

FXHQ-MAVE

Ceiling Suspended Type

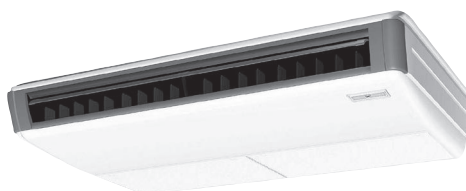
60 Hz

1. Lineup.....	2
2. Specifications	3
3. Dimensions.....	5
4. Piping Diagrams	8
5. Wiring Diagrams.....	9
6. Electric Characteristics	10
7. Safety Devices Setting	11
8. Capacity Tables.....	12
8.1 Cooling Capacity for Te: Auto	12
8.2 Cooling Capacity for Te: 6°C	12
8.3 Heating Capacity.....	12
9. Sound Levels.....	13

1. Lineup

Capacity range	3.6 kW	7.1 kW	11.2 kW
	1.25 HP	2.5 HP	4 HP
Capacity index	31.25	62.5	100
FXHQ	32MAVE	63MAVE	100MAVE

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



2. Specifications

Model				FXHQ32MAVE		FXHQ63MAVE	
Power supply				1 phase, 220-240/220 V, 50/60 Hz		1 phase, 220-240/220 V, 50/60 Hz	
★1 ★3 Cooling capacity			kcal/h	3,100		6,100	
			Btu/h	12,300		24,200	
			kW	3.6		7.1	
★2 ★3 Heating capacity			kcal/h	3,400		6,900	
			Btu/h	13,600		27,300	
			kW	4.0		8.0	
Power input	Cooling	50 Hz	kW	0.111		0.115	
		60 Hz	kW	0.142		0.145	
	Heating	50 Hz	kW	0.111		0.115	
		60 Hz	kW	0.142		0.145	
Casing / Colour				White (10Y9/0.5)		White (10Y9/0.5)	
Dimensions: (H×W×D)			mm	195×960×680		195×1,160×680	
Coil (Cross fin coil)	Rows × Stages × Fin pitch		mm	2×12×1.75		3×12×1.75	
	Face area		m ²	0.182		0.233	
Fan	Model			3D12K1AA1		4D12K1AA1	
	Type			Sirocco fan		Sirocco fan	
	Motor output × Number of units		W	62×1		62×1	
	Airflow rate (H/L)		m ³ /min	12/10		17.5/14	
			l/s	200/166		291/233	
			cfm	424/353		618/494	
Drive			Direct drive		Direct drive		
Temperature control				Microprocessor thermostat for cooling and heating		Microprocessor thermostat for cooling and heating	
Sound absorbing thermal insulation material				Glass wool		Glass wool	
Air filter				Resin net (with mold resistant)		Resin net (with mold resistant)	
Piping Connections	Liquid pipes		mm	φ6.4 (Flare connection)		φ9.5 (Flare connection)	
	Gas pipes		mm	φ12.7 (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	24		28	
★4 Sound pressure level (H/L)			dB(A)	36/31		39/34	
Safety devices				Fuse, Thermal protector for fan motor		Fuse, Thermal protector for fan motor	
Refrigerant control				Electronic expansion valve		Electronic expansion valve	
Standard accessories				Operation manual, Installation manual, Drain hose, Paper pattern for installation, Clamp metal, Insulation for fitting, Clamps, Washers		Operation manual, Installation manual, Drain hose, Paper pattern for installation, Clamp metal, Insulation for fitting, Clamps, Washers	
Drawing No.	Specification			C: 3D038815A		C: 3D038815A	
	Sound level			C: 4D035301		C: 4D035302	

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

kcal/h=kW×860
 Btu/h=kW×3412
 cfm=m³/min×35.3
 l/s=m³/min×1000/60

Model				FXHQ100MAVE	
Power supply				1 phase, 220-240/220 V, 50/60 Hz	
★1 ★3 Cooling capacity			kcal/h	9,600	
			Btu/h	38,200	
			kW	11.2	
★2 ★3 Heating capacity			kcal/h	10,800	
			Btu/h	42,700	
			kW	12.5	
Power input	Cooling	50 Hz	kW	0.135	
		60 Hz	kW	0.199	
	Heating	50 Hz	kW	0.135	
		60 Hz	kW	0.199	
Casing / Colour				White (10Y9/0.5)	
Dimensions: (H×W×D)			mm	195×1,400×680	
Coil (Cross fin coil)	Rows × Stages × Fin pitch		mm	3×12×1.75	
	Face area		m ²	0.293	
Fan	Model			3D12K2AA1	
	Type			Sirocco fan	
	Motor output × Number of units		W	130×1	
	Airflow rate (H/L)			m ³ /min	25/19.5
				l/s	416/325
				cfm	883/688
	Drive			Direct drive	
Temperature control				Microprocessor thermostat for cooling and heating	
Sound absorbing thermal insulation material				Glass wool	
Air filter				Resin net (with mold resistant)	
Piping Connections	Liquid pipes		mm	φ9.5 (Flare connection)	
	Gas pipes		mm	φ15.9 (Flare connection)	
	Drain pipe		mm	VP20 (External dia. 26, Internal dia. 20)	
Mass			kg	33	
★4 Sound pressure level (H/L)			dB(A)	45/37	
Safety devices				Fuse, Thermal protector for fan motor	
Refrigerant control				Electronic expansion valve	
Standard accessories				Operation manual, Installation manual, Drain hose, Paper pattern for installation, Clamp metal, Insulation for fitting, Clamps, Washers	
Drawing No.	Specification			C: 3D038815A	
	Sound level			C: 4D035303A	

