



# technical data

Concealed Floor Standing Unit  
FXNQ-MAVE

air conditioning systems

**R-410A**



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# 1 Specifications

1-1 Technical Specifications				FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE	
Capacity	Cooling	kW	2.20	2.80	3.60	4.50	5.60	7.10		
	Heating	kW	2.50	3.20	4.00	5.00	6.30	8.00		
Power Input (50Hz)	Cooling	kW	0.049	0.049	0.090	0.090	0.110	0.110		
	Heating	kW	0.049	0.049	0.090	0.090	0.110	0.110		
Power Input (60Hz)	Cooling	kW	0.047	0.047	0.079	0.084	0.105	0.108		
	Heating	kW	0.047	0.047	0.079	0.084	0.105	0.108		
Casing	Material	Galvanised steel								
Dimensions	Unit	Height	mm	610	610	610	610	610	610	
		Width	mm	930	930	1070	1070	1350	1350	
		Depth	mm	220	220	220	220	220	220	
Weight	Unit	kg	19	19	23	23	27	27		
Heat Exchanger	Dimensions	Nr of Rows		3	3	3	3	3	3	
		Fin Pitch	mm	1.50	1.50	1.50	1.50	1.50	1.50	
		Face Area	m <sup>2</sup>	0.159	0.159	0.200	0.200	0.282	0.282	
		Nr of Stages		14	14	14	14	14	14	
Fan	Type	Sirocco fan								
	Quantity		1	1	1	1	1	1		
Air Flow Rate	Cooling	High	m <sup>3</sup> /min	7.00	7.00	8.00	11.00	14.00	16.00	
		Low	m <sup>3</sup> /min	6.00	6.00	6.00	8.50	11.00	12.00	
Fan	Motor	Quantity		1	1	1	1	1	1	
		Model		D14B20	D14B20	2D14B13	2D14B13	2D14B20	2D14B20	
		Output (high)	W	15	15	25	25	35	35	
		Drive	Direct drive							
Refrigerant	Name	R-410A								
Cooling	Sound Pressure	High	dBA	35.0	35.0	35.0	38.0	39.0	40.0	
		Low	dBA	32.0	32.0	32.0	33.0	34.0	35.0	
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	mm	21	21	21	21	21	21	
Heat Insulation	Glass Fiber/Urethane Foam									
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									
	Fan motor thermal protector									
	Installation and operation manual									
Standard Accessories	Standard Accessories	Insulation for fitting								
		Drain hose								
		Clamps								
		Screws								
		Washer								
		Level adjustment screw								
		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 Specifications

1-2 Electrical Specifications (50Hz)			FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE
Power Supply	Name		VE					
	Phase		1~					
	Frequency	Hz	50					
	Voltage	V	220-240					
Current	Minimum circuit amps (MCA)	A	0.3	0.3	0.6	0.6	0.6	0.6
	Maximum fuse amps (MFA)	A	15	15	15	15	15	15
	Full load amps (FLA)	A	0.2	0.2	0.5	0.5	0.5	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)			FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE	FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE
Power Supply	Name		VE					
	Phase		1~					
	Frequency	Hz	60					
	Voltage	V	220					
Current	Minimum circuit amps (MCA)	A	0.3	0.3	0.5	0.5	0.6	0.6
	Maximum fuse amps (MFA)	A	15	15	15	15	15	15
	Full load amps (FLA)	A	0.2	0.2	0.4	0.4	0.5	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

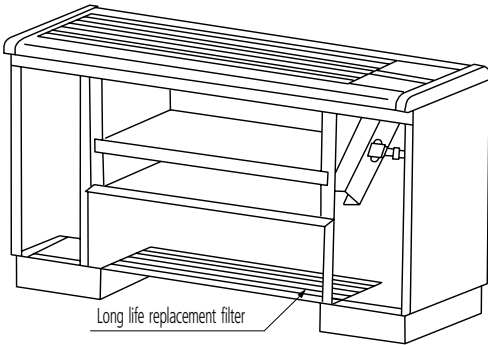
	FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
PC BOARD FUSE	250V 10A					
FAN MOTOR THERMAL PROTECTOR	°C OFF: 135 <sup>±10</sup> / ON: 120 or less					

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## 3 Options

	FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
LONG LIFE REPLACEMENT FILTER	KAFJ361K28		KAFJ361K45			KAFJ361K71

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## 4 Control systems

### Individual control systems

		FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
WIRED REMOTE CONTROL		BRC1D52 / BRC1D61 (1)					
INFRARED REMOTE CONTROL	Heat pump	BRC4C62					
	Cooling only	BRC4C64					
SIMPLIFIED REMOTE CONTROL		BRC2A51 / BRC2C51					
REMOTE CONTROL FOR HOTEL USE		BRC3A61					

### Centralised control systems

		FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
CENTRALISED REMOTE CONTROL		DCS302C51 / DCS302CA61 (1)					
UNIFIED ON/OFF CONTROL		DCS301C51 / DCS301BA61 (1)					
SCHEDULE TIMER		DST301C51 / DST301BA61 (1)					
RESIDENTIAL CENTRAL REMOTE CONTROL		DCS303A51 (1)(2)					

### Others

		FXNQ20MA	FXNQ25MA	FXNQ32MA	FXNQ40MA	FXNQ50MA	FXNQ63MA
WIRING ADAPTER		KRP1B61					
WIRING ADAPTER FOR ELECTRICAL APPENDICES (1)		KRP2A51 / KRP2A61 (1)					
WIRING ADAPTER FOR ELECTRICAL APPENDICES (2)		KRP4A51					
REMOTE SENSOR		KRC501-1					
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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### 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

