

# FXUQ-AVEB

## 4-Way Flow Ceiling Suspended Type

### 60 Hz

1. Lineup.....	2
2. Specifications .....	3
3. Dimensions.....	4
4. Piping Diagrams .....	5
5. Wiring Diagrams.....	6
6. Electric Characteristics .....	7
7. Safety Devices Setting .....	8
8. Capacity Tables.....	9
8.1 Cooling Capacity for Te: Auto .....	9
8.2 Cooling Capacity for Te: 6°C .....	9
8.3 Heating Capacity.....	9
9. Sound Levels.....	10

# 1. Lineup

Capacity range	8.0 kW	11.2 kW
	3 HP	4 HP
Capacity index	71	100
FXUQ	71AVEB	100AVEB

VEB : 1 phase, 220-240/220-230 V, 50/60 Hz



## 2. Specifications

Model			FXUQ71AVEB	FXUQ100AVEB	
Power supply			1 phase, 220-240/220-230 V, 50/60 Hz	1 phase, 220-240/220-230 V, 50/60 Hz	
★1 ★3 Cooling capacity		kcal/h	6,900	9,600	
		Btu/h	27,300	38,200	
		kW	8.0	11.2	
★2 ★3 Heating capacity		kcal/h	7,700	10,800	
		Btu/h	30,700	42,700	
		kW	9.0	12.5	
Power input	Cooling	50 Hz	kW	0.090	0.200
		60 Hz	kW	0.090	0.200
	Heating	50 Hz	kW	0.073	0.179
		60 Hz	kW	0.073	0.179
Casing / Colour			Fresh white	Fresh white	
Dimensions: (H×W×D)		mm	198×950×950	198×950×950	
Coil (Cross fin coil)	Rows × Stages × Fin pitch	mm	3×10×1.2	3×10×1.2	
	Face area	m <sup>2</sup>	0.330	0.330	
Fan	Model		QTS48D11M	QTS48D11M	
	Type		Turbo fan	Turbo fan	
	Motor output × Number of units	W	46×1	106×1	
	Airflow rate (H/M/L)	m <sup>3</sup> /min	22.5/19.5/16	31/26/21	
		l/s	375/325/267	517/433/350	
		cfm	794/688/565	1,094/918/741	
Drive		Direct drive	Direct drive		
Temperature control			Microprocessor thermostat for cooling and heating	Microprocessor thermostat for cooling and heating	
Insulation	Heat insulation		Heat resistant foamed polyethylene / Regular foamed polyethylene	Heat resistant foamed polyethylene / Regular foamed polyethylene	
Air filter			Resin net (with mould resistance)	Resin net (with mould resistance)	
Piping connections	Liquid pipes	mm	φ9.5 (Flare connection)	φ9.5 (Flare connection)	
	Gas pipes	mm	φ15.9 (Flare connection)	φ15.9 (Flare connection)	
	Drain pipe	mm	VP20 (External dia. 26, Internal dia. 20)	VP20 (External dia. 26, Internal dia. 20)	
Mass		kg	26	27	
★4 Sound pressure level (H/M/L)		dB(A)	40/38/36	47/44/40	
Safety devices			Fuse	Fuse	
Standard accessories			Operation manual, Installation manual, Declaration of conformity, Drain hose, Metal clamp, Washer for hanger, Clamp, Washer clamp, Joint insulating material, Sealing material, Elbow, Installation pattern paper, Blocking material, L-bent piping, Screw, Non woven fabric	Operation manual, Installation manual, Declaration of conformity, Drain hose, Metal clamp, Washer for hanger, Clamp, Washer clamp, Joint insulating material, Sealing material, Elbow, Installation pattern paper, Blocking material, L-bent piping, Screw, Non woven fabric	
Drawing No.	Specification		C: 4D080137	C: 4D080137	
	Sound level		C: 4D080130	C: 4D080131	

### Notes:

- ★1. Indoor temp.: 27°CDB, 19°CWB / outdoor temp.: 35°CDB / Equivalent piping length: 7.5 m, level difference: 0 m.
- ★2. Indoor temp.: 20°CDB / outdoor temp.: 7°CDB, 6°CWB / Equivalent piping length: 7.5 m, level difference: 0 m.
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4. Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

