



VRV IV⁺

VRV IV⁺

Sets the Standard... Again



VRV IV+ heat pump and
water-cooled systems



High Ambient

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 HVAC-R solutions further.

We lead where others follow. We will continue our global leadership in HVAC-R 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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Over 30 years of VRV History



R-22

1987

Introduction the original VRV air conditioning system to Europe, invented by Daikin in 1982

- › Up to 6 indoor units connected to 1 outdoor unit



R-407C

1998

Launch inverter series with R-407C

- › Up to 16 indoor units connected to 1 outdoor unit



2004

Expand to light commercial sector with VRV7-S

- › Available in 4, 5, 6HP capacities
- › 1 system can be installed in up to 9 rooms



2008

Launch of heat pump optimised for heating (VRV III-C)

- › Extended operation down to -25C
- › 2-stage compressor systems

1987

1991

1994

1998

2003

2004

2005

2006-2007

1991

Introduce VRV heat recovery

- › Simultaneous cooling and heating



1994

Awarded ISO9001 certification



2003

Introduce VRV7-- the first R-410A VRF system

- Available in cooling, heat pump and heat recovery
- › 40 units connected to single refrigerant circuit

R-410A



2005

Extends VRV7 inverter range with water cooled VRV-WIII

- › Available in heat pump and heat recovery



2006-2007

Launch the extensively re-engineered VRV8

- › Available in cooling, heat pump and heat recovery
- › Automatic charging and testing
- › Up to 64 units connected to 1 system





2009

Extends VRV range with water cooled VRV-WIII

- > Geothermal version available
- > Operate down to -10C in heating mode



2011

Launch total solution concept

- > Integrate hot water production and Biddle air curtains into VRV system
- > Connectable to Daikin Emura and Nexura
- > 400,000 outdoors units sold
- > 2.2 million indoor units sold



2015

Launch of VRV IV S-series

- > Most compact unit in the market
- > Widest range in the market

2008 | 2009 | 2010 | 2011 | 2012 | 2015 | 2019 | 2020

2010

Launch of replacement VRV (VRVIII-Q)

- > Upgrade to replace older VRV units using R-22 refrigerant



2012-2014

Setting new standards with the launch of VRV IV

- > 28% improved seasonal efficiency
- > Continuous heating on heat pumps
- > Available in heat pump, heat recovery, water-cooled and replacement series



2019

Launch of VRV IV+

- > 7th generation of inverter compressor with back pressure control
- > Improved seasonal efficiency (% on average)

2015

Launch of VRV IV i-series

- > The invisible VRV
- > Unique product concept



2020

Launch of VRV 5

- > R-32 Series for standard ambient market

Cooling Seasonal Performance Factor



Nominal efficiency vs Seasonal efficiency

Currently, the energy efficiency of cooling devices is measured in artificial and standardized conditions. For air conditioners, this is done at a constant temperature of 46°C or 35°C and at full cooling capacity. This results in T1 and T3 energy efficiency (EER), which is representing only two points to conclude on energy performance.

In other markets, like in the US and Europe, seasonal performance is measured with IPLV, SEER or ESEER calculations based on real-life conditions. However, these calculation methods have not been adopted for high Ambient or hot climates. In order to correct this situation, a more realistic calculation method called Cooling Seasonal Performance Factor for Hot Climate $CSPF_{T3}$ has been developed by the ISO Refrigeration and Air-Conditioning Subcommittee (SC6) for the testing and rating of air conditioners and heat pumps. This is the standard ISO 16358 -1 Amendment 1 issued in 2019 for the hot T3 climate zones.

The implementation of the Seasonal Efficiency calculation reflects more realistic energy efficiency value through the entire cooling season at hot climate conditions compared to currently used EER value.

The calculation follows the below considerations:

- › Use of a high ambient climate weather bin for cooling instead of one nominal temperature
- › Considering operation at partial capacity instead of full capacity

The adoption of the $CSPF_{T3}$ calculation method will result in a better estimation of the equipment's real-life performance over a year.

What is $CSPF_{T3}$?

(Cooling Seasonal Performance Factor for Hot Climate $CSPF_{T3}$) is the testing and rating of air conditioners as per the ISO 16358 -1 Amendment 1 issued in 2019 for T3 hot climate zones and takes into consideration the bin hours reflecting high ambient conditions.

How is $CSPF_{T3}$ expressed?

- › It is expressed as the $CSPF_{T3}$ value (Cooling Seasonal Performance Factor for Hot Climate $CSPF_{T3}$)
- › It is defined as the ratio of the total annual amount of heat that the equipment can remove from the indoor air when operating for cooling in active mode to the total annual amount of energy consumed by the equipment during the same period.

$$CSPF_{T3} = \frac{\text{Cooling Seasonal Total Load @T3 ISO weather bin}}{\text{Cooling Seasonal Energy Consumption @T3 ISO weather bin}}$$

Benefits of $CSPF$

The implementation of seasonal efficiency will provide end users with a fair comparison of different equipment based on realistic year-round efficiency which will lead to:



Reduced energy consumption



Reduced CO2 emission



Reduced electricity bills

Pioneering in innovation and environmental responsibility

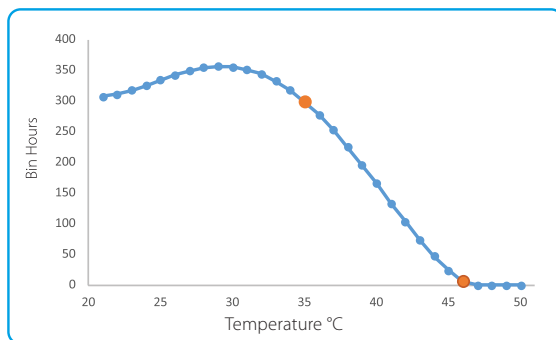
For Daikin, seasonal efficiency brings together two core ambitions: pushing for innovation and reducing the environmental footprint of our products. Being the first in the industry to design equipment based on optimal seasonal efficiency values, Daikin is once again pioneering high-performance cooling products that lower the impact on the environment and on your wallet.

Benefits of Seasonal Efficiency vs. Nominal Efficiency

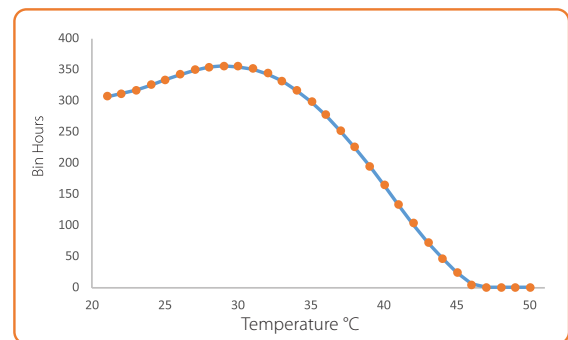
Energy Efficiency Ratio

Cooling Seasonal Performance Factor

TEMPERATURE



Energy Efficiency Ratio rating is based on one outdoor Ambient Temperature condition (T1 or T3)



Cooling Seasonal Performance Factor is based on the Hot Climate Weather bin as per ISO 16358-1 AMD1

EFFICIENCY

$$\text{EER} = \frac{\text{Cooling Capacity}}{\text{Power Input}} \quad \text{@T1 or T3}$$

Nominal efficiency gives an indication on how efficient an air conditioner operates at nominal conditions. 100% capacity performance is used to measure EER

For example, 10 HP Daikin VRV IV+Unit (RXYTQ10U5YF) can be evaluated using below mentioned efficiencies:

**T3 EER: 10.1 (Btu/h)W
2.96 W/W**

$$\text{CSPFT3} = \frac{\text{Cooling Seasonal Total Load @T3 ISO weather bin}}{\text{Cooling Seasonal Energy Consumption @T3 ISO weather bin}}$$

CSPFT3 gives an indication on how efficient an air conditioner operates over an entire cooling season. Variable or seasonal performance close to real life is used and not 100% capacity performance.

**CSPF_{T3}: 20.9(Btu/h)W
6.13 W/W**

When the new ISO standard for hot climate was published, Daikin has resolutely chosen for early implementation of this new legislation and started testing all products for seasonal efficiency. This commitment to pioneering the implementation of seasonal efficiency is a practice we observe every day.

Today, Daikin leads the way towards more efficient and cost-effective comfort solutions. All Daikin products - residential, commercial, as well as industrial - are seasonal-efficient, reducing energy and costs the smart way.



VRV IV+ standards and technologies

Our new VRV IV+ systems set pioneering standards in all-around 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.daikinmea.com.

VRV IV+ =

3 revolutionary standards

- › Variable Refrigerant Temperature
- › Refrigerant-cooled PCB
- › VRV configurator

+ unique VRV IV+ core technologies

- › Newly developed inverter compressor with back pressure control
- › 4-side heat exchanger
- › Improved SEER and EER
- › Predictive control
- › Outer rotor DC fan motor

Variable refrigerant temperature

Customise your VRV for best seasonal efficiency and comfort

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

- › **Seasonal efficiency increased by 28% (compared to conventional VRF)**
- › **First weather compensating control on the market**
- › **Customer comfort is assured thanks to higher outblow temperatures (preventing cold draughts)**

How does it work?

VRF standard

Capacity is controlled only with the variance of the inverter compressor

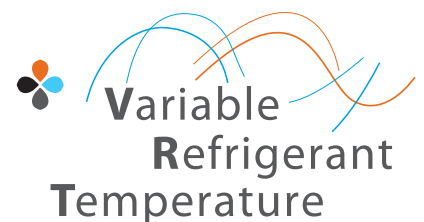
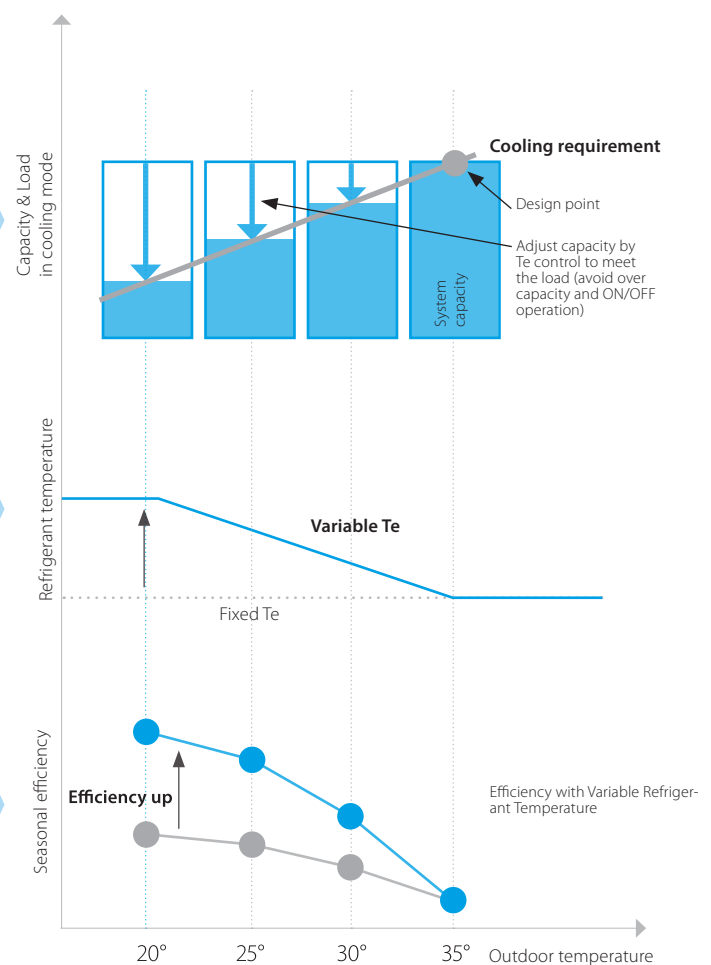
Daikin VRV IV+

Variable Refrigerant Temperature control for energy saving in partial load condition. The capacity is controlled by the inverter compressor and variation of the evaporating (T_e) and condensing (T_c) temperature of the refrigerant in order to achieve the highest seasonal efficiency.

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



Variable Refrigerant Temperature

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	
Step 1 Automatic* Evaporating AND condensing temperature automatically selected according to ambient temperature Quick reaction speed Top efficiency  The perfect balance: Achieves top efficiency throughout the year, reacts quickly on the hottest days	Step 2 Powerful Quick Mild *	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. Same as above but slower response than the powerful mode. 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
High sensible Target Te can be selected between 7°C to 11°C Quick reaction speed Top efficiency  Year round top efficiency	Powerful Quick Mild Eco	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. Same as above but slower response. The air off temperature remains fairly constant. Suitable for low ceiling rooms. Coil temperature would not change due to fluctuating load. Suitable for computer rooms. Suitable for low ceiling rooms.
Basic Current VRF standard	No submodes	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.

* Factory setting

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
You Tube

<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.



Simplified
commissioning



Retrieve initial system
settings



User friendly interface instead of
push buttons

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

Unique VRV IV+ core technologies

37
patents



NEW scroll
compressor

Back-pressure control **UNIQUE**

- › Pressure port increases pressure below the scroll in low load operation, preventing refrigerant leak from the high to low pressure side
- › Increased partial load efficiency

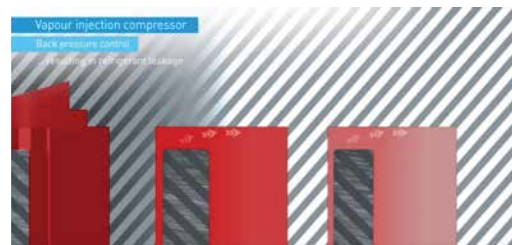


The back pressure control port sends high pressure refrigerant to the back of the scroll, preventing refrigerant leakage

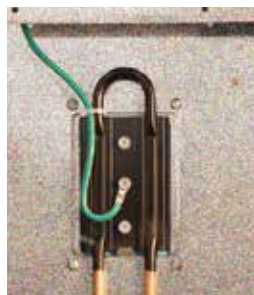


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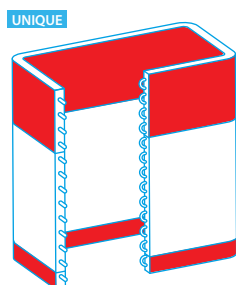
Refrigerant leak at low load with conventional compressor



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

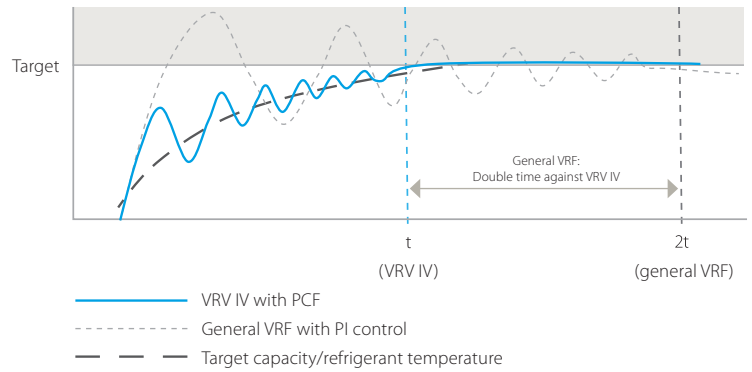


UNIQUE

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

General VRF: Pi control

Compressor works with feedback only for the control

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

Half time against general VRF

UNIQUE

DC fan motor

Outer rotor DC motor for higher efficiency

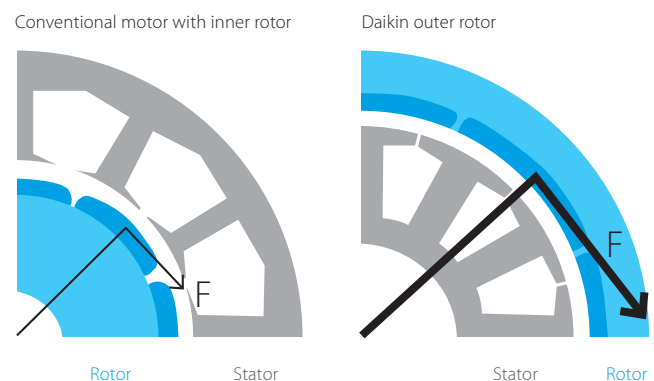
- › Larger rotor diameter results in greater force for the same magnetic field, leading to better efficiency
- › Better control, resulting in more fan steps to match the actual capacity

Sine wave DC inverter

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

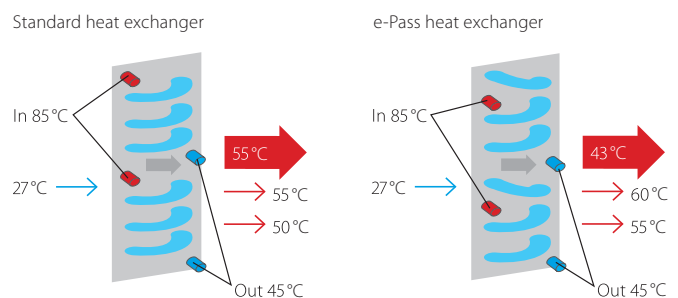
DC fan motor

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



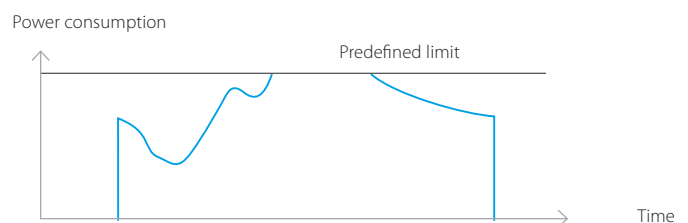
E-Pass heat exchanger

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.



