DAIKIN

Sky Air

Air Conditioning Technical Data

FVQ-C



> FVQ71CVEB
> FVQ100CVEB
> FVQ125CVEB
> FVQ140CVEB

TABLE OF CONTENTS

FVQ-C

1 Features 2

2 Specifications 3
Technical Specifications 3
Electrical Specifications 4

3 Safety device settings 5

4 Options 6

5 Dimensional drawings 7

6 Piping diagrams 8

7 Wiring diagrams 9
Wiring Diagrams - Single Phase 9

8 External connection diagrams 10

9 Sound data 11
Sound Pressure Spectrum 11

1 Features

For commercial spaces with high ceilings

- Ideal solution for commercial and busy environments
- Decrease of temperature variation by automatic fan speed selection or freely selectable 3-step fan speed.
- Improved comfort as a result of better airflow distribution from the vertical out blow which allows manual adjustment of air outlet blades at the top of the unit.
- Selectable horizontal out blow to better suit the layout of the room (via wired remote controller BRC1E52)
- No optional adapter needed for DIII-connection, link your unit into the wider building management system.





Infrastructure cooling


Home leave operation


Fan only



Auto cooling-heating changeover


Vertical auto swing


Fan speed steps



Dry programme


Air filter



Weekly timer


Wired remote control


Centralised control



Auto-restart


Self diagnosis

2 Specifications

2-1 Technical Specifications					FVQ71C	FVQ100C	FVQ125C	FVQ140C
Power input	Cooling	Nom.		kW	0.117	0.238		0.276
	Heating	Nom.		kW	0.117	0.238		0.276
Casing	Colour				Fresh White			
Dimensions	Unit	Height/Width/Depth		mm	1,850/600/270	1,850/600/350		
	Packed unit	Height/Width/Depth		mm	1,996/732/389	1,996/732/469		
Weight	Unit			kg	39	47		
	Packed unit			kg	61	70		
Heat exchanger	Inside length			mm	476			
	Rows	Quantity			2	3		
	Fin pitch			mm	1.75			
	Passes	Quantity			6	10	11	
	Face area			m²	0.40	0.22		
	Stages	Quantity			40	22		
	Empty tubeplate hole	Quantity			0	14	4	
	Fin	Type			Cross fin coil (multi louver fins and Hi-XSS tubes)			
Heat exchanger 2	Rows	Quantity			-	3		
	Fin pitch			mm	-	1.75		
	Face area			m²	-	0.22		
	Stages	Quantity			-	22		
Air filter	Type				Resin net with mold resistance			
Fan	Type				Sirocco fan			
	Quantity				1			
	Air flow rate	Cooling	High	m³/min	18	28		30
			Low	m³/min	14	22	24	26
			Nom.	m³/min	16	25	26	28
		Heating	High	m³/min	18	28		30
			Low	m³/min	14	22	24	26
			Nom.	m³/min	16	25	26	28
Fan motor	Model				QS33A1AM			
	Speed	Steps			3			
	Output	High		W	64	152		
Sound power level	Cooling			dBA	55	62	63	65
	Heating			dBA	55	62	63	65
Sound pressure level	Cooling	High/Low		dBA	43/38	50/44	51/46	53/48
	Heating	High/Low		dBA	43/38	50/44	51/46	53/48
Control systems	Wired remote control				BRC1D52 / BRC1E52A/B			
Refrigerant	Type				R-410A			
Piping connections	Liquid	Type/OD		mm	Flare connection/9.52			
	Gas	Type/OD		mm	Flare connection/15.9			
	Drain				I.D. 20/O.D. 26			
	Heat insulation				Foamed polystyrene / Foamed polyethylene			

Standard Accessories : Operation manual;
Standard Accessories : Installation manual;
Standard Accessories : Bracket for installation;
Standard Accessories : Hole protection rubber;
Standard Accessories : Bush;
Standard Accessories : Insulation for fitting;
Standard Accessories : Cover;
Standard Accessories : Clamps;
Standard Accessories : Screws;
Standard Accessories : Installation pattern;
Standard Accessories : Dew proof material;
Standard Accessories : Remote control wiring;

