



Air Conditioners

Technical Data



Large concealed ceiling unit



EEDEN11-204

FXMQ-MA



Air Conditioners

Technical Data



Large concealed ceiling unit



EEDEN11-204

FXMQ-MA

TABLE OF CONTENTS

FXMQ-MA

1	Specifications	2
	Technical Specifications	2
	Electrical Specifications	3
2	Safety device settings	4
	Safety Device Settings	4
3	Options	5
	Options	5
4	Control systems	6
	Control Systems	6
5	Capacity tables	7
	Cooling Capacity Tables	7
	Heating Capacity Tables	8
6	Dimensional drawings	9
	Dimensional Drawings	9
7	Centre of gravity	10
	Centre of Gravity	10
8	Piping diagrams	11
	Piping Diagrams	11
9	Wiring diagrams	12
	Wiring Diagrams - Single Phase	12
10	Sound data	13
	Sound Level Data	13
	Sound Pressure Spectrum	14
11	Fan characteristics	15
	Fan Characteristics	15
12	Installation	16
	Suspension Bolt Pitch Position	16
	Service Space	17

1 Specifications

1-1 Technical Specifications				FXMQ200MA		FXMQ250MA		
Cooling capacity	Nom.		kW	22.4 (1)		28.0 (1)		
Heating capacity	Nom.		kW	25.0 (2)		31.5 (2)		
Power input - 50Hz	Cooling	Nom.	kW	1.294 (1)		1.465 (1)		
	Heating	Nom.	kW	1.294 (2)		1.465 (2)		
Power input - 60Hz	Cooling	Nom.	kW	1.490 (1)		1.684 (1)		
	Heating	Nom.	kW	1.490 (2)		1.684 (2)		
Casing	Material			Galvanised steel plate				
Dimensions	Unit	Height	mm	470				
		Width	mm	1,380				
		Depth	mm	1,100				
Weight	Unit		kg	137				
Heat exchanger	Rows	Quantity		3				
	Fin pitch		mm	2.0				
	Face area		m ²	0.68				
	Stages	Quantity		26				
Fan	Type			Sirocco fan				
	Quantity			2				
	Air flow rate - 50Hz	Cooling	High	m ³ /min	58		72	
			Low	m ³ /min	50		62	
	Air flow rate - 60Hz	Cooling	High	m ³ /min	58		72	
			Low	m ³ /min	50		62	
	External static pressure - 50Hz	High		Pa	221		270	
		Nom.		Pa	132		191	
External static pressure - 60Hz	High		Pa	270				
	Nom.		Pa	132		147		
Fan motor	Quantity			2				
	Model			D13/4G2DA1				
	Output	High		W	380			
	Drive			Direct drive				
Sound pressure level	Cooling	High		dBA	48			
		Low		dBA	45			
Refrigerant	Type			R-410A				
	Control			Electronic expansion valve				
Piping connections	Liquid	Type			Flare connection			
		OD		mm	9.52			
	Gas	Type			Braze connection			
		OD		mm	19.1		22.2	
	Drain			PS1B				
Heat insulation			Glass fiber					
Temperature control				Microprocessor thermostat for cooling and heating				
Safety devices	Item	01		Fan motor thermal protection				
		02		Fuse				

Standard Accessories : Screws;

Standard Accessories : Clamps;

Standard Accessories : Sealing pads;

Standard Accessories : Connection pipes;

Standard Accessories : Installation and operation manual;

1 Specifications

1-2 Electrical Specifications			FXMQ200MA	FXMQ250MA
Power supply	Name		VE	
	Phase		1~	
	Frequency	Hz	50/60	
	Voltage	V	220-240/220	
Voltage range	Min.	%	-10	
	Max.	%	10	
Current - 50Hz	Minimum circuit amps (MCA)		8.1	9.0
	Maximum fuse amps (MFA)		15	
	Full load amps (FLA)	Total	6.5	7.2
Current - 60Hz	Minimum circuit amps (MCA)		9.0	10.1
	Maximum fuse amps (MFA)		15	
	Full load amps (FLA)	Total	7.2	8.1

Notes

- (1) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m (horizontal)
- (2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m (horizontal)
- (3) Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- (4) The external static pressure is changeable: change the connectors inside the electrical box, this pressure means: High static pressure - Standard
- (5) The air filter is not a standard accessory, but please mount it in the duct system of the suction side. Select its colorimetric method (gravity method) 50% or more.
- (6) Sound pressure levels are measured at 220V.
- (7) Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
- (8) Maximum allowable voltage range variation between phases is 2%.
- (9) MCA/MFA: $MCA = 1.25 \times FLA$
- (10) $MFA \leq 4 \times FLA$
- (11) Next lower standard fuse rating minimum 15A
- (12) Select wire size based on the value of MCA
- (13) Instead of a fuse, use a circuit breaker

