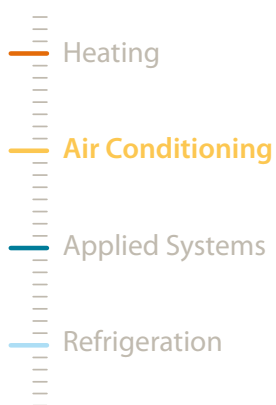




VRV[®]

Catalogue

All Seasons
CLIMATE COMFORT



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.



TABLE OF CONTENTS

VRV® AN ENERGY EFFICIENT APPROACH	5
TOTAL CLIMATE CONTROL: SETTING NEW STANDARDS	4
BEYOND THE ORDINARY	5
WHAT'S NEW?	6
OVER 25 YEARS OF VRV® HISTORY	8
TOTAL SOLUTION CONCEPT	10
WHICH VRV® OUTDOOR SYSTEM OFFERS ME THE BEST SOLUTION?	12
· Air-cooled outdoor systems	12
· Water-cooled outdoor systems	13
OVERVIEW OUTDOOR UNIT RANGE	14
OVERVIEW INDOOR UNIT RANGE	16
OVERVIEW VENTILATION RANGE	18
OVERVIEW NETWORK SOLUTIONS	19
POWERFUL SELECTION PROGRAMMES	20
· VRV® pro	20
· VRV® Xpress	21
AIR-COOLED VRV® OUTDOOR SYSTEMS	22
· Benefits for building owners	24
· Benefits for design offices and consultants	26
· Benefits for installers	28
· Benefits for end users	32
· Advanced air-cooled VRV® technologies	34
· VRV® heat recovery	36
· VRV® heat pump	46
· Replacement VRV®	66
WATER-COOLED VRV® OUTDOOR SYSTEMS	76
· Benefits	78
· Advanced water-cooled VRV® technologies	82
· Standard series	84
· Geothermal series	86
INDOOR UNITS	88
· Ceiling mounted cassette	90
· Concealed ceiling unit	100
· Wall mounted unit	110
· Ceiling suspended unit	112
· Floor standing unit	116
· Stylish indoor units connectable to VRV® heat pump RXYRQ-P	120
· Heating only hydrobox	142
BIDDLE AIR CURTAINS	146
· Which air curtain offers me the best solution?	147
· Biddle comfort air curtain	148
INTEGRATED VENTILATION	150
· Heat reclaim ventilation	152
· Outdoor air processing unit	156
· VRV® air handling applications	158
USER FRIENDLY CONTROL SYSTEMS	160
· Air conditioning network service (ACNSS)	162
· Individual control systems	164
· Centralised control systems	166
· Network solutions	167
· Alternative integration devices	172
· Concept and benefits	172
ACCESSORIES	174
· VRV® outdoor accessories	174
· VRV® indoor accessories	176
· Stylish indoor units accessories	178
· Ventilation accessories	180



Daikin Europe N.V.

ABOUT DAIKIN

Daikin has a worldwide reputation based on 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.

TOTAL CLIMATE CONTROL: SETTING NEW STANDARDS

Total climate control in which perfect living and working conditions are delivered inside a building is now both achievable and economically viable using the Daikin VRV® system.

At the heart of the VRV® climate control system is our renowned, cutting-edge heat pump technology that delivers very high levels of energy efficiency by using renewable energy from the outdoor air to drive the heating and cooling process. Without the need for a secondary heating system, this technology delivers high output for low input, leading to a direct saving in CO₂ emissions and running costs.

But the Daikin VRV® goes further and uses the same advanced technology to extract heat from areas needing cooling and then reuses it to warm other areas or create hot water, thus enabling it to heat and cool different parts of the building at the same time.

This combination of technologies means that our system regularly delivers a Coefficient of Performance (COP) of 4 or more, meaning that it produces four units of heat energy for every one unit of electrical energy used. And, when operating in heat recovery mode, the COP can be as high as 10, making the Daikin VRV® system the most advanced of its kind.



BEYOND THE ORDINARY

To achieve perfect indoor conditions means delivering the optimal comfort levels from the perspective of the occupants by ensuring the right temperature in the right places, with the right level of fresh air and humidity, and all with an acceptable level of sound. It also means delivering attention to detail in all aspects of the technical configuration.

Daikin's approach is a **total engineered** solution that focuses not only on the core components but also on the equipment that can be connected to our new generation of VRV® systems. Our latest equipment is designed to optimise the performance of the total system by automating as much of the routine controls and checks as possible and by providing a global network of local engineers to help maintain top efficiency.

Energy efficiency, more than COP

Some of the areas on which we focus include indoor units that have an automatic filter cleaning function to maintain optimum airflow and reduce energy consumption, while our concealed ceiling units have inverter driven fans that automatically adjust the airflow. Similarly, our automatic charging and containment check ensures the right levels of refrigerant, again ensuring the highest possible efficiency. And then there is the matter of control system. Here we have created a user-friendly integrated control unit that regulates just about everything and even takes the weather into account to ensure that the inside conditions are optimised no matter what the outside conditions.

Indeed, the Daikin total climate control solution is beyond the ordinary.



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 24, 28, 32, 33, 40, 46, 48, 78, 81

WHAT'S NEW?



HIGH SENSIBLE OPTION ON VRV®III HEAT PUMP

p 32

- › Optimise the working of the units for the European climate.
- › Work with increased sensible capacity in cooling mode, resulting in higher efficiency and improved comfort.

Higher comfort to the end user

Preventing cold draughts thanks to higher discharge air temperature on the indoor unit.

Higher energy efficiency

As no energy is wasted on unnecessary dehumidification, the system will work more efficiently while in cooling mode.

- › The best seasonal performance and the lowest running cost in the industry
- › All standard VRV®III features

VRV®III HEATING ONLY

p 66

- › Cost effective, low energy consumption heating system
- › Lower CO₂ emissions compared to traditional heating systems
- › All standard VRV®III features





VRV®III HEAT PUMP, WITH CONNECTION TO STYLISH INDOOR UNITS

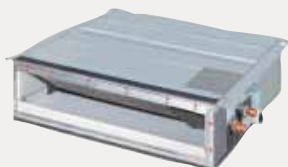
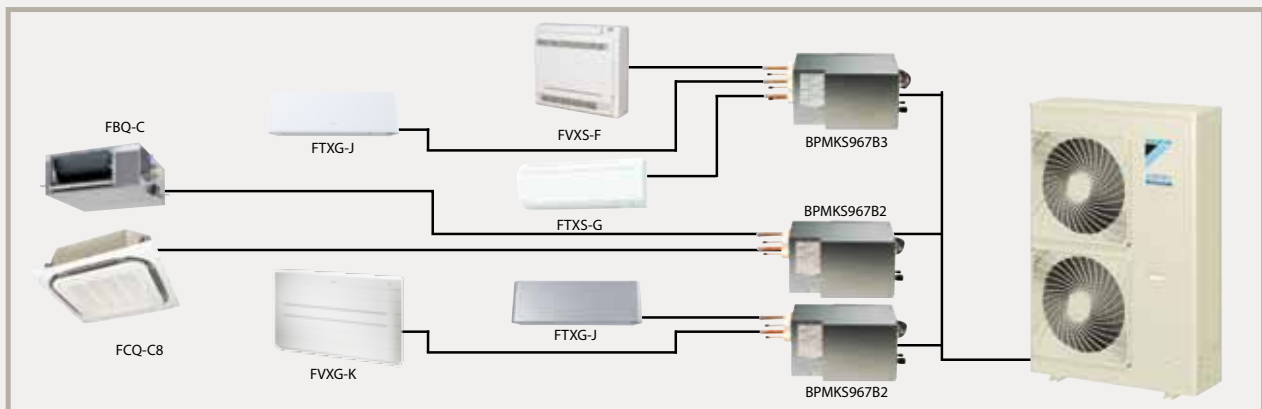
p 56

- › Innovative VRV® technology combined with stylish and silent indoor units
- › Wide range of indoor units: combine VRV® indoor units and stylish indoor units such as Daikin Emura and Nexura in one system
- › Up to 39 indoor units can be connected to a single 18HP unit

VRV®III-S HEAT PUMP

p 60

- › Slim design for flexible installation
- › Wide range of indoor units: either connect VRV® or stylish indoor units such as Daikin Emura, Nexura ...
- › Up to 9 indoor units can be connected
- › All indoor units can be individually controlled



1.5 KW INDOOR UNITS

p 57, 61

- › Units especially developed for small or well-insulated rooms, such as hotel bedrooms or small offices.
- › Available as 4-way blow cassette (FXZQ) and concealed ceiling unit (FXDQ-P7)



HEATING ONLY HYDROBOX FOR VRV® p 38, 142

VRV® plug-&-play, all necessary components integrated

- › Uses heat pump technology to produce hot water
- › Free hot water production possible

OVER 25 YEARS OF VRV® HISTORY



R-22

The original **VRV®** air conditioning system **developed by Daikin Industries Ltd.** in 1982 is **introduced into Europe** in VRV® standard format. VRV® D series can supply conditioned air from up to 6 indoor units connected to a single outdoor unit.

1987

1991

A further step forward is taken in 1991 with the introduction of the **VRV® heat recovery** system, offering simultaneous cooling and heating from different indoor units on the same refrigeration circuit.



In anticipation of phase out dates for all CFC based equipment, Daikin Europe steps up the production of VRV® air conditioning units using **R-407C**.



R-407C

Daikin Europe celebrates its 25th anniversary with the award of an **ISO14001 environmental certificate** and the introduction of VRV® Inverter series with R-407C, in cooling only or heat pump format. As many as 16 indoor units can be connected to 1 single outdoor unit.

1994

1998



Consistent high quality and efficiency lead to the widespread acceptance of the VRV® concept and Daikin becomes the first Japanese air conditioning manufacturer to be awarded the **ISO9001** certification. Daikin applies yet another quantum leap to VRV® technology: the VRV® Inverter-H series, operate up to 16 indoor units from just 1 outdoor unit.

The introduction of the **VRV®II-S** series extends VRV® operating scope into the **light commercial** sectors. Available in 4, 5 and 6HP capacities, the system is designed for installation in up to 9 rooms.



2003

2004

Daikin introduces the VRV®II, the **world's first R-410A** operated variable refrigerant flow system. Available in cooling only, heat pump and heat recovery versions, the system, which represents a considerable advance over earlier VRV® systems, demonstrates Daikin's innovative application of new technology. No less than **40 indoor units** in heat recovery as well as

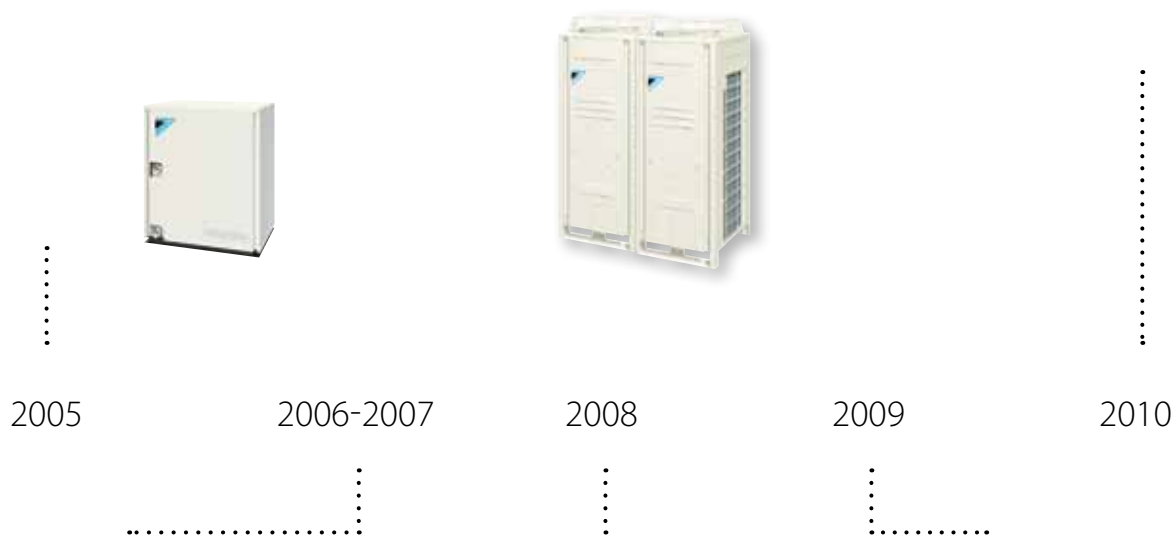
heat pump format can be connected to a single refrigerant circuit.

R-410A



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.

Daikin has extended its VRV® range with the innovative replacement VRV® – a highly cost effective **replacement for** VRV® systems still operating on the banned **R-22** refrigerant. This cost effective upgrade is possible because VRV®III-Q outdoor units can be installed using existing piping and in some cases existing indoor units. The system, among the first of its type, comes in heat pump and heat recovery models with capacities between 5 and 30HP and offers drastically increased efficiencies and considerable reductions in energy consumption compared to R-22 systems.



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.

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.



Daikin has extended the VRV®III 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 available now. This system uses geothermal heat as a **renewable energy** source and can operate down to -10°C in heating mode.



TOTAL SOLUTION CONCEPT

The Daikin VRV® Total Solution provides a single point of contact for the design and maintenance of your integrated climate control system. Our modular units enable you to select the right mix of equipment and technology to ensure that you achieve the optimal balance of temperature, humidity and air freshness for the perfect comfort zone with maximum energy efficiency and cost effectiveness.

VRV® OUTDOOR UNITS

Integrated heat pump solution

- › Solution for every climate from -25°C to +50°C
- › Flexible to fit any building
- › Top efficiencies to ensure low running costs and CO₂ emissions



HEATING AND COOLING



Wide range of indoor units that fit rooms of any size and shape

- › Perfect comfort
- › Whisper-quiet operation
- › Stylish design
- › Concealed installation possible

USER FRIENDLY CONTROL SYSTEMS



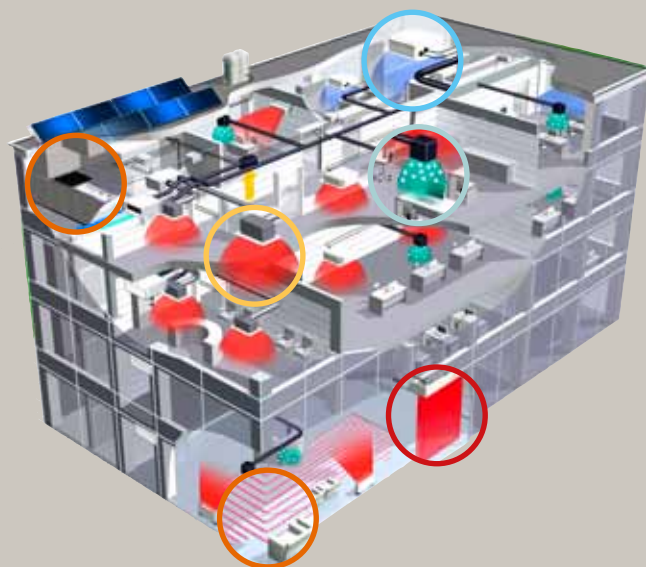
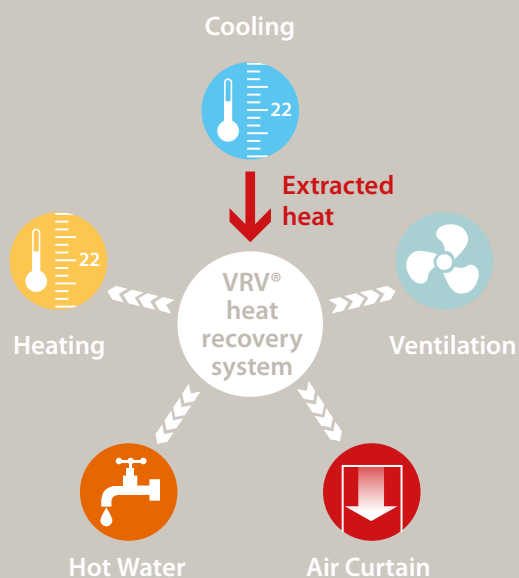
Full control for maximum efficiency

- › From individual control to the management of multiple buildings
- › User friendly touch screen control
- › Remote control & monitoring via internet



**SAVE UP TO 15%
COMPARED TO
TRADITIONAL
SYSTEMS**





AIR SEPARATION THROUGH AIR CURTAINS



A highly efficient solution to doorway climate separation

- › Most efficient open-door solution
- › Year-round comfort, even on the most demanding days
- › Free air curtain heating possible

VENTILATION



Create a high-quality indoor environment

- › Heat is reclaimed between out and indoor air
- › Free cooling possible
- › Optimum control of humidity
- › For one room or your entire building

HOT WATER



Use heat pump technology to produce hot water

- › Free hot water production possible
- › Possibility to connect to solar panels
- › Possible applications: bathrooms, sinks, under floor heating and radiators
- › Hot water up to 80°C



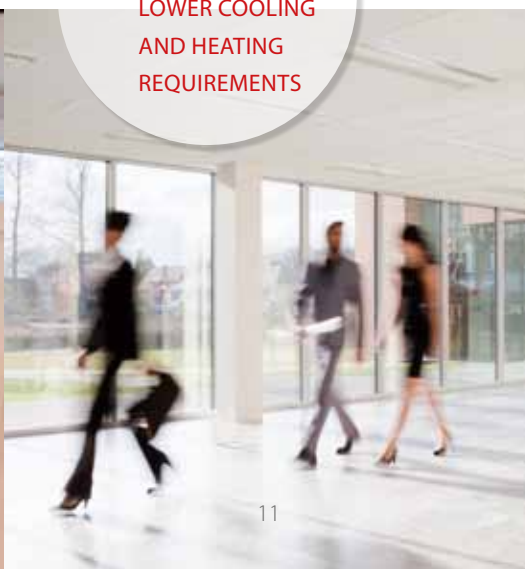
SAVE UP TO 72%
COMPARED TO
AN ELECTRIC AIR
CURTAIN



SAVE UP TO 40%
THANKS TO
LOWER COOLING
AND HEATING
REQUIREMENTS



SAVE UP TO 17%
COMPARED TO A
GAS BOILER



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)

STANDARD SERIES	OPTIMISED SOLUTIONS
SMALL FOOTPRINT COMBINATION <ul style="list-style-type: none"> › Optimized footprint within heat recovery range 	VRV® HEAT RECOVERY, WITH CONNECTION TO HEATING ONLY HYDROBOX <ul style="list-style-type: none"> › Fully integrated system › Free hot water HIGH COP COMBINATION <ul style="list-style-type: none"> › Top energy efficiency in Daikin 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

STANDARD SERIES	OPTIMISED SOLUTIONS
SMALL FOOTPRINT COMBINATION <ul style="list-style-type: none"> › Optimized footprint within heat pump range VRV® HEAT PUMP WITH CONNECTION TO STYLISH INDOOR UNITS <ul style="list-style-type: none"> › Innovative VRV® technology combined with stylish and silent indoor units VRV®III-S HEAT PUMP <ul style="list-style-type: none"> › Especially designed for small capacities › Space saving design › Either connect VRV® or stylish indoor units: Daikin Emura, Nexura... 	HIGH COP COMBINATION <ul style="list-style-type: none"> › Top energy efficiency in Daikin heat pump range VRV® HEAT PUMP OPTIMISED FOR HEATING <ul style="list-style-type: none"> › 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)

VRV® HEATING ONLY

- › For heating only operation from one system
- › Cost-effective, low energy consumption heating system

REPLACEMENT VRV®

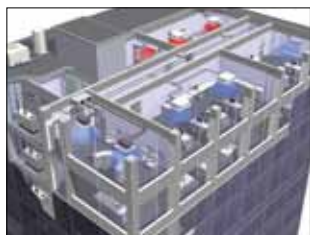


- › For cost-effective upgrade from R-22/R-407C to R-410A
- › Increased energy efficiency compared to R-22/R-407C systems
- › Fast installation compared to total system replacement (re-use of existing piping and in some cases indoor units)
- › Available in heat recovery and heat pump

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.

VRV-W HEAT RECOVERY



STANDARD SERIES

- › For simultaneous heating and cooling from one refrigerant system

GEO THERMAL 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

VRV-W HEAT PUMP



STANDARD SERIES

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

GEO THERMAL 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



OVERVIEW OUTDOOR UNIT RANGE

System	Type	Product name	4	5	6	8	10	12	14	16	18	20	22
Cooling capacity (kW) ¹			11.2	14.0	15.5	22.4	28.0	33.5	40.0	45.0	49.0	55.9	63.6
Heating capacity (kW) ²			12.5	16.0	18.0	25.0	31.5	37.5	45.0	50.0	56.5	62.5	67.2
NEW	HEAT RECOVERY	VRV III REYAQ-P for connection with heating only hydrobox											
		VRV III REYHQ-P High COP combination											
		VRV III REYQ-P8/P9 Small footprint combination											
NEW	HEAT PUMP	VRV III RXYHQ-P9 High COP combination											
		VRV III-C RTSYQ-P Heat pump optimised for heating											
NEW		VRV III RXYQ-P9 Small footprint combination											
NEW		VRV III RXYRQ-P Heat pump with connection to stylish indoor units											
NEW		VRV III-S RXYSQ-P8V1 (Single phase)											
NEW		VRV III-S RXYSQ-P8Y1 (Three phase)											
NEW	HEATING ONLY	VRV III RXHQ-P											
Cooling capacity (kW) ³						22.4	26.7			44.8	49.1	53.4	
Heating capacity (kW) ⁴						25.0	31.5			50.0	56.5	63.0	
WATER COOLED	STANDARD SERIES H/R - H/P	VRV-W III RWEYQ-P											
	GEO-THERMAL SERIES H/R - H/P	VRV-W III RWEYQ-PR											
Capacity class				140		280		360		460	500	540	636
Cooling capacity (kW) ¹ HR/HP				-/14.0	-/22.4	28.0/28.0	-/33.5	36.0/-	-/40.0		50.0/50.4	54.0/55.9	63.6
Heating capacity (kW) ² HR/HP				-/16.0	-/25.0	32.0/31.5	-/37.5	40.0/-	-/45.0	52.0/50.0	56.0/56.5	60.0/62.5	67.2
NEW	REPLACEMENT VRV® HEAT RECOVERY - HEAT PUMP	VRV III-Q RQCEQ-P VRV®III-Q - H/R											
		VRV III-Q RQYQ-P VRV®III-Q - H/P											






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









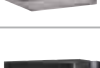







Capacity (HP)																    												
22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	Indoor units	Ventilation	Air curtain	Hydrobox connection	Control systems							
15	67.0	71.4	77.0	82.5	89.0	94.0	98.0	105.0	111.0	116.0	120.0	126.0	132.0	138.0	143.0	147.0	+	x	+	+	+	+	+	+	+	+	+	+
9.0	75.0	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	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	
																	+	x	+	+	+	+	+	x	+	+	+	

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 116 variations.**

The Roundflow cassette now includes a self cleaning filter, which automatically cleans itself daily, leading to yearly energy savings of up to 10%. Dust from the filter is collected in the unit for removal by simple vacuum cleaning.

				Capacity													
Type	Model	Product name		15	20	25	32	40	50	63	71	80	100	125	140	200	250
NEW » CEILING MOUNTED CASSETTE	Round flow cassette autocleaning function possible	FXFQ-P9															
	4-way blow ceiling mounted cassette	FXZQ-M9															
	2-way blow ceiling mounted cassette	FXCQ-M8															
	Ceiling mounted corner cassette	FXKQ-MA															
NEW » CONCEALED CEILING	Small concealed ceiling unit	FXDQ-M9															
	Slim concealed ceiling unit	FXDQ-P7															
	Concealed ceiling unit with inverter driven fan	FXSQ-P															
	Concealed ceiling unit with inverter driven fan	FXMQ-P7															
	Large concealed ceiling unit	FXMQ-MA ³															
WALL MOUNTED	Wall mounted unit	FXAQ-P															
CEILING SUSPENDED	Ceiling suspended unit	FXHQ-MA															
	4-way blow ceiling suspended unit	FXUQ-MA															
FLOOR STANDING	Floor standing unit	FXLQ-P															
	Concealed floor standing unit	FXNQ-P															
Cooling capacity (kW) ¹					2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	16.0	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	18.0	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




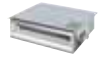








³ Not connectable to VRV'III-S (RXYSQ-P8V1, RXYSQ-P8Y1)

⁴ Decoration panel BYCQ140CG + BRC1E51A needed



NEW

NEW

				Capacity						
Type	Model	Product name		20	25	35	42	50	60	71
CEILING MOUNTED CASSETTE	Round flow cassette autocleaning function possible	FCQ-C8								
	4-way blow ceiling mounted cassette	FFQ-BV								
CONCEALED CEILING	Small concealed ceiling unit	FDBQ-B								
	Slim concealed ceiling unit	FDXS-E/C								
	Concealed ceiling unit with inverter driven fan	FBQ-C								
WALL MOUNTED	Daikin Emura Wall mounted unit	FTXG-J CTXG-J								
	Wall mounted unit	FTXS-J								
	Wall mounted unit	FTXS-G								
CEILING SUSPENDED	Ceiling suspended unit	FHQ-B								
FLOOR STANDING	Nexura floor standing unit	FVXG-K								
	Floor standing unit	FVXS-F								
	Flexi type unit	FLXS-B								

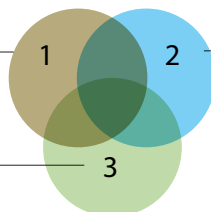
¹ The indoor units in the table above are only connectable to RXYRQ-P, RXYSQ-P8V1 and RXYSQ-P8Y1, in case of RXYRQ-P these indoor units can be combined with standard VRV® indoor units in the same system

² Decoration panel BYCQ140CG + BRC1E51A needed





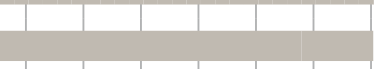












OVERVIEW VENTILATION RANGE

Ventilation: provision of fresh air



Humidification: optimise the balance between indoor and outdoor humidity

Air processing: optimise the balance between indoor and outdoor fresh air temperature

Type	Product name	Components of indoor air quality		Air flow rate (m³/h)											
				0	200	400	600	800	1,000	1,500	2,000	4,000	6,000	8,000	
HEAT RECLAIM VENTILATION	VAM-FA	 1 Ventilation													
	VKM-G	 1 Ventilation 3 Air processing													
	VKM-GM	 1 Ventilation 2 Humidification 3 Air processing													
OUTDOOR AIR PROCESSING UNIT¹	FXMQ-MF	 1 Ventilation 3 Air processing													
VRV² AIR HANDLING APPLICATIONS²	EKEXV-kit	 1 Ventilation 3 Air processing													




¹ Not connectable to VRV/III-S (RXYSQ-P8V1, RXYSQ-P8Y1)

² Air flow rate is a calculated indication only, based on the following values: heating capacity EKEXV-kit * 200m³/h

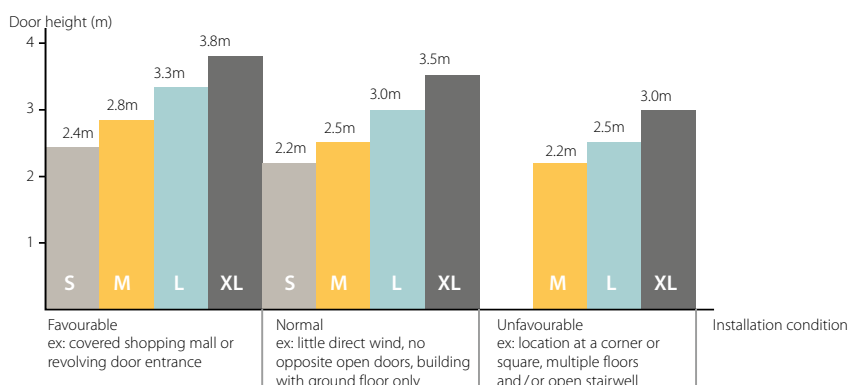
³ For more information on Daikin air handling units refer to your local dealer



OVERVIEW BIDDLE AIR CURTAIN RANGE

Type	Product Name	
BIDDLE COMFORT AIR CURTAIN (CA) FREE HANGING	CAV <u>S/M/L/XL</u> -DK-F	
BIDDLE COMFORT AIR CURTAIN (CA) CASSETTE	CAV <u>S/M/L/XL</u> -DK-C	
BIDDLE COMFORT AIR CURTAIN (CA) RECESSED	CAV <u>S/M/L/XL</u> -DK-R	

BIDDLE COMFORT AIR CURTAIN RANGE



OVERVIEW HYDROBOX RANGE

Type	Product name	Capacity
HEATING ONLY HYDROBOX ¹	HXHD-A	125

¹ Only connectable to REYAQ-P



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, setpoint temp.		Indication filter replacement		Malfunction code		Password security		Touch screen		Daily/monthly/yearly reports		Control via GSM		Graphical report		Visualisation		Ppd		Web acces & control		Http option		Eco mode		Pre cooling / heating		0°△ Between cooling & heating		Power limit control		Sliding t° avoids overcooling via sensor		Free cooling changeover		ACNSS connection air conditioning network service system		Scheduling presets (programs)		User friendliness		Max. Indoors groups																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
DS-NET																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

¹ Gateway for Lonworks networks

² Gateway for BACnet networks



POWERFUL SELECTION PROGRAMMES

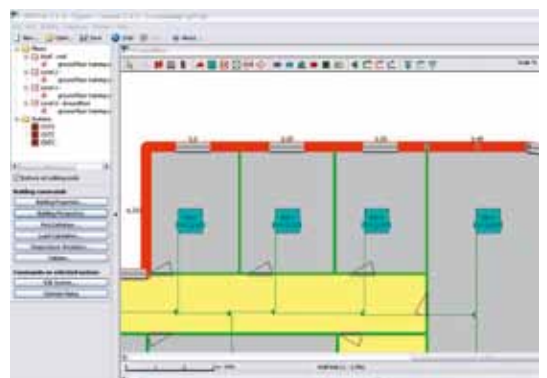
1. VRV® PRO, DESIGN TOOL

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 realtime thermal properties of any building. By calculating annual energy consumptions, it gives the designer the possibility to make accurate selections and get competitive quotations for each project. Moreover, it ensures optimum operating cycles and maximum energy efficiency.

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.

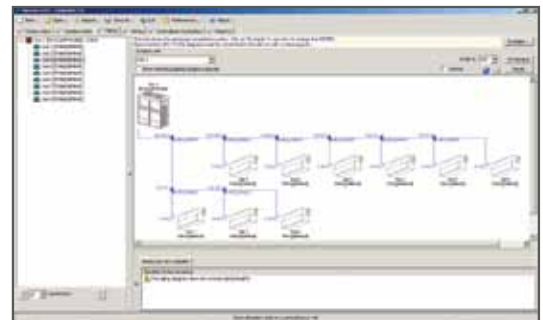




2. XPRESS, QUICK QUOTATION TOOL

Xpress is a software tool that allows creating on the spot quotations for a Daikin VRV® or CMS 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



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 Xpress, please contact the local Daikin representative.

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, heating only, cold climate and mini versions, the VRV® system is **EXTREMELY FLEXIBLE** with an operational capacity range of 5 (14.0kW) to 54HP (170.0kW) (heat pump small footprint combination) and 8 (22.4kW) to 48HP (151.0kW) (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®III-S HEAT PUMP



VRV® HEAT PUMP -
HIGH COP AND SMALL FOOTPRINT COMBINATION



REPLACEMENT VRV®III HEAT RECOVERY AND HEAT PUMP



VRV® HEAT PUMP OPTIMISED FOR HEATING



VRV® HEAT PUMP WITH CONNECTION TO STYLISH INDOOR UNITS

BENEFITS	P 24
ADVANCED VRV® TECHNOLOGIES	P 34
VRV® HEAT RECOVERY	P 36
› FOR CONNECTION TO HEATING ONLY HYDROBOX	P 38
› HIGH COP AND SMALL FOOTPRINT COMBINATION	P 40
VRV® HEAT PUMP	P 46
› HIGH COP COMBINATION	P 46
› OPTIMISED FOR HEATING	P 48
› SMALL FOOTPRINT COMBINATION	P 52
› WITH CONNECTION TO STYLISH INDOOR UNITS	P 56
› VRV®III-S HEAT PUMP	
OPTIMISED DESIGN FOR SMALL CAPACITIES	P 60
VRV® HEATING ONLY	P 66
VRV®III-Q - REPLACEMENT VRV®	
THE DAIKIN SOLUTION TO R-22 PHASE OUT	P 62

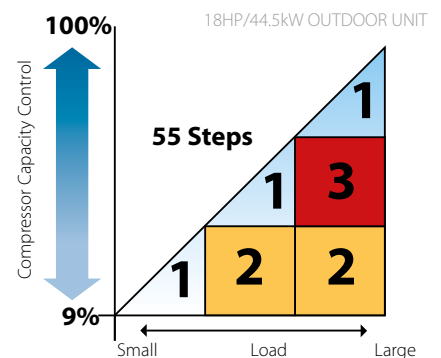
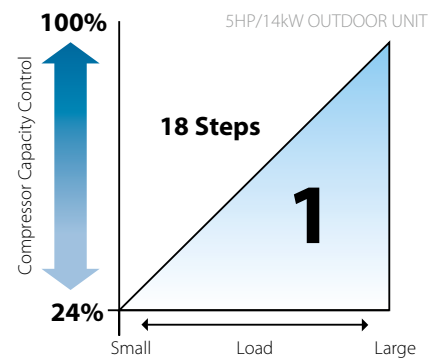


BENEFITS FOR BUILDING OWNERS



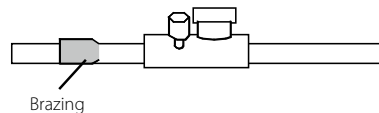
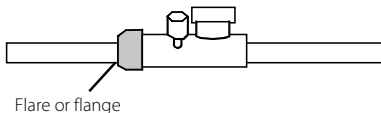
ENERGY SAVING AND INDIVIDUAL ZONE CONTROL - INVERTER TECHNOLOGY

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 connection 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.



TOP QUALITY - ONLY BRAZED CONNECTIONS

All flange 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.



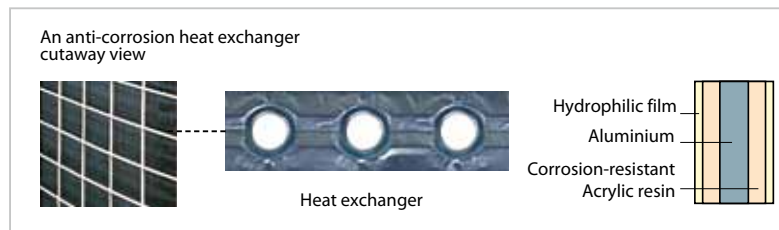
AHEAD OF ENVIRONMENTAL LEGISLATION - ROHS COMPLIANCE

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.

A LONG LASTING INVESTMENT - ANTI COROSION 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:

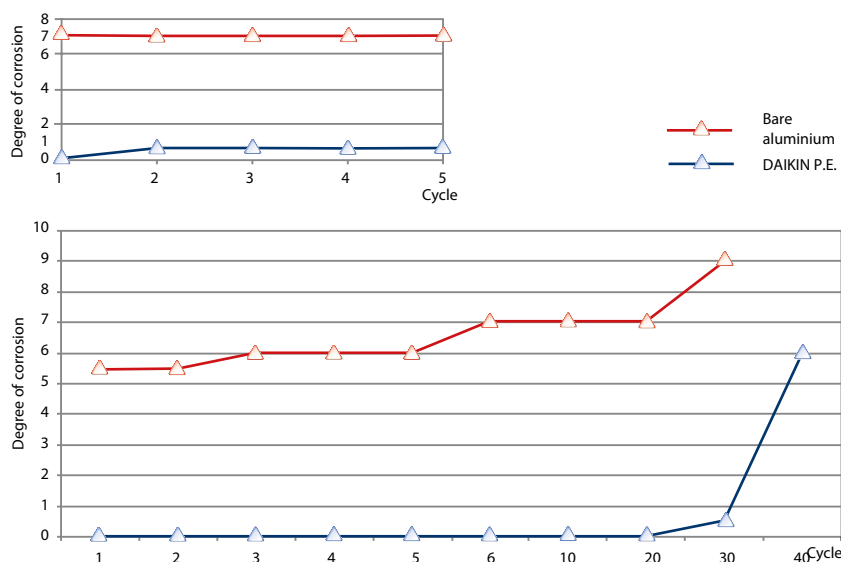
VDA Wechseltest

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



LOW INSTALLATION COST - 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).



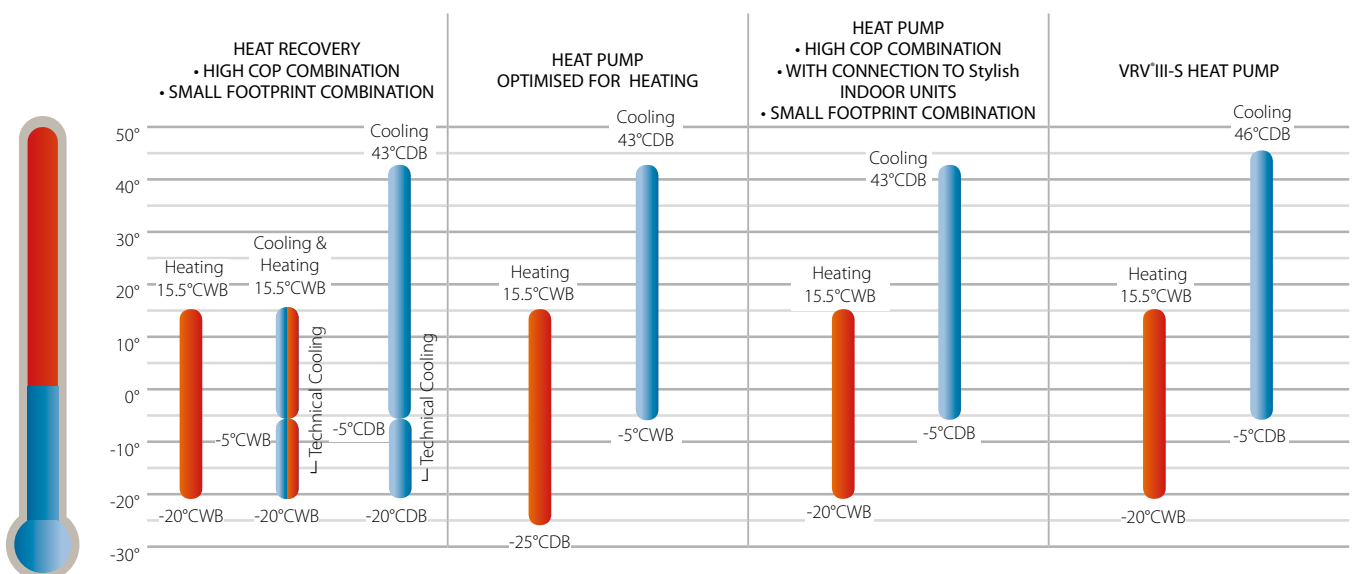
BENEFITS FOR DESIGN OFFICES AND CONSULTANTS

A SOLUTION FOR EVERY CLIMATE - WIDE OPERATION RANGE

The VRV® system can be installed practically anywhere.

Advanced PI(Proportional Integral) 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.



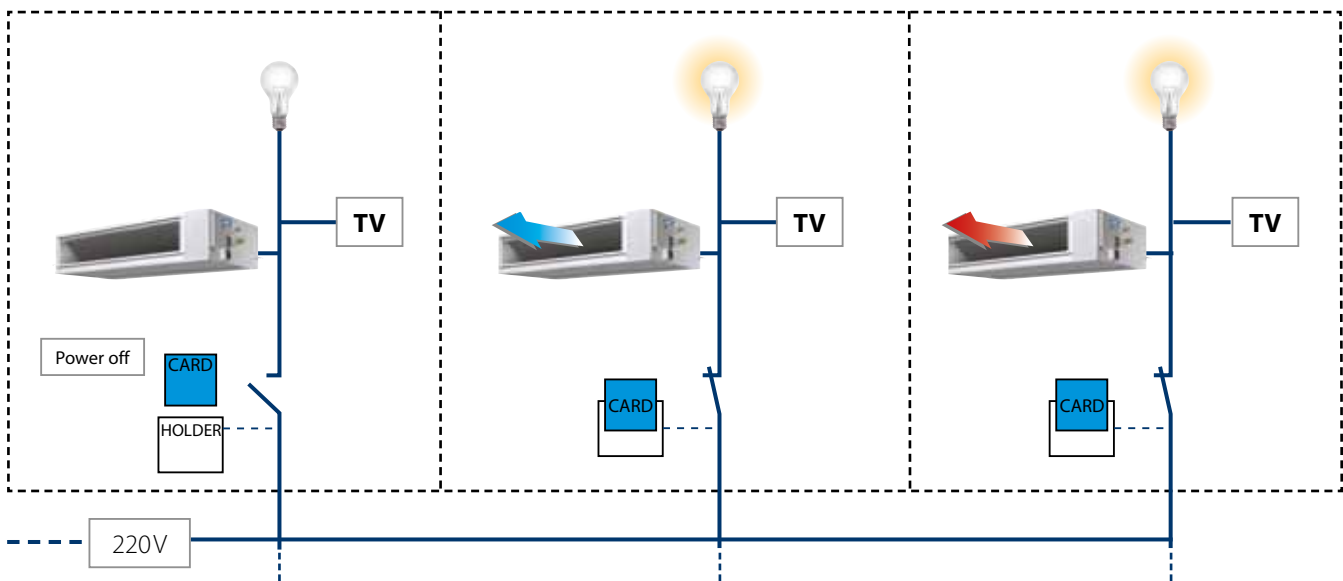
¹ Contact your local dealer for more information and restrictions

MULTIPLE TENANTS, ONE OUTDOOR UNIT - 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 closed, ...

* This option is available on the following indoor units: FXFQ-P9, FXZQ-M9, FXDQ-M9, FXDQ-PB, FXDQ-NB, FXSQ-P, FXMQ-P7, FXAQ-PV, FXLQ-P
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.



INDOOR INSTALLATION

The VRV®III optimised fan blade shape increases output and reduces pressure loss. Together with the high ESP setting (ESP up to 78pa), this makes the VRV® outdoor unit ideal for indoor installation and the use with ducts.





BENEFITS FOR INSTALLERS



EASY INSTALLATION - REFRIGERANT CONTAINMENT CHECK¹

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



EASY REPLACEMENT - 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

Daikin's total engineered solution ensures that, right from installation, the system has the correct refrigerant charge no matter what the original plan called for. In this way, the optimal efficiency and capacity is maintained thus delivering the correct level of heating or cooling for optimal comfort.



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 the temperature drops below 20°C* manual charging is necessary.

* 10°C for heat pump for cold regions

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

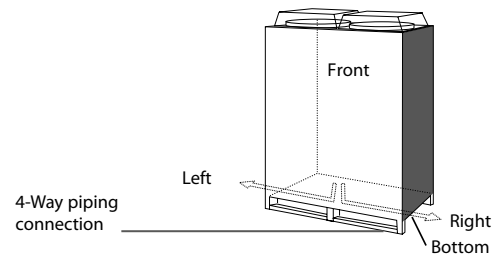
AUTOMATIC TEST

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.



DAIKIN 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.

Daikin Europe N.V. advises only to use Daikin REFNET piping system.

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.

EASY WIRING - "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.





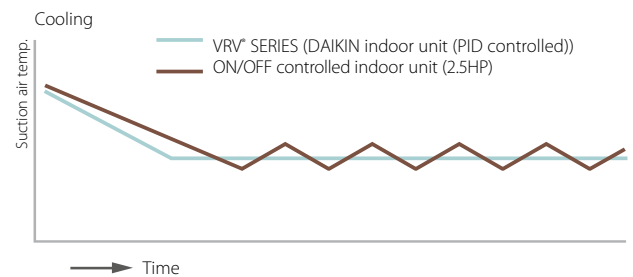


BENEFITS FOR END USERS



SMART CONTROL BRINGS COMFORT

An electronic expansion valve, using PID (Proportional Integral Differential) control, continuously adjusts the refrigerant volume in respond 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.

NEW



HIGH SENSIBLE MODE – YOUR SYSTEM OPTIMISED FOR THE EUROPEAN CLIMATE

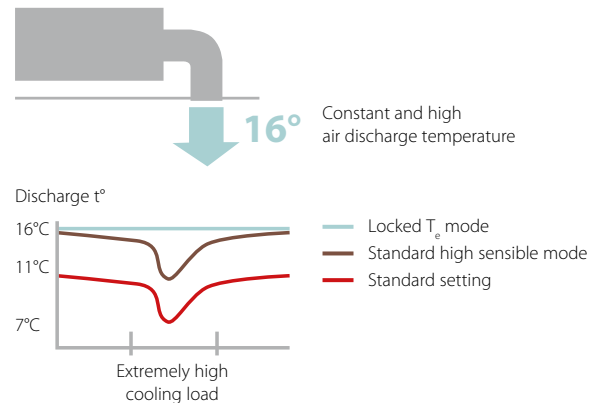
The high sensible mode option on the VRV® outdoor units optimises the working of the units for the European climate. The system works with an increased sensible capacity in cooling mode resulting in improved comfort and a higher efficiency.

Higher comfort to the end user

Preventing cold draughts thanks to higher discharge air temperature on the indoor unit.

Two possibilities:

- Standard high sensible mode: high cooling comfort with priority to capacity
- Locked evaporation temperature mode: full priority to cooling comfort
 - › constant and high air discharge temperature
 - › easier to select air discharge grilles



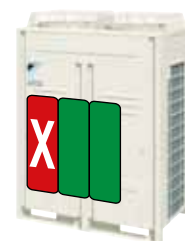
Higher energy efficiency

As no energy is wasted on unnecessary dehumidification, the system will work more efficiently in cooling mode.

* Option is activated through service mode on outdoor unit, only available on RXYQ-P9

COMFORT GUARANTEED AT ALL TIME - 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 will allow emergency operation of another compressor, or another outdoor unit module in case of a multi system, in order to maintain 8 hour maximum interim capacity.



