

# Sky Air COMFORT INVERTER

air to air heat pumps







www.daikin.eu



AIR CONDITIONERS, ENSURING COMFORT IN SHOPS,

ENERGY SAVING

RESTAURANTS

AND SMALL OFFICES.





# ABOUT DAIKIN

Daikin has a worldwide reputation based on almost 85 years' experience in the successful manufacture of high quality air conditioning equipment for industrial, commercial and residential use.

# **Daikin Quality**

Daikin's much envied quality quite simply stems from the close attention paid to design, production and testing as well as aftersales support. To this end, every component is carefully selected and rigorously tested to verify its contribution to product quality and reliability.

Daikin Europe N.V.





# ENVIRONMENTAL AWARENESS

# Air Conditioning and the Environment

Air conditioning systems provide a significant level of indoor comfort, making possible optimum working and living conditions in the most extreme climates.

In recent years, motivated by a global awareness of the need to reduce the burdens on the environment, some manufacturers including Daikin have invested enormous efforts in limiting the negative effects associated with the production and the operation of air conditioners.

Hence, models with energy saving features and improved eco-production techniques have seen the light of day, making a significant contribution to limiting the impact on the environment.

## Daikin's commitment to the environment

The pioneering concern for the environment and natural resources is a part of the entire global Daikin operation at all levels: from product design, manufacturing processes, down to the responsibility each individual Daikin employee takes for the environment.

This commitment is reflected in three areas: reducing waste in manufacturing and operations, recycling materials, and designing and producing energy-efficient climate control equipment.



# HEAT PUMPS - THE BASICS



## Daikin heat pumps: combining efficiency and total comfort

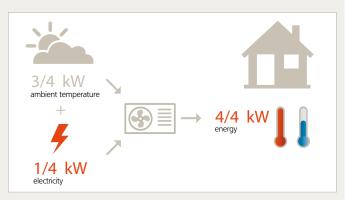
At Daikin, we put our more than 50 years of experience in advanced heat pump technology at your service. Our new generation of heat pumps are all-in-one heating and cooling solutions for your home. They see to it that your home is comfortably warm in the winter and keep your home cool in summer. Because our systems extract thermal energy from the ambient air (so-called air-to-air or air-to-water heat pumps), they are far more energy efficient and emit far less CO<sub>2</sub> than comparable fossil fuel based boiler systems. Good news for your energy bill and for the environment!

### How does a heat pump work?

The energy transfer in heat pumps occurs via a chemical substance called 'refrigerant' that circulates through two heat exchangers in an evaporation and condensation cycle. During this cycle, heat is transferred from an indoor area to the outdoor air in cooling mode, thus cooling the area in question. Similarly, heat can be pumped from the outdoor air indoors and be used to heat indoor areas.

### How energy-efficient are our heat pumps?

A heat pump's efficiency is measured in COP (Coefficient of Performance) for heating and EER (Energy efficiency ratio) for cooling. Daikin's heat pumps achieve COP's and EER's of up to 5, meaning one unit of consumed energy yields 5 units of heated or cooled energy.





### The complete Daikin Sky Air inverter program

Daikin has expanded its Sky Air Super Inverter series with a compact and versatile Sky Air Comfort Inverter series. The introduction of this range marks a major step by Daikin in offering a complete range of inverter systems to suit all applications.

Sky Air Comfort Inverter units provide inverter solutions for customers requiring the comfort of inverter technology but without the need for the top class performance of the Sky Air Super Inverter.

Whereas the Sky Air Super Inverter focuses on extremely high quality performance and top class energy savings, the new Sky Air Comfort Inverter emphasizes compact design and maximum comfort.

The Sky Air Comfort Inverter range is available in 7.1, 10.0 and 12.5kW single phase versions and is supported by a wide range of Daikin indoor units. These combinations may be used as pairs or in twin, triple or double twin combinations. Both Sky Air Super Inverter and Comfort Inverter ranges are designed for use in shops, restaurants and small offices.

The enlarged Sky Air inverter range (Super Inverter and Comfort Inverter) enables Daikin to offer a complete range of inverter units for all possible commercial applications from 7.1kW to 24.1kW in single and three phase versions.

# MAIN features

#### For end users:

- > Energy saving
- > Ensures maximum comfort
- Quiet in operation: sound pressure performance down to 47 dB(A)
- > Automatic control of room temperature
- > Wide operating range
- > 24 hour programmable remote control with a weekly schedule timer
- Wide range of indoor units: 8 different models in 33 different variants

### For installers:

- Easy installation
- > R-410A refrigerant
- Available in 7.1, 10.0, 12.5kW and 14.0kW single phase versions
- Maximum piping length up to 50m

# **RZQS** CREATING THE HIGHEST COMFORT LEVELS

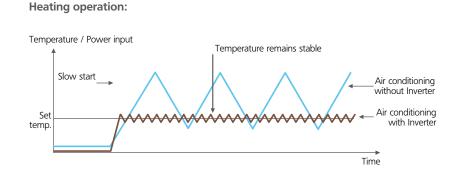


Inverter technology used in the RZQS Comfort Inverter ensures the highest comfort levels. The automatic control of room temperature makes that the actual sensed temperature in the room is at pre set level, ensuring it is never too cool or too hot.

