

# Air Conditioners Heating & Cooling



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FAQ-B



- » Energy label: Up to class A
- » Heat pump system
- » Seasonal inverter technology
- » 5 different discharge angles possible
- » Can be installed in both new & existing buildings

## The most reliable air conditioners

No shop, business, restaurant or hotel can go without adequate climate control these days. Research has shown that proper climate control contributes to the comfort of your customers and staff.

For the professional market, the choice of systems and models is nearly infinite. You can choose from systems with a heat pump and air conditioners that only cool. These heat pump systems render central heating unnecessary and ensure lower heating costs while providing the cooling needed on warmer days.

Wall mounted units create a comfortable indoor climate with a temperature and air humidity where everyone feels nice and comfortable, without draught and noise.



# 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Super Inverter in real-life situations, and more than 50% compared to non-inverter systems.

#### Seasonal Inverter



\*EPB (Energy Performance of Buildings) Directive 2002/91/EC, EuP (Energy Using Products) Eco-Design Directive

# Space-saving wall mounted unit

The FAQ-B wall mounted unit by Daikin is slim and stylish in materials, shape and colour. It can be installed on all types of walls, and leaves enough space free for furnishings, equipment and decorative accessories. The automatic air flow regulator provides for a uniform airflow and temperature distribution by moving the flaps vertically and/or horizontally (manually).

# Unique comfort functions for a healthy indoor climate

- > To maximize your comfort, you are able to select several **air flow patterns** from your remote control:
  - » Auto swing

Vertical auto swing automatically moves the flaps up and down to distribute air effectively throughout the whole room. When the air conditioning is turned off, the flaps shut automatically, so that dust cannot enter.

» 5 different air flow patterns

All five different air flow patterns between 10° and 70° can be freely selected. The chosen air flow pattern will be maintained during the operation of the air conditioning.

#### > Automatic air flow control

The last selected air flow pattern is memorized and automatically set the next time the unit is turned ON after having the initial setting for a short period of time. Initial setting is 10° for cooling and 70° for heating.





#### > Wide angle louvers

The wall mounted unit gives you the same comfortable feeling everywhere, its wide angle louvers deliver air about 10% faster. Long narrow rooms can easily be heated or cooled regardless where the unit is located in the room.

#### > Air filter

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





Infrared remote control (Optional)



Wired remote control control BRC1E51A (Optional)

# Flexible installation, simple maintenance

- > All maintenance work is carried out at the front of the indoor unit. The horizontal flaps and front panel are very easy to remove and clean.
- > The **outdoor** unit can be installed on the roof, terrace or against an outside wall.

## Super complete remote control

- > With the infrared remote control (optional) the simple operation of your Daikin air conditioner is always at your fingertips.
- > 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.

### **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), **twin or triple application** (connecting up to 3 indoors in the same room to a single outdoor).

# Heating & Cooling

Comfort Inverter

INDOOR UNITS				FAQ71B	FAQ100B	FAQ100B		
C	cooling	nom.	kW	7.1 <sup>3</sup>	10.0 <sup>3</sup>	10.00 <sup>3</sup>		
Capacity	heating	nom.	kW	8.0 <sup>4</sup>	11.2 4	11.20 4		
Devices in much	cooling	nom.	kW	2.28	3.29	2.780		
Power input	heating	nom.	kW	2.33	3.21	3.390		
EER				3.11	3.04	3.60		
ESEER				3.48	2.94	3.42		
COP				3.43	3.49	3.30		
Energy label	cooling/heating			B/	/B	A/C		
Annual energy cor	sumption		kWh	1,141	1,645	1,390		
Dimensions	unit	heightxwidthxdepth	mm	290x1,050x230	360x1,5	570x200		
Weight	unit		kg	13.0	26.0			
Casina	colour			White				
Casing	material			Resin				
Fan - Air flow rate	cooling	high/low	m³/min	19.0/15.0	23.0	/19.0		
Fall - All now rate	heating	high/low	m³/min	19.0/15.0	23.0/19.0			
Sound pressure	cooling	high/low	dBA	43.0/37.0	45.0	/41.0		
level	heating	high/low	dBA	43.0/37.0	45.0	/41.0		
Sound power level	cooling	high/low	dBA	59.0/53.0	61.0	/57.0		
sound power level	heating high/low		dBA	59.0/53.0	61.0	/57.0		
Power supply	phase/frequency/voltage I		Hz/V		1~/50/220-240			
Disting	liquid	OD	mm	ø 9.52				
Piping connections	gas	OD	mm		ø15.9			
connections	drain	OD	mm		ø26			

