



Air Conditioning Technical Data

Small concealed ceiling unit



EEDEN15-100

FDBQ-B

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1 Features

Designed for hotel applications

- Compact unit (230mm high & 652mm deep), can easily be mounted in narrow ceiling voids
- Discretely concealed in the ceiling: only the suction and discharge grilles are visible
- Whisper quiet operation: down to 28dBA sound pressure level
- Flexible installation, as 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

1



Home leave operation



Fan only



Auto cooling-heating changeover



Whisper quiet



Fan speed steps



Dry programme



Air filter



Weekly timer



Wired remote control



Auto-restart



Self diagnosis



Multi model application



VRV for residential application

2 Specifications

2-1 Technical Specifications				FDBQ25B	
Casing	Material			Zinc coated low carbon steel	
Dimensions	Unit	Height/Width/Depth	mm	230/652/502	
	Packed unit	Height/Width/Depth	mm	301/753/584	
Weight	Unit		kg	17.0	
	Packed unit		kg	18.0	
Heat exchanger	Length		mm	430	
	Rows	Quantity		2	
	Fin pitch		mm	1.40	
	Passes	Quantity		2	
	Face area		m ²	0.108	
	Stages	Quantity		12	
	Empty tubeplate hole	Quantity		0	
	Tube type			ø7 Hi-XA	
	Fin	Type			Rhombus
Air filter	Type			Resin net with mold resistance	
Fan	Type			Sirocco fan	
	Quantity			1	
	Air flow rate	Cooling	High	m ³ /min	6.50
			Low	m ³ /min	5.20
		Heating	High	m ³ /min	6.95
Low			m ³ /min	5.20	
Fan motor	Quantity			1	
	Drive			Direct drive	
	Speed	Steps		2	
	Output	High	W	10	
Sound power level	Cooling		dBA	55	
	Heating		dBA	55	
Sound pressure level	Cooling	High/Low	dBA	35.0/28.0	
	Heating	High/Low	dBA	35.0/29.0	
Control systems	Wired remote control			BRC1D52 / BRC1E52A/B	
Refrigerant	Type			R-410A	
Piping connections	Liquid	OD		6.35	
	Gas	OD		9.52	
	Drain			27.2	
Temperature control				Microprocessor thermostat for cooling and heating	

Standard Accessories : Suction air filter; Quantity : 1;

Standard Accessories : Installation and operation manual; Quantity : 1;

2-2 Electrical Specifications				FDBQ25B
Power supply	Name			V1
	Phase			1~
	Frequency		Hz	50
	Voltage		V	230
Voltage range	Min.		%	-10
	Max.		%	10
Current	Nominal running current (RLA) - 50Hz	Cooling	A	0.200
		Heating	A	0.200
Power supply intake				Outdoor unit only

Notes

Sound values are measured in a semi-anechoic room.

Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings.

The sound power level is an absolute value indicating the power which a sound source generates.

3 Options

3 - 1 Options

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FDBQ-B		
Operation control		
Nr.	Item	FDBQ25
1	Remote Control	BRC1D52
		BRC1E52A7 (*1)
		BRC1E52B7 (*2)
2	Optional PCB for external electric heaters, humidifiers and/or hour meters	EKRP1B2
3	Simplified remote control (with operation mode selector button)	BRC2E52C7 (*3)
4	Simplified remote control (without operation mode selector button)	BRC3E52C7 (*3)
5	Digital input adapter	BRP7A54 (*4)

NOTE

*1 Included languages are: English, German, French, Dutch, Spanish, Italian, Greek, Portuguese, Russian, Turkish and Polish.

*2 Included languages are: English, German, Albanian, Bulgarian, Croatian, Czech, Hungarian, Romanian, Serbian, Slovak and Slovenian.

*3 Included languages are:
 Language pack 1: English, German, French, Dutch, Spanish, Italian and Portuguese.
 With PC cable EKPCAB3 in combination with the Updater PC software, you can additionally change the language to:
 Language pack 2: English, Bulgarian, Croatian, Czech, Hungarian, Romanian and Slovenian.
 Language pack 3: English, Greek, Polish, Russian, Serbian, Slovak and Turkish.

