



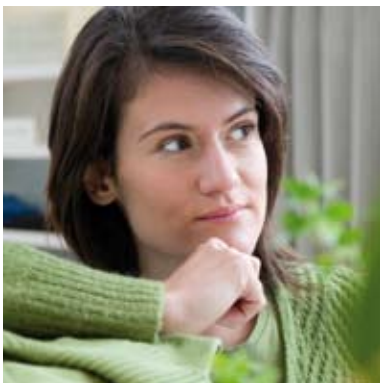
AIR CONDITIONERS, HEATING & COOLING

*for the retail market,
hotels, restaurants and offices*



HIGH COP, ROUND FLOW CEILING MOUNTED CASSETTE

air to air heat pumps



www.daikin.eu




FCQH-D



REVOLUTION IN CEILING MOUNTED CASSETTES

- » **High COP round flow cassette: up to class A energy label**
- » **360° air discharge**
- » **2 different decoration panels: white with grey louvers and full white including white louvers**
- » **Good design award**

ENERGY EFFICIENT

- »  **Energy label: up to class A**

QUALITY RHYMES WITH RELIABILITY

Wherever you live and work, chances are that you benefit from daikin's climate comfort every day. This is because Daikin develops air conditioners for all the places where people are active: from homes, offices and industrial halls to shops, sports centres and restaurants. In all these places, occupants and users have specific demands regarding temperature and air quality.

Daikin uses those demands as inspiration to develop integrated air conditioning solutions which guarantee quality and healthy indoor environments and which, over and above that, also provide considerable energy savings.

The FCQH Roundflow cassette model which, with its 360° air discharge pattern, provides improved air distribution in large areas with ceiling heights of up to 4.5 metres. The decoration panel is now available in 2 different colours and blends in perfectly with the traditional and contemporary white ceilings. The FCQH is compatible with the Daikin Sky Air systems and has one of the highest COP values on the market. The silent Roundflow is an A energy class product and it both cools and heats.

Not only does the Roundflow cassette operate almost inaudibly and reducing draughts, it is also **exceptionally energy efficient**. The FCQH model is compatible with the Daikin Sky Air systems and has one of the highest COP (Coefficient of Performance) values on the market. By applying special techniques, it achieves energy performance coefficients of 4.39. In practice this means that the system supplies as much as 4 kilowatts of cooling or heating capacity for every one kilowatt of electricity. Almost all units in the range have an A label according to the European energy classification.

- » The **inverter technology**, developed by Daikin is a true innovation in the area of climate control. The principle is simple: inverters adjust the power used to suit the actual requirement. No more, no less. This technology provides you with two concrete benefits:

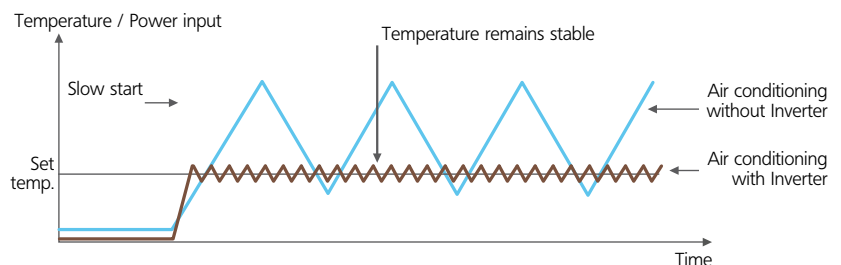
1. Comfort

The inverter repays its investment many times over by improving comfort. An air conditioning system with an inverter continuously adjusts its cooling and heating output to suit the temperature in the room. The inverter shortens system start-up time enabling the required room temperature to be reached more quickly. As soon as that temperature is reached, the inverter ensures that it is constantly maintained.

2. Energy efficient

Because an inverter monitors and adjusts ambient temperature whenever needed, energy consumption drops by 30% compared to a traditional on/off system!

Heating operation:



› **Round flow air discharge principle**

Another unique benefit is that the **360° air discharge pattern** reduces the air flow and temperature fluctuations, with the result that fewer on/off cycles are required. This round flow air discharge principle therefore provides additional energy savings.