This is a major improvement over standard fixed speed models, which utilise continuous on/off switching of the compressor, creating greater fluctuations in room temperatures.

# Inverter technology offers improved levels of comfort:

- > Less frequent start/stop cycles
- > Capacity is automatically throttled back when set point is approached
- > Start-up time is reduced by 1/3



# INVERTER TECHNOLOGY SAVES ENERGY FOR 2 MAIN REASONS

- 1. The compressor varies its speed according to the cooling or verwarmen load and therefore consumes only the power needed to match the precise requirements of the room.
- 2. When an inverter driven air conditioner is operating at partial load, the energy efficiency of the system is significantly higher than at full load. In a typical application, partial load conditions prevail for more than 90% of operating time. A fixed speed system can only operate at 100% capacity and cannot therefore, match the annual efficiencies of an inverter system.



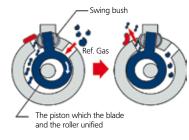
# RZQS

# ENERGY SAVING TECHNOLOGY

The incorporation of Daikin technology in the Sky Air Inverter series enables the system to offer improved inverter performances.

### > Reluctance DC compressor

The Sky Air Comfort Inverter uses the latest reluctance DC compressors resulting in a low starting current and more stable set points.



### Swing compressor

RZQS71 and 100 are equipped with a *swing compressor*. Friction and refrigerant leaks are suppressed and energy saving improved.



### Scroll compressor

RZQS125 and 140 are equipped with a *scroll compressor*. The motor in the compressor is transferred from the low pressure side to the high pressure side. This results in easier superheat control and improved performance. **Powerful magnets :** Secret to raising energy-efficiency!

Swing and scroll compressors are both driven by a newly developed motor using

# 4 neodymium magnets.

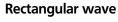
These magnets are more powerful than the generally used ferrite types, providing better performance, higher energy efficiency and increased energy cost savings.





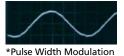
## > Sine Wave DC inverter

The Daikin Sky Air Comfort Inverter uses a sine wave DC inverter to generate smooth inverter waves in order to increase efficiency. The sine wave PWM (Pulse Width Modulation) adjusts the form of the current wave so that it is close to that of the supply voltage wave. High harmonics are reduced and 98% of the electricity is used.





### Sine wave PWM\*



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### > Fan motor

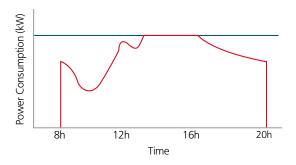
The DC fan motor offers substantial improvements in operating efficiency compared to conventional AC motors, especially during low speed operation. Energy efficiency levels at low velocities in particular have been improved.

## > I-demand function\*

Maximum power consumption can be easily controlled by use of the I-demand function. This option (KRP58M51) minimizes the difference between the actual power consumption and the predefined power consumption. Maximum power consumption can be limited to 80%, 70%, 60% or 40% of rated power input.

\* optional adapter required: KRP58M51

Maximum limit of power consumption can be controlled





# RZQS



# A. Reduced Afmetingen

Compact casing is used for 71 class model, resulting in easy installation. The dimensions of 100, 125 and 140 class models are just 770 height x 900 width x 320mm depth!

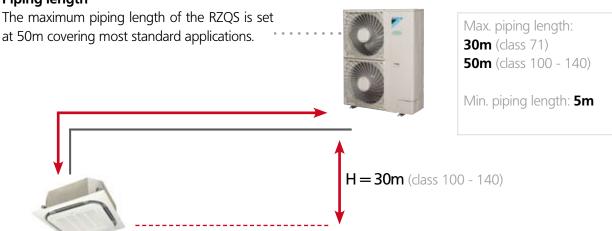


RZQS71D (770x900x320)



RZQS100-140D (1,170x900x320)

# B. Piping length

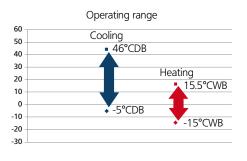






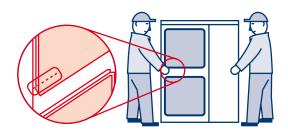
## C. Wide operating range

The ambient temperature operating range for RZQS is between -5°C and 46°C in cooling and -15°C and 15,5°C in heating.





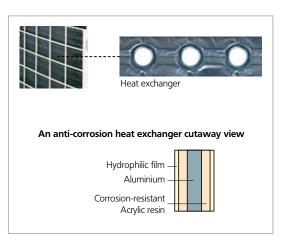
Fitted hand grips for easy transportation and installation.