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.



Benefits of a VRV IV+ installation



Consultants

Daikin's VRV IV+ technology maximises flexibility and leads the way in customisation to match individual building requirements in comfort and energy, with reduced running costs.

- › Technical design support
- › Ecological design meets and exceeds legal requirements
- › Maximum flexibility to meet customer requirements
- › Advanced software tools assist with system design
- › Complies with ESMA UAE, Kuwait, SASO-KSA, and QCC Abu Dhabi regulations



VRV IV+

Building owners

VRV IV+ is the ultimate in customised comfort and intelligent control tailored to your individual needs and to maximise energy efficiency. Annual cost savings up to 28% (compared to conventional VRF).

- › Up to 40% energy consumption saving over conventional AC system
- › Single point of contact for the design and maintenance of your climate system
- › Integrated system, combining air conditioning, ventilation, etc.
- › Allows maximum energy efficiency
- › Multiple systems can be managed in exactly the same way for the key accounts
- › Dedicated after-sales service to ensure fast on-site support



Water-cooled VRV

Installers

Daikin VRV IV+ sets the standard with state-of-the-art technology and time-saving commissioning and servicing

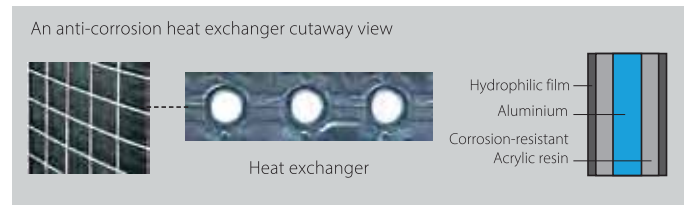
- › Simplified and time-saving commissioning with VRV configurator
- › Wide range of outdoor units (up to 48HP)
- › One supplier - one point of contact
- › Maximum flexibility to meet customer requirements
- › Customised training to maximise expertise



VRV IV S-series

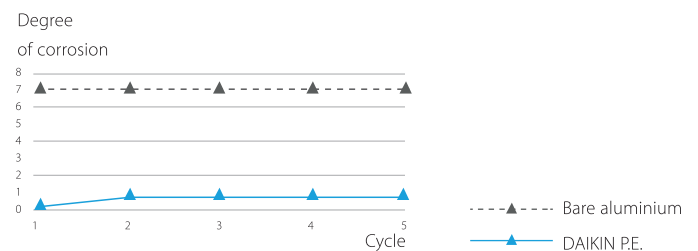
Anti-Corrosion Treatment

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 under-side of the unit gives additional protection.



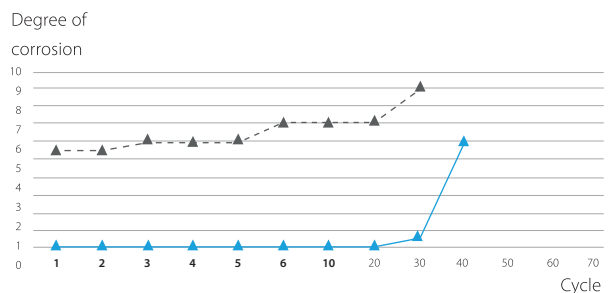
Performed tests:

- › 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 and room humidity testing period: 5 cycles



Kesternich test (S02)

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



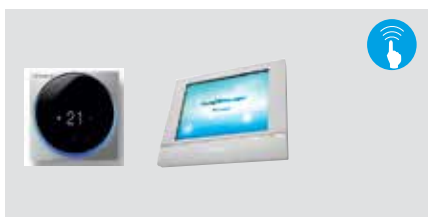
The total solution

One system - multiple applications for hotels, offices, retail shops and homes.

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



› **Controls** for maximum operating efficiency



› **Ventilation** for high quality environments



Great design flexibility



Flexible piping design

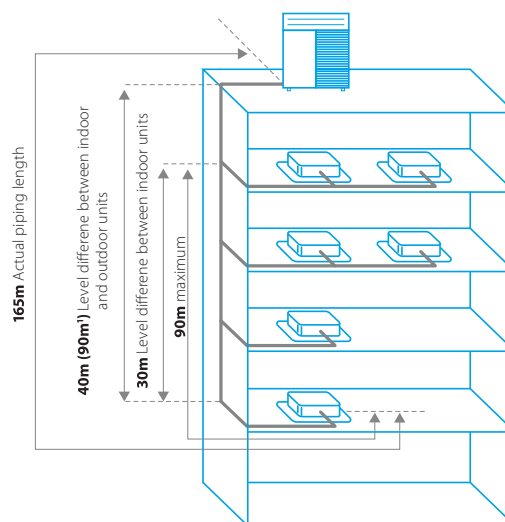
Total piping length	1000m
Longest length actual (Equivalent)	165m (190m)
Longest length after first branch	90m ¹
Level difference between indoor and outdoor units	90m ¹
Level difference between indoor units	30m

Free combination of outdoor units

Outdoor units can be used as a single unit or multiple units combined as a module for larger capacity applications. This allows for maximum optimization for smaller footprints or highest efficiency.

Indoor installation

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.



Recommended cable size

Model		RXYTQ8U5YF	RXYTQ10U5YF	RXYTQ12U5YF	RXYTQ14U5YF	RXYTQ16U5YF
Power cable	Sq mm	4	4	4	6	6
Control cable size		0.75 to 1.25 sq.mm PVC sheathed, non-shielded, 2-core 17				
Circuit breaker size	A	20.0	25.0	32.0	32.0	40.0

Note: These are the minimum required values. Refer to local regulations for further information.

Products overview **VRV**

Model		Product name
Air cooled - heat pump	VRV IV+ heat pump	Dakin's solution for comfort and low energy consumption › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units › Incorporates VRV IV+ standards and technologies such as Variable Refrigerant Temperature
		 RXYTQ-U5YF VRV IV⁺
Water cooled	Water cooled VRV IV	Ideal for high rise buildings, using water as heat source › 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
		 RWEYQ-T9Y1B VRV IV W⁺ series

Capacity (HP)

Product name	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
RXYTQ-U5YF VRV IV⁺ (50/60Hz) 		●	●	●	●	●																
RWEYQ-T9Y1B VRV IV W⁺ series 		●	●	●	●																	

● Single Unit

● Multi-combination

Products overview **VRV**

Capacity Class

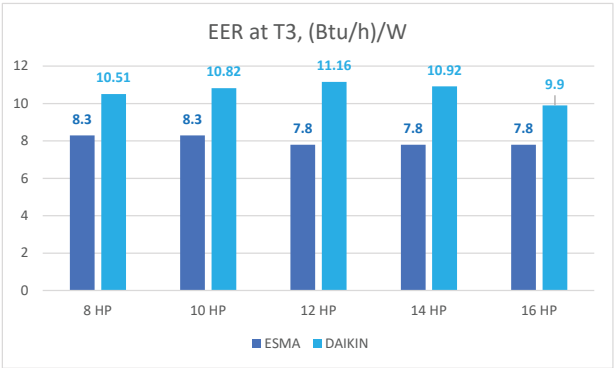
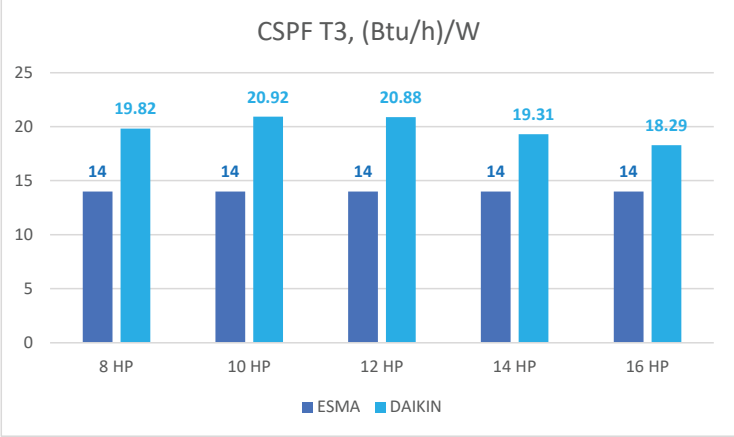
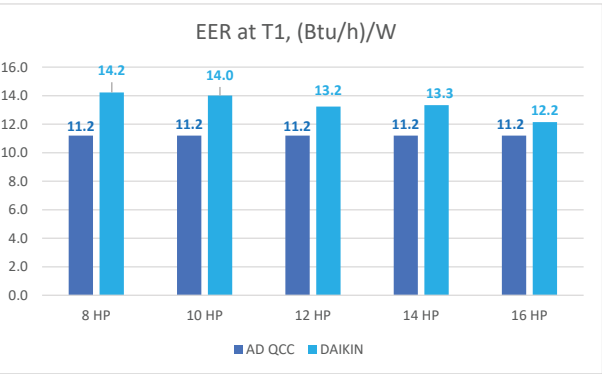
Type	Model		Product name	15	20	25	32	40	50	63	71	80	100	125	140	200	250		
Ceiling mounted cassette	UNIQUE Round flow cassette	360° air discharge for optimum efficiency and comfort › Auto cleaning function ensures high efficiency › Intelligent sensors save energy and maximize comfort › Flexibility to suit every room layout › Lowest installation height in the market!		FXFQ-BVEB														NEW Black designer panels	
	UNIQUE Fully flat cassette	Unique design that integrates fully flat into the ceiling › 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		FXZQ-A2VEB															
	2-way blow ceiling mounted cassette	Thin, lightweight design installs easily in narrow ceiling spaces › 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		FXCQ-AVEB															
Concealed Ceiling	Slim concealed ceiling unit	Slim design for flexible installation › 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		FXDQ-A3VEB														NEW Auto cleaning filter option Multi-zoning option	
	Concealed ceiling unit with medium ESP	Slimmest yet most powerfull medium static pressure unit on the market! › 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		FXSQ-A2VEB														Multi-zoning option	
	Concealed ceiling unit with high ESP	ESP up to 200, ideal for large sized spaces › 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		FXMQ-P7VEB9															
	140Pa Concealed ceiling unit with high ESP	ESP up to 140 Pa, ideal for large sized spaces › 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		FXMQ140PAVE															
	Concealed ceiling unit with high ESP	ESP up to 270, ideal for extra large sized spaces › Only grilles are visible › Large capacity unit: up to 31.5 kW heating capacity		FXMQ-MAVE															
Wall mounted	Wall mounted unit	For rooms with no false ceilings nor free floor space › 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		FXAQ-AUV1B															
Ceiling suspended	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 › 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		FXHQ-AVEB9															
	UNIQUE 4-way blow ceiling suspended unit	Unique Daikin unit for high rooms with no false ceilings nor free floor space › 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		FXUQ-AVEB9															
Floor standing	Concealed floor standing unit	Ideal for installation in offices, hotels and residential applications › 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		FXNQ-A2VEB															
	Floor standing unit	For perimeter zone air conditioning › 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		FXLQ-P5VEB															
Cooling capacity (kW) ¹						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) ²						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

(3) In addition to above listed models, the following Indoor Units can be connected to RXYTQ-U5YF series: FXAQ-ARVM, FXDQ-PDVM, FXDQ-NDVM, FXFSQ-ARV1, FXMQ-ARV1, FXMQ-NVE6, FXMQ-PBV1. All selections can be done in Daikin online VRV WebXpress Software or Daikin standalone VRV Xpress Software. Please contact your sales representative to be able to register for any of the software

Model			RXYTQ8U5YF	RXYTQ10U5YF	RXYTQ12U5YF	RXYTQ14U5YF	RXYTQ16U5YF
Cooling T1(1) 35°C (Nominal)	Capacity	HP	8	10	12	14	16
	Capacity	kW	22.4	28.0	33.5	40.0	45.0
	Capacity	Btu/h	76,450	95,550	114,350	136,500	153,550
	EER	(Btu/h) / W	14.23	14.02	13.24	13.34	12.15
	PI	kW	5.37	6.81	8.63	10.23	12.64
Cooling T3(2) 46°C	Nom. Capacity	Btu/h	68,950	86,000	97,250	109,200	119,800
		kW	20.2	25.2	28.5	32.0	35.1
	Max. Capacity (3)	kW	21.4	25.7	30.1	35.2	38.6
	EER	(Btu/h) / W	10.51	10.82	11.16	10.92	9.90
	PI	kW	6.56	7.95	8.7	10.00	12.10
	PI out	kW	6.36	7.70	8.43	9.66	11.71
Cooling Seasonal Performance Factor for Hot Climate (4)	CSPF T3	(Btu/h) / W	19.82	20.92	20.88	19.31	18.29
Heating (nominal) (5)	Capacity	kW	22.4	28.0	33.5	40.0	45.0
	Capacity	Btu/h	76,450	95,550	114,350	136,500	153,550
	COP	kW/kW	3.99	3.89	3.64	3.63	3.48
	PI	kW	5.62	7.20	9.19	11.01	12.92
Sound level (nominal)	Sound pressure	dBA	57	59	61	61	64
Dimensions	H x W x D	mm	1685x930x765				
VRV IV+ Net Weight		kg	198	234	234	283	283
Operation range cooling	Outdoor		-5 ~55°CDB				
	Indoor		14 ~25°CWB				
Operation range heating	Outdoor		-20 ~15.5°CWB				
	Indoor		15 ~27°CDB				
Refrigerant	Type		R-410A				
Pipe connection	Liquid		Ø 9.52 mm	Ø 9.52 mm	Ø 12.7 mm		
	Gas		Ø 19.1 mm	Ø 22.2 mm	Ø 28.6 mm		
Total Piping Length	System Actual	m	1000				
Max connectable indoor units			64				
Wiring length			Total Wiring Length: 2000m				
Compressors			1	1	1	2	2
Power supply			“3 Phase/ 380-415V/50Hz 3 Phase/ 400V/60Hz”				



(1) Cooling: Indoor temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, ISO15042:2011, power input of indoor units included
(2) Cooling: Indoor temperature: 29°CDB, 19°CWB, outdoor temperature: 46°CDB, ISO15042:2011, power input of indoor units included
(3) Maximum Cooling: Indoor temperature: 19°CWB, outdoor temperature: 46°CDB, Connection Ratio of Indoor Units 130%; can be used for limited number of hours
(4) Cooling seasonal performance factor for hot climates at T3 condition per ISO 16358-1:2013/AMD 1:2019
(5) Heating: Indoor temperature: 20°CDB outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m. Power input of indoor units included

VRV IV water cooled series

Ideal for high rise buildings, using water as heat source

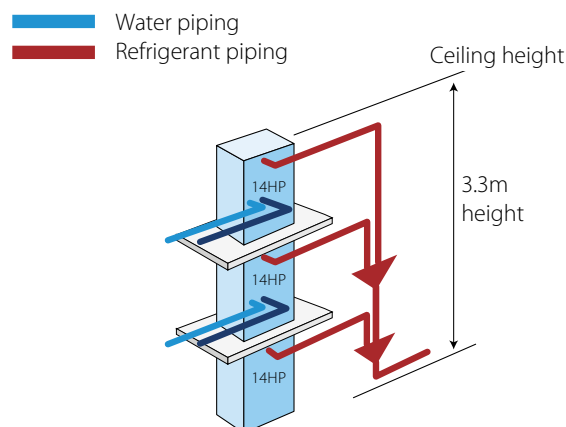
- › Unified range for standard and geothermal series simplifies stock.
- › Geothermal series reduce CO₂ emissions thanks to the use of geothermal energy as a renewable energy source
- › No need for an external heating or cooling source when used in geothermal mode
- › Covers all thermal needs of a building via a single point of contact: accurate temperature control, ventilation, air handling units, Biddle air curtains and hot water
- › Wide range of indoor units
- › 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

Main Benefits

- › Minimal technical room space required
- › Indoor installation makes units invisible from the outside



Stacked configuration



Outdoor unit				RWEYQ	8T9	10T9	12T9	14T9	
Capacity range				HP	8	10	12	14	
Cooling capacity	Prated,c			kW	22.4	28.0	33.5	40.0	
Heating capacity	Prated,h			kW	25.0	31.5	37.5	45.0	
	Max.	6°CWB		kW	25.0	31.5	37.5	45.0	
ηs,c				%	326.8	307.8	359.0	330.7	
ηs,h				%	524.3	465.9	436.0	397.1	
SEER					8.4	7.9	9.2	8.5	
SCOP					13.3	11.8	11.1	10.1	
Maximum number of connectable indoor units					64 (1)				
Indoor index connection	Min.				100.0	125.0	150.0	175.0	
	Nom.				-				
	Max.				300.0	375.0	450.0	525.0	
Dimensions	Unit	HeightxWidthxDepth		mm	980x767x560				
Weight	Unit				195	197			
Sound power level	Cooling	Nom.	dBA		65.0	71.0	72.0	74.0	
Sound pressure level	Cooling	Nom.	dBA		48.0	50.0	56.0	58.0	
Operation range	Inlet water temperature	Cooling	Min.~Max.	°CDB	10~45				
		Heating	Min.~Max.	°CWB	10~45				
	Temperature around casing	Max.	°CDB		40				
	Humidity around casing	Cooling-Heating	Max.	%		80~80			
	Refrigerant	Type/GWP				R-410A/2,087.5			
Piping connections	Charge	kg/TCO2Eq			7.9/16.5		9.6/20.0		
	Liquid	OD	mm		952		127		
	Gas	OD	mm		19.1 (2)		28.6 (2)		
	HP/LP gas	OD	mm		15.9 (3) / 19.1 (4)		19.1 (3) / 28.6 (4)		
	Drain	Size				14mm OD/ 10mm ID			
	Water	Inlet/Outlet	Size				ISO 228-G1 1/4 B/ISO 228-G1 1/4 B		
	Total piping length	System	Actual	m		500			
Power supply	Phase/Frequency/Voltage			Hz/V	3N~/50/380-415				
Current - 50Hz	Maximum fuse amps (MFA)			A	20		25		

(1) 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%)

(2) In case of heat pump system gas pipe is not used.

