

A photograph of a rooftop installation of numerous DAIKIN VRV outdoor units. The units are arranged in long, parallel rows on a flat roof. In the background, a cityscape is visible under a blue sky with scattered white clouds.

Catalogue
2017-2018
VRV

NEW
webbased
Xpress selection
software

Minimum running costs, maximum flexibility.
Fast installation, top reliability, perfect comfort.



Why choose Daikin

Our promise is to ensure that your customers can depend on Daikin for the ultimate in comfort, so that they are free to focus on their own working and home lives.

We promise to dedicate ourselves to technological excellence, a design focus and the highest quality standards so that your customers can trust and rely on the comfort we deliver.

Our promise to the planet is absolute. Our products are at the forefront of low energy consumption and we continuously innovate to reduce the environmental impact of HVACR solutions further.

We lead where others follow. We will continue our global leadership in HVACR solutions as our specialist expertise in all market sectors combined with 90 years' experience enable us to deliver added value in long-lasting relationships based on trust, respect and credibility.

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VRV IV sets the standard ... again



9 reasons why VRV is unique in the market

1 High energy efficiency

Variable Refrigerant Temperature leading to the highest seasonal efficiency

- Customize your VRV for best seasonal efficiency & comfort
- Up to 28% higher seasonal efficiency (ESEER)
- First *weather dependent* VRV

NEW

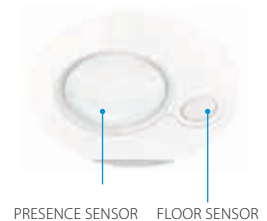
- › No more cold draught by supply of high outblow temperatures
- › Round flow cassette and concealed ceiling units with auto cleaning filter
- › Absolute credibility of data with Eurovent certification of air-cooled outdoor units
- › The best partner for your green project
 - A team of AP's across Europe who are there to help you
 - Maximise your BREEAM points with Daikin
 - Experience with many green and sustainable projects across Europe



2 Best comfort

Variable Refrigerant Temperature preventing cold draughts

- › True continuous heating, during defrost
- › 15 class units for small, well insulated rooms (cassette, wall, concealed ceiling models)
- › Low sound indoor and outdoor units
- › Presence and floor sensors direct the air flow away from persons, while ensuring an even temperature distribution



PRESENCE SENSOR FLOOR SENSOR

3 Top reliability

- › True technical cooling down to -20°C
- › Gas-cooled PCB
- › Most extensive testing before new units leave the factory
- › Widest support network and after sales service
- › All spare parts available in Europe
- › Preventive maintenance via i-Net

Did you know



- › Daikin is the first HVAC manufacturer to achieve BES6001 certificates for our products produced in the Belgian and Czech factory, including our Daikin Altherma, Split, Sky Air and VRV ranges
- › BES6001 certificates are awarded to companies who use socially and environmentally responsible suppliers
- › As the standard is recognised by BREEAM, specifiers and contractors can potentially gain additional BREEAM credits by choosing a certified product



DAIKIN EMURA



FXUQ



7-segment display



4 Market leading controls

- › Intelligent Touch manager, cost-effective mini BMS integrating all Daikin products
 - › Easy integrating in third party BMS via BACnet, LonWorks, Modbus, KNX
 - › Dedicated control solutions for applications such as technical cooling, shops, hotels, ...
- NEW**
- › Daikin Cloud Service offers services such as online control, energy monitoring, comparison of multiple sites

5 Stylish design products

- › Fully flat cassette, fully integrated in the ceiling
- › Daikin Emura, unique iconic design

6 Unique installation benefits

- › 'Invisible' VRV IV i-series
- › Automatic refrigerant charge and refrigerant containment check
- › 4-way blow ceiling suspended cassette (FXUQ)
- › Plug & play Daikin air handling unit
- › Total solution incl. low and high temperature hydro box, Biddle air curtains, etc.
- › VRV configurator software for the fastest commissioning, configuration and customisation
- › Outdoor unit display for quick on-site settings
- › Free combination of outdoor units to meet installation space or efficiency requirements
- › Compact units saving on installation space

7 Inventor and market leader of VRV systems since 1982

- › Over 90 years of expertise in heat pumps
- › Designed for and produced in Europe

8 Unique outdoor unit range covering all applications and climate conditions in design

9 VRV IV technologies

Variable refrigerant temperature

The biggest leap since the inverter compressor

- › Seasonal efficiency increased by 28%
- › The first weather accommodating control on the market
- › Customer comfort is assured thanks to higher outblow temperatures (preventing cold draughts)

Continous heating

Real continuous heating providing heating even during defrost

- › Continuous indoor comfort ensured by the heat accumulating element or alternate defrost
- › An innovative alternative to traditional heating systems

VRV configurator

Software for simplified commissioning, configuration and customisation

- › Graphical interface
- › Manage systems over multiple sites in exactly the same way
- › Retrieve initial settings



VRV IV

Heat pump
Heat recovery
Replacement
Water cooled



In the spotlight

BIM: Building Information Modelling

What is BIM?

BIM is an intelligent model-based process that provides insight to help you plan, design, construct and manage buildings and infrastructure

Collaboration and clash control

BIM uses a 3D model to provide the right information, to the right people, at the right time. This process improves efficiency throughout the design and building phases and increases savings by discovering clashes during the design phase, rather than later on during the building phase.

Download the Daikin BIM objects here:

<http://bimobject.com/en/product/?freetext=daikin>

Daikin and BIM – putting you ahead of competition

Daikin is among the first to supply a full library of BIM objects for its VRV products.

- ✓ Installers get an edge over competition where customers demand for BIM to be used
- ✓ Consultants have direct access to the base data through the objects, to design the system and see how our solutions can fit your project
- ✓ Customers have easy access to latest relevant information needed to maintain and manage the installation.



Green building solutions **BREEAM**[®]

Today's challenges

- ✓ In the near future the majority of new building projects in Europe are expected to be green
- ✓ 93% percent of developers & investors consider green certification important

Visit the minisite

<http://www.daikineurope.com/minisite/sustainability/index.jsp>

Daikin: the best partner for your green project

- ✓ We have a team of BREEAM accredited professionals (AP's) at your service that support you and your customer throughout the project
- ✓ Daikin offers solutions that maximise your BREEAM and LEED scores with heat recovery, Variable Refrigerant Temperature and i-Net.
- ✓ Daikin has successfully participated in many green and sustainable projects across Europe

World's first HVAC manufacturer to receive BES certificate

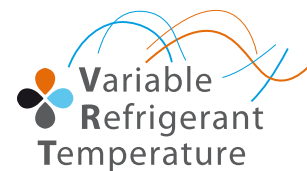
Case: Velocity, UK

- ✓ Energy performance certificate B
- ✓ VRV heat recovery ensures an energy cost of 9 euro/m³ compared to a typical cost of 29 euro/m³

€8.8/m² energy cost
vs €29/m² for a CIBSE typical office



Innovative outdoor units



VRV IV i-series

VRV IV heat pumps for indoor installation

You can install highly efficient, reliable Daikin air conditioning systems in the most demanding locations while remaining invisible from street level.

More details on page 62

Invisible

- ✓ Only the grilles are visible
- ✓ Seamless integration into surrounding architecture
- ✓ Low operation sound

Intelligent

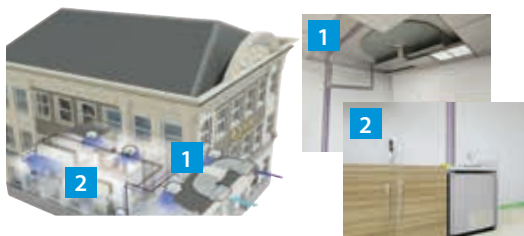
- ✓ Patented V-shape heat exchanger for the most compact unit ever
- ✓ Connectable to all VRV indoor units
- ✓ Total solution when combined with ventilation units, Biddle air curtains and controls

Intuitive

- ✓ Total flexibility as the outdoor unit is split up in 2 parts
- ✓ Easy and quick to transport and install
- ✓ Easy servicability, all components can be easily reached



NEW 8HP unit



unique patented concept

Split outdoor unit system:
1 heat exchanger unit installed in false ceiling
2 compressor unit installed in kitchen

VRV IV W+ series

Air-to-water heat pump

The new VRV IV W+ series bring a whole new range of features to increase your flexibility and make commissioning easier.

More flexibility

- ✓ Mixed connection of hydroboxes and VRV indoor units
- ✓ Connects to VRV or stylish indoor units such as Daikin Emura, Nexura, ...
- ✓ Most compact casing in the market
- ✓ No heat dissipation allows installation in non-ventilated indoor spaces

Unique zero heat dissipation principle

- ✓ No need for ventilation or cooling in the technical room
- ✓ Control heat dissipation to achieve maximum efficiency: set target technical room temperature and unit regulates actual heat dissipation



Easier commissioning & servicing

- ✓ 7 segment display
- ✓ 5 output signals allowing external control of
 - ON-OFF (e.g. compressor)
 - Operation mode (cooling / heating)
 - Limit of capacity
 - Error signal
- ✓ Rotating switchbox



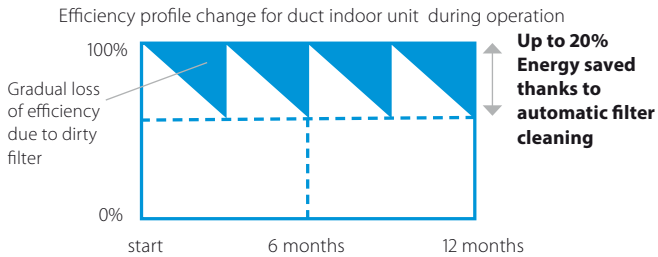
Most compact footprint in the market

Extension of the range: from 8 up to 42 HP

Unique auto cleaning technology

Reduce running costs

- › Automatic filter cleaning ensures low maintenance costs because the filter is always clean



Minimal time required for filter cleaning

- › The dust box can be emptied with a vacuum cleaner for fast and easy cleaning
- › No more dirty ceilings

Unique technology

- › Unique and innovative filter technology inspired by the Daikin auto cleaning cassette



Improved indoor air quality

- › Optimum airflow eliminates draft and insulates sound

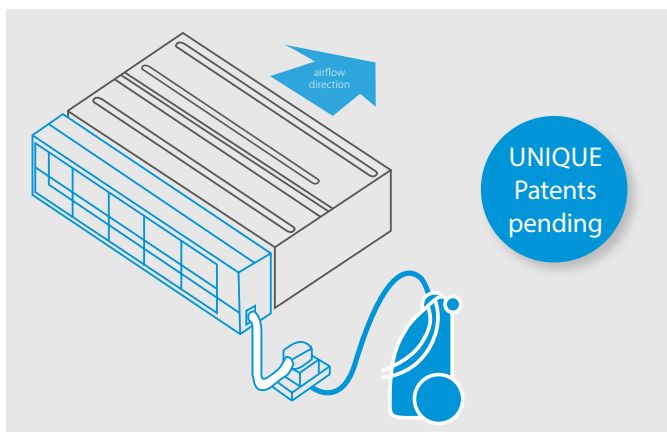
How does it work?

- 1 Scheduled automatic filter cleaning
- 2 Dust collects in a dust box that's integrated into the unit
- 3 The dust can easily be removed with a vacuum cleaner

Concealed ceiling units

- › Ideal for hotels and residential applications
- › Cleaning team /owner can clean the filter

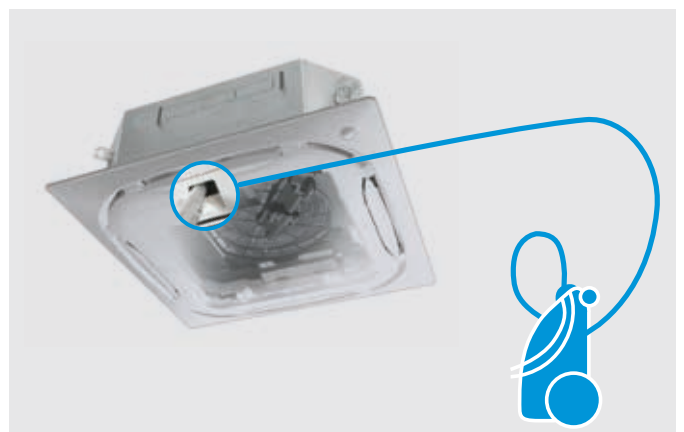
More details on page 112



Round flow cassette

- › Ideal for retail
- › Staff/owner can clean the filter
- › No need to use a ladder to reach the unit

More details on page 102



Combination table

	Split / Sky Air				VRV							
	FDXM-F3				FXDQ-A3							
	25	35	50	60	15	20	25	32	40	50	63	
BAE20A62	•	•			•	•	•	•				
BAE20A82									•	•		
BAE20A102			•	•								•

	FXFQ-A	FCQG-F	FCQHG-F	FCAHG-F
BYCQ140DG	•	•	•	•
BYCQ140DGF (fine mesh)	•	•	•	•

*Note: blue cells combination to be confirmed

The quick & quality way to upgrade R-22 and R-407C systems

Replacement VRV increases your profit

More details on page 79

- › Less installation time compared to a full replacement allows you to tackle more projects making it more profitable
- › Lower installation cost improves your competitive edge
- › Replace non-Daikin systems
- › Automatic charging and pipe cleaning ensures a quality replacement

Compare installation steps

Conventional solution

- 1 Recover refrigerant
- 2 Remove units
- 3 Remove refrigerant pipes
- 4 Install new piping and wiring
- 5 Install new units
- 6 Leak test
- 7 Vacuum drying
- 8 Refrigerant charging
- 9 Collect contamination
- 10 Test operation

VRV-Q

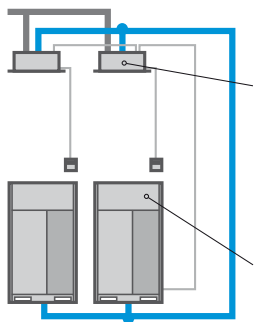
- 1 Recover refrigerant
 - 2 Remove units
- Re-use existing piping and wiring
- 3 Install new units
 - 4 Leak test
 - 5 Vacuum drying
- 6 Automatic refrigerant charging, cleaning and testing



Up to 45% shorter installation time

These benefits will convince your customer

No interruption of daily business

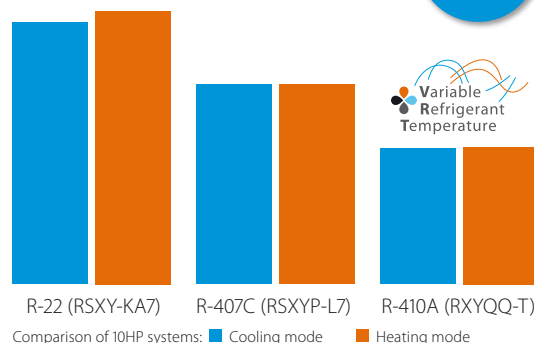


The Daikin low-cost upgrade solution

- ! **Replace indoor units and BS boxes**
Contact your local dealer to check compatibility in case you need to keep the indoor units.
- ! **Replace outdoor units**

Drastically improve your efficiency, comfort and reliability

Up to 48% less consumption



Pre-sized fresh air solution

Select your air handling unit like any other VRV indoor unit!

More details on page 154

Easy selection

- › 16 pre-selected combinations – to cover all fresh air needs in Europe
- › The right outdoor unit and the necessary connection kits to the coil of the AHU are factory mounted and configured.
- › Total solution – Daikin provides the complete solution


Fast quotation

- › Select as any other unit in Xpress selection software and show the solution in the report

Easy ordering

- › AHU and outdoor unit are automatically selected in VRV xpress

Easy installation

- › Same pipe diameter from AHU to outdoor unit
- › Install and connect like any other VRV indoor unit
- › Direct integration in 



Order AHU and outdoor in one step

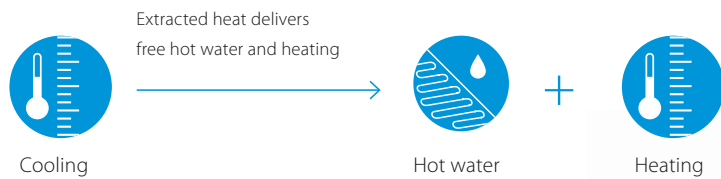
Which VRV

system offers me the best solution?

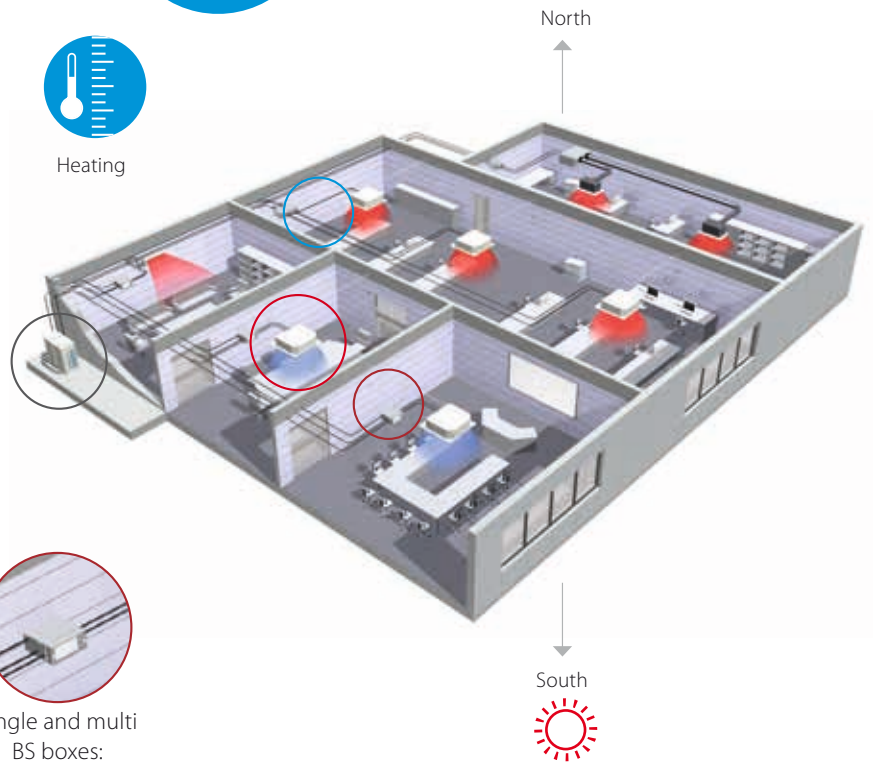
Heat recovery or heat pump?

VRV Heat recovery

Additional credits for BREAM certificate



- › Simultaneous heating **AND** cooling from one system
- › "Free" heating and hot water production by transferring heat from areas requiring cooling
- › Maximum individual comfort in all areas
- › Technical cooling down to -20°C
- › Running costs of a water-based fan coil unit can be 40 to 72% higher compared to a VRV heat recovery system



Components:

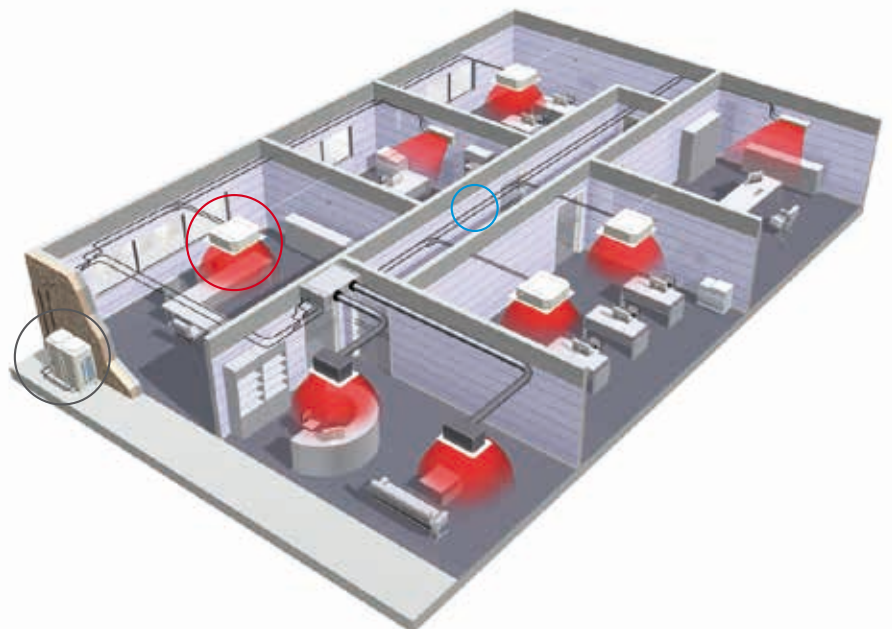
- Outdoor unit
- Indoor unit
- 3-pipe refrigerant piping
- Single and multi BS boxes: allows the individual switching of indoor units between heating and cooling

VRV Heat pump

- › For either heating **OR** cooling operation from one system

Components:

- Outdoor unit
- Indoor unit
- 2-pipe refrigerant piping

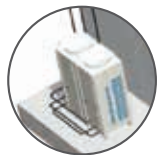


Air cooled or water cooled?

Air Cooled

- > Fast and easy to install; no need for additional components
- > Low maintenance costs
- > Operation range from -25°C~52°C
- > Can be installed both outdoors and indoors
- > Up to 54HP capacity for one system

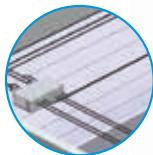
Components:



Outdoor unit



Indoor unit



Refrigerant piping

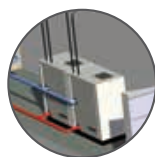


Water Cooled

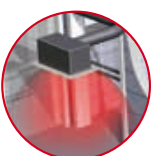
- > Suitable for high rise and large buildings because of the nearly unlimited possibilities of water piping
- > Not affected by outdoor temperature/climate conditions
- > Reduce CO₂ emissions thanks to the use of geothermal energy as a renewable energy source
- > Allows heat recovery in the entire building thanks to the storage of energy in the water circuit
- > Lower refrigerant levels thanks to the limited distance between outdoor and indoor units

Additional credits for BREEAM certificate

Components:



Outdoor unit



Indoor unit



Refrigerant piping



(Geothermal) water loop



Geothermal application

Which applications?

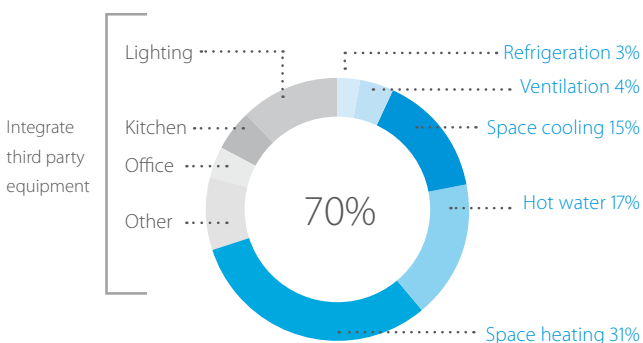


Typically, many buildings today rely on several separate systems for heating, cooling, air curtain heating and hot water. As a result energy is wasted. To provide a much more efficient alternative, VRV technology has been developed into a total solution managing up to 70% of a buildings energy consumption giving large potential to cost saving.

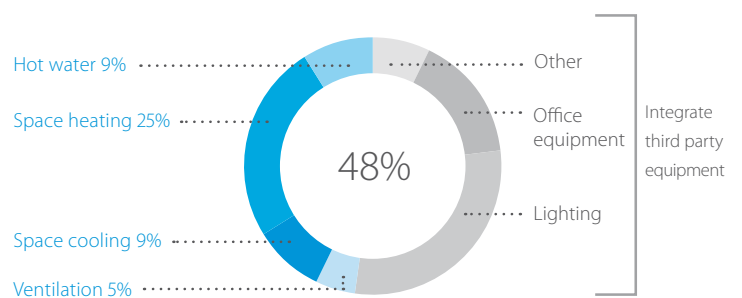
- › **Heating and cooling** for year round comfort
- › **Hot water** for efficient production of hot water
- › **Underfloor heating /cooling** for efficient space heating/cooling
- › **Ventilation** for high quality environments
- › **Air curtains** for optimum air separation
- › **Controls** for maximum operating efficiency
- › **Cooling** for server rooms, telecom shelters, ... via VRV heat recovery or Sky Air units
- › **Refrigeration** via our VRV based refrigeration units

Combine up to 70% of your building's energy consumption

Average hotel energy consumption



Average office energy consumption



One system, multiple applications for hotels, offices, retail, home ...

Heating and cooling



- › Combine VRV indoor units with other stylish indoor units in one system
- › New round flow cassette sets the standard for efficiency and comfort
- › Extensive range of models and capacities for optimal selection

Intelligent control systems



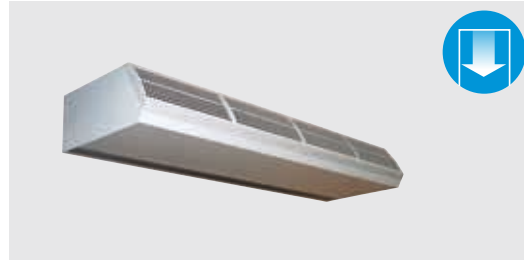
- › Mini BMS which connects Daikin and third-party equipment
- › Integrate intelligent control solutions with energy management tools to reduce running costs

Low-temperature hydrobox



- › Highly efficient space heating through:
 - Underfloor heating
 - Low temperature radiators
 - AHU water heat exchangers
- › Hot water from 25 °C to 45 °C
- › Cold water from +5°C to +20°C

Biddle air curtain



- › Payback time less than 1.5 years compared to electrical air curtain
- › A highly efficient solution for doorway climate separation

High temperature hydrobox



- › Efficient hot water production for:
 - Showers
 - Sinks
 - Tapwater for cleaning
- › Hot water from 25 °C to 80 °C
- › Connectable to VRV heat recovery and Water - cooled VRV

Ventilation



- › Widest range in DX ventilation – from small heat recovery ventilation to large scale air handling units
- › Provides a fresh, healthy and comfortable environment

NEW



VRV for offices and banks

Efficiency in the workplace



Efficient building and facilities management are key to minimising operational costs

Our solutions for offices:

- › Significantly reduced costs for hot water and heating by re-using heat recovered from areas requiring cooling
- › Unique cassette integrating fully flat into architectural ceilings
- › Intelligent sensors
 - maximise efficiency by raising the indoor set point or switching off the unit if there is nobody in the room
 - maximise comfort by directing the air flow away from people to avoid cold draughts
- › A complete Daikin mini Building Energy Management System (BEMS), with the Intelligent Touch Manager
- › Plug & play connection to air handling units for a healthier office atmosphere
- › Hot water production for sanitary use (e.g. kitchens) and space heating (e.g. underfloor loops)
- › Truly reliable technical cooling down to -20°C, including duty/standby function

VRV for hotels

Hospitality with economy



A hotel's reputation depends on how welcome and comfortable guests feel during their stay. Yet at the same time, hotel owners must maintain complete control of their operating costs and energy consumption.

Our solutions for hotels:

- › Low cost heating and hot water by recovering heat from areas requiring cooling
- › The perfect personal environment for guests by simultaneously heating spaces while cooling others
- › Flexible installation: the outdoor unit can be installed outdoors to maximise hospitality space or indoors to minimise external space or noise in city centres
- › Concealed ceiling units developed for small, well-insulated rooms such as hotel bedrooms, offering very low sound levels ensuring a good night's rest
- › Smart energy management via Intelligent Touch Manager puts the hotel owner in full control of energy costs
- › Intelligent and user-friendly hotel room controllers change the set point automatically when a guest leaves the room or opens the window
- › Easy integration in hotel booking software
- › Hot water production for bathrooms, underfloor heating and radiators up to 80°C

Check on
YouTube

www.youtube.com/DaikinEurope

Hotel



Bank / Retail



Check on
YouTube

www.youtube.com/DaikinEurope



VRV for retail

Reducing retail costs



Retailers are under pressure to reduce both store development costs and running costs. That is why affordable, energy-efficient solutions are vital for minimising lifetime costs, while ensuring compliance with the latest regulations.

Our retail solutions:

- > Compact inverter heat pump technology
- > Flexible installation: the outdoor unit can be installed outdoors to maximise commercial space or indoors to minimise external space or noise in city centres
- > Unique round flow cassettes with autocleaning panel saving up to 50% of energy use compared to standard cassette units
- > Intuitive touch screen intelligent Tablet Controller allowing multi site control via the Daikin Cloud Service
- > Easy to use remote control with lock-key function to avoid improper use
- > Individual control of each indoor unit or shop zone
- > Savings on running cost via pre/post trade modes, limiting energy use by lights, air conditioning, ...
- > The most efficient open-door solution with Biddle air curtains

VRV for residential use

There is no place like home



A cost effective, low energy consumption heat pump system for home owners, offering maximum comfort

Our residential solutions:

- > Lower CO₂ emissions compared to traditional heating systems
- > Compact outdoor unit design with a low sound level
- > Whisper-quiet indoor units down to 19dBA
- > Daikin Emura, iconic design wall mounted unit
- > Unique Nexura floor standing unit offering the feel of a radiator with the efficiency of a heat pump
- > Units to be concealed in the wall or ceiling to make them completely unnoticed
- > User-friendly, intuitive touch control, controlling your entire shop including lights, sensors, ...
- > Manage and control multiple shops from a central location via the Daikin Cloud Service
- > Up to 9 indoor units that can be connected to one outdoor unit

Want to know more about our commercial solutions?



Check on
YouTube

www.youtube.com/DaikinEurope

Residential





VRV IV standard & technologies

Our new VRV IV systems set pioneering standards in all-round climate comfort performance. Total design simplicity, offering rapid installation, full flexibility as well as absolute efficiency and comfort. Find out about all these revolutionary changes at

www.daikineurope.com/vrviv

VRV IV =

3 revolutionary standards

- › Variable Refrigerant Temperature
- › Continuous comfort during defrost
- › VRV configurator

+ unique VRV IV core technologies

- › Newly developed inverter compressor
- › Refrigerant-cooled PCB
- › 4-side heat exchanger
- › Predictive control
- › Outer rotor DC fan motor

Unique variable refrigerant temperature



The biggest leap since the inverter compressor

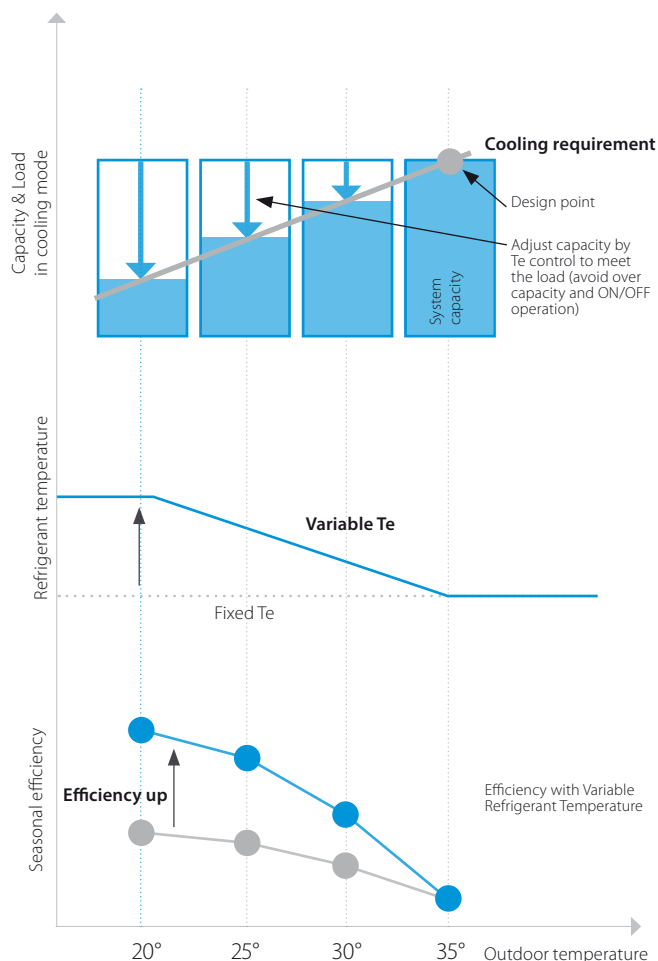
Thanks to its revolutionary variable refrigerant temperature technology (VRT), VRV IV continuously adjusts both the inverter compressor speed and the refrigerant temperature in cooling AND heating, providing the necessary capacity to meet the building load with the highest efficiency at all times!

- › **Seasonal efficiency increased by 28%**
- › **The first weather accommodating control on the market**
- › **Customer comfort is assured thanks to higher outdoor temperatures (preventing cold draughts)**

The colder it gets the lower the cooling need of the building

The lower the capacity need, the higher the refrigerant temperature can be

The higher the refrigerant temperature, the higher the efficiency



How does it work?

VRV standard

Capacity is controlled only with the variation of the inverter compressor

Daikin VRV IV

Variable Refrigerant Temperature control for energy saving in partial load condition.

The capacity is controlled by the inverter compressor and variation of the evaporating (Te) and condensing (Tc) temperature of the refrigerant in order to achieve the highest seasonal efficiency.

- UNIQUE** and variation of the evaporating (Te) and condensing (Tc) temperature of the refrigerant in order to achieve the highest seasonal efficiency.
- UNIQUE** Evaporating temperature can vary between 3 and 16° which is the widest on the market.



Calculate the benefit of variable refrigerant temperature for your project in our seasonal solutions calculator:

<http://extranet.daikineurope.com/en/software/downloads/solutions-seasonal-simulator/default.jsp>

Success story

Real test: up to 46% less energy consumed

A field trial was carried out in a shop of a fashion chain in Germany and showed that the innovative Daikin VRV IV delivers dramatically better energy efficiency compared with previous models.

The trial results showed that the new VRV IV system consumed up to 60% less energy than the VRV III system, particularly during cooling. Overall energy savings during heating averaged 20%.

How effective is the VRV IV heat pump technology?

The trial demonstrated that by using air, an infinitely renewable and free energy source, the VRV IV system provides a complete and environmentally sustainable solution for heating, cooling and ventilation in commercial applications. The trial also showed that only by monitoring climate control systems carefully and intelligently businesses can identify and control energy waste. This is a service which Daikin also offers.

8 Different modes to maximise efficiency and comfort

For maximum energy efficiency and customer satisfaction, the outdoor unit needs to adapt the evaporating/condensing temperature at the optimum point for the application.



Check on
YouTube

<https://www.youtube.com/DaikinEurope>

How to set the different modes?

6
patents

Set up the main operation mode of the system	Define how the system reacts to changing loads	
<p>Step 1</p> <p>Automatic* Evaporating AND condensing temperature automatically selected according to ambient temperature</p> <p>Quick reaction speed Top efficiency</p> <p>The perfect balance: Achieves top efficiency throughout the year, reacts quickly on the hottest days</p>	<p>Step 2</p> <p>Powerful</p> <p>Quick</p> <p>Mild *</p>	<p>Where a quick increase of load is expected such as conference rooms. Quick reaction speed to changing load has priority, with temporarily colder outblow as a result.</p> <p>Same as above but slower response than the powerful mode.</p> <p>This mode would be suitable for most office applications and it is the factory set mode. The perfect balance: Slower reaction speed with top efficiency</p>
<p>High sensible Target Te can be selected between 7°C to 11°C</p> <p>Quick reaction speed Top efficiency</p> <p>Year round top efficiency</p>	<p>Powerful</p> <p>Quick</p> <p>Mild</p> <p>Eco</p>	<p>Gives customer choice for fixing coil temperature which avoids cold draughts. A quick reaction speed to changing load has priority, with temporarily colder outblow as a result.</p> <p>Same as above but slower response.</p> <p>The air off temperature remains fairly constant. Suitable for low ceiling rooms.</p> <p>Coil temperature would not change due to fluctuating load. Suitable for computer rooms. Suitable for low ceiling rooms.</p>
<p>Basic Current VRF standard</p>	<p>No submodes</p>	<p>This is how most other VRF systems work and can be used for all general type of applications. Suitable for computer rooms. Suitable for low ceiling rooms.</p>

* Factory setting

	VRV III 20HP (2 modules)	VRV IV 18HP (1 module)
Period	March 2012 - February 2013	March 2013 - February 2014
Avg (kWh/Month)	2.797	1.502
Total (kWh)	33.562	18.023
Total (€)	6.041	3.244
Yearly (operation cost/m² (€/m²))	9,9	5,3
46% savings = € 2.797		

Measured data

Fashion store Unterhaching (Germany)

- › Floor space: 607m²
- › Energy cost: 0,18 €/kWh
- › System taken into account for consumption:
 - VRV IV heat pump with continuous heating
 - Round flow cassettes (without auto cleaning panel)
 - VAM for ventilation (2x VAM2000)
 - Biddle Air curtain.

Real continuous heating during defrost mode

VRV IV continues to provide heating even when in defrost mode, providing an answer to any perceived disadvantages of specifying a heat pump as a monovalent heating system.

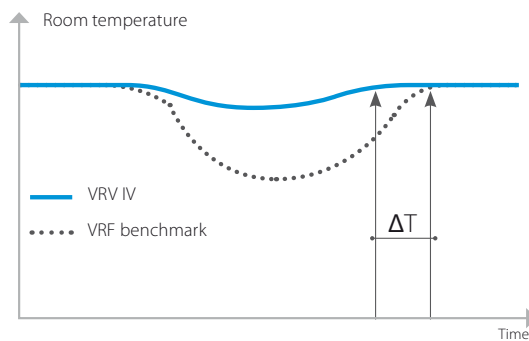
- › Continuous indoor comfort ensured by the heat accumulating element and alternate defrost
- › An innovative alternative to traditional heating systems



Check on YouTube

<https://www.youtube.com/DaikinEurope>

Heat pumps are known for their high energy efficiency in heating, but frost is accumulated on their heat exchanger during heating operation and this must be melted periodically using a defrost function that reverses the refrigeration cycle. This causes a temporary temperature drop and reduced comfort levels inside the building. Defrosting can take over 10 minutes (depending on the size of the system) and occurs mostly between -7 and +7°C when humidity levels in the air are high. Humidity freezes on the coil, resulting firstly in poor performance and eventually low comfort levels. The VRV IV has changed the heating paradigm by providing heat even during defrost operation thus diminishing the temperature drop indoors and providing comfort at all times.

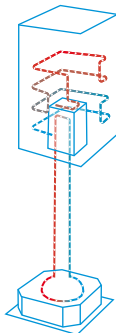


How does it work?

UNIQUE Heat accumulating element

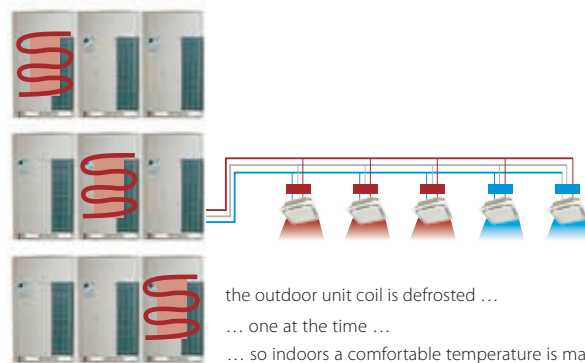
For the VRV IV heat pump single unit systems a unique heat-accumulating element is used. This element, based upon phase change material, provides the energy to defrost the outdoor unit.

- The outdoor unit coil is defrosted ...
- ... with the energy stored in the heat accumulating element ...
- ... while indoors a comfortable temperature is maintained.



Alternate defrost

On all our multi unit systems only 1 outdoor coil is defrosted at a time, ensuring continuous comfort during the whole process.



Available on:

Heat pump
RYYQ8-20T(8)

Water cooled VRV has no defrost cycles

Available on:

Heat pump	Heat recovery	Replacement VRV
RYYQ16-54T(8)	REYQ10-54T	RXYQQ16-42T
RXYQ16-54T(8)		RQCEQ280-848P

VRV Configurator

Software for simplified commissioning, configuration and customisation

- › Graphical interface
- › Manage systems over multiple sites in exactly the same way
- › Retrieve initial settings



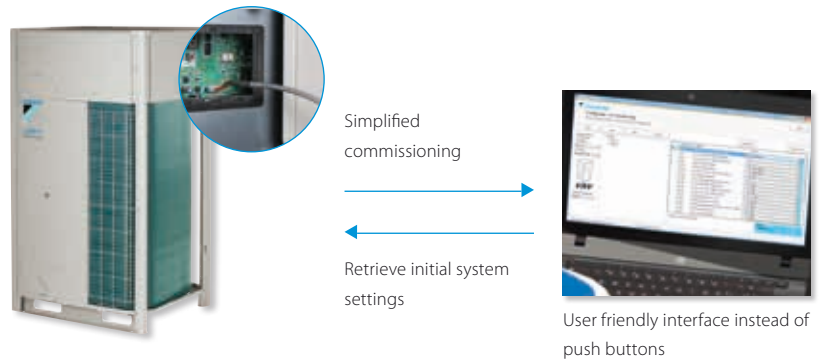
Check on
YouTube

<https://www.youtube.com/DaikinEurope>

Configurator software for simplified commissioning

The VRV configurator is an advanced software solution that allows for easy system configuration and commissioning:

- › less time is required on the roof configuring the outdoor unit
- › multiple systems at different sites can be managed in exactly the same way, thus offering simplified commissioning for key accounts
- › initial settings on the outdoor unit can be easily retrieved.



7-segment display

for quick and accurate error diagnosis

Outdoor unit display for quick on-site settings and easy read out of errors together with the indication of service parameters for checking basic functions.

- › easy-to-read error report
- › clear menu indicating quick and easy on-site settings
- › indication of basic service parameters to quickly check basic functions: high pressure, low pressure, frequency and operation time history of compressors, temperature of discharge/suction pipe.
- › No need to unmount the big front panel of the unit thanks to the service access

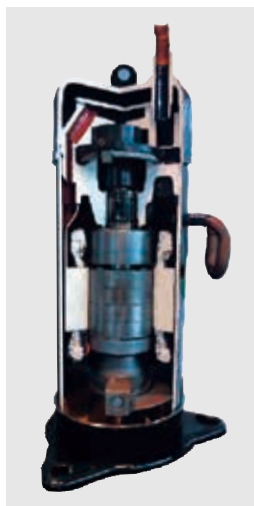


3 digit 7-segment display

Available on:

Heat recovery	Heat pump	Replacement VRV
REYQ-T	RYYQ-T(8)	RXYQQ-T
	RXYQ-T(8)	
	RXYSCQ-TV1 (only configurator, no 7 segment display)	
	RXYSQ-TVI/TY1 (only configurator, no 7 segment display)	
	SB.RKXYQ-T (only configurator, no 7 segment display)	

Unique VRV IV core technologies



Newly developed compressor

37 patents

Full inverter

- › Enabling variable refrigerant temperature and low start-up currents
- › Stepless capacity control

Reluctance brushless DC motor

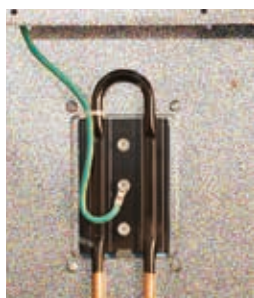
- › increased efficiency compared to AC motors by simultaneously using normal and reluctance torque
- › Powerful neodymium magnets efficiently generate high torque
- › High-pressure oil reduces thrust losses

High efficiency 6-pole motor

- › 50% stronger magnetic field and higher rotation efficiency

Thixocasting process

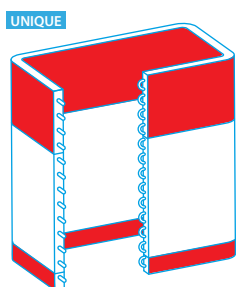
- › Compression volume is increased by 50% thanks to a new high-durability material cast in a semi-molten state



Refrigerant-cooled PCB

- › Reliable cooling because it is not influenced by ambient air temperature
- › Smaller switchbox for smoother air flow through the heat exchanger increasing heat exchange efficiency with 5%

6 patents



4-sided, 3-row heat exchanger

- › Heat exchange surface up to 50% larger (up to 235m²), leading to 30% more efficiency

10 patents

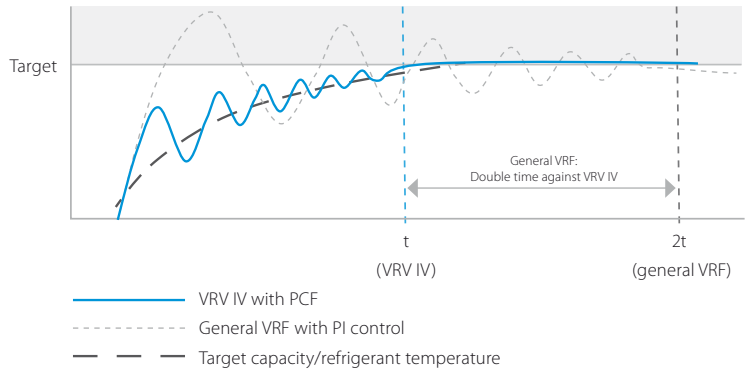


UNIQUE

Predictive Control Function (PCF)

- › Reaching targets faster
- › Reaching targets without overshooting, so there is no waste, resulting in improved efficiency

The large number of Daikin systems already in operation and which are monitored by our i-Net software put us in the unique position of being able to analyse this data and develop the predictive control function.



VRV IV: PCF

Compressor works with predictive data for the control

- › result: quick convergence to the target temperature and reduction of waste operation of the compressor

Half time against general VRF

General VRF: Pi control

Compressor works with feedback only for the control

- › result: waste operation and longer time before reaching target set point

DC fan motor

UNIQUE

Outer rotor DC motor for higher efficiency

- › Larger rotor diameter results in greater force for the same magnetic field, leading to better efficiency
- › Better control, resulting in more fan steps to match the actual capacity

Sine wave DC inverter

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

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.

Conventional motor with inner rotor



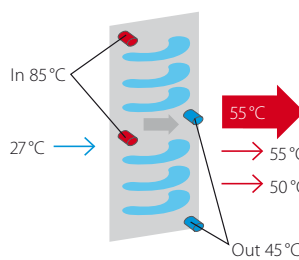
Daikin outer rotor



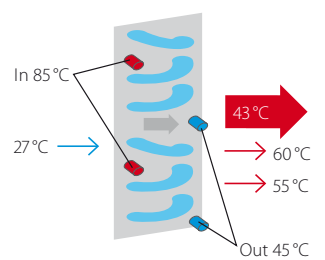
E-Pass heat exchanger

Optimising the heat exchanger's path layout prevents heat being transferred from the overheated gas section to the sub-cooled liquid section which is a more efficient way to use the heat exchanger.

Standard heat exchanger



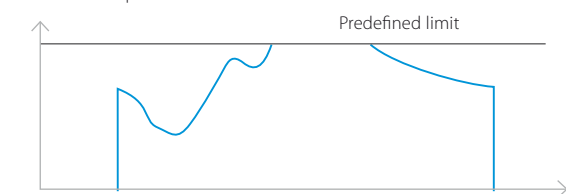
e-Pass heat exchanger



I-demand function

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

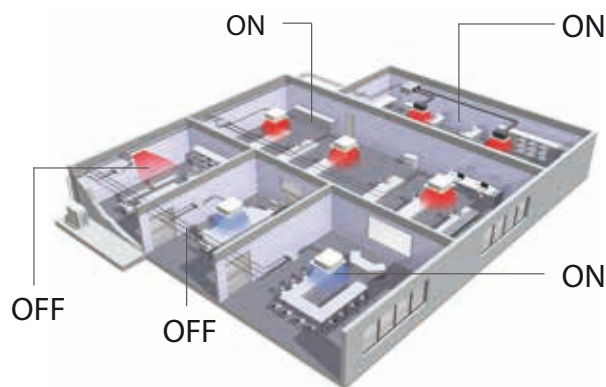
Power consumption



- Drastically reducing running costs
- Top reliability
- Up to 6 times greater resistance against corrosion

Precise zone control

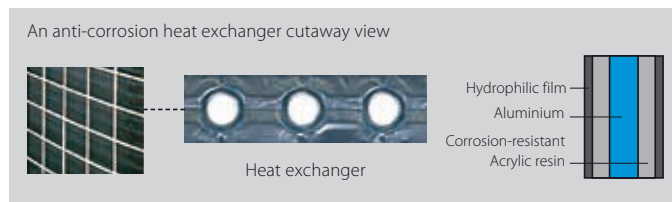
VRV systems have low running costs because it permits each zone to be controlled individually. That is, only those rooms that require air conditioning will be heated or cooled, while the system can be shut down completely in rooms where no air conditioning is required.



Anti Corrosion Treatment

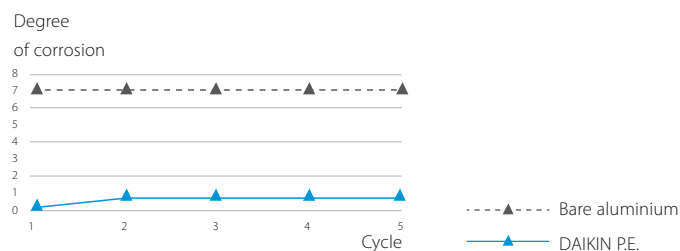
Special anti corrosion treatment of the heat exchanger provides 5 to 6 times greater resistance against acid rain and salt corrosion.

The provision of rust proof steel sheet on the underside of the unit gives additional protection.



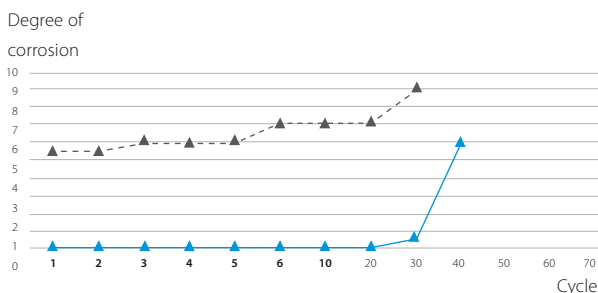
Performed tests:

- › 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



All inverter compressors

All inverter control compressors allow to control the refrigerant volume almost stepless. In this way the capacity perfectly matches the different loads in every room avoiding unnecessary energy use.

Additionally all inverter compressors also allow precise refrigerant temperature control, automatically adapting your VRV to your building and climate requirements, reducing running costs with 28%.

Even more, having no ON/OFF compressors, means total absence of high starting currents, which are being more and more limited by the grid operators and power suppliers.

Duty Cycling extends operation life

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

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).

Top quality Only brazed connections

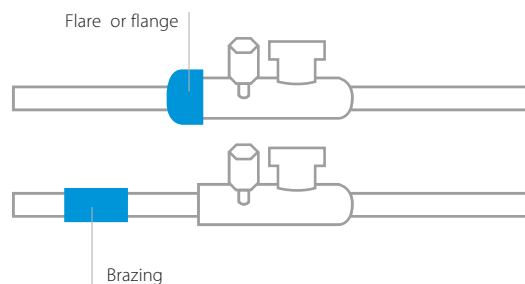
All flange and flare connections inside the unit have been replaced by brazing connections to ensure improved refrigerant containment. Also the connection of the outdoor in the main pipe is brazed.

ALL

INVERTER



Only one power supply



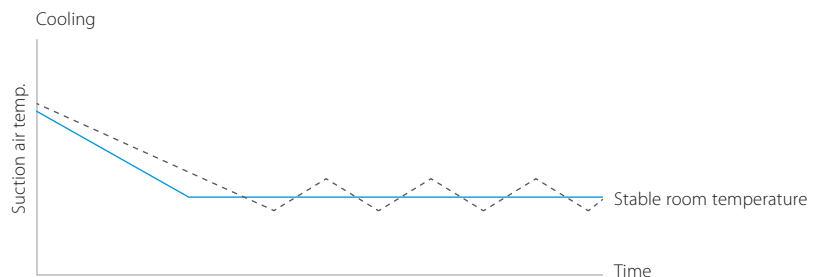
• Comfort guaranteed at all times

Smart Control brings comfort

Stable room temperature

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

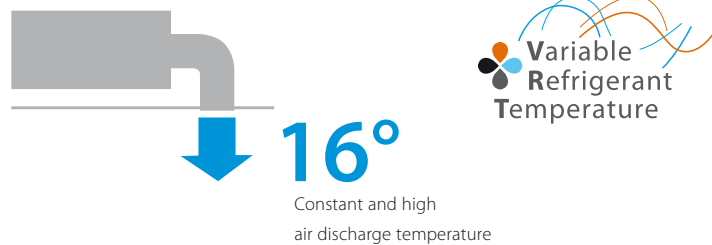
Note: The graph shows the data, measured in a test room assuming actual heating load. The thermostat can control stable room temperature at $\pm 0.5^{\circ}\text{C}$ from set point.



— VRV SERIES (DAIKIN indoor unit (PID controlled))
 - - - ON/OFF controlled indoor unit (2.5HP)

No more cold draught

Automatic or manual adjustment of refrigerant temperature leads to higher outblow temperatures which avoid the cold draught coming from the indoor unit.



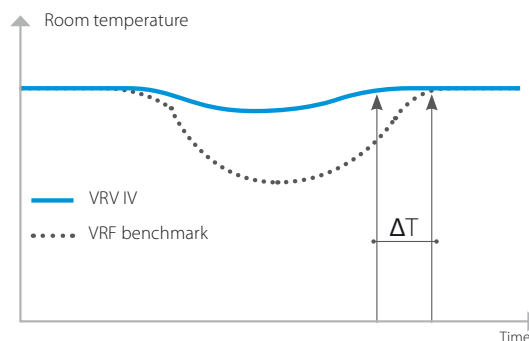
Available on all VRV IV units

Continuous heating

During defrost

- > Indoor comfort not effected via the unique heat accumulating element or alternate defrost
- > The best alternative to traditional heating systems

Available on REYQ-T, RYYQ-T, RXYQ-T(9) and RXYQQ-T



Back-up function

In the event of a compressor malfunction another compressor or outdoor unit will take over in order to maintain 8 hour interim capacity, allowing time for maintenance or repair while comfort remains guaranteed.



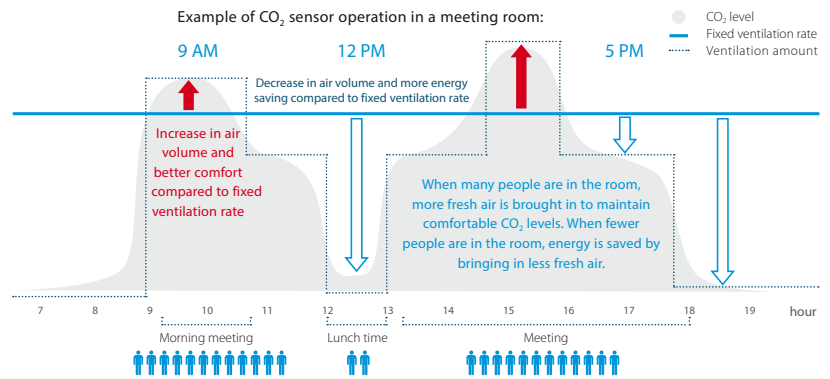
Single outdoor unit with multiple compressors



Multi outdoor unit system

Prevent energy losses from over-ventilation with CO₂ sensor

Enough fresh air is needed to create an enjoyable environment, but ventilating constantly is leading to energy waste. Therefore an optional CO₂ sensor can be installed which switches off the ventilation system when there is enough fresh air in the room, thus saving energy.



Low indoor unit operation sound level

Daikin indoor units have very low sound operation levels, down to 19dB(A), making them ideal for sound sensitive areas as hotel bedrooms, etc...

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:



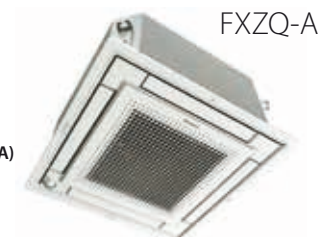
19dB(A)

Connectable to VRV IV, VRV IV S-series and VRV IV W-series*

*VRV IV W-series on special order. Consult your local sales representative for more information



25.5dB(A)



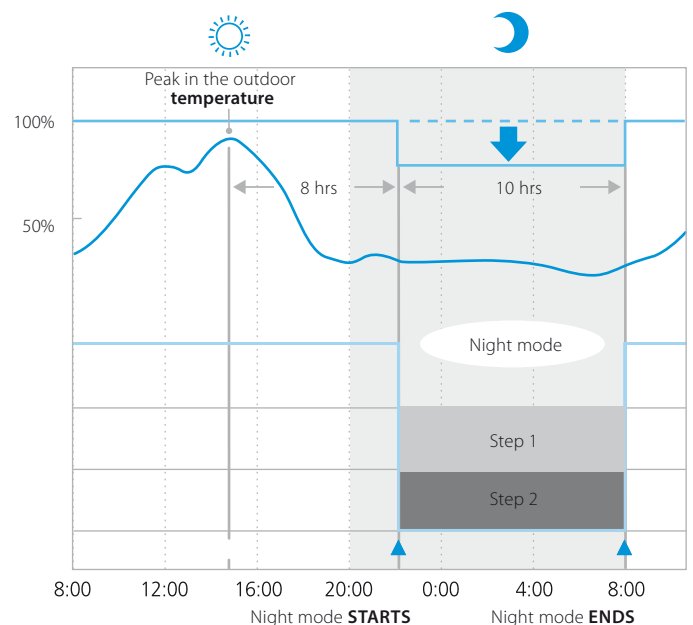
Connectable to all VRV heat pumps

Night quiet mode

For areas where there are stringent limitations to sound levels, the outdoor unit sound level can be automatically reduced to meet the requirement.

- Capacity* %
- Load %
- Operation Sound dBA

To manually set the time for low noise operation you can use the external control adaptor DTA104A61/62/53.



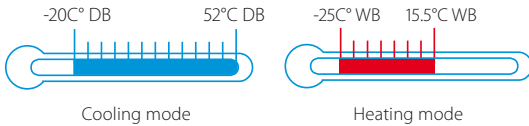
Example for VRV IV heat pump, factory setting.

• Great design flexibility

Wide operation range

Air cooled

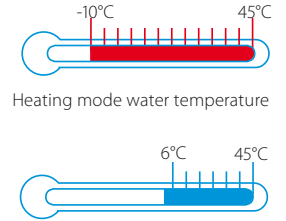
The VRV system can be installed practically anywhere. VRV air cooled outdoor units can cool between -20°C BD and +52°C DB outdoor ambient and can be used as monovalent heating system between -25°C WB and +15.5°C WB.



With the technical cooling function, the operation range in cooling of the heat recovery system is extended from -5°C to -20°C¹, making it perfect for integrating server rooms.

Water cooled

Standard water cooled outdoor units operation between 10°C & 45°C for both heating and cooling. In geothermal mode, the operation range is extended to -10°C* during heating and 6°C during cooling. These units are not influenced by external conditions and function well in extreme climates.

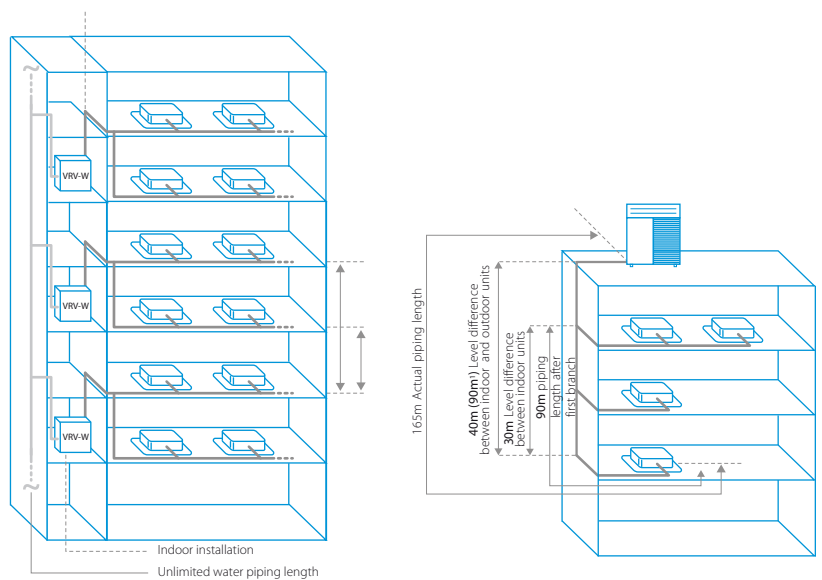


* Ethylene glycol should be added to the water when the water inlet temperature is below 5°C

Flexible piping design

The long piping lengths, high level differences and small refrigerant piping allows for a design with little limitations and leaving maximum space for lettable space.

¹ Contact your local dealer for more information and restrictions



VRV IV example

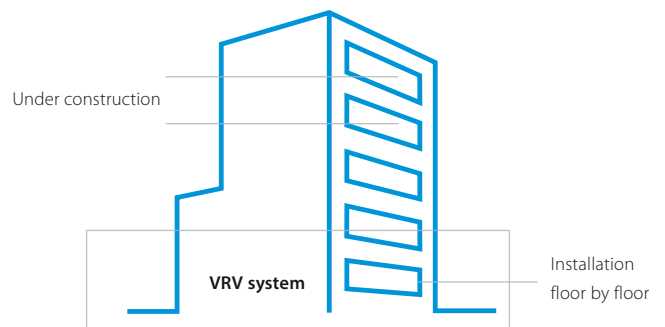
	Air cooled	Water cooled
Total piping length	1000m	300m
Longest length actual (Equivalent)	165m (190m)	120m (140m)
Longest length after first branch	90m ¹	40m (90m ¹)
Level difference between indoor and outdoor units	90m ¹	50m (40m ²)
Level difference between indoor units	30m	15m

¹ Contact your local dealer or consult technical literature for more information and restrictions

² In case outdoor unit is located below indoor units

Phased installation

Installation of the VRV system can 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.



Indoor installation

Air cooled

Standard outdoor unit installed indoors

The VRV optimised fan blade shape increases output and reduces pressure loss. Together with the high ESP setting (up to 78.4 Pa), it makes VRV outdoor units ideal for indoor installation using ducts.

ESP up to
78.4 Pa



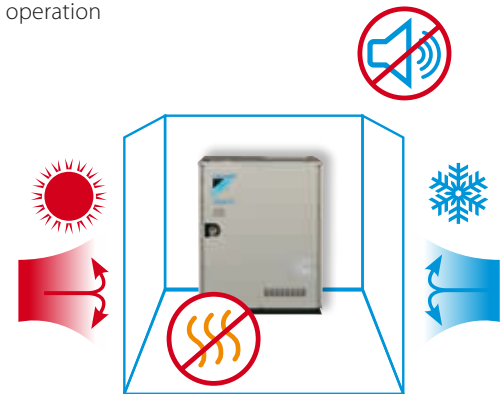
VRV IV i-series heat pump for indoor installation

The ultimate and unique solution from Daikin is to use the VRV IV i-series. This unit is optimised for indoor installation and is the most flexible solution, without the need for a large technical room to put the outdoor unit and it is complete invisible!

More details on page 62

Water cooled

- › Seamless integration in the surrounding architecture as you cannot see the unit
- › Highly suited for sound sensitive areas as there is no external operation sound
- › Superior efficiency, even in the most extreme outside conditions, especially in geothermal operation



Multiple tenants, one outdoor unit

The multi tenant 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 power supply can be turned off when a part of the building is closed or is being serviced without affecting the rest of the building.

2 solutions according to the needs:

- › Service setting, without additional hardware: for service execution within 24 hours
- › PCB option: when tenants leave for a longer period (holiday) and the main power supply is shut down



multi tenant

No structural reinforcement necessary

Thanks to the vibration-free and sufficient light construction of the outdoor units, floors do not need to be reinforced, reducing the overall cost of the building when compared to a chiller.

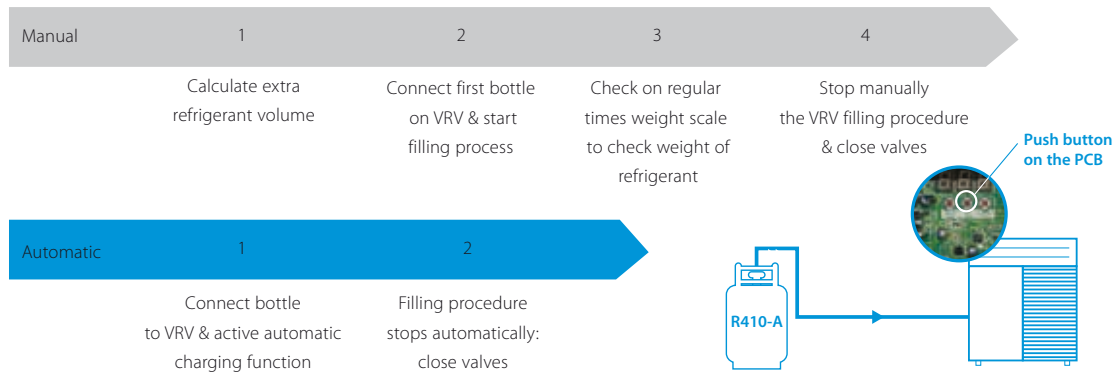
max. 398kg for a 20HP unit



- Fast installation and commissioning
- Easy servicing

Automatic charging & testing

Efficient use of time



After charging pushing the test operation button initiates a check on the wiring, shut off valves, sensors and refrigerant volume.

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

* 10°C for heat pump for cold regions

* Available on REYQ-T, RYYQ-T, RXYQ-T(9), RTSYQ-PA, RQYQ-P, RXYQQ-T, RQCEQ-P3

Did you know ...

Optimal charge = optimal efficiency



10% undercharged

up to 25% capacity loss

33% more energy use

Compliance to F-gas regulation

Remote refrigerant containment check

Perform the refrigerant containment check remotely via intelligent Touch Manager.

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.

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

- > Outdoor temperature
- > Reference system temperatures
- > Reference pressure temperatures
- > Refrigerant density
- > Types and number of indoor units



Remotely set the time and start the refrigerant containment check when it is most convenient for you.



Connect to customer site via internet or 3G increasing customer satisfaction as there is no disruption to the air conditioning during business hours.



Check the report once the check has been done.

Available on RYYQ-T, RXYQ-T(9), REYQ-T, RTSYQ-PA

Next to remote checking, the function can also be activated on-site via a push button on the PCB.

VRV configurator software

For simplified commissioning, configuration and customisation

Available on REYQ-T, RYYQ-T, RXYQ-T(9), RXYSCQ-TV1, RXYSQ-TV1/TY1, SB.RKXYQ-T and RXYQQ-T



User friendly interface instead of push buttons



3 digit 7-segment display

Compact design

The compact design of the outdoor units is sufficient 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.

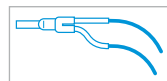


Daikin unified REFNET piping

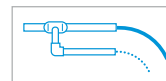
The unified Daikin REFNET piping system is designed for simple installation.

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.



REFNET joint



T-joint



REFNET joint



REFNET header

Easy wiring - "Super Wiring" System

Simplified wiring

Shared use of wiring between indoor units, outdoor units and centralised remote control

- > Easy retrofit of centralised remote control
- > Impossible to make incorrect connections thanks to non polarity wiring
- > Sheated wire can be used
- > Unique total wiring length up to 2,000 m

Cross wiring check

The cross wiring check function warns operatives of connection errors in inter unit wiring and piping.

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.

* auto address setting function is not available for centralized operation



Why Maintenance?



Peace of mind

Daikin Service and our Service Partner Network teams strive to develop smart services & solutions to exceed your expectations. Ensuring that your VRV systems are maintained by professionals gives you peace of mind!

Improved Safety

When a VRV unit doesn't operate in optimal condition over longer periods of time, it could cause unsafe working conditions or accidents. Regular maintenance ensures the unit operates safely and complies with local regulations and requirements.

Full Legal Compliance

Knowing that your VRV is maintained and serviced gives you the assurance all relevant legal requirements (e.g. F-gas regulation) are fulfilled. **REGULATION (EU) No 517/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006**

Healthy Air

A properly maintained VRV system will not only keep premises warm or cool, but it will prevent problems with air quality. Clean filters and coils mean better breathing for all users. An unmaintained unit is a breeding ground for dirt, mould and bacteria, all of which can cause or worsen respiratory problems for those living or working in the building or house.

Cost Savings

In the long run, maintenance is always cheaper than ad-hoc service interventions. Preventive maintenance allows you and Daikin to plan ahead and avoid rushed interventions. Our specialists will come prepared, thus avoiding repeated visits and extra interruptions.

Another benefit is the clear and transparent costs which can easily be budgeted, as well as clear and well-founded lifecycle reports which indicate future needs and requirements to be considered well in advance. Over time this reduces the Total Cost of Ownership (TCO) and related operational costs.

Minimized System Downtime

Scheduled care visits are transparent and easy to plan which gives sufficient time to find suitable dates for visits to avoid impact on production or comfort. A well-maintained system is less likely to fail during high season. Keeping a unit up-to-date on all inspections and maintenance checks means less worry that the unit will break down when it is needed the most.

Increased System Efficiency

Regular maintenance of a VRV system ensures that electricity costs and performance are not jeopardized, and that the safety features and the integrity of the system are in line with the latest standards and regulations. Routine maintenance such as inspections, oil and fluid changes, part replacements and other little fixes can help your VRV to run much more efficiently. In turn, you will benefit from fuel and energy savings because the unit will be running at peak performance.



Emergency Call-out

In case your VRV unit should still break down, all Daikin Care packages include access to a Hotline number for emergency call-out. Preventive and Extended Care also include Emergency Service Hotline access outside of regular office hours.

Genuine Spare Parts, Tools and Equipment

The spare parts used by Daikin Service or our Service Partner Network are all certified by Daikin, which means that the risk of failure and disturbances can be reduced while ensuring that the warranty is valid. In case opening, overhaul or repair is needed, Daikin as an OEM manufacturer has all the original tools, casts and equipment to ensure the repair is carried out according to factory recommendations and will keep your equipment up and running.

Daikin uses advanced service tools when we care for our VRV systems. These tools are not found on the open market and they facilitate advanced troubleshooting and reporting to be done to ensure that the VRV is optimized and parametrised correctly as well as verifying the integrity of the VRV system.