2 Specifications

2-2 Electrical Specifications			FVQ71C	FVQ100C	FVQ125C	FVQ140C
Power supply	Phase		1~			
	Frequency	Hz	50/60			
	Voltage	V	220-240/220			

3 Safety device settings

3 - 1 Safety Device Settings

FVQ-C

Safety devices		71	100	125	140
FVQ~C	Fuse	–	–	–	–
	Fan motor thermal fuse (°C)	–	–	–	–
	Fan motor thermal protector (°C)	–	–	–	–

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4 Options

4 - 1 Options

FVQ-C

Name of option \ Model name		FVQ71 • 100 • 125 • 140CVEB
Replacement long-life filter		KAFJ95L160
Central remote control		DCS302CA51
Unified ON/OFF controller		DCS301BA51
Schedule timer		DST301BA51
I-touch controller		DCS601C51
Remote control	Wired	BRC1E52A7 BRC1E51A7 BRC1D528
Simplified remote control (with operation mode selector button) *2		BRC2E52C7
Simplified remote control (without operation mode selector button) *2		BRC3E52C7
Adapter for wiring *1		KRP1BA57
Wiring adapter for electrical appendices (2) *1		KRP4AA52
Installation box for adapter PCB		KRP4AA95
Digital input adapter *1, *3		BRP7A52

NOTES

*1 Installation box for adapter PCB (KRP4AA95) is necessary.

*2 Included languages are:

Language pack 1: English, German, French, Dutch, Spanish, Italian and Portuguese.

With PC cable EKPCCAB3 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

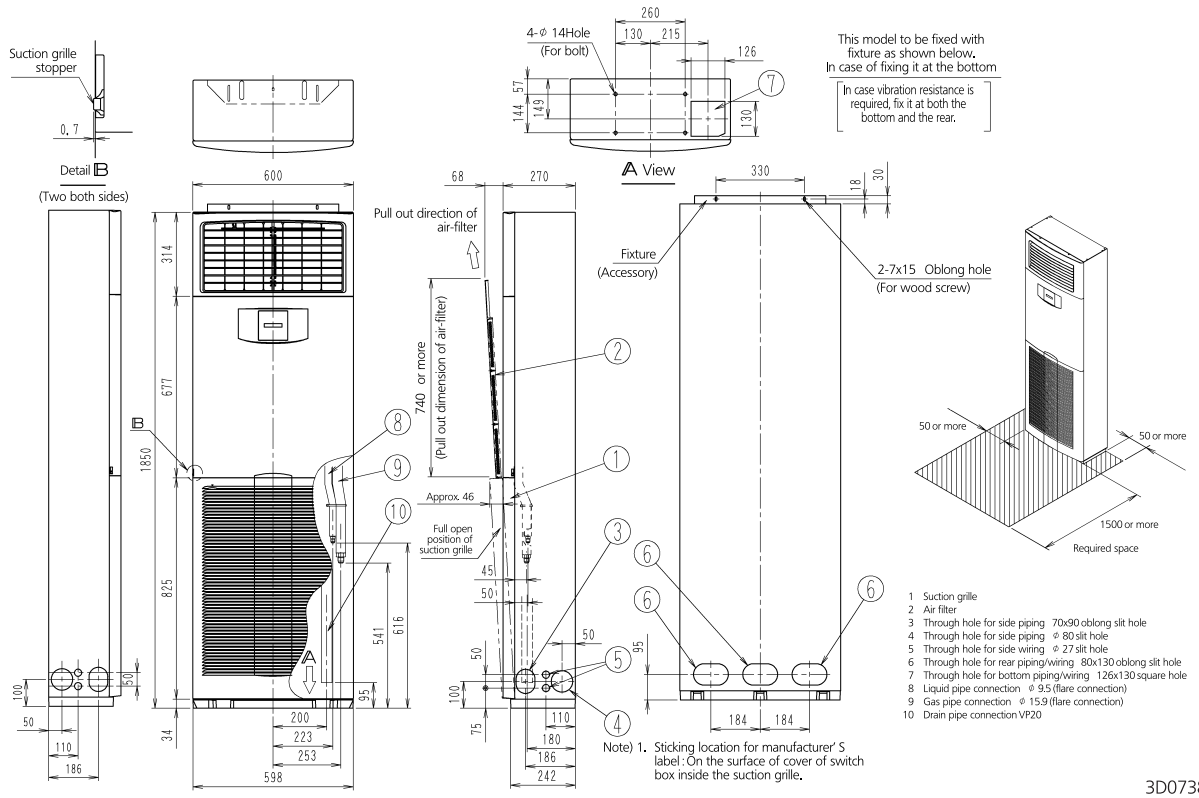
*3 Only possible in combination with simplified remote control BRC2/3E52C7.

