

# Daikin air conditioners for shops, restaurants and offices ceiling suspended unit

### Daikin Airconditioning UK Ltd





FHQ-BU





www.daikin.co.uk



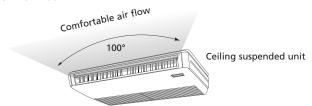


Ceiling suspended units are the ideal solution for rooms, shops or offices without false ceilings. Since they are installed directly against the ceiling they do not take up any floor or wall space.

These indoor units are ideal for uniform air distribution in large spaces because of their long air throw.

### **COMFORT**

- Air flow distribution for **ceiling heights** up to 3.8m without loss of capacity.
- The ceiling suspended unit ensures you a **comfortable air flow** in all directions thanks to an air flow pattern of 100°.



- 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 drafts.
- 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

- The reduced lateral servicing space enables the unit to be **easily installed** in corners and narrow spaces on walls and ceilings.
- 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



Infrared remote



Wired remote control (Optional)

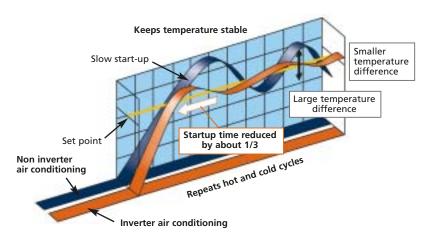


### **ENERGY EFFICIENT**

- Energy label: up to class B
- 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:

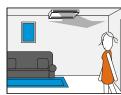
The rapid start up time provided by the inverter increases **comfort** by reducing the lead time in obtaining the required indoor temperature. As soon as the required temperature is reached, the inverter unit continuously scans the room for small changes and adjusts the room temperature in seconds, thereby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

• The 'home leave' 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.





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 - INVERTE	R CONTROL	LED (air cooled)		FHQ35BUV1B RKS35DVMB	FHQ50BUV1B RKS50BVMB9	FHQ60BUV1B RKS60BVMB9			
Cooling capacity		min~nom~max	kW	1.4~3.4~3.7	0.90~5.00~5.60	0.90~5.70~6.00			
Nominal input		min~nom~max	kW	0.30~1.21~1.50	0.45~1.83~2.02	0.44~2.15~2.23			
EER				2.81	2.73	2.65			
Energy label				С	D	D			
Annual energy consumption	cooling		kWh	605	915	1,075			
COOLING ONLY - NON INV	ERTER (air o	cooled)		FHQ50BUV1B	FHQ60BUV1B	FHQ71BUV1B	FHQ100BUV1B	FHQ125BUV1B	
				RS50BVMB	RS60BVMB	RR71B7V3B/W1B	RR100B7V3B/W1B	RR125B7W1B	
Cooling capacity		nominal	kW	5.00	5.70	7.10	9.80	12.20	
Nominal input		nominal	kW	1.83	2.15	2.70/2.65	3.75/3.68	4.50	
EER				2.73	2.65	2.63/2.68	2.61/2.66	2.71	
Energy label				D	D	D/D	D/D	D	
Annual energy consumption	cooling		kWh	915	1,075	1,350/1,325	1,875/1,840	2,250	
HEAT PUMP - INVERTER CO	ONTROLLED	(air cooled)		FHQ35BUV1B	FHQ50BUV1B	FHQ60BUV1B	FHQ71BUV1B	FHQ100BUV1B	FHQ125BUV1B
				RXS35DVMB	RXS50BVMB	RXS60BVMB	RZQ71B8V3B	RZQ100B8V3B/B7W1B	RZQ125B8V3B/B7W1B
Cooling capacity		min~nom~max	kW	1.4~3.4~3.7	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	1.4~4.1~5.0	0.90~6.00~7.00	0.90~7.20~8.00	8.00 (nom)	11.20 (nom)	14.00 (nom)
Nominal input	cooling	min~nom~max	kW	0.30~1.21~1.50	0.45~1.83~2.02	0.44~2.15~2.23	2.46 (nom)	3.15 (nom)	4.45 (nom.)
	heating	min~nom~max	kW	0.29~1.18~1.62	0.36~2.05~2.45	0.40~2.49~2.75	2.67 (nom)	3.60 (nom.)	4.50 (nom.)
EER				2.81	2.73	2.65	2.89	3.17	2.81
COP				3.47	2.93	2.89	3.00	3.11	3.11
Energy label	cooling			С	D	D	С	В	С
	heating			В	D	D	D	D	D
Annual energy consumption	cooling		kWh	605	915	1,075	1,230	1,575	2,225
HEAT PUMP - NON INVERT	TER			FHQ71BUV1B	FHQ100BUV1B	FHQ125BUV1B			
(air cooled)				RQ71B7V3B/W1B	RQ100B7V3B/W1B	RQ125B7W1B			
Cooling capacity		nominal	kW	7.10	9.80	12.20			
Heating capacity		nominal	kW	8.00	11.20	14.50			
Nominal input	cooling	nominal	kW	2.70/2.65	3.75/3.68	4.50			
	heating	nominal	kW	2.85/2.80	4.13/4.01	5.16			
EER				2.63/2.68	2.61/2.66	2.71			
COP				2.81/2.86	2.71/2.79	2.81			
Energy label	cooling			D/D	D/D	D			
	heating			D/D	E/E	D			
Annual energy consumption	cooling		kWh	1,350/1,325	1,875/1,840	2,250			