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.

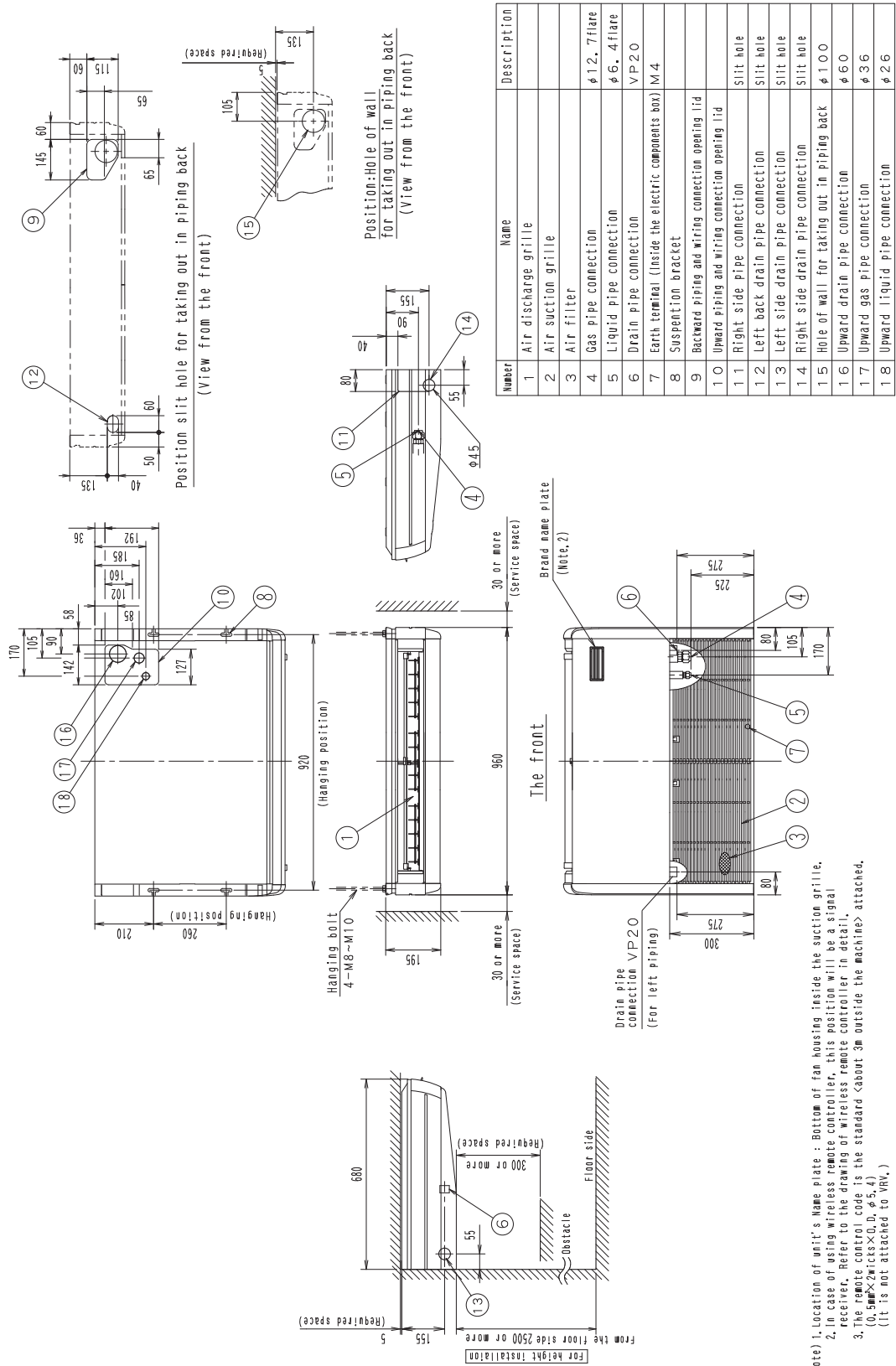
Conversion formulae

kcal/h=kW×860
Btu/h=kW×3412
cfm=m³/min×35.3
l/s=m³/min×1000/60

3. Dimensions

FXHQ32MAVE

Unit: mm

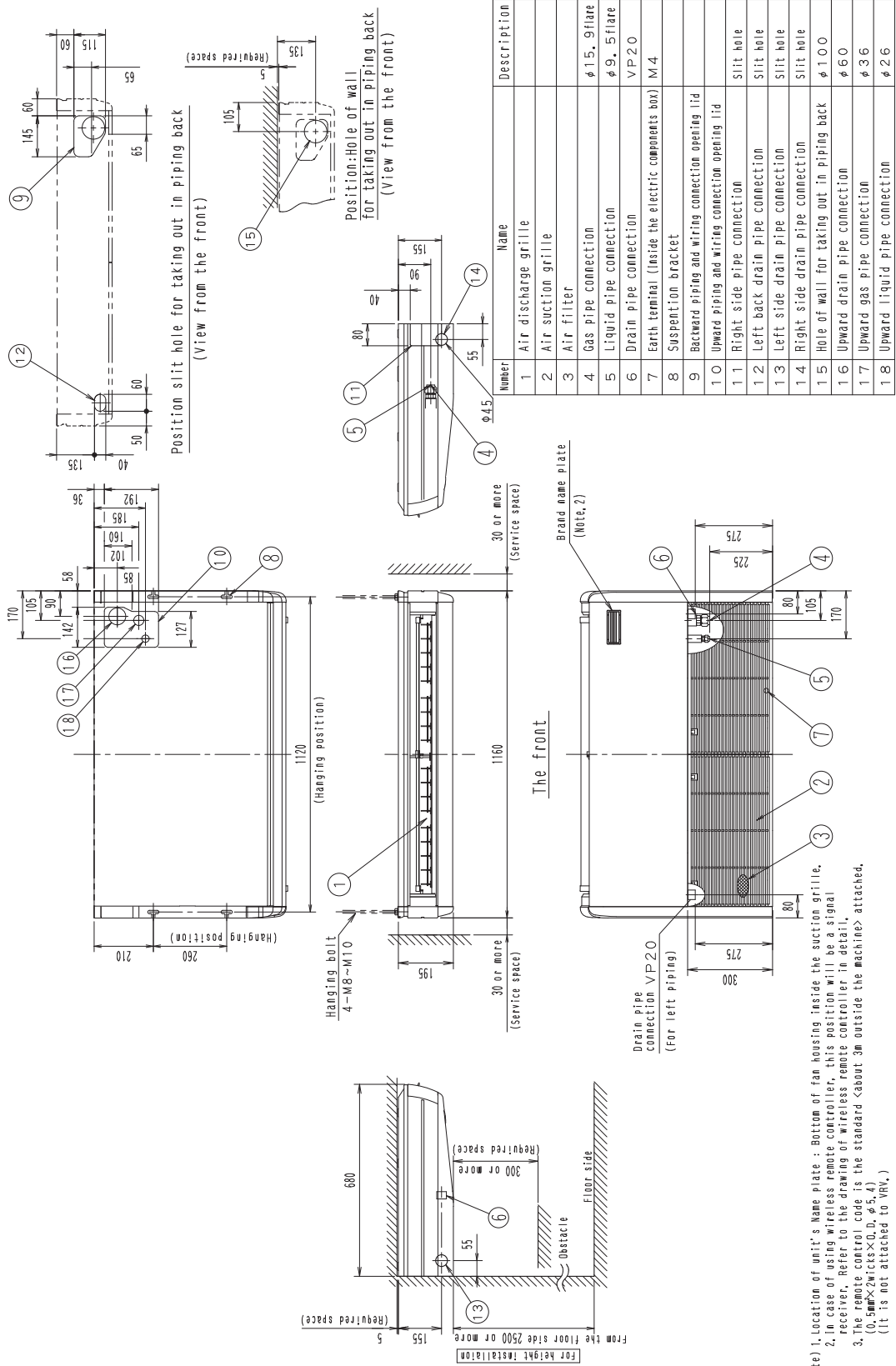


Note) 1. Location of unit's Name plate : Bottom of fan housing inside the suction grille.
2. In case of using wireless remote controller, this position will be a signal receiver. Refer to the drawing of wireless remote controller in detail.
3. The remote control code is the standard <about 3m outside the machine> attached. (0.5mm×2micks×0.D, $\phi 5.4$) (It is not attached to VRV.)