2 Safety device settings

2 - 1 Safety Device Settings

FXMQ-MA

		Safety devices		200	250
				250V 10A	250V 10A
FXMQ-MA	PC board fuse			250V 10A	250V 10A
	Fan motor thermal fuse	°C	-	-	-
	Fan motor thermal protector	°C	Off: 135 ^{±8} (On: 87 ^{±15})	Off: 135 ^{±8} (On: 87 ^{±15})	Off: 135 ^{±8} (On: 87 ^{±15})

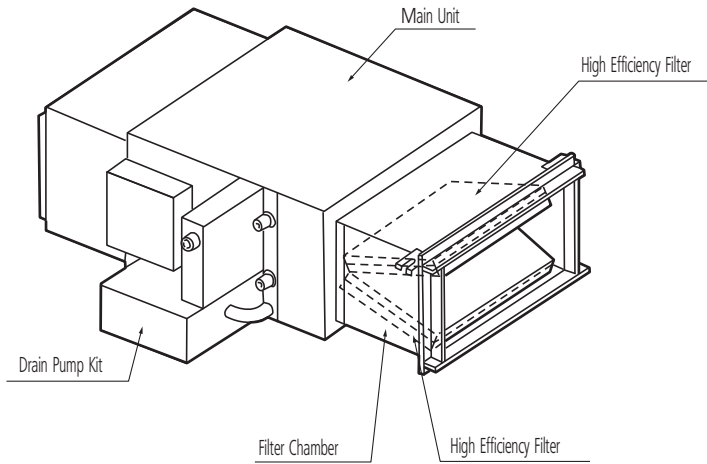
3D034597H

3 Options

3 - 1 Options

	FXMQ200MA	FXMQ250MA
DRAIN PUMP KIT		KDU30L250VE
HIGH EFFICIENCY FILTER 65%		KAFJ372L280
HIGH EFFICIENCY FILTER 90%		KAFJ373L280
FILTER CHAMBER		KDJ3705L280
REPLACEMENT LONG LIFE FILTER		KAFJ371L280

3D040334B



4 Control systems

4 - 1 Control Systems

FXMQ-MA

No.	Item	Type	FXMQ-MVE	
1	Remote control	Infrared	H/P	BRC4C62
			C/O	BRC4C64
		Wired		BRC1D52 / BRC1E51A / BRC1D61 (1)
2	Simplified remote control		BRC2A51	
3	Remote control for hotel use		BRC3A61	
4	Adapter for wiring		KRP1B61	
5-1	Wiring adapter for electrical appendices (1)		KRP2A61	
5-1	Wiring adapter for electrical appendices (2)		KRP4A51	
6	Remote sensor		KRCS01-1	
7	Installation box for adapter PCB		-	
8	Central remote control		DCS302C61	
8-1	Electrical box with earth terminal (3 blocks)		KJB311A	
9	Unified on/off controller		DCS301B51 / DCS301B61 (1)	
9-1	Electrical box with earth terminal (2 blocks)		KJB212A	
9-2	Noise filter (for electromagnetic interface use only)		KEK26-1	
10	Schedule timer		DCS302C51 / DCS302C61 (1)	
11	External control adapter for outdoor unit (must be installed on indoor units)		DTA104A61	
12	Residential wired remote control		DCS303A51 (1) (2)	

3D034600D

NOTES

1. For DAME only.
2. For residential use only. Cannot be used with other centralised control equipment.

5 Capacity tables

5 - 1 Cooling Capacity Tables

FXMQ-MA

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

Unit size	Nominal capacity	Outdoor air temp.	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	
°CDB		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	
200	22.4	10.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	26.8	17.6	29.4	17.8
		12.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	26.8	17.6	29.0	17.6
		14.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	26.8	17.6	28.7	17.4
		16.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	26.8	17.6	28.3	17.2
		18.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	26.8	17.6	27.9	16.9
		20.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	26.8	17.6	27.5	16.7
		21.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	26.8	17.6	27.4	16.6
		23.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	26.4	17.3	27.0	16.4
		25.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	26.1	17.1	26.6	16.2
		27.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.7	16.8	26.2	16.1
		29.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.3	16.6	25.8	15.9
		31.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	24.9	16.4	25.4	15.7
		33.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	24.5	16.3	25.0	15.6
		35.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.6	17.0	24.2	16.1	24.6	15.4
		37.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.2	16.8	23.8	16.0	24.3	15.3
		39.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	22.8	16.6	23.4	15.8	23.9	15.1
		250	28.0	10.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1
12.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8
14.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	35.9	21.6
16.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	35.4	21.3
18.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	34.9	21.0
20.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	34.4	20.7
21.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	34.2	20.6
23.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.0	21.7	33.7	20.3
25.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	32.6	21.5	33.2	20.2
27.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	32.1	21.2	32.8	20.0
29.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	31.6	20.9	32.3	19.9
31.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	31.1	20.6	31.8	19.7
33.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	30.6	20.4	31.3	19.5
35.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.5	21.1	30.2	20.2	30.8	19.4
37.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.0	20.9	29.7	20.0	30.4	19.2
39.0	18.9			16.9	22.5	18.5	26.2	20.4	28.0	21.0	28.5	20.6	29.2	19.8	29.9	19.0