FXNQ-MA		TC: Total capacity,kW - SHC: Sensible capacity,kW														
Unit size	Nominal capacity	Outdoor air temp. °CDB	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	TC	SHC	TC	SHC	TC	SHC	TC
20	2.2	10.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.6	1.8	2.9	1.8
		12.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.6	1.8	2.9	1.7
		14.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.6	1.8	2.8	1.7
		16.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.6	1.8	2.8	1.7
		18.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.6	1.8	2.7	1.7
		20.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.6	1.8	2.7	1.6
		21.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.6	1.8	2.7	1.6
		23.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.6	1.8	2.6	1.6
		25.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.6	1.7	2.6	1.6
		27.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.5	1.7	2.6	1.6
		29.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.5	1.7	2.5	1.6
		31.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.4	1.7	2.5	1.6
		33.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.8	2.4	1.7	2.5	1.6
		35.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.7	2.4	1.6	2.4	1.5
		37.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.3	1.7	2.3	1.6	2.4	1.6
39.0	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.2	1.7	2.3	1.6	2.3	1.5		
25	2.8	10.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.7	2.1
		12.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.6	2.1
		14.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.6	2.1
		16.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.5	2.1
		18.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.5	2.0
		20.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.4	2.0
		21.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.4	2.1	3.4	2.0
		23.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.3	2.1	3.4	2.0
		25.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.3	2.1	3.3	2.0
		27.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.1	3.3	1.9
		29.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.0	3.2	1.9
		31.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.1	2.0	3.2	1.9
		33.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.1	2.0	3.1	1.9
		35.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	3.0	2.1	3.0	2.0	3.1	1.9
		37.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	2.9	2.0	3.0	2.0	3.0	1.9
39.0	1.9	1.6	2.3	1.8	2.6	2.0	2.8	2.1	2.9	2.0	2.9	2.0	3.0	1.9		
32	3.6	10.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.3	2.6	4.7	2.6
		12.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.3	2.6	4.7	2.6
		14.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.3	2.6	4.6	2.6
		16.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.3	2.6	4.6	2.5
		18.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.3	2.6	4.5	2.5
		20.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.3	2.6	4.4	2.5
		21.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.3	2.6	4.4	2.5
		23.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.2	2.6	4.3	2.4
		25.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.2	2.6	4.3	2.4
		27.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.1	2.5	4.2	2.4
		29.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.1	2.5	4.2	2.4
		31.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	4.0	2.5	4.1	2.4
		33.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.6	3.9	2.4	4.0	2.3
		35.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.8	2.5	3.9	2.4	4.0	2.3
		37.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.5	3.7	2.5	3.8	2.4	3.9	2.3
39.0	2.4	2.1	2.9	2.2	3.4	2.5	3.6	2.6	3.7	2.5	3.8	2.4	3.8	2.3		
40	4.5	10.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.4	3.3	5.9	3.3
		12.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.4	3.3	5.8	3.3
		14.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.4	3.3	5.8	3.2
		16.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.4	3.3	5.7	3.2
		18.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.4	3.3	5.6	3.1
		20.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.4	3.3	5.5	3.1
		21.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.4	3.3	5.5	3.1
		23.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.3	3.2	5.4	3.0
		25.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.2	3.2	5.3	3.0
		27.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.2	3.1	5.3	3.0
		29.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.1	3.1	5.2	3.0
		31.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	5.0	3.1	5.1	2.9
		33.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.8	3.2	4.9	3.0	5.0	2.9
		35.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.7	3.2	4.9	3.1	5.0	2.9
		37.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.1	4.7	3.2	4.8	3.0	4.9	2.8
39.0	3.0	2.5	3.6	2.7	4.2	3.1	4.5	3.2	4.6	3.1	4.7	3.0	4.8	2.8		

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## 5 Capacity tables

### 5 - 1 Cooling capacity tables

FXNQ-MA		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	SHC
50	5.6	10.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1	7.4	4.1
		12.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1	7.3	4.1
		14.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1	7.2	4.0
		16.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1	7.1	4.0
		18.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1	7.0	3.9
		20.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1	6.9	3.9
		21.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1	6.8	3.8
		23.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.6	4.0	6.7	3.8
		25.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.5	4.0	6.6	3.7
		27.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.4	3.9	6.6	3.7
		29.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.3	3.9	6.5	3.7
		31.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.2	3.8	6.4	3.7
		33.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.1	3.8	6.3	3.6
		35.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	5.9	4.0	6.0	3.8	6.2	3.6
		37.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	5.8	3.9	5.9	3.7	6.1	3.6
		39.0	3.8	3.0	4.5	3.4	5.2	3.8	5.6	3.9	5.7	3.9	5.8	3.7	6.0	3.5
63	7.1	10.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.5	5.1	9.3	5.0
		12.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.5	5.1	9.2	5.0
		14.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.5	5.1	9.1	4.9
		16.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.5	5.1	9.0	4.8
		18.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.5	5.1	8.8	4.8
		20.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.5	5.1	8.7	4.7
		21.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.5	5.1	8.7	4.7
		23.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.4	5.0	8.5	4.6
		25.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.3	5.0	8.4	4.5
		27.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.1	4.9	8.3	4.5
		29.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	8.0	4.8	8.2	4.5
		31.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	7.9	4.7	8.1	4.4
		33.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.6	5.0	7.8	4.7	7.9	4.4
		35.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.5	4.9	7.7	4.7	7.8	4.3
		37.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.4	4.9	7.5	4.6	7.7	4.2
		39.0	4.8	3.7	5.7	4.2	6.6	4.8	7.1	4.9	7.2	4.8	7.4	4.6	7.6	4.2