(3) In case of heat recovery system.

(4) In case of heat pump system.

Round flow cassette



360° air discharge for improved comfort

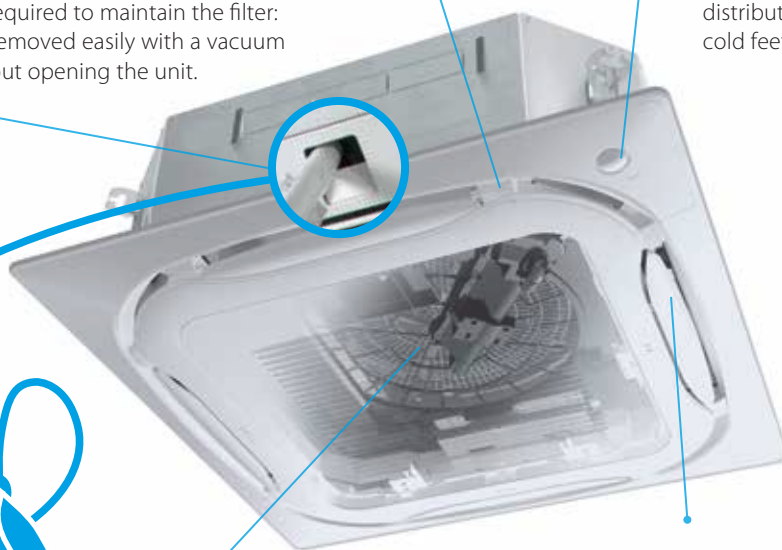
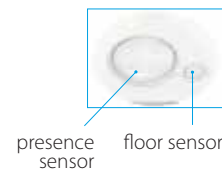
- › Industry-first and proven design.
- NEW › Wider flaps to even further improve equal temperature distribution

More energy efficient and user-friendly than any other cassette

- › Running costs can be reduced down to 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.

Intelligent sensors improve efficiency and comfort even more

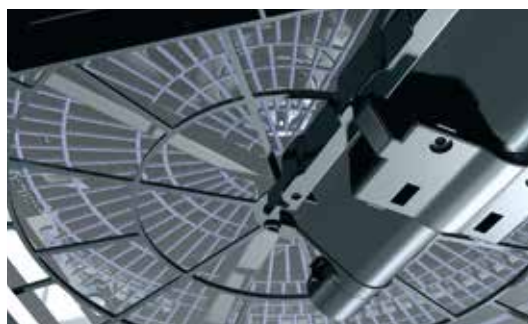
- › The presence sensor adjusts the set point if no one is detected in the room leading to up to 27% savings. It also automatically directs air flow away from any person to avoid draught.
- › The infrared floor sensor detects the average floor temperature and ensures even temperature distribution between ceiling and floor to prevent cold feet.



Auto cleaning filter

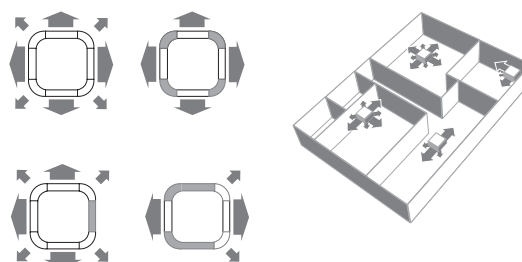
Dust can simply be removed using a vacuum cleaner without opening the unit.

* Available as an option



Flexible installation

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



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
- NEW** › Widest choice ever in decoration panels: Designer, standard and autocleaning panels in white (RAL9010) and black (RAL9005)
- NEW** › Bigger flaps improve equal air distribution
- › Individual flap control: flexibility to suit every room layout without changing the location of the unit!
- › Lowest installation height in the market: 214mm for class 20-63
- › Optional fresh air intake
- › Branch duct discharge allows to optimize air distribution in irregular shaped rooms or to supply air to small adjacent rooms



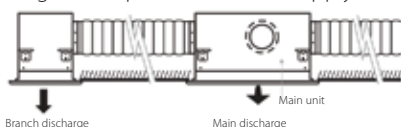
FXFQ-B



BRC1H82W



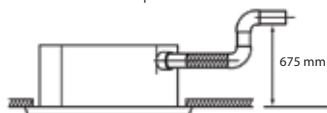
BRC7FA532F*



Branch discharge

Main discharge

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



White panel



White design panel



Black panel



Black design panel

Indoor unit				FXFQ	20B	25B	32B	40B	50B	63B	80B	100B	125B
Cooling capacity	Total capacity	Nom.	kW	2.20	2.80	3.60	4.50	5.60	7.10	9.00	11.20	14.00	
Heating capacity	Total 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	0.04				0.05	0.06	0.09	0.12	0.19	
	Heating	Nom.	kW	0.04				0.05	0.06	0.09	0.11	0.18	
Dimensions	Unit	HeightxWidthxDepth	mm	204x840x840							246x840x840		288x840x840
Weight	Unit		kg	19			20	21		24		26	
Casing	Material	Galvanised steel plate											
Decoration panel	Model	Standard panels: BYCQ140E - white with grey louvers / BYCQ140EW - full white / BYCQ140EB - black Auto cleaning panels (F = fine mesh): BYCQ140EG(F) - white / BYCQ140EGFB - black Designer panels: BYCQ140EP - white / BYCQ140EPB - black											
		Dimensions	HeightxWidthxDepth	mm	Standard panels: 50x950x950 / Auto cleaning panels: 130x950x950 / Designer panels: 50x950x950								
	Weight				kg Standard panels: 5.4 / Auto cleaning panels: 10.3 / Designer panels: 5.4								
	Fan	Air flow rate - 50Hz	Cooling	Low/High	m³/min	8.8/12.5		9.5/13.6	10.5/15.0	10.5/16.5	12.4/22.8	12.4/26.5	19.9/33.0
Heating			Low/High	m³/min	8.8/12.5		9.5/13.6	10.5/15.0	10.5/16.5	12.4/22.8	12.4/26.5	19.9/33.0	
Air filter	Type	Resin net											
Sound power level	Cooling	High	dBA	49			51		53	55	60	61	
Sound pressure level	Cooling	Low/Nom./High	dBA	28.0/29.0/31.0			29.0/31.0/33.0		30.0/33.0/35.0	30.0/34.0/38.0	30.0/37.0/43.0	36.0/41.0/45.0	
	Heating	Low/Nom./High	dBA	28.0/29.0/31.0			29.0/31.0/33.0		30.0/33.0/35.0	30.0/34.0/38.0	30.0/37.0/43.0	36.0/41.0/45.0	
Refrigerant	Type/GWP	R-410A/2,087.5											
Piping connections	Liquid	OD	mm	6.35						9.52			
	Gas	OD	mm	12.70						15.90			
	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			BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*									

*Not applicable for UAE

(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 cooling capacities are based on: indoor temperature: 20 °CDB; outdoor temperature: 7°CDB, 6°CWB equivalent refrigerant piping: 5m, level difference: 0m

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!



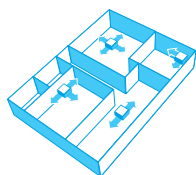
FXZQ-A



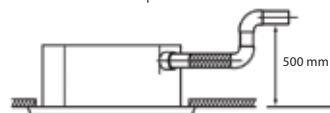
BRC1H82W



BRC7F530W-S*



- › 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	Total capacity	Nom.	kW	1.70	2.20	2.80	3.60	4.50	5.60	
Heating capacity	Total capacity	Nom.	kW	1.90	2.50	3.20	4.00	5.00	6.30	
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	HeightxWidthxDepth		mm	260x575x575					
Weight	Unit			kg	15.5			16.5		18.5
Casing	Material			Galvanised steel plate						
Decoration panel	Model				BYFQ60C2W1W					
	Colour				White (N9.5)					
	Dimensions	HeightxWidthxDepth	mm	46x620x620						
	Weight				2.8					
Decoration panel 2	Model				BYFQ60C2W1S					
	Colour				SILVER					
	Dimensions	HeightxWidthxDepth	mm	46x620x620						
	Weight				2.8					
Decoration panel 3	Model				BYFQ60B2W1					
	Colour				White (RAL9010)					
	Dimensions	HeightxWidthxDepth	mm	55x700x700						
	Weight				2.7					
Decoration panel 4	Model				BYFQ60B3W1					
	Colour				WHITE (RAL9010)					
	Dimensions	HeightxWidthxDepth	mm	55x700x700						
	Weight				2.7					
Fan	Air flow rate - 50Hz	Cooling	Low/High	m³/min	6.5/8.5	6.5/8.7	6.5/9.0	7.0/10.0	8.0/11.5	10.0/14.5
		Heating	Low/High	m³/min	6.5/8.5	6.5/8.7	6.5/9.0	7.0/10.0	8.0/11.5	10.0/14.5
Air filter	Type			Resin net						
Sound power level	Cooling	High	dBA	49			50	51	54	60
Sound pressure level	Cooling	Low/Nom./High	dBA	25.5/28.0/31.5	25.5/29.5/32.0	25.5/30.0/33.0	26.0/30.0/33.5	28.0/32.0/37.0	33.0/40.0/43.0	
	Heating	Low/Nom./High	dBA	25.5/28.0/31.5	25.5/29.5/32.0	25.5/30.0/33.0	26.0/30.0/33.5	28.0/32.0/37.0	33.0/40.0/43.0	
Refrigerant	Type/GWP			R-410A/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~/50/60/220-240/220					
Current - 50Hz	Maximum fuse amps (MFA)			A	16					
Control systems	Infrared remote control			BRC7EB530W (standard panel)* / BRC7F530W (white panel)* / BRC7F530S (grey panel)*						
	Wired remote control			BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*						

*Not applicable for UAE

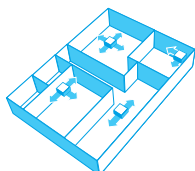
(1) Nominal cooling capacities are based on: indoor temperature: 27 °CDB, 19 °CWB, outdoor temperature: 35 °CDB, equivalent refrigerant piping: 5m, level difference: 0m

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

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!



- › 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



FXCQ20-40A

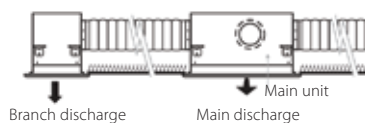


BRC1H82W

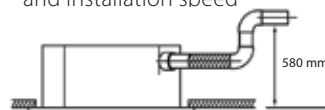


BRC7F5C52*

- › 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	Total capacity	Nom.	kW	2.2	2.8	3.6	4.5	5.6	7.1	9.0	14.0	
Heating capacity	Total 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	HeightxWidthxDepth		mm	305x775x620			305x990x620		305x1,445x620		
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	Low/High	m³/min	7.5/10.5	8/11.5		8.5/12	10.5/15	11.5/16	18.5/26	22.5/32
Air filter	Type			Resin net with mold resistance								
Sound power level	Cooling	Nom./High		dBA	46/48	47/50	48/50	49/52	51/53	53/55	54/58	58/62
Sound pressure level	Cooling	Low/Nom./High		dBA	28.0/30.0/32.0	29.0/31.0/34.0	30.0/32.0/34.0	31.0/33.0/36.0	31.0/35.0/37.0	32.0/37.0/39.0	33.0/38.0/42.0	38.0/42.0/46.0
	Heating	Low/Nom./High		dBA	28.0/30.0/32.0	29.0/31.0/34.0	30.0/32.0/34.0	31.0/33.0/36.0	31.0/35.0/37.0	32.0/37.0/39.0	33.0/38.0/42.0	38.0/42.0/46.0
Refrigerant	Type/GWP			R-410A/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			BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*								

*Not applicable for UAE

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

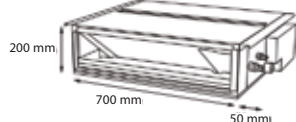
(2) Nominal cooling capacities are based on: indoor temperature: 20 °CDB; outdoor temperature: 7°CDB, 6°CWB equivalent refrigerant piping: 5m, level difference: 0m

Slim concealed ceiling unit

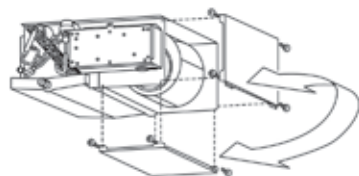
Slim design for flexible installation

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

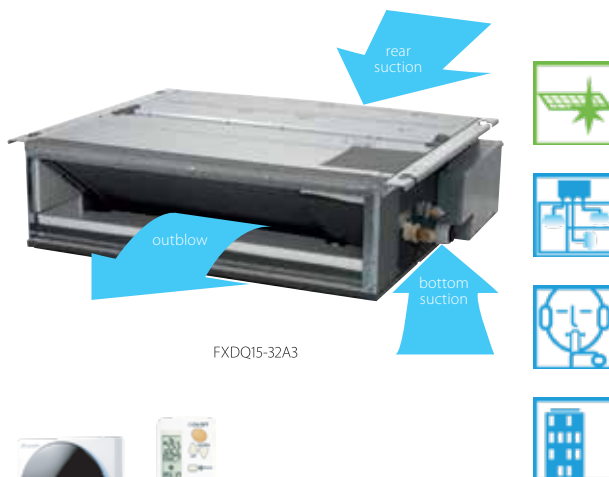
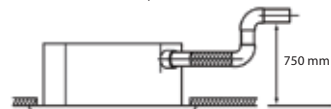
SERIE A (15, 20, 25, 32)



- › Medium external static pressure up to 44Pa facilitates unit use with flexible ducts of varying lengths
- › 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.
- › Auto cleaning filter option ensures maximum efficiency, comfort and reliability by regular filter cleaning
- › Multi zoning kit allows multiple individually-controlled climate zones to be served by one indoor unit
- › 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



