



# technical data

**FDBQ-B7**



**Concealed Ceiling, Inverter  
Controlled Unit**

air conditioning systems

# Split Sky Air

# Split - Sky Air



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 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 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.

Specifications are subject to change without prior notice.

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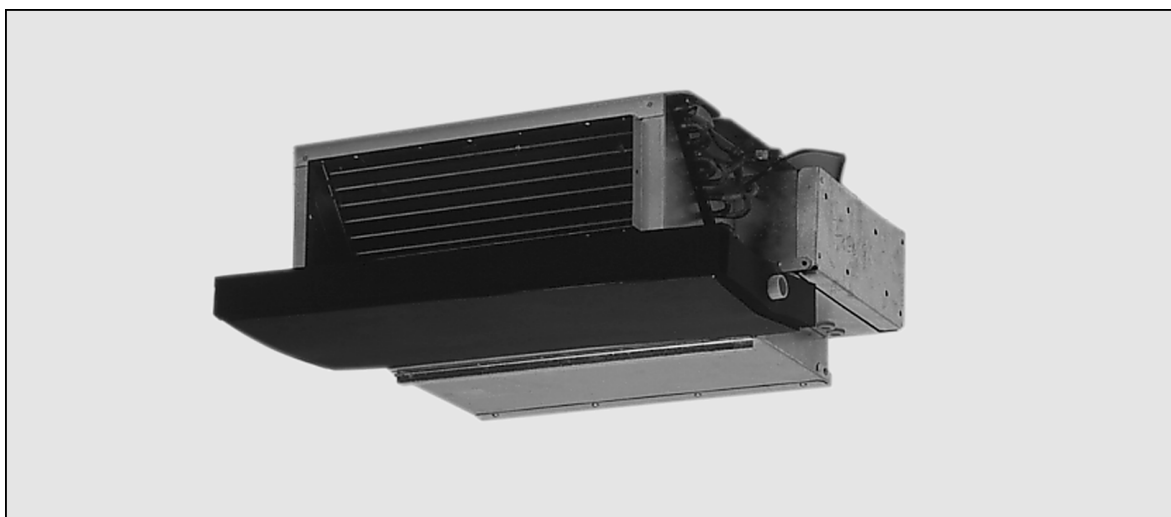
For capacity tables, please refer to part II: outdoor units



# 1 Features

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- Leaves maximum floor and wall space for furniture, decoration and fittings
- Ideal for use in hotel bedrooms.
- Since the casing is very compact (230mm high and 652mm deep), the indoor units can easily be mounted within a ceiling void.
- Since only the suction and discharge grilles are visible, the system will blend in any interior décor.
- Extremely quiet in operation both indoors and outdoors
- 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.
- The air suction direction can be altered from rear to bottom suction.
- For easy mounting, the drain pan can be located to the left or right of the unit.
- The air duct between the indoor unit and discharge grille can be up to 0.5m long
- 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.
- 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.



Optional



Heat pump



2 steps





## 2 Specifications

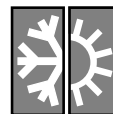
**2**

NOMINAL CAPACITY and NOMINAL INPUT			
For indoor units only:			
INDOOR UNITS		FDBQ25B7V1	
NOMINAL INPUT	Cooling	kW	-

For combination indoor + outdoor units (air cooled):			
INDOOR UNITS		FDBQ25B7V1	
OUTDOOR UNITS		2MKS40DVMB, 3MKS50DVMB, 4MKS58-75-90DVMB, 2MXS40DVMB, 3MXS52DVMB, 4MXS68-80DVMB, RMXS112-140-160D7V3B	
NOMINAL CAPACITY (2)	Cooling (1)	kW	For more information, see chapter MKS-D, MXS-D, RMXS-D
NOMINAL INPUT	Cooling	kW	
EER			
COP			
ENERGY LABEL	Cooling		
	Heating		
ANNUAL ENERGY CONSUMPTION	Cooling	kWh	