› **Home leave operation**

In case of extended absence, this function helps to save energy. If there is no one in the area for an extended period, e.g. during holidays or closing days, this function automatically sets the room temperature to a minimum of 10°C. At this point, all connected indoor units will switch over to heating mode. The function will be deactivated as soon as the room temperature reaches 15°C, and it will also have to be switched off when the room is in use again.

PERFECT CONTROL OF AIR FLOW AND INDOOR CLIMATE

The Roundflow provides comfortable air discharge in all directions. Thanks to the unique **360° radial air distribution pattern**, so-called dead corners - and temperature differences - are definitely something of the past. An incorporated **air filter** traps the smallest dust particles and, in so doing, ensures that there is a constant inflow of pure air. The indoor unit operates in an almost inaudible manner: the noise it makes amounts to barely 28 dB(A), which corresponds to rustling leaves. For even greater comfort, you can choose between various settings by simply using the remote control.

› **23 air flow patterns**

The indoor unit blows air out over 360°, but the optional closure kit make it possible to achieve 2-way, 3-way and 4-way flow patterns, which means you can install the Roundflow in a corner, next to a wall or in a confined space. In total, you have no less than 23 different air flow patterns at your disposal. By means of a separate connection (optional) the **indoor** unit can also have a maximum of **20% fresh air intake**.

› **Autoswing**

The vertical auto swing system makes the outflow louvers move up and down automatically, enabling even distribution of air and temperature in the room. There are three settings to choose from: standard, draught prevention and ceiling soiling prevention. The last-mentioned setting prevents the air from blowing too long in a horizontal position, which in turn prevents the ceiling from being soiled.

› **Automatic airflow regulation**

The airflow pattern that was last selected is saved and automatically set again when the air conditioner is started up again. The factory setting is 30° for cooling and 65° for heating.

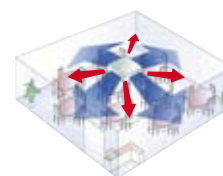
› **Draught prevention**

This setting sees to it that when the heating is turned on, there is an automatic switch to horizontal air flow. This helps prevent draughts.

› **Automatic cooling/heating changeover**

The Roundflow automatically selects cooling or heating mode to maintain the pre-set temperature.

Roundflow

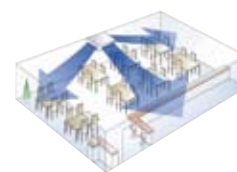


360° radial round flow enables uniform air flow distribution

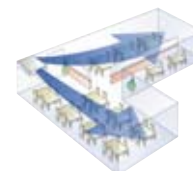
4-Way blow



3-Way blow



2-Way blow

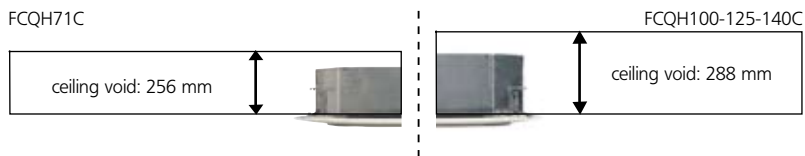


STRAIGHTFORWARD INSTALLATION MEANS LOW COSTS

The Roundflow cassette has a stylish, **modern line** and a **decorative front panel**, available in 2 different colours: white with white louvers (RAL9010) and white (RAL9010) with grey louvers.

» It is no accident that the roundflow cassette was awarded the “Good Design Award”, a prestigious distinction in Japan in industrial design field.

- » **The grille is also much less visibly integrated** so that the unit is more elegant and blends in **discreetly** with the traditional and contemporary white ceilings.
- » The **limited depth** (minimum installation height of 256 mm) enables the indoor unit to fit flush into false ceilings. It is possible to close the flaps so that the unit can be installed in the middle of the room, in a corner or in a confined space.



