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FXAQ-MAVE9

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1 Specifications

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1-1 TECHNICAL SPECIFICATIONS				FXAQ20MAVE9	FXAQ25MAVE9	FXAQ32MAVE9	FXAQ40MAVE9	FXAQ50MAVE9	FXAQ63MAVE9
Capacity	Cooling	kW		2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kW		2.5	3.2	4.0	5.0	6.3	8.0
Power Input (50Hz)	Cooling	kW		0.016	0.022	0.027	0.020	0.027	0.050
	Heating	kW		0.024	0.027	0.032	0.020	0.032	0.060
Power Input (60Hz)	Cooling	kW		0.016	0.022	0.027	0.020	0.027	0.050
	Heating	kW		0.024	0.027	0.032	0.020	0.032	0.060
Casing	Colour			white (3.0Y8.5/0.5)					
Dimensions	Unit	Height	mm	290	290	290	290	290	290
		Width	mm	795	795	795	1,050	1,050	1,050
		Depth	mm	230	230	230	230	230	230
Weight	Unit		kg	11	11	11	14	14	14
Heat Exchanger	Dimensions	Nr of Rows		2	2	2	2	2	2
		Fin Pitch	mm	1.40	1.40	1.40	1.40	1.40	1.40
		Face Area	m ²	0.161	0.161	0.161	0.213	0.213	0.213
		Nr of Stages		14	14	14	14	14	14
Fan	Type			Cross flow fan					
	Quantity			1	1	1	1		
Cooling	High	m ³ /min		7.5	8	9	12	15	19
	Low	m ³ /min		4.5	5	5.5	9	12	14
Fan	Motor	Quantity		1	1	1	1	1	1
		Model		OCL9661M	OCL9661M	OCL9661M	OCL9686M	OCL9686M	OCL9686M
		Output (high)	W	40	40	40	43	43	43
		Drive			Direct drive				
Refrigerant	Name			R-410A					
Cooling	Sound Pressure	High	dBA	35.0	36.0	37.0	39.0	42.0	46.0
		Low	dBA	29.0	29.0	29.0	34.0	36.0	39.0
Piping connections	Liquid (OD)	Type		Flare connection					
		Diameter	mm	6.35	6.35	6.35	6.35	6.35	9.52
	Gas	Type		Flare connection					
		Diameter	mm	12.7	12.7	12.7	12.7	12.7	15.9
	Drain	Diameter		VP13 (I.D. 13/O.D. 18)					
Heat Insulation			Foamed polystyrene/foamed polyethylene						
Air Filter				Washable resin net					
Refrigerant control				Electronic expansion valve					
Temperature control				Microprocessor thermostat for cooling and heating					
Safety devices				PC board fuse					
Standard Accessories	Standard Accessories			Installation and operation manual					
				Installation panel					
				Paper pattern for installation					
				Insulation tape					
				Clamps					
				Screws					
Notes				Nominal cooling capacities are based on : indoor temperature : 27×CDB, 19×CWB, outdoor temperature : 35×CDB, equivalent refrigerant piping : 5m (horizontal)					
				Nominal heating capacities are based on : indoor temperature : 20×CDB, outdoor temperature : 7×CDB, 6×CWB, equivalent refrigerant piping : 5m (horizontal)					
				Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.					

1-2 ELECTRICAL SPECIFICATIONS (50HZ)				FXAQ20MAVE9	FXAQ25MAVE9	FXAQ32MAVE9	FXAQ40MAVE9	FXAQ50MAVE9	FXAQ63MAVE9
Power Supply	Name			VE					
	Phase			1~					
	Frequency	Hz		50	50	50	50	50	50
	Voltage		V		220-240				

1 Specifications

1-2 ELECTRICAL SPECIFICATIONS (50HZ)			FXAQ20MAVE9	FXAQ25MAVE9	FXAQ32MAVE9	FXAQ40MAVE9	FXAQ50MAVE9	FXAQ63MAVE9
Current	Z-max	List	No requirements					
	Minimum circuit amps (MCA)	A	0.3	0.4	0.4	0.4	0.4	0.6
	Maximum fuse amps (MFA)	A	15	15	15	15	15	15
	Full load amps (FLA)	A	0.2	0.3	0.3	0.3	0.3	0.5
Voltage range	Minimum	V	-10%					
	Maximum	V	+10%					
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.					
			Maximum allowable voltage range variation between phases is 2%.					
			MCA/MFA : MCA = 1.25 x FLA					
			MFA is smaller than or equal to 4 x FLA					
			Next lower standard fuse rating minimum 15A					
			Select wire size based on the MCA					
			Instead of a fuse, use a circuit breaker					

1-3 ELECTRICAL SPECIFICATIONS (60HZ)			FXAQ20MAVE9	FXAQ25MAVE9	FXAQ32MAVE9	FXAQ40MAVE9	FXAQ50MAVE9	FXAQ63MAVE9
Power Supply	Name		VE					
	Phase		1~					
	Frequency	Hz	60	60	60	60	60	60
	Voltage	V	220	220	220	220	220	220
Current	Z-max	List	No requirements					
	Minimum circuit amps (MCA)	A	0.3	0.3	0.4	0.4	0.4	0.6
	Maximum fuse amps (MFA)	A	15	15	15	15	15	15
	Full load amps (FLA)	A	0.2	0.2	0.3	0.3	0.3	0.5
Voltage range	Minimum	V	-10%					
	Maximum	V	+10%					
Notes			Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.					
			Maximum allowable voltage range variation between phases is 2%.					
			MCA/MFA : MCA = 1.25 x FLA					
			MFA is smaller than or equal to 4 x FLA					
			Next lower standard fuse rating minimum 15A					
			Select wire size based on the MCA					
			Instead of a fuse, use a circuit breaker					

2 Safety device settings

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	FXAQ20MV	FXAQ25MV	FXAQ32MV	FXAQ40MV	FXAQ50MV	FXAQ63MV
PC BOARD FUSE	250V 3A					
4D034906F						

3 Options

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	FXAQ20MV	FXAQ25MV	FXAQ32MV	FXAQ40MV	FXAQ50MV	FXAQ63MV
DRAIN PUMP KIT	K-KDU572CVE					

ED39-226B

4 Control systems

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Individual control systems

		FXAQ20MV	FXAQ25MV	FXAQ32MV	FXAQ40MV	FXAQ50MV	FXAQ63MV
Wired remote control		BRC1D52					
Infrared remote control	Heat pump	BRC7E618					
	Cooling only	BRC7E619					

