

Air Conditioners

Heating & Cooling

SkyAir®

- » **Energy label:
Up to class A**
- » **Heat pump system**
- » **Seasonal inverter
technology**
- » **Round flow 360° air
discharge**
- » **Fits flush
into a false ceiling**
- » **Decoration panel
available in
3 variations**
- » **Higher comfort &
efficiency with the
auto cleaning panel**
- » **Multi model
application**

Round Flow Cassette



www.daikin.eu



FCQ-C8

As one of the leading manufacturers of air conditioning systems for both the retail and business markets, Daikin aims to meet 100% of your specific demands regarding temperature and air quality. We do this by developing integrated air conditioning solutions which guarantee a high quality and healthy indoor environment and which, over and above that, also provide considerable energy savings.

The FCQ-C8 Round flow cassette model which, with its 360° air discharge pattern, provides improved air distribution and a more constant temperature in large areas. The decoration panel is available in 2 different colours and blends in perfectly with the traditional and contemporary white ceilings.

Daikin introduces the first auto cleaning cassette to the European market. With this decoration panel energy & maintenance costs will be lower and comfort will be increased.

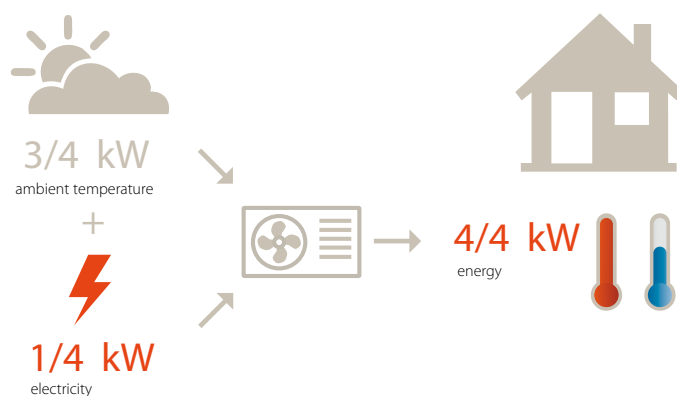
The slim 'Thin Body' FCQ-C8 model, has a low installation height, is exceptionally suited to applications in false ceilings and operates with less draught and whisper quiet.

Combining highest efficiency and year-round comfort with a heat pump system

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 run the system, but increasingly this electricity can also be generated from renewable energy sources (solar energy, wind energy, hydropower, biomass). A heat pump's efficiency is measured in COP (Coefficient Of Performance) for heating and EER (Energy Efficiency Ratio) for cooling.

* EU objective COM (2008)/30



Seasonal Inverter

In line with technological advancements and stricter environmental legislation, Daikin Europe N.V. is committed to leading the way in energy-efficient residential and commercial cooling solutions. A good example of this is Daikin's Sky Air® Seasonal Inverter, the first on the market to anticipate Europe's new stricter environmental requirements.

A bit of background: Europe has set aggressive targets for energy efficiency and environmental impact to be reached by 2020. In line with these goals, more accurate measurement of the real-life energy efficiency of systems will also be required from 2013.

This improved efficiency rating, referred to as 'seasonal efficiency' or SEER, measures actual energy consumption over an entire heating or cooling season. This means that it takes into account different outdoor temperatures and the resulting required capacities.

Daikin Europe N.V. is leading the way with its Sky Air® Seasonal Inverter line. These light commercial air conditioning units are the first on the market to anticipate the more accurate seasonal efficiency criteria that will apply after 2013.

Because of the optimized inverter control, the Sky Air® Seasonal Inverter performs better across the entire range of outdoor temperatures. Next to this, the auxiliary modes have been redesigned in order to reduce energy consumption when the unit is not operating (e.g. standby mode).

The result: up to 20% better seasonal efficiency than the current Sky Air® Super Inverter in real-life situations, and more than 50% compared to non-inverter systems.

Seasonal Inverter



All the Comfort Functions for a Healthy Indoor Climate

The Round flow 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 27 dBA**, which corresponds to rustling leaves. For even greater comfort, you can choose between various settings by simply using the remote control.

> **Auto swing**

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 65° for heating and 30° for cooling.