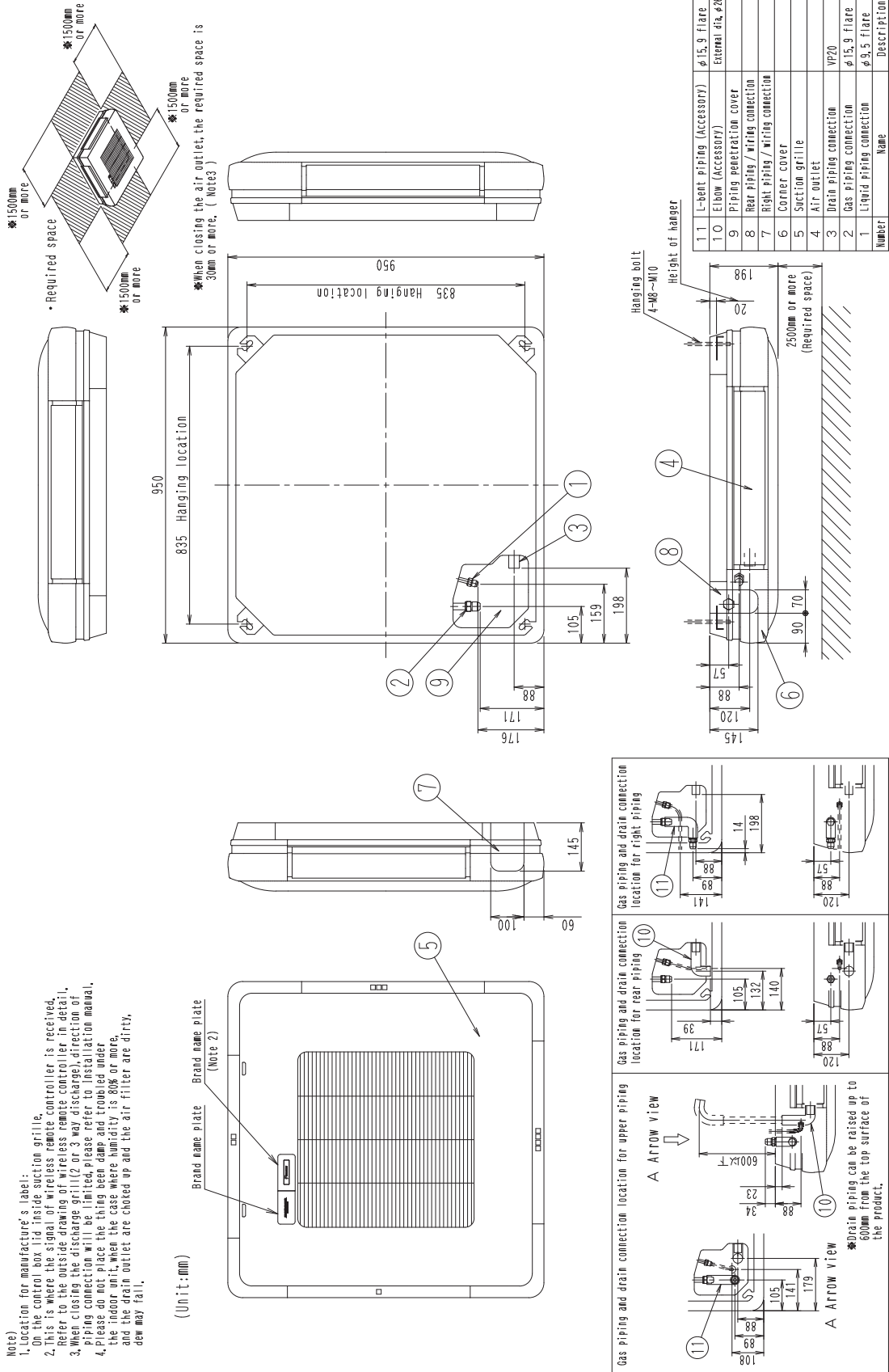
### Conversion formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \\ \text{l/s} &= \text{m}^3/\text{min} \times 1000/60 \end{aligned}$$