Single outdoor unit with multiple compressors



Multi outdoor unit system



LOW INDOOR UNIT OPERATION SOUND LEVEL

- 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



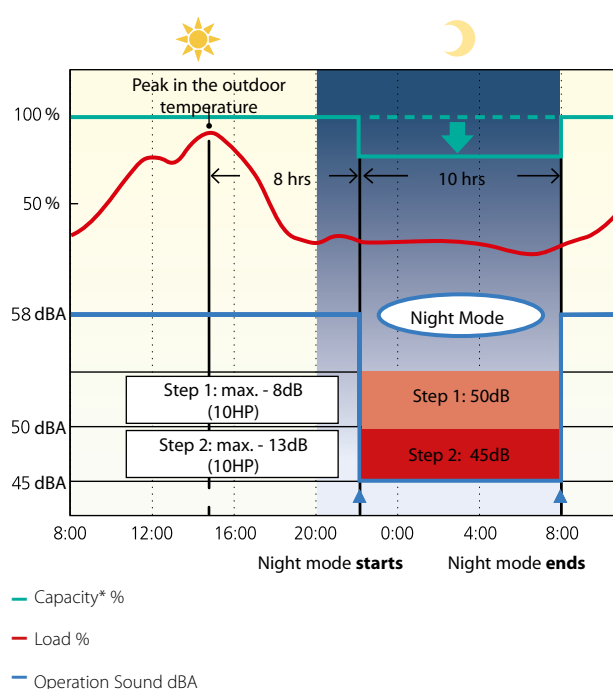
SILENT MODE

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.

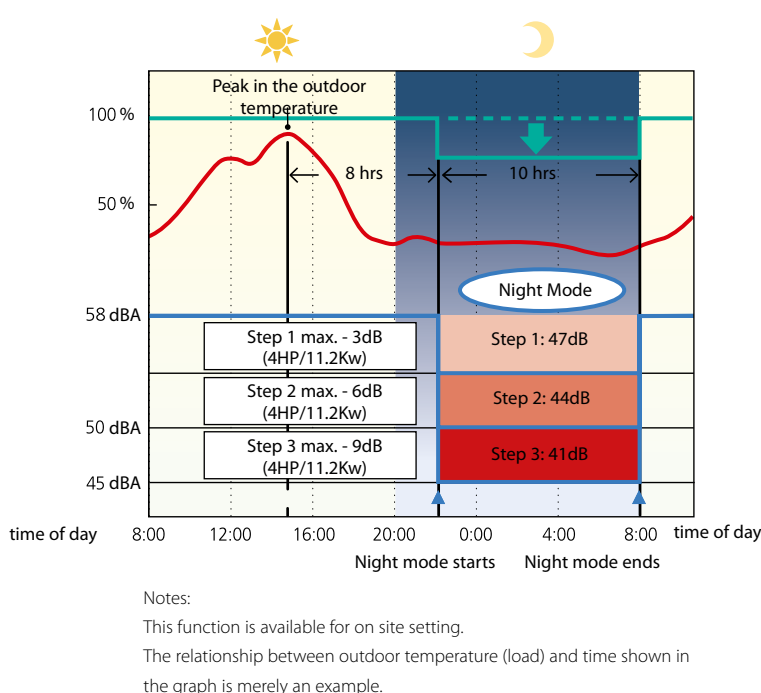
VRV® air cooled units

Night quiet function (max. -13dB(A))



VRV®III-S air cooled units

Night quiet function (max. -8dB(A))



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.

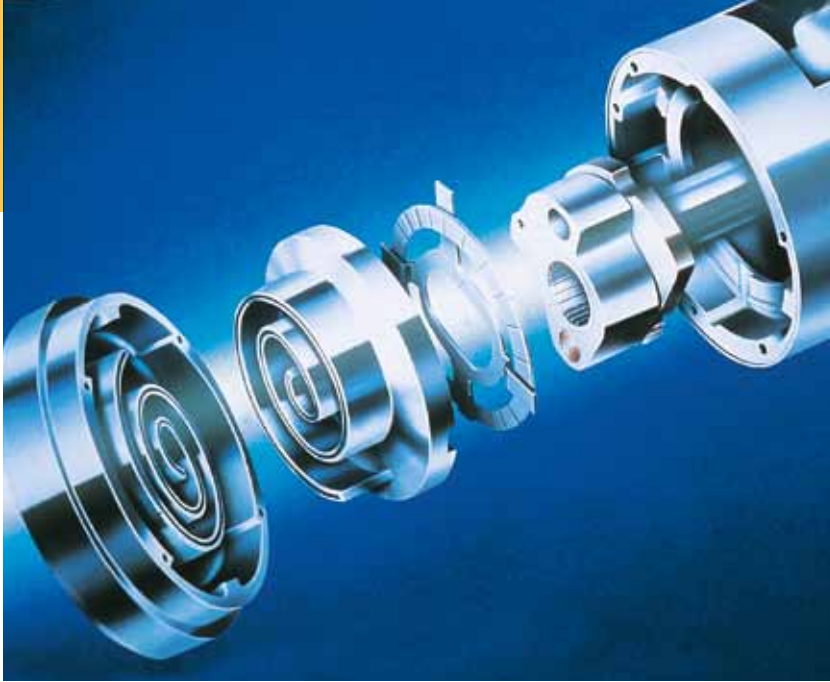
² Initial setting. Can be selected from 6, 8 and 10 hours.

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

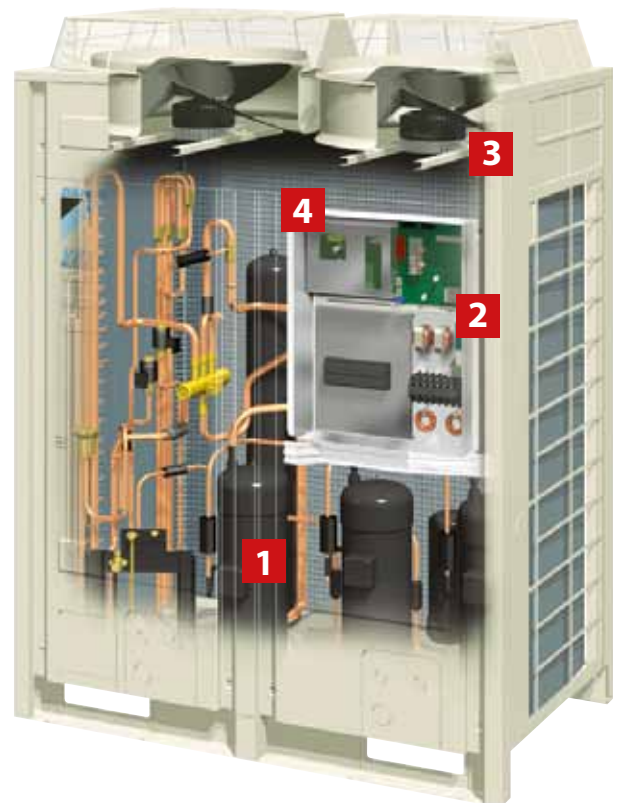
Effect on capacity (cooling) when using silent mode

	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:

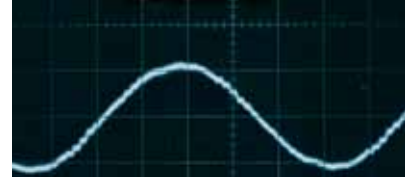


1 RELUCTANCE BRUSHLESS DC COMPRESSOR

- › 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

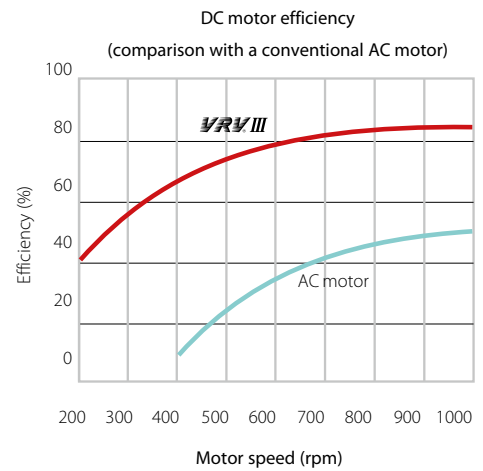
Optimizing the sine wave curve, results in smoother motor rotation and improved motor efficiency.



3 DC FAN MOTOR

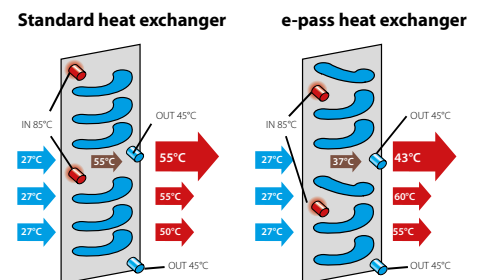
The use of a DC fan motor offers substantial improvements in operating efficiency compared to conventional AC motors, especially during low speed rotation.

DC fan motor structure



4 E-PASS HEAT EXCHANGER

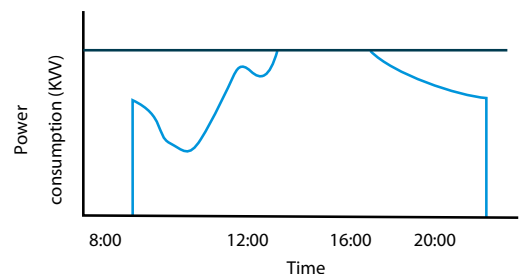
Optimization of the path layout of the heat exchanger prevents heat transferring from the overheated gas section towards the sub cooled liquid section - a more efficient use of the heat exchanger.



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

5 I-DEMAND FUNCTION

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





VRV® HEAT RECOVERY

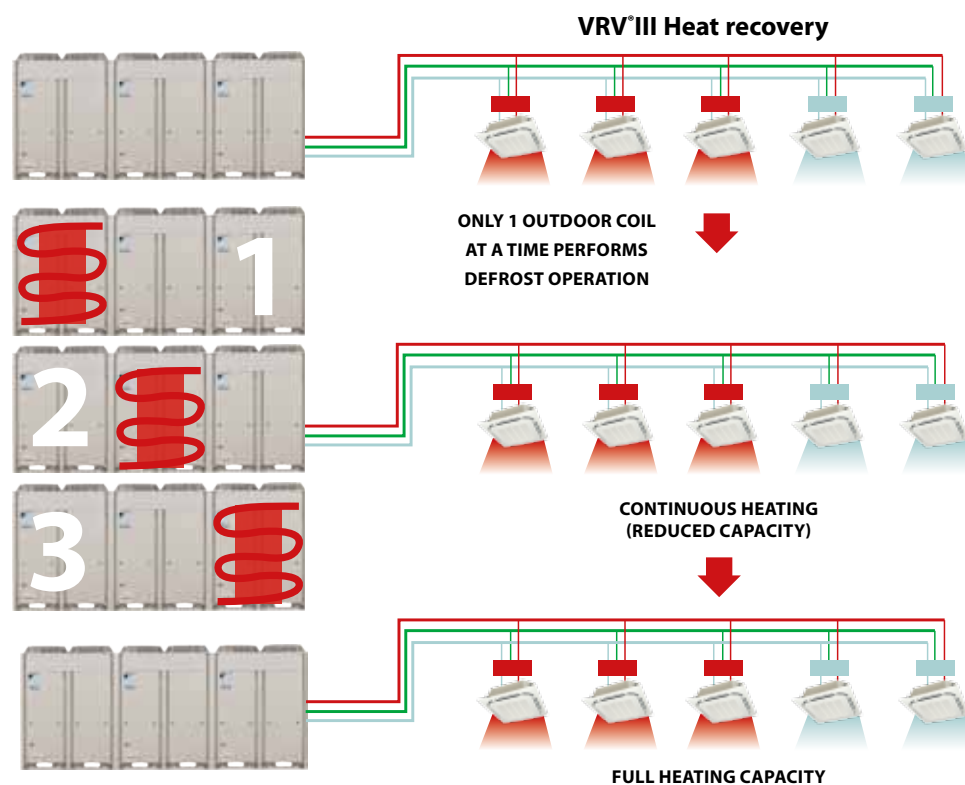
CONTINUOUS HEATING DURING DEFROST

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)



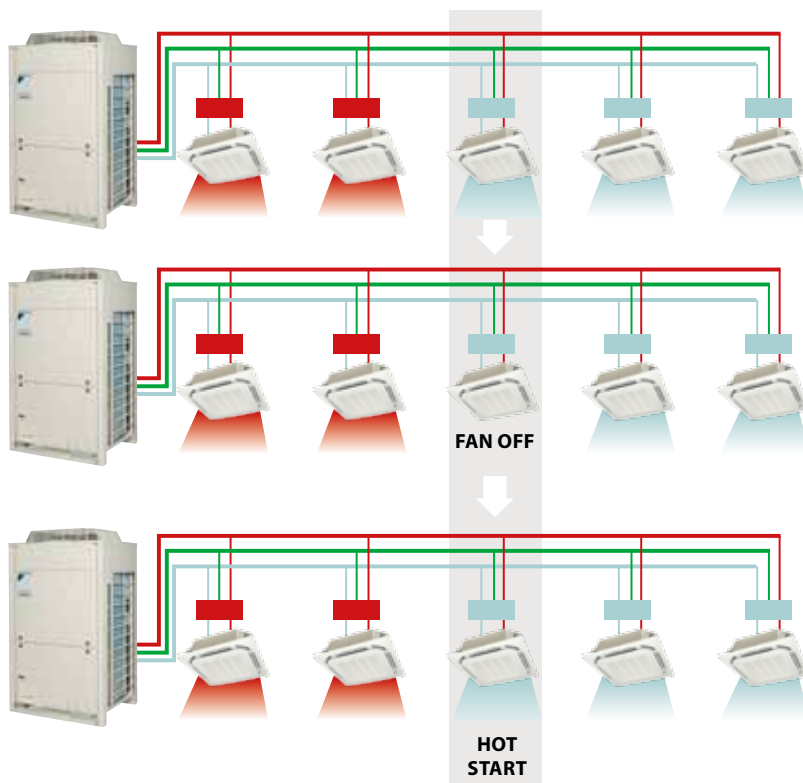
INDIVIDUAL COMFORT THANKS TO VRV®III BS BOX

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.



FLEXIBLE PIPING DESIGN

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

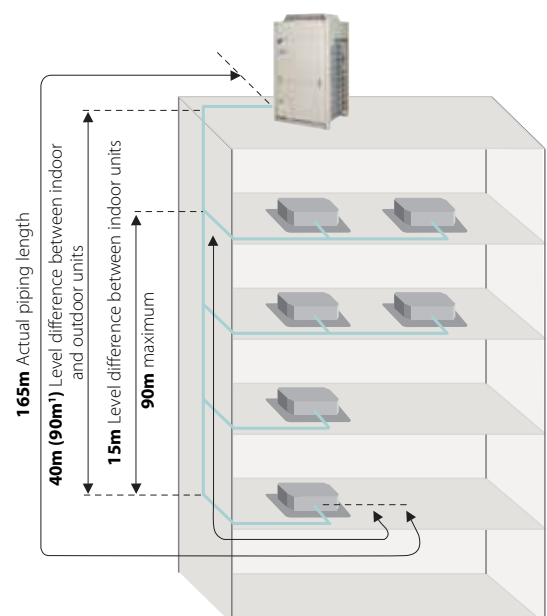
In case the outdoor unit is located above the indoor unit the height difference is 50m standard. It can be extended to 90m¹.

In case the outdoor unit is located below the indoor unit, the height difference is 40m standard. Height differences up to maximum 90m are possible¹.

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.

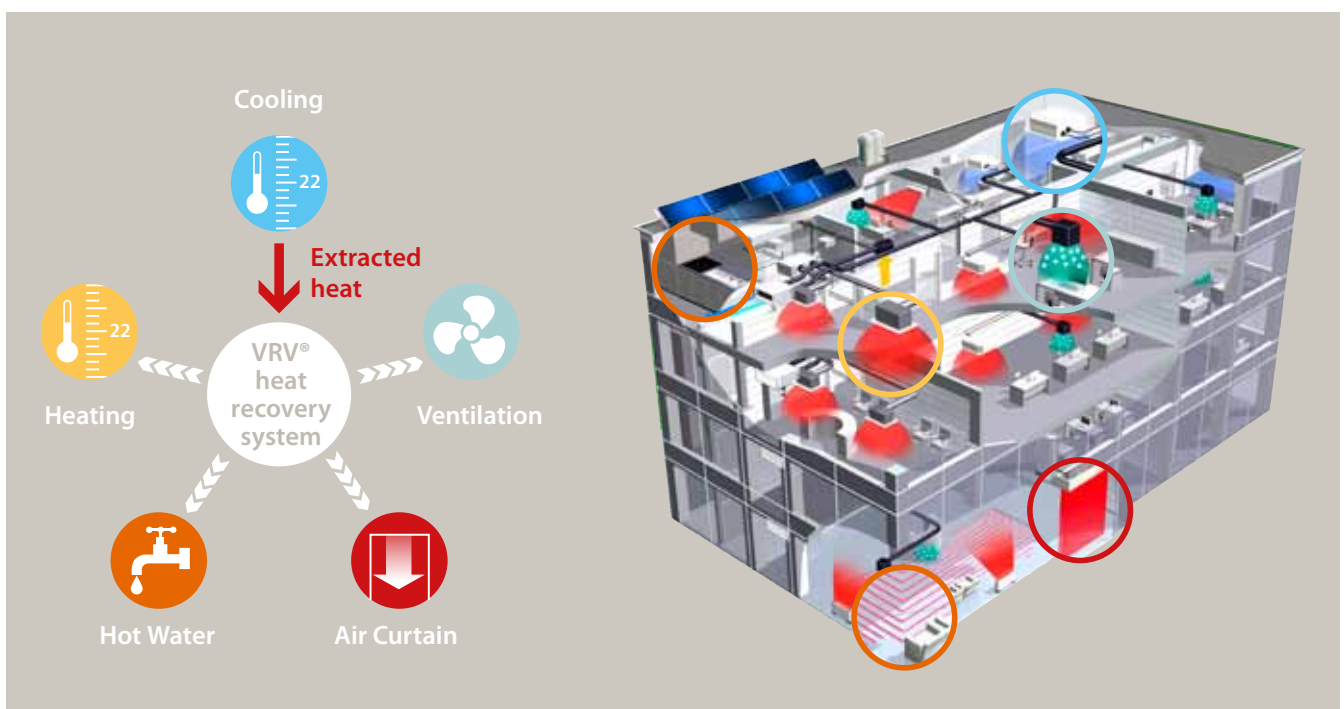
¹ For more information, please contact your local Daikin dealer.

¹ Branch selectors (BS units) are not taken into account, as their installation does not influence the piping design.





VRV® HEAT RECOVERY, FOR CONNECTION TO HEATING ONLY HYDROBOX

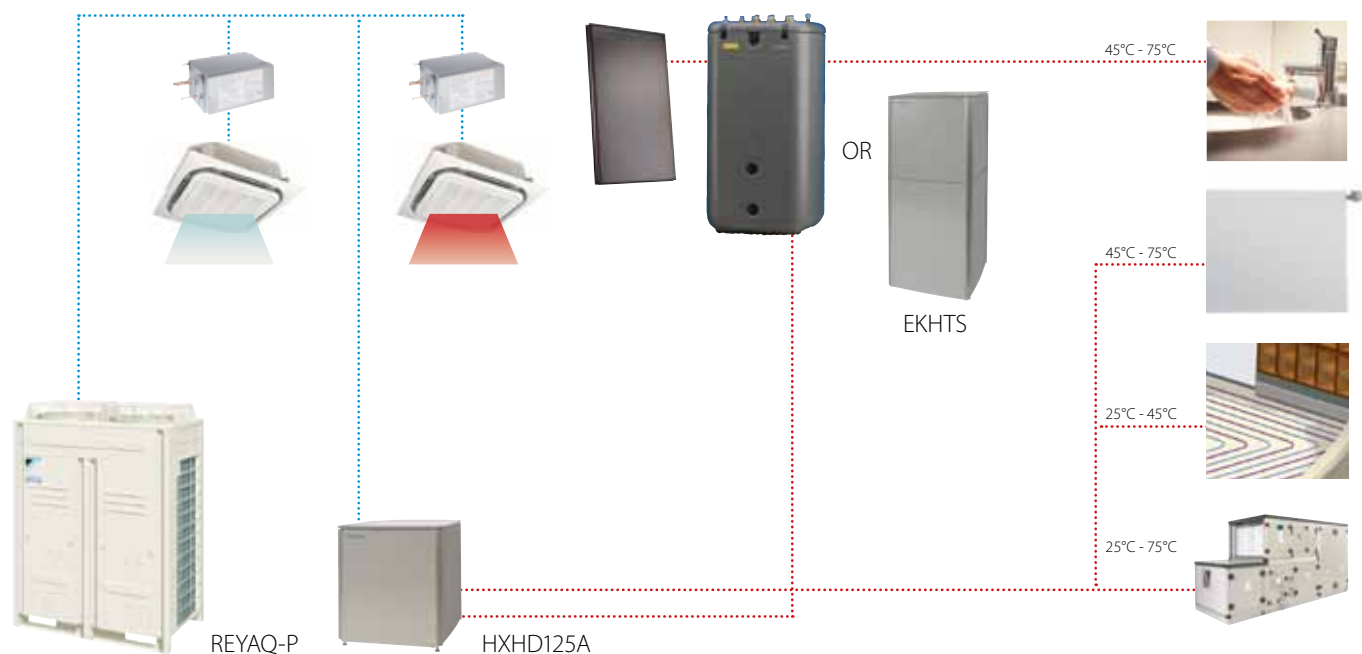


Daikin has been the market leader in variable refrigerant flow systems for the last twenty-five years and benefits from a large experience in energy efficient hot water systems based on heat pump technology.

The Daikin VRV® total solution provides a single point of contact for the design and maintenance of your integrated climate control system. Our heat recovery approach is a year-round solution: even when the outside temperature is 0°C or below, our total solution will still be cooling interior spaces in which people or equipment are generating heat. This heat will be recovered to produce hot water or to heat spaces that are below optimal temperature. Our wide product portfolio enables you to select the right mix of equipment and technology to ensure that you achieve the optimal balance of temperature, humidity and air freshness for the perfect comfort zone with maximum energy efficiency and cost effectiveness.

A HIGHLY EFFICIENT AND FLEXIBLE SOLUTION

All components integrated



› SPECIFICATIONS

OUTDOOR UNITS				REYAQ10P		REYAQ12P		REYAQ14P		REYAQ16P			
Cooling capacity			Nom.	kW	28 ¹		33.5 ¹		40 ¹		45 ¹		
Heating capacity			Nom.	kW	31.5 ²		37.5 ²		45 ²		50 ²		
Power input - 50Hz	Cooling		Nom.	kW	7.09		8.72		11.4		14.1		
Power input - 50Hz	Heating		Nom.	kW	7.38		8.84		11.0		12.8		
EER					3.95		3.84		3.51		3.19		
COP					4.27		4.24		4.09		3.91		
Dimensions		Unit	Height x Width x Depth		mm	1680 x 1300 x 765							
Weight		Unit			kg	331				339			
Maximum number of connectable indoor units					21		26		30		34		
Sound power level	Cooling		Nom.	dBA	78		80		83		84		
Sound pressure level	Cooling		Nom.	dBA	58		60		62		63		
Operation range	Cooling		Min.~Max.	°CDB	-5~43								
	Heating		Min.~Max.	°CWB	-20~15.5								
	hot water production	Space heating	Min.~Max.	°CDB	-20~20/24 ³								
		Domestic hot water	Min.~Max.	°CDB	-20~43								
Refrigerant				Type	R-410A								
Piping connections	Liquid	OD		mm	9.52				12.7				
	Gas	OD		mm	22.2				28.6				
	Discharge gas	OD		mm	19.1				22.2				
	Piping length	OU - IU	Max.	m	100								
	Total piping length	System	Actual	m	300								
	Level difference	OU - IU	Max.	m	40								
	Level difference	IU - IU	Max.	m	15								
Power supply	Phase	Frequency	Voltage	Hz/V	3~/50/380-415								

¹ Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; 100% connection ratio (DX indoor units)

² Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; 100% connection ratio (DX indoor units)

³ Field setting



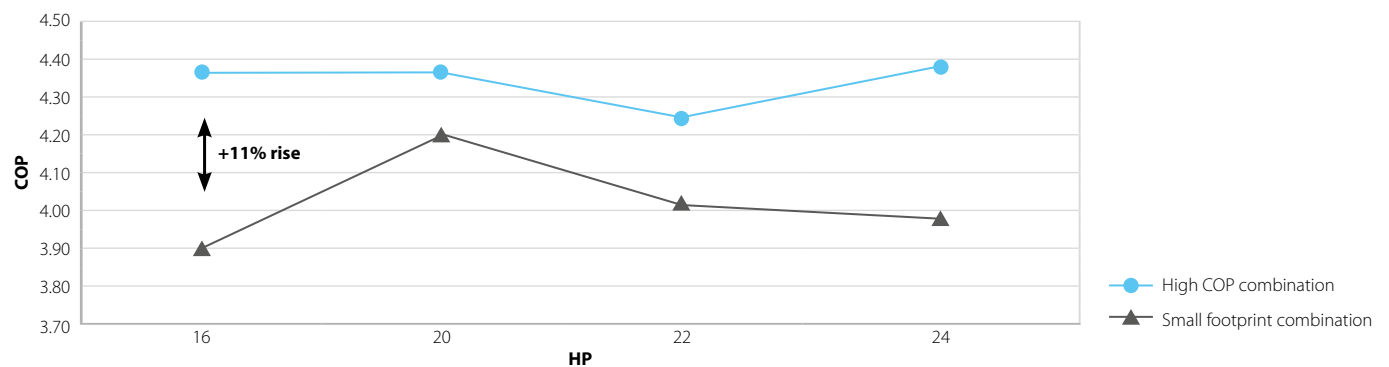
VRV®III HEAT RECOVERY HIGH COP AND SMALL FOOTPRINT COMBINATION

› 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

› SPECIFICATIONS

VRV® Heat recovery - High COP combination

OUTDOOR SYSTEM				REYHQ16P		REYHQ20P		REYHQ22P		REYHQ24P	
System	Outdoor unit module 1			REMQ8P9				REMQ10P8		REMHQ12P8	
	Outdoor unit module 2			REMQ8P9		REMHQ12P8					
Capacity range			HP	16		20		22		24	
Cooling capacity	Nom.		kW	45.0 ¹		56.0 ¹		61.5 ¹		67.0 ¹	
Heating capacity	Nom.		kW	50.0 ²		62.5 ²		69.0 ²		75.0 ²	
Power input - 50Hz	Cooling	Nom.	kW	10.5		13.9		16.0		17.2	
	Heating	Nom.	kW	11.5		14.3		16.3		17.2	
EER				4.29		4.04		3.84		3.89	
COP				4.36				4.24		4.37	
Maximum number of connectable indoor units				34		43		47		52	
Sound power level	Cooling	Nom.	dBA	82		85				87	
Sound pressure level	Cooling	Nom.	dBA	62		64				66	
Operation range	Cooling	Min.~Max.	°CDB	-5~43							
	Heating	Min.~Max.	°CWB	-20~15							
Refrigerant	Type			R-410A							
Piping connections	Liquid	OD	mm	12.7		15.9					
	Gas	OD	mm	28.6						34.9	
	Total piping length	System	Actual	1.000							
	Level difference	OU - IU		m	50 (outdoor unit in highest position) (optional: 90)						
Power supply	Phase / Frequency / Voltage			3N~ / 50 / 380-415							

Outdoor unit module				REMQ8P9	REMHQ12P8	REMQ10P8
Dimensions	Unit	HeightxWidthxDepth	mm	1,680x930x765		1,680x1,240x765
Weight	Unit		kg	204	331	254
Refrigerant	Type			R-410A		
Power supply	Phase / Frequency / Voltage			3~ / 50 / 380-415	3~ / 50 / 380-415	3~ / 50 / 380-415

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m
(2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m

VRV® heat recovery - small footprint combination

OUTDOOR SYSTEM					REYQ8P9Y1B	REYQ10P8Y1B	REYQ12P9Y1B	REYQ14P8Y1B	REYQ16P8Y1B	
Capacity range				HP	8	10	12	14	16	
Cooling capacity	Nom.			kW	22.4 ¹	28.0 ¹	33.5 ¹	40.0 ¹	45.0 ¹	
Heating capacity	Nom.			kW	25.0 ²	31.5 ²	37.5 ²	45.0 ²	50.0 ²	
Power input - 50Hz	Cooling	Nom.		kW	5.20	7.09	8.72	11.4	14.1	
	Heating	Nom.		kW	5.71	7.38	8.84	11.0	12.8	
EER					4.31	3.95	3.84	3.51	3.19	
COP					4.38	4.27	4.24	4.09	3.91	
Maximum number of connectable indoor units					17	21	26	30	34	
Indoor index connection	Min./Nom./Max.				100/200/260	125/250/325	150/300/390	175/350/455	200/400/520	
Dimensions	Unit	HeightxWidthxDepth		mm	1,680x1,300x765					
Weight	Unit			kg	331			339		
Heat exchanger	Type				Cross fin coil					
Fan-Type					Propeller fan					
Fan-Air flow rate	Cooling	Nom.		m³/min	190	210		235	240	
Sound pressure level	Cooling	Nom.		dBA	58	60		62	63	
Compressor	Type				Hermetically sealed scroll compressor					
Compressor 2	Type				Hermetically sealed scroll compressor					
Operation range	Cooling	Standard	Min.	°CDB	-5					
		Field setting	Min.	°CDB	-20 ³					
		Max.		°CDB	43					
	Heating	Min.~Max.		°CWB	-20~-15.5					
Refrigerant	Type				R-410A					
	Control				Expansion valve (electronic type)					
Piping connections	Liquid	OD		mm	9.52		12.7			
	Gas	OD		mm	19.1	22.2	28.6			
	Discharge gas	OD		mm	15.9	19.10		22.2		
	Oil equalizing	OD		mm	-					
	Total piping length	System	Actual	m	1,000					
	Level difference	OU - IU	Outdoor unit in highest position/Indoor unit in highest position		m	50/40 (16)	50/40			
		IU - IU	Max.		m	15				
Power supply	Phase/Frequency/Voltage				3~/50/380-415					
Current - 50Hz	Maximum fuse amps (MFA)				A	20	25		40	

OUTDOOR SYSTEM					REYQ18P9Y1B	REYQ20P9Y1B	REYQ22P8Y1B	REYQ24P8Y1B	REYQ26P8Y1B	REYQ28P8Y1B	REYQ30P8Y1B	REYQ32P8Y1B
System	Outdoor unit module 1				REMQ8P9Y1B		REMQ10P8Y1B	REMQ12P8Y1B	REMQ10P8Y1B	REMQ12P8Y1B	REMQ14P8Y1B	REMQ16P8Y1B
	Outdoor unit module 2				REMQ10P8Y1B	REMQ12P8Y1B			REMQ16P8Y1B			
Capacity range				HP	18	20	22	24	26	28	30	32
Cooling capacity	Nom.			kW	50.4 ¹	55.9 ¹	61.5 ¹	67.0 ¹	73.0 ¹	78.5 ¹	85.0 ¹	90.0 ¹
Heating capacity	Nom.			kW	56.5 ²	62.5 ²	69.0 ²	75.0 ²	81.5 ²	87.5 ²	95.0 ²	100 ²
Power input - 50Hz	Cooling	Nom.		kW	12.7	14.9	17.0	19.2	21.8	23.8	26.6	28.4
	Heating	Nom.		kW	13.4	15.2	17.1	18.9	20.6	22.3	24.2	25.8
EER					3.97	3.75	3.62	3.49	3.35	3.29	3.19	3.16
COP					4.22	4.11	4.04	3.97	3.96	3.92	3.18	3.87
Maximum number of connectable indoor units					39	43	47	52	56	60	64	
Indoor index connection	Min./Nom./Max.				225/450/585	250/500/650	275/550/715	300/600/780	325/650/845	350/700/910	375/750/975	400/800/1,040
Operation range	Cooling	Standard	Min.	°CDB	-5							
		Field setting	Min.	°CDB	-20 ³							
		Max.		°CDB	43							
	Heating	Min.~Max.		°CWB	-20~-15.5							
Refrigerant	Type				R-410A							
Piping connections	Liquid	OD		mm	15.9				19.1			
	Gas	OD		mm	28.6			34.9				
	Discharge gas	OD		mm	22.2	28.6						
	Oil equalizing	OD		mm	19.1							
	Total piping length	System	Actual	m	1,000							
	Level difference	OU - IU	Outdoor unit in highest position/Indoor unit in highest position	m	50/40							
		IU - IU		Max.	m	15						
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/380-415							
Current - 50Hz	Maximum fuse amps (MFA)			A	45	50			60	60	70	

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m (3) Technical cooling setting, contact your local dealer for more information



OUTDOOR SYSTEM					REYQ34P9Y1B	REYQ36P9Y1B	REYQ38P8Y1B	REYQ40P8Y1B	REYQ42P8Y1B	REYQ44P8Y1B	REYQ46P8Y1B	REYQ48P8Y1B	
System	Outdoor unit module 1				REM8Q9P9Y1B		REM10P8Y1B	REM12P8Y1B	REM10P8Y1B	REM12P8Y1B	REM14P8Y1B	REM16P8Y1B	
	Outdoor unit module 2				REM10P8Y1B		REM12P8Y1B		REM16P8Y1B			REM16P8Y1B	
Capacity range				HP	34	36	38	40	42	44	46	48	
Cooling capacity	Nom.			kW	95.4 ¹	101 ¹	107 ¹	112 ¹	118 ¹	124 ¹	130 ¹	150 ²	
Heating capacity	Nom.			kW	107 ²	113 ²	119 ²	125 ²	132 ²	138 ²	145 ²	42.6	
Power input - 50Hz	Cooling	Nom.		kW	26.9	29.1	31.2	33.4	35.8	38.0	40.8	38.7	
	Heating	Nom.		kW	26.3	28.1	30.0	31.8	33.5	35.2	37.1	3.16	
EER					3.55	3.47	3.43	3.35	3.29	3.26	3.18	3.87	
COP					4.07	4.02	3.96	3.93	3.94	3.92	3.90	64	
Maximum number of connectable indoor units					64								
Indoor index connection	Min./Nom./Max.				425/850/1,105	450/900/1,170	475/950/1,235	500/1,000/1,300	525/1,050/1,365	550/1,100/1,430	575/1,150/1,495	600/1,200/1,560	
Operation range	Cooling	Standard	Min.	°CDB	-5								
		Field setting	Min.	°CDB	-20 ³								
		Max.		°CDB	43								
	Heating	Min.~Max.			°CWB	-20~-15.5							
Refrigerant	Type				R-410A								
Piping connections	Liquid	OD		mm	19.1								
	Gas	OD		mm	34.9	41.3							
	Discharge gas	OD		mm	28.6			34.9					
	Oil equalizing	OD		mm	19.1								
	Total piping length	System	Actual	m	40 (14)	1,000							
	Level difference	OU - IU		Outdoor unit in highest position/ Indoor unit in highest position	m	50/40							
		IU - IU		Max.	m	15							
Power supply	Phase/Frequency/Voltage				3~/50/380-415								
Current - 50Hz	Maximum fuse amps (MFA)				A	80		90		100		110	

OUTDOOR UNIT MODULE					REM8P9Y1B	REM10P8Y1B	REM12P8Y1B	REM14P8Y1B	REM16P8Y1B
Dimensions	Unit	HeightxWidthxDepth			mm	1,680x930x765			1,680x1,240x765
Weight	Unit				kg	204	254	334	
Heat exchanger	Type					Cross fin coil			
Fan-Type						Propeller fan			
Fan-Air flow rate	Cooling	Nom.			m³/min	180	185	200	230
Fan-External static pressure	Max.				Pa	78			
Compressor	Type					Hermetically sealed scroll compressor			
Compressor 2	Type					Hermetically sealed scroll compressor			
Compressor 3	Type					Hermetically sealed scroll compressor			
Operation range	Cooling	Standard	Min.	°CDB	-5				
		Max.		°CDB	43				
	Heating	Min.~Max.		°CWB	-20~-15.5				
Refrigerant	Type					R-410A			
	Charge				kg	8.2	9.0	9.1	11.7
	Control					Expansion valve (electronic type)			
Power supply	Phase/Frequency/Voltage				Hz/V	3~/50/380-415			

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m (3) Technical cooling setting, contact your local dealer for more information

Individual Branch Selector for VRV® Heat Recovery

BSVQ-P8



BSVQ100P8

- › High comfort levels: individual control and change over of 1 group of indoor units
- › Maximum design flexibility because individual and multi boxes can be combined in one system
- › Low built-in height
- › No drain piping needed
- › Allows multi tenant applications (option PCB required)

				BSVQ100P8	BSVQ160P8	BSVQ250P8
Power input	Cooling	Nom.	kW	0.005		
	Heating	Nom.	kW	0.005		
Maximum capacity index of connectable indoor units				20 < x ≤ 100	100 < x ≤ 160	160 < x ≤ 250
Maximum number of connectable indoor units				6	8	
Casing	Material			Galvanised steel plate		Galvanised steel
Dimensions	Unit	HeightxWidthxDepth		mm		
Weight	Unit			kg		
Piping connections	Outdoor unit	Liquid	Type/OD	mm		
		Gas	Type/OD	mm		
		Discharge gas	Type/OD	mm		
	Indoor unit	Liquid	Type/OD	mm		
		Gas	Type/OD	mm		
		Discharge gas	Type/OD	mm		
Sound absorbing thermal insulation				Foamed polyurethane, frame resisting needle felt		
Power supply	Phase / Frequency / Voltage			Hz / V		
				1 ~ / 50 / 220-240		

Multi Branch Selector for VRV® Heat Recovery

BSV4/6Q-PV



BSV4Q100PV

- › Rapid installation resulting from less brazing points and wiring
- › High comfort levels: individual control and change over of up to 4 or 6 groups of indoor units
- › Maximum design flexibility because individual and multi boxes can be combined in one system
- › Low built-in height
- › No drain piping needed

				BSV4Q100PV		BSV6Q100PV	
Power input	Cooling	Nom.	kW	0.020		0.030	
	Heating	Nom.	kW	0.020		0.030	
Maximum number of connectable indoor units				24		36	
Maximum number of connectable indoor units per branch				6			
Number of branches				4		6	
Maximum capacity index of connectable indoor units				400		600	
Maximum capacity index of connectable indoor units per branch				100			
Casing	Material			Galvanised steel plate			
Dimensions	Unit	HeightxWidthxDepth		mm		209x1,577x635	
Weight	Unit			kg		60 89	
Piping connections	Outdoor unit	Liquid	Type/OD	mm	Brazing connection/12.7		Brazing connection/15.9
		Gas	Type/OD	mm	Brazing connection/28.6		
		Discharge gas	Type/OD	mm	Brazing connection/19.1		Brazing connection/28.6
	Indoor unit	Liquid	Type/OD	mm	Brazing connection/9.5		
		Gas	Type/OD	mm	Brazing connection/15.9		
Sound absorbing thermal insulation				Foamed polyurethane, frame resisting needle felt			
Power supply	Phase / Frequency / Voltage			Hz / V		1 ~ / 50 / 220-240	





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 + 10 + 10	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%

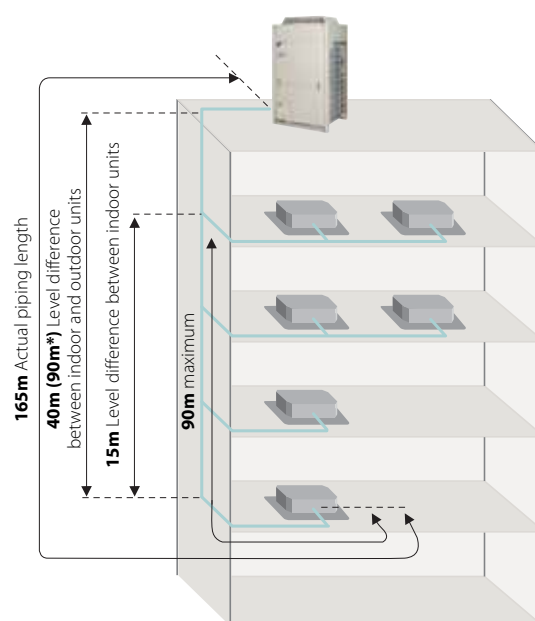
FLEXIBLE PIPING DESIGN

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

OUTDOOR SYSTEM				RXYHQ12P9
System	Outdoor unit module 1			RXYHQ12P9
	Outdoor unit module 2			-
	Outdoor unit module 3			-
Capacity range			HP	12
Cooling capacity	Nom.		kW	33.5 ¹
Heating capacity	Nom.		kW	37.5 ²
Power input - 50Hz	Cooling	Nom.	kW	8.61
	Heating	Nom.	kW	8.58
EER				3.89
COP				4.37
ESEER				5.37 ³
Maximum number of connectable indoor units				26
Indoor index connection	Min./Nom./Max.			150/300/390
Dimensions	Unit	HeightxWidthxDepth	mm	1,680x1,240x765
Weight	Unit		kg	281
Fan-Type				Propeller fan
Fan-Air flow rate	Cooling	Nom.	m ³ /min	233
	Heating	Nom.	m ³ /min	233
Fan-External static pressure	Max.		Pa	78
Sound power level	Cooling	Nom.	dBA	80
Sound pressure level	Cooling	Nom.	dBA	60
Compressor	Type			Hermetically sealed scroll compressor
Compressor 2	Type			Hermetically sealed scroll compressor
Operation range	Cooling	Min.	°CDB	-5.0
		Max.	°CDB	43.0
	Heating	Min.~Max.	°CWB	-20.0~15.0
Refrigerant	Type			R-410A
Refrigerant oil	Control			Electronic expansion valve
	Type			Synthetic (ether) oil
Piping connections	Liquid	OD		mm
	Gas	OD		mm
	Total piping length	System	Actual	m
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	m
		IU - IU	Max.	m
				15
Power supply	Phase/Frequency/Voltage		Hz/V	3N~/50/400
Current - 50Hz	Maximum fuse amps (MFA)		A	25

OUTDOOR SYSTEM				RXYHQ16P9	RXYHQ18P9	RXYHQ20P9	RXYHQ22P9	RXYHQ24P9	RXYHQ26P9	RXYHQ28P9	RXYHQ30P9	RXYHQ32P9	RXYHQ34P9	RXYHQ36P9				
System	Outdoor unit module 1			RXYQ8P9				RXYQ10P9				RXYQ8P9		RXYQ8P9		RXYQ10P9		RXYHQ12P9
	Outdoor unit module 2			RXYQ8P9	RXYQ10P9	RXYHQ12P9		RXYQ8P9		RXYQ10P9		RXYHQ12P9						
	Outdoor unit module 3			-				RXYQ8P9		RXYQ10P9		RXYHQ12P9						
Capacity range				HP	16	18	20	22	24	26	28	28	32	34	36			
Cooling capacity	Nom.			kW	45.00 ¹	49.00 ¹	55.90 ¹	61.50 ¹	67.00 ¹	71.40 ¹	77.00 ¹	82.50 ¹	89.00 ¹	94.00 ¹	98.00 ¹			
Heating capacity	Nom.			kW	50.00 ²	56.50 ²	62.50 ²	69.00 ²	75.00 ²	81.50 ²	88.00 ²	94.00 ²	102.00 ²	107.00 ²	113.00 ²			
Power input - 50Hz	Cooling	Nom.		kW	10.49	12.25	13.80	16.02	15.62	17.46	18.69	20.83	22.31	24.42	25.19			
	Heating	Nom.		kW	11.11	13.23	14.14	16.27	16.67	18.78	19.82	21.81	23.18	24.94	25.86			
EER					4.29	4.00	4.05	3.84	4.29	4.09	4.12	3.96	3.99	3.85	3.89			
COP					4.50	4.27	4.42	4.24	4.50	4.34	4.44	4.31	4.40	4.29	4.37			
ESEER					6.62 ³	6.18 ³	6.25 ³	5.93 ³	6.62 ³	6.31 ³	6.05 ³	6.11 ³	6.16 ³	5.96 ³	6.01 ³			
Maximum number of connectable indoor units					34	39	43	47	52	56	60	64						
Indoor index connection	Min./Nom./Max.				200/400/520	225/450/565	250/500/650	275/550/715	300/600/780	325/650/845	350/700/910	375/750/975	400/800/1,040	425/850/1,105	450/900/1,170			
Sound power level	Cooling	Nom.		dBA	82				83				85					
Sound pressure level	Cooling	Nom.		dBA	60	61	62		63		64		65					
Piping connections	Liquid	OD		mm	12.7	15.9				19.1								
	Gas	OD		mm	28.6				34.9				41.3					
	Total piping length	System	Actual	m	1,000													
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	m	50/40													
		IU - IU		Max.	m													
	Current - 50Hz	Maximum fuse amps (MFA)			A	50				63	15		80					

OUTDOOR UNIT MODULE				RXYQ8P9		RXYQ10P9	
Dimensions	Unit	HeightxWidthxDepth	mm	1,680x930x765			
Weight	Unit		kg	187		240	
Fan-Type				Propeller fan			
Fan-Air flow rate	Cooling	Nom.	m³/min	171		185	
	Heating	Nom.	m³/min	171		185	
Fan-External static pressure	Max.		Pa	78			
Sound power level	Cooling	Nom.	dBA	78			
Sound pressure level	Cooling	Nom.	dBA	57		58	
Compressor	Type			Hermetically sealed scroll compressor			
Compressor 2	Type			-		Hermetically sealed scroll compressor	
Operation range	Cooling	Min.	°CDB	-5.0			
		Max.	°CDB	43.0			
	Heating	Min.~Max.	°CWB	-20~15			
Refrigerant	Type			R-410A			
	Charge		kg	7.7		8.4	
	Control			Electronic expansion valve			
Refrigerant oil	Type			Synthetic (ether) oil			
	Charged volume		l	2.1		4.3	
Power supply	Phase/Frequency/Voltage			3N~/50/400			
Current - 50Hz	Maximum fuse amps (MFA)			25			

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high. (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high. (3) ESEER: Conditions: indoor temp. 27°C DB/19°C WB; outdoor temp. 35°C; 30°C; 25°C; 20°C. Formula: EER at 35°C * 0.03 + EER at 30°C * 0.33 + EER at 25°C * 0.41 + EER at 20°C * 0.23. For chillers the outdoor power input is taken into account (excluding pumps, cooling towers, indoor units, ...), for VRV® the outdoor power input is taken into account (excluding indoor units).