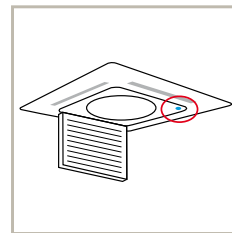
- » **The condensation channel can be checked effortlessly** via a transparent drain sleeve, plus there is easy access to the drain plug. Checks can be carried out without removing the front panel.



Wired remote control (Optional)



- » The indoor unit is easy to operate with the **wired remote control**. This has a programmable timer with which the system can be programmed per day or per week.
- » With the **optional ON/OFF function**, the air conditioner can, with a mobile phone, be switched on and off remotely. With this function you can also make the unit switch off automatically, e.g. when someone opens a window.
- » The **indoor unit has the D3-net connection as a standard accessory** and can be controlled via a centralised control system (iManager and iTouch Controller).
- » The **outdoor unit** can be installed on the roof, terrace or against an outside wall.



Infrared remote control (Optional)





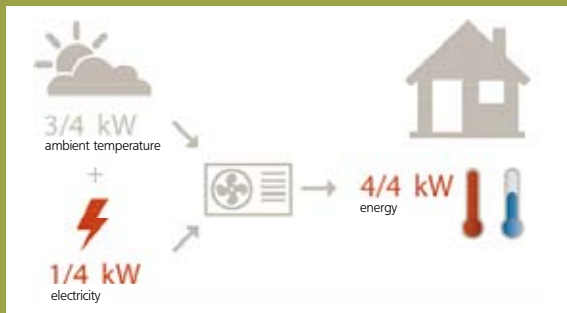
THE ROUNDFLOW FCQH IS THE IDEAL SOLUTION
IF COOLING AND HEATING MUST BE UNOBTRUSIVE,
SUCH AS IN SHOPS, RESTAURANTS, OFFICES,
SHOWROOMS, MUSEUMS AND SPORTS CENTRES.
IT IS THE FIRST CEILING CASSETTE ON THE MARKET
THAT CAN DISCHARGE AIR FULL CIRCLE.



DID YOU KNOW *that* ...

in a poorly ventilated room, CO₂ concentrations can rapidly increase as a result of people's presence?

With the aid of the optional fresh-air intake set, Daikin provides purified outside air. In this way, every room can be provided with fresh air without opening the windows.



DID YOU KNOW *that ...*



Air to air heat pumps use 3/4th of energy from renewable sources: the ambient air. This energy source is renewable and inexhaustible*. Of course, heat pumps also use 1/4th of electricity to transform the ambient air into comfort heat, but increasingly this electricity can also be generated from renewable energy sources (solar energy, wind energy, hydropower, biomass).

* EU objective COM (2008)/30



APPLICATION POSSIBILITIES

- › Depending on your air conditioning need, you can have your unit either **heat or cool (heat pump)**.
- › The indoor unit is suited to **single-split application** (one indoor unit to one outdoor unit) and **twin applications** (maximum of four indoor units in the same space to one outdoor unit).

CAPACITY AND POWER INPUT

HEATING & COOLING - INVERTER CONTROLLED				FCQH71D	FCQH100D	FCQH125D	FCQH140D			
				RZQS71DV1	RZQS100DV1	RZQS125DV1	RZQS140DV1			
Cooling capacity	nominal	kW	7.1	10.0	12.5	14.0				
Heating capacity	nominal	kW	8.0	11.2	14.0	16.0				
Nominal input	cooling	nominal	2.15	2.90	3.88	4.65				
	heating	nominal	2.16	2.95	3.79	4.69				
EER			3.30	3.45	3.22	3.01				
COP			3.70	3.80	3.69	3.41				
Energy label	cooling			A	A	A	B			
	heating			A	A	A	B			
Annual energy consumption	cooling	kWh	1,076	1,449	1,941	2,216				
HEATING & COOLING - INVERTER CONTROLLED				FCQH71D	FCQH100D	FCQH100D	FCQH125D	FCQH125D	FCQH140D	FCQH140D
				RZQ71DV1	RZQ100DV1	RZQ100BW1	RZQ125DV1	RZQ125BW1	RZQ140DV1	RZQ140BW1
Cooling capacity	nominal	kW	7.1	10.0	10.0	12.5	12.5	14.0	14.0	
Heating capacity	nominal	kW	8.0	11.2	11.2	14.0	14.0	16.0	16.0	
Nominal input	cooling	nominal	1.88	2.50	2.44	3.48	3.54	4.36	4.65	
	heating	nominal	1.92	2.47	2.56	3.46	3.59	4.29	4.52	
EER			3.78	4.00	4.10	3.59	3.53	3.21	3.01	
COP			4.16	4.53	4.38	4.05	3.90	3.73	3.54	
Energy label	cooling			A	A	A	A	A	B	
	heating			A	A	A	A	A	B	
Annual energy consumption	cooling	kWh	940	1,250	1,220	1,740	1,770	2,180	2,325	

