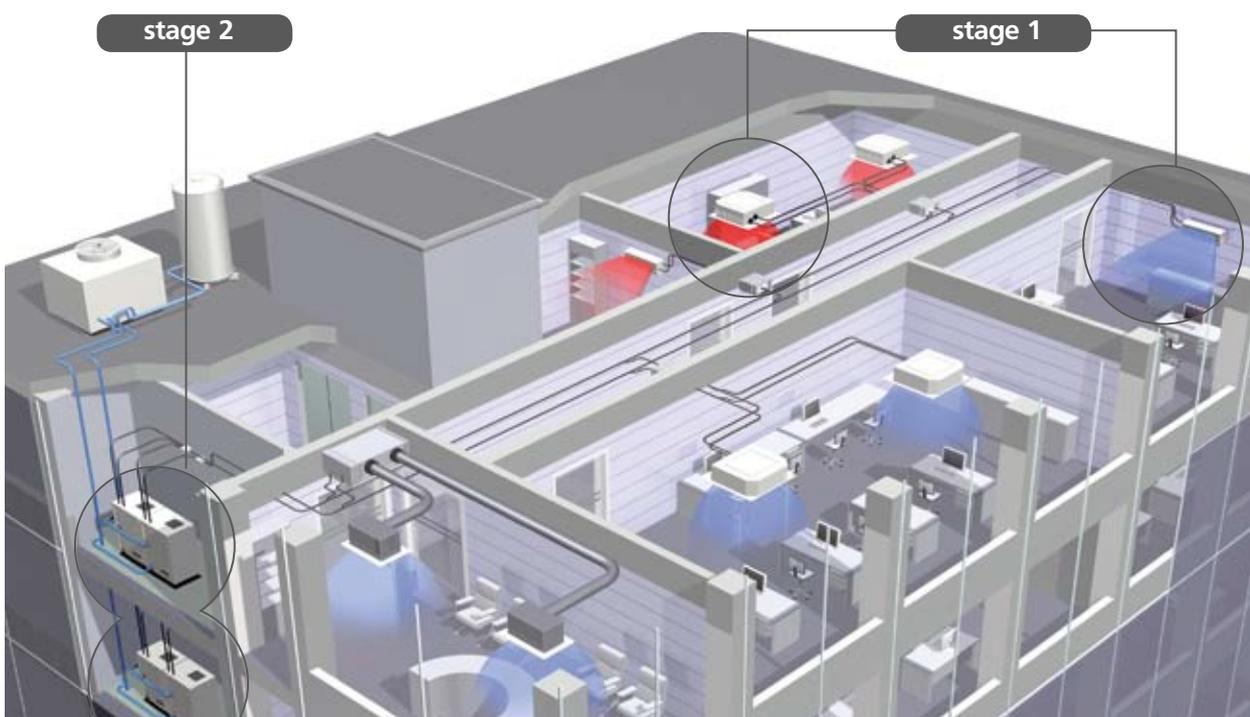
BENEFITS

HIGH ENERGY EFFICIENCIES RESULTS FROM 2-STAGE HEAT RECOVERY

VRV®-W benefits from a 2-stage heat recovery facility. The first stage is achieved within the refrigerant system and applies to heat recovery units only. Heat exhausted from indoor units in cooling mode is merely transferred to units in areas requiring heating, maximising energy efficiency and reducing electricity costs.

Heat recovery also available on heat pump units

Second stage heat recovery is achieved within the water loop between the water cooled outdoor units. Two-stage heat recovery substantially improves energy efficiency and represents an ideal solution to the requirements of modern office buildings, in which some areas may require cooling even in winter, depending on the degree of sunshine at the time and the number of individuals in the room.



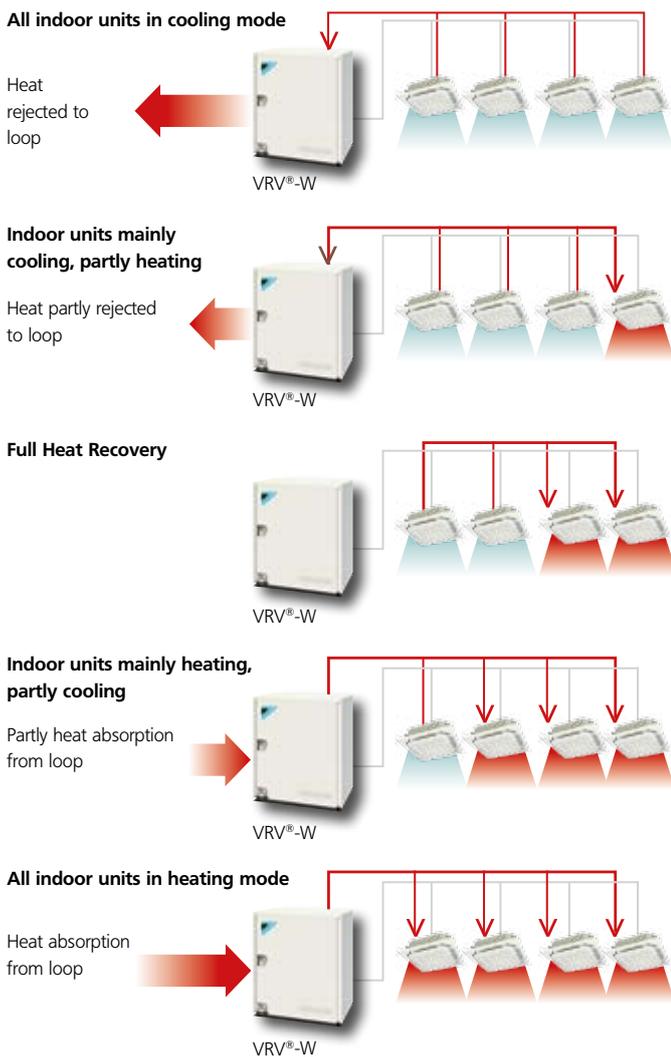
Stage 1: For heat recovery

Simultaneous heating and cooling within the refrigerant system.

When mainly cooling is required, the system recycles heat exhausted from the cooling operation for heating purposes.

When mainly heating is required, the system uses cooled post-heating operation refrigerant for cooling. Efficiency improves the more simultaneous operation is performed.

Heat recovery between indoor units



Note* Above system configurations are for illustration purposes only.

Stage 2: For heat recovery and heat pump!

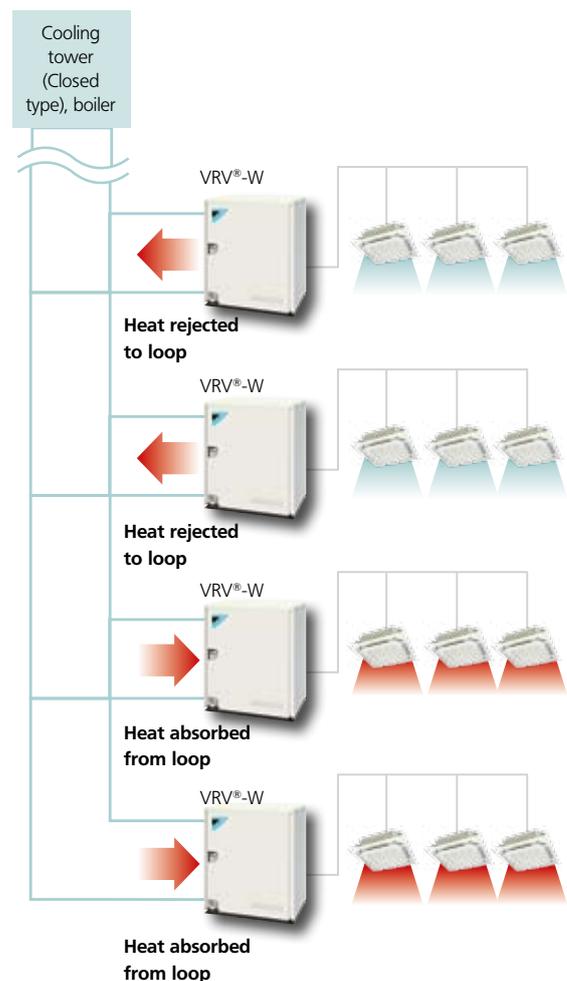
Heat recovery between the water cooled outdoor units

For heat recovery and heat pump units!

Heat recovery is also available between systems connected to the same water loop. These systems exchange heat via water, increasing energy efficiency.

Heat recovery between outdoor units

(Heat recovery and heat pump)



FLEXIBLE PIPING DESIGN

Flexible water piping

Water cooled VRV® uses water as its heat source, so it is optimal for large buildings, including tall, multi-storey buildings, because the system can tolerate water pressure of up to 1.96 MPa.

Furthermore, if the currently installed heat source's water temperature is between 10°C and 45°C, it may be possible to use the existing water pipe work and heat source. This alone makes it an ideal system solution for building refurbishment projects.

Because the system is water cooled, outdoor air temperature does not affect its heating capacity. In addition, water cooling means no defrost operation is required, and the resultant rapid start-up time assures quick and comfortable heating, even in cold environment.

Long refrigerant piping length

Considerable flexibility is available within the refrigerant circuit since up to 120m actual piping length and 50m* (if the VRV®-W outdoor unit is above the indoor units) in height can exist between the VRV®-W outdoor units and indoor units.

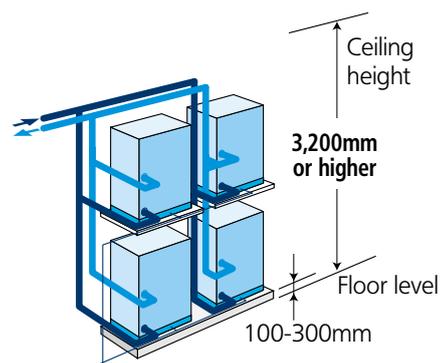
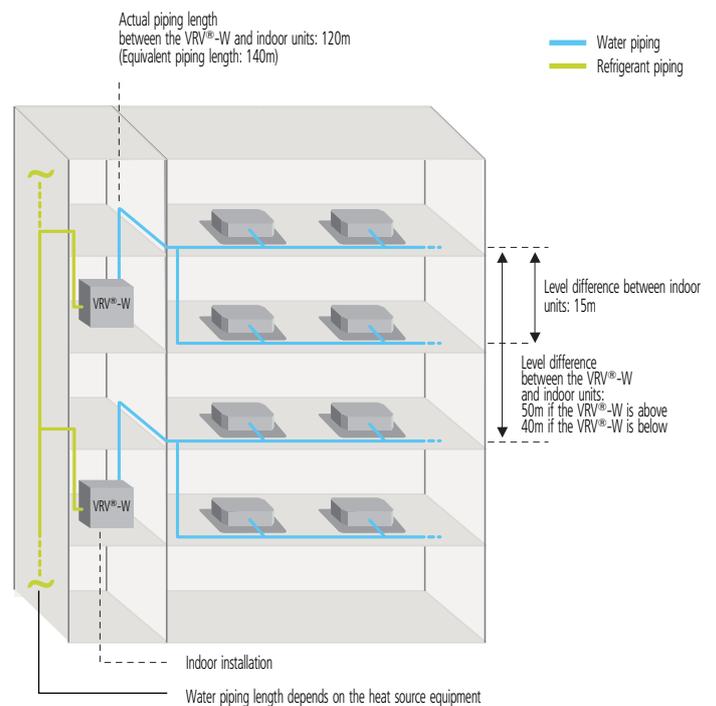
Water piping does not intrude on the occupied spaces, so there are no leakage problems.

* 40m if the VRV®-W outdoor unit is below the indoor units.

STACKED CONFIGURATION

The adoption of a new water heat exchanger and optimization of the refrigerant control circuit has resulted in the industry's most compact and lightweight design. The unit weight of 149kg* and height of 1,000mm makes installation easy. Stacked configuration is also possible, contributing further to space savings.

* for 8HP unit



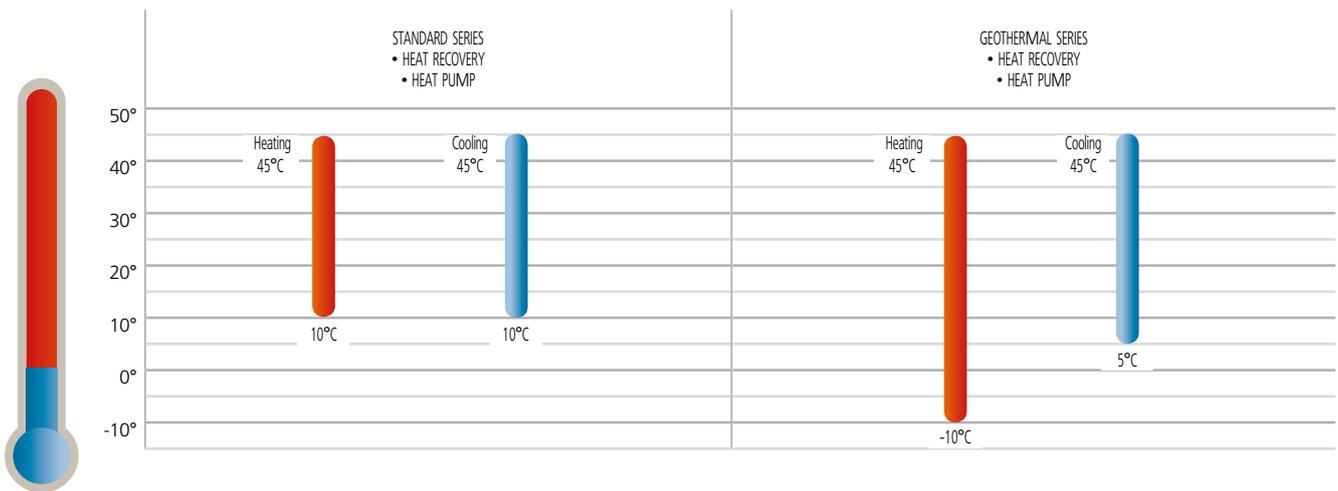
Stacked configuration is possible.

WIDE OPERATION RANGE

Standard water cooled outdoor units have a wide operation range of between 10°C & 45°C inlet water temperature, both in heating and cooling.

For the geothermal series the operation range is extended even more, down to -10°C* in heating and 5°C in cooling mode.

*Ethylene glycol should be added to the water when the water inlet temperature is below 5°C



LOW INDOOR UNIT OPERATION SOUND LEVEL

- › Continuous research by Daikin into reducing operation sound levels has resulted in the development of a purpose designed inverter scroll compressor and fan.
- › Daikin indoor units have very low sound operation levels, down to 25dB(A)

dB(A)	Perceived loudness	Sound
0	Threshold of hearing	-
20	Extremely soft	Rustling leaves
40	Very soft	Quiet room
60	Moderately loud	Normal conversation
80	Very loud	City traffic noise
100	Extremely loud	Symphonic orchestra
120	Threshold of feeling	Jet taking off

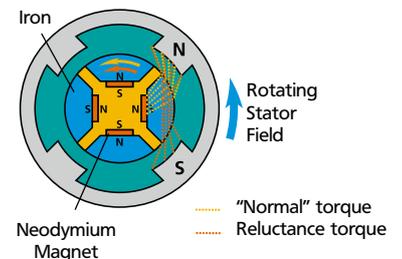




ADVANCED WATER COOLED VRV[®] TECHNOLOGIES

1 RELUCTANCE BRUSHLESS DC COMPRESSOR

- › The reluctance brushless DC motor provides significant increases in efficiency compared to conventional AC inverter motors, simultaneously using 2 different forms of torque (normal and reluctance torque) to produce extra power from small electric currents.
- › **The motor comprises powerful neodymium magnets**, that efficiently generate high torque. These magnets make a major contribution to the energy saving characteristics of the motor.
- › **High thrust mechanism**
By introducing high pressure oil, the reactive force from the fixed scroll is added to the internal force, thereby reducing thrust losses. This results in improved efficiency and suppressed sound level.



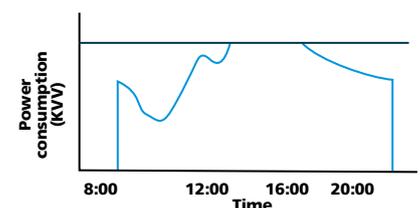
2 SINE WAVE DC INVERTER

- › Optimizing the sine wave curve, results in smoother motor rotation and improved motor efficiency.



3 I-DEMAND FUNCTION

- › The newly introduced current sensor minimizes the difference between the actual power consumption and the predefined power consumption.



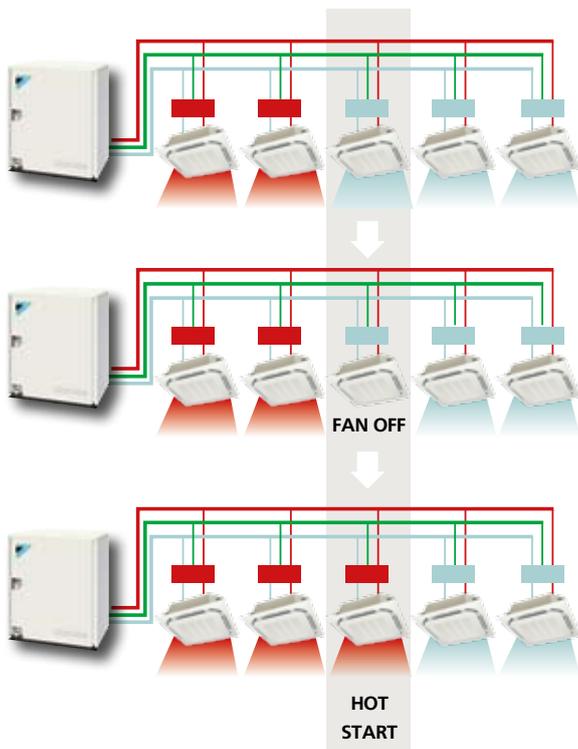
IMPROVED COMFORT THANKS TO VRV®III BS BOX

Individual change over from cooling to heating or vice versa of the indoor units is possible. This means that all indoor units who do not change over continue to provide optimum comfort for the users during this process.

VRV®WIII

With the VRV®III BS box, the other indoor units can keep heating while the target indoor units are switched from cooling to heating.

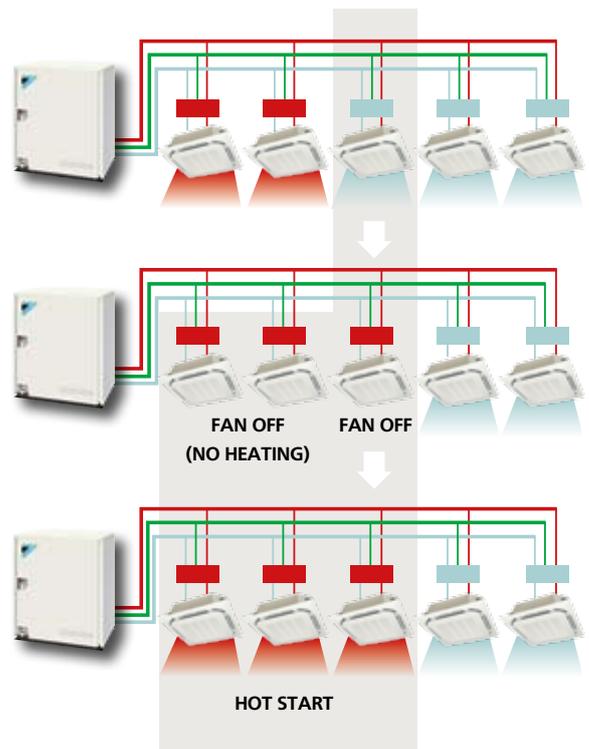
Example:



VRV®WII

When switching from cooling to heating with the conventional BS box, the other indoor units performing heating operations also had to be stopped until the changeover for the target indoor unit had been completed.

Example:



STANDARD SERIES

> SPECIFICATIONS

VRV®-W Heat recovery - Standard series

RWEYQ-P				8	10	16	18	20	24	26	28	30	
Modules	RWEYQ8P			1	-	2	1	-	3	2	1	-	
	RWEYQ10P			-	1	-	1	2	-	1	2	3	
Capacity	Cooling	kW		22.4	26.7	44.8	49.1	53.4	67.2	71.5	75.8	80.1	
	Heating	kW		25.0	31.5	50.0	56.5	63.0	75.0	81.5	88.0	94.5	
Max. n° of indoor units to be connected				13	16	26	29	32	36	36	36	36	
Indoor index connection	minimum			100	125	200	225	250	300	325	350	375	
	maximum			260	325	520	585	650	780	845	910	975	
Casing	Colour			Ivory white (5Y7,5/1)									
Dimensions	Unit	Height	mm	1,000									
		Width	mm	780	780	780 + 780	780 + 780	780 + 780	780 + 780 + 780	780 + 780 + 780	780 + 780 + 780	780 + 780 + 780	
		Depth	mm	550									
Weight	Unit			149	150	149 + 149	150 + 149	150 + 150	149 + 149 + 149	150 + 149 + 149	150 + 150 + 149	150 + 150 + 150	
Heat Exchanger	Dimensions	Type			Stainless steel plate								
Compressor	Dimensions	Type			Hermetically sealed scroll compressor								
	number of compressors			1	1	2	2	2	3	3	3	3	
Sound level	Cooling	Sound Pressure (Nominal)	dBA	50	51	53	54	54	55	55	55	56	
				R-410A									
Refrigerant	Name			R-410A									
	Charge	kg		3.5	4.2	3.5 + 3.5	4.2 + 3.5	4.2 + 4.2	3.5 + 3.5 + 3.5	4.2 + 3.5 + 3.5	4.2 + 4.2 + 3.5	4.2 + 4.2 + 4.2	
Refrigerant Oil	Name			Expansion valve (electronic type)									
				Synthetic (ether) oil									
Piping connections	Liquid (OD)	Type			Flare connection								
		Diameter (OD)	mm	9.52	9.52	12.7	15.9	15.9	15.9	19.1	19.1	19.1	
	Discharge Gas	Type			Brazed connection								
		Diameter (OD)	mm	15.9	19.1	22.2	22.2	22.2	28.6	28.6	28.6	28.6	
	Gas	Type			Brazed connection								
		Diameter (OD)	mm	19.1	22.2	28.6	28.6	28.6	34.9	34.9	34.9	34.9	
	Water inlet			PT1 1/4B internal thread									
Water outlet			PT1 1/4B internal thread										
Drain outlet			PS1 1/2B internal thread										
Capacity Control				23 to 100	23 to 100	11 to 100	11 to 100	11 to 100	8 to 100	8 to 100	8 to 100	8 to 100	
Safety devices					HPS / Inverter overload protector / Fusible plugs								
Power Supply	Phase			3~									
	Frequency	Hz		50									
	Voltage	V		380-415									

Notes: Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, inlet water temperature : 30°C, equivalent refrigerant piping : 7.5m, level difference : 0m.
 Nominal heating capacities are based on : indoor temperature : 20°CDB, inlet water temperature : 20°C, equivalent refrigerant piping : 7.5m, level difference : 0m
 Hold ambient temperature at 0-46°C and humidity at 80%RH or less. Heat rejection from the casing: 0.64kW/8HP
 Hold ambient temperature at 0-40°C and humidity at 80%RH or less. Heat rejection from the casing: 0.71kW/10HP

BS Box for heat recovery system

BS BOX				BSVQ100P8B		BSVQ160P8B		BSVQ250P8B	
Total capacity of connectable indoor units				x ≤ 100		100 < x ≤ 160		160 < x ≤ 250	
Maximum number of connectable indoor units				5		8		5	
Casing				galvanised steel plate					
Dimensions	HxWxD	mm		207x388x326					
Weight			kg	14		14		15	
Piping connections	indoor unit	liquid/gas	mm	9.5/15.9		9.5/15.9		9.5/22.2	
	outdoor unit	liquid/suction gas/discharge gas	mm	9.5/15.9/12.7		9.5/15.9/12.7		9.5/22.2/19.1	
Safety devices				PCB fuse					
Cool/heat selector				KRC19-26A					
Fixing box				KJB111A					
PCB for multi tenant				DTA114A61					



VRV®-W Heat pump - Standard series

RWEYQ-P			8	10	16	18	20	24	26	28	30	
Modules	RWEYQ8P		1	-	2	1	-	3	2	1	-	
	RWEYQ10P		-	1	-	1	2	-	1	2	3	
Capacity	Cooling	kW	22.4	26.7	44.8	49.1	53.4	67.2	71.5	75.8	80.1	
	Heating	kW	25.0	31.5	50.0	56.5	63.0	75.0	81.5	88.0	94.5	
Max. n° of indoor units to be connected			13	16	26	29	32	36	36	36	36	
Indoor index connection	minimum		100	125	200	225	250	300	325	350	375	
	maximum		260	325	520	585	650	780	845	910	975	
Casing	Colour		Ivory white (5Y7,5/1)									
Dimensions	Unit	Height	mm	1,000								
		Width	mm	780	780	780 + 780	780 + 780	780 + 780	780 + 780 + 780	780 + 780 + 780	780 + 780 + 780	780 + 780 + 780
		Depth	mm	550								
Weight	Unit	kg	149	150	149 + 149	150 + 149	150 + 150	149 + 149 + 149	150 + 149 + 149	150 + 150 + 149	150 + 150 + 150	
Heat Exchanger	Dimensions	Type	Stainless steel plate									
Compressor	Dimensions	Type	Hermetically sealed scroll compressor									
	number of compressors			1	1	2	2	2	3	3	3	3
Sound level	Cooling	Sound Pressure (Nominal)	dBA	50	51	53	54	54	55	55	56	
Refrigerant	Name			R-410A								
	Charge	kg	3.5	4.2	3.5 + 3.5	4.2 + 3.5	4.2 + 4.2	3.5 + 3.5 + 3.5	4.2 + 3.5 + 3.5	4.2 + 4.2 + 3.5	4.2 + 4.2 + 4.2	
	Control			Expansion valve (electronic type)								
Refrigerant Oil	Name			Synthetic (ether) oil								
Piping connections	Liquid (OD)	Type		Flare connection								
		Diameter (OD)	mm	9.52	9.52	12.7	15.9	15.9	15.9	19.1	19.1	19.1
	Discharge Gas	Type		Brazed connection								
		Diameter (OD)	mm	19.1	22.2	28.6	28.6	28.6	34.9	34.9	34.9	34.9
	Water inlet			PT1 1/4B internal thread								
	Water outlet			PT1 1/4B internal thread								
	Drain outlet			PS1 1/2B internal thread								
Capacity Control				23 to 100	23 to 100	11 to 100	11 to 100	11 to 100	8 to 100	8 to 100	8 to 100	8 to 100
Safety devices				HPS / Inverter overload protector / Fusible plugs								
Power Supply	Phase			3~								
	Frequency	Hz		50								
	Voltage	V		380-415								

Notes: Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, inlet water temperature: 30°C, equivalent refrigerant piping: 7.5m, level difference: 0m.
 Nominal heating capacities are based on: indoor temperature: 20°CDB, inlet water temperature: 20°C, equivalent refrigerant piping: 7.5m, level difference: 0m.
 Hold ambient temperature at 0-46°C and humidity at 80%RH or less. Heat rejection from the casing: 0.64kW/8HP
 Hold ambient temperature at 0-40°C and humidity at 80%RH or less. Heat rejection from the casing: 0.71kW/10HP

➤ ACCESSORIES

VRV®-W HEAT RECOVERY - STANDARD SERIES		RWEYQ8P	RWEYQ10P	RWEYQ16P	RWEYQ18P	RWEYQ20P	RWEYQ24P	RWEYQ26P	RWEYQ28P	RWEYQ30P	
Fixing box		KJB111A									
REFNET header		KHRP25M33H (max. 8 branch)									
		-	KHRP25M72H (max. 8 branch)								
			-					KHRP25M73H (max. 8 branch)			
REFNET joint		KHRP25A22T									
		KHRP25A33T									
		-						KHRP25A72T			
			-				KHRP25A73T				
Outdoor unit multi piping connection kit	for 2 outdoor units	-	BHFP26MA56								
	for 3 outdoor units		-				BHFP26MA84				
Strainer kit		BWU26A15									
		BWU26A20									
External control adapter for outdoor unit		DTA104A62									

VRV®-W HEAT PUMP - STANDARD SERIES		RWEYQ8P	RWEYQ10P	RWEYQ16P	RWEYQ18P	RWEYQ20P	RWEYQ24P	RWEYQ26P	RWEYQ28P	RWEYQ30P	
Cool/Heat selector		KRC19-26A									
Fixing box		KJB111A									
REFNET header		KHRP26M22H (max. 4 branch)									
		KHRP26M33H (max. 8 branch)									
		-	KHRP26M72H (max. 8 branch)								
			-					KHRP26M73H (max. 8 branch)			
REFNET joint		KHRP26A22T									
		KHRP26A33T									
		-						KHRP26A72T			
			-				KHRP26A73T				
Outdoor unit multi piping connection kit	for 2 outdoor units	-	BHFP22MA56								
	for 3 outdoor units		-				BHFP22MA84				
Strainer kit		BWU26A15									
		BWU26A20									
External control adapter for outdoor unit		DTA104A62									



GEOTHERMAL SERIES

➤ BENEFITS

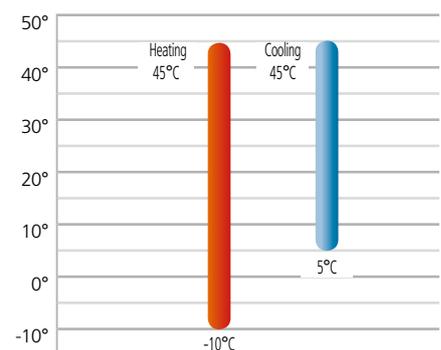
HEATING WITH GROUND SOURCED WATER AS A RENEWABLE ENERGY SOURCE

This water cooled system uses the renewable energy from ground water, water from lakes, rivers, ... Because the temperature of for example ground water remains relatively constant during the year, this systems has a superior efficiency, even in the most extreme outdoor temperatures.

EXTENDED OPERATION RANGE

The water cooled geothermal series have an inlet water temperature down to -10°C^* in heating, extending the water cooled application range.

* Ethylene glycol should be added to the water when the water inlet temperature is below 5°C



► SPECIFICATIONS

VRV®-W Heat recovery - Geothermal series

RWEYQ-PR				8	10
Capacity	Cooling		kW	22.4	26.7
	Heating		kW	25.0	31.5
COP (heating)				5.61	5.00
EER (cooling)				4.69	4.11
Max. n° of indoor units to be connected				13	16
Indoor index connection	minimum			100	125
	maximum			260	325
Casing	Colour	Ivory white (5Y7,5/1)			
Dimensions	Unit	Height	mm	1,000	
		Width	mm	780	
		Depth	mm	550	
Weight	Unit		kg	149	150
Heat Exchanger	Dimensions	Type	Stainless steel plate		
Inlet water temperature	cooling		°C	5 ~ 45	
	heating		°C	-10 ~ 45	
Compressor	Type	Hermetically sealed scroll compressor			
		number of compressors	1		1
Sound level	Cooling	Sound Pressure (Nominal)	dBA	*	*
Refrigerant	Name	R-410A			
	Charge		kg	3.5	4.2
	Control	Expansion valve (electronic type)			
Refrigerant Oil	Name	Synthetic (ether) oil			
Piping connections	Liquid (OD)	Type	Flare connection		
		Diameter (OD)	mm	9.52	9.52
	Discharge Gas	Type	Braze connection		
		Diameter (OD)	mm	15.9	19.1
	Gas	Type	Braze connection		
		Diameter (OD)	mm	19.1	22.2
	Water inlet	PT1 1/4B internal thread			
	Water outlet	PT1 1/4B internal thread			
Drain outlet	PS1 1/2B internal thread				
Capacity Control				23 to 100	23 to 100
Safety devices	HPS / Inverter overload protector / Fusible plugs				
Power Supply	Phase	3~			
	Frequency		Hz	50	
	Voltage		V	380-415	

Notes: Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, inlet water temperature: 30°C, equivalent refrigerant piping: 7.5m, level difference: 0m.
 Nominal heating capacities are based on: indoor temperature: 20°CDB, inlet water temperature: 20°C, equivalent refrigerant piping: 7.5m, level difference: 0m
 Hold ambient temperature at 0-46°C and humidity at 80%RH or less. Heat rejection from the casing: 0.64kW/8HP
 Hold ambient temperature at 0-40°C and humidity at 80%RH or less. Heat rejection from the casing: 0.71kW/10HP
 * data not available on time of publication

► ACCESSORIES

VRV®-W HEAT RECOVERY - GEOTHERMAL SERIES	RWEYQ8PR	RWEYQ10PR
Fixing box		KJB111A
REFNET header		KHRP25M33H (max. 8 branch)
REFNET joint		KHRP25A22T
		KHRP25A33T
Strainer kit		BWU26A15
		BWU26A20
External control adapter for outdoor unit		DTA104A62

➤ SPECIFICATIONS

VRV®-W Heat pump - Geothermal series

RWEYQ-PR				8	10
Capacity	Cooling	kW		22.4	26.7
	Heating	kW		25.0	31.5
COP (heating)				5.61	5.00
EER (cooling)				4.69	4.11
Max. n° of indoor units to be connected				13	16
Indoor index connection	minimum			100	125
	maximum			260	325
Casing	Colour			Ivory white (5Y7,5/1)	
Dimensions	Unit	Height	mm	1,000	
		Width	mm	780	
		Depth	mm	550	
Weight	Unit	kg		149	150
Heat Exchanger	Dimensions	Type		Stainless steel plate	
Inlet water temperature	cooling	°C		5 ~ 45	
	heating	°C		-10 ~ 45	
Compressor	Type			Hermetically sealed scroll compressor	
	number of compressors			1	1
Sound level	Cooling	Sound Pressure (Nominal)	dB(A)	*	*
Refrigerant	Name			R-410A	
	Charge	kg		3.5	4.2
	Control			Expansion valve (electronic type)	
Refrigerant Oil	Name			Synthetic (ether) oil	
	Liquid (OD)	Type	Flare connection		
Diameter (OD)		mm	9.52	9.52	
Piping connections	Discharge Gas	Type	Braze connection		
		Diameter (OD)	mm	19.1	22.2
	Water inlet	PT1 1/4B internal thread			
	Water outlet	PT1 1/4B internal thread			
Drain outlet	PS1 1/2B internal thread				
Capacity Control				23 to 100	23 to 100
Safety devices				HPS / Inverter overload protector / Fusible plugs	
Power Supply	Phase			3~	
	Frequency	Hz		50	
	Voltage	V		380-415	

Notes: Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, inlet water temperature: 30°C, equivalent refrigerant piping: 7.5m, level difference: 0m. Nominal heating capacities are based on: indoor temperature: 20°CDB, inlet water temperature: 20°C, equivalent refrigerant piping: 7.5m, level difference: 0m. Hold ambient temperature at 0-46°C and humidity at 80%RH or less. Heat rejection from the casing: 0.64kW/8HP. Hold ambient temperature at 0-40°C and humidity at 80%RH or less. Heat rejection from the casing: 0.71kW/10HP. * data not available on time of publication

➤ ACCESSORIES

VRV®-W HEAT PUMP - GEOTHERMAL SERIES	RWEYQ8PR	RWEYQ10PR
Cool/Heat selector	KRC19-26A	
Fixing box	KJB111A	
REFNET header	KHRP26M22H (max. 4 branch)	
	KHRP26M33H (max. 8 branch)	
REFNET joint	KHRP26A22T	
	KHRP26A33T	
Strainer kit	BWU26A15	
	BWU26A20	
External control adapter for outdoor unit	DTA104A62	

INDOOR UNITS

As many as 64 separate indoor units can be operated from the single refrigerant circuit of a 54 HP VRV® heat pump system. In fact, the Daikin VRV® indoor unit range, one of the widest on the market, currently comprises **NO LESS THAN 26 DIFFERENT STYLISH AND ELEGANT MODELS IN 110 DIFFERENT VARIANTS** – all designed to maximise comfort, minimise operating noise and simplify installation and servicing.

VRV® indoor units are modern, technologically advanced and come in ceiling mounted cassette, concealed ceiling, ceiling suspended, wall mounted and floor standing models. Recently, the range has been extended by the visually striking and much acclaimed roundflow ceiling mounted cassette with its unique 360° air flow distribution pattern.

Designed to fit rooms of any size and shape, Daikin indoor units are also user friendly, quiet running, ultra reliable, easy to control and supply users with that relaxing 'extra something' to the indoor climate.



CEILING MOUNTED CASSETTES



CEILING SUSPENDED UNITS



CONCEALED CEILING UNITS



FLOOR STANDING UNITS



WALL MOUNTED UNITS

CEILING MOUNTED CASSETTES P 78

CONCEALED CEILING UNITS P 90

WALL MOUNTED UNITS P 108

CEILING SUSPENDED UNITS P 116

FLOOR STANDING UNITS P 122



FXFQ-P8

20-25-32-40-50-63-80-100-125

ROUND FLOW CEILING MOUNTED CASSETTE

Comfort & Efficiency

- › 360° air discharge ensures uniform air flow and temperature distribution
- › Air discharge from the corners avoids dead zones that may be subject to temperature differences
- › Modern style decoration panel is available in 2 variations: White (RAL9010) with grey louvers and full white (RAL9010) including white louvers
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence
- › Fresh air intake: up to 20%
- › Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- › 23 different air flow patterns possible



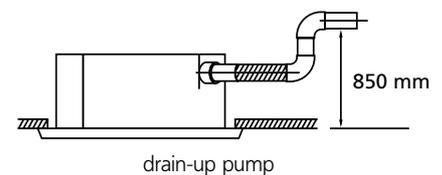
FXFQ20-63P8
White with grey louvers



FXFQ20-63P8
Full white

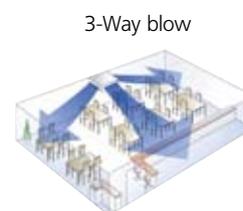
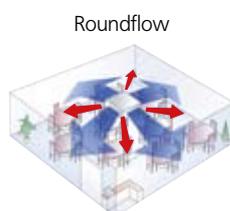
Flexible installation and Easy maintenance

- › Reduced installation height: 214mm for class 20-63
- › Drain-up pump with 850 mm lift fitted as standard
- › Easy visible drain check thanks to clear drain socket
- › Allows multi tenant applications (option PCB required)



Examples of Airflow Patterns

360° radial round flow
enables uniform air
flow distribution



¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXFQ-P8				20	25	32	40	50	63	80	100	125	
Cooling capacity			kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	
Heating capacity			kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	
Nominal input	cooling		kW	0.053			0.063	0.083	0.095	0.120	0.173	0.258	
	heating		kW	0.045			0.055	0.067	0.114	0.108	0.176	0.246	
Dimensions (H x W x D)			mm	204 x 840 x 840						246 x 840 x 840		288 x 840 x 840	
Weight			kg	20.0				21.0		24.0		26.0	
Casing				Galvanised steel									
Air Flow Rate	cooling	high / low	m ³ / min	12.5 / 9.0			13.5 / 9.0	15.5 / 10.0	16.5 / 11.0	23.5 / 14.5	26.5 / 17.0	33.0 / 20.0	
	heating	high / low	m ³ / min	12.5 / 9.0			13.5 / 9.0	15.0 / 9.5	17.5 / 12.0	23.5 / 14.5	28.0 / 17.5	33.0 / 20.0	
Sound power (nominal)		cooling	dB(A)	49			50	51	52	55	58	61	
Sound pressure	cooling	high / low	dB(A)	31 / 28			32 / 28	33 / 28	34 / 29	38 / 32	41 / 33	44 / 34	
	heating	high / low	dB(A)	31 / 28			32 / 28	33 / 28	36 / 30	38 / 32	42 / 34	44 / 34	
Refrigerant		name		R-410A									
Power Supply				1 ~ / 220-240V / 50Hz									
Piping Connections		Liquid / Gas / Drain	diameter	mm	6.35 / 12.7 / 32			6.4 / 12.7 / 32		9.5 / 15.9 / 32			
Air Filter				Resin net with mold resistance									
Drain-up Height			mm	750									
Decoration Panel	model			BYCQ140CW1 / BYCQ140CW1W									
	colour			RAL9010									
	dimensions (H x W x D)		mm	50x950x950									
	weight		kg	5.5									

Notes:

The sound pressure values are mentioned for a unit installed with rear suction

The sound power level is an absolute value indicating the power which a sound source generates.

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m.

Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m.

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

ACCESSORIES

FXFQ-P8				20	25	32	40	50	63	80	125
Wired remote control				BRC1D52							
Infrared remote control	cooling only			BRC7F533F							
	heat pump			BRC7F532F							
Decoration panel				BYCQ140CW1 / BYCQ140CW1W							
Replacement long life filter (non-woven type)				KAFP551K160							
Fresh air intake kit (20% fresh air intake) (chamber type)				KDDQ55C140							
Air discharge outlet sealing member				KDBHQ55C140							
PCB for multi tenant				DTA114A61 *1							

*1 Mounting plate KRP4A96 is required



FCQ-C

35-50-60

ROUND FLOW CEILING MOUNTED CASSETTE

Comfort & Efficiency

- › 360° air discharge ensures uniform air flow and temperature distribution
- › Air discharge from the corners avoids dead zones that may be subject to temperature differences
- › Modern style decoration panel is available in 2 variations: White (RAL9010) with grey louvers and full white (RAL9010) including white louvers
- › Quiet in operation
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence
- › Fresh air intake: up to 20%
- › Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- › 23 different air flow patterns possible



FCQ-C
White with grey louvers



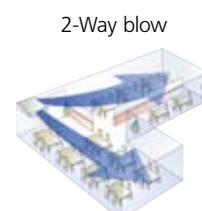
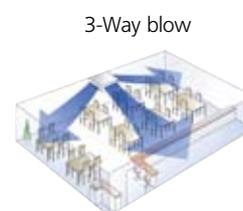
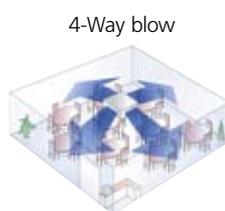
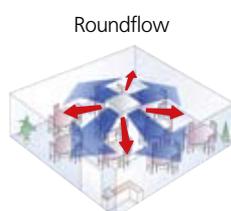
FCQ-C
Full white

Flexible installation and Easy maintenance

- › Reduced installation height: 214mm for class 20-63
- › Standard connection to D3-net without the need of an adapter PCB
- › Easy condensate drain check

Examples of Airflow Patterns

360° radial round flow enables uniform air flow distribution



¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FCQ-C			35	50	60	
Power input	cooling	kW		-		
	heating	kW		-		
Dimensions (HxWxD)		mm		204x840x840		
Weight		kg		19		
Casing				Galvanised steel		
Air flow rate	cooling	H/L	m ³ /min	10.5 / 8.5	12.5 / 8.5	13.5 / 8.5
	heating	H/L	m ³ /min	12.5 / 10.0	12.5 / 8.5	13.5 / 8.5
Fan speed			steps	2		
Sound pressure level	cooling	H/L	dB(A)	31 / 27	31 / 27	33 / 28
	heating	H/L	dB(A)	31 / 27	31 / 27	33 / 28
Sound power level	cooling	H	dB(A)	49	49	51
Refrigerant type				R-410A		
Piping connections	liquid / gas / drain (VP25)	mm	ø6.25 / ø9.52 / ID ø25.0 - OD ø32.0	ø6.25 / ø12.7 / ID ø25.0 - OD ø32.0		
Heat insulation				Foamed Polystyrene / Foamed Polyethylene		
Air filter				Resin net with mold resistance		
Power supply				1 ~, 220-240V, 50Hz		
Decoration panel	model			BYCQ140CW1 / BYCQ140CW1W		
	colour			RAL9010		
	dimensions (HxWxD)	mm		50x950x950		
	weight	kg		5.5		

Notes:

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat
 Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FCQ-C	35	50	60
Wired remote control		BRC1D52	
Infrared remote control		BRC7F532F	
Decoration panel		BYCQ140CW1 / BYCQ140CW1W	
Replacement long life filter (non-woven type)		KAFP551K160	
Fresh air intake kit (20% fresh air intake)		KDDQ55C140	
Air discharge outlet sealing member		KDBHQ55C140	



FXZQ-M9

20-25-32-40-50

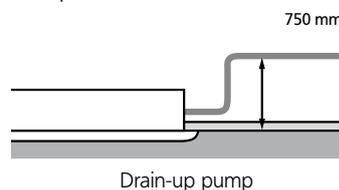
4-WAY BLOW CEILING MOUNTED CASSETTE 600 X 600MM

Comfort & Efficiency

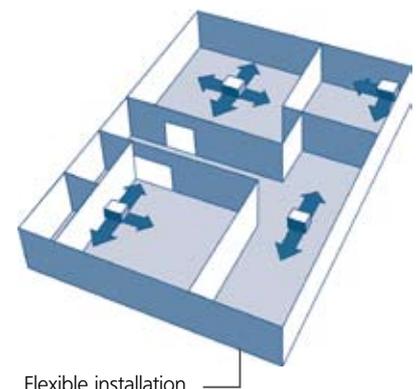
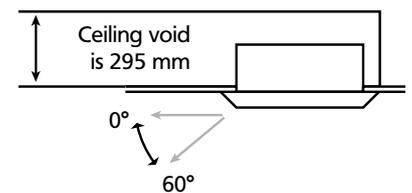
- › Modern style decoration panel in white (RAL9010)
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence
- › Whisper quiet operation: down to 25 dBA sound pressure level
- › Fresh air intake for healthy living
- › Comfortable air discharge ensures draught for operation and prevents ceiling soiling
- › Since the flaps can move to a 0° position, virtually no draught can be experienced
- › 5 different air flow patterns can be freely selected between 0° and 60°

Flexible installation and Easy maintenance

- › Compact casing (575mm in width and depth) enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles.
- › Possibility to shut 1 or 2 flaps for easy installation in corners
- › The switch box can be reached by simply removing the suction grille; therefore maintenance can be done very easily
- › Drain-up pump with 750mm lift fitted as standard
- › Allows multi tenant applications (option required)



FXZQ20-50M9



¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXZQ-M9			20	25	32	40	50
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3
Nominal input	cooling	W	73	73	76	89	115
	heating	W	64	64	68	80	107
Dimensions (HxWxD)		mm	286x575x575				
Weight		kg	18				
Casing			Galvanised steel plate				
Air flow rate (H/L)		m ³ /min	9.0/7.0	9.0/7.0	9.5/7.5	11.0/8.0	14.0/10.0
Sound pressure level (H/L) (220V)		dB(A)	30/25	30/25	32/26	36/28	41/33
Sound power level		dB(A)	47	47	49	53	58
Refrigerant type			R-410A				
Piping connections	liquid / gas	mm	ø6.4 / ø12.7				
Air filter			Resin net with mold resistant				
Drain-up height		mm	500				
Power supply		V1	1 ~, 50Hz, 220-240V				
Decoration panel	dimensions (HxWxD)	mm	55x700x700				
	weight	kg	2.7				
	colour		White (RAL 9010)				

Notes:

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent piping length: 7.5m (horizontal).

Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent piping length: 7.5m (horizontal).

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

ACCESSORIES

FXZQ-M9			20	25	32	40	50
Wired remote control					BRC1D52		
Infrared remote control	cooling only				BRC7E531		
	heat pump				BRC7E530		
Decoration panel					BYFQ60B		
Sealing member of air discharge outlet					KDBH44BA60		
Panel spacer					KDBQ44B60		
Replacement long life filter					KAFQ441B60		
Fresh air intake kit	direct installation type				KDDQ44XA60		
Multi tenant option					EKMTAC		



FFQ-B

25-35-50-60

4-WAY BLOW CEILING MOUNTED CASSETTE 600 X 600MM

Comfort & Efficiency

- › Modern style decoration panel in white (RAL9010)
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence
- › Whisper quiet operation: down to 24.5 dBA sound pressure level
- › Fresh air intake for healthy living
- › Comfortable horizontal air discharge ensures draught free operation and prevents ceiling soiling

Flexible installation and Easy maintenance

- › Compact casing (575mm in width and depth) enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles



FFQ-B

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FFQ-B				25	35	50	60
Nominal input	cooling		kW	0.073	0.084	0.097	0.120
	heating		kW	0.064	0.076	0.089	0.111
Dimensions (HxWxD)			mm	286x575x575			
Weight			kg	17.5			
Casing				Galvanised steel plate			
Fan speed				2 steps (direct drive)			
Air flow rate	cooling	H/L	m ³ / min	9 / 6.5	10 / 6.5	12 / 8	15 / 10
	heating	H/L	m ³ / min	9 / 6.5	10 / 6.5	12 / 8	15 / 10
Sound pressure level	cooling	H/L	dB(A)	29.5 / 24.5	32 / 25	36 / 27	41 / 32
	heating	H/L	dB(A)	29.5 / 24.5	32 / 25	36 / 27	41 / 32
Sound power level	cooling	H	dB(A)	46.5	49	53	58
Refrigerant type				R-410A			
Piping connections	liquid / gas / drain		mm	ø6.4 / ø9.5 / ø20.0		ø6.4 / ø12.7 / ø20.0	
Heat insulation				Both liquid and gas pipes			
Air filter				Removable / washable / mildew proof / long life			
Power supply			V1	1 ~, 230V, 50Hz			
Decoration panel	Model			BYFQ60B			
	Dimensions (HxWxD)		mm	55x700x700			
	Weight		kg	2.7			
	Colour			White (RAL9010)			

Notes:

Nominal cooling capacities measured at: indoor temperature 27°CDB / 19°CWB, outdoor temperature 35°CDB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m, level difference 0m

Nominal heating capacities measured at: indoor temperature 20°CDB, outdoor temperature 7°CDB / 6°CWB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m level difference 0m

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat

Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FFQ-B				25	35	50	60
Wired remote control						BRC1D52	
Infrared remote control						BRC7E530	
Decoration panel				BYFQ60B		BYFQ60B	
Long-life filter				KAFQ441BA60		KAFQ441BA60	
Fresh air intake kit	Direct installation type			KDDQ44XA60		KDDQ44XA60	
Sealing member of air discharge outlet				KDBH44BA60		KDBH44BA60	
Panel spacer				KDBQ44B60		KDBQ44B60	



FXCQ-M8

20-25-32-40-50-63-80-125

2-WAY BLOW CEILING MOUNTED CASSETTE

Comfort & Efficiency

- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence
- › Auto-swing function ensures efficient air and temperature distribution and prevents ceiling soiling

Filter

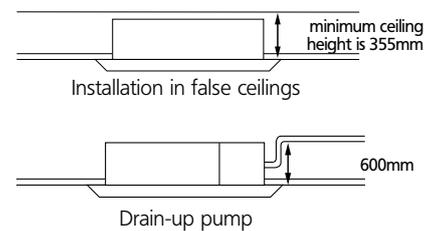
- › Standard long life filter

Flexible installation and Easy maintenance

- › Easy to install: depth of all units is 600mm
- › Easy installation in false ceilings of only 355mm
- › Maintenance operations can be performed by simply removing the front panel
- › Drain-up pump with 600mm lift fitted as standard
- › Easy to clean flat suction grille
- › Detachable swing flaps



FXCQ20-32M8



¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXCQ-M8			20	25	32	40	50	63	80	125	
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	14.0	
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	16.0	
Nominal input	cooling	kW	0.077	0.092	0.092	0.130	0.130	0.161	0.209	0.256	
	heating	kW	0.044	0.059	0.059	0.097	0.097	0.126	0.176	0.223	
Dimensions (HxWxD)		mm	305 x 780 x 600			305 x 995 x 600		305 x 1,180 x 600	305 x 1,670 x 600		
Weight		kg	26			31	32	35	47	48	
Casing			Galvanised steel plate								
Air flow rate (H/L)		m ³ /min	7/5	9/6.5	9/6.5	12/9	12/9	16.5/13	26/21	33/25	
Sound pressure level (H/L)		dB(A)	33/28	35/29	35/29	35.5/30.5	35.5/30.5	38/33	40/35	45/39	
Sound power level		dB(A)	45	50	50	50	50	52	54	60	
Refrigerant type			R-410A								
Piping connections	liquid / gas	mm	ø6.4/ø12.7					ø9.5/ø15.9			
Air filter			Resin net with mold resistant								
Drain-up height		mm	600								
Power supply		V3	1 ~, 50Hz, 230V								
Decoration panel	dimensions (HxWxD)	mm	53 x 1,030 x 680			53 x 1,245 x 680		53 x 1,430 x 680	53 x 1,920 x 680		
	weight	kg	8			8.5		9.5	12		
	colour		Ivory white								

Notes:

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 8m • level difference: 0m.
 Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 8m • level difference: 0m.
 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

ACCESSORIES

FXCQ-M8			20	25	32	40	50	63	80	125	
Wired remote control			BRC1D52								
Infrared remote control	cooling only		BRC7C67								
	heat pump		BRC7C62								
Decoration panel			BYBC32G			BYBC50G		BYBC63G	BYBC125G		
High efficiency filter 65% *1			KAFJ532G36			KAFJ532G56		KAFJ532G80	KAFJ532G160		
High efficiency filter 90% *1			KAFJ533G36			KAFJ533G56		KAFJ533G80	KAFJ533G160		
Filter chamber for bottom suction			KDDFJ53G36			KDDFJ53G56		KDDFJ53G80	KDDFJ53G160		
Replacement long life filter			KAFJ531G36			KAFJ531G56		KAFJ531G80	KAFJ531G160		

Note:

*1. Filter chamber is required when installing a high efficiency filter.



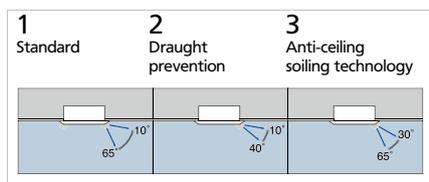
FXKQ-MA

25-32-40-63

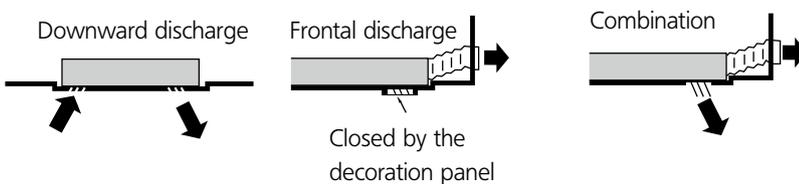
CEILING MOUNTED CORNER CASSETTE

Comfort & Efficiency

- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency
- › Home leave operation saves energy during absence
- › Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling



- › Optimum air flow conditions are created by either downward air discharge or frontal air discharge (via optional grille) or a combination of both

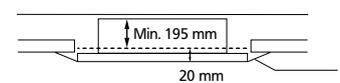


Flexible installation

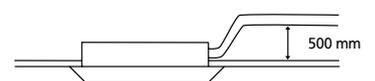
- › Compact dimensions, can easily be mounted in a narrow ceiling void (only 220 mm ceiling space required, 195 with panel spacer, available as accessory)
- › Drain-up pump with 500mm lift fitted as standard



FXKQ63MA



Panel spacer



Drain-up pump

¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXKQ-MA		25	32	40	63	
Cooling capacity	kW	2.8	3.6	4.5	7.1	
Heating capacity	kW	3.2	4.0	5.0	8.0	
Nominal input	cooling	kW	0.066	0.066	0.076	0.105
	heating	kW	0.046	0.046	0.056	0.085
Dimensions (HxWxD)	mm	215 x 1,110 x 710			215 x 1,310 x 710	
Weight	kg	31			34	
Casing		Galvanised steel plate				
Air flow rate (H/L)	m ³ /min	11/9	11/9	13/10	18/15	
Sound pressure level (H/L) (220V)	dB(A)	38/33	38/33	40/34	42/37	
Sound power level	dB(A)	-				
Refrigerant type		R-410A				
Piping connections	liquid/gas	mm	ø6.4/ø12.7		ø9.5/ø15.9	
Air filter		Resin net with mold resistant				
Drain-up height	mm	500				
Power supply	VE	1~, 50Hz, 220-240V				
Decoration panel	dimensions (HxWxD)	mm	70 x 1,240 x 800		70 x 1,440 x 800	
	weight	kg	8.5		9.5	
	colour		Ivory white			

Notes:

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 7.5m (horizontal).

Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 7.5m (horizontal).

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

ACCESSORIES

FXKQ-MA		25	32	40	63
Wired remote control				BRC1D52	
Infrared remote control	cooling only			BRC4C63	
	heat pump			BRC4C61	
Decoration panel			BYK45F		BYK71F
Panel spacer			KPBJ52F56		KPBJ52F80
Replacement long life filter			KAFJ521F56		KAFJ521F80
Air discharge grille			K-HV7AW		K-HV9AW
Air discharge blind panel			KDBJ52F56W		KDBJ52F80W
Flexible duct (with shutter)			KFDJ52F56		KFDJ52F80



FXDQ-M9

20-25

SMALL CONCEALED CEILING UNIT

Comfort & Efficiency

- › Designed for hotel bedrooms
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence

Filter

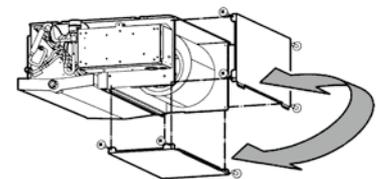
- › Standard air filter: removes airborne dust particles to ensure a steady supply of clean air

Flexible Installation

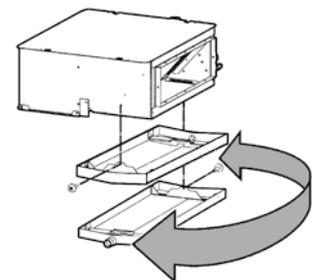
- › Compact dimensions (230mm high & 652mm deep), can easily be mounted in a ceiling void
- › The air suction direction can be altered from rear to bottom suction
- › For easy mounting, the drain pan can be located to the left or the right of the unit
- › Allows multi tenant applications (option required)



FXDQ20-25M9



Air suction direction



Drain pan

¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXDQ-M9			20	25
Cooling capacity		kW	2.2	2.8
Heating capacity		kW	2.5	3.2
Nominal input	cooling	kW	0.050	
	heating	kW	0.050	
Dimensions (HxWxD)		mm	230x502x652	
Weight		kg	17	
Casing			Galvanised steel plate	
Air flow rate (H/L)		m ³ /min	6.7/5.2	7.4/5.8
External static pressure		Pa	-	-
Sound pressure level (H/L)		dB(A)	37/32	
Sound power level		dB(A)	50	
Refrigerant type			R-410A	
Piping connections	liquid/gas	mm	ø6.4/ø12.7	
Air filter			Resin net with mold resistant	
Power supply		V3	1 ~, 50Hz, 230V	

Notes :

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 8m • level difference : 0m
 Nominal heating capacities are based on: indoor air temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 8m • level difference : 0m
 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

ACCESSORIES

FXDQ-M9			20	25
Wired remote control			BRC1D52, BRC2C51, BRC3A61	
Infrared remote control	cooling		BRC4C64	
	heating		BRC4C62	
Multi tenant option			EKMTAC	



FDBQ-B

25

SMALL CONCEALED CEILING UNIT

Comfort & Efficiency

- › Designed for hotel bedrooms
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence
- › Whisper quiet operation: down to 28 dBA sound pressure level

Filter

- › Standard air filter: removes airborne dust particles to ensure a steady supply of clean air

Flexible Installation

- › Compact dimensions (230mm high & 652mm deep), can easily be mounted in a ceiling void



FDBQ-B

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FDBQ-B				25
Nominal input	cooling		kW	-
	heating		kW	-
Dimensions		HxWxD	mm	230x652x502
Weight			kg	17
Casing				Galvanised steel plate
Fan speed			steps	2 steps (direct drive)
Air flow rate	cooling	H / L	m ³ /min	6.5 / 5.2
	heating	H / L	m ³ /min	6.5 / 5.2
External static pressure				-
Sound pressure level	cooling	H / L	dB(A)	35 / 28
	heating	H / L	dB(A)	35 / 29
Sound power level	cooling	H	dB(A)	55 / 49
Refrigerant type				R-410A
Piping connections	liquid / gas / drain (VP20)		mm	6.4 / 9.5 / ID21.6 - OD 27.2
Heat insulation				Both liquid and gas pipes
Air filter				Resin net with mold resistance
Power supply			V1	1 ~ 220-240V,50Hz

Notes:
 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat
 Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FDBQ-B				25
Wired remote control				BRC1D52, BRC2C51, BRC3A61



FXDQ-PB

20-25-32

SLIM CONCEALED CEILING UNIT

Comfort & Efficiency

- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence

Filter

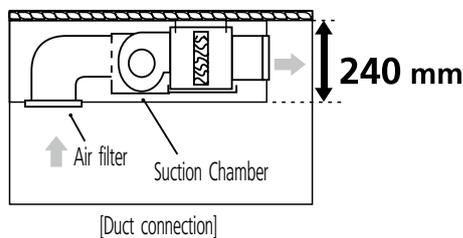
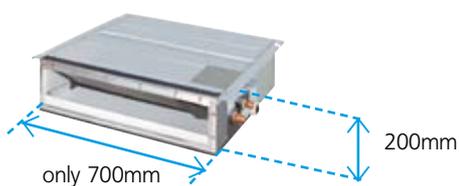
- › Standard air filter: removes airborne dust particles to ensure a steady supply of clean air

Flexible Installation

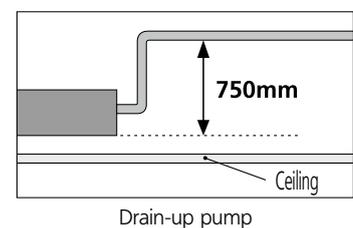
- › Compact dimensions, can easily be mounted in a ceiling void of only 240mm



FXDQ20-32PB



- › Medium external static pressure facilitates unit use with flexible ducts of varying lengths
- › Drain-up pump with 750mm lift fitted as standard
- › Allows multi tenant applications (option required)



¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXDQ-PB			20	25	32
Cooling capacity		kW	2.2	2.8	3.6
Heating capacity		kW	2.5	3.2	4.0
Nominal input	cooling	kW	0.086	0.086	0.089
	heating	kW	0.067	0.067	0.070
Dimensions (HxWxD)		mm	200 x 700 x 620		
Weight		kg	23	23	23
Casing			Galvanised steel plate		
Air flow rate (H/L)		m ³ /min	8.0/6.4	8.0/6.4	8.0/6.4
External static pressure		Pa	-		
Sound pressure level (H/L)		dB(A)	33/29	33/29	33/29
Sound power level		dB(A)	-		
Refrigerant type			R-410A		
Drain-up height		mm	750		
Piping connections		liquid / gas	ø6.4 / ø12.7		
Air filter			Removable, washable, mildew proof		
Power supply		VE	1 ~, 50Hz, 220-240V		

Notes:

Nominal cooling capacities are based on: • Indoor temperature: 27°CDB, 19°CWB • Outdoor temperature: 35°CDB • Equivalent piping length: 7.5m (horizontal).
 Nominal heating capacities are based on: • Indoor temperature: 20°CDB • Outdoor temperature: 7°CDB, 6°CWB • Equivalent piping length: 7.5m (horizontal).
 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
 The sound pressure values are mentioned for a unit installed with rear suction.

ACCESSORIES

FXDQ-PB			20	25	32
Wired remote control				BRC1D52	
Infrared remote control	cooling only			BRC4C64	
	heat pump			BRC4C62	
Insulation kit for high humidity				KDT25N32	
Multi tenant option				EKM7AC	



FXDQ-NB

40-50-63

SLIM CONCEALED CEILING UNIT

Comfort & Efficiency

- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence

Filter

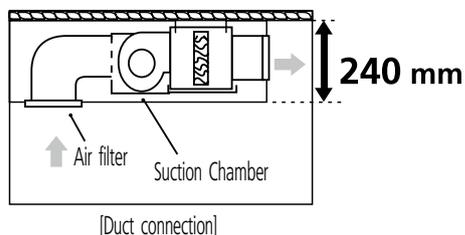
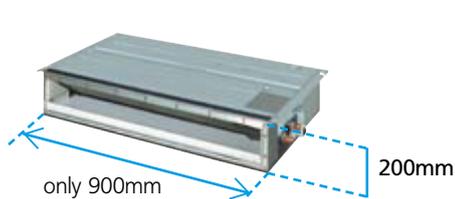
- › Standard air filter: removes airborne dust particles to ensure a steady supply of clean air

Flexible Installation

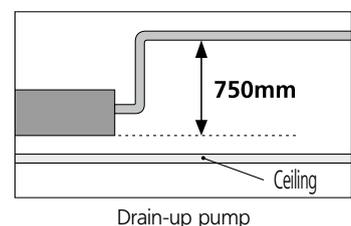
- › Compact dimensions, can easily be mounted in a ceiling void of only 240mm



FXDQ40-50NB



- › Medium external static pressure facilitates unit use with flexible ducts of varying lengths
- › Drain-up pump with 750mm lift fitted as standard
- › Allows multi tenant applications (option required)



Drain-up pump

¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXDQ-NB			40	50	63
Cooling capacity		kW	4.5	5.6	7.1
Heating capacity		kW	5.0	6.3	8.0
Nominal input	cooling	kW	0.160	0.165	0.181
	heating	kW	0.070	0.152	0.168
Dimensions (HxWxD)		mm	200 x 900 x 620		200 x 1.100 x 620
Weight		kg	27	28	31
Casing			Galvanised steel plate		
Air flow rate (H/L)		m ³ /min	10.5/8.5	12.5/10.0	16.5/13.0
External static pressure		Pa	-		
Sound pressure level (H/L)		dB(A)	34/30	35/31	36/32
Sound power level		dB(A)	-		
Refrigerant type			R-410A		
Drain-up height		mm	750		
Piping connections	liquid / gas	mm	ø6.4 / ø12.7		ø9.5 / ø15.9
Air filter			Removable, washable, mildew proof		
Power supply		VE	1 ~, 50Hz, 220-240V		

Notes:

Nominal cooling capacities are based on: • Indoor temperature: 27°CDB, 19°CWB • Outdoor temperature: 35°CDB • Equivalent piping length: 7.5m (horizontal).
 Nominal heating capacities are based on: • Indoor temperature: 20°CDB • Outdoor temperature: 7°CDB, 6°CWB • Equivalent piping length: 7.5m (horizontal).
 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
 The sound pressure values are mentioned for a unit installed with rear suction.

ACCESSORIES

FXDQ-NB			40	50	63
Wired remote control				BRC1D52	
Infrared remote control	cooling only			BRC4C64	
	heat pump			BRC4C62	
Insulation kit for high humidity			KDT25N50		KDT25N63
Multi tenant option				EKMTAC	



FDXS-E/C

25-35-50-60

SLIM CONCEALED CEILING UNIT

Comfort & Efficiency

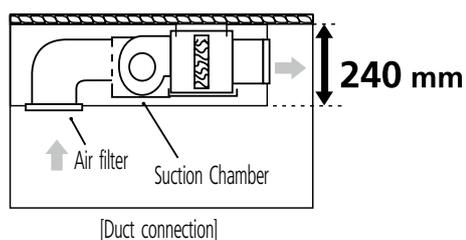
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence
- › Night set mode saves energy by preventing overcooling or overheating during night time
- ›
- › Powerful mode can be selected for rapid cooling or heating

Filter

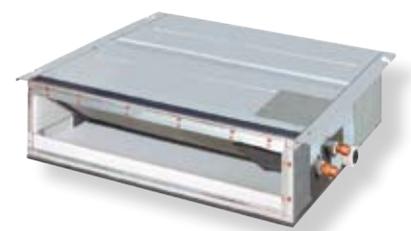
- › Standard suction filter: removes airborne dust particles to ensure a steady supply of clean air

Flexible Installation

- › Compact dimensions, can easily be mounted in a ceiling void of only 240mm



- › Medium external static pressure facilitates unit use with flexible ducts of varying lengths



FDXS25,35E

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FDXS-E/C				25	35	50	60
Nominal input	cooling		kW	0.071		0.071	
	heating		kW	0.071		0.071	
Dimensions (HxWxD)			mm	200x700x620		200x1,100x620	
Weight			kg	21		27	30
Casing				Galvanised steel plate			
Fan speed			steps	5 steps, silent and auto		5 steps, silent and auto	
Air flow rate	cooling	H/L/SL	m ³ /min	8.7/7.3/6.2	8.7/7.3/6.2	12.0/10.0/8.4	16.0/13.5/11.2
	heating	H/L/SL	m ³ /min	8.7/7.3/6.2	8.7/7.3/6.2	12.0/10.0/8.4	16.0/13.5/11.2
External static pressure			Pa	-		-	
Sound pressure level	cooling	H/L/SL	dB(A)	35/31/29	35/31/29	37/33/31	38/34/32
	heating	H/L/SL	dB(A)	35/31/29	35/31/29	37/33/31	38/34/32
Sound power level	cooling	H	dB(A)	53	53	55	56
Refrigerant type				R-410A			
Piping connections	liquid / gas / drain		mm	ø6.4 / 9.5 / ID 20.0 - OD 26.0		ø6.4 / 12.7 / ID 20.0 - OD 26.0	
Heat insulation				Both liquid and gas pipes			
Air filter				Removable, washable, mildew proof			
Power supply			V1 / VM	1 ~, 220-240, 50Hz			

Notes:

Nominal cooling capacities measured at: indoor temperature 27°CDB/19°CWB, outdoor temperature 35°CDB, equivalent piping length:: outdoor-BP 5m, BP-indoor 3m, level difference 0m

Nominal heating capacities measured at: indoor temperature 20°CDB, outdoor temperature 7°CDB/6°CWB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m level difference 0m

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat

Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FDXS-E/C	25	35	50	60
Infrared remote control			ARC433A8	
Anti-theft protection for remote control			KKF917AA4	
Suction grille			KDGF19A45	



NEW >>>

FXSQ-P

20-25-32-40-50-63-80-100-125

INVERTER DRIVEN CONCEALED CEILING UNIT

Comfort & Efficiency

- › Reduction of power consumption of 20% (compared to previous series) through use of new DC fan
- › Improved comfort thanks to 3-step airflow control
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of an integrated inverter control ensures maximum comfort and efficiency
- › Home leave operation saves energy during absence

Filter

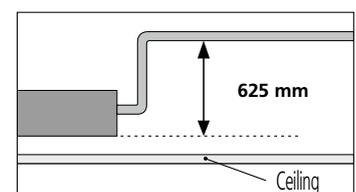
- › Standard air filter: removes airborne dust particles to ensure a steady supply of clean air

Flexible Installation

- › External static pressure up to 120 Pa facilitates the use with flexible ducts of varying lengths: ideal for shops and medium size offices
- › Possibility to change ESP through wired remote control allows optimisation of the supply air volume
- › Built-in drain pump as standard increases reliability of the drain system
- › Allows multi tenant applications (option PCB required)
- › Easy installation thanks to automatic air flow adjustment towards nominal air flow rate



FXSQ40-50P



Drain-up pump

¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXSQ-P			20	25	32	40	50	63	80	100	125	
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	12.0	16.0	
Nominal Input	cooling	kW	0.073	0.073	0.079	0.192	0.192	0.142	0.163	0.247	0.303	
	heating	kW	0.061	0.061	0.067	0.180	0.180	0.130	0.151	0.235	0.291	
Dimensions (HxWxD)		mm	300x550x700			300x700x700		300x1,000x700		300x1,400x700		
Weight		kg	23	23	23	26	26	35	35	46	46	
Casing			Galvanised steel									
Air Flow Rate	cooling	Max.	m ³ /min	9	9	9.5	16	16	19.5	25	32	39
		Min.	m ³ /min	6.5	6.5	7	11	11	16	20	23	28
External static pressure	high		Pa	70	70	70	100	100	100	100	120	120
	standard		Pa	30	30	30	30	30	30	40	40	50
Sound pressure level (H/L)			26 / 32	26 / 32	29 / 37	29 / 37	29 / 37	30 / 37	32 / 38	33 / 38	33 / 40	
Sound power level			51	51	52	58	58	56	56	62	62	
Refrigerant type			R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	
Piping connections	liquid (od) / gas / drain	mm	6.35 / 12.7 / VP25 (O.D. 32 / I.D. 25)					9.52 / 15.9 / VP25 (O.D. 32 / I.D. 25)				
Power Supply			1 ~ 50Hz, 220-240V									

Notes:

Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.
 Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m, level difference : 0m.
 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
 The sound pressure values are mentioned for a unit installed with rear suction

ACCESSORIES

FXSQ-P			20	25	32	40	50	63	80	100	125
Wired remote control			BRC1D52, BRC2C51, BRC3A61								
Infrared remote control	cooling only		BRC4C66								
	heat pump		BRC4C65								
Decoration panel			BYBS3ZD			BYBS4SD		BYBS71D		BYBS12SD	
Air discharge adapter for round duct			KDAJ25K36			KDAJ25KA56		KDAJ25KA71		KDAJ25KA140	
PCB for multi tenant			DTA114A61*2								

Notes:

- *1. If installing a high efficiency filter in the unit, an assembly chamber for either bottom or rear suction is required.
- *2. Mounting plate KRP4A96 is required



FBQ-C
35-50-60

INVERTER DRIVEN CONCEALED CEILING UNIT

Comfort & Efficiency

- › Reduction in power consumption thanks to DC inverter fans
- › Improved comfort thanks to 3-step airflow control
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of an integrated inverter control ensures maximum comfort and efficiency
- › Home leave operation saves energy during absence

Flexible Installation

- › Maximum external static pressure (ESP) is 100Pa
- › Possibility to change ESP through wired remote control allows optimisation of the supply air volume



FBQ35,50C

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FBQ-C				35	50	60
Nominal input	cooling		kW	0.090	0.140	0.350
	heating		kW	0.090	0.140	0.350
Dimensions (HxWxD)			mm	300x700x700		300x1,000x700
Weight			kg	25	25	34
Casing				Galvanised steel plate		
Air flow rate	cooling	H/L	m³/min	16 / 11	16 / 11	18 / 15
	heating	H/L	m³/min	16 / 11	16 / 11	18 / 15
External static pressure				-		
Fan speed			steps	10	10	8
Sound pressure level	cooling	H/L	dB(A)	37 / 29	37 / 29	37 / 29
	heating	H/L	dB(A)	37 / 29	37 / 29	37 / 29
Sound power level	cooling	H	dB(A)	63	63	57
Refrigerant type				R-410A		
Piping connections	liquid / gas / drain (VP25)		mm	6.35 / 9.52 / ID 25 - OD 32		6.35 / 12.7 / ID 25 - OD 32
Heat insulation				Both liquid and gas pipes		
Air filter				Resin net with mold resistance		
Power supply			V1	1 ~ 220-240V/50/60Hz		

Notes:

Nominal cooling capacities measured at: indoor temperature 27°CDB/19°CWB, outdoor temperature 35°CDB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m, level difference 0m

Nominal heating capacities measured at: indoor temperature 20°CDB, outdoor temperature 7°CDB/6°CWB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m level difference 0m

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat

Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FBO-C	35	50	60
Wired remote control	BRC1D52, BRC2C51, BRC3A61		
Infrared remote control	BRC4C62		
Decoration panel	BY8S45D		BY8S71D
Air discharge adapter for round duct	KDAJ25K56A		KDAJ25K71A



FXMQ-P

40-50-63-80-100-125

INVERTER DRIVEN CONCEALED CEILING UNIT



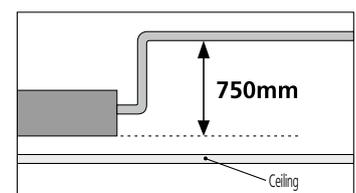
FXMQ50-80P

Comfort & Efficiency

- › Reduction of power consumption of 20% (compared to previous series) through use of new DC fan
- › Improved comfort thanks to 3-step airflow control
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence

Flexible Installation

- › Up to 200 Pa external static pressure allows extensive ductwork runs and flexible application: ideal for use in large areas
- › Possibility to change ESP through wired remote control allows optimisation of the supply air volume
- › Built-in drain pump as standard increases reliability of the drain system
- › Allows multi tenant applications (option PCB required)



Drain-up pump

¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXMQ-P			40	50	63	80	100	125
Cooling capacity		kW	4.5	5.6	7.1	9.0	11.2	14.0
Heating capacity		kW	5.0	6.3	8.0	10.0	12.5	16.0
Nominal input	cooling	kW	0.194	0.215	0.230	0.298	0.376	0.461
	heating	kW	0.182	0.203	0.218	0.286	0.364	0.449
Dimensions (HxWxD)		mm	300x700x700		300x1,000x700		300x1,400x700	
Weight		kg	28	36	36	36	46	46
Casing			Galvanised steel plate					
Air flow rate	max. / min.	m ³ / min	16 / 11	18 / 15	19.5 / 16	25 / 20	32 / 23	39 / 28
External static pressure	max. / min.		160 / 30		200 / 50			
Sound pressure level		dB(A)	-					
Sound power level		dB(A)	-					
Refrigerant type			R-410A					
Piping connections	liquid / gas	mm	ø6.4 / ø12.7			ø9.5 / ø15.9		
Air filter			Note 1					
Power supply		VE	1 ~, 50Hz, 220-240V					

Notes:

Nominal cooling capacities are based on : return air temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, external static pressure: 100Pa, equivalent refrigerant piping : 7.5m (horizontal)

Nominal heating capacities are based on : return air temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, external static pressure: 100Pa, equivalent refrigerant piping : 7.5m (horizontal)

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

¹ The air filter is not standard accessory, but please mount it in the duct system at the suction side. Select its colorimetric method (gravity method) 50% or more.

ACCESSORIES

FXMQ-P			40	50	63	80	100	125
Wired remote control						BRC1D52		
Infrared remote control	cooling only					BRC4C66		
	heat pump					BRC4C65		
High efficiency filter 65%			KAF372AA56		KAF372AA80		KAF372AA160	
High efficiency filter 90%			KAF373AA56		KAF373AA80		KAF373AA160	
Filter chamber			KDDF37AA56		KDDF37AA80		KDDF37AA160	
Longlife replacement filter			KAF371AA56		KAF371AA80		KAF371AA160	
Service panel			KTJ25K56W / KTJ25K56F / KTJ25K56T		KTJ25K80W / KTJ25K80F / KTJ25K80T		KTJ25K160W / KTJ25K160F / KTJ25K160T	
Air discharge adapter			KDAI25K56A		KDAI25K80A		KDAI25K160A	



FXMQ-MA

200-250

LARGE CONCEALED CEILING UNIT

Comfort & Efficiency

- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of an integrated inverter control ensures maximum comfort and efficiency
- › Home leave operation saves energy during absence

Flexible Installation

- › Up to 270 Pa external static pressure allows extensive ductwork runs and flexible application: ideal for use in large areas
- › Up to 31.5 kW in heating mode



FXMQ200-250MA

¹ Not connectable to RXYQ-PR and VRV®III-S (RXYSQ-PAV, RXYSQ-PAVY)



SPECIFICATIONS

FXMQ-MA			200	250
Cooling capacity		kW	22.4	28.0
Heating capacity		kW	25.0	31.5
Nominal input	cooling	kW	1.294	1.465
	heating	kW	1.294	1.465
Dimensions (HxWxD)		mm	470x1,380x1,100	
Weight		kg	137	137
Casing			Galvanised steel plate	
Air flow rate	max. / min.	m ³ / min	58/50	72/62
External static pressure	max. / min.		221/*	270/*
Sound pressure level		dB(A)	48/45	48/45
Sound power level		dB(A)	-	
Refrigerant type			R-410A	
Piping connections	liquid / gas	mm	ø9.5/ø19.1	ø9.5/ø22.2
Air filter			Note 1	
Power supply		VE	1~, 50Hz, 220-240V	

Notes:

Nominal cooling capacities are based on : return air temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, external static pressure: 100Pa, equivalent refrigerant piping : 7.5m (horizontal)

Nominal heating capacities are based on : return air temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, external static pressure: 100Pa, equivalent refrigerant piping : 7.5m (horizontal)

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

¹ The air filter is not standard accessory, but please mount it in the duct system at the suction side. Select its colorimetric method (gravity method) 50% or more.

ACCESSORIES

FXMQ-MA			200	250
Wired remote control				BRC1D52
Infrared remote control	cooling only			BRC4C66
	heat pump			BRC4C65
High efficiency filter 65%				KAFJ372L280
High efficiency filter 90%				KAFJ373L280
Filter chamber				KDJ3705L280
Longlife replacement filter				KAFJ371L280
Drain pump kit				KDU30L250VE



FXAQ-MV

20-25-32-40-50-63

WALL MOUNTED UNIT

Comfort & Efficiency

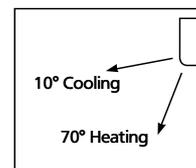
- › Vertical auto-swing function moves the discharge flaps up and down for efficient air distribution throughout the room
- › 5 different discharge angles can be programmed via the remote control
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence

Flexible Installation

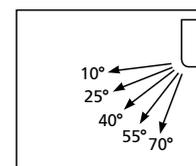
- › Can be installed in both new and existing buildings
- › Both horizontal flaps and front panel can easily be removed and washed
- › All maintenance operations can be carried out from the front of the unit
- › Allows multi tenant applications (option PCB required)



FXAQ40-63MV



Vertical auto-swing



5 discharge angles

¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXAQ-MV		20	25	32	40	50	63
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0
Nominal input	cooling	0.016	0.022	0.027	0.020	0.027	0.050
	heating	0.024	0.027	0.032	0.020	0.032	0.060
Dimensions (HxWxD)	mm	290 x 795 x 230			290 x 1,050 x 230		
Weight	kg	11			14		
Casing colour		White					
Air flow rate (H/L)	m ³ /min	7.5 / 4.5	8 / 5	9 / 5.5	12 / 9	15 / 12	19 / 14
Sound pressure level (H / L) (220V)	dB(A)	35 / 29	36 / 29	37 / 29	39 / 34	42 / 36	46 / 39
Sound power level	dB(A)	-					
Refrigerant type		R-410A					
Piping connections	liquid / gas	ø6.4 / ø12.7				ø9.5 / ø15.9	
Air filter		Resin net washable					
Power supply	VE	1~, 50Hz, 220-240V					

Notes:

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 5m (horizontal).

Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 5m (horizontal).

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

ACCESSORIES

FXAQ-MV		20	25	32	40	50	63
Wired remote control					BRC1D52		
Infrared remote control	cooling only				BRC7E619		
	heat pump				BRC7E618		
Drain pump kit					K-KDU572DVE		
PCB for multi tentant					DTA114A61		



FTXG-E/
CTXG-E

25-35-50

WALL MOUNTED UNIT

Design

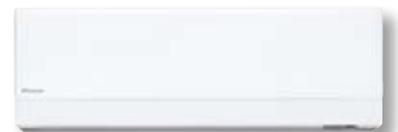
- › Good design award: unique evaluation criterion for industrial design in Japan
- › Available in 2 colour variations

Comfort & Efficiency

- › Movement sensor saves power consumption in unoccupied rooms
- › Night set mode saves energy by preventing overcooling or overheating during night time
- › Comfort mode guarantees draught free operation
- › Powerful mode can be selected for rapid cooling or heating
- › Whisper quiet operation: down to 22 dBA sound pressure level
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence

Filter

- › Titanium apatite photocatalytic air purification filter absorbs microscopic particles, decomposes odours and even deactivates bacteria and viruses



FTXG25,35E-W



FTXG25,35E-S

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FTXG-E/CTXG-E				25	35	50
Nominal input	cooling		kW	0.030	0.030	0.030
	heating		kW	0.030	0.030	0.030
Dimensions (HxWxD)			mm	275x840x150		
Weight			kg	9		
Casing colour				Mat crystal white (W) or mat crystal silver (S)		
Air flow rate	cooling	H/L/SL	m ³ /min	7.7/4.7/3.8	8.1/4.9/4.1	11.3/7.1/6.7
	heating	H/L/SL	m ³ /min	9.0/6.7/5.4	9.6/6.7/5.9	12.6/8.7/7.7
Fan speed			steps	5 steps, silent and auto		
Sound pressure level	cooling	H/L/SL	dB(A)	38/25/22	39/26/23	47/35/32
	heating	H/L/SL	dB(A)	38/28/25	39/29/26	47/35/32
Sound power level	cooling	H	dB(A)	56	57	64
Refrigerant type				R-410A		
Piping connections	liquid / gas / drain		mm	ø6.4 / ø9.5 / ø18.0		ø6.4 / ø12.7 / ø18.0
Heat insulation				Both liquid and gas pipes		
Air filter				Removable / washable / mildew proof		
Power supply			V1	1 ~, 220-240V, 50Hz		

Notes:

Nominal cooling capacities measured at: indoor temperature 27°CDB/19°CWB, outdoor temperature 35°CDB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m, level difference 0m

Nominal heating capacities measured at: indoor temperature 20°CDB, outdoor temperature 7°CDB/6°CWB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m level difference 0m

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat

Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FTXG-E/CTXG-E	25	35	50
Infrared remote control		ARC433A41	
Titanium apatite photocatalytic air purification filter (with frame)		KAF952B41	
Titanium apatite photocatalytic air purification filter (without frame)		KAF952B42	
Anti-theft protection for remote control		KKF917AA4	



FTXS-G

20-25-35-42-50

WALL MOUNTED UNIT

Comfort & Efficiency

- › Energy saving during standby mode: reduction of energy from 10W to 2W
- › Weekly timer: allows to program the unit on a weekly basis
- › Night set mode saves energy by preventing overcooling or overheating during night time
- › 2 area intelligent eye: air flow is sent to the area in a room where no person is detected
- › Comfort mode guarantees draught free operation
- › Powerful mode can be selected for rapid cooling or heating
- › Whisper quiet operation: down to 22 dBA sound pressure level
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence

Filter

- › Titanium apatite photocatalytic air purification filter absorbs microscopic particles, decomposes odours and even deactivates bacteria and viruses



FTXS-G

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FTXS-G				20	25	35	42	50
Nominal input	cooling		kW			-		
	heating		kW			-		
Dimensions (HxWxD)			mm	295x800x215				
Weight			kg	9	9	10	10	10
Casing colour				White				
Air flow rate	cooling	H/L	dB(A)	9.4/5.5	9.1/5.2	10.4/4.8	9.1/6.3	10.2/7.0
	heating			9.9/6.5	9.8/6.2	10.6/6.4	11.2/7.7	11.0/7.6
Fan speed				5 steps, silent and auto				
Sound pressure level	cooling	H/M/L/SL	dB(A)	38/32/25/22	38/32/25/22	42/34/26/23	42/38/33/30	43/39/34/31
	heating			38/33/28/25	39/34/28/25	42/36/29/26	42/38/33/30	44/39/34/31
Sound power level	cooling	H	dB(A)	54	54	58	58	59
Refrigerant type				R-410A				
Piping connections			liquid / gas	mm	ø6.4 / ø9.5	ø6.4 / ø9.5	ø6.4 / ø9.5	ø6.4 / ø12.7
Heat insulation				Both liquid and gas pipes				
Air filter				Removable / washable / mildew proof				
Power supply			V1	1~, 220-240V, 50Hz				

Notes:

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat

Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FTXS-G	20	25	42	35	50
Infrared remote control			ARC452A3		
Titanium apatite photocatalytic air purification filter			KAF968A42		
Anti-theft protection for remote control			KKF910A4		



FTXS-F

60-71

WALL MOUNTED UNIT

Comfort & Efficiency

- › Night set mode saves energy by preventing overcooling or overheating during night time
- › Movement sensor saves power consumption in unoccupied rooms
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence
- › Powerful mode can be selected for rapid cooling or heating

Filter

- › Titanium apatite photocatalytic air purification filter absorbs microscopic particles, decomposes odours and even deactivates bacteria and viruses



FTXS-F

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FTXS-F				60	71
Nominal input	cooling		kW	0.04	0.045
	heating		kW	0.045	0.060
Dimensions (HxWxD)			mm	290x1,050x238	
Weight			kg	12	
Casing colour				White	
Air flow rate	cooling	H/L	dB(A)	16.8 (H)	16.2 (H)
	heating			17.4 (H)	18.2 (H)
Fan speed				5 steps, silent and auto	
Sound pressure level	cooling	H/L	dB(A)	45 / 36	46 / 37
	heating			44 / 35	46 / 37
Sound power level	cooling	H	dB(A)	61	62
Refrigerant type				R-410A	
Piping connections		liquid / gas	mm	ø6.4 / 12.7	
Heat insulation				Both liquid and gas pipes	
Air filter				Removable / washable / mildew proof	
Power supply				1 ~ ,220-240,50Hz	

Notes:

Nominal cooling capacities measured at: indoor temperature 27°CDB/19°CWB, outdoor temperature 35°CDB, equivalent piping length:: outdoor-BP 5m, BP-indoor 3m, level difference 0m

Nominal heating capacities measured at: indoor temperature 20°CDB, outdoor temperature 7°CDB/6°CWB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m level difference 0m

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat

Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FTXS-F				60	71
Infrared remote control					ARC433A70
Titanium apatite photocatalytic air purification filter without frame (1)					KAF952B42
Anti-theft protection for remote control					KKF917AA4

(1) standard accessory



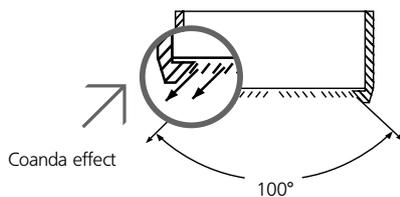
FXHQ-MA

32-63-100

CEILING SUSPENDED UNIT

Comfort & Efficiency

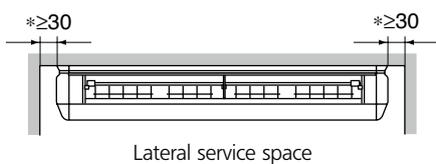
- › Wider air discharge thanks to Coanda effect: up to 100 degrees



- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency
- › Home leave operation saves energy during absence

Flexible installation & Easy maintenance

- › Can be installed in both new and existing buildings.
- › Air flow distribution for ceiling heights up to 3.8m without loss of capacity
- › The unit can easily be mounted in corners and narrow spaces, as it only needs 30mm lateral service space



Lateral service space



FXHQ32MA

¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXHQ-MA			32	63	100
Cooling capacity		kW	3.6	7.1	11.2
Heating capacity		kW	4.0	8.0	12.5
Nominal input	cooling	kW	0.111	0.115	0.135
	heating	kW	0.111	0.115	0.135
Dimensions (HxWxD)		mm	195 x 960 x 680	195 x 1,160 x 680	195 x 1,400 x 680
Weight		kg	24	28	33
Colour				Ivory white	
Air flow rate (H/L)		m ³ /min	12/10	17.5/14	25/19.5
Sound pressure level (H/L) (220V)		dB(A)	36/31	39/34	45/37
Sound power level		dB(A)		-	
Refrigerant type				R-410A	
Piping connections	liquid/gas	mm	ø6.4/ø12.7		ø9.5/ø15.9
Air filter				Resin net with mold resistant	
Power supply		VE		1~, 50Hz, 220-240V	

Notes:

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 7.5m (horizontal).

Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 7.5m (horizontal).

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

ACCESSORIES

FXHQ-MA			32	63	100
Wired remote control				BRC1D52	
Infrared remote control	cooling only			BRC7E66	
	heat pump			BRC7E63	
Drain pump kit			KDU50M60	KDU50M125	KDU50M125
Replacement long life filter	resin net		KAFJ501DA56	KAFJ501DA80	KAFJ501DA112
L-type piping kit	for upward direction		KHFP5M35	KHFP5M63	KHFP5M63

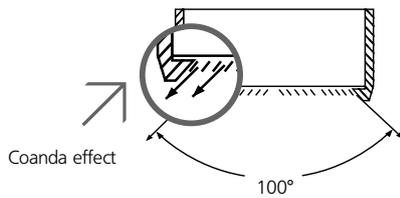


FHQ-B
35-50-60

CEILING SUSPENDED UNIT

Comfort & Efficiency

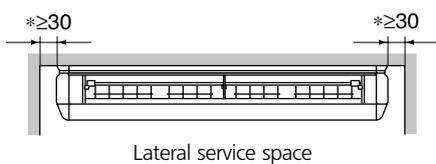
- › Wider air discharge thanks to Coanda effect: up to 100 degrees



- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency
- › Home leave operation saves energy during absence

Flexible installation & Easy maintenance

- › Can be installed in both new and existing buildings.
- › Air flow distribution for ceiling heights up to 3.8m without loss of capacity
- › The unit can easily be mounted in corners and narrow spaces, as it only needs 30mm lateral service space



Lateral service space



FHQ-B

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FHQ-B				35	50	60
Nominal input	cooling		kW	0.111	0.111	0.115
	heating		kW	0.111	0.111	0.115
Dimensions (HxWxD)			mm	195x960x680		195x1,160x680
Weight			kg	24	25	27
Casing colour				White		
Fan speed			steps	2 steps		
Air flow rate	cooling	H/L	m ³ / min	13 / 10	13 / 10	17 / 13
	heating	H/L	m ³ / min	13 / 10	13 / 10	16 / 13
Sound pressure level	cooling	H/L	dB(A)	37 / 32	38 / 33	39 / 33
	heating	H/L	dB(A)	37 / 32	38 / 33	39 / 33
Sound power level	cooling	H/L	dB(A)	53 / 48	54 / 49	55 / 49
Refrigerant type				R-410A		
Piping connections	liquid / gas / drain (VP20)		mm	ø6.4 / ø9.5 / ID ø20.0 - OD ø26.0	ø6.4 / ø12.7 / ID ø20.0 - OD ø26.0	
Heat insulation				Both liquid and gas pipes		
Power supply			V1	1 ~, 230V, 50Hz		

Notes:

Nominal cooling capacities measured at: indoor temperature 27°CDB / 19°CWB, outdoor temperature 35°CDB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m, level difference 0m

Nominal heating capacities measured at: indoor temperature 20°CDB, outdoor temperature 7°CDB / 6°CWB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m level difference 0m

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat

Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FHQ-B			35	50	60
Infrared remote control				BRC7E63	
Replacement long life filter	resin net		KAF501DA56		KAF501DA80
Drain pump kit				KDU50M60	
L-type piping kit	upward direction		KHFP5M35	KHFP5M63	



FXUQ-MA

71-100-125

4-WAY BLOW CEILING SUSPENDED UNIT

Comfort & Efficiency

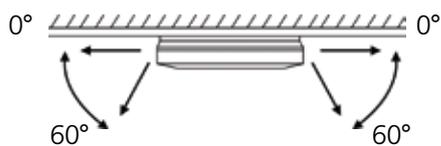
- › Air can be discharged in any of 4 directions
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency
- › Home leave operation saves energy during absence
- › Auto-swing function ensures efficient air and temperature distribution
- › Air can be discharged at 5 different angles between 0 and 60 degrees



FXUQ71MA



BEVQ71-125MA



Flexible installation & Easy maintenance

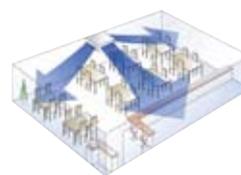
- › Can be installed in both new and existing buildings
- › Possibility to shut 1 or 2 flaps for easy installation in corners
- › Air flow distribution for ceiling heights up to 3.5m without loss of capacity
- › Drain-up pump with 500mm lift fitted as standard
- › 5m maximum distance between FXUQ unit and junction box

Examples of Airflow Patterns

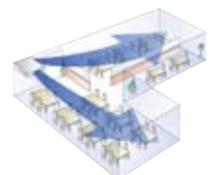
4-Way blow



3-Way blow



2-Way blow



¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXUQ-MA			71	100	125
Cooling capacity		kW	8.0	11.2	14.0
Heating capacity		kW	9.0	12.5	14.0
Nominal input	cooling	kW	0.180	0.289	0.289
	heating	kW	0.160	0.269	0.269
Dimensions (HxWxD)		mm	165 x 895 x 895	230 x 895 x 895	230 x 895 x 895
Weight		kg	25	31	31
Colour				White	
Air flow rate (H/L)			19 / 14	29 / 21	32 / 23
Sound pressure level (H/L) (220V)		dB(A)	40 / 35	43 / 38	44 / 39
Sound power level (H)		dB(A)	56	59	60
Refrigerant type				R-410A	
Piping connections	liquid / gas	mm	ø9.5 / ø15.9	ø9.5 / ø15.9	ø9.5 / ø15.9
Air filter				Resin net with mold resistant	
Power supply		V1		1 ~, 50Hz, 230V	
Combination with junction box			BEVQ71MA	BEVQ100MA	BEVQ125MA

Notes:

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB, 24°CWB, equivalent piping length 7.5m level difference: 0m
 Nominal heating capacities are based on: indoor temperature: 20°CDB, 15°CWB • outdoor temperature: 7°CDB, 6°CWB, equivalent piping length 7.5m level difference: 0m
 Capacities are net including a deduction for cooling (an addition for heating) for indoor fan motor heat.

ACCESSORIES

FXUQ-MA			71	100	125
Wired remote control				BRC1D52	
Infrared remote control	cooling only			BRC7C529	
	heat pump			BRC7C528	
Sealing member of air discharge outlet			KDBHJ49F80		KDBHJ49F140
Air discharge decoration panel			KDBTJ49F80		KDBTJ49F140
Vertical flap kit			KDGJ49F80		KDGJ49F140
Replacement long life filter				KAFJ495F140	
L-type connection piping kit			KHFP49M63		KHFP49M140

JUNCTION BOX FOR CONNECTION TO VRV®

BEVQ-MA			71	100	125
Dimensions	HxWxD	mm		100x350x225	
Weight		kg	3.0	3.0	3.5
Casing				Galvanised steel plate	
Power supply		VE		1 ~, 50Hz, 220-240V	



FXLQ-MA

20-25-32-40-50-63

FLOOR STANDING UNIT

Comfort

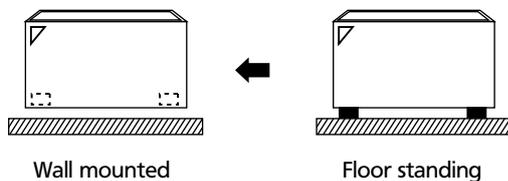
- › Ideal for installation beneath a window
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency
- › Home leave operation saves energy during absence

Flexible Installation

- › Requires very little installation space, only 222mm deep and 600mm high
- › Running the pipes from connections at the back, enables the unit to be wall mounted which in turn allows cleaning beneath the unit where dust tends to accumulate



FXLQ20-25MA



¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXLQ-MA		20	25	32	40	50	63	
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1	
Heating capacity	kW	2.5	3.2	4.0	5.0	6.3	8.0	
Nominal input	cooling	kW	0.049	0.049	0.090	0.090	0.110	0.110
	heating	kW	0.049	0.049	0.090	0.090	0.110	0.110
Dimensions (H x W x D)	mm	600 x 1,000 x 222		600 x 1,140 x 222		600 x 1,420 x 222		
Weight	kg	25		30		36		
Colour		Ivory white						
Air flow rate (H/L)	m ³ /min	7/6	7/6	8/6	11/8.5	14/11	16/12	
Sound pressure level (H/L) (220V)	dB(A)	35/32	35/32	35/32	38/33	39/34	40/35	
Sound power level	dB(A)	-						
Refrigerant type		R-410A						
Piping connections	liquid/gas	mm		ø6.4/ø12.7		ø9.5/ø15.9		
Air filter		Resin net with mold resistant						
Power supply	VE	1~, 50Hz, 220-240V						

Notes:

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 7.5m (horizontal).

Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 7.5m (horizontal).

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

ACCESSORIES

FXLQ-MA		20	25	32	40	50	63
Wired remote control		BRC1D52, BRC2C51, BRC3A61					
Infrared remote control	cooling only	BRC4C64					
	heat pump	BRC4C62					
Long life replacement filter		KAFJ361K28		KAFJ361K45		KAFJ361K71	



FXNQ-MA

20-25-32-40-50-63

CONCEALED FLOOR STANDING UNIT

Comfort

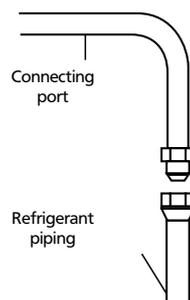
- › Ideal for installation below a window
- › Blends unobstrusively with any interior decor: only the suction and discharge grilles are visible
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency
- › Home leave operation saves energy during absence

Flexible Installation

- › Requires very little installation space, only 222mm deep and 600mm high
- › Running the pipes from connections at the back, enables the unit to be wall mounted which in turn allows cleaning beneath the unit where dust tends to accumulate
- › The connecting port faces downward, eliminating the need to attach auxiliary piping



FXNQ20-25MA



¹ Not connectable to RXYQ-PR



SPECIFICATIONS

FXNQ-MA			20	25	32	40	50	63
Cooling capacity		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity		kW	2.5	3.2	4.0	5.0	6.3	8.0
Nominal input	cooling	kW	0.049	0.049	0.090	0.090	0.110	0.110
	heating	kW	0.049	0.049	0.090	0.090	0.110	0.110
Dimensions (HxWxD)		mm	600 x 1,00 x 222		600 x 1,140 x 222		600 x 1,420 x 222	
Weight		kg	25		30		36	
Casing			Ivory white					
Air flow rate (H/L)		m ³ /min	7/6	7/6	8/6	11/8.5	14/11	16/12
Sound pressure level (H/L)(220V)		dB(A)	35/32	35/32	35/32	38/33	39/34	40/35
Sound power level		dB(A)	-					
Refrigerant type			R-410A					
Piping connections	liquid/gas	mm			ø6.4/ø12.7		ø9.5/ø15.9	
Air filter			Resin net with mold resistant					
Power supply		VE	1~, 50Hz, 220-240V					

Notes:

Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB • outdoor temperature: 35°CDB • equivalent refrigerant piping: 8m • level difference: 0m.

Nominal heating capacities are based on: indoor temperature: 20°CDB • outdoor temperature: 7°CDB, 6°CWB • equivalent refrigerant piping: 8m • level difference: 0m.

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

The sound pressure values are mentioned for a unit installed with rear suction.

ACCESSORIES

FXNQ-MA			20	25	32	40	50	63
Wired remote control			BRC1D52, BRC2C51, BRC3A61			BRC1D52, BRC2C51, BRC3A61		
Infrared remote control	cooling only		BRC4C64			BRC4C64		
	heat pump		BRC4C62			BRC4C62		
Replacement long life filter			KAFJ361K28	KAFJ361K45	KAFJ361K71	KAFJ361K28	KAFJ361K45	KAFJ361K71



FVXS-F

25-35-50

FLOOR STANDING UNIT

Comfort & Efficiency

- › Night set mode saves energy by preventing overcooling or overheating during night time
- › Weekly timer: allows to program the unit on a weekly basis
- › Powerful mode can be selected for rapid cooling or heating
- › Whisper quiet operation: down to 23 dBA sound pressure level
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency
- › Home leave operation saves energy during absence

Filter

- › Titanium apatite photocatalytic air purification filter absorbs microscopic particles, decomposes odours and even deactivates bacteria and viruses

Flexible Installation

- › Ideal for installation beneath a window
- › Can be installed against a wall or recessed



FVXS-F

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FVXS-F				25	35	50
Nominal input	cooling		kW	0.015	0.015	0.027
	heating		kW	0.017	0.017	0.017
Dimensions (HxWxD)			mm	600x700x210		
Weight			kg	14		
Casing colour				White		
Air flow rate	cooling	H/L/SL	m ³ /min	8.2/4.8/4.1	8.5/4.9/4.5	10.7/7.8/6.6
	heating	H/L/SL	m ³ /min	8.8/5.0/4.4	9.4/5.2/4.7	11.8/8.5/7.1
Fan speed			steps	5 steps, silent and auto		
Sound pressure level	cooling	H/L/SL	dB(A)	38/26/23	39/27/24	44/36/32
	heating	H/L/SL	dB(A)	38/26/23	39/27/24	45/36/32
Sound power level	cooling	H	dB(A)	54	55	56
Refrigerant type				R-410A		
Piping connections	liquid / gas / drain		mm	ø6.4 / ø9.5 / ø20.0		ø6.4 / ø12.7 / ø20.0
Heat insulation				Both liquid and gas pipes		
Air filter				Removable / washable / mildew proof		
Power supply			VM	1~, 220-240V, 50Hz		

Notes:

Nominal cooling capacities measured at: indoor temperature 27°CDB/19°CWB, outdoor temperature 35°CDB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m, level difference 0m

Nominal heating capacities measured at: indoor temperature 20°CDB, outdoor temperature 7°CDB/6°CWB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m level difference 0m

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat

Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FVXS-F	25	35	50
Infrared remote control		ARC425A1	
Titanium apatite photocatalytic air-purifying filter without frame (1)		KAF968A42	
Anti-theft protection for remote control		KKF936A4	

(1) standard accessory



FLXS-B

25-35-50-60

FLEXI TYPE UNIT

Comfort & Efficiency

- › Night set mode saves energy by preventing overcooling or overheating during night time
- › Can fit on either ceiling or lower wall. Its low height enables it to fit beneath a window
- › Powerful mode can be selected for rapid cooling or heating
- › Whisper quiet operation: down to 28 dBA sound pressure level
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency
- › Home leave operation saves energy during absence

Filter

- › Air purification filter with photocatalytic deodorising function: deodorises the air, powerfully decomposes cigarette and pet odours, removes house dust and pollen, deactivates bacteria and viruses

Flexible Installation

- › Allows both ceiling suspended as floor standing installation.



FLXS-B

¹ Only connectable to RXYQ-PR



SPECIFICATIONS

FLXS-B				25	35	50	60
Nominal input	cooling		kW	0.070	0.078	0.096	0.098
	heating		kW	0.074	0.078	0.096	0.098
Dimensions (HxVxD)			mm	490x1,050x200			
Weight			kg	16	16	17	17
Casing colour				Almond white			
Air flow rate	cooling	H/L/SL	m ³ /min	7.6/6.0/5.2	8.6/6.6/5.6	11.4/8.5/7.5	12.0/9.3/8.3
	heating	H/L/SL	m ³ /min	9.2/7.4/6.6	9.8/8.0/7.2	12.1/7.5/6.8	12.8/8.4/7.5
Fan speed			steps	5 steps, silent and auto			
Sound pressure level	cooling	H/L/SL	dB(A)	37/31/28	38/32/29	47/39/36	48/41/39
	heating	H/L/SL	dB(A)	37/31/29	39/33/30	46/35/33	47/37/34
Sound power level	cooling	H	dB(A)	53	54	63	64
Refrigerant type				R-410A			
Piping connections	liquid / gas / drain		mm	ø6.4 / ø9.5 / ø18.0		ø6.4 / ø9.5 / ø20.0	
Heat insulation				Both liquid and gas pipes			
Air filter				Removable / washable / mildew proof			
Power supply			VM	1 ~, 220-240 V, 50Hz			

Notes:

Nominal cooling capacities measured at: indoor temperature 27°CDB/19°CWB, outdoor temperature 35°CDB, equivalent piping length:: outdoor-BP 5m, BP-indoor 3m, level difference 0m

Nominal heating capacities measured at: indoor temperature 20°CDB, outdoor temperature 7°CDB/6°CWB, equivalent piping length: outdoor-BP 5m, BP-indoor 3m level difference 0m

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat

Sound pressure level measured at a certain distance from the unit

ACCESSORIES

FLXS-B	25	35	50	60
Infrared remote control			ARC433A5	
Photocatalytic deodorising filter (with frame)			KAZ917B41	
Photocatalytic deodorising filter (without frame)			KAZ917B42	
Air purification filter (with frame)			KAF925B41	
Air purification filter (without frame)			KAF925B42	
Anti-theft protection for remote control			KKF917AA4	

INTEGRATED VENTILATION

Daikin offers a variety of solutions for the provision of fresh air ventilation to offices, hotels, stores and other commercial outlets – each one complementary to and as flexible as the VRV® system itself.

Heat Reclaim Ventilation

Proper ventilation is a key component of climate control in buildings, offices and shops. In its basic function, it ensures a flow of incoming fresh air and outgoing stale air. Our HRV (heat reclaim ventilation) solution can do much more. It can recover heat and **OPTIMISE THE BALANCE BETWEEN INDOOR AND OUTDOOR TEMPERATURE AND HUMIDITY**, thus reducing the load on the system and increasing efficiency.

Outdoor air processing in a single unit

Our FXMQ-MF air processing solution uses heat pump technology to **COMBINE FRESH AIR TREATMENT AND AIR CONDITIONING IN A SINGLE SYSTEM**, thereby eliminating the usual design problems associated with balancing air supply and discharge. Total system cost is reduced and design flexibility enhanced because the airconditioning fan coil units and an outdoor air treatment unit can be connected to the same refrigerant line.

VRV® air handling applications

For medium and large commercial spaces, we offer a range of R-410A inverter condensing units that provide air handling and air conditioning. This approach combines the flexibility of our VRV® units with Air Handling Applications, resulting in a simple, reliable design for **OPTIMUM CONTROL OF INDOOR AIR QUALITY AND MAXIMUM EFFICIENCY**.



HEAT RECLAIM VENTILATION



VRV® AIR HANDLING APPLICATIONS



OUTDOOR AIR PROCESSING UNIT

HEAT RECLAIM VENTILATION

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OUTDOOR AIR PROCESSING UNIT

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VRV® AIR HANDLING APPLICATIONS

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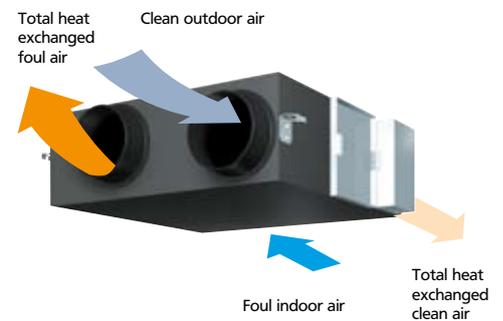


VAM-FA

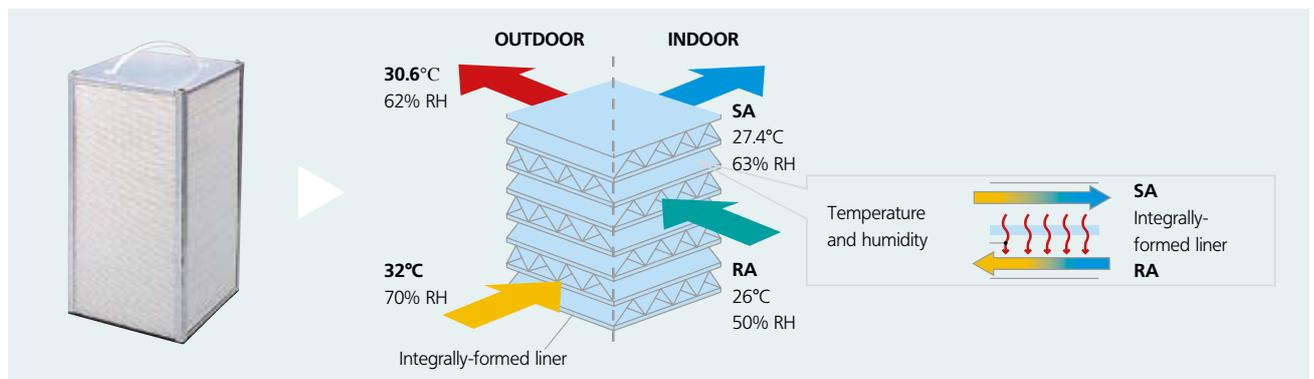
HEAT RECLAIM VENTILATION

The Daikin heat reclaim ventilation system modulates the temperature and humidity of incoming fresh air to match indoor conditions. A balance is thus achieved between indoor and outdoor ambients, enabling the cooling or heating load placed on the air conditioning system to be reduced significantly. HRV units can be controlled individually or integral with the Daikin VRV® or Sky Air series.

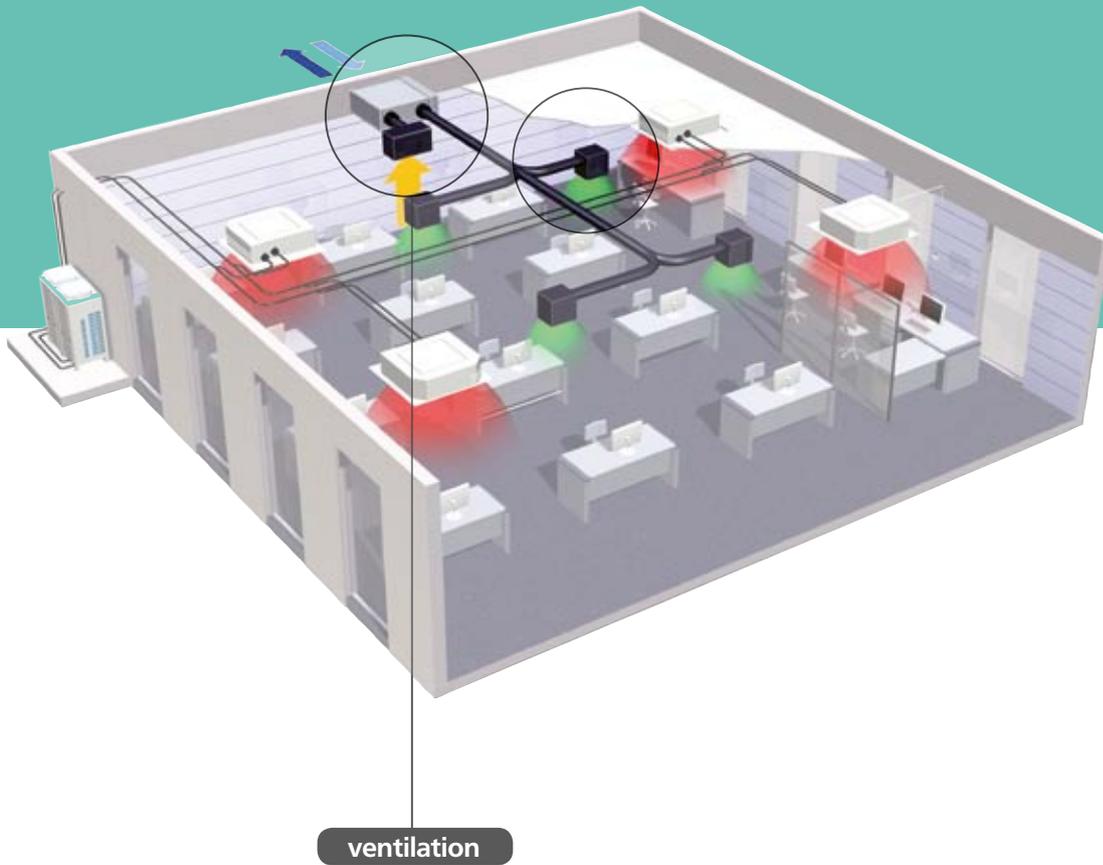
- › 9 models to choose from
- › Compact, energy saving ventilation
- › Specially developed heat exchange element with HEP (High Efficiency Paper)
- › Easy integration into the VRV® system
- › Connectable to current Daikin control systems



High Efficiency Paper



RH: Relative Humidity
 SA: Supply Air (to room)
 RA: Return Air (from room)



VAM-FA

VENTILATION		VAM150FA	VAM250FA	VAM350FA	VAM500FA	VAM650FA	VAM800FA	VAM1000FA	VAM1500FA	VAM2000FA
Air flow rate	m ³ /h	150	250	350	500	650	800	1,000	1,500	2,000
Sound pressure level (max) ¹	dB(A)	27/28.5	28/29	32/34	33/34.5	34.5/35.5	36/37	36/37	39.5/41.5	40/42.5
External static pressure (max)	Pa	69	64	98	98	93	137	157	137	137
Temperature exchange efficiency	%	74	72	75	74	74	74	75	75	75
Enthalpy exchange efficiency	heating	%	58	58	61	58	58	60	61	61
	cooling	%	64	64	65	62	63	65	66	66
Dimensions	Height	mm	285	285	301	301	364	364	364	726
	Width	mm	776	776	828	828	1,004	1,004	1,004	1,514
	Depth	mm	525	525	816	816	868	868	1,156	1,156
Weight	kg	24	24	33	33	48	48	61	132	158
Duct diameter	mm	Ø 100	Ø 150	Ø 150	Ø 200	Ø 200	Ø 250	Ø 250	Ø 350	Ø 350
Operation range (Ambient)		-15 ~ 50° CDB (80% RH or less)								
Power supply	VE	1 ~, 50Hz, 220-240V								

¹ Sound pressure level is measured in heat exchange mode.



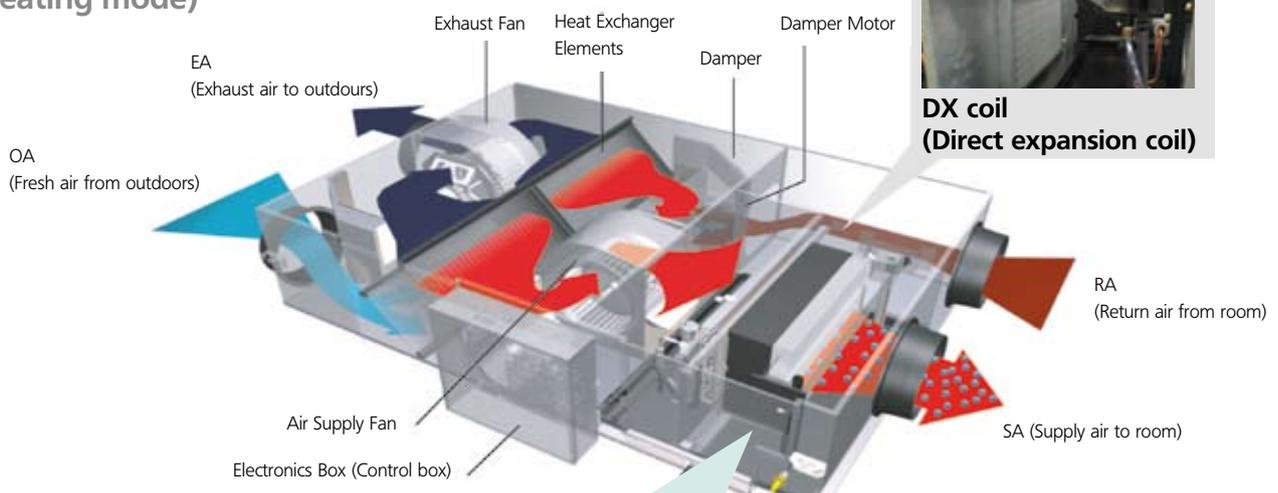
VKM-GM
VKM-G

HEAT RECLAIM VENTILATION

- › Heat purge (economiser): heat accumulated indoors is discharged at night
- › Integration of humidification and air conditioning into HRV unit
- › Increased static pressure thanks to improved fan performance
- › Individual control via HRV remote control
- › Connectable to current Daikin control systems



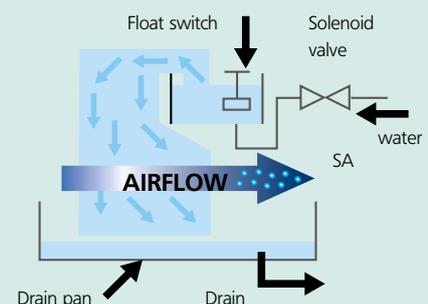
Operation example: humidification & air processing (heating mode)¹



DX coil
(Direct expansion coil)

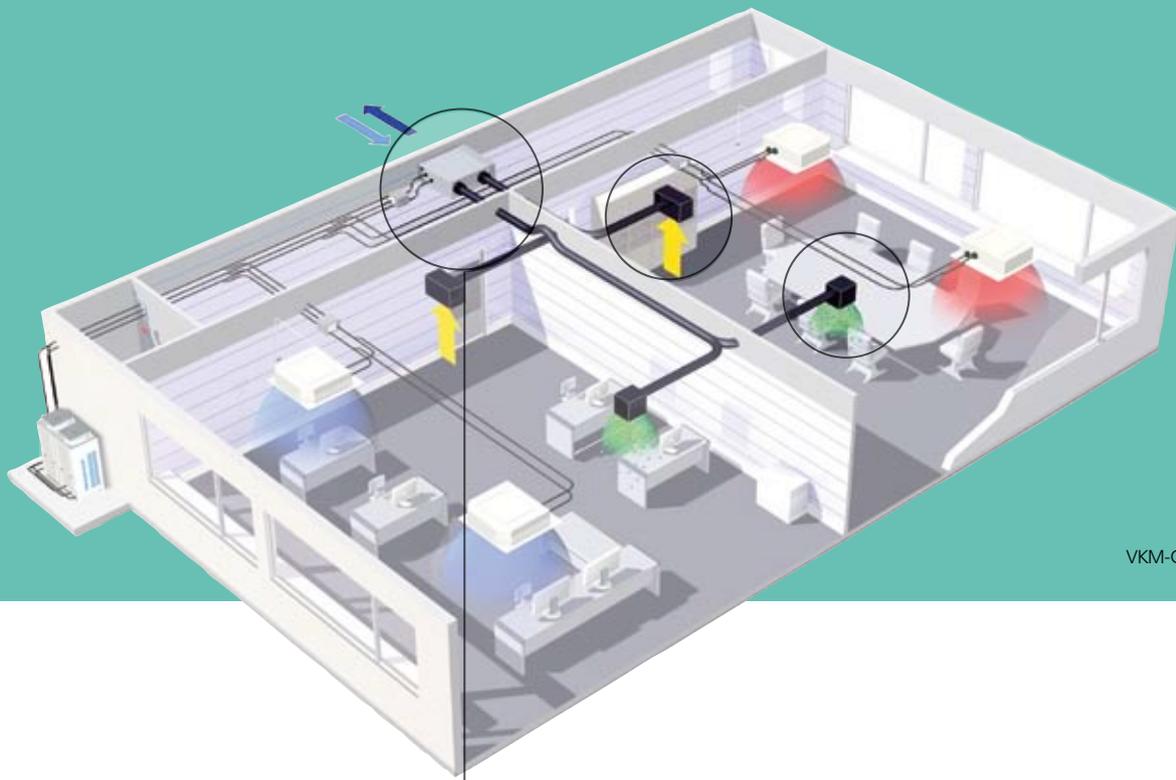
Humidifier element:

Utilizing the principle of capillary action, water is permeated throughout the humidifier element. The heated air from the DX coil passes through the humidifier and absorbs the moisture.



¹ VKM-GM example

² Not connectable to RXYQ-PR



VKM-GM example

Ventilation, humidification & air processing

VKM-GM

VENTILATION, DX coil & humidifier			VKM50GM	VKM80GM	VKM100GM
Fresh air conditioning load	cooling	kW	4.71	7.46	9.12
	heating	kW	5.58	8.79	10.69
Air flow rate	ultra high - high - low	m ³ /h	500 - 500 - 440	750 - 750 - 640	950 - 950 - 820
Sound pressure level - 220V	ultra high - high - low	dB(A)	37 - 35.5 - 32	38.5 - 36 - 33	39 - 37 - 34
Sound pressure level - 240V	ultra high - high - low	dB(A)	38 - 36 - 34	40 - 37.5 - 35.5	40 - 38 - 35.5
Static pressure	ultra high - high - low	Pa	160 - 120 - 100	140 - 90 - 70	110 - 70 - 60
Temperature exchange efficiency	ultra high - high - low	%	76 - 76 - 77.5	78 - 78 - 79	74 - 74 - 76.5
Enthalpy exchange efficiency - cooling	ultra high - high - low	%	64 - 64 - 67	66 - 66 - 68	62 - 62 - 66
Enthalpy exchange efficiency - heating	ultra high - high - low	%	67 - 67 - 69	71 - 71 - 73	65 - 65 - 69
Humidifier type	Natural evaporating humidifier				
Humidification capacity		kg/h	2.70	4.00	5.40
Dimensions	height	mm	387	387	387
	width	mm	1,764	1,764	1,764
	depth	mm	832	1,214	1,214
Weight		kg	102	120	125
Unit ambient condition	around unit			0 ~ 40°C(DW) (80% or less)	
	outdoor air			-15 ~ 40°C(DW) (80% or less)	
	return air			0 ~ 40°C(DW) (80% or less)	
Power supply		V1	1 ~, 220-240V, 50Hz		

VKM-G

VENTILATION & DX coil			VKM50G	VKM80G	VKM100G
Fresh air conditioning load	cooling	kW	4.71	7.46	9.12
	heating	kW	5.58	8.79	10.69
Air flow rate	ultra high - high - low	m ³ /h	500 - 500 - 440	750 - 750 - 640	950 - 950 - 820
Sound pressure level - 220V	ultra high - high - low	dB(A)	38 - 36 - 33.5	40 - 37.5 - 34.5	40 - 38 - 35
Sound pressure level - 240V	ultra high - high - low	dB(A)	39 - 37 - 35.5	41.5 - 39 - 37	41 - 39 - 36.5
Static pressure	ultra high - high - low	Pa	180 - 150 - 110	170 - 120 - 80	150 - 100 - 70
Temperature exchange efficiency	ultra high - high - low	%	76 - 76 - 77.5	78 - 78 - 79	74 - 74 - 76.5
Enthalpy exchange efficiency - cooling	ultra high - high - low	%	64 - 64 - 67	66 - 66 - 68	62 - 62 - 66
Enthalpy exchange efficiency - heating	ultra high - high - low	%	67 - 67 - 69	71 - 71 - 73	65 - 65 - 69
Dimensions	height	mm	387	387	387
	width	mm	1,764	1,764	1,764
	depth	mm	832	1,214	1,214
Weight		kg	96	109	114
Unit ambient condition	around unit			0 ~ 40°C(DW) (80% or less)	
	outdoor air			-15 ~ 40°C(DW) (80% or less)	
	return air			0 ~ 40°C(DW) (80% or less)	
Power supply		V1	1 ~, 220-240V, 50Hz		



FXMQ-MF

OUTDOOR AIR PROCESSING UNIT

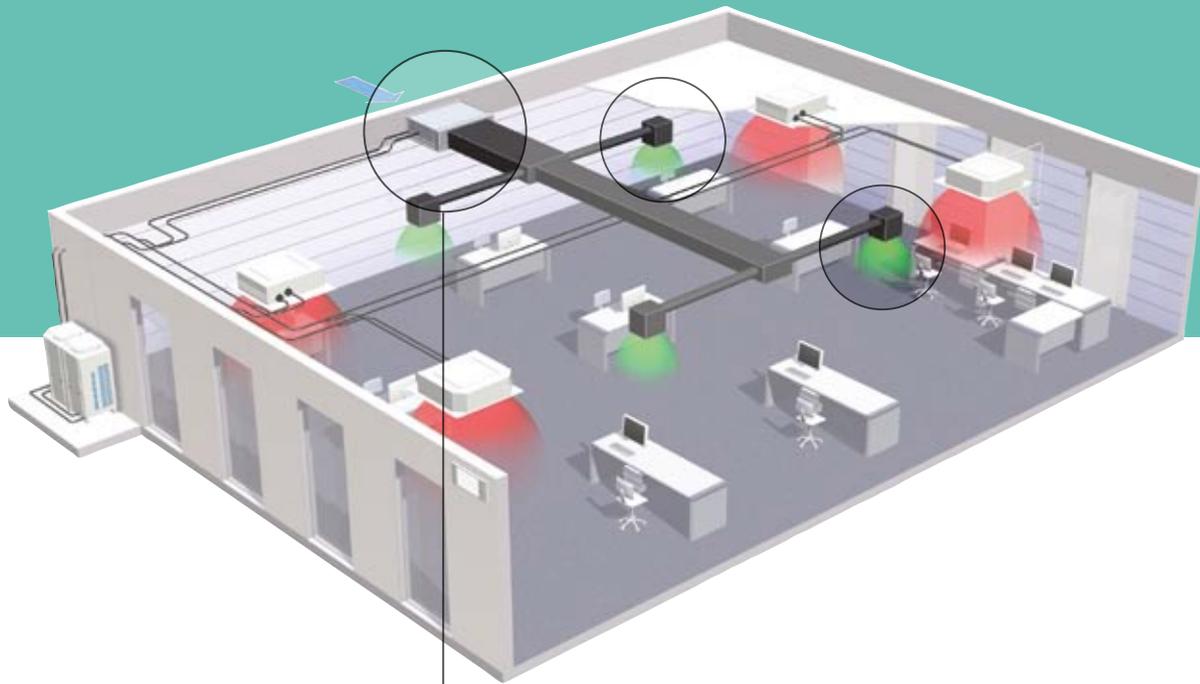
COMBINED FRESH AIR TREATMENT AND AIR CONDITIONING VIA A SINGLE SYSTEM



Both fresh air treatment and air conditioning can be achieved successfully in a single system via heat pump technology without the usual design problems associated with balancing air supply and discharge. Air conditioning fan coil units and an outdoor air treatment unit can be connected to the same refrigerant line, resulting in enhanced design flexibility and a significant reduction in total system costs.

- › 100% fresh air intake possible
- › Leaves maximum floor and wall space for furniture, decorations and fittings
- › Operation range: -5°C to 43°C
- › 225 Pa external static pressure allows extensive ductwork runs and flexible application: ideal for use in large areas
- › Drain pump kit available as accessory

¹ Not connectable to RXYQ-PR and VRV®III-S (RXYSQ-PAV, RXYSQ-PAVY)



Ventilation & air processing

FXMQ-MF

indoor Units				FXMQ125MF	FXMQ200MF	FXMQ250MF
Capacity	cooling		kw	14.0	22.4	28.00
	heating		kw	8.9	13.9	17.40
Power Input	cooling		kw	0.359	0.548	0.638
	heating		kw	0.359	0.548	0.638
Dimensions	HxWxD		mm	470x744x1,100	470x1380x1,100	
Weight			kg	86	123	
Air Flow Rate	cooling	medium	m3/min	18.0	28.0	35.0
	heating	medium	m3/min	18.0	28.0	35.0
Refrigerant				-		
Power Supply				220-240V/50Hz		
Piping Connections	liquid (od)/gas/drain		mm	9.5 / 15.9 / PS1B	9.5 / 19.1 / PS1B	9.5 / 22.2 / PS1B



VRV® + EXV-kit

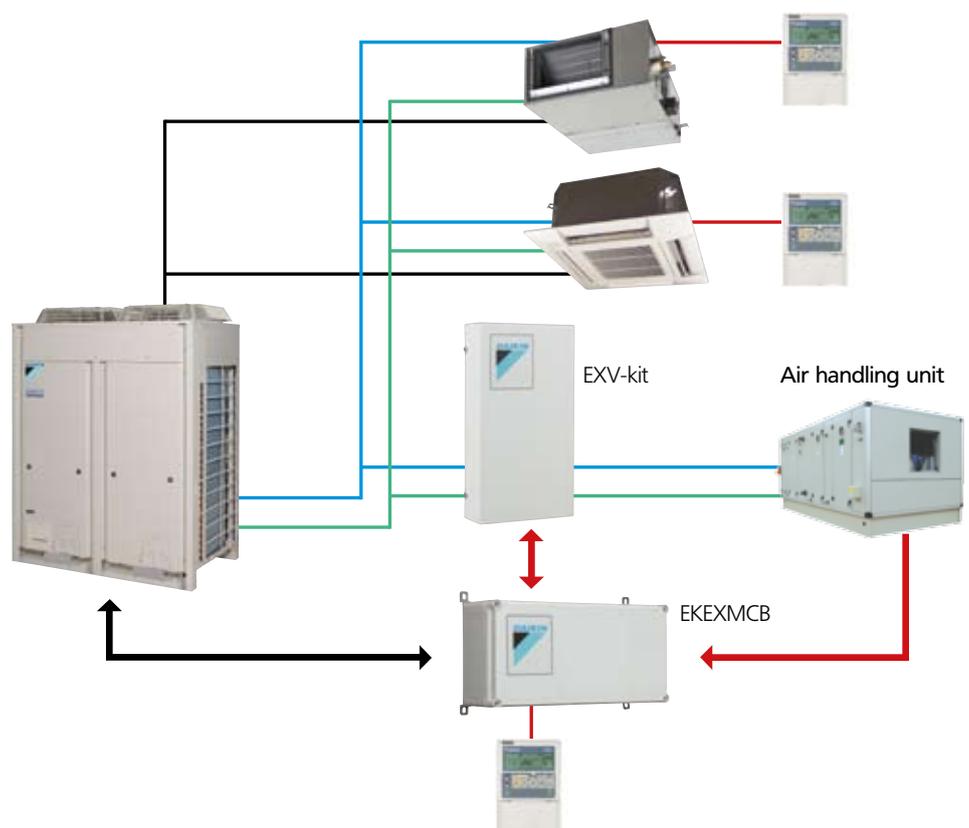
VRV® AIR HANDLING APPLICATIONS

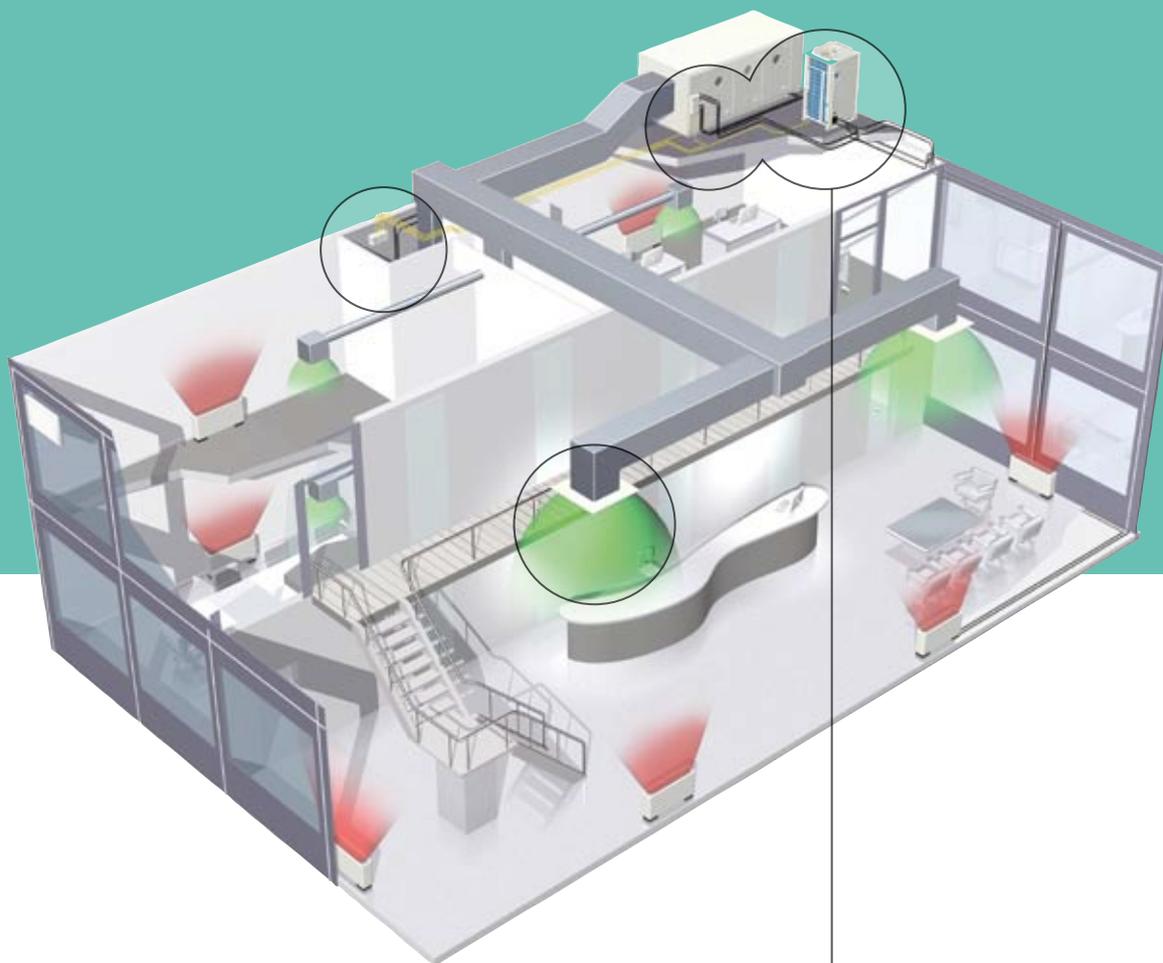
- › VRV® cooling only condensing unit provide cooling to air handling units through a dedicated expansion valve kit
- › Large range of expansion valve kits available (5 to 25 kW cooling capacity).
- › Set point control through wired remote controller BRC1D52
- › Connectable to large range of cooling only outdoor VRV® units (single systems: 5 - 18 Hp)



System example:

- gas pipe
- liquid pipe
- F1, F2 communication





Ventilation & air processing

Cooling only

RXQ-P(A)				5	8	10	12	14	16	18
Capacity range			HP	5	8	10	12	14	16	18
Capacity	cooling		kw	14.0	22.4	28.0	33.5	40.0	45.0	49.0
Power input (Nominal)	cooling		kw	3.52	5.56	7.42	9.62	12.4	14.2	16.2
Dimensions	HxWxD		mm	1,680x635x765			1,680x930x765		1,680x1,240x765	
Weight			kg	157	185	238		315		323
Sound Level	sound power	cooling	dB(A)	72	78			80		83
	sound pressure	cooling	dB(A)	54	57	58	60		63	
Air Flow Rate (nominal at 230V)	cooling		m ³ /min	95	171	185	196	233		239
Operation Range	cooling	min ~ max	°CDB	-5.0 ~ 43.0						
Refrigerant				R-410A						
Power Supply				3N ~ /400V/50Hz						
Max n° of indoor units to be connected				8	13	16	19	23	26	29
Piping connections	liquid (OD)/gas		mm	9.5 / 15.9	9.5 / 19.1	9.5 / 22.2	12.7 / 22.2	12.7 / 28.6		15.9 / 28.6

Combination table

Outdoor unit		Control box	Expansion valve kit							
		control z	class 50	class 63	class 80	class 100	class 125	class 140	class 200	class 250
		EKEXMCB	EKEXV50	EKEXV63	EKEXV80	EKEXV100	EKEXV125	EKEXV140	EKEXV200	EKEXV250
3ph	RXQ5P	x	x	x	x	x	x	x	x	x
	RXQ8P	x	x	x	x	x	x	x	x	x
	RXQ10P	x	x	x	x	x	x	x	x	x
	RXQ12P	x	x	x	x	x	x	x	x	x
	RXQ14PA	x	x	x	x	x	x	x	x	x
	RXQ16PA	x	x	x	x	x	x	x	x	x
	RXQ18PA	x	x	x	x	x	x	x	x	x

USER FRIENDLY CONTROL SYSTEMS

An air conditioning system will only operate as efficiently as its control system allows and the importance of precise, user friendly equipment is as relevant to simple residential room temperature controls as it is to full remote monitoring and regulation of large scale commercial buildings.

In order to keep pace with the technical advances inherent in modern air conditioning plus the urgent need to achieve higher energy efficiencies and manageable fuel costs, Daikin invests heavily in the research and production of similarly advanced and comprehensive methods of control.

In buildings with multiple air conditioning units that operate for long hours, system efficiency plays a paramount role in the pursuit of reduced energy consumption. **MAXIMUM EFFICIENCY** demands that maximum control of all aspects of system operation must be in harmony with important allied considerations such as round the clock monitoring, preventive maintenance, fault predictive analysis and rapid response in the event of malfunctions..

Daikin manufactures and markets an extensive portfolio of **STATE OF THE ART** computerised control systems that offer building owners, landlords and tenants comprehensive system cover backed up by vital data on operational performance and running costs on air conditioning systems of any size and complexity.

INDIVIDUAL CONTROL SYSTEMS

BRC4*

BRC7* ARC4*



INFRARED REMOTE CONTROL

Operation buttons: ON/OFF, timer mode start/stop, timer mode on/off, programme time, temperature setting, air flow direction¹, operating mode, fan speed control, filter sign reset², inspection/test indication²

Display: Operating mode, battery change, set temperature, air flow direction¹, programmed time, fan speed, inspection/test operation²

¹ Not applicable for FXDQ, FXSQ, FXNQ, FBDQ, FDXS, FBQ

² For FX** units only

³ For all features of the remote control, refer to the operation manual

BRC2C51



SIMPLIFIED REMOTE CONTROL

Simple, compact and easy to operate unit, suitable for use in hotel bedrooms

Operation buttons: ON/OFF, operating mode selection, fan speed control, temperature setting

Display: Cool/heat changeover control, Heat Recovery Ventilation (HRV) in operation, set temperature, operating mode, centralised control indication, fan speed, defrost/hot start, malfunction adjustment, operating mode selection, fan speed control, filter sign reset, inspection test / operation

BRC3A61



SIMPLIFIED BUILT-IN REMOTE CONTROL FOR HOTEL APPLICATIONS

Compact, user friendly unit, ideal for use in hotel bedrooms

Operation buttons: ON/OFF, fan speed control, temperature setting

Display: Heat Recovery Ventilation (HRV) in operation, set temperature, operating mode, centralised control indication, fan speed, defrost/hot start, malfunction



WIRED REMOTE CONTROL

- › Limit operation (min/max): room temperature is controlled within adjustable upper and lower limits. Limit operation can be activated manually or by schedule timer
- › Real time clock: indicates real time and day
- › Schedule timer:
 - It is possible to programme a weekly schedule timer
 - It is possible to programme the remote control for each day of the week.
 Five day actions can be set as follows:
 - Set point: unit is switched ON and normal operation is maintained
 - OFF: unit is switched OFF
 - Limits: unit is switched ON and min/max control (cf. limit operation for more details)
- › Home leave (frost protection): during occupants' absence, the indoor temperature can be maintained at a certain level. This function can also switch the unit ON/OFF
- › Different levels of disabled buttons can be selected as follows:
 - **Level 1:** all buttons are accessible
 - **Level 2:** all buttons are disabled except for: ON / OFF, set temperature up/down, fan speed, cooling/heating mode, enable/disable schedule timer, air flow direction adjustment button
 - **Level 3:** all buttons are disabled except for: ON/OFF, set temperature up/down, fan speed
- › User friendly HRV function, thanks to the introduction of a button for ventilation mode and fan speed
- › Constantly monitoring of the system for malfunctions in a total of 80 components
- › Immediate display of fault location and condition
- › Reduction of maintenance time and costs

Operation buttons: ON / OFF, timer mode start / stop, timer on/off, programmed time, temperature setting, air flow direction adjustment, operating mode selection, fan speed control, filter sign reset, inspection test/operation

Display: Operating mode, Heat Recovery Ventilation (HRV) in operation, cool / heat changeover control, centralised control indication, group control indication, set temperature, air flow direction, programmed time, inspection/test operation, fan speed, clean air filter, defrost / hot start, malfunction

BRC1D52



CENTRALISED CONTROL SYSTEMS

DCS302C51



CENTRALISED REMOTE CONTROL

Providing individual control of 64 groups (zones) of indoor units

- › A maximum of 64 groups (128 indoor units, max. 10 outdoor units) can be controlled
- › A maximum of 128 groups (128 indoor units, max. 10 outdoor units) can be controlled via 2 centralised remote controls in separate locations
- › Zone control
- › Group control (up and down buttons are added for group selection)
- › Control of HRV air flow direction and air flow rate
- › Expanded timer function
- › Malfunction code display
- › Maximum wiring length of 1,000m (total: 2,000m)

DCS301B51



UNIFIED ON/OFF CONTROL

Providing simultaneous and individual control of 16 groups of indoor units

- › A maximum of 16 groups (128 indoor units) can be controlled
- › 2 remote controls in separate locations can be used
- › Operating status indication (normal operation, alarm)
- › Centralised control indication
- › Maximum wiring length of 1,000m (total: 2,000m)

DST301B51



SCHEDULE TIMER

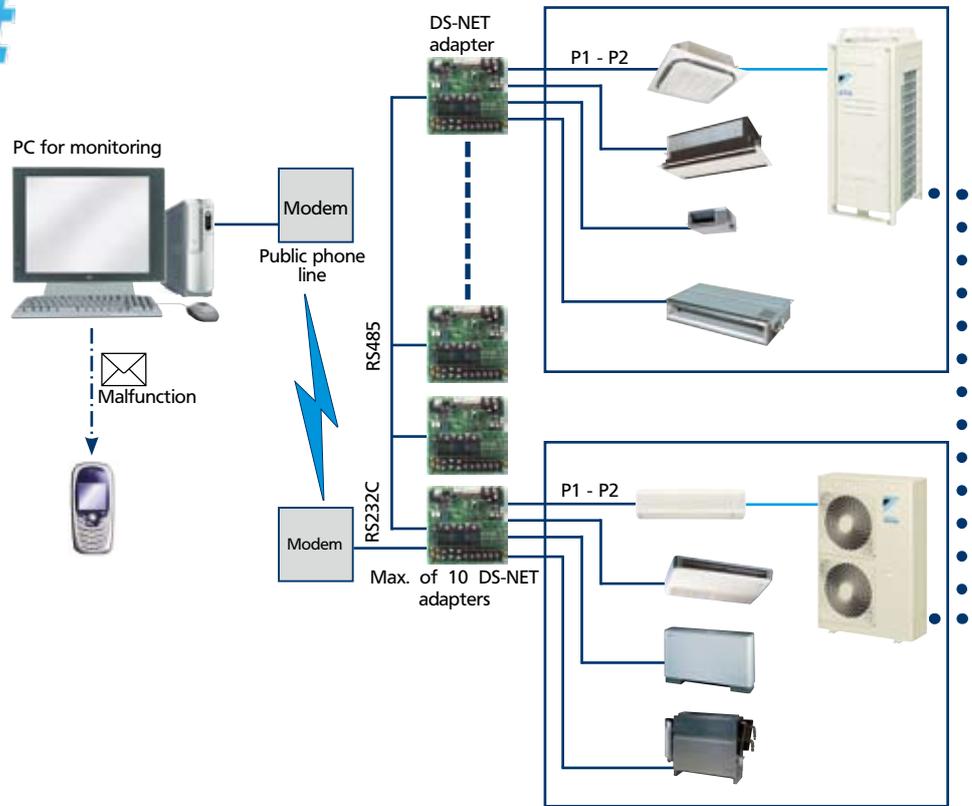
Enabling 64 groups to be programmed

- › A maximum of 128 indoor units can be controlled
- › 8 types of weekly schedule
- › A maximum of 48 hours back-up power supply
- › Maximum wiring length of 1,000m (total: 2,000m)

NETWORK SOLUTIONS



Basic solution for control and management of up to 2,000 indoor units (Sky Air & VRV®)



APPLICATION AREA

- › A small commercial area of less than 40 indoor units.
- › Critical applications for centralized monitoring.

SYSTEM LAYOUT

- › Allows monitoring and control of up to up to 50 stores or sites and 2,000 indoor units with just one modem and phone line.
- › Automates daily air conditioning operation in order to free users from the hassle of air conditioning operation/management.
- › The daily schedule setting allows automatic operation afterward.
- › Automates alarm (report messages) for any malfunctions/errors. Immediate report of any indoor unit breakdown to the servicing company.
- › Automatic report of breakdown/ malfunction information.
- › Minimizes the inconvenience of not having air conditioning via rapid messages

FUNCTIONS

- › Schedule setup (Daily schedule)
 - Start / stop
- › A/C malfunction report
 - Send message to monitoring system
- › Manual operation
 - Start/Stop, set temperature, operation mode, fan speed
- Status monitoring
 - Start/Stop, set temperature,
 - Operation mode, room temperature, operation time, error code

touch Intelligent Controller

Allows detailed and easy monitoring and operation of VRV® systems (max. 2 x 64 groups)

LANGUAGES

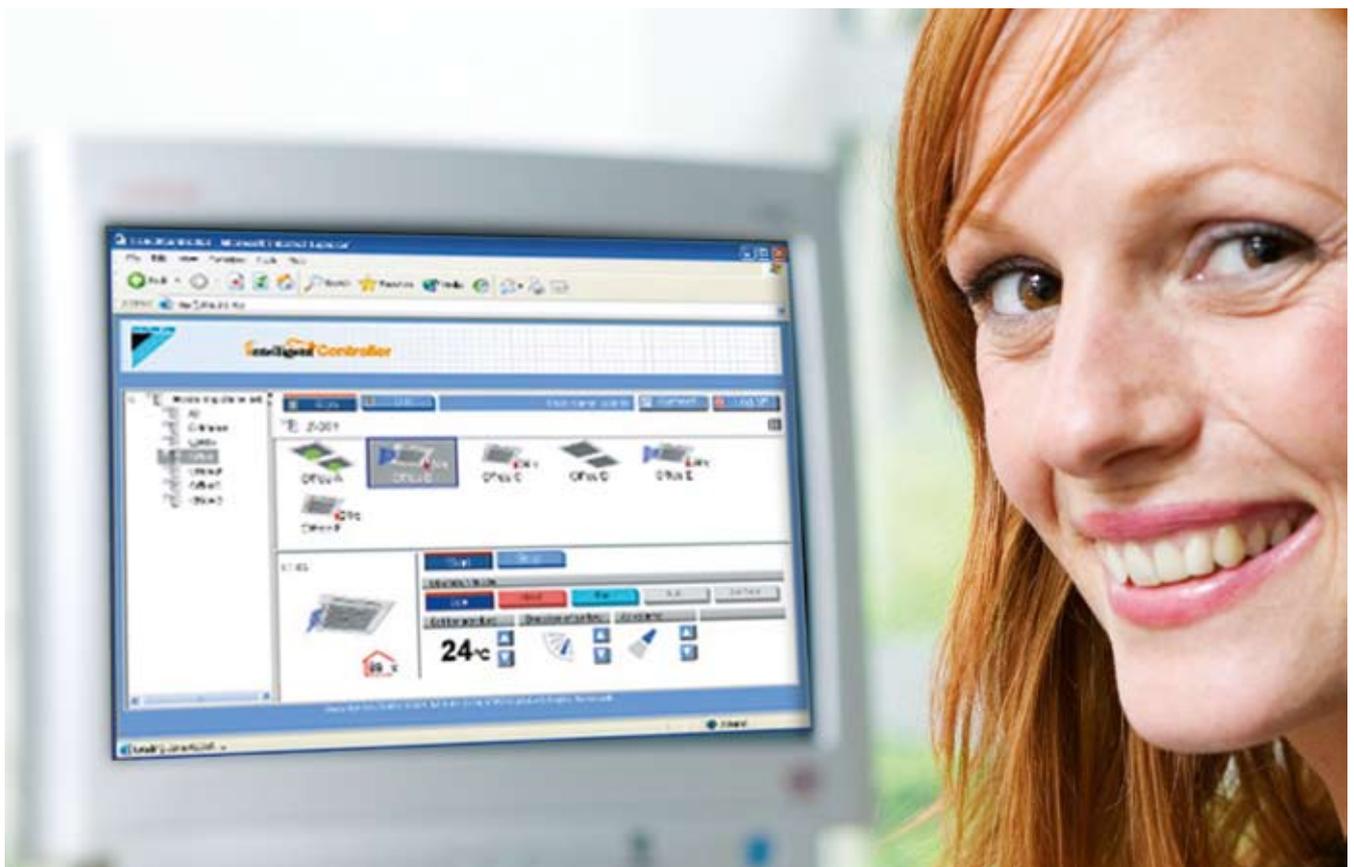
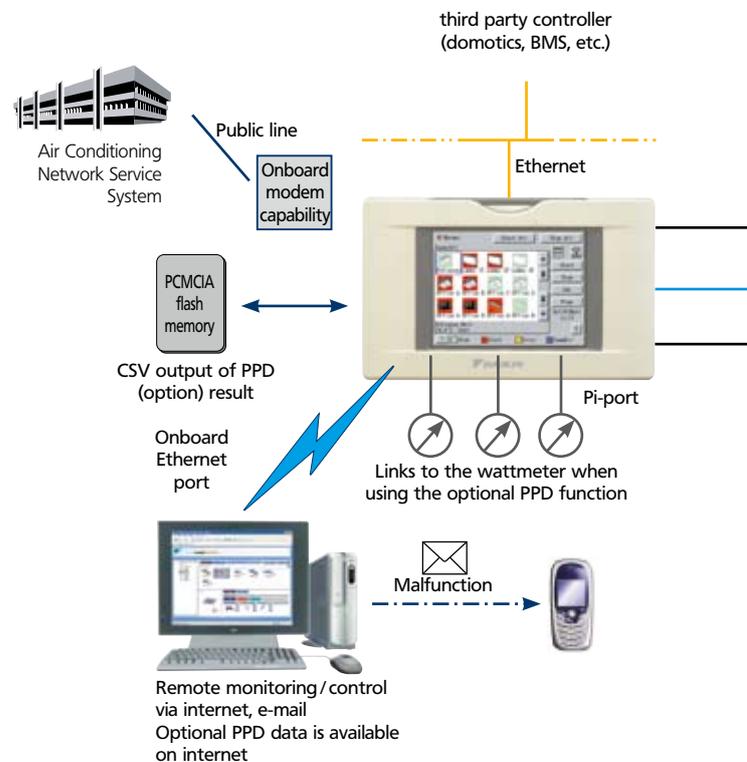
- › English, French, German, Italian, Spanish, Dutch*, Portuguese*

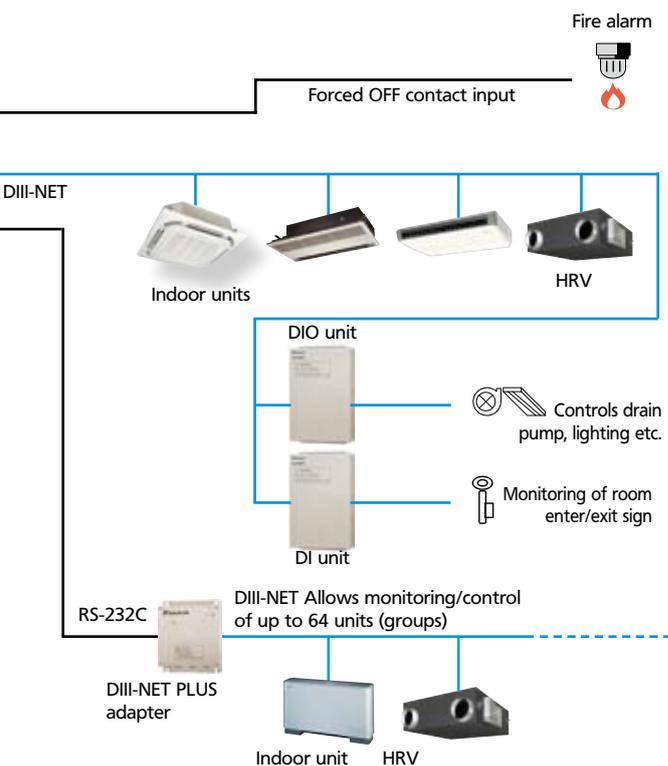
SYSTEM LAYOUT

- › Up to 2x64 indoor units can be controlled
- › Onboard Ethernet port (web browser & e-mail)
- › Digital i/o contacts (option DEC101A51/DEC102A51)
- › Touch panel (full colour LCD via icon display)

MANAGEMENT

- › Web application & internet compatibility
 - Monitoring & control according to user
 - Remote monitoring & control of more than one building
 - Remote monitoring & control of more than one building via internet
- › Power Proportional Distribution (option)
- › PPD data is available on the network through Web option
- › Easy management of electricity consumption
- › Enhanced history function





CONTROL

- › Individual control (set point, start/stop, fan speed) (max. 2 x 64 indoor units/groups)
- NEW ››› › Set back schedule*
- › Schedule control (8 schedules, 17 patterns)
- › Flexible grouping in zones
- › Yearly schedule
- NEW ››› › Free cooling function
- › Fire emergency stop control
- › Interlocking control
- › Increased HRV monitoring and control function
- › Automatic cooling/heating changeover
- › Quick selection and full control
- › Simple navigation
- › Heating optimization
- › Temperature limit
- › Password security: 3 levels (general, administration & service)

MONITORING

- › Visualisation via Graphical User Interface (GUI)
- › Icon colour display change function
- › Indoor units operation mode
- › Error messages via e-mail & mobile phone (web option)
- › Indication filter replacement
- › Multi PC

COST PERFORMANCE

- › Labour saving
- › Easy installation
- › Compact design: limited installation space
- › Overall energy saving

OPEN INTERFACE

- NEW ››› › Communication to a third party controller (domotics, BMS, etc.) is possible via http interface option

CONNECTABLE TO

- › VRV®
- › HRV
- › Sky Air (via interface adapter)
- › Split (via interface adapter)

* Contact your local dealer for more information and availability
For more details on Intelligent Touch Controller consult the Intelligent Touch Controller brochure.

Intelligent Manager

The ideal solution for full control and management of maximum 1,024 VRV® indoor units

LANGUAGES

- › English
- › French
- › German
- › Italian
- › Spanish
- NEW ››› › Dutch*
- NEW ››› › Portuguese*

SYSTEM LAYOUT

- › Up to 1,024 indoor units can be controlled (by 4 iPUs)
- › Ethernet TCP/IP (100Mbit recommended)
- › Integrated digital contacts on the Intelligent Processing Unit (iPU)
 - 20 general input ports
 - 2 digital outputs
- › Stand alone operation of the iPU for minimum 48 hours
- › Compatible with UPS shutdown software

MANAGEMENT

- › Web access function (option)
- › Power Proportional Distribution (option)
- › Operational history management (start/stop, malfunction, operating hours)
- › Generation of reports (graphics & tables) (daily, weekly, monthly)
- › Peak load shedding
- › Advanced tenant management
- › Sliding temperature
- › Eco mode (option)

CONTROL

- › Individual control (setpoint, start/stop, fan speed) (max. 1,024 indoor groups on one iManager system with four iPU's)
- › Group control (100 groups)
- › Schedule control (200 programs)
- › Fire emergency stop control (32 programs)
- › Interlocking control
- › Setpoint limitation
- › Automatic cooling/heating change-over
- › Power failure/release control
- › Temperature limit (automatic start)
- › Timer extension
- NEW ››› › Pre-cooling and -heating function*

MONITORING

- › Visualization via a Graphical User Interface (GUI)
- › featuring free layout
- › Operation mode of indoor units
- › Fault indication
- › Indication filter replacement
- › Setpoint indication
- › Operation time monitoring
- › Multi PC
- › On-line help

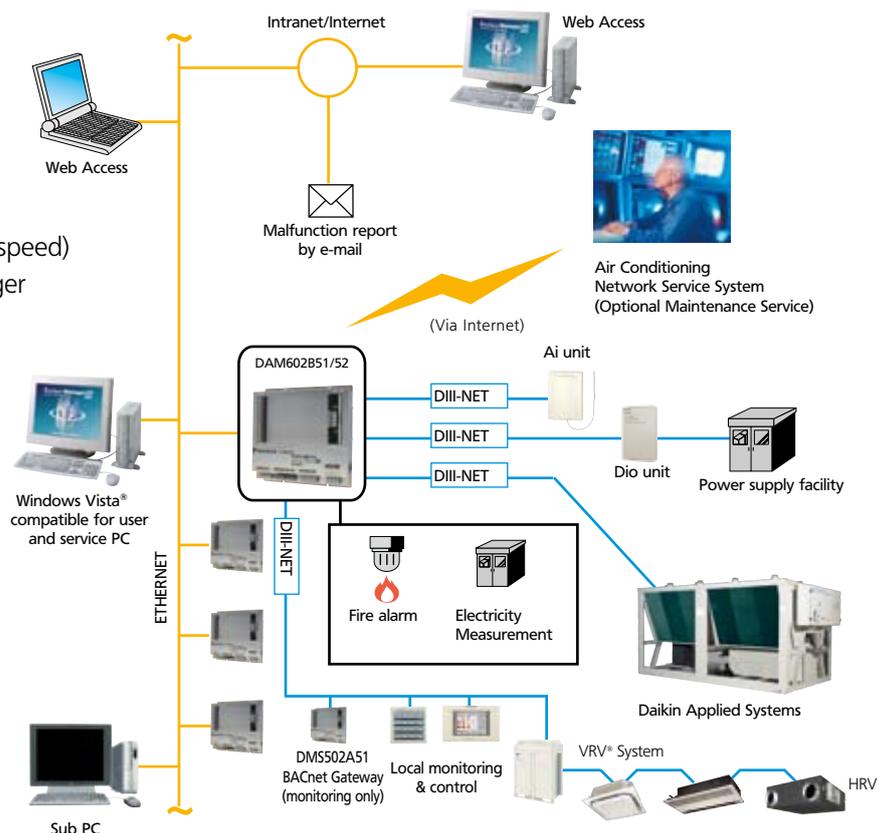
COST PERFORMANCE

- › Labour saving
- › Easy installation
- › Compact design: limited installation space
- › Overall energy saving

CONNECTABLE TO

- › VRV®
- › HRV
- › Sky Air (via interface adapter)
- › Split (via interface adapter)

* Contact your local dealer for more information and availability
For more details on Intelligent Manager consult the Intelligent Manager brochure.

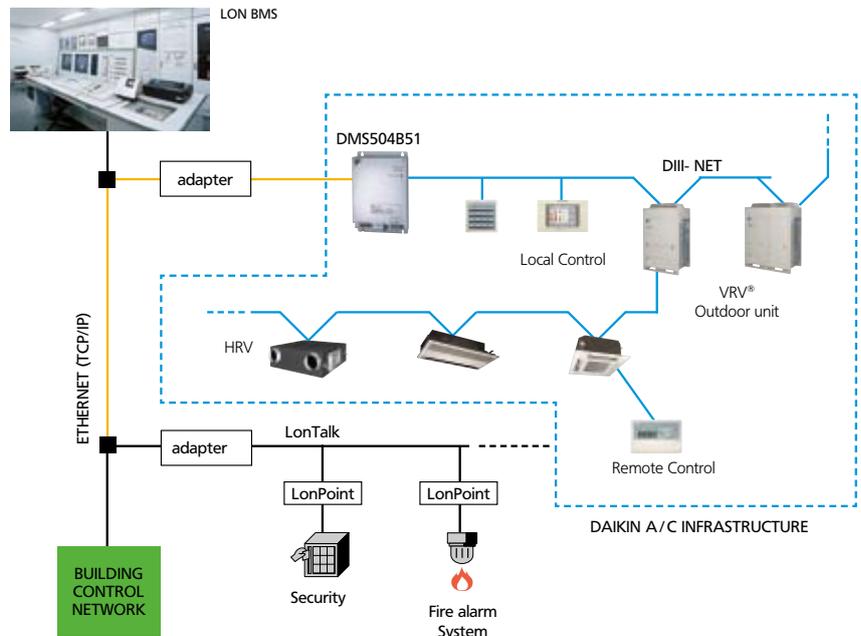


DMS-IF

Open network integration of VRV® monitoring and control functions into Lonworks Networks

- › Interface for connection to LonWorks networks
- › Communication via Lon protocol (twisted pair wire)
- › 64 groups connectable per DMS-IF
- › Unlimited site size
- › Quick and easy installation

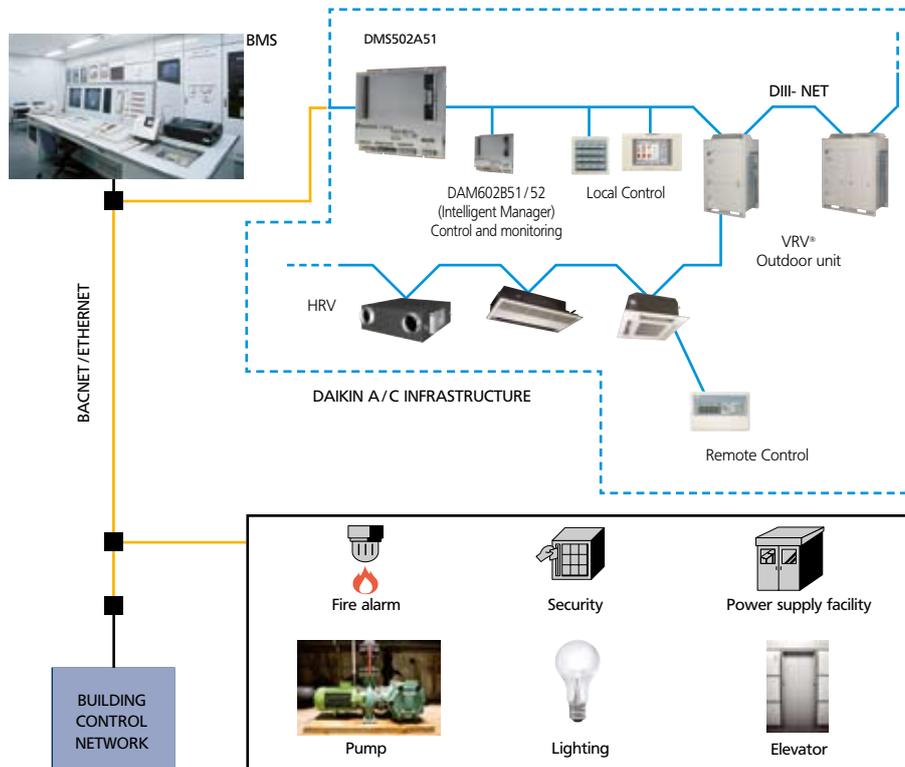
For more details on DMS-IF consult the DMS-IF brochure.



BACnet Gateway

Integrated control system for seamless connection between VRV® and BMS systems

- › PPD data is available on BMS-system
- › Interface for BMS system
- › Communication via BACnet protocol (connection via Ethernet)
- › 256 units connectable per BACnet gateway
- › Unlimited site size
- › Easy and fast installation



For more details on BACnet Gateway consult the BACnet Gateway brochure.

ACCESSORIES

INDIVIDUAL CONTROL SYSTEMS

DESCRIPTION	FXFQ	FXZQ	FXCQ	FXKQ	FXDQ-M9	FXDQ-PB FXDQ-NB	FXSQ	FXMQ-P	FXMQ-MA	FXAQ	FXUQ	FXHQ	FXLQ	FXNQ	
Wired remote control	BRC1D52														
Infrared remote control	cooling only	BRC7F533F	BRC7E531	BRC7C67	BRC4C63	BRC4C64	BRC4C64	BRC4C66	BRC4C65	BRC4C66	BRC7E619	BRC7C529	BRC7E66	BRC4C64	BRC4C64
	heat pump	BRC7F532F	BRC7E530	BRC7C62	BRC4C61	BRC4C62	BRC4C62	BRC4C65	BRC4C66	BRC4C65	BRC7E618	BRC7C528	BRC7E63	BRC4C62	BRC4C62
Simplified remote control	-	-	-	-	BRC2C51	BRC2C51	BRC2C51	BRC2C51	BRC2C51	BRC2C51	-	-	-	BRC2C51	BRC2C51
Simplified remote control for hotel use	-	-	-	-	BRC3A61	BRC3A61	BRC3A61	BRC3A61	BRC3A61	BRC3A61	-	-	-	BRC3A61	BRC3A61

CENTRALISED CONTROL SYSTEMS

DESCRIPTION	FXFQ	FXZQ	FXCQ	FXKQ	FXDQ-M9	FXDQ-PB FXDQ-NB	FXSQ	FXMQ-P	FXMQ-MA	FXAQ	FXUQ	FXHQ	FXLQ	FXNQ
Centralised remote control	DCS302C51													
Unified ON/OFF control	DCS301B51													
Schedule timer	DST301B51													

OTHERS

DESCRIPTION	FXFQ	FXZQ	FXCQ	FXKQ	FXDQ-M9	FXDQ-PB FXDQ-NB	FXSQ	FXMQ-P	FXMQ-MA	FXAQ	FXUQ	FXHQ	FXLQ	FXNQ
Wiring adapter ⁶	-	KRP1B57 ¹	-	KRP1B61	KRP1B61	KRP1B56	-	KRP1C64 ³	KRP1B61	-	KRP4A53	KRP1B3	KRP1B61	KRP1B61
Wiring adapter ⁷	EKRP1C11 ¹	-	EKRP1B2	-	EKRP1B2 ²	-	EKRP1B2A ³	-	-	-	-	-	-	-
Wiring adapter for electrical appendices (control and monitoring P1 P2)	KRP2A526 ¹	KRP2A52 ¹	KRP2A516 ¹	KRP2A61	KRP2A51	KRP2A53	KRP2A51	KRP2A61 ³	KRP2A61	KRP2A51 ¹	-	KRP2A62 ¹	KRP2A51	KRP2A51
Wiring adapter for electrical appendices (control and monitoring F1 F2)	KRP4AA53 ¹	KRP4A53 ¹	KRP4A516 ¹	KRP4A51	KRP4A51	KRP4A54	KRP4A51	KRP4AA51 ³	KRP4A51	KRP4A51 ¹	-	KRP4A52 ¹	KRP4A51	KRP4A51
Remote sensor	KRCS01-4	KRCS01-1					KRCS01-4			KRCS01-1				
Installation box / mounting plate for adapter PCB	KRP1H98	KRP1BA101	KRP1B96 ⁴⁵	-	-	KRP1BA101	KRP4A96 ⁴⁵	-	KRP4A93 ⁴⁵	KRP1B97	KRP1C93 ⁴	-	-	-
Electrical box with earth terminal (3 blocks)	-							KJB311A						
Electrical box with earth terminal (2 blocks)	KJB212AA							KJB212A						
Noise filter (for electromagnetic interface only)	-							KEK26-1A						
External control adapter (for C/H zone, input LNO & Demand)	-	DTA104A52	DTA104A51 ¹	DTA104A61	DTA104A61	DTA104A53	DTA104A61				-	DTA104A62	DTA104A61	DTA104A61
Interface adapter for Sky Air series (to connect Sky Air indoor to F1 F2)	-	-	-	-	-	-	-	-	-	-	DTA102A52	-	-	-
Connector for forced on/forced off	-	-	-	-	-	-	-	-	-	-	EKRORO	-	-	-

Notes:

¹ Installation box is required

² Fixing box is KRP1A90

³ Mounting plate KRP4A96 is required. Maximum 2 option PCB can be mounted.

⁴ Up to 2 adapters can be fixed per installation box

⁵ Only 1 installation box can be installed per indoor unit

⁶ For output 4 signals: Hour meter, fan, auxiliary electric heater, humidifier

⁷ For output 2 signals: Hour meter, fan



DESCRIPTION	FCQ-C	FFQ-B	FDBQ-B	FDXS-E/C	FBQ-C	FTXG-E/ CTXG-E	FTXS-G	FTXS-F	FHQ-B	FVXS-F	FLXS-B
Wired remote control	BRC1D52	BRC1D52	BRC1D52	-	BRC1D52	-	-	-	BRC1D52	-	-
Infrared remote control	BRC7F532F	BRC7E530	-	ARC433A8	BRC4C62	ARC433A41	ARC452A3	ARC433A70	BRC7E63	ARC452A1	ARC433A5
Simplified remote control	-	-	BRC2C51	-	BRC2C51	-	-	-	-	-	-
Simplified remote control for hotel use	-	-	BRC3A61	-	BRC3A61	-	-	-	-	-	-

DESCRIPTION	FCQ-C	FFQ-B	FDBQ-B	FDXS-E/C	FBQ-C	FTXG-E/ CTXG-E	FTXS-G	FTXS-F	FHQ-B	FVXS-F	FLXS-B
Centralised remote control						DCS302C51					
Unified ON/OFF control						DCS301B51					
Schedule timer						DST301B51					

DESCRIPTION	FCQ-C	FFQ-B	FDBQ-B	FDXS-E/C	FBQ-C	FTXG-E/ CTXG-E	FTXS-G	FTXS-F	FHQ-B	FVXS-F	FLXS-B
Wiring adapter ⁵	KRP1B457	KRP1B57 ¹	-	-	KRP1B5A54	-	-	-	KRP1B54	-	-
Wiring adapter ⁶	EKRP1C11 ¹	EKRP1B2	EKRP1B2 ²	-	EKRP1B2A ³	-	-	-	EKRP1B2	-	-
Wiring adapter external control and monitoring	KRP4A453 ¹	KRP4A53 ¹	-	-	KRP4A51	-	-	-	KRP4A52 ¹	-	-
Remote sensor	KRCS01-4	KRCS01-1	-	-	-	-	-	-	-	-	-
Installation box / mounting plate for adapter PCB	KRP1H98	KRP1B1A101	-	-	-	-	-	-	KRP1C93 ⁴	-	-
Interface adapter to connect indoor to F1 F2	DTA112B51	DTA112B51	DTA112B51	KRP928A2S	DTA112B51	KRP928A2S	KRP928A2S	KRP928A2S	DTA112B51	KRP928B(A)2S	KRP928A2S
Connector for forced on/forced off	EKRORO2	EKRORO	EKRORO	-	EKRORO3	-	-	-	EKRORO	-	-

Notes:

¹ Installation box is required

² Fixing box is KRP1A90

³ Mounting plate KRP4A96 is required. Maximum 2 option PCB can be mounted.

⁴ Up to 2 adapters can be fixed per installation box

⁵ For output 4 signals: Hour meter, fan, auxiliary electric heater, humidifier

⁶ For output 2 signals: Hour meter, fan



DS-net

DESCRIPTION	REFERENCE	COMMENTS
DS-net adapter	DTA113B51	4 units can be connected per adapter, 40 units when 10 adapters are connected
Software	DPC001B1-B51	Monitoring panel software

Intelligent touch Controller

DESCRIPTION	REFERENCE	COMMENTS
Intelligent Touch Controller	DCS601C51	2x64 units can be connected
	DCS002C51	Power Proportional Distribution (PPD) software
Software	DCS004A51	E-mail / Web software
	DCS007A51	HTTP option
Hardware	DCS601A52	DIII NET-Plus adapter
Installation box	KJB411A	For wall mounted installation
Touch-Pen	1264009	Spare part n° of Touch-Pen for Intelligent Touch Controller
	KRP928A2S	For connection to Split units
Interface adapters	DTA102A52	For connection to R-22 / R-407C Sky Air units
	DTA112B51	For connection to R-410A Sky Air units
Digital input	DEC101A51	Input contacts: 8 inputs with additional error feedback
Digital input/output	DEC102A51	Input contacts: 8 outputs with additional error and ON/OFF feedback

DESCRIPTION	REFERENCE	COMMENTS
Intelligent Processing unit	DAM602B51	256 indoor units per IPU
Software	DAM602B52	128 indoor units per IPU
Interface adapters	IMB.XX	Up to 1,024 indoor units
	KRP928A2S	For connection to Split units
	DTA102A52	For connection to R-407C/R-22 Sky Air units
DIII Ai	DTA112B51	For connection to R-410A Sky Air units
Digital input	DAM101A51	Outdoor temperature sensor
Digital input / output	DEC10151*	Input contacts: 16 points
Power Proportional Distribution	DEC10251*	Input contacts: 8 points; output contacts: 4 points
ECO Mode	DAM002A51	
Web Acces Function	DAM003A51	

DMS-IF

DESCRIPTION	REFERENCE	COMMENTS
LonWorks- networks compatible Gateway	DMS504B51	Up to 64 groups can be connected per DMS-IF
Interface adapters	KRP928A2S	For connection to Split units
	DTA102A52	For connection to R-407C/R-22 Sky Air units
	DTA112B51	For connection to R-410A Sky Air units

BACnet Gateway

DESCRIPTION	REFERENCE	COMMENTS
BACnet Gateway	DMS502A51	64 groups per Gateway
DIII board	DAM411B51	Extension of 3 x DIII lines (3 x 64) indoor units
Digital input/output	DAM412B51	For forced shutdown
	KRP928A2S	For connection to Split units
Interface adapters	DTA102A52	For connection to R-407C/R-22 Sky Air units
	DTA112B51	For connection to R-410A Sky Air units

BMS: BUILDING MANAGEMENT SYSTEM

DESCRIPTION	REFERENCE	COMMENTS	
Contact / analog signal	DPF201A51	enables ON/OFF command, operation and display of malfunction can be used in combination with up to 4 units.	
	DPF201A52	enables temperature measurement output for 4 groups; 0~5VDC»	
	DPF201A53	enables temperature setting input for 16 groups; 0~5VDC»	
	DSC302A52	used for combining of air conditioning control computer and central remote controller (ON/OFF, display)	
	Wiring adapter for electrical appendices (1)	KRP2A51	simultaneously controls air conditioning control computer and up to 64 groups of indoor units.
		KRP2A52	
Wiring adapter for electrical appendices (2)	KRP4A51-53	to control the group of indoor units collectively, which are connected by the transmission wiring of remote controller.	
External control adapter for outdoor unit	DTA104A51	cooling/heating mode change over, demand control and low noise control are available between the plural outdoor units.	
	DTA104A52		
DIII-net expander adapter	DTA109A51	a maximum of 10 outdoors or 128 indoors can be connected to 1 DTA109A51	
		a maximum of 8 DTA109A51 can be connected to DIII-net	
Mounting kit	KRP4A92	for easy installation of the DTA109A51	



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues.

For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.



ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.



Daikin units comply with the European regulations that guarantee the safety of the product.

VRV® products are not within the scope of the Eurovent certification programme.

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