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## 5 Capacity tables

### 5 - 2 Heating capacity tables

FXNQ-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	kW
20	2.5	-19.8	-20.0	1.5	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	1.5
		-16.7	-17.0	1.6	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	1.7
		-12.6	-13.0	1.8	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	1.9
		-9.5	-10.0	1.9	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	1.9
		-7.0	-7.6	2.0	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	2.1
		-3.0	-3.7	2.2	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	2.3	2.2
		3.0	2.2	2.5	2.5	2.4	2.4	2.3	2.3	2.2
		5.0	4.1	2.5	2.5	2.5	2.4	2.3	2.2	2.2
		7.0	6.0	2.6	2.6	2.5	2.4	2.3	2.2	2.2
		9.0	7.9	2.7	2.7	2.5	2.4	2.3	2.2	2.2
		11.0	9.8	2.8	2.7	2.5	2.4	2.3	2.2	2.2
13.0	11.8	2.8	2.7	2.5	2.4	2.3	2.2	2.2		
15.0	13.7	2.8	2.7	2.5	2.4	2.3	2.2	2.2		
25	3.2	-19.8	-20.0	1.9	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	1.9
		-16.7	-17.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0
		-14.7	-15.0	2.2	2.2	2.2	2.2	2.2	2.1	2.1
		-12.6	-13.0	2.3	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	2.4
		-9.5	-10.0	2.5	2.4	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	2.5
		-7.0	-7.6	2.6	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	2.7
		-3.0	-3.7	2.8	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	3.0	2.8
		3.0	2.2	3.1	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	2.8
		7.0	6.0	3.4	3.4	3.2	3.1	3.0	2.8	2.8
		9.0	7.9	3.5	3.4	3.2	3.1	3.0	2.8	2.8
		11.0	9.8	3.6	3.4	3.2	3.1	3.0	2.8	2.8
13.0	11.8	3.6	3.4	3.2	3.1	3.0	2.8	2.8		
15.0	13.7	3.6	3.4	3.2	3.1	3.0	2.8	2.8		
32	4.0	-19.8	-20.0	2.4	2.4	2.3	2.3	2.3	2.3	2.3
		-18.8	-19.0	2.4	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	2.5
		-14.7	-15.0	2.7	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	2.8
		-10.5	-11.0	3.0	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	3.0
		-8.5	-9.1	3.1	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	3.2
		-5.0	-5.6	3.4	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	3.5
		0.0	-0.7	3.7	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	3.5
		5.0	4.1	4.1	4.1	4.0	3.9	3.7	3.5	3.5
		7.0	6.0	4.2	4.2	4.0	3.9	3.7	3.5	3.5
		9.0	7.9	4.3	4.3	4.0	3.9	3.7	3.5	3.5
		11.0	9.8	4.5	4.3	4.0	3.9	3.7	3.5	3.5
13.0	11.8	4.5	4.3	4.0	3.9	3.7	3.5	3.5		
15.0	13.7	4.5	4.3	4.0	3.9	3.7	3.5	3.5		
40	5.0	-19.8	-20.0	3.0	2.9	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	3.0
		-16.7	-17.0	3.2	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	3.4
		-12.6	-13.0	3.6	3.6	3.6	3.5	3.5	3.5	3.5
		-10.5	-11.0	3.7	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	3.8
		-8.5	-9.1	3.9	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	4.0
		-5.0	-5.6	4.2	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	4.4
		0.0	-0.7	4.7	4.6	4.6	4.6	4.6	4.4	4.4
		3.0	2.2	4.9	4.9	4.9	4.8	4.7	4.4	4.4
		5.0	4.1	5.1	5.1	5.0	4.8	4.7	4.4	4.4
		7.0	6.0	5.2	5.2	5.0	4.8	4.7	4.4	4.4
		9.0	7.9	5.4	5.3	5.0	4.8	4.7	4.4	4.4
		11.0	9.8	5.6	5.3	5.0	4.8	4.7	4.4	4.4
13.0	11.8	5.6	5.3	5.0	4.8	4.7	4.4	4.4		
15.0	13.7	5.6	5.3	5.0	4.8	4.7	4.4	4.4		

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## 5 Capacity tables

### 5 - 2 Heating capacity tables

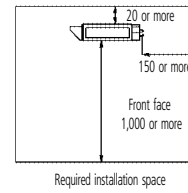
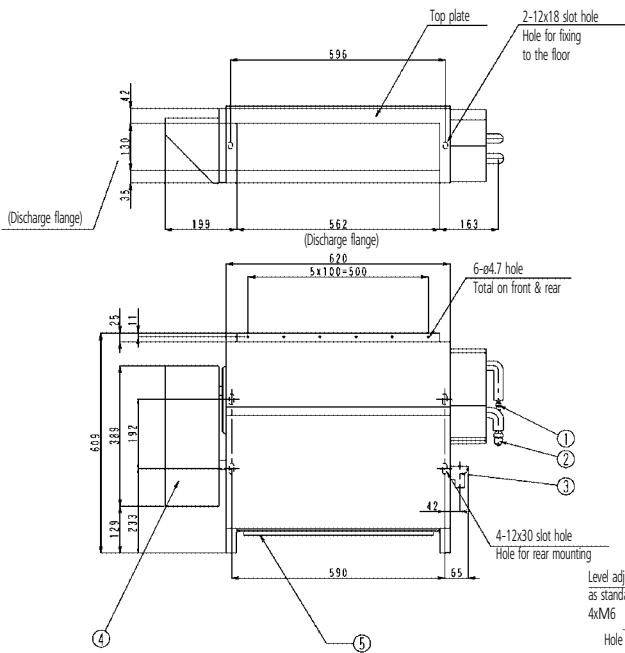
FXNQ-MA									
Unit Size	Nominal capacity	Outdoor air temperature		Indoor air temperature °CDB					
				16.0	18.0	20.0	21.0	22.0	24.0
		°CDB	°CWB	kW	kW	kW	kW	kW	kW
50	6.3	-19.8	-20.0	3.7	3.7	3.7	3.7	3.7	3.7
		-18.8	-19.0	3.8	3.8	3.8	3.8	3.8	3.8
		-16.7	-17.0	4.1	4.0	4.0	4.0	4.0	4.0
		-14.7	-15.0	4.3	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		