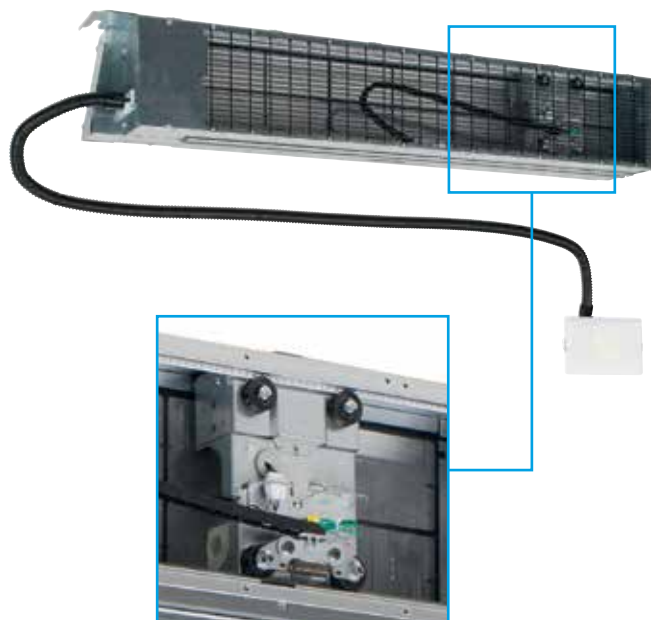
FXDQ15-32A3



BRC1H82W



BRC4C65*



Auto cleaning filter option

Indoor unit				FXDQ	15A3	20A3	25A3	32A3	40A3	50A3	63A3
Cooling capacity	Total capacity	Nom.	kW	1.70	2.20	2.80	3.60	4.50	5.60	7.10	
Heating capacity	Total capacity	Nom.	kW	1.90	2.50	3.20	4.00	5.00	6.30	8.00	
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 >			mm	240							
Dimensions	Unit	HeightxWidthxDepth	mm	200x750x620				200x950x620		200x1,150x620	
Weight	Unit		kg	22.0				26.0		29.0	
Casing	Material			Galvanised steel							
Fan	Air flow rate - 50Hz	Cooling Low/High	m³/min	6.4/7.5	6.4/8.0			8.5/10.5	10.0/12.5	13.0/16.5	
	External static pressure - 50Hz	Nom./High	Pa	10/30.0				15/44.0			
Air filter	Type			Removable / washable							
Sound power level	Cooling	High	dBA	50	51			52	53	54	
Sound pressure level	Cooling	Low/Nom./High	dBA	27.0/31.0/32.0	27.0/31.0/33.0			28.0/32.0/34.0	29.0/33.0/35.0	30.0/34.0/36.0	
Refrigerant	Type/GWP			R-410A/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* / BRC4C66*							
	Wired remote control			BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*							

(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 cooling capacities are based on: indoor temperature: 20 °CDB; outdoor temperature: 7°CDB, 6°CWB equivalent refrigerant piping: 5m, level difference: 0m

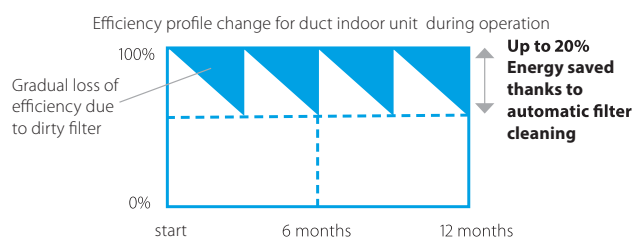
*Not applicable for UAE

Auto cleaning filter for concealed ceiling units

The unique automatic cleaning filter achieves higher efficiency and comfort with lower maintenance costs

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

Improved indoor air quality

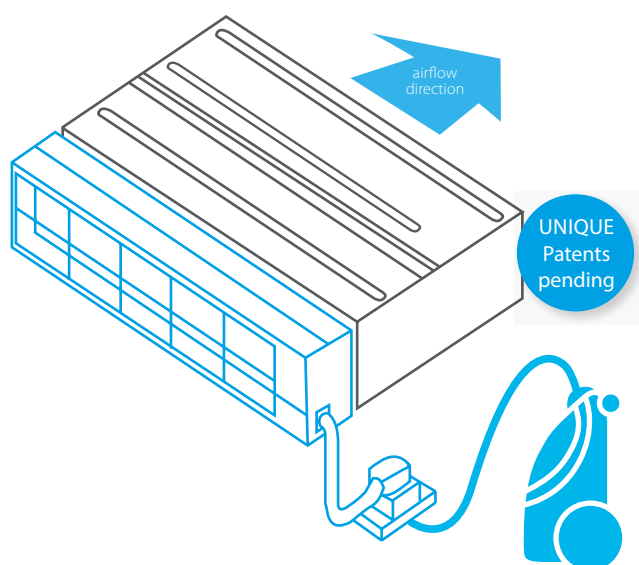
- › Optimum airflow eliminates draft and insulates sound

Superb reliability

- › Prevents clogged filters for seamless operation

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



www.youtube.com/DaikinEurope



Combination table

	VRV						
	FXDQ-A3						
	15	20	25	32	40	50	63
BAE20A62	•	•	•	•			
BAE20A82					•	•	
BAE20A102							•

	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

The multi-zoning system is a room-by-room controller. It is fitted with motorised dampers, which immediately adapt using Daikin ducted solutions. This system supports control of up to 8 zones via a centralised thermostat

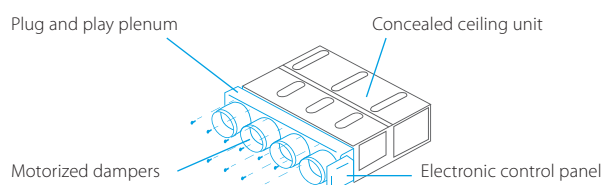
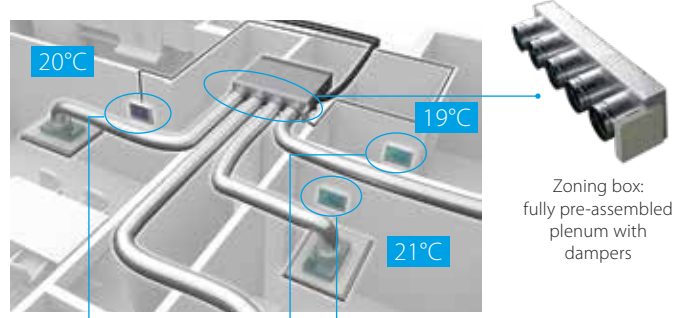
How does it work?

Increased comfort

- › 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

Easy to install

- › Automatic air flow adjustment according to the demand
- › Easy to install, integrates with the Daikin indoor units and system controls
- › Time saving as plenum comes fully pre-assembled with dampers, and control boards
- › Reduces the amount of refrigerant required in the installation



Blueface - Airzone Main Thermostat

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



AZCE6BLUEFACECB

Airzone Zone Thermostat

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



AZCE6THINKRB*

Airzone Zone Thermostat

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



AZCE6LITERB*

Standard Ceiling Void



Compact Ceiling Void



			VRV																		
			FXDQ-A3								FXSQ-A										
Number of rised dampers	Reference	Dimensions H x W x D (mm)	15	20	25	32	40	50	63	15	20	25	32	40	50	63	71	80	100	125	140
2	AZEZ6DAIST07XS2	300 x 930 x 454									•	•	•	•							
	AZEZ6DAIST07S2														•	•					
3	AZEZ6DAIST07XS3	300 x 930 x 454									•	•	•	•							
	AZEZ6DAIST07S3														•	•					
4	AZEZ6DAIST07S4	300 x 930 x 454													•	•					
	AZEZ6DAIST07M4																•				
5	AZEZ6DAIST07M5	300 x 1,425 x 454															•		•		
	AZEZ6DAIST07L5																		•	•	
6	AZEZ6DAIST07M6	300 x 1,638 x 454															•		•		
	AZEZ6DAIST07L6																			•	•
7	AZEZ6DAIST07L7	515 x 1,425 x 454																		•	•
	AZEZ6DAIST07XL7																				•
8	AZEZ6DAIST07L8	515 x 1,425 x 454																		•	•
	AZEZ6DAIST07XL8																				•
2	AZEZ6DAISL01S2	210 x 720 x 444	•	•	•	•															
3	AZEZ6DAISL01S3	210 x 720 x 444	•	•	•	•															
4	AZEZ6DAISL01M4	210 x 930 x 444						•	•												
5	AZEZ6DAISL01L5	210 x 1,140 x 444								•											

*Not applicable for UAE

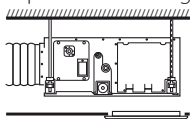
Concealed ceiling unit with medium ESP

Slimmest yet most powerful medium static pressure unit on the market

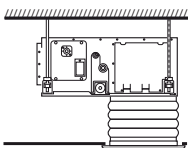
- › Slimmest unit in class, only 245mm (300mm built-in height) and therefore narrow ceiling voids are no longer a challenge



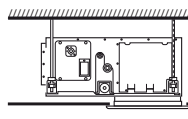
- › Quiet operation: down to 25dBA sound pressure level
- › Medium external static pressure up to 150Pa facilitates using flexible ducts of varying lengths
- › Possibility to change ESP via wired remote control allows optimisation of the supply air volume
- › Discretely concealed in the wall: only the suction and discharge grilles are visible
- › 15 class unit especially developed for small or well-insulated rooms, such as hotel bedrooms, small offices, etc.
- › Multi zoning kit allows multiple individually-controlled climate zones to be served by one indoor unit
- › 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



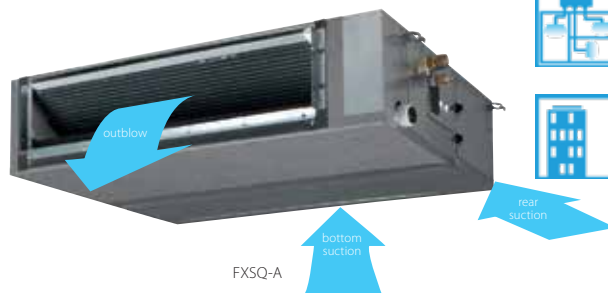
For free use into a false ceiling



For connecting onto a suction canvas (not supplied by Daikin)



For direct connection to Daikin panel (via EKBYS kit)

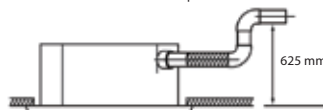


BRC1H82W



BRC4C65*

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

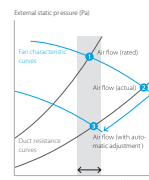


Automatic Airflow Adjustment function

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

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	Total capacity	Nom.		kW	1.70	2.20	2.80	3.60	4.50	5.60	7.10	9.00	11.20	14.00	16.00	
Heating capacity	Total capacity	Nom.		kW	1.90	2.50	3.20	4.00	5.00	6.30	8.00	10.0	12.5	16.0	18.0	
Power input - 50Hz	Cooling	Nom.		kW	0.090			0.096	0.151	0.154	0.188	0.213	0.290	0.331	0.386	
	Heating	Nom.		kW	0.086			0.092	0.147	0.150	0.183	0.209	0.285	0.326	0.382	
Dimensions	Unit	HeightxWidthxDepth		mm	245x550x800				245x700x800			245x1,000x800		245x1,400x800		245x1,550x800
Weight	Unit			kg	23.5			24.0	28.5	29.0	35.5	36.5	46.0	47.0	51.0	
Casing	Material				Galvanised steel plate											
Fan	Air flow rate - 50Hz	Cooling	Low/High	m³/min	6.5/8.7	6.5/9.0		7.0/9.5	11.0/15.0	11.0/15.2	15.0/21.0	16.0/23.0	23.0/32.0	26.0/36.0	28.0/39.0	
		Heating	Low/High	m³/min	6.5/8.7	6.5/9.0		7.0/9.5	11.0/15.0	11.0/15.2	15.0/21.0	16.0/23.0	23.0/32.0	26.0/36.0	28.0/39.0	
	External static pressure - 50Hz		Nom./High	Pa	30/150							40/150		50/150		
Air filter	Type				Resin net											
Sound power level	Cooling	High		dBA	54			55	60		59	61		64		
Sound pressure level	Cooling	Low/Nom./High		dBA	25.0/28.0/29.5	25.0/28.0/30.0		26.0/29.0/31.0	29.0/32.0/35.0		27.0/30.0/33.0	29.0/32.0/35.0		31.0/34.0/36.0	33.0/36.0/39.0	34.0/38.0/41.5
	Heating	Low/Nom./High		dBA	26.0/29.0/31.5	26.0/29.0/32.0		27.0/30.0/33.0	29.0/34.0/37.0		28.0/32.0/35.0	30.0/34.0/37.0		31.0/34.0/37.0	33.0/37.0/40.0	34.0/38.5/42.0
Refrigerant	Type/GWP				R-410A/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), drain height 625 mm											
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				BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*											

*Not applicable for UAE

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

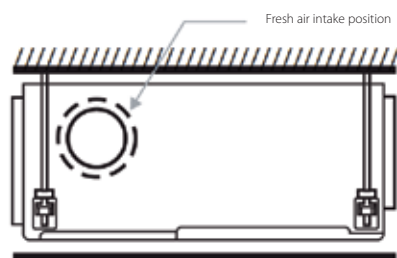
(2) Nominal cooling capacities are based on: indoor temperature: 20 °CDB; outdoor temperature: 7°CDB, 6°CWB equivalent refrigerant piping: 5m, level difference: 0m

Concealed ceiling unit with high ESP

Ideal for large sized spaces
FXMQ-P7: ESP up to 200 Pa

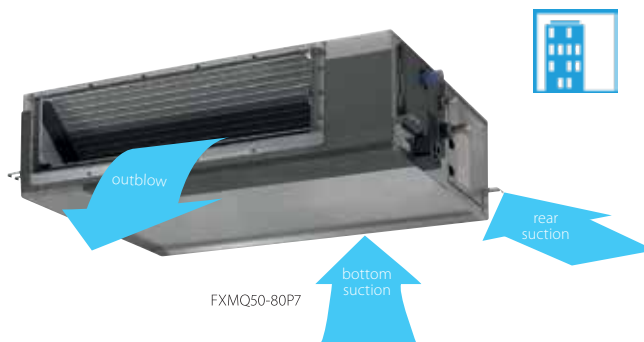
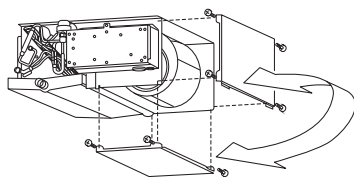
- › Possibility to change ESP via wired remote control allows optimisation of the supply air volume
- › High external static pressure up to 200Pa facilitates extensive duct and grille network
- › Discretely concealed in the wall: only the suction and discharge grilles are visible
- › Fresh air intake 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

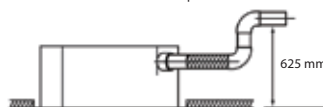


BRC1H82W



BRC4C65*

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

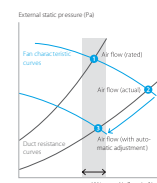


Automatic Airflow Adjustment function

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

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	50P7	63P7	80P7	100P7	125P7	140PAVE	200MA	250MA
Cooling capacity	Total capacity	Nom.		kW	5.6	7.1	9.0	11.2	14.0	16	22.4	28.0
Heating capacity	Total capacity	Nom.		kW	6.3	8.0	10.0	12.5	16.0	18	25.0	31.5
Power input - 50Hz	Cooling	Nom.		kW	0.110	0.120	0.171	0.176	0.241	0.405	1.294	1.465
	Heating	Nom.		kW	0.098	0.108	0.159	0.164	0.229	0.380	1.294	1.465
Required ceiling void >				mm	350					-		
Dimensions	Unit	HeightxWidthxDepth		mm	300x1,000x700			300x1,400x700			470x1,380x1,100	
Weight	Unit			kg	35			46			137	
Casing	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	Low/High	m³/min	15.0/18.0	16.0/19.5	20.0/25.0	23.0/32.0	28.0/39.0	32/39	50/58	62/72
		Heating	Low/High	m³/min	15.0/18.0	16.0/19.5	20.0/25.0	23.0/32.0	28.0/39.0	-/-		
	External static pressure - 50Hz	Nom./High		Pa	100/200					100/140	132/221	191/270
Air filter	Type				Resin net					-		
Sound pressure level	Cooling	Low/High		dBA	37/41	38/42	39/43		40/44	43/45	45/48	
	Heating	Low/High		dBA	37/41	38/42	39/43		40/44	-/-		
Refrigerant	Type/GWP				R-410A/-2.087.5							
Piping connections	Liquid	OD	mm	6.35	9.52							
	Gas	OD	mm	12.7	15.9				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							
Current - 50Hz	Maximum fuse amps (MFA)			A	16							
Control systems	Infrared remote control				BRC4C62* / BRC4C64*					BRC4C66* BRC4C65*	BRC4C62* / BRC4C64*	
	Wired remote control				BRC1H81/82W/S/K: BRC1H52W/S/K*; BRC1D52*							

(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 cooling capacities are based on: indoor temperature: 20 °CDB; outdoor temperature: 7°CDB, 6°CWB equivalent refrigerant piping: 5m, level difference: 0m

*Not applicable for UAE

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
- › 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