5 Capacity tables

5 - 2 Heating Capacity Tables

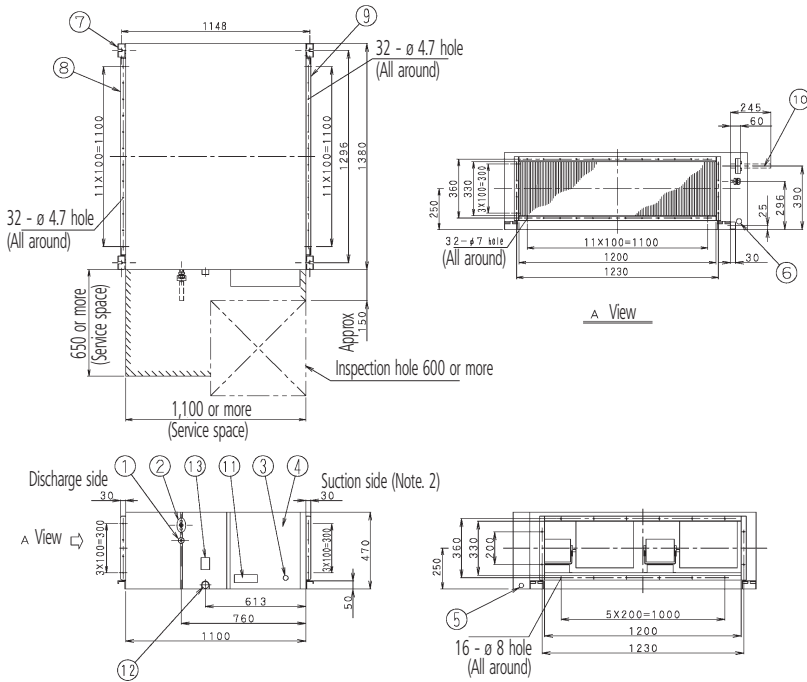
FXMQ-MA

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
200	25.0	-19.8	-20.0	14.8	14.7	14.7	14.7	14.6	14.6
		-18.8	-19.0	15.2	15.2	15.1	15.1	15.1	15.0
		-16.7	-17.0	16.1	16.0	16.0	16.0	16.0	15.9
		-14.7	-15.0	17.0	16.9	16.9	16.9	16.8	16.8
		-12.6	-13.0	17.9	17.8	17.8	17.7	17.7	17.7
		-10.5	-11.0	18.7	18.7	18.6	18.6	18.6	18.6
		-9.5	-10.0	19.2	19.1	19.1	19.1	19.0	19.0
		-8.5	-9.1	19.6	19.5	19.5	19.5	19.4	19.4
		-7.0	-7.6	20.2	20.2	20.2	20.1	20.1	20.1
		-5.0	-5.6	21.1	21.1	21.0	21.0	21.0	20.9
		-3.0	-3.7	22.0	21.9	21.9	21.9	21.8	21.8
		0.0	-0.7	23.3	23.2	23.2	23.2	23.2	21.8
		3.0	2.2	24.6	24.5	24.5	24.2	23.4	21.8
		5.0	4.1	25.4	25.4	25.0	24.2	23.4	21.8
		7.0	6.0	26.2	26.2	25.0	24.2	23.4	21.8
		9.0	7.9	27.1	26.6	25.0	24.2	23.4	21.8
		11.0	9.8	27.9	26.6	25.0	24.2	23.4	21.8
13.0	11.8	28.2	26.6	25.0	24.2	23.4	21.8		
15.0	13.7	28.2	26.6	25.0	24.2	23.4	21.8		
250	31.5	-19.8	-20.0	18.6	18.5	18.5	18.5	18.4	18.4
		-18.8	-19.0	19.2	19.1	19.0	19.0	19.0	18.9
		-16.7	-17.0	20.3	20.2	20.2	20.1	20.1	20.0
		-14.7	-15.0	21.4	21.3	21.3	21.2	21.2	21.2
		-12.6	-13.0	22.5	22.4	22.4	22.4	22.3	22.3
		-10.5	-11.0	23.6	23.6	23.5	23.5	23.4	23.4
		-9.5	-10.0	24.2	24.1	24.1	24.0	24.0	23.9
		-8.5	-9.1	24.7	24.6	24.6	24.5	24.5	24.4
		-7.0	-7.6	25.5	25.4	25.4	25.4	25.3	25.3
		-5.0	-5.6	26.6	26.6	26.5	26.5	26.4	26.4
		-3.0	-3.7	27.7	27.6	27.6	27.5	27.5	27.5
		0.0	-0.7	29.3	29.3	29.2	29.2	29.2	27.5
		3.0	2.2	31.0	30.9	30.8	30.5	29.5	27.5
		5.0	4.1	32.0	32.0	31.5	30.5	29.5	27.5
		7.0	6.0	33.1	33.0	31.5	30.5	29.5	27.5
		9.0	7.9	34.1	33.5	31.5	30.5	29.5	27.5
		11.0	9.8	35.2	33.5	31.5	30.5	29.5	27.5
13.0	11.8	35.5	33.5	31.5	30.5	29.5	27.5		
15.0	13.7	35.5	33.5	31.5	30.5	29.5	27.5		

