

Daikin air conditioners
for shops, restaurants and offices

CONCEALED CEILING UNIT

R-410A



www.daikineurope.com

FBQ-B





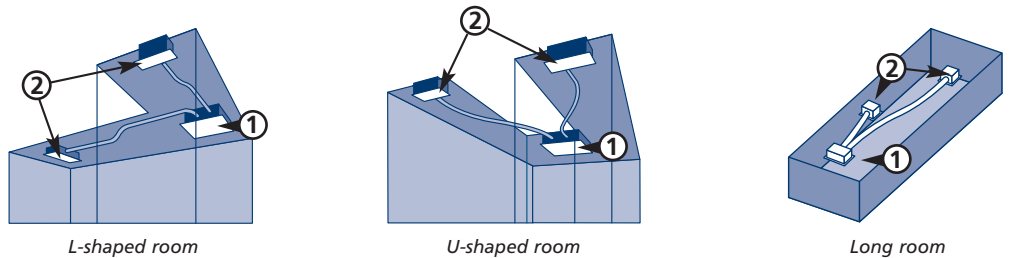
Concealed ceiling units are built into the false ceiling, leaving only the suction and discharge grilles visible. Because of this the grilles can be placed wherever you want and blend with any interior décor. The grilles allow uniform temperature distribution in large or heavily partitioned areas. Not only are concealed ceiling units visually unobtrusive, they are also among the quietest types of air conditioning.

COMFORT

- You have the choice of 2 **fan speeds** to select: high or low. A high fan speed provides maximum reach while a low fan speed minimizes draughts.
- The indoor unit is very **quiet in operation**. The sound levels are as low as 29dB (A), comparable to rustling leaves.
- Daikin's special **dry programme** reduces humidity in the room without variations in room temperature.
- The indoor unit contains an air **filter** which removes microscopic particles and dust.

FLEXIBLE INSTALLATION AND EASY TO USE

- Since the indoor unit has a low height it fits flush into narrow ceiling voids. The installation of the unit requires a **false ceiling** of only 350mm (when suction panel is used).
- The air discharge unit can be separated from the actual air conditioner for use in long, L-shaped or U-shaped rooms by means of flexible duct systems (ESP up to 88Pa). In this way even **irregularly shaped rooms** can be kept comfortable.



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

- The **outdoor unit** can be installed on a roof or terrace or placed against an outside wall.
- Special **anti-corrosion treatment** of the outdoor unit's heat exchanger fin, gives greater resistance against acid rain and salt corrosion. Additional resistance is provided by a rust proof steel sheet on the underside of the unit.



- Daikin **remote controls** give you easy control at your fingertips.
- The **wired remote control** provides you with a schedule timer, enabling to program the air conditioning daily or weekly.
- The optional **remote ON/OFF** enables you to start/stop the air conditioning from a mobile phone via a telephone remote control (field supply). The optional **forced OFF** enables you to switch off the unit automatically. E.g. when a window is opened, the unit switches off.

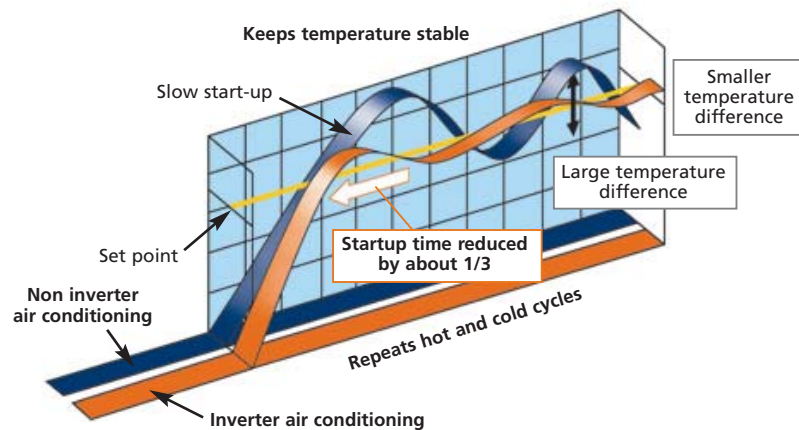


Wired remote control (Optional)



ENERGY EFFICIENT

- Energy label: up to class A
- **Inverter technology**
Improved energy efficiency:
The use of integrated inverter control ensures maximum **energy efficiency** by supplying only the required heating or cooling load where a standard non inverter unit would supply maximum load in an on/off regime.