FXAQ-A



BRC1H82W



BRC7EA628*



Indoor unit				FXAQ	15A	20A	25A	32A	40A	50A	63A
Cooling capacity	Total capacity	Nom.		kW	1.7	2.2	2.8	3.6	4.5	5.6	7.1
Heating capacity	Total capacity	Nom.		kW	1.9	2.5	3.2	4.0	5.0	6.3	8.0
Power input - 50Hz	Cooling	Nom.		kW	0.02		0.03		0.02	0.03	0.05
	Heating	Nom.		kW	0.03			0.04	0.02	0.04	0.06
Dimensions	Unit	HeightxWidthxDepth		mm	290x795x266				290x1,050x269		
Weight	Unit			kg	12				15		
Fan	Air flow rate - 50Hz	Cooling	Low/High	m³/min	7.0/8.4	7.0/9.1	7.0/9.4	7.0/9.8	9.7/12.2	11.5/14.4	13.5/18.3
Air filter	Type	Washable resin net									
Sound power level	Cooling	High		dBA	51.0	52.0	53.0	55.0		58.0	63.0
Sound pressure level	Cooling	Low/High		dBA	28.5/32.0	28.5/33.0	28.5/35.0	28.5/37.5	33.5/37.0	35.5/41.0	38.5/46.5
	Heating	Low/High		dBA	28.5/33.0	28.5/34.0	28.5/36.0	28.5/38.5	33.5/38.0	35.5/42.0	38.5/47.0
Refrigerant	Type/GWP	R-410A/2,087.5									
Piping connections	Liquid	OD		mm	6.35					9.52	
	Gas	OD		mm	12.7					15.9	
	Drain	VP13 (I.D. 15/O.D. 18)									
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/220-240						
Current - 50Hz	Maximum fuse amps (MFA)			A	16						
Control systems	Infrared remote control				BRC7EA628* / BRC7EA629*						
	Wired remote control				BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*						

*Not applicable for UAE

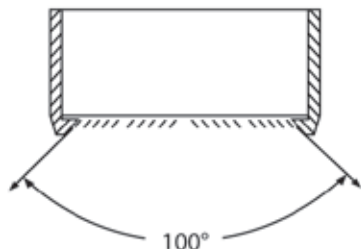
(1) Nominal cooling capacities are based on: indoor temperature: 27 °CDB, 19 °CWB, outdoor temperature: 35 °CDB, equivalent refrigerant piping: 5m, level difference: 0m

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

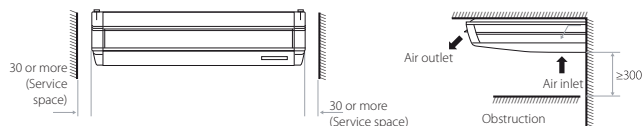
Ceiling suspended unit

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



- › 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

- › 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



FXHQ63A



BRC1H82W



BRC7G53*

Indoor unit				FXHQ	32A	63A	100A
Cooling capacity	Total capacity	Nom.		kW	3.6	7.1	11.2
Heating capacity	Total 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	HeightxWidthxDepth		mm	235x960x690	235x1,270x690	235x1,590x690
Weight	Unit			kg	24	33	39
Casing	Material				Resin		
Fan	Air flow rate - 50Hz	Cooling	Low/High	m³/min	10.0/14.0	14.0/20.0	19.0/29.5
		Heating	Low/High	m³/min	10.0/14.0	14.0/20.0	19.0/29.5
Air filter	Type				Resin net with mold resistance		
Sound power level	Cooling	Nom./High		dBA	52/54	53/55	55/62
Sound pressure level	Cooling	Low/Nom./High		dBA	31.0/34.0/36.0	34.0/35.0/37.0	34.0/37.0/44.0
	Heating	Low/Nom./High		dBA	31.0/34.0/36.0	34.0/35.0/37.0	34.0/37.0/44.0
Refrigerant	Type/GWP				R-410A/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				BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*		

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

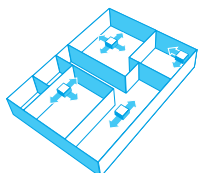
(2) Nominal cooling capacities are based on: indoor temperature: 20 °CDB; outdoor temperature: 7°CDB, 6°CWB equivalent refrigerant piping: 5m, level difference: 0m

*Not applicable for UAE

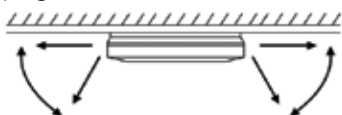
4-way blow ceiling suspended unit

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

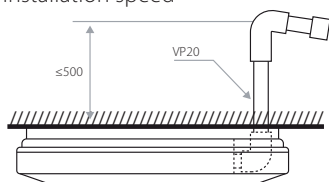
- › Even rooms with ceilings up to 3.5m can be heated up or cooled down very easily without capacity loss
- › Can easily be installed in both new and refurbishment projects
- › Individual flap control: flexibility to suit every room layout without changing the location of the unit!



- › 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



FXUQ-A



UNIQUE



BRC1H82W



BRC7C58*

Indoor unit				FXUQ	71A	100A
Cooling capacity	Total capacity	Nom.		kW	8.0	11.2
Heating capacity	Total 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	HeightxWidthxDepth		mm	198x950x950	
Weight	Unit			kg	26	27
Casing	Material				Resin	
Fan	Air flow rate - 50Hz	Cooling	Low/High	m³/min	16.0/22.5	21.0/31.0
		Heating	Low/High	m³/min	16.0/22.5	21.0/31.0
Air filter	Type				Resin net with mold resistance	
Sound power level	Cooling	Nom./High		dBA	56/58	62/65
Sound pressure level	Cooling	Low/Nom./High		dBA	36.0/38.0/40.0	40.0/44.0/47.0
	Heating	Low/Nom./High		dBA	36.0/38.0/40.0	40.0/44.0/47.0
Refrigerant	Type/GWP				R-410A/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				BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*	

*Not applicable for UAE

(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 cooling capacities are based on: indoor temperature: 20 °CDB; outdoor temperature: 7°CDB, 6°CWB equivalent refrigerant piping: 5m, level difference: 0m

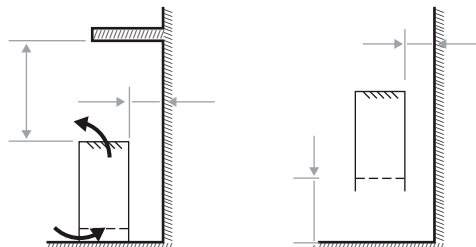
Floor standing unit

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



FXLQ20,25P



Floor standing

Wall mounted



BRC1H82W



BRC4C65*

- › 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	Total capacity	Nom.	kW	2.2	2.8	3.6	4.5	5.6	7.1	
Heating capacity	Total capacity	Nom.	kW	2.5	3.2	4.0	5.0	6.3	8.0	
Power input - 50Hz	Cooling	Nom.	kW	0.05		0.09		0.11		
	Heating	Nom.	kW	0.05		0.09		0.11		
Dimensions	Unit	HeightxWidthxDepth	mm	600x1,000x232		600x1,140x232		600x1,420x232		
Weight	Unit		kg	27		32		38		
Fan	Air flow rate - 50Hz	Cooling Low/High	m³/min	6.0/7		6.0/8	8.5/11	11.0/14	12.0/16	
Air filter	Type	Resin net								
Sound power level	Cooling	High	dBA	54			57	58	59	
Sound pressure level	Cooling	Low/High	dBA	32/35			33/38	34/39	35/40	
	Heating	Low/High	dBA	32/35			33/38	34/39	35/40	
Refrigerant	Type/GWP	R-410A/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			BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*						

*Not applicable for UAE

(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 cooling capacities are based on: indoor temperature: 20 °CDB; outdoor temperature: 7°CDB, 6°CWB equivalent refrigerant piping: 5m, level difference: 0m

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



FXNQ-A



BRC1H82W



BRC4C65*

- › 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	Total capacity	Nom.		kW	2.20	2.80	3.60	4.50	5.60	7.10
Heating capacity	Total capacity	Nom.		kW	2.50	3.20	4.00	5.00	6.30	8.00
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
Dimensions	Unit	HeightxWidthxDepth		mm	620 / 720x790x200			620 / 720x990x200		620 / 720x1,190x200
Weight	Unit			kg	23.5			27.5		32.0
Casing	Material				Galvanised steel plate					
Fan	Air flow rate - 50Hz	Cooling	Low/High	m³/min	6.4/8.0			8.5/10.5	10.0/12.5	13.0/16.5
		Heating	Low/High	m³/min	6.4/8.0			8.5/10.5	10.0/12.5	13.0/16.5
	External static pressure - 50Hz	Nom./High		Pa	10/41.0		10/42.0	15/52.0	15/59.0	15/55.0
Air filter	Type				Resin net					
Sound power level	Cooling	High		dBA	51			52	53	54
Sound pressure level	Cooling	Low/Nom./High		dBA	27.0/28.5/30.0			28.0/30.0/32.0	29.0/31.0/33.0	32.0/33.0/35.0
	Heating	Low/Nom./High		dBA	27.0/28.5/30.0			28.0/30.0/32.0	29.0/31.0/33.0	32.0/33.0/35.0
Refrigerant	Type/GWP				R-410A/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				BRC1H81/82W/S/K; BRC1H52W/S/K*; BRC1D52*					

*Not applicable for UAE

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

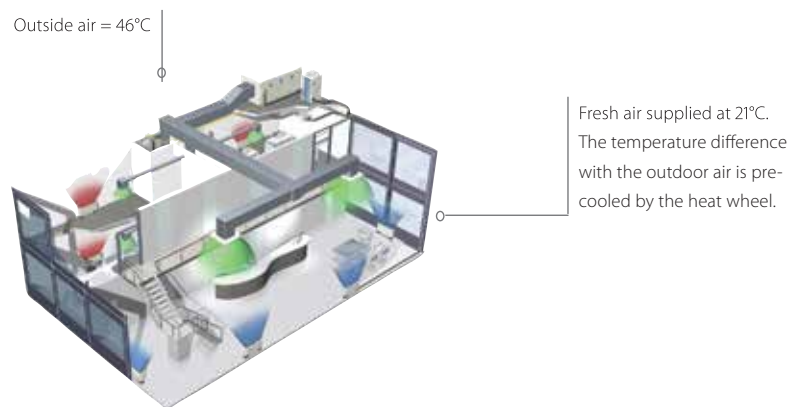
(2) Nominal cooling capacities are based on: indoor temperature: 20 °CDB; outdoor temperature: 7°CDB, 6°CWB equivalent refrigerant piping: 5m, level difference: 0m

Ventilation Range

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

High Efficiency

For most of the time, the AHU will be in cooling mode. By combining a heat wheel with the AHU, energy bills can be reduced by recovering the cool air exhausted to the atmosphere. When heating is required in winter conditions, we can simply package it with Daikin heat pumps which are renowned for their high efficiency. Fresh air can be heated in cases when the air is too cold to be supplied untreated.



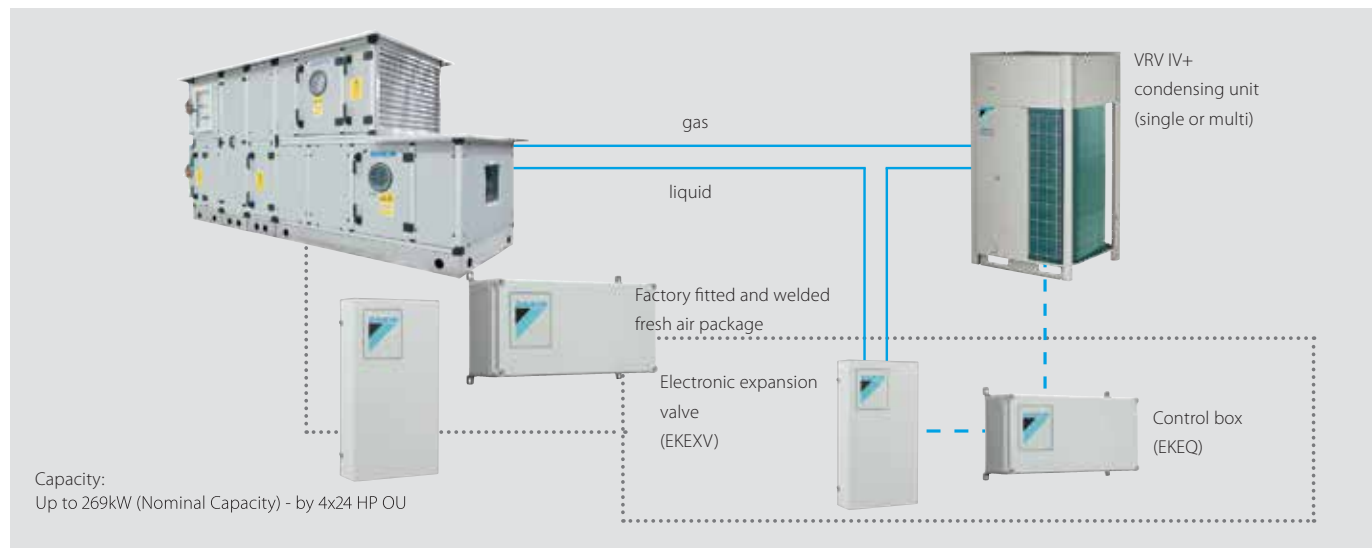
Fast response to changing loads resulting in high comfort levels

Daikin 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 package is the VRV range combined with an AHU that is designed to provide the perfect indoor conditions for the year round cooling demand in the Middle East, while reducing running cost.

Easy Design and Installation

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

Daikin Fresh air package



Product range

Type	Product name	0	200	400	600	800	1,000	2,000	4,000	6,000	8,000	32,00000	Components of good indoor air quality
	VAM-FC												› Ventilation › Heat recovery
Air handling units	DX Total Fresh Air Package												› Ventilation › Heat recovery › Air processing › Humidification › Filtration

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 using a proportional 0-10V algorithm for capacity control

X control: Precise control of air temperature (discharge temperature, suction temperature, room temperature) requiring a preprogrammed DDC controller (for special applications) using a proportional 0-10V algorithm for capacity control

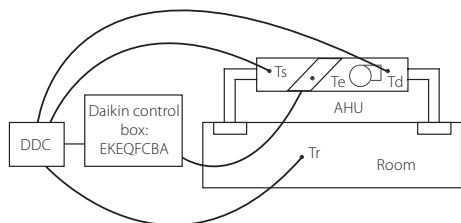
Y control: Control of refrigerant (Te/Tc) temperature via Daikin control (no DDC controller needed) with 3rd party thermostat (Daikin control for field settings and error indication)

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

Possibility W (Td/Tr control):

Air temperature control via DDC controller

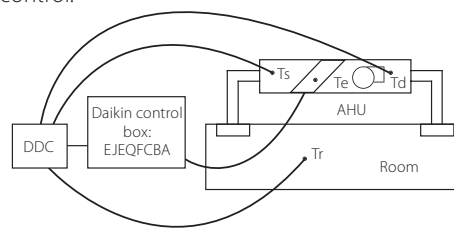
Room temperature is controlled as a function of the air handling unit suction or discharge air (customer selection). The DDC controller is translating the temperature difference between set point and air suction temperature (or air discharge temperature or room temperature) into a proportional 0-10V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



Possibility X (Td/Tr control):

Precise air temperature control via DDC controller

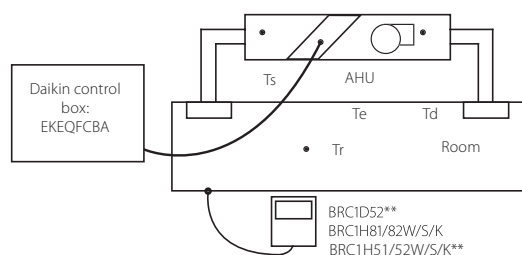
Room temperature is controlled as a function of the air handling unit suction or discharge air (customer selection). The DDC controller is translating the temperature difference between set point and air suction temperature (or air discharge temperature or room temperature) into a reference voltage (0-10V) 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.



Possibility Y control (Te/Tc control):

By fixed evaporating /condensing temperature

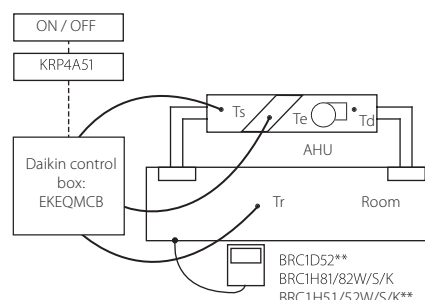
A fixed target evaporating temperature of between 3°C and 12°C can be set by the customer. In this case, room temperature is only indirectly controlled. The cooling load is determined from the actual evaporating temperature (i.e. load to the heat exchanger). A Daikin infrared remote control (BRC1D52** or BRC1H81/82W/S/K or BRC1H51/52W/S/K** - optional) can be connected for error indication.



