

Air Conditioners

# Heating & Cooling

**SkyAir**<sup>®</sup>

- » **Energy label:  
Up to class A**
- » **Heat pump system**
- » **Seasonal inverter  
technology**
- » **Flexible duct system  
for large areas**
- » **Neatly concealed  
in the ceiling**
- » **A uniform temperature  
distribution**

Concealed Ceiling Unit



[www.daikin.eu](http://www.daikin.eu)



FDQ-B

## The most advanced climate control for Large Spaces

The quality air conditioning of Daikin brings the temperature and air humidity to a level where everyone feels good in his skin. Our aim is for people to be able to feel comfortable in shopping centres, restaurants, at work or wherever. That is the perspective from which Daikin develops integrated solutions that guarantee high climate comfort and a healthy interior environment. Solutions that also yield great savings when it comes to energy costs.

The newest generation of inverter air conditioners by Daikin combines low energy use with advanced technology. This generation is also synonymous for great performance and simplified installation. Whisper-quiet advanced technology, with which Daikin leads in the restaurant, hotel and retail market.

## 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

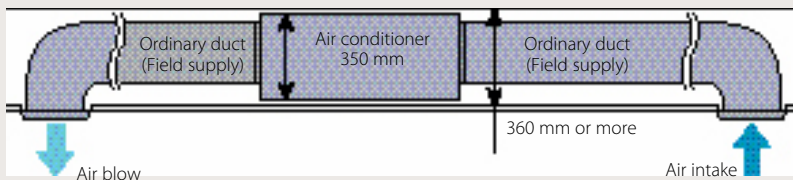


## Built-in satellite model FDQ-B: for a uniform temperature distribution

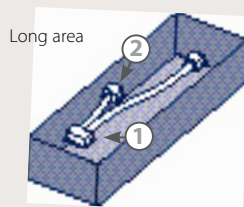
Built-in satellite units are mounted in the space between the ceiling and the lowered ceiling, leaving only the intake and grills showing. Since these grills can be placed anywhere, the temperature can be distributed evenly in large rooms and in rooms with partitions. The built-in satellite units are among the quietest air conditioners on the market.

### Flexible installation, Simple maintenance

- > Since the indoor unit has a low height it fits flush into a narrow ceiling void. The FDQ-B model can be installed in a false ceiling of nearly 360 mm.



- > The air discharge unit can be separated from the actual air conditioner for use in long or large areas by means of **flexible duct systems** (ESP up to 250Pa). In this way even very big areas can be kept comfortable.



- ① suction grille
- ② discharge grille (field supply) of the flexible ducts

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

## Maximum reliability, Minimum noise

### > Quiet in operation

The indoor unit is quiet in operation. The sound levels are as low as 44dBA, comparable to refrigerator humming or a quiet conversation.

### > Adjustable fan speed

You can select a high fan speed, providing you maximum reach.

### > Air filter

A built-in filter permanently clears the air of microscopically small dust particles.

## The integrated climate solutions of Daikin are a guarantee of:

- > Unparalleled comfort performance
- > A healthy indoor environment
- > And significant saving in energy costs\*.

\*Compared to non inverter units

## 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 be switched on and off remotely with a mobile phone. With this function you can also make the unit switch off automatically, e.g. when someone opens a window.



Wired remote control BRC1E51A  
(optional)

## Application options

- > Depending on your air conditioning need, you can have your unit either **heat or cool (heat pump)**.
- > It is possible to use the indoor unit in **pair** (connecting one indoor to one outdoor) and **twin**, (connecting up to 2 indoors in the same room to a single outdoor).



# Heating & Cooling

INDOOR UNITS				FDQ125B	FDQ125B	FDQ200B	FDQ250B
Capacity	cooling	nom.	kW	12.5 <sup>3</sup>		20.0 <sup>3</sup>	24.1 <sup>3</sup>
	heating	nom.	kW	14.0 <sup>4</sup>		23.0 <sup>4</sup>	26.4 <sup>4</sup>
Power input	cooling	nom.	kW	3.96	4.15	6.23	8.58
	heating	nom.	kW	3.61	3.69	6.74	8.22
EER				3.16	3.01	3.21	2.81
ESEER				3.50	3.39	-	-
COP				3.88	3.79	3.41	3.21
Energy label	cooling/heating			B/A	B/A	A/B	C/C
Annual energy consumption				1,978	2,075	3,115	4,290
Dimensions	unit	heightxwidthxdepth	mm	350x1,400x662		450x1,400x900	
Weight	unit			59.0		89	94
Casing	colour			Unpainted		Unpainted	
	material			Galvanised steel		Material Galvanised steel	
Fan - Air flow rate	cooling	nom.	m <sup>3</sup> /min	43		69	89
	heating	nom.	m <sup>3</sup> /min	43		69	89
Fan - External static pressure	high/nom./low	Pa		150/150/150		250/250/250	
Sound pressure level	cooling	high	dBA	44		45	47
	heating	low	dBA	44		45	47
Sound power level	cooling	nom.	dBA	75		81	82
Power supply	phase/frequency/voltage	Hz/V		1~/50/230		1~/50/230	
Piping connections	liquid	OD	mm	ø 9.52		ø 9.52	ø 12.7
	gas	OD	mm	ø 15.9		ø 22.2	
	drain	OD	mm	ø 26		-	

(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) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m. (4) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m. (5) The sound power level is an absolute value indicating the power which a sound source generates. (6) Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings.



