



technical data

Ceiling Mounted Corner Cassette
FXKQ-MAVE

air conditioning systems

R-410A



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FXKQ-MAVE

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1 Specifications

1-1 TECHNICAL SPECIFICATIONS				FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE
Capacity	Cooling	kW		2.80	3.60	4.50	7.10
	Heating	kW		3.20	4.00	5.00	8.00
Power Input (50Hz)	Cooling	kW		0.066	0.066	0.076	0.105
	Heating	kW		0.046	0.046	0.056	0.085
Power Input (60Hz)	Cooling	kW		0.069	0.069	0.092	0.120
	Heating	kW		0.049	0.049	0.072	0.100
Casing	Material			Galvanised steel			
Dimensions	Unit	Height	mm	215	215	215	215
		Width	mm	1110	1110	1110	1310
		Depth	mm	710	710	710	710
Weight	Unit		kg	31	31	31	34
Heat Exchanger	Dimensions	Nr of Rows		2	2	2	3
		Fin Pitch	mm	1.75	1.75	1.75	1.75
		Face Area	m ²	0.180	0.180	0.180	0.226
		Nr of Stages		11	11	11	11
Fan	Type			Sirocco fan			
	Quantity			1	1	1	1
Air Flow Rate	Cooling	High	m ³ /min	11.00	11.00	13.00	18.00
		Low	m ³ /min	9.00	9.00	10.00	15.00
Fan	Motor	Quantity		1	1	1	1
		Model		3D12H1AN1V1	3D12H1AN1V1	3D12H1AP1V1	4D12H1AJ1V1
		Output (high)	W	15	15	20	45
		Drive			Direct drive		
Refrigerant	Name			R-410A			
Cooling	Sound Pressure	High	dBA	38.0	38.0	40.0	42.0
		Low	dBA	33.0	33.0	34.0	37.0
Piping connections	Liquid (OD)	Type		Flare connection			
		Diameter	mm	6.35	6.35	6.35	9.52
	Gas	Type		Flare connection			
		Diameter	mm	12.7	12.7	12.7	15.9
	Drain	Diameter	mm	32	32	32	32
Heat Insulation			Foamed Polyethylene				
Decoration Panel	Model			BYK45FJW1	BYK45FJW1	BYK45FJW1	BYK71FJW1
	Colour			White			
	Dimensions	Height	mm	70	70	70	70
		Width	mm	1240	1240	1240	1440
		Depth	mm	800	800	800	800
Weight			kg	8.5	8.5	8.5	9.5
Air Filter	Resin net with mold resistance						
Refrigerant control	Electronic expansion valve						
Temperature control	Microprocessor thermostat for cooling and heating						
Safety devices	PC board fuse						
	Drain pump fuse						
	Fan motor thermal fuse	Fan motor thermal fuse	Fan motor thermal protector	Fan motor thermal protector			
Standard Accessories	Installation and operation manual						
	Metal clamp for drain hose						
	Clamps						
	Insulation for hanger bracket						
	Positioning jig for installation						
	Paper pattern for installation						
	Drain hose						
	Insulation for fitting						
	Sealing pads						
	Screws						
	Washer						
	Air outlet blocking pad						

1 Specifications

1-1 TECHNICAL SPECIFICATIONS		FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE
Notes	Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m (horizontal)				
	Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 7.5m (horizontal)				
	Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.				
	Sound pressure levels are measured at 220V				

1-2 ELECTRICAL SPECIFICATIONS (50HZ)		FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE	
Power Supply	Name	VE				
	Phase	1~				
	Frequency	Hz	50			
	Voltage	V	220-240			
Current	Minimum circuit amps (MCA)	A	0.3	0.3	0.3	0.5
	Maximum fuse amps (MFA)	A	15	15	15	15
	Full load amps (FLA)	A	0.2	0.2	0.2	0.4
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)		FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE	
Power Supply	Name	VE				
	Phase	1~				
	Frequency	Hz	60			
	Voltage	V	220			
Current	Minimum circuit amps (MCA)	A	0.4	0.4	0.5	0.6
	Maximum fuse amps (MFA)	A	15	15	15	15
	Full load amps (FLA)	A	0.3	0.3	0.4	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

		FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA
PC BOARD FUSE		250V 5A			
FAN MOTOR THERMAL FUSE	°C	146 \pm 3		-	
FAN MOTOR THERMAL PROTECTOR	°C	-		OFF: 120 \pm 5 / ON: 105 or less	
DRAIN PUMP THERMAL FUSE		145			

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3 Options

	FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA
DECORATION PANEL		BYK45FJW1		BYK71FJW1
PANEL SPACER		KPBJ52F56W		KPBJ52F80W
LONG LIFE REPLACEMENT FILTER		KAFJ521F56		KAFJ521F80
AIR DISCHARGE GRILL		K-HV7AW		K-HV9AW
AIR DISCHARGE BLIND PANEL		KDBJ52F56W		KDBJ52F80W
FLEXIBLE DUCT (WITH SHUTTER)		KFDJ52F56		KFDJ52F80

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The diagram illustrates the internal structure of the ceiling-mounted corner cassette. It shows the air flow path from the fan through the filter and duct to the discharge grill. Key components labeled include the shutter, flexible duct with shutter, fresh air intake position, air discharge grill, decoration panel for front discharge, long life filter, and panel spacer.

