

# Daikin air conditioners for shops, restaurants and offices







R-410A

FHQ-B



ww.daikin.eu

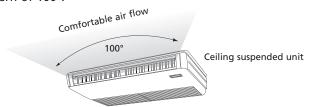




Ceiling suspended units are the ideal solution for rooms, shops or offices without false ceilings. Since they are installed directly against the ceiling they do not take up any floor or wall space. These indoor units are ideal for uniform air distribution in large spaces because of their long air throw.

### **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)



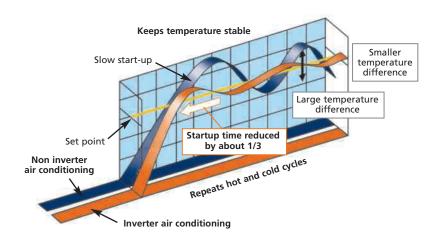
### **ENERGY EFFICIENT**

• Energy label: up to class A

#### • 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.



- 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)		FHQ35B	FHQ50B	FHQ60B			
			1.	RKS35E	RKS50F	RKS60F			
Cooling capacity		min~nom~max	kW	1.4~3.4~3.7	1.7~5.0~5.6	1.7~5.7~6.0			
Nominal input		min~nom~max	kW	1.05(nom)	1.83(nom)	2.15(nom)			
EER				3.24	2.73	2.65			
Energy label				A	D	E			
Annual energy consumption	cooling		kWh	525	915	1,075			1
COOLING ONLY - NON INV	ERTER (air	cooled)		FHQ50B RN50E	FHQ60B RN60E	FHQ71B RR71BV3/W1	FHQ100B RR100BV3/W1	FHQ125B RR125BW1	
Cooling capacity		nominal	kW	5.0	5.7	7.1	9.8	12.2	
Nominal input		nominal	kW	1.83	2.15	2.7/2.65	3.75/3.68	4.51	
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	2,255	
				FHQ35B	FHQ50B	FHQ60B			1
HEAT PUMP - INVERTER C	ONIROLLEL	) (air cooled)		RXS35E	RXS50F	RXS60F			
Cooling capacity		min~nom~max	kW	1.4~3.4~3.7	1.7~5.0~5.6	1.7~5.7~6.0			
Heating capacity		min~nom~max	kW	1.4~4.0~5.0	0.9~1.7~7.0	1.7~7.2~8.0			
Nominal input	cooling	min~nom~max	kW	1.05	1.83	2.15			
· · · · · · · · · · · · · · · · · · ·	heating	min~nom~max	kW	1.11	2.05	2.49			
EER			1	3.24	2.73	2.65	-		
COP				3.60	2.93	2.89	-		
Energy label	cooling			Α	D	D			
. 5,	heating			В	D	D			
Annual energy consumption			kWh	525	915	1,075			
				FHQ71B	FHQ100B	FHQ125B	FHQ71B	FHQ100B	FHQ125B
HEAT PUMP - INVERTER C	UNIKULLEL	(air cooled)		RZQS71BV3	RZQS100BV3	RZQS125CV1	RZQ71B8V3	RZQ100CV1/BW1	RZQ125CV1/BW1
Cooling capacity		nominal	kW	7.1	10.0	12.5	7.1	10.0	12.5
Heating capacity		nominal	kW	8.0	11.2	14.0	8.0	11.2	14.0
Nominal input	cooling	nominal	kW	2.53	4.15	4.58	2.46	3.30/3.15	4.45/4.45
	heating	nominal	kW	2.84	3.99	4.96	2.67	3.49/3.60	4.36/4.50
EER				2.81	2.41	2.73	2.89	3.03/3.17	2.81/2.81
COP				2.82	2.81	2.82	3.00	3.21/3.11	3.21/3.11
Energy label	cooling			С	E	D	А	B/B	C/C
	heating			D	D	D	D	C/D	C/D
Annual energy consumption	cooling		kWh	1,265	2,075	2,290	1,230	1,650/1,575	2,225/2,225
HEAT PUMP - NON INVERT	TED /air soo	lod)		FHQ71B	FHQ100B	FHQ125B		-	
HEAT POWIF - NON INVEN	IEN (all COO	neu)		RQ71BV3/W1	RQ100BV3/W1	RQ125BW1			
Cooling capacity		nominal	kW	7.1	9.8	12.2			
Heating capacity		nominal	kW	8.0	11.2	14.5	1		
Nominal input	cooling	nominal	kW	2.7/2.65	3.75/3.68	4.51	1		
•	heating	nominal	kW	2.85/2.8	4.13/4.01	5.16	1		
EER				2.63/2.68	2.61/2.66	2.71	1		
COP				2.81/2.86	2.71/2.79	2.81	1		
Energy label	cooling			D/D	D/D	D	1		
	heating			D/D	E/E	D			
Annual energy consumption	cooling		kWh	1,350/1,325	1,875/1,840	2,255			
							_		

#### Notes:

- 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).