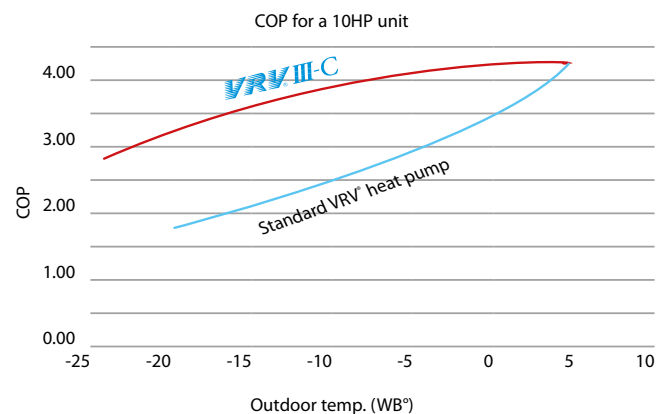
VRV® HEAT PUMP OPTIMISED FOR HEATING (VRV®III-C)

› BENEFITS



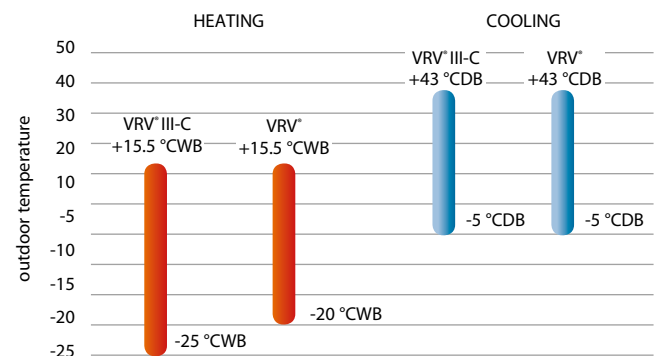
HIGH COP AT LOW AMBIENTS

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 for the entire range (up to 3.8 for a 10HP unit). Annual power costs are therefore, considerably lower than those of the standard heat pump.



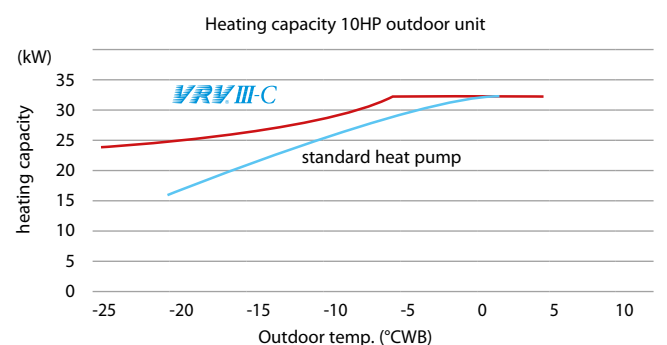
WIDE HEATING OPERATION RANGE

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



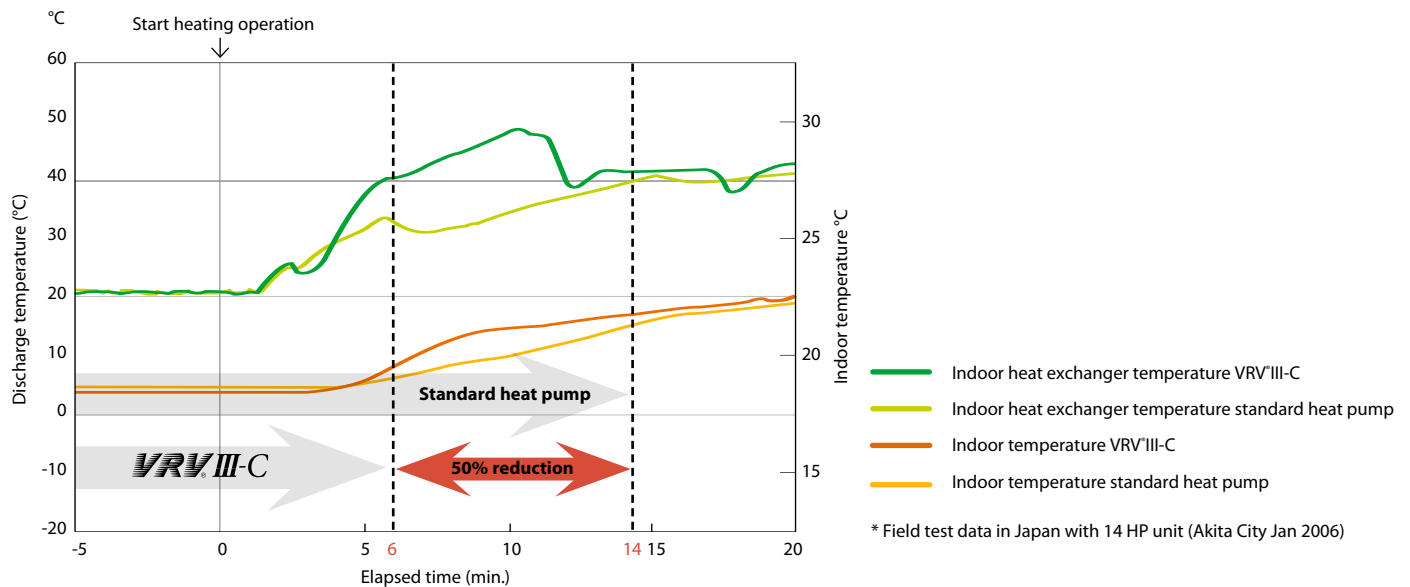
STABLE HEATING CAPACITY

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 the indoor unit heat exchanger 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

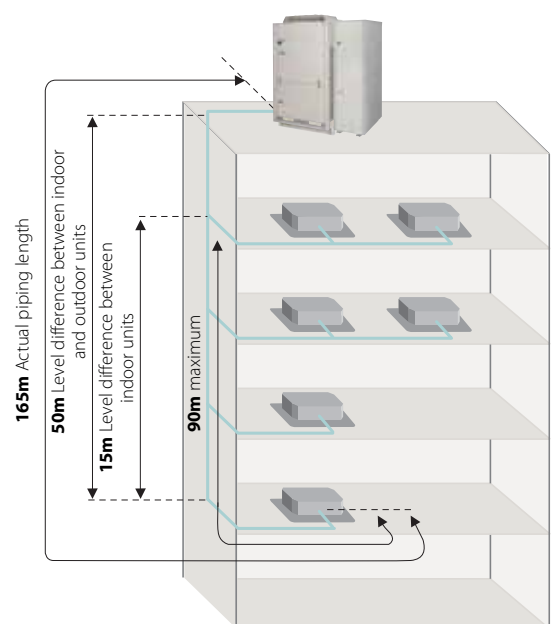
VRV III-C offers an extended piping length of 165m (190m equivalent piping length) with a total system piping length of 500m.

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.

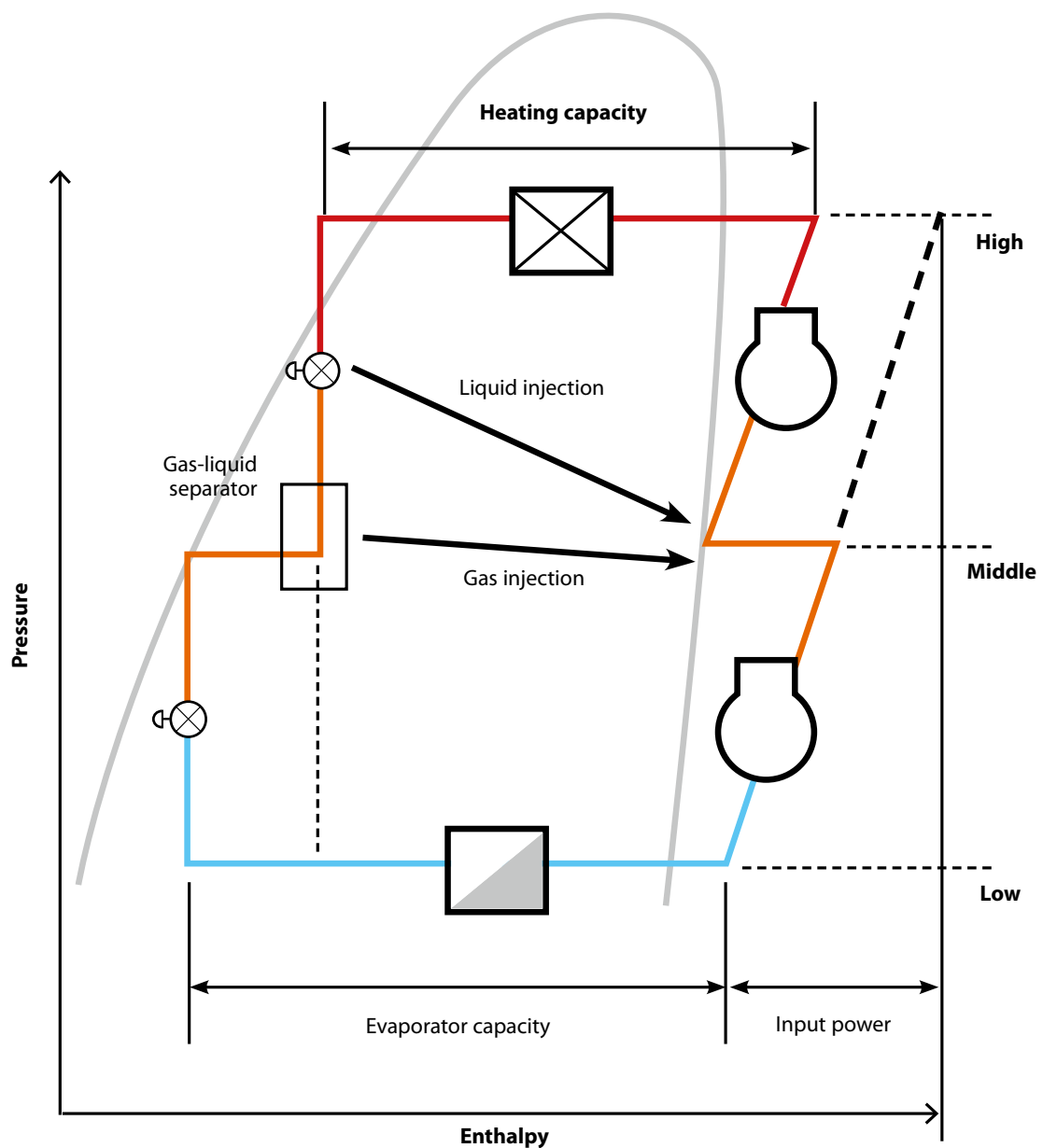


› UNIQUE TECHNOLOGIES

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

OUTDOOR SYSTEM				RTSYQ10P	RTSYQ14P	RTSYQ16P	RTSYQ20P
System	Outdoor unit module 1			RTSQ10P	RTSQ14P	RTSQ16P	RTSQ8P
	Outdoor unit module 2			-			RTSQ12P
	Function unit			BTSQ20P			
Capacity range			HP	10	14	16	20
Cooling capacity	Nom.		kW	28.0 ¹	40.0 ¹	45.0 ¹	56.0 ¹
Heating capacity	Nom.		kW	31.5 ²	45.0 ²	50.0 ²	63.0 ²
				28.0 ³	40.0 ³	45.0 ³	56.0 ³
Power input - 50Hz	Cooling	Nom.	kW	7.90	12.6	14.9	15.4
	Heating	Nom.	kW	7.70	11.3	12.9	15.3
EER				3.54 ¹	3.17 ¹	3.02 ¹	3.64 ¹
COP				4.09 ²	3.98 ²	3.88 ²	4.12 ²
Maximum number of connectable indoor units				21	30	34	43
Sound pressure level	Cooling	Max./Nom.	dBA	62/60	63/61	65/63	
Operation range	Cooling	Min.~Max.	°CDB	-5~46			
	Heating	Min.~Max.	°CWB	-25~15.5			
Refrigerant	Type			R-410A			
Piping connections	Liquid	OD	mm	9.52	12.7		15.9
	Gas	OD	mm	22.2	28.6		
	Oil equalizing	OD	mm		-		19.1
	Total piping length	System	Actual	m	500		
	Level difference	OU - IU		m	50 (outdoor unit in highest position)		
Power supply	Phase / Frequency / Voltage			Hz / V 3~ / 50 / 380-415			

(1) Cooling: Indoor temp. 27°CDB, 19°CWB / outdoor temp. 35°CDB / equivalent piping length: 7.5m / level difference: 0m / function unit length: 6m / combined indoor unit: FXFQ50P x 5 units

(2) Heating: Indoor temp. 20°CDB / outdoor temp. 7°CDB, 6°CWB / equivalent piping length: 7.5m / level difference: 0m / function unit length: 6m / combined indoor unit: FXFQ50P x 5 units

(3) Heating: Indoor temp. 20°CDB / outdoor temp. -10°CWB / equivalent piping length: 7.5m / level difference 0m / function unit length: 6m / combined indoor unit: FXFQ50P x 5 units

OUTDOOR UNIT MODULE				RTSQ8P	RTSQ10P	RTSQ12P	RTSQ14P	RTSQ16P	BTSQ20P
Dimensions	Unit	HeightxWidthxDepth	mm	1,680x930x765			1,680x1,240x765		1,570x460x765
Weight	Unit		kg	205	257		338	344	110
Refrigerant	Type			R-410A					
Power supply	Phase / Frequency / Voltage			3~ / 50 / 380-415					

SMALL FOOTPRINT COMBINATION

› BENEFITS

SEASONAL PERFORMANCE

The European 20/20/20 targets press energy users to drastically cut energy consumption and improve energy efficiency of buildings. In order to have a good view on the yearly running costs & CO₂ emissions of your air conditioning system, a seasonal performance indication is required. The current standards do not provide real guidance on the yearly performance of a VRV® system, as only one nominal point in cooling and one nominal point in heating is published. To correct this, a more accurate calculation method – the Seasonal Efficiency Ratio/Seasonal coefficient of performance - or SEER/SCOP – is being developed by the EU, in view of the upcoming Eco Design Directive for air conditioners > 12 kW. This will require AC manufacturers to provide yearly performance data (SEER/SCOP).

Daikin leads the market by publishing seasonal performance data

Until the new calculation method is known, Daikin already publishes ESEER and APF values today.

ESEER

The ESEER values provide a clear view on the part-load cooling performance of VRV® III. Thus enabling estimation of the annual power consumption in cooling mode.

The ESEER values published for air-cooled VRV® systems allow a comparison with other air-cooled systems only; when comparing with air-cooled chillers, auxiliary power consumption of circulation pumps still needs to be added to the chiller performance.

1 ESEER: formula:

$$\text{ESEER} = 0,03 * \text{EER}_A + 0,33 * \text{EER}_B + 0,41 * \text{EER}_C + 0,23 * \text{EER}_D$$

condition	load	ambient temperature
A	100%	35°CDB
B	75%	30°CDB
C	50%	25°CDB
D	25%	20°CDB

indoor temperature conditions:
19°CWB/27°CDB

For chillers the outdoor power input is taken into account (excluding pumps and indoor units), for VRV® the outdoor power input is taken into account (excluding indoor units).

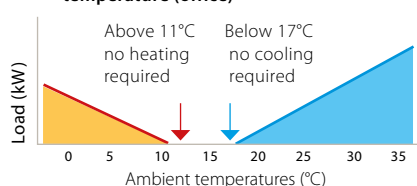
APF

The Annual Performance Factor or APF is the Japanese seasonal performance benchmark for VRF systems, which allows users to gauge the true seasonal performance of a VRF system in both heating and cooling.

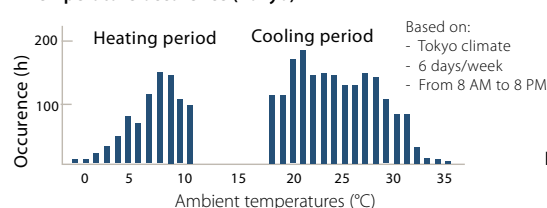
2 APF: Formula: Accumulated heating & cooling loads (kWh) (1*2) / accumulated power input in heating and cooling (kWh) (2*3)

RXYQ-P9	5	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
EER	3.98	4.29	3.77	3.48	3.23	3.17	3.02	3.80	3.62	3.49	3.41	3.26	3.20	3.11	3.09	3.02	3.43	3.34	3.28	3.25	3.17	3.14	3.08	3.07	3.02
ESEER	6.13	6.61	5.83	5.37	4.96	4.89	4.67	5.89	5.59	5.38	5.28	5.09	4.95	4.81	4.78	4.67	5.31	5.18	5.07	5.03	4.93	4.84	4.76	4.74	4.67
APF	5.0	5.4	5	4.6	4.6	4.4	4.2	4.9	4.8	4.6	4.6	4.5	4.4	4.4	4.3	4.2	4.6	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.2

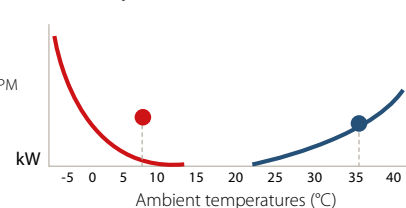
1 Load depending on outdoor temperature (office)



2 Temperature occurrence (Tokyo)



3 Power input curves



1 ESEER: Conditions: indoor temp. 27°C DB/19°C WB; outdoor temp. 35°C; 30°C; 25°C; 20°C. Formula: $\text{EER at } 35^\circ\text{C} * 0.03 + \text{EER at } 30^\circ\text{C} * 0.33 + \text{EER at } 25^\circ\text{C} * 0.41 + \text{EER at } 20^\circ\text{C} * 0.23$. For chillers the outdoor power input is taken into account (excluding pumps, cooling towers, indoor units, ...), for VRV® the outdoor power input is taken into account (excluding indoor units).

2 APF: Formula: Accumulated heating & cooling loads (kWh) (1*2) / accumulated power input in heating and cooling (kWh) (2*3)



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

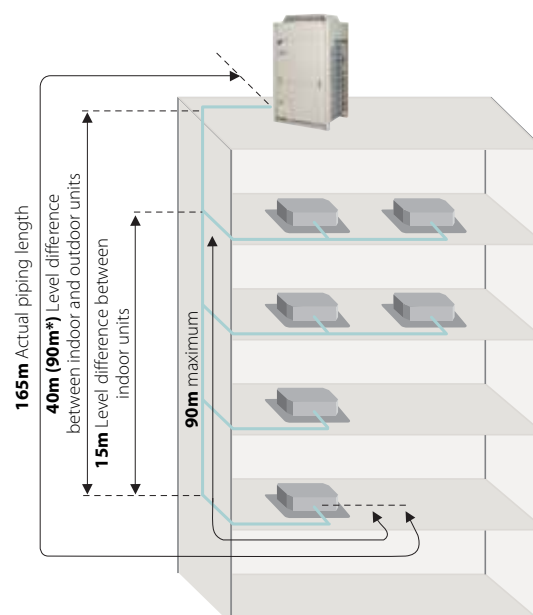
FLEXIBLE PIPING DESIGN

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

OUTDOOR SYSTEM				RXYQ5P9	RXYQ8P9	RXYQ10P9	RXYQ12P9	RXYQ14P9	RXYQ16P9	RXYQ18P9	
System	Outdoor unit module 1			RXYQ5P9	RXYQ8P9	RXYQ10P9	RXYQ12P9	RXYQ14P9	RXYQ16P9	RXYQ18P9	
Capacity range	HP			5	8	10	12	14	16	18	
Cooling capacity	kW			14.0 ¹	22.4 ¹	28.0 ¹	33.5 ¹	40.0 ¹	45.0 ¹	49.0 ¹	
Heating capacity	kW			16.0 ²	25.0 ²	31.5 ²	37.5 ²	45.0 ²	50.0 ²	56.5 ²	
Power input - 50Hz	Cooling	Nom.	kW	3.52	5.22	7.42	9.62	12.4	14.2	16.2	
	Heating	Nom.	kW	4.00	5.56	7.70	9.44	11.30	12.90	15.30	
EER				3.98	4.29	3.77	3.48	3.23	3.17	3.02	
COP				4.00	4.50	4.09	3.97	3.98	3.88	3.69	
ESEER				6.13 ³	6.61 ³	5.83 ³	5.37 ³	4.96 ³	4.89 ³	4.67 ³	
APF				5.0 ⁴	5.4 ⁴	5 ⁴	4.6 ⁴		4.4 ⁴	4.2 ⁴	
Maximum number of connectable indoor units				10	17	21	26	30	34	39	
Indoor index connection	Min./Nom./Max.			62.5/125/162.5	100/200/260	125/250/325	150/300/390	175/350/455	200/400/520	225/450/585	
Dimensions	Unit	HeightxWidthxDepth		mm	1,680x635x765			1,680x930x765			1,680x1,240x765
Weight	Unit			kg	159	187	240		316	324	
Fan-Type				Propeller fan							
Fan-Air flow rate	Cooling	Nom.	m ³ /min	95	171	185	196	233		239	
	Heating	Nom.	m ³ /min	95	171	185	196	233		239	
Fan-External static pressure	Max.			Pa	78						
Sound power level	Cooling	Nom.	dBA	72	78		80			83	
Sound pressure level	Cooling	Nom.	dBA	54	57	58	60			63	
Compressor	Type			Hermetically sealed scroll compressor							
Compressor 2	Type			-		Hermetically sealed scroll compressor					
Compressor 3	Type			-				Hermetically sealed scroll compressor			
Operation range	Cooling	Min.	°CDB		-5.0						
		Max.	°CDB		43.0						
	Heating	Min.~Max.		°CWB		-20~15					
		Inlet water temperature	Heating	Max.	°CWB		-				
Refrigerant	Type			R-410A							
	Control			Electronic expansion valve							
Refrigerant oil	Type			Synthetic (ether) oil							
Piping connections	Liquid	OD	mm	9.52			12.7		15.9		
	Gas	OD	mm	15.9	19.1	22.2	28.6				
	Total piping length	System	Actual	m	1,000						
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	m	50/40						
				m	15						
Power supply	Phase/Frequency/Voltage			3N~/50/400							
Current - 50Hz	Maximum fuse amps (MFA)			A	16	25		40			

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high. (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high. (3) Calculations were done according to Japanese Standard JIS B8616:2006. (4) ESEER: Conditions: indoor temp. 27°C DB/19°C WB; outdoor temp. 35°C; 30°C; 25°C; 20°C. Formula: EER at 35°C * 0.03 + EER at 30°C * 0.33 + EER at 25°C * 0.41 + EER at 20°C * 0.23. For chillers the outdoor power input is taken into account (excluding pumps, cooling towers, indoor units, ...), for VRV® the outdoor power input is taken into account (excluding indoor units).

OUTDOOR SYSTEM				RXYQ20P9	RXYQ22P9	RXYQ24P9	RXYQ26P9	RXYQ28P9	RXYQ30P9	RXYQ32P9	
System	Outdoor unit module 1			RXYQ8P9	RXYQ10P9	RXYQ12P9	RXYQ8P9	RXYQ10P9	RXYQ12P9	RXYQ14P9	
Capacity range	HP			20	22	24	26	28	30	32	
Cooling capacity	Nom.			kW	55.90 ¹	61.50 ¹	67.00 ¹	71.40 ¹	77.00 ¹	82.50 ¹	89.00 ¹
Heating capacity	Nom.			kW	62.50 ²	69.00 ²	75.00 ²	81.50 ²	88.00 ²	94.00 ²	102.00 ²
Power input - 50Hz	Cooling	Nom.	kW	14.71	16.99	19.20	20.94	23.62	25.78	28.62	
	Heating	Nom.	kW	14.95	17.08	18.89	20.69	22.98	24.67	26.63	
EER				3.80	3.62	3.49	3.41	3.26	3.20	3.11	
COP				4.18	4.04	3.97	3.94	3.83	3.81	3.83	
ESEER				5.89 ³	5.59 ³	5.38 ³	5.28 ³	5.09 ³	4.95 ³	4.81 ³	
APF				4.9 ⁴	4.8 ⁴	4.6 ⁴		4.5 ⁴	4.4 ⁴		
Maximum number of connectable indoor units				43	47	52	56	60	64		
Indoor index connection	Min./Nom./Max.			250/500/650	275/550/715	300/600/780	325/650/845	350/700/910	375/750/975	400/800/1,040	
Sound power level	Cooling	Nom.	dBA	83			85				
Sound pressure level	Cooling	Nom.	dBA	62	63		64	65			
Piping connections	Liquid	OD	mm	15.9			19.1				
	Gas	OD	mm	28.6			34.9				
	Total piping length	System	Actual	m	1,000						
	Level difference	OU - IU	Outdoor unit in highest position/Indoor unit in highest position	m	50/40						
		IU - IU	Max.	m	15						
	Current - 50Hz	Maximum fuse amps (MFA)			A	50			63	80	

OUTDOOR SYSTEM				RXYQ34P9	RXYQ36P9	RXYQ38P9	RXYQ40P9	RXYQ42P9	RXYQ44P9	RXYQ46P9	
System	Outdoor unit module 1			RXYQ16P9	RXYQ18P9	RXYQ8P9	RXYQ10P9	RXYQ12P9	RXYQ8P9	RXYQ10P9	
Capacity range				34	36	38	40	42	44	46	
Cooling capacity	Nom.			kW	94.00 ¹	98.00 ¹	105.00 ¹	111.00 ¹	116.00 ¹	126.00 ¹	
Heating capacity	Nom.			kW	107.00 ²	113.00 ²	119.00 ²	126.00 ²	132.00 ²	145.00 ²	
Power input - 50Hz	Cooling	Nom.		kW	30.42	32.45	30.61	33.23	35.37	36.92	39.75
	Heating	Nom.		kW	28.23	30.62	30.13	32.39	34.20	35.94	38.26
EER					3.09	3.02	3.43	3.34	3.28	3.25	3.17
COP					3.79	3.69	3.95	3.89	3.86	3.84	3.79
ESEER					4.78 ³	4.67 ³	5.31 ³	5.18 ³	5.07 ³	5.03 ³	4.93 ³
APF					4.3 ⁴	4.2 ⁴	4.6 ⁴	4.5 ⁴	4.4 ⁴		
Maximum number of connectable indoor units					64						
Indoor index connection	Min./Nom./Max.				425/850/1,105	450/900/1,170	475/950/1,235	500/1,000/1,300	525/1,050/1,365	550/1,100/1,430	575/1,150/1,495
Sound power level	Cooling	Nom.		dBA	85	86					87
Sound pressure level	Cooling	Nom.		dBA	65	66					67
Piping connections	Liquid	OD		mm	19.1						
	Gas	OD		mm	34.9	41.3					
	Total piping length	System	Actual	m	1,000						
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	m	50/40						
		IU - IU	Max.	m							
	Current - 50Hz	Maximum fuse amps (MFA)			A	80		15		100	

OUTDOOR SYSTEM				RXYQ48P9	RXYQ50P9	RXYQ52P9	RXYQ54P9
System	Outdoor unit module 1			RXYQ12P9	RXYQ14P9	RXYQ16P9	RXYQ18P9
Capacity range	HP			48	50	52	54
Cooling capacity	Nom.			132.00 ¹	138.00 ¹	143.00 ¹	147.00 ¹
Heating capacity	kW			151.00 ²	158.00 ²	163.00 ²	170.00 ²
Power input - 50Hz	Cooling	Nom.	kW	42.04	44.81	46.58	48.68
	Heating	Nom.	kW	39.95	41.91	43.47	45.95
EER				3.14	3.08	3.07	3.02
COP				3.78	3.77	3.75	3.70
ESEER				4.84 ³	4.76 ³	4.74 ³	4.67 ³
APF				4.3 ⁴			4.2 ⁴
Maximum number of connectable indoor units				64			
Indoor index connection	Min./Nom./Max.			600/1,200/1,560	625/1,250/1,625	650/1,300/1,690	675/1,350/1,755
Sound power level	Cooling	Nom.	dBA	87			88
Sound pressure level	Cooling	Nom.	dBA	67			68
Piping connections	Liquid	OD	mm	19.1			
	Gas	OD	mm	41.3			
	Total piping length	System	Actual	m			
		Level difference	OU - IU	Outdoor unit in highest position/Indoor unit in highest position	m		
	IU - IU		Max.	m	15		
	Current - 50Hz	Maximum fuse amps (MFA)			A	100	125

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high. (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high. (3) Calculations were done according to Japanese Standard JIS B8616:2006. (4) ESEER: Conditions: indoor temp. 27°C DB/19°C WB; outdoor temp. 35°C; 30°C; 25°C; 20°C. Formula: EER at 35°C * 0.03 + EER at 30°C * 0.33 + EER at 25°C * 0.41 + EER at 20°C * 0.23. For chillers the outdoor power input is taken into account (excluding pumps, cooling towers, indoor units, ...), for VRV* the outdoor power input is taken into account (excluding indoor units).



VRV® HEAT PUMP WITH CONNECTION TO STYLISH INDOOR UNITS

› BENEFITS













- › Innovative VRV® technology combined with stylish and silent indoor units
- › Wide range of indoor units: combine VRV® indoor units and stylish indoor units as Daikin Emura and Nexura

Including connection to new Daikin Emura & Nexura



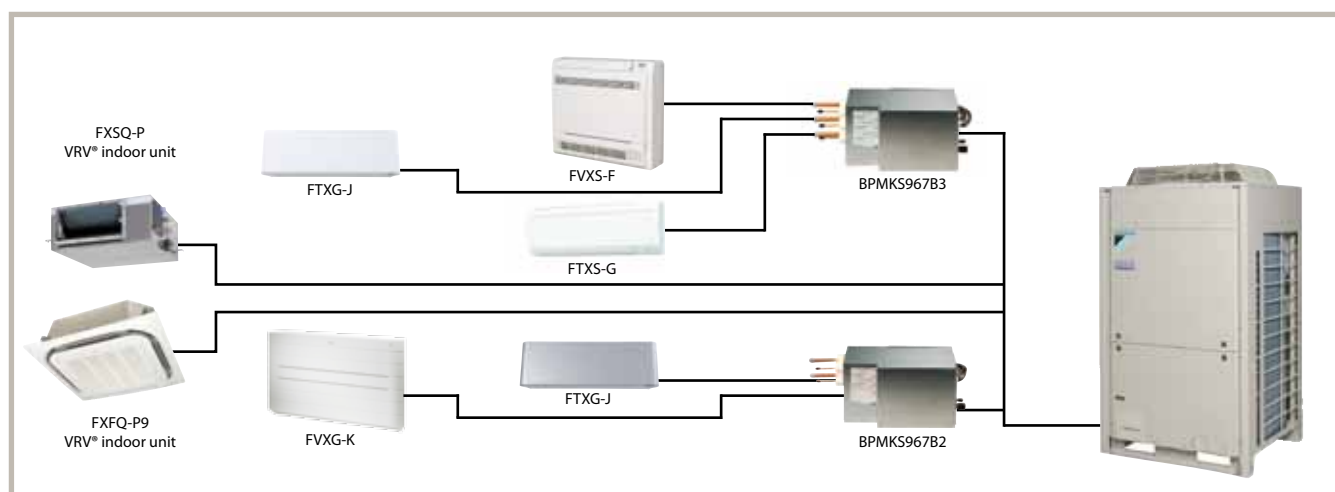
- › Up to 39 indoor units can be connected to a 18HP unit
- › High external static pressure (up to 78.4Pa) allows indoor installation
- › Night quiet mode in two steps: step 1: 50 dBA, step 2: 45 dBA
- › All indoor units can be individually controlled
- › Phased installation possible

CONNECTABLE INDOOR UNITS

				Capacity						
Type	Model	Product name		20	25	35	42	50	60	71
CEILING MOUNTED CASSETTE	Round flow cassette (incl. autoclean function ²)	FCQ-C8								
	4-way blow ceiling mounted cassette	FFQ-BV								
CONCEALED CEILING	Small concealed ceiling unit	FDBQ-B								
	Slim concealed ceiling unit	FDXS-E/C								
	Concealed ceiling unit with inverter driven fan	FBQ-C								
WALL MOUNTED	Daikin Emura Wall mounted unit	FTXG-J CTXG-J								
	Wall mounted unit	FTXS-J								
	Wall mounted unit	FTXS-G								
CEILING SUSPENDED	Ceiling suspended unit	FHQ-B								
FLOOR STANDING	Nexura floor standing unit	FVXG-K								
	Floor standing unit	FVXS-F								
	Flexi type unit	FLXS-B								

¹ The indoor units in the table above are only connectable to RXYRQ-P, RXYSQ-P8V1 and RXYSQ-P8Y1, in case of RXYRQ-P these indoor units can be combined with standard VRV® indoor units in the same system

² Decoration panel BYCQ140CG + BRC1E51A needed





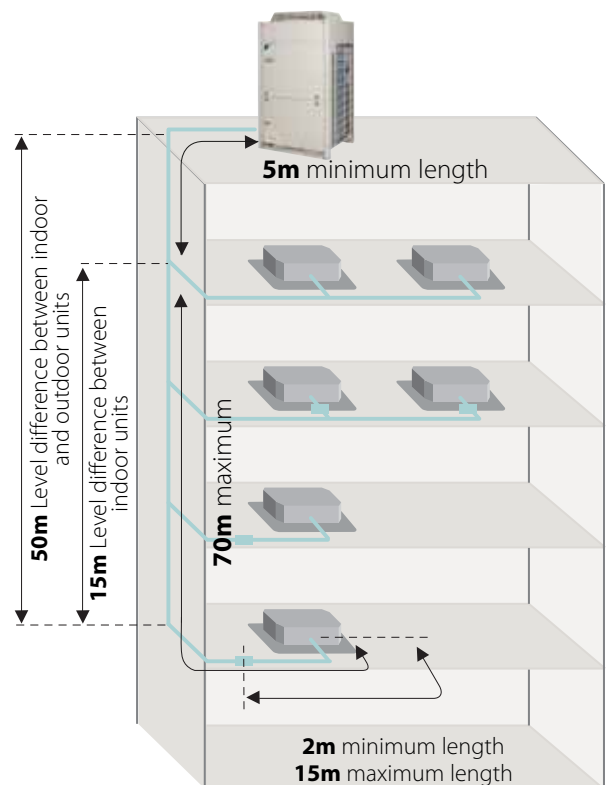
PIPING DESIGN

The VRV® heat pump with connection to stylish indoor units offers a total system piping length of 250 m. (Total main piping length $\leq 100\text{m}$ (between outdoor and BP box) + Total branch piping length $\leq 80\text{m}$ (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 70m.

The height difference between the outdoor and indoor unit can be maximum 50m.



Contact your local dealer for more information.

› SPECIFICATIONS

VRV® Heat pump with connection to stylish indoor units

	20 class	25 class	35 class	42 class	50 class	60 class	71 class
Daikin Emura - Wall mounted unit	-	FTXG25JW/S	FTXG35JW/S	-	FTXG50JW/S	-	-
Wall mounted unit	FTXS20J	FTXS25J	FTXS35J	FTXS42J	FTXS50J	FTXS60G	FTXS71G
Nexura - Floor standing unit	-	FVXG25K	FVXG35K	-	FVXG50K	-	-
Floors tanding unit	-	FVXS25F	FVXS35F	-	FVXS50F	-	-
Flexi type unit	-	FLXS25B	FLXS35B	-	FLXS50B	FLXS60B	-
Slim concealed ceiling unit	-	FDXS25E	FDXS35E	-	FDXS50C	FDXS60C	-
Concealed ceiling unit	-	FDBQ25B	FBQ35C	-	FBQ50C	FBQ60C	-
4-way blow ceiling mounted cassette (600x600)	-	FFQ25BV	FFQ35BV	-	FFQ50BV	FFQ60BV	-
Round flow cassette	-	-	FCQ35C8	-	FCQ50C8	FCQ60C8	-
Ceiling suspended cassette	-	-	FHQ35B	-	FHQ50B	FHQ60B	-

All VRV® indoor units in all available classes

OUTDOOR UNIT				RXYRQ8P	RXYRQ10P	RXYRQ12P	RXYRQ14P	RXYRQ16P	RXYRQ18P		
Capacity range			HP	8	10	12	14	16	18		
Cooling capacity	Nom.		kW	22.4 ¹	28.0 ¹	33.5 ¹	40.0 ¹	45.0 ¹	49.0 ¹		
Heating capacity	Nom.		kW	25.0 ²	31.5 ²	37.5 ²	45.0 ²	50.0 ²	56.5 ²		
Power input - 50Hz	Cooling	Nom.	kW	5.09	7.11	9.23	11.40	13.50	15.30		
	Heating	Nom.	kW	5.56	7.70	9.44	11.30	12.90	15.30		
EER				4.40	3.94	3.63	3.61	3.33	3.20		
COP				4.50	4.09	3.97	3.98	3.88	3.69		
Maximum number of connectable indoor units				17	21	26	30	34	39		
Indoor index connection	Min./Nom./Max.			160/200/260	200/250/325	240/300/390	280/350/455	320/400/520	360/450/585		
Dimensions	Unit	HeightxWidthxDepth	mm	1,680x930x765			1,680x1,240x765				
Weight	Unit		kg	187	240		316		324		
Fan-Type				Propeller fan							
Fan-Air flow rate	Cooling	Nom.	m³/min	171	185	196	233		239		
	Heating	Nom.	m³/min	171	185	196	233		239		
Fan-External static pressure	Max.		Pa	78							
Sound power level	Cooling	Nom.	dBA	78		80			83		
Sound pressure level	Cooling	Nom.	dBA	57	58	60			63		
Compressor	Type			Hermetically sealed scroll compressor							
Compressor 2	Type			-	Hermetically sealed scroll compressor						
Compressor 3	Type			-			Hermetically sealed scroll compressor				
Operation range	Cooling	Min.	°CDB	-5.0							
		Max.	°CDB	43.0							
	Heating	Min.~Max.	°CWB	-20.0~15.0							
		Inlet water temperature	Heating Max.	°CWB	-						
Refrigerant	Type			R-410A							
	Control			Electronic expansion valve							
Refrigerant oil	Type			Synthetic (ether) oil							
Piping connections	Liquid	OD		mm	9.52		12.7		15.9		
	Gas	OD		mm	19.1	22.2	28.6				
	Piping length	BP - IU	Max.	m	15 ³ / 12 ⁴ / 8 ⁵	15 ³ / 12 ⁴ / 8 ⁵	15 ³ / 12 ⁴ / 8 ⁵	15 ³ / 12 ⁴ / 8 ⁵	15 ³ / 12 ⁴ / 8 ⁵		
		After branch	Max.	m	70 ¹⁰						
	Total piping length	System	Actual	m	250						
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	m	50/40						
		OU - BP		Max.	m	40					
		BP-BP		Max.	m	15					
		IU - IU		Max.	m	15					
		Power supply		Phase/Frequency/Voltage			Hz/V		3N~/50/400		
Current - 50Hz	Maximum fuse amps (MFA)			A	25	40					

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high; 100% SA/RA indoor units connected (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high. (3) up to 60 class (4) 60 class (5) 71 class (6) Refer to refrigerant pipe selection or installation manual

BP Box for connection to stylish indoor units

BRANCH PROVIDER			BPMKS967B2		BPMKS967B3	
Max. n° of indoor units to be connected			2		3	
Max. indoor unit connectable capacity		kW	14.2 (7.1 + 7.1)		20.8 (6.0 + 7.1 + 7.1)	
Dimensions	Height x Width x Depth	mm	180 x 294 x 350			
Weight		kg	7.5		8	

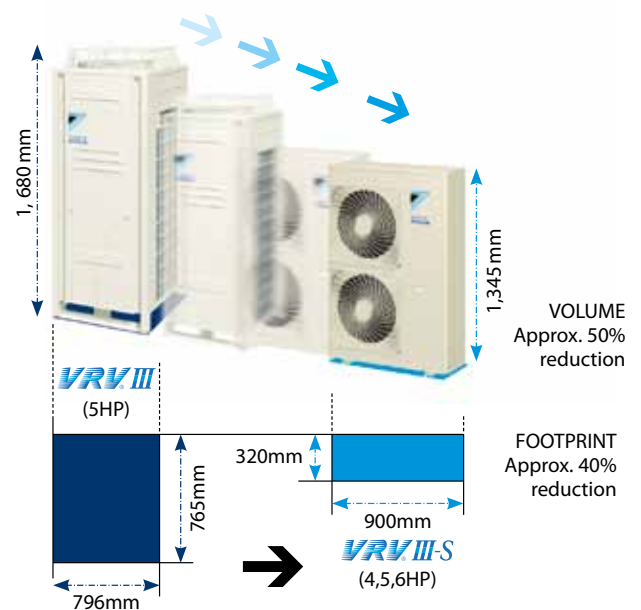


VRV®III-S HEAT PUMP OPTIMISED DESIGN FOR SMALL CAPACITIES

BENEFITS

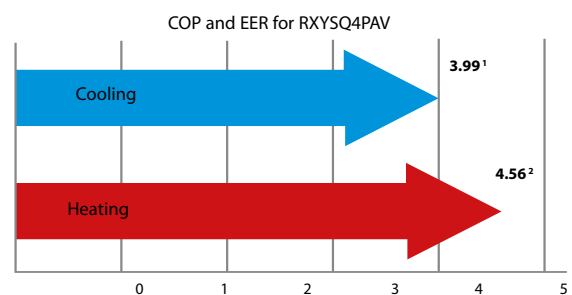
SPACE SAVING DESIGN

The VRV®III-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.

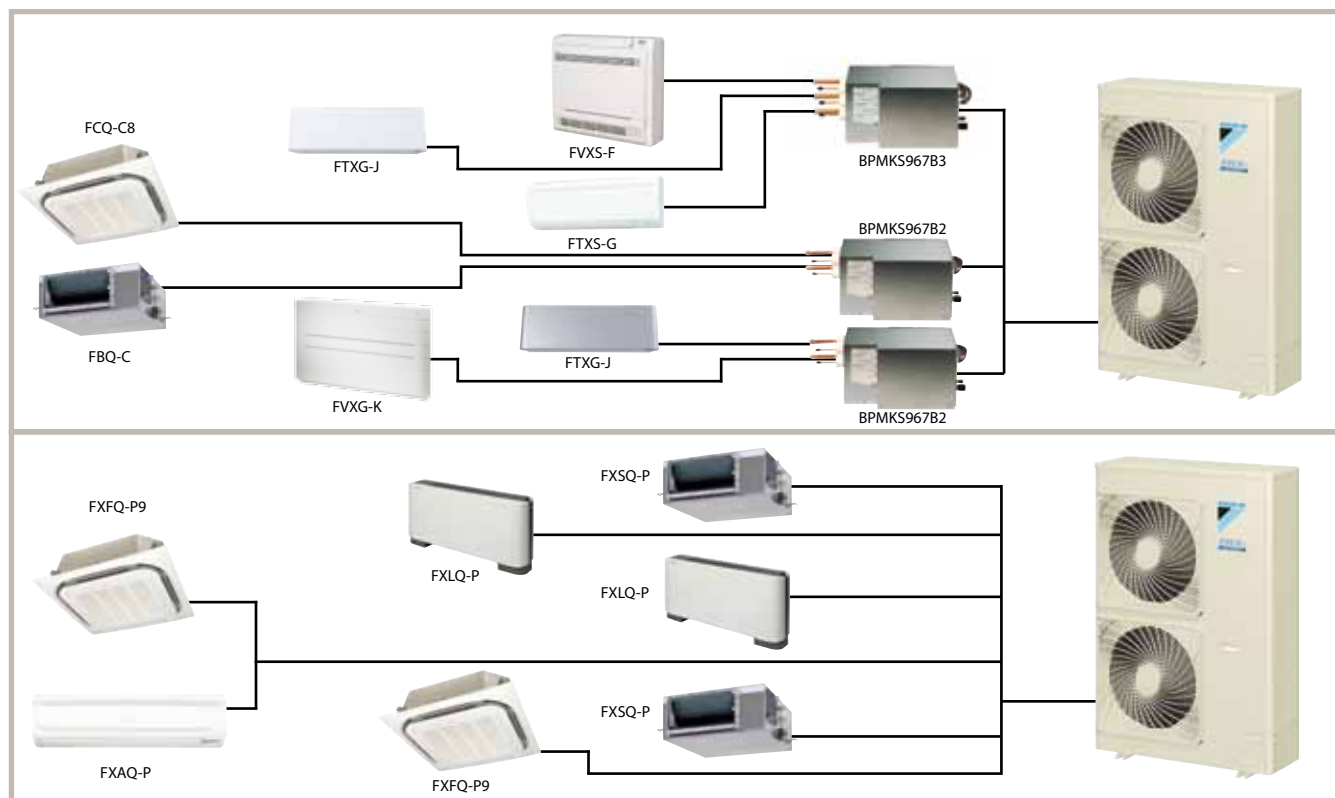


¹ Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°C, equivalent refrigerant piping: 5m, level difference: 0m.

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

WIDE RANGE OF INDOOR UNITS

Either connect VRV® indoor units or stylish indoor units as Daikin Emura, Nexura, ...



* VRV® indoor units and stylish indoor units cannot be combined.

CONNECTABLE INDOOR UNITS

				Capacity						
Type	Model	Product name		20	25	35	42	50	60	71
CEILING MOUNTED CASSETTE	Round flow cassette (incl. autoclean function ²)	FCQ-C8								
	4-way blow ceiling mounted cassette	FFQ-BV								
CONCEALED CEILING	Small concealed ceiling unit	FDBQ-B								
	Slim concealed ceiling unit	FDXS-E/C								
	Concealed ceiling unit with inverter driven fan	FBQ-C								
WALL MOUNTED	Daikin Emura Wall mounted unit	FTXG-J CTXG-J								
	Wall mounted unit	FTXS-J								
	Wall mounted unit	FTXS-G								
CEILING SUSPENDED	Ceiling suspended unit	FHQ-B								
FLOOR STANDING	Nexura floor standing unit	FVXG-K								
	Floor standing unit	FVXS-F								
	Flexi type unit	FLXS-B								

¹ The indoor units in the table above are only connectable to RXYRQ-P, RXYSQ-P8V1 and RXYSQ-P8Y1, in case of RXYRQ-P these indoor units can be combined with standard VRV® indoor units in the same system

² Decoration panel BYCQ140CG + BRC1E51A needed

FLEXIBLE PIPING DESIGN

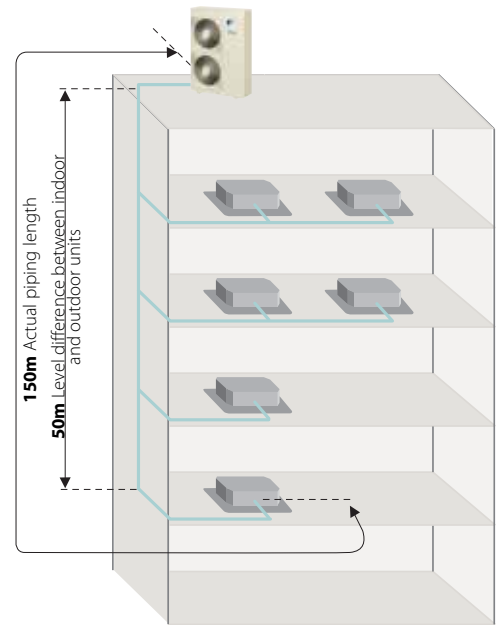
When connected to VRV® indoor units

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.