4 Control systems

Individual control systems

		FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA
WIRED REMOTE CONTROL				BRC1D52	
INFRARED REMOTE CONTROL	Heat pump			BRC4C61	
	Cooling only			BRC4C63	

Centralised control systems

		FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA
CENTRALISED REMOTE CONTROL				DCS302C51	
UNIFIED ON/OFF CONTROL				DCS301B51	
SCHEDULE TIMER				DST301B51	

Others

		FXKQ25MA	FXKQ32MA	FXKQ40MA	FXKQ63MA
WIRING ADAPTER				KRP1B61	
WIRING ADAPTER FOR ELECTRICAL APPENDICES (1)				KRP2A61	
WIRING ADAPTER FOR ELECTRICAL APPENDICES (2)				KRP4A51	
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)				KEK26-1A	
EXTERNAL CONTROL ADAPTER FOR OUTDOOR UNITS (INSTALLATION ON INDOOR UNIT)				DTA104A61	

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5 Capacity tables

5 - 1 Cooling capacity tables

FXKQ-MA			Indoor air temperature														TC: Total capacity,kW – SHC: Sensible capacity,kW	
Unit size	Nominal capacity	Outdoor air temp.	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	SHC	
25	2.8	10.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.4	2.5	3.7	2.5		
		12.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.4	2.5	3.6	2.5		
		14.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.4	2.5	3.6	2.5		
		16.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.4	2.5	3.5	2.4		
		18.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.4	2.5	3.5	2.4		
		20.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.4	2.5	3.4	2.4		
		21.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.4	2.5	3.4	2.4		
		23.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.3	2.5	3.4	2.3		
		25.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.3	2.5	3.3	2.3		
		27.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.2	2.4	3.3	2.3		
		29.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.2	2.4	3.2	2.3		
		31.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.1	2.4	3.2	2.3		
		33.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.1	2.4	3.1	2.3		
		35.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	3.0	2.5	3.0	2.4	3.1	2.3		
37.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	2.9	2.5	3.0	2.4	3.0	2.3				
39.0	1.9	1.9	2.3	2.2	2.6	2.3	2.8	2.4	2.9	2.5	2.9	2.3	3.0	2.2				
32	3.6	10.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.3	2.9	4.7	2.9		
		12.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.3	2.9	4.7	2.9		
		14.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.3	2.9	4.6	2.9		
		16.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.3	2.9	4.6	2.8		
		18.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.3	2.9	4.5	2.8		
		20.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.3	2.9	4.4	2.8		
		21.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.3	2.9	4.4	2.7		
		23.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.2	2.9	4.3	2.7		
		25.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.2	2.8	4.3	2.7		
		27.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.1	2.8	4.2	2.7		
		29.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.1	2.8	4.2	2.6		
		31.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	4.0	2.7	4.1	2.6		
		33.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	3.9	2.7	4.0	2.6		
		35.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.8	2.9	3.9	2.7	4.0	2.6		
37.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.7	2.8	3.8	2.7	3.9	2.6				
39.0	2.4	2.2	2.9	2.5	3.4	2.6	3.6	2.7	3.7	2.8	3.8	2.7	3.8	2.6				
40	4.5	10.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.4	3.5	5.9	3.5		
		12.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.4	3.5	5.8	3.5		
		14.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.4	3.5	5.8	3.4		
		16.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.4	3.5	5.7	3.4		
		18.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.4	3.5	5.6	3.3		
		20.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.4	3.5	5.5	3.3		
		21.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.4	3.5	5.5	3.3		
		23.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.3	3.4	5.4	3.2		
		25.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.2	3.4	5.3	3.2		
		27.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.2	3.3	5.3	3.2		
		29.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.1	3.3	5.2	3.1		
		31.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	5.0	3.2	5.1	3.1		
		33.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.8	3.3	4.9	3.2	5.0	3.1		
		35.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.7	3.3	4.9	3.2	5.0	3.0		
37.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.7	3.3	4.8	3.1	4.9	3.0				
39.0	3.0	2.6	3.6	2.8	4.2	3.2	4.5	3.2	4.6	3.2	4.7	3.1	4.8	3.0				
63	7.1	10.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.5	5.4	9.3	5.6		
		12.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.5	5.4	9.2	5.5		
		14.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.5	5.4	9.1	5.4		
		16.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.5	5.4	9.0	5.3		
		18.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.5	5.4	8.8	5.3		
		20.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.5	5.4	8.7	5.2		
		21.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.5	5.4	8.7	5.2		
		23.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.4	5.3	8.5	5.1		
		25.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.3	5.3	8.4	5.0		
		27.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.1	5.2	8.3	5.0		
		29.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	8.0	5.1	8.2	4.9		
		31.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	7.9	5.1	8.1	4.9		
		33.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.6	5.2	7.8	5.0	7.9	4.8		
		35.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.5	5.2	7.7	5.0	7.8	4.8		
37.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.4	5.1	7.5	4.9	7.7	4.8				
39.0	4.8	4.0	5.7	4.5	6.6	5.0	7.1	5.1	7.2	5.0	7.4	4.9	7.6	4.7				