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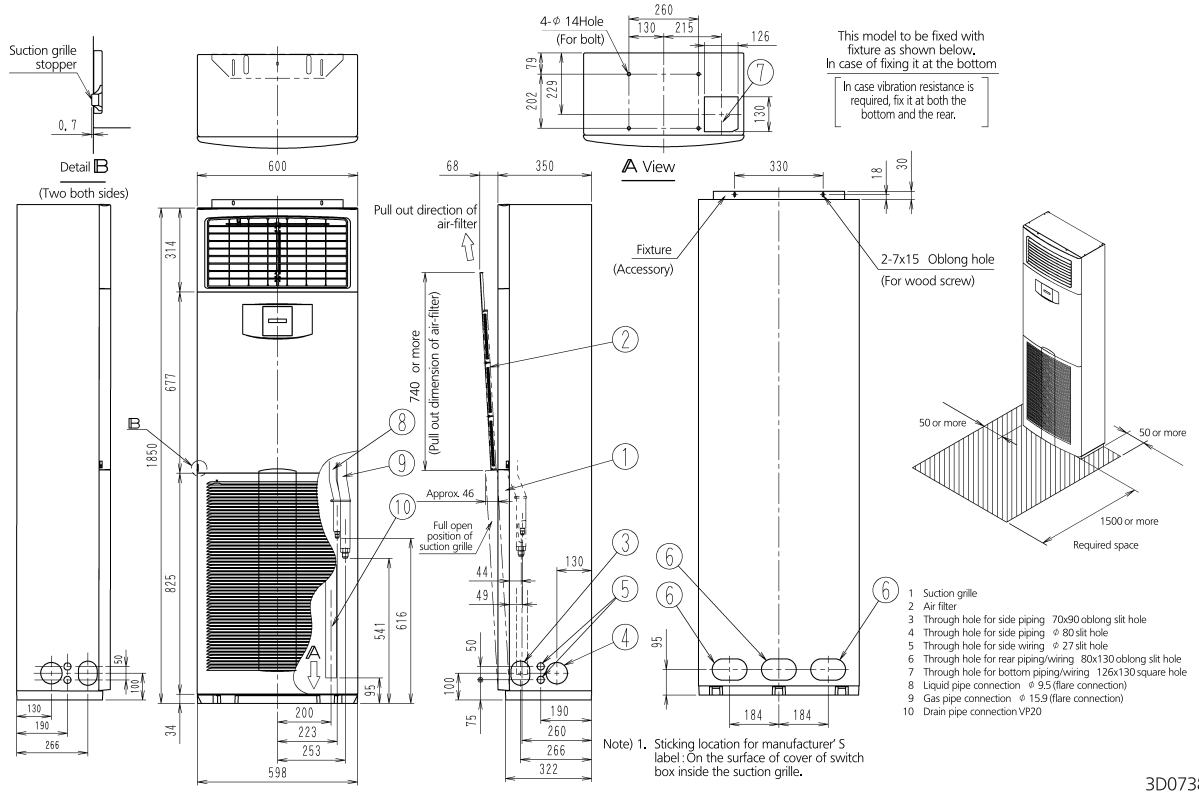
5 Dimensional drawings