3D038855A

FXHQ63MAVE

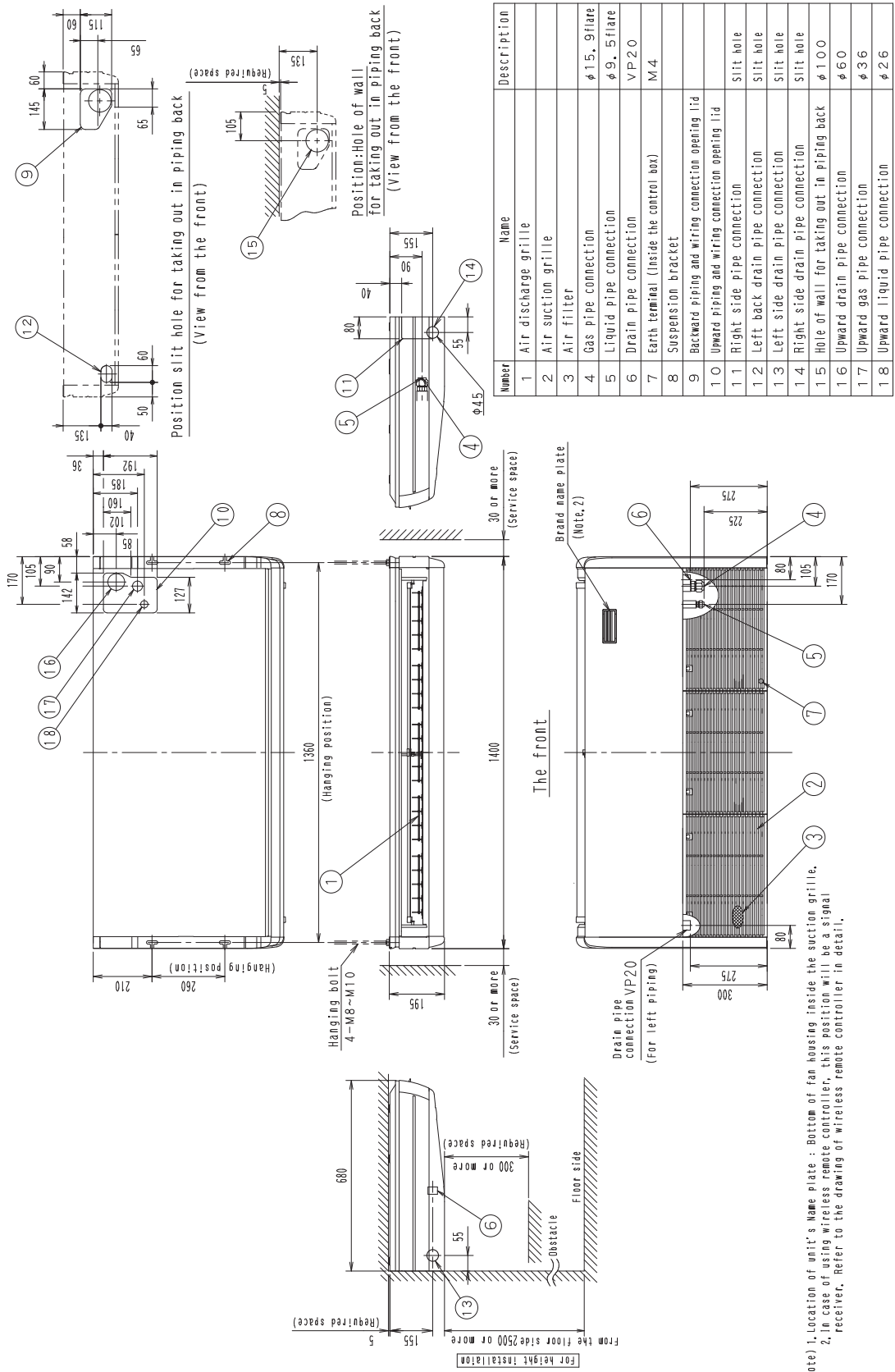
Unit: mm



3D038856A

FXHQ100MAVE

Unit: mm

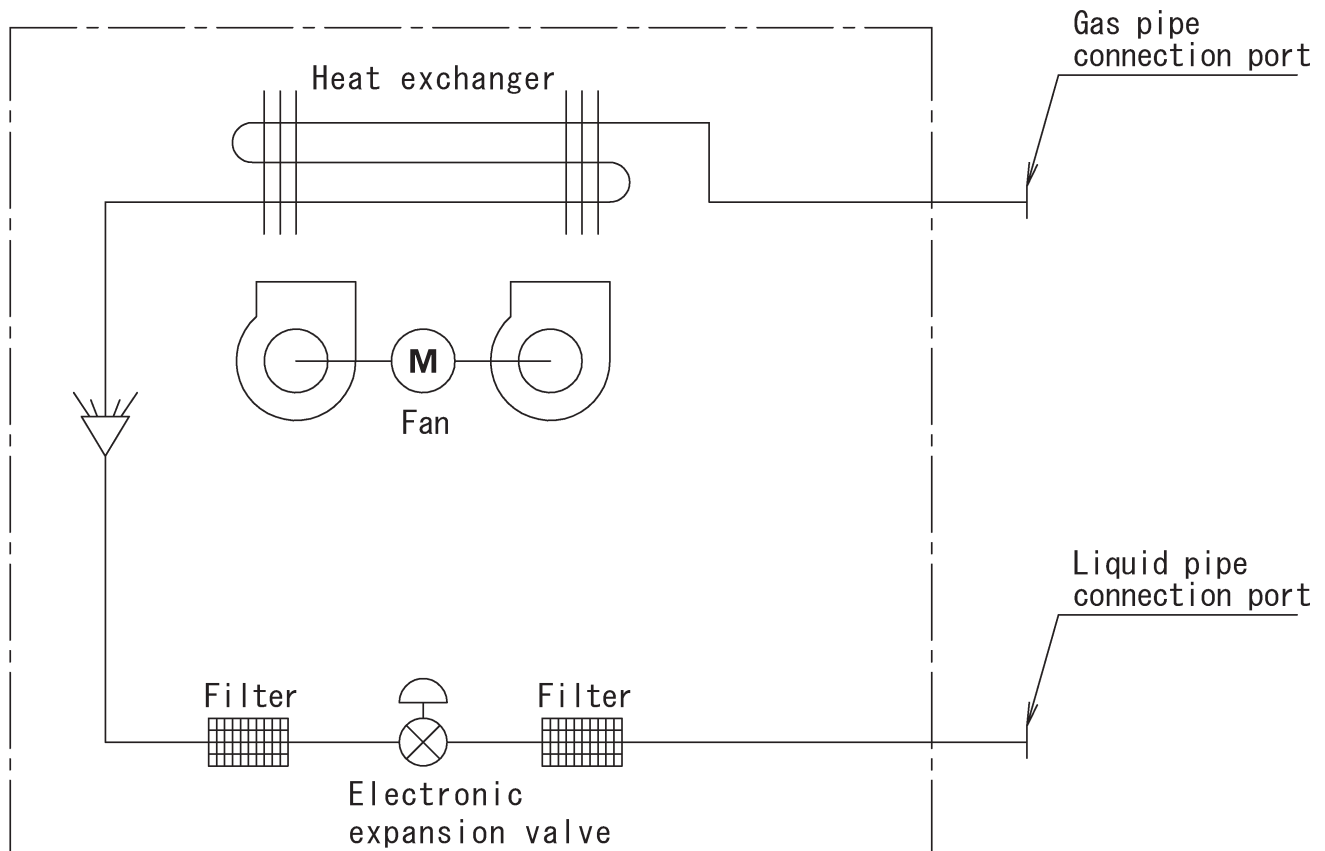


Note) 1. Location of unit's Name plate : Bottom of fan housing inside the suction grille.
2. In case of using wireless remote controller, this position will be a signal receiver. Refer to the drawing of wireless remote controller in detail.