### 3. Dimensions

#### FXUQ71AVEB / FXUQ100AVEB

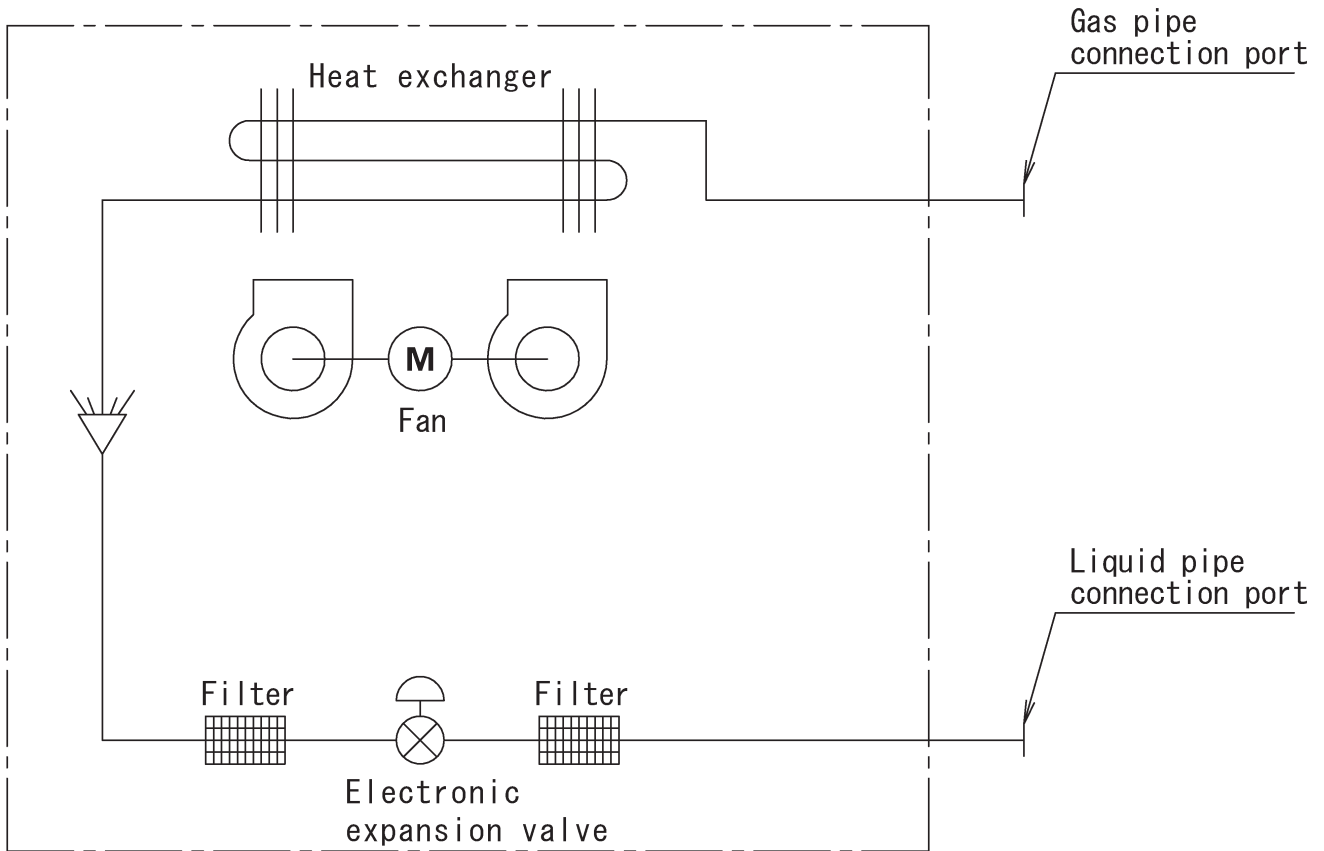
Unit: mm



3D080135

### 4. Piping Diagrams

#### FXUQ71AVEB / FXUQ100AVEB



#### APPLICABLE MODEL

- FXC, FXM, FXL, FXN
- FXH, FXK, FXS, FJSP
- CBXLS, FXSP, FXCP
- FZSP, FXNP, FJNP
- FHQ, FXA, FXMQ, FBQ
- FXAQ, FXSP~BA, FAQ, FCQ
- FZSP~BA (N), FSSP~BA,
- FQSP~BAN, FXUQ, FZCP, FZAP
- FXSQ~PV2S, FXSQ~T, FXSP~CA (N)
- FZSP~CA (N), FQSP~CAN
- FSSP~CA, FXSFP~AA, FSSFP~AA