Attractive Modernisation Solutions

Daikin also offers attractive modernisation solutions (retrofit or full replacement) for a range of older VRVs. In the case of retrofit, core parts of the unit will be replaced to ensure it can run for many more years. Using Daikin certified retrofit solutions from Daikin or Daikin Certified partners allow you to enjoy the benefits of reduced operating costs, no need to refurbish or reinstall and will include an attractive warranty policy if performed under a care agreement





VRV Outdoor Systems

A solution for every application

VRV

Outdoor units

Heat recovery	40
REYQ-T	44
Branch selector (BS box)	46
BS1Q-A	46
BS-Q14AV1	47
Heat pump	48
RYYQ-T(8) / RXYQ-T(8)	52
RXYSCQ-TV1	60
RXYSQ-TV1 / RXYSQ-TY1	61
SB,RKXYQ-T	70
RTSYQ-PA	75
RXYCQ-A	76
Replacement VRV	79
RQCEQ-P3	82
RQYQ-P/RXYQQ-T	83
Water-cooled VRV	84
RWEYQ-T8	93
RWEYQ-T9	94



Overview of functions

Widest range of BS boxes
Unique continuous heating

Widest range
Unique product













New range (Summer 2017)

	VRV IV Heat recovery	VRV IV heat pump with continuous heating	VRV IV heat pump without continuous heating	VRV IV S-series (compact)	VRV IV i-series	VRV III-C	VRV Classic	Replacement VRV IV heat pump	Replacement VRV III Heat recovery	VRV IV W-series	VRV IV W+series
	REYQ-T	RYYQ-T	RXYQ-T(9)	RXYSCQ-TV1 RXYSQ-TV1 RXYSQ-TY1	SB.RKXYQ-T	RTSYQ-PA	RXYCQ-A	ROYQ-P RXYQQ-T	ROCEQ-P	RWETQ-T8	RWEYQ-T9
Page	40	50	50	58	76	88	94	99	99	110	120
Variable Refrigerant Temperature	●	●	●	●	●	✗	✗	●	✗	●	●
Continuous heating (heat accumulating element)	✗	●	✗	✗	✗	✗	✗	✗	✗	-	-
Continuous heating (alternate defrost)	●	●	✗	✗	✗	✗	✗	✗	✗	-	-
VRV configurator	●	●	●	●	●	✗	✗	●	✗	✗	●
7 segment display	●	●	●	✗	✗	✗	✗	●	✗	✗	●
Automatic refrigerant charge	●	●	●	✗	✗	●	✗	●	●	✗	✗
Refrigerant containment check	●	●	●	✗	✗	●	✗	✗	✗	✗	✗
Night quiet mode	●	●	●	●	●	●	✗	●	●	-	-
Low noise function	●	●	●	●	●	●	●	●	●	-	-
Connectable to stylish indoor units (Daikin Emura, Nexura)	✗	●	●	●(2)	✗	✗	✗	✗	✗	●(1)	●(2)
Connectable to LT hydrobox for hot water	●	●	●	✗	✗	✗	✗	✗	✗	✗	●
Connectable to HT hydrobox for hot water	●	✗	✗	✗	✗	✗	✗	✗	✗	●(1)	●
Full inverter compressors	●	●	●	●	●	✗	✗	●	●	●	●
Gas cooled PCB	●	●	●	●(●) not available on RXYSCQ-TV1	✗	✗	✗	●	✗	✗	✗
4 side heat exchanger	●	●	●	✗	✗	✗	✗	●	✗	-	-
Reluctance brushless DC compressor	●	●	●	●	✗	●	●	●	●	●	●
Sine wave DC inverter	●	●	●	●	●	●	●	●	●	●	●
DC fan motor	●	●	●	●	●	●	●	●	●	-	-
E-pass heat exchanger	●	●	●	●	●	●	●	●	●	-	-
I demand function	●	●	●	●	●	●	✗	●	●	✗	✗
Manual demand function / power limitation	●	●	●	●	●	●	●	●	●	●	●

(1) special order unit. Contact your local sales representative

(2) Either connect VRV or stylish indoor units

Products overview **VRV**

Model		Product name	PG	4	5	6	8	10	12	13	14	16	18	20	22	24	26	28	
Air cooled - heat recovery	VRV IV heat recovery	<p>Best efficiency & comfort solution</p> <ul style="list-style-type: none"> Fully integrated solution with heat recovery for maximum efficiency Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, hot water, air handling units and Biddle air curtains "Free" heating and hot water through heat recovery The perfect personal comfort for guests/tenants via simultaneous cooling and heating Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature and continuous heating Allows technical cooling Widest range of BS boxes on the market 	<p>REYQ-T VRV IV</p> 	40				●	●	●		●	●	●					
	VRV IV heat pump with continuous heating	<p>Daikin's optimum solution with top comfort</p> <ul style="list-style-type: none"> Continuous heating during defrost Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, hot water, air handling units and Biddle air curtains Connectable to stylish indoor units (Daikin Emura, Nexura) Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature and continuous heating 	<p>RYYQ-T(8) VRV IV</p> 	50				●	●	●		●	●	●					
	VRV IV heat pump without continuous heating	<p>Daikin's solution for comfort & low energy consumption</p> <ul style="list-style-type: none"> Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, hot water, air handling units and Biddle air curtains Connectable to stylish indoor units (Daikin Emura, Nexura) Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature 	<p>RXYQ-T(8) VRV IV</p> 	52				●	●	●		●	●	●					
Air cooled - heat pump	VRV IV S-series Compact	<p>The most compact VRV</p> <ul style="list-style-type: none"> Compact and lightweight single fan design saves space and is easy to install Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air curtains Either connect VRV or stylish indoor units (Daikin Emura, Nexura) Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature 	<p>RXYSCQ-TV1 VRV IV S-series Compact</p> 	58	●	●													
	VRV IV S-series	<p>Space saving solution without compromising on efficiency</p> <ul style="list-style-type: none"> Space saving trunk design for flexible installation Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air curtains Either connect VRV or stylish indoor units (Daikin Emura, Nexura) Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature 	<p>RXYSQ-TV1/ TY1 VRV IV S-series</p> 	62		●	●	●											
	UNIQUE VRV IV heat pump for indoor installation	<p>The invisible VRV</p> <ul style="list-style-type: none"> Unique VRV heat pump for indoor installation Total flexibility for any shop location and building type as the outdoor unit is invisible and split up in 2 parts Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation and Biddle air curtains 	<p>SB.RKXYQ-T* VRV IV i-series</p> 	76			●	●	●										
VRV III heat pump optimised for heating	<p>Where heating is priority without compromising on efficiency</p> <ul style="list-style-type: none"> Suitable for single source heating Extended operation range down to -25°C in heating Stable heating capacity and high efficiencies at low ambient temperatures 	<p>RTSYQ-PA VRV III-C</p> 	88						●		●	●							
VRV Classic	<p>Classic VRV configuration</p> <ul style="list-style-type: none"> For standard cooling & heating requirements Connectable to VRV indoor units, controls and ventilation 	<p>RXYCQ-A VRV Classic</p> 	94					●	●	●		●	●	●					
Replacement	heat recovery	<p>Quick & quality replacement for R-22 and R-407C systems</p> <ul style="list-style-type: none"> Cost-effective and fast replacement through re-use of existing piping Drastically improve your comfort, efficiency and reliability No interruption of daily business while replacing your system Replace Daikin and other manufacturers systems safely 	<p>RQCEQ-P* VRV III-Q</p> 	99					●	●		●	●	●	●	●	●	●	●
	heat pump	<p>Quick & quality replacement for R-22 and R-407C systems</p> <ul style="list-style-type: none"> Cost-effective and fast replacement through re-use of existing piping Drastically improve your comfort, efficiency and reliability No interruption of daily business while replacing your system Replace Daikin and other manufacturers systems safely Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature 	<p>RXYQ-Q-T* VRV IV Q-series</p> 	99		●		●	●	●		●	●	●					
Water cooled	Water cooled VRV IV	<p>Ideal for high rise buildings, using water as heat source</p> <ul style="list-style-type: none"> Reduced CO2 emissions thanks to the use of geothermal energy as a renewable energy source No need for an external heating or cooling source when used in geothermal mode Compact & lightweight design can be stacked for maximum space saving Incorporates VRV IV standards & technologies such as Variable Refrigerant temperature Variable Water Flow control option increases flexibility and control 	<p>RWEYQ-T8* VRV IV W-series</p> 	110				●	●				●	●	●				
	NEW	<ul style="list-style-type: none"> Mixed connection of HT hydroboxes and VRV indoor units Either connect VRV or stylish indoor units (Daikin Emura, Nexura) 2 analogue input signals allowing external control 	<p>RWEYQ-T9* VRV IV W-series</p> 	110				●	●	●	●								

* Not Eurovent certified

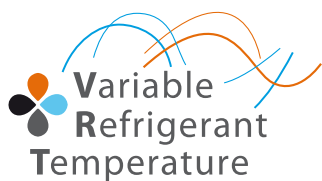
● Single unit
● Multi combination

Capacity (HP)													Description / Combination	VRV indoor units	Residential indoor units	LT Hydrobox HXY-A	HT Hydrobox HXHD-A	HRV units VAM-, VKM-	AHU connection EKEXV + EKEQMCBA	AHU connection EKEXV + EKEQFCBA	Air curtains CYV-DK-	Remarks
30	32	34	36	38	40	42	44	46	48	50	52	54										
													VRV IV Heat Recovery REYQ-T	○	×	○	○	○	○	×	○	› Standard total system connection ratio limit: 50 ~ 130%
													with only VRV indoor units	✓								
													with LT/HT Hydroboxes	✓		✓	✓	✓				› Max 32 indoor units, even on 16HP and larger systems › Total system connection ratio up to 200% possible
													HRV units VAM-, VKM-	✓		✓	✓	✓			✓	
●	●	●	●	●	●	●	●	●	●	●	●	●	AHU connection EKEXV + EKEQMCBA	✓				✓	✓		✓	› Dedicated systems (with only ventilation units) not allowed – a mix with standard VRV indoor units is always necessary
													Biddle air curtain CYV-DK-	✓				✓	✓		✓	
													VRV IV Heat Pump RYYQ-T(8) / RXYQ-T(8)	○	○	○	×	○	○	○	○	› Standard total system connection ratio limit: 50 ~ 130%
													with only VRV indoor units	✓								› 200% total system connection ratio possible under special circumstances
●	●	●	●	●	●	●	●	●	●	●	●	●	with residential indoor units	✓	✓			✓				› Only single-module systems (RYYQ 8~20 T / RXYQ 8~20 T) › Max 32 indoor units, even on 16HP, 18HP and 20HP systems
													with LT Hydroboxes	✓		✓		✓				› Max 32 indoor units, even on 16HP and larger systems › Contact Daikin in case of multi-module systems (>20HP)
													HRV units VAM-, VKM-	✓	✓	✓		✓	✓		✓	
													AHU connection EKEXV + EKEQMCBA	✓				✓	✓		✓	
●	●	●	●	●	●	●	●	●	●	●	●	●	AHU connection EKEXV + EKEQFCBA							✓		
													Biddle air curtain CYV-DK-	✓				✓	✓		✓	
													VRV IV-S RXYSCQ-/RXYSCQ-	○	○	×	×	○	○	○	○	› Standard total system connection ratio limit: 50 ~ 130%
													with VRV indoor units only	✓				✓	✓		✓	
													with residential indoor units only		✓							› With residential indoor: connection ratio limit: 80 ~ 130%
													AHU connection EKEXV + EKEQFCBA							✓		
													VRV IV i series SB.RKXYQ-T	✓	×	×	×	✓	✓	×	✓	› Standard total system connection ratio limit: 50 ~ 130%
													VRV III Cold Region RTSYQ-PA	✓	×	×	×	✓	✓	×	✓	› Standard total system connection ratio limit: 50 ~ 130%
													VRV Classic RXYCQ-A	✓	×	×	×	✓	×	×	×	› Standard total system connection ratio limit: 50 ~ 120% › In case of using at least one FXFQ20~25 indoor units on 8HP or 10HP models, the maximum connection ratio is 100%.
●													VRV III-Q Replacement H/R RQCEQ-P	✓	×	×	×	✓	×	×	×	› Standard total system connection ratio limit: 50 ~ 130%
●	●	●	●	●	●	●	●						VRV IV-Q Replacement H/P RXYQ-T	✓	×	×	×	✓	✓	×	✓	› Standard total system connection ratio limit: 50 ~ 130%
●													VRV IV-W Water-cooled VRV RWEYQ-T9	○	○	×	○	○	○	○	○	› Standard total system connection ratio limit: 50 ~ 130%
													with VRV indoor units	✓			✓	✓	✓	✓	✓	
													with split indoor units		✓							
●	●	●	●	●	●	●	●						with HT hydrobox	✓			✓					

○ ... connection of indoor unit possible, but not necessarily simultaneously with other allowed indoor units
 ✓ ... connection of indoor unit possible even simultaneously with other checked units in the same row
 × ... connection of indoor not possible on this outdoor unit system

VRV IV heat recovery

Best efficiency and comfort solution



VRV IV standards:

Variable refrigerant temperature

Customize your VRV for best seasonal efficiency & comfort

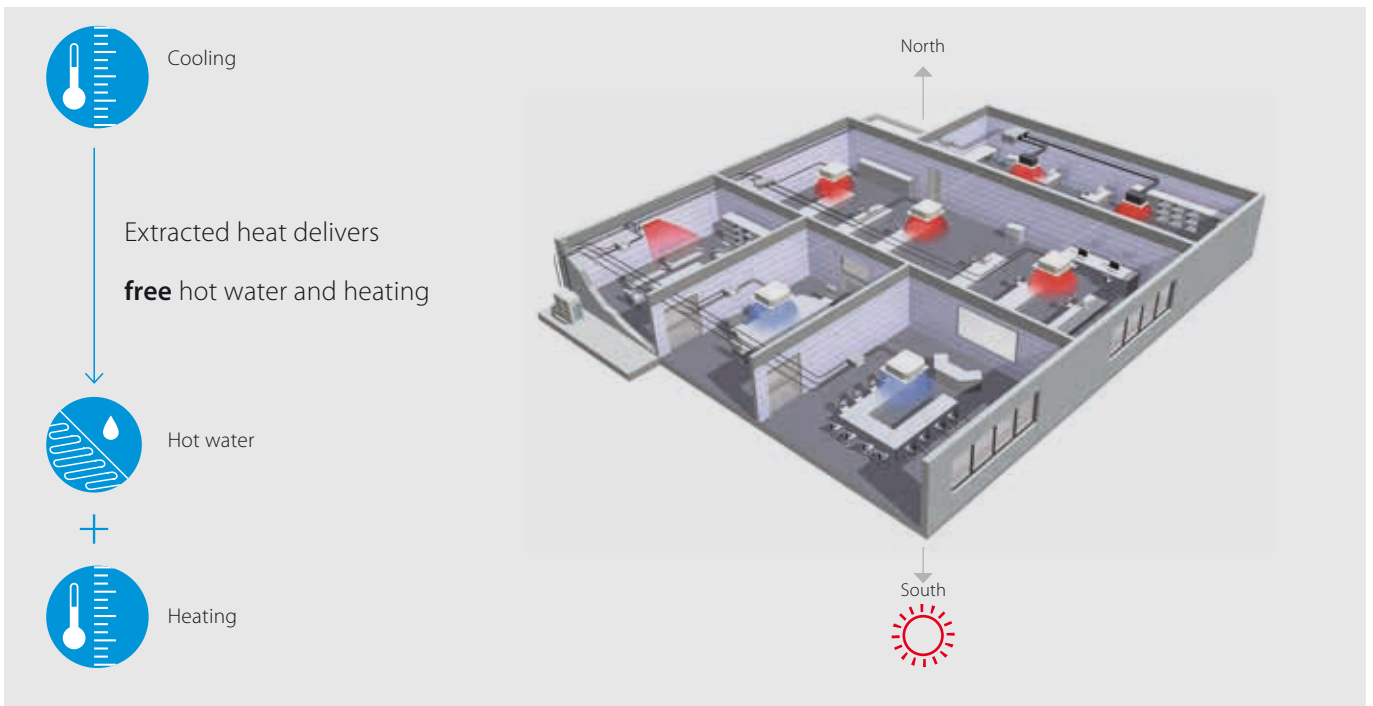
Continuous heating

The new standard in heating comfort

VRV configurator

Software for simplified commissioning, configuration and customisation

- > 7 segment display
- > Automatic refrigerant charge
- > Refrigerant containment check
- > Night quiet mode
- > Low noise function
- > Connectable to LT hydrobox for hot water
- > Connectable to HT hydrobox for hot water
- > Full inverter compressors
- > Gas cooled PCB
- > 4 side heat exchanger
- > Reluctance brushless DC compressor
- > Sine wave DC inverter
- > DC fan motor
- > E-pass heat exchanger
- > I demand function
- > Manual demand function



“Free” heat and hot water production

Until now, most commercial buildings have relied on separate systems for cooling, heating, hot water and so on, which results in a lot of wasted energy.

An integrated heat recovery system reuses heat from offices, server rooms, to warm other areas or create hot water.

Improved efficiency

In heat-recovery operation the VRV IV is up to 15% more efficient compared to VRV III. In single mode operation, the seasonal efficiency of the system can be even as much as 28% higher - thanks to the variable refrigerant temperature technology - compared to a conventional VRF system.

Optimised Partition of Heat Exchanger for highest seasonal efficiency in heat recovery mode

Vertically divided heat exchanger with an optimized ratio for mix mode operation. This improves heat recovery efficiency by reducing radiation losses.

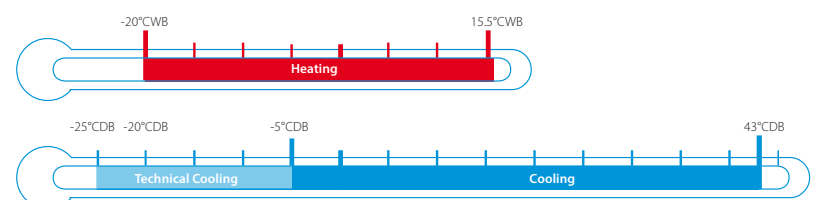
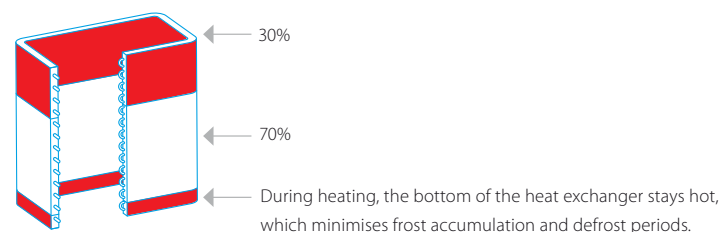
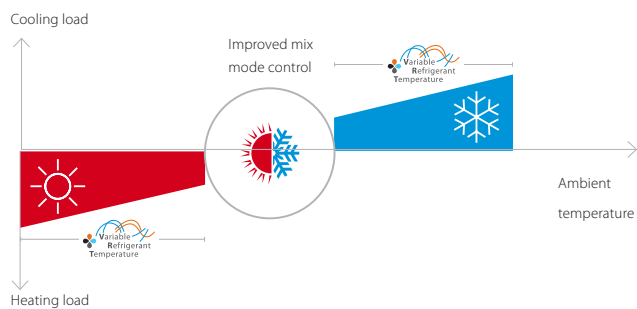
Wide heating operation range

VRV IV heat recovery has a standard operation range down to -20°CWB in heating. It can also provide cooling down to -20°CDB for technical server rooms (field setting).

Maximum comfort

A VRV heat-recovery system allows simultaneous cooling and heating.

- › For hotel owners, this means a perfect environment for guests as they can freely choose between cooling or heating.
- › For offices, it means a perfect working indoor climate for both north and south-facing offices.

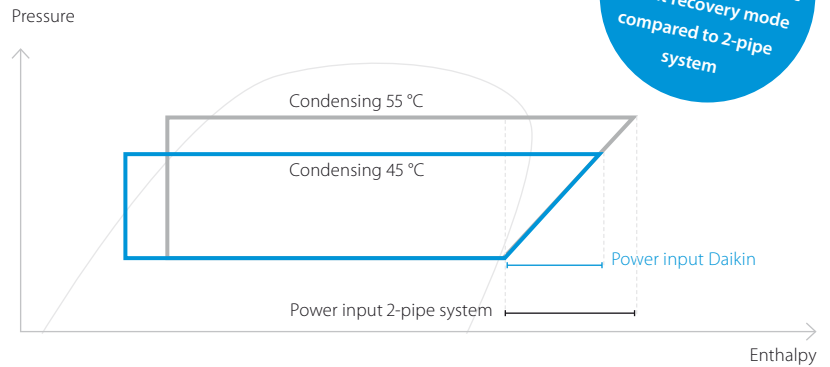


Advantages of 3-pipe technology

More “free” heat

Daikin 3-pipe technology needs less energy to recover heat, meaning significantly higher efficiency during heat recovery mode. Our system can recover heat at a low condensing temperature because it has dedicated gas, liquid and discharge pipes.

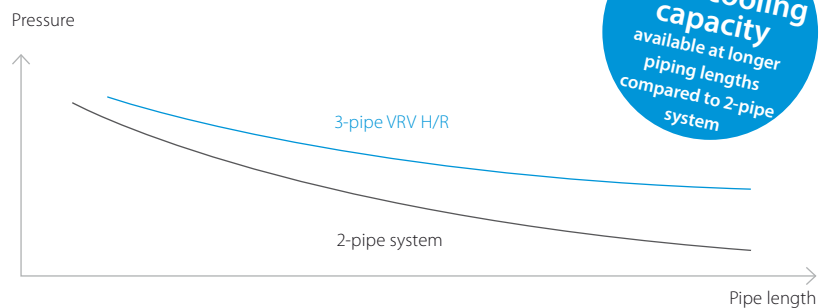
In a 2-pipe system, gas and liquid travel as a mixture so the condensing temperature needs to be higher in order to separate the mixed gas and liquid refrigerant. The higher condensing temperature means more energy is used to recover heat resulting in lower efficiency.



5 to 15% more efficient in heat recovery mode compared to 2-pipe system

Lower pressure drop means more efficiency

- › Smooth refrigerant flow in 3-pipe system thanks to 2 smaller gas pipes results in higher energy efficiency
- › Disturbed refrigerant flow in large gas pipe on 2-pipe system results in bigger pressure drop



Up to 5% more cooling capacity available at longer piping lengths compared to 2-pipe system

Save on refrigerant

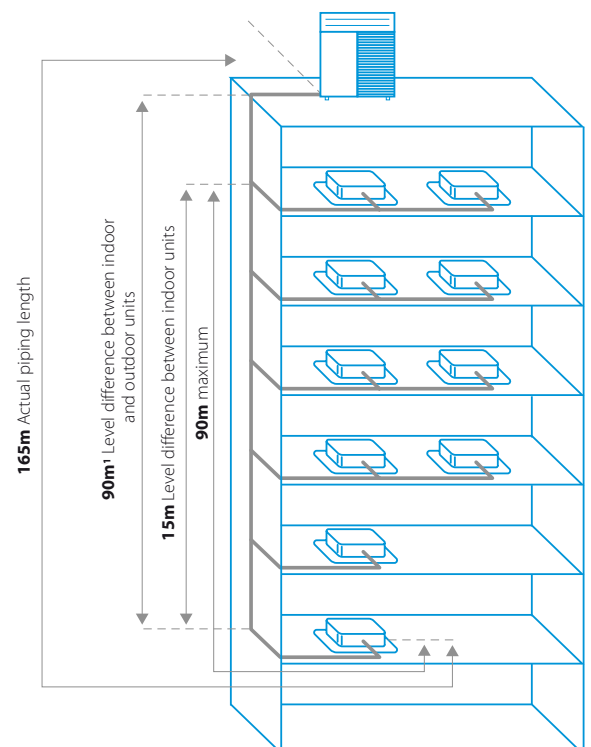
- › Smaller diameter pipes and 3-pipe system results in up to 36% less refrigerant charge compared to 2-pipe systems, saving on refrigerant cost and reducing environmental impact

Freely combine outdoor units

Combine outdoor units flexibly to reduce your carbon footprint, optimise your system for continuous heating, and achieve the highest efficiency.

Flexible piping design

Total piping length	1000m
Longest length actual (Equivalent)	165m (190m)
Longest length after first branch	90m ¹
Level difference between indoor and outdoor units	90m ¹
Level difference between indoor units	15m



¹ Outdoor unit in highest position. Consult your local sales representative for restrictions on piping lengths

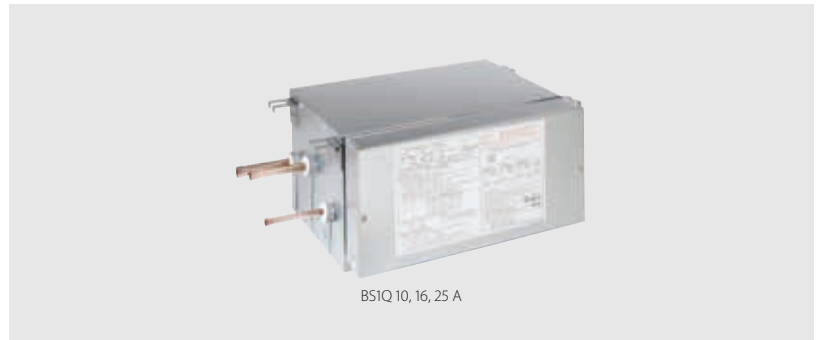
Fully redesigned BS boxes

Maximum design flexibility and installation speed

- › Quickly and flexibly design your system with a unique range of single and multi BS boxes.
- › A wide variety of compact and lightweight multi BS boxes greatly reduces installation time.
- › Free combination of single and multi BS boxes

Single port

- › Unique to the market
- › Compact and light to install
- › No drain piping needed
- › Ideal for remote rooms
- › Technical cooling function
- › Connect up to 250 class unit (28 kW)
- › Allows multi-tenant applications



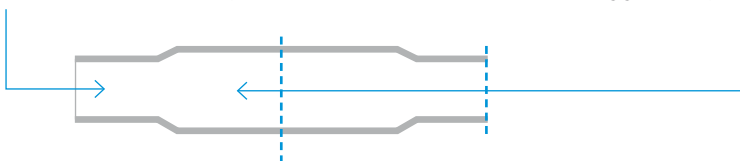
Multi port: 4 – 6 – 8 – 10 – 12 – 16

- › Up to 55% smaller and 41% lighter than previous range
- › Faster installation thanks to a reduced number of brazing points and wiring
- › All indoor units connectable to one BS box
- › Fewer inspection ports needed
- › Up to 16 kW capacity available per port
- › Connect up to 250 class unit (28kW) by combining 2 ports
- › No limit on unused ports, permitting phased installation
- › Allows multi-tenant applications



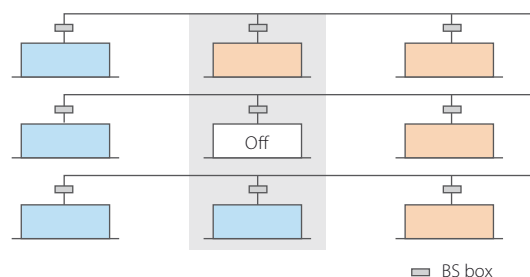
Faster installation thanks to open connection

- › No need to cut the pipe before brazing – for indoor units smaller or equal to 5.6 kW (50 class)
- › Cut and braise the pipe – for indoor units bigger or equal to 7.1 kW (63 class)



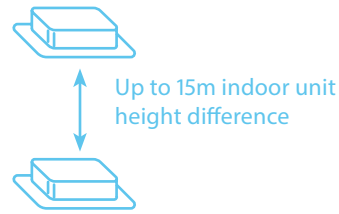
Maximum comfort at all times

With the VRV BS box, any indoor unit not being used to switch between heating and cooling maintains the constant desired temperature. This is because our heat recovery system does not need to equalise pressure over the entire system after a change-over.



VRV IV heat recovery

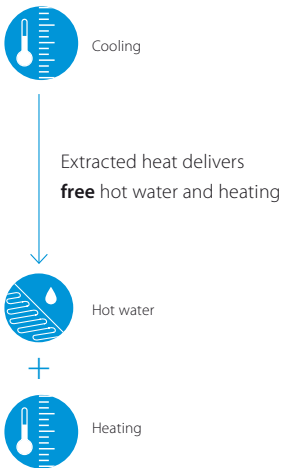
Best efficiency & comfort solution



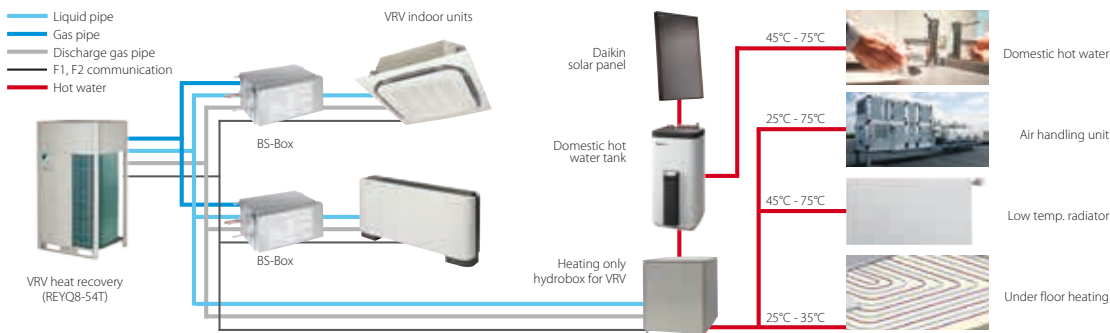
- › Fully integrated solution with heat recovery for maximum efficiency with COPs of up to 8 !
- › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, hot water, air handling units and Biddle air curtains
- › „Free“ heating and hot water production provided by transferring heat from areas requiring cooling to areas requiring heating or hot water
- › The perfect personal comfort for guests/tenants via simultaneous cooling and heating
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature, continuous heating, VRV configurator, 7 segment display and full inverter compressors, 4-side heat exchanger, refrigerant cooled PCB, new DC fan motor
- › Free combination of outdoor units to meet installation space or efficiency requirements
- › Possibility to extend the operation range in cooling down to -20°C for technical cooling operation such as server rooms
- › Contains all standard VRV features

Outdoor system			REYQ	8T	10T	12T	14T	16T	18T	20T	
Capacity range			HP	8	10	12	14	16	18	20	
Cooling capacity	Nom.	35°CDB	kW	22,4 (1)	28,0 (1)	33,5 (1)	40,0 (1)	45,0 (1)	50,4 (1)	56,0 (1)	
	Max.	6°CWB	kW	25,0 (2)	31,5 (2)	37,5 (2)	45,0 (2)	50,0 (2)	56,5 (2)	63,0 (2)	
Heating capacity	Nom.	6°CWB	kW	22,4 (2)	28,0 (2)	33,5 (2)	40,0 (2)	45,0 (2)	50,4 (2)	56,0 (2)	
	Max.	6°CWB	kW	25,0 (2)	31,5 (2)	37,5 (2)	45,0 (2)	50,0 (2)	56,5 (2)	63,0 (2)	
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	5,31 (1)	7,15 (1)	9,23 (1)	10,7 (1)	12,8 (1)	15,2	18,6
	Heating	Nom.	6°CWB	kW	4,75 (2)	6,29 (2)	8,05 (2)	9,60 (2)	11,2 (2)	12,3	14,9
		Max.	6°CWB	kW	5,51 (2)	7,38 (2)	9,43 (2)	11,3 (2)	12,9 (2)	14,3	17,5
EER at nom. capacity	35°CDB		kW/kW	4,22 (1)	3,92 (1)	3,63 (1)	3,74 (1)	3,52 (1)	3,32	3,01	
COP at nom. capacity	6°CWB		kW/kW	4,72 (2)	4,45 (2)	4,16 (2)	4,17 (2)	4,02 (2)	4,10	3,76	
COP at max. capacity	6°CWB		kW/kW	4,54 (2)	4,27 (2)	3,98 (2)		3,88 (2)	3,95	3,60	
ESEER - Automatic				7,41	7,37	6,84	7,05	6,63	6,26	5,68	
Maximum number of connectable indoor units				64 (3)							
Indoor index connection	Min.			100	125	150	175	200	225	250	
	Nom.			200	250	300	350	400	450	500	
	Max.			260	325	390	455	520	585	650	
Dimensions	Unit	HeightxWidthxDepth	mm	1.685x930x765			1.685x1.240x765				
Weight	Unit		kg	210	218		304	305	337		
Fan	Air flow rate	Cooling	Nom.	m³/min	162	175	185	223	260	251	261
Sound power level	Cooling	Nom.		dB(A)	78	79	81	86		88	
Sound pressure level	Cooling	Nom.		dB(A)	58		61	64	65	66	
Operation range	Cooling	Min.-Max.		°CDB	-5,0~-43,0						
	Heating	Min.-Max.		°CWB	-20~-15,5						
Refrigerant	Type			R-410A							
	GWP			2.087,5							
	Charge		TCO ₂ eq	20,2	20,5	20,7	24,6				
Piping connections	Liquid	OD	mm	9,52		12,7		15,9			
	Gas	OD	mm	19,1	22,2	28,6		28,6			
	Total piping length	System	Actual	1.000							
	Discharge gas	OD	mm	15,9	19,1		22,2		28,6		
Power supply	Phase/Frequency/Voltage		Hz/V	3N~/50/380-415							
Current - 50Hz	Maximum fuse amps (MFA)		A	20	25		32	40		50	

Outdoor system			REYQ	10T	13T	16T	18T	20T	22T	24T	26T	28T	30T	32T	
System	Outdoor unit module 1			REM05T		REY08T		REY10T	REY08T	REY12T		REY16T			
	Outdoor unit module 2			REM05T	REY08T	REY10T	REY12T	REY16T	REY14T	REY16T	REY18T	REY18T	REY16T	REY16T	
Capacity range			HP	10	13	16	18	20	22	24	26	28	30	32	
Cooling capacity	Nom.	35°CDB	kW	28,0 (1)	36,4 (1)	44,8 (1)	50,4 (1)	55,9 (1)	61,5 (1)	67,4 (1)	73,5 (1)	78,5 (1)	83,9 (1)	90,0 (1)	
	Max.	6°CWB	kW	32,0 (2)	41,0 (2)	50,0 (2)	56,5 (2)	62,5 (2)	69,0 (2)	75,0 (2)	82,5 (2)	87,5 (2)	94,0 (2)	100,0 (2)	
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	6,34	8,48	10,62	12,46	14,54	16,38	18,11	19,93	22,03	24,43	25,6
	Heating	Nom.	6°CWB	kW	5,42	7,46	9,50	11,04	12,80	14,34	15,95	17,65	19,25	20,35	22,4
		Max.	6°CWB	kW	6,50	8,76	11,02	12,89	14,94	16,81	18,41	20,73	22,33	23,73	25,8
EER at nom. capacity	35°CDB		kW/kW	4,42	4,29	4,22	4,04	3,84	3,75	3,72	3,69	3,56	3,43	3,52	
COP at nom. capacity	6°CWB		kW/kW	5,17	4,88	4,72	4,57	4,37	4,29	4,23	4,16	4,08	4,12	4,02	
COP at max. capacity	6°CWB		kW/kW	4,92	4,68	4,54	4,38	4,18	4,10	4,07	3,98	3,92	3,96	3,88	
ESEER - Automatic				7,77	7,54	7,41	7,38	7,06	7,07	6,87	6,95	6,72	6,48	6,63	
ESEER - Standard				6,55	6,36	6,25	5,98	5,68	5,54	5,46	5,41	5,23	5,03	5,14	
Maximum number of connectable indoor units				64 (3)											
Indoor index connection	Min.			125	162,5	200	225	250	275	300	325	350	375	400	
	Nom.			250	325,0	400	450	500	550	600	650	700	750	800	
	Max.			325	422,5	520	585	650	715	780	845	910	975	1.040	
Piping connections	Liquid	OD	mm	9,52	12,7		15,9			19,1					
	Gas	OD	mm	22,2	28,6		34,9			34,9					
	Total piping length	System	Actual	500							1.000				
	Discharge gas	OD	mm	19,1	22,2		28,6			28,6					
Current - 50Hz	Maximum fuse amps (MFA)		A	40				50		63				80	
Continuous heating				v											



REYQ-T



Outdoor system				REYQ	34T	36T	38T	40T	42T	44T	46T	48T	50T	52T	54T
System	Outdoor unit module 1				REYQ16T		REYQ8T	REYQ10T	REYQ12T	REYQ14T	REYQ16T		REYQ18T		
	Outdoor unit module 2				REYQ18T	REYQ20T	REYQ12T		REYQ16T			REYQ18T			
	Outdoor unit module 3				REYQ18T			REYQ16T			REYQ18T				
Capacity range		HP		34	36	38	40	42	44	46	48	50	52	54	
Cooling capacity	Nom.	35°CDB	kW	95,4 (1)	101,0 (1)	106,3 (1)	111,9 (1)	118,0 (1)	123,5 (1)	130,0 (1)	135,0 (1)	140,4 (1)	145,8 (1)	151,2 (1)	
	Max.	6°CWB	kW	95,4 (2)	101,0 (2)	106,3 (2)	111,9 (2)	118,0 (2)	123,5 (2)	130,0 (2)	135,0 (2)	140,4 (2)	145,8 (2)	151,2 (2)	
Heating capacity	Nom.	6°CWB	kW	106,5 (2)	113,0 (2)	119,0 (2)	125,5 (2)	131,5 (2)	137,5 (2)	145,0 (2)	150,0 (2)	156,5 (2)	163,0 (2)	169,5 (2)	
	Max.	6°CWB	kW	106,5 (2)	113,0 (2)	119,0 (2)	125,5 (2)	131,5 (2)	137,5 (2)	145,0 (2)	150,0 (2)	156,5 (2)	163,0 (2)	169,5 (2)	
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	28,0	31,4	29,74	31,58	32,75	34,83	36,3	38,4	40,8	43,2	45,6
	Heating	Nom.	6°CWB	kW	23,5	26,1	25,10	26,64	28,69	30,45	32,00	33,6	34,7	35,8	36,9
		Max.	6°CWB	kW	27,2	30,4	29,24	31,11	33,18	35,23	37,1	38,7	40,1	41,5	42,9
EER at nom. capacity	35°CDB		kW/kW	3,41	3,22	3,57	3,54	3,60	3,55	3,58	3,52	3,44	3,38	3,32	
COP at nom. capacity	6°CWB		kW/kW	4,06	3,87	4,24	4,20	4,11	4,06		4,02	4,05	4,07	4,10	
COP at max. capacity	6°CWB		kW/kW	3,92	3,72	4,07	4,03	3,96	3,90	3,91	3,88	3,90	3,93	3,95	
ESEER - Automatic				6,43	6,06	6,66	6,68	6,79	6,68	6,75	6,63	6,49	6,37	6,26	
Maximum number of connectable indoor units					64 (3)										
Indoor index connection	Min.			425	450	475	500	525	550	575	600	625	650	675	
	Nom.			850	900	950	1.000	1.050	1.100	1.150	1.200	1.250	1.300	1.350	
	Max.			1.105	1.170	1.235	1.300	1.365	1.430	1.495	1.560	1.625	1.690	1.755	
Piping connections	Liquid	OD	mm	19,1											
	Gas	OD	mm	34,9	41,3										
	Total piping length	System	Actual	1.000											
	Discharge gas	OD	mm	28,6					34,9						
Current - 50Hz	Maximum fuse amps (MFA)			A	80			100			125				
Continuous heating					v										
Outdoor unit module				REMQ	5T										
Dimensions	Unit	Height/Width/Depth		mm	1.685/930/765										
Weight	Unit			kg	210										
Fan	Air flow rate	Cooling	Nom.	m ³ /min	162										
	External static pressure	Max.		Pa	78										
Discharge direction					Vertical										
	Type					Propeller fan									
Sound power level	Cooling	Nom.		dB(A)	77										
Sound pressure level	Cooling	Nom.		dB(A)	56										
Operation range	Cooling	Min.~Max.		°CDB	-5,0~43,0										
	Heating	Min.~Max.		°CWB	-20~-15,5										
Refrigerant	Type				R-410A										
	GWP				2.087,5										
	Charge				TCO ₂ eq	20,2									
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/380-415										
Current - 50Hz	Maximum fuse amps (MFA)			A	20										

(1) Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m. Data for standard efficiency series
 (2) Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m. Data for standard efficiency series
 (3) Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% ≤ CR ≤ 130%) | REMQ5 unit cannot be used as standalone unit. | Technical cooling setting, refer to the installation manual for more information

Individual branch selector for VRV IV heat recovery

- > Unique range of single and multi BS boxes for flexible and fast design
- > Compact & light to install
- > Ideal for remote rooms as no drain piping is needed
- > Allows integration of server rooms into the heat recovery solution thanks to technical cooling function
- > Connect up to 250 class unit (28kW)
- > **UNIQUE** Faster installation thanks to open port connection
- > Allows multi tenant applications
- > Connectable to REYQ-T, RQCEQ-P3 and RWEYQ-T8/9 heat recovery units



Indoor unit					BS	1Q10A	1Q16A	1Q25A
Power input	Cooling	Nom.			kW		0,005	
	Heating	Nom.			kW		0,005	
Maximum number of connectable indoor units						6		8
Maximum capacity index of connectable indoor units						15 < x ≤ 100	100 < x ≤ 160	160 < x ≤ 250
Dimensions	Unit	HeightxWidthxDepth		mm	207x388x326			
Weight	Unit			kg	12		15	
Casing	Material		Galvanised steel plate					
Piping connections	Outdoor unit	Liquid	OD	mm	9,5			
		Gas	OD	mm	15,9		22,2	
		Discharge gas	OD	mm	12,7		19,1	
	Indoor unit	Liquid	OD	mm	9,5			
		Gas	OD	mm	15,9		22,2	
				Foamed polyurethane Flame-resistant needle felt				
Sound absorbing thermal insulation								
Power supply	Phase		1~					
	Frequency		50					
	Voltage		220-240					
	Maximum fuse amps (MFA)		15					

Multi branch selector for VRV IV heat recovery

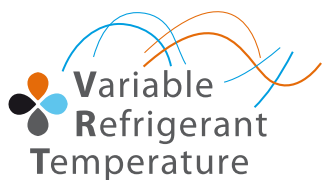
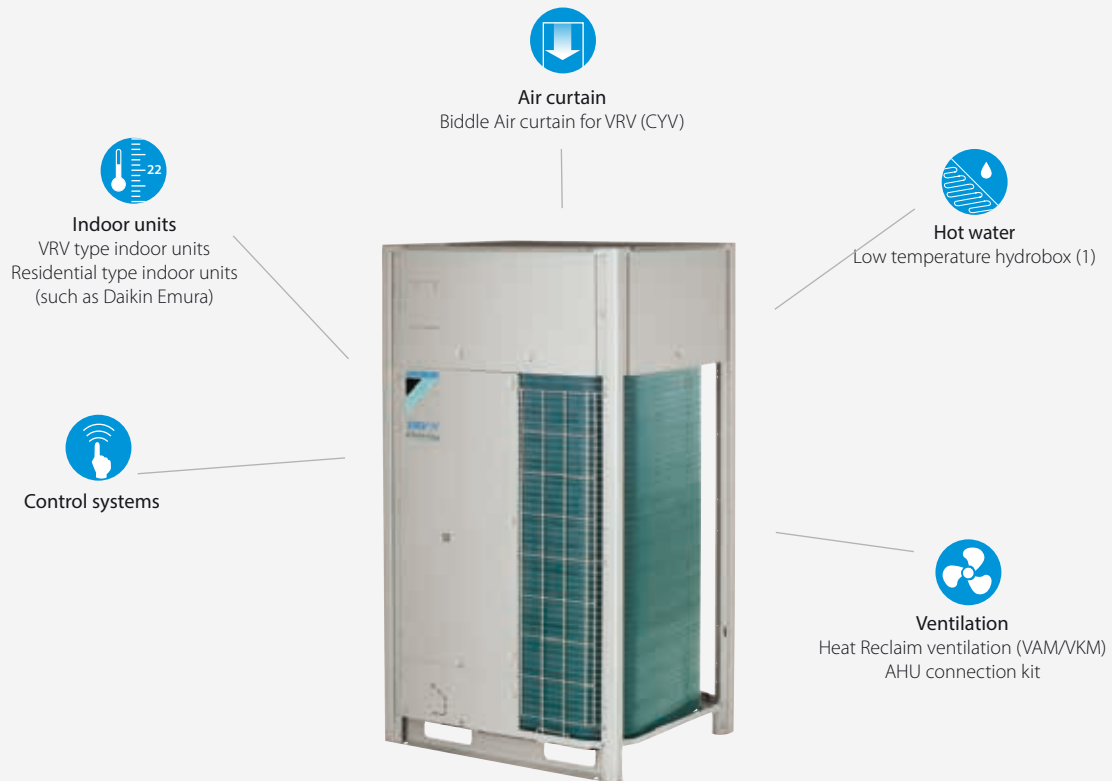
- › Unique range of single and multi BS boxes for flexible and fast design
- › Major reduction in installation time thanks to wide range, compact size and light weight multi BS boxes
- › Up to 70% smaller and 66% lighter than previous series
- › Faster installation thanks to a reduced number of brazing points and wiring
- › All indoor units connectable to one BS box
- › Less inspection ports needed compared to installing single BS boxes
- › Up to 16kW capacity available per port
- › Connect up to 250 class unit (28kW) by combining 2 ports
- › No limit on unused ports allowing phased installation
- › **UNIQUE** Faster installation thanks to open port connection
- › **UNIQUE** Refrigerant filters for high reliability
- › Allows multi tenant applications
- › Connectable to REYQ-T, RQCEQ-P3 and RWEYQ-T8/9 heat recovery units



Indoor unit				BS	4Q14AV1	6Q14AV1	8Q14AV1	10Q14AV1	12Q14AV1	16Q14AV1
Power input	Cooling	Nom.	kW	0,043	0,064	0,086	0,107	0,129	0,172	
		Heating	Nom.	kW	0,043	0,064	0,086	0,107	0,129	0,172
Maximum number of connectable indoor units				20	30	40	50	60	64	
Maximum number of connectable indoor units per branch				5						
Number of branches				4	6	8	10	12	16	
Maximum capacity index of connectable indoor units				400	600	750				
Maximum capacity index of connectable indoor units per branch				140						
Dimensions	Unit	HeightxWidthxDepth	mm	298x370x430	298x580x430		298x820x430		298x1.060x430	
Weight	Unit		kg	17	24	26	35	38	50	
Casing	Material	Galvanised steel plate								
Piping connections	Outdoor unit	Liquid	OD	mm	9,5	12,7	12,7 / 15,9	15,9	15,9 / 19,1	19,1
		Gas	OD	mm	22,2 / 19,1	28,6 / 22,2	28,6	28,6 / 34,9		34,9
		Discharge gas	OD	mm	19,1 / 15,9	19,1 / 22,2	19,1 / 22,2 / 28,6	28,6		
	Indoor unit	Liquid	OD	mm	9,5 / 6,4					
		Gas	OD	mm	15,9 / 12,7					
		Drain			VP20 (I.D. 20/O.D. 26)					
Sound absorbing thermal insulation				Urethane foam, polyethylene foam						
Power supply	Phase			1~						
	Frequency			Hz						
	Voltage			V						
	Maximum fuse amps (MFA)			A						
				15						

VRV IV heat pump

Daikin's optimum solution
with top comfort



VRV IV standards:

Variable refrigerant temperature

Customize your VRV for best seasonal efficiency & comfort

Continuous heating

The new standard in heating comfort

VRV configurator

Software for simplified commissioning, configuration and customisation

- > 7 segment display
- > Automatic refrigerant charge
- > Refrigerant containment check
- > Night quiet mode
- > Low noise function
- > Connectable to stylish indoor units (Only for single modules)
- > Connectable to LT hydrobox (1)
- > Full inverter compressors
- > Gas cooled PCB
- > 4 side heat exchanger
- > Reluctance brushless DC compressor
- > Sine wave DC inverter
- > DC fan motor
- > E-pass heat exchanger
- > I demand function
- > Manual demand function

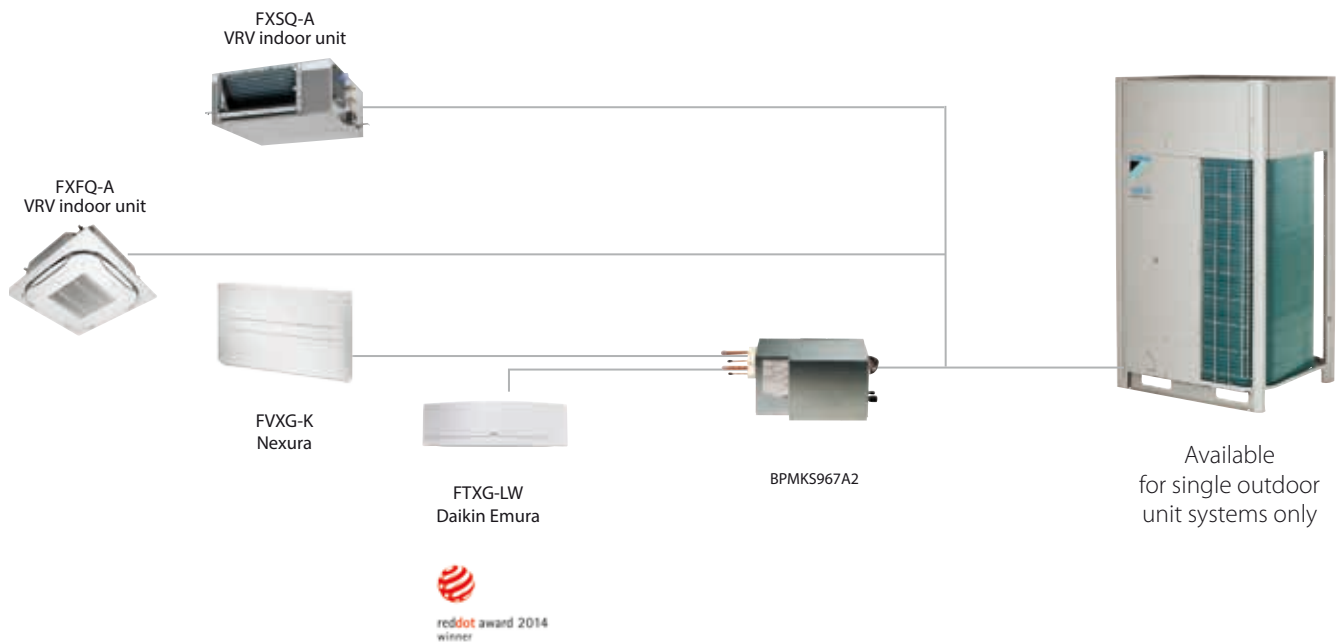
(1) Special order unit needed to connect LT hydroboxes with multi outdoor unit systems
For detailed explanation of these functions refer to vriv iv technologies tab



Wide range of indoor units

Freely combine VRV indoor units with stylish indoor units (Daikin Emura, Nexura, ...)

Mix of
RA units
& VRV units



Connectable indoor units

		15 CLASS	20 CLASS	25 CLASS	35 CLASS	42 CLASS	50 CLASS	60 CLASS	71 CLASS
Daikin Emura - Wall mounted unit	FTXG-LW/LS		•	•	•		•		
Wall mounted unit	CTXS-K	•			•				
Wall mounted unit	FTXS-K		•	•	•		•		
Wall mounted unit	FTXS-G					•		•	•
Nexura - Floor standing unit	FVXG-K			•	•		•		
Floor standing unit	FVXS-F			•	•		•		
Flexi type unit	FLXS-B(9)			•	•		•	•	

BPMKS box needed to connect RA indoors to VRV IV (RYYQ-T and RXYQ-T(9))

VRV IV

proven in practice: 40% more efficient

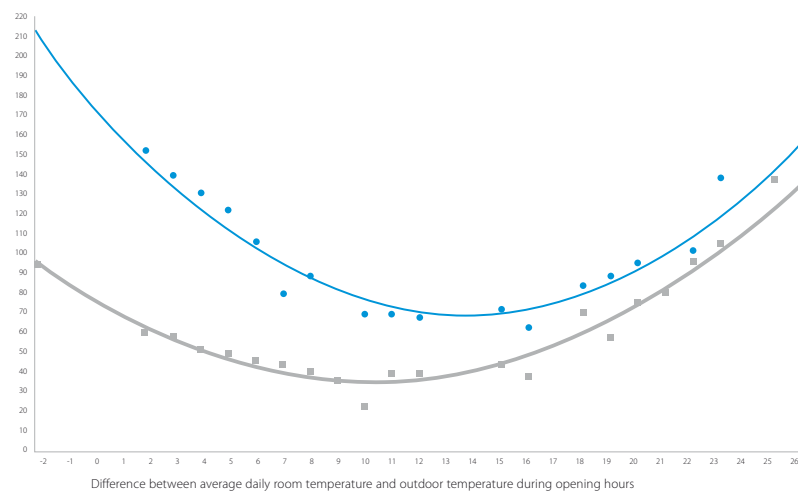
A field trial at a German fashion chain store demonstrated how the innovative features of VRV IV have improved energy efficiency dramatically over previous models.

Results: up to 60% less energy consumed

The results of the trial showed that the new VRV IV system consumed much less energy, particularly when cooling, compared with the VRV III system – in some cases up to 60% less. When heating, savings were an average of 20%.

The Unterhaching trial demonstrates how VRV IV heat pump technology uses a renewable energy source – air - to provide a complete and environmentally sustainable solution for heating, cooling, and ventilation in commercial environments. The trial also shows that businesses can only identify and control energy wastage through careful and intelligent monitoring of climate control systems, a service which Daikin can offer.

Average daily consumption during working hours in kWh



- Energy use VRV III in 2012 in kWh
- Energy use VRV IV in 2013 in kWh
- Trendline energy use VRV III
- Trendline energy use VRV IV

	VRV III 20HP (2 modules)	VRV IV 18HP (1 module)
Period	March 2012 - February 2013	March 2013 - February 2014
Avg (kWh/Month)	2.797	1.502
Total (KWh)	33.562	18.023
Total (€)	6.041	3.244
Yearly (operation cost/m² (€/m²))	9,9	5,3
46% savings = € 2.797		

Measured data

Fashion store Unterhaching (Germany)

- › Floor space: 607m²
- › Energy cost: 0,18 €/kWh
- › System taken into account for consumption:
 - VRV IV heat pump with continuous heating
 - Round flow cassettes (without auto cleaning panel)
 - VAM for ventilation (2x VAM2000)
 - Biddle Air curtain.



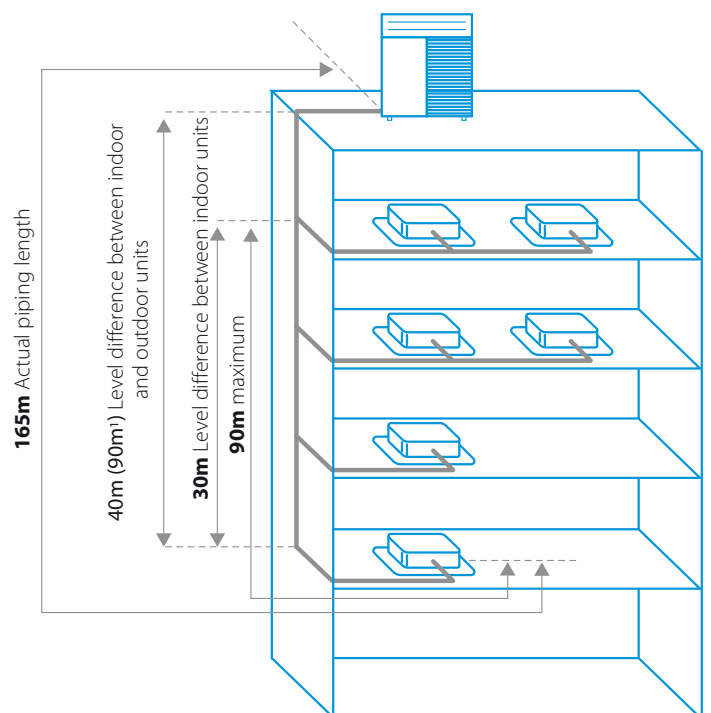
Free combination of outdoor units

Freely combine outdoor units to optimise for small footprint, continuous heating, highest efficiency or any other combination

Flexible piping design

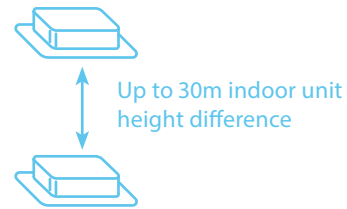
Total piping length	1000m
Longest length actual (Equivalent)	165m (190m)
Longest length after first branch	90m ¹
Level difference between indoor and outdoor units	90m ¹
Level difference between indoor units	30m

1 Contact your local dealer for more information and restrictions
 2 in case outdoor unit is located below indoor units



VRV IV heat pump

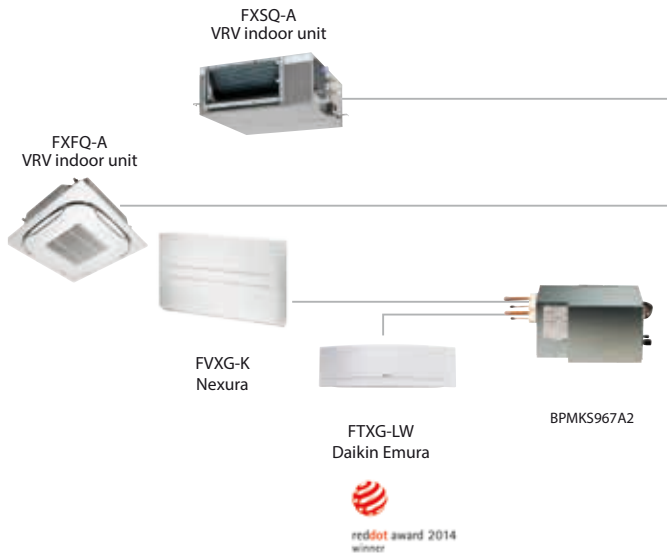
Daikin's optimum solution with top comfort



- › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, hot water, air handling units and Biddle air curtains
- › Wide range of indoor units: possibility to combine VRV with stylish indoor units (Daikin Emura, Nexura, ...)
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature, continuous heating, VRV configurator, 7 segment display and full inverter compressors, 4-side heat exchanger, refrigerant cooled PCB, new DC fan motor
- › Free combination of outdoor units to meet installation space or efficiency requirements
- › Available as heating only by irreversible field setting
- › Contains all standard VRV features

Outdoor unit				RYYQ/RXYQ	8T8	10T	12T	14T	16T	18T	20T
Capacity range				HP	8	10	12	14	16	18	20
Cooling capacity	Nom.	35°CDB	kW	22,4 (1)	28,0 (1)	33,5 (1)	40,0 (1)	45,0 (1)	50,4 (1)	56,0 (1)	
	Max.	6°CWB	kW	25,0 (2)	31,5 (2)	37,5 (2)	45,0 (2)	50,0 (2)	56,5 (2)	63,0 (2)	
Heating capacity	Nom.	6°CWB	kW	22,4 (2)	28,0 (2)	33,5 (2)	40,0 (2)	45,0 (2)	50,4 (2)	56,0 (2)	
	Max.	6°CWB	kW	25,0 (2)	31,5 (2)	37,5 (2)	45,0 (2)	50,0 (2)	56,5 (2)	63,0 (2)	
Power input - 50Hz	Cooling	Nom. 35°CDB	kW	5,21 (1)	7,29 (1)	8,98 (1)	11,0 (1)	13,0 (1)	15,0 (1)	18,5 (1)	
	Heating	Nom. 6°CWB	kW	4,75 (2)	6,29 (2)	7,77 (2)	9,52 (2)	11,1 (2)	12,6 (2)	14,5 (2)	
		Max. 6°CWB	kW	5,51 (2)	7,38 (2)	9,10 (2)	11,2 (2)	12,8 (2)	14,6 (2)	17,0 (2)	
EER at nom. capacity	35°CDB		kW/kW	4,30 (1)	3,84 (1)	3,73 (1)	3,64 (1)	3,46 (1)	3,36 (1)	3,03 (1)	
COP at nom. capacity	6°CWB		kW/kW	4,72 (2)	4,45 (2)	4,31 (2)	4,20 (2)	4,05 (2)	4,00	3,86	
COP at max. capacity	6°CWB		kW/kW	4,54 (2)	4,27 (2)	4,12 (2)	4,02 (2)	3,91 (2)	3,87	3,71	
ESEER - Automatic					7,53	7,20	6,96	6,83	6,50	6,38	5,67
Maximum number of connectable indoor units					64 (4)						
Indoor index connection	Min.			100	125	150	175	200	225	250	
	Nom.			200	250	300	350	400	450	500	
	Max.			260	325	390	455	520	585	650	
Dimensions	Unit	HeightxWidthxDepth	mm	1.685x930x765				1.685x1.240x765			
Weight	Unit		kg	243	252		356			391	
Fan	Air flow rate	Cooling Nom.	m ³ /min	162	175	185	223	260	251	261	
Sound power level	Cooling	Nom.	dB(A)	78	79		81		86	88	
	Sound pressure level	Nom.	dB(A)	58			61		64	65	
Operation range	Cooling	Min.~Max.	°CDB	-5~43							
	Heating	Min.~Max.	°CWB	-20~15,5							
Refrigerant	Type			R-410A							
	GWP			2.087,5							
	Charge		TCO ₂ eq kg	12,3	12,5	13,2	21,5	21,7	24,4	24,6	
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	m	1.000							
Power supply	Phase/Frequency/Voltage		Hz/V	3N~/50/380-415							
Current - 50Hz	Maximum fuse amps (MFA)		A	20	25	32		40		50	

Outdoor system				RYYQ/RXYQ	22T	24T8	26T	28T	30T	32T	34T	36T	38T8	40T
System	Outdoor unit module 1			10T	8T8		12T			16T		8T8	10T	
	Outdoor unit module 2			12T	16T	14T	16T	18T	16T	18T	20T	10T	12T	
	Outdoor unit module 3							-				20T	18T	
Capacity range				HP	22	24	26	28	30	32	34	36	38	40
Cooling capacity	Nom.	35°CDB	kW	61,5 (1)	67,4 (1)	73,5 (1)	78,5 (1)	83,9 (1)	90,0 (1)	95,4 (1)	101,0 (1)	106,3 (1)	111,9 (1)	
	Max.	6°CWB	kW	69,0	75,0	82,5	87,5	94,0	100,0	106,5	113,0	119,0	125,5	
Heating capacity	Nom.	6°CWB	kW	61,5 (2)	67,4 (2)	73,5 (2)	78,5 (2)	83,9 (2)	90,0 (2)	95,4 (2)	101,0 (2)	106,3 (2)	111,9 (2)	
	Max.	6°CWB	kW	69,0	75,0	82,5	87,5	94,0	100,0	106,5	113,0	119,0	125,5	
Power input - 50Hz	Cooling	Nom. 35°CDB	kW	16,27 (1)	18,2 (1)	20,0 (1)	22,0 (1)	24,0 (1)	26,0 (1)	28,0 (1)	31,5 (1)	29,2 (1)	31,3 (1)	
	Heating	Nom. 6°CWB	kW	14,06 (2)	15,85 (2)	17,29 (2)	18,87 (2)	20,4 (2)	22,2 (2)	23,7 (2)	25,6 (2)	25,1 (2)	26,7 (2)	
		Max. 6°CWB	kW	16,48	18,31	20,30	21,90	23,7	25,6	27,4	29,8	29,2	31,1	
EER at nom. capacity	35°CDB		kW/kW	3,77 (1)	3,70 (1)	3,68 (1)	3,57 (1)	3,5 (1)	3,46 (1)	3,4 (1)	3,21 (1)	3,6 (1)		
COP at nom. capacity	6°CWB		kW/kW	4,37	4,25		4,16	4,1	4,05	4,0	3,95	4,2		
COP at max. capacity	6°CWB		kW/kW	4,19	4,10	4,06	4,00		3,91	3,9	3,79	4,1	4,0	
ESEER - Automatic					7,07	6,81	6,89	6,69	6,60	6,50	6,44	6,02	6,36	6,74
Maximum number of connectable indoor units					64 (3)									
Indoor index connection	Min.			275	300	325	350	375	400	425	450	475	500	
	Nom.			550	600	650	700	750	800	850	900	950	1.000	
	Max.			715	780	845	910	975	1.040	1.105	1.170	1.235	1.300	
Piping connections	Liquid	OD	mm	15,9			19,1							
	Gas	OD	mm	28,6			34,9				41,3			
	Total piping length	System Actual	m	1.000										
Current - 50Hz	Maximum fuse amps (MFA)		A	63				80				100		



RYYQ-T(8)/RXYQ-T(8)

Outdoor system				RYYQ	42T	44T	46T	48T	50T	52T	54T
System	Outdoor unit module 1				10T	12T	14T		16T		18T
	Outdoor unit module 2						16T				18T
	Outdoor unit module 3						16T				18T
Capacity range		HP		42	44	46	48	50	52	54	
Cooling capacity	Nom.	35°CDB	kW	118,0 (1)	123,5 (1)	130,0 (1)	135,0 (1)	140,0 (1)	145,8 (1)	151,2 (1)	
	Max.	6°CWB	kW	118,0 (2)	123,5 (2)	130,0 (2)	135,0 (2)	140,0 (2)	145,8 (2)	151,2 (2)	
Heating capacity	Nom.	6°CWB	kW	131,5	137,5	145,0	150,0	156,0	163,0	169,5	
	Max.	6°CWB	kW	33,3 (1)	35,0 (1)	37,0 (1)	39,0 (1)	40,7 (1)	43,0 (1)	45,0 (1)	
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	28,49 (2)	29,97 (2)	31,72 (2)	33,3 (2)	34,6 (2)	36,3 (2)	37,8 (2)
	Heating	Nom.	6°CWB	kW	32,98	34,70	36,8	38,4	40,0	42,0	43,8
	Max.	6°CWB	kW								
EER at nom. capacity	35°CDB		kW/kW	3,54 (1)		3,51 (1)	3,46 (1)	3,44 (1)	3,4 (1)	3,40 (1)	
COP at nom. capacity	6°CWB		kW/kW	4,14	4,12	4,10	4,05			4,0	
COP at max. capacity	6°CWB		kW/kW	3,99	3,96	3,94	3,91		3,90		
ESEER - Automatic				6,65	6,62	6,60	6,50	6,46	6,42	6,38	
Maximum number of connectable indoor units					64 (3)						
Indoor index connection	Min.			525	550	575	600	625	650	675	
	Nom.			1.050	1.100	1.150	1.200	1.250	1.300	1.350	
	Max.			1.365	1.430	1.495	1.560	1.625	1.690	1.755	
Piping connections	Liquid	OD	mm	19,1							
	Gas	OD	mm	41,3							
	Total piping length	System	Actual	1.000							
Current - 50Hz	Maximum fuse amps (MFA)		A	100			125				

Outdoor unit module				RVMQ	10T	12T	14T	16T	18T	20T	8T
Dimensions	Unit	Height/Width/Depth		mm	1.685/930/765			1.685/1.240/765			1.685/930/765
Weight	Unit			kg	195		309		319		188
Fan	Air flow rate	Cooling	Nom.	m ³ /min	175	185	223	260	251	261	162
	External static pressure	Max.		Pa	78						
	Discharge direction				Vertical						
	Type				Propeller fan						
Sound power level	Cooling	Nom.		dB(A)	79	81		86		88	78
Sound pressure level	Cooling	Nom.		dB(A)	58	61		64	65	66	58
Operation range	Cooling	Min.~Max.		°CDB	-5~43						
	Heating	Min.~Max.		°CWB	-20~15,5						
Refrigerant	Type				R-410A						
	GWP				2.087,5						
	Charge		TCO _{2eq}		12,5	13,2	21,5	21,7	24,4	24,6	12,3
			kg		6	6,3	10,3	10,4	11,7	11,8	5,9
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/380-415						
Current - 50Hz	Maximum fuse amps (MFA)		A		25	32		40		50	20

(1) Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent refrigerant piping: 5m, level difference: 0m. Data for standard efficiency series (2) Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m. Data for standard efficiency series (3) Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% ≤ CR ≤ 130%) | The STANDARD ESEER value corresponds with normal VRV4 Heat Pump operation, not taking into account advanced energy saving operation functionality | The AUTOMATIC SEER value corresponds with normal VRV4 Heat Pump operation, taking into account advanced energy saving operation functionality (variable refrigerant temperature control operation)

VRV IV S-series heat pump

The most compact VRV

Most compact unit on the market
823mm high & 94kg



Control systems



Indoor units

VRV type indoor units
Residential type indoor units
(such as Daikin Emura)



Air curtain

Biddle Air curtain for VRV (CYV)



Ventilation

Heat Reclaim ventilation
(VAM/VKM) AHU
connection kit



RXYSQ4, 5TV1



RXYSQ4, 5, 6TV1/TY1



RXYSQ8, 10, 12TY1



VRV IV standards:

Variable refrigerant temperature

Customize your VRV for best seasonal efficiency & comfort

VRV configurator

Software for simplified commissioning, configuration and customisation

- > Refrigerant containment check
- > Night quiet mode
- > Low noise function
- > Connectable to stylish indoor units (Daikin Emura, Nexura)
- > Full inverter compressors
- > Gas cooled PCB (not available on RXYSQ4,5,6,8TY1)
- > Reluctance brushless DC compressor
- > Sine wave DC inverter
- > DC fan motor
- > E-pass heat exchanger
- > I demand function
- > Manual demand function

For detailed explanation of these functions refer to vrv iv technologies tab

Widest range of front blow units on the market



Lowest height on the market

Ideal for roof installations

> The low height mini VRV can be hidden in many places where a twin fan unit cannot due to its low height.



Unnoticeable for parapet installation

Ideal to install below a window on a Balcony

> Daikin VRV IV S-series compact can be installed discretely on a balcony thanks to its compact dimensions, offering you air conditioning while being almost unnoticeable.

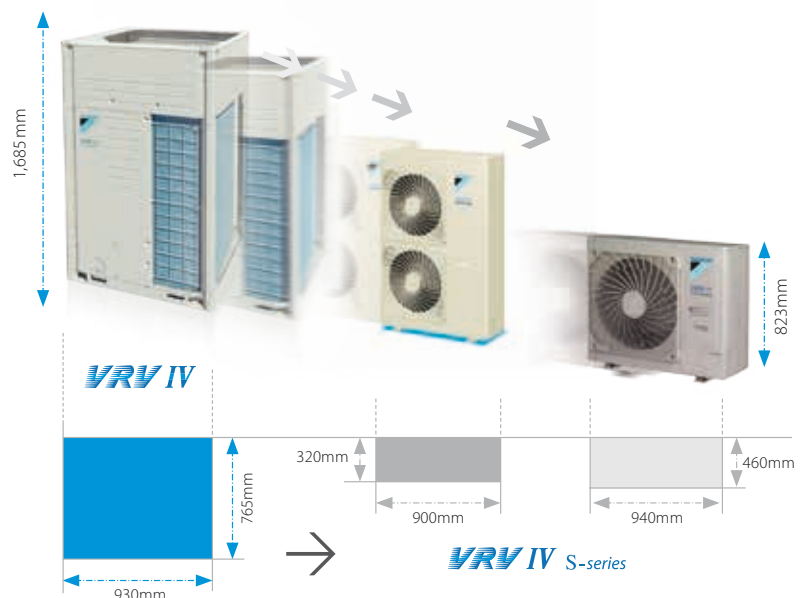


Low height make the unit invisible from inside and unnoticeable from the outside



Space saving design

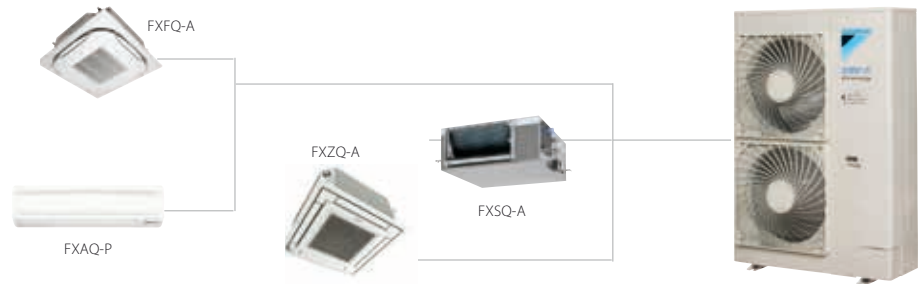
The VRV S-series is slimmer and more compact, resulting in significant savings in installation space.



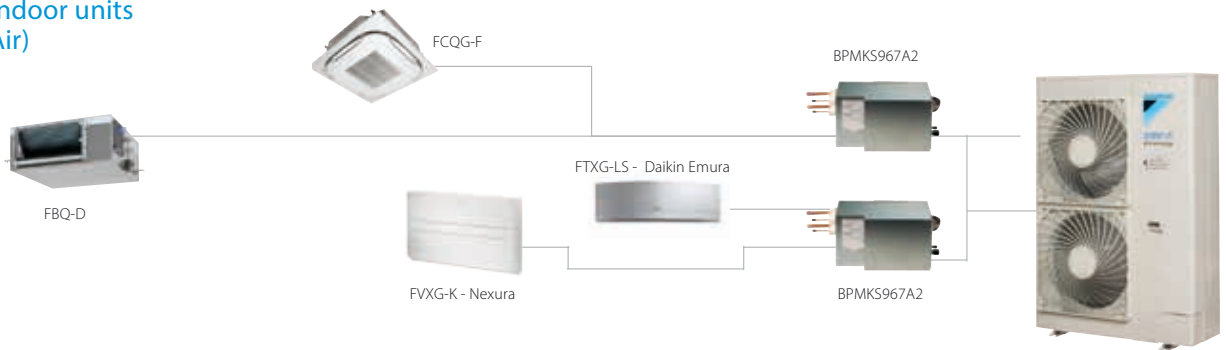


Wide range of indoor units

Connect VRV units...