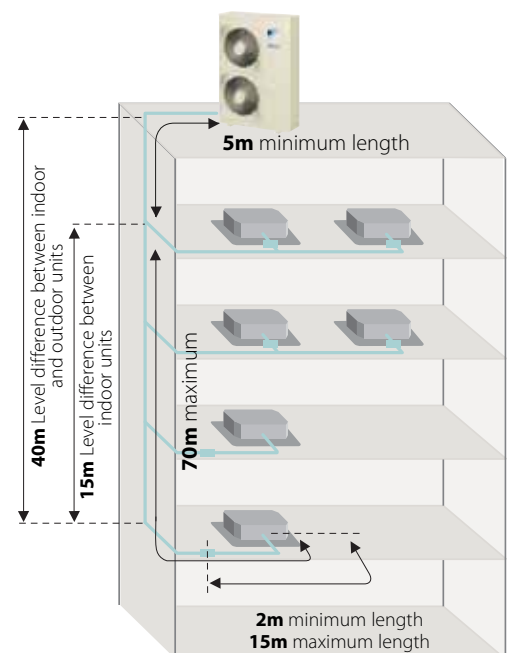
When connected to stylish indoor units

The VRV® heat pump with connection to stylish indoor units offers a total system piping length of 250 m. (Total main piping length ≤ 100m (between outdoor and BP box) + Total branch piping length ≤ 80m (between BP box and indoor)).

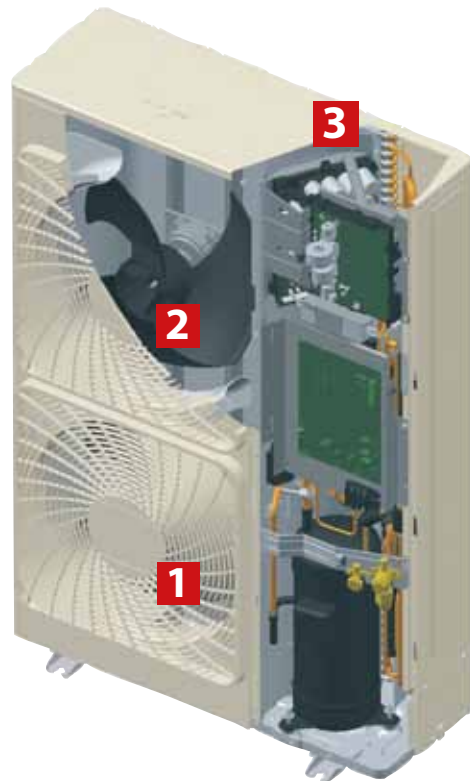
The minimum piping length between the outdoor unit and the first branch is 5m. The minimum piping length between the BP box and the indoor unit is 2m, the maximum length is 15m.

After the first branch, the longest piping length is 70m.

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



› ADVANCED TECHNOLOGIES



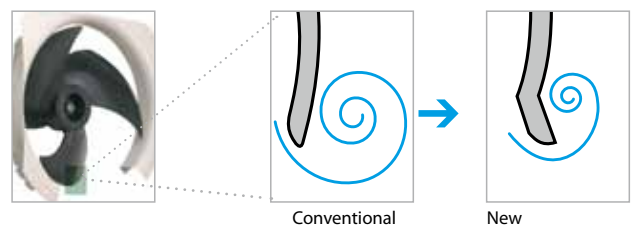
1 SUPER AERO GRILLE

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.

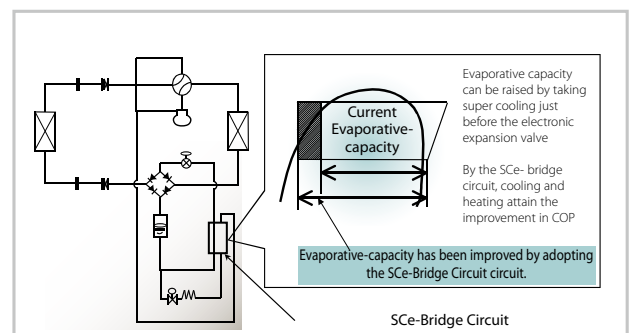
Aero spiral fan blade tips



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



› SPECIFICATIONS

VRV®III-S Heat pump - single phase (PAV), three phase (PAY)

OUTDOOR UNIT					RXYSQ4P8V1	RXYSQ5P8V1	RXYSQ6P8V1	RXYSQ4P8Y1	RXYSQ5P8Y1	RXYSQ6P8Y1	
Capacity range				HP	4	5	6	4	5	6	
Cooling capacity	Nom.			kW	11.2 ¹	14.0 ¹	15.5 ¹	11.2 ¹	14.0 ¹	15.5 ¹	
Heating capacity	Nom.			kW	12.5 ²	16.0 ²	18.0 ²	12.5 ²	16.0 ²	18.0 ²	
Power input - 50Hz	Cooling	Nom.		kW	2.81	3.51	4.53	2.89	3.61	4.65	
	Heating	Nom.		kW	2.74	3.86	4.57	2.82	3.97	4.70	
EER					3.99		3.42	3.88		3.33	
COP					4.56	4.15	3.94	4.43	4.03	3.83	
Maximum number of connectable indoor units					8 ³ / 6 ⁴	10 ³ / 8 ⁴	13 ³ / 9 ⁴	8 ³ / 6 ⁴	10 ³ / 8 ⁴	13 ³ / 9 ⁴	
Indoor index connection	Min./Nom./Max.				50//130	62.5//162.5	70//182	50//130	62.5//162.5	70//182	
Dimensions	Unit	HeightxWidthxDepth		mm	1,345x900x320						
Weight	Unit			kg	120						
Fan-Type					Propeller fan						
Fan-Air flow rate	Cooling	Nom.		m ³ /min	106						
	Heating	Nom.		m ³ /min	102	105		102	105		
Sound power level	Cooling	Nom.		dBA	66	67	69	66	67	69	
Sound pressure level	Cooling	Nom.		dBA	50	51	53	50	51	53	
	Heating	Nom.		dBA	52	53	55	52	53	55	
Compressor	Type				Hermetically sealed scroll compressor						
Operation range	Cooling	Standard	Min.	°CDB	-5						
		Max.		°CDB	46						
	Heating	Min.~Max.		°CWB	-20~-15.5						
Refrigerant	Type				R-410A						
	Control				Expansion valve						
Refrigerant oil	Type				Daphne FVC68D						
Piping connections	Liquid	OD		mm	9.52						
	Gas	OD		mm	15.9 ³ / 19.1 ⁴	15.9 ³ / 19.1 ⁴		19.1	15.9 ³ / 19.1 ⁴		19.1
	Drain	OD		mm	26x3			26x3			
	Total piping length	System	Actual	m	300 ³ / 115 ⁴	300 ³ / 135 ⁴	300 ³ / 145 ⁴	300 ³ / 115 ⁴	300 ³ / 135 ⁴	300 ³ / 145 ⁴	
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	m	50 ³ / 30 ⁴ / 40 ³ / 30 ⁴						
		IU - IU		Max.	m	15					
Power supply	Phase/Frequency/Voltage				1N~/50/220-240		3N~/50/380-415				
Current - 50Hz	Maximum fuse amps (MFA)				A		16.0				

(1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m (3) In case VRV® indoor units are connected (4) In case RA indoors are connected

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.





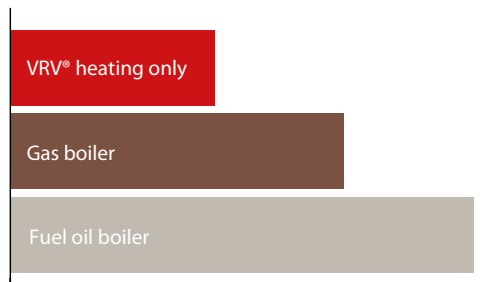
VRV® HEATING ONLY

› BENEFITS

LOW ENERGY CONSUMPTION AND LOW CO₂ EMISSIONS

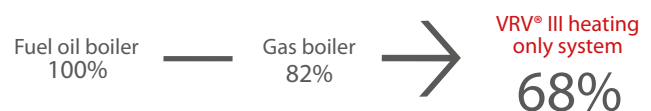
The VRV®III heating only system produces no direct CO₂ emissions, so you personally contribute to a better environment. The system does use electricity, but even without renewable electricity the CO₂ emissions are still much lower than boilers that use fossil fuels.

Average annual CO₂ emissions



A VRV® heating only system works more efficient than a traditional fossil-fuel boiler, generating 4kW of usable heat for every 1kW of electricity used. Talk about a good investment!

Reduced operation costs



Calculation based on data from Eurelectric (organisation of European electricity producers), "Eurelec Program - 2001" for EU27

Conditions: Required annual heating energy: 20,000 kWh. Source: Energy prices based on EUROSTAT statistics [first semester 2007].



PERFECT COMFORT:

FASTER RESPONSE THAN TRADITIONAL HEATING SYSTEMS AND A CONSTANT INDOOR TEMPERATURE

A heat pump system with an inverter continuously adjusts its heating output to suit the temperature in the room thus improving comfort levels. The inverter reduces system start-up time, enabling the required room temperature to be reached quicker. As soon as the correct temperature is reached, the inverter ensures that it is constantly maintained.

TEMPERATURE CONTROL, FRESH AIR PROVISION AND BIDDLE AIR CURTAINS ALL INTEGRATED IN A SINGLE SYSTEM

Connectable to the wide range of VRV® indoor units: 15 models in a total of 76 variations

NO NEED FOR FUEL STORAGE TANKS OR PUMPS



VRV® Heating only

OUTDOOR SYSTEM				RXHQ8P9	RXHQ10P9	RXHQ12P9	RXHQ14P9	RXHQ16P9	RXHQ18P9
System	Outdoor unit module 1			RXHQ8P9	RXHQ10P9	RXHQ12P9	RXHQ14P9	RXHQ16P9	RXHQ18P9
Capacity range	HP			8	10	12	14	16	18
Heating capacity	Nom.			kW	25.0 ¹	31.5 ¹	37.5 ¹	45.0 ¹	56.5 ¹
Power input - 50Hz	Heating	Nom.	kW	5.56	7.70	9.44	11.30	12.90	15.30
COP				4.50	4.09	3.97	3.98	3.88	3.69
Maximum number of connectable indoor units				17	21	26	30	34	39
Indoor index connection	Min./Nom./Max.			100/200/260	125/250/325	150/300/390	175/350/455	200/400/520	225/450/585
Dimensions	Unit	HeightxWidthxDepth	mm	1,680x930x765			1,680x1,240x765		
Weight	Unit		kg	187	240		316		324
Fan-Type	Propeller fan								
Fan-Air flow rate	Heating	Nom.	m³/min	171	185	196	233		239
Fan-External static pressure	Max.		Pa	78					
Sound pressure level	Heating	Nom.	dBA	61		64		67	
Operation range	Heating	Min.~Max.	°CWB	-20.0~15.0					
Compressor	Type	Hermetically sealed scroll compressor							
Compressor 2	Type	Hermetically sealed scroll compressor							
Compressor 3	Type	Hermetically sealed scroll compressor							
Refrigerant	Type	R-410A							
	Control	Electronic expansion valve							
Refrigerant oil	Type	Synthetic (ether) oil							
Piping connections	Liquid	OD	mm	9.52		12.7		15.9	
	Gas	OD	mm	19.1	22.2	28.6			
	Total piping length	System	Actual	1,000					
	Level difference	OU - IU	Outdoor unit in highest position/Indoor unit in highest position	50/40					
		IU - IU	Max.	15					
			m						
Power supply	Phase/Frequency/Voltage			Hz/V					
Current - 50Hz	Maximum fuse amps (MFA)			25			40		

OUTDOOR SYSTEM				RXHQ20P9	RXHQ22P9	RXHQ24P9	RXHQ26P9	RXHQ28P9	RXHQ30P9
System	Outdoor unit module 1			RXHQ8P9	RXHQ10P9	RXHQ12P9	RXHQ8P9	RXHQ10P9	RXHQ12P9
Capacity range	HP			20	22	24	26	28	30
Heating capacity	Nom.		kW	62.50 ¹	69.00 ¹	75.00 ¹	81.50 ¹	88.00 ¹	94.00 ¹
Power input - 50Hz	Heating	Nom.	kW	14.95	17.08	18.89	20.69	22.98	24.67
COP				4.18	4.04	3.97	3.94	3.83	3.81
Maximum number of connectable indoor units				43	47	52	56	60	64
Indoor index connection	Min./Nom./Max.			250/500/650	275/550/715	300/600/780	325/650/845	350/700/910	375/750/975
Sound pressure level	Heating	Nom.	dBA	66		67	68		69
Piping connections	Liquid	OD	mm	15.9			19.1		
	Gas	OD	mm	28.6		34.9			
	Total piping length	System	Actual	1,000					
	Level difference	OU - IU	Outdoor unit in highest position/Indoor unit in highest position	50/40					
		IU - IU	Max.	15					
			m						

(1) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high.

OUTDOOR SYSTEM				RXHQ32P9	RXHQ34P9	RXHQ36P9	RXHQ38P9	RXHQ40P9	RXHQ42P9
System	Outdoor unit module 1			RXHQ14P	RXHQ16P	RXHQ18P	RXHQ8P	RXHQ10P	RXHQ12P
Capacity range	HP			32	34	36	38	40	42
Heating capacity	Nom.			kW	102.00 ¹	107.00 ¹	113.00 ¹	119.00 ¹	132.00 ¹
Power input - 50Hz	Heating	Nom.	kW	26.63	28.23	30.62	30.13	32.39	34.20
COP				3.83	3.79	3.69	3.95	3.89	3.86
Maximum number of connectable indoor units				64					
Indoor index connection	Min./Nom./Max.			400/800/1,040	425/850/1,105	450/900/1,170	475/950/1,235	500/1,000/1,300	525/1,050/1,365
Sound pressure level	Heating	Nom.	dBa	69		70	69		70
Piping connections	Liquid	OD	mm	19.1					
	Gas	OD	mm	34.9		41.3			
	Total piping length	System	Actual	m	1,000				
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	m	50/40				
		IU - IU	Max.	m	15				
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400				

OUTDOOR SYSTEM				RXHQ44P9	RXHQ46P9	RXHQ48P9	RXHQ50P9	RXHQ52P9	RXHQ54P9
System	Outdoor unit module 1			RXHQ8P9	RXHQ10P9	RXHQ12P9	RXHQ14P9	RXHQ16P9	RXHQ18P9
Capacity range	HP			44	46	48	50	52	54
Heating capacity	Nom.			kW	138.00 ¹	145.00 ¹	151.00 ¹	158.00 ¹	170.00 ¹
Power input - 50Hz	Heating	Nom.	kW	35.94	38.26	39.95	41.91	43.47	45.95
COP				3.84	3.79	3.78	3.77	3.75	3.70
Maximum number of connectable indoor units				64					
Indoor index connection	Min./Nom./Max.			550/1,100/1,430	575/1,150/1,495	600/1,200/1,560	625/1,250/1,625	650/1,300/1,690	675/1,350/1,755
Sound pressure level	Heating	Nom.	dBA	71					72
Piping connections	Liquid	OD	mm	19.1					
	Gas	OD	mm	41.3					
	Total piping length	System	Actual	m	1,000				
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	m	50/40				
		IU - IU	Max.	m	15				
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/400				

(1) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m; indoor unit fan speed: high.



VRV®III-Q - REPLACEMENT VRV® THE DAIKIN SOLUTION TO R-22 PHASE OUT

Due to significant developments in heat pump technology, older systems of air conditioning run less efficiently than those available today. Furthermore the use of virgin R-22 is banned in Europe. To upgrade R-22 systems as cost effective as possible, Daikin replacement VRV® units can be installed using existing pipe-work.

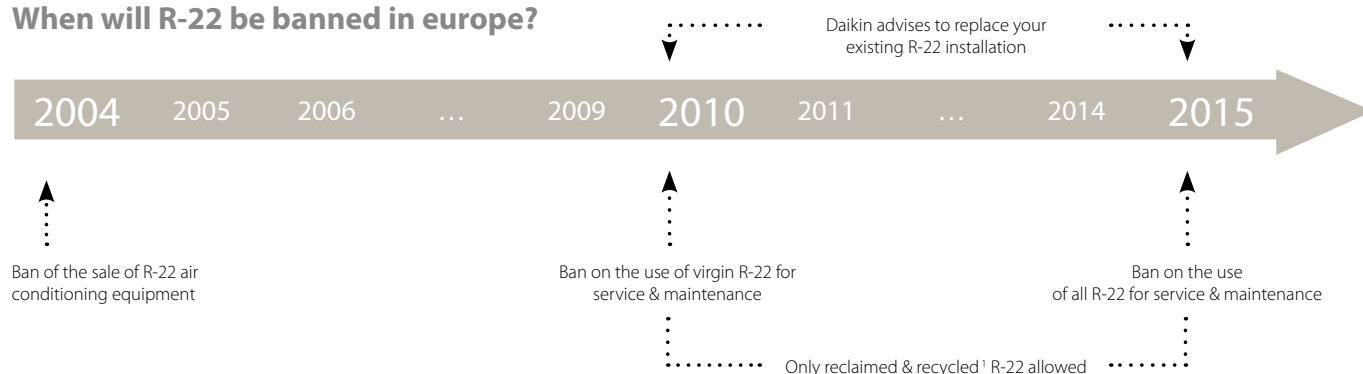
WHAT IS R-22 AND WHY IS IT PHASED-OUT IN EUROPE?

R-22 is a hydrochlorofluorocarbon (HCFC) which was commonly used in air conditioning systems. When R-22 is released into the air, the ultraviolet rays of the sun cause it to decompose and chlorine is released in the stratosphere. Chlorine reacts with ozone, reducing the amount of the ozone.

Due to ozone layer depletion, harmful ultraviolet rays reach the surface of the earth giving rise to a number of health and environmental issues. The international community therefore, signed the Montreal Protocol to phase out ozone depletion materials by 2030. The European Union however, decided to ban R-22 already in 2015.

Daikin advises to replace your existing installation already today.

When will R-22 be banned in europe?



¹ Recycled: re-use of R-22 following a basic cleaning process. Recycled R-22 must be re-used by the same company that carried out the recovery (can be done by installer)
Reclaimed: reprocessed R-22 in order to meet the equivalent performance of virgin R-22 (by specialized company)

WHAT IS THE IMPACT ON AN R-22 INSTALLATION?

The R-22 phase-out regulation will impact on all currently operating R-22 systems, although reliable R-22 equipment does not need to be replaced immediately because maintenance can be carried out with recycled or reclaimed R-22 until January 1st, 2015. However, currently not enough R-22 is reclaimed or recycled to cover the demand, supply shortages and price increases are expected. If there is no

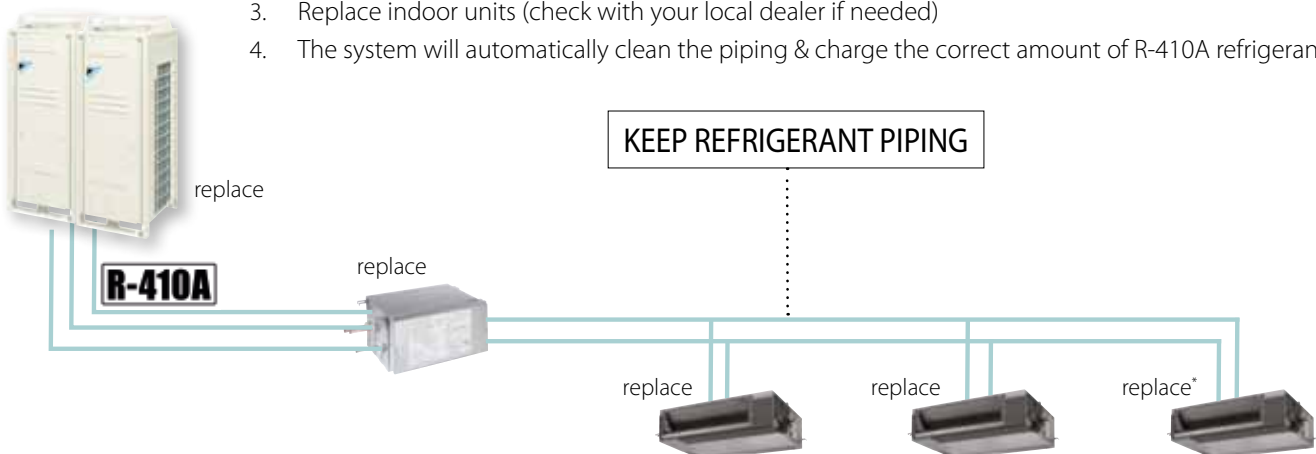
reclaimed or recycled R-22 available, certain repairs (for example: compressor change) are no longer possible and considerable air conditioning system downtime can occur. It is therefore worthwhile to consider a replacement system before 2015, especially for air conditioning systems with a large impact on the daily running of the business.

WHAT SHOULD BE REPLACED?

Replace your R-22 / R-407C outdoor unit with R-410A technology, but keep your refrigerant piping and in some cases your indoor units¹.

In case your indoor units can remain, works only need to be carried out at the outdoor unit and not inside your building (in case of a heat pump installation).

1. Replace outdoor unit
2. Replace BS-boxes (in case of H/R)
3. Replace indoor units (check with your local dealer if needed)
4. The system will automatically clean the piping & charge the correct amount of R-410A refrigerant



¹ Check with your local dealer if indoor units need to be replaced.

› FEATURES

FAST INSTALLATION

It is not necessary to remove the existing piping and even the indoor units can remain (depending on type of indoor unit). This means work only has to be carried out at the outdoor unit and not inside your building in case of a heat pump installation. The outdoor unit automatically charges the refrigerant and cleans the refrigerant piping. This unique Daikin feature makes the installation time even shorter.

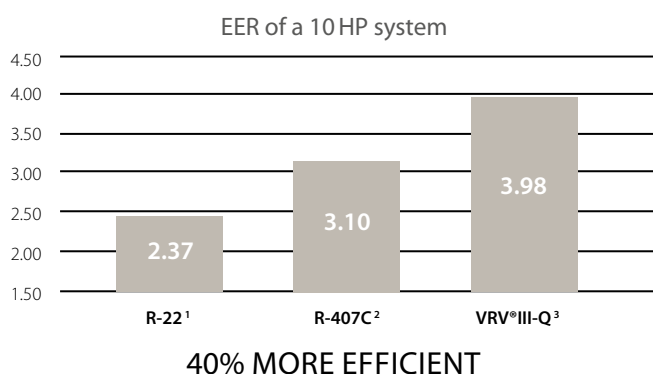
NO LIMITATIONS ON SYSTEM HISTORY

As a result of the combined automatic charging and refrigerant pipe cleaning function, it is possible to ensure a clean piping network, even when a compressor breakdown has previously occurred.

In this way all correct installed R-22 and R-407C VRV® systems can be replaced.

HIGH EFFICIENCY

Upgrading an old R-22 system to a Replacement VRV® system will result in increased system efficiency. Efficiency gains of more than 40% in cooling can be realized, by virtue of technological developments in current heat pump technology and the more efficient R-410A refrigerant. Increased energy efficiency equals lower energy consumption, subsequent lower energy costs and lower CO₂ emissions.



¹ R-22: RSXY10KA7

² R-407C: RSXYP10L7

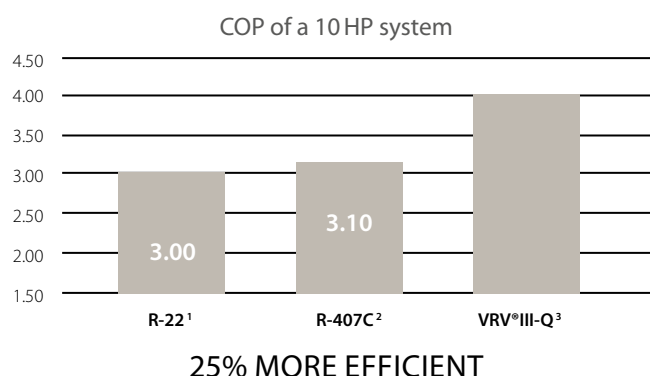
³ R-410A: RQYQ280P

LIMITED AND PLANNED-DOWNTIME

As the refrigerant piping can be maintained the installation is less intrusive and less time consuming than for a completely new system. Moreover, downtime can be carefully planned: whereas if a problem occurs when not enough reclaimed R-22 is available, a long and unplanned downtime can be the result.

LIMITED AND PHASED INVESTMENT COST

It is possible to spread the various stages of replacement over a certain period of time because the indoor units can remain in most cases. The air conditioning replacement therefore, can be incorporated in the general refurbishment schedule of the building and the investment cost can be spread. A further reduction in installation cost can be achieved by maintaining the old refrigerant copper pipe work.

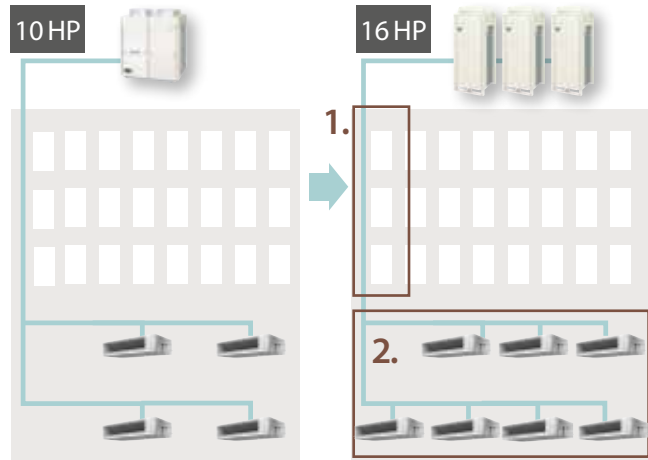


ENVIRONMENTAL AWARENESS

R-410A not only has a zero ozone depletion potential, it is also proven to be more energy efficient than R-22.

POSSIBILITY TO INCREASE CAPACITY

Cooling loads often increase subsequent to the initial installation of the air conditioning system. The Replacement VRV®(VRV®III-Q) enables system capacity to be increased without changing the refrigerant piping (depending on system characteristics). For example: It is possible to install a 16 HP Replacement VRV® on the refrigerant piping of an R-22 10 HP system.

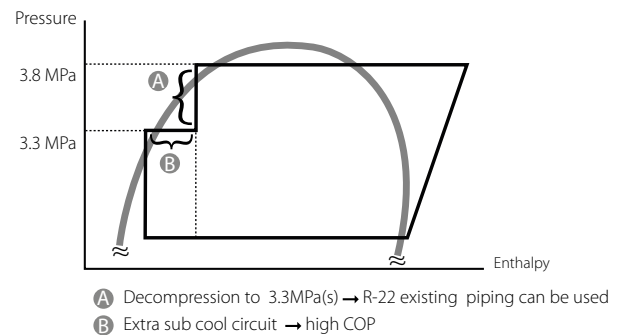


1. Keep main piping
2. Install indoor units with a higher total capacity

› TECHNOLOGIES

REDUCED PRESSURE

As R-22 VRV® systems used to work on a lower pressure than R-410A systems; thus the copper refrigerant piping was also designed for these lower pressures. Therefore the Replacement VRV® (VRV®III-Q) must operate at lower pressures than the standard VRV®III series. However thanks to the sub cool circuit a high efficiency level can be kept even with the lower pressures.



REFRIGERANT PIPE CLEANING

When replacing an air conditioning system, the piping is normally replaced as well since traces of old refrigerant and oil mixed with the oil and refrigerant of the new system can cause the equipment to malfunction.

In order to allow re-use of existing R-22 piping with an R-410A system Daikin developed a technology to capture and retain the contamination left in the refrigerant piping. During the charging of the system, R-410A refrigerant starts circulating through the copper piping collecting the contamination left in the refrigerant piping. The refrigerant including the remaining oil from the R-22 system is filtered in the outdoor unit and the contamination is deposited in the outdoor unit. This process is executed only once and takes about 1 hour (depending on system characteristics). Daikin is the first manufacturer in the industry to develop this combination of automatic charging and refrigerant pipe cleaning function.

› SPECIFICATIONS

VRV®-Q - Replacement VRV® - Heat recovery

				RQCEQ-P									
				280	360	460	500	540	636	712	744	816	848
Outdoor unit modules			RQEQ140P	2		2	1			1	1		
			RQEQ180P		2	1	2	3		2	1	1	
			RQEQ212P						3	1	2	3	4
Capacity range			HP	10	13	16	18	20	22	24	26	28	30
Capacity	cooling	nom.	kW	28.0	36.0	45.0	50.0	54.0	63.6	71.2	74.4	81.6	84.8
	heating	nom.	kW	32.0	40.0	52.0	56.0	60.0	67.2	78.4	80.8	87.2	89.6
Power input	cooling	nom.	kW	7.04	10.3	12.2	13.9	15.5	21.9	21.2	23.3	27.1	29.2
	heating	nom.	kW	8.00	10.7	13.4	14.7	16.1	17.7	20.7	21.2	23.1	23.6
EER	cooling			3.98	3.48	3.77	3.61	3.48	2.90	3.36	3.19	3.01	2.90
COP	heating			4.00	3.72	3.89	3.80	3.72	3.79	3.80	3.81	3.77	3.79
Max n° of indoor units to be connected				16	20	26	29	33	36	40	43	47	50
Indoor index connection	minimum			125	162,5	200	225	250	275	300	325	350	375
	standard			250	325	400	450	500	550	600	650	700	750
	maximum			325	422,5	520	585	650	715	780	845	910	975
Dimensions	unit	height	mm	1680									
		width	mm	635+ 635		635+ 635+ 635				635+ 635+ 635+ 635			
		depth	mm	765									
Weight			kg	175+ 175		175+ 175+175			179+ 179+179	175+175 +175+179	175+175 +179+179	175+179 +179+179	179+179+ 179+179
Sound pressure	cooling	nom.	dBa	57	61	61	62	63	64	63	64	65	66
Fan	type			Propeller									
	air flow rate (nominal at 230V)	cooling	m³/min	95+ 95	110+110	95+ 95 + 110	95+ 110+110	110+ 110 + 110		95+ 110+ 110+ 110		110+ 110+ 110+ 110	
	external static pressure (max.)			Pa									
Compressor	motor	type		Hermetically sealed scroll compressor									
Operation range	cooling	min. - max.	°CDB	-5~43									
	heating	min. - max.	°CWB	-20~15.5									
Refrigerant	type			R-410A									
	charge		kg	10.3+ 10.3	10.6+ 10.6	10.3+10.3 +10.6	10.3+10.6 +10.6	10.6+10.6 +10.6	11.2+11.2 +11.2	10.3+10.6 +10.6+11.2	10.3+10.6 +11.2+11.2	10.6+11.2 +11.2+11.2	11.2+11.2 +11.2+11.2
	control			Electronic expansion valve									
Piping connections	liquid		mm	9.52	12.7		15.9				19.1		
	gas		mm	22.2	25.4	28.6				34.9			
	discharge gas		mm	19.1		22.2			25.4			28.6	
	max. total length		m	300									
	max. length between		OU-IU	120 (actual length)									
	level difference		OU-IU	50 (outdoor unit in highest position)									
Power Supply				3~. 400V. 50Hz									

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

› SPECIFICATIONS

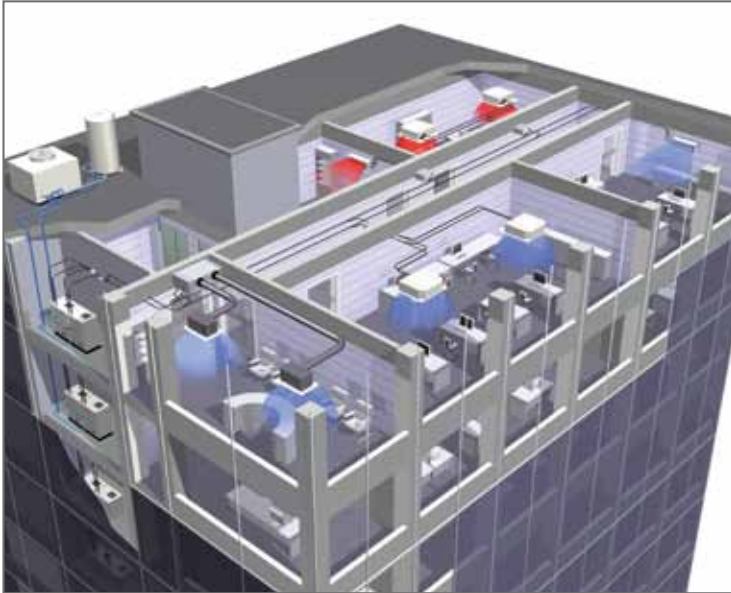
VRV®-Q - Replacement VRV® - Heat pump

				RQYQ-P																									
Outdoor system				140	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48				
System	Outdoor unit module 1			140	8	10	12	14	16	8				10	12	10	12	14	16	10				12	10	12	14	16	
	Outdoor unit module 2			-						10				12				16				10		12		16			
	Outdoor unit module 3			-												16								16					
Capacity range				HP	5	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48			
Cooling capacity	Nom.			kW	14.0 ¹	22.4 ¹	28.0 ¹	33.5 ¹	40.0 ¹	45.0 ¹	50.4 ¹	55.9 ¹	61.5 ¹	67.0 ¹	73.0 ¹	78.5 ¹	85.0 ¹	90.0 ¹	96.0 ¹	101 ¹	107 ¹	112 ¹	118 ¹	124 ¹	130 ¹	135 ¹			
Heating capacity	Nom.			kW	16.0 ²	25.0 ²	31.5 ²	37.5 ²	45.0 ²	50.0 ²	56.5 ²	62.5 ²	69.0 ²	75.0 ²	81.5 ²	87.5 ²	95.0 ²	100 ²	108 ²	113 ²	119 ²	125 ²	132 ²	138 ²	145 ²	150 ²			
Power input - 50Hz	Cooling	Nom.		kW	3.36	5.24	7.64	10.10	11.6	13.6	12.9	15.4	17.8	20.2	21.3	23.7	25.2	27.2	26.9	28.9	31.4	33.8	34.9	35.3	38.8	40.8			
	Heating	Nom.		kW	3.91	6.42	8.59	10.20	12.2	13.6	15.1	16.7	18.8	20.4	22.2	23.8	25.8	27.2	29.4	30.8	32.4	34.0	35.8	36.0	39.4	40.8			
EER					4.17	4.27	3.66	3.32	3.45	3.31	3.91	3.63	3.46	3.32	3.43	3.31	3.37	3.31	3.57	3.49	3.41	3.31	3.38	3.51	3.35	3.31			
COP					4.09	3.89	3.67	3.68	3.69	3.68	3.74	3.67	3.68	3.67	3.68	3.67	3.68	3.67	3.68	3.67	3.68	3.69	3.83	3.68	3.69	3.83	3.68		
Maximum number of connectable indoor units					10	17	21	26	30	34	39	43	47	52	56	60	64								64				
Dimensions	Unit	HeightxWidthxDepth		mm	1680x765				1,680x930x765				1,680x1,240x765				-				-				-				
Weight	Unit			kg	175	230	284		381		-				-				-				-						
Sound pressure level	Cooling	Nom.		dBA	54.0	57.0	58.0	60.0				61	62	63				64				65							
Operation range	Heating	Min.~Max.		°CWB	-20~-15.5																								
Refrigerant	Type			R-410A																									
Piping connections	Liquid	OD		mm	9.52				12.7				15.9								19.1								
	Gas	OD		mm	15.9	19.1	22.2	28.6								34.9								41.3					
	Total piping length	System	Actual	m	300																								
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	m	50/40																								
		IU - IU	Max.	m	15																								
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/380-415																								

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, **GEOTHERMAL** 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

P 78

ADVANCED VRV® TECHNOLOGIES

P 82

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

P 84

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

P 86



BENEFITS

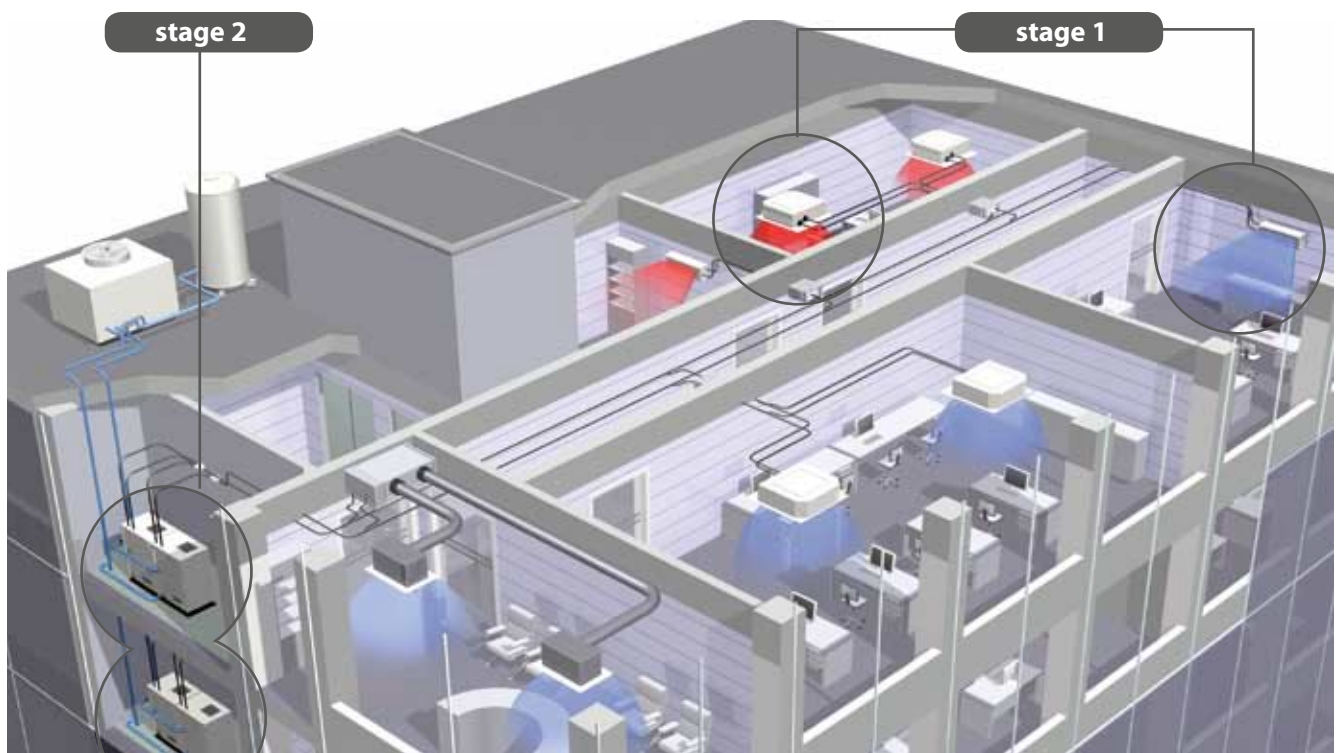


HIGH ENERGY EFFICIENCIES RESULTS FROM 2-STAGE HEAT RECOVERY

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.

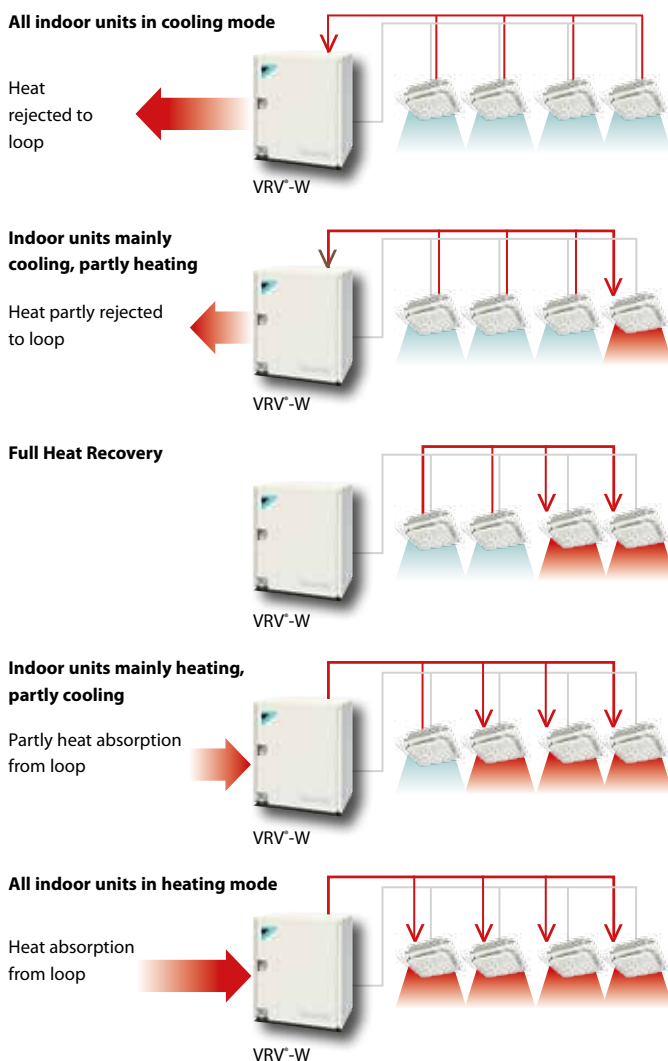
Stage 2: For heat recovery and heat pump!

Heat recovery between the water cooled outdoor units

For heat recovery and heat pump units!

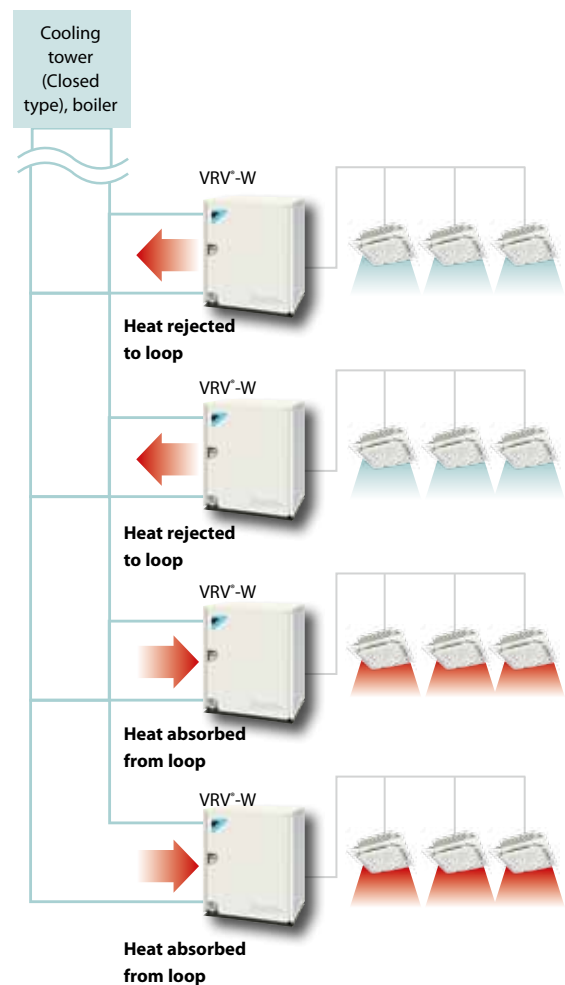
Heat recovery is also available between systems connected to the same water loop. These systems exchange heat via water, increasing energy efficiency.

Heat recovery between indoor units



Heat recovery between outdoor units

(Heat recovery and heat pump)



* Above system configurations are for illustration purposes only.

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.

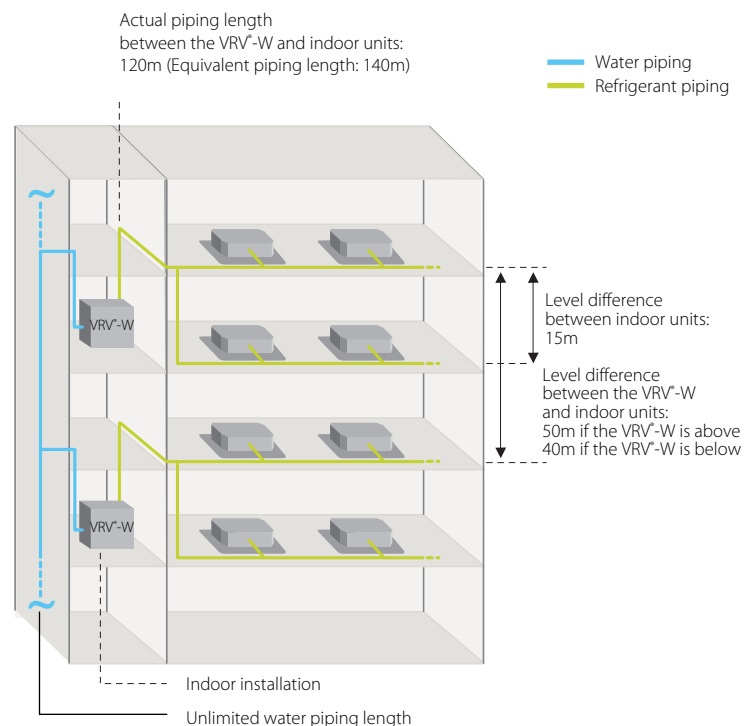
Because the system is water cooled, outdoor air temperature does not affect its heating capacity. In addition, water cooling means no defrost operation is required, and the resultant rapid start-up time assures quick and comfortable heating, even in cold environment.

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.