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## 6 Dimensional drawing & centre of gravity

### 6 - 1 Dimensional drawing

#### FXNQ20,25MA



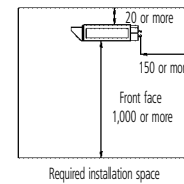
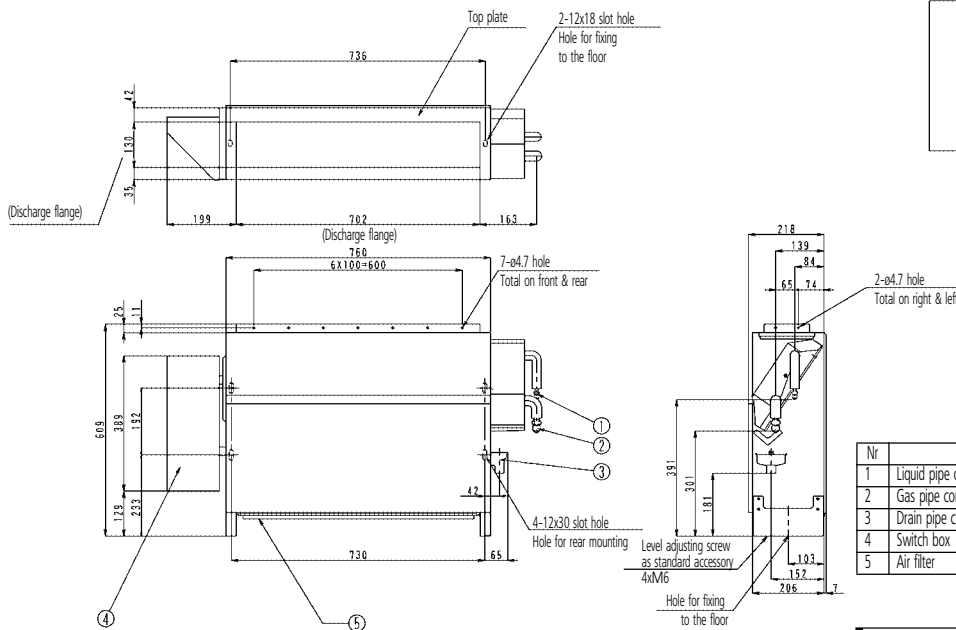
Nr	Part name	Description
1	Liquid pipe connection port	ø6.4 flare connection
2	Gas pipe connection port	ø12.7 flare connection
3	Drain pipe connection port	O.D. 21
4	Switch box	
5	Air filter	

#### NOTES

- 1 Location of unit's name plate: right lower corner of front plate.

3D038863A

#### FXNQ32,40MA



Nr	Part name	Description
1	Liquid pipe connection port	ø6.4 flare connection
2	Gas pipe connection port	ø12.7 flare connection
3	Drain pipe connection port	O.D. 21
4	Switch box	
5	Air filter	

#### NOTES

- 1 Location of unit's name plate: right lower corner of front plate.

3D038864B

# 6 Dimensional drawing & centre of gravity

## 6 - 1 Dimensional drawing

**FXNQ50,63MA**

Top plate  
2-12x18 slot hole  
Hole for fixing to the floor

(Discharge flange)  
139  
382  
163

1015

42  
103  
5

Required installation space

20 or more  
150 or more  
Front face  
1,000 or more

10-ø4.7 hole  
Total on front & rear

2-ø4.7 hole  
Total on right & left

4-12x30 slot hole  
Hole for rear mounting

Level adjusting screw as standard accessory 4xM6  
Hole for fixing to the floor

Piping size (Field supply)

Indoor unit	Gas side	Liquid side
FXNQ50MA	ø 12.7	ø 6.4
FXNQ63MA	ø 15.9	ø 9.5

Nr	Part name	Description
1	Liquid pipe connection port	flare connection
2	Gas pipe connection port	flare connection
3	Drain pipe connection port	O.D. 21
4	Switch box	
5	Air filter	