POSSIBLE COMBINATIONS MULTI - COOLING	POSSIBLE COMBINATIONS MULTI - COOLING ONLY							
Max. n° of indoor units		4	4	5				
	FHQ35B	•	•	•				
Cooling only	FHQ50B	•						
	FHQ60B							
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*	RMXS140E*	RMXS160E*
Max. n° of indoor units		3	4	4	5	7	8	9
	FHQ35B	•	•	•	•	•	•	•
Heat pump	FHQ50B							
	FHQ60B							
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

- Notes:
  (1) The indicated cooling, heating capacities and power input are indicative and are those connected to wall mounted D (35 class) /E (50, 60 class) series.

  \*At least two indoor units should be connected to these multi outdoor units.
  (2) For more detailed information, please consult our multi model/combination tables catalogue or your local dealer.

TWIN/TRIPLE/DOUBLE TWIN APPLICATION	FHQ35B	FHQ50B	FHQ60B	FHQ71B	FHQ100B	FHQ125B
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			
RZQ(S)140	4	3		2		
RZQ200		4	3	3	2	
RZQ250			4			2

### **Specifications indoor units**

COOLING ONLY/HEAT I	PUMP			FHQ35B	FHQ50B	FHQ60B	FHQ71B	B FHQ100B FHQ				
Dimensions		HxWxD	mm	195x96	60x680	195x1,1	60x680	0x680 195x1,400x680 195x1				
Weight			kg	24	25	2	27 32		35			
Casing colour						Wh	ite					
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	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			
Piping connections		liquid	mm		ø6.4			ø9.5				
		gas	mm	ø9.5	ø12	2.7		ø15.9				
		drain (VP20)	ID mm			ØŽ	20					
			OD mm			ØŽ	26					
Heat insulation				Both liquid and gas pipes								

### Indoor units: FHQ-B





FHQ35,50B

FHQ60,71B

### **Specifications outdoor units**

COOLING ONLY - INVERTER CO	NTROLLED		RKS35E	RKS50F	RKS60F	
Dimensions	HxWxD	mm	550x765x285	735x825x300		
Weight	·	kg	32	48		
Casing colour		-	Ivory white			
Sound pressure level	H/L	dB(A)	47/44	47/44	49/46	
Sound power level	Н	dB(A)	62	61	63	
Compressor	·	type	He	rmetically sealed sw	ring	
Refrigerant type				R-410A		
Refrigerant charge		kg/m	0.02	(for piping length >	10m)	
Maximum piping length	Maximum piping length			3	0	
Maximum level difference	el difference m 15 20			0		
Operation range	from ~ to	°CDB	-10~46	-10~46		
COOLING ONLY - NON INVERTE	R		RN50F	RN60F	RR71RV3/W1	

COOLING ONLY - NON INVERTER			RN50E	RN60E	RR71BV3/W1	RR71BV3/W1   RR100BV3/W1   RR125E		
Dimensions	HxWxD	mm	735x8	735x825x300 770x900x320 1,170x900x320			00x320	
Weight		kg	47	47	83/81	83/81 102/99 106		
Casing colour			lvory	white	Daikin white			
Sound pressure level	Н	dB(A)	47	49	50	53	53	
Sound power level	Н	dB(A)	61	63	63	66	67	
Compressor		type	Swing co	mpressor	Hermeti	Hermetically sealed scroll compessor		
Refrigerant type			R-4	10A		R-410A		
Refrigerant charge		kg/m	0.02 (piping	length > 10m)	2.70	3.70	3.70	
Maximum piping length		m	3	0	70	70 (equivalent length 90)		
Maximum level difference		m 20 30						
Operation range	from ~ to	°CDB	-10~46 -15~46					