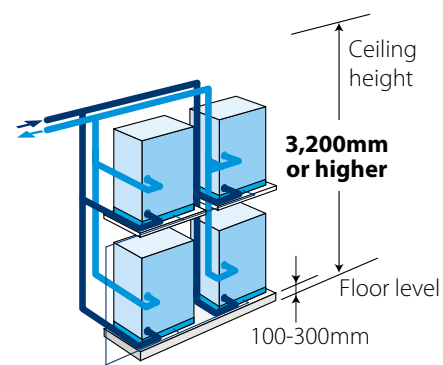
* 40m if the VRV®-W outdoor unit is below the indoor units.



SPACE SAVING - 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





YOUR SYSTEM OPTIMISED FOR THE EUROPEAN CLIMATE - HIGH SENSIBLE MODE

The high sensible mode on the VRV® outdoor units optimises the working of the units for the European climate. This optimisation has the following benefits:

Higher energy efficiency

As no energy is wasted on unnecessary dehumidification anymore the system will work more efficiently in cooling mode.

Higher comfort for the end-user

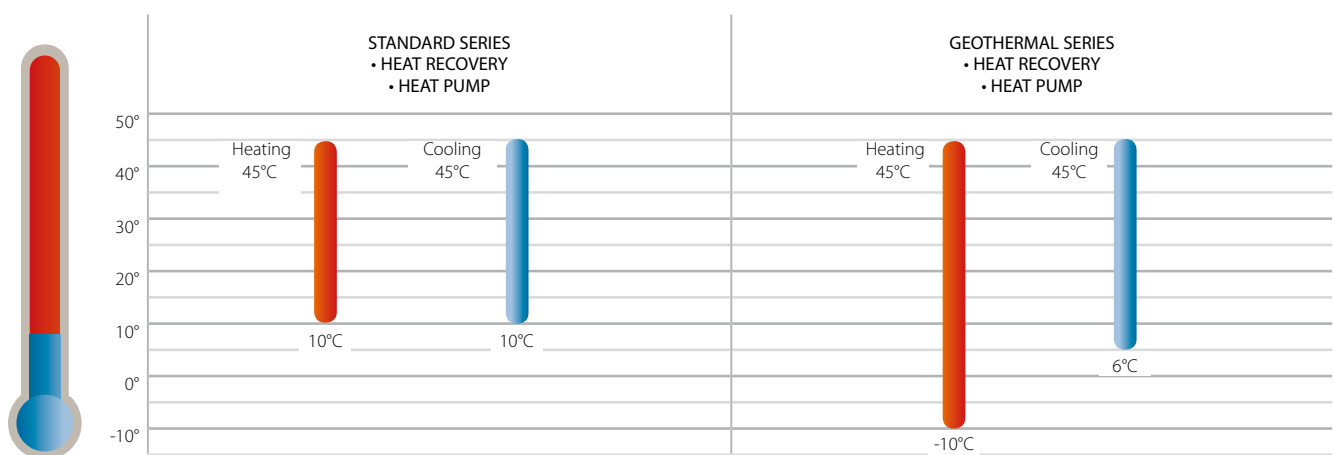
Thanks to the higher evaporation temperature also the discharge temperature of the indoor units will be increased in cooling mode, providing a higher comfort.

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 6°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

Daikin indoor units

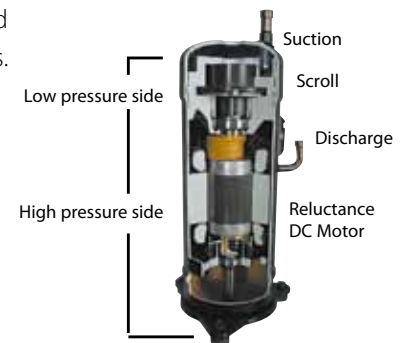
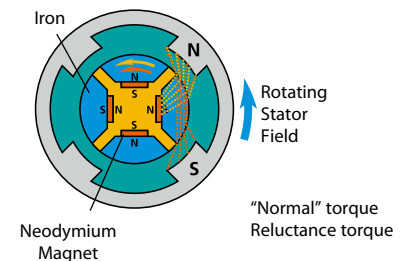


ADVANCED WATER COOLED VRV® TECHNOLOGIES



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.



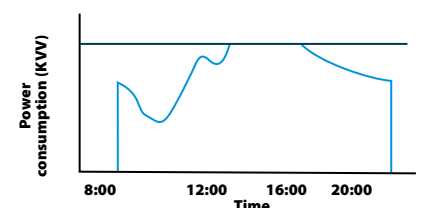
2 SINE WAVE DC INVERTER

- › 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.



INDIVIDUAL COMFORT THANKS TO VRV®III BS BOX

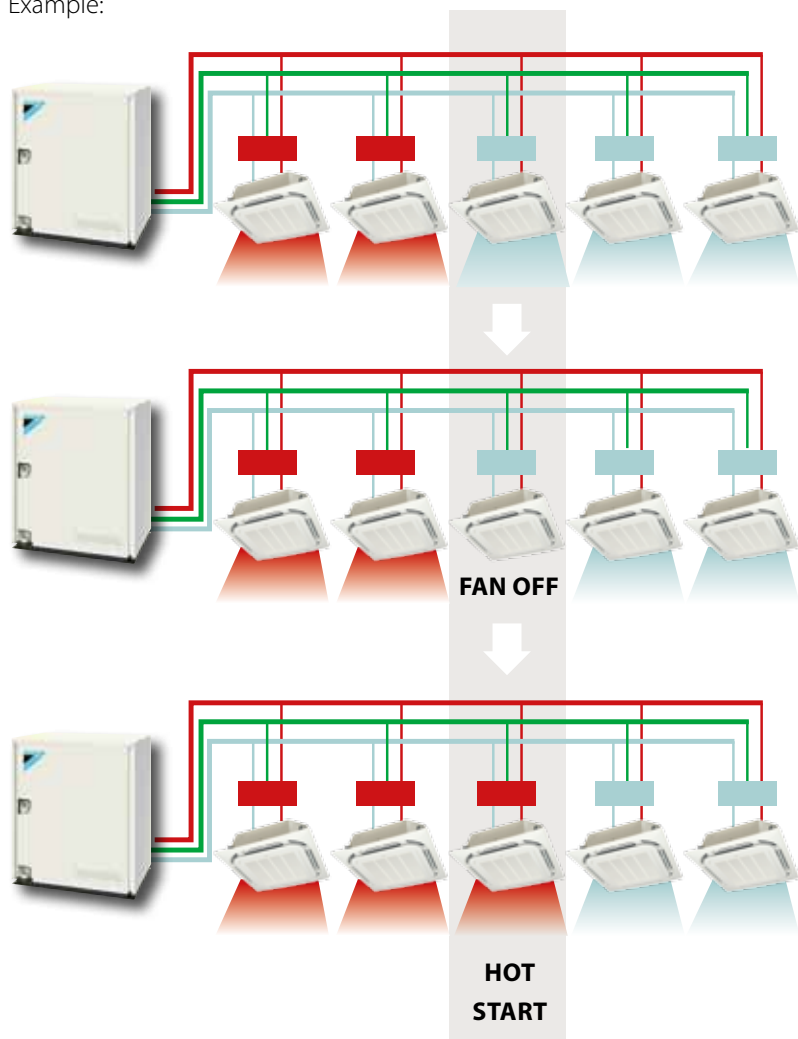
Individual change over from cooling to heating or vice versa of the indoor units is possible. This means that all indoor units who do not change over continue to provide optimum comfort for the users during this process.

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.



Example:





STANDARD SERIES

› SPECIFICATIONS

VRV®-W Standard series - Heat recovery - Heat Pump

OUTDOOR SYSTEM				RWEYQ8P	RWEYQ10P	RWEYQ16P	RWEYQ18	RWEYQ20P	RWEYQ24P	RWEYQ26P	RWEYQ28P	RWEYQ30P	
System	Outdoor unit module 1			RWEYQ8P	RWEYQ10P	RWEYQ8P	RWEYQ10P		RWEYQ8P	RWEYQ10P			
	Outdoor unit module 2			-		RWEYQ8		RWEYQ10	RWEYQ8		RWEYQ10		
	Outdoor unit module 3					-			RWEYQ8		RWEYQ10		
Cooling capacity	Nom.		kW	22.4 ¹	26.7 ¹	44.8 ¹	49.1 ¹	53.4 ¹	67.2 ¹	71.5 ¹	75.8 ¹	80.1 ¹	
Heating capacity	Nom.		kW	25.0 ²	31.5 ²	50.0 ²	56.5 ²	63.0 ²	75.0 ²	81.5 ²	88.0 ²	94.5 ²	
Power input - 50Hz	Cooling	Nom.	kW	4.55	6.03	9.10	10.6	12.1	13.7	15.1	16.6	18.1	
	Heating	Nom.	kW	4.24	6.05	8.48	10.3	12.1	12.7	14.5	16.3	18.2	
EER				4.89	4.14	4.92	4.63	4.41	4.91	4.74	4.57	4.43	
COP				5.81	5.08	5.87	5.48	5.21	5.91	5.62	5.40	5.19	
Maximum number of connectable indoor units				17	21	34	36						
Dimensions	Unit	HeightxWidthxDepth		mm	1,000x780x550			-x-x-					
Weight	Unit			kg	149	150	-						
Heat exchanger	Type			Stainless steel plate						-			
Sound pressure level	Cooling	Nom.	dBA	50	51	53	54	55			56		
Compressor	Type			Hermetically sealed scroll compressor						-			
Operation range	Inlet water temperature	Cooling	Min.~Max. °CDB	10~45									
		Heating	Min.~Max. °CWB	10~45									
Refrigerant	Type			R-410A									
	Control			Electronic expansion valve									
Refrigerant oil	Type			Synthetic (ether) oil									
Piping connections	Liquid	OD	mm	9.52		12.7	15.9		19.1				
	Gas	OD	mm	19.1 ³	22.2 ³	28.6 ³		34.9 ³					
	Discharge gas	OD	mm	15.9 ⁴ / 19.1 ⁵	19.1 ⁴ / 22.2 ⁵	22.2 ⁴ / 28.6 ⁵	22.2 ⁴ / 28.6 ⁵	22.2 ⁴ / 28.6 ⁵	28.6 ⁴ / 34.9 ⁵	28.6 ⁴ / 34.9 ⁵	28.6 ⁴ / 34.9 ⁵	28.6 ⁴ / 34.9 ⁵	
	Total piping length	System	Actual	m	300								
	Level difference	OU - IU	Outdoor unit in highest position/Indoor unit in highest position	m	50/40								
		IU - IU	Max.	m	15								
	Power supply	Phase/Frequency/Voltage			Hz/V								
Current - 50Hz	Maximum fuse amps (MFA)			25		35			45				

(1) Cooling: indoor temp. 27°CDB, 19°CWB; Inlet water temperature: 30°C; equivalent refrigerant piping: 7.5m; level difference: 0m. (2) Heating: indoor temp. 20°CDB; inlet water temperature: 20°C; equivalent piping length: 7.5m; level difference: 0m (3) In case of heat pump system, gas pipe is not used (4) In case of heat recovery system (5) In case of heat pump system (6) This unit should not be installed outdoors, but indoors e.g. in a machine room.

› For more information on BS boxes, please refer to page 44





GEO THERMAL SERIES

› BENEFITS

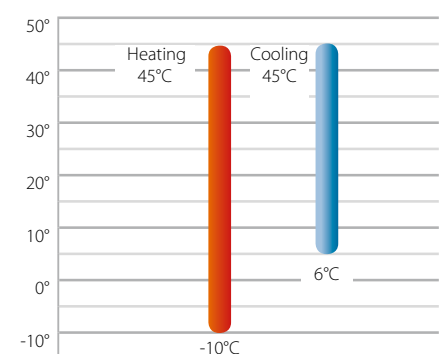
USING GROUND WATER AS A RENEWABLE ENERGY SOURCE

Superior efficiency, even in the most extreme outdoor temperatures

Because the temperature of ground water, lakes and rivers, remains relatively constant the year round, our water-cooled system maintains its superior efficiency, even in the most extreme outdoor temperatures, when the efficiency of air-cooled systems goes down.

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 10°C

› SPECIFICATIONS

› VRV®-W - Geothermal series - Heat pump - heat recovery

OUTDOOR UNIT				RWEYQ8PR	RWEYQ10PR
System	Outdoor unit module 1			RWEYQ8PY1R	RWEYQ10PY1R
Capacity range		HP		8	10
Cooling capacity	Nom.		kW	22.4 ¹	26.1 ¹
Heating capacity	Nom.		kW	25.0 ²	31.5 ²
Power input - 50Hz	Cooling	Nom.	kW	4.58	6.30
	Heating	Nom.	kW	4.30	6.20
EER				4.89	4.14
COP				5.81	5.08
Maximum number of connectable indoor units				17	21
Indoor index connection	Min./Nom./Max.			100//200	125//250
Dimensions	Unit	HeightxWidthxDepth	mm	1,000x780x550	
Weight	Unit		kg	149	150
Heat exchanger	Type			Stainless steel plate	
Sound pressure level	Cooling	Nom.	dBA	50	51
Compressor	Type			Hermetically sealed scroll compressor	
Operation range	Inlet water temperature	Cooling	Min.~Max. °CDB	10~45	
		Heating	Min.~Max. °CWB	10~45	
Refrigerant	Type			R-410A	
	Control			Electronic expansion valve	
Refrigerant oil	Type			Synthetic (ether) oil	
Piping connections	Liquid	OD	mm	9.52	
	Gas	OD	mm	19.1 ³	22.2 ³
	Discharge gas	OD	mm	15.9 ⁴ / 19.1 ⁵	19.1 ⁴ / 22.2 ⁵
	Total piping length	System	Actual	300	
	Level difference	OU - IU	Outdoor unit in highest position/ Indoor unit in highest position	50/40	
		IU - IU	Max.	15	
Power supply	Phase/Frequency/Voltage			3~/50/380-415	
Current - 50Hz	Maximum fuse amps (MFA)			25	

(1) Cooling: indoor temp. 27°CDB, 19°CWB; Inlet water temperature: 30°C; equivalent refrigerant piping: 7.5m; level difference: 0m. (2) Heating: indoor temp. 20°CDB; inlet water temperature: 20°C; equivalent piping length: 7.5m; level difference: 0m (3) In case of heat pump system, gas pipe is not used (4) In case of heat recovery system (5) In case of heat pump system (6) This unit should not be installed outdoors, but indoors e.g. in a machine room.

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 116 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. The Roundflow cassette now includes an optional auto cleaning filter, which automatically cleans itself daily, leading to yearly energy savings of up to 10%. Dust from the filter is collected in the unit for removal by simple vacuum cleaning.

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



STYLISH INDOOR UNITS

CEILING MOUNTED CASSETTES

P 92

FLOOR STANDING UNITS

P 116

CONCEALED CEILING UNITS

P 100

STYLISH INDOOR UNITS
CONNECTABLE TO VRV® HEAT PUMP RXYQ-PR

P 120

WALL MOUNTED UNITS

P 110

CEILING SUSPENDED UNITS

P 112

HEATING ONLY HYDROBOX FOR VRV®

P 142

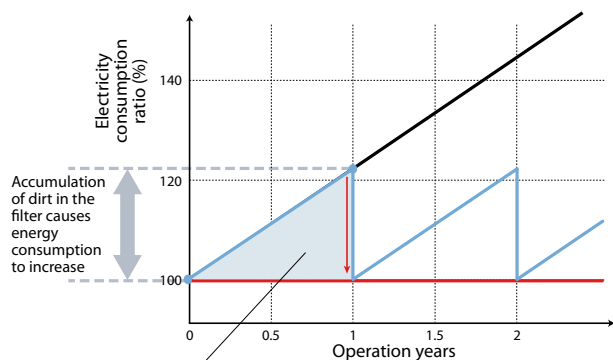


Daikin introduces first auto cleaning cassette to European market

Daikin launches a new decoration panel for the round flow cassette, equipped with a special filter, which automatically cleans itself once a day. All dust coming from this filter is stored in the indoor unit and can be removed with a normal vacuum cleaner. With this decoration panel energy and maintenance costs will be lower and comfort will be increased.

Higher efficiency and comfort from daily auto cleaning of the filter > Energy savings up to 10%

With a standard decoration panel the energy consumption of the unit increases slowly because dust accumulates in the filter. After the filter is cleaned the energy consumption is back at the level of installation. With the auto cleaning decoration panel the filter is cleaned everyday and therefore the energy consumption remains constant, resulting in an energy saving up to 10% compared to yearly filter cleaning.



Day 1: equal energy consumption
After 1 year: > 20% increase in energy consumption
=> An increase of 10% in energy consumption on a yearly basis

— Filter is never cleaned
— Filter is cleaned once a year
— Filter is cleaned every day



Easy removal of dust with a vacuum cleaner without opening the unit

- › Dust is stored in dust box
- › Emptying the dust box can be done with a vacuum cleaner
- › No rearrangement of shop interior etc to access the unit
- › Only a vacuum cleaner is required, no ladder or other equipment
- › Qualified personnel is not necessary
- › No manual cleaning – not required to touch the dust

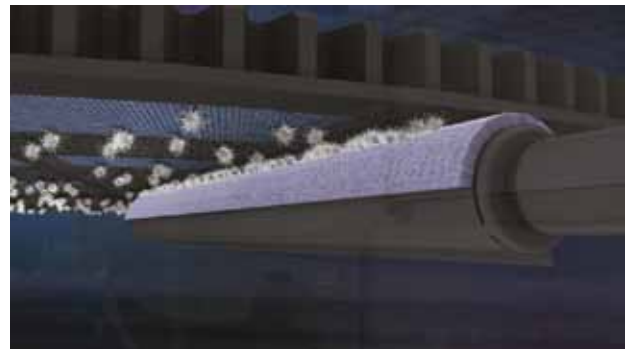
Lower maintenance costs thanks to auto cleaning function

- › Less time needed for filter maintenance
- › Less qualified personnel required

Detailed operation of the auto cleaning panel

1. Daily cleaning of the filter

Once a day the rounded filter turns 360° to pass the special brush. The end-user can program this timing with the remote controller.



2. Auto cleaning cassette: operation

The caught dust is sent to the dust box by using the airflow of the indoor fan.

On average the dust box can contain the dust of 1 year for office applications and half a year for shop applications (depending on annual operation hours and shop type).



3. Auto cleaning cassette: Operation

Removing dust with vacuum cleaner

- › Quick
- › Not necessary to touch dust
- › Not necessary to open panel



FXFQ-P9

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

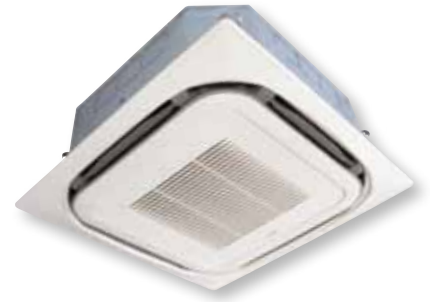
Round Flow Ceiling Mounted Cassette



FXFQ20-63P9
Standard panel in Pure White
with grey louvres



FXFQ20-63P9
Standard panel in Pure White,
including white louvres



FXFQ20-63P9
Auto cleaning panel in Pure White



GOOD DESIGN
AWARD
IN JAPAN



BRC1E51A



BRC7F532

Comfort & Efficiency

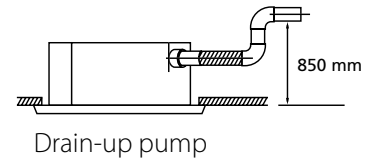
- › 360° air discharge ensures uniform air flow and temperature distribution
- › Modern style decoration panel is available in 3 different variations: pure white (RAL9010) auto cleaning panel, pure white (RAL9010) standard panel with grey louvers and pure white (RAL9010) standard panel with white louvers
- › For auto cleaning panel:
 - › Daikin introduces first auto cleaning cassette to European market
 - › Higher efficiency and comfort thanks to daily auto cleaning of the filter
 - › Lower maintenance costs thanks to auto cleaning function
 - › Easy dust removal with a vacuum cleaner without opening the unit
- › 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





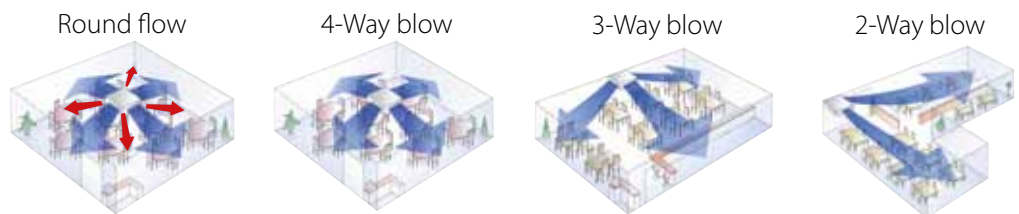
Flexible Installation & Easy Maintenance

- › Reduced installation height: 214mm for class 20-63
- › Standard drain pump with 850mm lift
- › Allows multi tenant applications (option PCB required)



Examples of Airflow Patterns

360° radial round flow enables uniform air flow distribution



SPECIFICATIONS

INDOOR UNITS				FXFQ20P9	FXFQ25P9	FXFQ32P9	FXFQ40P9	FXFQ50P9	FXFQ63P9	FXFQ80P9	FXFQ100P9	FXFQ125P9	
Cooling capacity	Nom.		kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	
Heating capacity	Nom.		kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	
Power input - 50Hz	Cooling	Nom.	kW	0.053			0.063	0.083	0.095	0.120	0.173	0.258	
	Heating	Nom.	kW	0.045			0.055	0.067	0.114	0.108	0.176	0.246	
Dimensions	Unit	HeightxWidthxDepth	mm	204x840x840						246x840x840		288x840x840	
Weight	Unit		kg	20				21			24		26
Decoration panel	Model				BYCQ140CW1 / BYCQ140CW1W / BYCQ140CGW1								
	Colour				Pure White(RAL 9010)								
	Dimensions	HeightxWidthxDepth	mm	50x950x950 / 50x950x950 / 130x950x950									
	Weight			kg	5.5 / 5.5 / 11.5								
Fan-Air flow rate - 50Hz	Cooling	High/Low	m³/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	m³/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 level	Cooling	Nom.	dBA	49			50	51	52	55	58	61	
Sound pressure level	Cooling	High/Low	dBA	31/28			32/28	33/28	34/29	38/32	41/33	44/34	
	Heating	High/Low	dBA	31/28			32/28	33/28	36/30	38/32	42/34	44/34	
Refrigerant	Type				R-410A								
Piping connections	Liquid/OD/Gas/OD/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	Phase / Frequency / Voltage	Hz / V	1~ / 50/60 / 220-240/220										

FXZQ-M9

15-20-25-32-40-50

4-Way Blow Ceiling Mounted Cassette

600 x 600mm



FXZQ15-50M9



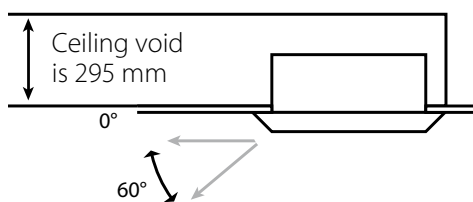
BRC1E51A



BRC7E530

Comfort & Efficiency

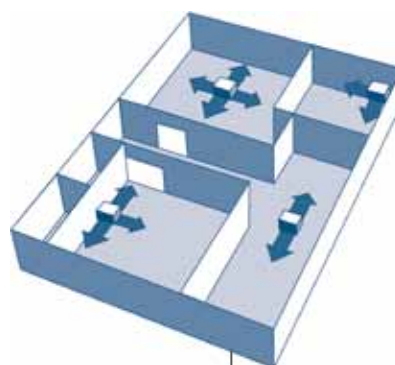
- › 15 class unit especially developed for small or well-insulated rooms, such as hotel bedrooms, small offices, etc.
- › Modern style decoration panel in pure white (RAL9010)
- › Home leave operation saves energy during absence
- › Whisper quiet operation: down to 25 dBA sound pressure level
- › Fresh air intake for healthy living
- › Comfortable air discharge ensures draught free operation and prevents ceiling soiling
- › Since the flaps can move to a 0 degree position, virtually no draught can be experienced



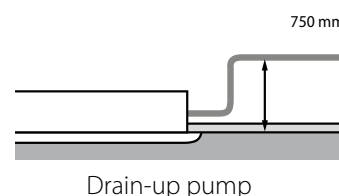


Flexible Installation & Easy Maintenance

- › 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
- › Easy maintenance: switch box can be reached by simply removing the suction grille
- › Drain-up pump with 750mm lift fitted as standard
- › Standard drain pump with 750mm lift



Flexible installation



SPECIFICATIONS

INDOOR UNITS				FXZQ15M9	FXZQ20M9	FXZQ25M9	FXZQ32M9	FXZQ40M9	FXZQ50M9
Cooling capacity	Nom.		kW	1.7	2.2	2.8	3.6	4.5	5.6
Heating capacity	Nom.		kW	1.9	2.5	3.2	4.0	5.0	6.3
Power input	Cooling	Nom.	kW	0.073			0.076	0.089	0.115
	Heating	Nom.	kW	0.064			0.068	0.080	0.107
Dimensions	Unit	HeightxWidthxDepth	mm	286x575x575					
Weight	Unit		kg	18					
Decoration panel	Model			BYFQ60B7W1					
	Colour			White (RAL9010)					
	Dimensions	HeightxWidthxDepth	mm	55x700x700					
	Weight			2.7					
Fan-Air flow rate	Cooling	High/Low	m³/min	8.1/7	9.0/7.0		9.5/7.5	11.0/8.0	14.0/10.0
Sound power level	Cooling	Nom.	dBA	46	47		49	53	58
Sound pressure level	Cooling	High/Low	dBA	29/25	30/25		32/26	36/28	41/33
Refrigerant	Type			R-410A					
Piping connections	Liquid/OD/Gas/OD/Drain		mm	6.35/12.7/26					
Power supply	Phase: Frequencyv: Voltage		Hz: V	1~ / 50 / 220-240					

FXCQ-M8

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

2-Way Blow Ceiling Mounted Cassette



FXCQ20-32M8



BRC1E51A



BRC7C62

Comfort & Efficiency

- › Home leave operation saves energy during absence
- › Auto swing function ensures efficient air and temperature distribution and prevents ceiling soiling



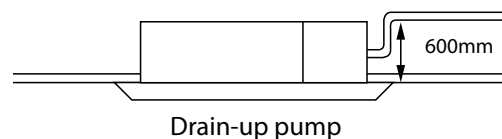


Filter

- › Standard long life filter

Flexible Installation & Easy Maintenance

- › Easy to install: depth of all units is 600mm
- › Maintenance operations can be performed by simply removing the front panel
- › Standard drain pump with 600mm lift



SPECIFICATIONS

INDOOR UNITS				FXCQ20M8	FXCQ25M8	FXCQ32M8	FXCQ40M8	FXCQ50M8	FXCQ63M8	FXCQ80M8	FXCQ125M8	
Cooling capacity	Nom.		kW	2.3	2.8	3.6	4.5	5.6	7.1	9.0	14.0	
Heating capacity	Nom.		kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	16.0	
Power input - 50Hz	Cooling	Nom.	kW	0.077	0.092		0.130		0.161	0.209	0.256	
	Heating	Nom.	kW	0.044	0.059		0.097		0.126	0.176	0.223	
Dimensions	Unit	HeightxWidthxDepth	mm	305x780x600			305x995x600		305x1,180x600	305x1,670x600		
Required ceiling void >			mm	350								
Weight	Unit		kg	26			31	32	35	47	48	
Decoration panel	Model			BYBC32GJW1			BYBC50GJW1		BYBC63GJW1	BYBC125GJW1		
	Colour						White (10Y9/0.5)					
	Dimensions	HeightxWidthxDepth	mm	53x1,030x680			53x1,245x680		53x1,430x680	53x1,920x680		
	Weight		kg	8			8.5		9.5	12		
Fan-Air flow rate - 50Hz	Cooling	High/Low	m³/min	7/5	9/6.5		12/9		16.5/13	26/21	33/25	
	Heating	High/Low	m³/min	7/5	9/6.5		12/9		-	16.5/13	26/21	33/25
Sound power level	Cooling	Nom.	dBA	45	50					52	54	60
Sound pressure level	Cooling	High/Low	dBA	33/28	35/29	35.0/29.0	35.5/30.5		38/33	40/35	45/39	
	Heating	High/Low	dBA	33/28	35/29	35.0/29.0	35.5/30.5		38/33	40/35	-	
Refrigerant	Type			R-410A								
Piping connections	Liquid/OD/Gas/OD/Drain		mm	6.35/12.7/VP25 (O.D. 32 / I.D. 25)					9.52/15.90/VP25 (O.D. 32 / I.D. 25)			
Power supply	Phase / Frequency / Voltage		Hz / V	1 ~ / 50 / 230								



FXKQ63MA



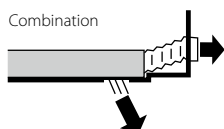
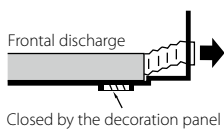
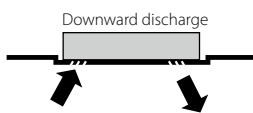
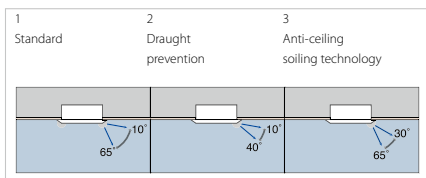
BRC1E51A



BRC4C61

Comfort & Efficiency

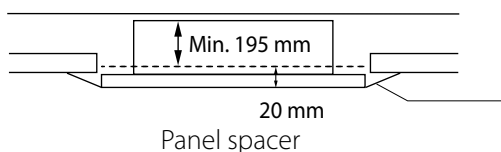
- › Home leave operation saves energy during absence
- › Comfortable horizontal auto swing ensures draughtfree operation and prevents ceiling soiling
- › Optimum air flow conditions are created by either downward air discharge or frontal air discharge (via optional grille) or a combination of both



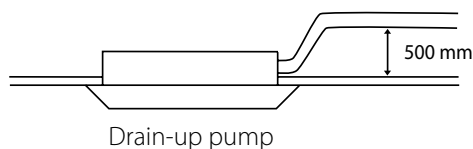


Flexible Installation

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



- › Standard drain pump with 500mm lift



SPECIFICATIONS

INDOOR UNITS				FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA
Cooling capacity	Nom.		kW	2.8	3.6	4.5	7.10
Heating capacity	Nom.		kW	3.2	4.0	5.0	8.00
Power input - 50Hz	Cooling	Nom.	kW	0.066		0.076	0.105
	Heating	Nom.	kW	0.046		0.056	0.085
Dimensions	Unit	HeightxWidthxDepth	mm	215x1,110x710			215x1,310x710
Weight	Unit		kg	31			34
Decoration panel	Model			BYK45FJW1			BYK71FJW1
	Colour			White			
	Dimensions	HeightxWidthxDepth	mm	70x1,240x800			70x1,440x800
	Weight		kg	8.5			9.5
Fan-Air flow rate - 50Hz	Cooling	High/Low	m ³ /min	11/9		13/10	18/15
Sound pressure level	Cooling	High/Low	dBA	38.0/33.0		40.0/34.0	42.0/37.0
Refrigerant	Type			R-410A			
Piping connections	Liquid/OD/Gas/OD/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	Phase / Frequency / Voltage		Hz / V	1~ / 50/60 / 220-240/220			

FXDQ-M9

20-25

Small Concealed Ceiling Unit



FXDQ20-25M9



BRC1E51A



BRC4C62

Comfort & Efficiency

- › Designed for hotel bedrooms
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › Home leave operation saves energy during absence



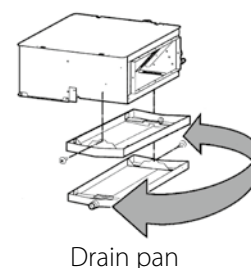
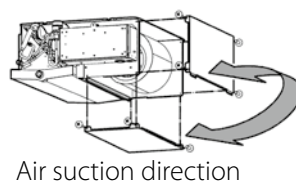


Filter

- › 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 PCB required)



SPECIFICATIONS

INDOOR UNITS				FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA
Cooling capacity	Nom.		kW	2.8	3.6	4.5	7.10
Heating capacity	Nom.		kW	3.2	4.0	5.0	8.00
Power input - 50Hz	Cooling	Nom.	kW	0.066		0.076	0.105
	Heating	Nom.	kW	0.046		0.056	0.085
Dimensions	Unit	HeightxWidthxDepth	mm	215x1,110x710			215x1,310x710
Weight	Unit		kg	31			34
Decoration panel	Model			BYK45FJW1			BYK71FJW1
	Colour			White			
	Dimensions	HeightxWidthxDepth	mm	70x1,240x800			70x1,440x800
	Weight		kg	8.5			9.5
Fan-Air flow rate - 50Hz	Cooling	High/Low	m ³ /min	11/9		13/10	18/15
Sound pressure level	Cooling	High/Low	dBA	38.0/33.0		40.0/34.0	42.0/37.0
Refrigerant	Type			R-410A			
Piping connections	Liquid/OD/Gas/OD/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	Phase / Frequency / Voltage		Hz / V	1~ / 50/60 / 220-240/220			



FXDQ20-32P7



BRC1E51A



BRC4C65

Comfort & Efficiency

- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › 15 class unit especially developed for small or well-insulated rooms, such as hotel bedrooms, small offices, etc.
- › Home leave operation saves energy during absence



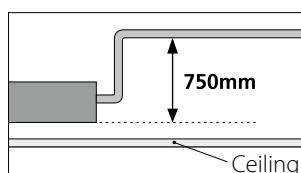
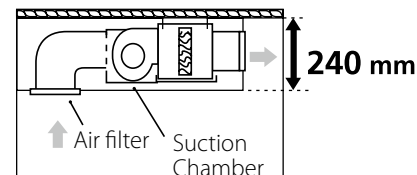
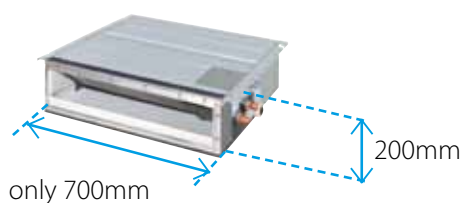


Filter

- › 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
- › Medium external static pressure facilitates unit use with flexible ducts of varying lengths
- › Standard drain pump with 750mm lift
- › Allows multi tenant applications (option PCB required)



Drain-up pump

SPECIFICATIONS

INDOOR UNITS				FXDQ15P7	FXDQ20P7	FXDQ25P7	FXDQ32P7	FXDQ40P7	FXDQ50P7	FXDQ63P7		
Cooling capacity	Nom.			kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1	
Heating capacity	Nom.			kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0	
Power input - 50Hz	Cooling	Nom.	kW	0.086				0.089	0.160	0.165	0.181	
	Heating	Nom.	kW	0.067				0.070	0.147	0.152	0.168	
Dimensions	Unit	HeightxWidthxDepth	mm	200x700x620	200x700x620				200x900x620		200x1,100x620	
Required ceiling void >			mm	240	240							
Weight	Unit			kg	23	23			27	28	31	
Fan-Air flow rate - 50Hz	Cooling	Super high/High/ Low	m³/min	7.5/7.0/6.4	8.0/7.2/6.4				10.5/9.5/8.5	12.5/11.0/10.0	16.5/14.5/13.0	
Fan-External static pressure - 50Hz	High/Nom.			Pa	30/10	30/10			44/15			
Sound power level	Cooling	Nom.	dBA	50	51				52	53	54	
Sound pressure level	Cooling	High/Nom./Low	dBA	32/31/29	33/31/29				34/32/30	35/33/31	36/34/32	
Refrigerant	Type			R-410A								
Piping connections	Liquid/OD/Gas/OD/Drain			mm	6.35/12.7/VP20 (I.D. 20/O.D. 26)						9.52/15.9/VP20 (I.D. 20/O.D. 26)	
Power supply	Phase / Frequency / Voltage			Hz / V	1 ~ / 50/60 / 220-240/220							

FXSQ-P

20-25-32-40-50-63-80-100-125-140

Concealed Ceiling Unit With Inverter Driven Fan



FXSQ40-50P



BRC1E51A



BRC4C66

Comfort & Efficiency

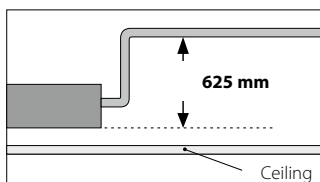
- › low energy consumption thanks to DC inverter fans
- › Improved comfort thanks to 3-step air flow control
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of an integrated inverter control ensures maximum comfort and efficiency
- › Home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

Filter

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

Flexible Installation

- › Easy installation thanks to automatic air flow adjustment towards nominal air flow rate
- › Up to 140Pa external static pressure (ESP) facilitates using flexible ducts of varying lengths: ideal for shops and medium size offices
- › Possibility to change ESP via wired remote control allows optimisation of the supply air volume
- › The air suction direction can be altered from rear to bottom suction
- › Standard built-in drain pump increases reliability of the drain system
- › Allows multi tenant applications (option PCB required)



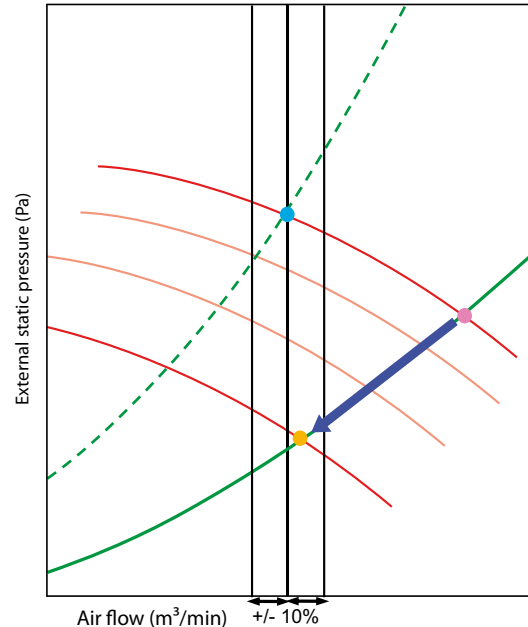
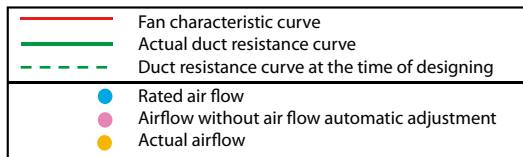
Drain-up pump



Easy installation thanks to automatic air flow adjustment towards nominal air flow: Installation made easier

Reduced installation time

- › After installation, it is possible that the actual duct resistance is lower than expected at time of designing. As a consequence the air flow will be too high.
- › With the automatic air flow adjustment function the unit can adapt its fan speed to a lower curve, so the air flow decreases.
- › The air flow will always be within 10% of the rated air flow because of the amount of possible fan curves (more than 8 fan curves available per model).
- › Alternatively the installer can manually select a fan curve with the wired remote control.



SPECIFICATIONS

INDOOR UNITS				FXSQ20P	FXSQ25P	FXSQ32P	FXSQ40P	FXSQ50P	FXSQ63P	FXSQ80P	FXSQ100P	FXSQ125P	FXSQ140P
Cooling capacity	Nom.		kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0	16.0
Heating capacity	Nom.		kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0	18.0
Power input - 50Hz	Cooling	Nom.	kW	0.041		0.044	0.097		0.074	0.118	0.117	0.185	0.261
	Heating	Nom.	kW	0.029		0.032	0.085		0.062	0.106	0.105	0.173	0.249
Dimensions	Unit	HeightxWidthxDepth	mm	300x550x700			300x700x700		300x1,000x700		300x1,400x700		
Required ceiling void >			mm	350									
Weight	Unit		kg	23			26		35		46		47
Decoration panel	Model			BYBS32DJW1			BYBS45DJW1		BYBS71DJW1		BYBS125DJW1		
	Colour			White (10Y9/0.5)									
	Dimensions	HeightxWidthxDepth	mm	55x650x500			55x800x500		55x1,100x500		55x1,500x500		
	Weight		kg	3.0			3.5		4.5		6.5		
Fan-Air flow rate - 50Hz	Cooling	High/Low	m³/min	9/6.5		9.5/7	16/11		19.5/16	25/20	32/23	39/28	46/32
	Heating	High/Low	m³/min	9/6.5		9.5/7	16/11		19.5/16	25/20	32/23	39/28	46/32
Fan-External static pressure - 50Hz	High/Nom.		Pa	70/30			100/30			100/40	120/40	120/50	140/50
Sound power level	Cooling	Nom.	dBA	55		56	63		59	63	61	66	67
Sound pressure level	Cooling	High/Low	dBA	32/26		33/27	37/29		37/30	38/32		40/33	42/34
	Heating	High/Low	dBA	32/26		33/27	37/29		37/30	38/32		40/33	42/34
Refrigerant	Type			R-410A									
Piping connections	Liquid/OD/Gas/OD/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	Phase / Frequency / Voltage		Hz / V	1~ / 50/60 / 220-240/220									

FXMQ-P7

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

Concealed Ceiling Unit With Inverter Driven Fan



FXMQ50-80P7



BRC1E51A



BRC4C66

Comfort & Efficiency

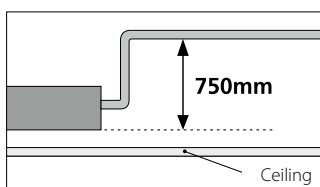
- › Low energy consumption thanks to DC inverter fans
- › Improved comfort thanks to 3-step air flow control
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of an integrated inverter control ensures maximum comfort and efficiency
- › Home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

Filter

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

Flexible Installation

- › Easy installation thanks to automatic air flow adjustment towards nominal air flow rate
- › Up to 200 Pa external static pressure (ESP) allows extensive ductwork runs and flexible application: ideal for use in large areas
- › Possibility to change ESP via wired remote control allows optimisation of the supply air volume
- › The air suction direction can be altered from rear to bottom suction
- › Standard built-in drain pump increases reliability of the drain system
- › Allows multi tenant applications (option PCB required)



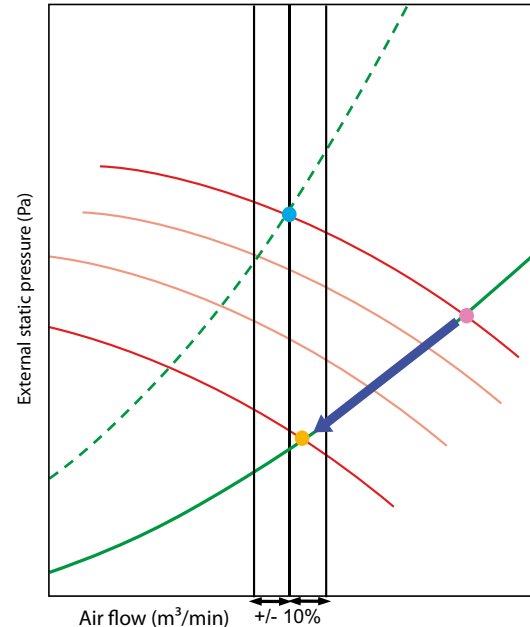
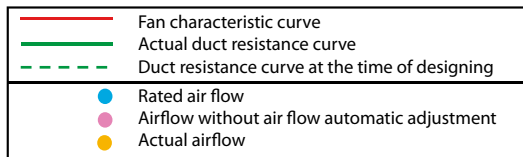
Drain-up pump



Easy installation thanks to automatic air flow adjustment towards nominal air flow: Installation made easier

Reduced installation time

- › After installation, it is possible that the actual duct resistance is lower than expected at time of designing. As a consequence the air flow will be too high.
- › With the automatic air flow adjustment function the unit can adapt its fan speed to a lower curve, so the air flow decreases.
- › The air flow will always be within 10% of the rated air flow because of the amount of possible fan curves (more than 8 fan curves available per model).
- › Alternatively the installer can manually select a fan curve with the wired remote control.