6 Dimensional drawings

6 - 1 Dimensional Drawings

FXMQ200,250MA



Piping size (field supply)

Model	Gas	Liquid
FXMQ200MA	ø 19.1 attached piping	ø 9.5
FXMQ250MA	ø 22.2 attached piping	ø 9.5

Nr	Part name	Description
1	Liquid pipe connection	Flare connection
2	Gas pipe connection	Attendant piping connection
3	Ground terminal	M5 (Inside switch box)
4	Switch box	
5	Power supply wiring connection	
6	Transmission wiring connection	
7	Hook	M10
8	Discharge companion flange	
9	Suction flange	
10	Attached piping	Brazing
11	Name plate	
12	Drain piping connection	PS1B Internal thread VP25 (O.D. ø33.349, I.D. ø30.391)
13	Water supply port	

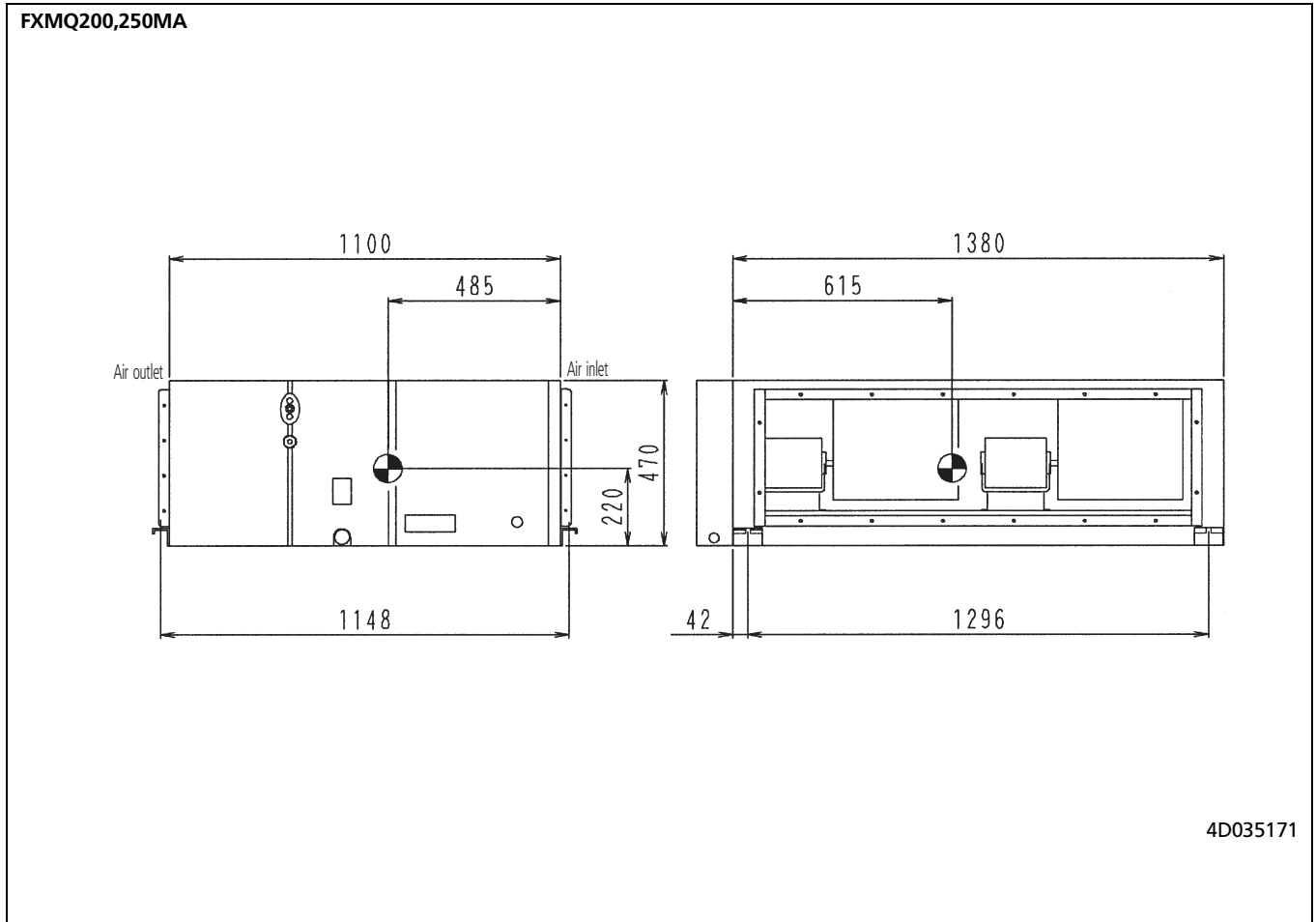
NOTES

- 1 Location of unit's name plate: switch box surface.
- 2 Mount the air filter at the suction side. (Select its colorimethod (gravity method) 50% or more).