*4 Only possible in combination with simplified remote control BRC2/3E52C7

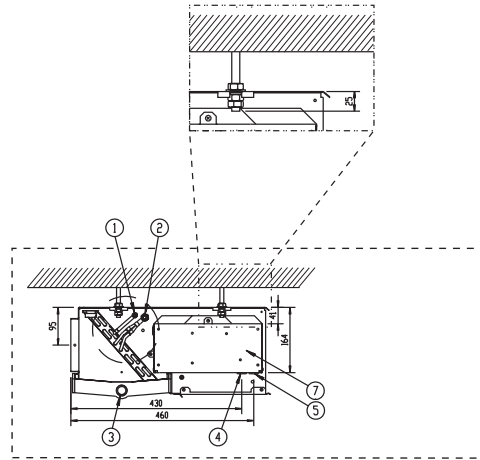
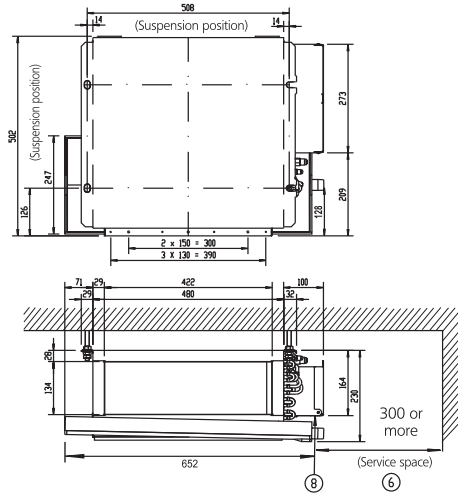
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4 Dimensional drawings

4 - 1 Dimensional Drawings

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unit (mm)



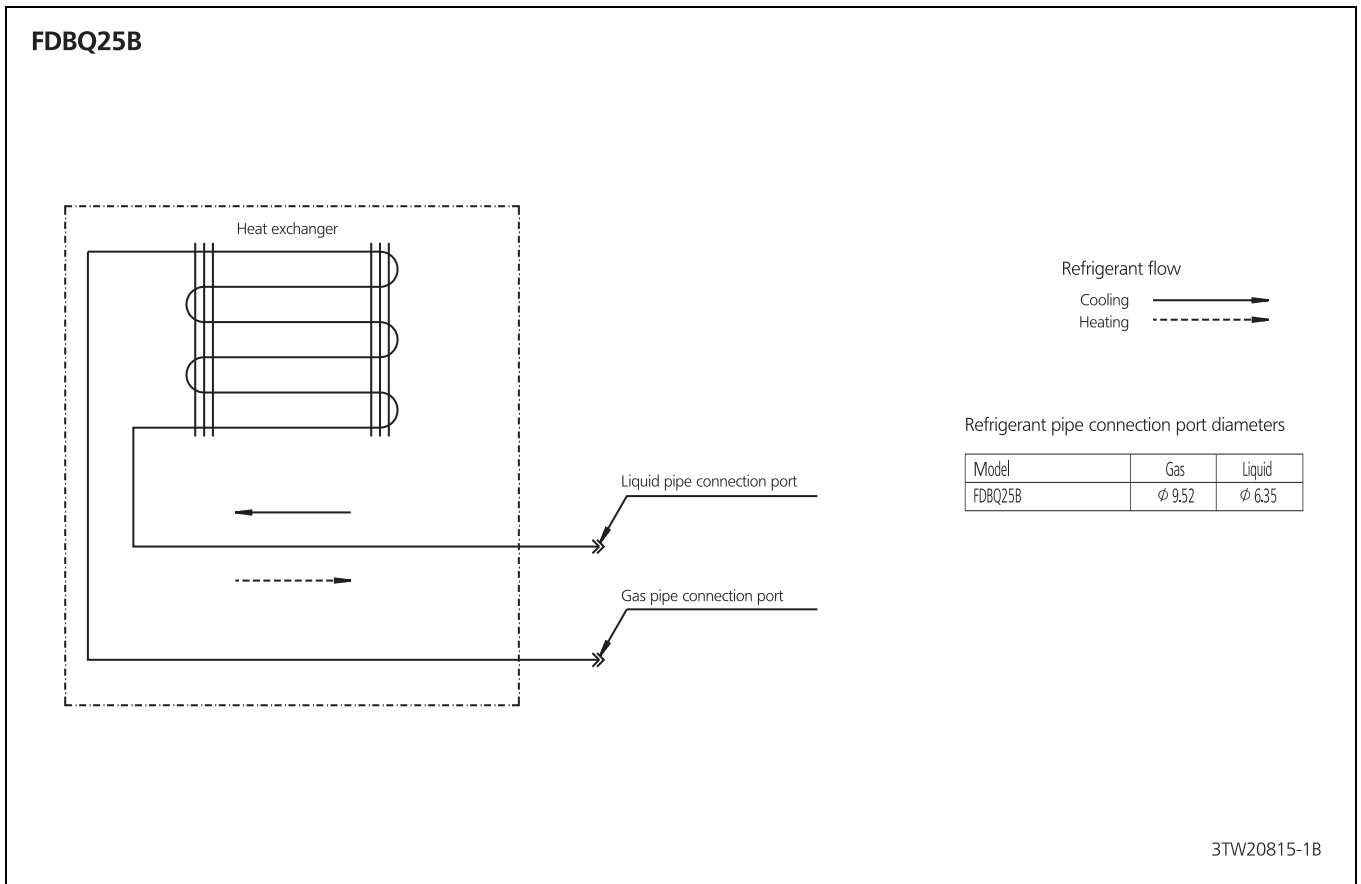
- 1 Liquid pipe connection (φ 6.35)
- 2 Gas pipe connection (φ 9.52)
- 3 Drain hole (OD = φ 27.2 ID = φ 21.6)
- 4 Entry for wiring on/off-switch, remote controller and electrical heater
- 5 Entry for wiring power supply
- 6 Service space
- 7 Switch box
- 8 Name plate