... or stylish indoor units (RA and Sky Air)



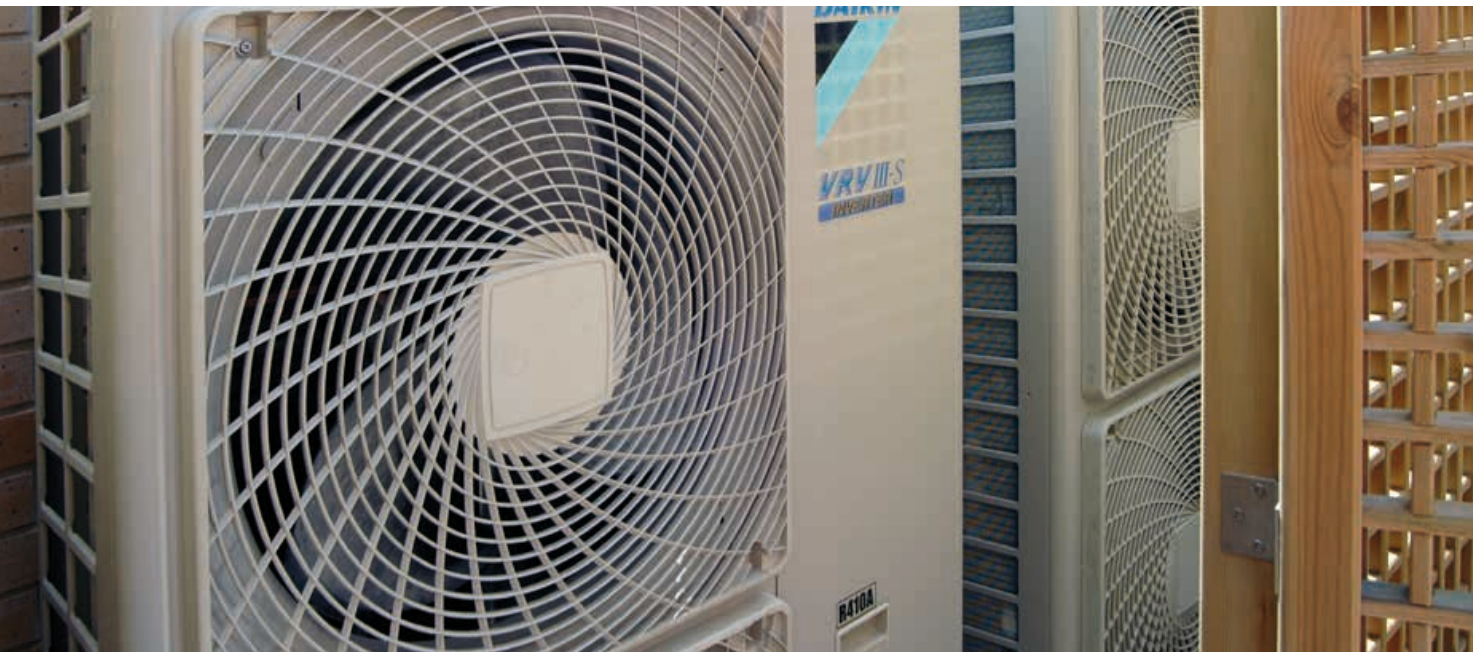
Connectable stylish indoor units

		15 CLASS	20 CLASS	25 CLASS	35 CLASS	42 CLASS	50 CLASS	60 CLASS	71 CLASS
Round flow cassette	FCQG-F				●		●	●	●
Fully flat cassette	FFQ-C			●	●		●	●	
Slim concealed ceiling unit	FDXM-F3			●	●		●	●	
Concealed ceiling unit with inverter driven fan	FBQ-D			●	●		●	●	
Daikin Emura - Wall mounted unit	FTXG-LW/LS		●	●	●		●		
Wall mounted unit	CTXS-K	●			●				
Wall mounted unit	FTXS-K		●	●	●	●	●		
Wall mounted unit	FTXS-G							●	●
Ceiling suspended unit	FHQ-CB				●		●		
Nexura - Floor standing unit	FVXG-K			●	●		●	●	
Floor standing unit	FVXS-F			●	●		●		
Concealed floorstanding unit	FNQ-A			●	●		●	●	
Flexi type unit	FLXS-B(9)			●	●		●	●	

For more info about Daikins stylish indoor units, please check our indoor unit-portfolio

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

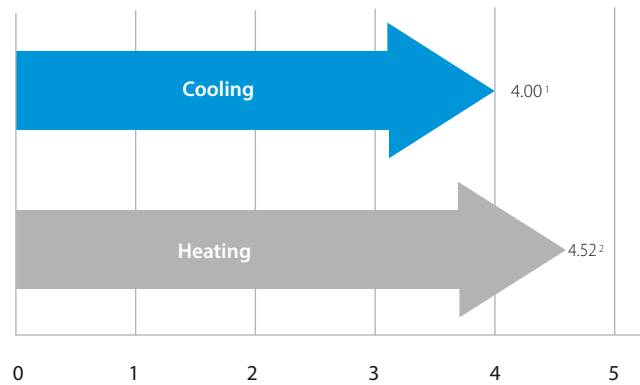
* To connect stylish indoor units a BPMKS unit is needed



High COP values

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

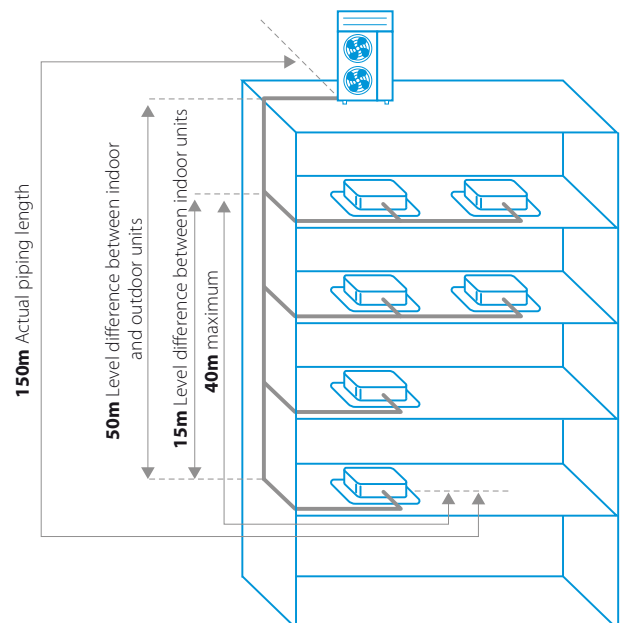
- ¹ Nominal cooling capacities are based on: indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°C, equivalent refrigerant piping: 5m, level difference: 0m.
- ² Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m



Flexible piping design

	VRV indoors connected	Stylish indoors connected
Total piping length	300m	140m
Longest length actual	120m (4-8HP)/ 150m (10-12HP)	
Minimum length between outdoor unit and first branch	-	5m
Minimum piping length between BP and indoor unit	-	2m
Maximum piping length between BP and indoor unit	-	15m
Longest length after first branch	40m	40m
Level difference between indoor and outdoor units	50m (40m ¹)	30m
Level difference between indoor units	15m	15m

¹ Outdoor unit in lowest position



VRV IV S-series

technologies

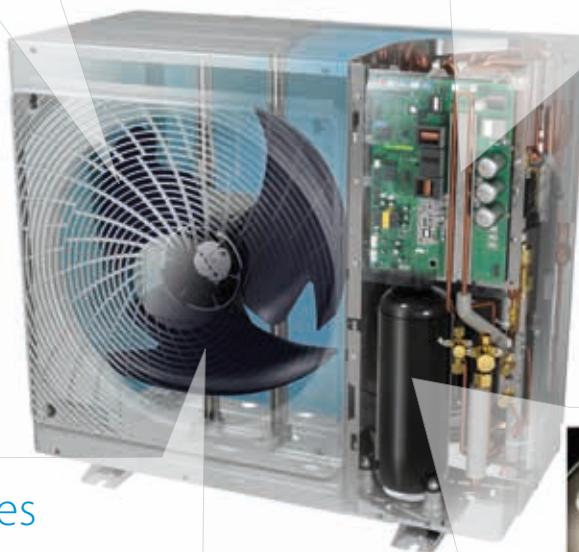
Super aero grille

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

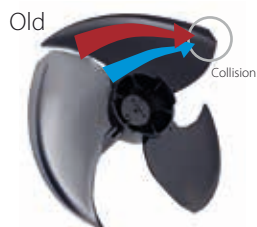


Refrigerant-cooled PCB

- > Reliable cooling because it is not influenced by ambient air temperature
- > Smaller switchbox for smoother air flow through the heat exchanger increasing heat exchange efficiency with 5%



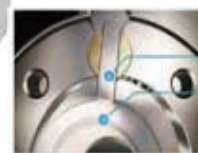
Improved fan blades



Air streams collide and generate loss



Air streams are smoothed around V-cut and reduces air flow loss



Vane fixed to rotor
Rotor

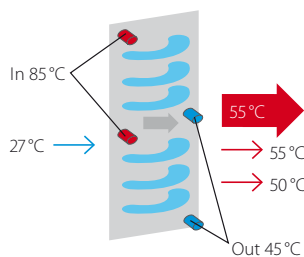
Compressor

- Swing type > **no oil separator**
Vane & rotor are unified resulting in:
- > Reduced noise level
 - > Longer compressor life
 - > Higher efficiency thanks to the absence of internal refrigerant leakage between high and low pressure side

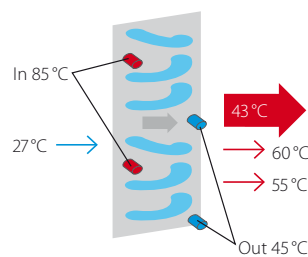
E-Pass heat exchanger

Optimising the heat exchanger's path layout prevents heat being transferred from the overheated gas section to the sub-cooled liquid section which is a more efficient way to use the heat exchanger.

Standard heat exchanger



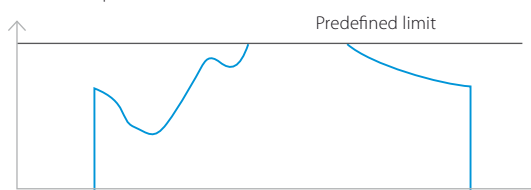
e-Pass heat exchanger



I-demand function

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

Power consumption



Time



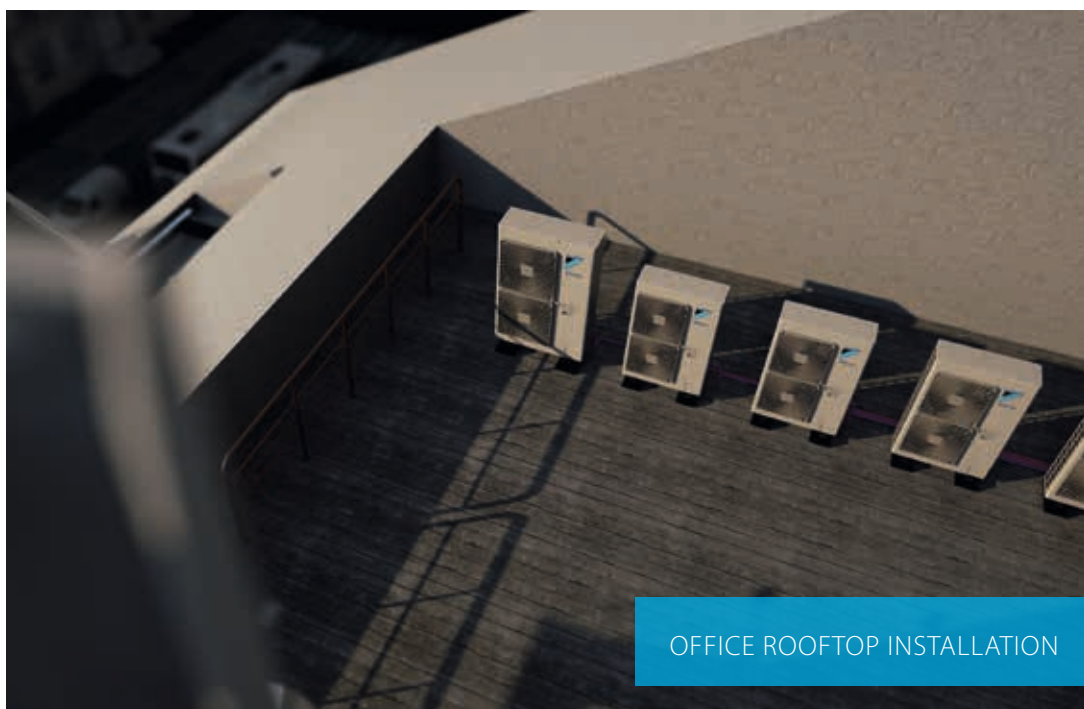
PIPE RUN OF 70M ALLOWS
INSTALLATION AWAY FROM THE HOUSE



LARGE VILLA APPLICATION



PARAPET INSTALLATION



OFFICE ROOFTOP INSTALLATION

VRV IV S-series compact heat pump

The most compact VRV

- › Compact & lightweight single fan design makes the unit almost unnoticeable
- › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air cutains
- › Wide range of indoor units: either connect VRV or stylish indoor units such as Daikin Emura, Nexura ...
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature, VRV configurator and full inverter compressors, refrigerant cooled PCB, new DC fan motor
- › Possibility to limit peak power consumption between 30 and 80%, for example during periods with high power demand
- › Contains all standard VRV features



Outdoor unit		RXYSCQ	4TV1	5TV1
Capacity range		HP	4	5
Cooling capacity	Nom. 35°CDB	kW	12,1	14,0
Heating capacity	Nom. 6°CWB	kW	12,1	14,0
	Max. 6°CWB	kW	14,2	16,0
Power input - 50Hz	Cooling	Nom. 35°CDB	kW	4,26
	Heating	Nom. 6°CWB	kW	3,18
		Max. 6°CWB	kW	4,14
COP at nom. capacity	6°CWB	kW/kW	3,81	3,58
COP at max. capacity	6°CWB	kW/kW	3,43	3,20
ESEER - Automatic			6,93	6,57
Maximum number of connectable indoor units				64
Indoor index connection	Min.		50	62,5
	Nom.			-
	Max.		130	162,5
Dimensions	Unit	HeightxWidthxDepth	mm	
Weight	Unit		kg	
Fan	Air flow rate	Cooling	Nom.	m ³ /min
Sound power level	Cooling	Nom.		dB(A)
Sound pressure level	Cooling	Nom.		dB(A)
Operation range	Cooling	Min.-Max.	°CDB	
	Heating	Min.-Max.	°CWB	
Refrigerant	Type		R-410A	
	GWP		2.087,5	
	Charge	TCO _{2eq}	7,7	
Piping connections	Liquid	OD	mm	
	Gas	OD	mm	
Power supply	Phase/Frequency/Voltage		Hz/V	
Current - 50Hz	Maximum fuse amps (MFA)	A	32	

(1) Actual number of units depends on the indoor unit type (VRV DX indoor, RA DX indoor, etc.) and the connection ratio restriction for the system (being; 50% ≤ CR ≤ 130%).

VRV IV S-series heat pump

Space saving solution without compromising on efficiency

- › Space saving trunk design for flexible installation
- › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air curtains
- › Wide range of indoor units: either connect VRV or stylish indoor units such as Daikin Emura, Nexura ...
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors
- › Possibility to limit peak power consumption between 30 and 80%, for example during periods with high power demand
- › Contains all standard VRV features



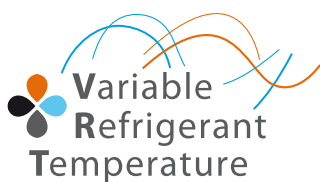
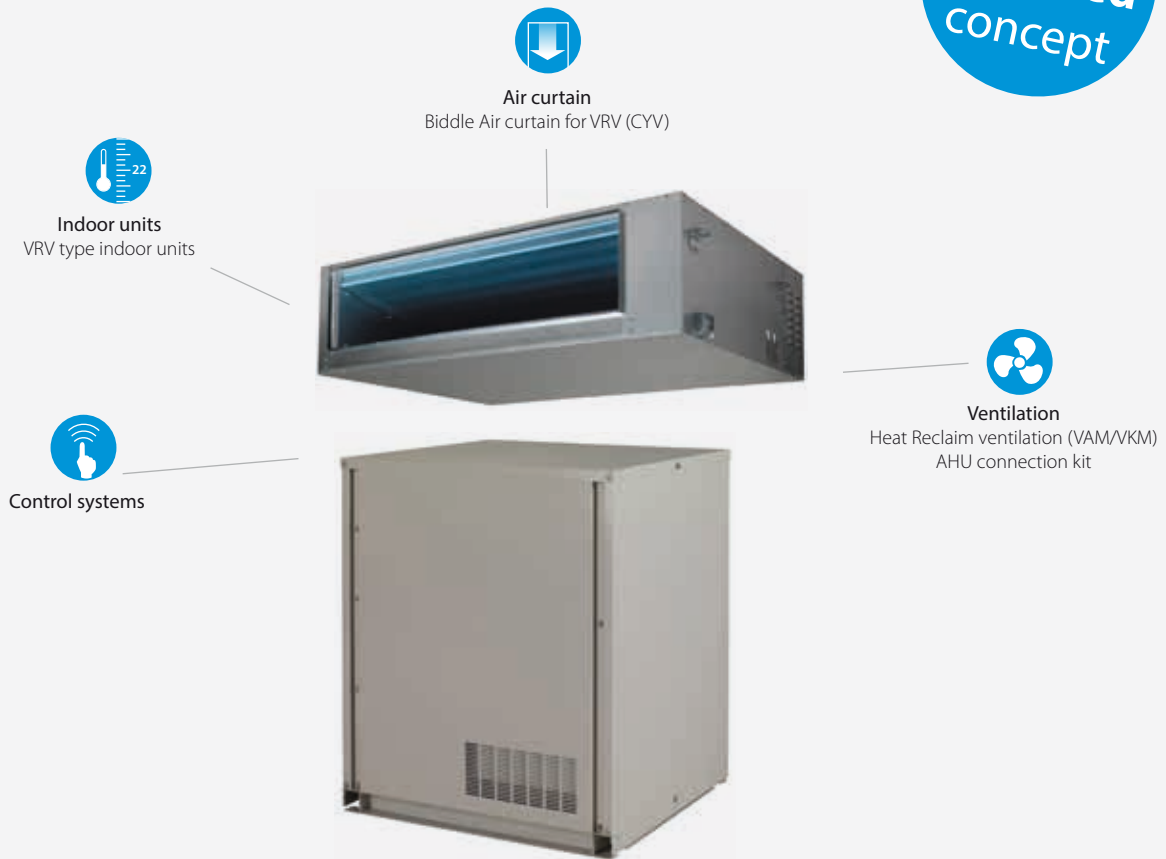
RXYSQ4-6TV1_TY1

Outdoor unit		RXYSQ-TV1/RXYSQ-TY1		4TV1	5TV1	6TV1	4TY1	5TY1	6TY1	8TY1	10TY1	12TY1	
Capacity range			HP	4	5	6	4	5	6	8	10	12	
Cooling capacity	Nom.	35°CDB	kW	12,1	14,0	15,5	12,1	14,0	15,5				
		Eurovent	kW							22,4	28,0	33,5	
Heating capacity	Nom.	6°CWB	kW	12,1	14,0	15,5	12,1	14,0	15,5	22,4	28,0	33,5	
		Max.	6°CWB	kW	14,2	16,0	18,0	14,2	16,0	18,0	25,0	31,5	37,5
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	3,03	3,73	4,56	3,03	3,73	4,56			
			Eurovent	kW							6,12	8,24	10,2
	Heating	Nom.	6°CWB	kW	2,68	3,27	3,97	2,68	3,27	3,97	5,20	6,60	8,19
			Max.	6°CWB	kW	3,43	4,09	5,25	3,43	4,09	5,25	6,22	8,33
EER at nom. capacity	Eurovent		kW/kW							3,66	3,40	3,30	
COP at nom. capacity	6°CWB		kW/kW	4,52	4,28	3,90	4,52	4,28	3,90	4,31	4,24	4,09	
COP at max. capacity	6°CWB		kW/kW	4,14	3,91	3,43	4,14	3,91	3,43	4,02	3,78	3,66	
ESEER - Automatic				7,89	7,49	6,73	7,89	7,49	6,73	6,72	6,41	6,18	
Maximum number of connectable indoor units				64 (1)									
Indoor index connection	Min.			50	62,5	70	50	62,5	70	100	125	150	
	Nom.												
	Max.			130	162,5	182	130	162,5	182	260	325	390	
Dimensions	Unit	HeightxWidthxDepth	mm	1.345x900x320						1.430x940x320		1.615x940x460	
Weight	Unit		kg	104									
Fan	Air flow rate	Cooling	Nom.	m ³ /min	106						144	175	180
											140	182	
Sound power level	Cooling	Nom.	dBA	68	69	70	68	69	70	73	74	76	
Sound pressure level	Cooling	Nom.	dBA	50	51		50	51		55		57	
Operation range	Cooling	Min.~Max.	°CDB	-5~46						-5~52			
	Heating	Min.~Max.	°CWB							-20~-15,5			
Refrigerant	Type			R-410A									
	GWP			2.087,5									
	Charge		TCO ₂ eq	7,5						9,4	14,6	16,7	
Piping connections	Liquid	OD	mm	3,6						5,5	7	8	
		Gas	OD	mm	15,9	19,1		15,9		19,1	22,2	25,4	
	Total piping length	System	Actual	m	300								
Power supply	Phase/Frequency/Voltage		Hz/V	1N~/50/220-240				3N~/50/380-415					
Current - 50Hz	Maximum fuse amps (MFA)		A	32				16		25		32	

(1) Actual number of units depends on the indoor unit type (VRV DX indoor, RA DX indoor, etc.) and the connection ratio restriction for the system (being; 50% ≤ CR ≤ 130%).

VRV IV i-series heat pump for indoor installation

unique
patented
concept



VRV IV standards:

Variable refrigerant temperature

Customize your VRV for best seasonal
efficiency & comfort

VRV configurator

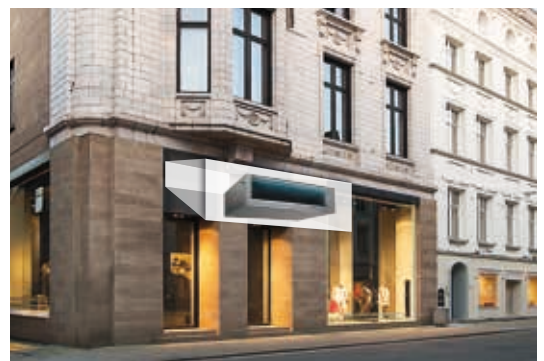
Software for simplified commissioning,
configuration and customisation

- › Night quiet mode
- › Full inverter compressors
- › Low noise function
- › Sine wave DC inverter
- › DC fan motor
- › E-pass heat exchanger
- › I demand function
- › Manual demand function

For detailed explanation of these functions refer to vriv technologies tab

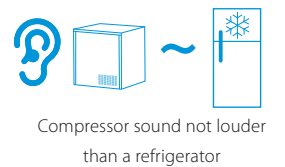
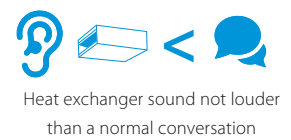
Invisible

- › Consider a wider range of properties because outdoor installation is not a factor
- › Open for business sooner because getting building permits is simplified
- › Seamless integration into the surroundings as only the grille is visible
- › No need for a roof installation or back alley installation

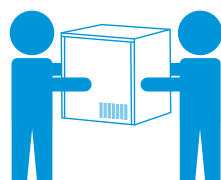


Quiet

- › Highly suited to densely populated areas such as city centres thanks to their low operating sound
- › Dedicated modes reduce sound further to comply with inner-city noise regulations



Lightweight parts can be installed by two people

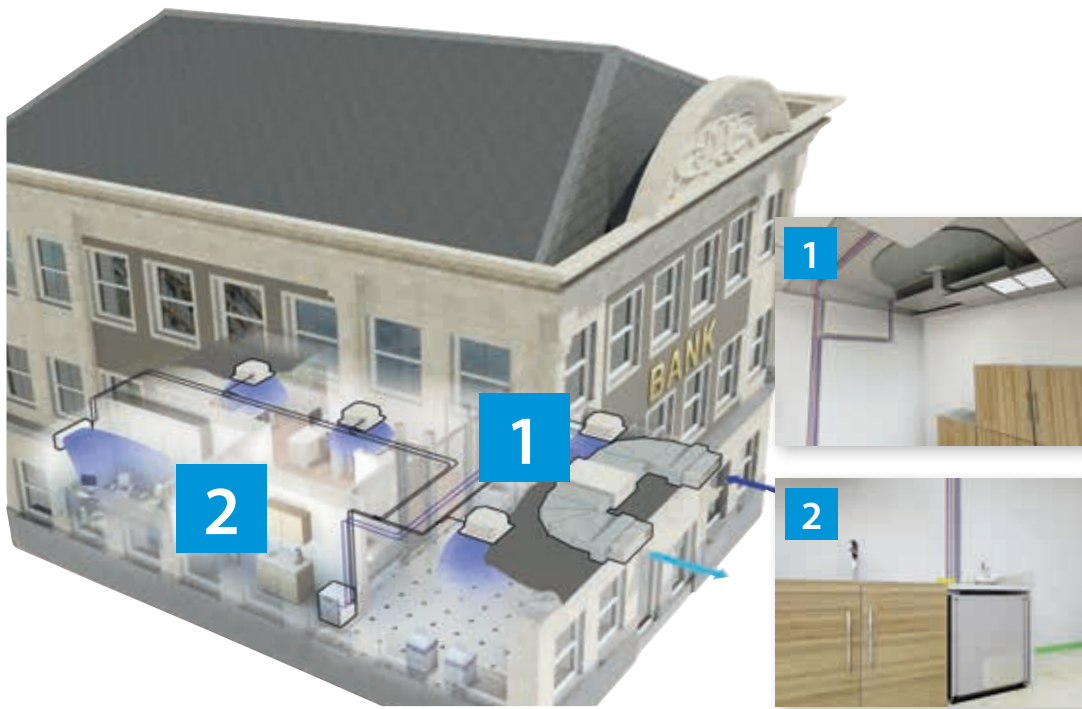


Unique split outdoor unit for indoor installation

Compact and easy to hide, the compressor can be installed at floor level, in a back office, storage room, technical area or in a kitchen, while the

heat exchanger can be installed in a false ceiling space. This means that the air conditioning system is completely invisible and does not take up expensive commercial floor space.

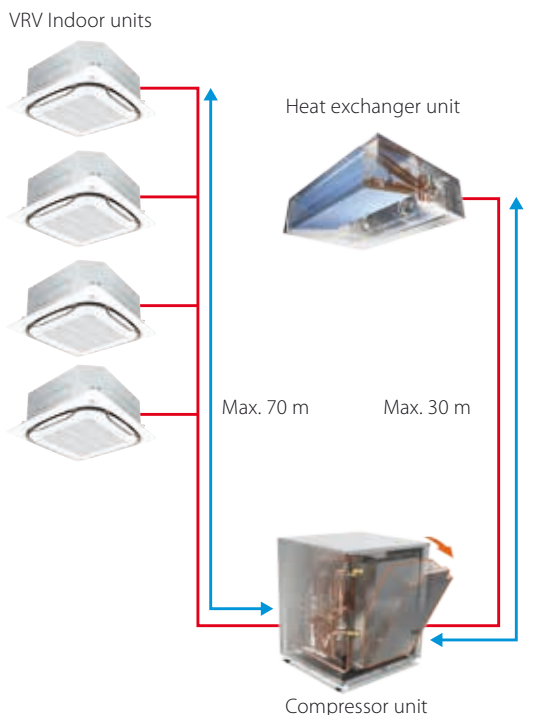
Unrivalled flexibility thanks to the fact that the outdoor unit is split into two parts



1. The heat exchanger can be installed in a false ceiling space.

2. The compressor is compact and easy to hide, this element can be installed at floor level, in a back office, storage room, technical area or in a kitchen.

This means that the air conditioning system is completely invisible and does not take up expensive commercial floor space.



Max. total piping length: 140m (5HP) / 300m (8HP)



Invisible air suction and air discharge

The problem solver

for many installation issues

Example 1

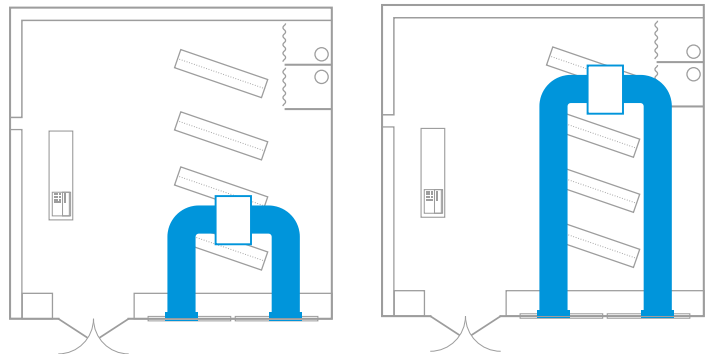
High flexibility

The other way around: install the modules where it fits your customer, not where it is the best fit for the outdoor unit

If there is no flat roof or backgarden available for installation of the outdoor unit, VRV IV i-series offers the solution.

The suction and exhaust can be installed at the façade or at the rear of the building as the inverter fans allows ESP to be adjusted to the length of the ductwork.

The compressor module can be installed up to 30 m from the heat exchanger unit in a storage room,



Flexible installation thanks to inverter fans

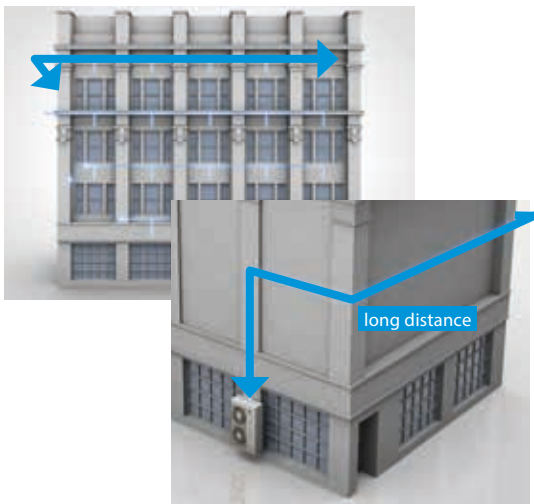


Example 2

Shorter pipe runs to the indoor units reduces installation costs compared to rooftop or back alley installation

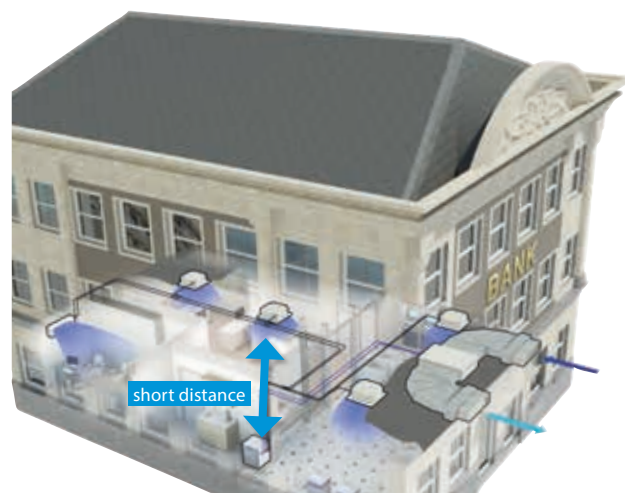
Back alley or rooftop needs very long piping lengths

- > Long installation time
- > Additional cost
- > Capacity loss



VRV IV i-series can be installed close to the indoor units

- > Quicker installation
- > Lower cost
- > No capacity loss



Example 3

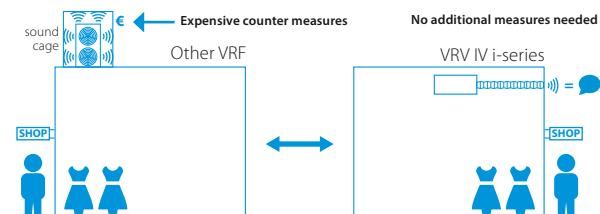
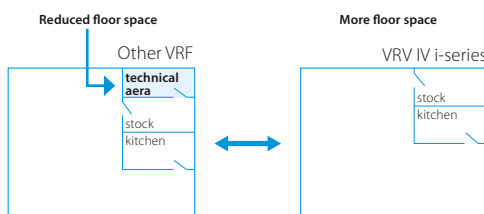
No need for bulky and expensive sound countermeasures

To comply with city regulation countermeasures are needed for standard units

- > Expensive sound cages might be needed to reduce sound (standard outdoor unit sound = 50~60 dBA)
- > Inside installation using expensive floor space

With VRV IV i-series you easily comply with city regulation without additional measures

- > Operation sound 47 dBA for 5HP model (flexible to install in corridor, shop area, ...) or lower with attenuator
- > No floor space is used as units can be installed in false ceiling, against the wall, ...



Patented V-shape heat exchanger for best surface to volume ratio

8
patents

Optimised air flow and temperature distribution

› Best performance for defrost (tested in high humidity down to -20°C).

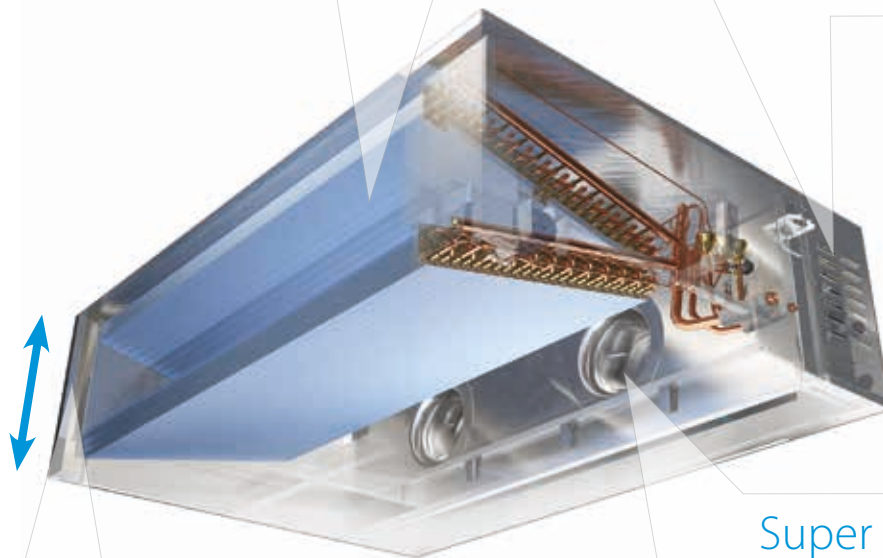
Patented perforated and insulated partition plate

Reduces conductivity and prevents cold bridges



Only
400mm
high

Fits easily in
any false ceiling



Super efficient centrifugal fans

- › Over 50% efficiency increase compared to sirocco fan
- › Patented backward-curved blade technology
- › More pressure increase



Standard delivered filter

› with the unit to prevent dirt from entering the heat exchanger



Compressor unit with rotating switchbox

Flexible and easy to install

Flexibility by back and top refrigerant connection possibility

Rotating switchbox

- › For easy access to all compressor parts

Only
77 kg
(5HP)

Tube-in-tube subcool heat exchanger

- › This patented heat exchanger increases the capacity of the system by ensuring optimal state of refrigerant in the heat exchanger module. This in turn increases overall efficiency.

No drain connection needed

- › Thanks to natural evaporation
- › Minimized cold surface to reduce dew formation
- › Fast and easy installation

Non welded bottom casing

- › Avoids any corrosion risk

Small footprint

- › Maximizes useable floor space (600 x 554 mm for 5HP)
- › Can easily be mounted in a storage room, back office, ...

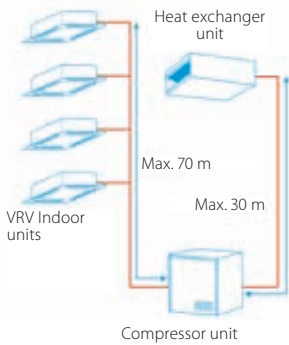
VRV IV heat pump for indoor installation

The invisible VRV

› Unique VRV heat pump for indoor installation



› Unrivalled flexibility because the unit is split up into two elements: the heat exchanger and the compressor



› Highly suited to densely populated areas thanks to the low operation sound and seamless integration into surrounding architecture as only the grille is visible



SB.RKXYQ-T

- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature, VRV configurator and full inverter compressors
- › Lightweight units (max. 105kg) can be installed by two people
- › Unique V-shape heat exchanger results in compact dimensions (h/e unit only 400mm high) allowing false ceiling installation, while ensuring top efficiency
- › Super efficient centrifugal fans (over 50% efficiency increase compared to sirocco fan)
- › Small footprint compressor unit (760 x 554 mm) maximizing useable floor space
- › Contains all standard VRV features

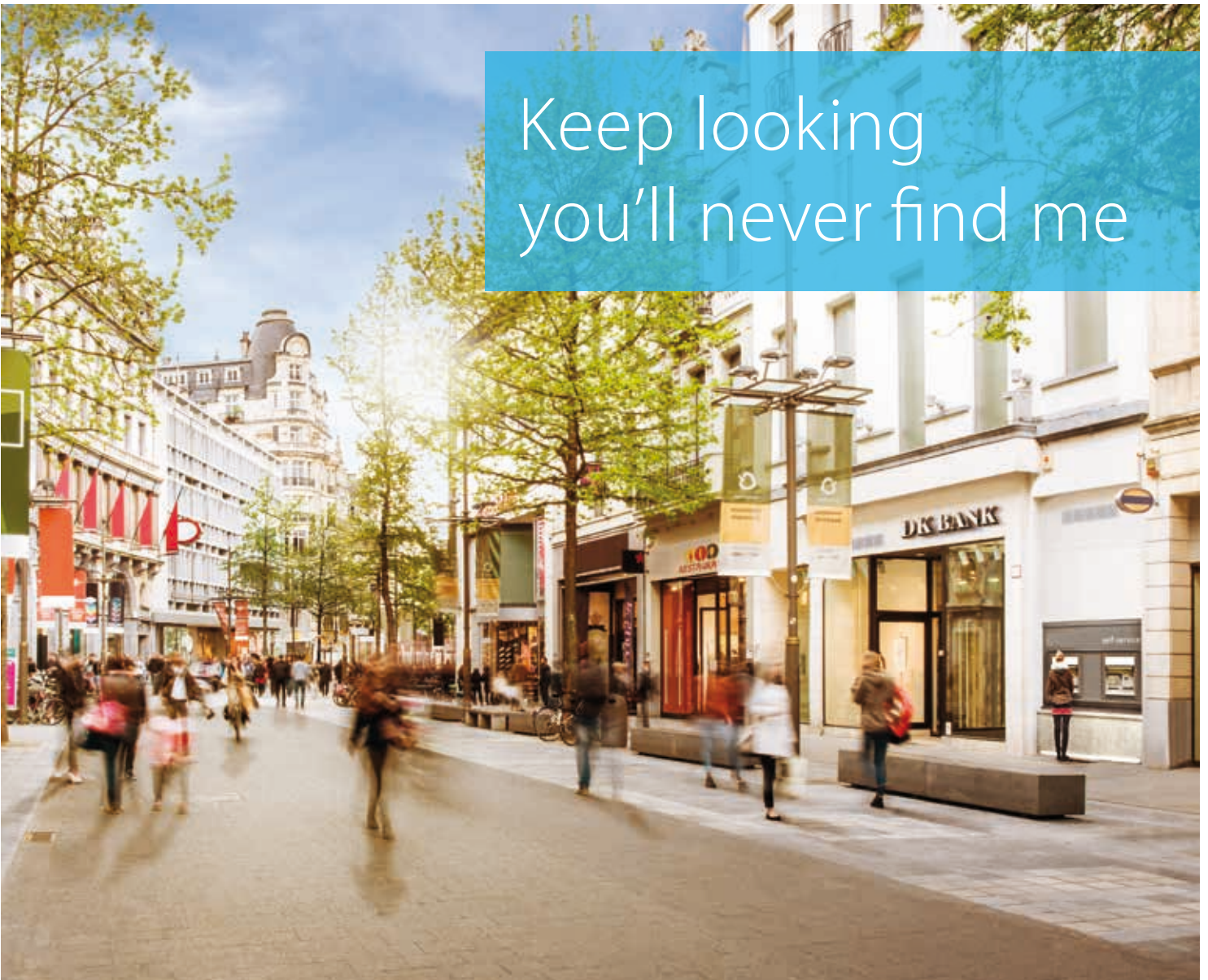
NEW

Outdoor system		SB.RKXYQ		5T		8T	
System	Heat exchanger unit			RDXYQ5T		RDXYQ8T	
	Compressor unit			RKXYQ5T		RKXYQ8T	
Capacity range			HP	5		8	
Cooling capacity	Nom. 35°CDB		kW	14,0		21,4	
Heating capacity	Nom. 6°CWB		kW	14,0		21,4	
	Max. 6°CWB		kW	16,0		25,0	
Power input - 50Hz	Cooling	Nom. 35°CDB	kW	4,38		7,64	
	Heating	Nom. 6°CWB	kW	3,68		5,94	
		Max. 6°CWB	kW	4,71		7,60	
EER at nom. capacity	35°CDB		kW/kW	3,20		2,80	
COP at nom. capacity	6°CWB		kW/kW	3,80		3,60	
COP at max. capacity	6°CWB		kW/kW	3,40		3,29	
Maximum number of connectable indoor units				10 (1)		17 (1)	
Indoor index connection	Min.			63		100	
	Nom.			125		200	
	Max.			163		260	
Fan	External static pressure	Max.	Pa	150			
		Nom.	Pa	60			
Piping connections	Between Compressor module (CM) and heat exchanger module (HM)	Liquid	OD mm	12,7			
		Gas	OD mm			19,1	
	Between Compressor module (CM) and indoor units (IU)	Liquid	OD mm	9,52			
		Gas	OD mm			15,9	
Total piping length		System	Actual	140		300	

(1) Actual number of units depends on the indoor unit type (VRV DX indoor, etc.) and the connection ratio restriction for the system (being: 50% ≤ CR ≤ 130%).

Outdoor unit module				compressor module		heat exchanger module		
				RKXYQ8T	RKXYQ5T	RDXYQ8T	RDXYQ5T	
Dimensions	Unit	Height/Width/Depth	mm	701/600/554	701/760/554	397/1.456/1.044	397/1.456/1.044	
Weight	Unit		kg	77	105	97	103	
Fan	Air flow rate	Cooling	Nom.	m ³ /min	-	-	55	100
				dB(A)	60	64	76	81
Sound pressure level	Cooling	Nom.		dB(A)	47	48	46	54
			Refrigerant	Type	R-410A			
GWP	Charge	TCO _{2eq}	kg	2,087,5	2,087,5	-	-	
				4,20	8,35	-	-	
				2,00	4,00	-	-	
Power supply	Phase/Frequency/Voltage		Hz/V	3N~/50/380-415	3N~/50/380-415	1N~/50/220-240	1N~/50/220-240	
Current - 50Hz	Maximum fuse amps (MFA)		A	16	20	10	10	

Keep looking
you'll never find me



The city secret

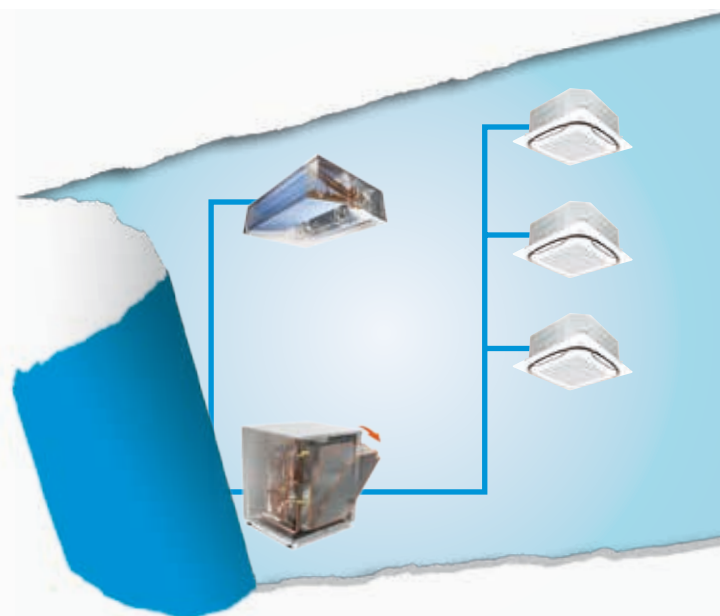
Unseen in the best places

Our VRV IV i-series offers you a truly unique solution for installations where you need a totally invisible system. It is compact and easy to hide indoors, with only the grilles being visible outside. Split into two lightweight components, the compressor can be installed at floor level in a storage room or technical area, and the heat exchanger unit, which is only 400 mm high, can be installed in a standard false ceiling. The VRV IV i-series has a patented V-shaped heat exchanger which boosts efficiency. So your customer can now enjoy all the power of a fully invisible VRV system.

VRV IV i-series



Find out more at www.daikineurope.com/citysecret



VRVIII-C

VRV heat pump

where heating is priority

without compromising on efficiency

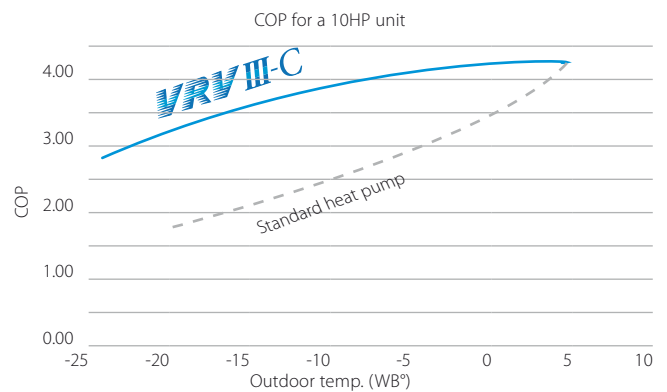


- › Automatic refrigerant charge
- › Refrigerant containment check
- › Night quiet mode
- › Low noise function
- › Reluctance brushless DC compressor
- › Sine wave DC inverter
- › DC fan motor
- › E-pass heat exchanger
- › I demand function
- › Manual demand function



High COP at low ambients

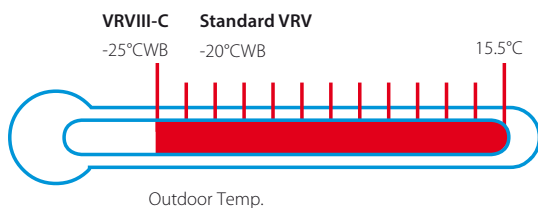
The use of two stage compression technology results in improved energy saving performance at low ambients, with a COP of more than 3.0 at -10°C outdoor ambient for the entire range.



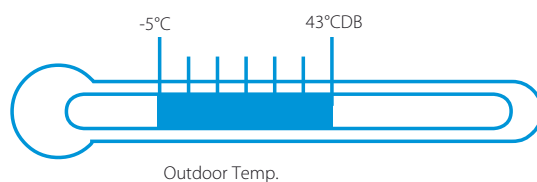
Wide heating operation range

VRV III-C has a standard operation range down to -25°CWB outdoor ambient in heating and can also provide cooling down to -5°CDB outdoor ambient.

Heating mode

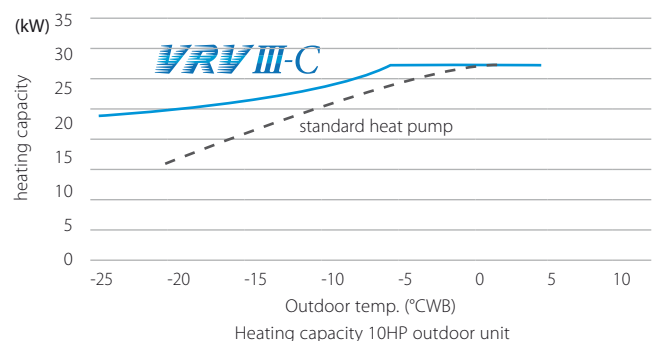


Cooling mode



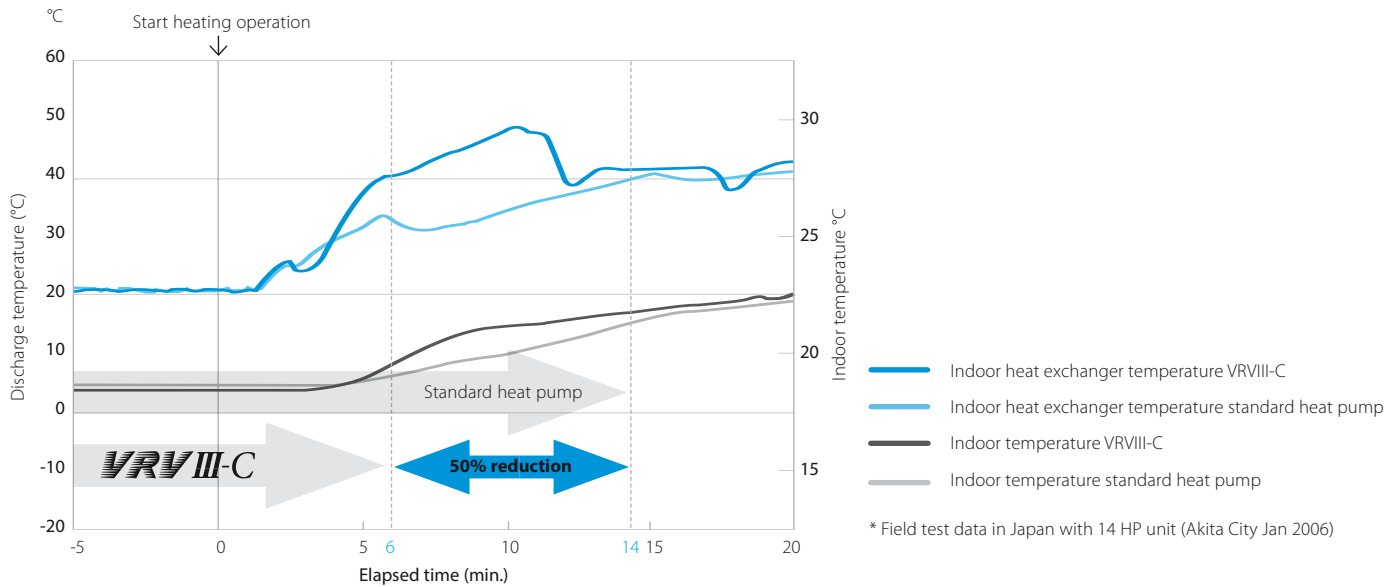
Stable heating capacity

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

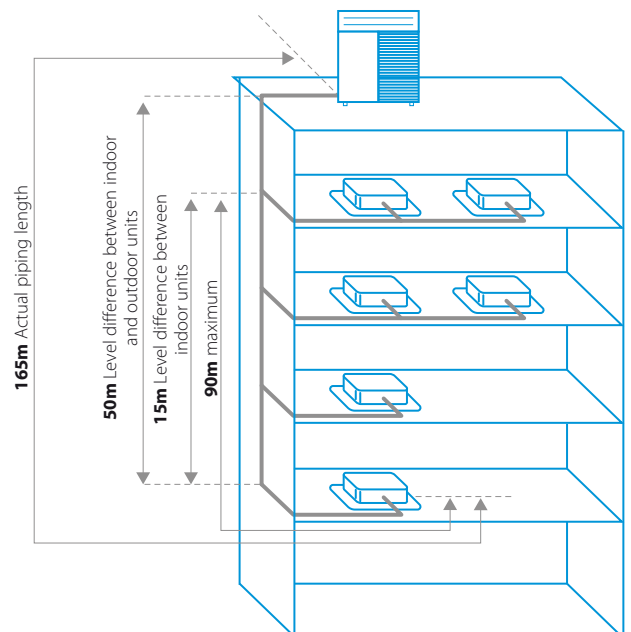
The time required for defrost is reduced to 4 minutes – less than half that of the standard VRV system (10 minutes), leading to a more stable interior indoor temperature and considerably improved comfort levels.

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

Flexible piping design

Total piping length	500m
Longest length actual (Equivalent)	165m (190m)
Longest length between outdoor unit and function unit	10m
Longest length after first branch	40m (90m ¹)
Level difference between indoor and outdoor units	50m (40m ²)
Level difference between indoor units	15m

1 Contact your local dealer for more information and restrictions
 2 In case outdoor unit is located below indoor units



VRVIII heat pump, optimised for heating

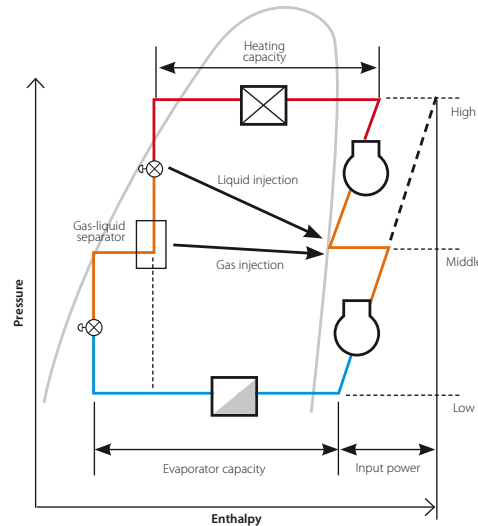
Where heating is priority without compromising on efficiency

- › First system in the industry developed for heating operation in low ambient conditions, making it suitable for single source heating
- › Extended operation range down to -25°C in heating
- › Stable heating capacity and high COP values at low ambients thanks to the two stage compression technology (COP values of 3.0 and more at -10°C)
- › Improved comfort thanks to shorter defrost time
- › Shorter heat up time compared to standard VRVIII heat pump
- › Contains all standard VRV features



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.



Outdoor system				RTSYQ	10PA	14PA	16PA	20PA
System	Outdoor unit module 1				RTSQ10PAY1	RTSQ14PAY1	RTSQ16PAY1	RTSQ8PAY1
	Outdoor unit module 2							RTSQ12PAY1
	Function unit				BTSQ20PY1			
Capacity range			HP	10	14	16	20	
Cooling capacity	Nom.	35°CDB	kW	28,0	40,0	45,0	56,0	
Heating capacity	Nom.	6°CWB	kW	31,5 / 28,0	45,0 / 40,0	50,0 / 45,0	63,0 / 55,9	
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	7,90	12,6	14,9	15,4
	Heating	Nom.	6°CWB	kW	7,78 / 8,18	11,4 / 12,8	13,0 / 15,0	15,4 / 18,70
EER at nom. capacity	35°CDB		kW/kW	3,54	3,17	3,02	3,64	
COP at max. capacity	6°CWB		kW/kW	4,05 / 3,42	3,95 / 3,13	3,85 / 3,00	4,09 / 2,99	
Maximum number of connectable indoor units					21	30	34	43
Indoor index connection	Min.				125	175	200	250
	Nom.				250	350	400	500
	Max.				325	455	520	650
Sound pressure level	Cooling	Nom./Max.		dB(A)	60/62	61/63	63/65	
Piping connections	Liquid	OD	mm	9,52		12,7		15,9
	Gas	OD	mm	22,2			28,6	
	Total piping length	System	Actual	m			500	
	Oil equalizing	OD	mm					19,1
Current - 50Hz	Maximum fuse amps (MFA)			A	25	35	40	50

Outdoor unit module				RTSQ	BTSQ20P	8PA	10PA	12PA	14PA	16PA
Dimensions	Unit	Height/Width/Depth		mm	1.570/460/765		1.680/930/765		1.680/1.240/765	
Weight	Unit			kg	110	205	257		338	344
Fan	Air flow rate	Cooling	Nom.	m ³ /min	-	185		200	233	239
	External static pressure	Max.		Pa	-			78		
	Type				-	Propeller fan				
Sound power level	Cooling	Nom.		dB(A)	-					
Operation range	Cooling	Min.-Max.		°CDB	-5~43					
	Heating	Min.-Max.		°CWB	-25~-15,5					
Refrigerant	Type				R-410A					
	GWP				2.087,5					
	Charge			TCO _{2eq}	-	19,6	21,9	22,8	24,4	
			kg	-	9,4	10,5	10,9	11,7		
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/380-415					
Current - 50Hz	Maximum fuse amps (MFA)			A	20	25		35	40	

VRV Classic heat pump RXYCQ-A

For standard cooling & heating requirements


Indoor units
VRV type indoor units


Ventilation
Heat Reclaim ventilation (VAM/VKM)


Control systems



- › Low noise function
- › Reluctance brushless DC compressor
- › Sine wave DC inverter
- › DC fan motor
- › E-pass heat exchanger
- › Manual demand function



Benefits

- › For projects with standard cooling & heating requirements
- › Fits any building as also indoor installation is possible as a result of high external static pressure of up to 78.4 Pa. Indoor installation leads to less piping length, lower installation costs, increased efficiency and better visual aesthetics
- › The ability to control each conditioned zone individually keeps VRV system running costs to an absolute minimum
- › Spread your installation cost by phased installation
- › Connectable to all standard VRV indoor units, controls and ventilation

Flexible piping design

Total piping length	300m
Longest length actual (Equivalent)	135m (155m)
Longest length after first branch	40m (90m ¹)
Level difference between indoor and outdoor units	30m
Level difference between indoor units	15m

¹ Contact your local dealer for more information and restrictions

VRV Classic

Classic VRV configuration

- › For standard cooling & heating requirements
- › Connectable to all standard VRV indoor units, controls and ventilation
- › Contains all standard VRV features

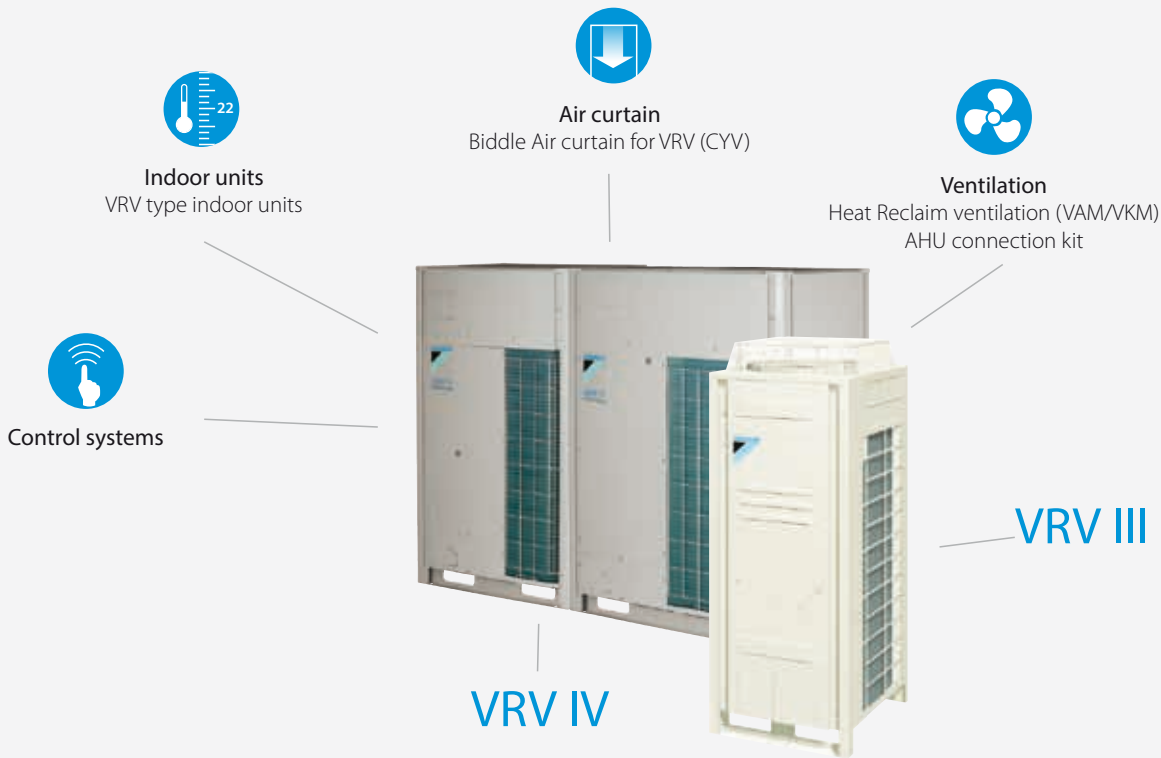


RXYCQ16-20A

Outdoor unit				RXYCQ	8A	10A	12A	14A	16A	18A	20A	
Capacity range				HP	8	10	12	14	16	18	20	
Cooling capacity	Nom.	35°CDB		kW	20,0	25,0	30,0	35,0	40,0	45,0	50,4	
Heating capacity	Nom.	6°CWB		kW	22,4	28,0	33,6	31,5	44,8	50,4	56,5	
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	6,60	6,74	8,77	11,4	12,9	15,0	17,9	
	Heating	Nom.	6°CWB	kW	5,80	7,00	8,62	8,18	11,8	13,8	16,1	
EER at nom. capacity	35°CDB			kW/kW	3,03	3,71	3,42	3,07	3,10	3,00	2,81	
COP at max. capacity	6°CWB			kW/kW	3,86	4,00	3,90	3,85	3,80	3,65	3,50	
Maximum number of connectable indoor units					64							
Indoor index connection	Min.				100	125	150	175	200	225	250	
	Nom.				200	250	300	350	400	450	500	
	Max.				200	250	360	420	480	540	600	
Dimensions	Unit	HeightxWidthxDepth		mm	1.680x635x765			1.680x930x765		1.680x1.240x765		
Weight	Unit			kg	159	187	240		316		324	
Fan	Air flow rate	Cooling	Nom.	m ³ /min	95	171	185	196	233		239	
Sound power level	Cooling	Nom.		dBA	78	81			86		88	
Sound pressure level	Cooling	Nom.		dBA	58	59	61		64	65	66	
Operation range	Cooling	Min.~Max.		°CDB	-5~43							
	Heating	Min.~Max.		°CWB	-20~-15,5							
Refrigerant	Type				R-410A							
	GWP				2.087,5							
	Charge			TCO ₂ eq	12,9	16,1	17,5	18	23,6	24	24,4	
Piping connections	Liquid	OD		mm	6,2			7,7		8,4		8,6
	Gas	OD		mm	15,9			19,1		22,2		28,6
	Total piping length	System	Actual	m	300							
	Power supply	Phase/Frequency/Voltage		Hz/V	3N~/50/380-415							
Current - 50Hz	Maximum fuse amps (MFA)			A	16	25			40			

Replacement VRV

Quick & quality replacement for R-22 and R-407C systems



Outdoor Unit Product Range

VRV IV Q-series

Heat pump

Variable refrigerant temperature

Customize your VRV for best seasonal efficiency & comfort



VRV configurator

Software for simplified commissioning, configuration and customisation

- › 7 segment display
- › Automatic refrigerant charge
- › Night quiet mode
- › Low noise function
- › Full inverter compressors
- › Gas cooled PCB
- › 4 side heat exchanger
- › Reluctance brushless DC compressor
- › Sine wave DC inverter
- › DC fan motor
- › E-pass heat exchanger
- › I demand function
- › Manual demand function

VRV III-Q

Heat pump & Heat recovery

- › Automatic refrigerant charge
- › Night quiet mode
- › Low noise function
- › Full inverter compressors
- › Reluctance brushless DC compressor
- › Sine wave DC inverter
- › DC fan motor
- › E-pass heat exchanger
- › I demand function
- › Manual demand function

For more information on these features refer to the VRV IV technologies tab

Replacement technology



The quick and quality way of upgrading R-22 and R-407C systems

These benefits will convince your customer

Drastically improve your efficiency, comfort and reliability

Avoid loss of business

Replacing now prevents unplanned, lengthy downtime of air conditioning systems. It also avoids loss of business for shops, complaints from guests in hotels, lower working efficiency and loss of tenants in offices.

Quick and easy installation

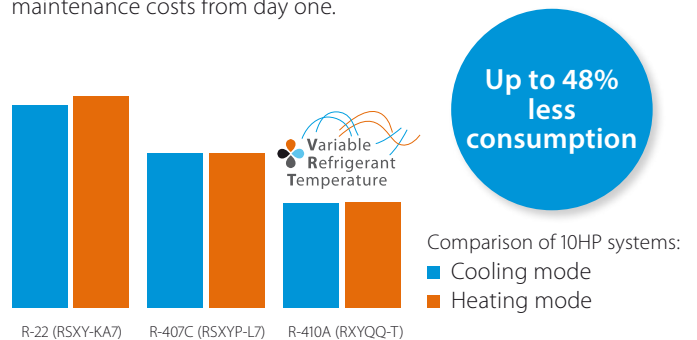
No interruption of daily business while replacing the system thanks to phased-in, fast installation.

Smaller footprint, more performance

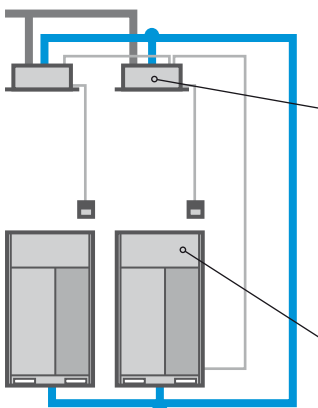
Thanks to a smaller footprint, Daikin outdoor units save space. Also, more indoor units can be connected to the new outdoor unit compared to the old system, allowing to increase capacity.

Lower long-term costs

EU Directives prohibit system repairs with R-22 after January 1, 2015. Delaying the required R-22 replacement until an unplanned system breakdown is a losing game. Replacement day will come. Installing a technically advanced system lowers energy consumption and maintenance costs from day one.



Keep your refrigerant piping



The Daikin low-cost upgrade solution

! Replace indoor units and BS boxes

Contact your local dealer to check compatibility in case you need to keep the indoor units.

! Replace outdoor units

Your copper pipes will last for multiple generations

- > copper pipes used in air conditioning systems tested by Daikin will last over 60 years after installation.
- > Japan/China have replaced with VRV Q-series already 10 years ago!

Umeda Center Building, Japan

- > original A/C system: 20 years in use
- > replacement with VRV Q-series: 2006 - 2009
- > capacity up from 1620HP to 2322HP
- > SHASE renewal award:





! Planning your replacement in future? Monitor your system now!

Your building use might have changed over the years. Monitoring and Daikin expert advice prepare you for an optimum replacement to maximize efficiency and comfort, while minimizing the investment cost of your new system.

VRV-Q benefits to increase your profit

Optimise your business

Less installation time

Tackle more projects in less time thanks to faster installation. It is more profitable than replacing the full system with new piping.

Lower installation costs

Reducing installation costs enables you to offer customers the most cost-effective solution and improve your competitive edge.

Replace non-Daikin systems **NON DAIKIN** **DAIKIN**

It is a trouble-free replacement solution for Daikin systems and for systems made by other manufacturers.

Easy as one-two-three

A simple solution for replacement technology enables you to handle more projects for more customers in less time and offer them the best price! Everybody gains.

Automatic refrigerant charge

The unique automatic refrigerant charge eliminates the need to calculate refrigerant volume and ensures that the system will operate perfectly. Not knowing the exact piping lengths because of changes or mistakes in case you didn't do the original installation or replacing a competitor installation no longer poses a problem.

Automatic pipe cleaning

There is no need to clean inside piping as this is handled automatically by the VRV-Q unit. Finally the test operation is performed automatically to save time.

Compare installation steps

Conventional solution

- 1 Recover refrigerant
- 2 Remove units
- 3 Remove refrigerant pipes
- 4 Install new piping and wiring
- 5 Install new units
- 6 Leak test
- 7 Vacuum drying
- 8 Refrigerant charging
- 9 Collect contamination
- 10 Test operation

VRV-Q

- 1 Recover refrigerant
- 2 Remove units
- Re-use existing piping and wiring
- 3 Install new units
- 4 Leak test
- 5 Vacuum drying
- 6 Automatic refrigerant charging, cleaning and testing



Up to 45% shorter installation time



One touch convenience:

- > Measure and charge refrigerant
- > Automatic pipe cleaning
- > Test operation



Replacement VRV

Quick & quality replacement for R-22 and R-407C systems

- › Cost effective and fast replacement as only the outdoor and indoor unit needs to be replaced, meaning almost no work has to be carried out inside the building
- › Efficiency gains of more than 70% can be realized, by virtue of technological developments in heat pump technology and the more efficient R-410A refrigerant
- › Less intrusive and time consuming installation compared to installing a new system, as the refrigerant piping can be maintained
- › Unique automatic refrigerant charge eliminates the need to calculate refrigerant volume and allows safe replacement of competitor replacement
- › Automatic cleaning of refrigerant piping ensures a clean piping network, even when a compressor breakdown has occurred
- › Accurate temperature control, fresh air provision, air handling units and Biddle air curtains all integrated in a single system requiring only one single point of contact (RXYQQ-T only)
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors (RXYQQ-T only)
- › Possibility to add indoor units and increase capacity without changing the refrigerant piping
- › Possibility to spread the various stages of replacement thanks to the modular design of the VRV system
- › Free combination of outdoor units to meet installation space or efficiency requirements (RXYQQ-T only)



RQCEQ712-848P3

Outdoor system				RQCEQ	280P3	360P3	460P3	500P3	540P3	636P3	712P3	744P3	816P3	848P3
System	Outdoor unit module 1			RQE140P3	RQE180P3	RQE140P3		RQE180P3	RQE212P3	RQE140P3		RQE180P3	RQE212P3	
	Outdoor unit module 2			RQE140P3	RQE180P3	RQE140P3	RQE180P3		RQE212P3	RQE180P3		RQE212P3		
	Outdoor unit module 3			-		RQE180P3		RQE212P3	RQE180P3	RQE212P3				
	Outdoor unit module 4			-		-		RQE212P3	RQE212P3					
Capacity range		HP	10	13	16	18	20	22	24	26	28	30		
Cooling capacity	Nom.	35°CDB	kW	28,0	36,0	45,0	50,0	54,0	63,6	71,2	74,4	81,6	84,8	
Heating capacity	Nom.	6°CWB	kW	32,0	40,0	52,0	56,0	60,0	67,2	78,4	80,8	87,2	89,6	
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	7,04	10,3	12,2	13,9	15,5	21,9	21,2	23,3	27,1	29,2
	Heating	Nom.	6°CWB	kW	8,00	10,7	13,4	14,7	16,1	17,7	20,7	21,2	23,1	23,6
EER at nom. capacity	35°CDB		kW/kW	3,98	3,48	3,77	3,61	3,48	2,90	3,36	3,19	3,01	2,90	
COP at max. capacity	6°CWB		kW/kW	4,00	3,72	3,89	3,80	3,72	3,79	3,80	3,81	3,77	3,79	
Maximum number of connectable indoor units				21	28	34	39	43	47	52	56	60	64	
Indoor index connection	Min.			140	180	230	250	270	318	356	372	408	424	
	Nom.			280	360	500		540	636	712	744	816	848	
	Max.			364	468	598	650	702	827	926	967	1.061	1.102	
Sound pressure level	Cooling	Nom.	dB(A)	57	61		62	63	64	63	64	65	66	
	Piping connections	Liquid	OD	mm	9,52	12,7		15,9				19,1		
	Gas	OD	mm	22,2	25,4	28,6				34,9				
	Total piping length	System	Actual	m		300								
	Discharge gas	OD	mm	19,1		22,2		25,4		28,6				
Current - 50Hz	Maximum fuse amps (MFA)		A	30	40	50	60		70	80		90		

Outdoor unit module				RQE	140P3	180P3	212P3
Dimensions	Unit	Height/Width/Depth		mm	1.680/635/765		
Weight	Unit			kg	175		179
Fan	Air flow rate	Cooling	Nom.	m ³ /min	95		110
	Type				Propeller fan		
Sound power level	Cooling	Nom.		dB(A)	-		
Sound pressure level	Cooling	Nom.		dB(A)	54	58	60
Operation range	Cooling	Min.-Max.		°CDB	-5~43		
	Heating	Min.-Max.		°CWB	-20~-15,5		
Refrigerant	Type				R-410A		
	GWP				2.087,5		
	Charge		TCO _{2eq}		21,5	22,1	23,4
			kg		10,3	10,6	11,2
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/380-415		
Current - 50Hz	Maximum fuse amps (MFA)		A		15	20	22,5



Replacement VRV



RXYQQ8-12T

Outdoor unit		RXYQQ-T	RQYQ140P	8T	10T	12T	14T	16T	18T	20T			
System	Outdoor unit module 1		RQYQ140P										
Capacity range			HP	5	8	10	12	14	16	18	20		
Cooling capacity	Nom.	35°CDB	kW	14,0	22,4	28,0	33,5	40,0	45,0	50,4	56,0		
Heating capacity	Nom.	6°CWB	kW	16,0	22,4	28,0	33,5	40,00	45,0	50,4	56,0		
	Max.	6°CWB	kW	-	25,00	31,50	37,50	45,00	50,00	56,50	63,00		
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	3,36	5,21	7,29	8,98	11,0	13,0	15,0	18,5	
	Heating	Nom.	6°CWB	kW	3,91	4,75	6,29	7,77	9,52	11,1	12,6	14,50	
		Max.	6°CWB	kW	-	5,5	7,38	9,1	11,2	12,8	14,6	17,0	
EER at nom. capacity	35°CDB		kW/kW	4,17	4,30	3,84	3,73	3,64	3,46	3,36	3,03		
COP at nom. capacity	6°CWB		kW/kW	-	4,72	4,45	4,31	4,20	4,05	4,00	3,86		
COP at max. capacity	6°CWB		kW/kW	4,09	4,54	4,27	4,12	4,02	3,91	3,87	3,71		
ESEER - Automatic				-	7,53	7,20	6,96	6,83	6,50	6,38	5,67		
Maximum number of connectable indoor units				10				64					
Indoor index connection	Min.			62,5	100	125	150	175	200	225	250		
	Nom.			125	200	250	300	350	400	450	500		
	Max.			162,5	260	325	390	455	520	585	650		
Dimensions	Unit	HeightxWidthxDepth	mm	1.680x635x765			1.685x930x765			1.685x1.240x765			
Weight	Unit		kg	175	187	194		305		314			
Fan	Air flow rate	Cooling	Nom.	m ³ /min	95	162	175	185	223	260	251	261	
Sound power level	Cooling	Nom.		dB(A)	-	78	79		81		86	88	
Sound pressure level	Cooling	Nom.		dB(A)	54,0		58		61		64	65	66
Operation range	Cooling	Min.~Max.		°CDB					-5~43				
	Heating	Min.~Max.		°CWB					-20~-15,5				
Refrigerant	Type								R-410A				
	GWP								2.087,5				
	Charge	TCO _{eq}		kg	23,2	12,3	12,5	13,2	21,5	21,7	24,4	24,6	
Piping connections	Liquid	OD		mm	11,1	5,9	6	6,3	10,3	10,4	11,7	11,8	
	Gas	OD		mm		9,52			12,7			15,9	
	Total piping length	System	Actual	m					300		28,6		
	Power supply	Phase/Frequency/Voltage		Hz/V	3~/50/380-415			3N~/50/380-415					
Current - 50Hz	Maximum fuse amps (MFA)		A	15	20	25		32		40	50		

Outdoor unit		RXYQQ-T	22T	24T	26T	28T	30T	32T	34T	36T	38T	40T	42T		
System	Outdoor unit module 1		RXYQQ10T	RXYQQ8T	RXYQQ12T			RXYQQ16T			RXYQQ8T	RXYQQ10T			
	Outdoor unit module 2		RXYQQ12T	RXYQQ16T	RXYQQ14T	RXYQQ16T	RXYQQ18T	RXYQQ16T	RXYQQ18T	RXYQQ20T	RXYQQ10T	RXYQQ12T	RXYQQ16T		
	Outdoor unit module 3									RXYQQ20T	RXYQQ12T	RXYQQ16T			
Capacity range			HP	22	24	26	28	30	32	34	36	38	40	42	
Cooling capacity	Nom.	35°CDB	kW	61,5	67,4	73,5	78,5	83,9	90,0	95,4	101,0	106,3	111,9	118,0	
Heating capacity	Nom.	6°CWB	kW	61,5	67,4	73,5	78,5	83,9	90,0	95,4	101,0	106,3	111,9	118,0	
	Max.	6°CWB	kW	69,0	75,0	82,5	87,5	94,0	100,0	106,5	113,0	119,0	125,5	131,5	
Power input - 50Hz	Cooling	Nom.	35°CDB	kW	16,27	18,21	19,98	21,98	24,0	26,0	28,0	31,5	29,2	31,3	33,29
	Heating	Nom.	6°CWB	kW	14,06	15,85	17,29	18,87	20,4	22,2	23,7	25,6	25,1	26,7	33,0
		Max.	6°CWB	kW	16,48	18,30	20,30	21,90	23,7	25,6	27,4	29,8	29,2	31,1	28,5
EER at nom. capacity	35°CDB		kW/kW	3,78	3,70	3,68	3,57	3,5	3,4	3,2		3,6		3,54	
COP at nom. capacity	6°CWB		kW/kW	4,37		4,25	4,16	4,10	4,05	4,00	3,95		4,2	4,14	
COP at max. capacity	6°CWB		kW/kW	4,19	4,10	4,06		4,00	3,91	3,90	3,79	4,1	4,0	3,99	
ESEER - Automatic				7,07	6,81	6,89	6,69	6,60	6,50	6,44	6,02	6,36	6,74	6,65	
Maximum number of connectable indoor units									64						
Indoor index connection	Min.			275	300	325	350	375	400	425	450	475	500	525	
	Nom.			550	600	650	700	750	800	850	900	950	1.000	1.050	
	Max.			715	780	845	910	975	1.040	1.105	1.170	1.235	1.300	1.365	
Piping connections	Liquid	OD		mm	15,9						19,1				
	Gas	OD		mm	28,6			34,9			41,3				
	Total piping length	System	Actual	m					300						
	Current - 50Hz	Maximum fuse amps (MFA)		A	63			80			100				

(1) The STANDARD ESEER value corresponds with normal VRV4 Heat Pump operation, not taking into account advanced energy saving operation functionality (2) The AUTOMATIC SEER value corresponds with normal VRV4 Heat Pump operation, taking into account advanced energy saving operation functionality (variable refrigerant temperature control operation) (3) Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% <= CR <= 130%)

Water cooled VRV IV W⁺ series

Ideal for high rise buildings,
using water as heat source

Unified range
for **heat pump**
& **heat recovery**
and **standard**
& **geothermal**
series



Indoor units

VRV type indoor units OR
Residential type indoor units
(such as Daikin Emura, ...)