4D034245R

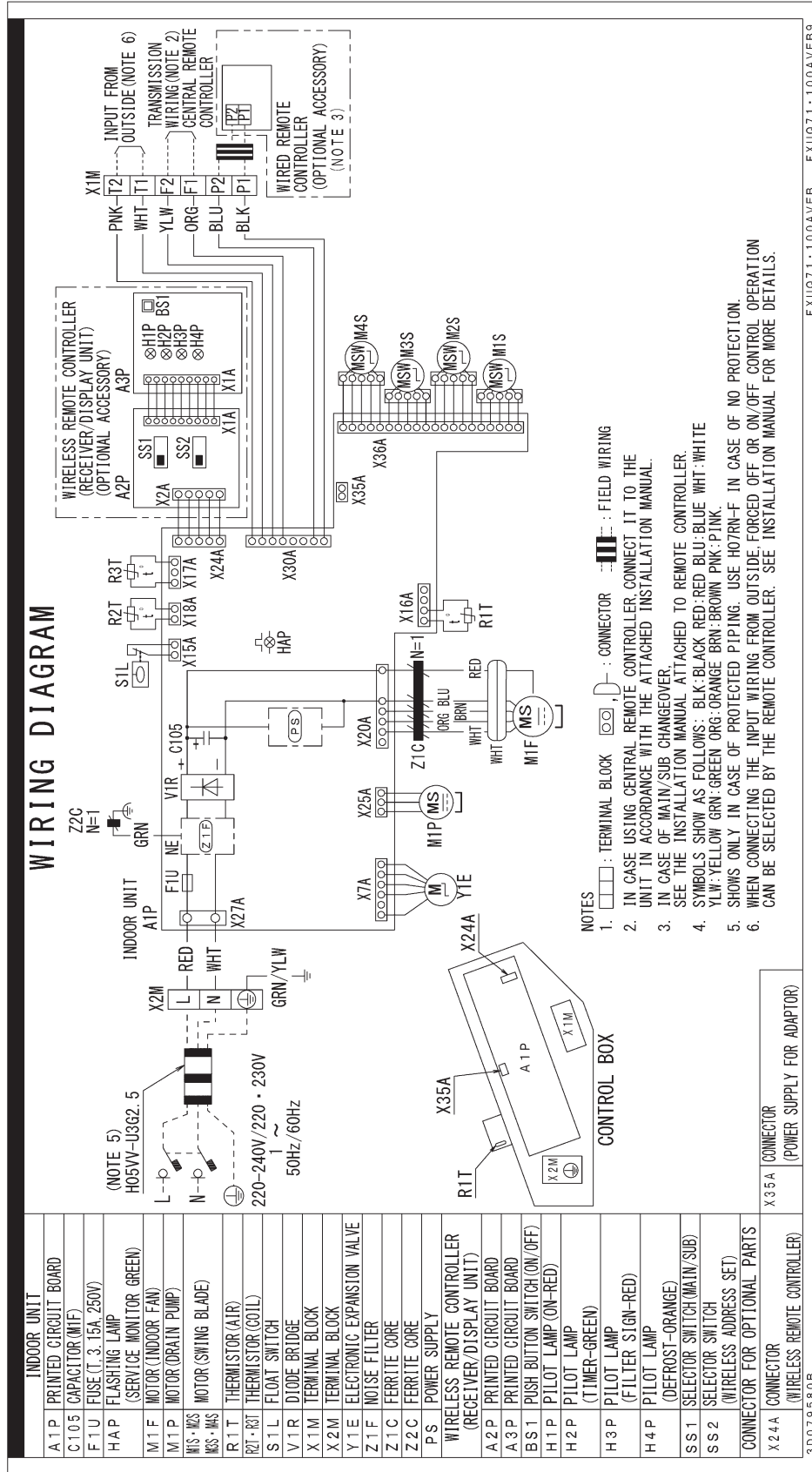
#### ■ Refrigerant pipe connection port diameters

Unit: mm

Model	Gas	Liquid
FXUQ71AVEB / FXUQ100AVEB	φ15.9	φ9.5

# 5. Wiring Diagrams

## FXUQ71AVEB / FXUQ100AVEB



3D079580B

## 6. Electric Characteristics

### FXUQ71AVEB / FXUQ100AVEB

Model	Units			Power supply		IFM		Input(W)	
	Hz	Volts	Voltage range	MCA	MFA	kW	FLA	Cooling	Heating
FXUQ71AVEB	50	220-240	Max. 264	0.6	16	0.046	0.5	90	73
FXUQ100AVEB	60	220•230	Min. 198	1.4	16	0.106	1.1	200	179