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5 Piping diagrams

5 - 1 Piping Diagrams

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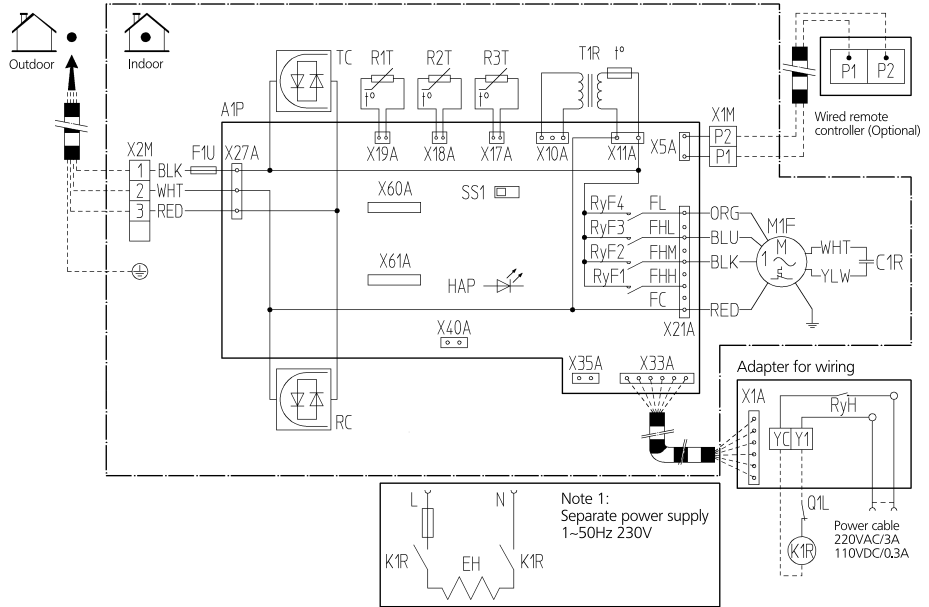
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6 Wiring diagrams

6 - 1 Wiring Diagrams - Single Phase

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A1P	Printed circuit board
T1R	Power supply transformer (transformer 220-240V/21.8V)
C1R	Capacitor (fan)
F1U	Fuse (5A, 250V)
F1T	Thermal fuse (152°C) (M1F embedded)
HAP	Light emitting diode (service monitor green)
M1F	Motor (fan)
R1T	Thermistor (Air)
R2T	Thermistor (Liquid)
R3T	Thermistor (Coil)
RyF1-4	Magnetic relay (fan)
SS1	Selector switch (emergency)
X1M	Terminal strip
X2M	Terminal strip
RC	Signal receiver circuit
TC	Signal transmission circuit
Adapter for wiring	
RyH	Magnetic relay
Q1L	Thermal protector
Connector for optional parts	
X60A, X61A	Connector (interface adapter for SKY AIR / US series)
X33A	Connector (adapter for wiring)
X35A	Connector (group control adapter)
X40A	Connector (remote ON/OFF forced OFF)
Field supply	
K1R	Magnetic relay
EH	Electrical heater



Notes

- 1 When using the central remote control, see manual for connection to the unit.
- 2 The remote controller model varies according to the combination system. See technical materials and catalogues, etc. before connecting.

- : Field wiring
- : Terminal
- : Connector
- : Wire clamp
- : Protective earth (screw)

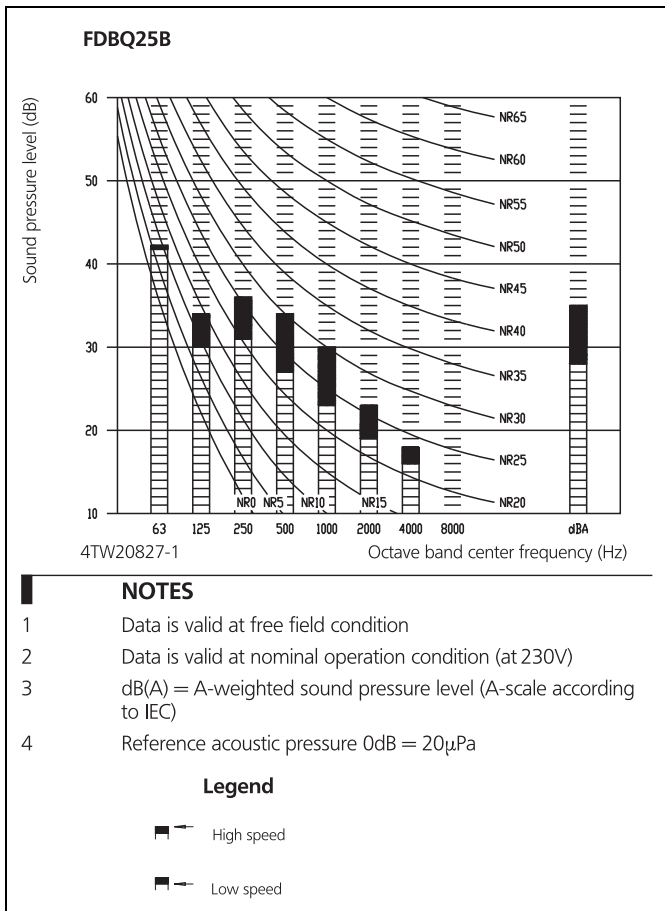
- Colours**
 BLK : Black
 ORG : Orange
 WHT : White
 BLU : Blue
 RED : Red

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7 Sound data

7 - 1 Sound Pressure Spectrum

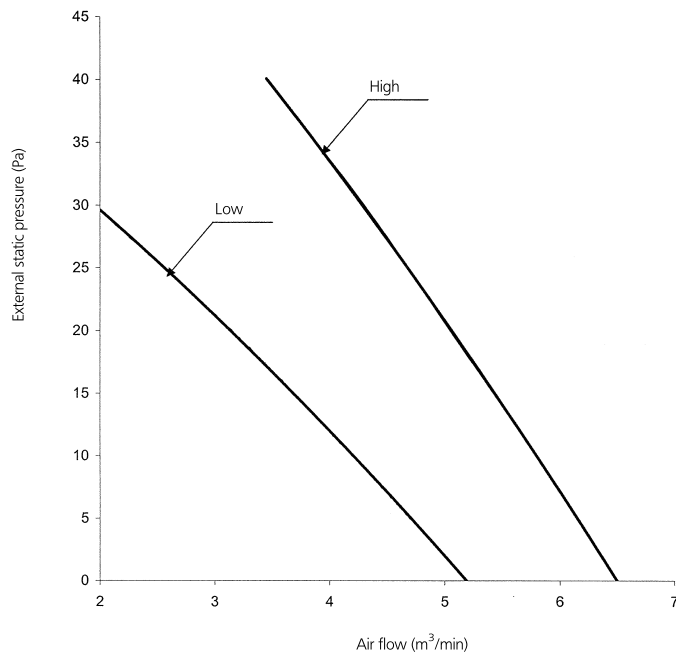
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8 Fan characteristics

8 - 1 Fan Characteristics

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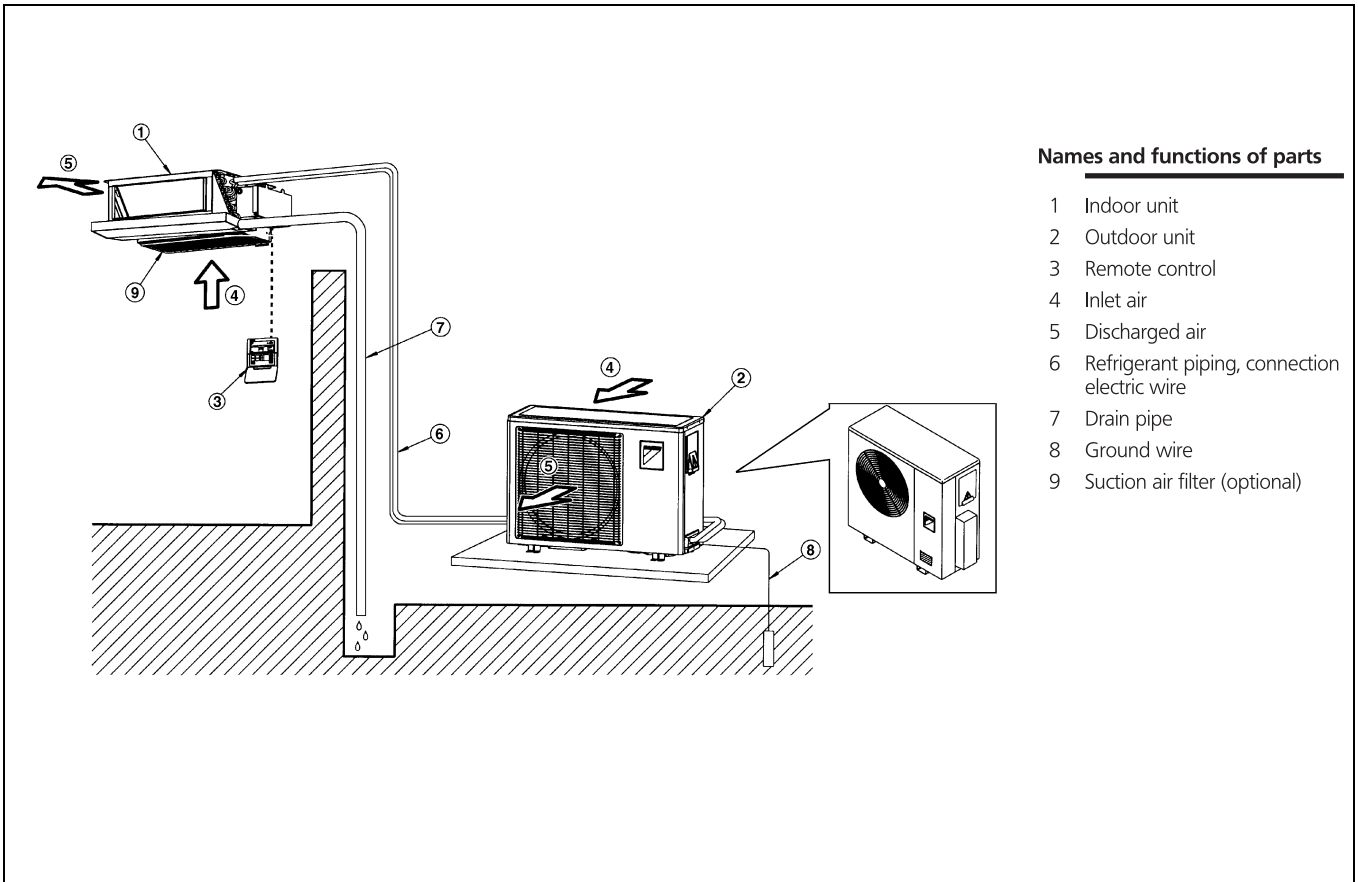
Note: The wired remote control can be used to switch between 'high' and 'low'

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9 Installation

9 - 1 Installation Method

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