Improved comfort:

The rapid start up time provided by the inverter increases **comfort** by reducing the lead time in obtaining the required indoor temperature. As soon as the required temperature is reached, the inverter unit continuously scans the room for small changes and adjusts the room temperature in seconds, thereby increasing comfort once again.

- The '**home leave**' function button should be set when the occupant leaves the room for a lengthy period of time, such as a holiday.
When the function is activated, the room temperature is automatically set to a minimum of 10°C, at which point all connected indoor units will switch to heating mode.
The function ceases to operate when the room temperature reaches 15°C and should also be switched off when the occupant returns home.

APPLICATION OPTIONS

- This model can be used both in **cooling only or heating**.
- It is possible to use the indoor unit in **pair** (connecting one indoor to one outdoor), **twin**, **triple**, **double twin** (connecting up to 4 indoors in the same room to a single outdoor) and **multi** applications (connecting up to 9 units in several rooms to 1 outdoor unit).



Capacity and power input

COOLING ONLY - INVERTER CONTROLLED (air cooled)			FBQ35B	FBQ50B	FBQ60B				
			RKS35D	RKS50E	RKS60E				
Cooling capacity	min~nom~max	kW	3.4 (nom)	0.9~5~5.6	0.9~5.7~6				
Nominal input	nominal	kW	1.21	1.92	2.19				
EER			2.81	2.60	2.60				
Energy label			C	E	E				
Annual energy consumption	cooling	kWh	605	960	1,095				
COOLING ONLY - NON INVERTER (air cooled)			FBQ50B	FBQ60B	FBQ71B	FBQ100B	FBQ125B		
			RN50E	RN60E	RR71BV3/W1	RR100BV3/W1	RR125BW1		
Cooling capacity	nominal	kW	5	5.7	7.1	10	12.2		
Nominal input	nominal	kW	1.92	2.19	2.79/2.68	3.79/3.6	4.67		
EER			2.60	2.60	2.54/2.65	2.64/2.78	2.61		
Energy label			E	E	D/E	D/E	D		
Annual energy consumption	cooling	kWh	960	1,095	1,395/1,340	1,895/1,800	2,335		
HEAT PUMP - INVERTER CONTROLLED (air cooled)			FBQ35B	FBQ50B	FBQ60B				
			RXS35D	RXS50E	RXS60E				
Cooling capacity	min~nom~max	kW	3.4	0.9~5~5.6	0.9~5.7~6				
Heating capacity	min~nom~max	kW	4.1 (nom)	0.9~6~7	0.9~7~8				
Nominal input	cooling	nominal	kW	1.21	1.92	2.19			
	heating	nominal	kW	1.28	1.87	2.50			
EER			2.81	2.60	2.60				
COP			3.20	3.21	2.80				
Energy label	cooling		C	E	E				
	heating		D	C	E				
Annual energy consumption	cooling	kWh	605	960	1,095				
HEAT PUMP - INVERTER CONTROLLED (air cooled)			FBQ71B	FBQ100B	FBQ125B	FBQ71B	FBQ100B	FBQ125B	
			RZQS71BV3	RZQS100BV3	RZQS125BV3	RZQ71B8V3	RZQ100B8V3/BW1	RZQ125B8V3/BW1	
Cooling capacity	min~nom~max	kW	7.1 (nom)	10.0 (nom)	12.5 (nom)	7.1 (nom)	10 (nom)	12.5 (nom)	
Heating capacity	min~nom~max	kW	8.0 (nom)	11.2 (nom)	14.0 (nom)	8 (nom)	11.2 (nom)	14 (nom)	
Nominal input	cooling	nominal	kW	2.52	3.83	4.40	2.21	2.86	3.98
	heating	nominal	kW	2.40	3.47	4.24	2.09	3	3.99
EER			2.82	2.61	2.84	3.32	3.50	3.14	
COP			3.33	3.23	3.30	3.21	3.73	3.51	
Energy label	cooling		C	D	C	A	A	B	
	heating		C	C	C	A	A	B	
Annual energy consumption	cooling	kWh	1,260	1,915	2,200	1,105	1,430	1,990	
HEAT PUMP - NON INVERTER (air cooled)			FBQ71B	FBQ100B	FBQ125B				
			RQ71BV3/W1	RQ100BV3/W1	RQ125BW1				
Cooling capacity	nominal	kW	7.1	10	12.2				
Heating capacity	nominal	kW	8	11.2	14.5				
Nominal input	cooling	nominal	kW	2.79/2.68	3.79/3.6	4.67			
	heating	nominal	kW	2.49	3.91/3.87	4.52			
EER			2.54/2.65	2.64/2.78	2.61				
COP			3.21	2.86/2.89	3.21				
Energy label	cooling		E/D	D/C	D				
	heating		C	D/D	C				
Annual energy consumption	cooling	kWh	1,395/1,340	1,885/1,780	2,335				