TECHNICAL SPECIFICATIONS				
INDOOR UNITS				FDBQ25B7V1
DIMENSIONS	Unit	H	mm	230
		W	mm	652
		D	mm	502
WEIGHT	Unit	kg		17
MATERIAL	Unit			Zinc coated low carbon steel
SOUND LEVEL	Sound pressure (3) (cooling/heating)	high	dB(A)	35/35
		low	dB(A)	28/29
	Sound power (4) (cooling/heating)	high	dB(A)	55/55
		low	dB(A)	49/49
FAN	Air flow rate (cooling/heating)	high	m <sup>3</sup> /min	6.5/6.95
		low	m <sup>3</sup> /min	5.2/5.2
	Speed	steps		2 steps
	Type			Sirocco fan
	Qty x motor output	W		1 x 10
	Drive			Direct drive
HEAT EXCHANGER	Type			Rhombus type, $\phi$ 7 Hi-XA tube
	Rows x stages x fin pitch	mm		2 x 12 x 1.40
	Face area	m <sup>2</sup>		0.108
AIR FILTER				Resin net (with mold resistant)
TEMPERATURE CONTROL				Microprocessor thermostat for cooling and heating
PIPING CONNECTIONS	liquid	mm		$\phi$ 6.35
	gas	mm		$\phi$ 9.52
	drain	mm		VP25 O.D. $\phi$ 27.2
	drain	mm		VP25 I.D. $\phi$ 21.6
INSULATION MATERIAL	Heat insulation			Both liquid and gas pipes

For outdoor units	Multi model application	See chapter MKS-D, MXS-D, RMXS-D
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## 2 Specifications

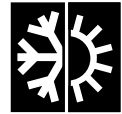
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ELECTRICAL SPECIFICATIONS				
<b>For indoor units only:</b>				<b>FDBQ25B7V1</b>
CURRENT	Nominal running current	cooling	A	0.2
	Max. running current	cooling	A	-
<b>For combination indoor units + outdoor units:</b>				<b>FDBQ25B7V1</b>
				<b>2MKS40DVMB, 3MKS50DVMB, 4MKS58-75-90DVMB, 2MXS40DVMB, 3MXS52DVMB, 4MXS68-80DVMB, RMXS112-140-160D7V3B</b>
CURRENT	Nominal running current	cooling	A	See chapter MKS-D, MXS-D, RMXS-D: Electrical data
	Maximum running current	cooling	A	
	Starting current	cooling	A	
<b>For indoor units only:</b>				<b>FDBQ25B7V1</b>
POWER SUPPLY				V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~
	Frequency		Hz	50
	Voltage		V	230
	Voltage range	min/max	V	197/253

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### NOTES

- Nominal cooling capacities are based on: indoor temperature 27°CDB/19.5°CWB \* outdoor temperature 35°CDB \* equivalent refrigerant piping length: 7.5m \* level difference: 0m.
- Nominal heating capacities are based on: indoor temperature: 20°CDB \* outdoor temperature: 7°CDB/6°CWB.
- Capacities are net, including a deduction for cooling for indoor fan motor heat.
- The sound pressure level is measured at 1.5m distance from the unit. For measuring conditions; please refer to item 6 of this chapter.
- The sound power level is an absolute value indicating the "power" which a sound source generates.
- Energy label: scale from A (most efficient) to G (less efficient).
- Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions).

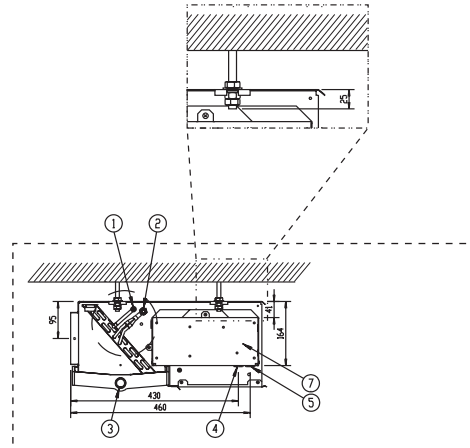
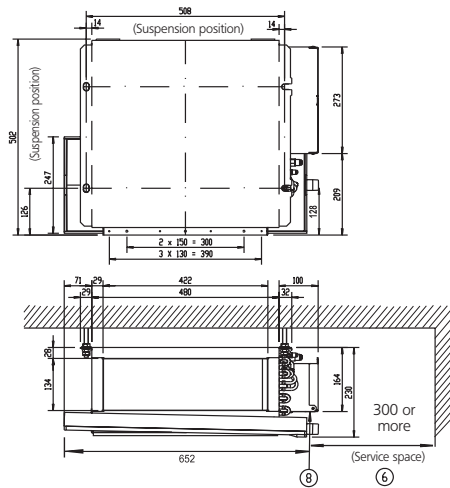