> **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**

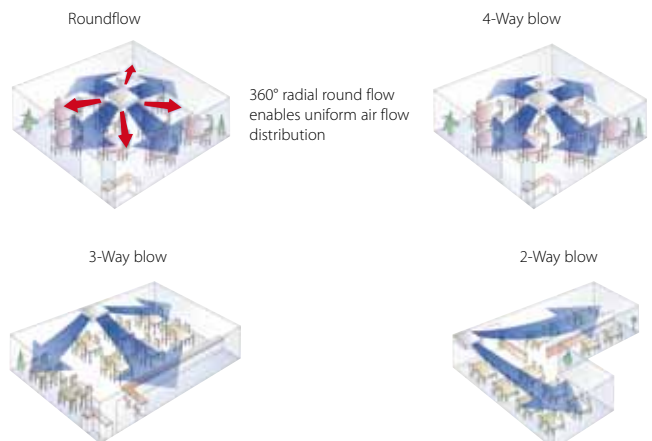
The Roundflow automatically selects heating or cooling mode to maintain the pre-set temperature.

> **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.

> **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.



Straightforward Installation means Low Costs



» Auto cleaning decoration panel:

a new option for Roundflow cassettes

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

» Higher efficiency and comfort

With the auto cleaning decoration panel the filter is cleaned everyday and therefore the energy consumption remains constant. This results in an energy saving up to 10% to yearly filter cleaning with a standard decoration panel.



» Easy maintenance and Lower maintenance costs

- > Once a day the rounded filter turns 360° to pass the special brush. The timing can be programmed with the remote controller.

- > The caught dust is sent to the dust box. On average this box can contain the dust of 1 year for office applications and half a year for shop applications (depending on annual operation hours and shop type).

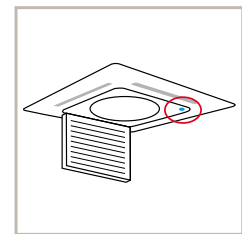
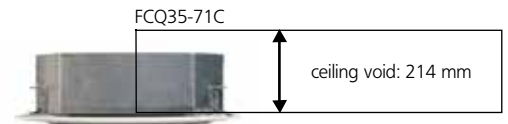
- > Removal of dust can easily be done with a vacuum cleaner:
 - > Quick
 - > No qualified personnel required
 - > No ladder or other equipment is needed
 - > No rearrangement of shop interior is required to access the unit
 - > Not necessary to open the decoration panel
 - > Not necessary to touch the dust

The Round flow cassette has 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 214 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.
- > The **outdoor unit** can be installed on the roof, terrace or against an outside wall.
- > **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.



Super complete remote control

- > The newly developed **wired remote control BRC1E51A (optional)** has a modern design in pure white (RAL 9010). Large buttons and arrow keys as well as the given explanation for each setting on the display, makes the remote control easy to operate. A holiday setting, home leave operation, and an improved weekly timer are included. The wired remote control is available in following languages: English, German, French, Spanish, Italian, Portuguese, Greek, Dutch, Russian and Turkish.
- > **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.
- > 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).



Wired remote control BRC1E51A (Optional)



Infrared remote control (Optional)

Application options

- > 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 connected to one outdoor unit), **twin, triple or double twin applications** (a maximum of four indoor units in the same room to one outdoor unit) and **multi-split application** (a maximum of nine indoor units in different rooms to one outdoor unit).



Heating & Cooling

INDOOR UNITS				FCQ35C8	FCQ50C8	FCQ60C8
Cooling capacity	min./nom./max.		kW	1.4/3.4 ³ /3.7	0.9/5.0 ³ /5.6	0.9 / 5.7 ³ / 6.0
Heating capacity	min./nom./max.		kW	1.4/4.2 ⁴ /5.0	0.9/6.0 ⁴ /7.0	0.9 / 7.0 ⁴ / 8.0
Power input	cooling	nom.	kW	0.95	1.410	1.640
	heating	nom.	kW	1.230	1.620	1.990
EER				3.58	3.55	3.48
COP				3.41	3.70	3.52
Annual energy consumption			kWh	475	705	820
Energy label	cooling/heating			A/B	A/A	A/B
Dimensions	unit	heightxwidthxdepth	mm	204x840x840		
Weight	unit		kg	19		
Casing	material			Galvanised steel plate		
Fan - Air flow rate	cooling	high/low	m ³ /min	10.5/8.5	12.5/8.5	13.5/8.5
	heating	high/low	m ³ /min	12.5/10.0	12.5/8.5	13.5/8.5
Sound pressure level	cooling	high/low	dBA		31/27	33/28
	heating	high/low	dBA		31/27	33/28
Sound power level	cooling	high	dBA		49	51
Power supply	phase/frequency/voltage		Hz/V	1~/50/60/220-240/220		
Piping connections	liquid	OD	mm	ø6.4		
	gas	OD	mm	ø9.5		ø12.7
	drain	OD	mm	ø32		
Decoration panel	model			BYCQ140CW1 / BYCQ140CW1W / BYCQ140CGW1		
	colour			Pure White(RAL 9010)		
	dimensions	heightxwidthxdepth	mm	50x950x950 / 50x950x950 / 130x950x950		
	weight		kg	5.5		

(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) (3) Nominal cooling capacities are based on: return air temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB; equivalent refrigerant piping: length 5m (horizontal) (4) Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m. (5) The sound pressure values are mentioned for a unit installed with rear suction. (6) The sound power level is an absolute value indicating the power which a sound source generates. (7) The BYCQ140CW1W has white insulations. Be informed that formation of dirt on white insulations is more visible and that it is consequently not advised to install the BYCQ140W1W decoration panel in environments exposed to concentrations of dirt.