Symbols :

- MCA : Min. Circuit Amps(A)
- MFA : Max. Fuse Amps (A) (See note 5)
- kW : Fan Motor Rated Output(kW)
- FLA : Full Load Amps(A)
- IFM : Indoor Fan Motor

Note :

1. Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,
2. Maximum allowable voltage unbalance between phases is 2%.
3. MCA/MFA  
 $MCA = 1.25 \times FLA$   
 $MFA \leq 4 \times FLA$   
 (Next lower standard fuse rating. Min. 16A)
4. Select wiring size based on the MCA.
5. Instead of fuse, use Circuit Breaker.

Minimum Ssc value	kVA	EN61000-3-2 is applied.
-------------------	-----	-------------------------

## 7. Safety Devices Setting

Model		FXUQ71AVEB	FXUQ100AVEB
Fuse		250 V, 3.15 A	250 V, 3.15 A
Fan motor thermal fuse	°C	–	–
Fan motor thermal protector	°C	–	–

4D013856M



## 8. Capacity Tables

### 8.1 Cooling Capacity for Te: Auto

Model	Capacity indication	Indoor air temp.													
		14°CWB		16°CWB		18°CWB		19°CWB		20°CWB		22°CWB		24°CWB	
		20°CDB		23°CDB		26°CDB		27°CDB		28°CDB		30°CDB		32°CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
FXUQ71AVEB	71	7.1	5.8	7.5	6.3	7.9	6.5	8.0	6.0	8.1	5.9	8.3	5.7	8.4	5.6
FXUQ100AVEB	100	9.9	8.0	10.5	8.4	11.0	8.7	11.2	8.1	11.3	7.9	11.6	7.7	11.8	7.4

TC: Total capacity: kW  
 SHC: Sensible heat capacity: kW

**Notes:**

1. These capacity tables are for use when selecting a **VRV** indoor unit. The actual capacity of the **VRV** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the **VRV** system satisfies the required heat load.
2.  shows rated condition.

### 8.2 Cooling Capacity for Te: 6°C

Model	Capacity indication	Indoor air temp.													
		14°CWB		16°CWB		18°CWB		19°CWB		20°CWB		22°CWB		24°CWB	
		20°CDB		23°CDB		26°CDB		27°CDB		28°CDB		30°CDB		32°CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
FXUQ71AVEB	71	5.4	4.6	6.4	5.2	7.5	5.9	8.0	6.0	8.4	6.1	8.6	5.9	8.8	5.8
FXUQ100AVEB	100	7.6	6.1	9.0	7.0	10.5	7.9	11.2	8.1	11.3	7.9	11.6	7.7	11.9	7.4

TC: Total capacity: kW  
 SHC: Sensible heat capacity: kW

**Notes:**

1. These capacity tables are for use when selecting a **VRV** indoor unit. The actual capacity of the **VRV** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the **VRV** system satisfies the required heat load.
2.  shows rated condition.

### 8.3 Heating Capacity

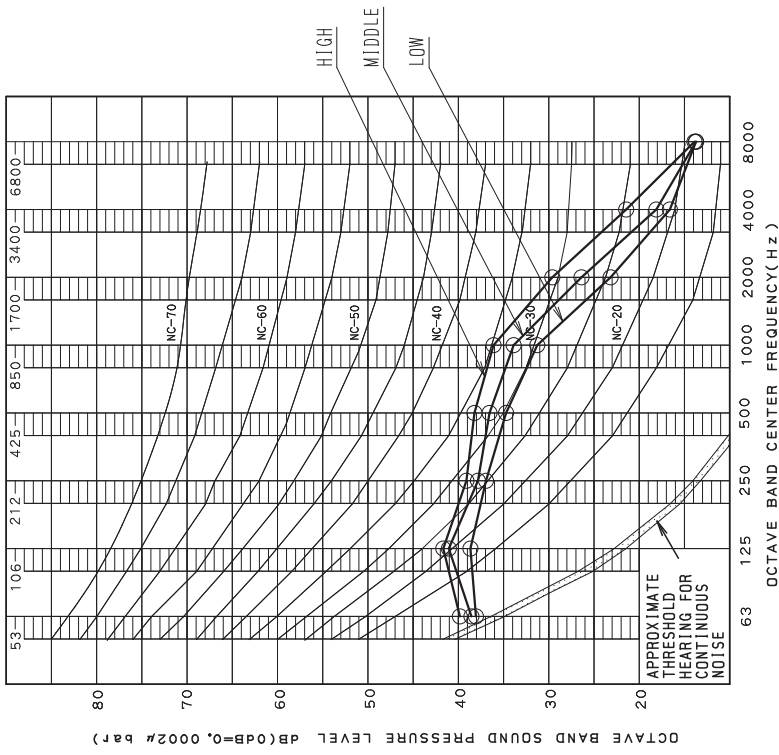
Model	Capacity indication	Indoor air temp.					
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB
		kW	kW	kW	kW	kW	kW
FXUQ71AVEB	71	9.5	9.4	9.0	8.7	8.4	7.9
FXUQ100AVEB	100	13.1	13.1	12.5	12.1	11.7	10.9