Notes:

1) Energy label: scale from A (most efficient) to G (less efficient).

2) Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions).

TWIN/TRIPLE/DOUBLE TWIN APPLICATION	FCQH71D	FCQH100D	FCQH125D	FCQH140D
RZQ(S)140	2			

Height	246 mm
Width	840 mm
Depth	840 mm

Height	246 mm
Width	840 mm
Depth	840 mm

Height	770 mm
Width	900 mm
Depth	320 mm



SPECIFICATIONS INDOOR UNITS

HEATING & COOLING				FCQH71D	FCQH100D	FCQH125D	FCQH140D
Dimensions	HxWxD	unit	mm	246x840x840	288x840x840		
		decoration panel	mm	50x950x950			
Weight		unit	kg	23	25		
		decoration panel	kg	5.5			
Colour		decoration panel		White (RAL9010) with grey louvers / White(RAL9010) with white louvers			
Air flow rate	cooling	H/L	m ³ /min	21.9/12.1	34.2/17.6	34.2/21.2	34.2/23.8
	heating	H/L	m ³ /min	21.9/12.1	34.2/17.6	34.2/21.3	34.2/23.9
Fresh Air	Max fresh air intake		%	20.0	13.0	12.7	12.7
	Max fresh air intake		m ³ /min	4.3	4.3	4.3	4.3
Fan speed			steps	3			
Sound pressure level	cooling	H/L	db(A)	36/28	45/32	45/36	45/38
	heating	H/L	db(A)	36/28	45/32	45/36	45/38
Sound power level	cooling	H	db(A)	54	62	62	62
Piping connections		liquid	mm	9.52 (flare connection)			
		gas	mm	15.9 (flare connection)			
		drain (VP25)	ID mm	25			
Heat insulation			OD mm	32			
				Foamed polystyrene / foamed polyethylene			

SPECIFICATIONS OUTDOOR UNITS

HEATING & COOLING - INVERTER CONTROLLED				RZQS71DV1	RZQ100DV1	RZQS125DV1	RZQS140DV1			
Dimensions	HxWxD		mm	770x900x320	1,170x900x320					
Weight			kg	68	103					
Casing colour				Ivory white						
Sound pressure level (night quiet mode)	cooling	H	db(A)	49 (47)	51 (49)	52 (50)				
	heating	H	db(A)	51	55	53	54			
Sound power level	cooling	H	db(A)	65	67		68			
Compressor			type	Herm. sealed swing	Hermetically sealed scroll					
Refrigerant type				R-410A						
Refrigerant charge			kg/m	2.75	3.7					
Max. piping length			m	30 (equiv. length 40)	50 (equivalent length 70)					
Max. level difference			m	15	30					
Operation range	cooling	from ~ to	°CDB	-5~46						
	heating	from ~ to	°CDB	-15~15.5						
HEATING & COOLING - INVERTER CONTROLLED				RZQ71DV1	RZQ100DV1	RZQ100BW1	RZQ125DV1	RZQ125BW1	RZQ140DV1	RZQ140BW1
Dimensions	HxWxD		mm	770x900x320	1,345x900x320	1,345x900x320	1,345x900x340	1,345x900x320	1,345x900x340	1,345x900x320
Weight			kg	67	109	106	109	106	109	106
Casing colour				Ivory white						
Sound pressure level (night quiet mode)	cooling	H	db(A)	48 (43)	50 (45)	49 (45)	51 (45)	50 (45)	51 (46)	50 (45)
	heating	H	db(A)	50	52	51	53	52	53	52
Sound power level	cooling	H	db(A)	64	65	65	67	66	68	66
Compressor			type	Herm. sealed swing	Hermetically sealed scroll					
Refrigerant type				R-410A						
Refrigerant charge			kg/m	2.75	3.95	4.3	3.95	4.3	3.95	4.3
Max. piping length			m	30 (equiv. length 40)	75 (equivalent length 95)					
Max. level difference			m	30						
Operation range	cooling	from ~ to	°CDB	-15~50						
	heating	from ~ to	°CDB	-20~15.5						