OUTDOOR UNITS				RZQ125D9V1	RZQ125B9W1	RZQ200CY	RZQ250CY
Dimensions	unit	heightxwidthxdepth	mm	1,345x900x320		1,680x930x765	
Weight	unit			109	106	183	184
Operation range	cooling	ambient	min.-max. °CDB	-15~50		-5~46	
	heating	ambient	min.-max. °CWB	-20~-15.5		-15~-15	
Sound pressure level	cooling	nom.	dBA	51	50	57	
	heating	nom.	dBA	53	52	57	
	night quiet mode	level 1	dBA	45		-	
Sound power level	cooling	nom.	dBA	67	66	78	
Compressor				Hermetically sealed scroll			
Refrigerant				R-410A			
Power supply	phase/frequency/voltage	Hz/V		1~/50/220-240	3N~/50/400	3N~/50/380-415	
Piping connections	additional refrigerant charge	kg/m		See installation manual			
	level difference	IU - OU	max. m	30		-	-
		IU - IU	max. m	0.5		-	-
pipng length	system	equivalent m	75		100		

# Heating & Cooling

INDOOR UNITS				FDQ125B
Capacity	cooling	nom.	kW	12.5 <sup>3</sup>
	heating	nom.	kW	14.0 <sup>4</sup>
Power input	cooling	nom.	kW	4.30
	heating	nom.	kW	3.97
EER				2.91
COP				3.53
Energy label	cooling/heating			2,148
Annual energy consumption				kWh C/B
Dimensions	unit	heightxwidthxdepth	mm	350x1,400x662
Weight	unit			kg 59
Casing	colour			Unpainted
	material			Galvanised steel
Fan - Air flow rate	cooling	nom.	m <sup>3</sup> /min	43
	heating	nom.	m <sup>3</sup> /min	43
Fan - External static pressure	high/nom./low		Pa	150/150/150
Sound pressure level	cooling	high	dBA	44
	heating	low	dBA	44
Sound power level	cooling	nom.	dBA	75
Power supply	phase/frequency/voltage		Hz/V	1~/50/230
Piping connections	liquid	OD	mm	ø9.52
	gas	OD	mm	ø15.9
	drain	OD	mm	ø26

(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) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m. (4) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m. (5) The sound power level is an absolute value indicating the power which a sound source generates. (6) Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings.

OUTDOOR UNITS				RZQS100D7V1
Dimensions	unit	heightxwidthxdepth	mm	1,170x900x320
Weight	unit			kg 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	51
	heating	nom.	dBA	55
	night quiet mode		dBA	49
Sound power level	cooling	nom.	dBA	67
Compressor	type			Hermetically sealed scroll
Refrigerant	type			R-410A
Power supply	phase/frequency/voltage		Hz/V	1~/50/220-240
Piping connections	additional refrigerant charge		kg/m	See installation manual
	level difference	IU - OU	max. m	30
		IU - IU	max. m	0.5
	total piping	system	actual m	70

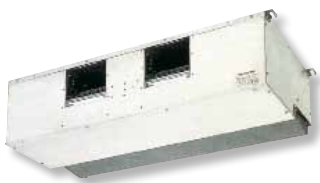


# Heating & Cooling

INDOOR UNITS				FDQ125B
Cooling capacity	nom.		kW/Btu/h/kcal/h	12.5 <sup>3</sup>
Heating capacity	nom.		kW/Btu/h/kcal/h	14.6 <sup>4</sup>
Power input	cooling	nom.	kW	4.79
	heating	nom.	kW	4.51
EER				2.61
COP				3.24
Annual energy consumption	kWh			2,395
Energy label	cooling/heating			D/C
Dimensions	unit	heightxwidthxdepth	mm	350x1,400x662
Weight	unit			kg
Casing	colour			Unpainted
	material			Galvanised steel
Fan-Air flow rate	cooling	nom.	m <sup>3</sup> /min	43.0
	heating	nom.	m <sup>3</sup> /min	43.0
Fan-External static pressure	high/nom./low		Pa	150/150/150
Sound pressure level	cooling	high	dBA	44.0
	heating	low	dBA	44.0
Sound power level	cooling	nom.	dBA	75.0
Power supply	phase/frequency/voltage		Hz/V	1~/50/230
Piping connections	liquid	OD	mm	ø 9.52
	gas	OD	mm	ø 15.9
	drain	OD	mm	ø 26

OUTDOOR UNITS				RQ125BW1
Dimensions	unit	heightxwidthxdepth	mm	1,170x900x320
Weight	unit			kg
Operation range	cooling	ambient	min.~max. °CDB	-5~-46
	heating	ambient	min.~max. °CWB	-10~-15
Sound pressure level	cooling	nom.	dBA	53
Sound power level	cooling	nom.	dBA	67
Compressor	type			Hermetically sealed scroll compressor
Refrigerant	type			R-410A
Power supply	phase/frequency/voltage		Hz/V	3N~/50/400
Piping connections	pipng length	max.	OU - IU	m
	additional refrigerant charge			kg/m
	level difference	IU - OU	max.	m
	IU - IU	max.	m	0.5

(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) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m; level difference: 0m (4) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m; level difference: 0m



Indoor unit  
FDQ200-250B



Wired remote control  
BRC1E51A



Outdoor unit  
RZQ200-250CY



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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