NEW



Control systems



Air curtain

Biddle Air curtain for VRV (CYV)

> RWEYQ-T9



NEW

Hot water

High temperature hydrobox
Low temperature hydrobox



Ventilation

Heat Reclaim ventilation (VAM/VKM)
AHU connection kit



Widest range of BS boxes for the fastest installation



VRV IV standards: Variable refrigerant temperature

Customize your VRV for best seasonal efficiency & comfort

VRV configurator **NEW**

Software for simplified commissioning, configuration and customisation

- > 7 segment display **NEW**
- > Full inverter compressors
- > Connectable to stylish indoor units **NEW**
- > Connectable to LT hydrobox **NEW**
- > Connectable to HT hydrobox **NEW**
- > Reluctance brushless DC compressor
- > Sine wave DC inverter
- > Manual demand function

For more information on these features refer to the VRV IV technologies tab

NEW
RWEYQ-T9



VRV IV W⁺ series

The new VRV IV W⁺ series bring a whole new range of features to increase your flexibility and make commissioning easier.

More flexibility

- > Mixed connection of hydroboxes and VRV indoor units
- > Connects to VRV or stylish indoor units such as Daikin Emura, Nexura, ...
- > Most compact casing in the market
- > No heat dissipation allows installation in non-ventilated indoor spaces

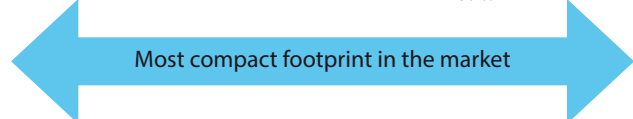
Unique zero heat dissipation principle

- > No need for ventilation or cooling in the technical room
- > Control heat dissipation to achieve maximum efficiency: set target technical room temperature and unit regulates actual heat dissipation



Easier commissioning & customisation

- > 7 segment display
- > 5 output signals allowing external control of
 - ON-OFF (e.g. compressor)
 - Operation mode (cooling / heating)
 - Limit of capacity
 - Error signal
- > Rotating switchbox



Extension of the range:
from 8 up to 42 HP

Total solution

 NEW Daikin Emura wall mounted unit	 NEW Nexura Floor standing unit	 Fully flat cassette	 Intelligent Manager
 Bidle air curtain	 NEW Air handling unit for ventilation	 NEW Low temperature hydrobox	 NEW High temperature hydrobox



Geothermal operation and advantages

Geothermal operation uses the more stable temperature of the ground around the building, eliminating the need for another heat source. It reduces CO₂ emissions and is an infinitely renewable energy source.



Indoor installation makes unit invisible from the outside

Seamless integration in the surrounding architecture as you cannot see the unit

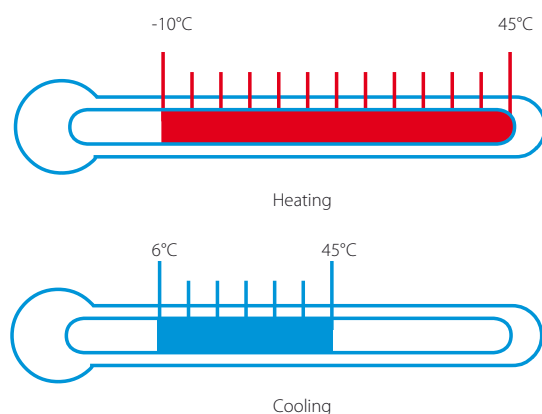
- › Highly suited for sound sensitive areas as there is no external operation sound
- › Superior efficiency, even in the most extreme outside conditions, especially in geothermal operation



Wide operation range

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



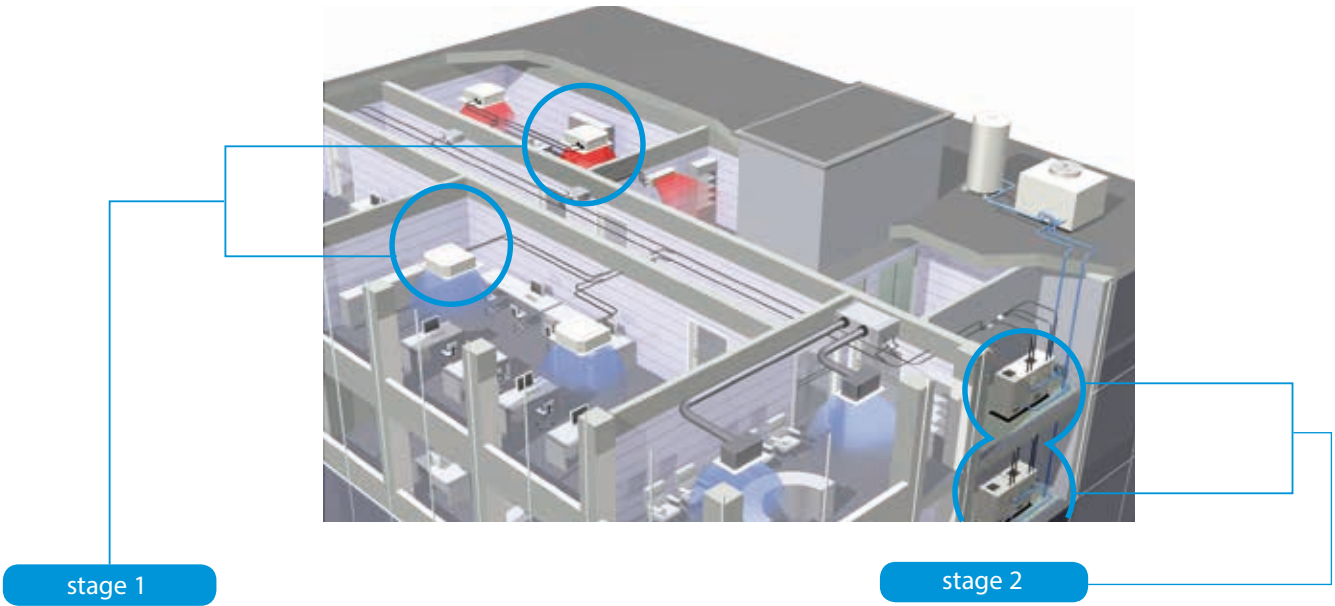
High energy efficiencies results from 2-stage heat recovery

Stage 1: Heat recovery between indoor units in the same refrigerant circuit

Heat exhausted from indoor units in cooling mode is transferred to units in areas requiring heating, maximising energy efficiency and reducing electricity costs.

Stage 2: Heat recovery between the outdoor units via the water loop - also available on heat pump units!

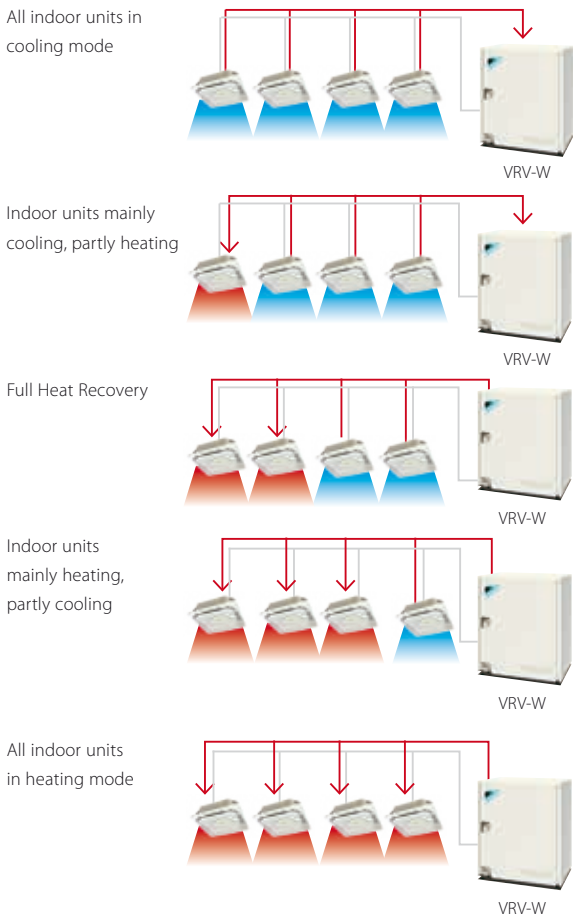
Second stage heat recovery is achieved within the water loop between the water cooled outdoor units.



stage 1

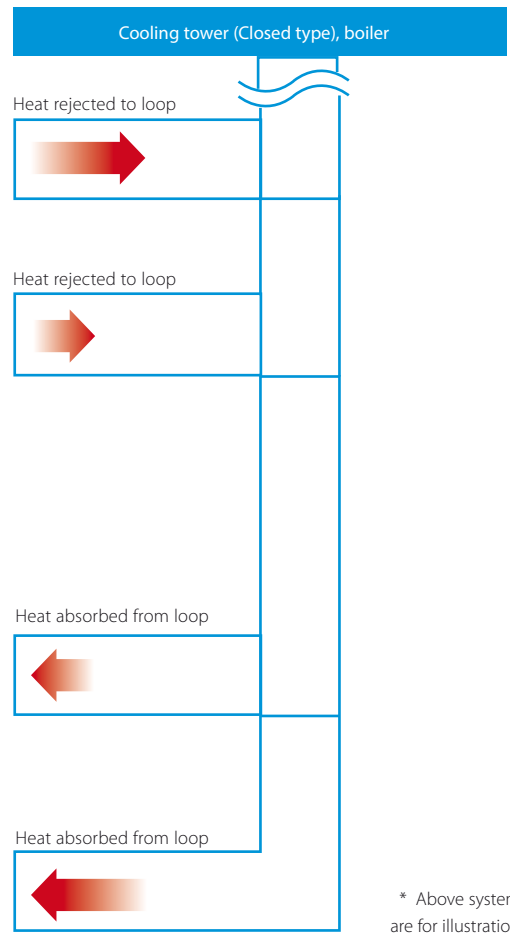
stage 2

Heat recovery between indoor units



Heat recovery between outdoor units

(Heat recovery and heat pump)

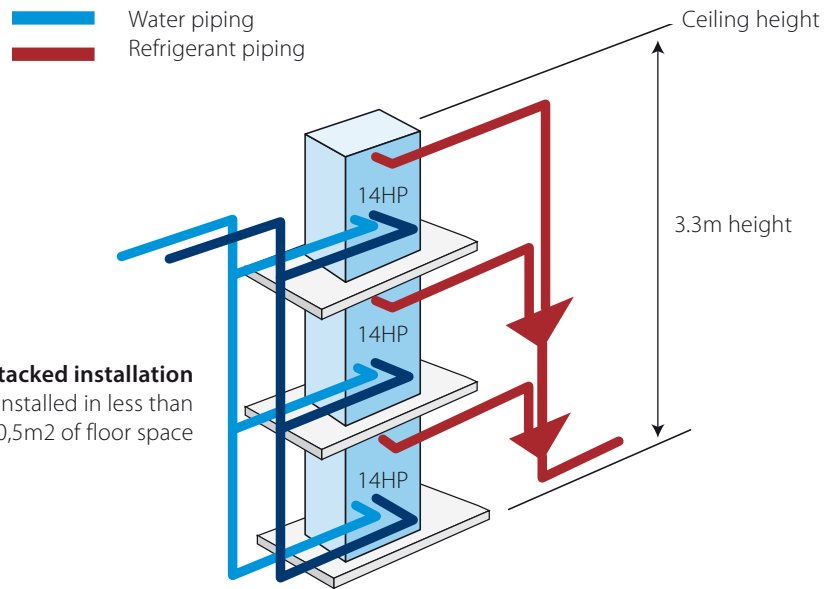


* Above system configurations are for illustration purposes only.

Space saving - Stacked configuration

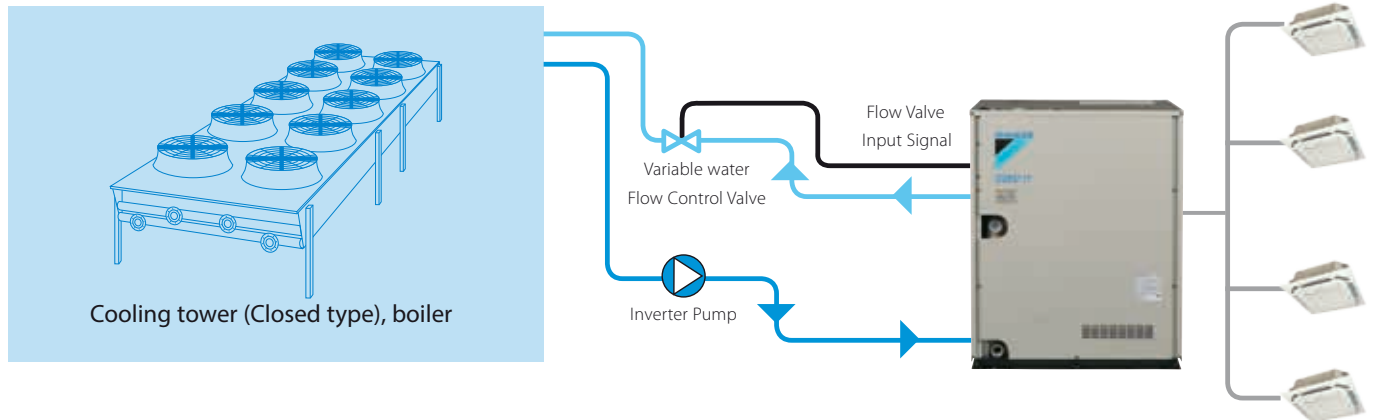
The adoption of a new water heat exchanger and optimization of the refrigerant control circuit has resulted in the industry's most compact and lightweight design. The unit height of 1,000 mm makes installation easy. Stacked configuration is also possible, contributing further to space savings.

Space saving stacked installation
Up to 42HP system installed in less than 0,5m² of floor space



Variable water flow control

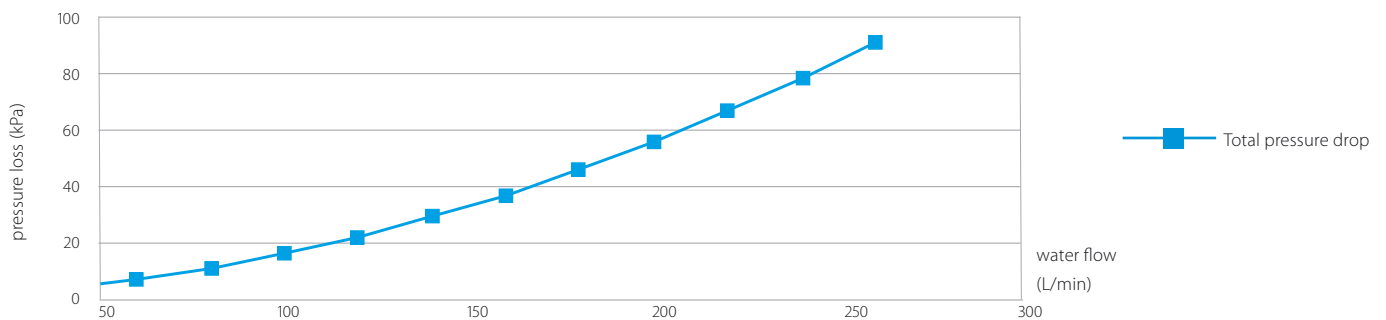
- › The variable water flow control option reduces excessive energy use by the circulation pump.
- › By controlling a variable water valve, the water flow is reduced when possible, saving energy.
- › Via 0~10 Volt



Standard water strainer

A standard water strainer reduces installation time. The new filter also has less pressure drop at higher water flows.

	Specifications
Connections	G1 ¼"
PHE connections	G1 ¼"
Mesh size	Max. particle diam. 0,5mm
Design Pressure	2.0MPa
Design Temp.	Max. 80 °C
Glycol resistance	Up to 40% ethylene glycol
Pressure drop	See below graph



Lower refrigerant levels

Water-cooled VRV systems typically have less refrigerant per system making it ideal to comply with the EN378 legislation limiting the amount of refrigerant in hospitals and hotels.

The refrigerant levels remain limited thanks to:

- › limited distance between outdoor and indoor unit
- › modularity: enabling small systems per floor instead of one big system. Thanks to the water circuit heat recovery is still possible in the entire building

Fully redesigned BS boxes

Maximum design flexibility and installation speed

- › Quickly and flexibly design your system with a unique range of single and multi BS boxes.
- › A wide variety of compact and lightweight multi BS boxes greatly reduces installation time.
- › Free combination of single and multi BS boxes

Single port

- › Unique to the market
- › Compact and light to install
- › No drain piping needed
- › Ideal for remote rooms
- › Technical cooling function
- › Connect up to 250 class unit (28 kW)
- › Allows multi-tenant applications



BS1Q 10, 16, 25 A

Multi port: 4 – 6 – 8 – 10 – 12 – 16

- › Up to 55% smaller and 41% lighter than previous range
- › Faster installation thanks to a reduced number of brazing points and wiring
- › All indoor units connectable to one BS box
- › Fewer inspection ports needed
- › Up to 16 kW capacity available per port
- › Connect up to 250 class unit (28kW) by combining 2 ports
- › No limit on unused ports, permitting phased installation
- › Allows multi-tenant applications



BS 4 Q14 AV1

BS 6, 8 Q14 AV1

BS 10, 12 Q14 AV1

BS 16 Q14 AV1

Flexible piping design

Flexible water piping

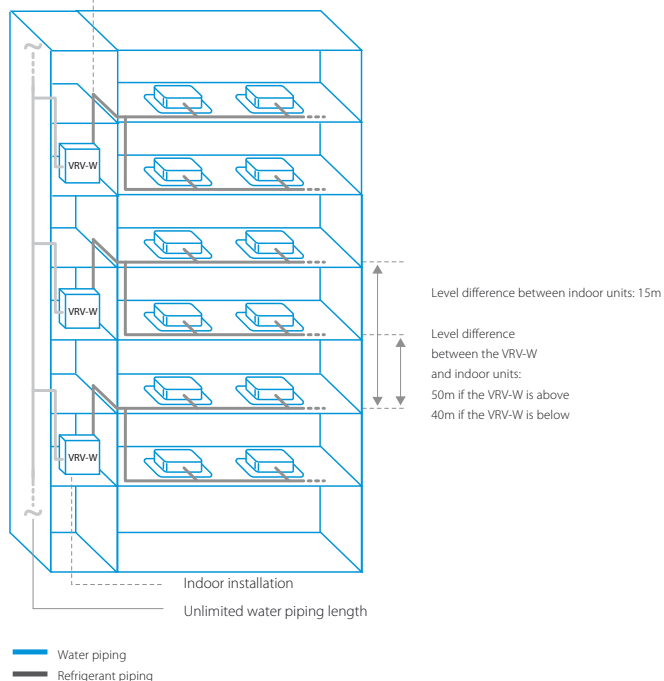
Water cooled VRV uses water as its heat source, so it is optimal for large buildings, including tall, multi-storey buildings, because the system can tolerate water pressure of up to 1.96 MPa.

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.

Total piping length	300m
Longest length actual (Equivalent)	120m (140m)
Longest length after first branch	40m (90m ¹)
Level difference between indoor and outdoor units	50m (40m ²)
Level difference between indoor units	15m

1 Contact your local dealer for more information and restrictions
2 In case outdoor unit is located below indoor units

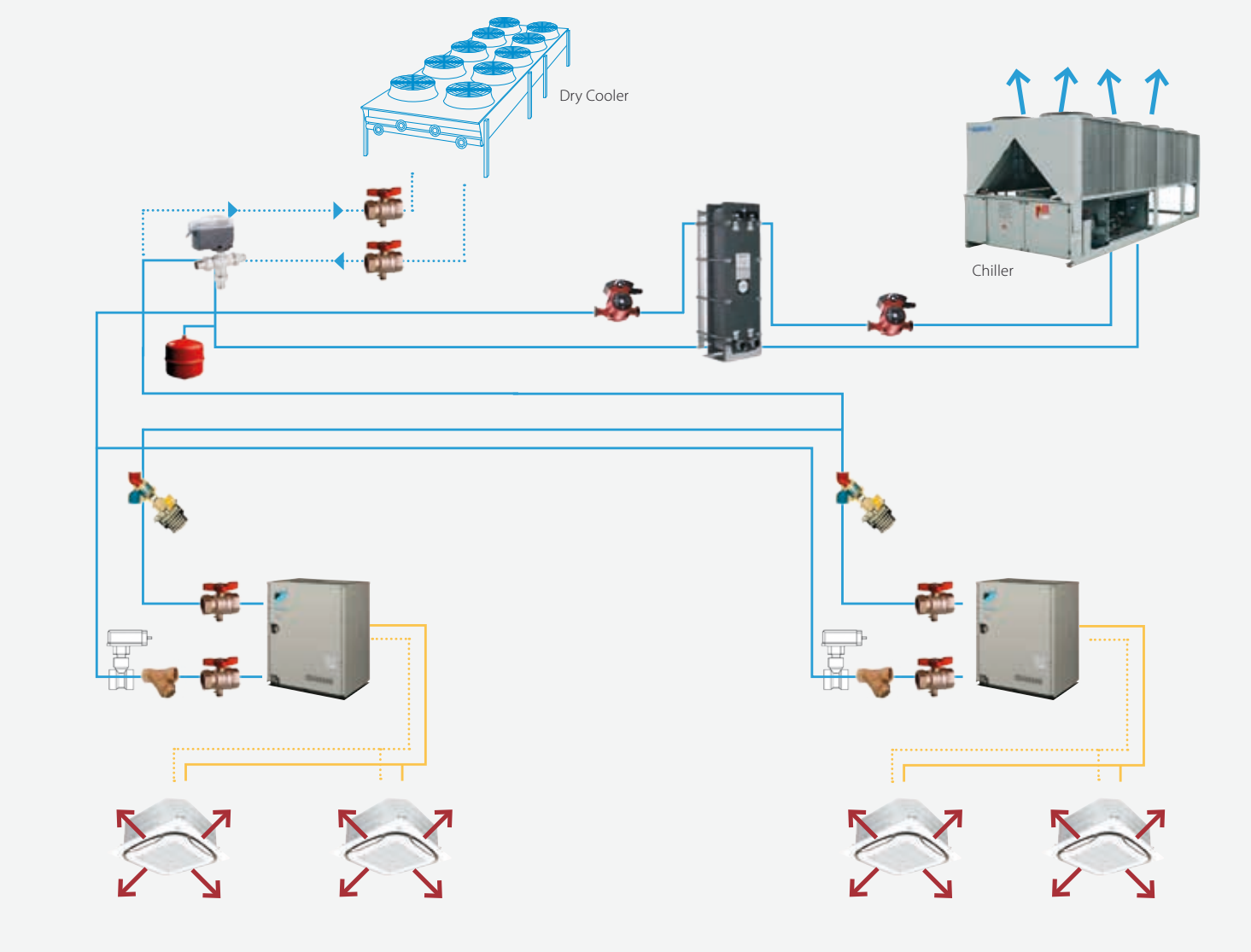
Actual piping length between the VRV-W and indoor units: 120m (Equivalent piping length: 140m)











Application

examples

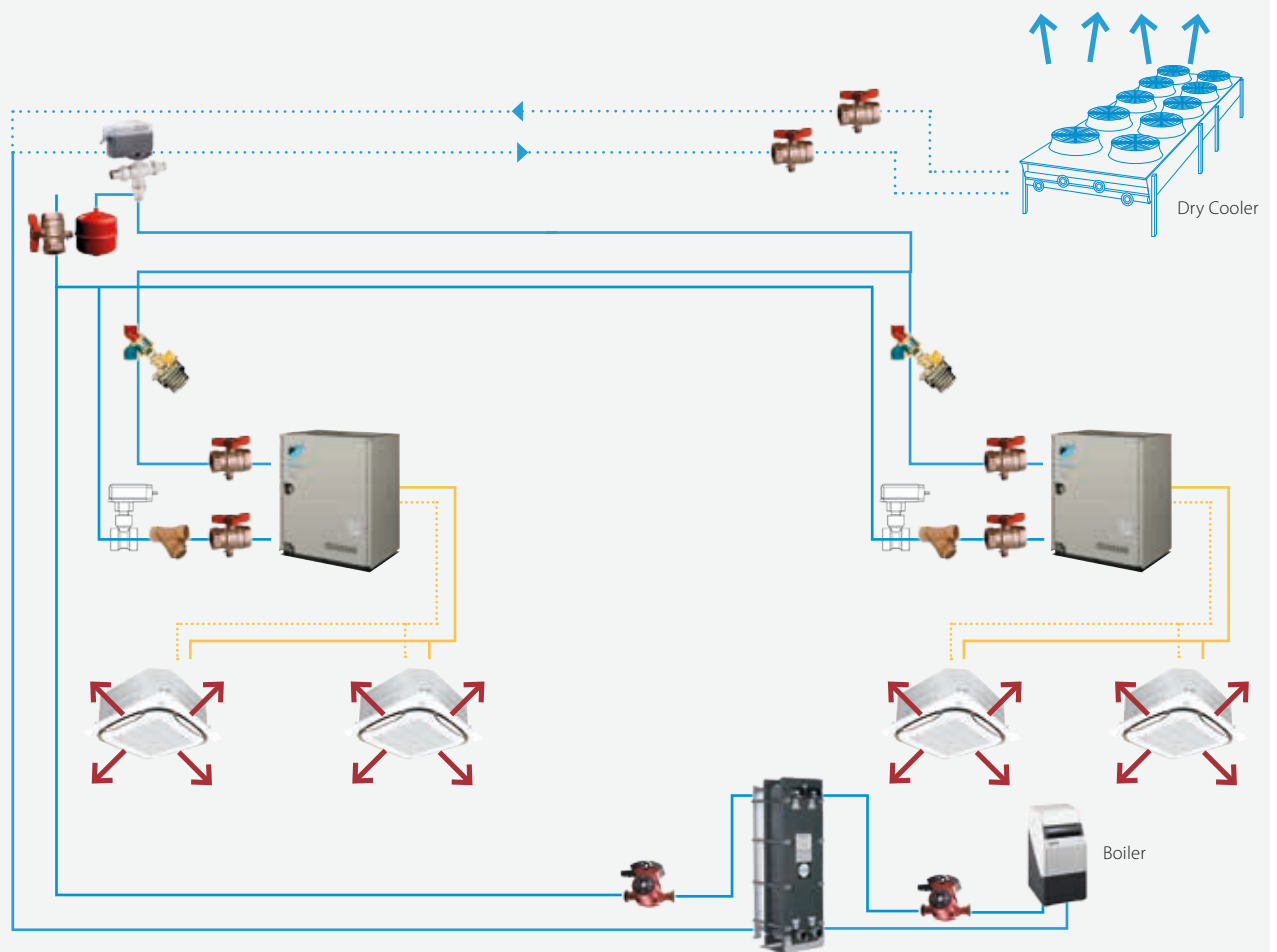
Dry cooler used for cooling, Chiller used for heating



-  Expansion tank
-  Circulator Pump
-  Flow valve or flow control valve
-  Stop valve
-  Strainer
-  Heat exchanger
-  Flow switch
-  Three way valve

Water flow —
 Refrigerant flow —
⋯

Dry cooler used for cooling, boiler used for heating



Expansion tank



Circulator Pump



Flow valve or flow control valve



Stop valve



Strainer



Heat exchanger



Flow switch



Three way valve

Water flow ————
 Refrigerant flow ————

Ground loop

Examples

Open system

Uses water from a well or surface water (river, lake). The water is pumped back to a second well or surface water



Conditions:

- › At 20 m depth water has a constant temperature of 10°C through the year
- › Surface water cools down to 5°C during winter

- ✓ Can be the most economical type of geothermal system
- ✓ Constant ground water temperature has positive impact on heat pump efficiency
- ✗ Risk to damage system components because of water quality → a secondary loop might be required to protect the heat exchanger
- ✗ Water should be tested for acidity, mineral content, organic content and corrosiveness:
- ✗ In many areas open systems are prohibited due to environmental concerns

Closed system

Uses water pipes that are buried in the ground and exchange heat with the ground



Vertical system conditions

- › Typical depth: 30-140 m. Below 15 m, the temperature of the ground is constant around 10°C

- ✓ Less surface space required
- ✓ Very constant ground temperature
- ✗ Expensive due to drilling cost

For smaller applications also horizontal loops can be used



Horizontal loop system

- › Typical trench depth: 1 – 2 m. The ground temperature varies, but always above 5°C (Exception: in cold areas)
- › Slinky loop: the plastic geothermal loop pipe is coiled in overlapped circles and flattened (Installed where there is not enough space for closed horizontal)

- ✓ Installation is easier and less expensive than vertical closed loops.
- ✗ Mainly for small applications as the property land should be large enough
- ✗ You cannot plant trees or build constructions over the land containing the loop.
- ✗ Glycol is needed to prevent freezing of the water.



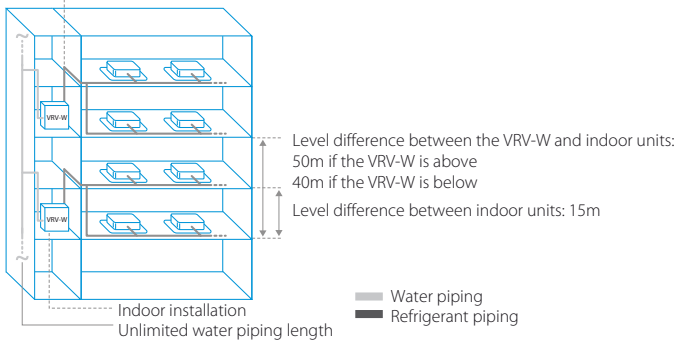
VRV IV water cooled series

Ideal for high rise buildings, using water as heat source

- › Unified range for standard and geothermal series simplifies stock. Geothermal series reduce CO₂ emissions thanks to the use of geothermal energy as a renewable energy source
- › No need for an external heating or cooling source when used in geothermal mode
- › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units and Biddle air curtains
- › Compact & lightweight design can be stacked for maximum space saving
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors
- › 2-stage heat recovery: first stage between indoor units, second stage between outdoor units thanks to the storage of energy in the water circuit
- › Available in heat pump and heat recovery version
- › Variable Water Flow control option increases flexibility and control
- › Contains all standard VRV features



RWEYQ8-10T8



Outdoor Unit Product Range

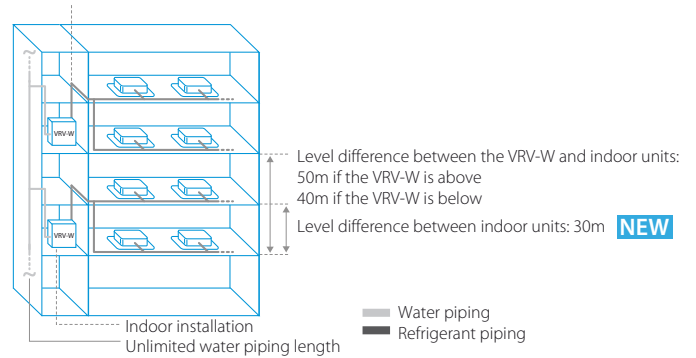
Outdoor unit		RWEYQ	8T8	10T8	16T8	18T8	20T8	24T8	26T8	28T8	30T8	
System	Outdoor unit module 1		RWEYQ8T	RWEYQ10T	RWEYQ8T		RWEYQ10T	RWEYQ8T		RWEYQ10T		
	Outdoor unit module 2		-		RWEYQ8T	RWEYQ10T		RWEYQ8T		RWEYQ10T		
	Outdoor unit module 3		-		-		RWEYQ8T	-		RWEYQ10T		
Capacity range		HP	8	10	16	18	20	24	26	28	30	
Cooling capacity	Nom.	35°CDB	kW		22,4 (1) / 22,4 (2)	28,0 (1) / 27,5 (2)	44,8 (1) / 44,8 (2)	50,4 (1) / 49,9 (2)	56,0 (1) / 55,0 (2)	67,2 (1) / 72,3 (2)	78,4 (1) / 77,4 (2)	84,0 (1) / 82,5 (2)
			kW		25,0 (3) / 25,0 (4)	31,5 (3) / 31,5 (4)	50,0 (3) / 50,0 (4)	56,5 (3) / 56,5 (4)	63,0 (3) / 63,0 (4)	75,0 (3) / 75,0 (4)	81,5 (3) / 81,5 (4)	88,0 (3) / 94,5 (4)
Heating capacity	Nom.	6°CWB	kW		4,42 (1) / 4,45 (2)	6,14 (1) / 6,35 (2)	8,8 (1) / 8,9 (2)	10,6 (1) / 10,8 (2)	12,3 (1) / 12,7 (2)	13,3 (1) / 13,4 (2)	15,0 (1) / 15,3 (2)	16,7 (1) / 17,2 (2)
			kW		4,21 (3) / 4,30 (4)	6,00 (3) / 6,20 (4)	8,4 (3) / 8,6 (4)	10,2 (3) / 10,5 (4)	12,0 (3) / 12,4 (4)	14,4 (3) / 14,8 (4)	16,2 (3) / 16,7 (4)	18,0 (3) / 18,6 (4)
EER at nom. capacity	35°CDB	kW/kW	5,07 (1)	4,56 (1) / 4,33 (2)	5,07 (1) / 5,03 (2)	4,77 (1) / 4,62 (2)	4,56 (1) / 4,33 (2)	5,07 (1) / 5,03 (2)	4,86 (1) / 4,74 (2)	4,69 (1) / 4,51 (2)	4,56 (1) / 4,33 (2)	
COP at max. capacity	6°CWB	kW/kW	5,94 (3) / 5,81 (4)	5,25 (3) / 5,08 (4)	5,94 (3) / 5,81 (4)	5,53 (3) / 5,38 (4)	5,25 (3) / 5,08 (4)	5,94 (3) / 5,81 (4)	5,65 (3) / 5,51 (4)	5,43 (3) / 5,27 (4)	5,25 (3) / 5,08 (4)	
Maximum number of connectable indoor units			36 (5)									
Indoor index connection	Min.		100	125	200	225	250	300	325	350	375	
	Nom.		200	250	400	450	500	600	650	700	750	
	Max.		260	325	520	585	650	780	845	910	975	
Dimensions	Unit	HeightxWidthxDepth	mm			1.000x780x550			-			
Weight	Unit		kg			137			-			
Fan	Air flow rate	Cooling	Nom.	m ³ /min		-		-		-		
Sound pressure level	Cooling	Nom.	dB(A)		50	51	53	54	55	56		
	Operation range	Inlet water temperature	Cooling	Min.-Max.	°CDB		10~45		-		-	
		Heating	Min.-Max.	°CWB		-10 / 10,0~45		-		-		
Refrigerant	Type		R-410A		-		-		-		-	
	GWP		2.087,5		-		-		-		-	
	Charge	TCO _{eq}	kg	7,3	8,8	-		-		-		
Piping connections	Liquid	OD	mm		9,52		12,7		15,9		19,1	
	Gas	OD	mm		19,10 (6)		22,2 (6)		28,6		34,9	
	Total piping length	System	Actual	m		300		300		300		
	Discharge gas	OD	mm		15,9 (7) / 19,10 (8)		19,1 (7) / 22,10 (8)		22,2 (6) / 28,60 (7)		28,6 (6) / 34,90 (7)	
Power supply	Phase/Frequency/Voltage	Hz/V	3N~/50/380-415		-		-		-		-	
Current - 50Hz	Maximum fuse amps (MFA)	A	20		32		50		-		-	

(1) Cooling: Indoor temp. 27°CDB; 19°CWB; inlet water temp.: 30°C; equivalent refrigerant piping: 7,5m; level difference: 0m. Rated values are with 100% water (no glycol) (2) Cooling: Indoor temp. 27°CDB; 19°CWB; inlet water temp.: 30°C; equivalent refrigerant piping: 7,5m; level difference: 0m. Rated values are with 30% glycol. (3) Heating: Indoor temp. 20°CDB; inlet water temp.: 20°C; equivalent refrigerant piping: 7,5m; level difference: 0m. Rated values are with 100% water (no glycol). (4) Heating: Indoor temp. 20°CDB; inlet water temp.: 20°C; equivalent refrigerant piping: 7,5m; level difference: 0m. Rated values are with 30% glycol. (5) Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc) and the connection ratio restriction for the system (50% <= CR <= 130%) (6) In case of heat pump system, gas pipe is not used (7) In case of heat recovery system (8) In case of heat pump system

VRV IV water cooled series

Ideal for high rise buildings, using water as heat source

- › Unified range for standard and geothermal series simplifies stock. Geothermal series reduce CO₂ emissions thanks to the use of geothermal energy as a renewable energy source
- › No need for an external heating or cooling source when used in geothermal mode
- › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units, Biddle air curtains and hot water
- › Wide range of indoor units: either connect VRV or stylish indoor units such as Daikin Emura, Nexura, ...
- › Compact & lightweight design can be stacked for maximum space saving
- › Incorporates VRV IV standards & technologies: Variable Refrigerant Temperature and full inverter compressors
- › 2-stage heat recovery: first stage between indoor units, second stage between outdoor units thanks to the storage of energy in the water circuit
- › Available in heat pump and heat recovery version
- › Variable Water Flow control option increases flexibility and control
- › 2 analogue input signals allowing external control
- › Contains all standard VRV features



NEW Extended piping length between indoor and outdoor units up to 165m (actual)

Outdoor unit		RWEYQ	8T9	10T9	12T9	14T9
Cooling capacity	Nom. 35°CDB	kW	22,4	28,0	33,5	40,0
Heating capacity	Nom. 6°CWB	kW	25,0	31,5	37,5	45,0
EER at nom. capacity	35°CDB	kW/kW	6,40	5,75	5,55	5,04
COP at nom. capacity	6°CWB	kW/kW	6,50	6,40	6,10	5,37
Indoor index connection	Min.		100	125	150	275
	Nom.		200	250	300	350
	Max.		300	375	450	525
Dimensions	Unit HeightxWidthxDepth	mm	1.000 x 780 x 550			
Weight	Unit	kg				
Sound power level	Cooling	Nom.	-			
Sound pressure level	Cooling	Nom.	-			
Operation range	Inlet water temperature	Min.~Max.	10 ~ 45			
Piping connections	Liquid	OD	9,52		12,7	
	Gas	OD	19,1	22,2	28,6	
	Discharge gas	OD	15,9 (1) / 19,1 (2)	19,1 (1) / 22,2 (2)	19,1 (1) / 28,6 (2)	22,2 (1) / 28,6 (2)
Piping connections	Total piping length	System Actual	300			
Power supply	Phase/Frequency/Voltage	Hz/V	3~/50/380-415			

Outdoor system		RWEYQ	16T9	18T9	20T9	22T9	24T9	26T9	28T9
System	Outdoor unit module 1		RWEYQ8T9	RWEYQ8T9	RWEYQ8T9	RWEYQ10T9	RWEYQ12T9	RWEYQ12T9	RWEYQ14T9
	Outdoor unit module 2		RWEYQ8T9	RWEYQ10T9	RWEYQ12T9	RWEYQ12T9	RWEYQ12T9	RWEYQ14T9	RWEYQ14T9
Capacity range		HP	16	18	20	22	24	26	28
Cooling capacity	35°CDB	kW	44,8	50,4	55,9	61,5	67	73,5	80
EER at nom. Capacity	35°CDB	kW	6,4	6,08	5,98	5,65	5,55	5,30	5,04
Heating capacity	6°CWB	kW	50	56,5	62,5	69	75	82,5	90
COP at nom. Capacity	6°CWB	kW	6,5	6,45	6,3	6,25	6,1	5,735	5,37

Outdoor system		RWEYQ	30T9	32T9	34T9	36T9	38T9	40T9	42T9
System	Outdoor unit module 1		RWEYQ8T9	RWEYQ8T9	RWEYQ8T9	RWEYQ12T9	RWEYQ12T9	RWEYQ12T9	RWEYQ14T9
	Outdoor unit module 2		RWEYQ10T9	RWEYQ12T9	RWEYQ12T9	RWEYQ12T9	RWEYQ12T9	RWEYQ14T9	RWEYQ14T9
	Outdoor unit module 3		RWEYQ12T9	RWEYQ12T9	RWEYQ14T9	RWEYQ12T9	RWEYQ14T9	RWEYQ14T9	RWEYQ14T9
Capacity range		HP	30	32	34	36	38	40	42
Cooling capacity	35°CDB	kW	83,9	89,4	95,9	100,5	107	113,5	120
EER at nom. Capacity	35°CDB	kW	5,9	5,83	5,66	5,55	5,38	5,21	5,04
Heating capacity	6°CWB	kW	94	100	107,5	112,5	120	127,5	135
COP at nom. Capacity	6°CWB	kW	6,33	6,23	5,99	6,1	5,85	5,61	5,37

*Note: blue cells contain preliminary data

(1) in case of heat recovery

(2) in case of heat pump





VRV Indoor units

One of the widest ranges on the market, it 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

VRV indoor units

Ceiling mounted cassette units		
UNIQUE	FXFQ-A	105
UNIQUE	FXZQ-A	109
	FXCQ-A	110
	FXKQ-MA	111

Concealed ceiling units

	FXDQ-M9	112
	FXDQ-A3	113
SLIMMEST IN CLASS	FXSQ-A	116
	FXMQ-P7 / FXMQ-MB	118

Wall mounted unit

	FXAQ-P	120
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Ceiling suspended units

	FXHQ-A	121
UNIQUE	FXUQ-A	122

Floor standing units

SLIMMEST IN CLASS	FXNQ-A	123
	FXLQ-P	124

Stylish indoor units

BPMKS	
Accessory to connect stylish indoor units	125

Wall mounted

UNIQUE DESIGN UNIT	FTXG-LS/LW	127
	CTXS-K / FTXS-K	129

Floor standing


















UNIQUE RADIATING PANEL	FVXG-K	131
	FVXS-F	132

Flexi type unit

FLXS-B(9)	133
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Products overview

Capacity class (kW)

Type	Model	Product name	PG	15	20	25	32	40	50	63	71	80	100	125	140	200	250	
Ceiling mounted cassette	<p>UNIQUE</p> <p>Round flow cassette</p> <p>360° air discharge for optimum efficiency and comfort</p> <ul style="list-style-type: none"> Auto cleaning function ensures high efficiency Intelligent sensors save energy and maximize comfort Flexibility to suit every room layout Lowest installation height in the market! 	 <p>FXFQ-A</p> 	132		•	•	•	•	•	•		•	•	•				
	<p>UNIQUE</p> <p>Fully flat cassette</p> <p>Unique design that integrates fully flat into the ceiling</p> <ul style="list-style-type: none"> Perfect integration in standard architectural ceiling tiles Blend of iconic design and engineering excellence Intelligent sensors save energy and maximize comfort Small capacity unit developed for small or well-insulated rooms Flexibility to suit every room layout 	  <p>FXZQ-A</p> 	138	•	•	•	•	•	•									
	<p>2-way blow ceiling mounted cassette</p> <p>Thin, lightweight design installs easily in narrow ceiling spaces</p> <ul style="list-style-type: none"> Depth of all units is 620mm, ideal for narrow ceiling spaces Flexibility to suit every room layout Reduced energy consumption thanks to DC fan motor The flaps close entirely when the unit is not operating Optimum comfort with automatic air flow adjustment to the required load 	<p>FXCQ-A</p> 	143		•	•	•	•	•	•			•		•			
	<p>Ceiling mounted corner cassette</p> <p>1-way blow unit for corner installation</p> <ul style="list-style-type: none"> Compact dimensions enable installation in narrow ceiling voids Flexible installation thanks to different air discharge options 	<p>FXKQ-MA</p> 	146			•	•	•		•								
Concealed ceiling	<p>Small concealed ceiling unit</p> <p>Designed for hotel rooms</p> <ul style="list-style-type: none"> Compact dimensions enable installation in narrow ceiling voids Discretely concealed in the ceiling; only the grilles are visible Flexible installation as the air suction direction can be altered from rear to bottom suction 	<p>FXDQ-M9</p> 	148		•	•												
	<p>Slim concealed ceiling unit</p> <p>Slim design for flexible installation</p> <ul style="list-style-type: none"> Compact dimensions enable installation in narrow ceiling voids Medium external static pressure up to 44Pa Only grilles are visible Small capacity unit developed for small of well-insulated rooms Reduced energy consumption thanks to DC fan motor 	<p>FXDQ-A3</p> 	150	•	•	•	•	•	•									NEW Auto cleaning filter option
	<p>Concealed ceiling unit with medium ESP</p> <p>Slimmest yet most powerful medium static pressure unit on the market!</p> <ul style="list-style-type: none"> Slimmest unit in class, only 245mm Low operating sound level Medium external static pressure up to 150Pa facilitates using flexible ducts of varying lengths Automatic air flow adjustment function measures the air volume and static pressure and adjusts it towards the nominal air flow, guaranteeing comfort 	<p>FXSQ-A</p> 	158	•	•	•	•	•	•	•			•	•	•	•		
	<p>Concealed ceiling unit with high ESP</p> <p>ESP up to 200, ideal for large sized spaces</p> <ul style="list-style-type: none"> Optimum comfort guaranteed no matter the length of ductwork or type of grilles, thanks to automatic air flow adjustment Reduced energy consumption thanks to DC fan motor Flexible installation as the air suction direction can be altered from rear to bottom suction 	<p>FXMQ-P7</p> 	168						•	•		•	•	•				
	<p>Concealed ceiling unit with high ESP</p> <p>ESP up to 270, ideal for extra large sized spaces</p> <ul style="list-style-type: none"> Only grilles are visible Large capacity unit: up to 31.5 kW heating capacity 	<p>FXMQ-MB</p> 	168													•	•	
Wall mounted	<p>Wall mounted unit</p> <p>For rooms with no false ceilings nor free floor space</p> <ul style="list-style-type: none"> Flat, stylish front panel is more easy to clean Small capacity unit developed for small of well-insulated rooms Reduced energy consumption thanks to DC fan motor The air is comfortably spread up- and downwards thanks to 5 different discharge angles 	<p>FXAQ-P</p> 	176	•	•	•	•	•	•	•								
Ceiling suspended	<p>Ceiling suspended unit</p> <p>For wide rooms with no false ceilings nor free floor space</p> <ul style="list-style-type: none"> Ideal for comfortable air flow in wide rooms thanks to Coanda effect Rooms with ceilings up to 3.8m can be heated or cooled very easily! Can easily be installed in both new and refurbishment projects Can even be mounted in corners or narrow spaces without any problem Reduced energy consumption thanks to DC fan motor 	<p>FXHQ-A</p> 	179				•			•			•					
	<p>UNIQUE</p> <p>4-way blow ceiling suspended unit</p> <p>Unique Daikin unit for high rooms with no false ceilings nor free floor space</p> <ul style="list-style-type: none"> Rooms with ceilings up to 3.5m can be heated up or cooled down very easily! Can easily be installed in both new and refurbishment projects Flexibility to suit every room layout Reduced energy consumption thanks to DC fan motor 	<p>FXUQ-A</p> 	183								•		•					
Floor standing	<p>Concealed floor standing unit</p> <p>Ideal for installation in offices, hotels and residential applications</p> <ul style="list-style-type: none"> Discretely concealed in the wall, leaving only the suction and discharge grilles visible Can even be installed underneath a window Requires very little installation space as the depth is only 200mm High ESP allows flexible installation 	<p>FXNQ-A</p> 	185		•	•	•	•	•	•								
	<p>Floor standing unit</p> <p>For perimeter zone air conditioning</p> <ul style="list-style-type: none"> Can be installed in front of glass walls or free standing as both the front and the back are finished Ideal for installation beneath a window Requires very little installation space Wall mounted installation facilitates cleaning beneath the unit 	<p>FXLQ-P</p> 	190		•	•	•	•	•	•								
Cooling capacity (kW):					1,7	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):					1,9	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

Stylish indoor units overview

Depending on the application, Split and Sky Air indoor units can be connected to our VRV IV and VRV IV S-series outdoor units. Refer to the **outdoor unit portfolio** for combination restrictions.













Type	Model	Product name	Capacity class (kW)								Connectable outdoor unit				
			15	20	25	35	42	50	60	71	RYYQ-T	RXYQ-T(9)	RXYSCQ-TV ^B	RXYSQ-TV ^B	RWEYQ-T9(B) ³
Ceiling mounted cassette	Round flow cassette (incl. auto-cleaning function ¹)	FCQG-F				•			•	•				✓	✓
	Fully flat cassette	FFQ-C			•	•			•	•				✓	✓
Concealed ceiling	Small concealed ceiling unit	FDBQ-B			•									✓	✓
	Slim concealed ceiling unit	FDXM-F3			•	•			•	•		NEW Auto cleaning filter option		✓	✓
	Concealed ceiling unit with inverter-driven fan	FBQ-D				•			•	•				✓	✓
Wall mounted	Daikin Emura Wall mounted unit	FTXG-LW/LS		•	•	•			•				✓	✓	✓
	Wall mounted unit	CTXS-K FTXS-K	•	•	•	•	•	•					✓	✓	✓
	Wall mounted unit	FTXS-G								•	•		✓	✓	✓
Ceiling suspended	Ceiling suspended unit	FHQ-CB				•			•	•				✓	✓
Floor standing	Nexura floor standing unit	FVXG-K			•	•			•				✓	✓	✓
	Floor standing unit	FVXS-F			•	•			•				✓	✓	✓
	Concealed floor standing unit	FNQ-A			•	•			•	•				✓	✓
	Flexi type unit	FLXS-B(9)			•	•			•	•			✓	✓	✓

¹ Decoration panel BYCQ140DG or BYCQ140DGF + BRC1E53A/B/C needed

² To connect stylish indoor units a BPMKS unit is needed

³ A mix of RA indoor units and VRV indoor units is not allowed.

Benefits overview **VRV**

We care		Inverter technology	In combination with inverter controlled outdoor units
		Home leave operation	During absence, indoor comfort levels can be maintained
		Fan only	The air conditioner can be used as fan, blowing air without cooling or heating
		Auto cleaning filter	The filter automatically cleans itself. Simplicity of upkeep means optimum energy efficiency and maximum comfort without the need for expensive or time-consuming maintenance
		Floor and presence sensor	The presence sensor directs the air away from any person detected in the room. The floor sensor detects the average floor temperature and ensures an even temperature distribution between ceiling and floor
Comfort		Draught prevention	When starting to warm up or when the thermostat is off, the air discharge direction is set horizontally and the fan to low speed, to prevent draught. After warming up, air discharge and fan speed are set as desired
		Whisper quiet	Daikin indoor units are whisper quiet. Also the outdoor units are guaranteed not to disturb the quiet of the neighbourhood
		Auto cooling-heating changeover	Automatically selects cooling or heating mode to achieve the set temperature
Air treatment		Air filter	Removes airborne dust particles to ensure a steady supply of clean air
Humidity control		Dry programme	Allows humidity levels to be reduced without variations in room temperature
Air flow		Ceiling soiling prevention	The air discharge of the indoor unit is specially designed to prevent air being blown against the ceiling to prevent ceiling stains
		Vertical auto swing	Possibility to select automatic vertical moving of the air discharge louvre, for uniform air flow and temperature distribution
		Fan speed steps	Multiple fan speeds to select, to optimize comfort levels
		Individual flap control	Individual flap control via the wired remote controller makes it simple to fix the position of each flap individually, to suit any new room configuration. Optional closure kits are available as well
Remote control & timer		Weekly timer	Timer can be set to start and stop operation anytime on a daily or weekly basis
		Infrared remote control	Infrared remote control with LCD to remotely control your indoor unit
		Wired remote control	Wired remote control to remotely control your indoor unit
		Centralised control	Centralised control to control several indoor units from one single point
		Multi zoning NEW	Allows up to 6 individual climate zones with one indoor unit
Other functions		Auto-restart	The unit restarts automatically at the original settings after power failure
		Self-diagnosis	Simplifies maintenance by indicating system faults or operating anomalies
		Drain pump kit	Facilitates condensation draining from the indoor unit
		Multi tenant	The indoor unit's main power supply can be turned off when leaving the building or for servicing purposes

Ceiling mounted cassette units				Concealed ceiling units					Wall mounted unit	Ceiling suspended units		Floor standing units	
FXFQ-A	FXZQ-A	FXCQ-A	FXKQ-MA	FXDQ-M9	FXDQ-A3	FXSQ-A	FXMQ-P7	FXMQ-MB	FXAQ-P	FXHQ-A	FXUQ-A	FXNQ-A	FXLQ-P
•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•
•					NEW •								
•	•												
•	•		•								•		
•	•	•	•		•	•		•					
•	•	•	•	•	•	•	•	•	•	•	•	•	•
G1 F8 (optional)	G1	•	G1	•	•	G1 F8 (optional)	•	G1 F8 (optional)	•	G1	G1	G1	G1
•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•										
•	•	•	•						•		•		
3	3	3	2	2	3	3	3	2	2	3	3	2	2
•	•										•		
•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•
					NEW •	NEW •							
•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•
Standard	Standard	Standard	Standard		Standard	Standard	Standard	Optional	Optional	Optional	Standard		
•	•	(•)	(•)	•	•	•	•	(•)	•	(•)	(•)	•	•

FCQG-F/FCQHG-F/FXFQ-A

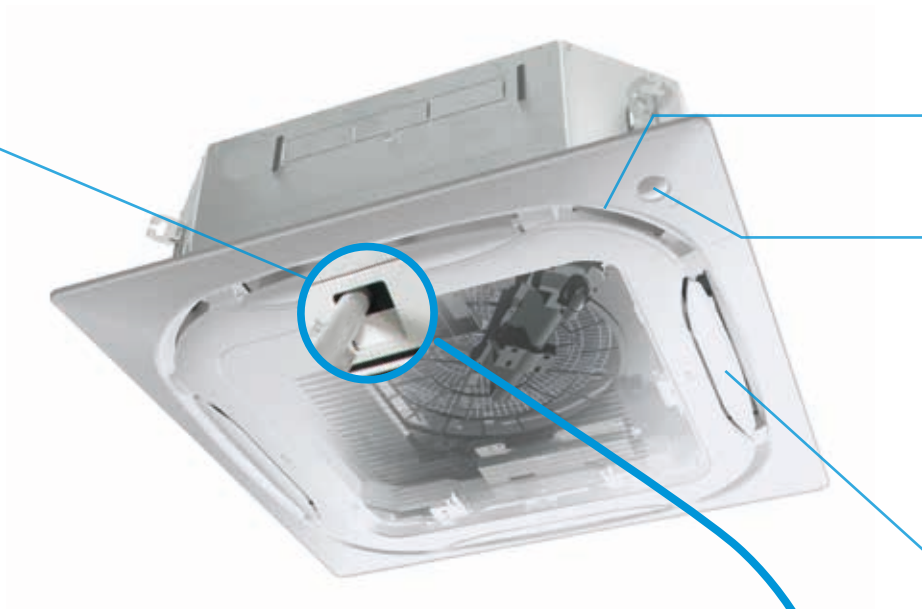
Auto cleaning cassette

More energy efficient and user-friendly than any other cassette

- > Running costs are reduced by 50% compared with standard solutions
- > Automatic filter cleaning.
- > Less time is required to maintain the filter: dust can be removed easily with a vacuum cleaner without opening the unit.

Finer mesh panel

- > For dust prone areas (i.e. clothing and book shops) a finer mesh panel (BYCQ140DGF) ensures consistent performance and optimum air distribution
- > Clean ceilings ensured thanks to fine mesh and clean filter



BYCQ140DG	BYCQ140DGF
Auto-cleaning panel	auto-cleaning panel with fine mesh filter
White with grey louvers	White with grey louvers

Auto-cleaning cassette for maintaining the optimum store atmosphere

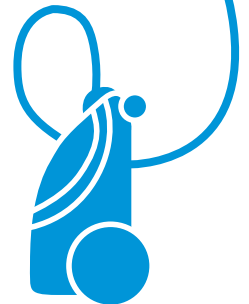


Air distribution with a clean filter



Air distribution with a dusty filter

Dust can be removed easily with a vacuum cleaner without opening the unit.

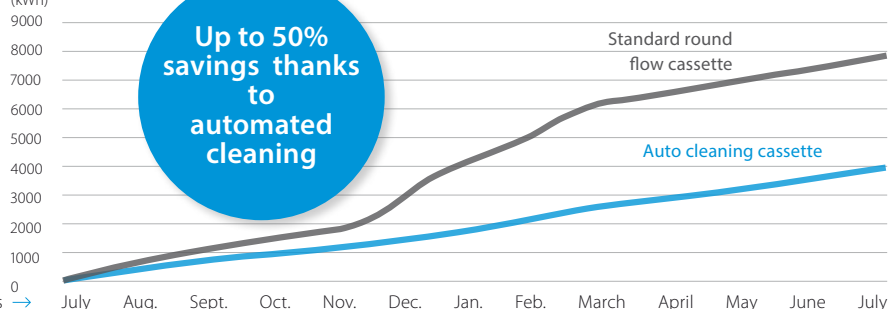


References

Coral shop, UK

Running costs were reduced by up to 50% compared with standard solutions thanks to clean filter.

Energy consumption (kWh)



Up to 50% savings thanks to automated cleaning

Cumulative energy comparison over 12 months →

Why choose a round flow cassette?

- 360° air discharge for optimum comfort
- Intelligent sensors for maximum efficiency

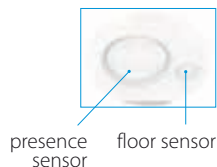


360° air discharge for improved comfort

- › Industry-first and proven design.

Intelligent sensors improve efficiency and comfort even more

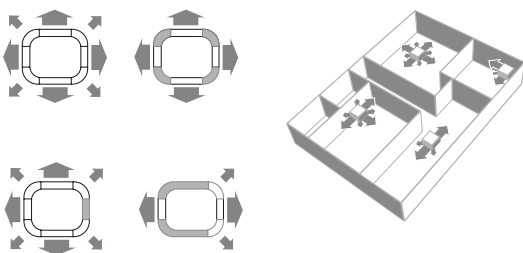
- › The presence sensor adjusts the set point if no one is detected in the room leading to up to 27% savings. It also automatically directs air flow away from any person to avoid draught.



- › The infrared floor sensor detects the average floor temperature and ensures even temperature distribution between ceiling and floor to prevent cold feet.

Flexible installation

- › Flaps can be individually controlled or closed using the wired remote control, to suit room configuration. Optional closure kits are also available.



Benefits for the installer

- › Product with unique functions in this market.
- › Less time needed for onsite maintenance.
- › Use the controller to individually open or close any of the four flaps to easily adapt to a changing room layout.
- › Easy set-up of the sensor option to improve comfort and save energy.

Benefits for the consultant

- › Product with unique functions in this market.
- › Designed for use in all types and sizes of commercial offices and retail environments.
- › Ideal product for improving BREEAM score/EPBD in combination with Sky Air Seasonal Smart or VRV IV heat pump units.

Benefits for the end user

- › Designed for use in all types and sizes of commercial offices and retail environments.
- › Perfect environment conditions: no more draughts or cold feet.
- › Save up to 50% on running costs with the auto-cleaning panel, which also facilitates maintenance.
- › Your customers can save up to 27% on their energy bills thanks to the sensor option.
- › Flexible use of space thanks to individual flap control.

Marketing tools

- › Visit the website: www.daikineurope.com/minisite/round-flow-cassette/



www.youtube.com/DaikinEurope





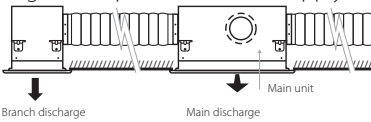
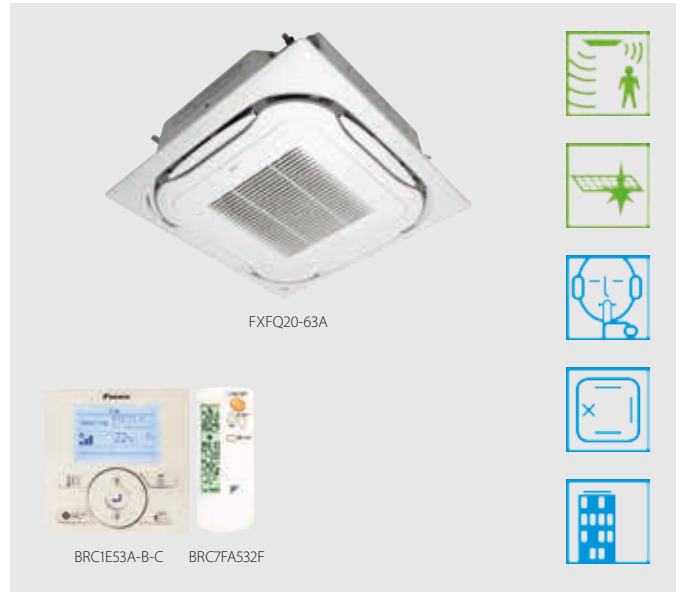
AUTO CLEANING PANEL WITH FINE MESH
FILTER, IDEAL FOR CLOTHING SHOPS



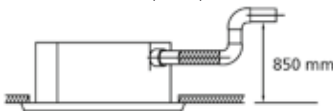
Round flow cassette

360° air discharge for optimum efficiency and comfort

- › Automatic filter cleaning results in higher efficiency & comfort and lower maintenance costs. 2 filters available: standard filter and finer mesh filter (for fine dust applications e.g. clothing shops)
- › Two optional intelligent sensors improve energy efficiency and comfort.
- › Individual flap control: flexibility to suit every room layout without changing the location of the unit!
- › Modern style decoration panel is available in 3 different variations: white (RAL9010) with grey louvers, full white (RAL9010) or auto cleaning panel
- › Reduced energy consumption thanks to specially developed small tube heat exchanger, DC fan motor and drain pump
- › Optional fresh air intake
- › Lowest installation height in the market: 214mm for class 20-63
- › Branch duct discharge allows to optimize air distribution in irregular shaped rooms or to supply air to small adjacent rooms



- › Standard drain pump with 675mm lift increases flexibility and installation speed



Indoor unit			FXFQ	20A	25A	32A	40A	50A	63A	80A	100A	125A
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	0,038			0,053		0,061	0,092	0,115	0,186
	Heating	Nom.	kW	0,038			0,053		0,061	0,092	0,115	0,186
Dimensions	Unit	Height	mm	204						246		288
		Width	mm	840								
		Depth	mm	840								
Weight	Unit		kg	19		20	21		24		26	
Casing	Material			Galvanised steel plate								
Decoration panel	Model			BYCQ140D7GFW1 - auto cleaning panel with fine mesh filter								
	Colour			Pure White (RAL 9010)								
	Dimensions	HeightxWidthxDepth	mm	130x950x950								
	Weight		kg	10,3								
Decoration panel 2	Model			BYCQ140D7GW1 - auto cleaning panel								
	Colour			Pure White (RAL 9010)								
	Dimensions	HeightxWidthxDepth	mm	130x950x950								
	Weight		kg	10,3								
Decoration panel 3	Model			BYCQ140D7W1W - full white								
	Colour			Pure White (RAL 9010)								
	Dimensions	HeightxWidthxDepth	mm	50x950x950								
	Weight		kg	5,4								
Decoration panel 4	Model			BYCQ140D7W1 - white with grey louvers								
	Colour			Pure White (RAL 9010)								
	Dimensions	HeightxWidthxDepth	mm	50x950x950								
	Weight		kg	5,4								
Fan-Air flow rate - 50Hz	Cooling	High/Nom./Low	m³/min	12,5/10,6/8,8			13,6/11,6/9,5	15,0/12,8/10,5	16,5/13,5/10,5	22,8/17,6/12,4	26,5/19,5/12,4	33,0/26,5/19,9
	Heating	High/Nom./Low	m³/min	12,5/10,6/8,8			13,6/11,6/9,5	15,0/12,8/10,5	16,5/13,5/10,5	22,8/17,6/12,4	26,5/19,5/12,4	33,0/26,5/19,9
Air filter	Type			Resin net with mold resistance								
Sound power level	Cooling	High/Nom.	dB(A)	49/-			51/-	53/-	55/-	60/-	61/-	
Sound pressure level	Cooling	High/Nom./Low	dB(A)	31/29/28			33/31/29	35/33/30	38/34/30	43/37/30	45/41/36	
	Heating	High/Nom./Low	dB(A)	31/29/28			33/31/29	35/33/30	38/34/30	43/37/30	45/41/36	
Refrigerant	Type			R-410A								
	GWP			2.087,5								
Piping connections	Liquid	OD	mm	6,35					9,52			
	Gas	OD	mm	12,7					15,9			
	Drain			VP25 (O.D. 32 / I.D. 25)								
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/60/220-240/220								
Current - 50Hz	Maximum fuse amps (MFA)		A	16								
Control systems	Infrared remote control			BRC7FA532F								
	Wired remote control			BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52								
	Simplified wired remote control for hotel applications			BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)								

(1) The BYCQ140D7W1W has white insulations. Be informed that formation of dirt on white insulation is visibly stronger and that it is consequently not advised to install the BYCQ140D7W1W decoration panel in environments exposed to concentrations of dirt.
 (2) BYCQ140D7W1: pure white standard panel with grey louvers; BYCQ140D7W1W: pure white standard panel with white louvers; BYCQ140D7GW1: pure white auto cleaning panel.

Fully Flat Cassette

Design & Genius in one



Why choose fully flat cassette

- Unique design in the market that integrates fully flat into the ceiling
- Advanced technology and top efficiency combined
- Most quiet cassette available on the market

FFQ-C / FXZQ-A



Choice between grey or white panel

Benefits for the installer

- › Unique product in the market!
- › Most quiet unit (25dBA)
- › The user-friendly remote control, available in several languages, enables the easy set-up of sensor option and control of the individual flap position
- › Meeting European design taste.

Benefits for the consultant

- › Unique product in the market!
- › Blends seamlessly in any modern office interior design
- › Ideal product to improve BREEAM score/EPBD in combination with Sky Air Seasonal Smart (FFQ-C) or VRV IV heat pump units (FXZQ-A).

Benefits for the end user

- › Engineering excellence and unique design in one
- › Most quiet unit (25dBA)
- › Perfect working conditions: no more cold draughts
- › Save up to 27% on your energy bill thanks to the optional sensors
- › Flexible usage of space and suits any room configuration thanks to individual flap control
- › User-friendly remote control, available in several languages.





Unique design

- › Designed by a European design office to fully meet the European taste.
- › Fully flat into the ceiling, leaving only 8mm.



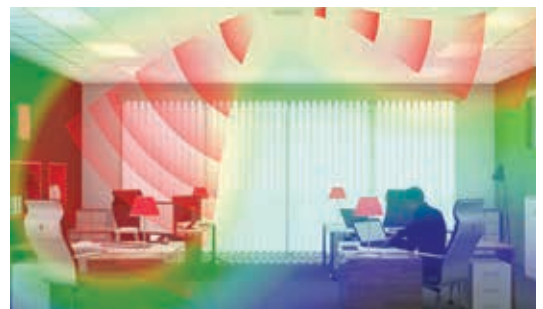
- › Fully integrated in the one ceiling tile, enabling lights, speakers and sprinklers to be installed in adjoining ceiling tiles.
- › Decoration panel available in 2 colours (white and white-silver).



Differentiating in technology

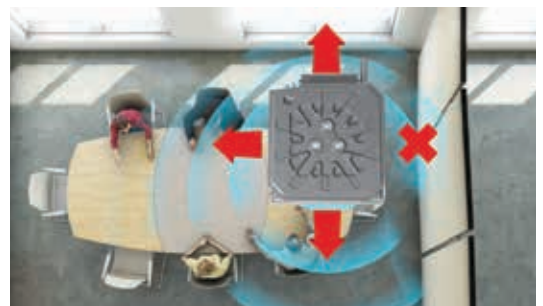
Optional presence sensor

- › When the room is empty, it can adjust the set temperature or switch off the unit – saving energy.
- › When people are detected, the direction of the airflow is adapted to avoid cold draughts being directed towards occupants.