5 - 1 Dimensional Drawings

FVQ71C



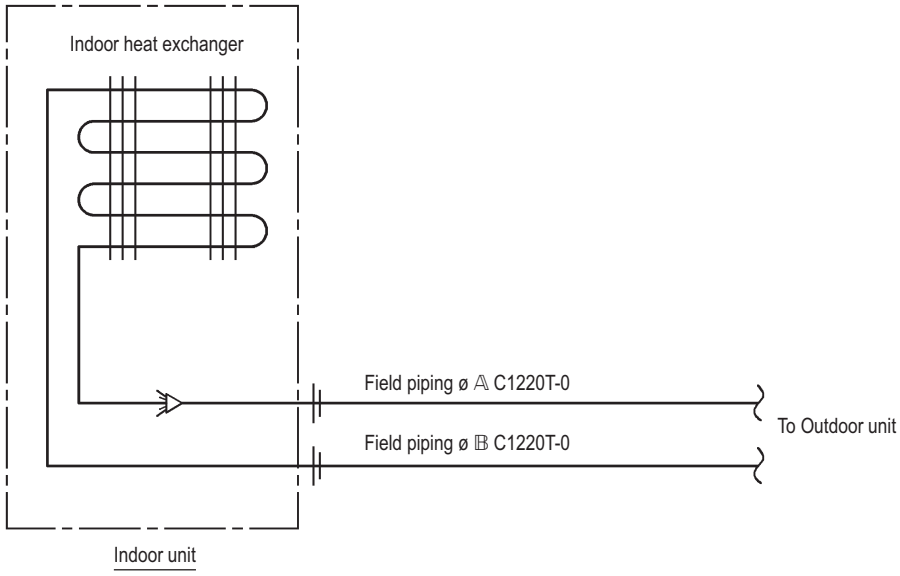
FVQ100-125-140C



6 Piping diagrams

6 - 1 Piping Diagrams

FVQ-C



Model	A	B
FVQ71,100,125,140CVEB	9.5	15.9

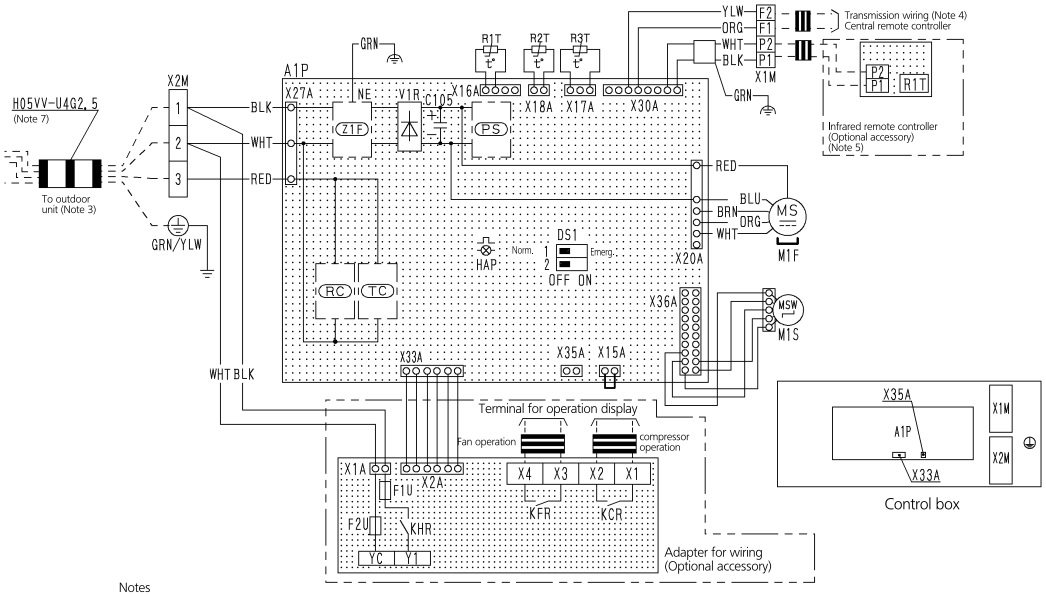
4D037995W

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

FVQ-CVEB

Indoor unit	
A1P	Printed circuit board
C105	Capacitor
HAP	Flashing lamp (service monitor-green)
M1F	Motor (indoor fan)
M1S	Motor (swing flap)
R1T	Thermistor (air)
R2T-R3T	Thermistor (coil)
DS1	Dipswitch on PCB (emergency)
V1R	Diode bridge
X1M	Terminal block (Remote controller)
X2M	Terminal block (Transmission wiring)
Z1F	Noise filter
PS	Switching power supply
RC	Signal receiver circuit
TC	Signal transmission circuit
Wired remote controller	
R1T	Thermistor (air)
Connector for optional parts	