OUTDOOR UNITS				RXS35G	RXS50G	RXS60F
Dimensions	unit	heightxwidthxdepth	mm	550x765x285	735x825x300	
Weight	unit		kg	34	48	
Operation range	cooling	ambient	min.-max. °CDB		-10~46	
	heating	ambient	min.-max. °CWB	-15~20	-15~18	-15~20
Sound pressure level	cooling	high/silent	dBA		48/44	49/46
	heating	high/silent	dBA		48/45	49/46
Sound power level	cooling	nom.	dBA	63	62	63
Compressor	type			Hermetically sealed swing compressor		
Refrigerant	type			R-410A		
Power supply	phase/frequency/voltage		Hz/V	1~/50/230		
Piping connections	piping length	system	equivalent m	30		
	additional refrigerant charge		kg/m	0.02 (for piping length exceeding 10m)		
	level difference	IU - OU	max. m	15	20	



Seasonal Inverter

Heating & Cooling

INDOOR UNITS				FCQ71C8	FCQ100C8	FCQ125C8	FCQ140C8	FCQ100C8	FCQ125C8	FCQ140C8
Capacity	cooling	nom.	kW	7.1 ³	10.0 ³	12.5 ³	14.0 ³	10.00 ³	12.50 ³	14.00 ³
	heating	nom.	kW	8.0 ⁴	11.2 ⁴	14.0 ⁴	16.0 ⁴	11.20 ⁴	14.00 ⁴	16.00 ⁴
Power input	cooling	nom.	kW	2.11	2.64	3.70	5.11	2.640	3.880	5.36
	heating	nom.	kW	2.21	2.96	3.88	4.89	3.140	4.360	5.69
EER				3.36	3.79	3.38	2.74	3.49	3.22	2.61
ESEER				3.71	3.54	3.73	3.14	3.56	3.58	3.01
COP				3.62	3.78	3.61	3.27	3.57	3.21	2.81
Energy label	cooling/heating			A/A			D/C	A/B	A/C	D/D
Annual energy consumption				1,055	1,319	1,849	2,555	1,320	1,940	2,680
Dimensions	unit	heightxwidthxdepth	mm	246x840x840		288x840x840		288x840x840		
Weight	unit			kg	23	25	25			
Casing	material			Galvanised steel plate			Galvanised steel plate			
Fan - Air flow rate	cooling	high/low	m ³ /min	21.9/12.1	34.2/17.6	34.2/21.2	34.2/23.8	34.2/17.6	34.2/21.2	34.2/23.8
	heating	high/low	m ³ /min	21.9/12.1	34.2/17.6	34.2/21.3	34.2/23.9	34.2/17.6	34.2/21.3	34.2/23.9
Sound pressure level	cooling	high/low	dBA	36/28	45/32	45/36	45/38	45/32	45/36	45/38
	heating	high/low	dBA	36/28	45/32	45/36	45/38	45/32	45/36	45/38
Sound power level	cooling	high	dBA	54	62			62		
Power supply	phase/frequency/voltage		Hz/V	1~/50/60/220-240/220			1~/50/60/220-240/220			
Piping connections	liquid	OD	mm	ø9.52			ø9.52			
	gas	OD	mm	ø15.9			ø15.9			
	drain	OD	mm	ø26			ø26			
Decoration panel	model			BYCQ140CW1 / BYCQ140CW1W / BYCQ140CGW1						
	colour			Pure White(RAL 9010)						
	dimensions	heightxwidthxdepth	mm	50x950x950 / 50x950x950 / 130x950x950						
	weight			kg	5.5					

(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) (3) The sound pressure values are mentioned for a unit installed with rear suction. (4) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m (5) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m