3D038857C

4. Piping Diagrams

FXHQ32MAVE / FXHQ63MAVE / FXHQ100MAVE



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

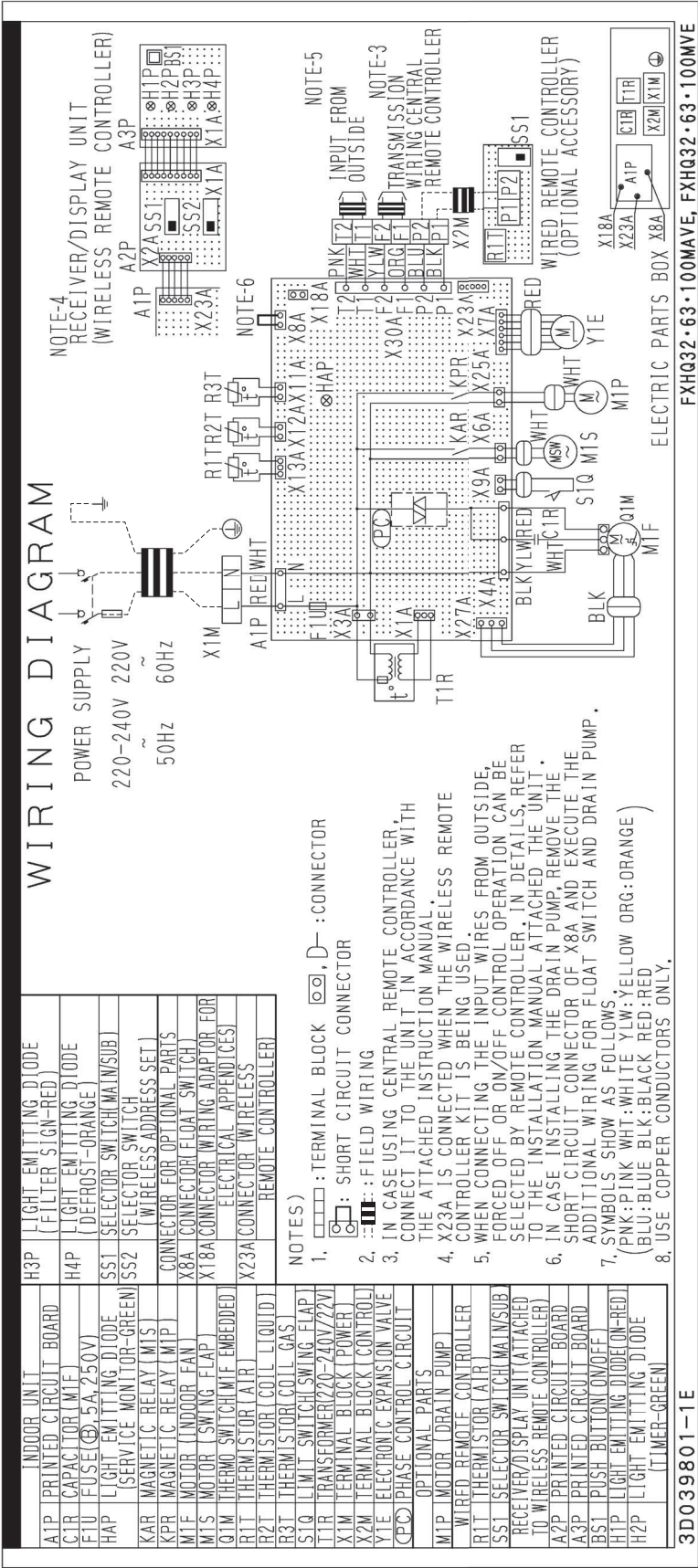
■ Refrigerant pipe connection port diameters

Unit: mm

Model	Gas	Liquid
FXHQ32MAVE	φ12.7	φ6.4
FXHQ63MAVE / FXHQ100MAVE	φ15.9	φ9.5

5. Wiring Diagrams

FXHQ32MAVE / FXHQ63MAVE / FXHQ100MAVE



6. Electric Characteristics

FXHQ32MAVE / FXHQ63MAVE / FXHQ100MAVE

Model	Units			Power supply		IFM		Input(W)	
	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXHQ32MAVE	50	220-240	MAX. 264 Min. 198	0.8	15	0.062	0.6	111	111
FXHQ63MAVE				0.8	15	0.062	0.6	115	115
FXHQ100MAVE				0.9	15	0.130	0.7	135	135
FXHQ32MAVE	60	220	MAX. 242 Min. 198	0.9	15	0.062	0.7	142	142
FXHQ63MAVE				0.9	15	0.062	0.7	145	145
FXHQ100MAVE				1.3	15	0.130	1.0	199	199

Symbols :

MCA : Min. Circuit Amps (A)
 MFA : Max. Fuse Amps (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. 15A)

4. Select wire size based on the MCA.

5. Instead of fuse, use Circuit Breaker.

7. Safety Devices Setting

Model		FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE
PCB fuse		250 V, 5 A	250 V, 5 A	250 V, 5 A
Fan motor thermal protector	°C	OFF: 130±5 ON : 80±20	OFF: 130±5 ON : 80±20	OFF: 130±5 ON : 80±20

C: 3D034597P

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
FXHQ32MAVE	32	3.2	2.8	3.4	3.1	3.5	3.1	3.6	2.9	3.6	2.6	3.7	2.7	3.8	2.6
FXHQ63MAVE	63	6.3	4.9	6.7	5.3	7.0	5.5	7.1	5.2	7.2	5.1	7.3	4.9	7.5	4.6
FXHQ100MAVE	100	9.9	7.5	10.5	8.0	11.0	8.4	11.2	8.0	11.3	7.8	11.6	7.4	11.8	7.2

TC: Total capacity: kW

SHC: Sensible heat capacity: kW

Notes:

- 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.
- ☐ 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
FXHQ32MAVE	32	2.4	2.3	2.9	2.6	3.4	2.8	3.6	2.9	3.6	2.6	3.7	2.7	3.8	2.6
FXHQ63MAVE	63	4.8	4.1	5.7	4.6	6.6	5.1	7.1	5.2	7.2	5.1	7.4	4.9	7.5	4.6
FXHQ100MAVE	100	7.6	6.2	9.0	6.9	10.5	7.8	11.2	8.0	11.3	7.8	11.6	7.4	11.9	7.2

TC: Total capacity: kW

SHC: Sensible heat capacity: kW

Notes:

- 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.
- ☐ shows rated condition.

8.3 Heating Capacity

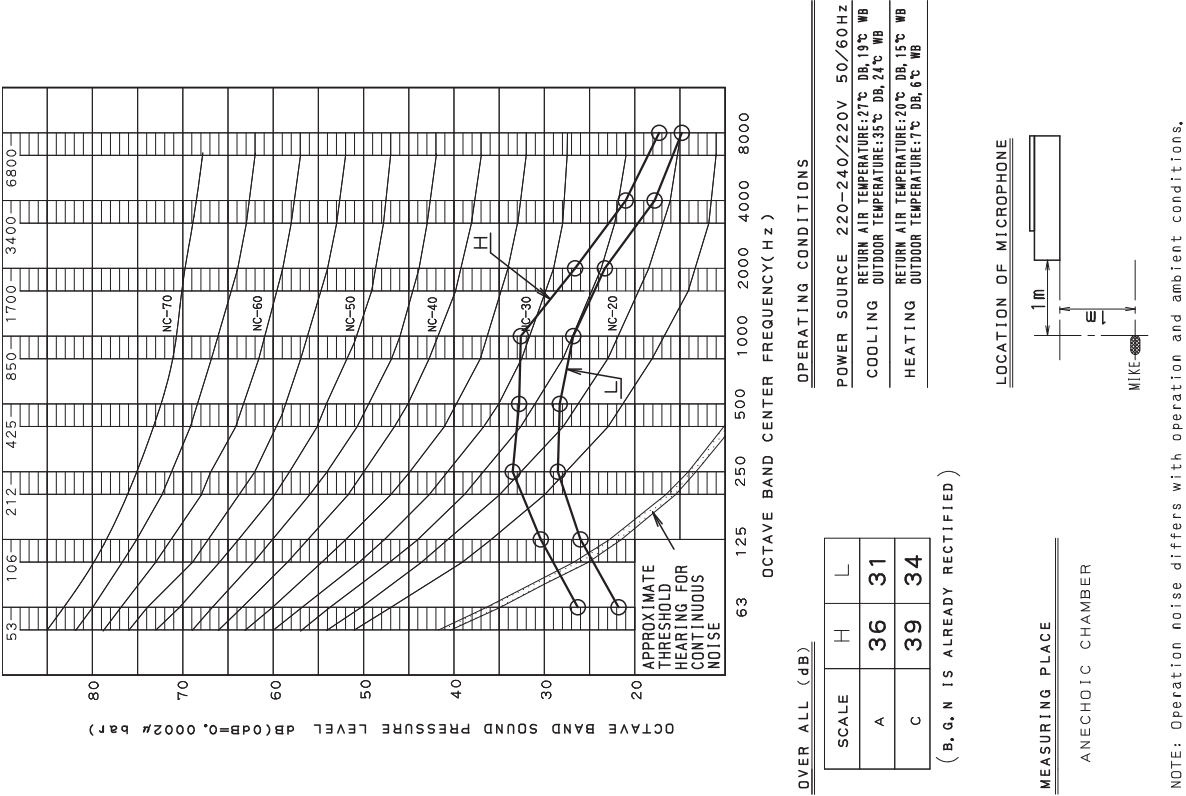
Model	Capacity indication	Indoor air temp.					
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB
		kW	kW	kW	kW	kW	kW
FXHQ32MAVE	32	4.2	4.2	4.0	3.9	3.7	3.5
FXHQ63MAVE	63	8.4	8.4	8.0	7.7	7.5	7.0
FXHQ100MAVE	100	13.1	13.1	12.5	12.1	11.7	10.9

Notes:

- 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.
- ☐ shows rated condition.

