

Air Conditioning
Technical Data

FDBQ-B



> FDBQ25B5V1

TABLE OF CONTENTS

FDBQ-B

1	Features	2
2	Specifications	3
	Technical Specifications	3
	Electrical Specifications	3
3	Options	4
4	Dimensional drawings	5
5	Piping diagrams	6
6	Wiring diagrams	7
	Wiring Diagrams - Single Phase	7
7	Sound data	8
	Sound Pressure Spectrum	8
8	Fan characteristics	9
9	Installation	10
	Installation Method	10

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



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	Rows	Quantity			2				
	Fin pitch			mm	1.40				
	Passes	Quantity			2				
	Face area			m²	0.108				
	Stages	Quantity			12				
	Empty tubeplate hole	Quantity			0				
	Tube type				ø7 Hi-XA				
	Fin	Type			Rhombus				
	Length			mm	430				
Air filter	Type				Resin net with mold resistance				
Fan	Type				Sirocco fan				
	Quantity				1				
	Air flow rate	Cooling	High	m³/min	6.50				
			Low	m³/min	5.20				
		Heating	High	m³/min	6.95				
			Low	m³/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 : Installation and operation manual; Quantity : 1;

Standard Accessories : Suction air filter; Quantity : 1;

2-2 Electrical Specifications				FDBQ25B
Power supply	Name			V1
	Phase			1~
	Frequency	Hz		50
	Voltage	V		230
Voltage range	Max.	%		10
	Min.	%		-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

3

FDBQ_B

Operation control

Nr.	Item	Type
1	Remote control	Wired
2	Optional PCB for external electric heaters, humidifiers and/or hour meters	
3	Simplified remote control (with operation mode selector button)	
4	Simplified remote control (without operation mode selector button)	
5	Digital input adaptor	

FDBQ25
BRC1D52
BRC1E53A7 (*1)
BRC1E53B7 (*2)
BRC1E53C7 (*3)(*6)
EKRP1B2
BRC2E52C7 (*4)(*6)
BRC3E52C7 (*4)(*6)
BRP7A54 (*5)

(*1) Included languages are: English, German, French, Italian, Spanish, Portuguese, and Dutch.

(*2) Included languages are: English, Czech, Croatian, Hungarian, Slovenian, Romanian, and Bulgarian.

(*3) Included languages are: English, Russian, Greek, Turkish, Polish, Albanian, and Slovak.

(*4) 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.

(*5) Only possible in combination with BRC2/3E52C7 or BRC1E53A/B/C7.

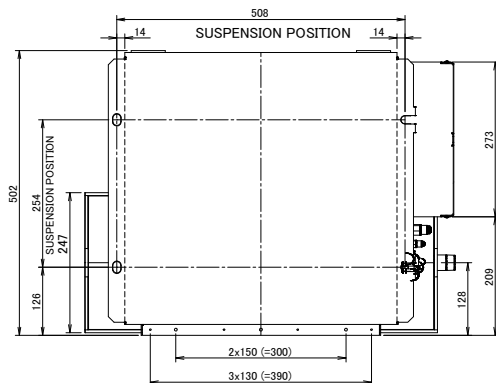
(*6) Language pack 3 of controller BRC1E53C7 is different from that of controller BRC2/3E52C7.

4TW25859-1H

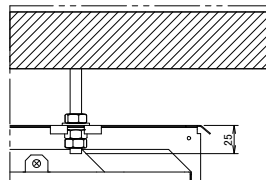
4 Dimensional drawings

4 - 1 Dimensional Drawings

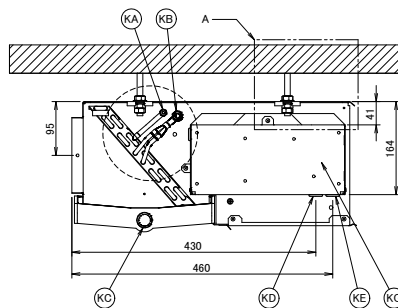
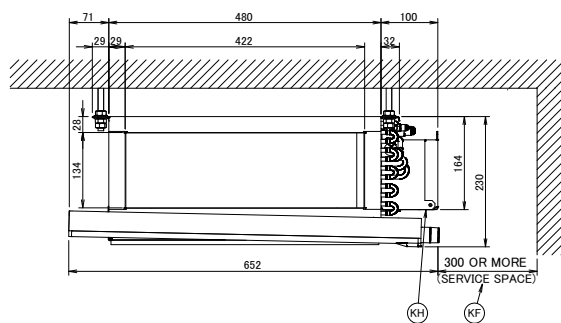
FDBQ25B



- 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



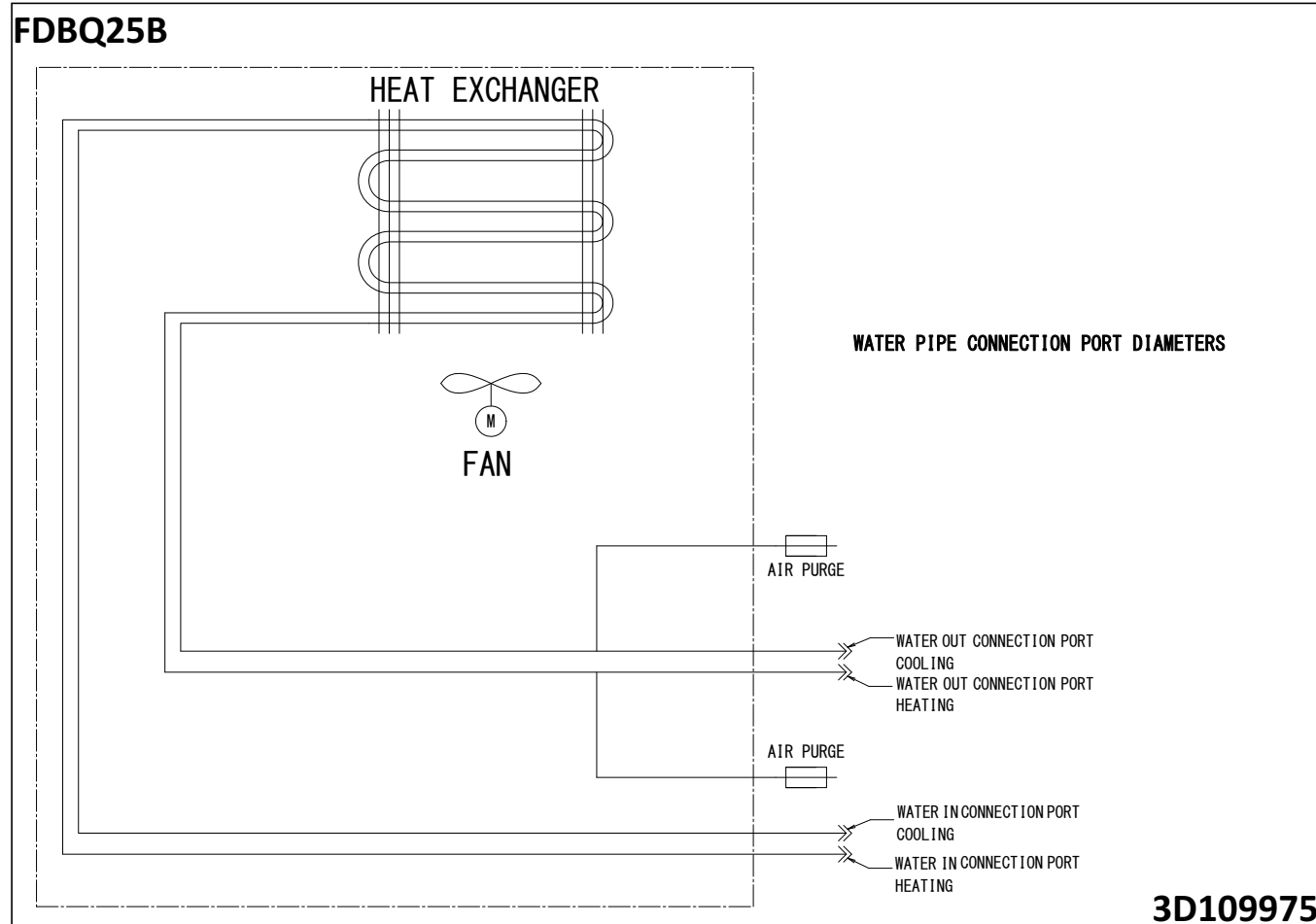
DETAIL-A



3D110103

5 Piping diagrams

5 - 1 Piping Diagrams

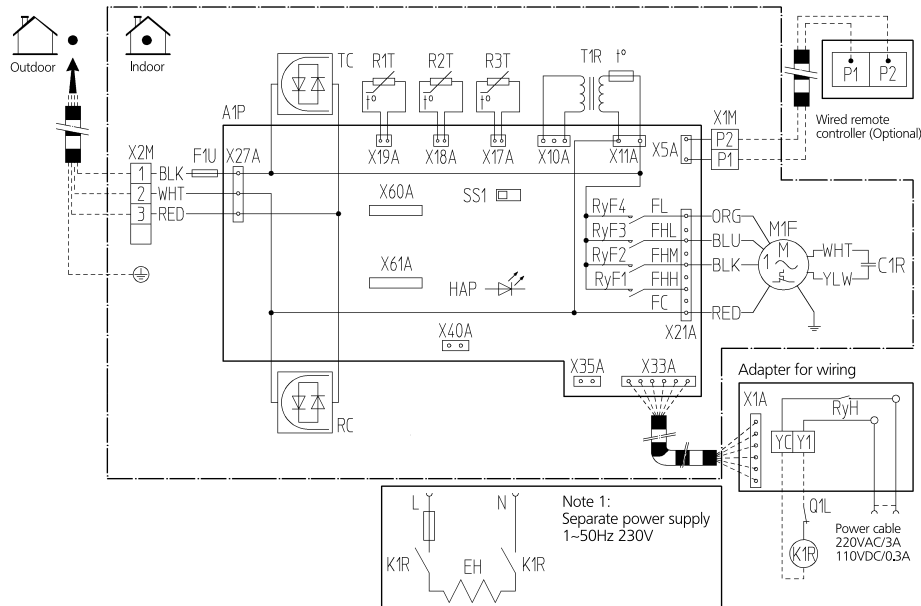


6 Wiring diagrams

6 - 1 Wiring Diagrams - Single Phase

FDBQ25B

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

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

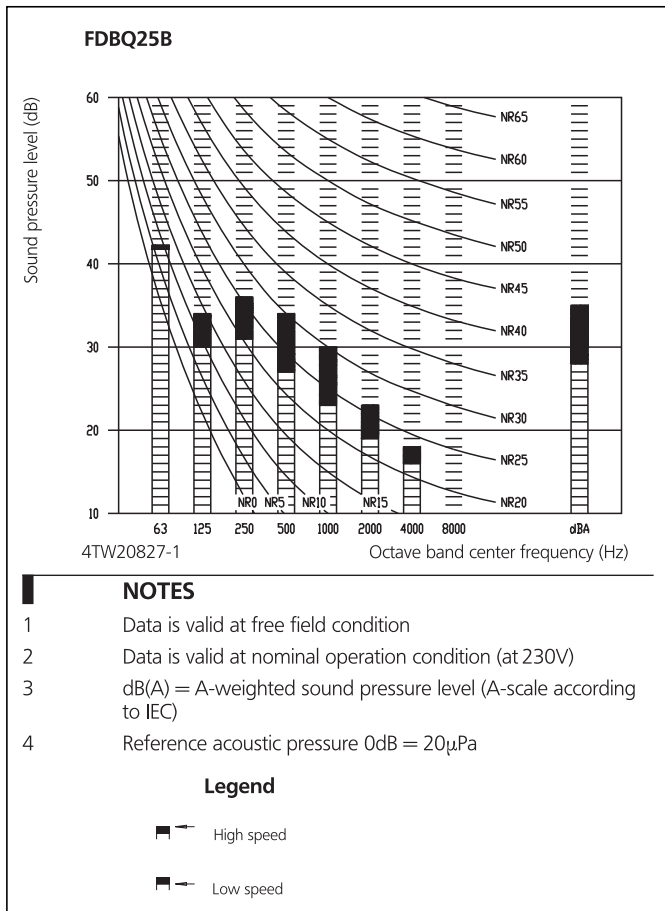
: Field wiring
 : Terminal
 : Connector
 : Wire clamp
 : Protective earth (screw)

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

2TW25856-1B

7 Sound data

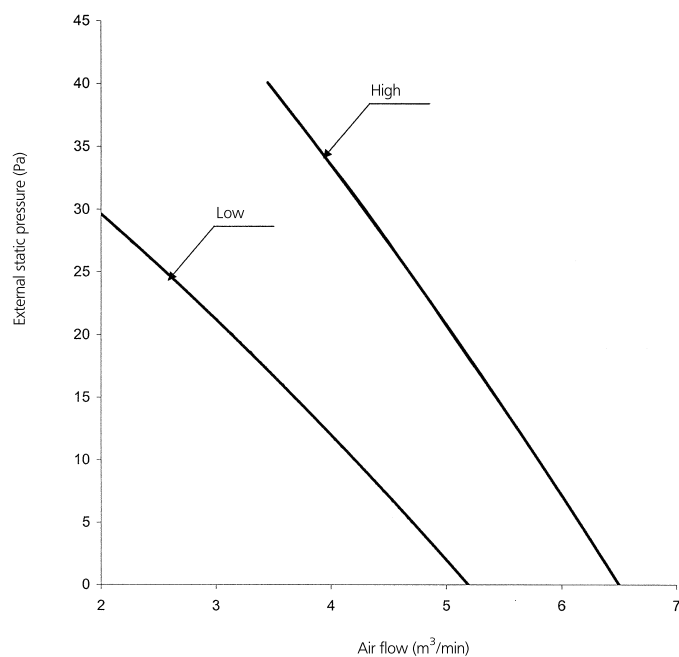
7 - 1 Sound Pressure Spectrum



8 Fan characteristics

8 - 1 Fan Characteristics

FDBQ25B



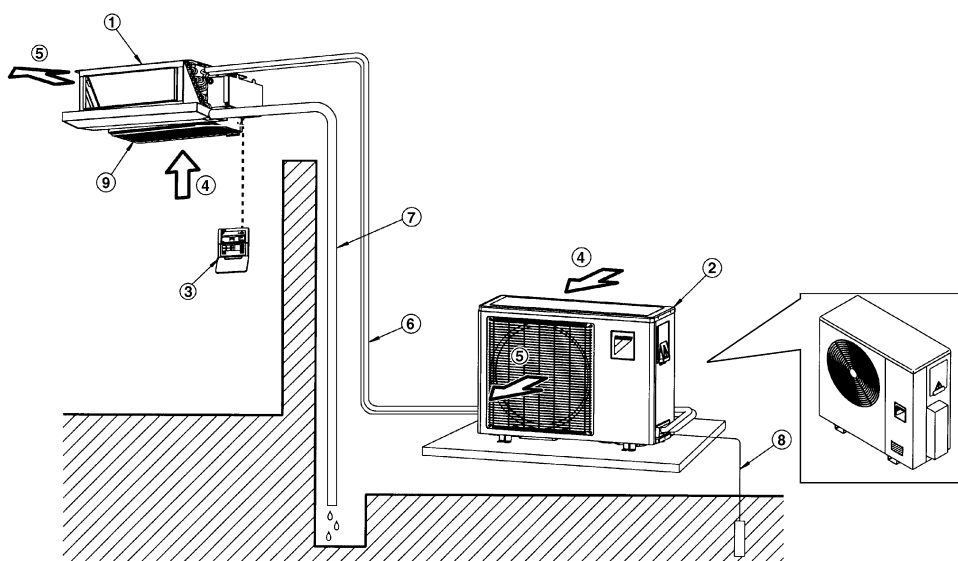
Note: The wired remote control can be used to switch between 'high' and 'low'

4TW25858-1

9 Installation

9 - 1 Installation Method

9



Names and functions of parts

- 1 Indoor unit
- 2 Outdoor unit
- 3 Remote control
- 4 Inlet air
- 5 Discharged air
- 6 Refrigerant piping, connection electric wire
- 7 Drain pipe
- 8 Ground wire
- 9 Suction air filter (optional)



Daikin Europe N.V. Naamloze Vennootschap - Zandvoordestraat 300, B-8400 Oostende - Belgium - www.daikin.eu - BE 0412 120 336 - RPR Oostende



EEDEN18

05/18



Daikin Europe N.V. participates in the Eurovent Certified Performance programme for Liquid Chilling Packages and Hydronic Heat Pumps, Fan Coil Units and Variable Refrigerant Flow systems. Check ongoing validity of certificate: www.eurovent-certification.com



The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V.. Daikin Europe N.V. has compiled the content of this leaflet to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this leaflet. All content is copyrighted by Daikin Europe N.V.