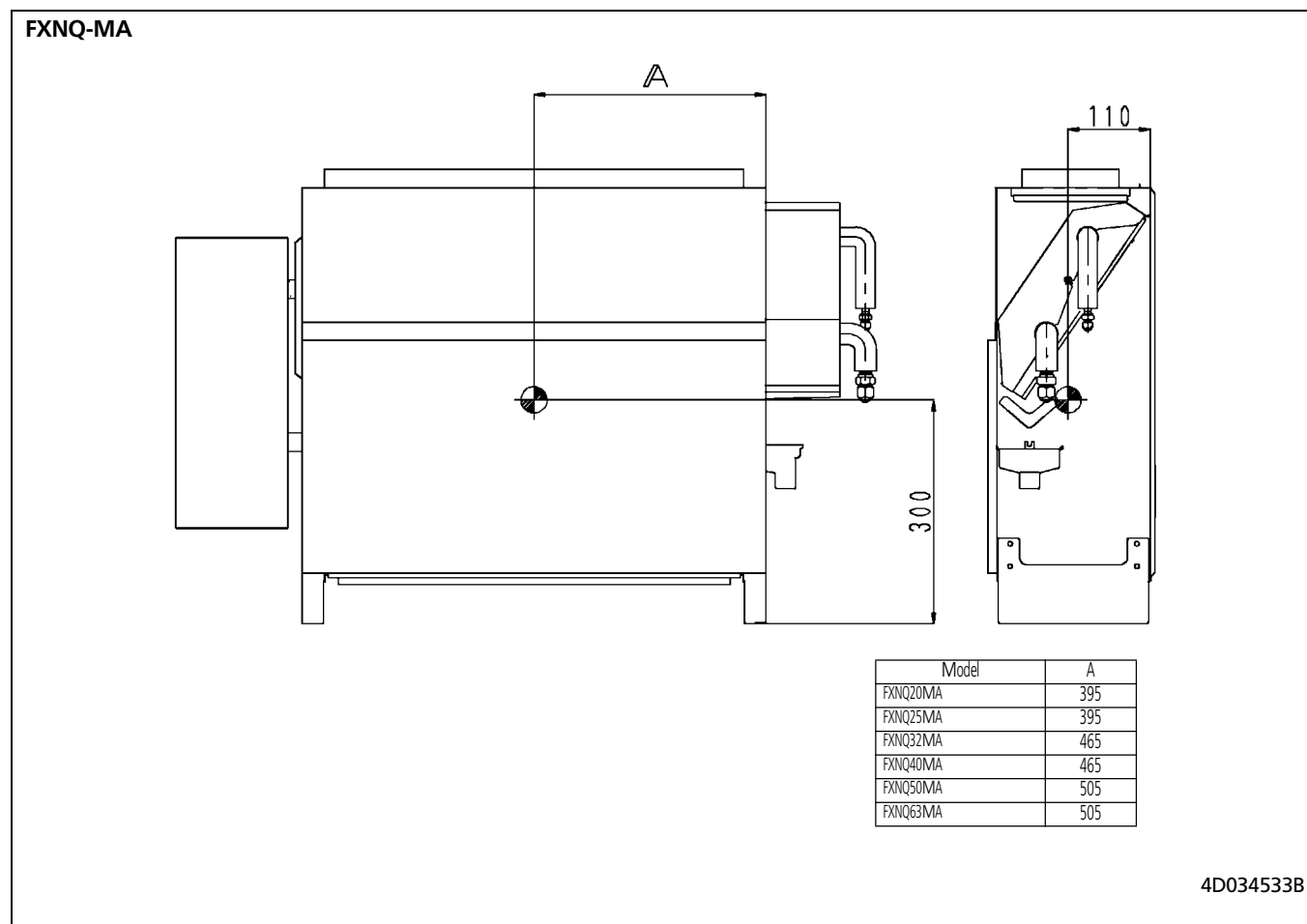
**NOTES**

1 Location of unit's name plate: right lower corner of front plate.

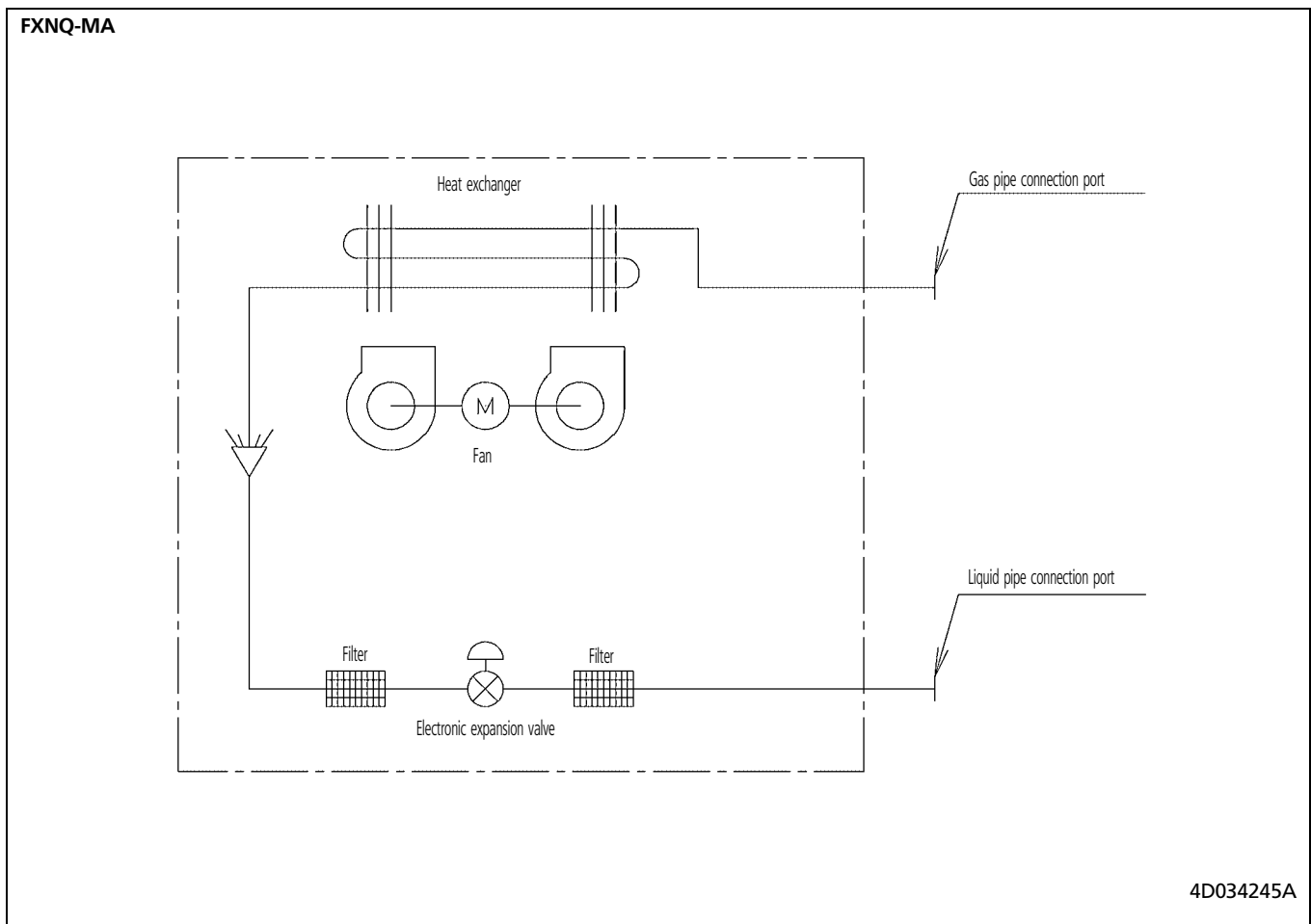
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## 6 Dimensional drawing & centre of gravity