### 3 Dimensional drawings

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FDBQ25B7V1

unit (mm)



- 1 Liquid pipe connection ( $\phi 6.35$ )
- 2 Gas pipe connection ( $\phi 9.52$ )
- 3 Drain hole (OD =  $\phi 27.2$  ID =  $\phi 21.6$ )
- 4 Entry for wiring on/off-switch, remote controller and electrical heater
- 5 Entry for wiring power supply
- 6 Service space
- 7 Switch box
- 8 Name plate

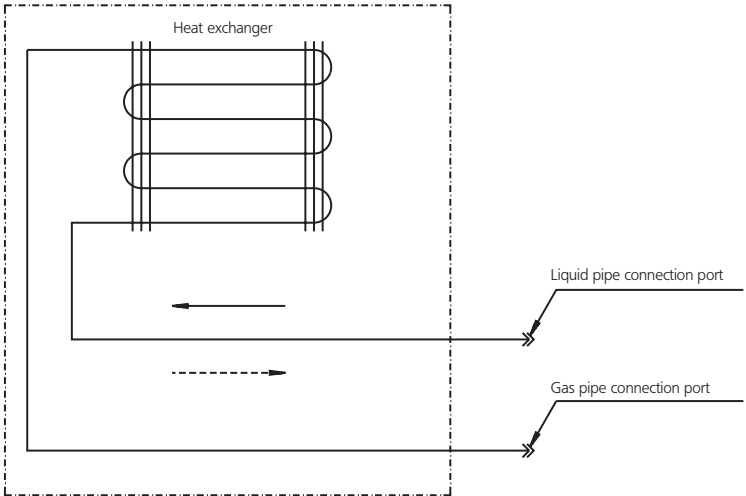
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# 4 Piping diagrams