SPECIFICATIONS

INDOOR UNITS				FXMQ20P7	FXMQ25P7	FXMQ32P7	FXMQ40P7	FXMQ50P7	FXMQ63P7	FXMQ80P7	FXMQ100P7	FXMQ125P7
Cooling capacity	Nom.		kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	11.2	14.0
Heating capacity	Nom.		kW	2.5	3.2	4.0	5.0	6.3	8.0	10.0	12.5	16.0
Power input - 50Hz	Cooling	Nom.	kW	0.049		0.053	0.151	0.110	0.120	0.171	0.176	0.241
	Heating	Nom.	kW	0.037		0.041	0.139	0.098	0.108	0.159	0.164	0.229
Dimensions	Unit	HeightxWidthxDepth	mm	300x550x700			300x700x700	300x1,000x700			300x1,400x700	
Required ceiling void >			mm	350								
Weight	Unit		kg	23			26	35			46	
Decoration panel	Model			BYBS32DJW1			BYBS45DJW1	BYBS71DJW1			BYBS125DJW1	
	Colour			White (10Y9/0.5)								
	Dimensions	HeightxWidthxDepth	mm	55x650x500			55x800x500	55x1,100x500			55x1,500x500	
	Weight		kg	3.0			3.5	4.5			6.5	
Fan-Air flow rate - 50Hz	Cooling	High/Low	m³/min	9/6.5		9.5/7	16/11	18/15	19.5/16	25/20	32/23	39/28
	Heating	High/Low	m³/min	9.0/6.5		9.5/7	16/11	18/15	19.5/16	25/20	32/23	39/28
Fan-External static pressure - 50Hz	High/Nom.		Pa	100/50			160/100	200/100				
Sound power level	Cooling	High/Nom.	dBA	56/-		57/-	65/-	61/-	64/-	67/-	65/-	70/-
Sound pressure level	Cooling	High/Nom./Low	dBA	33/31/29		34/32/30	39/37/35	41/39/37	42/40/38	43/41/39		44/42/40
	Heating	High/Nom./Low	dBA	33/31/29		34/32/30	39/37/35	41/39/37	42/40/38	43/41/39		44/42/40
Refrigerant	Type			R-410A								
Piping connections	Liquid/OD/Gas/OD/Drain		mm	6.35/12.7/VP25 (I.D. 25/O.D. 32)					9.52/15.9/VP25 (I.D. 25/O.D. 32)			
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50/60 / 220-240/220								



FXMQ200-250MA



BRC1E51A



BRC4C66

Comfort & Efficiency

- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › Home leave operation saves energy during absence

Flexible Installation

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



* Not connectable to VRV*III-S (RXYSQ-P8V1, RXYSQ-P8Y1)



SPECIFICATIONS

INDOOR UNITS				FXMQ200MA	FXMQ250MA
Cooling capacity	Nom.		kW	22.4	28.0
Heating capacity	Nom.		kW	25.0	31.5
Power input - 50Hz	Cooling	Nom.	kW	1.294	1.465
	Heating	Nom.	kW	1.294	1.465
Dimensions	Unit	HeightxWidthxDepth	mm	470x1,380x1,100	
Weight	Unit		kg	137	
Fan-Air flow rate - 50Hz	Cooling	High/Low	m ³ /min	58/50	72/62
Fan-External static pressure - 50Hz	High/Nom.		Pa	221/132	270/147
Sound pressure level	Cooling	High/Low	dBA	48/45	
Refrigerant	Type			R-410A	
Piping connections	Liquid/OD/Gas/OD/Drain		mm	9.52/19.1/PS1B	9.52/22.2/PS1B
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50/60 / 220-240/220	



FXAQ40-63P



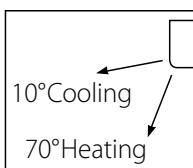
BRC1E51A



BRC7E618

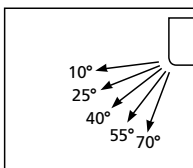
Comfort & Efficiency

- › Modern style decoration panel in white (RAL9010)
- › Vertical auto swing moves the discharge flaps up and down for efficient air and temperature distribution throughout the room



Vertical auto swing

- › 5 different discharge angles can be programmed via the remote control



5 discharge angles

- › Home leave operation saves energy during absence

Flexible Installation

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





SPECIFICATIONS

INDOOR UNITS				FXAQ20P	FXAQ25P	FXAQ32P	FXAQ40P	FXAQ50P	FXAQ63P
Cooling capacity	Nom.		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	Nom.		kW	2.5	3.2	4.0	5.0	6.3	8.0
Power input - 50Hz	Cooling	Nom.	kW	0.019	0.028	0.030	0.020	0.033	0.050
	Heating	Nom.	kW	0.029	0.034	0.035	0.020	0.039	0.060
Casing Colour				White (3.0Y8.5/0.5)					
Dimensions	Unit	HeightxWidthxDepth	mm	290x795x238			290x1,050x238		
Weight	Unit		kg	11			14		
Fan-Air flow rate - 50Hz	Cooling	High/Low	m ³ /min	7.5/4.5	8/5	8.5/5.5	12/9	15/12	19/14
Sound pressure level	Cooling	High/Low	dBA	35 / 29	36 / 29	37 / 29	39 / 34	42 / 36	46 / 39
Refrigerant	Type			R-410A					
Piping connections	Liquid/OD/Gas/OD/Drain		mm	6.35/12.7/VP13 (I.D. 13/O.D. 18)					9.52/15.9/VP13 (I.D. 13/O.D. 18)
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50 / 220-240					



FXHQ32MA



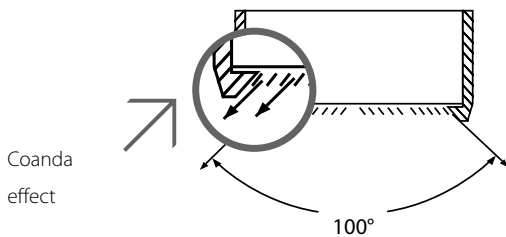
BRC1E51A



BRC7E63

Comfort & Efficiency

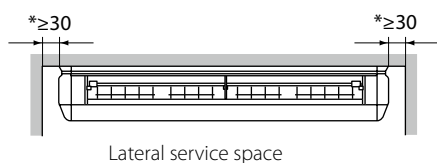
- Wider air discharge thanks to Coanda effect: up to 100 degrees



- 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 capacity loss
- The unit can easily be mounted in corners and narrow spaces, as it only needs 30mm lateral service space





SPECIFICATIONS

INDOOR UNITS				FXHQ32MA		FXHQ63MA		FXHQ100MA	
Cooling capacity	Nom.		kW	3.6		7.1		11.2	
Heating capacity	Nom.		kW	4.0		8.0		12.5	
Power input - 50Hz	Cooling	Nom.	kW	0.111		0.115		0.135	
	Heating	Nom.	kW	0.111		0.115		0.135	
Casing Colour				White (10Y9/0.5)					
Dimensions	Unit	HeightxWidthxDepth	mm	195x960x680		195x1,160x680		195x1,400x680	
Weight	Unit		kg	24		28		33	
Fan-Air flow rate - 50Hz	Cooling	High/Low	m³/min	12/10		17.5/14		25/19.5	
Sound pressure level	Cooling	High/Low	dBA	36/31		39/34		45/37	
Refrigerant	Type			R-410A					
Piping connections	Liquid/OD/Gas/OD/Drain			6.35/12.7/VP20 (I.D. 20/O.D. 26)		9.52/15.9/VP20 (I.D. 20/O.D. 26)			
Power supply	Phase / Frequency / Voltage			Hz / V		1~ / 50/60 / 220-240/220			



FXUQ71MA



BEVQ71-125MA



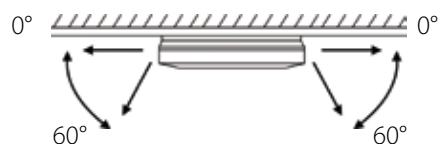
BRC1E51A



BRC7C528

Comfort & Efficiency

- › Air can be discharged in any of 4 directions
- › 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



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 capacity loss
- › Standard drain pump with 500mm lift

Examples of Airflow Patterns



SPECIFICATIONS

INDOOR UNITS				FXUQ71MA	FXUQ100MA	FXUQ125MA
Cooling capacity	Nom.		kW	8.0	11.2	14.0
Heating capacity	Nom.		kW	9.0	12.5	16.0
Power input - 50Hz	Cooling	Nom.	kW	0.180	0.289	
	Heating	Nom.	kW	0.160	0.269	
Casing Colour				White		
Dimensions	Unit	HeightxWidthxDepth	mm	165x895x895	230x895x895	
Weight	Unit		kg	25	31	
Fan-Air flow rate - 50Hz	Cooling	High/Low	m³/min	19/14	29/21	32/23
	Heating	High/Low	m³/min	19/14	29/21	32/23
Sound power level	Cooling	High/Nom.	dBA	56/-	59/-	60/-
Sound pressure level	Cooling	High/Low	dBA	40/35	43/38	44/39
	Heating	High/Low	dBA	40/35	43/38	44/39
Refrigerant	Type			R-410A		
Piping connections	Liquid/OD/Gas/OD/Drain		mm	9.52/15.9/I.D. 20/O.D. 26		
Power supply	Phase / Frequency / Voltage			1~ / 50 / 220-240		

JUNCTION BOX FOR CONNECTION TO VRV®

JUNCTION BOX			BEVQ71MA	BEVQ100MA	BEVQ125MA
Dimensions	Height x Width x Depth	mm		100x350x225	
Weight		kg	3.0		3.5
Casing	Galvanised steel plate				
Power supply	1~/220-240V/50Hz				



FXLQ20-25P



BRC1E51A



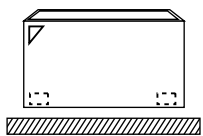
BRC7C62

Comfort

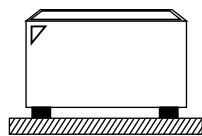
- › Stylish modern casing finished in pure white (RAL9010) and iron grey (RAL7011)
- › Unit can be installed as free standing model by use of optional back plate
- › Ideal for installation beneath a window
- › Home leave operation saves energy during absence

Flexible Installation

- › Requires very little installation space, only 232 mm deep and 600 mm high
- › Wall mounted installation facilitates cleaning beneath the unit where dust tends to accumulate
- › Allows multi tenant applications (option PCB required)
- › Wired remote control can easily be integrated in the unit



Wall mounted



Floor standing



Detail of the FXLQ-P
built-in wired remote
control



SPECIFICATIONS

INDOOR UNITS				FXLQ20P	FXLQ25P	FXLQ32P	FXLQ40P	FXLQ50P	FXLQ63P
Cooling capacity	Nom.		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	Nom.		kW	2.5	3.2	4.0	5.0	6.3	8.0
Power input - 50Hz	Cooling	Nom.	kW	0.049		0.090		0.110	
	Heating	Nom.	kW	0.049		0.090		0.110	
Casing Colour				Fresh white (RAL9010) / Dark grey (RAL7011)					
Dimensions	Unit	HeightxWidthxDepth	mm	600x1,000x232		600x1,140x232		600x1,420x232	
Weight	Unit		kg	27		32		38	
Fan-Air flow rate - 50Hz	Cooling	High/Low	m³/min	7/6		8/6	11/8.5	14/11	16/12
Sound power level	Cooling	Nom.	dBA	-					
Sound pressure level	Cooling	High/Low	dBA	35/32			38/33	39/34	40/35
Refrigerant	Type			R-410A					
Piping connections	Liquid/OD/Gas/OD/Drain		mm	6.35/12.7/O.D. 21 (Vinyl chloride)					9.52/15.9/O.D. 21 (Vinyl chloride)
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50/60 / 220-240/220					



FXNQ20-25P



BRC1E51A



BRC7C65

Comfort

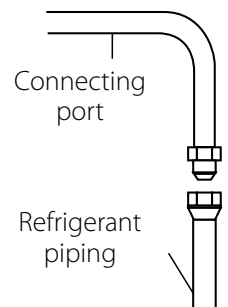
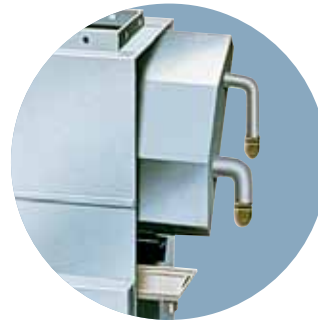
- › Ideal for installation beneath a window
- › Blends unobstrusively with any interior décor: only the suction and discharge grilles are visible
- › Home leave operation saves energy during absence





Flexible Installation

- › Ideal for installation beneath a window
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › Requires very little installation space
- › The connecting port faces downward, eliminating the need to attach auxiliary piping
- › Allows multi tenant applications (option PCB required)



SPECIFICATIONS

INDOOR UNITS				FXNQ20P	FXNQ25P	FXNQ32P	FXNQ40P	FXNQ50P	FXNQ63P
Cooling capacity	Nom.		kW	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	Nom.		kW	2.5	3.2	4.0	5.0	6.3	8.0
Power input - 50Hz	Cooling	Nom.	kW	0.049		0.090		0.110	
	Heating	Nom.	kW	0.049		0.090		0.110	
Dimensions	Unit	HeightxWidthxDepth	mm	610x930x220		610x1,070x220		610x1,350x220	
Weight	Unit		kg	19		23		27	
Fan-Air flow rate - 50Hz	Cooling	High/Low	m³/min	7/6		8/6	11/8.5	14/11	16/12
Sound pressure level	Cooling	High/Low	dBA	35/32			38/33	39/34	40/35
Refrigerant	Type			R-410A					
Piping connections	Liquid/OD/Gas/OD/Drain		mm	6.35/12.7/O.D. 21 (Vinyl chloride)					9.52/15.9/O.D. 21 (Vinyl chloride)
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50/60 / 220-240/220					



FTXG25,35,50J-W



FTXG25,35,50J-S



ARC466A1

Comfort & Efficiency

- › Remarkable blend of iconic design and engineering excellence with an elegant finish in brushed aluminium or matt crystal white
- › Weekly timer can be set to start heating or cooling anytime on a daily or weekly basis
- › Comfort mode guarantees draught free operation by preventing that warm or cold air is directly blown on to the body
- › Indoor unit silent operation: "silent" buttons on the remote control lower the operating sound of the indoor unit by 3dBA
- › Movement sensor saves power consumption in unoccupied rooms: when the room is empty, the unit switches to economy mode after 20 minutes and restarts when a person enters the room
- › Night set mode saves energy by preventing overcooling or overheating during night time
- › Powerful mode can be selected for rapid heating or cooling; after the powerful mode is turned off, the unit returns to the preset mode

Filter

- › Titanium apatite photocatalytic air purification filter removes airborne microscopic particles, powerfully decomposes odours and helps to prevent the propagation of bacteria, viruses, microbes to ensure a steady supply of clean air



* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)



SPECIFICATIONS

INDOOR UNIT				FTXG25J-S	FTXG35J-S	FTXG50J-S	FTXG25J-W	FTXG35J-W	FTXG50J-W
Casing	Colour			Silver			White		
Dimensions	Unit	HeightxWidthxDepth	mm	295x915x155			295x915x155		
Weight	Unit		kg	11			11		
Fan - Air flow rate	Cooling	High/Nom./Low/Silent operation	m ³ /min	8.8/6.8/4.7/3.8	10.1/7.3/4.6/3.9	10.3/8.5/6.7/5.7	8.8/6.8/4.7/3.8	10.1/7.3/4.6/3.9	10.3/8.5/6.7/5.7
	Heating	High/Nom./Low/Silent operation	m ³ /min	9.6/7.9/6.2/5.4	10.8/8.6/6.4/5.6	11.4/9.8/8.1/7.1	9.6/7.9/6.2/5.4	10.8/8.6/6.4/5.6	11.4/9.8/8.1/7.1
Sound power level	Cooling	High	dBA	54	58	60	54	58	60
	Heating	High	dBA	55	58	60	55	58	60
Sound pressure level	Cooling	High/Nom./Low/Silent operation	dBA	38/32/25/22	42/34/26/23	44/40/35/32	38/32/25/22	42/34/26/23	44/40/35/32
	Heating	High/Nom./Low/Silent operation	dBA	39/34/28/25	42/36/29/26	44/40/35/32	39/34/28/25	42/36/29/26	44/40/35/32
Piping connections	Liquid	OD	mm	6.35			6.35		
	Gas	OD	mm	9.5		12.7	9.5		12.7
	Drain	OD	mm	18.0			18.0		
Power supply	Phase / Frequency / Voltage		Hz / V	1 ~ / 50 / 220-240			1 ~ / 50 / 220-240		



FTXS20-50G



ARC452A3

Comfort & Efficiency

- › 2 area intelligent eye: air flow is sent to the area in a room where no person is detected
- › Energy saving during standby mode: reduction of energy from 10W to 2W
- › Weekly timer: allows to program the unit on a weekly basis
- › ECONO mode decreases power consumption so that other appliances that need large power supply can be used
- › 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 22dBA sound pressure level
- › Indoor unit silent operation: "Silent" buttons on the remote control lower the operation sound of the indoor unit by 3dBA
- › 3D air flow combines vertical and horizontal auto-swing to circulate a stream of warm/cool air right to the corners of even large spaces

Filter

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



* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)



SPECIFICATIONS

INDOOR UNIT				FTXS20J	FTXS25J	FTXS35J	FTXS42J	FTXS50J	FTXS60G	FTXS71G
Casing	Colour			White					White	White
Dimensions	Unit	HeightxWidthxDepth	mm	295x800x215					290x1,050x250	290x1,050x250
Weight	Unit		kg	9		10			12	12
Fan - Air flow rate	Cooling	High/Nom./Low/Silent operation	m ³ /min	9.4/7.4/5.5/4.1	10.8/7.9/5.2/3.7	11.4/8.7/5.8/4.4	11.3/9.0/6.8/5.9	11.6/9.2/7.0/6.0	16.0/13.5/11.3/10.1	17.4/-/-/-
	Heating	High/Nom./Low/Silent operation	m ³ /min	9.9/8.2/6.6/6.2	11.9/9.1/6.4/5.9	12.4/9.5/6.8/6.0	12.2/9.7/7.3/6.4	12.1/9.8/7.6/6.7	17.2/14.9/12.6/11.3	19.7/-/-/-
Sound power level	Cooling	Nom.	dBA	54	57	61		62	61	62
	Heating	Nom.	dBA	54	58	61		63	60	62
Sound pressure level	Cooling	High/Nom./Low/Silent operation	dBA	38/32/25/22	41/33/25/22	45/37/29/23	45/39/33/30	46/40/34/31	45/41/36/33	46/42/37/34
	Heating	High/Nom./Low/Silent operation	dBA	38/33/28/25	42/35/28/25	45/39/29/26	45/39/33/30	47/41/34/31	44/40/35/32	46/42/37/34
Piping connections	Liquid	OD	mm	6.35					-	-
	Gas	OD	mm	9.52				12.7	-	-
	Drain	OD	mm	18.0					-	-
Power supply	Phase / Frequency / Voltage		Hz / V	1 ~ / 50 / 220-240						1 ~ / 50 / 220-230-240



FVXG20-50K



ARC466A2

Comfort & Efficiency

- › The aluminium part of the front panel of the Nexura indoor unit has the capability of warming up, just like a traditional radiator, to add even more comfort on cold days
- › Comfortable vertical auto swing ensures draughtfree operation and prevents ceiling soiling
- › Night set mode saves energy by preventing overcooling or overheating during night time
- › ECONO mode decreases power consumption so that other appliances that need large power consumption can be used
- › The indoor unit distributes air at the sound of a whisper. The noise produced amounts to barely 22dB(A) in cooling and 19dB(A) in radiant heat mode. In comparison, the ambient sound in a quiet room amounts to 40dB(A) on average
- › Indoor unit silent operation: "silent" buttons on the remote control lower the operating sound of the indoor unit by 3dBA each
- › Powerful mode can be selected for rapid heating or cooling; after the powerful mode is turned off, the unit returns to the preset mode
- › Weekly timer can be set to start heating or cooling anytime on a daily or weekly basis

Filter

- › Titanium apatite photocatalytic air purification filter removes airborne microscopic particles, powerfully decomposes odours and helps to prevent the propagation of bacteria, viruses, microbes to ensure a steady supply of clean air

Flexible installation

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



* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)



SPECIFICATIONS

INDOOR UNIT				FVXG25K	FVXG35K	FVXG50K
Casing	Colour			Fresh white (6.5Y 9.5/0.5)		
Dimensions	Unit	HeightxWidthxDepth	mm	600x950x215		
Weight	Unit			kg		
Fan - Air flow rate	Cooling	High/Nom./Low/Silent operation	m ³ /min	8.9/7.0/5.3/4.5	9.1/7.2/5.3/4.5	10.6/8.9/7.3/6.0
	Heating	High/Nom./Low/Silent operation	m ³ /min	9.9/7.8/5.7/4.7	10.2/8.0/5.8/5.0	12.2/10.0/7.8/6.8
Sound power level	Cooling	Nom.	dBA	54	55	56
	Heating	Nom.	dBA	55	56	58
Sound pressure level	Cooling	High/Nom./Low/Silent operation	dBA	38/32/26/23	39/33/27/24	44/40/36/32
	Heating	High/Nom./Low/Silent operation	dBA	39/32/26/22	40/33/27/23	46/40/34/30
Piping connections	Liquid	OD	mm	6.35		
	Gas	OD	mm	9.5		12.7
	Drain	OD	mm	18		
Power supply	Phase / Frequency / Voltage		Hz / V	1 ~ / 50 / 220-240		

FVXS-F

Floor Standing Unit Stylish Indoor Units for Connection to VRV® Heat Pumps



FVXS-F



ARC452A1

Comfort & Efficiency

- › Weekly timer: allows to program the unit on a weekly basis
- › Night set mode saves energy by preventing overcooling or overheating during night time
- › Powerful mode can be selected for rapid cooling or heating
- › Whisper quiet operation: down to 23 dBA sound pressure level
- › Vertical auto-swing function moves the discharge flaps up and down for efficient air distribution throughout the room
- › 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



* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)



SPECIFICATIONS

INDOOR UNIT				FVXS25F	FVXS35F	FVXS50F
Casing	Colour			White		
Dimensions	Unit	HeightxWidthxDepth	mm	600x700x210		
Weight	Unit			14		
Fan - Air flow rate	Cooling	High/Nom./Low/Silent operation	m ³ /min	8.2/6.5/4.8/4.1	8.5/6.7/4.9/4.5	10.7/9.2/7.8/6.6
	Heating	High/Nom./Low/Silent operation	m ³ /min	8.8/6.9/5.0/4.4	9.4/7.3/5.2/4.7	11.8/10.1/8.5/7.1
Sound power level	Cooling	High	dBA	54	55	56
	Heating	High	dBA	54	55	57
Sound pressure level	Cooling	High/Nom./Low/Silent operation	dBA	38/32/26/23	39/33/27/24	44/40/36/32
	Heating	High/Nom./Low/Silent operation	dBA	38/32/26/23	39/33/27/24	45/40/36/32
Piping connections	Liquid	OD	mm	6.35		
	Gas	OD	mm	9.5		12.7
	Drain	OD	mm	20.0		
Power supply	Phase / Frequency / Voltage			1~ / 50 / 220-240		

FCQ-C8

35-50-60

Round Flow Ceiling Mounted Cassette Stylish Indoor Units for Connection to VRV® Heat Pumps



FCQ-C8
Standard panel in Pure White
with grey louvres



FCQ-C8
Standard panel in Pure White,
including white louvres



FCQ-C8
Auto cleaning panel in Pure White



BRC1E51A



BRC7F532

Comfort & Efficiency

- › 360° air discharge ensures uniform air flow and temperature distribution
- › Modern style decoration panel is available in 3 different variations: Standard panel in white (RAL9010) with grey louvers, standard panel in full white (RAL9010) including white louvers and auto cleaning panel
- › For auto cleaning panel:
 - › Daikin introduces first auto cleaning cassette to European market
 - › Higher efficiency and comfort from daily auto cleaning of the filter
 - › Lower maintenance costs thanks to auto cleaning function
 - › Easy removal of dust with a vacuum cleaner without opening the unit
- › 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% (optional kit required)
- › Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- › 23 different air flow patterns possible



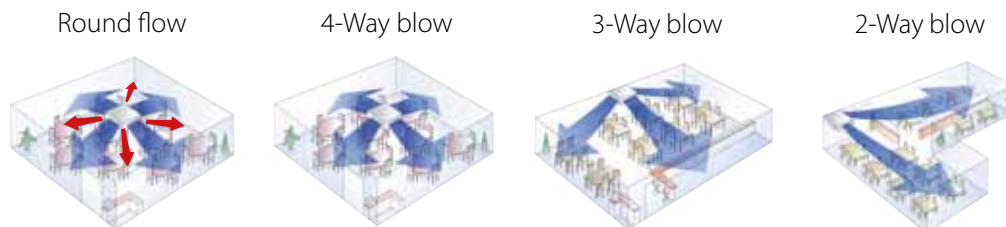
* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)

Flexible Installation & Easy Maintenance

- › Reduced installation height: 214mm for class 35-60
- › Standard connection to D3-net without the need of an adapter PCB

Examples of Airflow Patterns

360° radial round flow enables uniform air flow distribution



SPECIFICATIONS

INDOOR UNIT				FCQ35C	FCQ50C	FCQ60C
Casing	Material			Galvanised steel plate		
Dimensions	Unit	HeightxWidthxDepth	mm	204x840x840		
Weight	Unit		kg	19		
Decoration panel	Model			BYCQ140CW1		
	Colour			Pure White (RAL 9010)		
	Dimensions	HeightxWidthxDepth	mm	50x950x950		
	Weight		kg	5.5		
Fan - Air flow rate	Cooling	High/Low	m³/min	10.5/8.5	12.5/8.5	13.5/8.5
	Heating	High/Low	m³/min	12.5/10.0	12.5/8.5	13.5/8.5
Fan speed	Steps			2		
Sound power level	Cooling	High	dBA	49		51
Sound pressure level	Cooling	High/Low	dBA	31/27		33/28
	Heating	High/Low	dBA	31/27		33/28
Power supply	Phase / Frequency / Voltage			1~ / 50/60 / 220-240/220		

FFQ-BV

25-35-50-60

4-Way Blow Ceiling Mounted Cassette 600 x 600mm Stylish Indoor Units for Connection to VRV® Heat Pumps



FFQ-BV



BRC1E51A



BRC7E530W

Comfort & Efficiency

- › Modern style decoration panel in pure 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 & 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



* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)



SPECIFICATIONS

INDOOR UNIT				FFQ25B	FFQ35B	FFQ50B	FFQ60B
Dimensions	Unit	HeightxWidthxDepth	mm	286x575x575			
Weight	Unit		kg	17.5			
Casing	Unit			Galvanised steel plate			
Decoration panel	Model			BYFQ60BAW1			
	Colour			White (RAL9010)			
	Dimensions	HeightxWidthxDepth	mm	55x700x700			
	Weight		kg	2.7			
Fan - Air flow rate	Cooling	High/Low	m³/min	9.0/6.5	10.0/6.5	12.0/8.0	15.0/10.0
	Heating	High/Low	m³/min	9.0/6.5	10.0/6.5	12.0/8.0	15.0/10.0
Fan speed	Steps			2 (direct drive)			
Sound power level	Cooling	High	dBA	46.5	49.0	53.0	58.0
Sound pressure level	Cooling	High/Low	dBA	29.5/24.5	32.0/25.0	36.0/27.0	41.0/32.0
	Heating	High/Low	dBA	29.5/24.5	32.0/25.0	36.0/27.0	41.0/32.0
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50 / 230			



FDBQ-B



BRC1E51A

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



* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)



SPECIFICATIONS

INDOOR UNIT				FDBQ25B
Cooling capacity	Nom.		kW	-
Casing	Material			Zinc coated low carbon steel
Dimensions	Unit	HeightxWidthxDepth	mm	230x652x502
Weight	Unit		kg	17.0
Fan - Air flow rate	Cooling	High/Low	m³/min	6.50/5.20
	Heating	High/Low	m³/min	6.95/5.20
Sound power level	Cooling	High/Low	dBA	55.0/49.0
	Heating	High/Low	dBA	55.0/49.0
Sound pressure level	Cooling	High/Low	dBA	35.0/28.0
	Heating	High/Low	dBA	35.0/29.0
Piping connections	Liquid	OD	mm	6.35
	Gas	OD	mm	9.52
	Drain			27.2
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50 / 230



FDXS25,35E



ARC433A8

Comfort & Efficiency

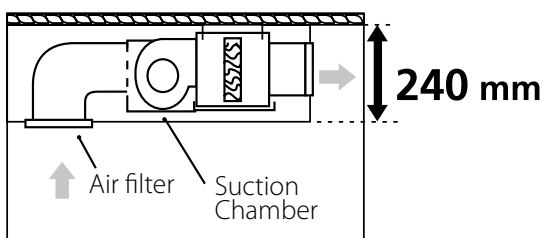
- › Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- › The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- › Home leave operation saves energy during absence
- › Night set mode saves energy by preventing overcooling or overheating during night time
- › Powerful mode can be selected for rapid cooling or heating
- › Quiet operation: down to 29dBA sound pressure level

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



* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)



SPECIFICATIONS

INDOOR UNIT				FDXS25E		FDXS35E		FDXS50C		FDXS60C	
Dimensions	Unit	HeightxWidthxDepth		mm	200x700x620			200x900x620		200x1,100x620	
Weight	Unit			kg	21.0			27.0		30.0	
Fan - Air flow rate	Cooling	High/Nom./Low/Silent operation		m³/min	8.7/8.0/7.3/6.2			12.0/11.0/10.0/8.4		16.0/14.8/13.5/11.2	
	Heating	High/Nom./Low/Silent operation		m³/min	8.7/8.0/7.3/6.2			12.0/11.0/10.0/8.4		16.0/14.8/13.5/11.2	
Fan - External static pressure	Nom.			Pa	30			40			
Sound power level	Cooling	High		dBA	53.0			55.0		56.0	
	Heating	High		dBA	53.0			55.0		56.0	
Sound pressure level	Cooling	High/Nom./Low/Silent operation		dBA	35.0/33.0/31.0/29.0			37.0/35.0/33.0/31.0		38.0/36.0/34.0/32.0	
	Heating	High/Nom./Low/Silent operation		dBA	35.0/33.0/31.0/29.0			37.0/35.0/33.0/31.0		38.0/36.0/34.0/32.0	
Piping connections	Liquid	OD		mm	-					6.35	
	Gas	OD		mm	-					12.7	
	Drain	OD		mm	-					26	
Power supply	Phase / Frequency / Voltage			Hz / V	1 ~ / 50/60 / 220-240/220-230						



FBQ35,50C



BRC1E51A

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

Filter

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

Flexible Installation

- › Maximum external static pressure (ESP) is 100Pa
- › Possibility to change ESP through wired remote control allows optimisation of the supply air volume
- › Easy installation thanks to automatic air flow adjustment towards nominal air flow rate



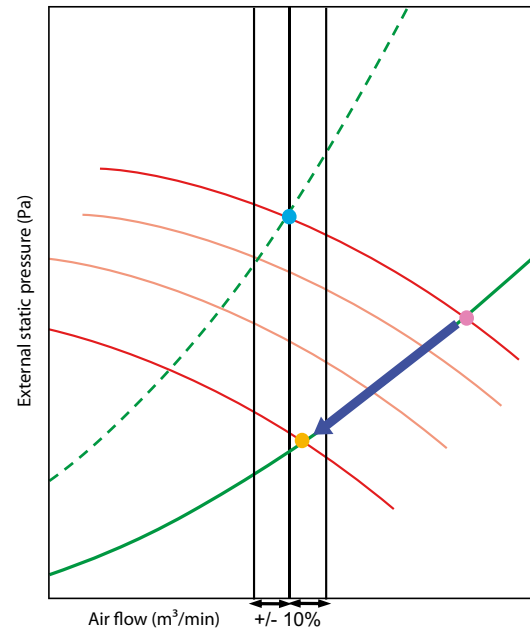
* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)

Easy installation thanks to automatic air flow adjustment towards nominal air flow: Installation made easier

Reduced installation time

- › After installation, it is possible that the actual duct resistance is lower than expected at time of designing. As a consequence the air flow will be too high.
- › With the automatic air flow adjustment function the unit can adapt its fan speed to a lower curve, so the air flow decreases.
- › The air flow will always be within 10% of the rated air flow because of the amount of possible fan curves (more than 8 fan curves available per model).
- › Alternatively the installer can manually select a fan curve with the wired remote control.

—	Fan characteristic curve
—	Actual duct resistance curve
- - -	Duct resistance curve at the time of designing
●	Rated air flow
●	Airflow without air flow automatic adjustment
●	Actual airflow



SPECIFICATIONS

INDOOR UNIT				FBQ35C	FBQ50C	FBQ60C
Casing	Colour			White		
Dimensions	Unit	HeightxWidthxDepth	mm	195x960x680		195x1,160x680
Weight	Unit		kg	24	25	27
Fan - Air flow rate	Cooling	High/Low	m³/min	13 / 10		17 / 13
	Heating	High/Low	m³/min	13 / 10		16 / 13
Sound power level	Cooling	High	dBA	53 / 48	54 / 49	55 / 49
Sound pressure level	Cooling	High/Low	dBA	37 / 32	38 / 33	39 / 33
	Heating	High/Low	dBA	37 / 32	38 / 33	39 / 33
Refrigerant type				R-410A		
Power supply	Phase / Frequency / Voltage		Hz / V	1~, 230V, 50Hz		



FHQ-B



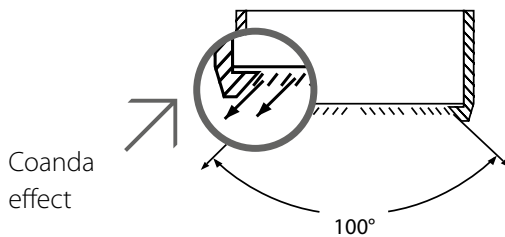
BRC1E51A



BRC7EA63W

Comfort & Efficiency

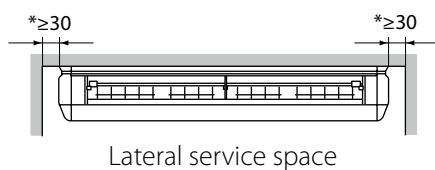
- › Wider air discharge thanks to Coanda effect: up to 100 degrees



- › 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



* Only connectable to RXYRQ-P and VRV®III-S (RXYSQ-P8V1, RXYSQ-P8Y1)



SPECIFICATIONS

INDOOR UNIT				FHQ35B	FHQ50B	FHQ60B
Casing	Colour			White		
Dimensions	Unit	HeightxWidthxDepth	mm	195x960x680		
Weight	Unit		kg	24	25	27
Fan - Air flow rate	Cooling	High/Low	m ³ /min	13/10		
	Heating	High/Low	m ³ /min	13/10		
Sound power level	Cooling	High/Low	dBA	53/48	54/49	55/49
Sound pressure level	Cooling	High/Low	dBA	37/32	38/33	39/33
	Heating	High/Low	dBA	37/32	38/33	39/33
Refrigerant type				R-410A		
Power supply	Phase / Frequency / Voltage			1~ / 50 / 230		



FLXS-B



ARC433A6

Comfort & Efficiency

- › Can fit on either ceiling or lower wall. Its low height enables it to fit beneath a window
- › Night set mode saves energy by preventing overcooling or overheating during night time
- › Powerful mode can be selected for rapid cooling or heating
- › Whisper quiet operation: down to 28 dBA sound pressure level
- › Vertical auto-swing function moves the discharge flaps up and down for efficient air distribution throughout the room
- › 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.





SPECIFICATIONS

INDOOR UNIT				FLXS25B	FLXS35B	FLXS50B
Casing	Colour			Almond white		
Dimensions	Unit	HeightxWidthxDepth	mm	490x1,050x200		
Weight	Unit		kg	16		17
Fan - Air flow rate	Cooling	High/Nom./Low/Silent operation	m ³ /min	7.6/6.8/6.0/5.2	8.6/7.6/6.6/5.6	11.4/10.0/8.5/7.5
	Heating	High/Nom./Low/Silent operation	m ³ /min	9.2/8.3/7.4/6.6	9.8/8.9/8.0/7.2	12.1/9.8/7.5/6.8
Sound power level	Cooling	High	dBA	53	54	63
	Heating	High	dBA	53	55	62
Sound pressure level	Cooling	High/Nom./Low/Silent operation	dBA	37/34/31/28	38/35/32/29	47/43/39/36
	Heating	High/Nom./Low/Silent operation	dBA	37/34/31/29	39/36/33/30	46/41/35/33
Piping connections	Liquid	OD	mm	6.35		
	Gas	OD	mm	9.5		12.7
	Drain	OD	mm	18.0		
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50/60 / 220-240/220-230		

HXHD-A

Heating only hydrobox for VRV®



HXHD-A



EKHTS-AC



EKHWP

- › Fully integrated system
- › "Free" hot water production
- › High energy efficiency (up to 17% savings compared to a gas boiler)
- › VRV® plug-and-play installation
- › Fully integrated water-side components
- › Solar collector option
- › Various control possibilities
- › Stackable design for flexible installation
- › Leaving water temperature range: 25-80°C
- › Large operation range (down to -20°C and up to 43°C)
- › Possible applications include bathrooms, sinks, underfloor heating, radiators and air handling units
- › No gas connection needed





Stackable design for flexible installation

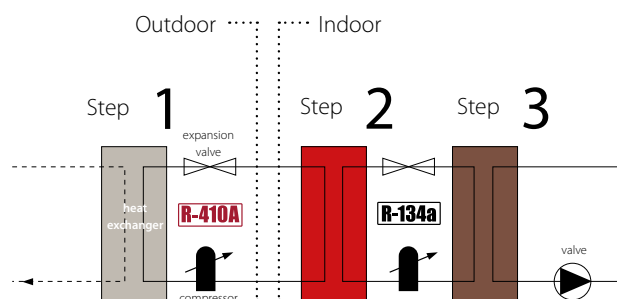
The indoor unit and domestic hot water tank can be stacked to save space, or installed next to each other, if only limited height is available.



100% thermo dynamic energy

High performance in 3 steps:

1. The outdoor unit extracts heat from the ambient outdoor air. This heat is transferred to the hydrobox via R-410A refrigerant.
2. The indoor unit receives the heat and further increases the temperature with R-134a refrigerant.
3. The heat is transferred from the R-134a refrigerant circuit to the water circuit. Thanks to the unique cascade compressor approach, water temperatures of 80° C can be reached without using an additional back-up heater.



SPECIFICATIONS

HYDROBOX					HXHD125A	
Heating capacity			Nom	kW	14 ¹	
Casing				Colour	Metallic grey	
				Material	Precoated sheet metal	
Dimensions	Unit	Height x Width x Depth		mm	705 x 600 x 695	
Weight	Unit			kg	92	
Water circuit	Piping connections diameter			inch	G 1" (female)	
	Heating water system	Water volume	Min.~Max.	l	20~200	
Refrigerant				Type	R-134a	
Refrigerant circuit	Gas side diameter			mm	12.7	
Refrigerant circuit	Liquid side diameter			mm	9.52	
Sound pressure level			Nom	dBA	42 ²	
					43 ³	
Sound pressure level	Night quiet mode	Level 1		dBA	38 ²	
Operation range	Heating	Ambient	Min.~Max.	°C	-20~20/24 ⁴	
		Water side	Min.~Max.	°C	25~80	
	Domestic hot water	Ambient	Min.~Max.	°CDB	-20~43	
		Water side	Min.~Max.	°C	45~75	
Power supply	Phase	Frequency	Voltage	Hz/V	1 ~ / 50 / 220-240	

1 Heating: entering condenser water temp. 40°C; leaving condenser water temp. 45°C; ambient air temp. 7°CDB, 6°CWB

2 Sound levels are measured at: EW 55°C; LW 65°C

3 Sound levels are measured at: EW 70°C; LW 80°C

4 Field setting



DOMESTIC HOT WATER TANK: OVERVIEW

Functions	1/ EKHTS-A	2/ EKHWP-A
Preferred application	Domestic hot water only	Domestic hot water – possibility for solar connection
Operation	The water stored in the tank is used for domestic hot water	Domestic hot water is not stored in the tank but flows through the tank's coil

1/ EKHTS – DOMESTIC HOT WATER ONLY

- › Available in 200 and 260 litres
- › Efficient temperature heat-up: from 10°C to 50°C in only 60 minutes



DOMESTIC HOT WATER TANK				EKHTS200AC		EKHTS260AC	
Casing	Colour			Metallic grey			
	Material			Galvanised steel (precoated sheet metal)			
Dimensions	Unit	Height/Integrated on indoor unit/Width/Depth		mm	1,335/2,010/600/695	1,335/2,285/600/695	
Weight	Unit	Empty		kg	70	78	
Heat exchanger	Quantity			1			
	Tube material			Duplex steel (EN 1.4162)			
	Face area			m ²	1.56		
	Internal coil volume			l	7.5		
Tank	Water volume			l	200	260	
	Material			Stainless steel (EN 1.4521)			
	Maximum water temperature			°C	75		

2/ EKHWP-A – DOMESTIC HOT WATER WITH POSSIBILITY FOR SOLAR CONNECTION

Solar connection

- › Environmentally friendly and energy efficient
- › Solar panels can produce up to 70% of the energy needed for hot water production – a major cost saving
- › Specialised coatings make our solar panels highly energy efficient – all shortwave solar energy is transferred into heat
- › The solar panels are charged with water only when needed for heating – avoiding the need for 'anti-freeze' protection



SOLAR COLLECTOR				EKSV26P	EKSH26P
Dimensions	Unit	HeightxWidthxDepth	mm	2,000x1,300x85	1,300x2,000x85
Weight	Unit		kg	43	
Volume			l	1.7	2.1
Surface	Outer		m ²	2.601	
	Aperture		m ²	2.364	
	Absorber		m ²	2.354	
Coating				Micro-therm (absorption max.96%, Emission ca. 5% +/-2%)	
Absorber				Harp-shaped copper pipe register with laser-welded highly selective coated aluminium plate	
Glazing				Single pane safety glass, transmission +/- 92%	
Allowed roof angle	Min.-Max.		°	15~80	
Operating pressure	Max.		bar	6	
Stand still temperature	Max.		°C	200	
Thermal performance	Zero loss collector efficiency η_0		%	78.7	
	Heat loss coefficient a1		W/m ² .K	4,270	
	Temperature dependence of the heat loss coefficient a2		W/m ² .K ²	0.0070	
	Thermal capacity		kJ/K	6.5	
	Incident angle modifier	AM at 50°		0.94	
Installed position				Vertical	Horizontal

Domestic hot water tank

- › Available in 300 and 500 litres
- › (Pre-)heat the water for your heating system with solar energy



DOMESTIC HOT WATER TANK				EKHWP300A	EKHWP500A
Casing	Colour				Dust grey (RAL7037)
	Material				Impact resistant polypropylene
Weight	Unit	Empty	kg	59	92
Heat exchanger	Domestic hot water	Tube material		Stainless steel (DIN 1.4404)	
		Face area	m ²	5.7	5.9
		Internal coil volume	l	27.8	28.4
		Operating pressure	bar	6	
		Average specific thermal output	W/K	2,795	2,860
	Charging	Tube material		Stainless steel (DIN 1.4404)	
		Face area	m ²	2.5	3.7
		Internal coil volume	l	12.3	17.4
		Average specific thermal output	W/K	1,235	1,809
	Auxiliary solar heating	Tube material		Stainless steel (DIN 1.4404)	
		Face area	m ²	-	1.0
		Internal coil volume	l	-	5
Tank	Water volume		l	300	500
		Maximum water temperature	°C	85	

Pump station

- › The pump station ensures that the correct water pressure and flow rates are maintained for optimum efficiency

SOLAR CONNECTION				EKSRS3
Dimensions	Unit	HeightxWidthxDepth	mm	332 x 230 x 145
Control	Type	Digital temperature difference controller with plain text display		
	Power consumption	W	2	
Mounting				On side of tank
Sensor	Solar panel temperature sensor			Pt1000
	Storage tank sensor			PTC
	Return flow sensor			PTC
	Feed temperature and flow sensor			Voltage signal (3.5V DC)

BENEFITS OF BIDDLE AIR CURTAINS CONNECTED TO DAIKIN HEAT PUMPS

Biddle air curtains provide highly efficient solutions for retailers and consultants to combat the issue of climate separation across their outlet or office doorway.

‘Open Door’ Trading

Although the customer friendly aspects of open door trading are widely appreciated by retail and commercial outlet managers, open doors can also give rise to massive losses in conditioned warm or cold air and hence, energy. Biddle air curtains however, not only preserve indoor temperatures and generate significant economies, they also represent an **INVITATION FOR CUSTOMERS**, to enter a pleasant trading and working environment.

High efficiency and low CO₂ emission

The stable store environment ensuing from efficient outdoor/indoor climate separation limits heat loss through the door opening and enhances the efficiency of the air conditioning system. By combining Biddle air curtains with highly efficient Daikin VRV® and ERQ heat pumps, users benefit from substantial energy savings of up to 72% compared to electric air curtains.

Short pay back period

Energy savings accruing from the installation of this advanced equipment give rise to the remarkable payback period of less than **1.5 YEARS*** with massive potential extra savings likely to stem from reductions in future energy bills.

Comfort through patented technology

Customers and staff alike can enjoy maximum indoor comfort all year round, irrespective of external weather conditions resulting from the combined advanced rectifier technology and constant air velocity inherent in Biddle air curtains.

Easy installation

Easy and fast installation of these systems not only reduces costs but makes expensive water systems, boilers and gas connection redundant. Furthermore, integrating a Biddle air curtain with a Daikin VRV® also eliminates the need to install multiple outdoor units, thereby reducing installation time and costs still further. This unrivalled combination in fact, enables Daikin to offer its customers the ultimate, environmentally conscious, **‘TOTAL SOLUTION’ PACKAGE**, comprising cooling, heating, outdoor-indoor climate separation and fresh air ventilation.

* Compared to an electric curtain

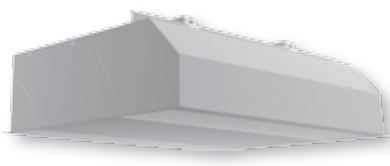
WHICH AIR CURTAIN OFFERS ME THE BEST SOLUTION?

Biddle comfort air curtains come in door widths from 1 up to 2.5 meters. Below you can find an overview of the different versions and available door heights.