### E. Anti-corrosion treatment

Special anti-corrosion treatment of the heat exchanger provides 5 to 6 times more resistance against acid rain and salt corrosion. The provision of rust proof steel sheet on the underside of the unit gives additional protection providing the quality standard adapted by Daikin.

	Corrosion resistance rating						
	Non-treated Anti-corrosion treat						
Salt corrosion	1	5 to 6					
Acid rain	1	5 to 6					





# RZQS

# Quiet in operation

### A. Low sound pressure

Reductions in outdoor unit sound pressure levels have been achieved via:

- redesigned fan blades and inlet bell mouth
- a high efficiency aero spiral fan with backward curved blade tips that reduces air turbulence and pressure loss
- the redesigned bell mouth air inlet fitted with guide vanes at the intake that also reduces air turbulence around the blades

dB(A)	Perceived loudness	Sound	_
0	Treshold of hearing	-	-
20	Extremely soft	Rustling leaves	
40	Very soft	Quiet room	DZOC
60	Moderately loud	Normal conversation	RZQS
80	Very loud	City traffic noise	
100	Extremely loud	Symphonic orchestra	
120	Threshold of feeling	Jet taking off	

Using the latest technology, sound pressure levels down to 47 dB(A) in cooling (3 HP) are achieved.

### B. Night quiet function: max. -5 dB(A)

During night time, sound level of the outdoor unit can be reduced for a certain period by limiting the maximum compressor frequency and fan speed: starting time and ending time can be set.

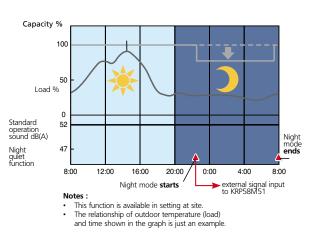
The night quiet function can be enabled according to end user preferences via 2 different modes:

### Mode 1: automatic mode

Set via the remote control. Time of maximum temperature is memorized. The low operating mode will become active 8 hours after the peak temperature in daytime and operation will return to normal after 10 hours of low noise operation.

### Mode 2: customized mode

Starting and ending times can be set by using an external timer control (optional adapter KRP58M51 + field supplied timer switch required).







# Control systems



# A. Infrared remote control

### BRC7\*

### ON/OFF

- $\rightarrow$  Timer mode start/stop
- $\rightarrow$  Timer mode on/off
- Programme time
- $\rightarrow$  Temperature setting
- $\rightarrow$  Air flow direction
- $\rightarrow$  Operating mode
- $\rightarrow$  Fan speed control
- $\rightarrow$  Filter sign reset
- Inspection/test indication

INDOOR UNITS	HEATING & COOLING
FFQ-B	BRC7E530
FCQ-C	BRC7F532F
FCQH-D	BRC7F532F
FBQ-C	-
FDQ-B	-
FHQ-B	BRC7E63
FAQ71B	BRC7E618
FAQ100B	BRC7C510

# B. Bedrade afstandsbediening

## BRC1D52

- $\rightarrow~$  Real time clock: indicates real time and day
- > Limit operation (min/max): room temperature is controlled within adjustable upper and lower limits. Limit operation can be activated manually or by schedule timer
- $\rightarrow$  Schedule timer:
  - > It is possible to programme a weekly schedule timer
  - > It is possible to programme 5 actions for each day of the week
- $\rightarrow$  Home leave (frost protection): during absence, the indoor temperature can be maintained at a certain level. This function can also switch the unit ON or OFF
- $\rightarrow~$  Different levels of disabled buttons can be selected as follows:
  - > Level 1: all buttons are accessible
  - Level 2: all buttons are disabled except for: ON/OFF, set temperature up/down, fan speed, cooling/verwarmen mode, enable/disable schedule timer, air flow direction adjustment button
  - Level 3: all buttons are disabled except for: ON/OFF, set temperature up/down, fan speed





# INDOOR - OUTDOOR Combinations

The RZQS inverter can be connected to a wide range of indoor units to suit all possible tastes and applications, including:

- > FFQ 4-way blow cassette (600x600mm)
- > FCQ(H) Roundflow ceiling mounted cassette
- > FBQ concealed ceiling units
- > FDQ large concealed ceiling units
- > FHQ ceiling suspended units
- > FAQ wall mounted units
- > FVQ floor standing units

All units (except FFQ-B) can be connected for pair applications. Several units can also be connected for twin, triple and double twin configurations.