Optional floor sensor

- › Detects the temperature difference and re-directs the airflow to ensure even temperature distribution.



Top efficiency

- › Seasonal labels up to **A++***
- › When the room is empty, the sensor option can adjust the set temperature or switch off the unit – saving up to 27% energy.

* for FFQ25,35C in combination with RXS25,35L3

Other benefits

- › Individual flap control: easily control one or more flaps via the wired remote controller (BRC1E*) when rearranging the room. When fully closing or blocking the flaps, the option “Sealing member of air discharge outlet” is needed.
- › Most silent cassette in the market (25dBA), important for office applications.



Marketing tools

- › www.daikineurope.com/fullyflat
- › www.youtube.com/DaikinEurope



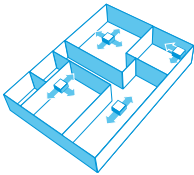


FULLY FLAT CASSETTE INTEGRATES
FULLY FLAT INTO THE CEILING

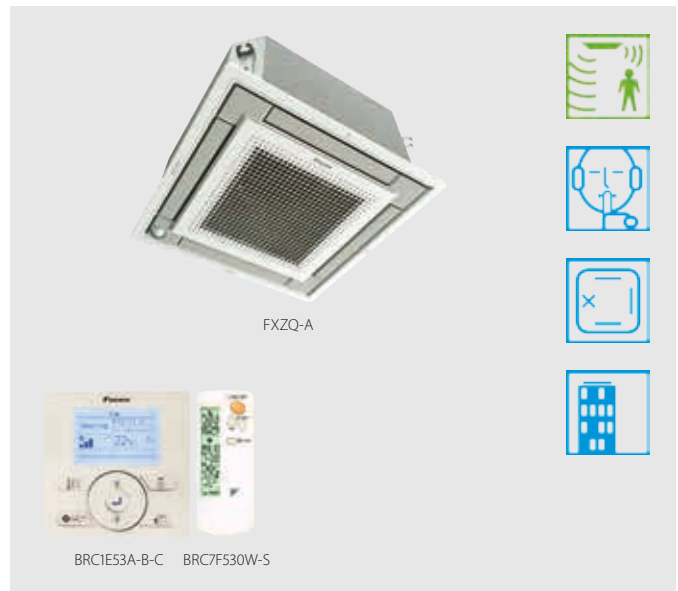
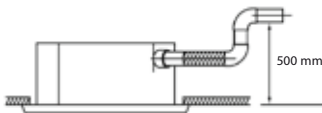
Fully flat cassette

Unique design in the market that integrates fully flat into the ceiling

- › Fully flat integration in standard architectural ceiling tiles, leaving only 8mm
- › Remarkable blend of iconic design and engineering excellence with an elegant finish in white or a combination of silver and white
- › Two optional intelligent sensors improve energy efficiency and comfort.
- › 15 class unit especially developed for small or well-insulated rooms, such as hotel bedrooms, small offices, etc.
- › Individual flap control: flexibility to suit every room layout without changing the location of the unit!



- › Reduced energy consumption thanks to specially developed small tube heat exchanger, DC fan motor and drain pump
- › Optional fresh air intake
- › Standard drain pump with 630mm lift increases flexibility and installation speed



Indoor unit			FXZQ	15A	20A	25A	32A	40A	50A	
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 - 50Hz	Cooling	Nom.	kW	0,043			0,045	0,059	0,092	
	Heating	Nom.	kW	0,036			0,038	0,053	0,086	
Dimensions	Unit	Height	mm	260						
		Width	mm	575						
		Depth	mm	575						
Weight	Unit		kg	15,5			16,5		18,5	
Casing	Material			Galvanised steel plate						
Decoration panel	Model			BYFQ60CW						
	Colour			White (N9,5)						
	Dimensions	HeightxWidthxDepth	mm	46x620x620						
	Weight		kg	2,8						
Decoration panel 2	Model			BYFQ60CS						
	Colour			White (N9,5) + Silver						
	Dimensions	HeightxWidthxDepth	mm	46x620x620						
	Weight		kg	2,8						
Decoration panel 3	Model			BYFQ60B3W1						
	Colour			White (RAL9010)						
	Dimensions	HeightxWidthxDepth	mm	55x700x700						
	Weight		kg	2,7						
Fan-Air flow rate - 50Hz	Cooling	High/Nom./Low	m³/min	8,5/7/6,5	8,7/7,5/6,5	9/8/6,5	10/8,5/7	11,5/9,5/8	14,5/12,5/10	
	Heating	High/Nom./Low	m³/min	8,5/7/6,5	8,7/7,5/6,5	9/8/6,5	10/8,5/7	11,5/9,5/8	14,5/12,5/10	
Air filter	Type			Resin net with mold resistance						
Sound power level	Cooling	High/Nom.	dB(A)	49/-			50/-	51/-	54/-	60/-
Sound pressure level	Cooling	High/Nom./Low	dB(A)	31,5/28/25,5	32/29,5/25,5	33/30/25,5	33,5/30/26	37/32/28	43/40/33	
	Heating	High/Nom./Low	dB(A)	31,5/28/25,5	32/29,5/25,5	33/30/25,5	33,5/30/26	37/32/28	43/40/33	
Refrigerant	Type			R-410A						
	GWP			2.087,5						
Piping connections	Liquid	OD	mm	6,35						
	Gas	OD	mm	12,7						
	Drain			VP20 (I.D. 20/O.D. 26)						
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/220-240						
Current - 50Hz	Maximum fuse amps (MFA)		A	16						
Control systems	Infrared remote control			BRC7F530W (white panel) / BRC7F530S (grey panel) / BRC7EB530W (standard panel)						
	Wired remote control			BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52						
	Simplified wired remote control for hotel applications			BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)						

(1) Dimensions do not include control box

2-way blow ceiling mounted cassette

Thin, lightweight design installs easily in narrow corridors

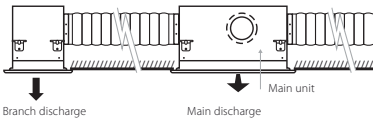
- › Depth of all units is 620mm, ideal for narrow spaces
- › Individual flap control: flexibility to suit every room layout without changing the location of the unit!
- › Reduced energy consumption thanks to specially developed small tube heat exchanger, DC fan motor and drain pump
- › Stylish unit blends easily with any interior. The flaps close entirely when the unit is not operating and there are no air intake grilles visible
- › Fresh air intake integrated in the same system thus reducing installation cost as no additional ventilation device is required

Fresh air intake opening in casing

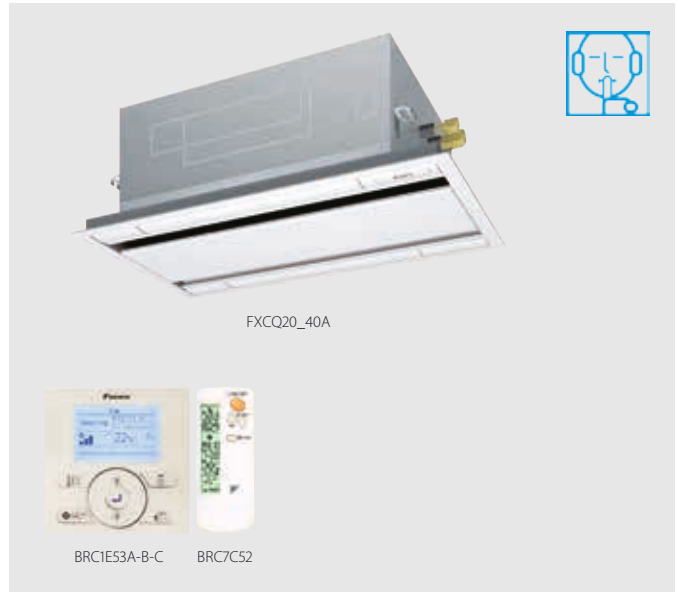
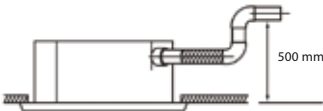


* Brings in up to 10% of fresh air into the room

- › Optimum comfort guaranteed with automatic air flow adjustment to the required load
- › Maintenance operations can be performed by removing the front panel
- › Branch duct discharge allows to optimize air distribution in irregular shaped rooms or to supply air to small adjacent rooms



- › Standard drain pump with 580mm lift increases flexibility and installation speed



Indoor unit			FXCQ	20A	25A	32A	40A	50A	63A	80A	125A	
Cooling capacity	Nom.	kW	2,2	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	0,031	0,039	0,041	0,059	0,063	0,090	0,149		
	Heating	Nom.	kW	0,028	0,035	0,037	0,056	0,060	0,086	0,146		
Dimensions	Unit	Height	mm	305								
		Width	mm	775				990		1,445		
		Depth	mm	620								
Weight	Unit	kg	19				22	25	33	38		
Casing	Material		Galvanised steel plate									
Decoration panel	Model		BYBCQ40HW1			BYBCQ63HW1			BYBCQ125HW1			
	Colour		Fresh white (6,5Y 9,5/0,5)									
	Dimensions	HeightxWidthxDepth	mm	55x1.070x700				55x1.285x700		55x1.740x700		
	Weight	kg	10				11		13			
Fan-Air flow rate - 50Hz	Cooling	High/Nom./Low	m ³ /min	10,5/9/7,5	11,5/9,5/8	12/10,5/8,5	15/13/10,5	16/14/11,5	26/22,5/18,5	32/27,5/22,5		
Air filter	Type		Resin net with mold resistance									
Sound power level	Cooling	Nom.	dBA	-								
Sound pressure level	Cooling	High/Nom./Low	dBA	32,0/30,0/28,0	34,0/31,0/29,0	34,0/32,0/30,0	36,0/33,0/31,0	37,0/35,0/31,0	39,0/37,0/32,0	42,0/38,0/33,0	46,0/42,0/38,0	
	Heating	High/Nom./Low	dBA	32,0/30,0/28,0	34,0/31,0/29,0	34,0/32,0/30,0	36,0/33,0/31,0	37,0/35,0/31,0	39,0/37,0/32,0	42,0/38,0/33,0	46,0/42,0/38,0	
Refrigerant	Type		R-410A									
	GWP		2.087,5									
Piping connections	Liquid	OD	mm	6,35						9,52		
	Gas	OD	mm	12,7						15,9		
	Drain			VP25 (O.D. 32 / I.D. 25)								
Power supply	Phase/Frequency/Voltage	Hz/V	1~/50/220-240									
Current - 50Hz	Maximum fuse amps (MFA)	A	16									
Control systems	Infrared remote control		BRC7C52									
	Wired remote control		BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52									
	Simplified wired remote control for hotel applications		BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)									

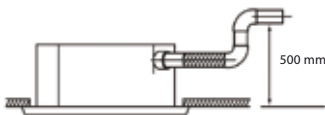
Ceiling mounted corner cassette

1-way blow unit for corner installation

- › Compact dimensions, can easily be mounted in a narrow ceiling void (only 220mm ceiling space required, 195 with panel spacer, available as accessory)
- › Optimum air flow conditions are created by either downward air discharge or frontal air discharge (via optional grille) or a combination of both



- › Maintenance operations can be performed by removing the front panel
- › Standard drain pump with 330mm lift increases flexibility and installation speed

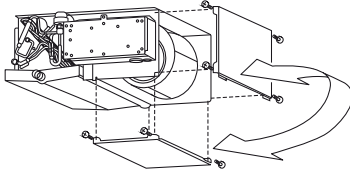


Indoor unit		FXKQ	25MA	32MA	40MA	63MA
Cooling capacity	Nom.	kW	2,8	3,6	4,5	7,10
Heating capacity	Nom.	kW	3,2	4,0	5,0	8,00
Power input - 50Hz	Cooling	Nom.	0,066		0,076	0,105
	Heating	Nom.	0,046		0,056	0,085
Dimensions	Unit	Height	215			
		Width	1.110		1.310	
		Depth	710			
Weight	Unit	kg	31		34	
Casing	Material	Galvanised steel plate				
Decoration panel	Model	BYK45FJW1			BYK71FJW1	
	Colour	White				
	Dimensions	HeightxWidthxDepth	70x1.240x800			70x1.440x800
	Weight	kg	8,5		9,5	
Fan-Air flow rate - 50Hz	Cooling	High/Low	11/9		13/10	18/15
	Air filter	Type	Resin net with mold resistance			
Sound power level	Cooling	Nom.	-			
Sound pressure level	Cooling	High/Low	38,0/33,0		40,0/34,0	42,0/37,0
Refrigerant	Type	R-410A				
	GWP	2.087,5				
Piping connections	Liquid	OD	6,35		9,52	
	Gas	OD	12,7		15,9	
	Drain	VP25 (O.D. 32 / I.D. 25)				
Power supply	Phase/Frequency/Voltage	Hz/V	1~/50/60/220-240/220			
Current - 50Hz	Maximum fuse amps (MFA)	A	15			
Control systems	Infrared remote control	BRC4C61				
	Wired remote control	BRC1D52 / BRC1E53A/B/C				
	Simplified wired remote control for hotel applications	BRC2E53C (heat recovery type) / BRC3E53C (heat pump type)				

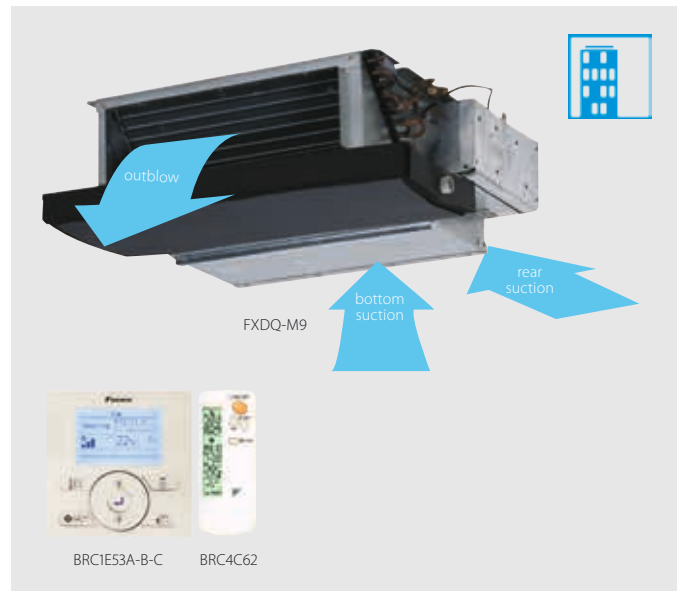
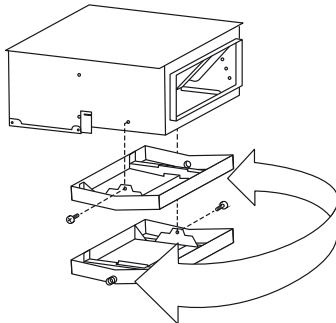
Small concealed ceiling unit

Designed for hotel applications

- › Compact unit (230mm high & 652mm deep), can easily be mounted in narrow ceiling voids
- › Discretely concealed in the ceiling: only the suction and discharge grilles are visible
- › Flexible installation, as 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 right of the unit

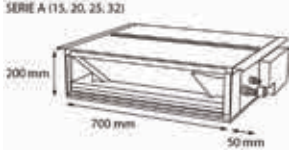


Indoor unit				FXDQ	20M9	25M9
Cooling capacity	Nom.		kW	2,2		2,8
Heating capacity	Nom.		kW	2,5		3,2
Power input - 50Hz	Cooling	Nom.	kW		0,050	
	Heating	Nom.	kW		0,050	
Required ceiling void >			mm		250	
Dimensions	Unit	Height	mm		230	
		Width	mm		502	
		Depth	mm		652	
Weight	Unit		kg		17	
Casing	Colour				Unpainted	
	Material				Galvanised steel	
Fan-Air flow rate - 50Hz	Cooling	High/Low	m ³ /min	6,7/5,2		7,4/5,8
	Heating	High/Low	m ³ /min	6,7/5,2		7,4/5,8
Air filter	Type				Resin net with mold resistance	
Sound power level	Cooling	Nom.	dBA		50	
Sound pressure level	Cooling	High/Low	dBA		37/32	
	Heating	High/Low	dBA		37/32	
Refrigerant	Type				R-410A	
	GWP				2.087,5	
Piping connections	Liquid	OD	mm		6,35	
	Gas	OD	mm		12,7	
	Drain				I.D. 21,6, O.D. 27,2	
Power supply	Phase/Frequency/Voltage		Hz/V		1~/50/230	
Current - 50Hz	Maximum fuse amps (MFA)		A		16	
Control systems	Infrared remote control				BRC4C62	
	Wired remote control				BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52	
	Simplified wired remote control for hotel applications				BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)	

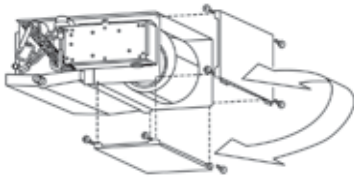
Slim concealed ceiling unit

Slim design for flexible installation

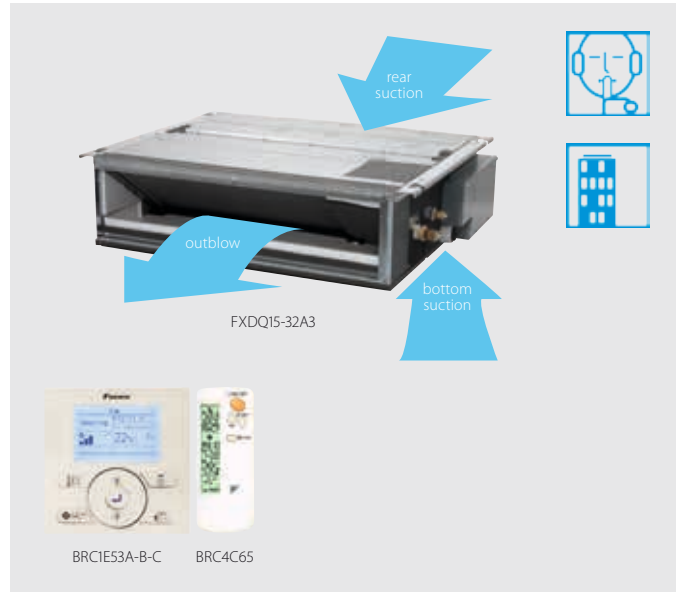
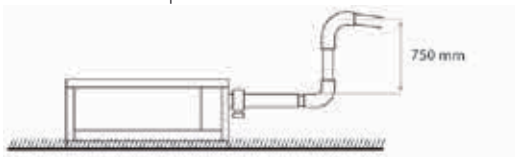
- › Compact dimensions, can easily be mounted in a ceiling void of only 240mm



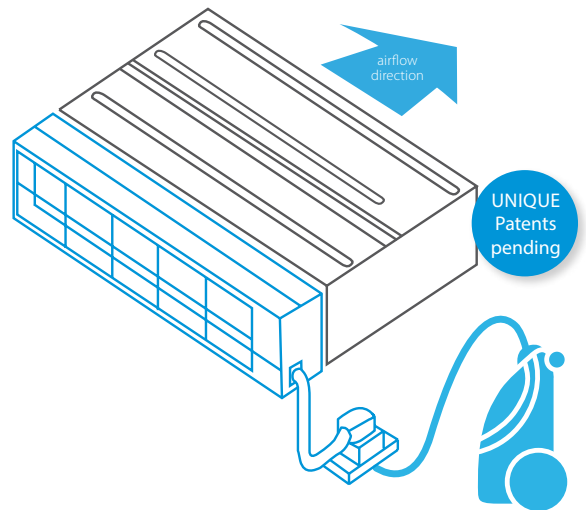
- › Medium external static pressure up to 44Pa facilitates unit use with flexible ducts of varying lengths
- › Discretely concealed in the ceiling: only the suction and discharge grilles are visible
- › 15 class unit especially developed for small or well-insulated rooms, such as hotel bedrooms, small offices, etc.
- › Reduced energy consumption thanks to specially developed DC fan motor
- › Flexible installation, as the air suction direction can be altered from rear to bottom suction



- › Standard drain pump with 750mm lift increases flexibility and installation speed



NEW
Auto cleaning filter option



Indoor unit			FXDQ	15A3	20A3	25A3	32A3	40A3	50A3	63A3	
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	0,071			0,078		0,099		0,110
	Heating	Nom.	kW	0,068			0,075		0,096		0,107
Required ceiling void >				240							
Dimensions	Unit	Height	mm	200							
		Width	mm	750			950		1.150		
		Depth	mm	620							
Weight	Unit		kg	22			26		29		
Casing	Colour			Galvanised steel / Non painted.							
Fan-Air flow rate - 50Hz	Cooling	High/Nom./Low	m ³ /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			44/15				
Air filter	Type			Removable / washable / mildew proof							
Sound power level	Cooling	Nom.	dB(A)	50	51			52	53	54	
Sound pressure level	Cooling	High/Nom./Low	dB(A)	32/31/27	33/31/27			34/32/28	35/33/29	36/34/30	
Refrigerant	Type			R-410A							
	GWP			2.087,5							
Piping connections	Liquid	OD	mm	6,35			9,52				
	Gas	OD	mm	12,7			15,9				
	Drain			VP20 (I.D. 20/O.D. 26)							
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/60/220-240/220							
Current - 50Hz	Maximum fuse amps (MFA)		A	16							
Control systems	Infrared remote control			BRC4C65							
	Wired remote control			BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52							
	Simplified wired remote control for hotel applications			BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)							

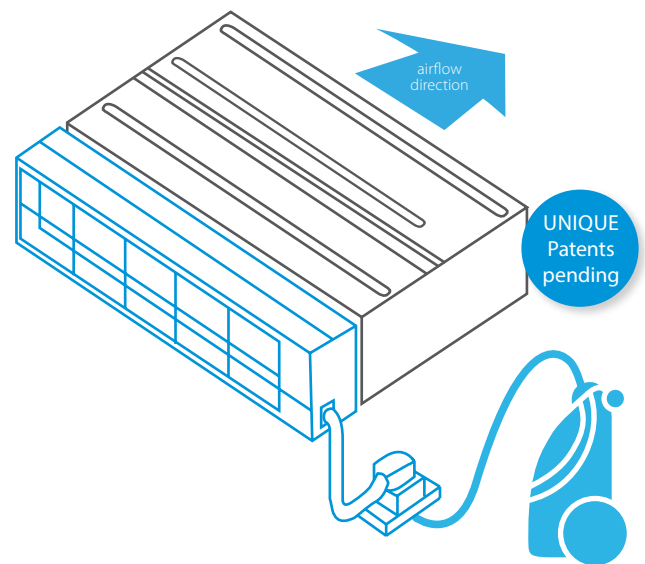
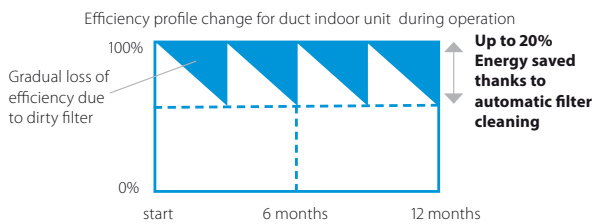


Auto cleaning filter for concealed ceiling units

A unique success story repeated

Reduce running costs

- › Automatic filter cleaning ensures low maintenance costs because the filter is always clean



Improved indoor air quality

- › Optimum airflow eliminates draft and insulates sound

Minimal time required for filter cleaning

- › The dust box can be emptied with a vacuum cleaner for fast and easy cleaning
- › No more dirty ceilings

Unique technology

- › Unique and innovative filter technology inspired by the Daikin auto cleaning cassette



How does it work?

- 1 Scheduled automatic filter cleaning
- 2 Dust collects in a dust box that's integrated into the unit
- 3 The dust can easily be removed with a vacuum cleaner

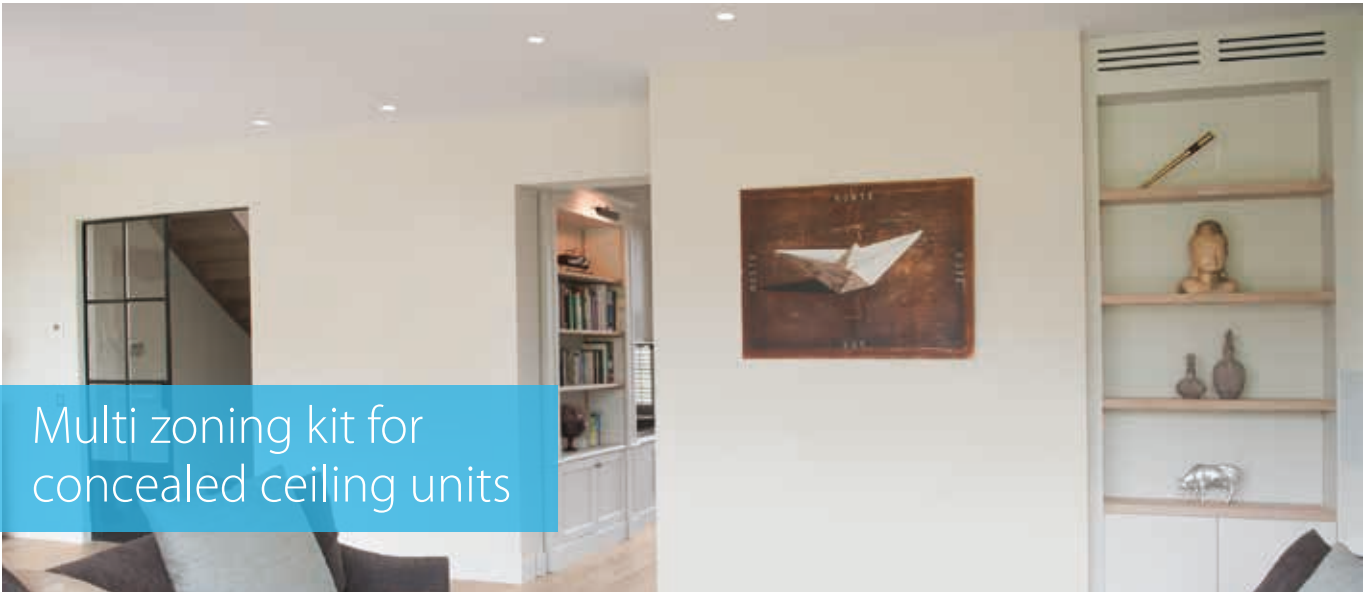
Combination table

	Split / Sky Air				VRV							
	FDXM-F3				FXDQ-A3							
	25	35	50	60	15	20	25	32	40	50	63	
BAE20A62	•	•			•	•	•	•				
BAE20A82									•	•		
BAE20A102			•	•								•

*Note: blue cells combination to be confirmed

Specifications

	BAE20A62	BAE20A82	BAE20A102
Height (mm)	212		
Width (mm)	764	964	1164
Width (mm) (incl. hanger bracket)	984	1094	1294
Depth (mm)	201		



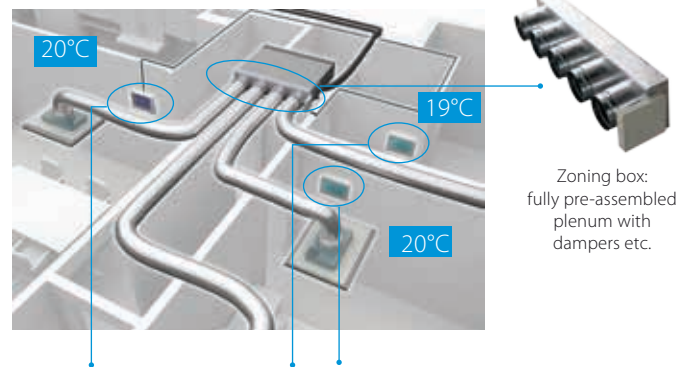
Multi zoning kit for concealed ceiling units

Increase flexibility: heat or cool multiple rooms with one indoor unit

The zoning kit increases the flexibility of Split, Sky Air and VRV system applications by allowing multiple individually-controlled climate zones to be served by one indoor unit

- › Increases comfort levels by allowing more individual zone control
 - Up to 8 individual zones can be served thanks to separate modulating dampers
 - Individual thermostat for room-by-room or zone-by-zone control
- › Eco-adapt reduces the power consumption thanks to use dynamic setpoint temperatures
- › Automatic air flow adjustment according to the demand
- › Easy to install, integrates with the Daikin indoor units and system controls
- › Promote the all in one package for the multi-zoning
- › Time saving as plenum comes fully pre-assembled with dampers, and control boards
- › Reduces the amount of refrigerant required in the installation

How does it work?



Individual zone thermostats

Blueface - Airzone Main Thermostat

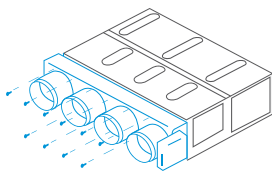
- › Color graphic interface for controlling zones
- › Wired communication

Airzone Zone Thermostat

- › Graphic interface with low-energy e-ink screen for controlling zones
- › Radio communication

Airzone Zone Thermostat

- › Thermostat with buttons for controlling the temperature
- › Radio communication



Plug and play plenum

Connectable to: (preliminary)

- › FDXM-F3
- › FBQ-D
- › ADEQ-C
- › FXDQ-A3
- › FXSQ-A

Concealed ceiling unit with medium ESP

Slimmest yet most powerful medium static pressure unit on the market

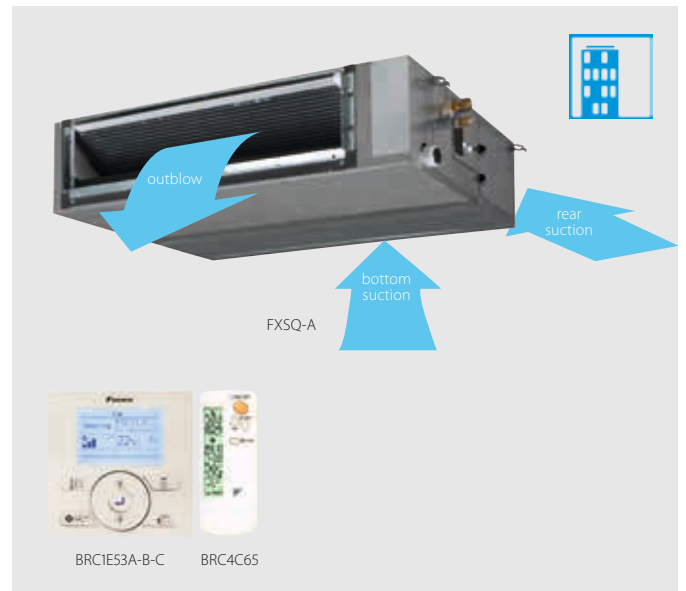
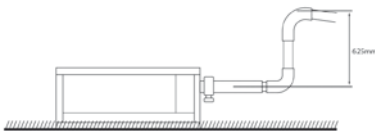
- > Slimmest unit in class, only 245mm (300mm built-in height) and therefore narrow ceiling voids are no longer a challenge



- > Whisper quiet operation: down to 25dBA sound pressure level
- > Medium external static pressure up to 150Pa facilitates using flexible ducts of varying lengths
- > Possibility to change ESP via wired remote control allows optimisation of the supply air volume
- > Discretely concealed in the wall: 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.
- > Reduced energy consumption thanks to specially developed DC fan motor and drain pump
- > Optional fresh air intake
- > Flexible installation: air suction direction can be altered from rear to bottom suction and choice between free use or connection to optional suction grilles



- > Standard built-in drain pump with 625mm lift increases flexibility and installation speed



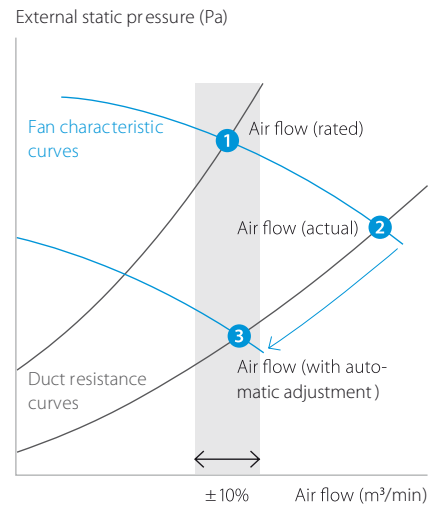
Automatic Airflow Adjustment function

Automatically selects the most appropriate fan curve to achieve the units' nominal air flow within ±10%

Why?

After installation the real ducting will frequently differ from the initially calculated air flow resistance → the real air flow may be much lower or higher than nominal, leading to a lack of capacity or uncomfortable air temperature

Automatic Airflow Adjustment function will adapt the unit's fan speed to any ducting automatically (10 or more fan curves are available on every model), making installation much faster



Indoor unit			FXSQ	15A	20A	25A	32A	40A	50A	63A	80A	100A	125A	140A	
Cooling capacity	Nom.		kW	1,7	2,2	2,8	3,6	4,5	5,6	7,1	9,0	11,2	14,0	16,0	
Heating capacity	Nom.		kW	1,9	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			0,045	0,092	0,095		0,121	0,157	0,214	0,243	
	Heating	Nom.	kW	0,038			0,042	0,089	0,092		0,118	0,154	0,211	0,240	
Dimensions	Unit	Height	mm	245											
		Width	mm	550			700			1.000			1.400		1.550
		Depth	mm	800											
Weight	Unit		kg	23,5			24	28,5	29	35,5	36,5	46	47	51	
Casing	Colour			Not painted (galvanised)											
	Material			Galvanised steel plate											
Fan-Air flow rate - 50Hz	Cooling	High/Nom./Low	m³/min	8,7/7,5/6,5	9/7,5/6,5	9,5/8/7,0	15/12,5/11	15,2/12,5/11	21,0/18/15	23/19,5/16	32/27/23	36/31,5/26	39/34/28		
	Heating	High/Nom./Low	m³/min	8,7/7,5/6,5	9/7,5/6,5	9,5/8/7	15/12,5/11	15,2/12,5/11	21/18/15	23/19,5/16,0	32/27/23	36/31,5/26	39/34/28		
Fan-External static pressure - 50Hz	High/Nom.		Pa	150/30							150/40		150/50		
Air filter	Type			Resin net with mold resistance											
Sound power level	Cooling	Nom.	dBA	54			55	60	59	61			64		
	Heating	High/Nom./Low	dBA	29,5/28/25	30/28/25	31/29/26	35/32/29	33/30/27	35/32/29	36/34/31	39/36/33	41,5/38/34			
Refrigerant	Type			R-410A											
	GWP			2.087,5											
Piping connections	Liquid	OD	mm	6,35							9,52				
	Gas	OD	mm	12,7							15,9				
	Drain			VP20 (I.D. 20/O.D. 26)											
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/60/220-240/220											
Current - 50Hz	Maximum fuse amps (MFA)		A	16											
Control systems	Infrared remote control			BRC4C65											
	Wired remote control			BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52											
	Simplified wired remote control for hotel applications			BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)											

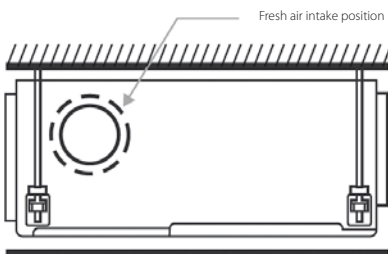
Concealed ceiling unit with high ESP

Ideal for large sized spaces

FXMQ-P7: ESP up to 200 Pa

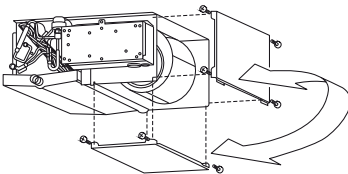
- › Possibility to change ESP via wired remote control allows optimisation of the supply air volume
- › High external static pressure up to 200Pa facilitates extensive duct and grille network
- › Discretely concealed in the wall: only the suction and discharge grilles are visible
- › Reduced energy consumption thanks to specially developed DC fan motor
- › Fresh air intake integrated in the same system thus reducing installation cost as no additional ventilation device is required

Fresh air intake opening in casing

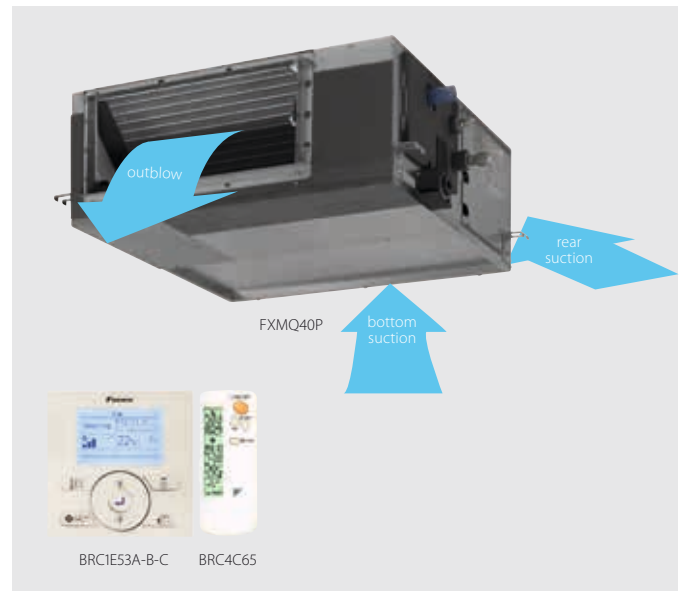
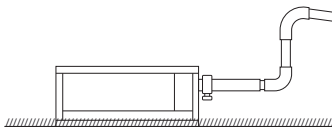


* Brings in up to 10% of fresh air into the room

- › Flexible installation, as the air suction direction can be altered from rear to bottom suction



- › Standard built-in drain pump with 625mm lift increases flexibility and installation speed



USP: FXMQ-MB: ESP up to 270

- › High external static pressure up to 270Pa facilitates extensive duct and grille network
- › Discretely concealed in the wall: only the suction and discharge grilles are visible
- › Large capacity unit: up to 31.5 kW heating capacity
- › Reduced energy consumption thanks to specially developed DC fan motor

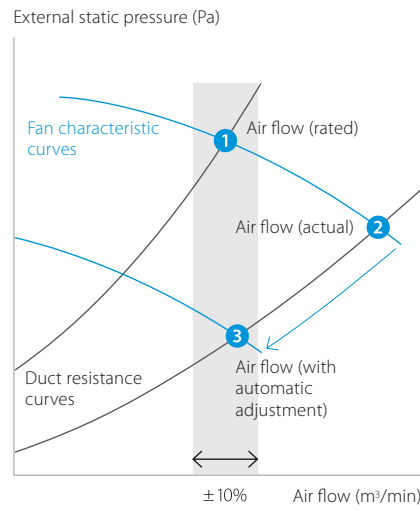
Automatic Airflow Adjustment function

Automatically selects the most appropriate fan curve to achieve the units' nominal air flow within ±10%

Why?

After installation the real ducting will frequently differ from the initially calculated air flow resistance → the real air flow may be much lower or higher than nominal, leading to a lack of capacity or uncomfortable air temperature

Automatic Airflow Adjustment function will adapt the unit's fan speed to any ducting automatically (10 or more fan curves are available on every model), making installation much faster



Indoor unit				FXMQ-P7/FXMQ-MB	50P7	63P7	80P7	100P7	125P7	200MB	250MB
Cooling capacity	Nom.		kW	5,6	7,1	9,0	11,2	14,0	22,4	28,0	
Heating capacity	Nom.		kW	6,3	8,0	10,0	12,5	16,0	25,0	31,5	
Power input - 50Hz	Cooling	Nom.	kW	0,110	0,120	0,171	0,176	0,241	0,895	1,185	
	Heating	Nom.	kW	0,098	0,108	0,159	0,164	0,229	0,895	1,185	
Required ceiling void >			mm	350							
Dimensions	Unit	Height	mm	300					470		
		Width	mm	1.000			1.400		1.380		
		Depth	mm	700					1.100		
Weight	Unit		kg	35			46		132		
Casing	Colour			Unpainted							
	Material			Galvanised steel plate							
Decoration panel	Model			BYBS71DJW1			BYBS125DJW1				
	Colour			White (10Y9/0,5)							
	Dimensions	HeightxWidthxDepth	mm	55x1.100x500			55x1.500x500			-x-x-	
	Weight		kg	4,5			6,5				
Fan-Air flow rate - 50Hz	Cooling	High/Nom./Low	m³/min	18/16,5/15	19,5/17,8/16	25/22,5/20	32/27,5/23	39/33,5/28	58/54,0/50	72/67,0/62	
	Heating	High/Nom./Low	m³/min	18/16,5/15	19,5/17,8/16	25/22,5/20	32/27,5/23	39/33,5/28	-/-	-/-	
Fan-External static pressure - 50Hz	High/Nom.		Pa	200/100					270/160	270/170	
Air filter	Type			Resin net with mold resistance							
Sound power level	Cooling	High/Nom.	dBA	61/-	64/-	67/-	65/-	70/-	-/-		
	Heating	High/Nom./Low	dBA	41/39/37	42/40/38	43/41/39	44/42/40	44/42/40	48/-/45		
Refrigerant	Type			R-410A							
	GWP			2.087,5							
Piping connections	Liquid	OD	mm	6,35				9,52			
	Gas	OD	mm	12,7	15,9					19,1	22,2
	Drain			VP25 (I.D. 25/O.D. 32)						PS1B	
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/60/220-240/220					1~/50/220-240		
Current - 50Hz	Maximum fuse amps (MFA)		A	16							
Control systems	Infrared remote control			BRC4C65							
	Wired remote control			BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52							
	Simplified wired remote control for hotel applications			BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)							

Wall mounted unit

For rooms with no false ceilings nor free floor space

- › Flat, stylish front panel blends easily within any interior décor and is easier to clean
- › Can easily be installed in both new and refurbishment projects
- › 15 class unit especially developed for small or well-insulated rooms, such as hotel bedrooms, small offices, etc.
- › Reduced energy consumption thanks to specially developed DC fan motor
- › The air is comfortably spread up- and downwards thanks to 5 different discharge angles that can be programmed via the remote control
- › Maintenance operations can be performed easily from the front of the unit

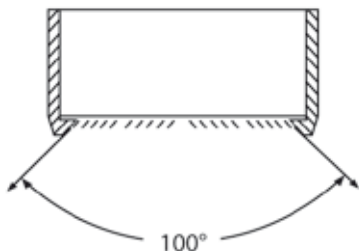


Indoor unit			FXAQ	15P	20P	25P	32P	40P	50P	63P	
Cooling capacity	Nom.		kW	1,7	2,2	2,8	3,6	4,5	5,6	7,1	
Heating capacity	Nom.		kW	1,9	2,5	3,2	4,0	5,0	6,3	8,0	
Power input - 50Hz	Cooling	Nom.	kW	0,017	0,019	0,028	0,030	0,020	0,033	0,050	
	Heating	Nom.	kW	0,025	0,029	0,034	0,035	0,020	0,039	0,060	
Dimensions	Unit	Height	mm				290				
		Width	mm				795		1.050		
		Depth	mm				238				
		Weight	kg				11		14		
Casing	Colour						White (3,0Y8,5/0,5)				
Fan-Air flow rate - 50Hz	Cooling	High/Low	m ³ /min	7,0/4,5	7,5/4,5	8/5	8,5/5,5	12/9	15/12	19/14	
Air filter	Type			Washable resin net							
Sound power level	Cooling	High/Nom.	dB(A)	52,0/-	53,0/-	54,0/-	55,5/-	57,0/-	60,0/-	65,0/-	
	Sound pressure level	Cooling	High/Low	dB(A)	34,0/29,0	35,0/29,0	36,0/29,0	37,5/29,0	39,0/34,0	42,0/36,0	47,0/39,0
Refrigerant	Type			R-410A							
	GWP			2.087,5							
Piping connections	Liquid	OD	mm				6,35				
	Gas	OD	mm				12,7		9,52		
	Drain						VP13 (I.D. 13/O.D. 18)		15,9		
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/220-240							
Current - 50Hz	Maximum fuse amps (MFA)		A	16							
Control systems	Infrared remote control			BRC7EB518							
	Wired remote control			BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52							
	Simplified wired remote control for hotel applications			BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)							

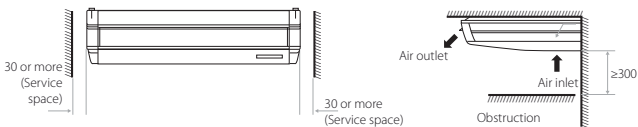
Ceiling suspended unit

For wide rooms with no false ceilings nor free floor space

- › Ideal for comfortable air flow in wide rooms thanks to Coanda effect: up to 100° discharge angle



- › Even rooms with ceilings up to 3.8m can be heated up or cooled down very easily without capacity loss
- › Can easily be installed in both new and refurbishment projects
- › Can easily be mounted in corners and narrow spaces, as it only needs 30mm lateral service space



- › Optional fresh air intake
- › Reduced energy consumption thanks to specially developed DC fan motor and drain pump
- › Stylish unit blends easily with any interior. The flaps close entirely when the unit is not operating and there are no air intake grilles visible

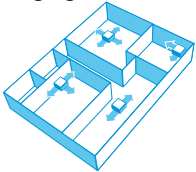


Indoor unit				FXHQ	32A	63A	100A
Cooling capacity	Nom.		kW	3.6	7.1	11.2	
Heating capacity	Nom.		kW	4.0	8.0	12.5	
Power input - 50Hz	Cooling	Nom.	kW	0.107	0.111	0.237	
	Heating	Nom.	kW	0.107	0.111	0.237	
Dimensions	Unit	Height	mm	235	235	235	
		Width	mm	960	1,270	1,590	
		Depth	mm		690		
Weight	Unit		kg	24	33	39	
Casing	Colour				Fresh White		
	Material				Resin		
Fan-Air flow rate - 50Hz	Cooling	High/Nom./Low	m ³ /min	14.0/12.0/10.0	20.0/17.0/14.0	29.5/24.0/19.0	
	Heating	High/Nom./Low	m ³ /min	14.0/12.0/10.0	20.0/17.0/14.0	29.5/24.0/19.0	
Air filter	Type			Resin net with mold resistance			
Sound power level	Cooling	Nom.	dBA		-		
Sound pressure level	Cooling	High/Nom./Low	dBA	36.0/34.0/31.0	37.0/35.0/34.0	44.0/37.0/34.0	
	Heating	High/Nom./Low	dBA	36.0/34.0/31.0	37.0/35.0/34.0	44.0/37.0/34.0	
Refrigerant	Type			R-410A			
	GWP			2,087.5			
Piping connections	Liquid	OD	mm	6.35		9.52	
	Gas	OD	mm	12.7		15.9	
	Drain			VP20 (I.D. 20/O.D. 26)			
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/220-240			
Current - 50Hz	Maximum fuse amps (MFA)		A	16			
Control systems	Infrared remote control			BRC7G53			
	Wired remote control			BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52			
	Simplified wired remote control for hotel applications			BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)			

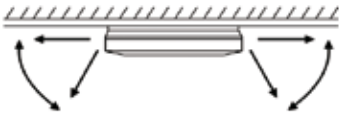
4-way blow ceiling suspended unit

Unique Daikin unit for high rooms with no false ceilings nor free floor space

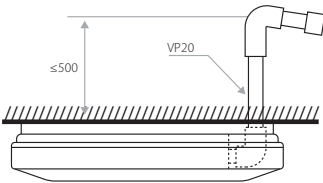
- > Even rooms with ceilings up to 3.5m can be heated up or cooled down very easily without capacity loss
- > Can easily be installed in both new and refurbishment projects
- > Individual flap control: flexibility to suit every room layout without changing the location of the unit!



- > Reduced energy consumption thanks to specially developed small tube heat exchanger, DC fan motor and drain pump
- > Stylish unit blends easily with any interior. The flaps close entirely when the unit is not operating and there are no air intake grilles visible
- > Optimum comfort guaranteed with automatic air flow adjustment to the required load
- > 5 different discharge angles between 0 and 60° can be programmed via the remote control



- > Standard drain pump with 500mm lift increases flexibility and installation speed



Indoor unit			FXUQ	71A	100A
Cooling capacity	Nom.		kW	8,0	11,2
Heating capacity	Nom.		kW	9,0	12,5
Power input - 50Hz	Cooling	Nom.	kW	0,090	0,200
	Heating	Nom.	kW	0,073	0,179
Dimensions	Unit	Height	mm	198	
		Width	mm	950	
		Depth	mm	950	
Weight	Unit		kg	26	27
Casing	Colour			Fresh White	
	Material			Resin	
Fan-Air flow rate - 50Hz	Cooling	High/Nom./Low	m ³ /min	22,5/19,5/16,0	31,0/26,0/21,0
	Heating	High/Nom./Low	m ³ /min	22,5/19,5/16,0	31,0/26,0/21,0
Air filter	Type			Resin net with mold resistance	
Sound power level	Cooling	Nom.	dBA	-	
Sound pressure level	Cooling	High/Nom./Low	dBA	40,0/38,0/36,0	47,0/44,0/40,0
	Heating	High/Nom./Low	dBA	40,0/38,0/36,0	47,0/44,0/40,0
Refrigerant	Type			R-410A	
	GWP			2.087,5	
Piping connections	Liquid	OD	mm	9,52	
	Gas	OD	mm	15,9	
	Drain			I.D. 20/O.D. 26	
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/60/220-240/220-230	
Current - 50Hz	Maximum fuse amps (MFA)		A	16	
Control systems	Infrared remote control			BRC7C58	
	Wired remote control			BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52	
	Simplified wired remote control for hotel applications			BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)	

Concealed floor standing unit

Designed to be concealed in walls

- › Discretely concealed in the wall: only the suction and discharge grilles are visible
- › Requires very little installation space as the depth is only 200mm



- › Its low height (620 mm) enables the unit to fit perfectly beneath a window
- › High ESP allows flexible installation

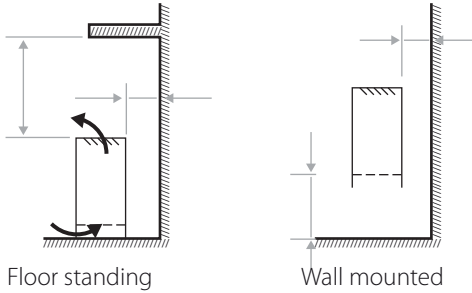
Indoor unit		FXNQ	20A	25A	32A	40A	50A	63A	
Cooling capacity	Nom.	kW	2,2	2,8	3,6	4,5	5,6	7,1	
Heating capacity	Nom.	kW	2,5	3,2	4,0	5,0	6,3	8,00	
Power input - 50Hz	Cooling	Nom.	0,071			0,078	0,099	0,110	
	Heating	Nom.	0,068			0,075	0,096	0,107	
Dimensions	Unit	Height	620 / 720 (1)						
		Width	790			990			1.190
		Depth	200						
Weight	Unit	kg	23,5			27,5		32	
Casing	Colour	Unpainted							
	Material	Galvanised steel plate							
Fan-Air flow rate - 50Hz	Cooling	High/Nom./Low	8,0/7,2/6,4			10,5/9,5/8,5	12,5/11/10,0	16,5/14,5/13,0	
	Heating	High/Nom./Low	8,0/7,2/6,4			10,5/9,5/8,5	12,5/11/10,0	16,5/14,5/13,0	
Fan-External static pressure - 50Hz	High/Nom.	Pa	41/10		42/10	52/15	59/15	55/15	
Air filter	Type	Resin net with mold resistance							
Sound power level	Cooling	High/Nom.	51/-			52/-	53/-	54/-	
Sound pressure level	Cooling	High/Nom./Low	30/28,5/27			32/30/28	33/31/29	35/33/32	
	Heating	High/Nom./Low	30/28,5/27			32/30/28	33/31/29	35/33/32	
Refrigerant	Type	R-410A							
	GWP	2.087,5							
Piping connections	Liquid	OD	6,35			9,52			
	Gas	OD	12,7			15,9			
	Drain	VP20 (I.D. 20/O.D. 26)							
Power supply	Phase/Frequency/Voltage	Hz/V	1~/50/60/220-240/220						
Current - 50Hz	Maximum fuse amps (MFA)	A	16						
Control systems	Infrared remote control	BRC4C65							
	Wired remote control	BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52							
	Simplified wired remote control for hotel applications	BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)							

(1) Including installation legs

Floor standing unit

For perimeter zone air conditioning

- › Unit can be installed as free standing model by use of optional back plate
- › Its low height enables the unit to fit perfectly beneath a window
- › Stylish modern casing finished in pure white (RAL9010) and iron grey (RAL7011) blends easily with any interior
- › Requires very little installation space



- › Wall mounted installation facilitates cleaning beneath the unit where dust tends to accumulate



- › Wired remote control can easily be integrated in the unit



Indoor unit			FXLQ	20P	25P	32P	40P	50P	63P	
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	8,000	
Power input - 50Hz	Cooling	Nom.	kW		0,049		0,090		0,110	
	Heating	Nom.	kW		0,049		0,090		0,110	
Dimensions	Unit	Height	mm				600			
		Width	mm	1.000		1.140		1.420		
		Depth	mm	232						
Weight	Unit		kg	27			32		38	
Casing	Colour			Fresh white (RAL9010) / Dark grey (RAL7011)						
Fan-Air flow rate - 50Hz	Cooling	High/Low	m ³ /min	7/6		8/6		11/8,5	14/11	16/12
Air filter	Type			Resin net						
Sound power level	Cooling	Nom.	dBA	-						
Sound pressure level	Cooling	High/Low	dBA	35/32		38/33		39/34	40/35	
	Heating	High/Low	dBA	35/32		38/33		39/34	40/35	
Refrigerant	Type			R-410A						
	GWP			2.087,5						
Piping connections	Liquid	OD	mm	6,35					9,52	
	Gas	OD	mm	12,7					15,9	
	Drain			O.D. 21 (Vinyl chloride)						
Power supply	Phase/Frequency/Voltage		Hz/V	1~/50/60/220-240/220						
Current - 50Hz	Maximum fuse amps (MFA)		A	15						
Control systems	Infrared remote control			BRC4C65						
	Wired remote control			BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52						
	Simplified wired remote control for hotel applications			BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)						

VRV heatpump combined with stylish indoor units

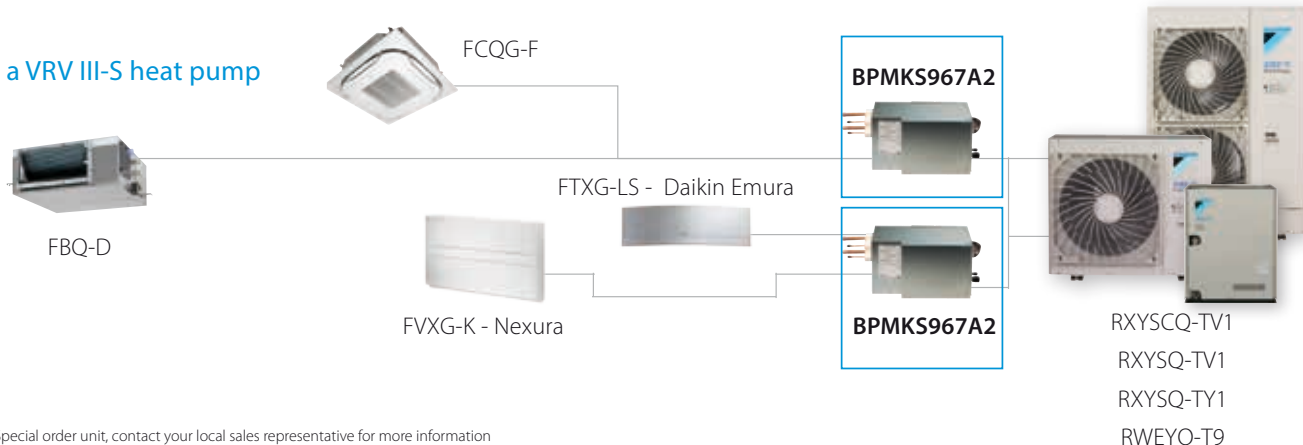
Combine VRV indoor units with stylish indoor units

on a VRV IV heat pump



Connect only stylish indoor units to VRV IV S-series or VRV IV W-series outdoor units

on a VRV III-S heat pump



> * Special order unit, contact your local sales representative for more information

BPMKS967A

Branch provider

To connect Split and Sky Air indoor units to VRV outdoor units



Branch provider			BPMKS967A2	BPMKS967A2
Connectable indoor units			1~2	1~3
Max. indoor unit connectable capacity			14,2	20,8
Max. connectable combination			71+71	60+71+71
Dimensions	Height x Width x Depth	mm	180x294x350	
Weight		kg	7	8

Daikin Emura Form. Function. Redesigned



Why choose Daikin Emura?

- Unique **design**. Designed in Europe for Europe.
- High seasonal **efficiency**, further improved by energy saving techniques like weekly timer and intelligent eye.
- Optimal **comfort** thanks to advanced technologies e.g. 2-area intelligent eye, whisper quiet operation and online controller.



Benefits

- › A remarkable blend between iconic design and engineering excellence
- › Stylish design in matt crystal white and silver
- › Whisper quiet with sound levels down to 19 dBA
- › Horizontal and vertical autoswing
- › 2-area intelligent eye saves energy by reducing the set point if nobody is present and directs airflow away from people, thus avoiding cold draught
- › Weekly timer
- › Online controller: Always in control no matter where you are



Wall mounted unit

Design at its best, delivering superior efficiency and comfort

- › Remarkable blend of iconic design and engineering excellence with an elegant finish in silver and anthracite or in matt crystal white
- › Daikin Emura has been awarded with Reddot design award 2014 by an international jury, thanks to its excellent design
- › Designed to perfectly balance technological leadership and the beauty of aerodynamics
- › Online controller (optional): control your indoor from any location with an app, via your local network or internet
- › Whisper quiet in operation: the operating of the unit can hardly be heard. The sound pressure level goes down to 19dB(A)



Indoor unit		FTXG		20LW	20LS	25LW	25LS	35LW	35LS	50LW	50LS
Dimensions	Unit	HeightxWidthxDepth	mm	303x998x212							
Weight	Unit		kg	12							
Air filter	Type			Removable / washable / mildew proof							
Fan - Air flow rate	Cooling	High/Low/Silent operation	m ³ /min	8,9/4,4/2,6				10,9/4,8/2,9		10,9/6,8/3,6	
	Heating	High/Low/Silent operation	m ³ /min	10,2/6,3/3,8		11,0/6,3/3,8		12,4/6,9/4,1		12,6/8,1/5,0	
Sound power level	Cooling		dB(A)	54				59		60	
	Heating		dB(A)	56				59		60	
Sound pressure level	Cooling	High/Low/Silent operation	dB(A)	38/25/19				45/26/20		46/35/25	
	Heating	High/Low/Silent operation	dB(A)	40/28/19		41/28/19		45/29/20		47/35/25	
Control systems	Infrared remote control			ARC466A1							
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50 / 220-240							

(1) EER/COP according to Eurovent 2012, for use outside EU only.

(2) MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). For more detailed information on each combination, please refer to the electrical data drawing.



Wall mounted unit

Discreet, modern design for optimal efficiency and comfort thanks to 2 area intelligent eye

- › Discreet, modern design. Its smooth curve blends beautifully with the wall resulting in an unobtrusive presence that matches all interior décors.
- › High quality matt crystal white finish
- › Whisper quiet in operation: the operating of the unit can hardly be heard. The sound pressure level goes down to 19dBA!
- › Ideal for installation in bedrooms (20,25 class) and larger or irregular shaped living areas (35,42,50 class)
- › 2 area intelligent eye: air flow is sent to a zone other than where the person is located at that moment; if no people are detected, the unit will automatically switch over to the energy-efficient setting (FTXS35,42,50K)
- › Online controller (optional): control your indoor from any location with an app, via your local network or internet



Indoor unit		FTXS	CTXS15K	CTXS35K	20K	25K	35K	42K	50K	60G	71G	
Dimensions	Unit	HeightxWidthxDepth	289x780x215				298x900x215			290x1.050x250		
Weight	Unit		8				11			12		
Air filter	Type		Removable / washable / mildew proof									
Fan - Air flow rate	Cooling	High/Low/Silent operation	m ³ /min	7,9/4,7/3,9	9,2/5,2/3,9	8,8/4,7/3,9	9,1/5,0/3,9	11,2/5,8/4,1	11,2/7,0/4,1	11,9/7,4/4,5	16,0/11,3/10,1	17,2/11,5/10,5
	Heating	High/Low/Silent operation	m ³ /min	9,0/6,0/4,3	10,1/6,3/4,3	9,5/6,0/4,3	10,0/6,0/4,3	12,1/6,5/4,2	12,4/7,8/5,2	13,3/8,4/5,5	17,2/12,6/11,3	19,5/14,2/12,6
Sound power level	Cooling		dB(A)	55	59	58		59		60		63
	Heating		dB(A)	56	58			59		60	59	62
Sound pressure level	Cooling	High/Low/Silent operation	dB(A)	37/25/21	42/28/21	40/24/19	41/25/19	45/29/19	45/33/21	46/34/23	45/36/33	46/37/34
	Heating	High/Low/Silent operation	dB(A)	38/28/21	41/30/21	40/27/19	41/27/19	45/29/19	45/33/22	47/34/24	44/35/32	46/37/34
Control systems	Infrared remote control		ARC466A6				ARC466A9			ARC452A3		
Power supply	Phase / Frequency / Voltage	Hz / V	1~ / 50 / 220-240									

(1) EER/COP according to Eurovent 2012, for use outside EU only (2) When connected with multi-system outdoor unit, refer to the specifications of the multi outdoor unit to be connected. (3) MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). For more detailed information on each combination, please refer to the electrical data drawing.

The best of two worlds united

Pure comfort and design



Why choose Nexura?

- Unique radiant heat panel that heats up just like a traditional radiator
- Whisper quiet operation down to 19 dBA
- Unobtrusive yet stylish design
- Reduced air flow, creating an even distribution of air through the room

Comfort is key

Nexura makes your world a comfortable one. The coolness of a summer breeze or the cosiness of an extra heat source brings a feeling of well-being to your living space all year round. Its unobtrusive yet stylish design with a front panel that radiates additional heat, its low noise level and reduced air flow turn your room into a haven.

Radiant heat panel

To add even more comfort on cold days, the aluminium front panel of the Nexura unit has the capability of warming up, just like a traditional radiator. The result? A comfortable feeling of warm air that envelopes you. And all you have to do to activate this unique feature is push the "radiant" button on your remote control.

Benefits

- > Vertical autoswing
- > Weekly timer
- > Guaranteed operation down to -25°C (with RXLG-M)

Online controller

Always in control, no matter where you are. Control your indoor from any location with an app, via your local network or internet.



Floor standing unit with radiant heat panel

Stylish floor standing unit with radiant heat panel for comfortable heat and very low noise

- › 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
- › Quiet and discrete, Nexura offers you the best in heating and cooling, in comfort and design
- › 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.
- › Comfortable vertical auto swing ensures draughtfree operation and prevents ceiling soiling
- › Online controller (optional): control your indoor from any location with an app, via your local network or internet
- › Can be installed against a wall or recessed
- › Its low height enables the unit to fit perfectly beneath a window



Indoor unit		FVXG	25K	35K	50K	
Dimensions	Unit	HeightxWidthxDepth	600x950x215			
Weight	Unit	kg	22			
Air filter	Type		Removable / washable / mildew proof			
Fan - Air flow rate	Cooling	High/Low/Silent operation	m ³ /min	8,9/5,3/4,5	9,1/5,3/4,5	10,6/7,3/6,0
	Heating	High/Low/Silent operation	m ³ /min	9,9/5,7/4,7	10,2/5,8/5,0	12,2/7,8/6,8
Sound power level	Cooling		dB(A)	52	58	
	Heating		dB(A)	53	60	
Sound pressure level	Cooling	High/Low/Silent operation	dB(A)	38/26/23	39/27/24	44/36/32
	Heating	High/Low/Silent operation/Radiant heat	dB(A)	39/26/22/19	40/27/23/19	46/34/30/26
Control systems	Infrared remote control		ARC466A2			
Power supply	Phase / Frequency / Voltage		Hz / V			
			1~ / 50 / 220-240			

(1) EER/COP according to Eurovent 2012, for use outside EU only

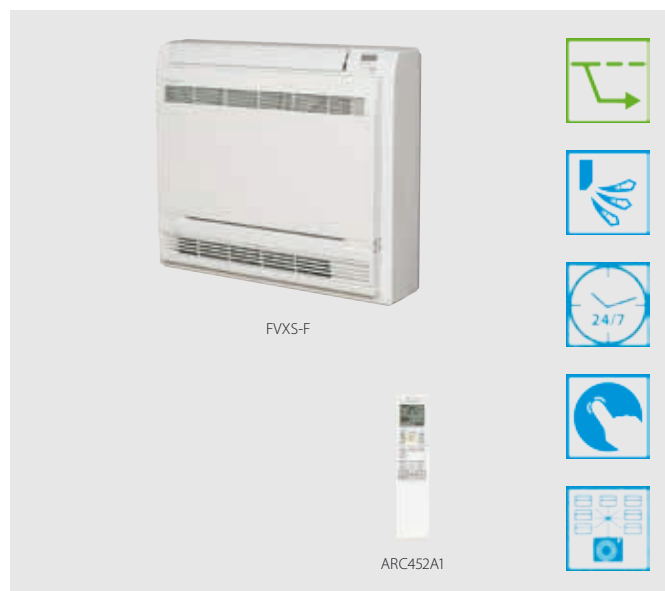
(2) MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). For more detailed information on each combination, please refer to the electrical drawing.

(3) Operation range in combination with Nexura, FVXG-K, cooling: min. 10°CDB - max. 46°CDB; heating: min. -15°CWB - max. 18°CWB

Floor standing unit

Floor standing unit for optimal heating comfort thanks to dual airflow

- › Its low height enables the unit to fit perfectly beneath a window
- › Can be installed against a wall or recessed
- › Vertical auto swing moves the discharge flaps up and down for efficient air and temperature distribution throughout the room
- › Online controller (optional): control your indoor from any location with an app, via your local network or internet



Indoor unit		FVXS		25F	35F	50F
Dimensions	Unit	HeightxWidthxDepth	mm	600x700x210		
Weight	Unit		kg	14		
Air filter	Type			Removable / washable / mildew proof		
Fan - Air flow rate	Cooling	High/Low/Silent operation	m ³ /min	8,2/4,8/4,1	8,5/4,9/4,5	10,7/7,8/6,6
	Heating	High/Low/Silent operation	m ³ /min	8,8/5,0/4,4	9,4/5,2/4,7	11,8/8,5/7,1
Sound power level	Cooling		dBA	52		60
	Heating		dBA	52		60
Sound pressure level	Cooling	High/Low/Silent operation	dBA	38/26/23	39/27/24	44/36/32
	Heating	High/Low/Silent operation	dBA	38/26/23	39/27/24	45/36/32
Control systems	Infrared remote control			ARC452A1		
Power supply	Phase / Frequency / Voltage		Hz / V	1~ / 50 / 220-240		

(1) EER/COP according to Eurovent 2012, for use outside EU only.

(2) MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). For more detailed information on each combination, please refer to the electrical data drawing.

Flexi type unit

Flexible unit, ideal for rooms without false ceiling, can fit on either ceiling or wall

- › Can fit on either ceiling or lower wall; its low height enables the unit to fit beneath a window
- › Vertical auto swing moves the discharge flaps up and down for efficient air and temperature distribution throughout the room
- › Home leave operation maintains the indoor temperature at your specified comfort level during absence, thus saving energy
- › Online controller (optional): control your indoor from any location with an app, via your local network or internet



Indoor unit		FLXS	25B	35B9	50B	60B	
Dimensions	Unit	HeightxWidthxDepth	490x1.050x200				
Weight	Unit		16		17		
Air filter	Type		Removable / washable / mildew proof				
Fan - Air flow rate	Cooling	High/Low/Silent operation	m ³ /min	7,6/6,0/5,2	8,6/6,6/5,6	11,4/8,5/7,5	12,0/9,3/8,3
	Heating	High/Low/Silent operation	m ³ /min	9,2/7,4/6,6	12,8/8,0/7,2	12,1/7,5/6,8	12,8/8,4/7,5
Sound power level	Cooling		dBA	51	53	60	
	Heating		dBA	51	59	-	59
Sound pressure level	Cooling	High/Low/Silent operation	dBA	37/31/28	38/32/29	47/39/36	48/41/39
	Heating	High/Low/Silent operation	dBA	37/31/29	46/33/30	46/35/33	47/37/34
Control systems	Infrared remote control		ARC433B67				
Power supply	Phase / Frequency / Voltage	Hz / V	1~ / 50/60 / 220-240/220-230	1~ / 50 / 220-240	1~ / 50/60 / 220-240/220-230	1~ / 50 / 230	

(1) EER/COP according to Eurovent 2012, for use outside EU only. (2) MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker). For more detailed information on each combination, please refer to the electrical data drawing.



Hot water

Efficient hot water production for underfloor heating, radiators and air handling units, or for producing hot water for sinks, baths and showers. Integrating heat recovery into the VRV system means that the production of hot water is virtually free.