Possibility Z (Ts/Tr control):

Control your AHU just like a VRV indoor unit with 100% fresh air (BRC1D52** or BRC1H81/82W/S/K or BRC1H51/52W/S/K** - optional)

Set point can be fixed via standard Daikin infrared remote control. Remote ON/OFF can be achieved by an optional adapter KRP4A51. No external DDC controller should be connected. The cooling load is determined from the air suction temperature and set point on the Daikin controller.



Ts = Air suction temperature
Td = Air discharge temperature

Tr = Room temperature
Te = Evaporating temperature

AHU = Air handling unit
DDC = Digital Display Controller

	Option kit	Features
Possibility W	EKEQFCBA	DDC controller is required temperature control using air suction or air discharge temperature
Possibility X		DDC and Microtech controller is required Precise temperature control using air suction or air discharge temperature
Possibility Y		Using fixed evaporating temperature, no set point can be set using remote control
Possibility Z	EKFQMCBA*	Using Daikin infrared remote control BRC1D52** or BRC1H81/82W/S/K Temperature control using air suction temperature

**Not applicable for UAE

* EKEQMCB (for 'multi' application)

Control Systems

Control Systems

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New premium
design wired
remote control

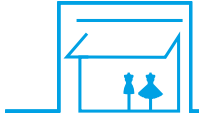


Control solutions summary

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



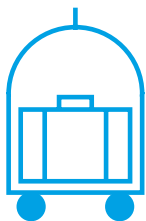
	Unit Control	Integrating control				Advanced control	
	BRC1H*	RTD-20	RTD-Net	KLIC-DI	EKMBDXA	DCC601A51	DCM601A51
							
	User-friendly wired remote control	Retail economiser	Modbus interface for monitoring & control	KNX interface	DIII-net modbus interface	Intelligent ControlBer	Energy Manager
	1 remote 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) & 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)	● (3)
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

*BRC1H81/82W/S/K, BRC1H51/52W/S/K

Hotel



	Unit control	Integrating control		Advanced control
	BRC1H*	RTD-HO	KLIC-DI	DCM601A51
				
	1 remote controller for 1 indoor unit (group)	1 gateway for 1 indoor unit (group)	1 gateway for 1 indoor unit	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

*BRC1H81/82W/S/K, BRC1H51/52W/S/K

Office



	Unit control	Integrating control		Advanced control	
			 LonWorks Interface	 BACnet Interface	 Intelligent Controller
	BRC1H*	EKMBDXA	DMS504B51	DMS502A51	DCC601A51
	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) (5)
Automatic control of A/C	●	●	●	●	●
Centralised control for management		●	●	●	●
Local control for office staff	●			● (4)	● through Web Remote management
Limit control possibilities for office staff	●	●	●	●	●
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	● (3)				
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 (DAM411B51) needed to have up to 256 indoor unit(s) (groups), 40 outdoors (3) Not available on all indoor units (4) Via Daikin cloud service (5) Through own IT set-up (not Daikin cloud sever) (5) Up to 10 DCC601A51 can be combined as a single site on Daikin Cloud Service

*BRC1H81/82W/S/K, BRC1H51/52W/S/K

Home automation



	Unit	Integrating control		Advanced control
				 Intelligent Controller
	BRC1H*	RTD-Net	KLC-DI	DCM601A51
	1 remote controller for 1 indoor unit (group)	1 gateway for 1 indoor unit (group)	1 gateway for 1 indoor unit	1 unit for 32 indoor unit(s) (3)
Automatic control of A/C	●	●	●	●
Limit control possibilities for children	●	●	●	●
Create zones within the home				●
Interlock with eg. Alarm, PIR sensor				● (limited)
Integrate Daikin units into existing BMS via Modbus		●		
Integrate Daikin units into existing BMS via KNX			●	
Monitor energy consumption	● (1)			Via WAGO I/O

(1) : Not available for all indoors (2) via Daikin cloud service (3) Up to 10 DCC601A51 can be combined as a single site on Daikin Cloud Service

*BRC1H81/82W/S/K, BRC1H51/52W/S/K

Madoka

The beauty of simplicity.



BRC1H52S* / BRC1H82S



BRC1H52K* / BRC1H82K



BRC1H52W* / BRC1H82W

User-friendly wired remote controller with premium design

A complete redesigned controller focused on enhancing user experience

- › Sleek and elegant design
- › Intuitive touch-button control
- › Three colours to match any interior
- › Compact, measures only 85 x 85 mm
- › Advanced settings and commissioning via smartphone

* Not applicable for UAE



reddot award 2018
winner



DESIGN
AWARD
2018



Madoka Assistant

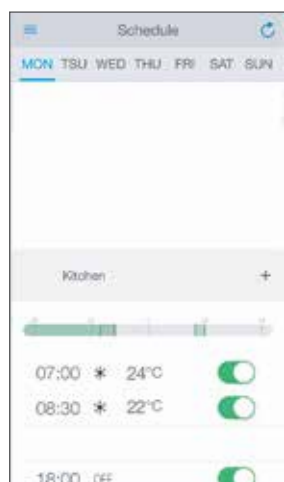


Simplifies the advanced settings such as schedule or set point limitation



- ☒ Visual interface simplifies advanced settings such as schedule setting, energy saving activation, setting restrictions, etc.
- ☒ Easy and quick commissioning
- ☒ Featuring Bluetooth® low energy technology

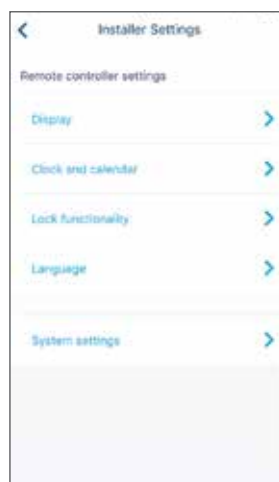
Easy setting of schedules



Advanced user settings



Installer settings



Field settings



Individual control systems

BRC1H52/82W / BRC1H52/82S / BRC1H52/82K

Madoka wired remote controller for Sky Air and VRV



BRC1H52/82W



BRC1H52/82S



BRC1H52/82K

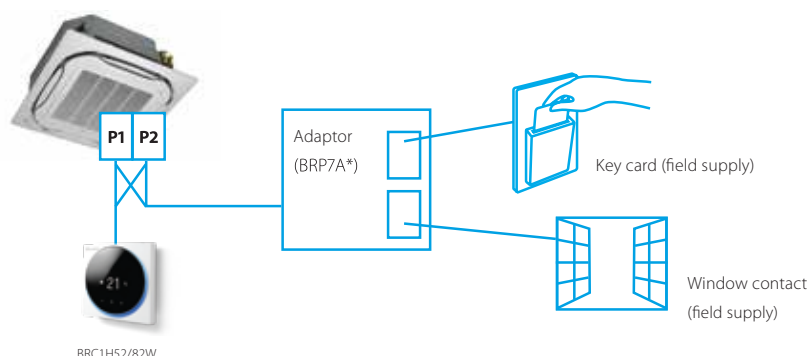
A complete redesigned controller focussed to enhance user experience

- › Sleek and elegant design
- › Intuitive touch-button control
- › Two display options: standard and detailed
- › Direct access to basic functions (on/off, set point, mode, target values, fan speed, louvres, filter icon & reset (4), error & code)
- › Three colours to match any interior
- › Compact, measures only 85 x 85 mm
- › Real time clock with auto update to daylight saving time
- › Equipped with a buzzer

Hotel application features

- › Energy saving through key card, window contact integration and set point limitation (BRP7A*)
- › Flexible setback function ensures room temperature remains within comfortable limits to ensure guest comfort

Key card and window contact integration



Madoka Assistant: Advanced settings can be easily done via your smartphone

A range of energy-saving functions that can be selected individually

- › Temperature range restriction
- › Setback function
- › Presence and floor sensor setting (available on the Round Flow and Fully Flat Cassettes)
- › Set temperature auto reset
- › Off timer

Temperature range restriction means no excessive heating/cooling

Save on 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.

Other functions

- › Up to three independent schedules can be programmed, allowing you to switch easily between them throughout the year (e.g. summer/winter/mid-season)
- › Possibility to individually restrict menu functions

BRC2E52C* / BRC3E52C*

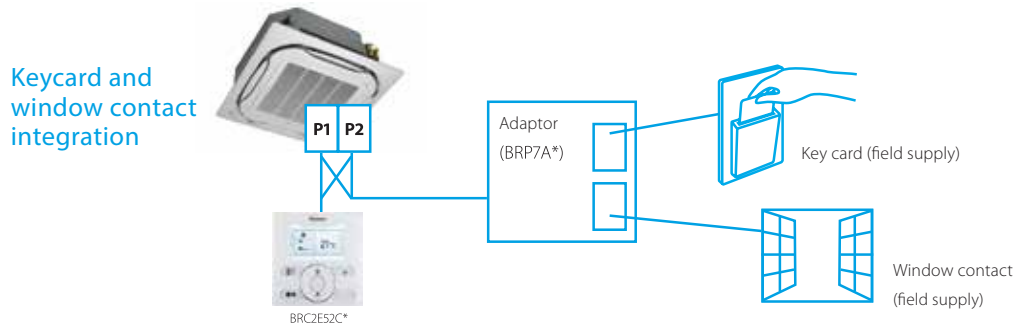
Simplified wired remote control developed for hotel applications



BRC2E52C*

With operation mode selector

- › Symbol driven interface for intuitive control
- › Functions restricted to basic customer needs
- › Energy saving through key card, window contact integration and set point limitation (BRP7A*)
- › 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



BRC1D52*

Wired remote control



BRC1D52

- › Schedule timer: Five day actions can be set
- › 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

ARC4*/BRC4*/BRC7*

Infrared remote control



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

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

Centralised control systems

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.

DCS303A51**

Residential central remote controller



Maximum 16 groups of indoor units can be easily controlled with the large LCD panel

- › Max. 16 groups (128 indoor units) controllable
- › Backlight and large LCD panel for easy readability
- › ON/OFF, temperature settings and scheduling can be controlled individually for indoor units
- › All indoor units can be turned on or off at once with "ALL" button
- › Each group has a dedicated button for convenience
- › Outside temperature display

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

DCS301B51

Unified ON/OFF control

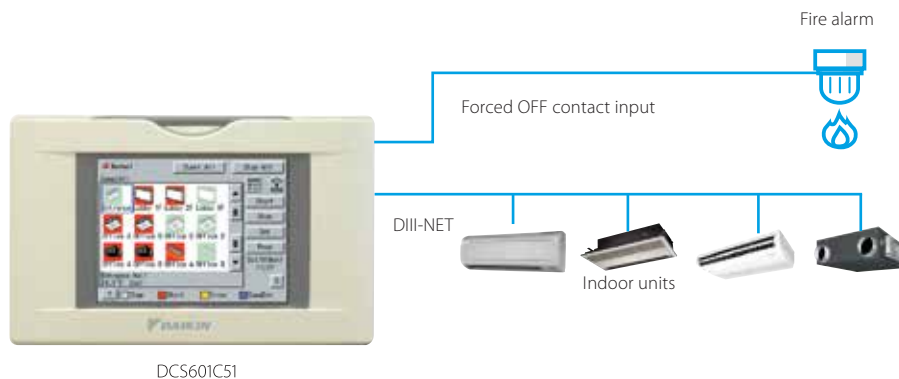


Providing simultaneous and individual control of 16 groups of indoor units.

- › 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)

**For residential use only. Cannot be used with other centralised control equipment.

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

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:

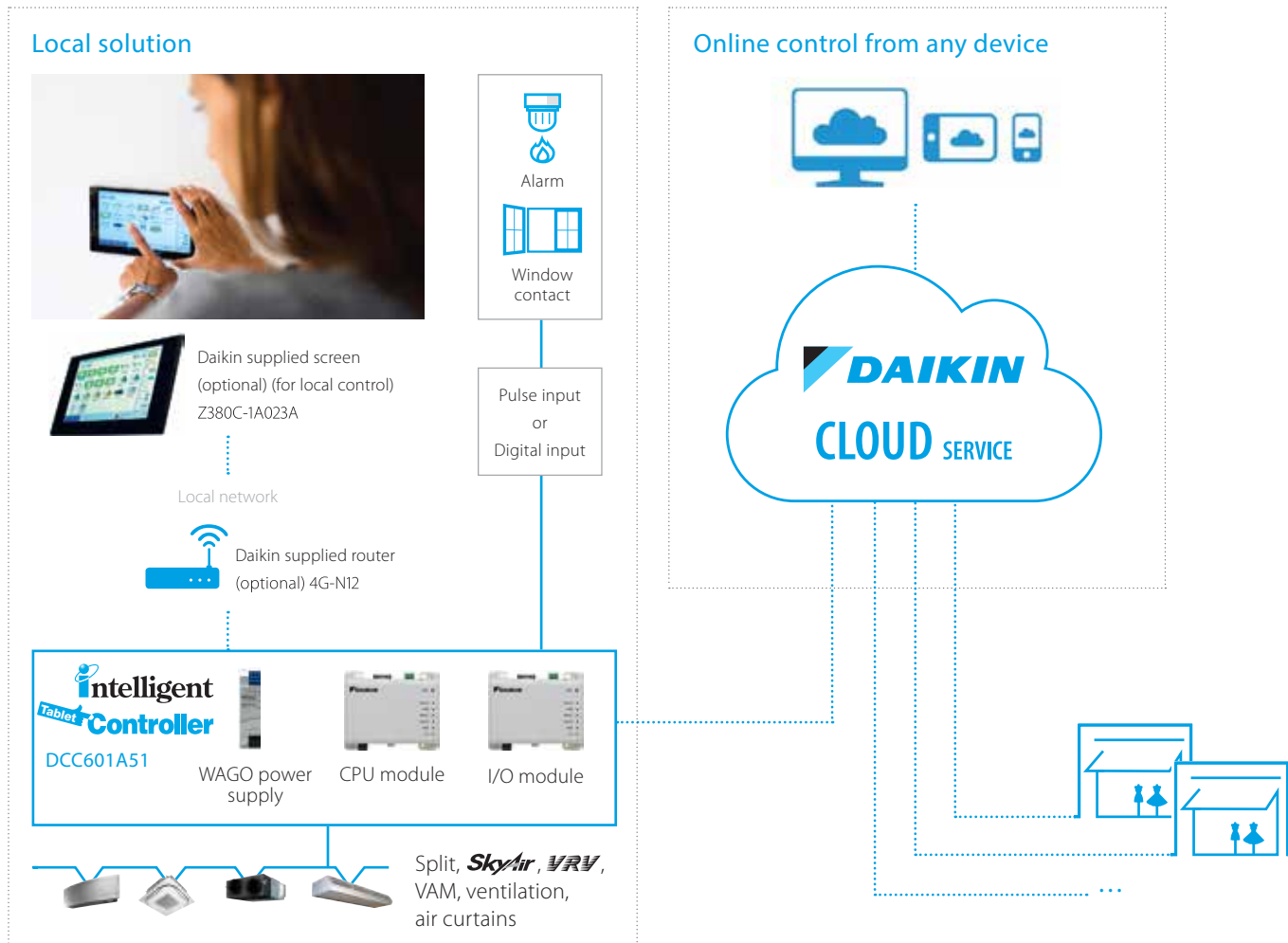
Local solution

- › 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

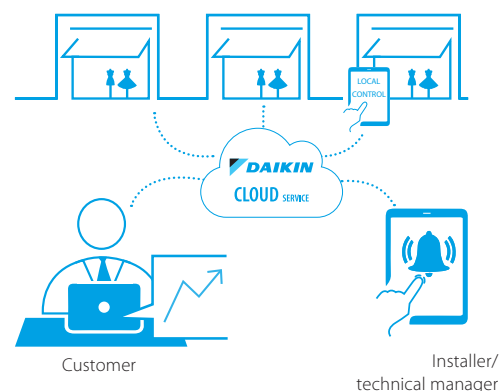
User friendly touch control

- › 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)

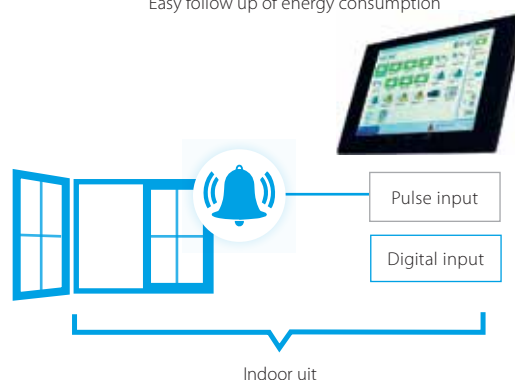
From one to ∞ sites



Intuitive control from the cloud



Easy follow up of energy consumption



Functions overview

Languages		Local solution	Cloud solution
		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	•	•