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FDBQ25B7V1



Refrigerant flow  
Cooling ———→  
Heating - - - - -→

Refrigerant pipe connection port diameters

Model	Gas	Liquid
FDBQ25B7V1	φ 9.52	φ 6.35

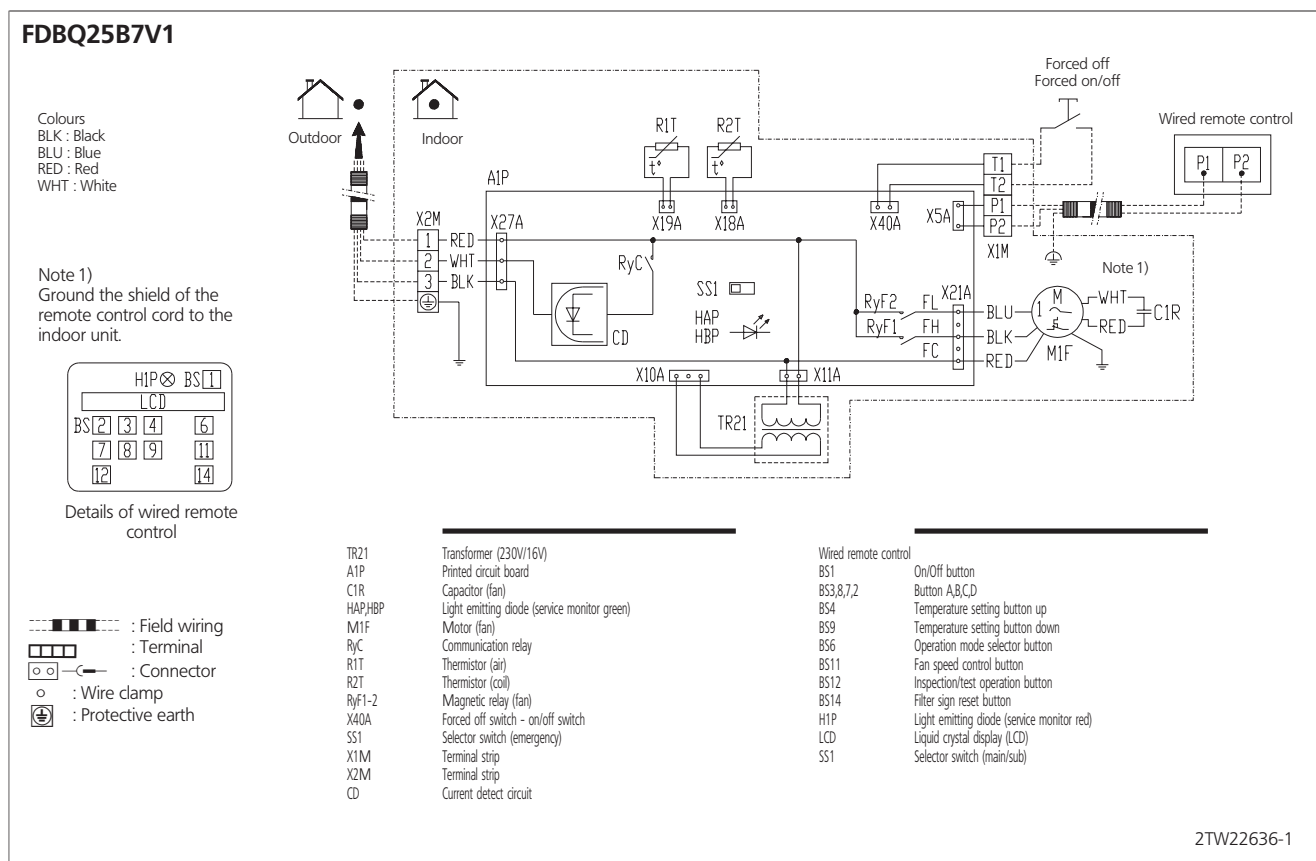
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## 5 Wiring diagrams

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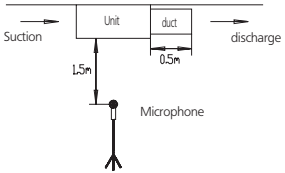




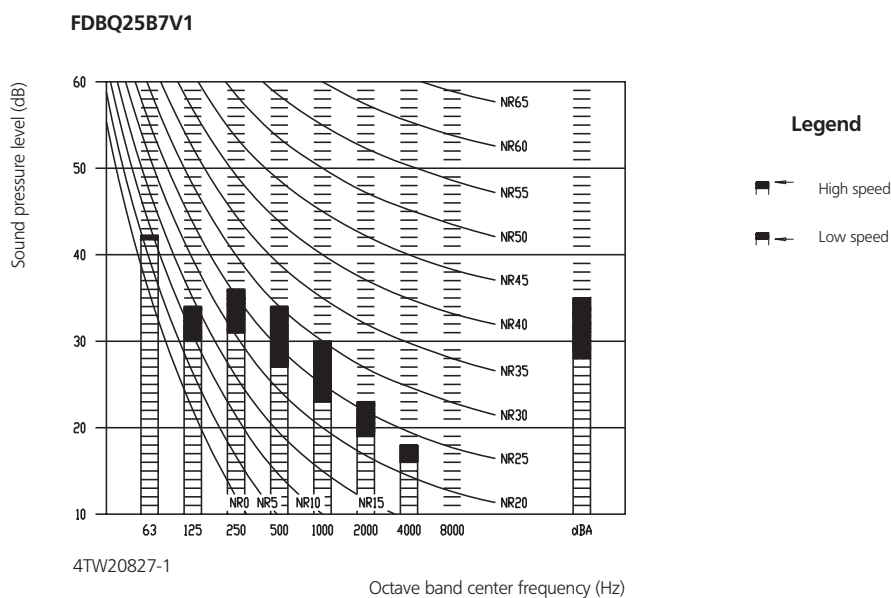
## 6 Sound level

### 6-1 Sound level data

6  
6-1

Model	Sound pressure level		Measuring location	Sound power	
	230V			H (cooling/heating)	L (cooling/heating)
	50Hz				
	H (cooling/heating)	L (cooling/heating)			
FDBQ25B7V1	35/35	28/29		55/55	49/49