3D038851

7 Centre of gravity

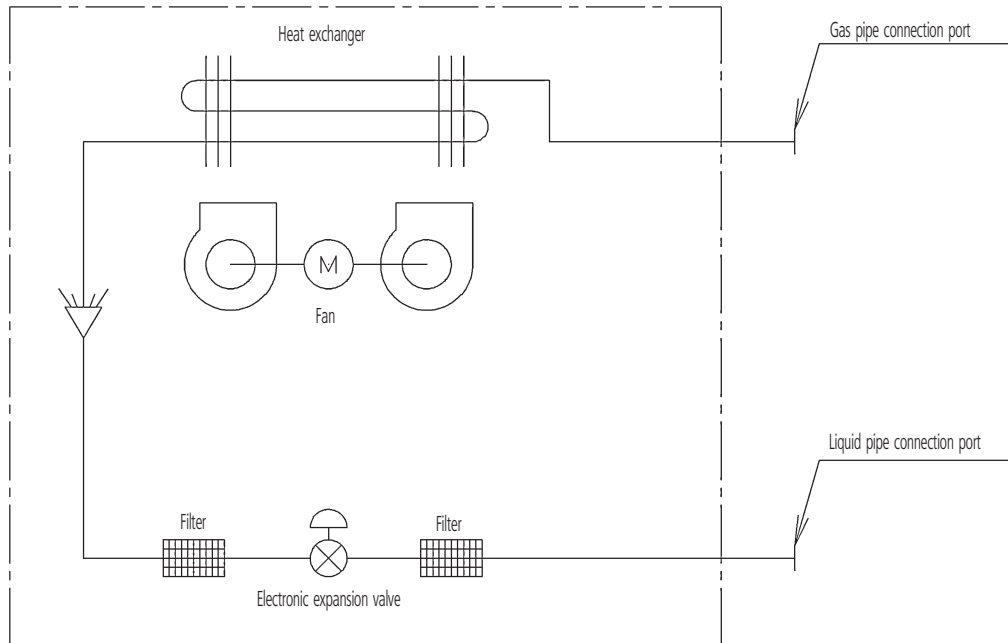
7 - 1 Centre of Gravity



8 Piping diagrams

8 - 1 Piping Diagrams

FXMQ-MA



Piping connection diameters

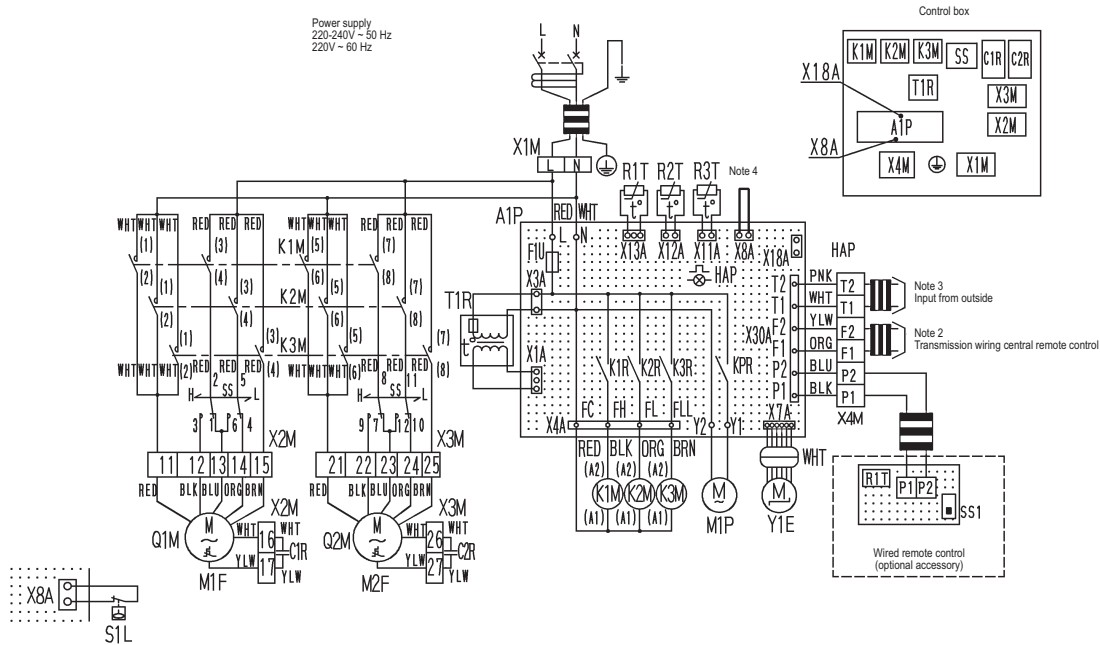
Model	Gas	Liquid
FXMQ200MA	ø19.1	ø9.5
FXMQ250MA	ø22.2	ø9.5