ACCESSORIES: CONTROL SYSTEMS

INDOOR UNITS	FCQH71D	FCQH100D	FCQH125D	FCQH140D
Wired remote control			BRC1D52	
Infrared remote control			BRC7F532F	
Centralised remote control			DCS302CA51	
Unified ON/OFF control			DCS301BA51	
Schedule timer			DST301BA51	
Wiring adapter for electrical appendices		KRP1B57 / KRP4A53 / KRP1BA57(1) / KRP4AA53(1)		
Wiring adapter (hour meter)			EKRP1C11	
Installation box for adapter PCB			KRP1H98	
Remote ON/OFF			EKRORO2	
Remote sensor			KRCS01-4	
Fixing box			KJB212AA	

Note: 1) Installation box is necessary for these adaptors

ACCESSORIES: INDOOR UNITS

INDOOR UNITS	FCQH71D	FCQH100D	FCQH125D	FCQH140D
Decoration panel		BYCQ140CW1/BYCQ140CW1W ⁽¹⁾		
Replacement long-life filter			KAFP551K160	
Fresh air intake kit (min. 20% fresh air)			KDDQ55C140	
Sealing member of air discharge outlet			KDBHQ55C140	

Note: 1) The BYCQ140CW1W has white insulations. Be informed that formation of dirt on white insulation is visibly stronger and that it is consequently not advised to install the BYCQ140CW1W decoration panel in environments exposed to concentrations of dirt.

ACCESSORIES: OUTDOOR UNITS

OUTDOOR UNITS	RZQ(S)71DV1	RZQ(S)100BW1/DV1	RZQ(S)125BW1/DV1	RZQ(S)140BW1/DV1	RZQ200CY1	RZQ250CY1
Central drain plug		EKDK04			KWC26B280	
Refrigerant branch piping	for twin	KHRQ22M20TA (KHRQ58T) (1)			KHRQ22M20TA	
Demand adapter kit		KRP58M51			KRP58M51	

Note: 1) For RZQ100-140BW1 in combination with FCQH71C, use the refrigerant branch piping mentioned between brackets.

- Notes:
- 1) V1 = 1~, 230V, 50Hz; V3 = 1~, 230V, 50Hz
 - 2) Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB • outdoor temperature 35°CDB • refrigerant piping length 7.5m • level difference 0m.
 - 3) Nominal heating capacities are based on: indoor temperature 20°CDB • outdoor temperature 7°CDB/6°CWB • refrigerant piping length 7.5m • level difference 0m.
 - 4) Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
 - 5) Units should be selected on nominal capacity. Max. capacity is limited to peak periods.
 - 6) The sound pressure level is measured via a microphone at a certain distance from the unit (for measuring conditions: please refer to the technical data books).
 - 7) The sound power level is an absolute value indicating the "power" which a sound source generated.



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

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



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



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

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



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



Daikin Europe N.V. participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory. Multi units are Eurovent certified for combinations up to 2 indoor units.

DAIKIN EUROPE N.V.

Naamloze Vennootschap
Zandvoordestraat 300
B-8400 Oostende, Belgium
www.daikin.eu
BTW: BE 0412 120 336
RPR Oostende

Daikin products are distributed by:

FSC