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5 Capacity tables

5 - 2 Heating capacity tables

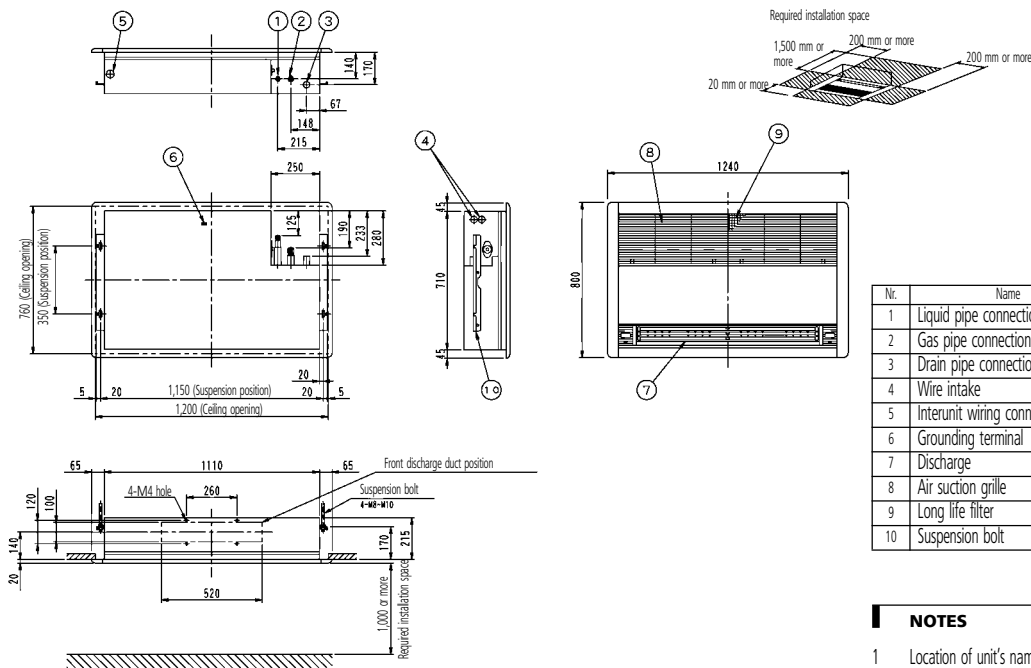
FXKQ-MA									
Unit Size	Nominal capacity	Outdoor air temperature		Indoor air temperature °CDB					
				16.0	18.0	20.0	21.0	22.0	24.0
		°CDB	°CWB	kW	kW	kW	kW	kW	kW
25	3.2	-19.8	-20.0	1.9	1.9	1.9	1.9	1.9	1.9
		-18.8	-19.0	1.9	1.9	1.9	1.9	1.9	1.9
		-16.7	-17.0	2.1	2.1	2.0	2.0	2.0	2.0
		-14.7	-15.0	2.2	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		
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		

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6 Dimensional drawing & centre of gravity

6 - 1 Dimensional drawing

FXKQ25,32,40MA



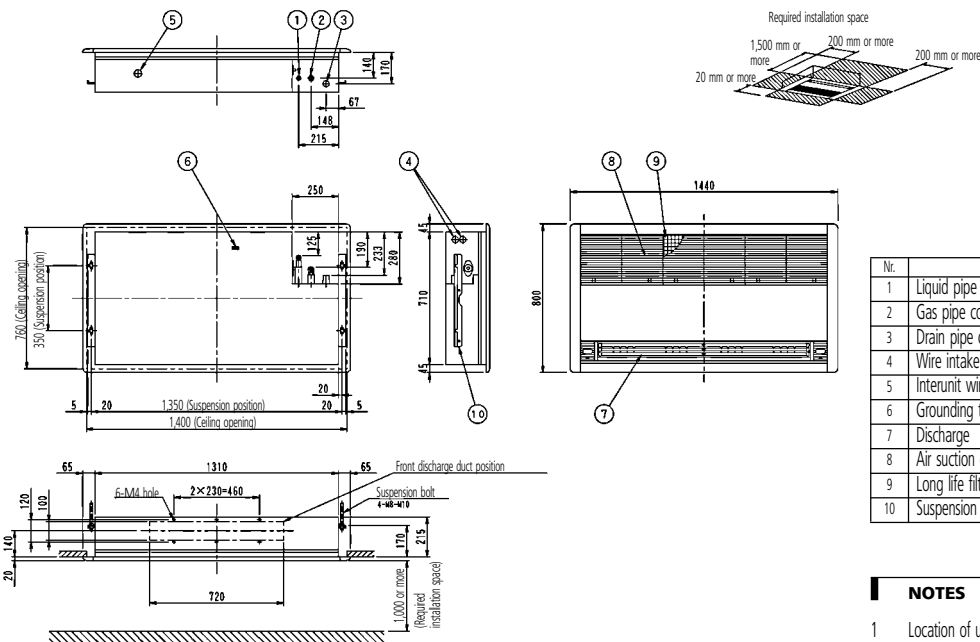
Nr.	Name	Description
1	Liquid pipe connection	ø 6.4 Flare connection
2	Gas pipe connection	ø 12.7 Flare connection
3	Drain pipe connection	VP25 (O.D. ø 32)
4	Wire intake	
5	Interunit wiring connection	
6	Grounding terminal	Inside switch box (M4)
7	Discharge	
8	Air suction grille	
9	Long life filter	
10	Suspension bolt	

NOTES

- Location of unit's name plate:
 - For main body: Bottom part of fan housing inside of air suction grille.
 - For decoration panel: Service lid face inside of air suction grille.
- When installing an optional accessory, refer to the installation drawings.

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FXKQ63MA



Nr.	Name	Description
1	Liquid pipe connection	ø 9.5 Flare connection
2	Gas pipe connection	ø 15.9 Flare connection
3	Drain pipe connection	VP25 (O.D. ø 32)
4	Wire intake	
5	Interunit wiring connection	
6	Grounding terminal	Inside switch box (M4)
7	Discharge	
8	Air suction grille	
9	Long life filter	
10	Suspension bolt	