# Comfort Inverter

# MODEL RANGE

	OUTDOOR UNITS				INDOOF	R UNITS			
	RZQS-C	FFQ-B	FCQ-C	FCQH-D	FBQ-C	FDQ-B	FHQ-B	FAQ-B	FVQ-B
	00	ŕ	1	1					
	RZQS71D	-	71	71	71	-	71	71	71
PAIR	RZQS100D	-	100	100	100	-	100	100	100
APPLICATION	RZQS125D	-	125	125	125	125	125	-	125
	RZQS140D	-	140	140	140	-	-	-	-
	RZQS71D	2x35	2x35	-	2x35	-	2x35	-	-
	B706100D	2x50	2x50	-	2x50	-	2x50	-	-
	RZQS100D	3x35	3x35	-	3x35	-	3x35	-	-
TWIN/TRIPLE/		2x60	2x60	-	2x60	-	2x60	-	-
DOUBLE TWIN	RZQS125D	3 x 50	3x50	-	3x50	-	3x50	-	-
APPLICATION		4x35	4x35	-	4x35	-	4x35	-	-
		-	2x71	2x71	2x71	-	2x71	2x71	-
	RZQS140D	3x50	3x50	-	3x50	-	3x50	-	-
		4x35	4x35	-	4x35	-	4x35	-	-

# FFQ-B

4-Way Blow Ceiling Mounted Cassette (600 x 600mm)

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FFQ25~60B



4-Way Blow Ceiling Mounted Cassette (600 x 600mm)

- Compact casing (575mm in width and depth) enables unit to fit flush into ceilings and match standard architectural modules, without cutting ceiling tiles
- > Modern style decoration panel in white (RAL9010)
- > Home leave operation saves energy during absence
- > Whisper quiet operation: down to 25 dBA sound pressure level
- > Fresh air intake for healthy living
- > Comfortable horizontal air discharge ensures draughtfree operation and prevents ceiling soiling
- Since the flaps can move to a 0 degree position, virtually no draught can be experienced
- > Possibility to shut 1 or 2 flaps for easy installation in corners
- > The switch box can be reached by simply removing the suction grille; therefore maintenance can be done very easily.
- > Drain-up pump with 750mm lift fitted as standard

# 🌸 FFQ

<b>HEATING &amp; COOLING</b>				FFQ35B	FFQ50B	FFQ60B			
Cooling capacity		min~nom~max	kW						
Heating capacity		min~nom~max	kW						
Naminalianut	cooling	nominal	kW						
Nominal input	heating	nominal	kW						
EER				twir	n/triple/double twin application	only			
COP									
En aver dahal		cooling							
Energy label	Energy label heating								
Annual energy consumption	1	cooling	kWh						
Dimensions (HxWxD) unit unit		mm	286×575×575						
		unit	kg	17.5					
Air flow rate (H/L)		cooling	m <sup>3</sup> /min	10/6.5	12/8	15/10			
		heating	m <sup>3</sup> /min	10/6.5	12/8	15/10			
Sound pressure level (H/L)		cooling	dB(A)	10/6.5	12/8	15/10			
		heating	dB(A)	32/25	36/27	41/32			
Sound power level (H)		cooling	dB(A)	49	53	58			
		heating	dB(A)	49	53	58			
Power supply			V1		1~, 230V, 50Hz				
Infrared remote control					BRC7E530				
Wired remote control				BRC1D52					
Decoration panel				BYFQ60B					
Dimensions (HxWxD)		decoration panel	mm		55 x 700 x 700				
Weight		decoration panel	kg		2.7				

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 full load (= nominal capacity).

# FCQ-C



Roundflow Ceiling Mounted Cassette

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Roundflow Ceiling Mounted Cassette

- 360° air discharge ensures uniform air flow and temperature distribution
- Air discharge from the corners avoids dead zones that may be subject to > temperature differences
- Modern style decoration panel is available in 2 different variations: white > (RAL9010) with grey louvers and full white (RAL9010) including white louvers Energy efficient: up to class A energy labels >
- Home leave operation saves energy during absence >
- Fresh air intake: up to 20% >
- Comfortable horizontal air discharge ensures draughtfree operation and prevents > ceiling soiling
- 23 different air flow patterns possible >
- Drain-up pump with 850mm lift fitted as standard >

# FCQ

HEATING & COO	DLING			FCQ35C	FCQ50C	FCQ60C	FCQ71C	FCQ100C	FCQ125C	FCQ140C
Cooling capacity		nominal	kW				7.1	10.0	12.5	14.0
Heating capacity		nominal	kW				8.0	11.2	14.0	16.0
NI 1 11 1	cooling	nominal	kW				2.28	3.22	4.02	5.36
Nominal input	heating	nominal	kW				2.35	3.28	4.06	4.98
EER				twin/triple/o	double twin ap	plication only	3.11	3.11	3.11	2.61
COP							3.41	3.41	3.45	3.21
		cooling					В	В	В	D
Energy label		heating					В	В	В	С
Annual energy co	nsumption	cooling	kWh				1,141	1,608	2,01	2,682
Dimensions (HxW	/xD)	unit	mm		204x84	40×840		246x840x840		
Weight		unit	kg	19	19	19	21	23	23	23
A: (I	、	cooling	m <sup>3</sup> /min	10.5/8.5	12.5/8.5	13.5/8.5	15.5/9.0	23.5/16.0	27.5/19.0	27.5/19.0
Air flow rate (H/L	.)	heating	m <sup>3</sup> /min	12.5/10.0	12.5/8.5	13.5/8.5	16.0/9.5	23.5/16.0	27.5/19.0	27.5/19.0
Coursel and a second la		cooling	dB(A)	31/27	31/27	33/28	33/28	37/32	41/35	41/35
Sound pressure le	vel (H/L)	heating	dB(A)	31/27	31/27	33/28	34/28	37/32	41/35	42/35
Sound power leve	2	cooling	dB(A)	49	49	51	51	54	58	58
Power supply			VE			1~, 220-2	240V/220V, 50	)Hz/60Hz		
Infrared remote co	ontrol			BRC7F532F						
Wired remote con	itrol			BRC1D52						
DECORATION PAI	NEL			BYCQ140CW1 / BYCQ140CW1W						
Dimensions (H x W	/xD)	decoration panel	mm	50x950x950						
Weight		decoration panel	kg	5.5						

<sup>1)</sup> Energy label: scale from A (most efficient) to G (less efficient). Notes:

Annual energy consumption: based on average use of 500 running hours per year full load (= nominal capacity).
 Annual energy consumption: based on average use of 500 running hours per year full load (= nominal capacity).
 The BYCQ140CW1W has white insulations. Be informed that formation of dirt on white insulations is visibly stronger and that is consequently not advised to install the BYCQ140CW1W decoration panel in enveronments exposed to concentrations of dirt.

# FCQH-D

High COP, Roundflow Ceiling Mounted Cassette





High COP, Roundflow Ceiling Mounted Cassette

FCQH-D



- High COP round flow cassette: up to class A energy labels
- 360° air discharge ensures uniform air flow and temperature distribution >
- Air discharge from the corners avoids dead zones that may be subject to > temperature differences
- Modern style decoration panel is available in 2 different variations: white > (RAL9010) with grey louvers and full white (RAL9010) including white louvers
- Home leave operation saves energy during absence >
- Fresh air intake: up to 20% >

>

- Comfortable horizontal air discharge ensures draughtfree operation and > prevents ceiling soiling
- 23 different air flow patterns possible >
- Drain-up pump with 850mm lift fitted as standard >

# FCQH

HEATING & COOLING				FCQH71D	FCQH100D	FCQH125D	FCQH140D	
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	kW	2.15	2.90	3.88	4.65	
Norminal input	heating	nominal	kW	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	
	cooling			А	А	A	В	
Energy label	heating			А	А	A	В	
Annual energy consumption	cooling		kWh	1,076	1,449	1,941	2,326	
Dimensions (HxWxD)	unit		mm	246x840x840	288x840x840			
Veight	unit		kg	23	25			
A: flammata (11/1)	cooling		m <sup>3</sup> /min	21.9/12.1	34.2/17.6	34.2/21.2	34.2/23.8	
Air flow rate (H/L)	heating		m <sup>3</sup> /min	21.9/12.1	34.2/17.6	34.2/21.3	34.2/23.9	
	cooling		db(A)	36/28	45/32	45/36	45/38	
Sound presure level (H/L)	heating		db(A)	36/28	45/32	45/36	45/38	
Sound power level	cooling		db(A)	54	62	62	62	
Power supply			VE		1~, 220-240V/2	20V, 50Hz/60Hz		
nfrared remote control				BRC7F532F				
Nired remote control				BRC1D52				
DECORATION PANEL			i	BYCQ140CW1 / BYCQ140CW1W				
Dimensions (HxWxD)		decoration panel	mm	50x950x950				
Weight		decoration panel	kg	5.5				

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

 2) Annual energy consumption: based on average use of 500 running hours per year full load (= nominal capacity).
 3) The BYCQ140CW1W has white insulations. Be informed that formation of dirt on white insulations is visibly stronger and that is consequently not advised to install the BYCQ140CW1W decoration panel in enveronments exposed to concentrations of dirt.

# FBQ-C Inverter driven Concealed Ceiling Unit





Inverter driven Concealed Ceiling Unit

FBQ100~140C

- Reduction in power consumption thanks to DC inverter fans >
- Improved comfort thanks to 3-step airflow control >
- Maximum external static pressure (ESP) is 100Pa >
- Possibility to change ESP through wired remote control allows > optimisation of the supply air volume
- Blends unobtrusively with any interior décor: only the suction > and discharge grilles are visible
- Energy efficient: up to class A energy labels >
- Home leave operation saves energy during absence >
- Whisper quiet operation: down to 29 dBA sound pressure level >
- Standard air filter: removes airborne dust particles to ensure a steady > supply of clean air
- Easy installation thanks to automatic air flow adjustment towards > nominal air flow rate
- Built-in drain pump as standard increases reliability of the drain system >

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3 K	D	U

<b>HEATING &amp; COOLING</b>	HEATING & COOLING						FBQ71C	FBQ100C	FBQ125C	FBQ140C
Cooling capacity		nominal	kW				7.1	10.0	12.5	14.0
Heating capacity		nominal	kW				8.0	11.2	14.0	16.0
Naminalianut	cooling	nominal	kW					3.03	3.98	4.77
Nominal input	heating	nominal	kW				2.25	3.07	4.11	4.67
EER				twin / triple	/ double twir only	n application	3.26	3.30	3.14	2.81
COP					Only		3.55	3.65	3.41	3.21
Francis Jahral	cooling						А	А	В	С
Energy label	heating						В	А	В	С
Annual energy consumption	cooling		kWh				1,089	1,515	1,990	2,384
Dimensions (HxWxD)	vimensions (HxWxD) unit			300x700x700 300x1,000x700			00x700	300x1,400x700		
Weight		unit	kg	2	5	3	4		45	
A: (I . (III)	cooling		m <sup>3</sup> /min	16/11	16/11	18/15	18/15	32/23	39/28	39/28
Air flow rate (H/L)	heating		m <sup>3</sup> /min	16/11	16/11	18/15	18/15	32/23	39/28	41/29
Coursel and a second low of (11/1)	cooling		db(A)	37/29	37/29	37/29	37/29	38/32	40/33	40/33
Sound presure level (H/L)	heating		db(A)	37/29	37/29	37/29	37/29	38/32	40/33	41/34
Sound power level	cooling		db(A)	63	63	57	57	61	66	66
Drain-up height			mm	625						
Power supply			VE	1~, 230V, 50Hz						
Wired remote control							BRC1D52			
DECORATION PANEL				BYBS45DJW1 BYBS71DJ			1DJW1	DJW1 BYBS125DJW1		
Dimensions (HxWxD)	decoration panel		mm	55x800x500 55x1,1		55x1,10	00x500 55x1,500x500		)	
Weight		decoration panel	kg			4	5	6.5		

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 full load (= nominal capacity).

# FDQ-B Large Concealed Ceiling Unit





Large Concealed Ceiling Unit

>

Up to 150 Pa external static pressure allows extensive ductwork runs and flexible application: ideal for use in large areas

FDQ125B

- Blends unobtrusively with any interior décor: only the suction and discharge grilles are visible
- > Home leave operation saves energy during absence
- > Standard air filter: removes airborne dust particles to ensure a steady supply of clean air

# 🗰 FDQ

<b>HEATING &amp; COOLING</b>				FDQ125B			
Cooling capacity		nominal	kW	12.5			
Heating capacity		nominal	kW	14.0			
Naminalianut	cooling	nominal	kW	4.30			
Nominal input	heating	nominal	kW	3.97			
EER	EER			2.91			
COP				3.53			
En aver dahal	cooling			C			
Energy label	heating			В			
Annual energy consumption	cooling		kWh	2,148			
Dimensions (HxWxD)	unit		mm	350x1,400x662			
Weight	unit		kg	59			
Air flow rate (NA)	cooling		m <sup>3</sup> /min	43			
Air flow rate (M)	heating		m <sup>3</sup> /min	43			
	cooling		dB(A)	44			
Sound pressure level (H)	heating		dB(A)	44			
Sound power level (H)	cooling		dB(A)	75			
Power supply			V3/V1	1~, 230V, 50Hz			
Wired remote control				BRC1D52			

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 full load (= nominal capacity).

# **FHQ-B** Ceiling Suspended Unit





Ceiling Suspended Unit

FHQ71,100B



- > Can be installed in both new and existing buildings
- > Wider air discharge thanks to Coanda effect: up to 100 degrees
- > Home leave operation saves energy during absence
- > Air flow distribution for ceiling heights up to 3.8m without loss of capacity
- The unit can easily be mounted in corners and narrow spaces, as it only needs
   30mm lateral service space

# 🗰 FHQ

<b>HEATING &amp; COOLIN</b>	IG			FHQ35B	FHQ50B	FHQ60B	FHQ71B	FHQ100B	FHQ125B
Cooling capacity		nominal	kW				7.1	10.0	12.5
Heating capacity		nominal	kW				8.0	11.2	14.0
	cooling	nominal	kW				2.51	3.56	4.55
Nominal input	heating	nominal	kW				2.75	3.85	4.86
EER				twin/triple	/double twin app	lication only	2.83	2.81	2.75
COP							2.91	2.91	2.88
	cooling						С	С	D
Energy label	heating						D	D	D
Annual energy consu	mption	cooling	kWh				1,254	1,779	2,273
Dimensions	•	HxWxD	mm	195x960x680 195x1,1			60×680	195x1,400x680	195 x 1,590 x 680
Weight		I	kg	24	25		27		32
	cooling		m <sup>3</sup> /min	13/10	13/10	17/13	17/14	24/20	30/25
Air flow rate (H/L)	heating		m <sup>3</sup> /min	13/10	13/10	17/13	17/14	24/20	30/25
<b>C</b>		cooling	dB(A)	37/32	38/33	39/33	39/35	42/37	44/39
Sound pressure level	(H/L)	heating	dB(A)	37/32	38/33	39/33	39/35	42/37	44/39
<b>C</b>	<u>`````````````````````````````````````</u>	cooling	dB(A)	53/48	54/49	55/49	55/51	58/53	60/55
Sound power level (H) heating dB(A		dB(A	53/48	54/49	55/49	55/51	58/53	60/55	
Power supply			V1	1~, 220-240V, 50Hz					
Infrared remote contr	ol			BRC7E63					
Wired remote control				BRC1D52					

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 full load (= nominal capacity).







Wall Mounted Unit

>

FAQ71B



- Can be installed in both new and existing buildings
- Vertical auto-swing function moves the discharge flaps up and down for efficient > air distribution throughout the room
- 5 different discharge angles can be programmed via the remote control >
- Home leave operation saves energy during absence >
- Both horizontal flaps and front panel can easily be removed and washed >
- All maintenance operations can be carried out from the front of the unit >

# 🔹 FAQ

HEATING & COOLING				FAQ71B	FAQ100B	
Cooling capacity	nominal		kW	7.1	10.0	
Heating capacity		nominal	kW	8.0	11.2	
Naminalianut	cooling	nominal	kW	2.44	3.56	
Nominal input	heating	nominal	kW	2.49	3.49	
EER				2.91	2.81	
COP				3.21	3.21	
Energy label cooling heating				С	С	
				С	С	
Annual energy consumption	cooling		kWh	1,220	1,779	
Dimensions	HxWxD		mm	290x1,050x230	360 x 1,570 x 200	
Weight			kg	13	26	
A: fl	cooling		m <sup>3</sup> /min	19/15	23/19	
Air flow rate (H/L)	heating		m <sup>3</sup> /min	19/15	23/19	
	cooling		dB(A)	43/37	45/41	
Sound pressure level (H/L)	heating		dB(A)	43/37	45/41	
	cooling		dB(A)	59/53	61/57	
Sound power level (H/L)	heating		dB(A)	59/53	61/57	
Power supply			V1	1~, 220-240, 50Hz		
Infrared remote control				BRC7E618	BRC7C510	
Wired remote control				BRC1D52		

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 full load (= nominal capacity).





FVQ-B



Floor Standing Unit

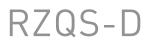
- Ideal solution for shops, restaurants or offices without false ceilings
- > Very efficient for use in rooms with high ceilings
- > Can be installed in both new and existing buildings
- > Dual air discharge flow for better air distribution



HEATING & COOLING			FVQ71B	FVQ100B	FVQ125B	
Cooling capacity		nominal	kW	7.1	10.0	12.5
Heating capacity		nominal	kW	8.0	11.2	14.0
Nominal input	cooling	nominal	kW	2.53	3.56	4.45
	heating	nominal	kW	2.49	3.49	4.36
EER				2.81	2.81	2.81
COP				3.21	3.21	3.21
Energy label		cooling		С	E	C
		heating		С	E	C
Annual energy consumption		cooling	kWh	1,265	1,779	2,225
Dimensions (HxWxD)	ensions (HxWxD) unit mr		mm	1,850×600×270	1,850×600×350	
Weight		unit	kg	39	46	47
A:		cooling	m <sup>3</sup> /min	18/14	28/22	32/25
Air flow rate (H/L)		heating	m <sup>3</sup> /min	18/14	28/22	32/25
Sound pressure level (H/L)		cooling	dB(A)	42/36	48/42	50/44
		heating	dB(A)	42/36	48/42	50/44
Sound power level		cooling	dB(A)	54/48	60/54	62/56
Power supply VE			1~, 220-240V, 50Hz			
Wired remote control				BRC1C61		

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 full load (= nominal capacity).



# Comfort Inverter



Comfort Inverter





- Energy saving unit resulting from inverter technology Wide range: 71 up to 140 class >
- >
- Ensures maximum comfort >
- Sound pressure performance down to 47 dB(A) >
- >
- Wide operating temperature range Wide range of indoor units: 8 different models in 33 different variants >

# RZQS

HEATING & COOLING			RZQS71DV1	RZQS100DV1	RZQS125DV1	RZQS140DV1		
Power supply			1~, 220-240V, 50Hz					
Dimensions HxWxD		mm	770×900×320	0x320 1,170x900x320				
Weight		kg	68	103	103	103		
Colour				Ivory white				
Sound pressure level (nom)	cooling		dB(A)	49 (47)	51 (49)	51 (49)	52 (50)	
(night quiet mode)	heating		dB(A)	51	55	53	54	
Sound power level	cooling		dB(A)	65	67	67	68	
Compressor			type	Herm. sealed swing	Hermetically sealed scroll			
Refrigerant type				R-410A				
Refrigerant charge		kg	2.75	3.7	3.7	3.7		
Refrigerant oil				FVC50K	FVC50K Daphne FVC68D			
Refrigerant oil charge		I	0.75	1.0	1.0	1.0		
Minimum/maximum piping length		m	5/30 (40 equivalent)	5/50 (70 equivalent)				
Chargeless piping length		m	30	30	30	30		
Maximum installation height difference		m	15	30	30	30		
Maximum interunit level difference			m			0.5		
Piping connections drain		mm			ø 9.52			
		gas	mm			ø 15.9		
		drain	mm			ø 26 (3x)		
Operation range	cooling	from ~ to	°CDB			-5~46		
	heating	from ~ to	°CWB			-15~15,5		

# **OPTIONAL ACCESSORIES**

Name of option	RZQS71DV1	RZQS100DV1	RZQS125DV1	RZQS140DV1		
Central drain plug		EKDK04				
	Twin		KHRQ22M20TA8			
Refrigerant branch piping	Triple	-	KHRQ127H8			
	Double twin	-	-	KHRQ22M20TA8 (3x)		
Demand adapter kit		KRP58M51				



# **POWER SUPPLY**

V1 = 1~, 220-240V, 50Hz V3 = 1~, 230V, 50Hz VE = 1~, 220-240V, 50Hz/60Hz

# **MEASURING CONDITIONS**

# HEATING & COOLING

<ol> <li>nominal cooling capacities are based on:</li> </ol>	
indoor temperature	27°CDB/19°CWB
outdoor temperature	35°CDB
refrigerant piping length	7.5m
level difference	0m
2) nominal heating capacities are based on:	
indoor temperature	20°CDB
outdoor temperature	7°CDB/6°CWB
refrigerant piping length	7.5m
level difference	0m

The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value, depending on the distance and acoustic environment (for measuring conditions: please refer to the technical databooks). The Geluidsvermogenniveau is an absolute value indicating the "power" which a sound source generates. For more detailed information please consult our technical databooks.

Daikin air conditioners offer a comprehensive range of features to enhance your comfort. In this catalogue, main features are represented by following pictogrammes:

### 'We Care' Icons

A number of 'We Care' icons are highlighted in green throughout the catalogue to indicate product features that have an impact on reducing energy consumption:



Energy efficiency Daikin air conditioners are energy efficient and economical.



Fan only The air conditioner can be used as fan, blowing air without cooling or heating.

# COMFORT

level.



#### Draught prevention

When starting to warm up or when the thermostat is off, the air discharge direction is set horizontally and the fan to low speed, to prevent draught. After warming up, air discharge and fan speed are set as desired.

During absence, the indoor temperature can be maintained at a certain



#### Auto cooling-heating changeover

Home leave operation

Automatically selects cooling or heating mode to achieve the set temperature.



## Whisper quiet

Daikin indoor units are whisper quiet. Also the outdoor units are guaranteed not to disturb the quiet of the neighbourhood.



#### **Double thermostat function**

Controls the temperature via a sensor on the air conditioner or via a sensor on the remote control.



#### **Ceiling soiling prevention**

A special function prevents air from blowing out too long in horizontal position, to prevent ceiling stains.



#### Horizontal auto swing

Possibility to select automatic horizontal moving of the air discharge louvre, for uniform air flow and temperature distribution.



#### Vertical auto swing

Possibility to select automatic vertical moving of the air discharge louvre, for uniform air flow and temperature distribution.



### Fan speed steps

Allows to select up to the given number of fan speed.

# HUMIDITY CONTROL



Dry programme With the  $\bar{\mathrm{d}}\mathrm{r}\mathrm{y}$  programme, the humidity level in the room is reduced with minor temperature fluctuations.

# AIR TREATMENT



Air filter Removes airborne dust particles to ensure a steady supply of clean air.



Air purification filter Removes airborne dust particles and prevents the propagation of bacteria and viruses to ensure a steady supply of clean air

## **REMOTE CONTROL & TIMER**



### Weekly timer



Timer can be set to start heating or cooling anytime on a daily or weekly basis.



#### Infrared remote control

Infrared remote control with LCD to start, stop and regulate the air conditioner from a distance.



# Wired remote control

Wired remote control to start, stop and regulate the air conditioner from a distance



Centralised control Centralised control to start, stop and regulate several air conditioners from one central point.

# **OTHER FUNCTIONS**



#### Auto-restart

The unit restarts automatically at the original settings after power failure.



#### Self-diagnosis



Simplifies maintenance by indicating system faults or operating anomalies.



#### Twin/triple/double twin application

2,3 or 4 indoor units can be connected to only 1 outdoor unit even if they have different capacities. All indoor units operate within the same mode (cooling or heating) from one remote control.

### Drain pump kit

Facilitates condensation draining from the indoor unit.





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.



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. The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Daikin  $% \lambda =0.01$ 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 on its knowledge. No express of 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 Europe N.V.



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