## **Specifications outdoor units**

Maximum piping length

Operation range

Maximum level difference

cooling

heating

from ~ to

from ~ to

HEAT PUMP - INVERTER CO	ONTROLLEI	0		RXS35E	RXS50F	RXS60F	1	
Dimensions		HxWxD	mm	550x765x285		25x300		
Weight		TIAVVAD	kg	32		18		
Casing colour			ky	32	lvory white	+0		
Sound pressure level (night quiet mode)	cooling	H/L	dB(A)	47/44	47/44	49/46		
Journa pressure lever (flight quiet fliode)	heating	H/L	dB(A)	48/45	48/45	49/46		
Sound power level	cooling	H	dB(A)	62	61	63		
Compressor	cooling	11	type		rmetically sealed sw			
Refrigerant type			туре	Tie	R-410A	virig		
Refrigerant charge			kg/m	0.02	(for piping length >	. 10m\		
Maximum piping length			m Kg/III	20		30		
Maximum level difference			m	15		20		
Operation range	cooling	from ~ to	°CDB	13	-10~46	20		
Operation range	heating	from ~ to	°CWB	-15~20		~18		
HEAT PUMP - INVERTER CO			CVVD	RZQS71BV3	RZQS100BV3	RZQS125CV1		
	ONTROLLEI				`	,		
Dimensions		HxWxD	mm	770x90		1,170x900x320		
Weight			kg	6		103		
Casing colour					Ivory white			
Sound pressure level (night quiet mode)	cooling	Н	dB(A)	49 (43)	51 (45)	51(49)		
	heating	Н	dB(A)	51	55	53		
Sound power level	cooling	Н	dB(A)	65	67	67		
Compressor			, ,		Herm. sealed scroll			
Refrigerant type					R-410A			
Refrigerant charge	Refrigerant charge kg/m				.8	3.7		
Maximum piping length			m	30 (equivalent length 40)	50 (equivalent length 70)	50 (equivalent length 95)		
Maximum level difference			m	15	3	30		
Operation range	cooling	from ~ to	°CDB		-5~46			
	heating	from ~ to	°CWB		-15~15.5			
HEAT PUMP - NON INVERT	ΓER			RZQ71B8V3	RZQ100CV1	RZQ100BW1	RZQ125CV1	RZQ125BW1
Dimensions		HxWxD	mm	770x900x320	1,170x900x320	1,345x900x320	1,170x900x320	1,345x900x320
Weight			kg	68	103	106	103	106
Casing colour			·			Ivory white		
Sound pressure level (night quiet mode)	cooling	Н	dB(A)	47(43)	49(45)	49(45)	50(45)	50(45)
	heating	Н	dB(A)	49	51	51	52	52
Sound power level	cooling	Н	dB(A)	63	65	65	66	66
Compressor			type	Herm. sealed swing		Hermetically	y sealed scroll	
Refrigerant type			'			R-410A		
Refrigerant charge			kg/m	2.8	3.7	4.3	3.7	4.3
Maximum piping length			m	50 (equivalent length 70)	75 (equivalent length 70)	75	(equivalent length 9	95)
Maximum level difference			m			30		
Operation range	cooling	from ~ to	°CDB	-15	~50		-5~46	
	heating	from ~ to	°CWB			-20~15.5		
HEAT PUMP - NON INVERT	ΓER			RQ71BV3/W1	RQ100BV3/W1	RQ125BW1		
Dimensions		HxWxD	mm	770x900x320	1,170x9	000x320		
Weight			kg	84/83	103/101	108		
Casing colour					Daikin white			
Sound pressure level	cooling	Н	dB(A)	50	53	53		
Sound power level	cooling	Н	dB(A)	63	66	67		
Compressor	,		type		rmetically sealed so			
Refrigerant type			1.21	110	R-410A	-		
Refrigerant charge			kg/m	2.70	3.70	3.70		
Maximum nining langth			m		/oguit/alant langth	-		

70 (equivalent length 90)

-5~46

-10~15

m

m

°CDB

°CWB



INDOOR UNITS		FHQ35B FHQ50B FHQ60B FHQ71B FHQ100B FHQ125B					
Wired remote control				BRC	1D52		
Infrared remote control	cooling only			BRC	7E66		
	heat pump BRC7E63						
Centralised remote control		DCS302C51					
Unified ON/OFF control		DCS301B51					
Schedule timer		DST301B51					
Adapter for wiring				KRP	1B54		
Adapter for external ON/O	FF and monitoring (1)			KRP	4A52		
Adapter for wiring (hour m	eter) (2)		EKRP1B2		-		
Interface adapter for Sky A	ir	DTA112B51					
Installation box for adapter	PCB	KRP1C93					
Remote ON/OFF, forced OF	F	EKRORO					

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

### Accessories: indoor units

INDOOR UNITS	FHQ35B	FHQ50B	FHQ60B	FHQ71B	FHQ100B	FHQ125B
Replacement long-life filter	KAF50	1DA56	KAFJ501DA80 KAF501DA112		KAF501DA112	KAF501DA160
Drain-up kit		KDU50M60			KDU50M125	
L-type piping kit (upward direction)	KHFP5M35	KHFP	5M63		KHFP5MA160	

### Accessories: outdoor units

OUTDOOR UNITS		RKS/RXS35E	RN50E-RKS/RXS50F	RN60E-RKS/RXS60F				
Air direction adjustr	ment grille	KRW937A4	KPW9	)45A4	1			
Central drain plug		KKP937A4	-	-				
OUTDOOR UNITS		RR/RQ71B	RR/RQ100B	RR/RQ125B	RZQ(S)71B	RZQ(S)100B/C	RZQ(S)125B/C	
Central drain plug			KKPJ5F180		KKPJ5F180			
Refrigerant	for twin		KHRQ22M20TA			KHRQ22M20TA		
branch piping	for triple	-	KHRQ	)127H	-	KHRO	)127H	
	for double twin	-	-	-	-	-	KHRQ22M20TA (x3)	
Demand adapter kit	t i	-	-	-	KRP58M51			

#### Notes:

- 1)  $V1 = 1 \sim$ , 230V, 50Hz;  $VM = 1 \sim$ , 220-240V/220-230V, 50Hz/60Hz,  $V3 = 1 \sim$ , 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 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 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. 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.

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RPR Oostende



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