BIDDLE COMFORT AIR CURTAIN (CA)



Free-Hanging (F)

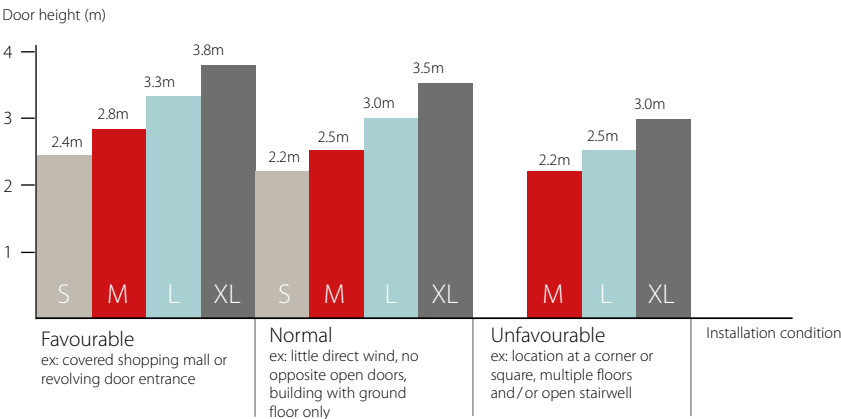


Cassette (C)



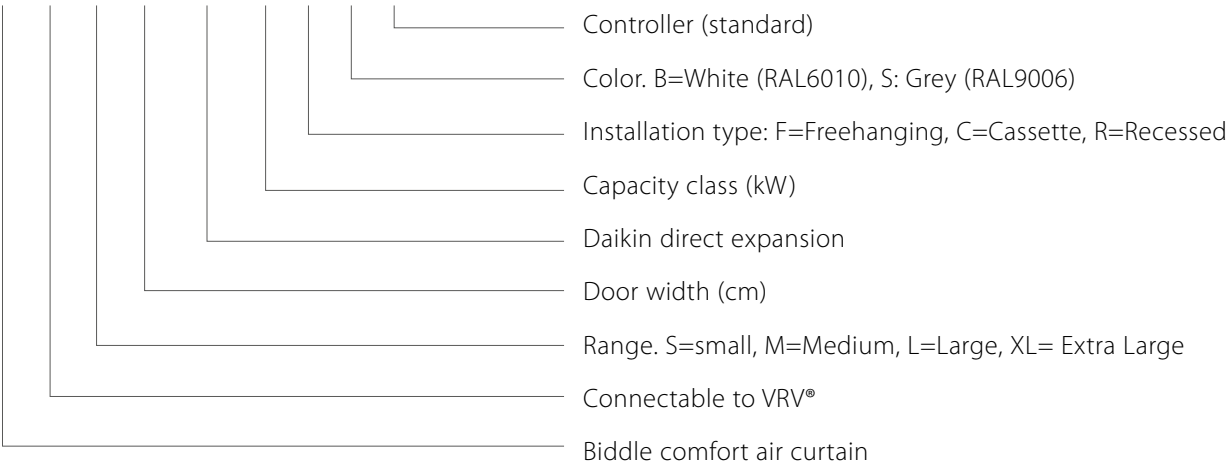
Recessed (C)

BIDDLE COMFORT AIR CURTAIN RANGE



BIDDLE COMFORT AIR CURTIAN NOMENCLATURE

CA V S 150 DK 80 F S C





CAVM150DK80FSC

- › Connectable to VRV® heat recovery and heat pump
- › VRV® is among the first DX systems suitable for connection to air curtains
- › A payback period of less than 1.5 years compared to installing an electric air curtain
- › Provides virtually free air curtain heating via recovered heat from indoor units in cooling mode¹
- › Easy and quick to install at reduced costs since no additional water systems, boilers and gas connections are required
- › All year round comfort ensured by the constant discharge velocity and adjustable jet airflow width (European patent)
- › Maximum energy efficiency stemming from almost zero down flow turbulence, optimised air flow and the application of advanced discharge rectifier technology
- › Around 85% air separation efficiency, greatly reducing both heat loss and required indoor unit heating capacity

Adjustable
airflow width

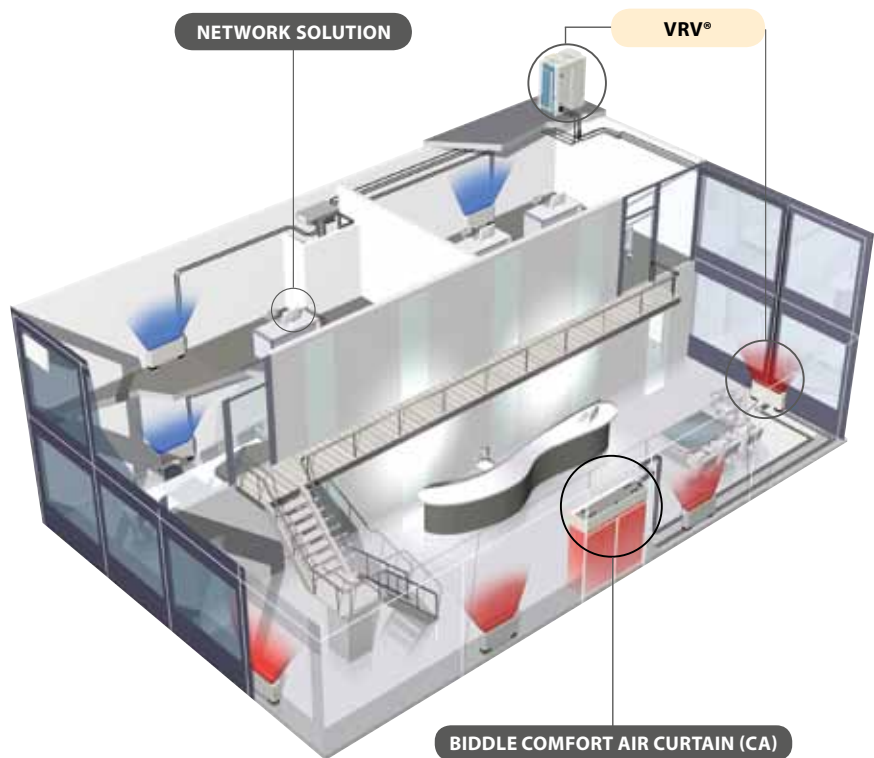


Rectifier
technology



¹ in case of connection to a VRV® heat recovery outdoor unit





AIR CURTAIN SIZE				Small				Medium					
Heating capacity ¹			kW	6.0	7.5	9.7	13.3	7.7	9.4	12.1	16.8		
Delta T ¹	Inlet = room temperature		K	20	17	16	18		15	14	16		
Power input (50Hz)	Fan only/Heating		kW	0.20	0.30	0.40	0.50	0.28	0.42	0.56	0.70		
Maximum door width			m	1.0	1.5	2.0	2.5	1.0	1.5	2.0	2.5		
Maximum door height			Favorable/Normal/Unfavorable conditions	m				2.4 / 2.2 / -				2.8 / 2.5 / 2.2	
Dimensions	Height	Unit F/C/R	mm	270									
	Width	Unit F/C/R	mm	1,123 / 1,000 / 1,048	1,623 / 1,500 / 1,548	2,123 / 2,000 / 2,048	2,623 / 2,500 / 2,548	1,123 / 1,000 / 1,048	1,623 / 1,500 / 1,548	2,123 / 2,000 / 2,048	2,623 / 2,500 / 2,548		
	Depth	Unit F/C/R	mm	590 / 821 / 561									
Weight	Unit F/C/R		kg	61 / 59 / 61	73 / 83 / 88	89 / 102 / 108	101 / 129 / 137	66 / 68 / 66	79 / 88 / 93	97 / 111 / 117	119 / 136 / 144		
Casing	Colour			BC:RAL9010 / SC:RAL 9006									
Fan - Air flow rate - Heating ¹			m ³ /h	880	1,310	1,750	2,190	1,230	1,840	2,450	3,060		
Refrigerant	Type			R-410A									
Sound pressure - Heating ¹			dBA	42	44	45	46	45	47	48	49		
Piping connections			Liquid (OD) / Gas	mm	9.52 / 16.0								
Power Supply				1~230V/50Hz									

AIR CURTAIN SIZE			Large				XLarge			
			CAVL100DK125*BC*SC	CAVL150DK200*BC*SC	CAVL200DK250*BC*SC	CAVL250DK350*BC*SC	CAVLX100DK125*BC*SC	CAVLX150DK200*BC*SC	CAVLX200DK250*BC*SC	CAVLX250DK350*BC*SC
Heating capacity ¹		kW	12.5	18.8	24.0	25.8	14.7	22.0	27.8	29.6
Delta T ¹	Inlet = room temperature	K	17		16	14	15		12	
Power input (50Hz)	Fan only/Heating	kW	0.75	1.13	1.50	1.88	1.40	2.10	2.80	3.50
Maximum door width		m	1.0	1.5	2.0	2.5	1.0	1.5	2.0	2.5
Maximum door height		Favorable/Normal/Unfavorable conditions	m 3.3 / 3.0 / 2.5				3.8 / 3.5 / 3.5			
Dimensions	Height	Unit F/C/R	mm 370							
	Width	Unit F/C/R	mm 1,123 / 1,000 / 1,048	1,623 / 1,500 / 1,548	2,123 / 2,000 / 2,048	2,623 / 2,500 / 2,548	1,123 / 1,000 / 1,048	1,623 / 1,500 / 1,548	2,123 / 2,000 / 2,048	2,623 / 2,500 / 2,548
	Depth	Unit F/C/R	mm 774 / 1,105 / 745							
Weight	Unit F/C/R	kg	83 / 81 / 83	108 / 118 / 141	137 / 151 / 155	166 / 190 / 196	69 / 84 / 86	102 / 123 / 146	130 / 160 / 164	162 / 198 / 204
Casing	Colour		BC:RAL9010 / SC:RAL 9006							
Fan - Air flow rate - Heating ¹		m³/h	1,730	2,600	3,470	4,340	2,800	4,190	5,590	6,990
Refrigerant	Type		R-410A							
Sound pressure - Heating ¹		dBA	51	53	54	55	56	58	59	60
Piping connections	Liquid (OD) / Gas	mm	9.52 / 16.0	9.52 / 19.0	9.52 / 22.0	9.52 / 22.0	9.52 / 16.0	9.52 / 19.0	9.52 / 22	
Power Supply			1~230V/50Hz							

¹ values measured at speed 4, installation level B
F: Freehanging model, C: Cassette model, R: Recessed model

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

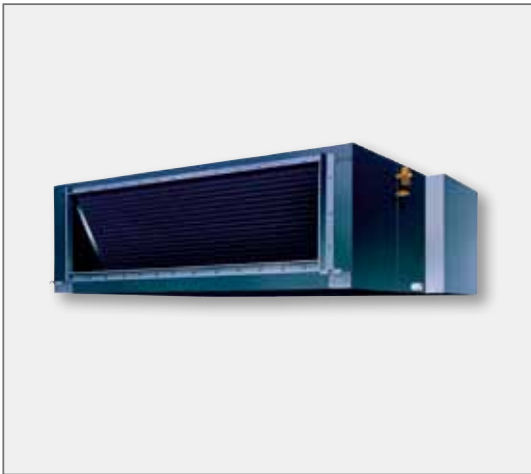
For medium and large commercial spaces, we offer a range of R-410A inverter condensing units that connect to air handling units. This approach combines the flexibility of our VRV® units with Air Handling Applications, resulting in a simple, reliable design for **OPTIMUM CONTROL OF INDOOR AIR QUALITY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



HEAT RECLAIM VENTILATION



VRV® AIR HANDLING APPLICATIONS



OUTDOOR AIR PROCESSING UNIT

HEAT RECLAIM VENTILATION

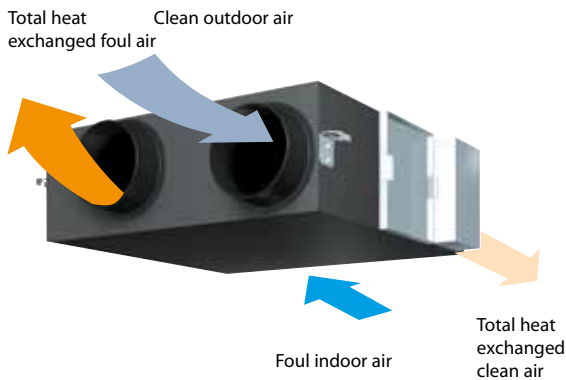
P 152

OUTDOOR AIR PROCESSING UNIT

P 156

VRV® AIR HANDLING APPLICATIONS

P 158



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 air conditioning system (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

DS-net

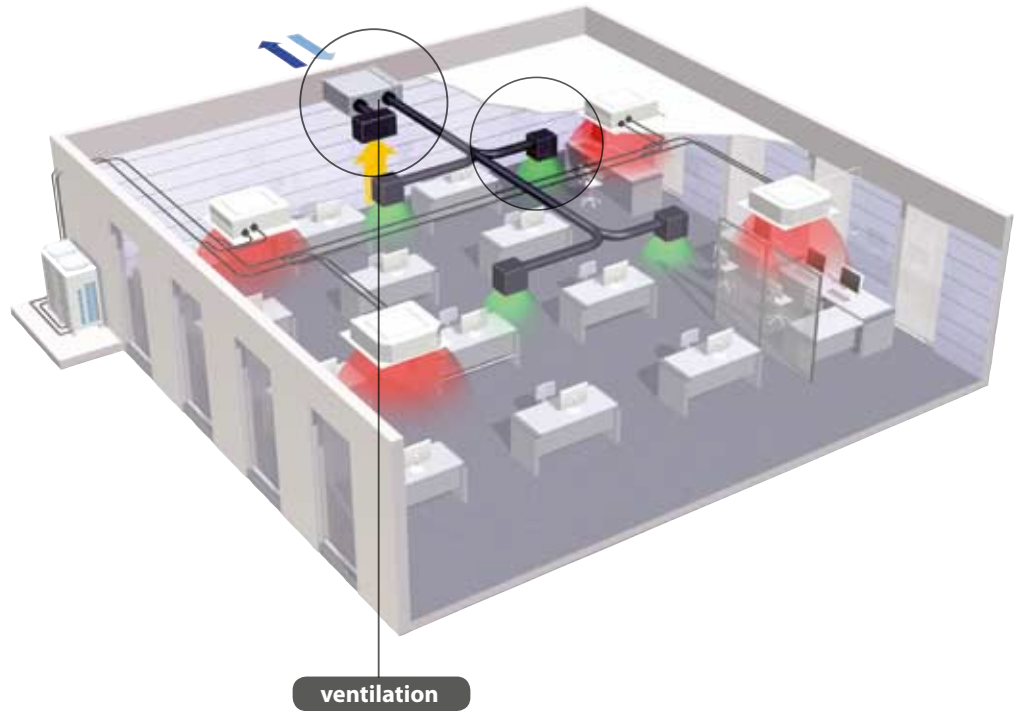
Intelligent touch Controller

Intelligent Manager

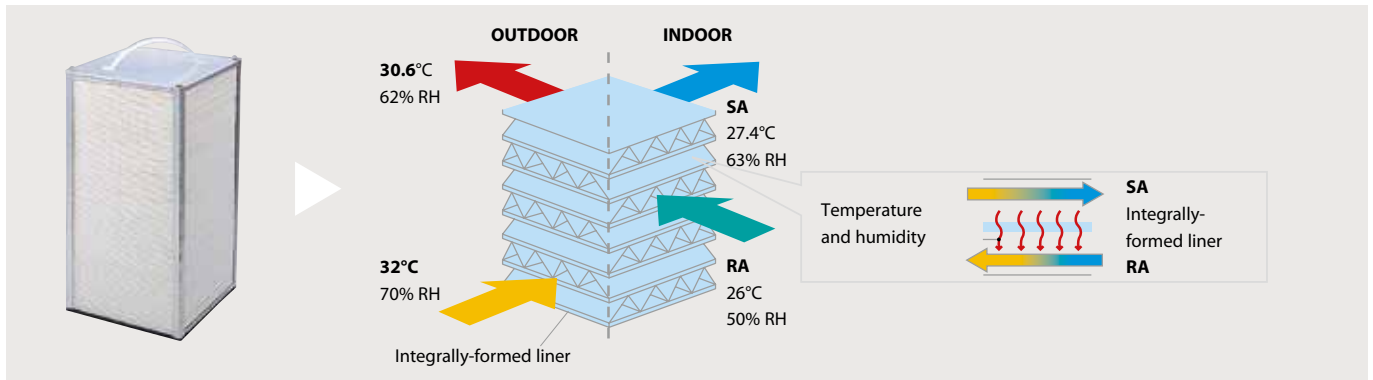
LonWorks Interface

BACnet Interface





High Efficiency Paper



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

VAM-FA				VAM150FA	VAM250FA	VAM350FA	VAM500FA	VAM650FA	VAM800FA	VAM1000FA	VAM1500FA	VAM2000FA
VENTILATION												
Air flow rate	HH	m ³ /h		150	250	350	500	650	800	1,000	1,500	2,000
Sound pressure level (220V) ¹	HH	dBA		27	28	32	33	34.5	36	36	39.5	40
External static pressure (max.)	HH	Pa		69	64	98	98	93	137	157	137	137
Temperature exchange efficiency	HH	%		74	72	75	74	74	74	75	75	75
Enthalpy exchange efficiency	cooling	HH	%	58	58	61	58	58	60	61	61	61
	heating	HH	%	64	64	65	62	63	65	66	66	66
Dimensions	height	mm		285	285	301	301	364	364	364	726	726
	width	mm		776	776	828	828	1,004	1,004	1,004	1,514	1,514
	depth	mm		525	525	816	816	868	868	1,156	868	1,156
Weight	unit	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)		°CDB		-15 ~ 50 (80% RH or less)								
Power supply				1~, 220-240V, 50Hz								

¹ Sound pressure level is measured in heat exchange mode.

VKM-GM VKM-G

Heat Reclaim Ventilation, humidification and air processing



- › 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

DS-net

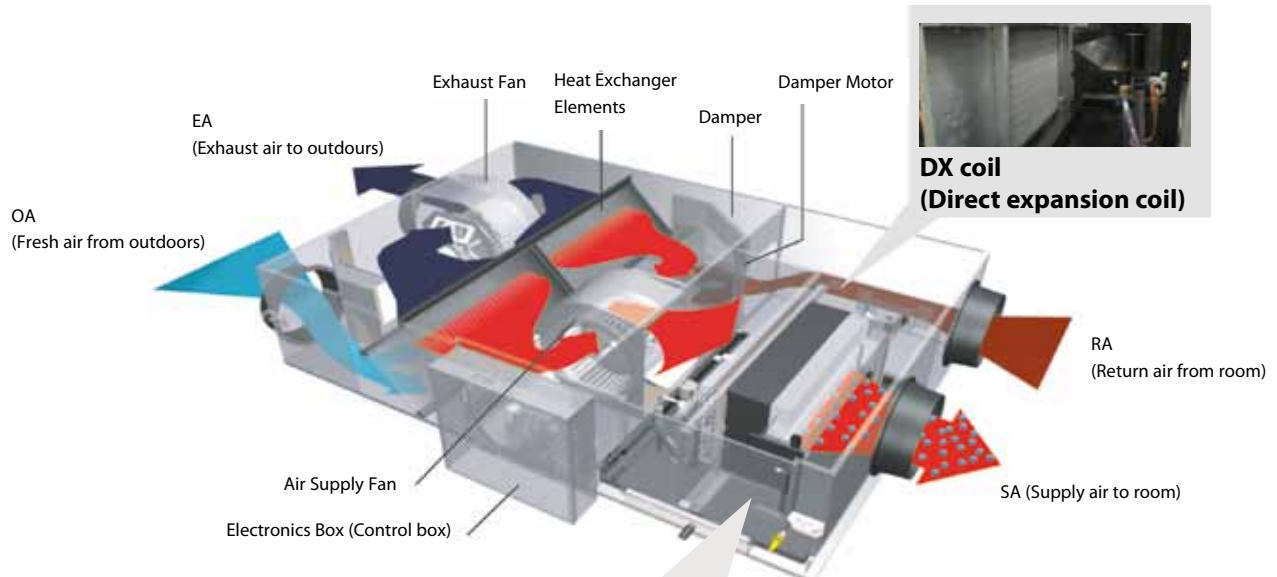
Intelligent touch Controller

Intelligent Manager

LonWorks Interface

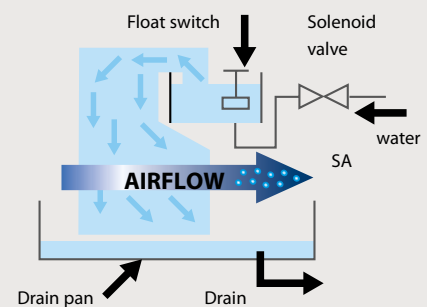
BACnet Interface

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

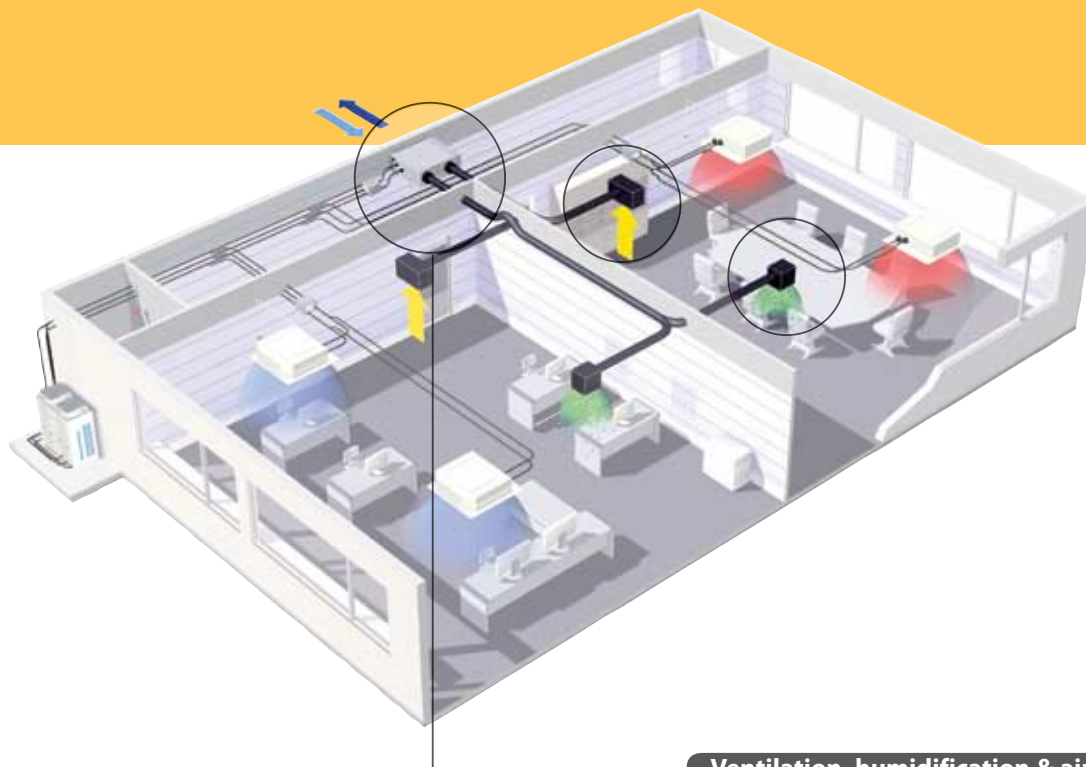


Humidifier element:

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



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	HH / H / L	m³/h	500 - 500 - 440	750 - 750 - 640	950 - 950 - 820
Sound pressure level - 220V	HH / H / L	dBA	37 - 35 - 32	38.5 - 36 - 33	39 - 37 - 34
Sound pressure level - 240V	HH / H / L	dBA	38 - 36 - 34	40 - 37.5 - 35.5	40 - 38 - 35.5
Static pressure	HH / H / L	Pa	160 - 120 - 100	140 - 90 - 70	110 - 70 - 60
Temperature exchange efficiency	HH / H / L	%	76 - 76 - 77.5	78 - 78 - 79	74 - 74 - 76.5
Enthalpy exchange efficiency - cooling	HH / H / L	%	64 - 64 - 67	66 - 66 - 68	62 - 62 - 66
Enthalpy exchange efficiency - heating	HH / H / L	%	67 - 67 - 69	71 - 71 - 73	65 - 65 - 69
Humidifier type			Natural evaporating humidifier		
Humidification capacity		kg/h	2.7	4.0	5.4
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	°CDB	0~40 (80% or less)		
	outdoor air	°CDB	-15~40 (80% or less)		
	return air	°CDB	0~40 (80% or less)		
Power supply			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	HH / H / L	m³/h	500 - 500 - 440	750 - 750 - 640	950 - 950 - 820
Sound pressure level - 220V	HH / H / L	dBA	38 - 36 - 33.5	40 - 37.5 - 34.5	40 - 38 - 35
Sound pressure level - 240V	HH / H / L	dBA	39 - 37 - 35.5	41.5 - 39 - 37	41 - 39 - 36.5
Static pressure	HH / H / L	Pa	180 - 150 - 110	170 - 120 - 80	150 - 100 - 70
Temperature exchange efficiency	HH / H / L	%	76 - 76 - 77.5	78 - 78 - 79	74 - 74 - 76.5
Enthalpy exchange efficiency - cooling	HH / H / L	%	64 - 64 - 67	66 - 66 - 68	62 - 62 - 66
Enthalpy exchange efficiency - heating	HH / H / L	%	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	°CDB	0~40 (80% or less)		
	outdoor air	°CDB	-15~40 (80% or less)		
	return air	°CDB	0~40 (80% or less)		
Power supply			1~, 220-240V, 50Hz		



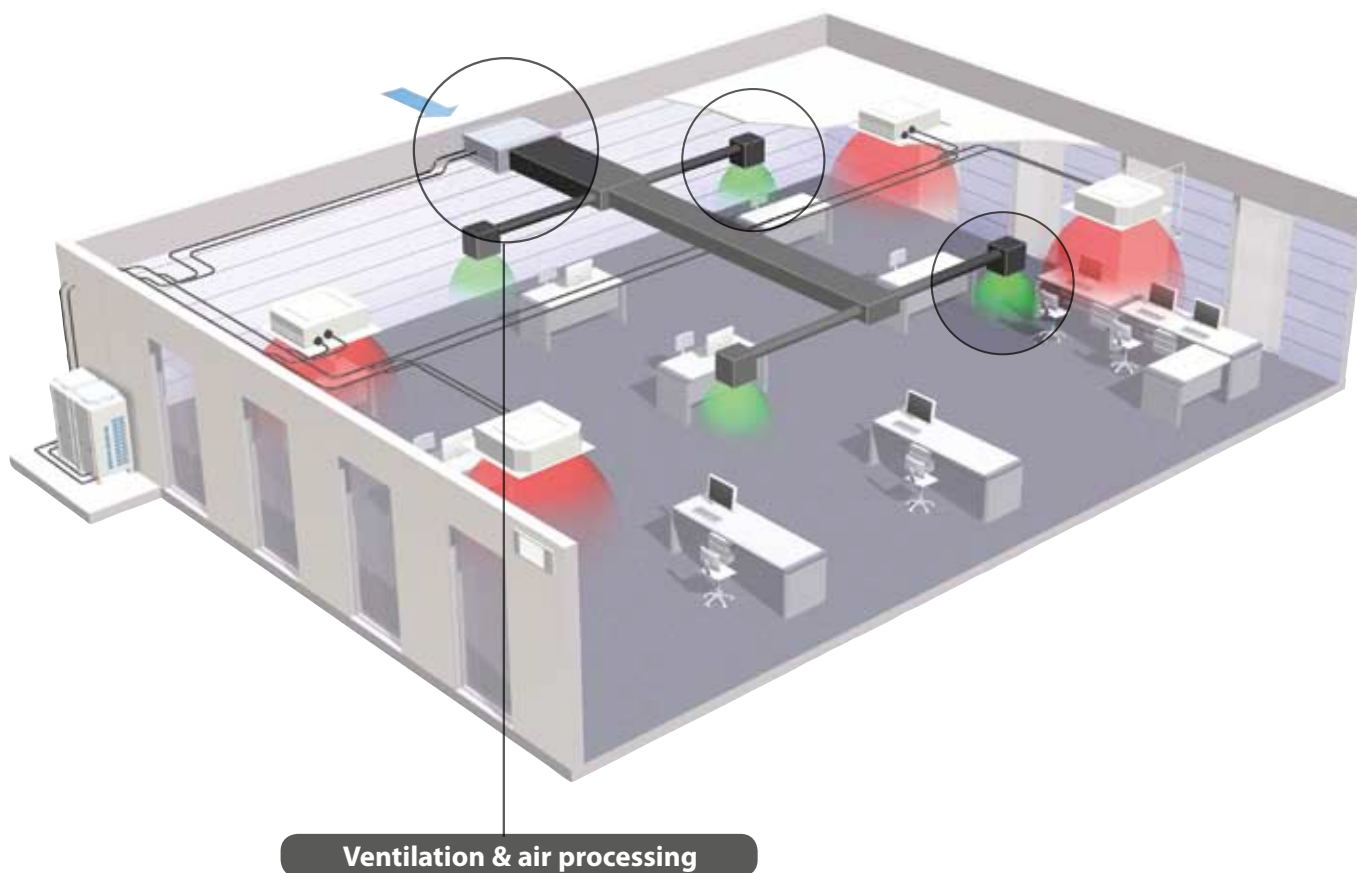
Combined fresh air treatment and air conditioning via a single system

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 indoor 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 VRV^{III}-S (RXYSQ-P8V1, RXYSQ-PBY1)

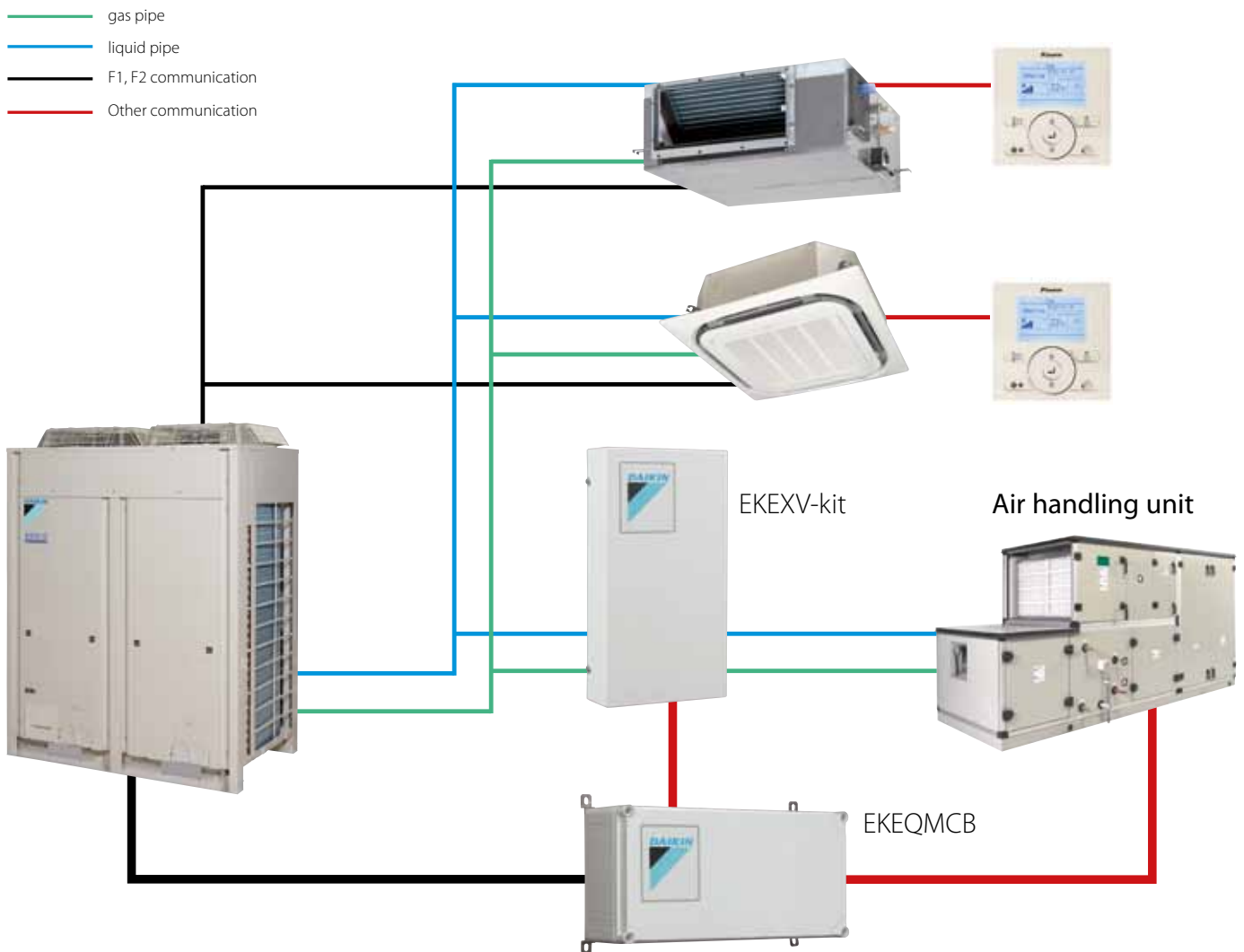


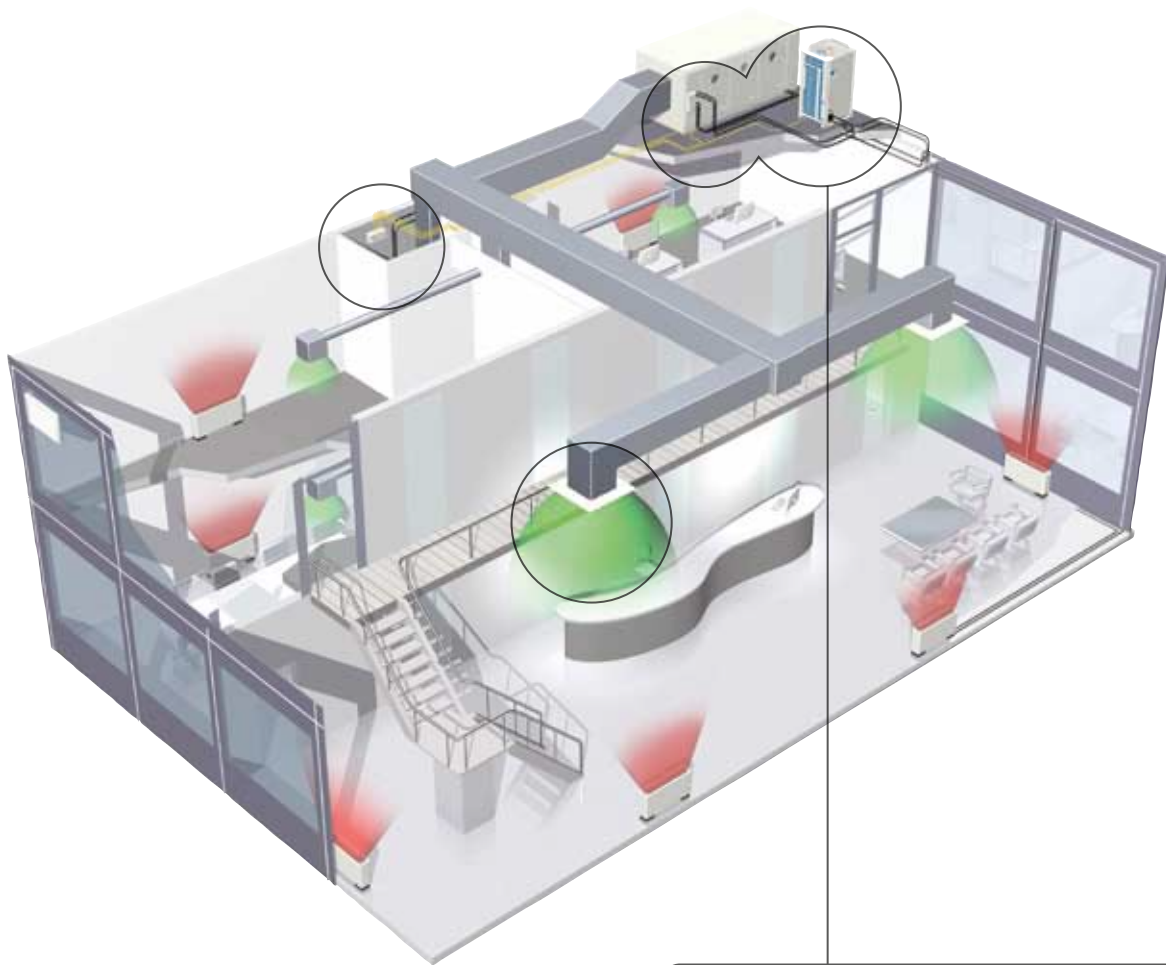
FXMQ-MF						
Ventilation & air processing				FXMQ125MF	FXMQ200MF	FXMQ250MF
Capacity	cooling	nom.	kw	14.0	22.4	28.00
	heating	nom.	kw	8.9	13.9	17.40
Power Input	cooling	nom.	kw	0.359	0.548	0.638
	heating	nom.	kw	0.359	0.548	0.638
Dimensions	HxWxD		mm	470x744x1,100	470x1380x1,100	
Weight			kg	86	123	
Air Flow Rate	cooling	medium	m³/min	18	28	35
	heating	medium	m³/min	18	28	35
External static pressure		Standard	Pa	185	225	205
Refrigerant				R-410A		
Sound Power	Cooling	Nominal	dBA	-		
Sound Pressure	Cooling	Nominal (220V)	dBA	42	47	
Piping Connections	liquid (od)/gas/drain		mm	9.5 / 15.9 / PS1B	9.5 / 19.1 / PS1B	9.5 / 22.2 / PS1B
Power Supply				1~, 220-240V/50Hz		



- › Connectable to all VRV® heat recovery and heat pump systems
- › Inverter controlled units
- › Large capacity range (from 5 to 54HP)
- › Heat recovery, heat pump
- › R-410A
- › Control of room temperature via Daikin control (BRC1E51 or BRC1D52)
- › Large range of expansion valve kits available
- › BRC1* is used to set the set point temperature (connected to the EKEQMCB)

System example:





Ventilation & air processing

EKEXV class	Allowed nominal heat exchanger capacity (kW)					
	Cooling (Evaporation temperature 6°C)			Heating (Condensing temperature 46°C)		
	Minimum	Standard	Maximum	Minimum	Standard	Maximum
50	5.0	5.6	6.2	5.6	6.3	7.0
63	6.3	7.1	7.8	7.1	8.0	8.8
80	7.9	9.0	9.9	8.9	10.0	11.1
100	10.0	11.2	12.3	11.2	12.5	13.8
125	12.4	14.0	15.4	13.9	16.0	17.3
140	15.5	16.0	17.6	17.4	18.0	19.8
200	17.7	22.4	24.6	19.9	25.0	27.7
250	24.7	28.0	30.8	27.8	31.5	34.7

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.



AIR CONDITIONING NETWORK SERVICE (ACNSS)



INDIVIDUAL CONTROL SYSTEMS



CENTRALISED CONTROL SYSTEMS



NETWORK SOLUTIONS



ALTERNATIVE INTEGRATION DEVICES

AIR CONDITIONING NETWORK SERVICE (ACNSS) P 162

INDIVIDUAL CONTROL SYSTEMS P 164

CENTRALISED CONTROL SYSTEMS P 166

NETWORK SOLUTIONS P 167

ALTERNATIVE INTEGRATION DEVICES P 172

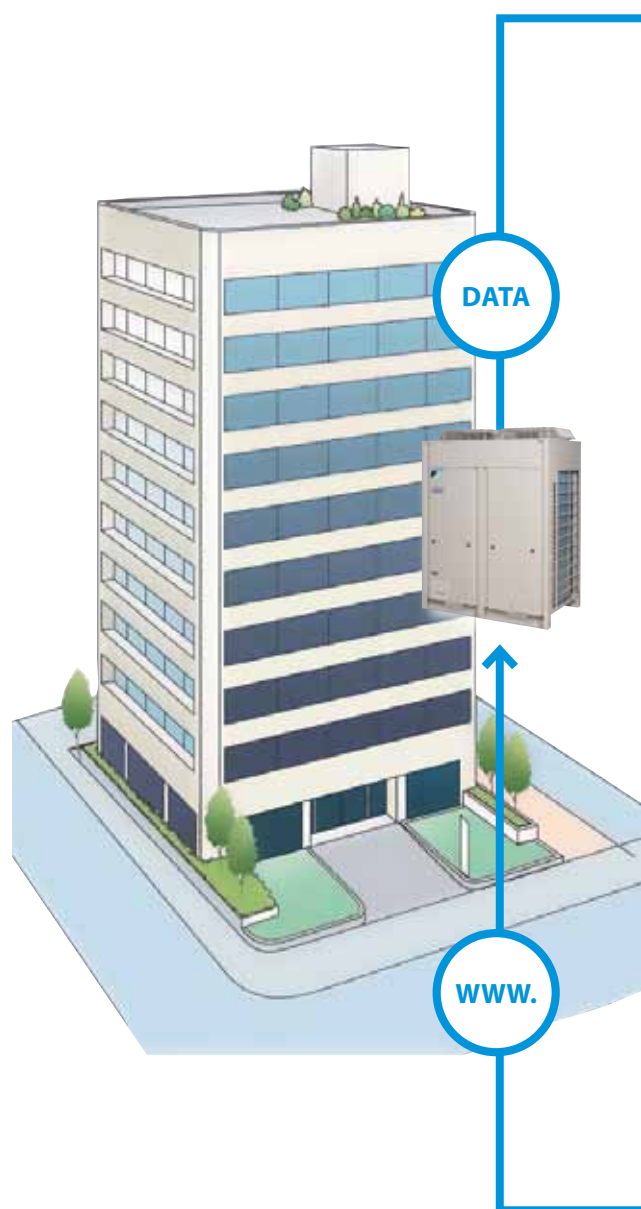
AIR CONDITIONING NETWORK SERVICE SYSTEM (ACNSS)

The challenge of your technical management is safeguarding in the long term optimal operation of your air conditioning system without incurring huge costs along the way. Daikin's Air Conditioning Network Service System improves the effectiveness of your management.

The network service system is a link via the internet, between the air conditioning system and Daikin's Remote Monitoring Centre. In so doing, expert service engineers monitor the operating status of the entire system nonstop all through the year. The 'ACNSS monitoring service' prevents troubles and prolongs the life of your equipment.

Thanks to the prediction of malfunctions and the technical advice following from data analysis, you not only maximise equipment availability, but also control cost without sacrificing comfort levels.

Daikin's ACNSS is also supported by the optional 'ACNSS energy saving service' as energy use is one of the largest operating expenses of any business. This service enables you to optimise on power consumption without failing to keep the customer's amenity.



ACNSS MONITORING SERVICE



ACNSS ENERGY SAVING SERVICE

COMFORT MAINTAINED

1 DATA TRANSMISSION

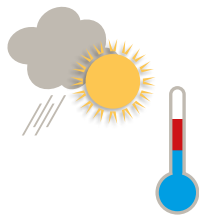
Air conditioners's running information and other necessary data are collected and compiled, and sent to the centre. Advance failure forecasts and monitoring data for accidental problems are transmitted.



OPTION:

ENERGY-SAVING CONTROL DETERMINATION

Operating information is analyzed, and the optimum energy-saving control settings are calculated according to weather data for the region.



WEATHER INFORMATION



2 DAIKIN REMOTE MONITORING CENTRE

Daikin's control implemented



Intelligent touch Controller



Intelligent Manager III

3 DATA ANALYSIS & SYSTEM MONITORING

Reporting data is reviewed and system is monitored 24/7 for any occurrences.

Energy-saving Report
Maintenance Report
Malfunction and prediction call



Information to
customers,
service company

* A contract with Daikin is necessary for applying Energy-saving Air conditioning Network Service System. If you would like an estimation, please contact us.

INDIVIDUAL CONTROL SYSTEMS

BRC4* ARC4*
BRC7*



INFRARED REMOTE CONTROL

Operation buttons³: 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

Display³: 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

⁴ BRC7* is shown

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

BRC1E51A



WIRED REMOTE CONTROL - BRC1E51A

User-friendly remote control with contemporary design

- NEW,,
- › Easy to use: all main functions directly accessible
 - › Energy saving functions: set temperature auto reset, set temperature range limit
 - › Easy setup: improved graphical user interface for advanced menu settings
 - › Real time clock with auto update to daylight saving time
 - › Schedule timer with holiday setting, improved weekly timer and home leave operation
 - › Supports multiple languages (English, German, Dutch, Spanish, Italian, Portuguese, French, Greek, Russian, Turkish)*
 - › Built-in backup power: when a power failure occurs all settings remain stored up to 48 hours
 - › Includes all available features for BRC1D52
 - › Automatically displays installer contact in case of a malfunction

BRC1D52



WIRED REMOTE CONTROL - BRC1D52

- › Schedule timer:
 - › Five actions can be set per day 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 absence, the indoor temperature can be maintained at a certain level. This function can also switch the unit ON/OFF
- › 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
- › 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



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

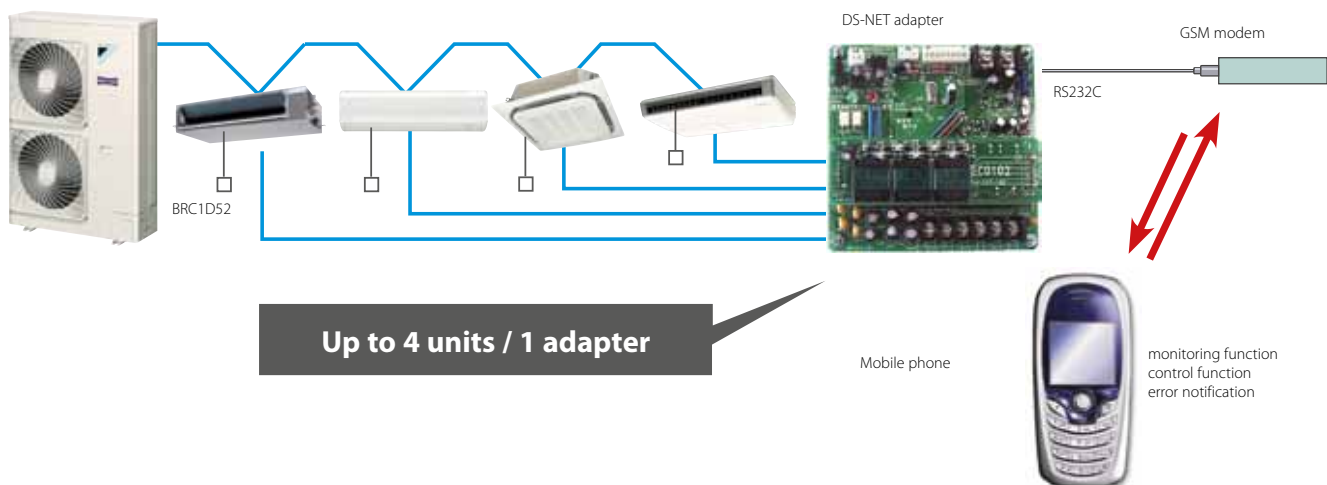
Enabling 64 groups to be programmed

- › 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 of
Sky Air® and VRV®



FUNCTIONS

1. Monitoring Functions

You can monitor your air conditioning units by simply sending a text message with your mobile phone with the word "Report":

- › Start/stop
- › Operation mode (fan/cool/heat)
- › Temperature setting
- › Error code

2 . Control Functions

You can control your air conditioning units by simply sending a text message via your mobile phone:

- › Start/stop
- › Operation mode (fan/cool/heat)
- › Temperature setting

3. Error Notification

When an error occurs, a text message will be sent automatically to your mobile phone (error notification).