OUTDOOR UNITS					RZQ71D3V1	RZQ100D9V1	RZQ100B9W1		
Dimensions	unit	heightxwid	dthxdepth	mm	770x900x320	1,345x9	00x320		
Weight	unit			kg	67	109	106		
Operation range	cooling	ambient	min.~max.	°CDB		-15.0~50.0			
Operation range	heating	ambient	min.~max.	°CWB		-20.0~15.5			
<b>C 1</b>	cooling	nom.		dBA	48	50	49		
Sound pressure level	heating	nom.		dBA	50	52	51		
level	night quiet mod	e		dBA	43	45			
Sound power level	cooling	nom.		dBA	64	65			
Compressor	Compressor type			type	Hermetically sealed swing Hermeticallay sealed scroll		/ sealed scroll		
Refrigerant				type	R-410A				
Power supply	phase/frequency	/voltage		Hz/V	1~/50/220-240		3N~/50/400		
	additional refrigerant charge		ge	kg/m	See installation manual				
Piping	level difference	IU - OU	max.	m		30			
connections	level difference	IU - IU	max.	m		0.5			
	piping length	system	equivalent	m	70	9	5		

INDOOR UNITS				FAQ71B	FAQ100B		
<b>c</b> 1.	cooling	nom.	kW	7.1 <sup>3</sup>	10.0 <sup>3</sup>		
	heating	nom.	kW	8.0 <sup>4</sup>	11.2 4		
	cooling	nom.	kW	2.44	3.56		
Power input	heating	nom.	kW	2.49	3.49		
EER				2.91	2.81		
COP				3.:	21		
SCOP							
Energy label	cooling/heati	ng		C,	/C		
Annual energy cor		3	kWh	1,220	1,779		
Dimensions	unit	heightxwidthxdepth	mm	290x1,050x230	360x1,570x200		
Weight	unit		kg	13.0	26.0		
	colour			White			
Casing	material			Resin			
	cooling	high/low	m³/min	19.0/15.0	23.0/19.0		
Fan - Air flow rate	heating	high/low	m³/min	19.0/15.0	23.0/19.0		
Sound pressure	cooling	high/low	dBA	43.0/37.0	45.0/41.0		
level	heating	high/low	dBA	43.0/37.0	45.0/41.0		
Sound power	cooling	high/low	dBA	59.0/53.0	61.0/57.0		
level .	heating	high/low	dBA	59.0/53.0	61.0/57.0		
Power supply	phase/frequency/voltage		Hz/V	1~/50/2	220-240		
	liquid	OD	mm	ø9.52			
Piping	gas	OD	mm	ø1	5.9		
connections –	drain	OD	mm	ØŽ	26		

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

(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; 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.

# Heating & Cooling

INDOOR UNITS				FAQ71B	FAQ100B		
Cooling capacity	nom.		kW	7.1 <sup>3</sup>	10.0 <sup>3</sup>		
Heating capacity	nom.		kW	8.0 <sup>4</sup>	11.2 4		
Power input	cooling	nom.	kW	2.65	3.56		
	heating	nom.	kW	2.58	3.96		
EER				2.68	2.81		
COP				3.10	2.83		
Annual energy con	sumption		kWh	1,325	1,780		
Energy label	cooling/heating			D/D	C/D		
Dimensions	unit	heightxwidthxdepth	mm	290x1,050x230	360x1,570x200		
Weight	unit		kg	13.0	26.0		
Casing	colour			White			
	material			Re	sin		
Fan - Air flow rate	cooling	high/low	m³/min	19.0/15.0	23.0/19.0		
	heating	high/low	m³/min	19.0/15.0	23.0/19.0		
Sound pressure	cooling	high/low	dBA	43.0/37.0	45.0/41.0		
level	heating	high/low	dBA	43.0/37.0	45.0/41.0		
Sound power level	cooling	high/low	dBA	59.0/53.0	61.0/57.0		
	heating	high/low	dBA	59.0/53.0	61.0/57.0		
Power supply	phase/frequency/voltage		Hz/V	1~/50/220-240			
Piping	liquid	OD	mm	ø 9.52			
connections	gas	OD	mm	ø1	5.9		
	drain	OD	mm	026			