**Notes:**

1. These capacity tables are for use when selecting a **VRV** indoor unit. The actual capacity of the **VRV** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the **VRV** system satisfies the required heat load.
2.  shows rated condition.

# 9. Sound Levels

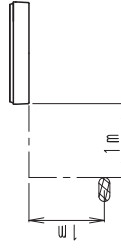
## FXUQ71AVEB



OPERATING CONDITIONS

POWER SOURCE	220-240V 50Hz/220 - 230V 60Hz
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

LOCATION OF MICROPHONE



OVER ALL ( dB )

SCALE	MODE		
	HIGH	MIDDLE	LOW
A	40.0	38.0	36.0
C	46.1	44.9	43.3

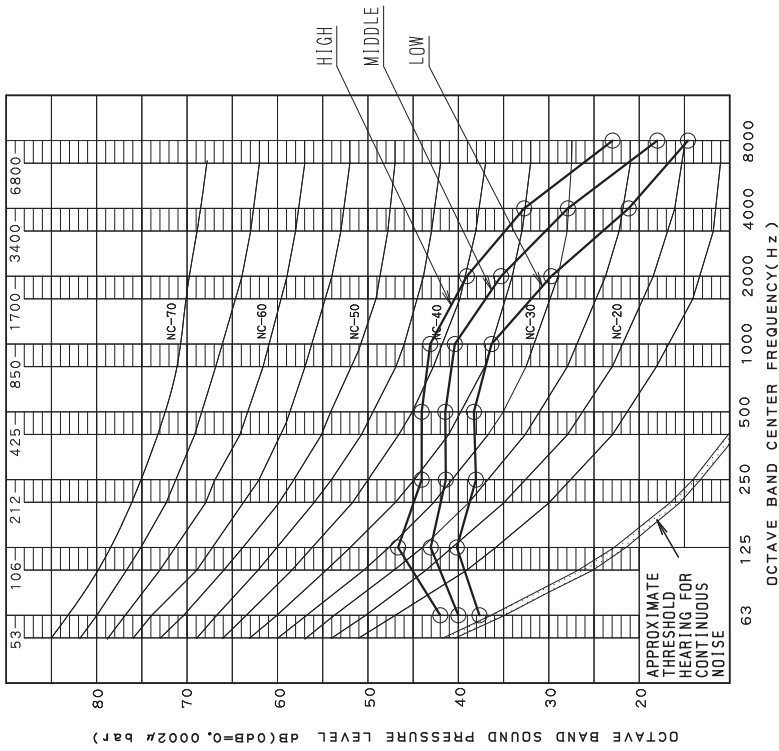
(B, G, N IS ALREADY RECTIFIED)

MEASURING PLACE  
ANECHOIC CHAMBER

NOTE: Operation noise differs with operation and ambient conditions.

4D080130

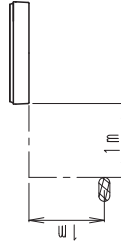
## FXUQ100AVEB



OPERATING CONDITIONS

POWER SOURCE	220-240V 50Hz/220 - 230V 60Hz
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

LOCATION OF MICROPHONE



OVER ALL ( dB )

SCALE	MODE		
	HIGH	MIDDLE	LOW
A	47.0	44.0	40.0
C	51.2	48.4	45.2

(B, G, N IS ALREADY RECTIFIED)

MEASURING PLACE  
ANECHOIC CHAMBER

NOTE: Operation noise differs with operation and ambient conditions.

4D080131