OUTDOOR UNITS				RZQ71D3V1	RZQ100D9V1	RZQ125D9V1	RZQ140D9V1	RZQ100B9W1	RZQ125B9W1	RZQ140B9W1
Dimensions	unit	heightxwidthxdepth	mm	770x900x320	1,345x900x320			1,345x900x320		
Weight	unit			kg	67	106		106		
Operation range	cooling	ambient	min.-max. °CDB	-15.0~50.0			-15.0~50.0			
	heating	ambient	min.-max. °CWB	-20.0~15.5			-20.0~15.5			
Sound pressure level	cooling	nom.	dBA	48	49	50		49	50	
	heating	nom.	dBA	50	49	52		49	52	
	night quiet mode		dBA	43	45			45		
Sound power level	cooling	nom.	dBA	64	65	66		65	66	
Compressor	type			Hermetically sealed swing			Hermetically sealed scroll			
Refrigerant	type			R-410A			R-410A			
Power supply	phase/frequency/voltage		Hz/V	1~/50/220-240			3N~/50/400			
	additional refrigerant charge		kg/m	See installation manual			See installation manual			
Piping connections	level difference	IU - OU	max. m	30			30.0			
		IU - IU	max. m	0.5			0.5			
	piping length	system	equivalent m	70	75			75		



Heating & Cooling

INDOOR UNITS				FCQ71C8VEB	FCQ100C8VEB	FCQ125C8VEB	FCQ140C8VEB
Cooling capacity	nom.		kW	7.1 ³	10.0 ³	12.5 ³	14.0 ³
Heating capacity	nom.		kW	8.0 ⁴	11.2 ⁴	14.0 ⁴	16.0 ⁴
Power input	cooling	nom.	kW	2.28	3.22	4.02	5.36
	heating	nom.	kW	2.35	3.28	4.06	4.98
EER					3.11		2.61
COP				3.41		3.45	3.21
Annual energy consumption			kWh	1141	1608	2010	2682
Energy label	cooling/heating				B/B		D/C
Dimensions	unit	heightxwidthxdepth	mm	204x840x840		246x840x840	
Weight	unit		kg	21		23	
Casing	material			Galvanised steel plate			
Fan - Air flow rate	cooling	high/low	m ³ /min	15.5/9.0	23.5/16.0	27.5/19.0	
	heating	high/low	m ³ /min	16.0/9.5	23.5/16.0	27.5/19.0	
Sound pressure level	cooling	high/low	dBA	33/28	37/32	41/35	
	heating	high/low	dBA	34/28	37/32	41/35	42/35
Sound power level	cooling	high	dBA	51	54	58	
Power supply	phase/frequency/voltage		Hz/V	1~/50/60/220-240/220			
Piping connections	liquid	OD	mm	ø9.52			
	gas	OD	mm	ø15.9			
	drain	OD	mm	ø26			
Decoration panel	model			BYCQ140CW1 / BYCQ140CW1W / BYCQ140CGW1			
	colour			Pure White(RAL 9010)			
	dimensions	heightxwidthxdepth	mm	50x950x950 / 50x950x950 / 130x950x950			
	weight		kg	5.5			

(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) (3) Nominal cooling capacities are based on: return air temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB; equivalent refrigerant piping: length 5m (horizontal) (4) Nominal heating capacities are based on: indoor temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent refrigerant piping: 5m, level difference: 0m. (5) The sound pressure values are mentioned for a unit installed with rear suction. (6) The sound power level is an absolute value indicating the power which a sound source generates. (7) The BYCQ140CW1W has white insulations. Be informed that formation of dirt on white insulations is more visible and that it is consequently not advised to install the BYCQ140W1W decoration panel in environments exposed to concentrations of dirt.

OUTDOOR UNITS				RZQS71DV1	RZQS100DV1	RZQS125DV1	RZQS140DV1
Dimensions	unit	heightxwidthxdepth	mm	770x900x320		1,170x900x320	
Weight	unit		kg	68		103	
Operation range	cooling	ambient	min.-max. °CDB	-5.0~46			
	heating	ambient	min.-max. °CWB	-15~-15.5			
Sound pressure level	cooling	nom.	dBA	49	51		52
	heating	nom.	dBA	51	55	53	54
	night quiet mode	level 1	dBA	47	49		50
Sound power level	cooling	nom.	dBA	65	67		68
Compressor			type	Hermetically sealed scroll			
Refrigerant			type	R-410A			
Power supply	phase/frequency/voltage		Hz/V	1~/50/220-240			
	additional refrigerant charge		kg/m	See installation manual			
Piping connections	level difference	IU - OU	max. m	15		30	
		IU - IU	max. m		0.5		
	piping length	system	equivalent m	40		70	



Indoor unit FCQH100,125,140D8



Wired remote control BRC1E51A, infrared remote control BRC7F532F



Outdoor unit RZQ100-140D9V1/B9W1



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.



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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.



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