Centralised control systems

		FXAQ20MV	FXAQ25MV	FXAQ32MV	FXAQ40MV	FXAQ50MV	FXAQ63MV
Remote control		DCS302C51					
Unified on/off control		DCS301B51					
Schedule timer		DST301B51					

Others

		FXAQ20MV	FXAQ25MV	FXAQ32MV	FXAQ40MV	FXAQ50MV	FXAQ63MV
Wiring adapter for electrical appendices (1)		KRP2A51#					
Wiring adapter for electrical appendices (2)		KRP4A51#					
Installation box for adapter PCB (2) (3)		KRP4A93					
Remote sensor		KRCS01-1					
Electrical box with earth terminal (3 blocks)		KJB311A					
Electrical box with earth terminal (2 blocks)		KJB212A					
Noise filter (for electromagnetic interface use only)		KEK26-1					
External control adapter for outdoor units (installation on indoor unit)		DTA104A61#					
Adapter for multi tenant		DTA114A61					

3D023974L

NOTES

- 1 Installation box is necessary for each adapter marked with #
- 2 Up to 2 adapters can be fixed per installation box.
- 3 Only 1 installation box can be installed per indoor unit.

5 Capacity tables

5 - 1 Cooling capacity tables

FXAQ-MV		TC: Total capacity kW - SHC: Sensible capacity kW														
Unit size	Nominal capacity	Outdoor air temp. °CDB	Indoor air temperature													
			14.0WB		16.0WB		18.0WB		19.0WB		20.0WB		22.0WB		24.0WB	
			20.0DB		23.0DB		26.0DB		27.0DB		28.0DB		30.0DB		32.0DB	
			TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
20	2.2	10.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.6	2.0	2.9	1.9
		12.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.6	2.0	2.9	1.9
		14.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.6	2.0	2.8	1.9
		16.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.6	2.0	2.8	1.9
		18.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.6	2.0	2.7	1.9
		20.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.6	2.0	2.7	1.9
		21.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.6	2.0	2.7	1.9
		23.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.6	1.9	2.6	1.9
		25.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.6	1.9	2.6	1.9
		27.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.5	1.9	2.6	1.8
		29.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.5	1.9	2.5	1.8
		31.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.4	1.9	2.5	1.8
		33.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.4	1.9	2.5	1.8
		35.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.4	1.9	2.4	1.8
		37.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.3	1.8	2.4	1.7
39.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.2	1.9	2.2	1.9	2.3	1.8		
25	2.8	10.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.4	2.3	3.7	2.3
		12.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.4	2.3	3.6	2.2
		14.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.4	2.3	3.6	2.3
		16.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.4	2.3	3.5	2.2
		18.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.4	2.3	3.5	2.2
		20.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.4	2.3	3.4	2.2
		21.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.4	2.3	3.4	2.2
		23.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.3	2.3	3.4	2.2
		25.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.3	2.2	3.3	2.2
		27.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.2	2.2	3.3	2.1
		29.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.2	2.2	3.2	2.1
		31.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.1	2.2	3.2	2.1
		33.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.1	2.2	3.1	2.1
		35.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.0	2.2	3.1	2.1
		37.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	2.9	2.2	3.0	2.1	3.0	2.0
39.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	2.9	2.2	2.9	2.1	3.0	2.0		
32	3.6	10.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.3	2.8	4.7	2.8
		12.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.3	2.8	4.7	2.8
		14.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.3	2.8	4.6	2.8
		16.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.3	2.8	4.6	2.8
		18.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.3	2.8	4.5	2.7
		20.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.3	2.8	4.4	2.7
		21.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.3	2.8	4.4	2.7
		23.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.2	2.8	4.3	2.7
		25.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.2	2.8	4.3	2.6
		27.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.1	2.7	4.2	2.6
		29.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.1	2.7	4.2	2.6
		31.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	4.0	2.7	4.1	2.6
		33.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	3.9	2.6	4.0	2.5
		35.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	3.9	2.6	4.0	2.5
		37.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.7	2.6	3.8	2.6	3.9	2.5
39.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.7	2.6	3.8	2.6	3.8	2.5		
40	4.5	10.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.9	3.6
		12.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.8	3.5
		14.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.8	3.5
		16.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.7	3.5
		18.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.6	3.4
		20.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.5	3.4
		21.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.5	3.4
		23.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.3	3.6	5.4	3.3
		25.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.2	3.6	5.3	3.3
		27.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.2	3.5	5.3	3.3
		29.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.1	3.5	5.2	3.2
		31.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.0	3.4	5.1	3.2
		33.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	4.9	3.4	5.0	3.1
		35.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.7	3.6	4.9	3.4	5.0	3.1
		37.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.7	3.5	4.8	3.3	4.9	3.1
39.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.6	3.5	4.7	3.3	4.8	3.0		

5 Capacity tables

5 - 1 Cooling capacity tables

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FXAQ-MV

TC: Total capacity;kW - SHC: Sensible capacity;kW

Unit size	Nominal capacity	Outdoor air temp.	Indoor air temperature													
			14.OWB		16.OWB		18.OWB		19.OWB		20.OWB		22.OWB		24.OWB	
			20.ODB		23.ODB		26.ODB		27.ODB		28.ODB		30.ODB		32.ODB	
			°CDB	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC
50	5.6	10.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.4	4.4
		12.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.3	4.3
		14.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.2	4.3
		16.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.1	4.3
		18.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.0	4.2
		20.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.9	4.2
		21.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2
		23.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.6	4.4	6.7	4.1
		25.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.5	4.3	6.6	4.1
		27.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.4	4.3	6.6	4.0
		29.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.3	4.2	6.5	4.0
		31.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.2	4.2	6.4	3.9
		33.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.1	4.2	6.3	3.9
		35.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	5.9	4.3	6.0	4.1	6.2	3.8
		37.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	5.8	4.3	5.9	4.1	6.1	3.8
		39.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	5.7	4.2	5.8	4.0	6.0	3.8
		63	7.1	10.0	4.8	4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.5	5.6
12.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.5	5.6	9.2	5.3
14.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.5	5.6	9.1	5.2
16.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.5	5.6	9.0	5.2
18.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.5	5.6	8.8	5.2
20.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.5	5.6	8.7	5.1
21.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.5	5.6	8.7	5.1
23.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.4	5.5	8.5	5.0
25.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.3	5.5	8.4	5.0
27.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.1	5.4	8.3	4.9
29.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	8.0	5.4	8.2	4.9
31.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	7.9	5.3	8.1	4.8
33.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.6	5.4	7.8	5.2	7.9	4.8
35.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.5	5.4	7.7	5.2	7.8	4.7
37.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.4	5.3	7.5	5.1	7.7	4.7
39.0	4.8			4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.2	5.3	7.4	5.1	7.6	4.6