OUTDOOR UNITS					RQ71BV3	RQ100BV3	
Dimensions	unit	heightxwi	dthxdepth	mm	770x900x320	1,170x900x320	
Weight	unit			kg	84	103	
Operation range	cooling	ambient	min.~max.	°CDB	-5.0~46.0		
	heating	ambient	min.~max.	°CWB	-10.0~15.0		
Sound pressure level	cooling	nom.		dBA	50.0	53.0	
Sound power level	cooling	nom.		dBA	63.0	66.0	
Compressor	type				Hermetically sealed scroll compressor		
Refrigerant	type				R-410A		
Power supply	phase/frequency	/voltage		Hz/V	1~/50/230		
Piping	piping length	max.	OU - IU	m	70		
connections	additional refrigerant charge		kg/m				
	level difference	IU - OU	max.	m	30	0.0	
		IU - IU	max.	m	0.	5	

INDOOR UNITS				FAQ71B	FAQ100B		
Cooling capacity	nom.		kW	7.1 <sup>3</sup>	10.0 <sup>3</sup>		
Heating capacity	nom.		kW	8.0 4	11.2 4		
Power input	cooling	nom.	kW	2.53	3.52		
	heating	nom.	kW	2.49	3.82		
EER				2.81	2.84		
COP				3.21	2.93		
Annual energy con	sumption		kWh	1,265	1,760		
Energy label	cooling/heatin	g		C/C	C/D		
Dimensions	unit	heightxwidthxdepth	mm	290x1,050x230	360x1,570x200		
Weight	unit		kg	13.0	26.0		
Casing	colour			White			
	material			Resin			
Fan - Air flow rate	cooling	high/low	m³/min	19.0/15.0	23.0/19.0		
	heating	high/low	m³/min	19.0/15.0	23.0/19.0		
Sound pressure	cooling	high/low	dBA	43.0/37.0	45.0/41.0		
evel	heating	high/low	dBA	43.0/37.0	45.0/41.0		
Sound power level	cooling	high/low	dBA	59.0/53.0	61.0/57.0		
	heating	high/low	dBA	59.0/53.0	61.0/57.0		
Power supply	phase/frequency/voltage		Hz/V	1~/50/220-240			
Piping	liquid	OD	mm	69.52			
connections	gas	OD	mm	ø15	5.9		
	drain	OD	mm	ø2	6		

OUTDOOR UNITS					RQ71BW1	RQ100BW1	
Dimensions	unit	heightxwi	dthxdepth	mm	770x900x320	1,170x900x320	
Weight	unit			kg	83	101	
Operation range	cooling	ambient	min.~max.	°CDB	-5.0~46.0		
	heating	ambient	min.~max.	°CWB	-10.04	~15.0	
Sound pressure level	cooling	nom.	nom.		50.0	53.0	
Sound power level	cooling	nom.		dBA	63.0	66.0	
Compressor	type				Hermetically sealed scroll compressor		
Refrigerant	type				R-410A		
Power supply	phase/frequency	/voltage		Hz/V	3N~/50/400		
Piping	piping length	max.	OU - IU	m	70		
connections	additional refrigerant charge		kg/m	-			
	level difference	IU - OU	max.	m	30	.0	
		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) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB; equivalent refrigerant piping: 7.5m; level difference: 0m (4) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m (horizontal); 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. (7) The sound pressure level is a masured via a microphone at 1 m distance of the unit.





Indoor unit FAQ71B

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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. 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.



Wired remote control BRC1E51A

**R** CE





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