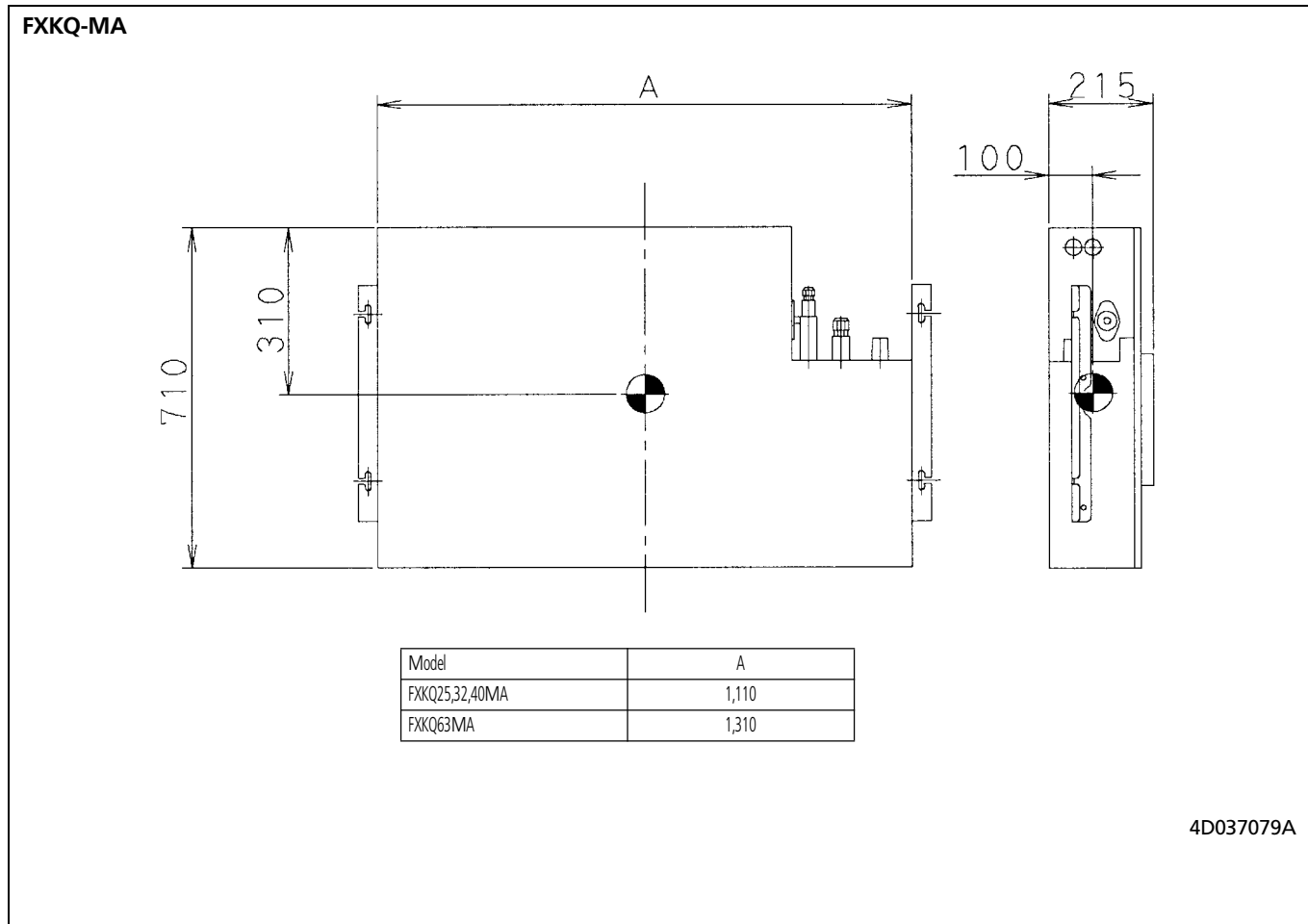
NOTES

- Location of unit's name plate:
 - For main body: Bottom part of fan housing inside of air suction grille.
 - For decoration panel: Service lid face inside of air suction grille.
- When installing an optional accessory, refer to the installation drawings.

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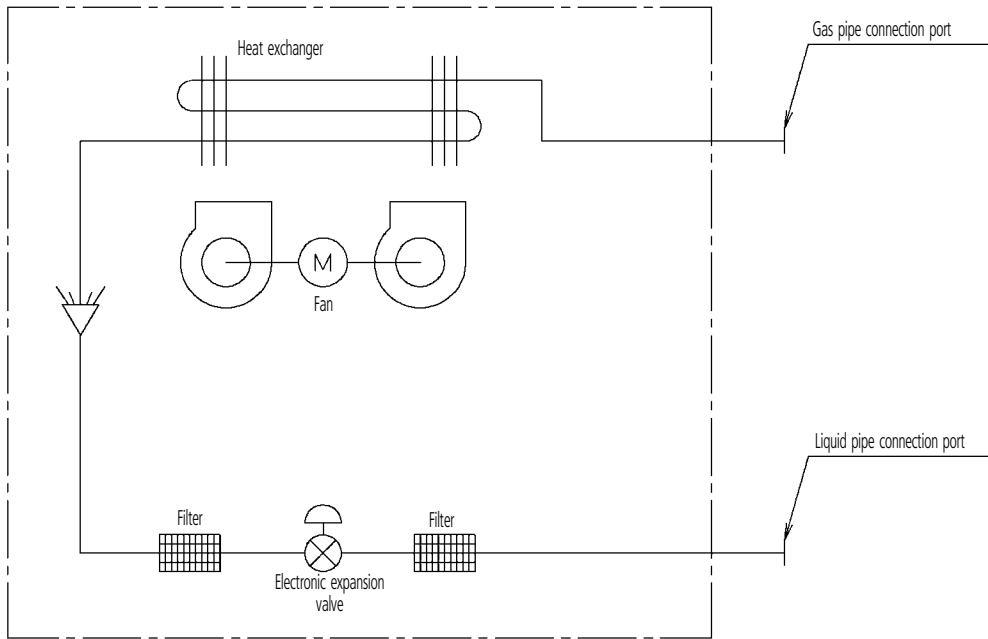
6 Dimensional drawing & centre of gravity

6 - 2 Centre of gravity



7 Piping diagram

FXKQ-MA



Piping connection diameters

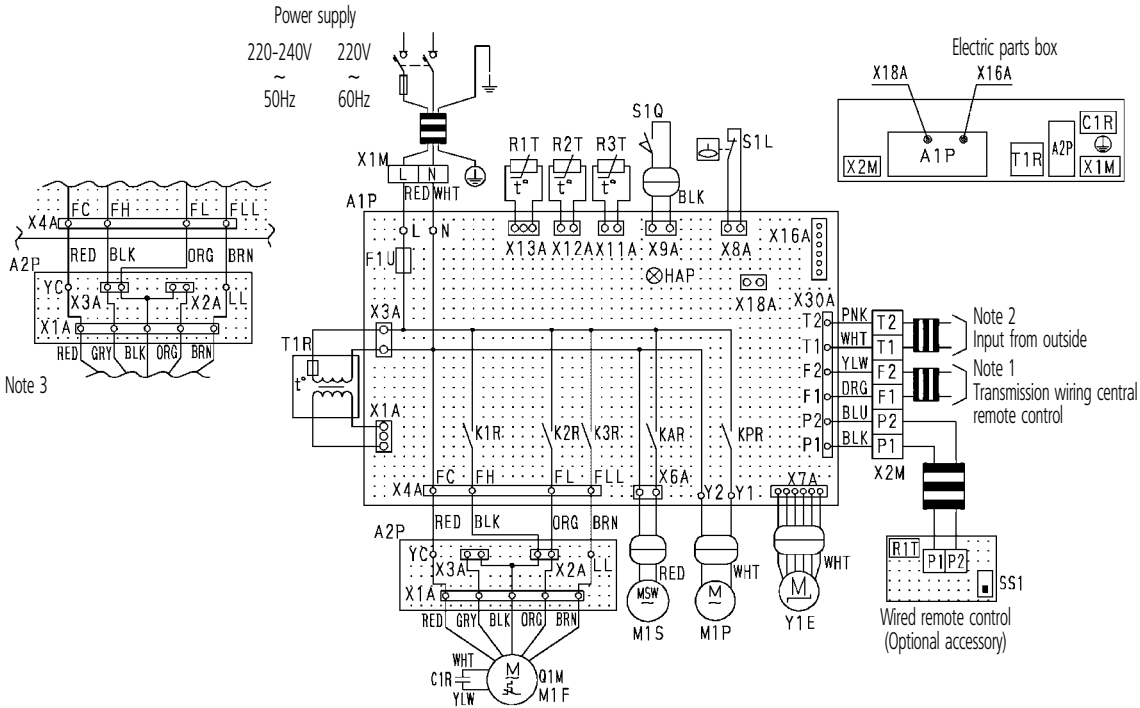
Model	Gas	Liquid
FXKQ25,32,40MA	ø12.7	ø6.4
FXKQ63MA	ø15.9	ø9.5

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8 Wiring diagram

8 - 1 Wiring diagram

FXKQ-MA



Indoor Unit		R1T	Thermistor (Air)
A1P	Printed circuit board	R2T-R3T	Thermistor (Coil)
A2P	Terminal board	S1Q	Limit switch (Swing flap)
C1R	Capacitor (M1F)	T1R	Transformer (220-240V/22V)
F1U	Fuse (5A, 250V)	X1M	Terminal block (Power)
HAP	Light emitting diode (Service monitor-green)	X2M	Terminal block (Control)
K1R-K3R	Magnetic relay (M1F)	Y1E	Electronic expansion valve
KAR	Magnetic relay (M1S)	Wired remote control	
KPR	Magnetic relay (M1P)	R1T	Thermistor (Air)
M1F	Motor (Indoor fan)	SS1	Selector Switch (Main/Sub)
M1P	Motor (Drain pump)	Connector for optional parts	
M1S	Motor (Swing flap)	X16A	Connector (Adapter for wiring)
Q1M	Thermo switch (M1F embedded)	X18A	Connector (Wiring adapter for electrical appendices)

- : Terminal block
 : Connector
 : Terminal
 : Field wiring
- COLORS : BLK : Black PNK : Pink
 : BLU : Blue RED : Red
 : BRN : Brown WHT : White
 : GRY : Gray YLW : Yellow
 : ORG : Orange

NOTES

- In case 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 the unit.
- In case high E.S.P. operation, change over the wiring connection from X2A to X3A.
- Use copper conductors only.

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9 Sound data

9 - 1 Sound level data

FXKQ-MA

Model	Sound pressure level - 220 V		Sound pressure level - 240 V		Sound power level
	H	L	H	L	
FXKQ25MA	38	33	40	35	*
FXKQ32MA	38	33	40	35	*
FXKQ40MA	40	34	42	36	*
FXKQ63MA	42	37	44	39	*

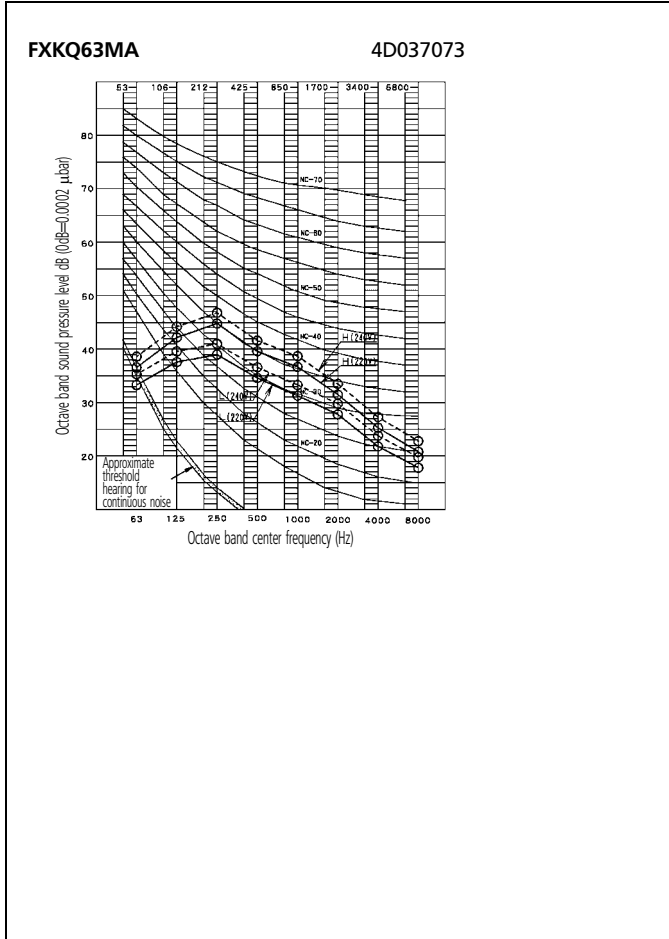
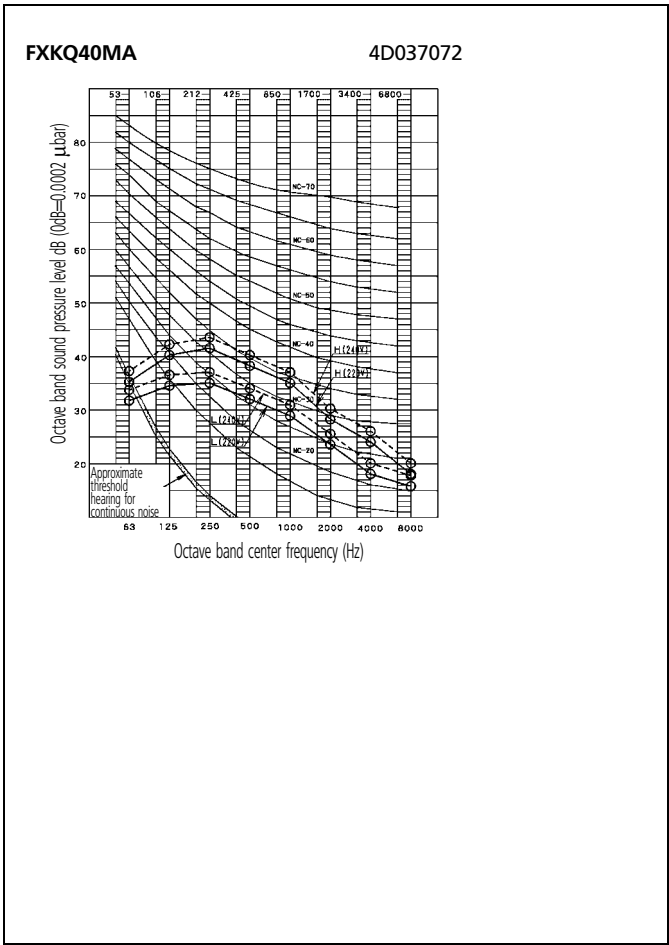
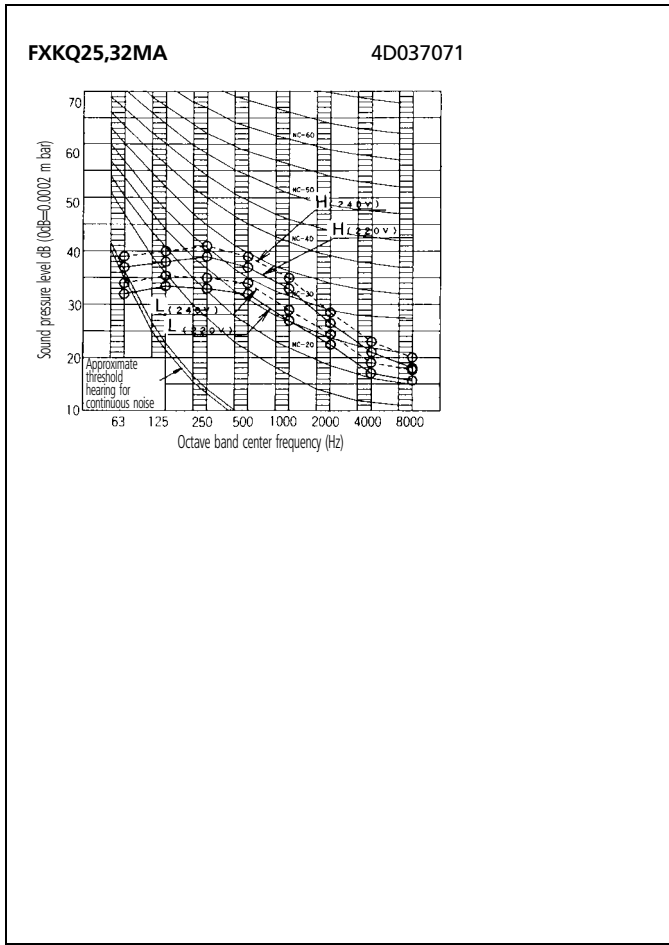
* data were not available at the time of publication

NOTES

- 1 Reference acoustic pressure 0dB=0.0002μbar
- 2 Operation noise differs with operation and ambient conditions
- 3 Measuring place: anechoic chamber