X33A	Connector (Adapter for wiring)
X35A	Connector (Power supply for adapter)
Adapter for wiring	
F1U F2U	Fuse (Ⓔ, 5A, 250V)
KCR	Magnetic relay
KFR	Magnetic relay
KHR	Magnetic relay



Notes

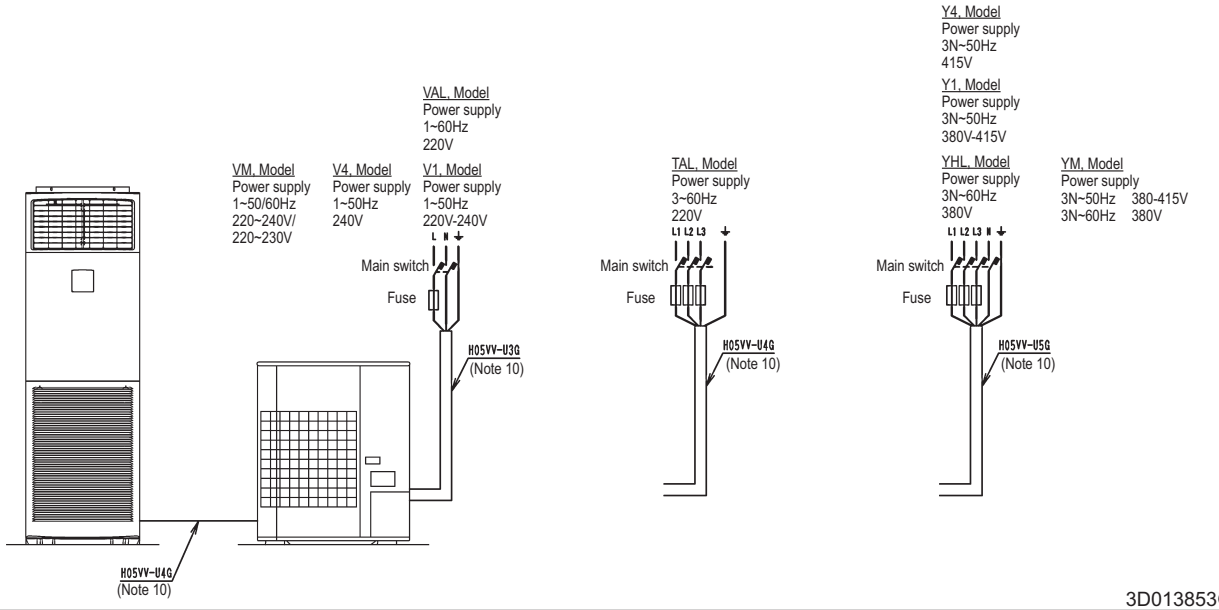
1. ▭▭▭ : Terminal block ⊠ :Connector ⊤ : Short circuit connector
2. ▭▮▭ : Field wiring
3. For the detail, see wiring diagram attached to outdoor unit.
4. In case using central remote controller, connect it to the unit in accordance with the attached installation manual.
5. In case of main/sub changeover, see the installation manual attached to remote controller.
6. Symbols shows as follows: BLK:Black RED:Red BLU:Blue WHT:White PNK:Pink YLW:Yellow GRY:Gray GRN:Green ORG:Orange BRN:Brown
7. Shows only in case of protected pipes, use HO7RN-F in case of no protection.