### 6 - 2 Centre of gravity



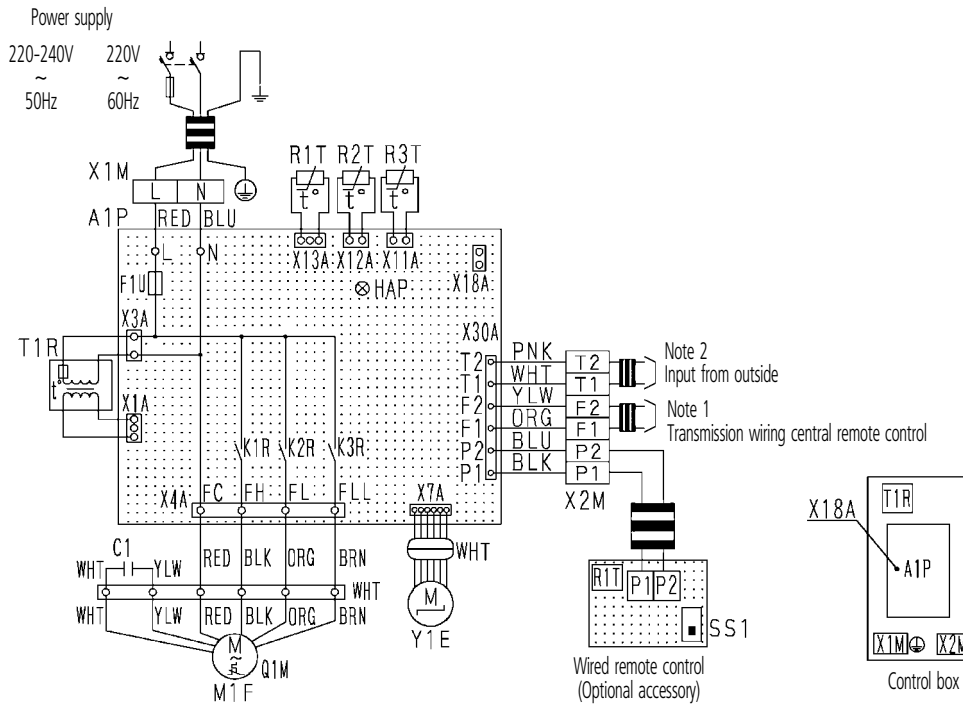
## 7 Piping diagram



# 8 Wiring diagram

## 8 - 1 Wiring diagram

FXNQ-MA



Indoor unit		R2T • R3T	Thermistor (Coil)
A1P	Printed circuit board	T1R	Transformer (220-240V/22V)
C1	Capacitor (M1F)	X1M	Terminal block (Power)
F1U	Fuse (5A, 250V)	X2M	Terminal block (Control)
HAP	Light emitting diode (Service monitor-green)	Y1E	Electronic expansion valve
K1R-K3R	Magnetic relay (M1F)	Wired remote control	
M1F	Motor (Indoor fan)	R1T	Thermistor (Air)
Q1M	Thermo switch (M1F embedded)	SS1	Selector switch (Main/sub)
R1T	Thermistor (Air)	Connector for optional parts	
		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  
           ORG : Orange     YLW : Yellow

### NOTES

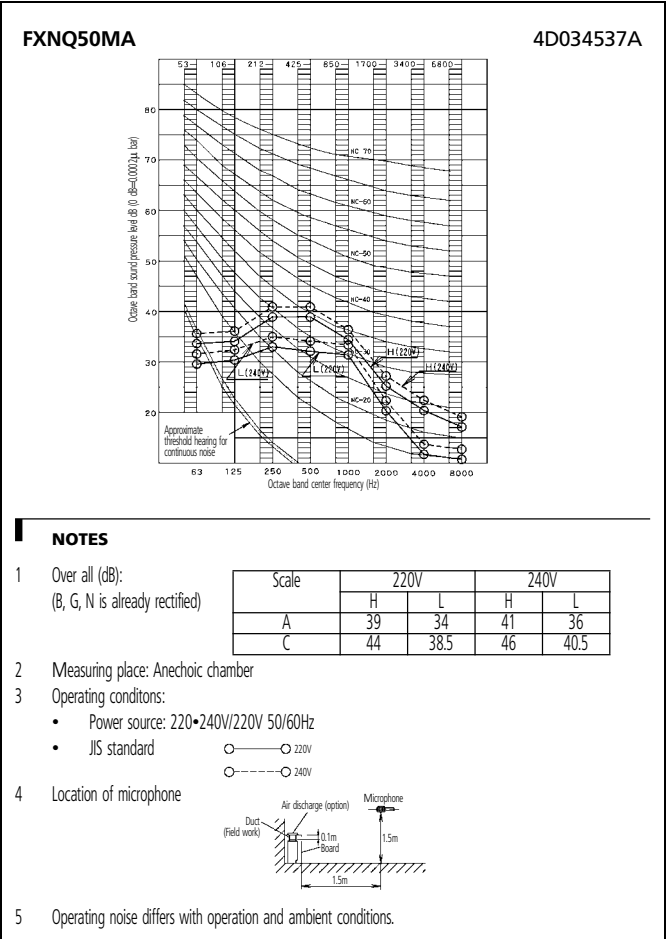
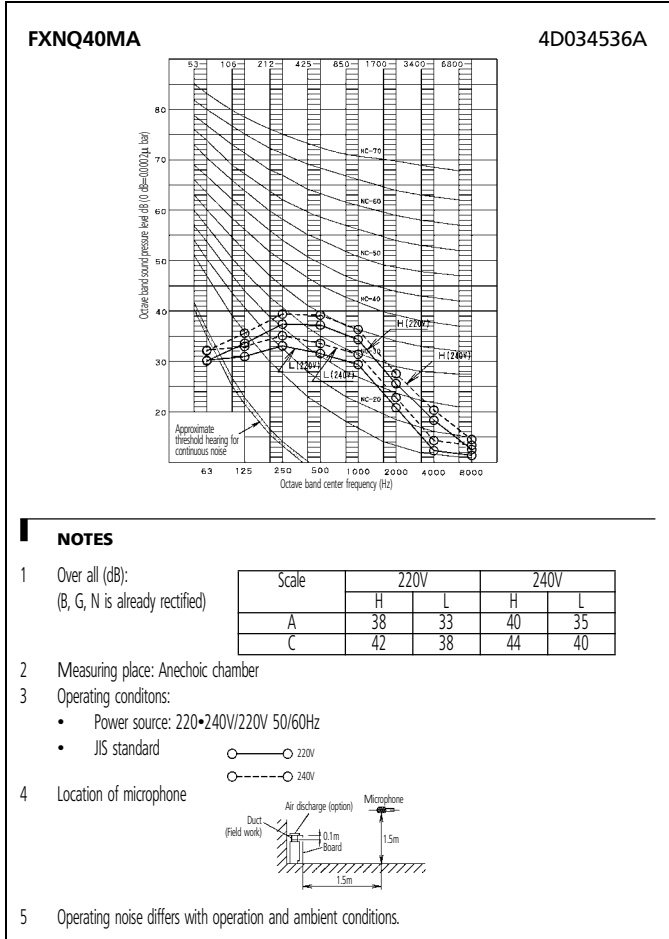
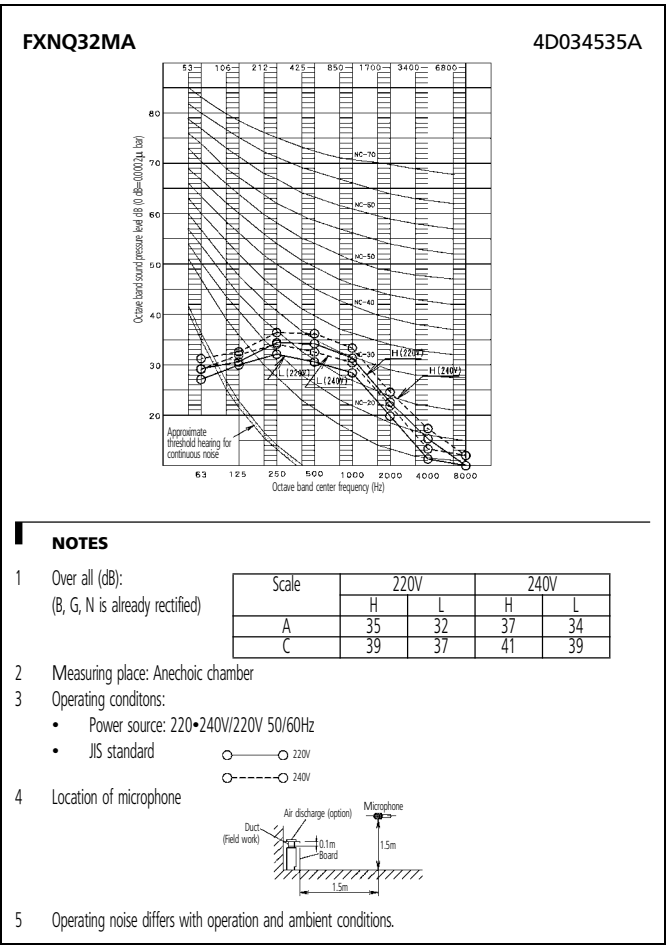
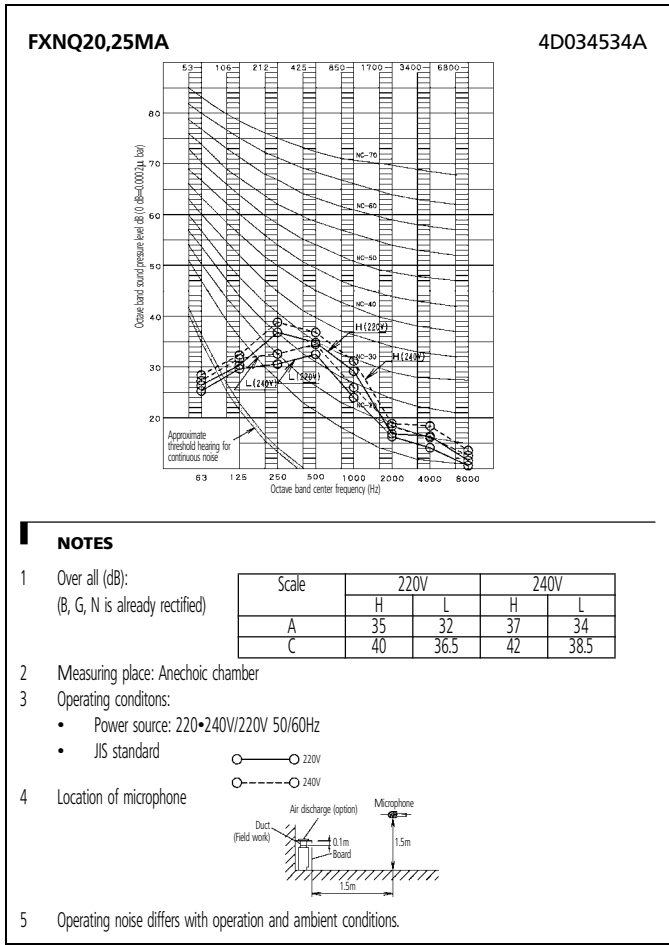
- 1 In case using central remote control, connect it to the unit in accordance with the attached instruction manual.
- 2 When connecting the input wires from the outside, forced off or on/off control operation can be selected by remote control. In details, refer to the installation manual attached to the unit.
- 3 Use copper conductors only.