MULTI - COOLING ONLY	Max. n°	Max. cooling	Max. PI cooling		
MOLII - COOLING ONLI	of indoor units	capacities (kW)	(kW)		
	of illuoor utilits	capacities (KVV)	(KVV)		
4MKS58D	4	6.60	2.47		
4MKS75D	4	9.27	3.71		
4MKS90D	4	9.86	3.52		
MULTI - HEAT PUMP	Max. n°	Max. cooling	Max. PI cooling	Max. heating	Max. PI heating
	of indoor units	capacities (kW)	(kW)	capacities (kW)	(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°	Max. cooling	Max. PI cooling	Max. heating	Max. PI heating
	of indoor units	capacities (kW)	(kW)	capacities (kW)	(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 or check with your local dealer.

\* At least 2 indoor units should be connected to a Multi outdoor unit.

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

TWIN/TRIPLE/DOUBLE TWIN APPLICATION	FHQ35BUV1B	FHQ50BUV1B	FHQ60BUV1B	FHQ71BUV1B	FHQ100BUV1B	FHQ125BUV1B
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**

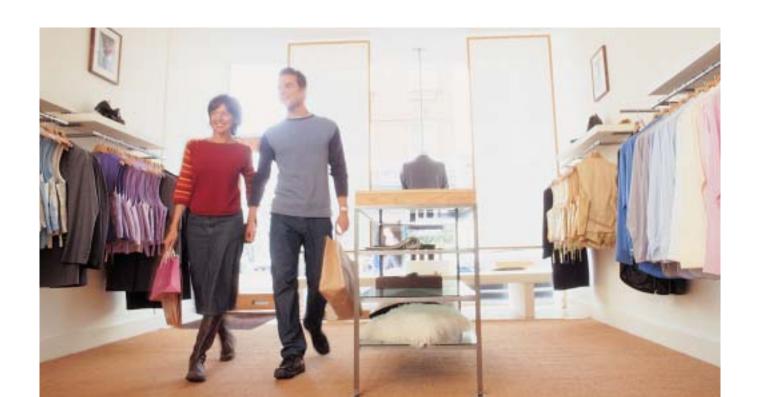
COOLING ONLY/HEAT F			FHQ35BUV1	FHQ50BUV1	FHQ60BUV1	FHQ71BUV1B	FHQ100BUV1B	FHQ125BUV1B	
Dimensions		HxWxD	mm	195x96	50x680	195x1,160x680		195x1,400x680	195x1,590x680
Weight		·	kg	24	25	2	7	32	35
Casing colour						WI	nite	-	
Air flow rate	cooling	H/L	m³/min	13/10	13/10	17/13	17/14	24/20	30/25
	heating	H/L	m³/min	13/10	13/10	16/13	17/14	24/20	30/25
Fan speed				2 steps					
Sound pressure level	cooling	H/L	dB(A)	37/32	38/33	39/33	39/35	42/37	44/39
	heating	H/L	dB(A)	37/32	38/33	39/33	39/35	42/37	44/39
Sound power level	cooling	H/L	dB(A)	53/48	54/49	55/49	55/51	58/53	60/55
	heating	H/L	dB(A)	53/48	54/49	55/49	55/51	58/53	60/55
Piping connections	Piping connections liquid mm			ø6.4			ø9.5		
gas mm  drain (VP20) ID mm  OD mm			ø9.5	ø12	2.7		ø15.9		
			ø20						
			ø26						
Heat insulation				Both liquid and gas pipes					

Indoor units: FHQ-BU





FHQ35,50BUV1 FHQ60,71BUV1



## **Specifications outdoor units**

COOLING ONLY - INVER	RTER CONTROI	LLED		RKS35DVMB	RKS50BVMB9	RKS60BVMB9			
Dimensions		HxWxD	mm	550x765x285	735x8	25x300			
Weight			kg	32	49	53			
Casing colour					Ivory white				
Sound pressure level		H/L	dB(A)	47/44	47/-	49/-			
Sound power level		Н	dB(A)	62	63	64			
Compressor				herm	etically sealed swing	type			
Refrigerant type					R-410A	, ,,			
Refrigerant charge			kg/m	0.02	(for piping length >	10m)			
Maximum piping length			m	20		10			
Maximum level difference			m	15		10			
Operation range		from ~ to	°CDB	-10~46	-10(-15	5*)~46			
COOLING ONLY - NON	INVERTER			RS50BVMB	RS60BVMB	RR71B7V3B/W1B	RR100B7V3B/W1E	RR125B7W1B	
Dimensions		HxWxD	mm	735x82	25x300	770x900x320	1170x <sup>Q</sup>	900x320	
Weight		- Internal	kg	49	53	83/81	102/99	106	
Casing colour			1.9	lvory		11.11	Ivory white		
Sound pressure level		Н	dB(A)	47	49	50	53	53	
Sound power level		Н	dB(A)	63	64	63	66	67	
Compressor		1	~~(/ ·/)	Swing co			netically sealed scrol		
Refrigerant type				R-4	·	il i	R-410A	Турс	
Refrigerant charge			kg/m	0.02 (piping		2.70	3.70	3.70	
Maximum piping length			m m	3		2.70	70(equivalent leng		
Maximum level difference			m	2			30	ui 30)	
Operation range		from ~ to	°CDB	+10			-15~46		
HEAT PUMP - INVERTER	R CONTROLLE			RXS35DVMB	RXS50BVMB	RXS60BVMB	RZQ71B8V3B	RZQ100B8V3B/B7W1B	RZQ125B8V3B/B7W1B
Dimensions		HxWxD	mm	550x765x285	735x8	25x300	770x900x320	1,345x9	00x320
Weight			kg	32	49	53	68	10	
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	Н	dB(A)	62	63	64	63	65	66
	heating	Н	dB(A)	63	64	64		-	-
Compressor			,		rmetically sealed sw		Herm. sealed swing	hermetically se	aled scroll type
Refrigerant type					R-410A			R-410A	71
Refrigerant charge			kg/m	0.02	(for piping length >	10m)	2.8 (for 30m)	4.3 (fo	· 30m)
Maximum piping length			m	20		10	50 (equiv. length 70)		lent length 95)
Maximum level difference			m	15		10	3 ,	5	<u> </u>
Operation range	cooling	from ~ to	°CDB		-10~46			-15~50	
	heating	from ~ to	°CWB		-15~20			-20~15.5	
HEAT PUMP - NON INV				RQ71B7V3B/W1B	RQ100B7V3B/W1B	RQ125B7W1B			
Dimensions	HxWxD		mm	770x900x320		00x320	Ī		
Weight			kg	84/83	103/101	108	1		
Casing colour					Ivory white		1		
Sound pressure level	cooling	Н	dB(A)	50		53	1		
Sound pressure level Sound power level		H	dB(A)	50 63	53 66	53 67			
	cooling		dB(A)	63	53	67			
Sound power level Compressor			1 1	63	53 66	67			
Sound power level Compressor Refrigerant type			dB(A)	63 herm	53 66 etically sealed scroll R-410A	67 type			
Sound power level Compressor Refrigerant type Refrigerant charge			dB(A)	63 herm	53 66 netically sealed scrol R-410A 3.70	67 type			
Sound power level Compressor Refrigerant type Refrigerant charge Maximum piping length	cooling		kg/m	63 herm	53 66 etically sealed scroll R-410A	67 type			
Sound power level Compressor Refrigerant type Refrigerant charge	cooling		dB(A)	63 herm	53 66 netically sealed scrol R-410A 3.70 (equivalent length	67 type			
Sound power level Compressor Refrigerant type Refrigerant charge Maximum piping length Maximum level difference	cooling	Н	kg/m m	63 herm	53 66 letically sealed scrol R-410A 3.70 (equivalent length 30	67 type			

<sup>\*</sup> 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.

<sup>-</sup> Information is not available.

### **Accessories: control systems**

INDOOR UNITS	FHQ35BU	FHQ50BU	FHQ60BU	FHQ71BU	FHQ100BU	FHQ125BU		
Wired remote control		BRC1D527						
Infrared remote control	cooling only	BRC7E66						
	heat pump	BRC7E63W						
Centralised remote control	Centralised remote control			DCS30	)2C51			
Unified ON/OFF control	Unified ON/OFF control		DCS301B51					
Schedule timer	Schedule timer		DST301B51					
Adapter for wiring	Adapter for wiring		KRP1B54					
Adapter for external ON/O	Adapter for external ON/OFF and monitoring (1)		KRP4A52					
Adapter for wiring (hour meter) (2)			EKRP1B2			-		
Interface adapter for Sky Air		DTA112B51						
Installation box for adapter PCB		KRP1C93						
Remote ON/OFF, forced OFF		EKRORO						

<sup>(1)</sup> Installation box for adapter PCB (KRP1C93) is necesarry

### **Accessories**

INDOOR UNITS	FHQ35BU	FHQ50BU	FHQ60BU	FHQ71BU	FHQ100BU	FHQ125BU
Replacement long-life filter	KAFJ501D56		KAFJ501D80		KAFJ501D112	KAFJ501D160
Drain-up kit	KDU50M60VE			KDU50M125VE		
L-type piping kit (upward direction)	KHFP5M35 KHFP5M63		KHFP5M160			

### **Accessories**

OUTDOOR UNITS		RKS/RXS35D	RS/RKS/RXS50B	RS/RKS/RXS60B			
Air direction adjustmer	Air direction adjustment grille			45A4			
Central drain plug	Central drain plug			-			
OUTDOOR UNITS		RR/RQ71B7	RR/RQ100B7	RR/RQ125B7	RZQ71B	RZQ100B	RZQ125B
Central drain plug	Central drain plug		KKPJ5F180		KKPJ5F180		
Refrigerant	ant for twin		KHRQ22M20TA7		KHRQ22M20TA7		
branch piping	for triple	-	KHRQ	127H7	- KHRQ127H7		(127H7
	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 75m \* 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 via a microphone at a certain distance from the unit (for measuring conditions: please refer to the technical data books).
- 7) The sound power level is an absolute value indicating the "power" which a sound source generated.



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.



Daikin units comply with the European regulations that quarantee 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. 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.

### Head office

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Daikin products are distributed by:

<sup>(2)</sup> Possibility to connect an hour meter (field supply). This part should not be installed inside the equipment