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8 External connection diagrams

8 - 1 External Connection Diagrams

FVQ-C



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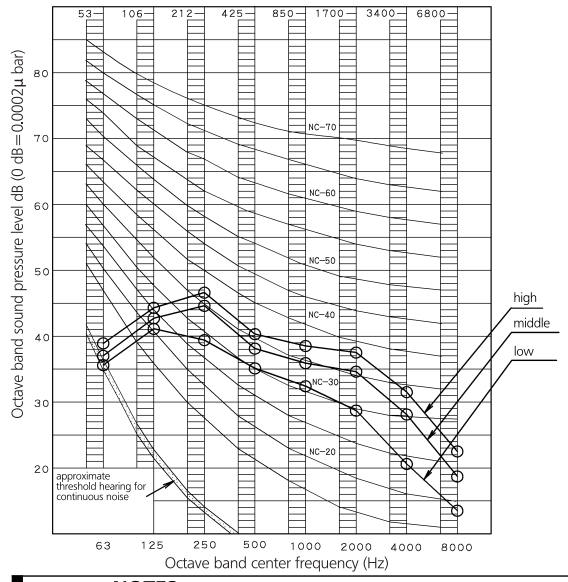
NOTES

1. _____ Line voltage wiring
   _ _ _ _ _ Control circuit wiring
2. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
3. Use copper conductor only.
4. As for details, see wiring diagrams.
5. Install fuse and mainswitch for safety.
6. All field wiring and components must be provided by a licensed electrician.
7. Unit shall be grounded in compliance with the applicable local and national codes.
8. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
9. Never share a common power source with other equipment.
10. Shows only in case of protected pipes.
    Use H07RN-F in case of no protection.

9 Sound data

9 - 1 Sound Pressure Spectrum

FVQ71C



NOTES

1 Overall (dB)

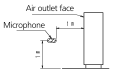
Scale	230V		
	high	middle	low
A	43	41	38
C	48	46	43

(B,G,N is already rectified)

Power level (dB)

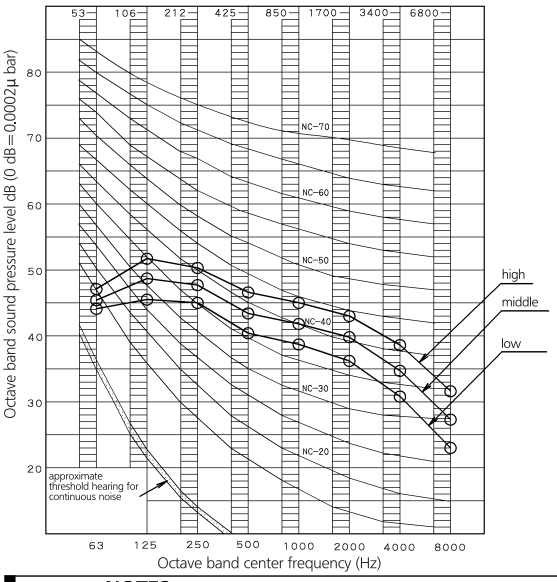
230V		
high	middle	low
55	53	50

2 Measuring place: Anechoic chamber
3 Operation noise differs with operation and ambient conditions.
4 Operating conditions: Power source: 230V 50Hz
5 Cooling: Return air temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB
6 Heating: Return air temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB
○—○ 230V
7 Location of microphone



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FVQ100C



NOTES

1 Overall (dB)

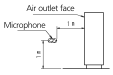
Scale	230V		
	high	middle	low
A	50	47	44
C	55	52	50