Hot water

Low temperature hydrobox
HXY-A8 136

High temperature hydrobox
NEW HXHD-A8 137
Accessories for hot water 138

Hydrobox range

Capacity class (kW)

Type	Product name	Model	80	125	200	Leaving water temperature range
Low temperature hydrobox	HXY-A8 	<p>For high efficiency space heating and cooling</p> <ul style="list-style-type: none"> > Ideal for hot or cold water in underfloor, air handling units, low temperature radiators ... > Hot/cold water from 5° to 45°C > Large operation range (down to -20°C and up to 43°C) > Fully integrated water-side components save time on system design > Space saving contemporary wall hung design 	●	●		5 °C - 45 °C
High temperature hydrobox	HXHD-A8 	<p>For efficient hot water production and space heating</p> <ul style="list-style-type: none"> > Ideal for hot water in bathrooms, sinks and for underfloor heating, radiators, air handling units, ... > Hot water from 25 to 80°C > "Free" heating and hot water through heat recovery > Uses heat pump technology to produce hot water efficiently, providing up to 17% savings compared to a gas boiler > Possibility to connect thermal solar collectors 		●	● NEW	25 °C - 80 °C

Low temperature hydrobox for VRV

For high efficiency space heating and cooling

- › Air to water connection to VRV for applications such as underfloor, air handling units, low temperature radiators, ...
- › Leaving water temperature range from 5°C to 45°C without electric heater
- › Super wide operating range for hot/cold water production from -20 to +43°C ambient outdoor temperature
- › Saves time on system design as all water-side components are fully integrated with direct control over leaving water temperature
- › Space saving contemporary wall hung design
- › No gas connection or oil tank needed
- › Connectable to VRV IV heat pump and heat recovery



- Liquid pipe
- Gas pipe
- F1, F2 communication
- Hot/cold water



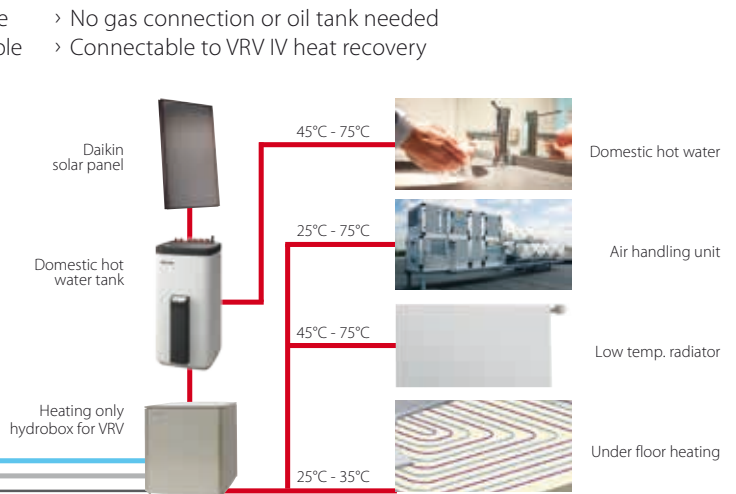
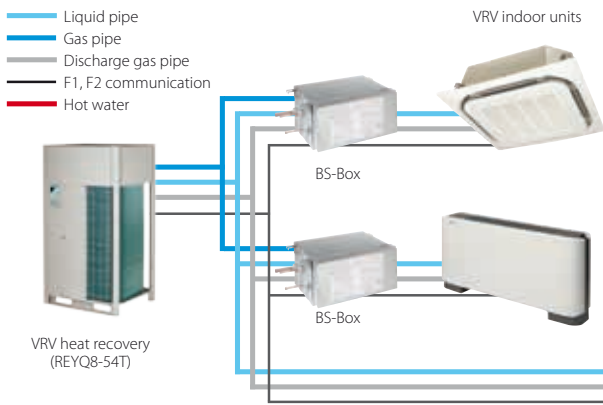
Indoor Unit		HXY	080A8	125A8	
Cooling capacity	Nom.	kW	8,0 (1)	12,5 (1)	
Heating capacity	Nom.	kW	9,00 (2)	14,00 (2)	
Dimensions	Unit	HeightxWidthxDepth	890x480x344		
Weight	Unit	kg	44		
Casing	Colour		White		
	Material		Precoated sheet metal		
Sound pressure level	Nom.	dBA	-		
Operation range	Heating	Ambient	Min.~Max.	°C	-20~24
		Water side	Min.~Max.	°C	25~45
	Domestic hot water	Ambient	Min.~Max.	°CDB	---
		Water side	Min.~Max.	°C	---
Refrigerant	Type		R-410A		
	GWP		2.087,5		
Refrigerant circuit	Gas side diameter	mm	15,9		
	Liquid side diameter	mm	9,5		
Water circuit	Piping connections diameter	inch	G 1"1/4 (female)		
Power supply	Phase/Frequency/Voltage	Hz/V	1~/50/220-240		
Current	Recommended fuses	A	6~16		

(1) Tamb 35°C - LWE 18°C (DT=5°C) (2) DB/WB 7°C/6°C - LWC 35°C (DT=5°C) (3) Flow switch setting

High temperature hydrobox for VRV

For efficient hot water production and space heating

- › Air to water connection to VRV for applications such as bathrooms, sinks, underfloor heating, radiators and air handling units
- › Leaving water temperature range from 25 to 80°C without electric heater
- › „Free“ heating and hot water production provided by transferring heat from areas requiring cooling to areas requiring heating or hot water
- › Uses heat pump technology to produce hot water efficiently, providing up to 17% savings compared to a gas boiler
- › Possibility to connect thermal solar collectors to the domestic hot water tank
- › Super wide operating range for hot water production from -20 to +43°C ambient outdoor temperature
- › Saves time on system design as all water-side components are fully integrated with direct control over leaving water temperature
- › Various control possibilities with weather dependant set point or thermostat control
- › 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



NEW
For production of large quantities of hot water
Launch end 2017

Indoor Unit		HXHD	125A8	200A8	
Heating capacity	Nom.	kW	14.0	22.4	
Casing	Colour			Metallic grey	
	Material			Precoated sheet metal	
Dimensions	Unit	HeightxWidthxDepth	705x600x695		
Weight	Unit		92	-	
Operation range	Heating	Ambient	Min.-Max.	°C	-20~20 / 24 (1)
		Water side	Min.-Max.	°C	25~80
	Domestic hot water	Ambient	Min.-Max.	°CDB	-20~43
		Water side	Min.-Max.	°C	45~75
Refrigerant	Type			R-134a	
	Charge		kg	2	
			TCO _{2eq}	2.9	-
GWP				1,430.0	
Sound power level	Nom.	dB(A)	55 (2)	-	
Sound pressure level	Nom.	dB(A)	42 (2) / 43 (3)	-	
	Night quiet mode	Level 1	dB(A)	38 (2)	
Refrigerant circuit	Gas side diameter	mm	12.7	-	
	Liquid side diameter	mm	9.52	-	
Water circuit	Piping connections diameter	inch	G 1" (female)	-	
	Heating water system	Water volume	Max.-Min.	l	200~20
Power supply	Phase/Frequency/Voltage	Hz/V		1~/50/220-240	
Current	Recommended fuses	A	20	-	

(1) Field setting (2) Sound levels are measured at: EW 55°C; LW 65°C (3) Sound levels are measured at: EW 70°C; LW 80°C

Domestic hot water tank

Stackable stainless steel domestic hot water tank

- › 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
- › Available in 200 and 260 liters
- › Heat loss is reduced to a minimum thanks to the high quality insulation
- › At necessary intervals, the indoor unit can heat up the water to 60°C to prevent the risk of bacteria growth
- › Efficient temperature heat-up: from 10°C to 50°C in only 60 minutes



Accessory		EKHTS			200AC		260AC	
Casing	Colour	Metallic grey						
	Material	Galvanised steel (precoated sheet metal)						
Dimensions	Unit	Height	Integrated on indoor unit	mm	2.010		2.285	
		Width						
	Depth	mm	695					
Weight	Unit	Empty			kg		70	
	Tank	Water volume	l		200		260	
Heat exchanger	Material	Stainless steel (EN 1.4521)						
	Maximum water temperature	°C						
	Insulation	Heat loss	kWh/24h		1,2		1,5	
	Quantity	1						
Heat exchanger	Tube material	Duplex steel (EN 1.4162)						
	Face area	m²						
	Internal coil volume	l						

EKHWP-B/PB

Domestic hot water tank

Plastic domestic hot water tank with solar support

- › Available in 300 and 500 liters
- › Large hot water storage tank to provide domestic hot water at any time
- › Heat loss is reduced to a minimum thanks to the high quality insulation
- › Space heating support possible (500l tank only)
- › Tank designed for connection with pressured thermal solar system



Accessory		EKHWP		Pressured		Unpressured		
				300PB	500PB	300B	500B	
Casing	Colour	Traffic white (RAL9016) / Dark grey (RAL7011)						
	Material	Impact resistant polypropylene						
Dimensions	Unit	Width	mm	595	790	595	790	
		Depth	mm	615	790	615	790	
	Unit	Empty	kg	58	89	58	82	
Weight	Water volume	l		294	477	294	477	
	Material	Polypropylen						
Tank	Maximum water temperature	°C						
	Insulation	Heat loss	kWh/24h	1,5	1,7	1,5	1,7	
	Energy efficiency class	B						
	Standing heat loss	W		64	72	64	72	
Heat exchanger	Storage volume	l		294	477	294	477	
	Domestic hot water	Quantity	1					
		Tube material	Stainless steel (DIN 1.4404)					
	Face area	m²		5.600	5.800	5.600	5.800	
	Internal coil volume	l		27,1	29,0	27,1	29,0	
	Operating pressure	bar		6				
	Average specific thermal output	W/K		2.790	2.825	2.790	2.825	
	Charging	Quantity	1					
		Tube material	Stainless steel (DIN 1.4404)					
		Face area	m²		3	4	3	4
Internal coil volume		l		13	19	13	19	
Auxiliary solar heating	Operating pressure	bar		3				
	Average specific thermal output	W/K		1.300	1.800	1.300	1.800	
	Tube material	Stainless steel (DIN 1.4404)						
	Face area	m²		-	1	-	1	
Auxiliary solar heating	Internal coil volume	l		-	2	-	2	
	Operating pressure	bar		-	3	-	3	
	Average specific thermal output	W/K		-	280	-	280	

Solar collector

Thermal solar collector for hot water production

- › Solar collectors can produce up to 70% of the energy needed for hot water production - a major cost saving
- › Horizontal and vertical solar collector for domestic hot water production
- › High efficiency collectors transfer all the short-wave solar radiation into heat as a result of their highly selective coating
- › Easy to install on roof tiles



Accessory		EKSV/EKSH	21P	26P
Mounting			Vertical	
Dimensions	Unit	HeightxWidthxDepth	1.006x85x2.000	
Weight	Unit	kg	33	42
Volume		l	1,3	2,1
Surface	Outer	m ²	2,01	2,60
	Aperture	m ²	1.800	2.360
	Absorber	m ²	1,79	2,35
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	192	
Thermal performance	collector efficiency (η _{col})	%	61	
	Zero loss collector efficiency η ₀	%	0,781	0,784
	Heat loss coefficient a ₁	W/m ² .K	4,240	4,250
	Temperature dependence of the heat loss coefficient a ₂	W/m ² .K ²	0,006	0,007
	Thermal capacity	kJ/K	4,9	6,5
Auxiliary	Solpump	W	-	
	Solstandby	W	-	
	Annual auxiliary electricity consumption Q _{aux}	kWh	-	

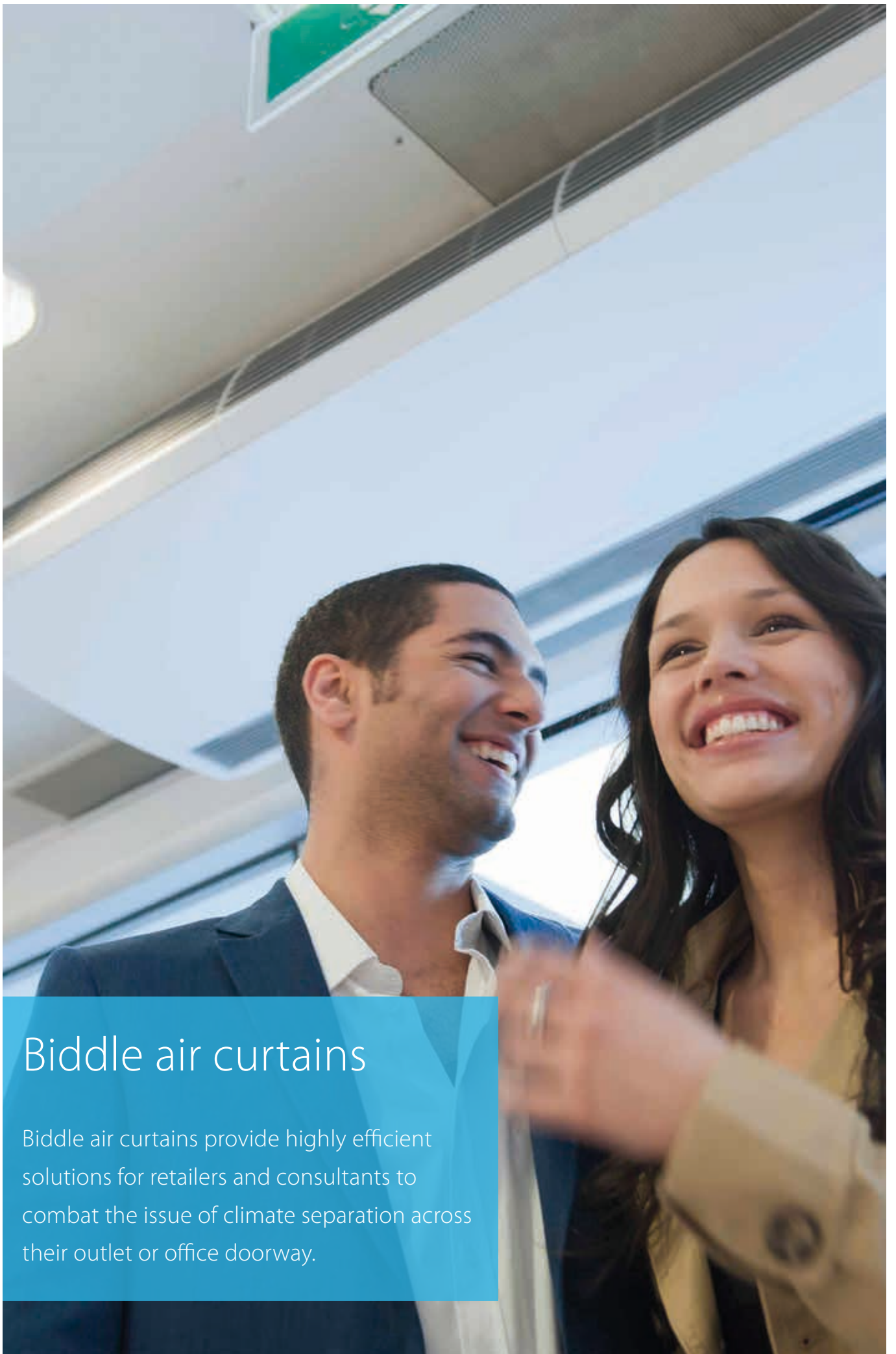
EKSRDS2A/EKSRPS4A

Pump station

- › Save energy and reduce CO₂ emissions with a solar system for domestic hot water production
- › Pump station connectable to unpressurised solar system
- › Pump station and control provide the transfer of solar heat to the domestic hot water tank



Accessory		EKSRPS4A/EKSRDS2A	4A	2A
Mounting			On side of tank	On wall
Dimensions	Unit	HeightxWidthxDepth	815x142x230	410x314x154
Weight	Unit	kg	6	
Operation range	Ambient temperature	Min.~Max.	5~40	0~40
Operating pressure	Max.	bar	-	6
Stand still temperature	Max.	°C	85	120
Thermal performance	collector efficiency (η _{col})	%	-	
	Zero loss collector efficiency η ₀	%	-	
Control	Type		Digital temperature difference controller with plain text display	
	Power consumption	W	2	5
Power supply	Phase/Frequency/Voltage	Hz/V	1~/50/230	/50/230
Sensor	Solar panel temperature sensor		Pt1000	
	Storage tank sensor		PTC	-
	Return flow sensor		PTC	-
	Feed temperature and flow sensor		Voltage signal (3,5V DC)	-
Power supply intake			Indoor unit	
Auxiliary	Solpump	W	30	23
	Solstandby	W	2,00	5,00
	Annual auxiliary electricity consumption Q _{aux}	kWh	78	89



Biddle air curtains

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

Biddle air curtains

connected to Daikin Heat Pumps

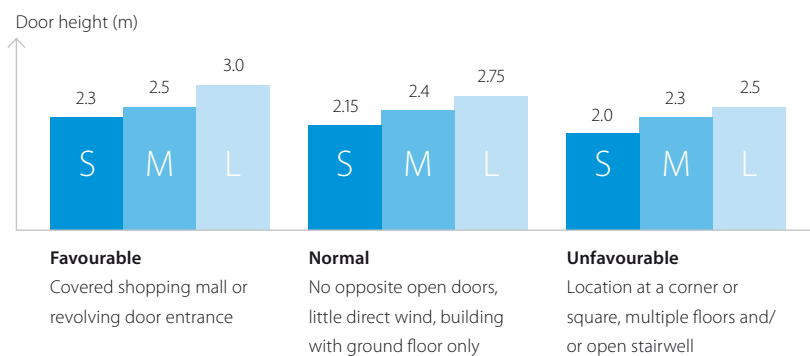
'Open Door' Trading

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.

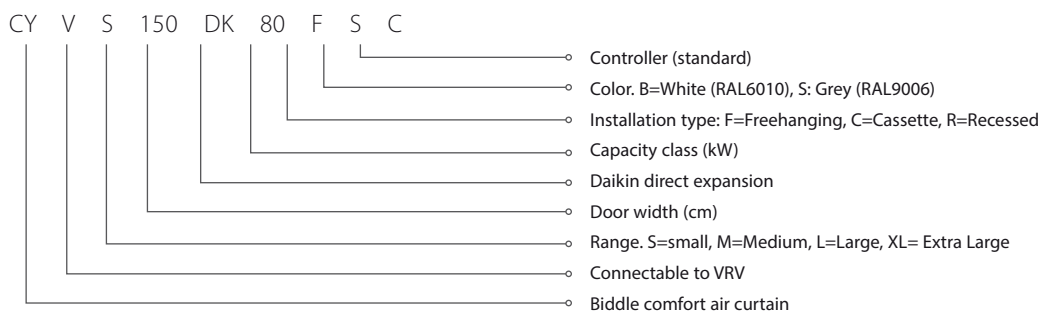
High efficiency and low CO₂ emission

An efficient outdoor/indoor climate separation limits heat loss through the door opening and enhances the efficiency of the air conditioning system. Combining Biddle air curtains with Daikin heat pumps can lead to savings up to 72% compared to electric air curtains and a payback period of less than 1.5 years!

Air curtain size selector



Biddle comfort air curtain nomenclature



Portfolio

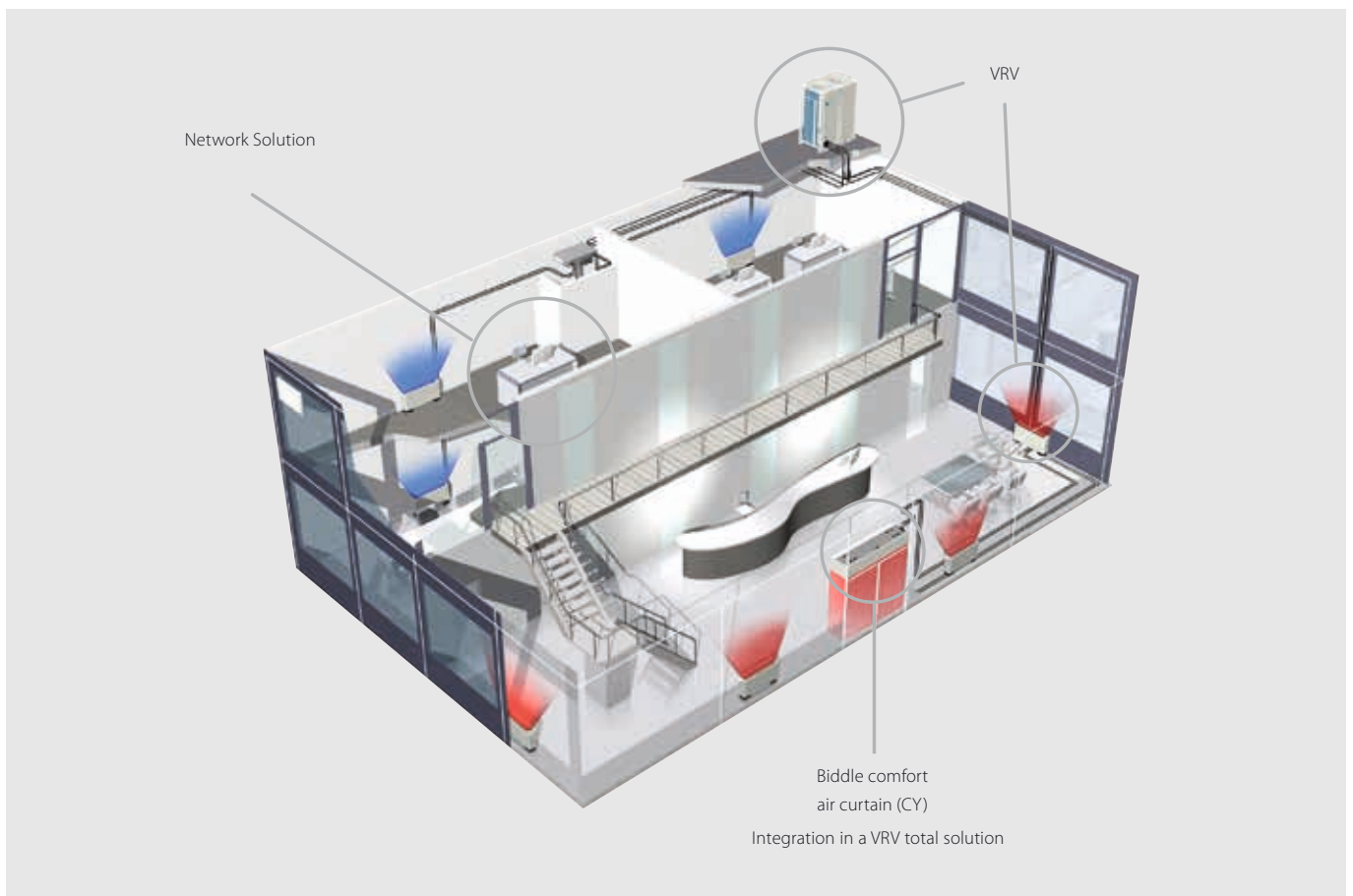
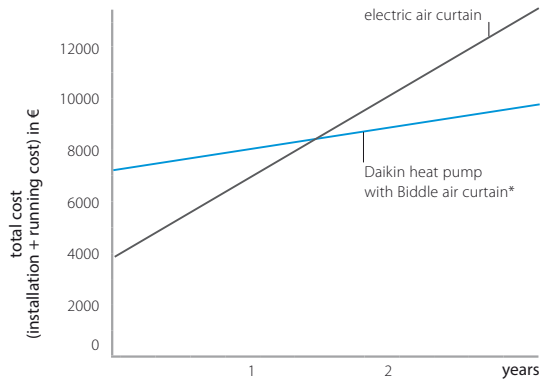
Type	Product name
Biddle air curtain free hanging	CYV S/M/L-DK-F
Biddle air curtain cassette	CYV S/M/L-DK-C
Biddle air curtain recessed	CYV S/M/L-DK-R

- › A payback time of less than 1.5 years compared to electrical air curtains
- › Easy and quick installation
- › Maximum energy efficiency thanks to rectifier technology
- › 85% air separation efficiency
- › Cassette model (C): mounted into a false ceiling enhancing aesthetics
- › Free-hanging model (F): easy wall mounted installation
- › Recessed model (R) : neatly concealed in the ceiling

Biddle air curtain for VRV

- › Connectable to VRV heat recovery and heat pump
- › VRV is among the first DX systems suitable for connection to air curtains
- › Free-hanging model (F): easy wall mounted installation
- › Cassette model (C): mounted into a false ceiling leaving only the decoration panel visible
- › Recessed model (R): neatly concealed in the ceiling
- › Provides virtually free air curtain heating via recovered heat from indoor units in cooling mode (in case of VRV heat recovery)
- › Easy and quick to install at reduced costs since no additional water systems, boilers and gas connections are required
- › **PATENTED TECHNOLOGY:** 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

Packtime of less than 1.5 years



* Payback period and gains calculated based upon the following: Air curtain is 9hrs/day – 156 days year (1,404 hrs/year) in use. Annual energy consumption for an electric air curtain: 3,137EUR (COP = 0.95). Typical installation cost: 1,000EUR; Typical equipment cost: 2,793EUR. Annual energy consumption for CYQS200DK100FBN and ERQ100AV: 748EUR (COP 4.00). Typical installation cost: 2,000EUR; Typical equipment cost: 5,150EUR. Calculation based upon electricity cost: 0,1705EUR /kWh



				Small				Medium				
				CYVS100DK80 *BN/*SN	CYVS150DK80 *BN/*SN	CYVS200DK100 *BN/*SN	CYVS250DK140 *BN/*SN	CYVM100DK80 *BN/*SN	CYVM150DK80 *BN/*SN	CYVM200DK100 *BN/*SN	CYVM250DK140 *BN/*SN	
Heating capacity	Speed 3		kW	7,40	9,0	11,6	16,2	9,2	11,0	13,4	19,9	
Power input	Fan only	Nom.	kW	0,23	0,35	0,46	0,58	0,37	0,56	0,75	0,94	
	Heating	Nom.	kW	0,23	0,35	0,46	0,58	0,37	0,56	0,75	0,94	
Delta T	Speed 3		K	19	15		16	17	14	13	15	
Casing	Colour			BN: RAL9010 / SN: RAL9006								
Dimensions	Unit	Height F/C/R	mm	270/270/270								
		Width F/C/R	mm	1.000/1.000/1.048	1.500/1.500/1.548	2.000/2.000/2.048	2.500/2.500/2.548	1.000/1.000/1.048	1.500/1.500/1.548	2.000/2.000/2.048	2.500/2.500/2.548	
		Depth F/C/R	mm	590/821/561								
Required ceiling void >				mm								
				420								
Door height	Max.		m	23 (1) / 215 (2) / 20 (3)	23 (1) / 215 (2) / 20 (3)	23 (1) / 215 (2) / 20 (3)	23 (1) / 215 (2) / 20 (3)	25 (1) / 24 (2) / 23 (3)	25 (1) / 24 (2) / 23 (3)	25 (1) / 24 (2) / 23 (3)	25 (1) / 24 (2) / 23 (3)	
Door width	Max.		m	1,0	1,5	2,0	2,5	1,0	1,5	2,0	2,5	
Weight	Unit		kg	56	66	83	107	57	73	94	108	
Fan-Air flow rate	Heating	Speed 3	m ³ /h	1.164	1.746	2.328	2.910	1.605	2.408	3.210	4.013	
Sound pressure level	Heating	Speed 3	dBA	47	49	50	51	50	51	53	54	
Refrigerant	Type / GWP			R-410A / 2.087,5								
Piping connections	Liquid/OD/Gas/OD		mm	9,52/16,0				9,52/19,0		9,52/16,0		9,52/19,0
Required accessories (should be ordered separately)				Daikin wired remote control (BRC1E53A / BRC1E53B / BRC1E53C or BRC1D52)								
Power supply	Voltage		V	230								

				Large			
				CYVL100DK125*BN/*SN	CYVL150DK200*BN/*SN	CYVL200DK250*BN/*SN	CYVL250DK250*BN/*SN
Heating capacity	Speed 3		kW	15,6	23,3	29,4	31,1
Power input	Fan only	Nom.	kW	0,75	1,13	1,50	1,88
	Heating	Nom.	kW	0,75	1,13	1,50	1,88
Delta T	Speed 3		K	15			14
Casing	Colour			BN: RAL9010 / SN: RAL9006			
Dimensions	Unit	Height F/C/R	mm	370/370/370			
		Width F/C/R	mm	1.000/1.000/1.048	1.500/1.500/1.548	2.000/2.000/2.048	2.500/2.500/2.548
		Depth F/C/R	mm	774/1.105/745			
Required ceiling void >				mm			
				520			
Door height	Max.		m	3,0 (1) / 2,75 (2) / 2,5 (3)	3,0 (1) / 2,75 (2) / 2,5 (3)	3,0 (1) / 2,75 (2) / 2,5 (3)	3,0 (1) / 2,75 (2) / 2,5 (3)
Door width	Max.		m	1,0	1,5	2,0	2,5
Weight	Unit		kg	76	100	126	157
Fan-Air flow rate	Heating	Speed 3	m ³ /h	3.100	4.650	6.200	7.750
Sound pressure level	Heating	Speed 3	dBA	53	54	56	57
Refrigerant	Type / GWP			R-410A / 2.087,5			
Piping connections	Liquid/OD/Gas/OD		mm	9,52/16,0		9,52/19,0	
Required accessories (should be ordered separately)				Daikin wired remote control (BRC1E53A / BRC1E53B / BRC1E53C or BRC1D52)			
Power supply	Voltage		V	230			

(1) Favorable conditions: covered shopping mall or revolving door entrance (2) Normal conditions: little direct wind, no opposite open doors, building with ground floor only
 (3) Unfavorable conditions: location at a corner or square, multiple floors and/or open stairway



Ventilation & air handling

Daikin offers the widest range in DX ventilation in the market.

With a variety of ventilation solutions from small heat recovery ventilation to large scale air handling units we help provide a fresh, healthy and comfortable environment in offices, hotels, stores and other commercial environments.



Ventilation & air handling

Daikin fresh air portfolio 147

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UNIQUE NEW

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Daikin offers a variety of solutions for fresh air

from small heat recovery ventilation to large-scale air handling units for the provision of fresh air ventilation to homes, or commercial outlets such as offices, hotels, stores and others.

Ventilation solutions

Daikin offers state-of-the-art ventilation solutions that can easily be integrated into any project.

- › Unique portfolio within DX manufacturers
- › High-quality solutions complying with the highest Daikin quality standards
- › Seamless integration of all products to provide the best indoor climate
- › All Daikin products connected to a single control total control of the HVAC system.

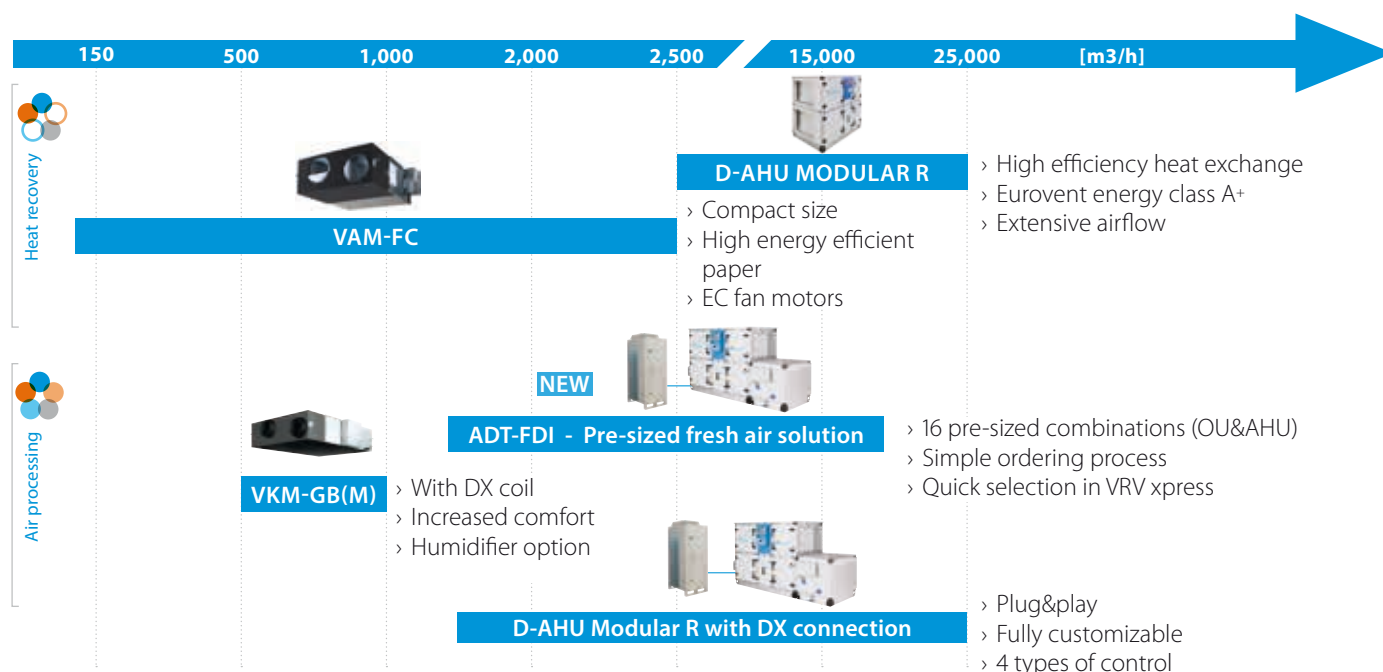
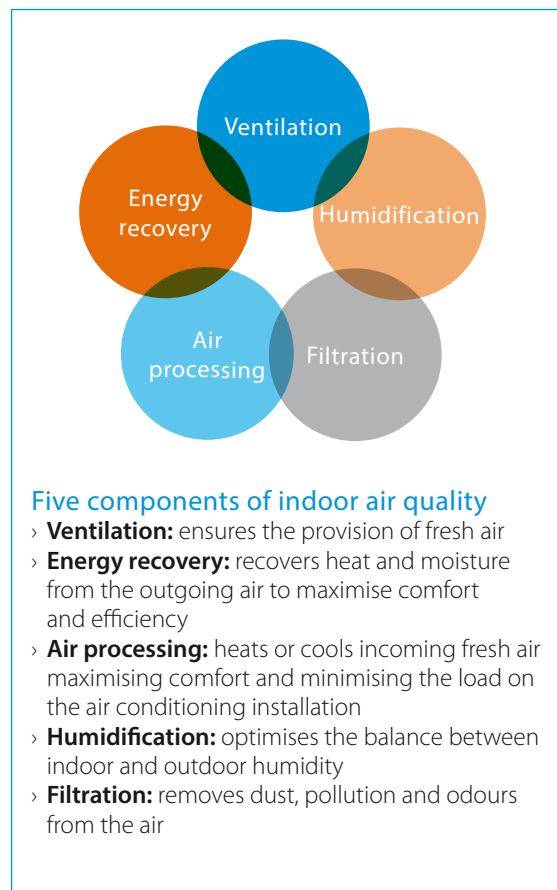
Heat Reclaim Ventilation - Ventilation with heat recovery as standard

Proper ventilation is a key component of climate control in buildings, offices and shops and part of the EU requirements. Our heat recovery units can **recover both sensible and latent heat** thus substantially **reducing the air conditioning load of up to 40%**. The range starts from as low as 150 m³/h to 2500 m³/h (VAM) and go up to 25000 m³/h (Modular AHU).

Ventilation with DX connection - Control over fresh air temperature

Daikin offers a range of R-410A inverter condensing units to be used in combination with Daikin AHUs for ultimate control over the fresh air. There are 4 control possibilities when **combining AHU and Daikin outdoor units** hence offering all the required flexibility for any installation. Indoor units can be combined to the same outdoor unit to reduce the installation costs. For **false-ceiling installations** where space is a constraint, the VKM can fit perfectly to deliver fresh air at a comfortable temperature and it has an optional humidification element.

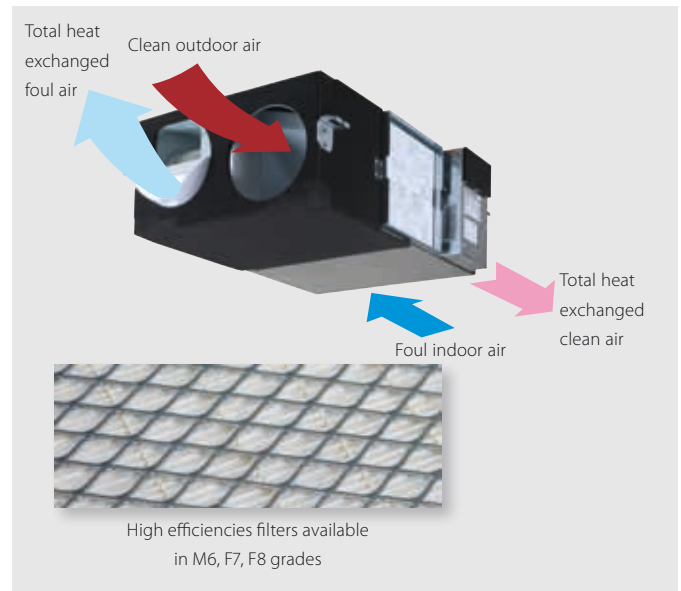
Fresh air portfolio



Heat reclaim ventilation

Ventilation with heat recovery as standard

- › Energy saving ventilation using indoor heating, cooling and moisture recovery
- › Ideal solution for shops, restaurants or offices requiring maximum floor space for furniture, decorations and fittings
- › Free cooling possible when outdoor temperature is below indoor temperature (eg. during nighttime)
- › Reduced energy consumption thanks to specially developed DC fan motor
- › Prevent energy losses from over-ventilation while improving indoor air quality with optional CO₂ sensor
- › Can be used as stand alone or integrated in the Sky Air or VRV system
- › Wide range of units: air flow rate from 150 up to 2,000 m³/h
- › Optional medium and fine dust filters M6, F7, F8 to meet customer request or legislation
- › Shorter installation time thanks to easy adjustment of nominal air flow rate, so less need for dampers compared with traditional installation.
- › Specially developed heat exchange element with High Efficiency Paper (HEP)

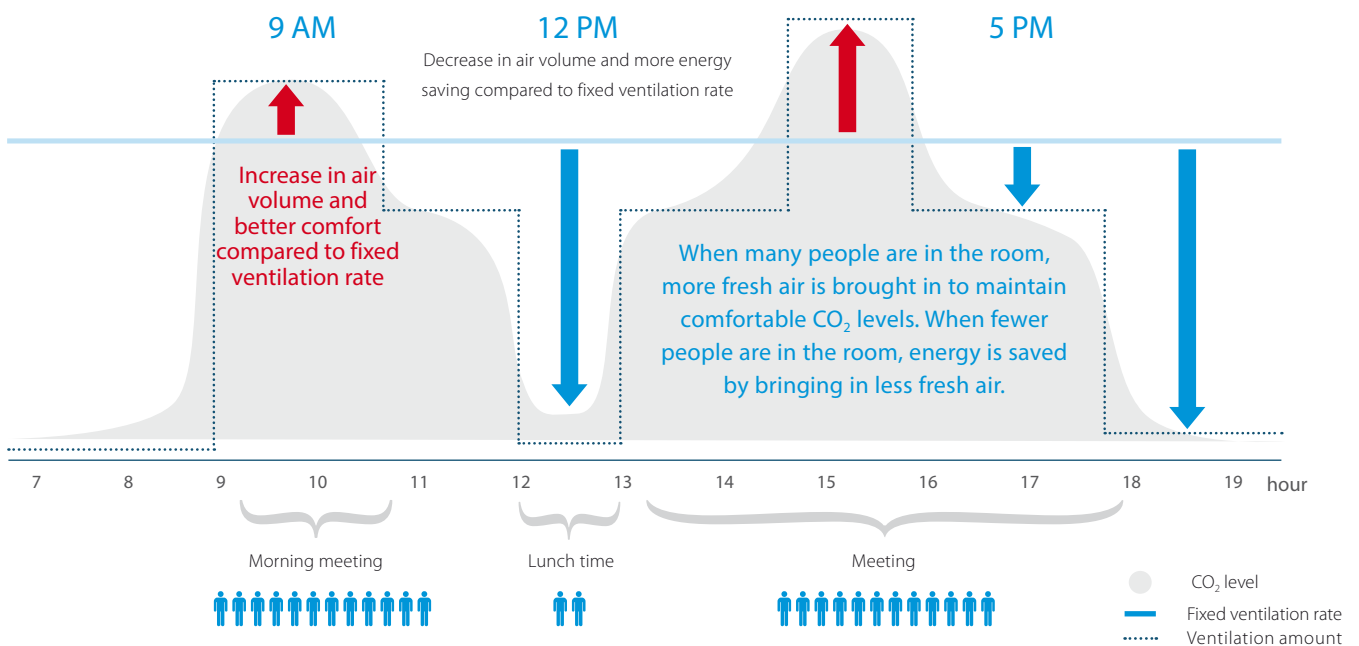


- › No drain piping needed
- › Can operate in over- and under pressure
- › Total solution for fresh air with Daikin supply of both VAM / VKM and electrical heaters

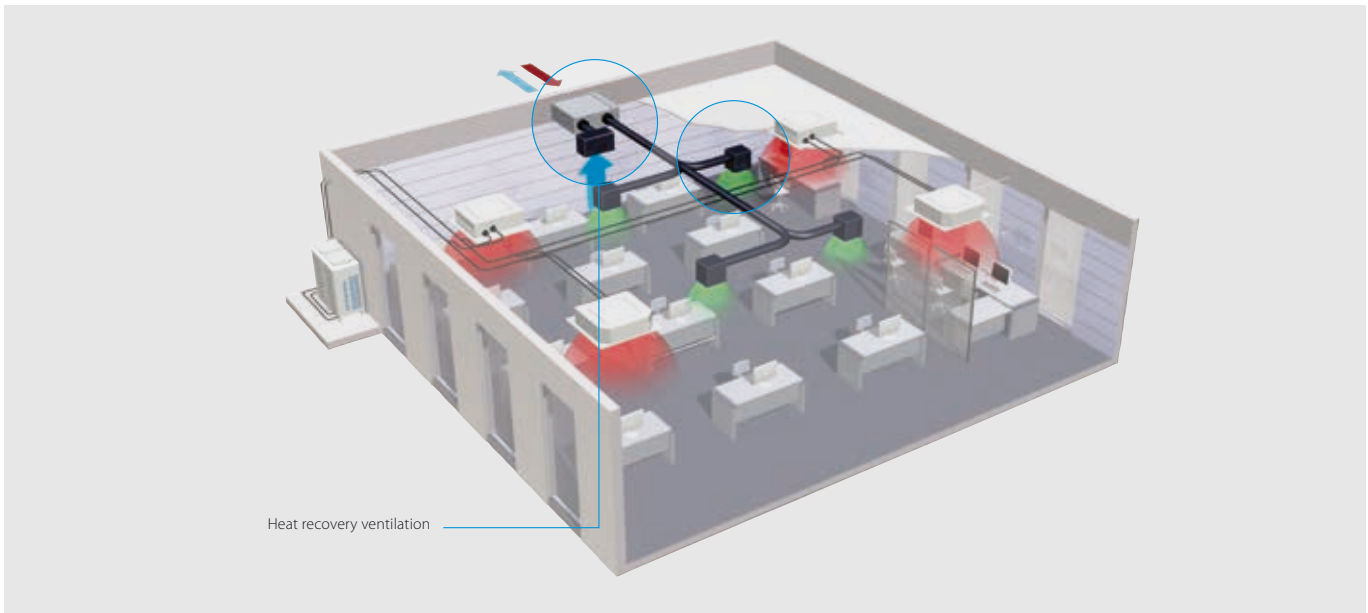
Prevent energy losses from over ventilation with CO₂ sensor

Enough fresh air is needed to create an enjoyable environment, but ventilating constantly is leading to energy waste. Therefore an optional CO₂ sensor can be installed which throttles or even switches off the ventilation system when there is enough fresh air in the room, thus saving energy.

Example of CO₂ sensor operation in a meeting room:



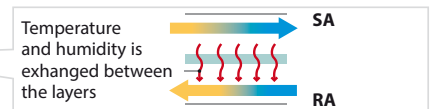
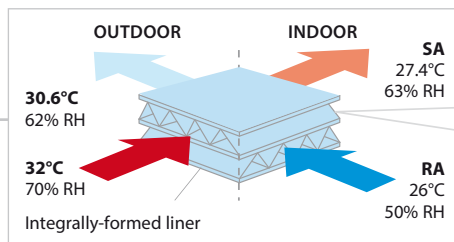
Using CO₂ sensors has the most energy-saving potential in buildings where occupancy fluctuates during a 24-hour period, is unpredictable and peaks at a high level. For example office buildings, government facilities, retail stores and shopping malls, movie theaters, auditoriums, schools, entertainment clubs and nightclubs. The ventilation unit's reaction to fluctuations in CO₂ can be easily adjusted through a field setting.



High Efficiency Paper

Operation of the high efficiency paper.

Cross flow of air to exchange heat and moisture.



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

Ventilation				VAM	150FC	250FC	350FC	500FC	650FC	800FC	1000FC	1500FC	2000FC														
Power input - 50Hz	Heat exchange mode	Nom.	Ultra high/High/Low	kW	0,132/0,111/0,058	0,161/0,079/0,064	0,071 (1)/0,057 (1)/0,020 (1)	0,147 (1)/0,101 (1)/0,049 (1)	0,188 (1)/0,114 (1)/0,063 (1)	0,320 (1)/0,241 (1)/0,185 (1)	0,360 (1)/0,309 (1)/0,198 (1)	0,617 (1)/0,463 (1)/0,353 (1)	0,685 (1)/0,575 (1)/0,295 (1)														
	Bypass mode	Nom.	Ultra high/High/Low	kW	0,132/0,111/0,058	0,161/0,079/0,064	0,071 (1)/0,057 (1)/0,020 (1)	0,147 (1)/0,101 (1)/0,049 (1)	0,188 (1)/0,114 (1)/0,063 (1)	0,320 (1)/0,241 (1)/0,185 (1)	0,360 (1)/0,309 (1)/0,198 (1)	0,617 (1)/0,463 (1)/0,353 (1)	0,685 (1)/0,575 (1)/0,295 (1)														
Temperature exchange efficiency - 50Hz	Ultra high/High/Low			%	77,0 (2) / 72,0 (3) / 78,3 (2) / 72,3 (3) / 82,8 (2) / 73,2 (3)	74,9 (2) / 69,5 (3) / 76,0 (2) / 70,0 (3) / 80,1 (2) / 72,0 (3)	78,0 (2) / 71,6 (4) / 79,3 (2) / 71,9 (4) / 84,1 (2) / 73,0 (4)	77,0 (2) / 70,2 (4) / 78,8 (2) / 70,7 (4) / 80,9 (2) / 71,3 (4)	77,0 (2) / 69,8 (4) / 79,1 (2) / 71,2 (4) / 81,1 (2) / 72,9 (4)	77,0 (2) / 67,8 (4) / 78,2 (2) / 68,8 (4) / 79,1 (2) / 69,6 (4)	78,0 (2) / 70,2 (4) / 78,6 (2) / 71,1 (4) / 80,2 (2) / 73,4 (4)	78,0 (2) / 69,5 (4) / 79,6 (2) / 70,3 (4) / 80,8 (2) / 71,0 (4)	78,0 (2) / 70,2 (4) / 79,6 (2) / 71,3 (4) / 80,6 (2) / 74,6 (4)														
	Enthalpy exchange efficiency - 50Hz	Cooling	Ultra high/High/Low	%	60,3 (2)/61,9 (2)/67,3 (2)	60,3 (2)/61,2 (2)/64,5 (2)	63,4 (2)/65,0 (2)/70,7 (2)	60,3 (2)/63,4 (2)/66,9 (2)	60,3 (2)/64,0 (2)/67,3 (2)	62,4 (2)/63,6 (2)/64,6 (2)	66,3 (2)	66,3 (2)	66,2 (2)	63,4 (2)/65,0 (2)/67,8 (2)													
Heating		Ultra high/High/Low	%	66,6 (2)/67,9 (2)/72,4 (2)	66,6 (2)/67,4 (2)/70,7 (2)	67,6 (2)/68,9 (2)/73,7 (2)	64,5 (2)/67,6 (2)/71,1 (2)	65,5 (2)/67,7 (2)/69,7 (2)	67,6 (2)/68,8 (2)/69,8 (2)	68,6 (2)/69,4 (2)/71,5 (2)	68,6 (2)/69,7 (2)/70,5 (2)	68,6 (2)/69,7 (2)/70,5 (2)	68,6 (2)/69,5 (2)/72,1 (2)														
Operation mode	Heat exchange mode, bypass mode, fresh-up mode																										
Heat exchange system	Air to air cross flow total heat (sensible + latent heat) exchange																										
Heat exchange element	Specially processed non-flammable paper																										
Dimensions	Unit	HeightxWidthxDepth	mm	285x776x525			301x828x816		364x1.000x868		364x1.000x1.160		726x1.510x868		726x1.510x1.160												
Weight	Unit		kg	24,0			33,0		51,0		54,0		63,0		128		145										
Casing	Material			Galvanised steel plate																							
Fan-Air flow rate - 50Hz	Heat exchange mode	Ultra high/High/Low	m ³ /h	150 (5)/140 (5)/105 (5)		250 (5)/230 (5)/155 (5)		350 (1)/320 (1)/210 (1)		500 (1)/410 (1)/310 (1)		650 (1)/545 (1)/450 (1)		800 (1)/725 (1)/665 (1)		1.000 (1)/950 (1)/820 (1)		1.500 (1)/1.350 (1)/1.230 (1)		2.000 (1)/1.880 (1)/1.500 (1)							
	Bypass mode	Ultra high/High/Low	m ³ /h	150 (5)/140 (5)/105 (5)		250 (5)/230 (5)/155 (5)		350 (1)/320 (1)/210 (1)		500 (1)/410 (1)/310 (1)		650 (1)/545 (1)/450 (1)		800 (1)/725 (1)/665 (1)		1.000 (1)/950 (1)/820 (1)		1.500 (1)/1.350 (1)/1.230 (1)		2.000 (1)/1.880 (1)/1.500 (1)							
Fan-External static pressure - 50Hz	Ultra high/High/Low			Pa	90 (5)/87 (5)/40 (5)		70 (5)/63 (5)/25 (5)		103 (1)/93 (1)/51 (1)		83 (1)/73 (1)/35 (1)		100 (1)/73 (1)/49 (1)		109 (1)/94 (1)/78 (1)		147 (1)/135 (1)/100 (1)		116 (1)/97 (1)/80 (1)		132 (1)/118 (1)/77 (1)						
Air filter	Type			Multidirectional fibrous fleeces																							
Sound pressure level - 50Hz	Heat exchange mode	Ultra high/High/Low	dBA	27,0/26,0/20,5		28,0/26,0/21,0		32,0/31,5/23,5		33,0/31,5/24,5		34,5/33,0/27,0		36,0/34,5/31,0		36,0/35,0/31,0		39,5/38,0/34,0		40,0/38,0/35,0							
	Bypass mode	Ultra high/High/Low	dBA	27,0/26,5/20,5		28,0/27,0/21,0		32,0/31,0/24,5		33,5/32,5/25,5		34,5/34,0/27,0		36,0/34,5/31,0		36,0/35,5/31,0		40,5/38,0/33,5		40,0/38,0/35,0							
Operation range	Min.		°CDB	-15																							
	Max.		°CDB	50																							
	Relative humidity		%	80% or less																							
Connection duct diameter	mm			100			150			200			250			350											
Power supply	Phase/Frequency/Voltage			Hz/V																							
Current	Maximum fuse amps (MFA)			15,0									16,0														
Specific energy consumption (SEC)	Cold climate			kWh/(m ² ·a)			-56,0 (6)			-60,5 (6)			-														
	Average climate			kWh/(m ² ·a)			-22,1 (6)			-27,0 (6)			-														
	Warm climate			kWh/(m ² ·a)			-0,100 (6)			-5,30 (6)			-														
SEC class				D / (6)			B / (6)						-														
Maximum flow rate at 100 Pa ESP	Flow rate	m ³ /h			130 (5)			207 (5)						-													
	Electric power input	W			129			160						-													
Sound power level (Lwa)	dB			40			43			48			50			51			53			55			57		
Annual electricity consumption	kWh/a			18,9 (6)			13,6 (6)																				
Annual heating saved	Cold climate			kWh/a			41,0 (6)			40,6 (6)																	
	Average climate			kWh/a			80,2 (6)			79,4 (6)																	
	Warm climate			kWh/a			18,5 (6)			18,4 (6)																	

(1) Measured on fan curve 15. Refer to fan curves. (2) Measured according to JIS B 8628 (3) Measured at reference flow rate according to EN13141-7 (4) Measured according to EN308 : 1997 (5) Clean the filter when the filter icon appears on the controller screen. Regular filter cleaning is important for delivered air quality and for the unit's energy efficiency. (6) In accordance with commission regulation (EU) No 1254/2014 | In accordance with commission regulation (EU) No 1253/2014 | At reference flow rate in accordance with commission regulation (EU) No 1254/2014

VH

- > Total solution for fresh air with Daikin supply of both VAM and electrical heaters
- > Increased comfort in low outdoor temperature thanks to the heated outdoor air
- > Integrated electrical heater concept (no additional accessories required)
- > Standard dual flow and temperature sensor
- > Flexible setting with adjustable setpoint
- > Increased safety with 2 cut-outs: manual & automatic
- > BMS integration thanks to:
 - Volt free relay for error indication
 - 0-10VDC input for setpoint control



ELECTRICAL HEATER FOR VAM	VH	(VH)
Supply voltage		220/250V ac 50/60 Hz. +/-10%
Output current (maximum)		19A at 40°C (ambient)
Temperature sensor		5k ohms at 25°C (table 502 1T)
Temperature control range		0 to 40°C / (0-10V 0-100%)
Control fuse		20 x 5mm 250mA
LED indicators		Power ON - Yellow Heater ON - Red (solid or flashing, indicating pulsed control) Airflow fault - Red
Mounting holes		98mm x 181mm centres 5 mm ø holes
Maximum ambient adjacent to terminal box		35°C (during operation)
Auto high temp. cutout		100°C Pre-set
Man. reset high temp. cutout		125°C Pre-set
Run relay		1A 120V AC or 1A 24V DC
BMS setpoint input		0-10VDC

		VH	1B	2B	3B	4B	4/AB	5B
Capacity	kW		1	1	1	1,5	2,5	2,5
Duct diameter	mm		100	150	200	250	250	300
Connectable VAM			VAM150FC -	VAM250FC VAM350FC	VAM500FC VAM650FC	VAM800FC VAM1000FC	VAM800FC VAM1000FC	VAM1500FC VAM2000FC

For the selection of the appropriate capacity, please refer to the VAM selection software.

Heat reclaim ventilation, humidification and air processing

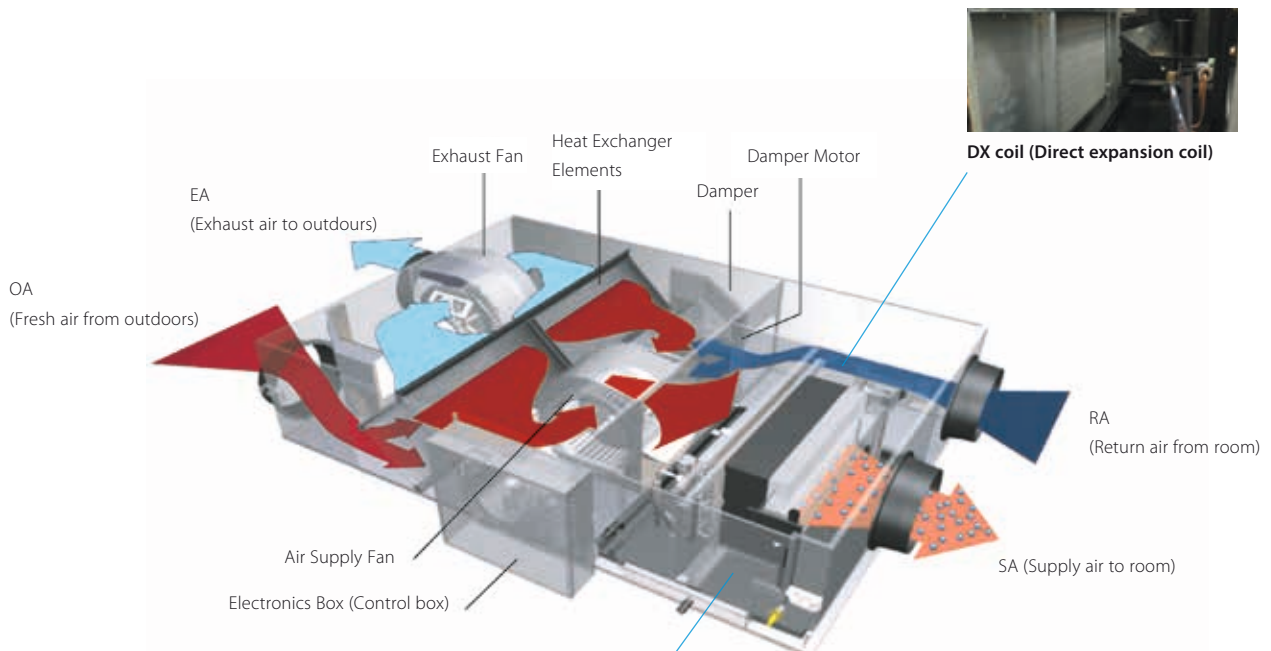
Pre heating or cooling of fresh air for lower load on the air conditioning system

- > Energy saving ventilation using indoor heating, cooling and moisture recovery
- > Creates a high quality indoor environment by pre conditioning incoming fresh air
- > Humidification of the incoming air results in comfortable indoor humidity level, even during heating
- > Ideal solution for shops, restaurants or offices requiring maximum floor space for furniture, decorations and fittings
- > Free cooling possible when outdoor temperature is below indoor temperature (eg. during nighttime)
- > Low energy consumption thanks to DC fan motor
- > Prevent energy losses from over-ventilation while improving indoor air quality with optional CO2 sensor
- > Shorter installation time thanks to easy adjustment of nominal air flow rate, so less need for dampers compared with traditional installation.



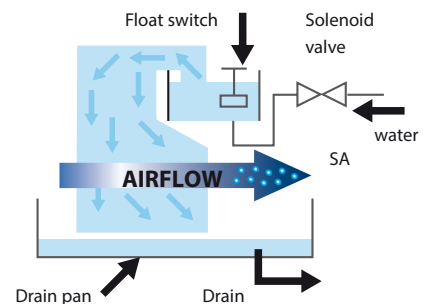
- > Specially developed heat exchange element with High Efficiency Paper (HEP)
- > Can operate in over- and under pressure

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

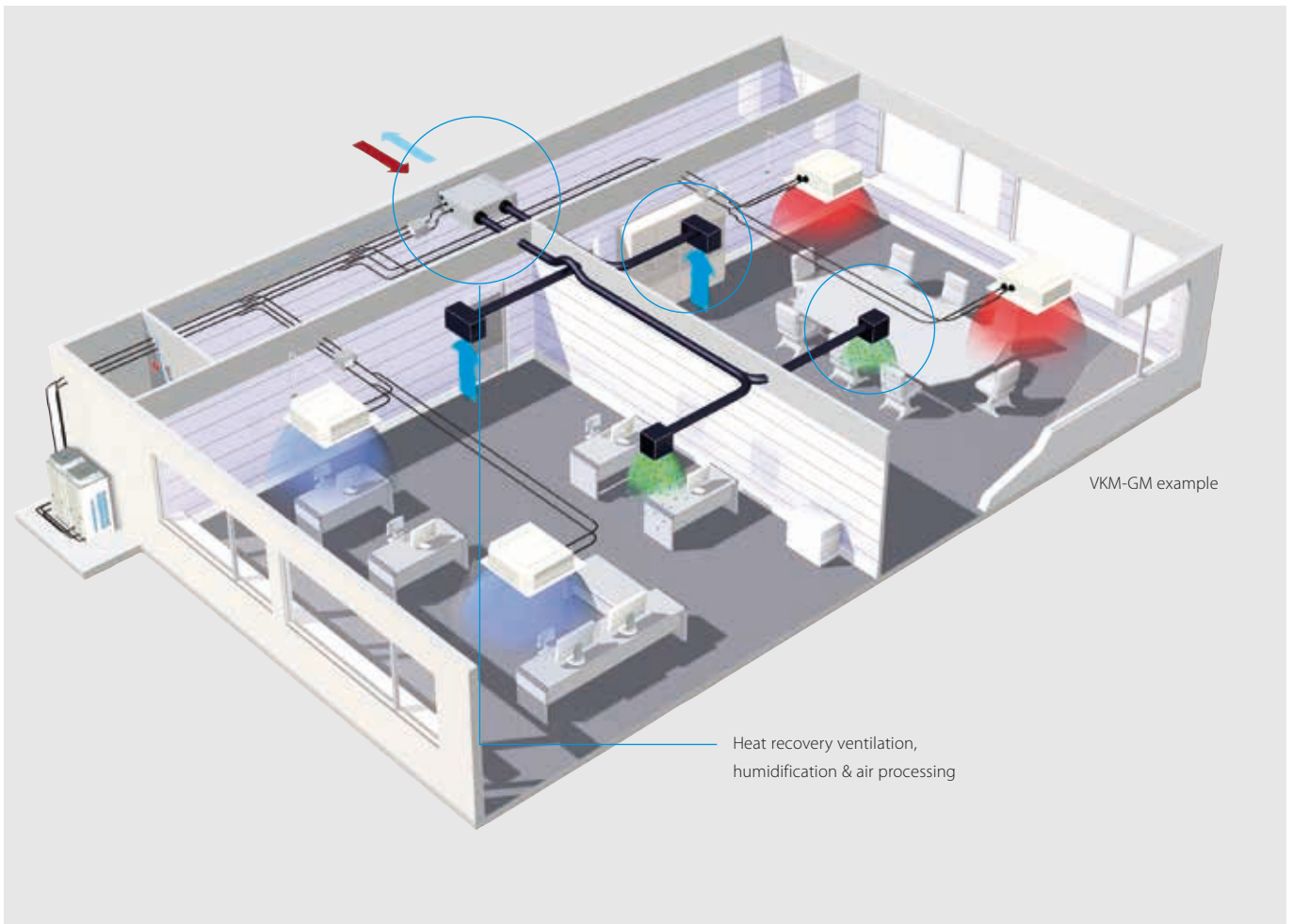


Humidifier element:

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



Ventilation			VKM-GB/VKM-GBM	50GB	80GB	100GB	50GBM	80GBM	100GBM	
Power input - 50Hz	Heat exchange mode	Nom.	Ultra high/High/Low	kW	0,270/0,230/0,170	0,330/0,280/0,192	0,410/0,365/0,230	0,270/0,230/0,170	0,330/0,280/0,192	0,410/0,365/0,230
	Bypass mode	Nom.	Ultra high/High/Low	kW	0,270/0,230/0,140	0,330/0,280/0,192	0,410/0,365/0,230	0,270/0,230/0,170	0,330/0,280/0,192	0,410/0,365/0,230
Fresh air conditioning load	Cooling			kW	4,71 / 1,91 / 3,5	7,46 / 2,96 / 5,6	9,12 / 3,52 / 7,0	4,71 / 1,91 / 3,5	7,46 / 2,96 / 5,6	9,12 / 3,52 / 7,0
	Heating			kW	5,58 / 2,38 / 3,5	8,79 / 3,79 / 5,6	10,69 / 4,39 / 7,0	5,58 / 2,38 / 3,5	8,79 / 3,79 / 5,6	10,69 / 4,39 / 7,0
Temperature exchange efficiency - 50Hz	Ultra high/High/Low			%	76/76/77.5	78/78/79	74/74/76.5	76/76/77.5	78/78/79	74/74/76.5
Enthalpy exchange efficiency - 50Hz	Cooling	Ultra high/High/Low		%	64/64/67	66/66/68	62/62/66	64/64/67	66/66/68	62/62/66
	Heating	Ultra high/High/Low		%	67/67/69	71/71/73	65/65/69	67/67/69	71/71/73	65/65/69
Operation mode			Heat exchange mode / Bypass mode / Fresh-up mode							
Heat exchange system			Air to air cross flow total heat (sensible + latent heat) exchange							
Heat exchange element			Specially processed non-flammable paper							
Humidifier			System			Natural evaporating type				
Dimensions	Unit	HeightxWidthxDepth	mm	387x1.764x832	387x1.764x1.214		387x1.764x832	387x1.764x1.214		
Weight	Unit		kg	94	110	112	100	119	123	
Casing			Material Galvanised steel plate							
Fan-Air flow rate - 50Hz	Heat exchange mode	Ultra high/High/Low		m ³ /h	500/500/440	750/750/640	950/950/820	500/500/440	750/750/640	950/950/820
	Bypass mode	Ultra high/High/Low		m ³ /h	500/500/440	750/750/640	950/950/820	500/500/440	750/750/640	950/950/820
Fan-External static pressure - 50Hz	Ultra high/High/Low			Pa	210/170/140	210/160/110	150/100/70	200/150/120	205/155/105	110/70/60
Air filter			Type Multidirectional fibrous fleeces							
Sound pressure level - 50Hz	Heat exchange mode	Ultra high/High/Low		dB(A)	39/37/35	41,5/39/37	41/39/36,5	38/36/34	40/37,5/35,5	40/38/35,5
	Bypass mode	Ultra high/High/Low		dB(A)	40/38/35,5	41,5/39/37	41/39/36,5	39/36/34,5	41/38/36	41/39/35,5
Operation range	Around unit			°CDB	0°C~40°CDB, 80% RH or less					
	Supply air			°CDB	-15°C~40°CDB, 80% RH or less					
	Return air			°CDB	0°C~40°CDB, 80% RH or less					
	On coil temperature	Cooling/Max./Heating/Min.		°CDB	-15/43				-15/43	
Refrigerant			Control Electronic expansion valve							
			Type R-410A							
			GWP 2.087,5							
Connection duct diameter				mm	200	250		200	250	
Piping connections	Liquid	OD		mm	6,35					
	Gas	OD		mm	12,7					
	Water supply			mm	6,4					
	Drain				PT3/4 external thread					
Power supply	Phase/Frequency/Voltage			Hz/V	1~50/220-240					
Current	Maximum fuse amps (MFA)			A	15					

Daikin air handling units solutions

You will find your match

Why choose Daikin air handling units with a DX connection?



Simplifying business

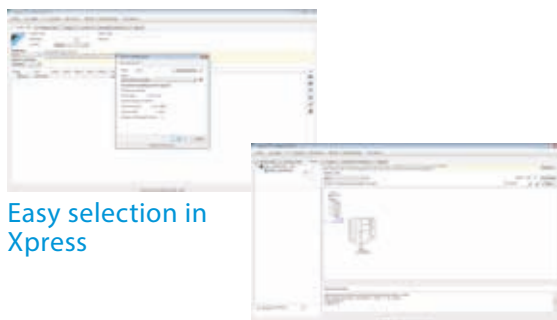
The unique total solution approach by Daikin helps businesses to propose better cross-pillar solutions, to increase their success ratio by providing unmatched product combinations to the end-user and to simplify the life of installers by supplying high-quality products coming from the same manufacturer. Contrary to other manufacturers, Daikin does not use OEM products in its AHU with DX offer. Many competitors are either offering OEM DX outdoor units or OEM AHU which create additional problems when warranties or faults arise.

Having a single interface for your business makes Daikin the right choice.

Supporting tools

Selecting an AHU in combination with a DX unit has never been this easy amongst manufacturers. The well known VRV xpress selection software has been modified to integrate pre-sized AHU combinations with DX outdoor units or just to select outdoor units connected to expansion valve kits.

If a more complex selection is required, then the new Astra web can be utilized to make unique tailor-made solutions for any project requirements.



Easy selection in Xpress

One stop shop

Daikin is the only global manufacturer in the market **capable of offering a true plug & play solution** where Daikin AHUs manufactured by Daikin Applied Europe and certified by Eurovent, offer off-the-shelf compatibility with Daikin's unique VRV outdoor unit range for the best performance in the market. This unique integration of cross-pillar products under the same umbrella, gives the customer both peace-of-mind and added value when promoting a total solution approach.

Complete range of possibilities

Thanks to the **most complete offer in the market**, Daikin has the solution for all types of commercial applications requiring fresh air. Daikin provides ventilation solutions based on AHU from 2,500 m³/h up to 140,000 m³/h either with natural heat recovery or more advanced ventilation solutions where a VRV outdoor unit can be connected to the Daikin AHU for ultimate climate control. The harmonized control between the VRV outdoor unit and the AHU offer outstanding 24h/7 control of the system when connected to an iTM.

Advantages

- > Unique manufacturer offering a complete range
- > Plug&play solution
- > Direct iTM compatibility
- > VRV xpress supporting AHU business **NEW**
- > Pre-sized AHU+DX outdoor units for fresh air **NEW**

New pre-sized fresh air solution

Order AHU and outdoor in one step



Easy selection

- › 16 pre-selected combinations – to cover all fresh air needs in Europe
- › The right outdoor unit and the necessary connection kits to the coil of the AHU are factory mounted and configured.
- › Total solution – Daikin provides the complete solution

Fast quotation

- › Select as any other unit in Xpress selection software and show the solution in the report

Easy ordering

- › AHU and outdoor unit are automatically selected in VRV xpress

Easy installation

- › Same pipe diameter from AHU to outdoor unit
- › Direct integration in 

Download Xpress now with the new pre-sized combination from my.daikin.eu



More details in the dedicated brochure

Pre-sized fresh air solution

High end ventilation with heat recovery

- › Pre-sized making selection, quotation, ordering easy
- › Connects directly to pre-selected Daikin DX outdoor units
- › IE premium efficiency motor
- › High efficiency heat wheel (heat recovery)
- › Compact design
- › Indoor air quality compliant with VDI hygiene guideline
- › Operating limits from -20°C up to +46 °C ambient temperature
- › Direct integration in intelligent Touch Manager for monitoring and control



			ADT03FDI-80	ADT03FDI-100	ADT03FDI-125	ADT04FDI-125	ADT04FDI-140	ADT04FDI-200	ADT05FDI-200	ADT05FDI-250
Airflow	Nominal Air Flow valid for Cooling (1) and Heating(2)	m3/h	2.200	2.700	3.200	3.600	4.100	4.700	5.500	6.200
Expansion valve kit	Type		EKEXV80	EKEXV100	EKEXV125	EKEXV125	EKEXV140	EKEXV200	EKEXV200	EKEXV250
	Number									
Control box	Type		EKEQFCBA							
	Number		1							
Outdoor unit	Type		ERQ100AV1		ERQ125AV1		ERQ140AV1		ERQ200AW1	ERQ250AW1
	Number									1
Energy Rating	Eurovent Energy Class		A+		A		A+		A	A+
	ERP Compliance		ErP 2018							
Heat Recovery Technology	Winter	Nom.	Sorption Heat Wheel							
	Nom.	%								
Heat Recovery Technology	Winter	Nom.	81,5	79,2	76,9	81,1	79,6	77,8	79	77,4
	Nom.	%								
ESP	Nom.	Pa	200							
SFPv	Nom.	W/(m3/s)	1.388	1.508	1.660	1.402	1.512	1.637	1.456	1.575
Supply Fan power input	Nom.	W	0,53	0,7	0,92	0,89	1,08	1,35	1,4	1,72
Filter class	Supply		F7+ F7							
	Extract		F7+ F7							
Dimensions	Unit	Height	1.540			1740			2.780	
		Width	2.500			2.620			1.400	
		Depth	990			1.200			840	
Weight		Kg	549			659			840	
Total Power Input	Nom.	kW	1,55	2	2,3	2,25	2,63	3,15	3,25	3,86
Power supply	Electrical voltage	V/ph/Hz	230V/1Ph/50Hz			400V/3Ph/50Hz				
Door opening (following supply air direction)			Right							
			ADT06FDI-250	ADT07FDI-250	ADT07FDI-140	ADT07FDI-200	ADT08FDI-200	ADT09FDI-200	ADT09FDI-250	ADT10FDI-250
Airflow	Nominal Air Flow valid for Cooling (1) and Heating(2)	m3/h	6.900	7.400	8.000	8.700	10.000	11.500	13.200	14.900
Expansion valve kit	Type		EKEXV250		EKEXV140	EKEXV200			EKEXV250	EKEXV250
	Number		1			2				
Control box	Type		EKEQFCBA							
	Number		1			2				
Outdoor unit	Type		ERQ250AW1		ERQ140AV1	ERQ200AW1		ERQ250AW1		
	Number		1		2	2		2		
Energy Rating	Eurovent Energy Class		A	A+		A		A+	A	A+
	ERP Compliance		ErP 2018							
Heat Recovery Technology	Winter	Nom.	Sorption Heat Wheel							
	Nom.	%								
Heat Recovery Technology	Winter	Nom.	77,9	80,2	79,3	78,1	78,4	79,7	77,9	80,2
	Nom.	%								
ESP	Nom.	Pa	200							
SFPv	Nom.	W/(m3/s)	1.580	1.438	1.491	1.581	1.429	1.438	1.569	1.397
Supply Fan power input	Nom.	W	1,86	1,82	2,04	2,35	2,48	2,82	3,54	3,62
Filter class	Supply		F7+ F7							
	Extract		F7+ F7							
Dimensions	Unit	Height	1920			2.180		2.460		2.570
		Width	2.980	3.100		3.150		2.980		3.100
		Depth	1.400	1.600		1940		2.300		2.300
Weight		Kg	887	1.063		1.489		1.594	1.973	
Total Power Input	Nom.	kW	4,14	4,07	4,48	5,08	5,37	6,06	7,44	7,6
Power supply	Electrical voltage	V/ph/Hz	400V/3Ph/50Hz							
Door opening (following supply air direction)			Right							

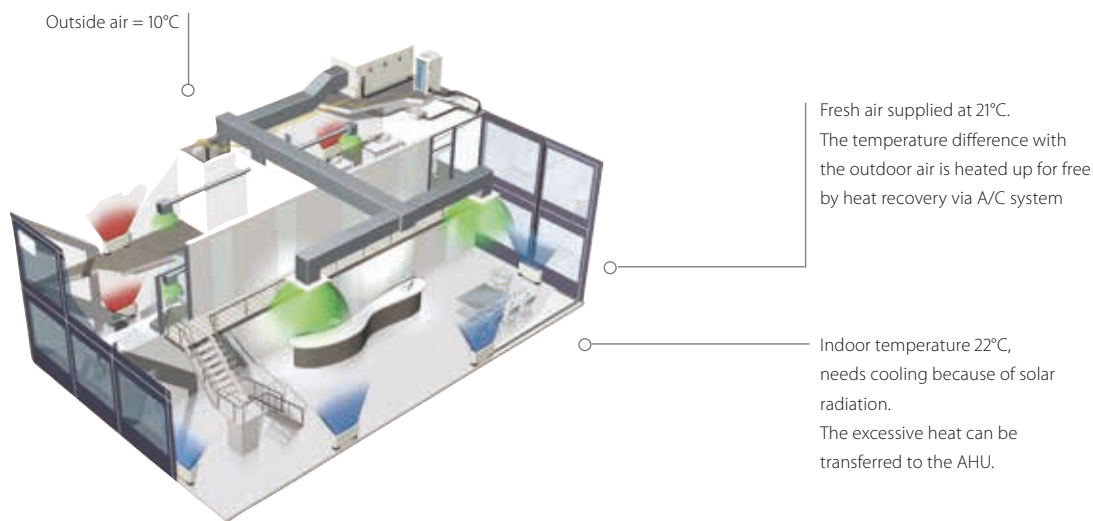
(1) Cooling: indoor temp. 27°CDB, 19,0°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m
 (2) Heating: indoor temp. 20°CDB; outdoor temp. -15°CDB; equivalent refrigerant piping: 5m; level difference: 0m

Why use VRV and ERQ condensing units for connection to air handling units?