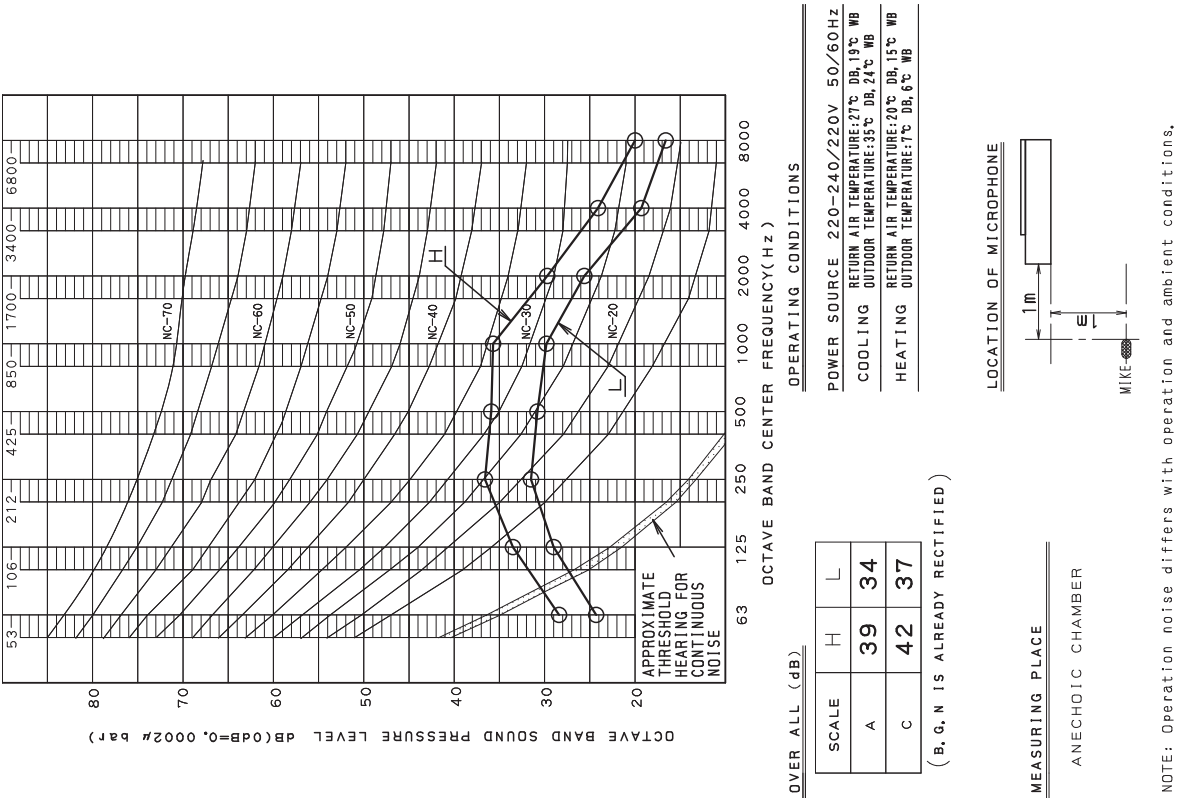
9. Sound Levels

FXHQ32MAVE



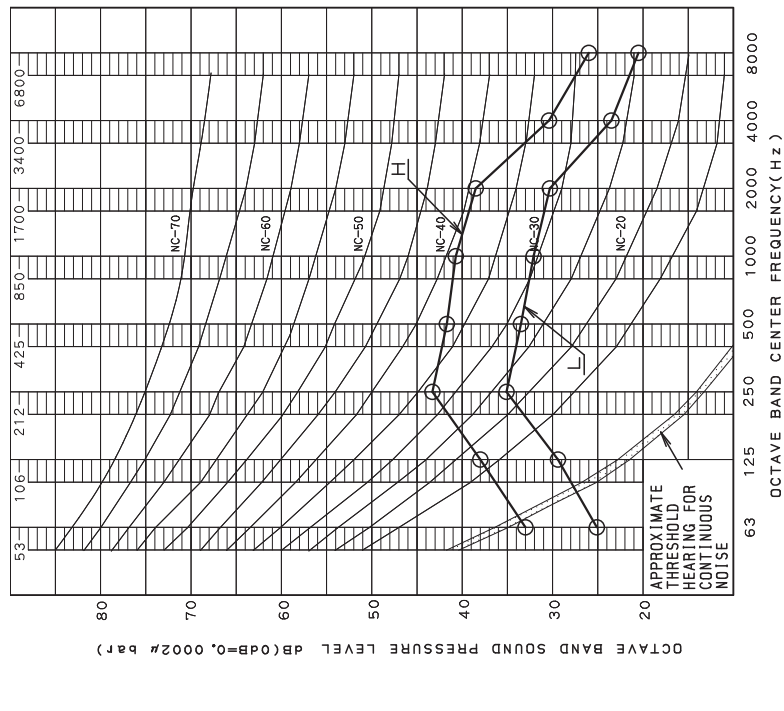
4D035301

FXHQ63MAVE



4D035302

FXHQ100MAVE



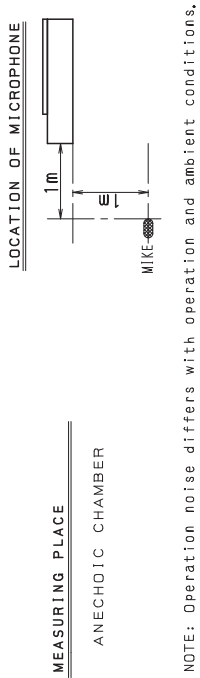
OVER ALL (dB)

SCALE	H	L
A	45	37
C	47	40

(B, G, N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE	220-240/220V 50/60HZ
RETURN AIR TEMPERATURE:	27℃ DB, 19℃ WB
COOLING OUTDOOR TEMPERATURE:	35℃ DB, 24℃ WB
RETURN AIR TEMPERATURE:	20℃ DB, 15℃ WB
HEATING OUTDOOR TEMPERATURE:	7℃ DB, 6℃ WB



4D035303A