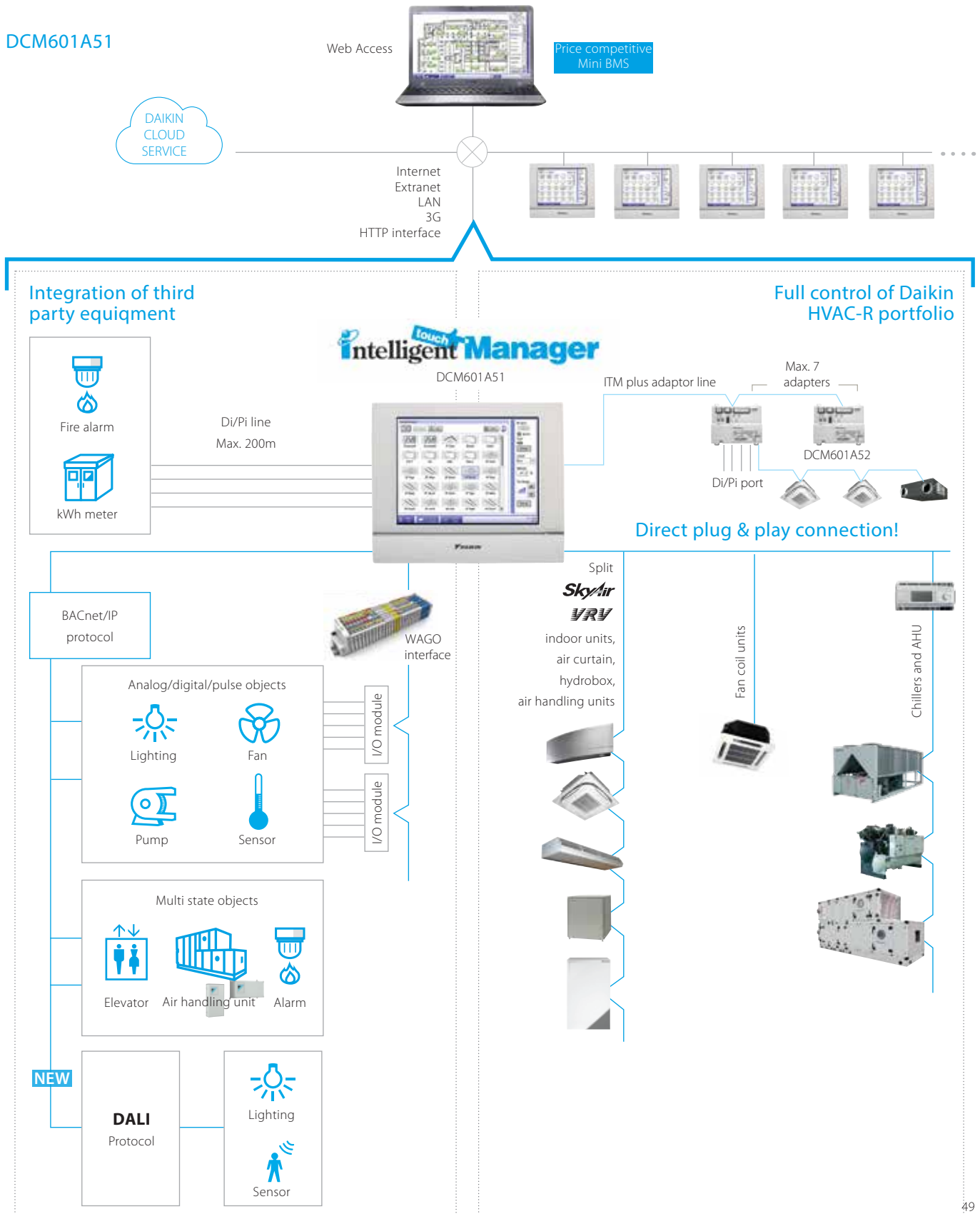
(1) only available in combination with certain indoor units

*For available Daikin Cloud Service options refer to the option list

Mini BMS

with full integration
across all product pillars

DCM601A51



Centralised control systems



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

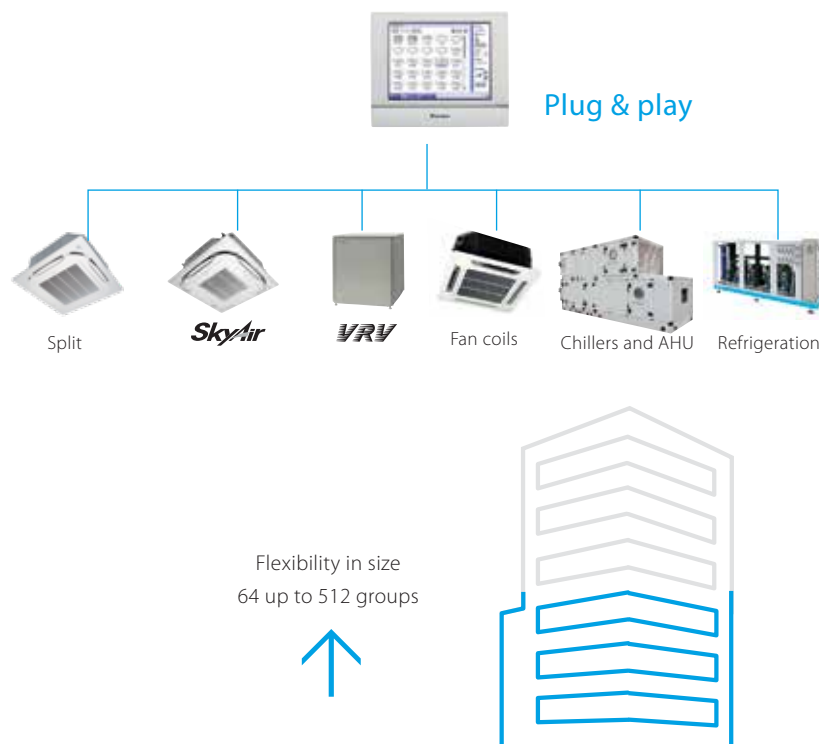
- › Monitoring if energy use is according to plan
- › Helps to detect origins of energy waste
- › Powerful schedules guarantee correct operation throughout the year
- › Save energy by interlocking A/C operation with other equipment such as heating

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



Functions overview

Languages

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

Control

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

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

System layout

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

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

NEW

Open http interface

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

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

Standard Protocol Interfaces

Modbus Interface

RTD

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



Overview functions



Main functions	RTD-NET	RTD-10	RTD-20	RTD-HO
Dimensions H x W x D mm			100 x 100 x 22	
Key card + window contact				✓
Set back function				✓
Prohibit or restrict remote control functions (setpoint limitation, ...)	✓	✓	✓	✓
Modbus (RS485)	✓	✓	✓	✓
Group control	✓	✓	✓	✓
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-NET	RTD-10	RTD-20	RTD-HO
On/Off	M	M, V, R	M	M*
Set point	M	M, V, R	M	M*
Mode	M	M, V, R	M	M*
Fan	M	M, V, R	M	M*
Louver	M	M, V, R	M	M*
HRV Damper control	M	M, V, R	M	
Prohibit/Restrict functions	M	M, V, R	M	M*
Forced thermo off				

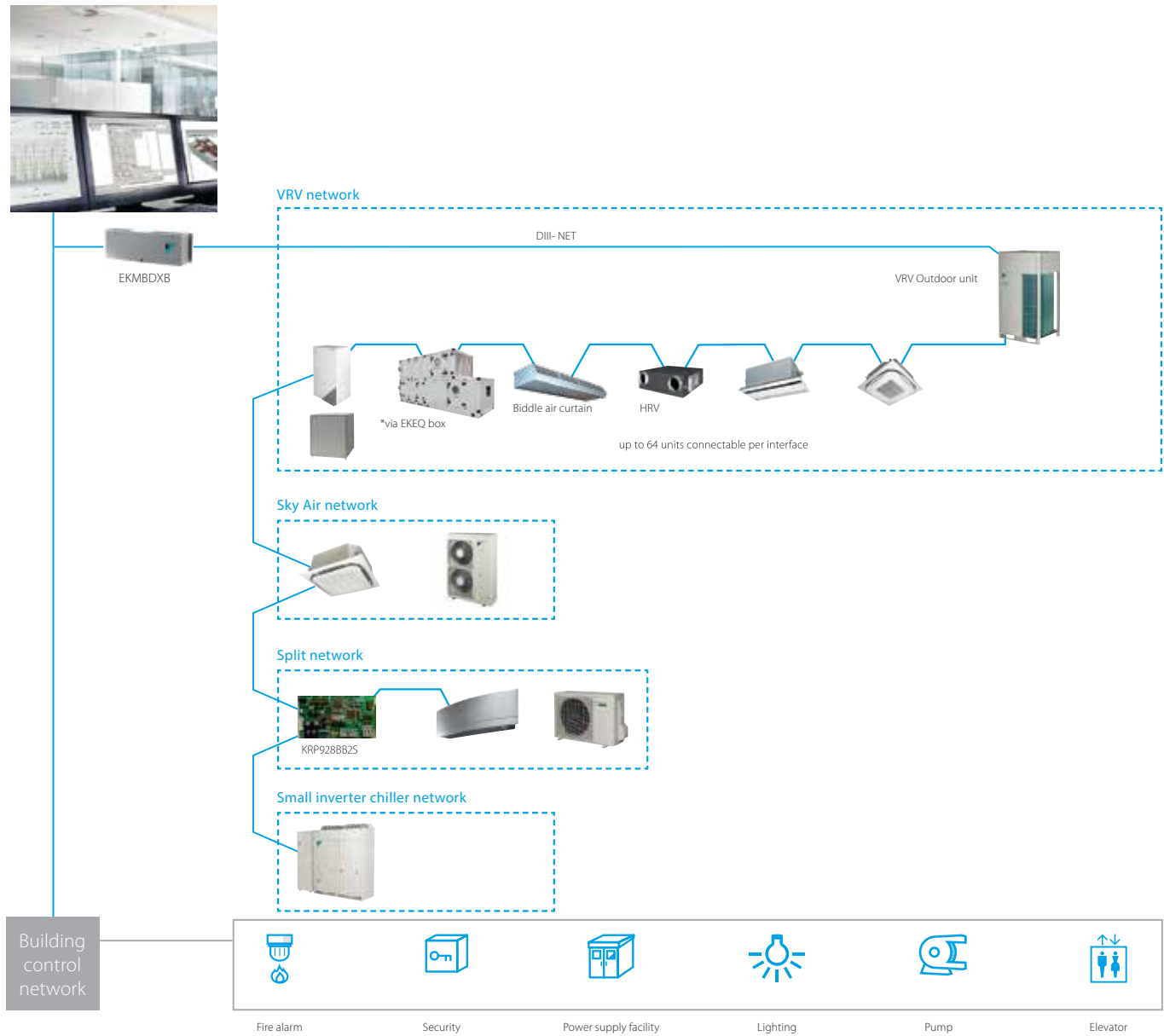
Monitoring functions	RTD-NET	RTD-10	RTD-20	RTD-HO
On/Off	M	M	M	M
Set point	M	M	M	M
Mode	M	M	M	M
Fan	M	M	M	M
Louver	M	M	M	M
RC temperature	M	M	M	M
RC mode	M	M	M	M
nbr units	M	M	M	M
Fault	M	M	M	M
Fault code	M	M	M	M
Return air temperature (Average /Min/Max)	M	M	M	M
Filter alarm	M	M	M	M
Termo on	M	M	M	M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

DIII-net Modbus interface

EKMBOX

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 units systems).



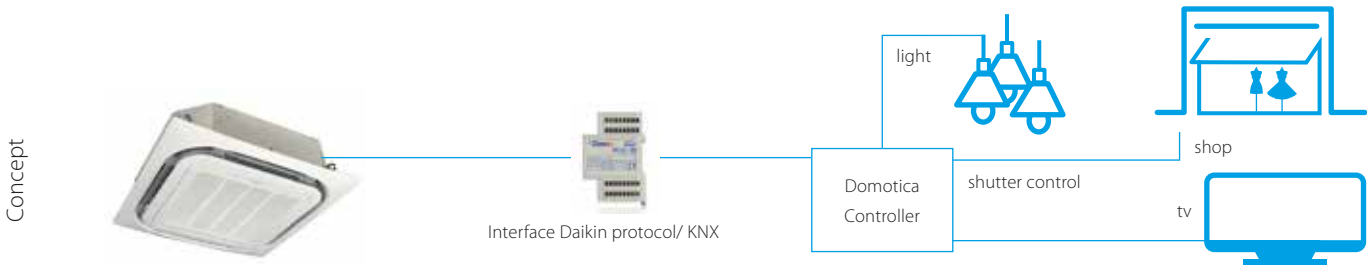
EKMBOX7V1			
Maximum number of connectable indoor units		64	
Maximum number of connectable outdoor units		10	
Communication	DIII-NET - Remark		DIII-NET (F1F2)
	Protocol - Remark		2 wire; communication speed: 9600 bps or 19200 bps
	Protocol - Type		RS485 (modbus)
	Protocol - Max. Wiring length	m	500
Dimensions	HeightxWidthxDepth	mm	124x379x87
Weight		kg	2.1
Ambient temperature - operation	Max.	°C	60
	Min.	°C	0
Installation		Indoor installation	
Power supply	Frequency	Hz	50/60
	Voltage	V	220-240

KNX interface

KLIC-DI

Integration of VRV in HA/BMS systems

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 ‘scene’ - 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

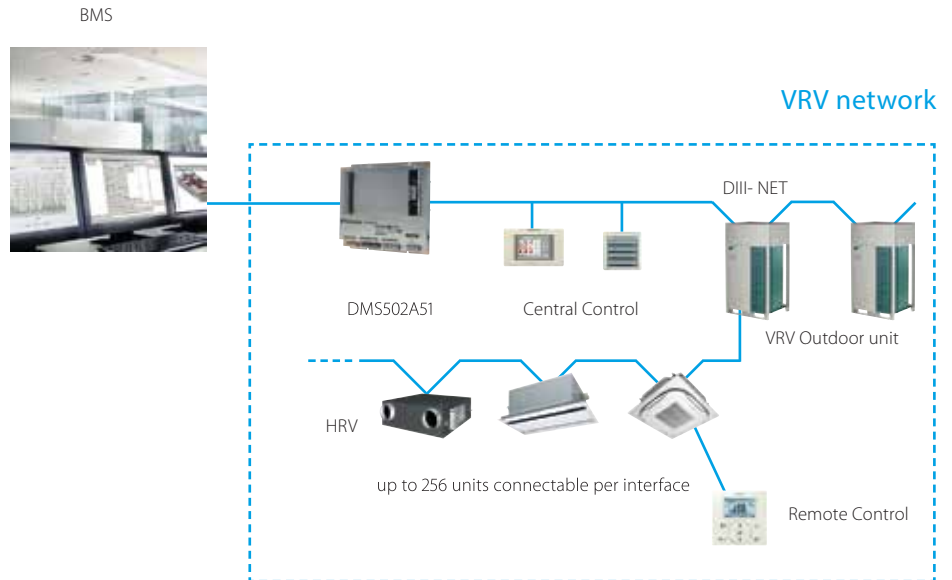
KLIC-DI Size 90x60x35mm VRV	
Basic control	
On/Off	●
Mode	Auto, heat, dry, fan, cool
Temperature	●
Fan speed levels	2 or 3
Swing	Swing or fixed positions (5)
Advanced functionalities	
Error management	
Scenes	●
Auto switch off	●
Temperature limitation	●
Initial configuration	●
Master and slave configuration	●

BACnet Interface

DMS502A51 Material Name (DMS502B51 Product Name)

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

- › Interface for BMS system
- › Unlimited site size
- › Easy and fast installation
- › PPD data is available on BMS system