### 6-2 Sound pressure spectrum



#### NOTES

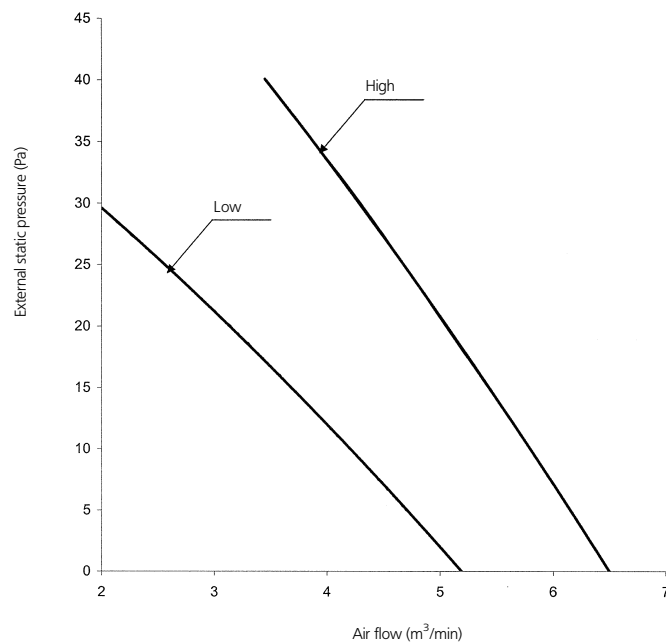
- 1 Data is valid at free field condition
- 2 Data is valid at nominal operation condition (at 230V)
- 3 dBA = A-weighted sound pressure level (A-scale according to IEC)
- 4 Reference acoustic pressure 0dB = 20Pa



## 7 Fan characteristics

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FDBQ25B7V1



Note: The wired remote control can be used to switch between 'high' and 'low'

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## 8 Accessories

### 8-1 Standard accessories

8

8-1

	FDBQ25B7V1	
Operation manual Installation manual	1 of each	
Suction air filter ESDAF	1	

### 8-2 Optional accessories

#### FDBQ25B7V1

Optional accessories	Remark	Kit name
Remote control	Wired type	BRC1D527
Wiring adapter (hour meter) *		EKRP1B2
Remote ON/OFF, forced OFF		EKRORO

\* Possibility to connect an hour meter. This part should not be installed inside the equipment.

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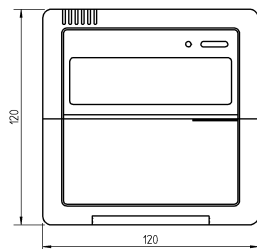
## 9 Control systems

### 9-1 Wired remote control

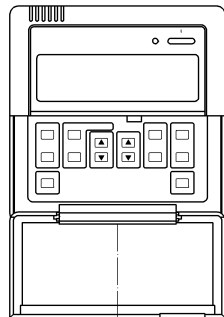
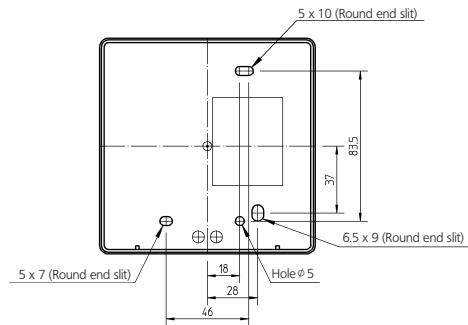
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BRC1D527



Cover closed



Cover open

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# 10 Installation

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