5 Capacity tables

5 - 2 Heating capacity tables

FXAQ-MV									
Unit Size	Nominal capacity	Outdoor air temperature		Indoor air temperature °CDB					
				16.0	18.0	20.0	21.0	22.0	24.0
		°CDB	°CWB	kW	kW	kW	kW	kW	kW
20	2.5	-19.8	-20.0	1.5	1.5	1.5	1.5	1.5	1.5
		-18.8	-19.0	1.5	1.5	1.5	1.5	1.5	1.5
		-16.7	-17.0	1.6	1.6	1.6	1.6	1.6	1.6
		-14.7	-15.0	1.7	1.7	1.7	1.7	1.7	1.7
		-12.6	-13.0	1.8	1.8	1.8	1.8	1.8	1.8
		-10.5	-11.0	1.9	1.9	1.9	1.9	1.9	1.9
		-9.5	-10.0	1.9	1.9	1.9	1.9	1.9	1.9
		-8.5	-9.1	2.0	2.0	1.9	1.9	1.9	1.9
		-7.0	-7.6	2.0	2.0	2.0	2.0	2.0	2.0
		-5.0	-5.6	2.1	2.1	2.1	2.1	2.1	2.1
		-3.0	-3.7	2.2	2.2	2.2	2.2	2.2	2.2
		0.0	-0.7	2.3	2.3	2.3	2.3	2.3	2.2
		3.0	2.2	2.5	2.5	2.4	2.4	2.3	2.2
		5.0	4.1	2.5	2.5	2.5	2.4	2.3	2.2
		7.0	6.0	2.6	2.6	2.5	2.4	2.3	2.2
		9.0	7.9	2.7	2.7	2.5	2.4	2.3	2.2
		11.0	9.8	2.8	2.7	2.5	2.4	2.3	2.2
13.0	11.8	2.8	2.7	2.5	2.4	2.3	2.2		
15.0	13.7	2.8	2.7	2.5	2.4	2.3	2.2		
25	3.2	-19.8	-20.0	1.9	1.9	1.9	1.9	1.9	1.9
		-18.8	-19.0	1.9	1.9	1.9	1.9	1.9	1.9
		-16.7	-17.0	2.1	2.1	2.0	2.0	2.0	2.0
		-14.7	-15.0	2.2	2.2	2.2	2.2	2.2	2.1
		-12.6	-13.0	2.3	2.3	2.3	2.3	2.3	2.3
		-10.5	-11.0	2.4	2.4	2.4	2.4	2.4	2.4
		-9.5	-10.0	2.5	2.4	2.4	2.4	2.4	2.4
		-8.5	-9.1	2.5	2.5	2.5	2.5	2.5	2.5
		-7.0	-7.6	2.6	2.6	2.6	2.6	2.6	2.6
		-5.0	-5.6	2.7	2.7	2.7	2.7	2.7	2.7
		-3.0	-3.7	2.8	2.8	2.8	2.8	2.8	2.8
		0.0	-0.7	3.0	3.0	3.0	3.0	3.0	2.8
		3.0	2.2	3.1	3.1	3.1	3.1	3.0	2.8
		5.0	4.1	3.3	3.2	3.2	3.1	3.0	2.8
		7.0	6.0	3.4	3.4	3.2	3.1	3.0	2.8
		9.0	7.9	3.5	3.4	3.2	3.1	3.0	2.8
		11.0	9.8	3.6	3.4	3.2	3.1	3.0	2.8
13.0	11.8	3.6	3.4	3.2	3.1	3.0	2.8		
15.0	13.7	3.6	3.4	3.2	3.1	3.0	2.8		
32	4.0	-19.8	-20.0	2.4	2.4	2.3	2.3	2.3	2.3
		-18.8	-19.0	2.4	2.4	2.4	2.4	2.4	2.4
		-16.7	-17.0	2.6	2.6	2.6	2.6	2.6	2.5
		-14.7	-15.0	2.7	2.7	2.7	2.7	2.7	2.7
		-12.6	-13.0	2.9	2.8	2.8	2.8	2.8	2.8
		-10.5	-11.0	3.0	3.0	3.0	3.0	3.0	3.0
		-9.5	-10.0	3.1	3.1	3.1	3.1	3.0	3.0
		-8.5	-9.1	3.1	3.1	3.1	3.1	3.1	3.1
		-7.0	-7.6	3.2	3.2	3.2	3.2	3.2	3.2
		-5.0	-5.6	3.4	3.4	3.4	3.4	3.4	3.4
		-3.0	-3.7	3.5	3.5	3.5	3.5	3.5	3.5
		0.0	-0.7	3.7	3.7	3.7	3.7	3.7	3.5
		3.0	2.2	3.9	3.9	3.9	3.9	3.7	3.5
		5.0	4.1	4.1	4.1	4.0	3.9	3.7	3.5
		7.0	6.0	4.2	4.2	4.0	3.9	3.7	3.5
		9.0	7.9	4.3	4.3	4.0	3.9	3.7	3.5
		11.0	9.8	4.5	4.3	4.0	3.9	3.7	3.5
13.0	11.8	4.5	4.3	4.0	3.9	3.7	3.5		
15.0	13.7	4.5	4.3	4.0	3.9	3.7	3.5		
40	5.0	-19.8	-20.0	3.0	2.9	2.9	2.9	2.9	2.9
		-18.8	-19.0	3.0	3.0	3.0	3.0	3.0	3.0
		-16.7	-17.0	3.2	3.2	3.2	3.2	3.2	3.2
		-14.7	-15.0	3.4	3.4	3.4	3.4	3.4	3.4
		-12.6	-13.0	3.6	3.6	3.6	3.5	3.5	3.5
		-10.5	-11.0	3.7	3.7	3.7	3.7	3.7	3.7
		-9.5	-10.0	3.8	3.8	3.8	3.8	3.8	3.8
		-8.5	-9.1	3.9	3.9	3.9	3.9	3.9	3.9
		-7.0	-7.6	4.0	4.0	4.0	4.0	4.0	4.0
		-5.0	-5.6	4.2	4.2	4.2	4.2	4.2	4.2
		-3.0	-3.7	4.4	4.4	4.4	4.4	4.4	4.4
		0.0	-0.7	4.7	4.6	4.6	4.6	4.6	4.4
		3.0	2.2	4.9	4.9	4.9	4.8	4.7	4.4
		5.0	4.1	5.1	5.1	5.0	4.8	4.7	4.4
		7.0	6.0	5.2	5.2	5.0	4.8	4.7	4.4
		9.0	7.9	5.4	5.3	5.0	4.8	4.7	4.4
		11.0	9.8	5.6	5.3	5.0	4.8	4.7	4.4
13.0	11.8	5.6	5.3	5.0	4.8	4.7	4.4		
15.0	13.7	5.6	5.3	5.0	4.8	4.7	4.4		