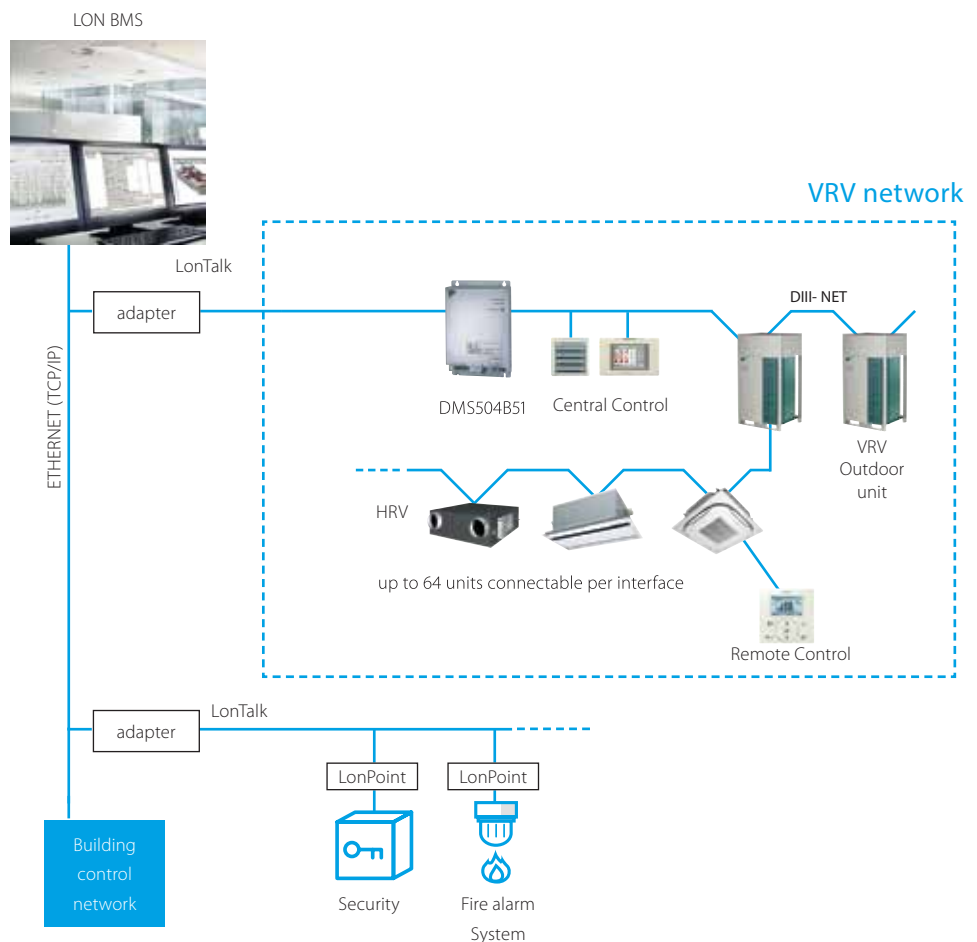


LonWorks Interface

DMS504B51

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

- › Interface for Lon connection to LonWorks networks
- › Communication via Lon protocol (twisted pair wire)
- › 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



Daikin Cloud Service

to achieve optimal operation



Daikin Cloud Service is a cloud-based remote control and monitoring solution for DX systems. Using enhanced control, monitoring and predictive logic, Daikin Cloud Service provides real-time data and support from Daikin experts to help you identify cost-saving opportunities, increase the lifetime of your equipment and reduce the risk of unexpected issues.

Monitor & control* your system no matter where you are while teaming up with Daikin experts

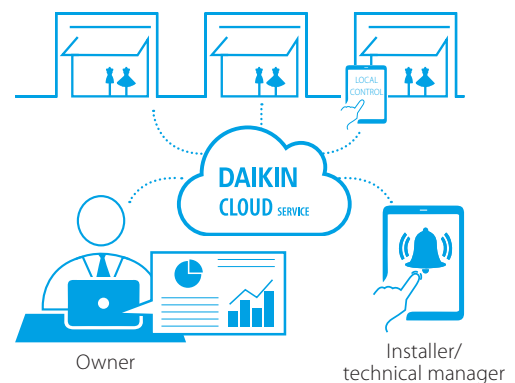
Remote control and energy visualisation

Puts you in the driving seat of your energy management

- ✓ Control and monitor your premises, wherever you are
- ✓ Centralised control and monitoring of all your premises
- ✓ Check errors remotely without having to go on site
- ✓ Visualise energy consumption and reduce energy waste by comparing different premises

Multi-site monitoring

From one to an ∞ number of sites



Remote support and diagnostics

Daikin specialist supervision, so you can focus on your core business

- ✓ Early warning of system deviations to maximise system uptime and avoid emergency repairs**
- ✓ Service providers have access to operational data so they arrive on site prepared
- ✓ Remote expert assistance in case of errors



Advice and optimisation

Get the best out of your system through expert advice

- ✓ Periodical analysis and optimisation report by experts
- ✓ Personalised actions to maximise energy efficiency and comfort
- ✓ Increased system lifetime as the system runs as it should

Daikin Cloud Service requires a subscription. Contact your local sales representative for more information.

* Remote Control function via Daikin Cloud Service only available for sites with an Intelligent Tablet controller

Daikin Cloud Service packages

	Control and monitoring	Remote support and diagnostics	Advice and optimisation
Remote control, scheduling and interlocking	✓ (DCC601A51 only)	✓ (DCC601A51 only)	✓ (DCC601A51 only)
Energy monitoring	✓	✓	✓
Multi-site benchmark	✓	✓	✓
Alarm history and e-mail notifications**		✓	✓
Predictions and e-mail notifications**		✓	✓
Operational data access	✗	✓	✓
Indoor use analysis		✓	✓
Outdoor use analysis		✓	✓
Remote diagnostic and support from Daikin		✓	✓
Periodical analysis and optimisation advice from Daikin			✓
Can be combined with maintenance programmes: - Technical inspection - Preventive Maintenance Plan - Comprehensive Maintenance Plan			✓

Packages subject to local availability
Daikin Cloud Service replaces VRV Cloud and i-Net services.

Flexible solution

Manage your premises according to your needs, using a local control or remotely via Daikin Cloud Service, or a combination of both.

Control*, no matter where you are

Daikin Cloud Service gives you full control of one or more premises wherever you are, using your PC, tablet or smartphone.

Predictive logic for VRV to prevent breakdowns

The operational data is continuously analysed by Daikin algorithms to predict potential failures and avoid unexpected costs.

Compatible with:

- › Intelligent Tablet Controller (DCC601A51)
- › Intelligent Touch Manager (DCM601A51) + IoT gateway
- › LC8 + IoT gateway



1. Monitor and control your system



2. Compare energy use with target



3. Compare energy use from multiple sites



4. Detailed energy consumption follow up



5. Follow up of alarm and fault prediction

* Remote Control function via Daikin Cloud Service only available for sites with an Intelligent Tablet controller

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

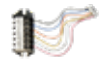
ADAPTER PCBs

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	VRV
	(E)KRP1B* adapter for wiring	• Facilitates integration of auxiliary heating apparatus, humidifiers, fans, damper • Powered by and installed at the indoor unit		✓
	KRP2A*/KRP4A* Wiring adapter for electrical appendices	• 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		✓
	DTA104A* Outdoor Unit External Control Adapter	• 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	• 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	• Allows integration of split units to Daikin central controls	✓	
	DTA113B51 Basic solution for control of Sky Air and VRV	• Rotation/backup operation function for Sky Air and VRV (up to 4 units can be connected to one adaptor)		✓

Accessories

EKRORO		• External ON/OFF or forced off • Example: door or window contact
EKRORO 3		• External ON/OFF or forced off • F1/F2 contact • Example: door or window contact
KRC19-26A		• 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		• Cool/heat selector PCB • Required to connect KRC19-26A to a VRV IV outdoor unit

Anti-Corrosion Treatment



Heavy corrosion protection coating option is available to provide special treatment for the most severe coastal application.

For further details, please contact your Daikin Sales representative.

Supporting tools, software and apps

New web based Xpress selection software

Making selection easy, anytime, anywhere

- › Web & cloudbased, access to your projects from anywhere, anyplace...
- › Platform (Windows, Mac, ...) and hardware (laptop, desktop, tablet) independent
- › Re-engineered GUI for maximum easy of use
- › No need to do local installation
- › No tool updates required (always latest version available)
- › Possibility to copy / share projects
- › Possibility to select all VRV and Ventilation products from single access

vrvxpress.
daikin.eu

ventilationxpress.
daikin.eu



Easy selection, anytime, anywhere

Other selection software

VRV Pro

Enables VRV air conditioning systems to be engineered in a precise and economical way, taking into account the complex piping rules. Moreover, it ensures optimum operating cycles and maximum energy efficiency.

- › Accurate heat load calculation
- › Precize selection based on peak loads
- › Energy consumption indication



VRV Xpress

- › Offline selection tool for all high ambient VRV products
- › Calculation of the systems which use Precision Piping Method for installation including Header Packs and Daikin TightFit (DGT II) Joints for fast & brazing-free installation

Unit	Room	Area	Height	Temp. C	Temp. F	Lat. N	Long. E	Alt. M	Wind	Humidity	Occupancy	Equipment	Notes
Unit 1	Room 1	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	
Unit 2	Room 2	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	
Unit 3	Room 3	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	
Unit 4	Room 4	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	
Unit 5	Room 5	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	
Unit 6	Room 6	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	
Unit 7	Room 7	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	
Unit 8	Room 8	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	
Unit 9	Room 9	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	
Unit 10	Room 10	20.00	2.50	24.00	75.20	45.76	12.10	100.00	50%	100%	100%	100%	

Webbased ASTRA selection **NEW** for air handling units

A powerful tool to select the right Air Handling Units for your needs.

- › 3D interface
- › quick selection procedures
- › new print-out possibilities and report shapes



WAGO selection tool **NEW**

The WAGO Selection Tool is specifically designed to select the optimal WAGO I/O system for your needs.

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



Plugins and third-party software tools

Building Information Modelling (BIM) support

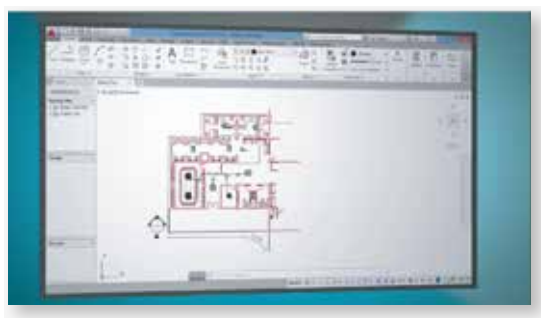
- › BIM improves efficiency of design and build phase
- › Daikin is among the first to supply a full library of BIM objects for its VRV products



bim.daikin.eu

VRV CAD 2D

- › Displays VRV pipe design on a Autocad 2D floorplan
- › Improves project management
- › Accurately calculates the pipe dimensions and refnets
- › Determines the outdoor unit size
- › Validates VRV pipe rules
- › Accounts for the extra refrigerant charge, including a max room concentration check



Energy simulation and design aid tools

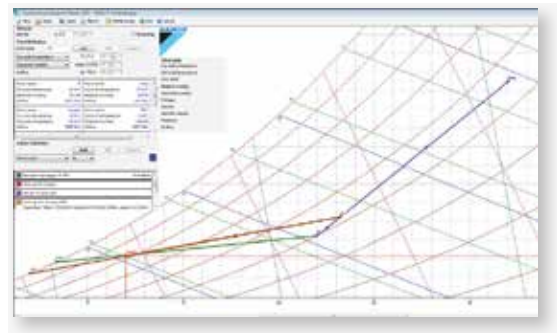
Seasonal simulator

- › The Seasonal Simulator is an innovative software tool that calculates and compares potential seasonal efficiency ratings.
- › This user-friendly tool compares various Daikin systems, annual power consumption, CO₂ emissions, and much more, to present an accurate ROI calculation in a matter of minutes.



Psychrometrics diagram **NEW**

- › The Psychrometrics Diagram Viewer demonstrates the changing properties of moist air.
- › With this tool, users can choose two points with specific conditions, plot them on the diagram and select actions to change the conditions, i.e. heat, cool and mix air.



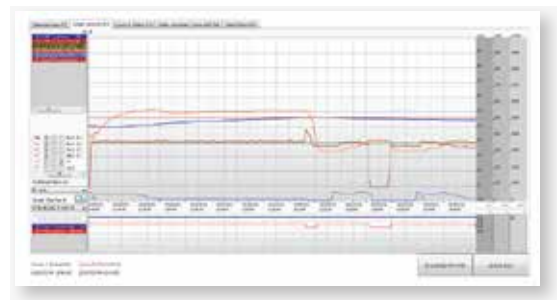
Error code app

Quickly know the meaning of fault codes, for each product family and the potential cause



D-Checker

D-checker is a software application used to record and monitor operation data of Daikin applied, split, Multi-split, Sky-air units, Daikin Altherma LT, ground source heat pump, Hybrid, ZEAS, Conveni-pack &



VRV Service-Checker

- › Connected via F1/F2 bus to check multiple systems at the same time
- › Connection of external pressure sensors possible

Online support

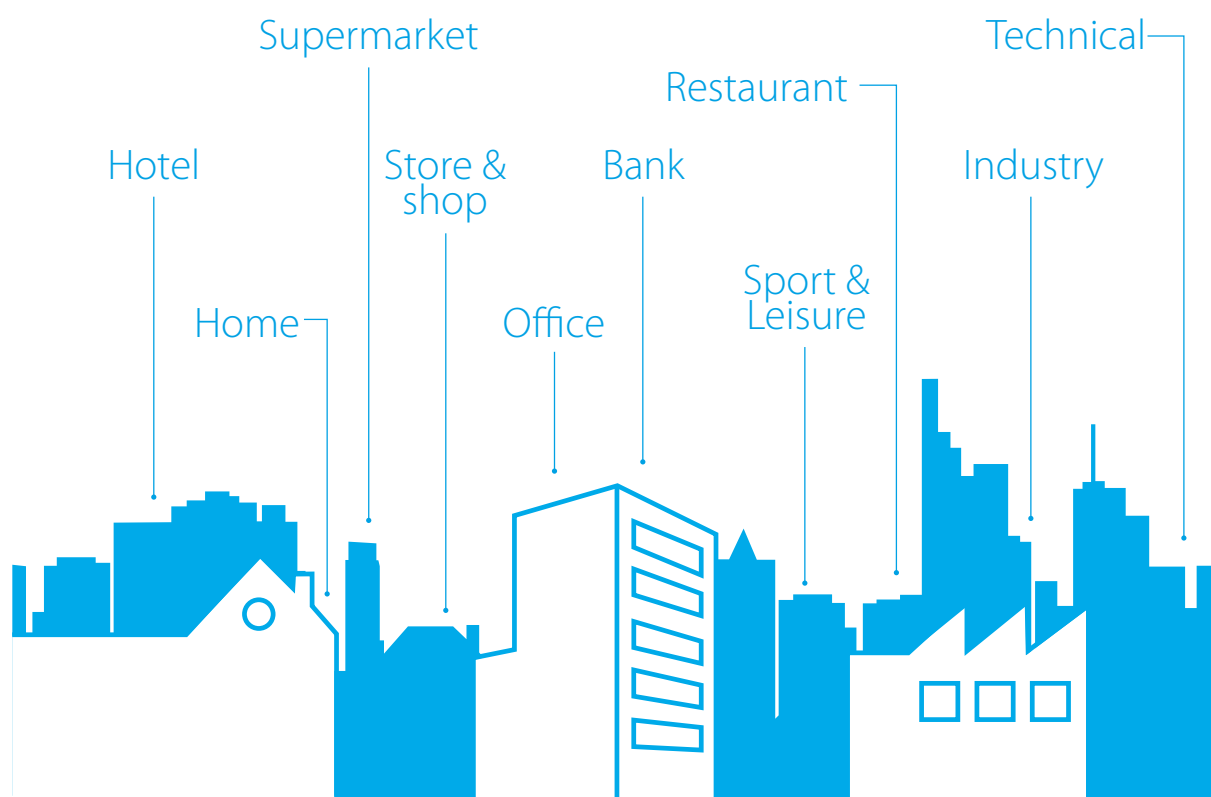
my.daikinmea.com

NEW Business portal

- › Experience our new extranet that thinks with you at my.daikinmea.com
- › Find information in seconds via a powerful search
- › Customise the options so you see only info relevant for you
- › Access via mobile device or desktop

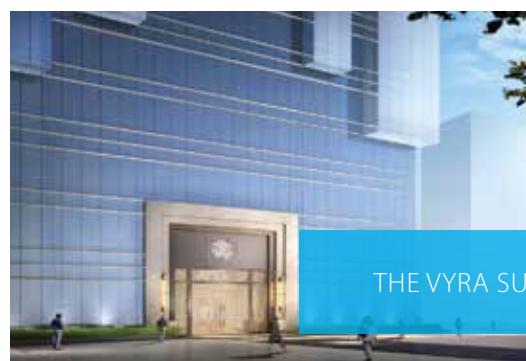


Internet



Find our solution for different applications:

- › Get more commercial details on our flagship products via our dedicated minisites
- › See our references



We're here to help you
online and offline!



Full BIM objects library is
available at bim.daikin.eu

Independently Tested by

Intertek



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