(B,G,N is already rectified)

Power level (dB)

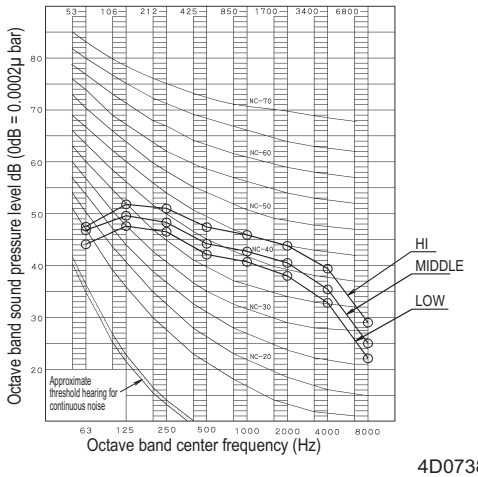
230V		
high	middle	low
62	59	56

2 Measuring place: Anechoic chamber
3 Operation noise differs with operation and ambient conditions.
4 Operating conditions: Power source: 230V 50Hz
5 Cooling: Return air temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB
6 Heating: Return air temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB
○—○ 230V
7 Location of microphone



4D073852

FVQ125C



4D073853A

NOTES

Overall (dB)

Scale	230V		
	HI	MIDDLE	LOW
A	51	48	46
C	56	53	52

(B, G, N is already rectified)

Power level (dB)

230V		
HI	MIDDLE	LOW
63	60	58

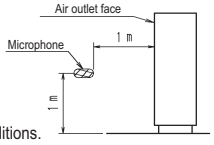
Operating conditions

Power source 230V 50Hz

Cooling	Return air temperature: 27 °C DB, 19 °C WB Outdoor temperature: 35 °C DB, 24 °C WB
Heating	Return air temperature: 20 °C DB, 15 °C WB Outdoor temperature: 7 °C DB, 6 °C WB

○—○ 230V

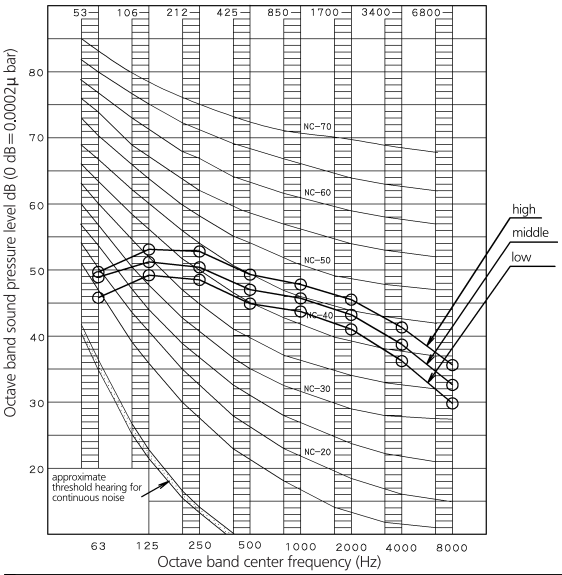
Location of microphone



Measuring place
Anechoic chamber

Operation noise differs with operation and ambient conditions.

FVQ140C



NOTES

1 Overall (dB)

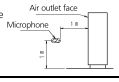
Scale	230V		
	high	middle	low
A	53	51	48
C	58	56	54

(B,G,N is already rectified)

Power level (dB)

230V		
high	middle	low
65	63	60

2 Measuring place: Anechoic chamber
3 Operation noise differs with operation and ambient conditions.
4 Operating conditions: Power source: 230V 50Hz
5 Cooling: Return air temperature: 27°C DB, 19°C WB
Outdoor temperature: 35°C DB, 24°C WB
6 Heating: Return air temperature: 20°C DB, 15°C WB
Outdoor temperature: 7°C DB, 6°C WB
○—○ 230V
7 Location of microphone



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