5 Capacity tables

5 - 2 Heating capacity tables

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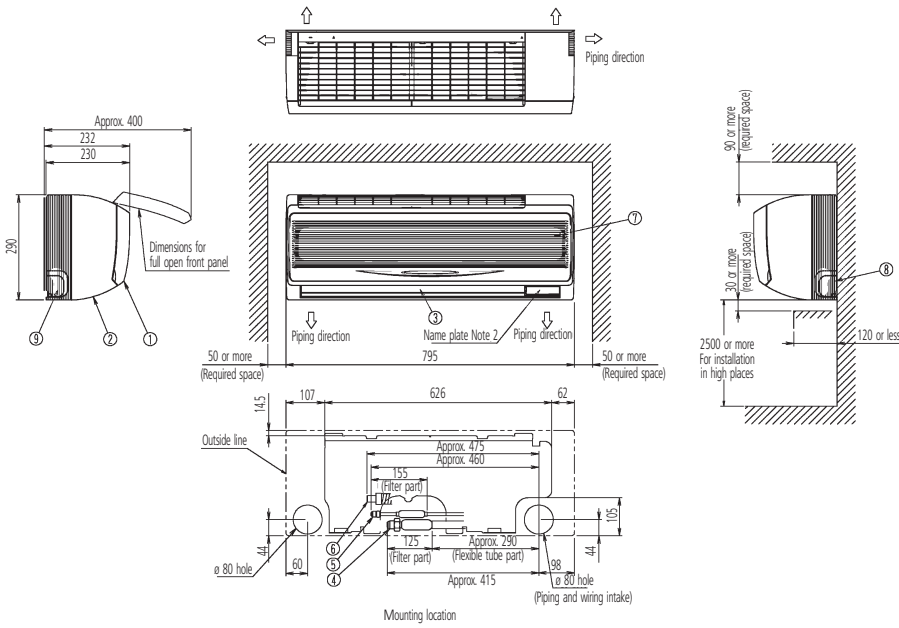
FXAQ-MV

Unit Size	Nominal capacity	Outdoor air temperature		Indoor air temperature °CDB					
				16.0	18.0	20.0	21.0	22.0	24.0
		°CDB	°CWB	kW	kW	kW	kW	kW	kW
50	6.3	-19.8	-20.0	3.7	3.7	3.7	3.7	3.7	3.7
		-18.8	-19.0	3.8	3.8	3.8	3.8	3.8	3.8
		-16.7	-17.0	4.1	4.0	4.0	4.0	4.0	4.0
		-14.7	-15.0	4.3	4.3	4.3	4.2	4.2	4.2
		-12.6	-13.0	4.5	4.5	4.5	4.5	4.5	4.5
		-10.5	-11.0	4.7	4.7	4.7	4.7	4.7	4.7
		-9.5	-10.0	4.8	4.8	4.8	4.8	4.8	4.8
		-8.5	-9.1	4.9	4.9	4.9	4.9	4.9	4.9
		-7.0	-7.6	5.1	5.1	5.1	5.1	5.1	5.1
		-5.0	-5.6	5.3	5.3	5.3	5.3	5.3	5.3
		-3.0	-3.7	5.5	5.5	5.5	5.5	5.5	5.5
		0.0	-0.7	5.9	5.9	5.8	5.8	5.8	5.5
		3.0	2.2	6.2	6.2	6.2	6.1	5.9	5.5
		5.0	4.1	6.4	6.4	6.3	6.1	5.9	5.5
		7.0	6.0	6.6	6.6	6.3	6.1	5.9	5.5
		9.0	7.9	6.8	6.7	6.3	6.1	5.9	5.5
		11.0	9.8	7.0	6.7	6.3	6.1	5.9	5.5
13.0	11.8	7.1	6.7	6.3	6.1	5.9	5.5		
15.0	13.7	7.1	6.7	6.3	6.1	5.9	5.5		
63	8.0	-19.8	-20.0	4.7	4.7	4.7	4.7	4.7	4.7
		-18.8	-19.0	4.9	4.9	4.8	4.8	4.8	4.8
		-16.7	-17.0	5.1	5.1	5.1	5.1	5.1	5.1
		-14.7	-15.0	5.4	5.4	5.4	5.4	5.4	5.4
		-12.6	-13.0	5.7	5.7	5.7	5.7	5.7	5.7
		-10.5	-11.0	6.0	6.0	6.0	6.0	6.0	5.9
		-9.5	-10.0	6.1	6.1	6.1	6.1	6.1	6.1
		-8.5	-9.1	6.3	6.3	6.2	6.2	6.2	6.2
		-7.0	-7.6	6.5	6.5	6.4	6.4	6.4	6.4
		-5.0	-5.6	6.8	6.7	6.7	6.7	6.7	6.7
		-3.0	-3.7	7.0	7.0	7.0	7.0	7.0	7.0
		0.0	-0.7	7.5	7.4	7.4	7.4	7.4	7.0
		3.0	2.2	7.9	7.8	7.8	7.7	7.5	7.0
		5.0	4.1	8.1	8.1	8.0	7.7	7.5	7.0
		7.0	6.0	8.4	8.4	8.0	7.7	7.5	7.0
		9.0	7.9	8.7	8.5	8.0	7.7	7.5	7.0
		11.0	9.8	8.9	8.5	8.0	7.7	7.5	7.0
13.0	11.8	9.0	8.5	8.0	7.7	7.5	7.0		
15.0	13.7	9.0	8.5	8.0	7.7	7.5	7.0		

6 Dimensional drawing & centre of gravity

6 - 1 Dimensional drawing

FXAQ20,25,32MV



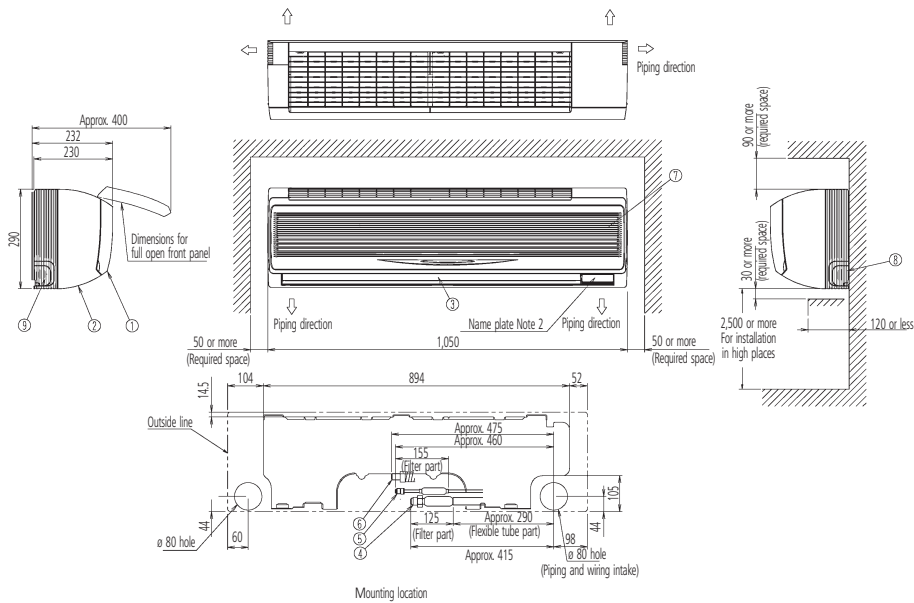
Nr	Part name	Description
1	Front panel	
2	Front grill	
3	Air outlet	
4	Gas pipe	ø 12.7 Flare connection
5	Liquid pipe	ø 6.4 Flare connection
6	Drain hose	VP13 (External dia. ø18)
7	Grounding terminal	M4
8	Right side pipe connection hole	
9	Left side pipe connection hole	

NOTES

- 1 Name plate location: right side surface of casing
- 2 In case of using an infrared remote control, this position will be a signal receiver. Refer to the drawing of an infrared remote control in detail.

3D034903C

FXAQ40,50MV



Nr	Part name	Description
1	Front panel	
2	Front grill	
3	Air outlet	
4	Gas pipe	ø 12.7 Flare connection
5	Liquid pipe	ø 6.4 Flare connection
6	Drain hose	VP13 (External dia. ø 18)
7	Grounding terminal	M4
8	Right side pipe connection hole	
9	Left side pipe connection hole	

NOTES

- 1 Name plate location: right side surface of casing.
- 2 In case of using an infrared remote control, this position will be a signal receiver. Refer to the drawing of the infrared remote control in detail.

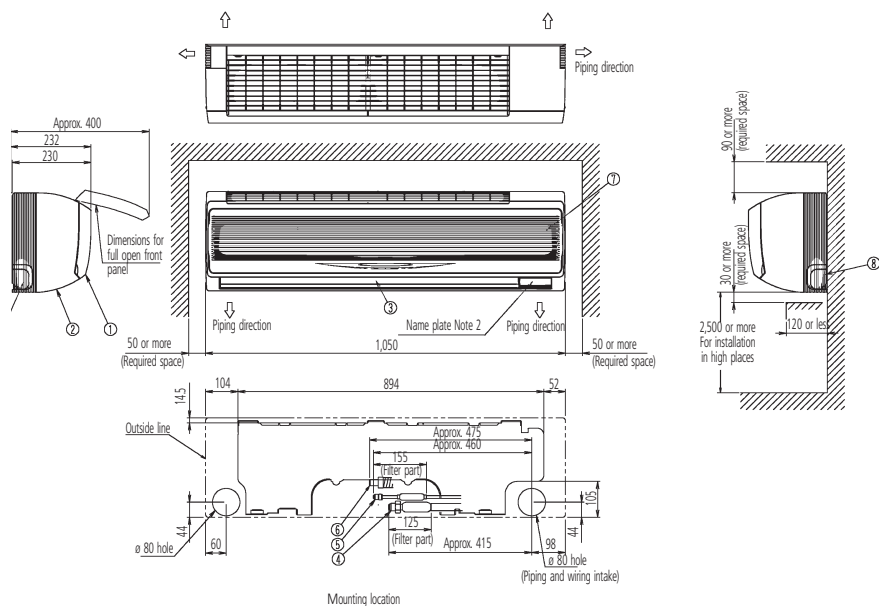
3D038539B

6 Dimensional drawing & centre of gravity

6 - 1 Dimensional drawing

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FXAQ63MV



Nr	Part name	Description
1	Front panel	
2	Front grill	
3	Air outlet	
4	Gas pipe	ø 15.9 Flare connection
5	Liquid pipe	ø 9.5 Flare connection
6	Drain hose	VP13
7	Grounding terminal	M4
8	Right side pipe connection hole	
9	Left side pipe connection hole	

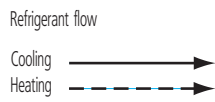
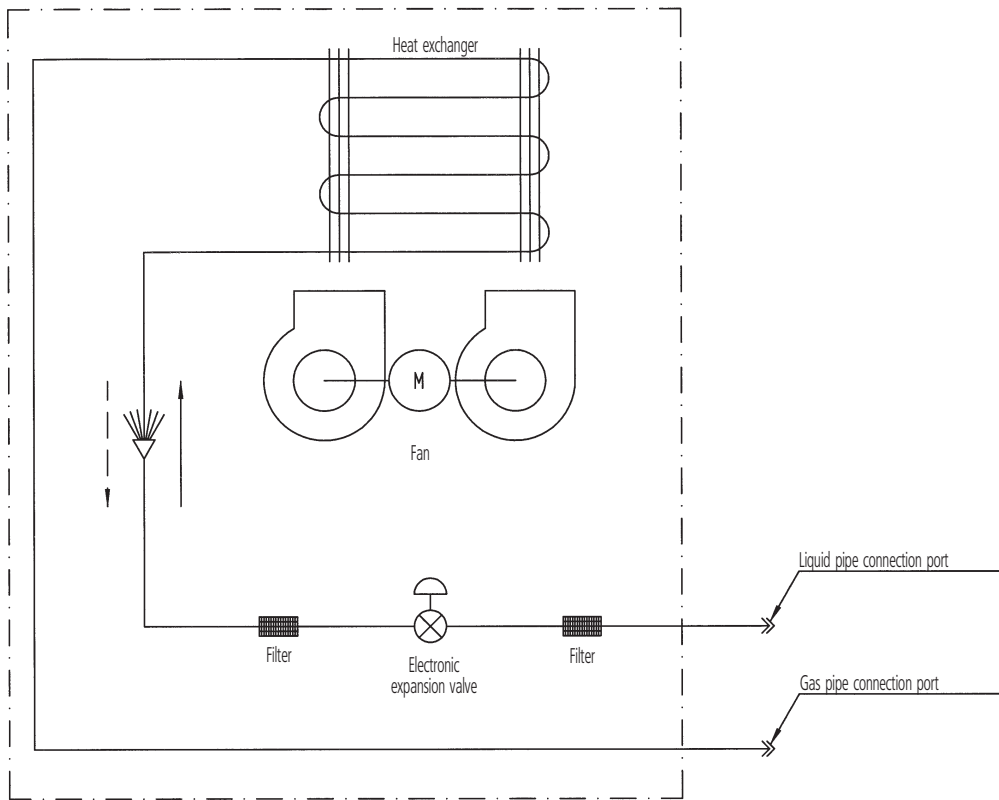
NOTES

- 1 Name plate location: right side surface of casing.
- 2 In case of using an infrared remote control, this position will be a signal receiver. Refer to the drawing of the infrared remote control in detail.

3D038541B

7 Piping diagram

FXAQ-MV



Piping connection diameters

Model	Gas	Liquid
FXAQ20,25,32,40,50MV	ø12.7	ø6.4
FXAQ63MV	ø15.9	ø9.5

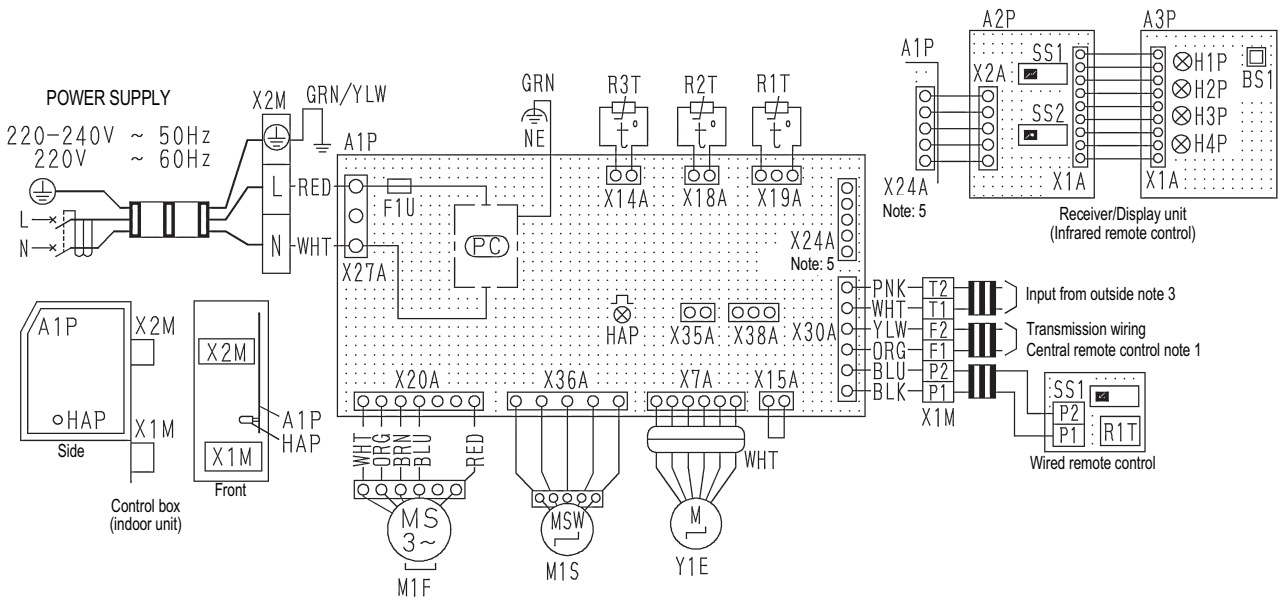
DU220-602J

8 Wiring diagram

8 - 1 Wiring diagram

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FXAQ-MV



Indoor unit		Y1E	Electronic expansion valve	Wired remote control		
A1P	Printed circuit board	PC	Power Circuit	R1T	Thermistor (Air)	
F1U	Fuse (⊗, 3A, 250V)	Receiver / display unit (attached to infrared remote control)			SS1	Selector switch (main/sub)
HAP	Light emitting diode (service monitor-green)	A2P	Printed circuit board	Connector for optional parts		
M1F	Motor (indoor fan)	A3P	Printed circuit board	R1T	Thermistor (Air)	
M1S	Motor (swing flap)	BS1	Push button (On/Off)	SS1	Selector switch (main/sub)	
R1T	Thermistor (air)	H1P	Light emitting diode (On-red)	Connector for optional parts		
R2T	Thermistor (coil liquid pipe)	H2P	Light emitting diode (timer-green)	X15A	Connector (float switch)	
R3T	Thermistor (coil gas pipe)	H3P	Light emitting diode (filter sign-red)	X35A	Connector (group control adapter)	
X1M	Terminal block	H4P	Light emitting diode (defrost-orange)	X38A	Connector (adapter for multi tenant)	
X2M	Terminal block	SS1	Selector switch (Wireless address set)			

- | | | | | | |
|-------|----------------|---------|-------------|-------------|-------------|
| □□□□ | : Terminal | Colors: | RED: Red | PRP: Purple | ORG: Orange |
| ⊙, D- | : Connector | | BLK: Black | GRN: Green | |
| ⊙ | : Connector | | WHT: White | BLU: Blue | |
| ≡≡≡ | : Field wiring | | YLW: Yellow | PNK: Pink | |

3D060858A

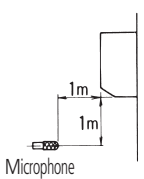
NOTES

- In case of using central remote control, connect it to the unit in accordance with the attached instruction manual.
- When connecting the input wires from outside, forced off or on/off control operation can be selected by remote control. In details, refer to the installation manual attached to the unit.
- Remote control model varies according to the combination system confirm engineering materials and catalogs, etc. before connecting.
- Confirm the method of setting the selector switch (SS1, SS2) of wired remote control and infrared remote control by installation manual and engineering data, etc.
- X24A is connected when the infrared remote control kit is being used.

9 Sound data

9 - 1 Sound level data

FXAQ-MV

Model	Sound pressure level		Measuring location	Sound power level
	H	L		
FXAQ20MV	35	29		*
FXAQ25MV	36	29		*
FXAQ32MV	37	29		*
FXAQ40MV	39	34		*
FXAQ50MV	42	36		*
FXAQ63MV	46	39		*

NOTES

- 1 Reference acoustic pressure 0 dB = 20 Pa.
- 2 Measuring place: anechoic chamber.
- 3 Operating noise differs with operation and ambient conditions.

*Data were not available at the time of publication

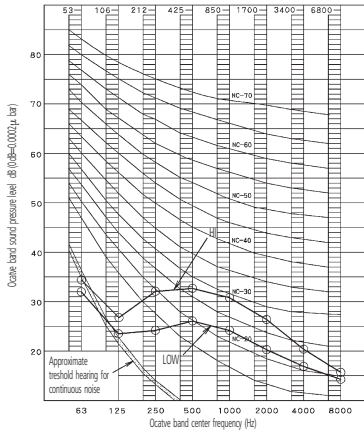
9 Sound data

9 - 2 Sound pressure spectrum

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FXAQ20MV

4D037087D



NOTES

1 Over all (dB):
(B, G, N is already rectified)

Scale	Mode	
	Hi	Low
A	35.0	29.0
C	39.5	34.5

2 Operating conditions:

- Power source: 220-240V 50Hz / 220V 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

3 Measuring place: Anechoic chamber

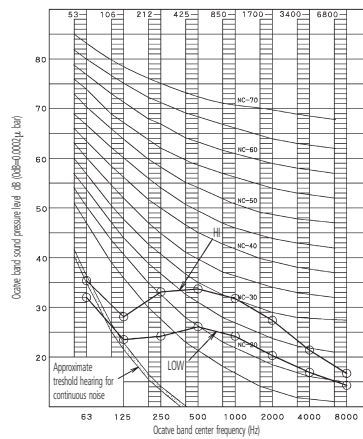
4 Location of microphone



5 Operating noise differs with operation and ambient conditions.

FXAQ25MV

4D037088D



NOTES

1 Over all (dB):
(B, G, N is already rectified)

Scale	Mode	
	Hi	Low
A	36.0	29.0
C	40.5	34.0

2 Operating conditions:

- Power source: 220-240V 50Hz / 220V 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

3 Measuring place: Anechoic chamber

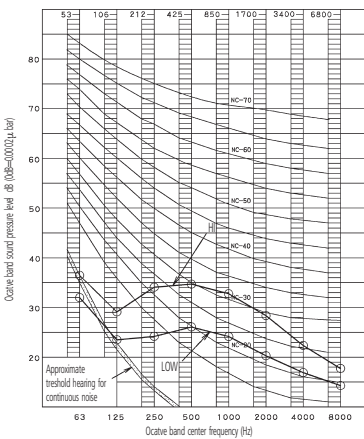
4 Location of microphone



5 Operating noise differs with operation and ambient conditions.

FXAQ32MV

4D037089D



NOTES

1 Over all (dB):
(B, G, N is already rectified)

Scale	Mode	
	Hi	Low
A	37.0	29.0
C	41.5	34.5

2 Operating conditions:

- Power source: 220-240V 50Hz / 220V 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

3 Measuring place: Anechoic chamber

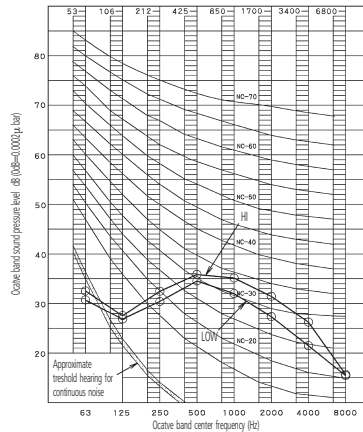
4 Location of microphone



5 Operating noise differs with operation and ambient conditions.

FXAQ40MV

4D038513A



NOTES

1 Over all (dB):
(B, G, N is already rectified)

Scale	Mode	
	Hi	Low
A	39.0	34.0
C	41.0	39.0

2 Operating conditions:

- Power source: 220-240V 50Hz / 220V 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

3 Measuring place: Anechoic chamber

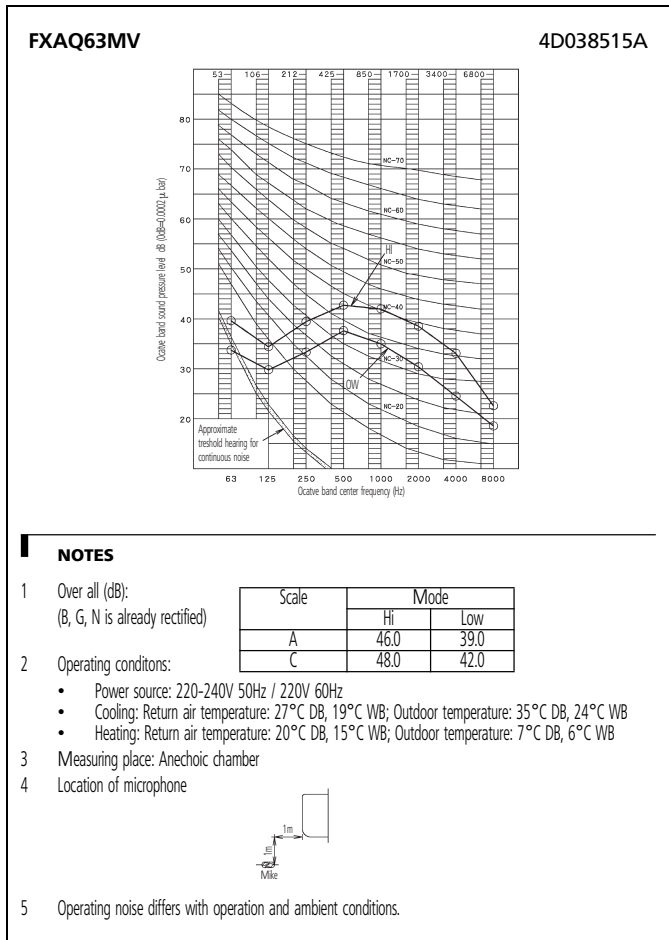
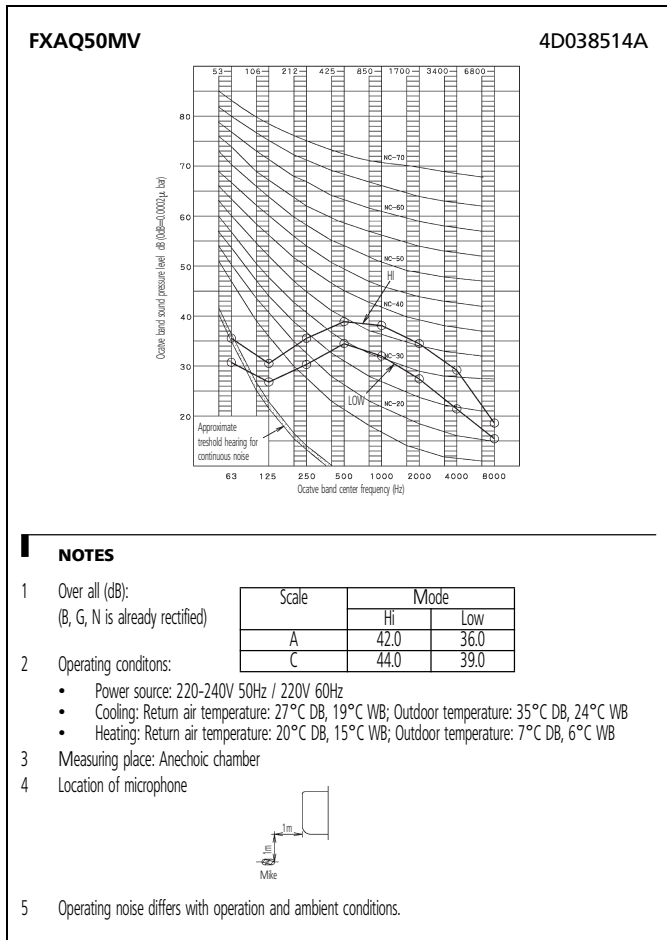
4 Location of microphone



5 Operating noise differs with operation and ambient conditions.

9 Sound data

9 - 2 Sound pressure spectrum



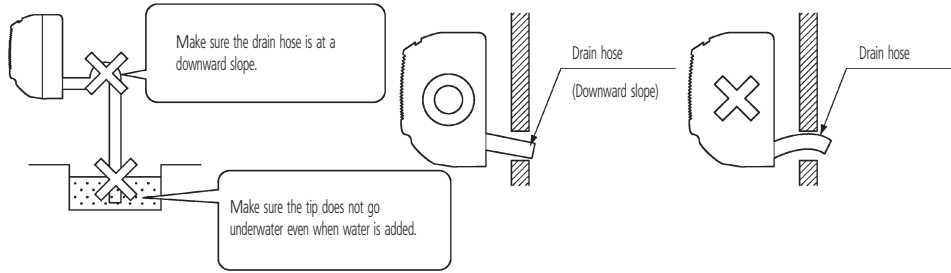
10 Installation

10 - 1 Drainage instructions

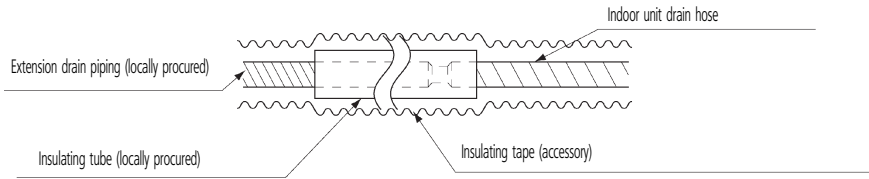
1
10

Install the drain piping

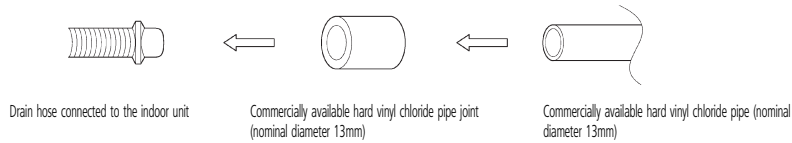
- The drain pipe should be short with a downward slope and should prevent the formation of air pockets.



- When extending the drain hose, use a commercially available drain extension hose, and be sure to insulate the extended section of the drain hose which is indoors.



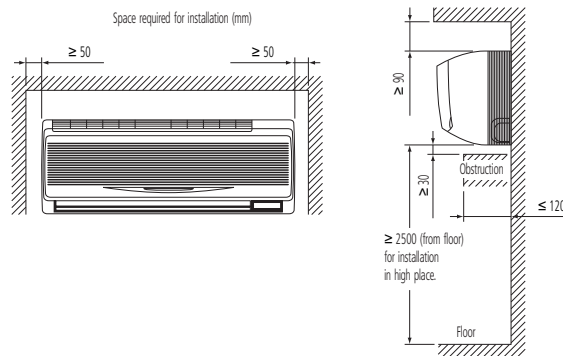
- Make sure the diameter of the piping is the same as the piping (hard vinyl chloride, nominal diameter 13mm) or bigger.
- When directly connecting a hard vinyl chloride pipe joint (nominal diameter 13mm) to the drain hose connected to the indoor unit (i.e. for embedded piping, etc.), use a commercially available hard vinyl chloride pipe joint (nominal diameter 13mm).



10 Installation

10 - 2 Service space

- 1 Select an installation site where the following conditions are fulfilled and that meets with your customer's approval.
 - In the upper space (including the back of the ceiling) of the indoor unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
 - Where the wall is strong enough to bear the indoor unit weight.
 - Where sufficient clearance for installation and maintenance can be ensured.
 - Where optimum air distribution can be ensured.
 - Where nothing blocks the air passage.
 - Where condensation can be properly drained.
 - Where the wall is not significantly tilted.
 - Where not exposed to combustible gases.
 - Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual of the outdoor unit.)
 - Keep the indoor and outdoor units, power cable and transmission wiring, at least 1 m from TVs and radios, to prevent distorted pictures and static. (Depending on the type and source of the electrical waves, static may be heard even when more than 1 m away.)
 - Install the indoor unit no less than 2.5 m above the floor. Where unavoidably lower, take what measures are necessary to keep hands out of the air inlet.



- 2 Consider whether the location where the unit will be installed can support the full weight of the unit, and reinforce it with boards and beams, etc. if needed before proceeding with the installation. Also, reinforce the location to prevent vibration and noise before installing.
- 3 The indoor unit may not be directly installed on the wall. Use the attached installation panel before installing the unit.

10 Installation

10 - 2 Service space

1

10