High Efficiency

Daikin heat pumps are renowned for their high energy efficiency. Integrating the AHU with a heat recovery system is even more effective since an office system can frequently be in cooling mode

while the outdoor air is too cold to be brought inside in an unconditioned state. In this case heat from the offices is merely transferred to heat up the cold incoming fresh air.



Fast response to changing loads resulting in high comfort levels

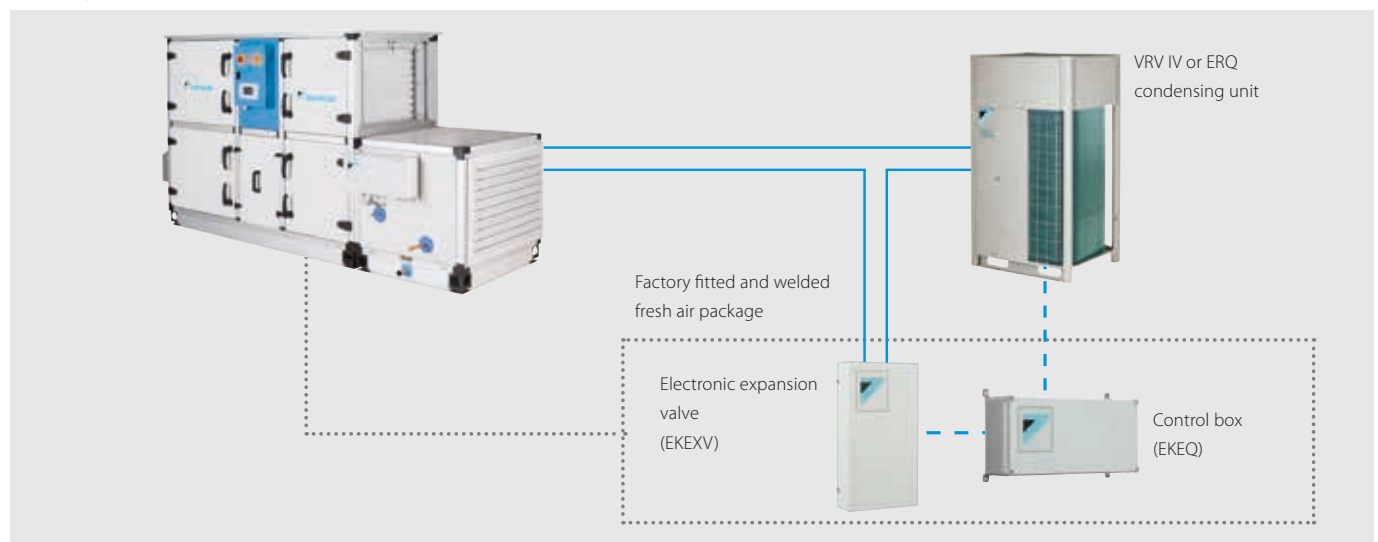
Daikin ERQ and VRV units respond rapidly to fluctuations in supply air temperature, resulting in a steady indoor temperature and resultant high comfort levels for the end user. The ultimate is the VRV range which improves comfort even more by offering continuous heating, also during defrost.

Easy Design and Installation

The system is easy to design and install since no additional water systems such as boilers, tanks and gas connections etc. are required. This also reduces both the total system investment and running cost.

Daikin Fresh air package

- › If the pre-sized fresh air solution does not match the need.
- › Plug & play connection between VRV/ERQ and the entire D-AHU modular range.
- › Factory fitted and welded control and expansion valve kits.



In order to maximise installation flexibility, 4 types of control systems are offered

W control: Off the shelf control of air temperature (discharge temperature, suction temperature, room temperature) via any DDC controller, easy to setup

X control: Precise control of air temperature (discharge temperature, suction temperature, room temperature) requiring a preprogrammed DDC controller (for special applications)

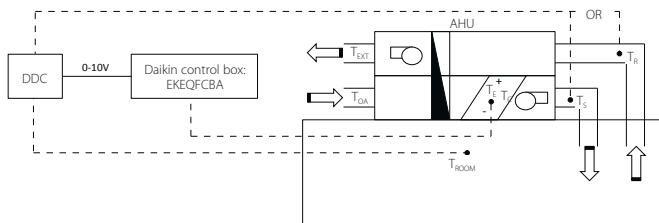
Z control: Control of air temperature (suction temperature, room temperature) via Daikin control (no DDC controller needed)

Y control: Control of refrigerant (T_e/T_c) temperature via Daikin control (no DDC controller needed)

1. W control ($T_s/T_r/T_{ROOM}$ control):

Air temperature control via DDC controller

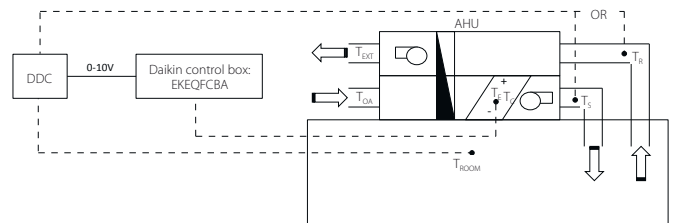
Room temperature is controlled as a function of the air handling unit suction or discharge air (customer selection). The DDC controller is translating the temperature difference between set point and air suction temperature (or air discharge temperature or room temperature) into a proportional 0-10V signal which is transferred to the Daikin control box (EKEQFCBA). This voltage modulates the capacity requirements of the outdoor unit.



2. X control ($T_s/T_r/T_{ROOM}$ control):

Precise air temperature control via DDC controller

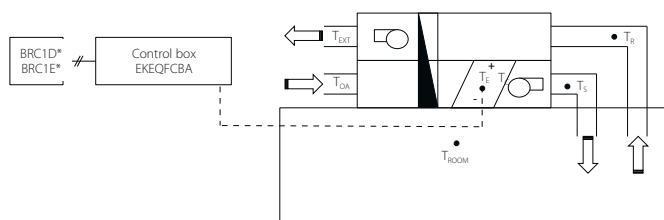
Room temperature is controlled as a function of the air handling unit suction or discharge air (customer selection). The DDC controller is translating the temperature difference between set point and air suction temperature (or air discharge temperature or room temperature) into a reference voltage (0-10V) which is transferred to the Daikin control box (EKEQFCBA). This reference voltage will be used as the main input value for the compressor frequency control.



3. Y control (T_e/T_c control):

By fixed evaporating /condensing temperature

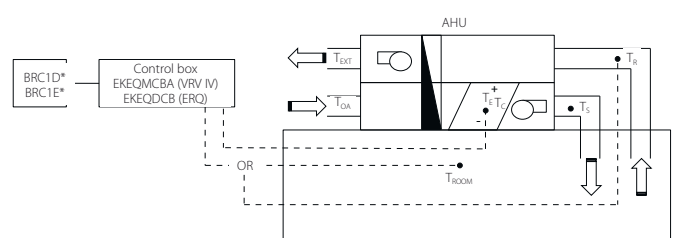
A fixed target evaporating or condensing temperature can be set by the customer. In this case, room temperature is only indirectly controlled. A Daikin wired remote control (BRC1D52 or BRC1E52A/B - optional) have to be connected for initial set-up but not required for operation.



4. Z control (T_s/T_{ROOM} control):

Control your AHU just like a VRV indoor unit with 100% fresh air

Allows the possibility to control the AHU just like a VRV indoor unit. Meaning temperature control will be focused on return air temperature from the room into the AHU. Requires BRC1D52 or BRC1E52A/B for operation. The only control that allows the combination of other indoor units to the AHU at the same time.



T_s = Supply air temperature	T_r = Return air temperature	T_{OA} = Outdoor air temperature	T_{ROOM} = Room air temperature
T_{EXT} = Extraction air temperature	T_e = Evaporating temperature	T_c = Condensing temperature	

	Option kit	Features
Possibility W	EKEQFCBA	Off-the-shelf DDC controller that requires no pre-configuration
Possibility X		Pre-configured DDC controller required
Possibility Y		Using fixed evaporating temperature, no set point can be set using remote control
Possibility Z	EKEQDCB EKFQMCBA*	Using Daikin infrared remote control BRC1D52 or BRC1E52A/B Temperature control using air suction temperature or room temperature (via remote sensor)

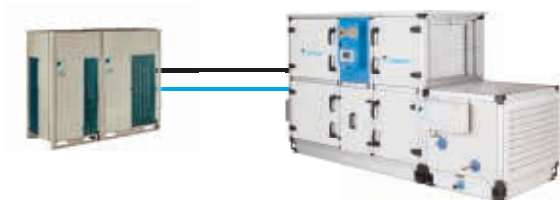
* EKEQMCB (for 'multi' application)

VRV - for larger capacities (from 8 to 54HP)

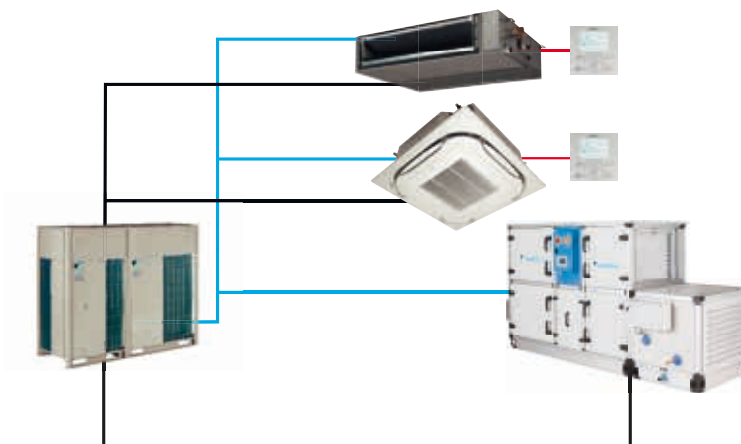
An advanced solution for both pair and multi application

- > Inverter controlled units
- > Heat recovery, heat pump
- > R-410A
- > Control of room temperature via Daikin control
- > Large range of expansion valve kits available
- > BRC1E52A/B is used to set the set point temperature (connected to the EKEQMCBA).
- > Connectable to all VRV heat recovery and heat pump systems

W, X, Y control for VRV IV heat pump



Z control for all VRV outdoor units



- Refrigerant piping
- F1-F2
- other communication



ERQ - for smaller capacities (from 100 to 250 class)

A basic fresh air solution for pair application

- › Inverter controlled units
- › Heat pump
- › R-410A
- › Wide range of expansion valve kits available
- › Perfect for the Daikin Modular air handling unit

The "Daikin Fresh Air Package" provides a complete Plug & Play Solution including AHU, ERQ or VRV Condensing Unit and all unit control (EKEQ, EKEX, DDC controller) factory mounted and configured. The easiest solution with only one point of contact.



ERQ-AW1

Ventilation				ERQ	100AV1	125AV1	140AV1
Capacity range			HP	4	5	6	
Cooling capacity	Nom.		kW	11,2	14,0	15,5	
Heating capacity	Nom.		kW	12,5	16,0	18,0	
Power input	Cooling	Nom.	kW	2,81	3,51	4,53	
	Heating	Nom.	kW	2,74	3,86	4,57	
EER					3,99		
COP				4,56	4,15	3,42	3,94
Dimensions	Unit	HeightxWidthxDepth	mm	1.345x900x320			
Weight	Unit		kg	120			
Casing	Material			Painted galvanized steel plate			
Fan-Air flow rate	Cooling	Nom.	m ³ /min	106			
	Heating	Nom.	m ³ /min	102		105	
Sound power level	Cooling	Nom.	dBA	66	67		69
Sound pressure level	Cooling	Nom.	dBA	50	51		53
	Heating	Nom.	dBA	52	53		55
Operation range	Cooling	Min./Max.	°CDB	-5/46			
	Heating	Min./Max.	°CWB	-20/15,5			
	On coil temperature	Heating/Min./Cooling/Max.	°CDB	10/35			
Refrigerant	Type			R-410A			
	Charge		kg	4,0			
			TCO ₂ eq	8,4			
	GWP			2.087,5			
Piping connections	Control			Expansion valve (electronic type)			
	Liquid	OD	mm	9,52			
	Gas	OD	mm	15,9			19,1
	Drain	OD	mm	26x3			
Power supply	Phase/Frequency/Voltage		Hz/V	1N~/50/220-240			
Current	Maximum fuse amps (MFA)		A	32,0			

Ventilation				ERQ	125AW1	200AW1	250AW1
Capacity range			HP	5	8	10	
Cooling capacity	Nom.		kW	14,0	22,4	28,0	
Heating capacity	Nom.		kW	16,0	25,0	31,5	
Power input	Cooling	Nom.	kW	3,52	5,22	7,42	
	Heating	Nom.	kW	4,00	5,56	7,70	
EER				3,98	4,29	3,77	
COP				4,00	4,50	4,09	
Dimensions	Unit	HeightxWidthxDepth	mm	1.680x635x765		1.680x930x765	
Weight	Unit		kg	159	187	240	
Casing	Material			Painted galvanized steel plate			
Fan-Air flow rate	Cooling	Nom.	m ³ /min	95	171		185
	Heating	Nom.	m ³ /min	95	171		185
Sound power level	Nom.		dBA	72		78	
Sound pressure level	Nom.		dBA	54			58
Operation range	Cooling	Min./Max.	°CDB	-5/43			
	Heating	Min./Max.	°CWB	-20/15			
	On coil temperature	Heating/Min./Cooling/Max.	°CDB	10/35			
Refrigerant	Type			R-410A			
	Charge		kg	6,2	7,7	8,4	
			TCO ₂ eq	12,9	16,1	17,5	
	GWP			2.087,5			
Piping connections	Control			Electronic expansion valve			
	Liquid	OD	mm	9,52			
	Gas	OD	mm	15,9	19,1		22,2
	Drain	OD	mm	26x3			
Power supply	Phase/Frequency/Voltage		Hz/V	3N~/50/400			
Current	Maximum fuse amps (MFA)		A	16		25	

Integration of ERQ and VRV in third party air handling units

a wide range of expansion valve kits and control boxes

Combination table

		Control box			Expansion valve kit										Mixed connection with VRV indoor units	
		EKEQDCB	EKEQFCBA	EKEQMCBA	EKE XV50	EKE XV63	EKE XV80	EKE XV100	EKE XV125	EKE XV140	EKE XV200	EKE XV250	EKE XV400	EKE XV500		
	Z control		W,X,Y control	Z control	-	-	-	-	-	-	-	-	-	-	-	-
1-phase	ERQ100	P	P	-	-	P	P	P	P	-	-	-	-	-	-	-
	ERQ125	P	P	-	-	P	P	P	P	P	-	-	-	-	-	-
	ERQ140	P	P	-	-	-	P	P	P	P	-	-	-	-	-	-
	ERQ125	P	P	-	-	P	P	P	P	P	-	-	-	-	-	-
3-phase	ERQ200	P	P	-	-	-	-	P	P	P	P	P	-	-	-	-
	ERQ250	P	P	-	-	-	-	-	P	P	P	P	-	-	-	-
	VRV III	-	-	n1	n1	n1	n1	n1	n1	n1	n1	n1	n1	n1	n1	Mandatory
	VRV IV H/P / VRV IV W-series / VRV IV S-series	-	P (1 -> 3)	n2	n2	n2	n2	n2	n2	n2	n2	n2	n2	n2	n2	Possible (not mandatory)
	VRV IV H/R / VRV IV i-series	-	-	n1	n1	n1	n1	n1	n1	n1	n1	n1	n1	n1	n1	Mandatory

- P (pair application): combination depends on the capacity of the air handling unit
- n1 (multi application) - Combination of AHUs and VRV DX indoors (mandatory). To determine the exact quantity please refer to the engineering data book.
- n2 (multi application) - Combination of AHUs and VRV DX indoors (not mandatory). To determine the exact quantity please refer to the engineering data book.
- Control box EKEQFA can be connected to some types of VRV IV outdoor units (with a maximum of 3 boxes per unit). Do not combine EKEQFA control boxes with VRV DX indoor units, RA indoor units or hydroboxes

Capacity table

Cooling

EKE XV Class	Allowed heat exchanger capacity (kW)			Allowed heat exchanger volume (dm ³)	
	Minimum	Standard	Maximum	Minimum	Maximum
50	5,0	5,6	6,2	1,33	1,65
63	6,3	7,1	7,8	1,66	2,08
80	7,9	9,0	9,9	2,09	2,64
100	10,0	11,2	12,3	2,65	3,30
125	12,4	14,0	15,4	3,31	4,12
140	15,5	16,0	17,6	4,13	4,62
200	17,7	22,4	24,6	4,63	6,60
250	24,7	28,0	30,8	6,61	8,25
400	35,4	45,0	49,5	9,26	13,2
500	49,6	56,0	61,6	13,2	16,5

Saturated evaporating temperature: 6°C
Air temperature: 27°C DB / 19°C WB

Heating

EKE XV Class	Allowed heat exchanger capacity (kW)			Allowed heat exchanger volume (dm ³)	
	Minimum	Standard	Maximum	Minimum	Maximum
50	5,6	6,3	7,0	1,33	1,65
63	7,1	8,0	8,8	1,66	2,08
80	8,9	10,0	11,1	2,09	2,64
100	11,2	12,5	13,8	2,65	3,30
125	13,9	16,0	17,3	3,31	4,12
140	17,4	18,0	19,8	4,13	4,62
200	19,9	25,0	27,7	4,63	6,60
250	27,8	31,5	34,7	6,61	8,25
400	39,8	50,0	55,0	9,26	13,2
500	55,1	63,0	69,3	13,2	16,5

Saturated condensing temperature: 46°C
Air temperature: 20°C DB

EKE XV - Expansion valve kit for air handling applications

Ventilation		EKE XV	50	63	80	100	125	140	200	250	400	500	
Dimensions	Unit	mm	401x215x78										
Weight	Unit	kg	2,9										
Sound pressure level Nom.		dBA	45										
Operation range	On coil	Heating Min.	°CDB										
	temperature	Cooling Max.	°CDB										
Refrigerant	Type / GWP		R-410A / 2.087,5										
Piping connections	Liquid	OD	mm	6,35	9,52							12,7	15,9

(1) The temperature of the air entering the coil in heating mode can be reduced to -5°CDB. Contact your local dealer for more information. (2) 45% Relative humidity.

EKEQ - Control box for air handling applications

Ventilation		EKEQ	FCBA	DCB	MCBA
Application			See note	Pair	Multi
Outdoor unit			ERQ / VRV	ERQ	VRV
Dimensions	Unit	mm	132x400x200		
Weight	Unit	kg	3,9	3,6	
Power supply	Phase/Frequency/Voltage	Hz/V	1~/50/230		

The combination of EKEQFCBA and ERQ is in pair application. The EKEQFCBA can be connected to some type of VRV IV outdoor units with a maximum of 3 control boxes. The combination with DX indoor units, hydroboxes, RA outdoor units, ... is not allowed. Refer to the combination table drawing of the outdoor unit for details.

Pair application selection

- › **the outdoor unit is connected to ONE COIL (with single circuit or maximum 3 interlaced circuits) using up to 3 control boxes**
- › **indoor unit combination is not allowed**
- › **only works with X, W, Y control**

Step 1: Required AHU capacity

An AHU with double flow, heat recovery and 100% fresh air is to be installed in Europe where the outdoor sizing temperature is 35 °CDB and the target supply air temperature for fresh air is 25 °CDB. Load calculations point to a required capacity of 45kW. By checking on the EKEXV capacity table, for cooling operation, 40kW falls within the 400 class valve. Since 40kW is not the nominal capacity, a class adjustment has to be done. $40/45=0,89$ and $0,89 \times 400=356$. So the capacity class of the expansion valve kit is 356.

Step 2: Outdoor unit selection

For this AHU, a VRV IV heat pump model with continuous heating is going to be used (RYYQ-T series). For a capacity of 40kW at 35 °CDB, an outdoor of 14HP (RYYQ14T). The capacity class of the 14 HP outdoor unit is 350.

Total connection ratio of the system is $356/350=102\%$ hence it falls within the range 90-110%.

Step 3: Control box selection

In this particular case, the control will work with precise air temperature control. Only W or X control allow this. Since the consultant wants to use an "off-the-shelf" DDC module, the EKEQFCBA box with W control allows easy set-up due to pre-set factory values.

Multi application selection

- › **the outdoor unit can be connected to MULTIPLE COILS (and their control boxes)**
- › **indoor units are also connectable but not mandatory**
- › **only works with Z control**

Step 1: Required AHU capacity

An AHU with double flow, heat recovery and 100% fresh air is to be installed in Europe where the outdoor sizing temperature is 35 °CDB and the target supply air temperature for fresh air is 25 °CDB. On top of this, for this building, 5 round-flow cassette units FXFQ50A will also be connected to this OU.

Load calculations point to a required capacity of 20kW for the AHU and 22,5 kW for the indoor units.

By checking on the EKEXV capacity table, for cooling operation, 20kW falls within the 200 class valve. Since 22,4 kW is the nominal capacity, a class adjustment has to be done. $20/22,4=0,89$ and $0,89 \times 200=178$. So the capacity class of the expansion valve kit is 178. Total capacity class of the indoor unit system is $178+250=428$

Step 2: Outdoor unit selection

For this system where a AHU is connected with indoor units, it is mandatory to use a heat recovery unit. By consulting the engineering databook for REYQ-T, the total required capacity of 42,5 kW requires a 16HP model REYQ16T. Which will deliver 45kW at the design temperature of 35 °CDB. This unit has a capacity class of 400. Total connection ratio of the system is $428/400=107\%$ hence it falls within the range 50-110%.

Step 3: Control box selection

In this particular case, the only available control is Z control and the combination of AHU and VRV DX indoor units requires EKEQMCBA control box.

Rooftop

- › Easy to install 'plug and play' concept plus single installation configuration; no additional piping is required since indoor and outdoor sides are pre-connected
- › High efficiency and reliable scroll compressor
- › Wide operating range
- › Flat top unit design allows maximum use of warehouse and container space
- › Free cooling and fresh air intake possible with optional economiser
- › Convertible return and supply air: fan can be mounted in two directions
- › Factory pre-charged refrigerant ensures clean and efficient operation
- › Belt driven fan enables air volume and static pressure to be adjusted as required.
- › Adjustable fan pulley as standard to meet a wide range of supply air volumes and external static pressures
- › Anti-corrosion treated coil



Indoor unit		UATYQ	250CY1	350CY1	450CY1	550CY1	600CY1	700CY1	900CY1		
Cooling capacity	Nom.	kW	27,34	35,58	44,72	55,69	66,82	72,60	93,10		
Heating capacity	Nom.	kW	24,91	34,79	41,79	53,93	61,69	69,61	87,90		
Power input	Cooling	Nom.	kW	8,14	10,78	13,04	16,74	19,65	21,61	28,47	
	Heating	Nom.	kW	7,33	10,84	12,86	15,54	18,58	21,42	27,90	
EER			3,36	3,30	3,43	3,33	3,40	3,36	3,27		
COP			3,40	3,21	3,25	3,47	3,32	3,25	3,15		
Evaporator	Air flow rate	Cooling	m ³ /min	93,6	121,8	160,2	189,6	206,7	235,02	271,84	
	External static pressure		Pa	147			206		206		
Evaporator piping connections	Condensation drain size	OD	mm						25,4	-	
Condenser	Dimensions	Unit	Height	mm	1.150	1.028	1.130	1.048	1.302	1.454	1.454
			Width	mm	1.638	2.113			2.209		2.209
			Depth	mm	2.063	2.670			2.670		2.670
Weight	Unit	kg	445	580	610	830	880	1.020	1.020		
Casing	Colour		Light grey								
Air flow rate	Cooling	cfm	8.230	12.000	12.100	12.900	20.200	21.200	-		
Operation range	Cooling	Min.~Max.	°CDB						0~52	-	
	Heating	Min.~Max.	°CWB						-15~18	-	
Sound pressure level	Nom.	dB(A)	68	64	65	68	70	70	70		
Sound power level	Nom.	dB(A)	82	83		87	90		90		
Refrigerant	Type		R-410A						R-410A		
	GWP		2.087,5						2.087,5		
	Charge	TCO _{eq}	12,7	12,1	15	18,2	21,7	24,2	-		
		kg	6,1	5,8	7,2	8,7	10,4	11,6	-		
Power supply	Phase/Frequency/Voltage	Hz/V	3~/50/380-415						3~/50/380-415		

(1) All units are being tested and comply to ISO5151. (2) Sound pressure levels are measured according to JIS B 8616 standard (3) All performance calculations are strictly according to Eurovent standard

Economiser option

Indoor unit		ECONO	250AY1	350AY1	450AY1	550AY1	600AY1	700AY1	900AY1		
Dimensions	Packed unit	Height	mm						534	534	
		Width	mm	1.440	1.430		1.458		1.460		
		Depth	mm	1.144	1.124		1.564		1.682		
Weight	Unit	kg	51	42	43	53	54	69	78		
Packing	Weight	kg	152	140	141	165	166	181	-		
Fan	Air flow rate	Cooling	Nom.	l/s	1.560	2.030	2.670	3.160	3.445	3.917	4.553
			cfm	3.300	4.300	5.650	6.700	7.300	8.300	9.600	
Power supply	Voltage	V	24 DC						24 DC		
Option for			UATYQ250CY1	UATYQ350CY1	UATYQ450CY1	UATYQ550CY1	UATYQ600CY1	UATYQ700CY1	UATYQ900CY1		
Test Standard			ISO 13253						ISO 13253		

*Note: blue cells contain preliminary data

Rooftop

- › Easy to install 'plug and play' concept plus single installation configuration; no additional piping is required since indoor and outdoor sides are pre-connected
- › Factory pre-charged refrigerant ensures clean and efficient operation
- › Belt driven fan enables air volume and static pressure to be adjusted as required.
- › Flat top unit design allows maximum use of warehouse and container space
- › High efficiency and reliable scroll compressor
- › Anti-corrosion treated coil



Indoor unit		UATYP		C10AY1		C10AY1		
Cooling capacity	Nom.	kW		101,11		109,61		
Heating capacity	Nom.	kW		102,29		126,31		
Power input	Cooling	Nom.	kW	43,17		48,20		
	Heating	Nom.	kW	41,67		46,80		
EER				2,34		2,27		
COP				2,45		2,70		
Evaporator	Air flow rate	Cooling	m ³ /min	312		354		
	External static pressure			Pa				
Evaporator piping connections	Condensation drain size	OD	mm					
Condenser	Dimensions	Unit	Height	mm		1.974		
			Width	mm		2.252		
			Depth	mm		3.180		
Weight	Unit		kg	1.510		1.600		
Casing	Colour							
	Material			Electro-galvanised mild steel				
Air flow rate	Cooling		cfm	20.000				
Operation range	Cooling	Min.~Max.	°CDB					
	Heating	Min.~Max.	°CWB					
Sound power level	Nom.			dBA				
Refrigerant	Type							
	GWP							
	Charge	TCO ₂ eq	kg		23,9		35,5	
Power supply	Phase/Frequency/Voltage			Hz/V		3~/50/380-415		
						13,5 / 20,0		20,0

(1) All units are being tested and comply to ISO5151. (2) Sound pressure levels are according to JIS B 8615 standard. Position of the measurement is 1m in front and 1m below the unit. (3) Designation based on cooling cycle.

Market leading controls

- ✓ INTUITIVE & USER-FRIENDLY INTERFACE
- ✓ CROSS PILLAR INTEGRATION
- ✓ CLOUD CONTROL
- ✓ SMART ENERGY MANAGEMENT
- ✓ INTEGRATION OF DAIKIN AND THIRD PARTY PRODUCTS



Intelligent ^{Touch} Manager

Mini BMS for medium to large commercial buildings

- › Price competitive mini BMS
- › Cross-pillar integration of Daikin products
- › Integration of third party equipment via WAGO or BACnet/IP
- › Connect up to 512 indoor units groups

→ [more information on page 174](#)



Intelligent ^{Tablet} Controller

Advanced centralised controller with Cloud connection

- › Simply control your entire building centrally
- › Total solution concept (integration of Split, Sky Air, VRV, ventilation, air curtains and hot water)
- › Stylish optional screen fits any interior
- › Cloud connection offers additional services such as online control, energy monitoring, comparison of energy consumption of multiple sites
- › Connect up to 32 indoor units




→ [more information on page 172](#)

Find out more on
<http://www.daikineurope.com/commercial/needs/controls>



Control Systems

Control Systems

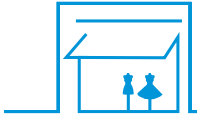
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Requirement tables per application

Daikin offers various control solution adapted to the requirements of even the most demanding commercial application.

- > Basic control solutions for those customers with few requirements and limited budget
- > Integrating control solutions for those customers that would like to integrate Daikin units into their existing BMS system
- > Advanced control solutions for those customers that expect Daikin to deliver a mini BMS solution, including advance energy management

Shop



	Unit control		Integrating control			Advanced control	
	BRC1E53A/B/C	RTD-20	RTD-Net	KLIC-DI	EKMBDXA	DCC601A51	DCM601A51
	1 remote controller for 1 indoor unit (group)	1 gateway for 1 indoor unit (group)	1 gateway for 1 indoor unit (group)	1 gateway for 1 indoor unit	1 gateway for max. 64 indoor unit(s) (groups) & 10 outdoors	1 unit for 32 indoor unit(s)	1 iTM for 64 indoor unit(s) (groups) (1)
Automatic control of A/C	●	●	●	●	●	●	●
Limit control possibilities for shop staff	●	●	●	●	●	●	●
Create zones within the shop		●				●	●
Interlock with eg. Alarm, PIR sensor		●				● (limited)	●
Integrate Daikin units into existing BMS via Modbus			●		●		
Integrate Daikin units into existing BMS via KNX				●			
Integrate Daikin units into existing BMS via HTTP							●
Monitor energy consumption	● (4)					● (2)	●
Advanced energy management						● (2)	●
Allows free cooling						●	●
Integrate Daikin products cross pillars into Daikin BMS							●
Integrate third party products into Daikin BMS						●	●
Online control						● (2)	●
Manage multiple sites						● (2)	● (3)

(1) 7 iTM plus adapters (DCM601A52) can be added to have 512 indoor groups and 80 outdoor (systems) (2) Via Daikin cloud service (3) Through own IT set-up (not Daikin cloud server) (4) Not available on all indoors

Hotel



	Unit control	Integrating control		Advanced control	
	BRC2/3E52C	RTD-HO	KLIC-DI	DCS601C51	DCM601A51
	1 remote controller for 1 indoor unit (group)	1 gateway for 1 indoor unit (group)	1 gateway for 1 indoor unit	1 iTC for 64 indoor unit(s) (groups)	1 iTM for 64 indoor unit(s) (groups) (1)
Hotel guest can control & monitor basic functionalities from his room	●	●	● (3)	●	●
Limit control possibilities for hotel guests	●	●	●	●	●
Interlock with window contact	● (2)	●			●
Interlock with key-card	● (2)	●			●
Integrate Daikin units into existing BMS via Modbus		●			
Integrate Daikin units into existing BMS via KNX			●		
Integrate Daikin units into existing BMS via HTTP				●	●
Monitor energy consumption					●
Advanced energy management					●
Integrate Daikin products cross pillars into Daikin BMS					●
Integrate third party products into Daikin BMS					●
Online control					●

(1) : 7 iTM plus adapters (DCM601A52) can be added to have 512 indoor groups and 80 outdoor (systems) (2) Via BRP7A51 adapter (3) requires KNX compatible controller

Office



	Unit control	Integrating control			Advanced control	
	BRC1E53A/B/C	EKMBDXA	DMS504B51	DMS502A51 / DAM412B51	DCC601A51	DCM601A51
	1 remote controller for 1 indoor unit (group)	1 gateway for max. 64 indoor unit(s) (groups) & 10 outdoors	1 gateway for 64 indoor unit(s) (groups)	1 gateway for 128 indoor unit(s) (groups), 20 outdoors (2)	1 unit for 32 indoor unit(s) (groups)	1 iTM for 64 indoor unit(s) (groups) (1)
Automatic control of A/C	●	●	●	●	●	●
Centralised control for management		●	●	●	●	●
Local control for office workers	●	●	●	●	●	●
Limit control possibilities for office workers	●				●	●
Integrate Daikin units into existing BMS via Modbus		●				
Integrate Daikin units into existing BMS via HTTP					●	●
Integrate Daikin units into existing BMS via LonTalk			●			
Integrate Daikin units into existing BMS via BACnet				●		
Energy consumption read out	●					
Monitor energy consumption					● (4)	●
Advanced energy management					● (4)	●
Integrate Daikin cross pillar products into Daikin BMS						●
Integrate third party products into Daikin BMS					●	●
Online control					● (4)	●
Manage multiple sites					● (4)	● (5)

(1) 7 iTM plus adapters (DCM601A52) can be added to have 512 indoor groups and 80 outdoor (systems) (2) extension needed to go to 256 indoor unit(s) (groups), 40 outdoors (3) ON/OFF only (4) Via Daikin cloud service (5) Through own IT set-up (not Daikin cloud sever)

NEW

Infrastructure cooling



	Unit	Integrating		Advanced
	BRC1E53A/B/C	RTD-10	DTA113B51	DCM601A51
	1 remote controller for 1 indoor unit (group) (2)	1 gateway for 1 indoor unit (group) Up to 8 gateways can be linked together	1 adapter for op to 4 units	1 iTM for 64 indoor unit(s) (groups) (1)
Automatic control of A/C	●	●	●	●
Back-up operation	●	●	●	●
Duty rotation	●	●	●	●
Limit control possibilities in the technical cooling room	●	●		●
If room temperature above max., then show alarm & start standby unit.		●		●
If an error occurs, an alarm will be shown.	●	●		●
If an error occurs, activate an alarm output	Via KRP2/4A option (3)	●		Via WAGO I/O

(1): 7 iTM plus adapters (DCM601A52) can be added to have 512 indoor groups and 80 outdoor (systems) (2) Infrastructure cooling functions only compatible with indoor units connected to Seasonal Smart outdoor units. (3) See option list of indoor unit

Individual control systems

ARC4*/BRC4*/BRC7*

Infrared remote control



ARC466A1

BRC4*/BRC7*

Operation buttons: ON/OFF, timer mode start/stop, timer mode on/off, programme time, temperature setting, air flow direction (1), operating mode, fan speed control, filter sign reset (2), inspection (2)/test indication (2)

Display: Operating mode, battery change, set temperature, air flow direction (1), programmed time, fan speed, inspection/test operation (2)

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

BRC073

Wired remote control for Split



BRC073

- › User friendly remote control with contemporary design
- › Easy to use: all main functions directly accessible
- › Easy commissioning: intuitive interface for advanced menu settings
- › Optimise your air conditioning system by activating a series of energy saving functions (temperature range limit, setback function, off timer, ...)
- › Set up to 3 independent schedules, so the user can easily change the schedule himself throughout the year (e.g. summer, winter, mid-season)
- › Real time clock with auto update to daylight saving time
- › Supports multiple languages (English, German, French, Italian, Spanish, Portuguese, Dutch, Czech, Croatian, Hungarian, Slovenian, Romanian, Bulgarian, Russian, Greek, Turkish, Polish, Serbian and Slovak) (depending on language package)
- › Possibility to individually restrict menu functions
- › Possibility to individually restrict each button
- › Possibility to individually restrict each operation mode (Cooling, Heating, Auto, etc.)
- › When a power failure occurs all settings remain stored up to 48 hours thanks to the built-in backup power and the clock remains running
- › Setback operation maintains the indoor temperature at your specified comfort level during absence, thus saving energy

Note : Cable for wired remote control BRCW901A03 (3m) or BRC-W901A08 (8m) required

BRC1D52

Wired remote control for Sky Air and VRV



- › Schedule timer:
 - Five day actions can be set as follows:
 - set point: unit is switched ON and normal operation is maintained
 - OFF: unit is switched OFF1
 - 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
- › 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

NEW BRC1E53A/B/C

User friendly remote control with contemporary design for Sky Air and VRV



Graphical display of indicative electricity consumption (Function available in combination with FBQ-D, FCQG and FCGHQ)

A series of energy saving functions that can be individually selected

- > **NEW** Demand control: decreases the power consumption to 70 or 40 % when other large appliances need to be switched on (1)
- > Temperature range limit
- > Setback function
- > Presence & floor sensor connection (available on round flow and fully flat cassette)
- > kWh indication
- > Set temperature auto reset
- > Off timer

Temperature range limit avoids excessive heating or cooling

Save energy by constraining the lower temperature limit in cooling and upper temperature limit in heating mode.

note : Also available in auto cooling/heating change over mode.

kWh indication keeps track of your consumption (2)

The kWh indication shows an indicative electricity consumption of the last day/month/year.

Other functions

- > Up to 3 independent schedules can be set, so the user can easily change the schedule himself throughout the year (e.g. Summer, winter, mid-season)
- > Possibility to individually restrict menu functions Easy to use: all main functions directly accessible
- > **NEW** Choice of display between symbol or text
- > Easy setup: clear graphical user interface for advanced menu settings
- > **NEW** Remote control save mode : screen turns off when no person is changing mode or adjusting settings
- > **NEW** Selection of quiet mode function for the outdoor unit (1)
- > Real time clock with auto update to daylight saving time
- > Built-in backup power: when a power failure occurs all settings remain stored up to 48 hours
- > Supports multiple languages:
 - BRC1E53A: English, German, French, Dutch, Spanish, Italian, Portugese
 - BRC1E53B: English, Czech, Croatian, Hungarian, Romanian, Slovenian, Bulgarian
 - BRC1E53C: English, Greek, Russian, Turkish, Polish, Slovak, Albanian



Cost-effective solution for infrastructure cooling applications

- > Only in combination with RZQG*
- > Duty rotation

After a certain period of time, the operating unit will go into standby and the standby unit will take over, increasing lifetime of the system
Rotation interval can be set from 6h, 12h, 24h, 72h, 96h, weekly

- > Back-up operation: if one unit fails, the other unit will automatically start

(1) Only available on Seasonal Smart RZQG*, RZAG* and Seasonal classic RZQSG*

(2) For Sky Air FBQ-D, FCQG and FCQHG pair combinations only

BRC2E52A / BRC3E52A

Simplified wired remote control developed for hotel applications



BRC2E52C

With operation mode selector



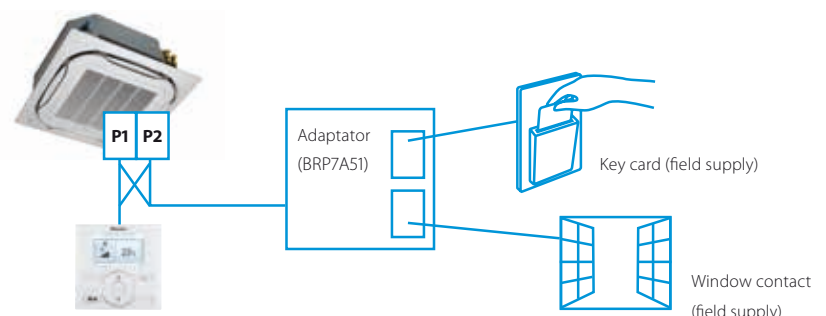
BRC3E52C

Without operation mode selector

- > Symbol driven interface for intuitive control
- > Functions restricted to basic customer needs
- > Contemporary design
- > Energy saving thanks key card, window contact integration and set point limitation (BRP7A51)
- > Flexible setback function ensures room temperature remains within comfortable limits to ensure guest comfort

- > Flat backpanel for easy installation
- > Easy commissioning: intuitive interface for advanced menu settings
- > 2 versions available:
 - BRC3E52C: temperature, fan speed, ON/OFF
 - BRC2E52C: temperature, mode, fan speed, ON/OFF

Key card and window contact integration



Centralised control systems

Centralised control of the Sky Air and VRV system can be achieved via 3 user friendly compact remote controllers. These controls may be used independently or in combination with 1 group = several (up to 16) indoor units in combination and 1 zone = several groups in combination.

A centralised remote control is ideal for use in tenanted commercial buildings subject to random occupation, enabling indoor units to be classified in groups per tenant (zoning).

The schedule timer programmes the schedule and operation conditions for each tenant and the control can easily be reset according to varying requirements.

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
- › malfunction code display
- › maximum wiring length of 1,000m (total: 2,000m)
- › air flow direction and air flow rate of HRV can be controlled
- › expanded timer function

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
- › a maximum wiring length of 1,000m (total: 2,000m)

DCS301B51

Unified ON/OFF control



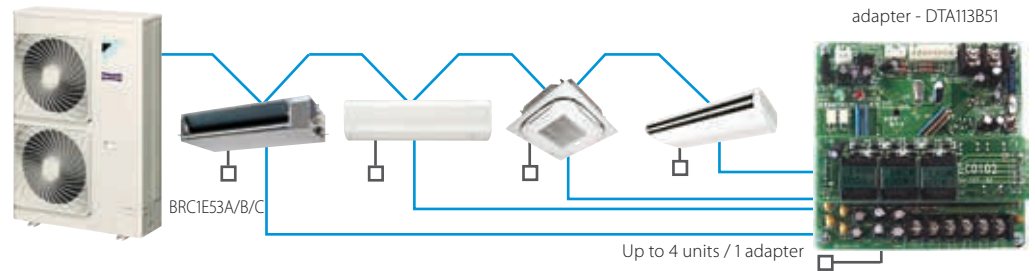
Providing simultaneous and individual control of 16 groups of indoor units.

- › 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)

DTA113B51

Basic solution for control of Sky Air and VRV

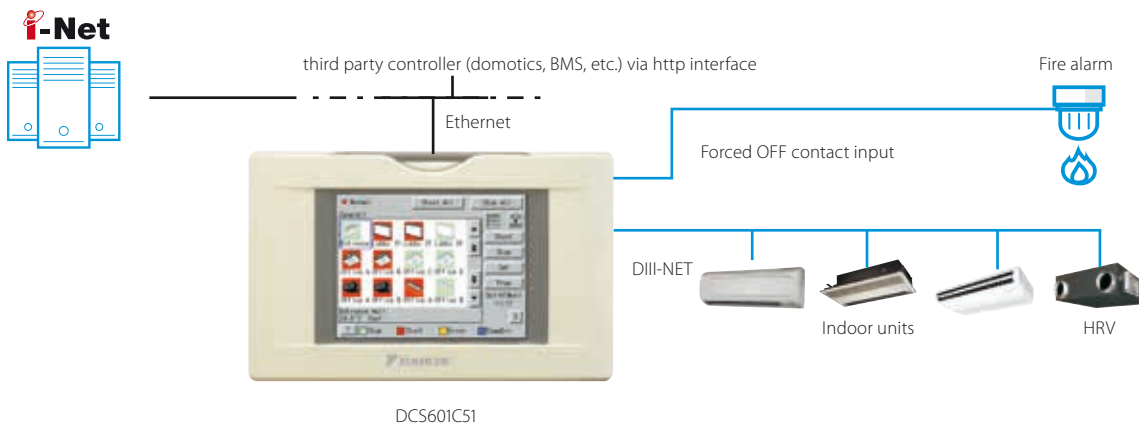
- › Rotation function
- › Backup operation function.



Intelligent Controller

DCS601C51

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



Languages

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

System layout

- › Up to 64 indoor units can be controlled
- › Touch panel (full colour LCD via icon display)

Control

- › Individual control (set point, start/stop, fan speed) (max. 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
- › 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 DCS007A51)

Connectable to

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

Advanced centralised controller with Cloud connection

- Intuitive and user-friendly interface
- Flexible concept for stand alone and multi site applications
- Total solution thanks to integration of 3rd party equipment
- Monitor & control your small commercial building, no matter where you are

2 solutions:

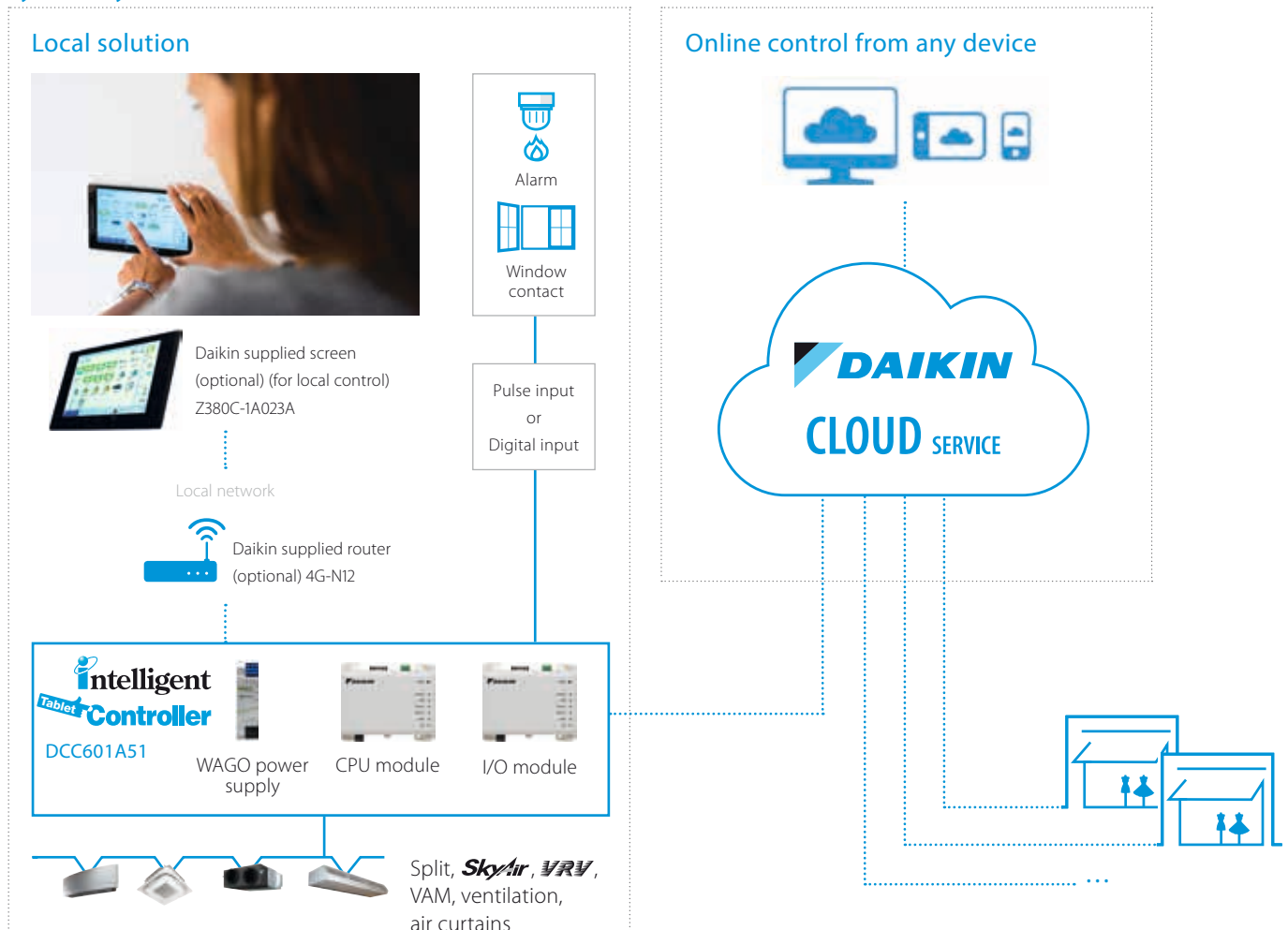
Local solution

- › Offline centralised control
- › Stylish optional screen fits any interior

Cloud solution

- › Flexible online control from any device (Laptop, tablet...)
- › Monitor & control one or multiple sites
- › Benchmark the energy consumption of different installations (1)
- › Energy consumption follow-up to comply with local regulations

System layout



(1) For VRV

Total solution

- › Total solution thanks to a large integration of Daikin products and 3rd party equipment
- › Connect a wide range of units (Split, Sky Air, VRV, Ventilation, Biddle air curtains)
- › Simply control your entire building centrally
- › Increased customer shopping experience by better management of your shop comfort level

Daikin Cloud Services

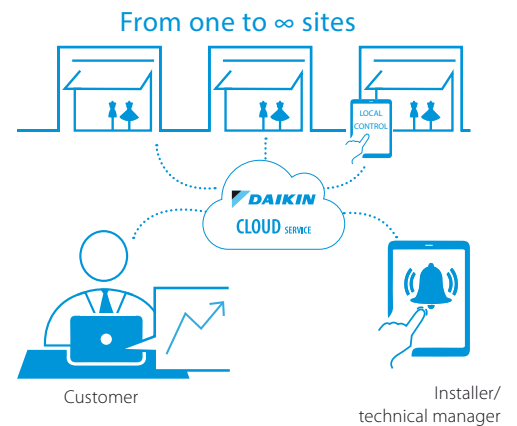
- › Control your building no matter where you are
- › Monitor and control multiple sites
- › Installer or technical manager can remotely login to the cloud for first troubleshooting
- › Benchmark the energy consumption of different installations (1)
- › Manage & track your energy use

User friendly touch control

- › Stylish Daikin supplied optional screen for local control fits any interior
- › Intuitive and user-friendly interface
- › Full solution with simple control
- › Easy commissioning

Flexible

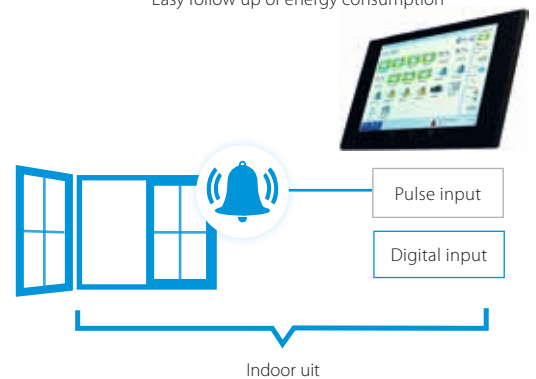
- › Inputs via digital and pulse input for 3rd party equipment such as kWh meters, emergency input, window contact, ...
- › Modular concept allows your cloud to grow with your business
- › Control up to 32 indoor unit (groups)



Intuitive control from the cloud



Easy follow up of energy consumption



Functions overview

		Local solution	Cloud solution
Languages		Depends on local device	EN, DE, FR, NL, ES, IT, EL, PT, RU, TR, DA, SV, NO, FI, CS, HR, HU, PL, RO, SL, BG, SK
System layout	N° of connectable indoor units	32	32
	Multiple sites control		●
Monitoring & control	Basic control functions (ON/OFF, mode, filter sign, setpoint, fan speed, ventilation mode, room temperature, ...)	●	●
	Remote control prohibition	●	●
	All devices ON/OFF	●	●
	Zone control		●
	Group control	●	●
	Weekly schedule	●	●
	Yearly schedule		●
	Interlock control	●	●
	Set point limitation		●
	Visualisation of energy use per operation mode		●
Connectable to	DX split, Sky Air, VRV	●	●
	VAM, VKM ventilation	●	●
	Air curtains	●	●

For available Daikin Cloud Service options refer to the option list

Mini BMS

with full integration
across all product pillars

DCM601A51



- Price competitive mini BMS
- Cross-pillar integration of Daikin products
- Integration of third party equipment



NEW

Download the WAGO
selection tool from
my.daikin.eu

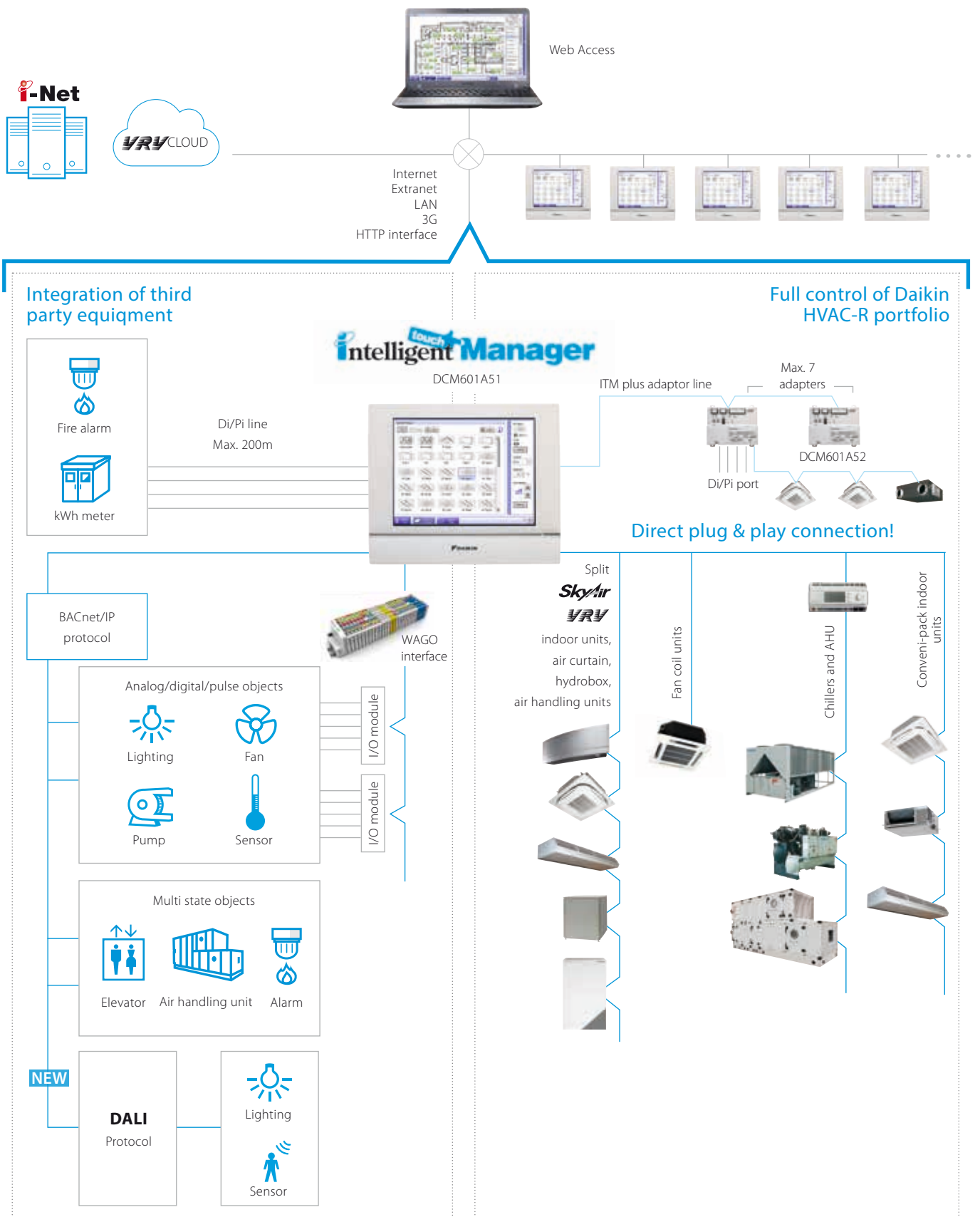
- › Easy selection of WAGO materials
- › Material list creation
- › Time saving
 - Includes wiring schemes
 - Contains commissioning/preset data for iTM



Check on
You Tube

[https://www.youtube.com/
DaikinEurope](https://www.youtube.com/DaikinEurope)

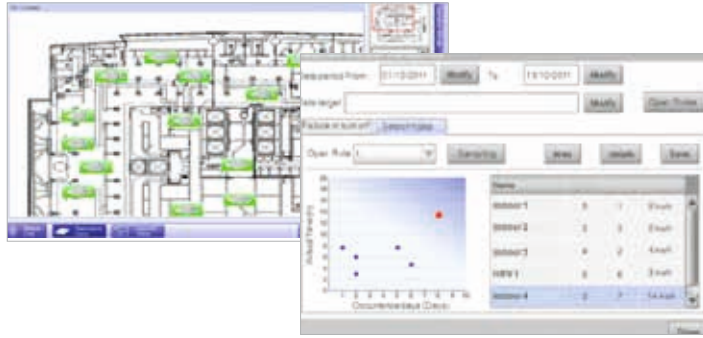
System overview





User friendliness

- › Intuitive user interface
- › Visual lay out view and direct access to indoor unit main functions
- › All functions direct accessible via touch screen or via web interface



Smart energy management

- › Monitoring if energy use is according to plan
- › Helps to detect origins of energy waste
- › Powerful schedules guarantee correct operation throughout the year
- › Save energy by interlocking A/C operation with other equipment such as heating

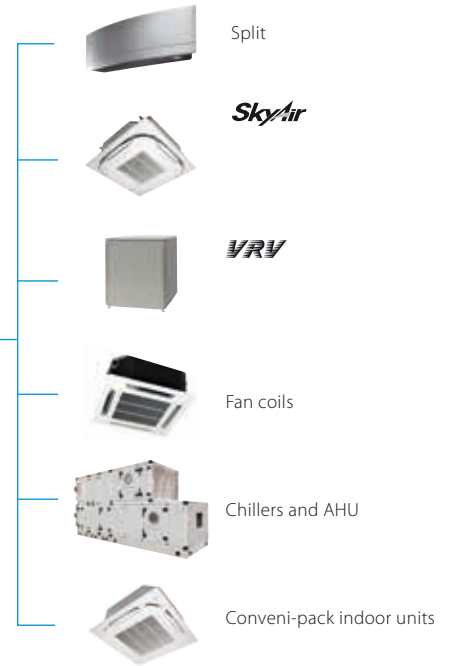
Flexibility

- › Cross-pillar integration (heating, air conditioning, applied systems, refrigeration, air handling units)
- › BACnet protocol for 3rd party products integration
- › I/O for integration of equipment such as lights, pumps... on WAGO modules
- › Modular concept for small to large applications
- › Control up to 512 indoor unit groups via one ITM and combine multiple ITM via web interface

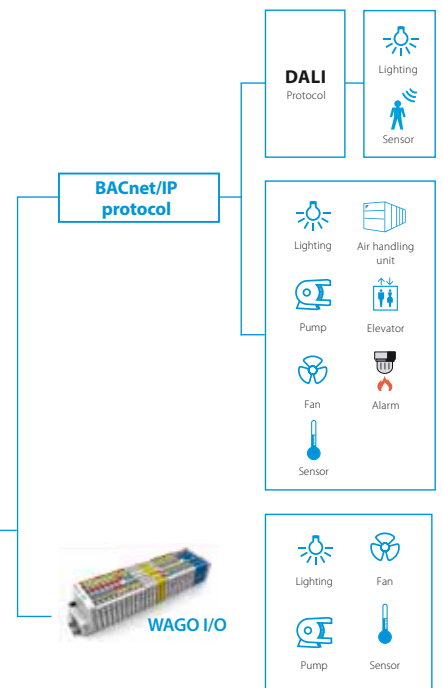
Easy servicing and commissioning

- › Remote refrigerant containment check reducing on site visit
- › Simplified troubleshooting
- › Save time on commissioning thanks to the pre-commissioning tool
- › Auto registration of indoor units

Plug & play



Flexibility in size
64 up to 512 groups



Functions overview

Languages

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

Management

- › Web access
- › Power Proportional Distribution (option)
- › Operational history (malfunctions, ...)
- › Smart energy management
 - monitor if energy use is according to plan
 - detect origins of energy waste
- › Setback function
- › Sliding temperature

WAGO Interface

- › Modular integration of 3rd party equipment
 - WAGO coupler (interface between WAGO and iTM)
 - Di module
 - Do module
 - Ai module
 - Ao module
 - Thermistor module
 - Pi module

Open http interface

- › Communication to any third party controller (domotics, BMS, etc.) is possible via http open interface (http option DCM007A51)

System layout

- › Up to 512 unit groups can be controlled (ITM + 7 iTM Plus adapters)

Control

- › Individual control (512 groups)
- › Schedule setting (Weekly schedule, yearly calendar, seasonal schedule)
- › Interlock control
- › Setpoint limitation
- › Temperature limit

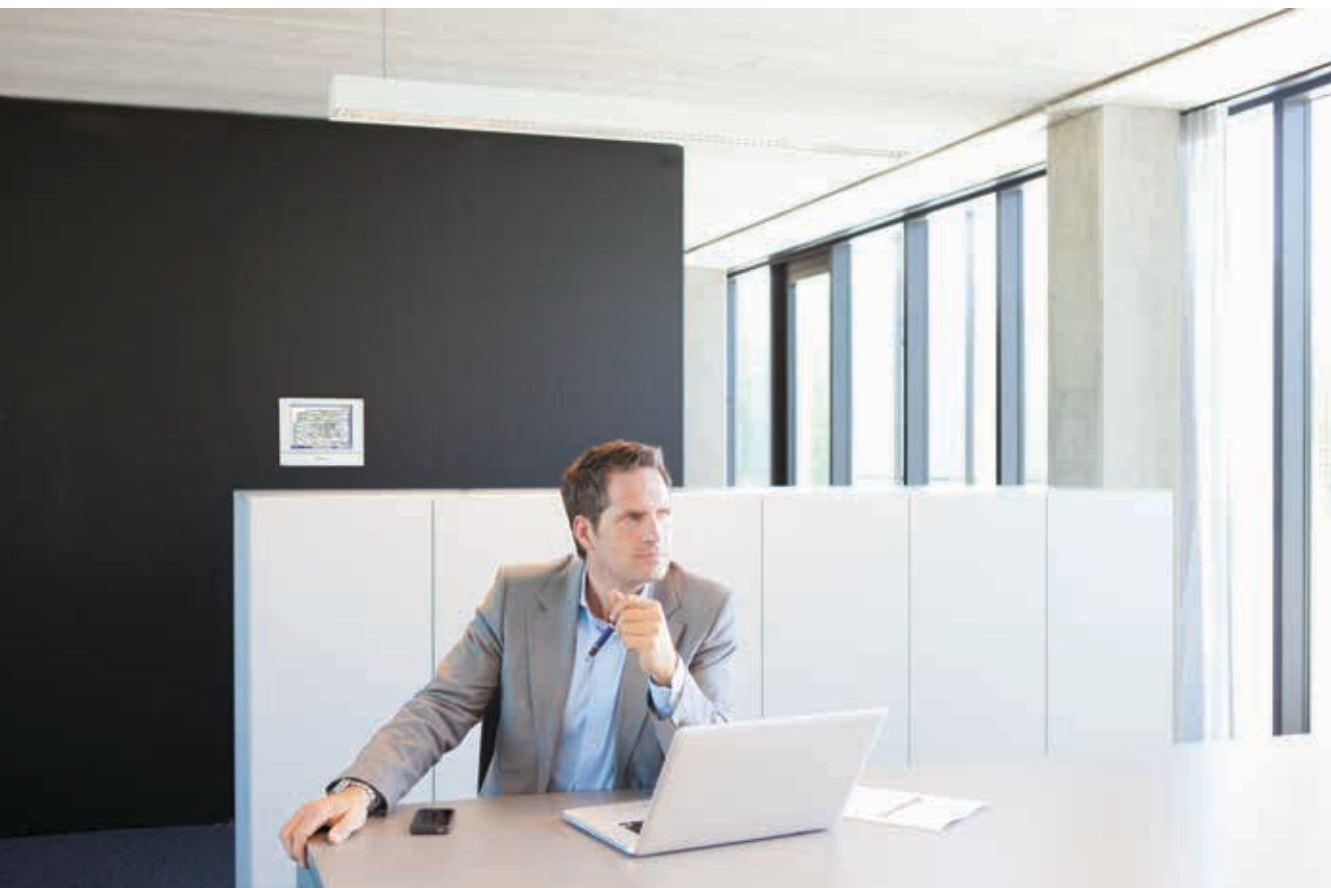
NEW

DALI integration

- › Control and monitor the lights
- › Easier facility management: receive error signal when light or light controller has a malfunction
- › Flexible approach and less wiring needed, compared to classic light scheme
- › Easier to make groups and control scenes
- › Connection between intelligent Touch Manager and DALI through WAGO BACnet IP interface

Connectable to

- DX Split, Sky Air, VRV
- Chillers (via MT3-EKMBACIP controller)
- Daikin AHU
- Fan coils
- Daikin Altherma Flex type
- LT and HT hydroboxes
- Biddle Air curtains
- WAGO I/O
- BACnet/IP protocol



Modbus Interface

RTD

RTD-RA

- › Modbus interface for monitoring and control of residential indoor units

RTD-NET

- › Modbus interface for monitoring and control of Sky Air, VRV, VAM and VKM

RTD-10

- › Advanced integration into BMS of Sky Air, VRV, VAM and VKM through either:
 - Modbus
 - Voltage (0-10V)
 - Resistance
- › Duty/standby function for server rooms

RTD-20

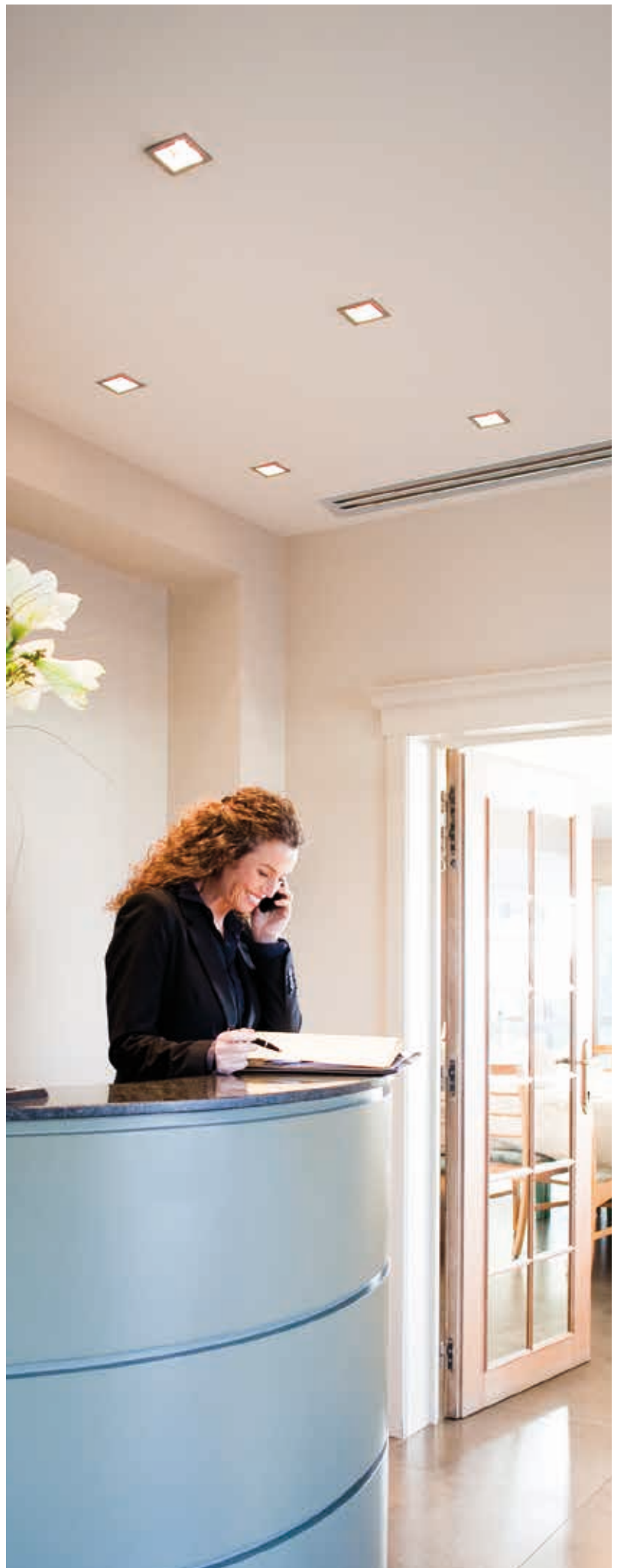
- › Advanced control of Sky Air, VRV, VAM/VKM and air curtains
- › Clone or independent zone control
- › Increased comfort with integration of CO₂ sensor for fresh air volume control
- › Save on running costs via
 - pre/post and trade mode
 - set point limitation
 - overall shut down
 - PIR sensor for adaptive deadband

RTD-HO

- › Modbus interface for monitoring and control of Sky Air, VRV, VAM and VKM
- › Intelligent hotel room controller

RTD-W

- › Modbus interface for monitoring and control of Daikin Altherma Flex Type, VRV HT hydrobox and small inverter chiller



Overview functions



Main functions			RTD-RA	RTD-NET	RTD-10	RTD-20	RTD-HO
Dimensions	H x W x D	mm	80 x 80 x 37,5			100 x 100 x 22	
Key card + window contact							✓
Set back function			✓				
Prohibit or restrict remote control functions (setpoint limitation, ...)			✓	✓	✓	✓**	✓
Modbus (RS485)			✓	✓	✓	✓	✓
Group control			✓(1)	✓	✓	✓	✓
0 - 10 V control					✓	✓	
Resistance control					✓	✓	
IT application			✓		✓	✓	
Heating interlock					✓	✓	
Output signal (on/defrost, error)					✓	✓****	✓
Retail application						✓	
Partitioned room control						✓	
Air curtain				✓***	✓***	✓	

(1): By combining RTD-RA devices

Control functions	RTD-RA	RTD-NET	RTD-10	RTD-20	RTD-HO
On/Off	M,C	M	M,V,R	M	M*
Set point	M	M	M,V,R	M	M*
Mode	M	M	M,V,R	M	M*
fan	M	M	M,V,R	M	M*
Louver	M	M	M,V,R	M	M*
HRV Damper control	M	M	M,V,R	M	M*
Prohibit/Restrict functions	M	M	M,V,R	M	M*
Forced thermo off	M				

Monitoring functions	RTD-RA	RTD-NET	RTD-10	RTD-20	RTD-HO
On/Off	M	M	M	M	M
Set point	M	M	M	M	M
Mode	M	M	M	M	M
fan	M	M	M	M	M
Louver	M	M	M	M	M
RC temperature		M	M	M	M
RC mode		M	M	M	M
nbr units		M	M	M	M
Fault	M	M	M	M	M
Fault code	M	M	M	M	M
Return air temperature (Average /Min/Max)	M	M	M	M	M
Filter alarm		M	M	M	M
Thermo on	M	M	M	M	M
Defrost		M	M	M	M
Coil In/Out temperature	M	M	M	M	M



Main functions			RTD-W
Dimensions	H x W x D	mm	100x100x22
On/off prohibition			✓
Modbus RS485			✓
Dry contact control			✓
Output signal (operation error)			✓
Space heating / cooling operation			✓
Domestic hot water control			✓
Smart Grid control			

Control functions	RTD-W
On/Off Space heating/cooling	M,C
Set point leaving water temperature (heating / cooling)	M,V
Room temperature setpoint	M
Operation mode	M
Domestic Hot water ON	
Domestic Hot Water reheat	M,C
Domestic Hot Water reheat setpoint	
Domestic Hot Water storage	M
Domestic Hot Water Booster setpoint	
Quiet mode	M,C
Weather dependent setpoint enable	M
Weather dependent curve shift	M
Fault/pump info relay choice	
Control source prohibition	M

Smart grid mode control	RTD-W
Prohibit Space heating/cooling	
Prohibit DHW	
Prohibit Electric heaters	
Prohibit All operation	
PV available for storage	
Powerful boost	

Monitoring functions	RTD-W
• On/Off Space heating/cooling	• M,C
• Set point leaving water temperature (H/C)	• M
• Room temperature setpoint	• M
• Operation mode	• M
• Domestic Hot Water reheat	• M
• Domestic Hot Water storage	• M
• Number of units in the group	• M
• Average leaving water temperature	• M
• Remocon room temperature	• M
• Fault	• M,C
• Fault code	• M
• Circulation pump operation	• M
• Flow rate	
• Solar pump operation	
• Compressor status	• M
• Desinfection operation	• M
• Setback operation	• M
• Defrost/ start up	• M
• Hot start	
• Booster Heater operation	
• 3-Way valve status	
• Pump running hours accumulated	• M
• Compressor running hours accumulated	
• Actual leaving water temperature	• M
• Actual return water temperature	• M
• Actual DHW tank temperature (*)	• M
• Actual refrigerant temperature	
• Actual outdoor temperature	• M

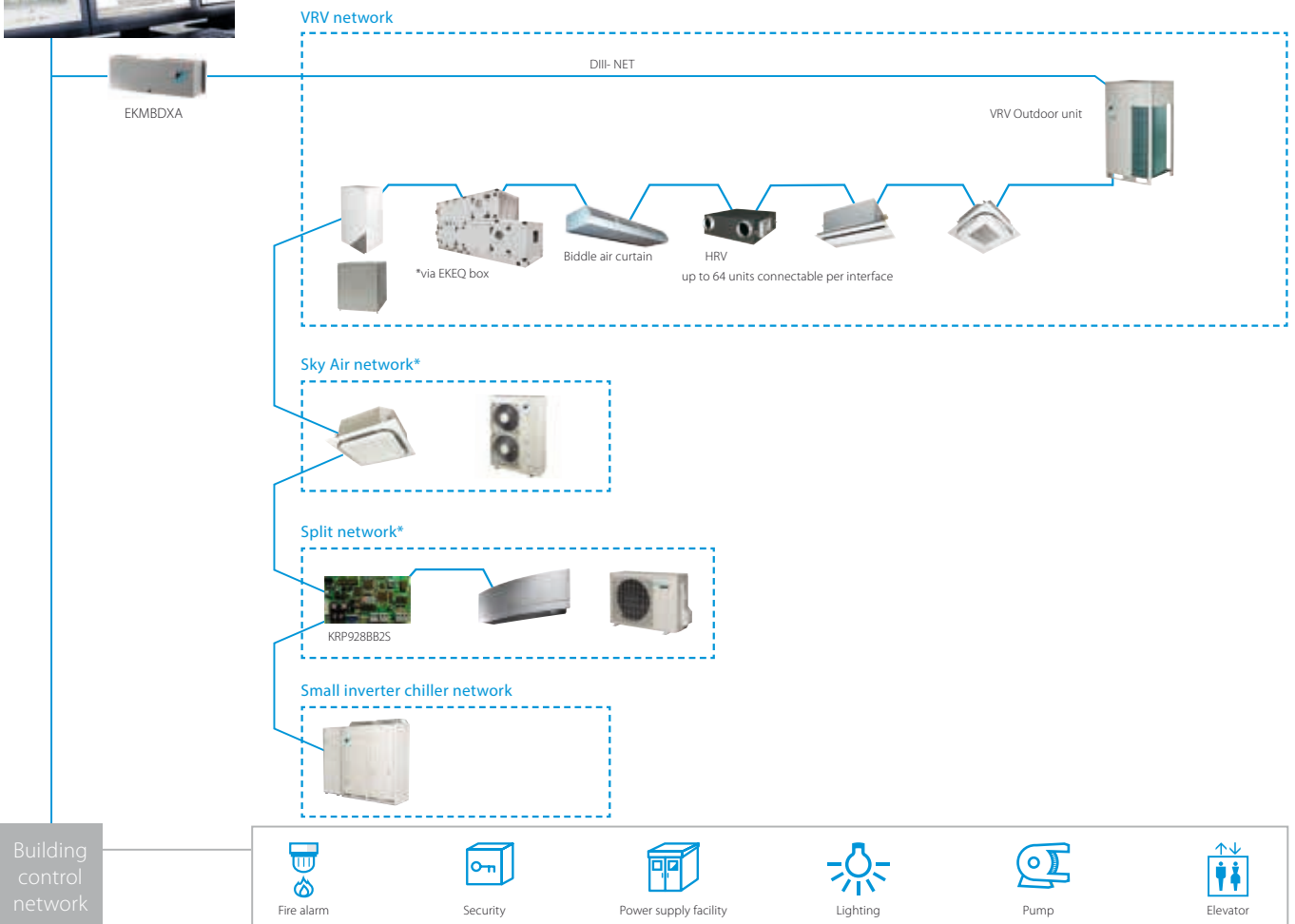
M : Modbus / R : Resistance / V : Voltage / C: control
 * : only when room is occupied / ** : setpoint limitation / (*) if available
 *** : no fan speed control on the CVY air curtain / **** : run & fault

DIII-net Modbus interface

EKMBDXA

Integrated control system for seamless connection between Split, Sky Air, VRV and small inverter chillers and BMS systems

- > Communication via Modbus RS485 protocol
- > Detailed monitoring and control of the VRV total solution
- > Easy and fast installation via DIII-net protocol
- > As the Daikin DIII-net protocol is being used, only one modbus interface is needed for a group of Daikin systems (up to 10 outdoor unit systems).