4D034245D

9 Wiring diagrams

9 - 1 Wiring Diagrams - Single Phase

FXMQ200,250MA



Indoor unit		R2T, R3T	Thermistor (coil)	Wired remote control	
A1P	Printed circuit board	SS	Select switch (static pressure)	R1T	Thermistor (air)
C1R, C2R	Capacitor (M1F, 2F)	T1R	Transformer (220-240V/22V)	SS1	Select switch (main/sub)
F1U	Fuse (⊙, 5A, 250V)	X1M	Terminal block (power)	Connector for optional parts	
HAP	Light emitting diode (service monitor-green)	X2M, X3M	Terminal block	X8A	Connector (float switch)
K1M	Magnetic contactor (M1F, 2F)	X4M	Terminal block (control)	X18A	Connector (wiring adapter for electrical appendices)
K2M	Magnetic contactor (M1F, 2F)	Y1E	Electronic expansion valve		
K3M	Magnetic contactor (M1F, 2F)	Optional parts			
K1R - K3R	Magnetic relay (M1F, 2F)	M1P	Motor (drain pump)		
M1F, M2F	Motor (indoor fan)				
Q1M, Q2M	Thermo switch (M1F, 2F embedded)				
R1T	Thermistor (air)				

PNK: pink	WHT: white
YLW: yellow	ORG: orange
BLU: blue	BLK: black
RED: red	BRN: brown

3D039621D

NOTES

- : terminal block, □○□, D- : connector, -○- : terminal, □□ : short circuit connector, -||- : field wiring
- 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 to the unit.
- In case installing the drain pump, remove the short circuit connector of X8A and execute the additional wiring for float switch and drain pump.
- Use copper conductors only.
- In case high E.S.P. operation, change the switch (SS) for 'H'.

10 Sound data

10 - 1 Sound Level Data

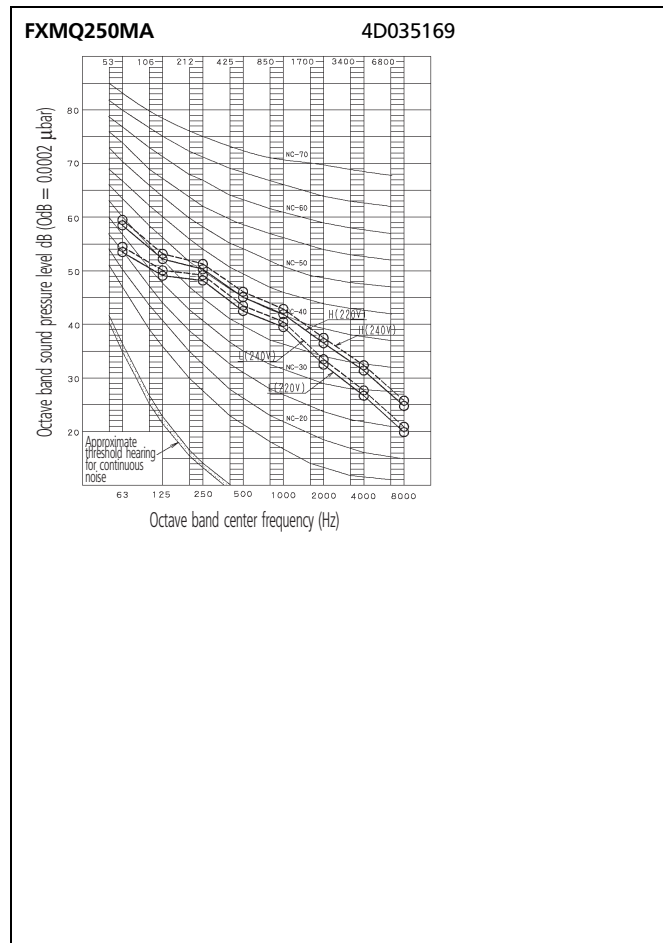
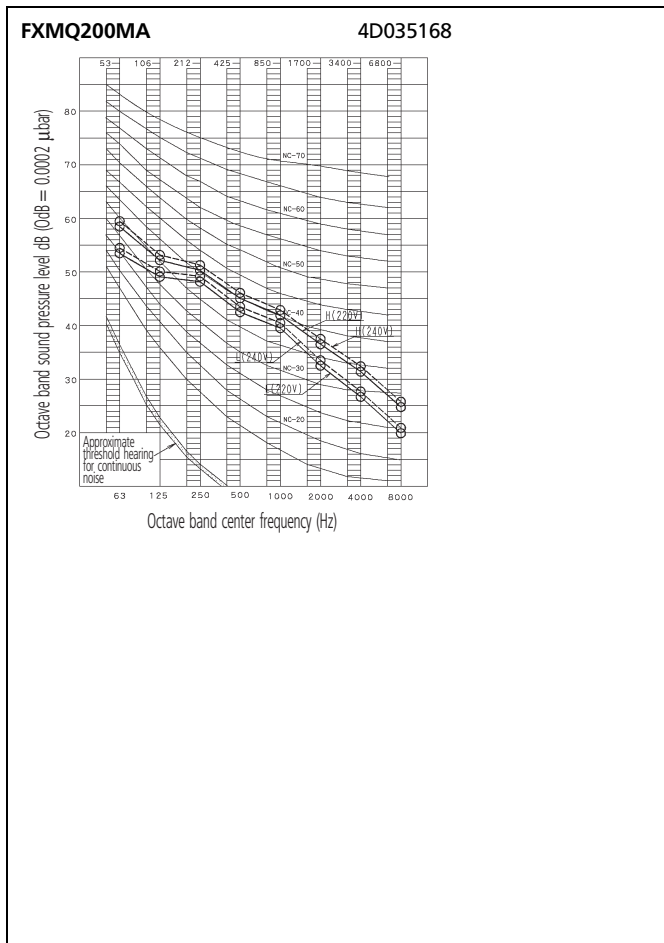
FXMQ-MA				
Model	Sound pressure level - 220V			Sound power level
	H	L	Measuring location	
FXMQ200MA	48	45		*
FXMQ250MA	48	45		*

