DAIKIN
AIR CONDITIONING

Daikin air conditioners
for shops, restaurants and offices
concealed ceiling units

Daikin Airconditioning UK Ltd

www.daikin.co.uk

FBQ-B7

R-410A
OPTIMISED DESIGN

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.
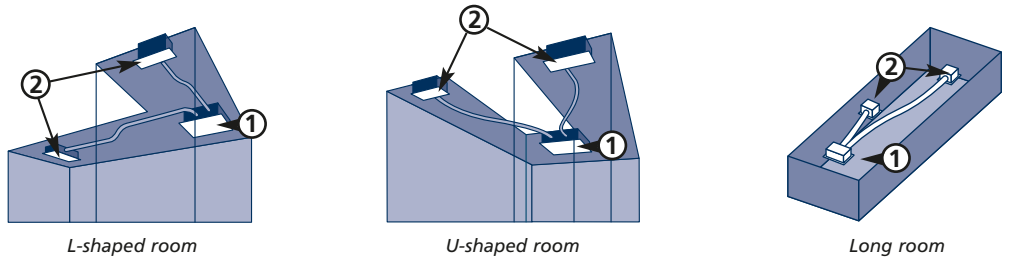
Not only are concealed ceiling units visually unobtrusive, they are also among the quietest types of air conditioning.

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.
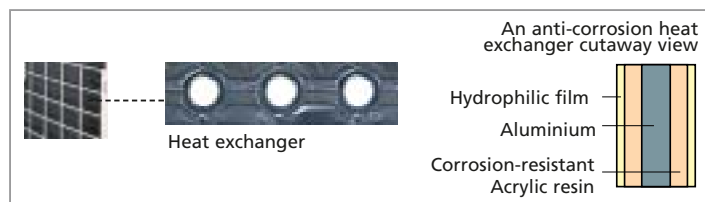
FLEXIBLE INSTALLATION AND EASY TO USE

- 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.

| *L-shaped room* | *U-shaped room* | *Long room* |

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.

An anti-corrosion heat exchanger cutaway view

Heat exchanger

Hydrophilic film
Aluminium
Corrosion-resistant
Acrylic resin

- 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.
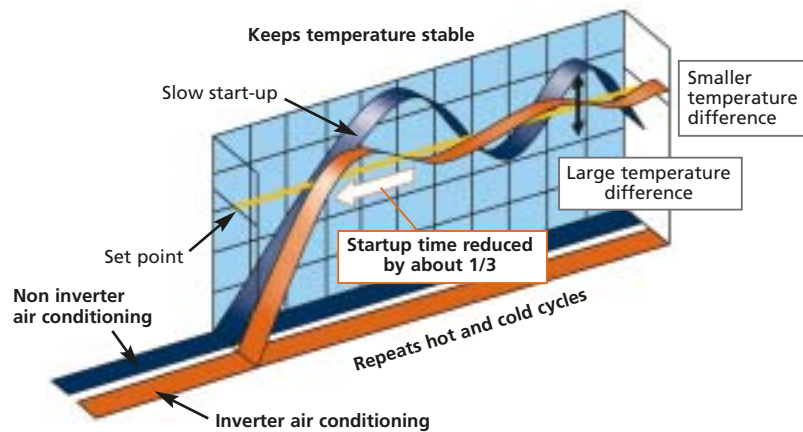
Wired remote control (Optional)
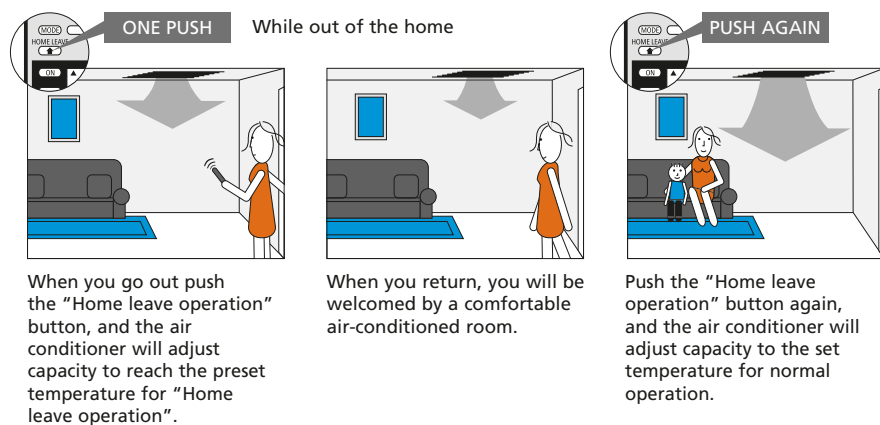
ENERGY EFFICIENT

- 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.

Keeps temperature stable
Slow start-up
Smaller temperature difference
Large temperature difference
Set point
Startup time reduced by about 1/3
Non inverter air conditioning
Repeats hot and cold cycles
Inverter air conditioning

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' operation** button prevents large temperature differences by continuously operating at a minimum (heating mode) or maximum (cooling mode) preset level while you're out or sleeping. It also allows the indoor temperature to return quickly to your favourite comfort level.

ONE PUSH · While out of the home · PUSH AGAIN

When you go out push the "Home leave operation" button, and the air conditioner will adjust capacity to reach the preset temperature for "Home leave operation".

When you return, you will be welcomed by a comfortable air-conditioned room.

Push the "Home leave operation" button again, and the air conditioner will adjust capacity to the set temperature for normal operation.

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)			FBQ35B7V1	FBQ50B7V1	FBQ60B7V1		
			RKS35DVMB	RKS50BVMB9	RKS60BVMB9		
Cooling capacity	min~nom~max	kW	3.4 (nom)	0.90~5.00~5.60	0.90~5.70~6.00		
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)			FBQ50B7V1	FBQ60B7V1	FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
			RS50BVMB	RS60BVMB	RR71B7V3B/W1B	RR100B7V3B/W1B	RR125B7W1B
Cooling capacity	nominal	kW	5.00	5.70	7.10	10.00	12.20
Nominal input	nominal	kW	1.92	2.19	2.71/2.59	3.77/3.58	4.67
EER			2.60	2.60	2.62/2.74	2.65/2.79	2.61
Energy label			E	E	D/D	D/D	D
Annual energy consumption	cooling	kWh	960	1,095	1,355/1,295	1,885/1,790	2,335

HEAT PUMP - INVERTER CONTROLLED (air cooled)			FBQ35B7V1	FBQ50B7V1	FBQ60B7V1	FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
			RXS35DVMB	RXS50BVMB	RXS60BVMB	RZQ71B8V3B	RZQ100B8V3B/B7W1B	RZQ125B8V3B/B7W1B
Cooling capacity	min~nom~max	kW	3.4	0.90~5.00~5.60	0.90~5.70~6.00	7.10 (nom)	10.00 (nom)	12.50 (nom)
Heating capacity	min~nom~max	kW	4.1 (nom)	0.90~6.00~7.00	0.90~7.00~8.00	8.00 (nom)	11.20 (nom)	14.00 (nom)
Nominal input	cooling	nominal	kW	1.21	1.92	2.19	2.14	2.86	3.98
	heating	nominal	kW	1.28	1.87	2.50	2.09	3.00	3.99
EER				2.81	2.60	2.60	3.32	3.50	3.14
COP				3.20	3.21	2.80	3.83	3.73	3.51
Energy label	cooling			C	E	E	A	A	B
	heating			C	C	E	A	A	B
Annual energy consumption	cooling	kWh		605	960	1,095	1,070	1,430	1,990

HEAT PUMP - NON INVERTER (air cooled)			FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B		
			RQ71B7V3B/W1B	RQ100B7V3B/W1B	RQ125B7W1B		
Cooling capacity	nominal	kW	7.10	10.00	12.20		
Heating capacity	nominal	kW	8.00	11.20	14.50		
Nominal input	cooling	nominal	kW	2.71/2.59	3.77/3.56	4.67
	heating	nominal	kW	2.49	3.92/3.88	4.52
EER			2.62/2.74	2.65/2.81	2.61		
COP			3.21	2.86/2.89	3.21		
Energy label	cooling		D/D	D/C	D		
	heating		C	D/D	C		
Annual energy consumption	cooling	kWh	1,355/1,295	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)

MULTI - COOLING ONLY	Max. n° of indoor units	Max. cooling capacities (kW)	Max. PI cooling (kW)		
4MKS58D	4	6.60	2.47		
4MKS75D	4	9.27	3.71		
4MKS90D	4	9.86	3.52		
MULTI - HEAT PUMP	Max. n° of indoor units	Max. cooling capacities (kW)	Max. PI cooling (kW)	Max. heating capacities (kW)	Max. PI heating (kW)
2MXS52D*	2	6.50	2.69	7.34	2.42
3MXS52D*	3	6.50	2.69	7.34	2.42
4MXS68D*	4	8.68	3.69	10.64	3.41
4MXS80D*	4	9.49	3.34	11.00	3.52
SUPER MULTI PLUS - HEAT PUMP	Max. n° of indoor units	Max. cooling capacities (kW)	Max. PI cooling (kW)	Max. heating capacities (kW)	Max. PI heating (kW)
RMXS112D*	7	11.20	3.57	12.50	4.01
RMXS140D*	8	14.00	5.23	16.00	5.31
RMXS160D*	9	15.50	5.55	17.50	5.56

Notes:
For more detailed information about specifications, capacities, power input, energy labelling and annual energy consumption, please refer to our Multi Model Catalogue/Super Multi Plus catalogue or check with your local dealer.
* At least 2 indoor units should be connected to a Multi outdoor unit.

TWIN/TRIPLE/DOUBLE TWIN APPLICATION	FBQ35B7V1	FBQ50B7V1	FBQ60B7V1	FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
RR/RQ71	2					
RR/RQ100	3	2				
RR/RQ125		3	2			
RZQ71	2					
RZQ100	3	2				
RZQ125	4	3	2			
RZQ140	4	3		2		
RZQ200		4	3	3	2	
RZQ250			4			2

Specifications indoor units

COOLING ONLY/HEAT PUMP				FBQ35B7V1	FBQ50B7V1	FBQ60B7V1	FBQ71B7V3B	FBQ100B7V3B	FBQ125B7V3B
Dimensions	HxWxD	unit	mm	300x700x800		300x1,000x800		300x1,400x800	
		decoration panel	mm	55x880x500		55x1,000x500		55x1,400x500	
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	m³/min	11.5/9	14/10	19/14	19/14	27/20	35/24
	heating	H/L	m³/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
	heating	H	dB(A)	52	53	60	-	-	-
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					

- information is not available

Indoor units : FBQ-B7

FBQ35,50,60B7V1, FBQ71B7V3B

FBQ100,125B7V3B

Specifications outdoor units

COOLING ONLY - INVERTER CONTROLLED			RKS35DVMB	RKS50BVMB9	RKS60BVMB9
Dimensions	HxWxD	mm	550x765x285	735x825x300	
Weight		kg	32	49	53
Casing colour			Ivory white		
Sound pressure level	H/L	dB(A)	47/44	47/-	49/-
Sound power level	H	dB(A)	62	63	64
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			RS50BVMB	RS60BVMB	RR71B7V3B/W1B	RR100B7V3B/W1B	RR125B7W1B
Dimensions	HxWxD	mm	735x825x300		770x900x320	1,170x900x320	
Weight		kg	49	53	84/83	103/101	108
Casing colour			Ivory white		Ivory white		
Sound pressure level	H	dB(A)	47	49	50	53	53
Sound power level	H	dB(A)	63	64	63	66	67
Compressor			Swing compressor		Hermetically scaled scroll compessor		
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		-5~46		

HEAT PUMP - INVERTER CONTROLLED				RXS35DVMB	RXS50BVMB	RXS60BVMB	RZQ71B8V3B	RZQ100B8V3B/B7W1B	RZQ125B8V3B/B7W1B
Dimensions		HxWxD	mm	550x765x285	735x825x300		770x900x320	1,345x900x320	
Weight			kg	32	49	53	68	106	
Casing colour				Ivory white			Ivory white		
Sound pressure level	cooling	H/L	dB(A)	47/44	47/-	49/-	47(43)	49(45)	50(45)
(night quiet mode)	heating	H/L	dB(A)	48/45	48/-	49/-	49/-	51/-	52/-
Sound power level	cooling	H	dB(A)	62	63	64	63	65	66
	heating	H	dB(A)	63	64	64	-	-	-
Compressor				hermetically sealed swing			Herm. sealed swing	Hermetically scaled scroll compressor	
Refrigerant type				R-410A			R-410A		
Refrigerant charge			kg/m	0.02 (for piping length > 10m)			2.8 (for 30m)	4.3 (for 30m)	
Maximum piping length			m	20	30		50 (equivalent length 70)	75 (equivalent length 95)	
Maximum level difference			m	15	20		5		
Operation range	cooling	from ~ to	°CDB	-10~46			-15~50		
	heating	from ~ to	°CWB	-15~20			-20~15.5		

HEAT PUMP - NON INVERTER				RQ71B7V3B/W1B	RQ100B7V3B/W1B	RQ125B7W1B
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 scaled 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	FBQ35B7	FBQ50B7	FBQ60B7	FBQ71B7	FBQ100B7	FBQ125B7
Wired remote control				BRC1D527		
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*				EKRP1B2		

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

Accessories

INDOOR UNITS	FBQ35B7	FBQ50B7	FBQ60B7	FBQ71B7	FBQ100B7	FBQ125B7
Decoration panel	BYBS45DJW1		BYBS71DJW1		BYBS125DJW1	
Service access panel	KTB25K56W		KTBJ25K80W		KTBJ25K160W	
High-efficiency filter 65% (colorimetric method)*1	KAFJ252L56		KAFJ252L80		KAFJ252L160	
High-efficiency filter 90% (colorimetric method)*1	KAFJ253L56		KAFJ253L80		KAFJ253L160	
Filter chamber for bottom suction	KAJ25L56D		KAJ25L80D		KAJ25L160D	
Filter chamber for rear suction	KAJ25L56B		KAJ25L80B		KAJ25L160B	
Air suction canvas	KSA-25K56		KSA-25K80		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	RS/RKS/RXS50B	RS/RKS/RXS60B			
Air direction adjustment grille	KRP937A4	KPW945A4				
Central drain plug	KKP937A4	-	-			

OUTDOOR UNITS		RR/RQ71B7	RR/RQ100B7	RR/RQ125B7	RZQ71B	RZQ100B	RZQ125B
Central drain plug			KKPJ5F180			KKPJ5F180	
Refrigerant branch piping	for twin		KHRQ22M20TA7			KHRQ22M20TA7	
	for triple	-	KHRQ127H7		-	KHRQ127H7	
	for double twin	-	-	-	-	-	KHRQ22M20TA7 (x3)
Demand adapter kit	remote control of sound reduction and power input	-	-	-		KRP58M51	

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

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. is participating in the EUROVENT Certification Programme. Products are as listed in the EUROVENT Directory of Certified Products. Multi units are Eurovent certified for combinations up to 2 indoor units.

Specifications are subject to change without prior notice.

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