9 Sound data

9 - 2 Sound pressure spectrum

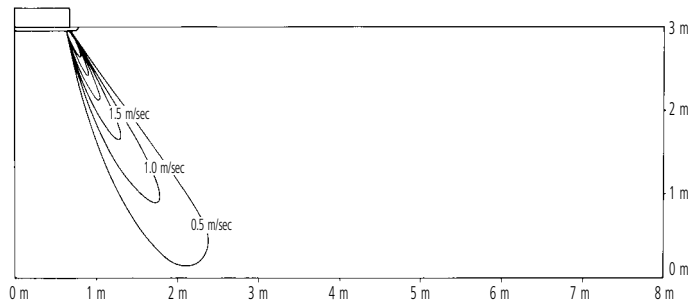


10 Air flow pattern

FXKQ63MA

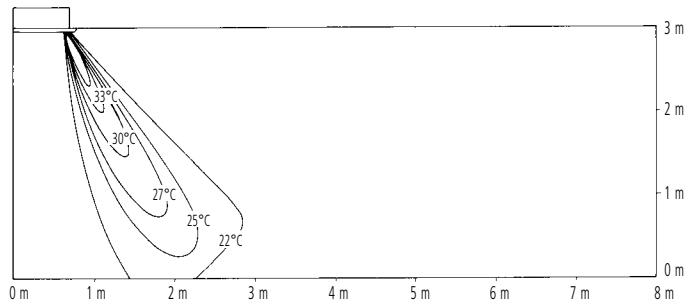
Heating air velocity distribution

Lower air blow



Heating temperature distribution

Lower air blow



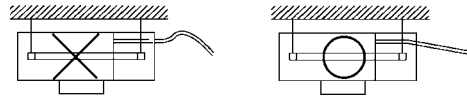
NOTES

- 1 The corner type is applicable on a high ceiling. The standard set-up height is 3 m. Shown here is the measurement distribution at the ceiling height of 3 m.

11 Installation

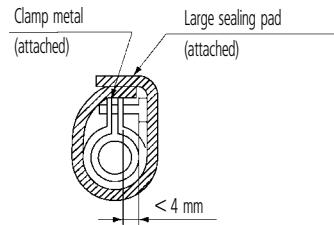
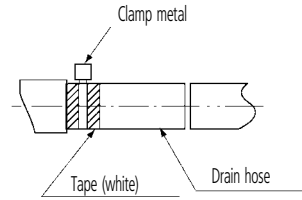
11 - 1 Drainage instructions

Rig the drain pipe as shown below and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.



Install the drain pipes.

- Keep piping as short as possible and slope it downwards so that the air does not remain trapped inside the pipe.
- The diameter of the drain pipe should be larger than or equal to the diameter of the connecting pipe (Vinyl tube; pipe size: 25 mm; outer dimension: 32 mm).
- Use the attached drain hose and clamp metal. Insert the drain hose into the drain socket, up to the white tape. Tighten the clamp until the screw head is less than 4 mm from the hose.

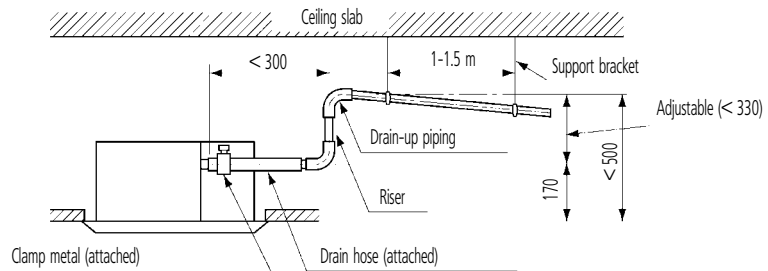


CAUTION

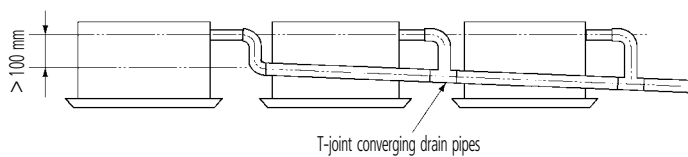
- 1 Installing the unit at an angle opposite to the drain piping might cause leaks.
- Wrap the attached sealing pad over the clamp and drain hose to insulate.
 - Insulate the drain hose inside the building.
 - Insulate the clamp and drain hose with the attached large sealing pad. If the drain hose cannot be sufficiently set on a slope, execute the drain raising piping. Secure a downward gradient of 1/100 or more for the drain pipe. To accomplish this, mount supporting brackets at an interval of 1 - 1.5 m.

Precautions when installing drain-up piping.

- Make sure the drain-up piping is maximum 330 mm high. Install the drain-up piping horizontally, and make sure it is not further than 300 mm from the base of the drain socket.



- Use the following outline if installing concentrated drain piping. If converging multiple drain pipes, install according to the procedure shown on the right.



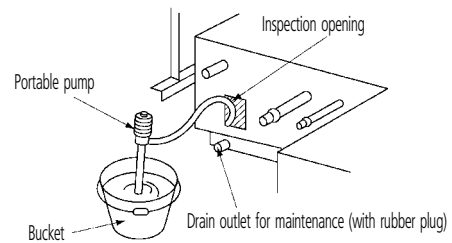
Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.

11 Installation

11 - 1 Drainage instructions

When piping work is finished

- Check if drainage flows smoothly. Open the inspection opening, add approximately 1,000 cc of water slowly into the drain pan and check drainage flow.



NOTE

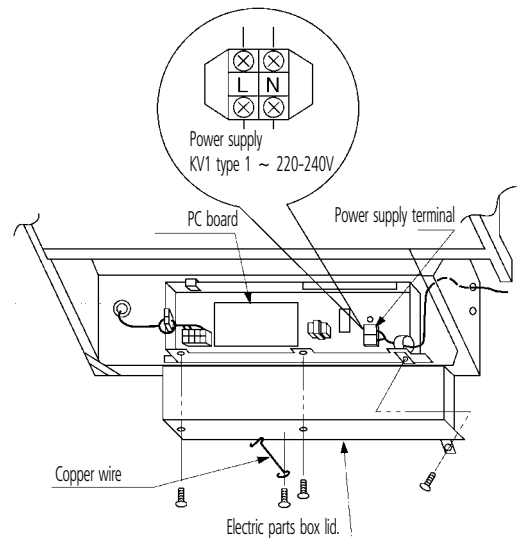
- 1 Use the drain outlet for maintenance to drain water from the drain pan.

When electric wiring work is finished

- Check drainage flow during COOL running, explained under "TEST OPERATION"

When electric wiring work is not finished

- Remove the electric parts box lid, connect power supply and remote control to the terminals.
Next, press the inspection/test operation button "TEST" on the remote control. The unit will engage the test operation mode. Press the operation mode selector button "FAN" until selection FAN OPERATION "FAN". Then, press the ON/OFF button "ON/OFF". The indoor unit fan and drain pump will start up. Check that the water has drained from the unit. Press "TEST" to go back to the first mode.

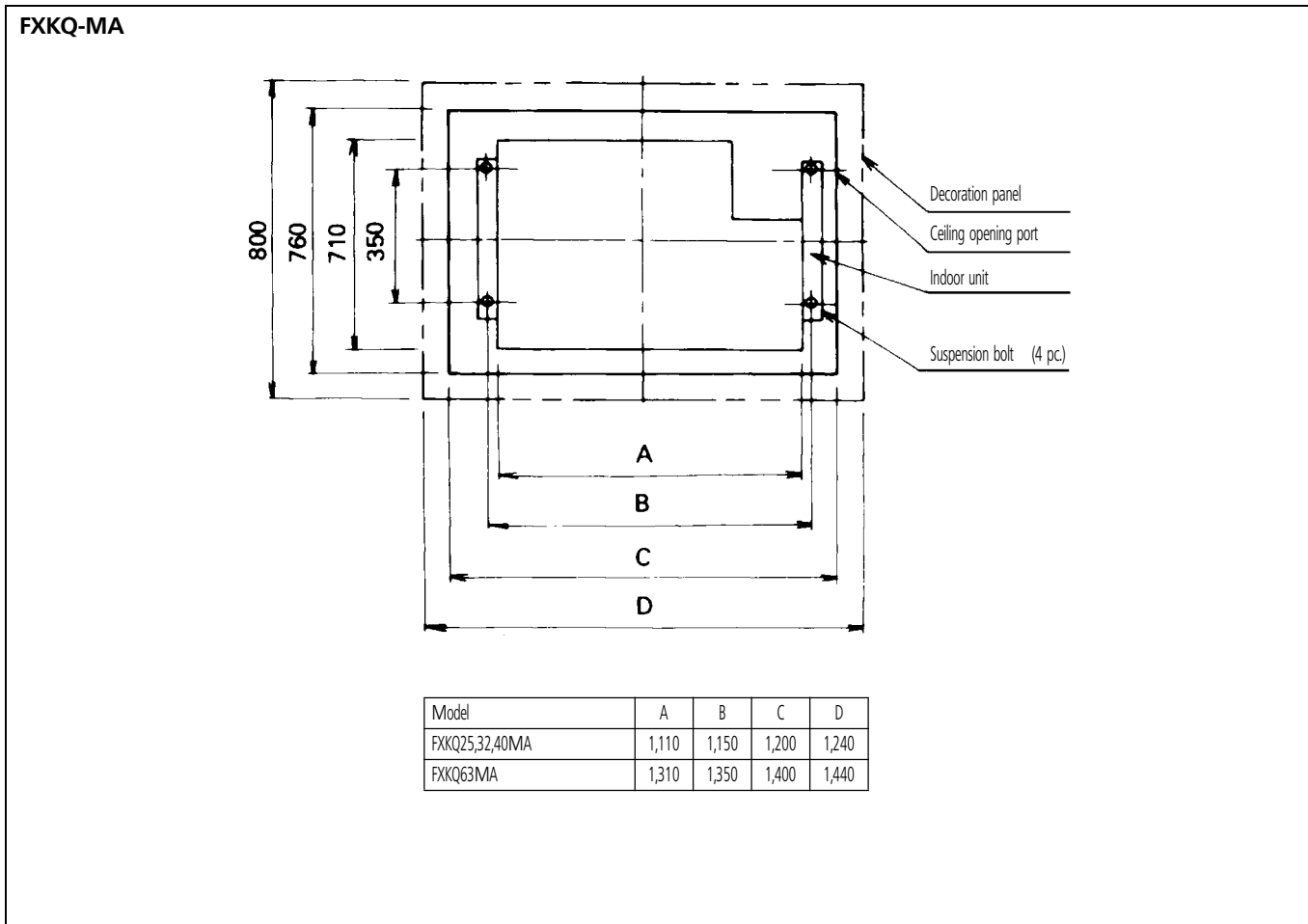


CAUTION

- 1 Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.

11 Installation

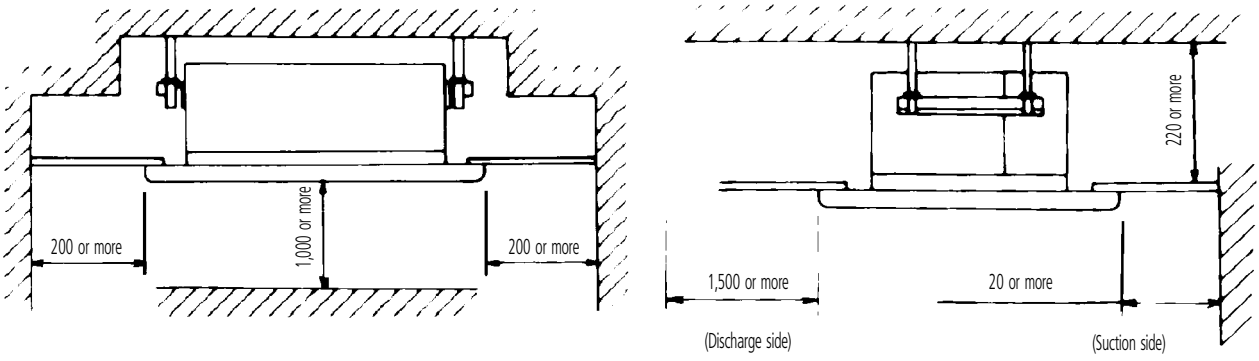
11 - 2 Suspension bolt pitch position



11 Installation

11 - 3 Service space

FXKQ-MA



NOTES

- 1 Above figures mean minimum values