NOTES

- 1 Reference acoustic pressure 0 dB = 20 Pa.
- 2 Measuring place: anechoic chamber
- 3 Operation noise differs with operation and ambient conditions.
*Data were not available at the time of publication

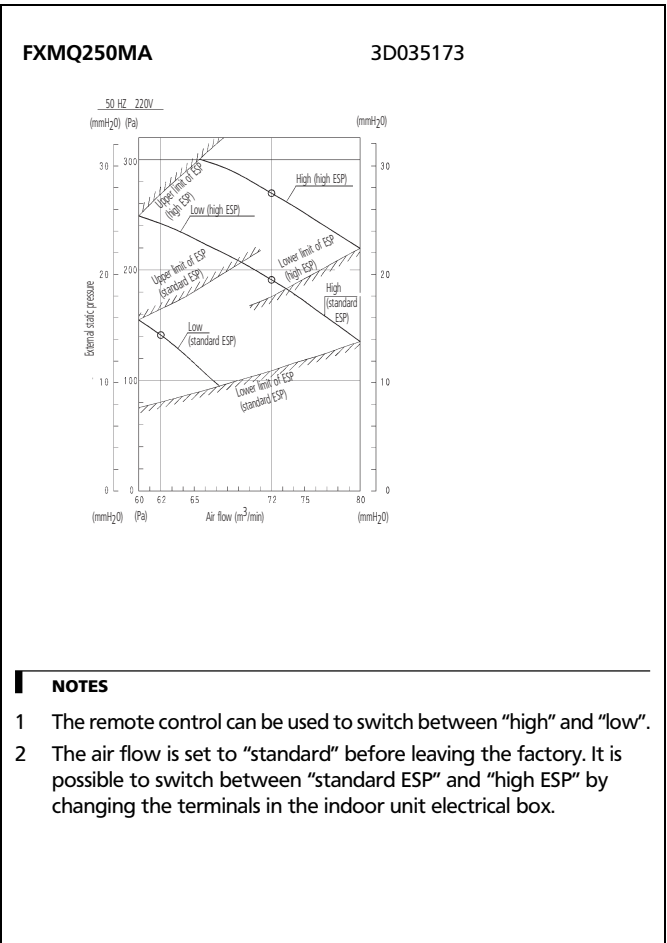
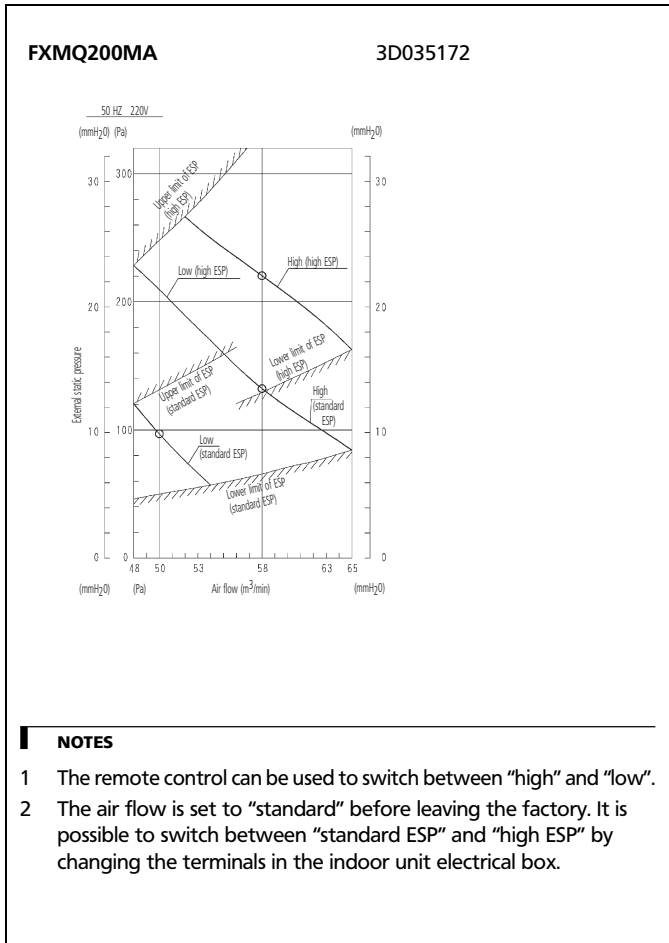
10 Sound data