3D039826D



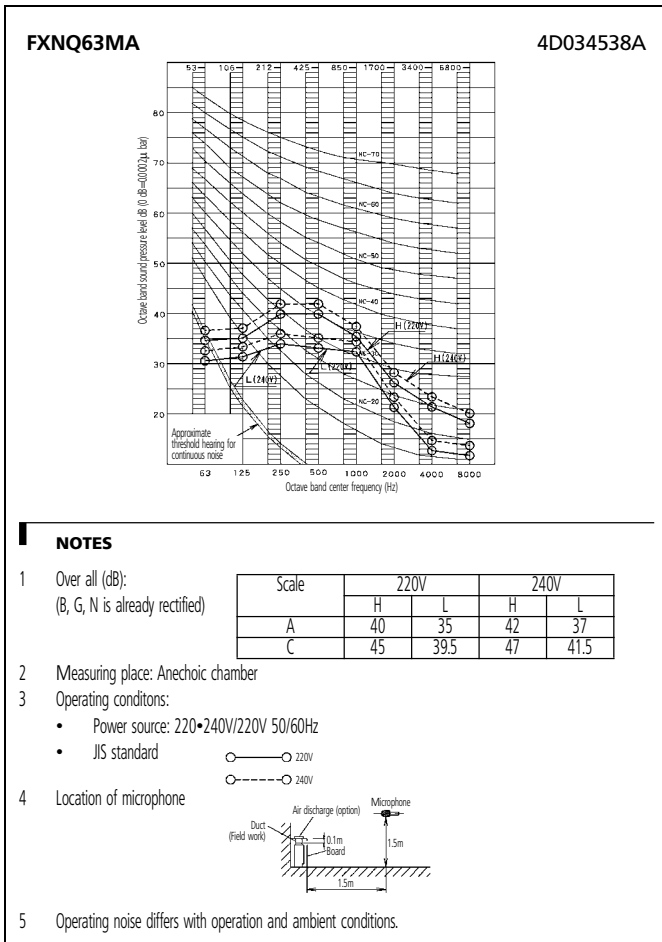
# 9 Sound data

## 9 - 1 Sound pressure spectrum



## 9 Sound data

### 9 - 1 Sound pressure spectrum

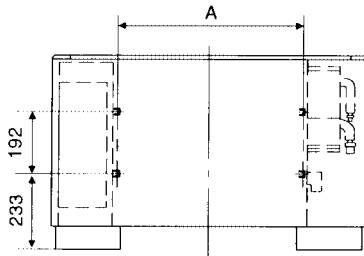


## 10 Installation

### 10 - 1 Suspension bolt pitch position

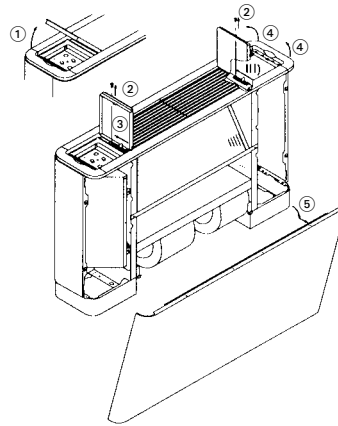
#### FXNQ-MA

- Positioning of holes for fastening to the wall



Model	A
FXNQ20,25MA	590
FXNQ32,40MA	730
FXNQ50,63MA	1,010

- How to open/close the front panel



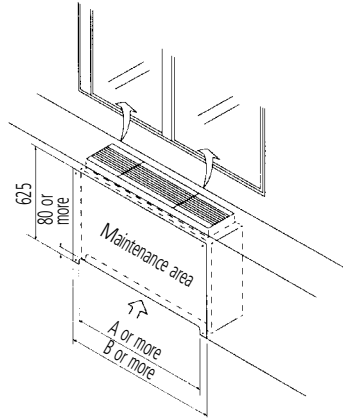
- 1 Open the lid of control panel (both left and right).
- 2 Remove screws (both left and right).
- 3 Push the knobs (both left and right) to the rear.
- 4 Lift the front of the top plate.
- 5 Lower the front panel towards the front of the unit.
- 6 To close, perform the procedure in opposite order. Pull towards the front until the knob snaps in place.

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# 10 Installation

## 10 - 2 Service space

FXNQ-MA



Model	A	B
FXNQ20,25MA	570	1,030
FXNQ32,40MA	710	1,170
FXNQ50,63MA	990	1,450

**NOTE**

- 1 Leave sufficient clearance for air inlet and maintenance.

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