Notes:

- 1) Energy label : scale from A (most efficient) to G (less efficient).
- 2) Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions)

POSSIBLE COMBINATIONS MULTI - COOLING ONLY			4MKS58E (1)	4MKS75E (1)	5MKS90E (1)					
Max. n° of indoor units			4	4	5					
Cooling only	FBQ35B		●	●	●					
	FBQ50B		●	●	●					
	FBQ60B			●	●					
Max. cooling capacity	kW		7.30	9.28	10.50					
Max. PI cooling	kW		2.24	3.54	3.98					
POSSIBLE COMBINATIONS MULTI - HEAT PUMP			2MXS52E* (1)	3MXS52E* (1)	4MXS68E* (1)	4MXS80E* (1)	5MXS90E* (1)	RMXS112E*	RMXS140E*	RMXS160E*
Max. n° of indoor units			2	3	4	4	5	7	8	9
Heat pump	FBQ35B		●	●	●	●	●	●	●	●
	FBQ50B		●	●	●	●	●	●	●	●
	FBQ60B				●	●	●	●	●	●
Max. cooling capacity	kW		6.92	7.30	8.68	9.60	10.50	11.2	14.0	15.5
Max. heating capacity	kW		7.98	8.30	10.64	11.00	11.50	12.5	16.0	17.5
Max. PI cooling	kW		2.25	2.25	3.69	3.56	4.01	3.50	5.09	5.40
Max PI heating	kW		2.51	2.51	3.41	3.11	3.46	3.93	5.21	5.43

Notes:

- (1) The indicated cooling, heating capacities and power input are indicative and are those connected to wall mounted D (25,35 class) /E (50, 60 class) series.
- (2) For more detailed information, please consult our multi model/combination tables catalogue or your local dealer.

*At least two indoor units should be connected to these multi outdoor units.

TWIN/TRIPLE/DOUBLE TWIN APPLICATION	FBQ35B	FBQ50B	FBQ60B	FBQ71B	FBQ100B	FBQ125B
RR/RQ71	2					
RR/RQ100	3	2				
RR/RQ125		3	2			
RZQ(S)71	2					
RZQ(S)100	3	2				
RZQ(S)125	4	3	2			
RZQ140	4	3		2		
RZQ200		4	3	3	2	
RZQ250			4			2

Specifications indoor units

COOLING ONLY/HEAT PUMP				FBQ35B	FBQ50B	FBQ60B	FBQ71B	FBQ100B	FBQ125B
Dimensions	HxVxD	unit	mm	300x700x800		300x1,000x800		300x1,400x800	
		decoration panel	mm	55x800x500		55x1,100x500		55x1,500x500	
Weight		unit	kg	30	31	41		51	52
		decoration panel	kg	3.5		4.5		6.5	
Colour		decoration panel		White		White		White	
		Air flow rate	cooling	H/L	m ³ /min	11.5/9	14/10	19/14	19/14
heating	H/L		m ³ /min	11.5/9	14/10	19/14	19/14	27/20	35/24
Fan speed				2 steps (direct drive)			3 steps (direct drive)		
Sound pressure level	cooling	H/L	dB(A)	33/29	33/29	34/30	34/30	36/31	38/32
	heating	H/L	dB(A)	33/29	33/29	34/30	34/30	36/31	38/32
Sound power level	cooling	H	dB(A)	52	53	60	60	62	63
Piping connections		liquid	mm	ø6.35			ø9.52		
		gas	mm	ø9.52	ø12.70		ø15.9		
		drain (VP20)	ID mm	ø25					
			OD mm	ø32					
Heat insulation				Both liquid and gas pipes					

Indoor units : FBQ-B



FBQ35,50,60B, FBQ71B



FBQ100,125B



Specifications outdoor units

COOLING ONLY - INVERTER CONTROLLED				RKS35D	RKS50E	RKS60E			
Dimensions	HxWxD		mm	550x765x285	735x825x300				
Weight			kg	32	47	47			
Casing colour				Ivory white					
Sound pressure level	H/L		dB(A)	47/44	47/44	49/46			
Sound power level	H		dB(A)	62	61	63			
Compressor				hermetically sealed swing type					
Refrigerant type				R-410A					
Refrigerant charge			kg/m	0.02 (for piping length > 10m)					
Maximum piping length			m	20	30				
Maximum level difference			m	15	20				
Operation range	from ~ to		°CDB	-10~46	-10(-15*)~46				
COOLING ONLY - NON INVERTER				RN50E	RN60E	RR71BV3/W1	RR100BV3/W1	RR125BW1	
Dimensions	HxWxD		mm	735x825x300		770x900x320	1,170x900x320		
Weight			kg	47	47	83/81	102/99	106	
Casing colour				Ivory white			Ivory white		
Sound pressure level	H		dB(A)	47	49	50	53	53	
Sound power level	H		dB(A)	61	63	63	66	67	
Compressor				Swing compressor		Hermetically sealed scroll compressor			
Refrigerant type				R-410A		R-410A			
Refrigerant charge			kg/m	0.02 (piping length > 10m)		2.70	3.70	3.70	
Maximum piping length			m	30		70 (equivalent length 90)			
Maximum level difference			m	20		30			
Operation range	from ~ to		°CDB	-10~46		-15~46			
HEAT PUMP - INVERTER CONTROLLED				RXS35D	RXS50E	RXS60E			
Dimensions	HxWxD		mm	550x765x285	735x825x300				
Weight			kg	32	48	48			
Casing colour				Ivory white					
Sound pressure level	cooling	H/L	dB(A)	47/44	47/44	49/46			
(night quiet mode)	heating	H/L	dB(A)	48/45	48/45	49/46			
Sound power level	cooling	H	dB(A)	62	61	63			
Compressor				hermetically sealed swing					
Refrigerant type				R-410A					
Refrigerant charge			kg/m	0.02 (for piping length > 10m)					
Maximum piping length			m	20	30				
Maximum level difference			m	15	20				
Operation range	cooling	from ~ to	°CDB	-10~46					
	heating	from ~ to	°CWB	-15~20	-15~18				
HEAT PUMP - INVERTER CONTROLLED				RZQS71B	RZQS100B	RZQS125B	RZQ71B8V3	RZQ100B8V3/BW1	RZQ125B8V3/BW1
Dimensions	HxWxD		mm	770x900x320		1,345x900x320	770x900x320	1,345x900x320	
Weight			kg	68		106	68	106	
Casing colour				Ivory white			Ivory white		
Sound pressure level	cooling	H/L	dB(A)	49 (43)	51 (45)	51 (45)	47(43)	49(45)	50(45)
(night quiet mode)	heating	H/L	dB(A)	51	55	53	49/-	51/-	52/-
Sound power level	cooling	H	dB(A)	65	67	67	63	65	66
Compressor				Hermetically sealed swing		Herm. sealed scroll	Herm. sealed swing	Hermetically sealed scroll compressor	
Refrigerant type				R-410A			R-410A		
Refrigerant charge			kg/m	2.80		4.3	2.8 (for 30m)		4.3 (for 30m)
Maximum piping length			m	30 (equivalent length 40)		50 (equivalent length 70)	50 (equivalent length 70)		75 (equivalent length 95)
Maximum level difference			m	15		30	30		
Operation range	cooling	from ~ to	°CDB	-5~46			-15~50		
	heating	from ~ to	°CWB	-15~15.5			-20~15.5		
HEAT PUMP - NON INVERTER				RQ71BV3/W1	RQ100BV3/W1	RQ125BW1			
Dimensions	HxWxD		mm	770x900x320	1,170x900x320				
Weight			kg	84/83	103/101	108			
Casing colour				Ivory white					
Sound pressure level	cooling	H	dB(A)	50	53	53			
Sound power level	cooling	H	dB(A)	63	66	67			
Compressor				Hermetically sealed scroll compressor					
Refrigerant type				R-410A					
Refrigerant charge			kg/m	2.70	3.70	3.70			
Maximum piping length			m	70 (equivalent length 90)					
Maximum level difference			m	30					
Operation range	cooling	from ~ to	°CDB	-5~46					
	heating	from ~ to	°CWB	-10~15					

* Possibility to extend the operation range down to -15°C by turning ON the switch on the outdoor unit PCB. In this case, the unit will stop operation at -20°C or lower and will recover when temperature rises again.

- Information is not available.

Accessories: control systems

INDOOR UNITS	FBQ35B	FBQ50B	FBQ60B	FBQ71B	FBQ100B	FBQ125B
Wired remote control			BRC1D52			
Centralised remote control			DCS302C51			
Unified ON/OFF control			DCS301B51			
Schedule timer			DST301B51			
Adapter for wiring			KRP1B54			
Adapter for external ON/OFF and monitoring			KRP4A51			
Interface adapter for Sky Air			DTA112B51			
Remote ON/OFF, forced OFF			EKRORO			
Option PCB for external electrical heater, humidifier and/or hour meter*			EKRPIB2			

*Electrical heater, humidifier and hour meter are field supply. These parts should not be installed inside the equipment.

Accessories

INDOOR UNITS	FBQ35B	FBQ50B	FBQ60B	FBQ71B	FBQ100B	FBQ125B
Decoration panel	BYBS45D		BYBS71D		BYBS125D	
Service access panel	KTBJ25K56W		KTBJ25K80W		KTBJ25K160W	
High-efficiency filter 65% (colorimetric method)*1	KAFJ25L56		KAFJ25L80		KAFJ25L160	
High-efficiency filter 90% (colorimetric method)*1	KAFJ25L56		KAFJ25L80		KAFJ25L160	
Filter chamber for bottom suction	KAJ25L56D		KAJ25L80D		KAJ25L160D	
Filter chamber for rear suction	KAJ25L56B		KAJ25L80B		KAJ25L160B	
Air suction canvas	KSA-25K56		KSA-25KA80		KSA-25K160	
Blind board/screening door	KBBJ25K56		KBBJ25K80		KBBJ25K160	
Air discharge adapter for round duct	KDAJ25K56		KDAJ25K71		KDAJ25K140	

*1 If installing a high-efficiency filter on the unit, an assembly chamber for either bottom or rear suction is required.

Accessories

OUTDOOR UNITS	RKS/RXS35D	RN/RKS/RXS50E	RN/RKS/RXS60E			
Air direction adjustment grille	KRP937A4	KPW945A4				
Central drain plug	KKP937A4	-	-			
OUTDOOR UNITS	RR/RQ71B	RR/RQ100B	RR/RQ125B	RZQ(S)71B	RZQ(S)100B	RZQ(S)125B
Central drain plug		KKPJ5F180			KKPJ5F180	
Refrigerant branch piping	for twin	KHRQ22M20TA			KHRQ22M20TA	
	for triple	-	KHRQ127H	-	KHRQ127H	
	for double twin	-	-	-	-	KHRQ22M20TA (x3)
Demand adapter kit	-	-	-		KRP58M51	

- Notes:
- V1 = 1 ~, 230V, 50Hz; VM = 1 ~, 220-240V/220-230V, 50Hz/60Hz; V3 = 1 ~, 230V, 50Hz
 - Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB • outdoor temperature 35°CDB • refrigerant piping length 7.5m • level difference 0m.
 - Nominal heating capacities are based on: indoor temperature 20°CDB • outdoor temperature 7°CDB/6°CWB • refrigerant piping length 7.5m • level difference 0m.
 - Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
 - Units should be selected on nominal capacity. Max. capacity is limited to peak periods.
 - The sound pressure level is measured at a certain distance from the unit. It is a relative value, depending on the distance and acoustic environment.
 - The sound power level is an absolute value indicating the "power" which a sound source generates.

In all of us,
a green heart



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 environmental friendly products. This challenge demands the eco design and development of a wide range of products and an energy management system; which involves energy conservation and 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.



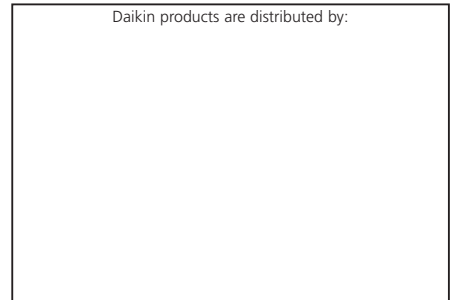
Daikin units comply with the European regulations that guarantee the safety of the product.



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.

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