* Additional centralized controller might be required. For more information contact your local dealer.

		EKMBDXA7V1		
Maximum number of connectable indoor units		64		
Maximum number of connectable outdoor units		10		
Communication	DIII-NET - Remark	DIII-NET (F1F2)		
	Protocol - Remark	2 wire; communication speed: 9600 bps or 19200 bps		
	Protocol - Type	RS485 (modbus)		
	Protocol - Max. Wiring length	m	500	
Dimensions	HeightxWidthxDepth	mm	124x379x87	
Weight		kg	2,1	
Ambient temperature - operation	Max.	°C	60	
	Min.	°C	0	
Installation			Indoor installation	
Power supply	Frequency	Hz	50	
	Voltage	V	220-240	

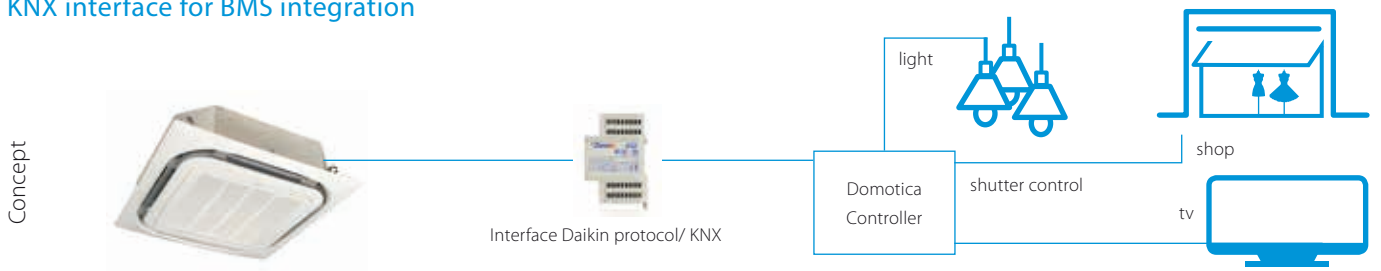
KNX interface

KLIC-DD
KLIC-DI

Integration of Split, Sky Air and VRV in HA/
BMS systems
Connect split indoor units to KNX interface
for Home Automation system



Connect Sky Air / VRV indoor units to
KNX interface for BMS integration





KNX interface line-up

The integration of Daikin indoor units through the KNX interface allows monitoring and control of several devices, such as lights and shutters, from one central controller. One particularly important feature is the ability to programme a 'scenario' - such as "Home leave" - in which the end-user selects

a range of commands to be executed simultaneously once the scenario is selected. For instance in "Home leave", the air conditioner is off, the lights are turned off, the shutters are closed and the alarm is on.

KNX interface for

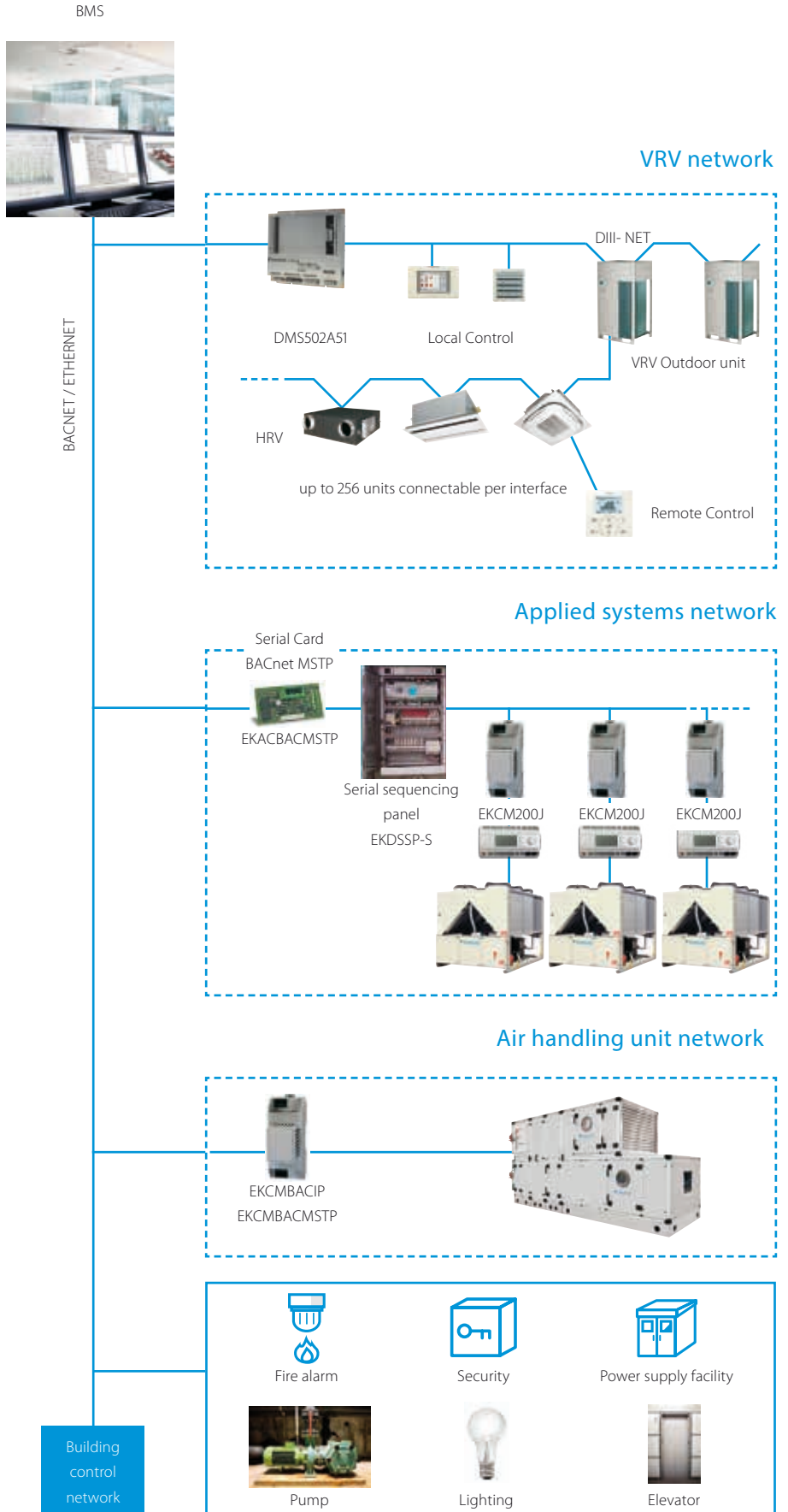
	 KLIC-DD Size 45x45x15mm	 KLIC-DI Size 90x60x35mm	
	Split	Sky Air	VRV
Basic control			
On/Off	●	●	●
Mode	Auto, heat, dry, fan, cool	Auto, heat, dry, fan, cool	Auto, heat, dry, fan, cool
Temperature	●	●	●
Fan speed levels	3 or 5 + auto	2 or 3	2 or 3
Swing	Stop or movement	Stop or movement	Swing or fixed positions (5)
Advanced functionalities			
Error management	Communication errors, Daikin unit errors		
Scenes	●	●	●
Auto switch off	●	●	●
Temperature limitation	●	●	●
Initial configuration	●	●	●
Master and slave configuration		●	●

BACnet Interface

DMS502A51 / EKACBACMSTP / EKCMBACIP / EKCMBACMSTP

Integrated control system for seamless connection between VRV, applied systems, air handling units and BMS systems

- > Interface for BMS system
- > Communication via BACnet protocol (connection via Ethernet)
- > Unlimited sitesize
- > Easy and fast installation
- > PPD data is available on BMS system (only for VRV)

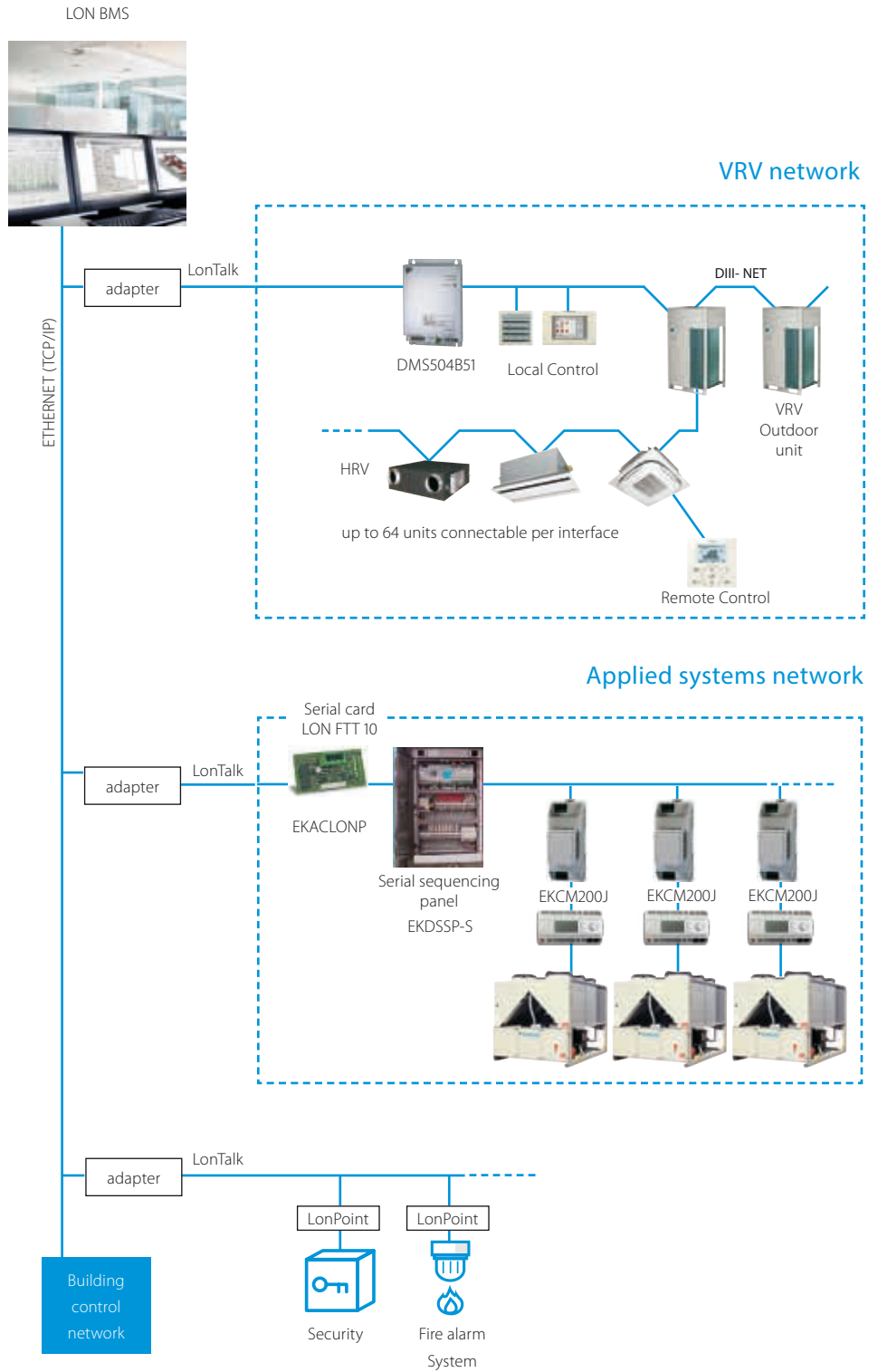


LonWorks Interface

DMS504B51 / EKACLONP

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

- > Interface for Lon connection to LonWorks networks
- > Communication via Lon protocol (twisted pair wire)
- > Unlimited sitesize
- > Quick and easy installation



Daikin Configurator Software

EKPCCAB3

Simplified commissioning:
graphical interface to configure, commission
and upload system settings

Simplified commissioning

The Daikin configurator for Daikin Altherma and VRV is an advanced software solution that allows for easy system configuration and commissioning:

- › Less time is required on the roof configuring the outdoor unit
- › Multiple systems at different sites can be managed in exactly the same way, thus offering simplified commissioning for key accounts
- › Initial settings on the outdoor unit can be easily retrieved



Simplified
commissioning



Retrieve initial
system settings





ONLINE
CONTROLLER



WIRED REMOTE CONTROL
BRC1E53A/B/C



INTELLIGENT
TOUCH MANAGER
DCM601A51



INFRARED REMOTE
CONTROLLER

What is I-Net?

A service based on our global remote monitoring technology, keeping your system trouble-free and working with top efficiency.



What does I-Net offer you

Safeguarding the lifelong optimum operation of your air conditioning system means getting geared up to operate the system in a energy efficient way and reduce unexpected breakdowns and costs to the absolute minimum. This is where I-Net helps to improve the effectiveness of your building management.

I-Net is about 'being connected' with Daikin, the Internet-based link between you, your air conditioning system and Daikin's Remote Monitoring Centre. This allows you to monitor your energy consumption and Daikin's expert service engineers to monitor your entire system's status non-stop, all year round. Through predicting malfunctions and offering technical advice from data analysis, you can maximise equipment uptime, as well as controlling energy costs with no sacrifice in comfort levels. By doing this, i-Net will prevent problems, prolong your system's service life while reducing the energy bill.

I-Net Services

i-Net consists of 2 main services: the VRV Cloud and I-Net performance monitoring and analysis.

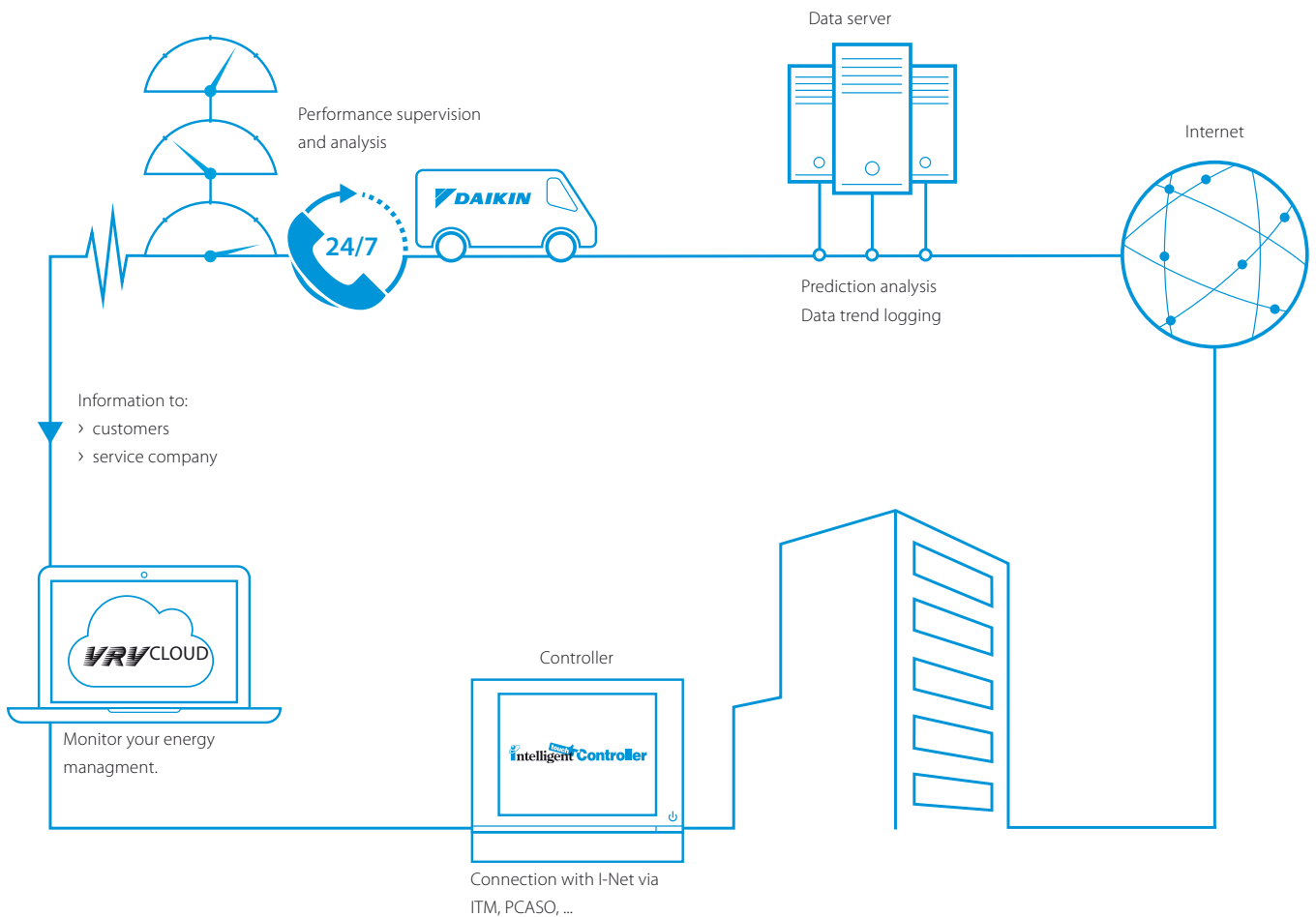
VRV Cloud

The VRV Cloud puts you in the driving seat of your energy management. The easy-to-use energy data trending and analytic tools puts you in control and shows you CO₂ footprint reduction opportunities and energy savings of up to 15%.

Saving starts by measuring. Enhance your company's sustainability !

I-Net performance monitoring and analysis

Focus on your core business and hand the HVAC over to Daikin. Daikin I-Net connects your system continuously with Daikin. It notifies alarms and early warnings of system deviations to maximise system uptime and the comfort of the people in the building. Service providers have webbased access to operation data so that they are fully prepared when they arrive on-site. Specialists run trend analyses. All of which boosts your system's reliability by ensuring that it is running at optimum efficiency.



i-Net

Daikin VRV Cloud

Helps you manage your energy through Daikin technology.

- > Intelligent energy visualization tool that helps you with your energy management
- > 24/7 online monitoring by the customer from any location.
- > User friendly visualization of VRV energy management (kWh)
- > Analysis support of waste operation
- > Multiple site monitoring

- > Performance Supervision by Daikin experts enhances a maintenance plan.
- > This service aims to enhance the service level, to respond fast and accurate, to save on unexpected repair costs and assure the peace of mind. Repetitive interventions and disturbance of building tenants and maintenance teams are kept to a minimum.

Long lifetime systems

- > I-Net will maximise the installation's lifetime, by assuring the equipment runs in optimal conditions and avoid unnecessary stress on components.

Performance monitoring

Daikin's unique I-Net Service aims to prevent the equipment coming to an unexpected stop or needing emergency repair.

Fast response, better prepared

- > If an alarm does occur, the service provider is immediately alerted and receives all crucial information.
- > Early fault indication (predictions) : operation data are 24/7 checked by I-Net prediction algorithms to act as early as possible, averting unscheduled breakdowns.

Analysis

Be connected with Daikin's experts, this gives you a clear overview of operability and use of the air conditioning system.

- > Daikin continuously monitors energy, operation and comfort data. Thanks to periodic analysis of the data, Daikin can suggest ways of improving performance.
- > if there is a problem, Daikin specialists will analyse the operation data history to provide remote support.

Wireless room temperature sensor

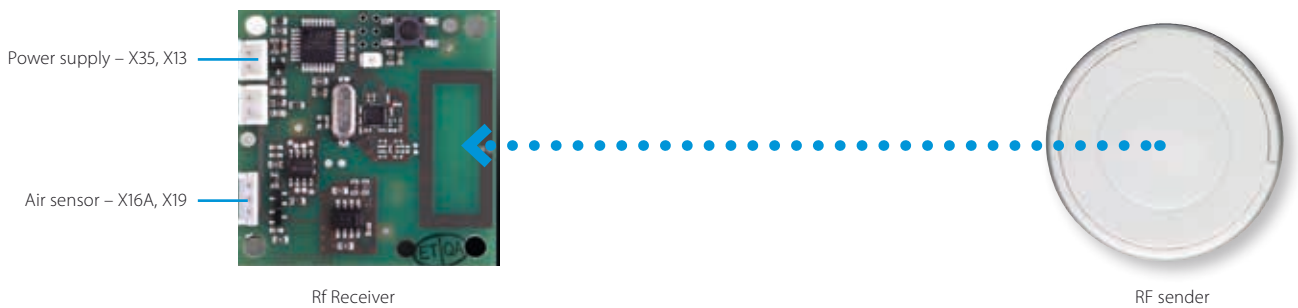
K.RSS



Flexible and easy installation

- › Accurate temperature measurement thanks to flexible placement of the sensor
- › No need for wiring
- › No need to drill holes
- › Ideal for refurbishment

Connection diagram Daikin indoor unit PCB (FXSQ example)



Specifications

				Wireless room temperature sensor kit (K.RSS)	
		Wireless room temperature receiver		Wireless room temperature sensor	
Dimensions	mm	50 x 50		ø 75	
Weight	g	40		60	
Power supply		16VDC, max. 20 mA		N/A	
Battery life		N/A		+/- 3 years	
Battery type		N/A		3 Volt Lithium battery	
Maximum range	m			10	
Operation range	°C			0~50	
Communication	Type			RF	
	Frequency	MHz			868,3

- › Room temperature is sent to the indoor unit every 90 seconds or if the temperature difference is 0.2°C or larger.

Wired room temperature sensor

KRCS01-1B
KRCS01-4B



- › Accurate temperature measurement, thanks to flexible placement of the sensor


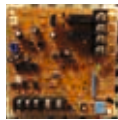



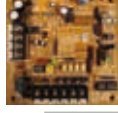

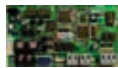


Specifications

Dimensions (HxW)	mm	60 x 50
Weight	g	300
Length of branch wiring	m	12

ADAPTER PCBs




Simple solutions for unique requirements Concept and benefits

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

			Connectable to:		
			Split	Sky Air	VRV
	(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) (KRP2A* via P1 P2) Remotely start and stop up to 128 indoor units (64 groups) (KRP4A* via F1 F2) Alarm indication/ fire shut down Remote temperature setpoint adjustment Cannot be used in combination with a central controller 		●	●
	KRP58M3	<ul style="list-style-type: none"> Low noise and demand control option for RZQ200/250C 		●	
	SB.KRP58M51	<ul style="list-style-type: none"> Low noise and demand control option for RZQG and RZQSG single phase Includes mounting plate EKMKA1 		●	
	KRP58M51	<ul style="list-style-type: none"> Low noise and demand control option for RZQG1 and RZQSG 3 phase 		●	
	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 			●
	DCS302A52 Unification adapter for computerized control	<ul style="list-style-type: none"> Enables unified display (operation/malfunction) and unified control (ON/OFF) from BMS system Must be used together with Intelligent Touch Controller or intelligent Touch Manager Cannot be combined with KRP2/4* Can be used for all VRV indoor models 			●
	KRP928* Interface adapter for DIII-net	<ul style="list-style-type: none"> Allows integration of split units to Daikin central controls 	●		
	KRP413* Wiring adapter normal open contact / normal open pulse contact	<ul style="list-style-type: none"> Switch off auto restart after power failure Indication of operation mode / error Remotely start /stop Remotely change operation mode Remotely change fan speed 	●		
	KRP980* Adapter for split units without an S21 port	<ul style="list-style-type: none"> Connect a wired remote control Connect to Daikin central controls Allow external contact 	●		

Some adapters require an installation box, refer to the option lists for more information

Accessories

EKRORO		<ul style="list-style-type: none"> External ON/OFF or forced off Example: door or window contact
EKRORO 3		<ul style="list-style-type: none"> External ON/OFF or forced off F1/F2 contact Example: door or window contact
KRC19-26A		<ul style="list-style-type: none"> Mechanical cool/heat selector Allows switching over an entire system between cooling/heating/fan only Connects to the A/B/C terminals of the unit
BRP2A81		<ul style="list-style-type: none"> Cool/heat selector PCB Required to connect KRC19-26A to a VRV IV outdoor unit

AUTO-CLEANING PANEL



FILTERS



INTELLIGENT SENSORS

Options & accessories

VRV outdoor	192
VRV indoor & Hot Water	196
Stylish indoor	200
Ventilation	202
Control Systems	203

		VRV IV Heat Recovery					
		REYQ 8~12T	REYQ 14~20T	REM05T	2-module systems	3-module systems	
Kits	Multi-module connection kit (obligatory) - Connects multiple modules into a single refrigerant system				BHFQ23P907	BHFQ23P1357	
	Extended level difference kit - Allows outdoor unit to be more than 50m above indoor units	Special order unit					
	Central drain pan kit - Installs onto the underside of the outdoor unit and collects drain water from all bottom plate outlets into a single outlet. In cold areas should be heated by a field-supplied heater to prevent drain water from freezing in the drain pan.						
	Heater tape kit - Optional electrical heater to guarantee trouble-free operation in extremely cold and humid climates (one per outdoor unit needed)	EKBPH012T + EKBHPCBT	EKBPH020T + EKBHPCBT	EKBPH012T + EKBHPCBT			
	BHGP26A1 Digital pressure gauge kit – displays current condensing and evaporating pressures in the system as Standard, or expansion valve positions and temperature sensor data in a special service mode. Connect to the outdoor unit PCB, for installation in the outdoor unit.	•	•	•	1 kit per system	1 kit per system	
Adapters	External control adapter for outdoor unit - Allows to activate Low Noise Operation and three levels of demand control, limiting power consumption via external dry contacts. Connects to the F1/F2 communication line and requires power supply from an indoor unit*, BSVQ box, or VRV-WIII outdoor unit.	DTA104A53/61/62 For installation into an indoor unit: exact adapter type depends on type of indoor unit. See Options & Accessories of indoor units					
	KRC19-26A Mechanical cool/heat selector – allows to switch an entire Heat Pump system, or one BS-box of a Heat Recovery system between cooling, heating and fan only. Connects to the A-B-C terminals of the outdoor unit / BS-box.						
	EBRP2B - Cool/heat selector PCB						
	BRP2A81 Cool/heat selector PCB (required to connect KRC19-26A to VRV IV outdoor)						
	KKSA26A560* Cool/heat selector PCB mounting plate (only required when cool/heat selector PCB and Heater tape kit are combined)						
	Others	KJB111A Installation box for remote cool/heat selector KRC19-26A					
		EKCHSC - Cool/heat selector cable					
		EKPCCAB3 VRV configurator	•	•	•	•	•
		KKSB2B61* Demand PCB mounting plate. Needed to mount Demand PCB for one or more outdoor units.					
		DTA109A51 DIII-net expander adapter	•	•	•	•	•
BPMKS967A2/A3 Branch provider (for connection of 2/3 RA indoor units)							
EKDK04 Drain plug kit							

		VRV IV S-series				
		RXYSCQ-T	RXYSQ4-6TV1	RXYSQ4-6TY1	RXYSQ8-12TY1	
Kits	Multi-module connection kit (obligatory) - Connects multiple modules into a single refrigerant system					
	Extended level difference kit - Allows outdoor unit to be more than 50m above indoor units					
	Central drain pan kit - Installs onto the underside of the outdoor unit and collects drain water from all bottom plate outlets into a single outlet. In cold areas should be heated by a field-supplied heater to prevent drain water from freezing in the drain pan.					
	Heater tape kit - Optional electrical heater to guarantee trouble-free operation in extremely cold and humid climates (one per outdoor unit needed)					
	BHGP26A1 Digital pressure gauge kit – displays current condensing and evaporating pressures in the system as Standard, or expansion valve positions and temperature sensor data in a special service mode. Connect to the outdoor unit PCB, for installation in the outdoor unit.					
Adapters	External control adapter for outdoor unit - Allows to activate Low Noise Operation and three levels of demand control, limiting power consumption via external dry contacts. Connects to the F1/F2 communication line and requires power supply from an indoor unit*, BSVQ box, or VRV-WIII outdoor unit.					
	KRC19-26A Mechanical cool/heat selector – allows to switch an entire Heat Pump system, or one BS-box of a Heat Recovery system between cooling, heating and fan only. Connects to the A-B-C terminals of the outdoor unit / BS-box.		•	•		
	EBRP2B - Cool/heat selector PCB		•			
	BRP2A81 Cool/heat selector PCB (required to connect KRC19-26A to VRV IV outdoor)					
	KKSA26A560* Cool/heat selector PCB mounting plate (only required when cool/heat selector PCB and Heater tape kit are combined)					
	Others	KJB111A Installation box for remote cool/heat selector KRC19-26A		•	•	
		EKCHSC - Cool/heat selector cable			•	•
		EKPCCAB3 VRV configurator	•	•	•	•
		KKSB2B61* Demand PCB mounting plate. Needed to mount Demand PCB for one or more outdoor units.				
		DTA109A51 DIII-net expander adapter				
BPMKS967A2/A3 Branch provider (for connection of 2/3 RA indoor units)		•	•	•	•	
EKDK04 Drain plug kit		•	•			

		VRV IV-Q Heat Pump Replacement VRV				
		RQYQ140P	RXYQ8-12T	RXYQ14-20T	2-module systems	3-module systems
Kits	Multi-module connection kit (obligatory) Connects multiple modules into a single refrigerant system				BHFQ22P1007	BHFQ22P1517
	Central drain pan kit - Installs onto the underside of the outdoor unit and collects drain water from all bottom plate outlets into a single outlet. In cold areas should be heated by a field-supplied heater to prevent drain water from freezing in the drain pan.	KWC26B160				
	Heater tape kit - Optional electrical heater to guarantee trouble-free operation in extremely cold and humid climates (one per outdoor unit needed)		EKBPH012T + EKBPHPCBT	EKBPH020T + EKBPHPCBT		
	BHGP26A1 Digital pressure gauge kit – displays current condensing and evaporating pressures in the system as Standard, or expansion valve positions and temperature sensor data in a special service mode. Connect to the outdoor unit PCB, for installation in the outdoor unit.	•	•	•	1 kit per system	1 kit per system
Adapters	External control adapter for outdoor unit - Allows to activate Low Noise Operation and three levels of demand control, limiting power consumption via external dry contacts. Connects to the F1/F2 communication line and requires power supply from an indoor unit*, BSVQ box, or VRV-WIII outdoor unit.	DTA104A53/61/62 For installation into an indoor unit: exact adapter type depends on type of indoor unit. See Options & Accessories of indoor units				
	KRC19-26A Mechanical cool/heat selector – allows to switch an entire Heat Pump system, or one BS-box of a Heat Recovery system between cooling, heating and fan only. Connects to the A-B-C terminals of the outdoor unit / BS-box.	•	•	•	1 kit per system	1 kit per system
	BRP2A81 Cool/heat selector PCB (required to connect KRC19-26A to VRV IV outdoor) KKSA26A560* - Cool/heat selector PCB mounting plate (only required when cool/heat selector PCB and Heater tape kit are combined)		•	•	•	•
Others	KJB111A Installation box for remote cool/heat selector KRC19-26A	•	•	•	1 kit per system	1 kit per system
	EKPCCAB3 VRV configurator		•	•	•	•
	KKSB2B61* Demand PCB mounting plate. Needed to mount Demand PCB for one or more outdoor units.			•		
	DTA109A51 DIII-net expander adapter	•	•	•	•	•

Refnets & branch selector boxes

		Refnet Joints				Refnet Headers	
		Capacity index < 200	Capacity index 200 ≤ x < 290	Capacity index 290 ≤ x < 640	Capacity index > 640	Capacity index < 290	Capacity index 290 ≤ x < 640
Refnets	Metric-size connections for heat pump systems (2-pipe)	KHRQM22M20T	KHRQM22M29T	KHRQM22M64T	KHRQM22M75T	KHRQM22M29H	KHRQM22M64H
	Imperial-size connections for heat recovery pump (2-pipe)	KHRQ22M20T	KHRQ22M29T9	KHRQ22M64T	KHRQ22M75T	KHRQ22M29H	KHRQ22M64H
	Metric-size connections for heat recovery systems (3-pipe)	KHRQM23M20T	KHRQM23M29T	KHRQM23M64T	KHRQM23M75T	KHRQM23M29H	KHRQM23M64H
	Imperial-size connections for heat recovery systems (3-pipe)	KHRQ23M20T	KHRQ23M29T9	KHRQ23M64T	KHRQ23M75T	KHRQ23M29H	KHRQ23M64H
Options for Branch selector-boxes (BS-box) (only for connection with VRV heat recovery system)	EKBSVQLNP Sound reduction kit (sound insulation)						
	KHFP26A100C Closed pipe kit						
	KHRP26A1250C Joint kit						
	Quiet kit						

VRV III-Q Heat Recovery Replacement VRV				VRV-W IV Water-cooled VRV				
RREQ 140~212	2-module systems	3-module systems	4-module systems	RWEYQ8-10T8	Heat Pump application		Heat Recovery application	
					2-module systems	3-module systems	2-module systems	3-module systems
	BHFP26P36C	BHFP26P63C	BHFP26P84C		BHFQ22P1007	BHFQ22P1517	BHFQ23P907	BHFQ23P1357
KWC26B160	1 kit per module	1 kit per module	1 kit per module					
●	1 kit per system	1 kit per system	1 kit per system					

DTA104A53/61/62

Installation in the RWEYQ outdoor unit possible. For installation in indoor units, use appropriate type (DTA104A53/61/62) for particular indoor unit. See Options & Accessories of indoor units

				●	1 kit per system	1 kit per system		
				●	1 kit per system	1 kit per system		
				●	1 kit per system	1 kit per system		
				●	●	●	●	●
●	●	●	●	●	●	●	●	●

Capacity index > 640	Heat Recovery Branch Selector Boxes (BS-Boxes)						
	1-port BS1Q-A	4-port BS4Q14AV1	6-port BS6Q14AV1	8-port BS8Q14AV1	10-port BS10Q14AV1	12-port BS12Q14AV1	16-port BS16Q14AV1
KHRQM22M75H							
KHRQ22M75H							
KHRQM23M75H							
KHRQ23M75H							
	●						
		●	●	●	●	●	●
		●	●	●	●	●	●
		KDDN26A4	KDDN26A8	KDDN26A8	KDDN26A12	KDDN26A12	KDDN26A16

		Ceiling mounted cassette units				
		Round flow (800x800)	4-way (600x600)	2-way blow		
		FXFQ 20~125A	FXZQ 15~50A	FXCQ 20~40A	FXCQ 50~63A	FXCQ 80 ~125A
Panels	Decoration panel (obligatory for cassette units, optional for others, rear panel for FXLQ)	BYCQ140DG (self clean) *5/*6 BYCQ140DGF (fine mesh) *5/*6 BYCQ140DW (white) *3 BYCQ140D7W1 (Standard)	BYFQ60CW (white panel) BYFQ60CS (grey panel) BYFQ60B3 (Standard panel)	BYBCQ40H	BYBCQ63H	BYBCQ125H
	Panel spacer for reducing required installation height		KDBQ44B60 (Standard panel)			
	Sealing kit for 3- or 2-directional air discharge	KDBHQ55B140 *7	BDBHQ44C60 (white & grey panel)			
	Sensor kit	BRYQ140A	BRYQ60AW (white panel) BRYQ60AS (grey panel)			
Individual control systems	Infrared remote control including receiver	BRC7FA532F	BRC7F530W *9*10 (white panel) BRC7F530S *9*10 (grey panel) BRC7EB530 *9*10 (standard panel)	BRC7C52	BRC7C52	BRC7C52
	BRC1E53A/B/C Premium wired remote control with full-text interface and back-light	•	•	•	•	•
	BRC1D52 *4 Standard wired remote control with weekly timer	•	•	•	•	•
	BRC2E52C Simplified remote control (with operation mode button)	•	•	•	•	•
	BRC3E52C Simplified remote control (without operation mode button)	•	•	•	•	•
Centralised control systems	DCC601A51 Intelligent Tablet Controller	•	•	•	•	•
	DCS601C51 *12 intelligent Touch Controller	•	•	•	•	•
	DCS302C51 *12 Central remote control	•	•	•	•	•
	DCS301B51 *12 *13 Unified ON/OFF control	•	•	•	•	•
	DST301B51 *12 Schedule timer	•	•	•	•	•
Building management system + standard protocol interface	DCM601A51 Intelligent Touch Manager	•	•	•	•	•
	EKMBOXA DIII-net modbus interface	•	•	•	•	•
	KLIC-DI KNX interface	•	•	•	•	•
	DMS502A51 BACnet interface	•	•	•	•	•
	DMS504B51 LowWorks interface	•	•	•	•	•
Filters	Replacement long life filter, non-woven type	KAFP551K160	KAFQ441BA60	KAFP531B50	KAFP531B80	KAFP531B160
	Auto cleaning filter	see decoration panel				
Adapters	Wiring adapter for external monitoring/control via dry contacts and setpoint control via 0-140Ω	KRP4A53 *2*7	KRP4A53 *2	KRP4A51	KRP4A51	KRP4A51
	Wiring adapter with 2 output signals (Compressor / Error, Fan output)	KRP1B57 *2*7	KRP1B57			
	Wiring adapter with 4 output signals (Compressor / Error, Fan, Aux. heater, Humidifier output)	EKR1P1C11 *2*7	EKR1P1B2	EKR1P1B2	EKR1P1B2	EKR1P1B2
	Adapter for wiring (interlock for fresh air intake fan)					
	Wiring adapter for external central monitoring/control (controls 1 entire system)		KRP2A52	KRP2A51	KRP2A51	KRP2A51
	External control adapter for outdoor unit (installation on indoor unit)			DTA104A61	DTA104A61	DTA104A61
	Adapter for multi-tenant applications (24VAC PCB power supply interface)	DTA114A61	DTA114A61			
	Digital input adapter *2/11	BRP7A53	BRP7A53	BRP7A51	BRP7A51	BRP7A51
	Installation box / Mounting plate for adapter PCBs (For units where there is no space in the switchbox)	KRP1H98 *7	KRP1A101	KRP1C96	KRP1C96	KRP1C96
	External wired temperature sensor	KRCS01-4	KRCS01-4	KRCS01-4	KRCS01-4	KRCS01-4
K.RSS External wireless temperature sensor	•	•	•	•	•	
Connector for forced-off contact	Standard	Standard	Standard	Standard	Standard	
Others	Multi zoning kit					
	Drain pump kit	Standard	Standard	Standard	Standard	Standard
	Fresh air intake kit	KDDQ55B140-1 + KDDQ55B140-2 *7*8	KDDQ44XA60			
	Air discharge adapter for round duct					
Filter chamber for bottom suction			KDDFP53B50	KDDFP53B80	KDDFP53B160	

*1 pump station is necessary for this option

*2 Installation box is necessary for these adapters

3 The BYCQ140D7W1W has white insulation. Be informed that formation of dirt on white insulation is visibly stronger and that it is consequently not advised to install the BYCQ140D7W1W decoration panel in environments exposed to concentrations of dirt

*4 Not recommended because of the limitation of the functions

*5 To be able to control the BYCQ140D7GW1 the controller BRC1E is needed

*6 The BYCQ140D7GW1 is not compatible with Multi and Split Non-Inverter Outdoor units

*7 Option not available in combination with BYCQ140D7GW1

*8 Both parts of the fresh air intake are needed for each unit

*9 Sensing function not available

*10 Independently controllable flaps function not available

*11 Only possible in combination with simplified remote control BRC2/3E

*12 When fixing box is required, use KJB212A, KJB311A or KJB411A depending on the size of the controller

*13 Option KEK26-1A (Noise filter) is required when installing DCS301B51

		Concealed ceiling units (duct units)					
		High efficiency		FXMQ 200~250	Large		
		FXMQ 50~80	FXMQ 100~125		FXTQ50~63	FXTQ80~100	
Panels	Decoration panel (obligatory for cassette units, optional for others, rear panel for FXLQ)						
	Panel spacer for reducing required installation height						
	Sealing kit for 3- or 2-directional air discharge						
	Sensor kit						
Individual control systems	Infrared remote control including receiver	BRC4C65	BRC4C65	BRC4C65	BRC4C65	BRC4C65	
	BRC1E53A/B/C Premium wired remote control with full-text interface and back-light	•	•	•	•	•	
	BRC1D52 *4 Standard wired remote control with weekly timer	•	•	•	•	•	
	BRC2E52C Simplified remote control (with operation mode button)	•	•	•	•	•	
	BRC3E52C Simplified remote control (without operation mode button)	•	•	•	•	•	
	Centralised control systems	DCC601A51 Intelligent Tablet Controller	•	•	•	•	•
DCS601C51 *12 intelligent Touch Controller		•	•	•	•	•	
DCS302C51 *12 Central remote control		•	•	•	•	•	
DCS301B51 *12 *13 Unified ON/OFF control		•	•	•	•	•	
DST301B51 *12 Schedule timer		•	•	•	•	•	
Building management system + standard protocol interface		DCM601A51 Intelligent Touch Manager	•	•	•	•	•
		EKMBOXA DIII-net modbus interface	•	•	•	•	•
	KLIC-DI KNX interface	•	•	•			
	DMS502A51 BACnet interface	•	•	•	•	•	
	DMS504B51 LowWorks interface	•	•	•	•	•	
	Filters	Replacement long life filter, non-woven type					
Auto cleaning filter							
Adapters	Wiring adapter for external monitoring/control via dry contacts and setpoint control via 0-140Ω	KRP4A51	KRP4A51	KRP4A51	KRP4A52 *2	KRP4A51	
	Wiring adapter with 2 output signals (Compressor / Error, Fan output)						
	Wiring adapter with 4 output signals (Compressor / Error, Fan, Aux. heater, Humidifier output)	EKR1B2	EKR1B2	KRP1B61	EKR1B2 *2	KRP1B61	
	Adapter for wiring (interlock for fresh air intake fan)						
	Wiring adapter for external central monitoring/control (controls 1 entire system)	KRP2A51	KRP2A51	KRP2A51	KRP2A51 *2	KRP2A51	
	External control adapter for outdoor unit (installation on indoor unit)	DTA104A61	DTA104A61	DTA104A61	DTA104A61	DTA104A61	
	Adapter for multi-tenant applications (24VAC PCB power supply interface)	DTA114A61	DTA114A61		DTA114A61		
	Digital input adapter *2/11	BRP7A51	BRP7A51	BRP7A51	BRP7A51	BRP7A51	
	Installation box / Mounting plate for adapter PCBs (For units where there is no space in the switchbox)	KRP4A96	KRP4A96		KRP1BA101 / KRP1B100		
	External wired temperature sensor	KRCS014	KRCS014	KRCS011	KRCS014	KRCS011	
Others	K.RSS External wireless temperature sensor	•	•	•	•	•	
	Connector for forced-off contact	Standard	Standard	Standard	Standard	Standard	
	Multi zoning kit						
	Drain pump kit	Standard	Standard		Standard		
	Fresh air intake kit						
	Air discharge adapter for round duct	KDAJ25K71	KDAJ25K140		KDAP25A140A		
L-type piping kit (for upward direction)							

*1 pump station is necessary for this option

*2 Installation box is necessary for these adapters

3 The BYCQ140D7/W1W has white insulation. Be informed that formation of dirt on white insulation is visibly stronger and that it is consequently not advised to install the BYCQ140D7/W1W decoration panel in environments exposed to concentrations of dirt

*4 Not recommended because of the limitation of the functions

*5 To be able to control the BYCQ140D7/GW1 the controller BRC1E is needed

*6 The BYCQ140DGW1 is not compatible with Multi and Split Non-Inverter Outdoor units

*7 Option not available in combination with BYCQ140D7/GW1

*8 Both parts of the fresh air intake are needed for each unit

*9 Sensing function not available

*10 Independently controllable flaps function not available

*11 Only possible in combination with simplified remote control BRC2/3E

*12 When fixing box is required, use KJB212A, KJB311A or KJB411A depending on the size of the controller

*13 Option KEK26-1A (Noise filter) is required when installing DCS301B51

Options - Stylish indoor

INDOOR UNITS		R-410A					
		FDXM-F3	FTXG-LW/S	C/FTXS-K	FVXG-K	FVXS-F	FLXS-B(9)
Individual control systems	BRC1E53A/B/C (3)(4)(5) - Premium wired remote control with full-text interface and back-light	•					
	BRC073 (9) - Wired remote control (cord for wired remote control required)		•	•	•	•	•
	BRC2E52C - Simplified remote control (with operation mode selector button)						
	BRC2C51 - Simplified remote control	•					
	BRC3E52C - Simplified remote control (without operation mode selector button)	•					
	BRC3A61 - Remote control for hotel use						
	BRC4C65 - Infrared remote control	•(10)					
Centralised control systems	DCC601A51 - Centralised controller with cloud connection by using the adapter KRP928*				•	•	•
	Online controller		BRP069A41	BRP069A43 (CTXS15-35, FTXS20-25) BRP069A42 (FTXS35-50)	BRP069A42	BRP069A42	BRP069A42
	DCS302C51 - Central remote control		•	•			
	DCS301B51 - Unified ON/OFF control		•	•			
	DST301BA51 - Schedule timer	•	•	•			
Building Management System & Standard protocol interface	DCM601A5A - Intelligent Touch Manager		•	•	•	•	•
	EKMBDXA - Modbus interface						
	RTD-RA (9) - Modbus gateway		•	•	•	•	•
	KLIC-DD (9) - KNX Interface		•	•	•	•	•
Adapters	BRP7A54 (7)(8) - Adapter PCB for interlock (key card, ...)	•					
	BRP069A45 - WIFI adapter fro smart phone						
	KRP1B56 - Adapter for wiring	•					
	EKRP1B2 (6) - Adapter for wiring (hour meter)						
	KRP413A15 (9) - Adapter for wiring normal open contact/normal open pulse contact (time clock and other devices to be purchased locally)		•	•	•	•	•
	KRP4A54 - Adapter for external ON/OFF and monitoring for electrical appendices	•					
	KRP2A53 - Wiring adapter for electrical appendices	•					
	Installation box for adapter PCBs (when there is no space in the switchbox)	KRP1BA101					
	KRP980A1 - Interface adapter for wired remote control			class 15-20-25			
	KRP928A 2S (9) - Interface adapter for DIII-net		•	•	•	•	•
	DTA114A61 - Multi tenant	•					
KRCS01-4 - External wired temperature sensor							
Filter	KEK26-1A - Noise filter (for electromagnetic use only)	•					
Others	Anti-theft protection for remote control		KKF910A4	KKF910A4	KKF910A4		
	KRCS01-4B - External wired temperature sensor	•					
	BRCW901A03 - Cord for wired remote control - 3m		•	•	•	•	•
	BRCW901A08 - Cord for wired remote control - 8m		•	•	•	•	•
	BKS028 - Installation leg				•		
	KDT25N32/KDT25N50/KDT25N63 - Installation kit for high humidity	•					
	KJB212A - Electrical box with earth terminal (2 blocks)	•					
	KJB311A - Electrical box with earth terminal (3 blocks)	•					

(1) Can be used only in combination with KRP980A1

(2) WLAN installation kit include interface adapter PCB

(3) BRC1E53A: included languages: English, German, French, Italian, Spanish, Dutch, Greek, Russian, Turkish, Portuguese, Polish

(4) BRC1E53B: included languages: English, German, Czech, Hungarian, Romanian, Slovenian, Bulgarian, Slovak, Serbian, Albanian

(5) BRC1E53C: included languages

(6) Installation box for adapter PCB is necessary. Hour meter is field supply and should not be installed inside the equipment.

(7) Installation box for adapter PCB is necessary. They require mounting plate KRP4A96, maximally 2 optional PCBs can be mounted.

(8) Only in combination with simplified remote control BRC2E52C or BRC3E52C.

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

(10) Standard there is no remote control delivered with this indoor unit. Wired or infrared control to be ordered separately.

(11) Standard delivered with the unit.

*Note: blue cells combination to be confirmed

Options - Stylish indoor

		R-410A		R-410A			
INDOOR UNITS		FCQHG-F FCQG-F	FFQ-C	FDBQ-B	FBQ-D	FDQ-B	FHQ-CB
Panels	Decoration panel (obligatory for cassette units, optional for others)	BYCQ140D (standard) BYCQ140DW (white)(1) BYCQ140DG/ BYCQ140DGF (auto-cleaning)(2)(4)	BYFQ60CW (white) BYFQ60CS (silver) BYFQ60B3 (standard)				
	Panel spacer for reducing required installation height		KDBQ44B60 (only for standard panel)				
	Sealing kit for 3- or 2-directional air discharge	KDBHQ55B140	BDBHQ44C60				
	Sensor kit	BRYQ140A	BRYQ60AW (white) (9) BRYQ60AS (silver)(9)				
Individual control systems	Infrared remote control (incl. receiver)	BRC7FA532F	BRC7EB530W - for standard panel (5)(6) BRC7F530W - for white panel (5)(6) BRC7F530S - for silver panel (5)(6)		BRC4C65	BRC4C65	BRC7G53
	BRC1E53A/B/C (3) - Premium wired remote control with full-text interface and back-light	•	•	•	•	•	•
	BRC1D52 - Standard wired remote control with weekly timer	•	•	•	•	•	•
	BRC2E52C - Simplified remote control (with operation mode selector button)	•	•	•	•	•	•
	BRC3E52C - Simplified remote control (without operation mode selector button)	•	•	•	•	•	•
	ARCWB - Wired remote controller						
Centralised control systems	DIII-net connection - for connection to centralized control	standard	standard	DTA112B51	standard	DTA112B51	standard
	DCC601A51 - Intelligent tablet controller	•	•	•	•	•	•
	DCS601C51 (11) - Intelligent touch controller	•	•	•	•	•	•
	DCS302C51 (11) - Central remote control	•	•	•	•	•	•
	DCS301B51 (11) (12) - Unified ON/OFF control	•	•	•	•	•	•
	DST301B51 (11) - Schedule timer	•	•	•	•	•	•
Building Management System & Standard protocol interface	DCM601A51 - Intelligent Touch Manager	•	•	•	•	•	•
	RTD-RA - Modbus interface for monitoring and control	•	•	•	•	•	•
	RTD-NET - Modbus interface for monitoring and control	•	•	•	•	•	•
	RTD-10 - Modbus interface for infrastructure cooling	•	•	•	•	•	•
	RTD-20 - Modbus interface for retail	•	•	•	•	•	•
	RTD-HO - Modbus interface for hotel	•	•	•	•	•	•
	EKMBOXA - Modbus interface	•	•	•	•	•	•
	KLIC-DI - KNX Interface	•	•	•	•	•	•
	DMS502A51 - BACnet Interface	•	•	•	•	•	•
	DMS504B51 - LonWorks interface	•	•	•	•	•	•
Filters	Replacement long-life filter, non-woven type	KAFP551K160	KAFQ441BA60				"KAFP501A56 (35-50) KAFP501A80 (60-71) KAFP501A60 (100-140)"
	Auto cleaning filter	see deco panel					
Adapter	Wiring adapter for external monitoring/control via dry contacts and setpoint control via 0-140 Ω	KRP4A53 (7)	KRP4A53 (7)		KRP4A52 (10)	KRP4A51 (11)	KRP4A52
	Wiring adapter with 2 output signals (compressor/ Error, Fan output)	KRP1B57 (7)	KRP1B57 (7)				
	Wiring adapter for external central monitoring/control (controls 1 entire system)				KRP2A51 (7)		
	Adapter for wiring (interlock for fresh air intake fan)				KRP1B54	KRP1B54 (11)	KRP1B54
	Wiring adapter with 4 output signals (compressor / Error, Fan, Aux, heater, Humidifier output)	EKRP1C11	EKRP1B2	EKRP1B2	EKRP1B2	EKRP1B2 (10) (11)	
	Adapter for keycard or window contact connection (in combination with BRC2/3E* only)	BRP7A53	BRP7A53		BRP7A51 (11)(12)	BRP7A54 (11)(12)	BRP7A52 (12)(14)
	Installation box/Mounting plate for adapter PCBs (when there is no space in the switchbox, an installation box is required)	KRP1H98	KRP1BA101		KRP1BA101 (11)(12)	KRP4A96	"KRP1D93A [box] KKSAP50A56 (35-50) [mounting plate]"
	External wired temperature sensor	KRCS01-4B	KRCS01-4B	KRCS01-1B	KRCS01-4B	KRCS01-1B	KRCS01-4B
	K.RSS - External wireless temperature sensor	•	•	•	•	•	•
	Remote ON/OFF, forced OFF kit	standard	standard	standard	standard	EKRORO	EKRORO4
DTA112B51 - Interface adapter for Sky Air					•		
Others	Drain pump kit						"KDU50P60VE (35-50) KDU50P140VE [71-140]"
	Multi zoning kit				3 dampers (35 - 50) 4 dampers (60 - 71) 5 dampers (100 - 125) 6 dampers (140)		
	L-type piping kit (upward direction)						"KHFP5MA35 (35) KHFP5N63 (50-60) KHFP5N160 [71-140]"
	Fresh air intake kit (direct installation type)	KDDQ55B140-1 + KDDQ55B140-2	KDDQ44XA60				KDDQ50A140
	Air discharge adapter for round duct				KDAP25A56A (35-50) KDAP25A71A (60-71) KDAP25A140A [100-140]		

(1) Dirt formation is more easily visible on white insulation. It is recommended not to install this option in environments with a high concentration of dirt.

(2) To be able to control option BYCQ140D(G/F), controller BRC1E is needed.

(3) Included languages are:

A: English, German, French, Dutch, Spanish, Italian and Portuguese

B: English, Bulgarian, Croatian, Czech, Hungarian, Romanian and Slovakian

C: English, Greek, Polish, Russian, Serbian, Slovak and Turkish

(4) The option is intended exclusively for use in fine dust environments (e.g. Clothing shops). Do not use it in environments that are greasy or have high humidity.

(5) Sensing function is not available

(6) Individual flap control function not available

(7) If installing an electrical heater, an option PCB for external electrical heater (EKRP1B2) for each indoor unit is required.

(8) Mounting plate KRP4A96 is required for these options. Maximum 2 option PCB's can be mounted.

(9) Only possible to combine with simplified remote control BRC2E52C/BRC3E52C

(10) Requires installation box for adapter PCB

Options & accessories - Ventilation

		Heat reclaim ventilation - VAM									Heat reclaim ventilation VKM			Air handling unit applications		
		VAM 150FC	VAM 250FC	VAM 350FC	VAM 500FC	VAM 650FC	VAM 800FC	VAM 1000FC	VAM 1500FC	VAM 2000FC	VKM 50GB(M)	VKM 80GB(M)	VKM 100GB(M)	EKEQFCBA (1)	EKEQDCB (1)	EKEQMCBA (1)
Individual control systems	BRC301B61 VAM wired remote control	•	•	•	•	•	•	•	•	•						
	BRC1E53A/B/C Premium wired remote control with full-tekst interface and back-light	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	BRC1D52 Standard wired remote control with weekly timer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Centralised control systems	DCC601A51 intelligent Tablet Controller	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	DCS302C51 Centralised remote control	•	•	•	•	•	•	•	•	•	•	•	•			
	DCS301B51 Unified ON/OFF control	•	•	•	•	•	•	•	•	•	•	•	•			
	DST301B51 Schedule timer	•	•	•	•	•	•	•	•	•	•	•	•			
	DCM601A5A Intelligent Touch Manager	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Building Management System & Standard protocol interface	EKMBDXA Modbus interface	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	DMS502A51 BACnet Interface	•	•	•	•	•	•	•	•	•	•	•	•			
	DMS504B51 LonWorks Interface	•	•	•	•	•	•	•	•	•	•	•	•			
	EN779 Medium M6			EKAFV50 F6	EKAFV50 F6	EKAFV80 F6	EKAFV80 F6	EKAFV100 F6	EKAFV100 F6 x2	EKAFV100 F6 x2						
	EN779 Fine F7			EKAFV50 F7	EKAFV50 F7	EKAFV80 F7	EKAFV80 F7	EKAFV100 F7	EKAFV100 F7 x2	EKAFV100 F7 x2						
Silencer	Model name			KDDM24 B50	KDDM24 B100	KDDM24 B100	KDDM24 B100	KDDM24 B100 x2	KDDM24 B100 x2			KDDM24 B100	KDDM24 B100			
	Nominal pipe diameter (mm)			200	200	250	250	250	250			250	250			
CO ₂ sensor				BRYMA65	BRYMA65	BRYMA65	BRYMA100	BRYMA100	BRYMA200	BRYMA200	BRYMA65	BRYMA100	BRYMA200			
Electrical heater		VH1B	VH2B	VH2B	VH3B	VH3B	VH4B / VH4/AB	VH4B / VH4/AB	VH5B	VH5B						
Others	Wiring adapter for external monitoring/control (controls 1 entire system)	KRP2A51	KRP2A51	KRP2A51 (2)	KRP2A51 (2)	KRP2A51 (2)	KRP2A51 (2)	KRP2A51 (2)	KRP2A51 (2)	KRP2A51 (2)	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)			
	Adapter PCB for humidifier	KRP50-2	KRP50-2	KRP1C4 (3/5)	KRP1C4 (3/5)	KRP1C4 (3/5)	KRP1C4 (3/5)	KRP1C4 (3/5)	KRP1C4 (3/5)	KRP1C4 (3/5)	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)			
	Adapter PCB for third party heater	BRP4A50	BRP4A50	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)	BRP4A50A (3/4)			
	External wired temperature sensor															KRCS01-1


Notes

- (1) Do not connect the system to DIII-net devices LONWorks interface, BACnet interface, ...; intelligent Touch Manager, EKMBDXA are allowed)
- (2) Installation box KRP1B1A101 needed
- (3) Fixing plate EKMPVAM additionally needed for VAM1500-2000
- (4) 3rd party heater and 3rd party humidifier cannot be combined
- (5) Installation box KRP50-2A90 needed


VH electrical heater for VAM	
Supply voltage	220/250V ac 50/60 Hz. +/-10%
Output current (maximum)	19A at 40°C (ambient)
Temperature sensor	5k ohms at 25°C (table 502 1T)
Temperature control range	0 to 40°C / (0-10V 0-100%)
Run on timer	Adjustable from 1 to 2 minutes (factory set at 1.5 minutes)
Control fuse	20 X5 mm 250 m A
LED indicators	Power ON - Yellow Heater ON - Red (solid or flashing, indicating pulsed control) Airflow fault - Red
Mounting holes	98mm X 181mm centres 5 mm ø holes
Maximum ambient adjacent to terminal box	35°C (during operation)
Auto high temp. cutout	100°C Pre-set
Man. reset high temp. cutout	125°C Pre-set
Run relay	1A 120V AC or 1A 24V DC
BMS setpoint input	0-10VDC

Vh electrical heater for vam		vH1B	VH2B	VH3B	VH4B	VH4/AB	VH5B
Capacity	kW	1	1	1	1,5	2,5	2,5
Duct diameter	mm	100	150	200	250	250	350
Connectable VAM		VAM150FC	VAM250FC	VAM500FC	VAM800FC	VAM800FC	VAM1500FC
		-	VAM350FC	VAM650FC	VAM1000FC	VAM1000FC	VAM2000FC

Intelligent Tablet Controller - DCC601A51

				
		Options for local control	Cloud options	Software
Zenpad 8" Tablet for local control	Z380C	●	-	-
Asus 4G-N12 router	4G-N12	●	-	-
Online control - for remote monitoring and control	DCC001A51	-	●	-
Multi site – for remote monitoring, control and comparison of multiple sites (needed for each site)	DCC002A51	-	●	-
Full – contains packs DCC001/002/003A51	DCC004A51	-	●	-
App for tablet – Application to run on Z380C tablet (download from Play store, Android only)		-	-	●
Commissioning tool		-	-	●
Software update tool		-	-	●

Intelligent Touch Manager

		
		Options & software
iTM plus adapter – Allows connection of an additional 64 indoor units/groups. Up to 7 adapters can be connected	DCM601A52	●
iTM ppd software – Allows distribution of used kWh by indoor units connected to the iTM	DCM002A51	●
iTM HTTP interface - Allows communication to any third party controller via http interface	DCM007A51	●
iTM energy navigator – Energy management option	DCM008A51	●
iTM BACnet Client option – Enables integration of third party devices to the iTM via the BACnet/IP protocol. (This is not a gateway and cannot replace DMS502A51)	DCM009A51	●

Standard protocol interfaces

		DMS502A51
		BACnet Interface
DIII-net expansion port (2 ports), connects up to 128 additional indoor units	DAM411B51	●
Digital pulse inputs (12) for PPD functionality	DAM412B51	●



Daikin Services

Saving energy doesn't stop with the purchase or installation of energy-efficient equipment; it has to be kept running under optimum conditions.

Good maintenance and servicing are key elements in ensuring the maximum performance.

**Are you sure the filters are clean and none of the components are defective?
Are all of your settings correct?**

Any of these things may lead to a reduced level of comfort. And while you may not notice the difference right away, you will certainly notice it at the end of the year – when you pay your energy bill.

Our Daikin design team is constantly striving to improve the energy efficiency of our systems.

We at Daikin Service are here to support you in keeping your units up and running efficiently by means of optimised commissioning and start-up, regular and preventative maintenance, remote monitoring, improving the performance of units, and providing cost effective upgrades to benefit from the efficiency gains from our latest state of the art technology.

Optimisation and upgrades



Intelligent remote monitoring



Upgrading / optimisation

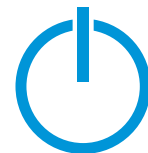
Keep the installation in top condition



Maintenance plan

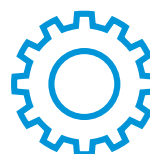


Installation support



Commissioning

Parts and repairs



Spare parts



Repair service

Commissioning

To guarantee your Daikin unit efficiency and long term performance, Daikin offers the **professional start-up of your Daikin system** by highly qualified, OEM educated engineers as part of the commissioning services.

Commissioning through an authorized Partner or by Daikin itself assures you that your unit is working as it should and is delivering all the benefits of a unique climate.

Every commissioning is documented as per Daikin standard and a detailed commissioning report is provided, detailing all activities done and recording the functioning of the units.



The prices listed are based on completion of the Pre-Commissioning checklist which covers a range of core activities including the general conditions at the site, provision of power and the required electrical distribution as well as installation related topics. This ensures that the service can be provided efficiently, on time and giving the best results. For the latest edition of the Pre-Commissioning checklist please visit: www.daikin-ce.com

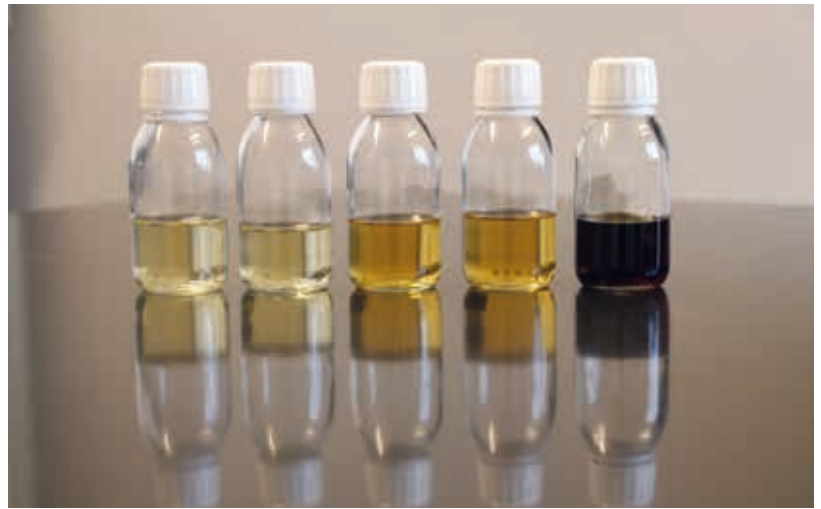
Maintenance

Maintenance is the key element to ensure the quality, efficiency and flawless operation of any asset. Our Care agreements are based on years of experience to ensure you reap the full benefits of having Daikin Certified engineers maintain your equipment.

Preventive maintenance and regular service is a key component in securing your investment. Dust, temperature, humidity and load degrade the reliability and performance of a VRV system over time. Regular maintenance of a unit or system ensures that electricity costs and performance are not jeopardized, and that the safety features and the entire system are in line with the latest standards and regulations.

Regular care safeguards your investment for the full lifetime of the Daikin System. Downtime and failures are avoided, while keeping operating costs low, as they should be throughout the entire system lifecycle.

Preventive maintenance plans give you cost transparency avoiding unexpected repair costs or degradation of comfort, quality or production loss.



Daikin Cares contains 3 different levels of maintenance agreements catering to your every need. In addition to these 3 Care packages Daikin offers a comprehensive set of options you can choose from.

1. Care:

Care is the minimal requirement to fulfil current legislation requirements, and makes sure your VRV system is operating in a correct fashion and according to parameters.

The Care package includes the following services:

- Scheduled Inspections based on predefined activities
- Soft- and firmware upgrades as needed and if required
- Validated Log book

2. Preventive Care:

Preventive Care keeps the VRV system in optimal condition for a long time.

In addition to the maintenance activities included in the Care package, Preventive Care includes:

- Service based on predefined activities
- Optimizations and analysis of the retrieved data
- On-site VRV system diagnostic and/or analysis during service intervention
- Recorded, retrievable service history of each VRV system
- Lifecycle report
- Emergency support & callout
- Access to technical assistance and repair service

3. Extended Care:

Extended Care provides maximum equipment availability at the minimum Total Cost of Ownership.

In addition to the activities mentioned in the Preventive care package, Extended Care includes:

- Labor- & travel cost, spare parts for planned maintenances are included
- Labor- & travel cost, spare parts for repairs are included
- Refrigerant is also included
- Remote Predictive Performance monitoring & Analysis
- Extension of warranty

Options:

Energy audit & report using VRV Cloud
 Remote monitoring I-Net
 Remote analysis using state of the art Big Data tools
 Fleet management for larger systems or multi-site systems using I-Tap Cloud
 Specialist support and consultancy

Service

E-Parts

Find the correct spare part for your Daikin unit, check availability (real-time) and order online.

All in just a few simple steps.

Your benefits:

- > fast handling
- > free shipment
- > 24/7 accessibility
- > flexible delivery
- > "real time" availability



Register now to use the E-Parts service

Create access for you and your colleagues.

- Simply go to my.daikin.eu
- download the registration form
- fill it in
- and send it back to Daikin (service@daikin.XX)

Always accessible for you

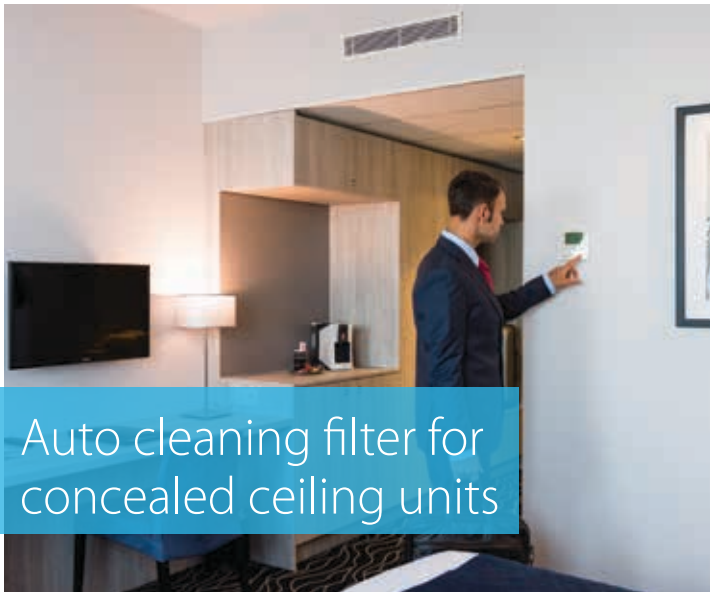
You can login directly or visit the E-Parts via the Business Portal:

<http://eparts.daikin-ce.com>

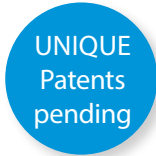
<https://my.daikin.eu>



In our Business Portal you can find the links to E-Parts and to the spareparts bank.



A unique success story repeated

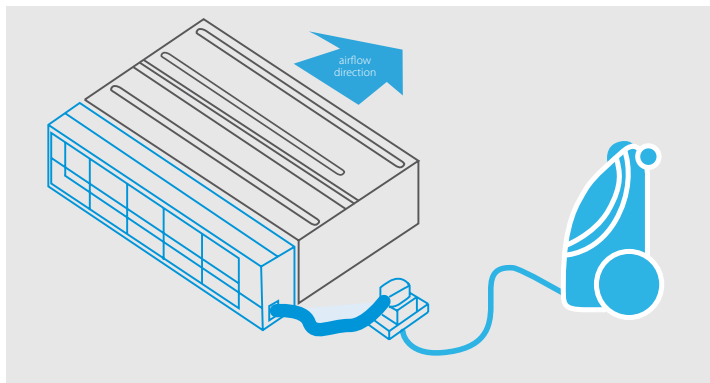


- ✓ Reduced running costs
- ✓ Improved room air quality
- ✓ Minimal time required for filter cleaning
- ✓ Unique technology

Select your AHU like any other VRV indoor



- ✓ Easy selection
- ✓ Fast quotation
- ✓ Easy ordering
- ✓ Easy installation



DAIKIN AIRCONDITIONING CENTRAL EUROPE HandelsgmbH

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