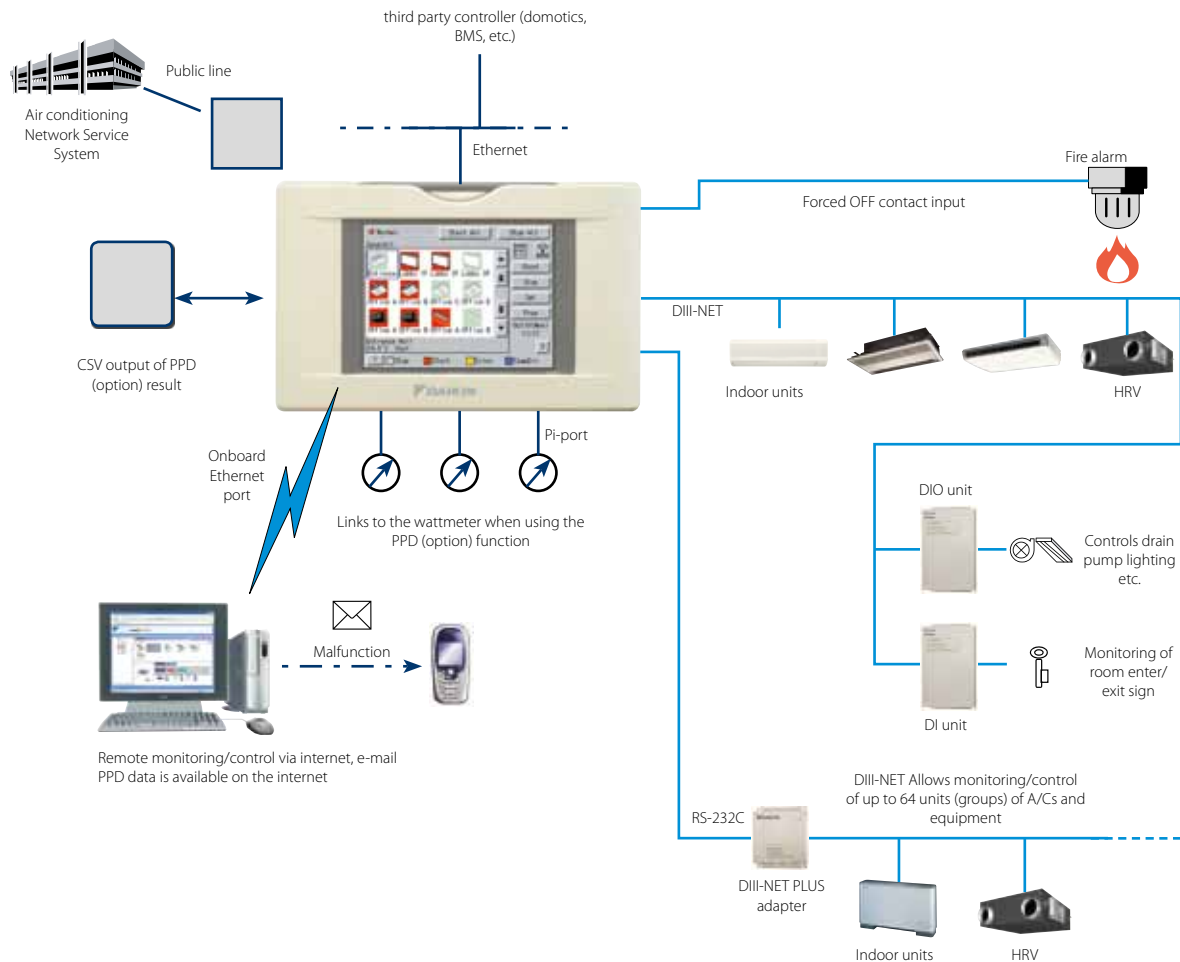
4. Stand alone operation

- › Rotation function
- › Backup operation function.

NETWORK SOLUTIONS

Intelligent touch Controller

Detailed & easy monitoring and operation of VRV® systems
(max. 2 X 64 groups/indoor units).



LANGUAGES

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

SYSTEM LAYOUT

- › Up to 2 x 64 indoor units can be controlled
- › Onboard Ethernet port (web browser + e-mail)
- › Digital i/o contacts (option)
- › 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: PPD (option)
- › PPD data is available on the internet
- › Easy management of electricity consumption
- › Enhanced history function



CONTROL

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

MONITORING

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

COST PERFORMANCE

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

OPEN INTERFACE

- › Communication to any third party controller (domotics, BMS, etc.) is possible via open interface
- › Http option

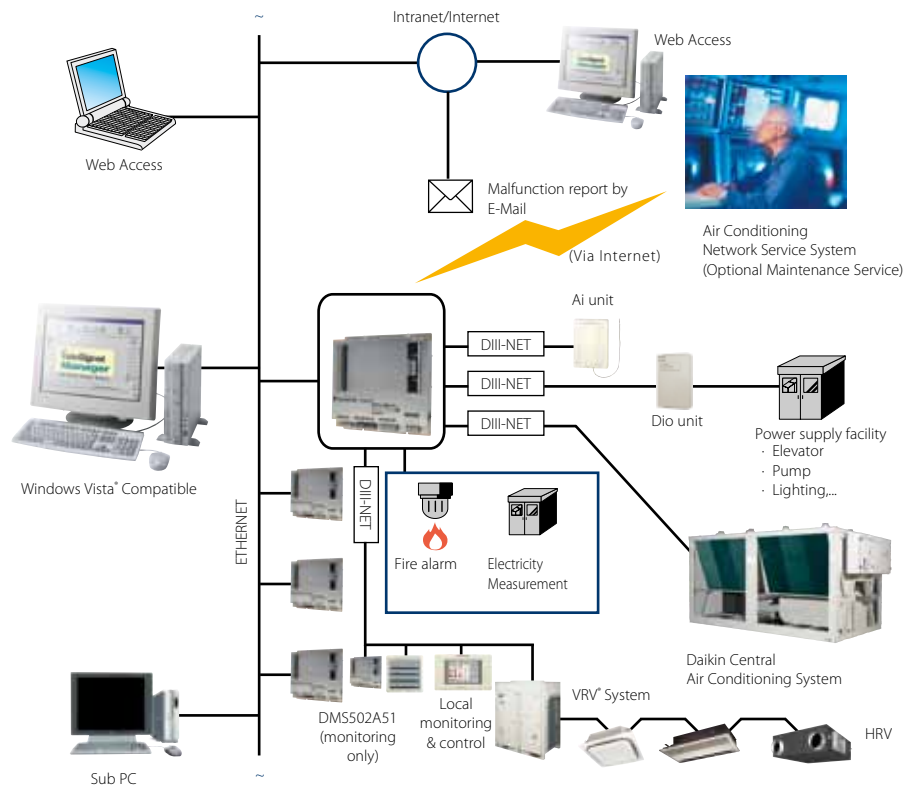
CONNECTABLE TO

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

NETWORK SOLUTIONS

Intelligent Manager

Full control and management of VRV® systems (Maximum 200 groups)



LANGUAGES

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

SYSTEM LAYOUT

- › Up to 1,024 indoor units can be controlled (by 4 iPU's)
- › Ethernet TCP/IP / 10 base / T communication
- › 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 (option)
- › Power Proportional

- › Distribution (option)
- › Operational history management (start/stop, malfunction, operation hours)
- › Generation of reports (graphics & tables) (daily, weekly, monthly)
- › Peak load shedding
- › Advanced tenant management
- › Sliding temperature
- › Eco mode (option)
- › Pre-cooling and -heating function

CONTROL

- › Individual control (setpoint, start/stop, fan speed) (max. 1,024 indoor units)
- › Group control (100 groups)
- › Schedule control (128 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

MONITORING

- › Visualisation 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

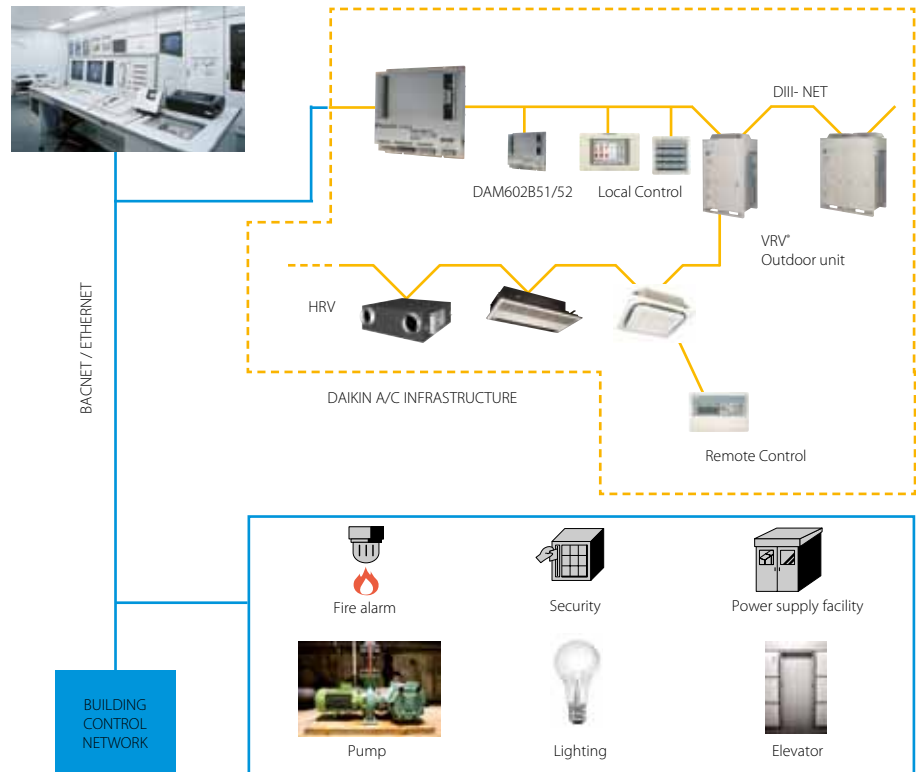
CONNECTABLE TO

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

BACnet Interface

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

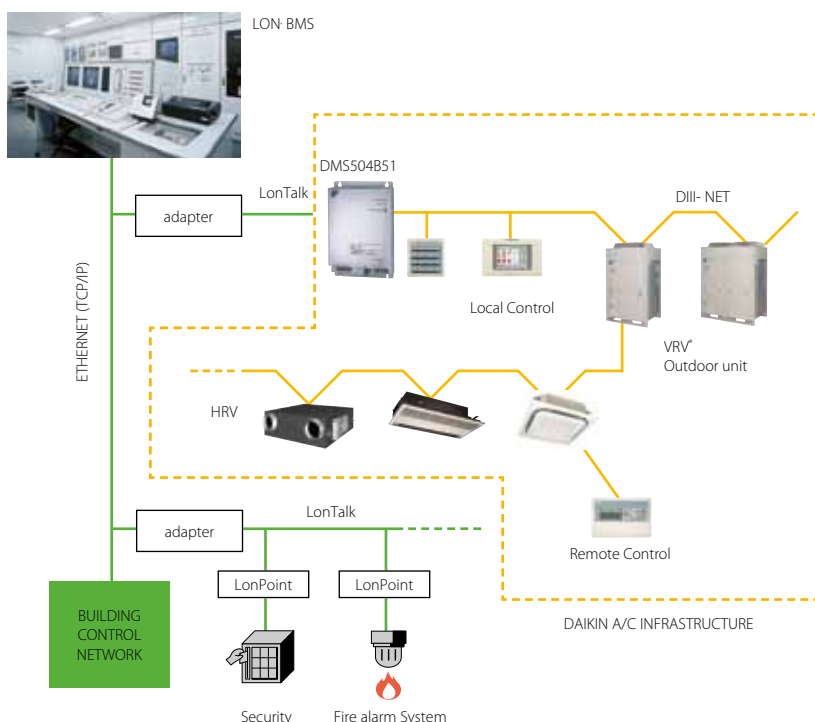
- › PPDdata is available on BMS system
- › Interface for BMS system
- › Communication via BACnet protocol (connection via Ethernet)
- › 256 units connectable per BACnet gateway
- › Unlimited sitesize
- › Easy and fast installation



LonWorks Interface

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




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



ALTERNATIVE INTEGRATION DEVICES

Daikin's adapter PCB's provide simple solutions for unique requirements. They are a low cost option to satisfy simple control requirements and can be used on single or multiple units.

ADAPTER PCB'S – SIMPLE SOLUTIONS FOR UNIQUE REQUIREMENTS

	(E)KRP1B* adapter for wiring	<ul style="list-style-type: none"> › Facilitates integration of auxiliary heating apparatus, humidifiers, fans, damper › Powered by and installed at the indoor unit
	KRP2A*/ KRP4A* Wiring adapter for electrical appendices	<ul style="list-style-type: none"> › Remotely start and stop up to 16 indoor units (1 group) (KRP4A* via F1 F2) › Remotely start and stop up to 128 indoor units (64 groups) (KRP2A* via P1 P2) › Alarm indication/ fire shut down › Remote temperature setpoint adjustment
	DTA104A* Outdoor Unit External Control Adapter	<ul style="list-style-type: none"> › Individual or simultaneous control of VRV system operating mode › Demand control of individual or multiple systems › Low noise option for individual or multiple systems

CONCEPT AND BENEFITS

- › Low cost option to satisfy simple control requirements
- › Deployed on single or multiple units



VRV ® OUTDOOR UNITS			VRV® air cooled outdoor systems														
			VRVIII® heat recovery (high COP and small footprint combination)						VRVIII® heat recovery, with connection to heating only hydrobox				VRV®-Q heat recovery replacement VRV®	VRVIII® heat pump optimised for heating			
			REYQ8P9	REYQ12P9	REMQ8P9		REMQ14-16P8	REYQ18-48P8/P9					RQ(C)EQ-P		RTSYQ14P		
			REYQ10P8	REYQ14-16P8	REMQ10P8	REMQ12P9	REMHQ12P9	REYHQ16-24P	REYAQ10P	REYAQ12P	REYAQ14P	REYAQ16P		RTSYQ10P	RTSYQ16P	RTSYQ20P	
Cool/heat selector																	
Fixing box													KJB111A				
REFNET header			KHRQ23M29H		KHRQ23M29H				KHRQ(M)22M29H					KHRQ22M29H ⁸			
				KHRQ23M64H		KHRQ23M64H				KHRQ(M)22M64H				KHRQ22M64H			
REFNET joint								KHRQ23M75H	KHRQ(M)23M29H								
			KHRQ23M20T							KHRQ(M)23M64H					KHRQ22M20T		
			KHRQ23M29T9							KHRQ(M)22M75H					KHRQ22M29T9		
				KHRQ23M64T		KHRQ23M64T			KHRQ(M)22M20T					KHRQ22M64T			
								KHRQ23M75T	KHRQ(M)22M29T9								
Outdoor unit multi piping connection kit	For 2 outdoor units						BHFP23P907		KHRQ(M)22M64T			BHFP26P36C		BHFP22P1007			
	For 3 outdoor units						BHFP23P1357		KHRQ(M)22M75T			BHFP26P63C					
	For 4 outdoor units								KHRQ(M)23M75H			BHFP26P84C					
Central drain pan kit			KWC25C450 ²		KWC26C280 ²		KWC2@6C450 ²	¹⁰	KHRQ(M)23M20T								
Drain pan heater kit														BEH22A10Y1L/N/U / BEH22A18Y1L/N/U			
Digital pressure gauge kit			BHGP26A1 ³						KHRQ(M)23M29T9								
Increase height difference between indoor & outdoor to 90m									KHRQ(M)23M64T								
BS Box for H/R			BSVQ100P, BSVQ160P, BSVQ250P						KHRQ(M)23M75T								
Central BS Box for H/R			BSV4Q100PV														
Sound reduction kit for BSVQ Box			EKBSVQLNP ⁴														
BP Box for connection to stylish indoor units																	
									KWC25C450								
Wind cover	Full set	KPS25C450 ⁵		KPS26C280 ⁵		KPS26C504 ⁵	¹⁰	BHGP26A1									
	Top/discharge	KPS25C450T ⁵		KPS26C280T ⁵		KPS26C504T ⁵	¹⁰										
	Rear/suction	KPS25C450B ⁵		KPS26C280B ⁵		KPS26C504B ⁵	¹⁰	BSVQ100P8V18, BSVQ160P8V18, BSVQ250P8V18 ²									
	Left/suction	KPS26C504L ⁵						BSV4Q100PV1, BSV6Q100PV1 ²									
	Right/suction	KPS26C504R ⁵						EKBSVQLNP ⁴									
Snowbreak hood	Kit (inlet + outlet)												KPS26C280 ⁹	KPS26C504 ⁹	KPS26C280X2 ⁹		
	Air outlet												KPS26C280T ⁹	KPS26C504T ⁹	KPS26C280TX2 ⁹		
	Left side air inlet												KPS26C504L ⁹		KPS26C504LX2 ⁹		
	Right side air inlet												KPS26C504R ⁹		KPS26C504RX2 ⁹		
	Back side air inlet												KPS26C280B ⁹	KPS26C504B ⁹	KPS26C280BX2 ⁹		

VRV ® OUTDOOR UNITS		VRV®-WIII standard series - heat recovery								
		RWEYQ8P	RWEYQ10P	RWEYQ16P	RWEYQ18P	RWEYQ20P	RWEYQ24P	RWEYQ26P	RWEYQ28P	RWEYQ30P
Cool/heat selector										
Fixing box		KJB111A								
REFNET header		KHRQ23M29H								
					KHRQ23M64H					
					KHRQ23M75H					
REFNET joint		KHRQ23M20T/KHRQ23M29T								
					KHRQ23M64T					
					KHRQ23M75T					
Outdoor unit multi piping connection kit	For 2 outdoor units				BHFP26MA56			BHFP26MA84		
	For 3 outdoor units									
Strainer kit		BWU26A15								
		BWU26A20								
External control adapter for outdoor unit		DTA104A62								
BS Box for H/R		BSVQ100P8, BSVQ160P8, BSVQ250P8								
Central BS Box for H/R		BSV4Q100PV, BSV6Q100PV								

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
- (6) 1 Option per module is required
- (7) The option should be installed inside the outdoor unit, only needed in case outdoor unit is installed above indoor
- (8) Ø 25.4 Gas pipe in KHRQ22M29H is not available for DENV refnet. This is only required for the 10HP model using size uo AND with an indoor connection ratio of less than 80%
- (9) 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.
- (10) To be combined based on the outdoor multi table.

VRV® air cooled outdoor systems													
VRVIII® heat pump (high COP and small footprint combination) / VRV®III heating only						VRVIII® heat pump with connection to stylish indoor units			VRV®III-S heat pump			VRV®-Q heat pump replacement VRV®	
	RXYQ8P9 RXHQ8P		RXYQ12P9 RXHQ12P	RXYHQ12P9	RXYQ14-18P9 RXHQ14-18P	RXYQ20-54P9 RXHQ20-54P							
RXYQ5P9	RXYQ10P9 RXHQ10P						RXYRQ8-10P	RXYRQ12P	RXYRQ14-18P	RXYSQ4P8V1/ RXYSQ4P8Y1	RXYSQ5P8V1/ RXYSQ5P8Y1	RXYSQ6P8V1/ RXYSQ6P8Y1	RQYQ-P
KRC19-26A6							KRC19-26A6			KRC19-26A6			KRC19-26A6
KJB111A							KJB111A			KJB111A			KJB111A
KHRQ22M29H							KHRQ22M29H			KHRQ22M29H			
			KHRQ22M64H						KHRQ22M64H				
						KHRQ22M75H							
KHRQ22M20T							KHRQ22M20T			KHRQ22M20T			
		KHRQ22M29T9					KHRQ22M29T9						
			KHRQ22M64T						KHRQ22M64T				
						KHRQ22M75T							
							BHFQ22P1007						BHFP22P36C
							BHFQ22P1517						BHFP22P54C
KWC26B160	KWC26B280		KWC26B450		2		KWC26B280		KWC26B450	KKPJ5F180			
BHGP26A1							BHGP26A1						
		EKLD90P12			EKLD90P18	6/7							
							BPMKS967B2						
							BPMKS967B3						

	FXFQ20-63P9	FXFQ80-125P9	FXZQ20-50M9	FXCQ20-32M8	FXCQ40-50M8	FXCQ63M8
Decoration panel	BYCQ140CW1 / BYCQ140CW1W ⁴ / BYCQ140CGW1 ^{2,3}		BYFQ60B	BYBC32G	BYBC50G	BYBC63G
Decoration panel option						
Replacement long life filter (non-woven type)	KAFP551K160					
Fresh air intake kit (20% fresh air intake)(chamber type)	KDDQ55C140-1 ⁵⁽¹⁾ / KDDQ55C140-2 ⁵⁽¹⁾					
Fresh air intake kit (direct installation type)			KDDQ44XA60			
Sealing member of air discharge outlet	KDBHQ55C140 ⁵		KDBH44BA60			
Panel spacer			KDBH44B60			
Replacement long life filter			KAFQ441B60	KAFJ531G36	KAFJ531G56	KAFJ531G80
High efficiency filter 65%				KAFJ532G36 ¹	KAFJ532G56 ¹	KAFJ532G80 ¹
High efficiency filter 90%				KAFJ533G36 ¹	KAFJ533G56 ¹	KAFJ533G80 ¹
Filter chamber for bottom suction				KDDFJ53G36	KDDFJ53G56	KDDFJ53G80
Air discharge grille						
Air discharge blind panel						
Flexible duct (with shutter)						
Insulation kit for high humidity						
Air discharge adapter for round duct						

	FXMQ20-25-32P7	FXMQ40P7	FXMQ50-63P7	FXMQ80P7	FXMQ100-125P7	FXMQ200-250MA	FXAQ20-63P	FXHQ32MA
Decoration panel	BYBS32D	BYBS45D	BYBS71D	BYBS71D	BYBS125D			
Decoration panel option	EKBYBSD							
Rear decoration panel								
Sealing member of air discharge outlet								
Replacement long life filter						KAFJ371L280		
High efficiency filter 65%						KAFJ372L280		
High efficiency filter 90%						KAFJ373L280		
Filter chamber						KDJ3705L280		
Air discharge adapter for round duct	KDAJ25K36A	KDAJ25K56A	KDAJ25K71A	KDAJ25K140A				
Drain pump kit						KDU30L250VE	K-DU572EVE	KDU50M60VE
Replacement long life filter (resin net)								KAFJ501DA56
L-type piping kit (for upward direction)								KHFP5M35
Air discharge decoration panel								
Vertical flap kit								

Notes:

- (1) Filter chamber is required when installing a high efficiency filter
 (2) To be able to control the BYCQ140CGW1, wired remote control BRC1E51A is needed
 (3) BYCQ140CGW1 is not compatible with VRV®III-S
 (4) The BYCQ140CW1W has white insulations. Be informed that information of dirt on white insulation is visibly stronger and that it is consequently not advised to install the BYCQ140CW1W decoration panel in environments exposed to concentrations of dirt.
 (5) Option not available in combination with BYCQ140CGW1

INDIVIDUAL CONTROL SYSTEMS		FXFQ	FXZQ	FXCQ	FXKQ	FXDQ-M9
Wired remote control		BRC1E51A ¹⁰ / BRC1D528	BRC1E51A / BRC1D52	BRC1E51A ¹⁰ / BRC1D528	BRC1E51A ¹⁰ / BRC1D528	BRC1E51A ¹⁰ / BRC1D528
Infrared remote control	Heat pump	BRC7F532F ⁸	BRC7E530	BRC7C62	BRC4C61	BRC4C62
Simplified remote control						BRC2C51
Simplified remote control for hotel use						BRC3A61

CENTRALISED CONTROL SYSTEMS		FXFQ	FXZQ	FXCQ	FXKQ	FXDQ-M9
Centralised remote control		DCS302C51	DCS302C51	DCS302C51	DCS302C51	DCS302C51
Unified ON/OFF control		DCS301B51	DCS301B51	DCS301B51	DCS301B51	DCS301B51
Schedule timer		DST301B51	DST301B51	DST301B51	DST301B51	DST301B51

OTHERS		FXFQ	FXZQ	FXCQ	FXKQ	FXDQ-M9
Wiring adapter ⁶			KRP1B57 ¹		KRP1B61	KRP1B61
Wiring adapter ⁷		EKRP1C11 ^{1/8}		EKRP1B2		EKRP1B2 ²
Wiring adapter for control and monitoring of F1 F2		KRP2A526 ^{1/8}	KRP2A52 ¹	KRP2A51 ¹	KRP2A61	KRP2A51
Wiring adapter for control and monitoring of P1 P2		KRP4AA53 ^{1/8}	KRP4A53 ¹	KRP4A51 ¹	KRP4A51	KRP4A51
Remote sensor		KRCS01-4	KRCS01-1	KRCS01-1	KRCS01-1	KRCS01-1
Installation box / mounting plate for adapter PCB		KRP1H98 ⁸	KRP1BA101	KRP1B96 ⁴⁵		
Electrical box with earth terminal (3 blocks)			KJB311A	KJB311A	KJB311A	KJB311A
Electrical box with earth terminal (2 blocks)		KJB212AA	KJB212A	KJB212A	KJB212A	KJB212A
Noise filter (for electromagnetic interface only)			KEK26-1A	KEK26-1A	KEK26-1A	KEK26-1A
External control adapter (for C/H zone, input LNO & Demand)			DTA104A52	DTA104A51 ¹	DTA104A61	DTA104A61
Interface adapter to connect indoor to F1 F2						
Connector for forced on/forced off						
Multi tenant option		DTA114A61 ^{3/8}	EKMTAC ⁹			EKMTAC ⁹

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
 (8) Option not available in combination with BYCQ140CGW1
 (9) This kit contains parts to connect with 10 multi tenant indoor units
 (10) Included languages are English, German, French, Dutch, Spanish, Italian, Greek, Portuguese, Russian & Turkish
 (11) Both options needed

FXCQ80-125M8	FXKQ25-40MA	FXKQ63MA	FXDQ20-25M9	FXDQ20-32P7	FXDQ40-50P7	FXDQ63P7	FXSQ20-32P	FXSQ40-50P	FXSQ63-80P	FXSQ100-140P
BYBC125G	BYK45F	BYK71F					BYBS32D	BYBS45D	BYBS71D	BYBS125D
							EKBYBSD			
	KPBJS2F56W	KPBJS2F80W								
KAFJ531G160	KAFJ521F56	KAFJ521F80								
KAFJ532G160 ¹										
KAFJ533G160 ¹										
KDDFJ53G160										
	K-HV7AW	K-HV9AW								
	KPBJS2F56W	KPBJS2F80W								
	KFDJ52F56	KFDJ52F80								
				KDT25N32	KDT25N50	KDT25N63				
							KDAJ25KA36A	KDAJ25KA56A	KDAJ25KA71A	KDAJ25KA140A

FXHQ63MA	FXHQ100MA	FXUQ71MA	FXUQ100MA	FXUQ125MA	FXLQ20-25P	FXLQ32-40P	FXLQ50-63P	FXNQ20P	FXNQ25P	FXNQ32P	FXNQ40P	FXNQ50P	FXNQ63P
					EKRDP25A	EKRDP40A	EKRDP63A						
	KDBHJ49F80	KDBHJ49F140											
		KAFJ495F140			KAFJ361K28	KAFJ361K45	KAFJ361K71	KAFJ361K28	KAFJ361K45	KAFJ361K71			
KDU50M125VE	KDU50M125VE												
KAFJ501DA80	KAFJ501DA112												
KHFP5M63	KHFP5M63			KHFP49M140									
		KDBTJ49F80	KDBTJ49F140										
		KDGJ49F80	KDGJ49F140										

FXDQ-P7	FXSQ	FXMQ-P7	FXMQ-MA	FXAQ	FXUQ	FXHQ	FXLQ	FXNQ
BRC1E51A ¹⁰ /BRC1D52	BRC1E51A / BRC1D528	BRC1E51A / BRC1D52	BRC1E51A / BRC1D528	BRC1E51A / BRC1D528	BRC1E51A / BRC1D528	BRC1E51A / BRC1D528	BRC1E51A / BRC1D528	BRC1E51A / BRC1D528
BRC4C65	BRC4C65	BRC4C66	BRC4C65	BRC7E618	BRC7C528	BRC7E63	BRC4C65	BRC4C65
BRC2C51	BRC2C51	BRC2C51	BRC2C51				BRC2C(A)51	BRC2C51
BRC3A61	BRC3A61	BRC3A61	BRC3A61				BRC3A61	BRC3A61

FXDQ-P7	FXSQ	FXMQ-P7	FXMQ-MA	FXAQ	FXUQ	FXHQ	FXLQ	FXNQ
DCS302C51	DCS302C51	DCS302C51	DCS302C51	DCS302C51	DCS302C51	DCS302C51	DCS302C51	DCS302C51
DCS301B51	DCS301B51	DCS301B51	DCS301B51	DCS301B51	DCS301B51	DCS301B51	DCS301B51	DCS301B51
DST301B51	DST301B51	DST301B51	DST301B51	DST301B51	DST301B51	DST301B51	DST301B51	DST301B51

FXDQ-P7	FXSQ	FXMQ-P7	FXMQ-MA	FXAQ	FXUQ	FXHQ	FXLQ	FXNQ
KRP1B56	KRP1C64	KRP1C64 ³	KRP1B61		KRP4A53	KRP1B3	KRP1B61	KRP1B61
	EKRPP1B2A ³	EKRPP1B2A ³						
KRP2A53	KRP2A51	KRP2A51 ³	KRP2A61	KRP2A51 ¹		KRP2A62 ¹	KRP2A51	KRP2A51
KRP4A54	KRP4A51	KRP4A51 ³	KRP4A51	KRP4A51 ¹		KRP4A52 ¹	KRP4A51	KRP4A51
KRCS01-1	KRCS01-4B	KRCS01-4	KRCS01-1	KRCS01-1	KRCS01-1	KRCS01-1	KRCS01-1	KRCS01-1
KRP1BA101	KRP4A96 ^{4/5}	KRP4A96 ^{4/5}		KRP4A93 ^{4/5}	KRP1B97	KRP1C93 ⁴		
KJB311A	KJB311A	KJB311A	KJB311A	KJB311A		KJB311A	KJB311A	KJB311A
KJB212A	KJB212A	KJB212A	KJB212A	KJB212A		KJB212A	KJB212A	KJB212A
KEK26-1A			KEK26-1A	KEK26-1A		KEK26-1A	KEK26-1A	KEK26-1A
DTA104A53	DTA104A61	DTA104A61	DTA104A61	DTA104A61		DTA104A62	DTA104A61	DTA104A61
					DTA102A52			
					EKRORO			
EKMTAC ⁹	DTA104A61 ³	DTA114A61		DTA114A61			EKMTAC ⁹	EKMTAC ⁹

Stylish indoor units accessories

INDOOR UNITS - CONTROL SYSTEMS		FVXG25-50K	FTXG25J	FTXG35J	FTXG50J	FDXS25E	FDXS35E	FDXS50C	FDXS60C
Wired remote control		BRC944B2	BRC944B2			BRC944B2		BRC944B2	
Wiring adapter for time clock	Normal open contact		KRP413AA1S ¹	KRP413AB1S		KRP413AA1S ¹		KRP413AA1S ¹	
Remote control	Normal open pulse contact	KKF910A4	KRP413AA1S ¹	KRP413AB1S		KRP413AA1S ¹		KRP413AA1S ¹	
Centralised control board	Up to 5 rooms	KRC72A	KRC72A ²			KRC72A ²		KRC72A ²	
Central remote control		DCS302CA51	DCS302C51			DCS302C51		DCS302C51	
Unified on/off control		DCS301BA51	DCS301B51			DCS301B51		DCS301B51	
Schedule timer		DST301BA51	DST301B51			DST301B51		DST301B51	
Interface adapter		KRP928BB2S	KRP928BA2S ³	KRP928BB2S		KRP928BA2S ³		KRP928BA2S ³	

Notes

(1) Wiring adapter supplied by Daikin. Time clock and other devices: to be purchased locally.

(2) Wiring adapter is also required for each indoor unit.

(3) For DIII-net adapter

INDOOR UNITS	FTXG25J	FTXG35J	CTXG50J	FDXS25E	FDXS35E	FDXS50C	FDXS60C
Anti-theft protection for remote control	KKF910A4			KKF917AA4		K(K)F917AA4	
Suction grille				KDG19A45		KDG19A45	

INDOOR UNITS - CONTROL SYSTEMS		FTXS20J	FTXS25J	FTXS35J	FTXS42J	FTXS50J	FTXS60G	FTXS71G
Wired remote control		BRC944B2						
Wiring adapter for time clock	Normal open contact	KRP413AA1S ¹						
Remote control	Normal open pulse contact	KRP413AA1S ¹						
Centralised control board	Up to 5 rooms	KRC72A ²						
Central remote control		DCS302CA51						
Unified on/off control		DCS301BA51						
Schedule timer		DST301BA51						
Interface adapter		KRP928BA2S ³						

Notes

(1) Wiring adapter supplied by Daikin. Time clock and other devices: to be purchased locally.

(2) Wiring adapter is also required for each indoor unit.

(3) For DIII-net adapter

INDOOR UNITS	FTXS20J	FTXS25J	FTXS35J	FTXS42J	FTXS50J	FTXS60G	FTXS71G
Anti-theft protection for remote control	KKF910A4						KKF910A4
Titanium apatite photocatalytic air-purification filter without frame	KAF968A42 ¹					KAF970A46	
Cord for remote control assy (3m)	BRCW901A03						
Cord for remote control assy (8m)	BRCW901A08						

Notes

(1) Standard accessory

INDOOR UNITS - CONTROL SYSTEMS		FVXS25F	FVXS35F	FVXS50F	FLXS25B	FLXS35B	FLXS50B	FLXS60B
Wiring adapter for time clock	Normal open contact	KRP413AA1S ¹			KRP413AA1S ¹			
Remote control	Normal open pulse contact	KRP413AA1S ¹			KRP413AA1S ¹			
Centralised control board	Up to 5 rooms	KRC72A ²			KRC72A ²			
Central remote control		DCS302C61			DCS302C51			
Unified on/off control		DCS301B61			DCS301B51			
Schedule timer		DST301B61			DST301B51			
Interface adapter		KRP928BA2S ³			KRP928BA2S ³			

Notes

(1) Wiring adapter supplied by Daikin. Time clock and other devices: to be purchased locally.

(2) Wiring adapter is also required for each indoor unit.

(3) For DIII-net adapter

INDOOR UNITS	FVXS25F	FVXS35F	FVXS50F	FLXS25B	FLXS35B	FLXS50B	FLXS60B
Air purification and deodorising filter set without frame							
Air supply filter with frame							
Anti-theft protection for remote control	KKF936A4			KKF917AA4			
Suction grille							
Titanium apatite photocatalytic air-purification filter without frame	KAF968A42 ¹						
Photocatalytic deodorising filter, with frame				KAZ917B41			
Photocatalytic deodorising filter, without frame				KAZ917B42			
Air purification filter, with frame				KAF925B41			
Air purification filter, without frame				KAF925B42			

Notes

(1) Standard accessory

INDOOR UNITS - CONTROL SYSTEMS	FFQ25B	FFQ35B	FFQ50B	FFQ60B	FDBQ25B	FBQ35C	FBQ50C	FBQ60C	FBQ71C	FBQ100C	FBQ125C	FBQ140C
Wired remote control	BRC1E51A/BRC1052 ⁷				BRC1D528/BRC1E51A7 ⁷	BRC1D528/BRC1E51A7 ⁷						
Infrared remote control (heat pump)	BRC7E530W					BRC4C65						
Centralised remote control	DCS302C51					DCS302C51						
Unified ON/OFF control	DCS301B51					DCS301B51						
Schedule timer	DST301B51					DST301B51						
Adapter for wiring	KRP1BA57 ⁴					KRP1C64 ⁶						
Adapter for external ON/OFF and monitoring/for electrical appendices	KRP4AA53 ⁴					KRP4A51 ⁶						
Interface adapter for Sky Air®	DTA112BA51											
Installation box for adapter PCB	KRP1BA101											
Remote sensor	KRCS01-1					KRCS01-4B						
Remote ON/OFF, forced OFF	EKROROA					EKRORO3						
Adapter for wiring (hour meter)	EKRP1B2A				EKRP1B2A							
Options PCB for external electrical heater, humidifier and/or hour meter						EKRP1B2A ^{5,6}						
Mounting plate for adapter PCB						KRP4A96						

Notes
(1) Installation box for adapter PCB is necessary (2) Interface adapter for Sky Air® series (DTA112BA51) is necessary (3) Possibility to connect an hour meter (field supply). This part should not be installed inside the equipment. (4) Included all the languages: English, German, French, Italian, Spanish, Dutch, Greek, Russian, Turkish, Portuguese (5) Option not available in combination with BYCQ140CGW1 (6) When using decoration panel BYCQ140CGW1, wiring adapter (hour meter) KRP1C12 must be used (7) When using decoration panel BYCQ140CGW, installation box for adapter PCB KRP1J98 must be used

INDOOR UNITS	FFQ25B	FFQ35B	FFQ50B	FFQ60B	FBQ35C	FBQ50C	FBQ60C	FBQ71C	FBQ100C	FBQ125C	FBQ140C
Replacement long-life filter	KAFQ441BA60				-						
Sealing member of air discharge outlet	KDBHQ44BA60				-						
Decoration panel	BYFQ60B				BYBS45D		BYBS71D		BYBS125D		
Decoration panel option	-						EKBYBSD ¹				
Fresh air intake kit (min. 20% fresh air)	-				KDAJ25K56A		KDAJ25KA71A		KDAJ25KA140A		
Fresh air intake kit (direct installation type)	KDDQ44XA60				-						
Panel spacer	KDBQ44BA60				-						

Notes

(1) Decoration panel option EKBYBSD is required for direct mounting of the decoration panel of the unit.

INDOOR UNITS - CONTROL SYSTEMS	FHQ35B	FHQ50B	FHQ60B	FHQ71B	FHQ100B	FHQ125B	FCQ35C8	FCQ50C8	FCQ60C8	FCQ71C8	FCQ100C8	FCQ125C8	FCQ140C8
Wired remote control	BRC1E51A/BRC1052 ⁴						BRC1E51A/BRC1052 ⁴						
Infrared remote control (heat pump)	BRC7EA63W						BRC7F532F ³						
Centralised remote control	DCS302C51						DCS302C51						
Unified ON/OFF control	DCS301B51						DCS301B51						
Schedule timer	DST301B51						DST301B51						
Adapter for wiring	KRP1BA54						-						
Adapter for external ON/OFF and monitoring/for electrical appendices	KRP4AA52 ¹						KRP1BA57/KRP4AA53 ^{1/4}						
Interface adapter for Sky Air® ²	DTA112BA51						-						
Installation box for adapter PCB	KRP1CA93						KRP1H98 ⁵						
Remote sensor	-		KRCS01-1A				KRCS01-4						
Remote ON/OFF, forced OFF	-		EKROROA				EKRORO2						
Electrical box with earth terminal (3 blocks)	-		KJB311AA				-						
Electrical box with earth terminal (2 blocks)	-		KJB212AA				KJB212AA						
Adapter for wiring (hour meter) ³	-		-				EKRP1C11 ^{1/5}						

Notes
(1) Installation box for adapter PCB is necessary (2) Interface adapter for Sky Air® series (DTA112BA51) is necessary (3) Possibility to connect an hour meter (field supply). This part should not be installed inside the equipment. (4) Included all the languages: English, German, French, Italian, Spanish, Dutch, Greek, Russian, Turkish, Portuguese (5) Option not available in combination with BYCQ140CGW1 (6) When using decoration panel BYCQ140CGW1, wiring adapter (hour meter) KRP1C12 must be used (7) When using decoration panel BYCQ140CGW, installation box for adapter PCB KRP1J98 must be used

INDOOR UNITS	FCQ35C8	FCQ50C8	FCQ60C8	FCQ71C8	FCQ100C8	FCQ125C8	FCQ140C8	FHQ35B	FHQ50B	FHQ60B	FHQ71B	FHQ100B	FHQ125B
Replacement long-life filter	KAFP551K160							KAFP501DA56	KAFP501DA80	KAFP501DA112	KAFP501DA160		
Drain-up kit	-							KDU50N60VE		KDU50N125VE			
L-type piping kit (upward direction)	-							KHFP5MA35	KHFP5MA63		KHFP5MA160		
Sealing member of air discharge outlet	KDBHQ55C140 ⁴							-					
Decoration panel	BYCQ140CW1 + BYCQ140CW1W ¹ + BYCQ140CGW1 ^{2,3}							-					
Fresh air intake kit (min. 20% fresh air)	KDDQ55C140 ⁴							-					

Notes
(1) The BYCQ140CW1W has white insulations. Be informed that information of dirt on white insulation is visibly stronger and that it is consequently not advised to install the BYCQ140CW1W decoration panel in environments exposed to concentrations of dirt. (2) To be able to control the BYCQ140CGW1, the controller BRC1E® is needed (3) The BYCQ140CGW1 is not compatible with mini-VRV®, multi and split non inverter outdoor units (4) Option not available in combination with BYCQ140CGW1

Ventilation accessories

OTHERS		VAM150FA	VAM250FA	VAM350FA	VAM500FA	VAM650FA	VAM800FA	VAM1000FA
High efficiency filter	-65%							
	-90%							
Replacement air filter		YAFF323F15	YAFF323F25	YAFF323F35	YAFF323F50	YAFF323F65		YAFF323F100
Replacement long life filter								
Filter chamber ¹								
Silencer	Nom. piping diameter				KDDM24A50	KDDM24A100		KDDM24A100
					ø200mm	ø250mm		
Duct adapter	Nom. piping diameter							
Drain pump kit								
Adapter for wiring								
Central drain pan								
Central drain plug								
Cool/heat selector								
Fixing box								

Notes

(1) Filter chamber has a suction-type flange. (Main unit does not).

Some options may not be usable due to the equipment installations conditions. Please confirm prior to ordering.

Some options may not be used in combination.

Operating sound may increase somewhat depending on the options used.

INDIVIDUAL CONTROL SYSTEMS	VAM-FA	VKM-GA(M)
Wired remote control	BRC1E51A / BRC1D52	BRC1E51A / BRC1D52
VAM wired remote control	BRC301B61	

CENTRALISED CONTROL SYSTEMS	VAM-FA	VKM-GA(M)
Centralised remote control	DCS302C51	DCS302C51
Unified ON/OFF control	DCS301B51	DCS301B51
Schedule timer	DST301B51	DST301B51

OTHERS	VAM-FA	VKM-GA(M)
Wiring adapter for electrical appendices (control and monitoring P1 P2)	KRP2A61	KRP2A61
Wiring adapter for electrical appendices (control and monitoring F1 F2)		
Adapter for humidifier (running ON signal output)	KRP50-2	KRP50-2
Adapter for heater control kit	BRP4A50	BRP4A50
Remote sensor		

Notes

(1) Cool/heat selector required for operation

(2) Do not connect the system to DIII-net devices (Intelligent controller, Intelligent Manager, LonWorks interface, BACnet interface...).

VAM1500FA	VAM2000FA	VKM50GA(M)	VKM80-100GA(M)	FXMQ125MF	FXMQ200-250MF	ERQ100-125AV1	ERW140AV1	ERQ125AW1	ERQ200-250AW1
		KAF241G80M	KAF241G100M	KAFJ372L140	KAFJ372L280				
				KAFJ373L140	KAFJ373L280				
YAFF323F65X2	YAFF323F100X2	KAF242G80M	KAF242G100M	KAFJ371L140	KAFJ371L280				
				KDJ3705L140	KDJ3705L280				
KDDM24A100X2			KDDM24B100						
ø250mm			ø250mm						
YDFA25A1									
ø250mm									
				KDU30L250VE					
				KRP1B61					
								KWC26B160	KWC26B280
						KKPJ5F180	KKPJ5F180		
						KRC19-26A6			
						KJB111A			

FXMQ-MF	EKEQDCB ²	EKEQDCB ²	EKEQMCB ²
BRC1E51A / BRC1D52	BRC1E51A / BRC1D52	BRC1E51A / BRC1D52 ¹	BRC1E51A / BRC1D52 ¹

FXMQ-MF	EKEQDCB ²	EKEQDCB ²	EKEQMCB ²
DCS302C51			
DCS301B51			
DST301B51			

FXMQ-MF	EKEQDCB ²	EKEQDCB ²	EKEQMCB ²
KRP2A61			
KRP4A51		KRP4A51	
		KRCS01-1	



DSnet

DESCRIPTION	REFERENCE	COMMENTS
DS-net adapter	DTA113B51	4 units can be connected per adapter, 40 units when 10 adapters are connected

Intelligent touch **Controller**

DESCRIPTION	REFERENCE	COMMENTS
Intelligent Touch Controller	DCS601CS1	2x64 units can be connected
Software	DCS002CS1	Power Proportional Distribution (PPD) software
	DCS004A51	E-mail / Web software
	DCS007A51	HTTP option
Hardware	DCS601A52	DIII NET-Plus adapter
Touch-Pen	1264009	Spare part n° of Touch-Pen for Intelligent Touch Controller
Interface adapters	KRP928A25	For connection to Split units
	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
	DAM602B52	128 indoor units per IPU
Software	IM3.XX	Up to 1,024 indoor units
Interface adapters	KRP928B2S	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
DIII Ai	DAM101A51	Outdoor temperature sensor
Digital input	DEC10151	Input contacts: 16 points
Digital input/output	DEC10251	Input contacts: 8 points; output contacts: 4 points
Power Proportional Distribution	DAM002A51	
ECO Mode	DAM003A51	
Web Acces Function	DAM004A51	

LonWorks Interface

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 Interface

DESCRIPTION	REFERENCE	COMMENTS
BACnet Gateway	DMS502A51	64 groups per Gateway
DIII board	DAM411B51	Extension of 2 x DIII lines (2 x 64) indoor units
Digital input/output	DAM412B51	For forced shutdown
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

BMS: BUILDING MANAGEMENT SYSTEM

DESCRIPTION		REFERENCE	COMMENTS
Contact / analog signal	Parallel interface - Basic unit	DPF201A51	enables ON/OFF command, operation and display of malfunction can be used in combination with up to 4 units.
	Temperature measurement units	DPF201A52	enables temperature measurement output for 4 groups; 0~5VDC.»
	Temperature setting units	DPF201A53	enables temperature setting input for 16 groups; 0~5VDC.»
	Unification adapter for computerised control	DCS302A52	used for combining of air conditioning control computer and central remote controller (ON/OFF, display)
	Wiring adapter for electrical appendices (1)	KRP2A51 KRP2A52	simultaneously controls air conditioning control computer and up to 64 groups of indoor units.
	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 DTA104A52	cooling/heating mode change over, demand control and low noise control are available between the plural outdoor units.	
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	

NOTES

[illegible]

[illegible]



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.



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

The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Daikin Europe N.V. has compiled the content of this leaflet to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this leaflet. All content is copyrighted by Daikin Europe N.V.

FSC

ECPEN11-200

Daikin products are distributed by: