

Daikin air conditioners for small rooms in multi application

Concealed Ceiling Unit **R-410A**



FDBQ-B



Concealed ceiling units are ideal for use in small rooms such as hotel bedrooms. They are built into the false ceiling, leaving only the suction and discharge grilles visible. The grilles can be placed wherever you want and blend with any interior décor. 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.
- The indoor unit contains an air **filter** which removes microscopic particles and dust.

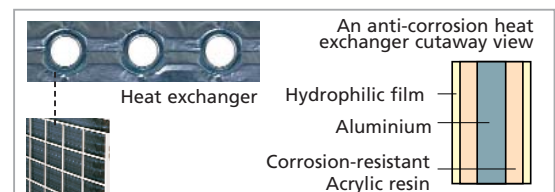
FLEXIBLE INSTALLATION AND EASY TO MAINTAIN

- Since the indoor unit is low in height it fits flush into **narrow ceiling voids**.
- The air **duct** between the indoor unit and the discharge grille can be up to 0.5m



① Can be 0.5 m long

- 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.



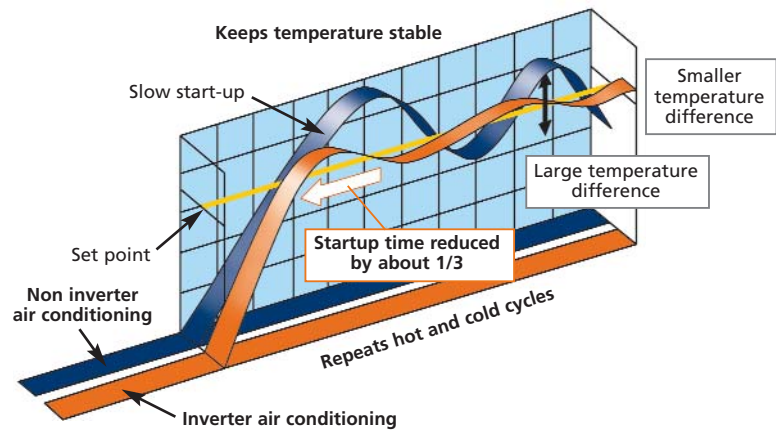
- Daikin **remote controls** give you easy control at your fingertips.
- The **wired remote control** provides you with a schedule timer, enabling to program the air conditioning daily or weekly.
- For **hotel applications** the indoor unit can be switched off at reception when a guest checks out and restarted when one checks in. It can also be operated by remote control to switch off if a window is opened and restart on its closure and similarly, to switch off when a guest leaves the room and restart when one enters.

ENERGY EFFICIENT

- **Inverter technology :**

1. 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.



2. Improved comfort:

The rapid start up time provided by the inverter increases **comfort** by reducing the lead time in obtaining the required indoor temperature. Once 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.



Wired remote control (Optional)

APPLICATION OPTIONS

- This model can be used both in **cooling only or heating**.

- It is possible to use the indoor unit in **multi** application. This system allows you to have air conditioning in several rooms. In fact, up to 9 different indoor units can be connected to 1 outdoor unit operating individually.



POSSIBLE COMBINATIONS MULTI - COOLING ONLY		4MKS58E (1)	4MKS75F (1)	5MKS90E (1)				
Max. n° of indoor units		4	4	5				
Cooling only	FDBQ25B	●	●	●				
Max. cooling capacity	kW	7.30	9.33	10.50				
Max. PI cooling	kW	2.24	3.06	3.98				

POSSIBLE COMBINATIONS MULTI - HEAT PUMP		3MXS52E* (1)	4MXS68F* (1)	4MXS80E* (1)	5MXS90E* (1)	RMXS112E* (1)	RMXS140E*	RMXS160E*
Max. n° of indoor units		3	4	4	5	7	8	9
Heat pump	FDBQ25B	●	●	●	●	●	●	●
Max. cooling capacity	kW	7.30	8.73	9.60	10.50	11.2	14.0	15.5
Max. heating capacity	kW	8.30	10.68	11.00	11.50	12.5	16.0	17.5
Max. PI cooling	kW	2.25	2.95	3.56	4.01	3.50	5.09	5.40
Max PI heating	kW	2.51	2.58	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 class) series.

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

For more detailed information, please consult our multi model/combination tables catalogue or your local dealer.

Specifications indoor units

COOLING ONLY/HEAT PUMP				FDBQ25B
Dimensions	HxWxD		mm	230x652x502
Weight			kg	17
Air flow rate	cooling	H/L	m ³ /min	6.5/5.2
	heating	H/L	m ³ /min	6.95/5.2
Fan speed				2 steps (direct drive)
Sound pressure level	cooling	H/L	dB(A)	35/28
	heating	H/L	dB(A)	35/29
Sound power level	cooling	H/L	dB(A)	55/49
	heating	H/L	dB(A)	55/49
Piping connections	liquid		mm	ø6.35
	gas		mm	ø9.52
	drain		ID mm	ø21.6
			OD mm	ø27.2
Heat insulation				Both liquid and gas pipes

Indoor unit : FDBQ-B



FDBQ25B



Specifications outdoor units

COOLING ONLY - INVERTER CONTROLLED (air cooled)				4MKS58E	4MKS75F	5MKS90E					
Dimensions	HxWxD	mm	735x936x300		770x900x320						
Weight		kg	49	57	69						
Casing colour			Ivory white								
Sound pressure level	H	dB(A)	46	48	48						
Sound power level	H	dB(A)	59	61	62						
Compressor		type	Hermetically sealed swing								
Refrigerant type			R-410A								
Amount of additional charge		kg/m	chargeless		0.02 (65m or more)						
Maximum piping length	for total of each room	m	50	60	75						
	for one room	m	25								
Maximum level difference	between ind. and outd. unit	m	15								
	between indoor units	m	15								
Operation range	cooling	from ~ to	°CDB -10~46								
HEAT PUMP - INVERTER CONTROLLED (air cooled)				3MXS52E (1)	4MXS68F (1)	4MXS80E (1)	5MXS90E (1)	RMXS112E (1)	RMXS140E (1)	RMXS160E (1)	
Dimensions	HxWxD	mm	735x936x300			770x900x320			1,345x900x320		
Weight		kg	49	58	72	73		135			
Casing colour			Ivory white					Ivory white			
Sound pressure level	cooling	H/L	dB(A)	46	48	48	52	51	52	54	
	heating	H/L	dB(A)	47	49	49	52	53	54	56	
Sound power level	cooling	H	dB(A)	59	61	62	66	67	68	70	
Compressor		type	Hermetically sealed swing				Hermetically sealed scroll				
Refrigerant type			R-410A				R-410A				
Amount of additional charge		kg/m	0.02 (for piping length exceeding 30m)				charge less				
Maximum piping length	for total of each room	m	50	60	70	75	115 (total system)	135 (total system)	145 (total system)		
	for one room	m	25				55 (total outdoor unit - BP)				
Maximum level difference	between ind. and outd. unit	m	15				30				
	between indoor units	m	7.5				30 (outdoor - BP)				
Operation range	cooling	from ~ to	°CDB -10~46				-5~46				
	heating	from ~ to	°CWB -15~15.5				-15~20				

(1) At least 2 indoor units should be connected to a Multi outdoor unit.

Accessories: control systems

INDOOR UNITS	FDBQ25B
Wired remote control	BRC1D52
Adapter for wiring (hour meter)*	EKRP1B2
Remote ON/OFF, forced OFF	EKRORO

* Possibility to connect an hour meter (field supply). This part should not be installed inside the equipment.

Accessories: outdoor units

OUTDOOR UNITS	3MXS/4MKS/5MKS/4MXS/5MXS-E/F	RMXS-E
Air direction adjustment grille	KPW945A4	KPW945A4
Drain plug	KKP937A4 (3MXS/4MXS/5MXS)	KKPJF180
Refnet joint	-	KHRQ22M20TA
Branch provider (2 rooms)	-	BPMKS967A2B
Branch provider (3 rooms)	-	BPMKS967A3B

Notes:

- V1 = 1~, 230V, 50Hz; VM = 1~, 220-240V/220-230V, 50Hz/60Hz
- 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.

Head Office

Daikin Airconditioning UK Limited
 The Heights, Brooklands, Weybridge, Surrey KT13 0NY
 Tel 0845 6419000 Fax 0845 6419109

www.daikin.co.uk



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.



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

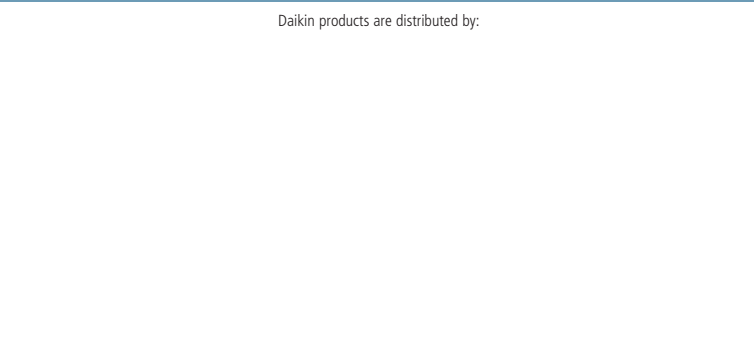


ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.



Daikin Europe N.V. participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FCU); 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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