10 - 2 Sound Pressure Spectrum



11 Fan characteristics

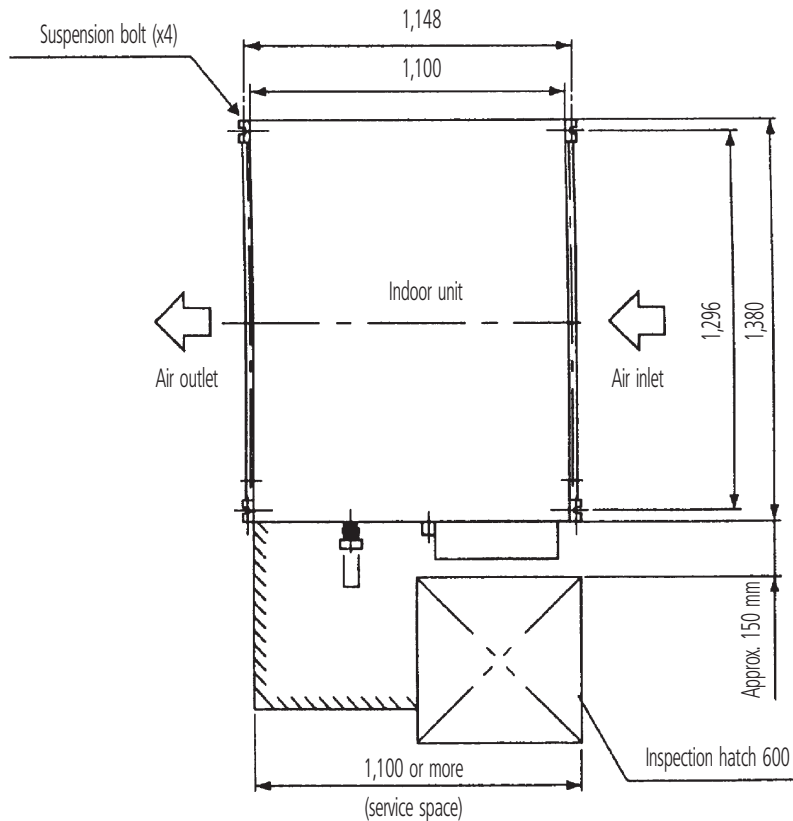
11 - 1 Fan Characteristics



12 Installation

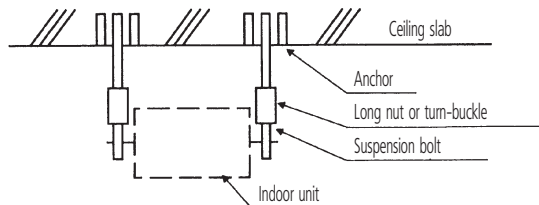
12 - 1 Suspension Bolt Pitch Position

FXMQ200,250MA



NOTES

- 1 Install a canvas duct to the air discharge outlet and air inlet so that vibration from the machine body is not transmitted to the duct or ceiling. You should also apply acoustic (insulation material) to the inside of the duct, and vibration insulation rubber to the suspension bolts.
- 2 Install suspension bolts.
Use bolts of 10 mm diameter.
Install the equipment where supporting structures are strong enough to bear the equipment's weight. Use embedded inserts or anchor bolts with new buildings and hole-in-anchors with old buildings.



NOTE

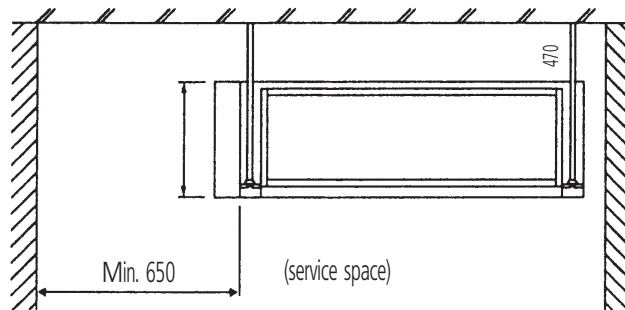
- 1 All the above parts are to be procured in the field.

3P086156-2-5

12 Installation

12 - 2 Service Space

FXMQ200,250MA



NOTE

- 1 Above figures mean minimum values.

3P086156-2-4

In all of us,
a green heart



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



VRV® products are not within the scope of the Eurovent certification programme.

The present publication is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Daikin Europe N.V. has compiled the content of this publication to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this publication. All content is copyrighted by Daikin Europe N.V.

Daikin products are distributed by: