FXZQ-MVE
Ceiling Mounted Cassette
(Compact Multi Flow) Type
60 Hz

1. Lineup

Capacity range	2.2 kW	2.8 kW	3.6 kW	4.5 kW	5.6 kW
	0.8 HP	1 HP	1.25 HP	1.6 HP	2 HP
Capacity index	20	25	31.25	40	50
FXZQ	20MVE	25MVE	32MVE	40MVE	50MVE

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

2. Specifications

Model				FXZQ20MVE	FXZQ25MVE
Power supply				1 phase, 220-240/220 V, 50/60 Hz	1 phase, 220-240/220 V, 50/60 Hz
★1 ★3 Cooling capacity			kcal/h	1,900	2,400
			Btu/h	7,500	9,600
			kW	2.2	2.8
★2 ★3 Heating capacity			kcal/h	2,200	2,800
			Btu/h	8,500	10,900
			kW	2.5	3.2
Power input	Cooling	50 Hz	kW	0.073	0.073
		60 Hz	kW	0.075	0.075
	Heating	50 Hz	kW	0.064	0.064
		60 Hz	kW	0.069	0.069
Casing / Colour				Galvanized steel plate	Galvanized steel plate
Dimensions: (H×W×D)			mm	286×575×575	286×575×575
Coil (Cross fin coil)	Rows × Stages × Fin pitch		mm	2×10×1.5	2×10×1.5
	Face area		m^2	0.269	0.269
Fan	Model			QTS32C15M	QTS32C15M
	Type			Turbo fan	Turbo fan
	Motor output × Number of units		W	55×1	55×1
	Airflow rate (H/L)		m^3/min	9.0/7.0	9.0/7.0
			l/s	150/116	150/116
			cfm	318/247	318/247
	Drive			Direct drive	Direct drive
Temperature control				Microprocessor thermostat for cooling and heating	Microprocessor thermostat for cooling and heating
Sound absorbing thermal insulation material				Foamed polystyrene/Foamed polyethylene	Foamed polystyrene/Foamed polyethylene
Piping connections	Liquid pipes		mm	φ6.4 (Flare connection)	φ6.4 (Flare connection)
	Gas pipes		mm	φ12.7 (Flare connection)	φ12.7 (Flare connection)
	Drain pipe		mm	VP20 (External dia. 26 Internal dia. 20)	VP20 (External dia. 26 Internal dia. 20)
Mass			kg	18	18
★4 Sound pressure level (H/L)		230 V, 50 Hz	dB(A)	30/25	30/25
		240 V, 50 Hz	dB(A)	32/26	32/26
		220 V, 60 Hz	dB(A)	32/29	32/29
Safety devices				PCB fuse, Fan motor thermal protector	PCB fuse, Fan motor thermal protector
Refrigerant control				Electronic expansion valve	Electronic expansion valve
Decoration panels (Option)	Model			BYFQ60B3W1	BYFQ60B3W1
	Panel colour			White (6.5Y9.5/0.5)	White (6.5Y9.5/0.5)
	Dimensions: (H×W×D)		mm	55×700×700	55×700×700
	Air filter			Resin net (with mould resistance)	Resin net (with mould resistance)
	Mass		kg	2.7	2.7
Standard accessories				Operation manual, Installation manual, Paper pattern for installation, Drain hose, Clamp metal, Washer fixing plate, Sealing pads, Clamps, Screws, Washer for hanging bracket, Insulation for fitting	Operation manual, Installation manual, Paper pattern for installation, Drain hose, Clamp metal, Washer fixing plate, Sealing pads, Clamps, Screws, Washer for hanging bracket, Insulation for fitting
Drawing No.	Specification			C: 3D038929C	C: 3D038929C
	Sound level	230 V, 50 Hz		C: 4D040274A	C: 4D040274A
		240 V, 50 Hz		C: 4D040492A	C: 4D040492A
		220 V, 60 Hz		C: 4D040323B	C: 4D040323B

Notes:

★1. Indoor temp.: 27°CDB, 19°CWB / outdoor temp.: 35°CDB / Equivalent piping length: 7.5 m, level difference: 0 m.
★2. Indoor temp.: 20°CDB / outdoor temp.: 7°CDB, 6°CWB / Equivalent piping length: 7.5 m, level difference: 0 m.
★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
★4. Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m^3/min×35.3 l/s=m^3/min×1000/60

Model				FXZQ32MVE	FXZQ40MVE
Power supply				1 phase, 220-240/220 V, 50/60 Hz	1 phase, 220-240/220 V, 50/60 Hz
★1 ★3 Cooling capacity			kcal/h	3,100	3,900
			Btu/h	12,300	15,400
			kW	3.6	4.5
★2 ★3 Heating capacity			kcal/h	3,400	4,300
			Btu/h	13,600	17,100
			kW	4.0	5.0
Power input	Cooling	50 Hz	kW	0.076	0.089
		60 Hz	kW	0.080	0.095
	Heating	50 Hz	kW	0.068	0.080
		60 Hz	kW	0.073	0.088
Casing / Colour				Galvanized steel plate	Galvanized steel plate
Dimensions: (H×W×D)			mm	286×575×575	286×575×575
Coil (Cross fin coil)	Rows × Stages × Fin pitch		mm	2×10×1.5	2×10×1.5
	Face area		m^2	0.269	0.269
Fan	Model			QTS32C15M	QTS32C15M
	Type			Turbo fan	Turbo fan
	Motor output × Number of units		W	55×1	55×1
	Airflow rate (H/L)		m^3/min	9.5/7.5	11.0/8.0
			l/s	158/125	183/133
			cfm	335/265	388/282
	Drive			Direct drive	Direct drive
Temperature control				Microprocessor thermostat for cooling and heating	Microprocessor thermostat for cooling and heating
Sound absorbing thermal insulation material				Foamed polystyrene/Foamed polyethylene	Foamed polystyrene/Foamed polyethylene
Piping connections	Liquid pipes		mm	ϕ6.4 (Flare connection)	ϕ6.4 (Flare connection)
	Gas pipes		mm	ϕ12.7 (Flare connection)	ϕ12.7 (Flare connection)
	Drain pipe		mm	VP20 (External dia. 26 Internal dia. 20)	VP20 (External dia. 26 Internal dia. 20)
Mass			kg	18	18
★4 Sound pressure level (H/L)		230 V, 50 Hz	dB(A)	32/26	36/28
		240 V, 50 Hz		34/28	37/29
		220 V, 60 Hz		33/29	36/30
Safety devices				PCB fuse, Fan motor thermal protector	PCB fuse, Fan motor thermal protector
Refrigerant control				Electronic expansion valve	Electronic expansion valve
Decoration panels (Option)	Model			BYFQ60B3W1	BYFQ60B3W1
	Panel colour			White (6.5Y9.5/0.5)	White (6.5Y9.5/0.5)
	Dimensions: (H×W×D)		mm	55×700×700	55×700×700
	Air filter			Resin net (with mould resistance)	Resin net (with mould resistance)
	Mass		kg	2.7	2.7
Standard accessories				Operation manual, Installation manual, Paper pattern for installation, Drain hose, Clamp metal, Washer fixing plate, Sealing pads, Clamps, Screws, Washer for hanging bracket, Insulation for fitting	Operation manual, Installation manual, Paper pattern for installation, Drain hose, Clamp metal, Washer fixing plate, Sealing pads, Clamps, Screws, Washer for hanging bracket, Insulation for fitting
Drawing No.	Specification			C: 3D038929C	C: 3D038929C
	Sound level	230 V, 50 Hz		C: 4D040285A	C: 4D040286A
		240 V, 50 Hz		C: 4D040491A	C: 4D040490A
		220 V, 60 Hz		C: 4D040289B	C: 4D040290B

Notes:

★1. Indoor temp.: 27°CDB, 19°CWB / outdoor temp.: 35°CDB / Equivalent piping length: 7.5 m, level difference: 0 m.
★2. Indoor temp.: 20°CDB / outdoor temp.: 7°CDB, 6°CWB / Equivalent piping length: 7.5 m, level difference: 0 m.
★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
★4. Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
During actual operation, these values are normally somewhat higher as a result of ambient conditions.

Conversion formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m^3/min×35.3 l/s=m^3/min×1000/60

Model				FXZQ50MVE
Power supply				1 phase, 220-240/220 V, 50/60 Hz
★1 ★3 Cooling capacity			kcal/h	4,800
			Btu/h	19,100
			kW	5.6
★2 ★3 Heating capacity			kcal/h	5,400
			Btu/h	21,500
			kW	6.3
Power input	Cooling	50 Hz	kW	0.115
		60 Hz	kW	0.128
	Heating	50 Hz	kW	0.107
		60 Hz	kW	0.122
Casing / Colour				Galvanized steel plate
Dimensions: (H×W×D)			mm	286×575×575
Coil (Cross fin coil)	Rows × Stages × Fin pitch		mm	2×10×1.5
	Face area		m^2	0.269
Fan	Model			QTS32C15M
	Type			Turbo fan
	Motor output × Number of units		W	55×1
	Airflow rate (H/L)		m^3/min	14.0/10.0
			l/s	233/166
			cfm	493/353
	Drive			Direct drive
Temperature control				Microprocessor thermostat for cooling and heating
Sound absorbing thermal insulation material				Foamed polystyrene/Foamed polyethylene
Piping connections	Liquid pipes		mm	ϕ6.4 (Flare connection)
	Gas pipes		mm	ϕ12.7 (Flare connection)
	Drain pipe		mm	VP20 (External dia. 26 Internal dia. 20)
Mass			kg	18
★4 Sound pressure level (H/L)		230 V, 50 Hz	dB(A)	41/33
		240 V, 50 Hz		42/35
		220 V, 60 Hz		41/34
Safety devices				PCB fuse, Fan motor thermal protector
Refrigerant control				Electronic expansion valve
Decoration panels (Option)	Model			BYFQ60B3W1
	Panel colour			White (6.5Y9.5/0.5)
	Dimensions: (H×W×D)		mm	55×700×700
	Air filter			Resin net (with mould resistance)
	Mass		kg	2.7
Standard accessories				Operation manual, Installation manual, Paper pattern for installation, Drain hose, Clamp metal, Washer fixing plate, Sealing pads, Clamps, Screws, Washer for hanging bracket, Insulation for fitting
Drawing No.	Specification			C: 3D038929C
	Sound level	230 V, 50 Hz		C: 4D040287A
		240 V, 50 Hz		C: 4D040293A
		220 V, 60 Hz		C: 4D041034A

Notes:

★1. Indoor temp.: 27°CDB, 19°CWB / outdoor temp.: 35°CDB / Equivalent piping length: 7.5 m, level difference: 0 m.
★2. Indoor temp.: 20°CDB / outdoor temp.: 7°CDB, 6°CWB / Equivalent piping length: 7.5 m, level difference: 0 m.
★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
★4. Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit centre.
During actual operation, these values are normally somewhat higher as a result of ambient conditions.

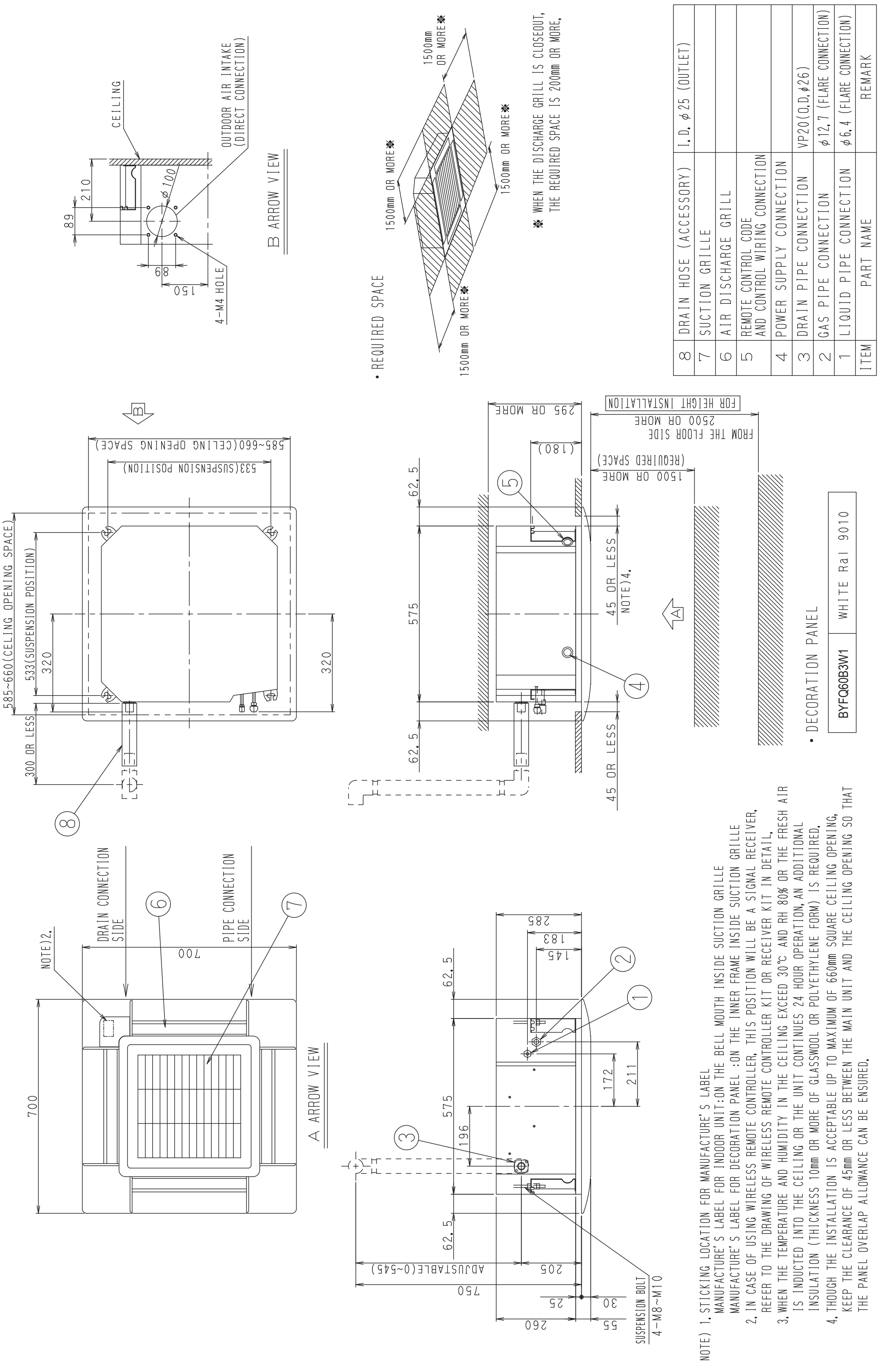
Conversion formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m^3/min×35.3 l/s=m^3/min×1000/60

3. Dimensions

FXZQ20MVE / FXZQ25MVE / FXZQ32MVE / FXZQ40MVE / FXZQ50MVE

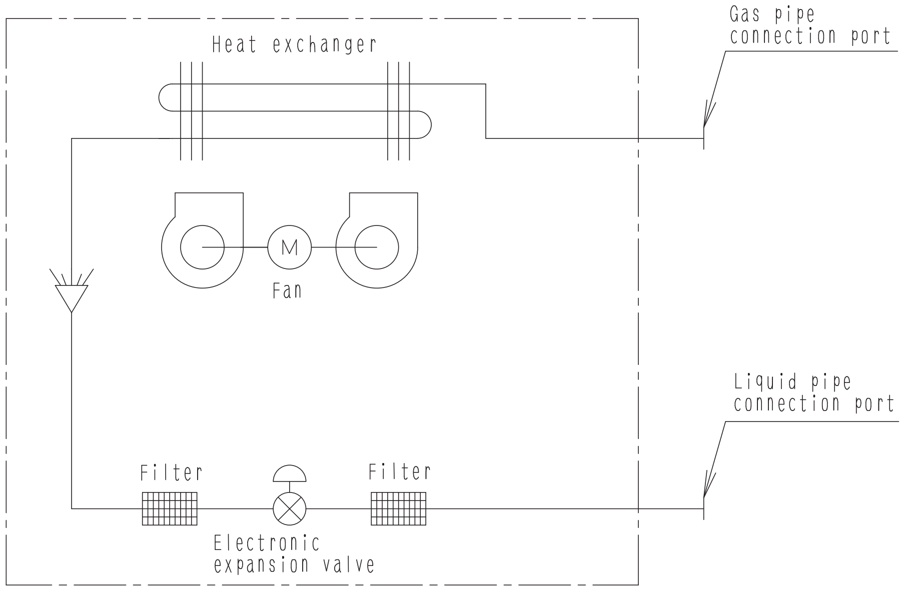
Unit: mm

C: 3D039005G



4. Piping Diagrams

FXZQ20MVE / FXZQ25MVE / FXZQ32MVE / FXZQ40MVE / FXZQ50MVE



4D040157B

■ **Refrigerant pipe connection port diameters**

Unit: mm

Model	Gas	Liquid
FXZQ20MVE / FXZQ25MVE / FXZQ32MVE / FXZQ40MVE / FXZQ50MVE	ϕ12.7	ϕ6.4

5. Wiring Diagrams

FXZQ20MVE / FXZQ25MVE / FXZQ32MVE / FXZQ40MVE / FXZQ50MVE

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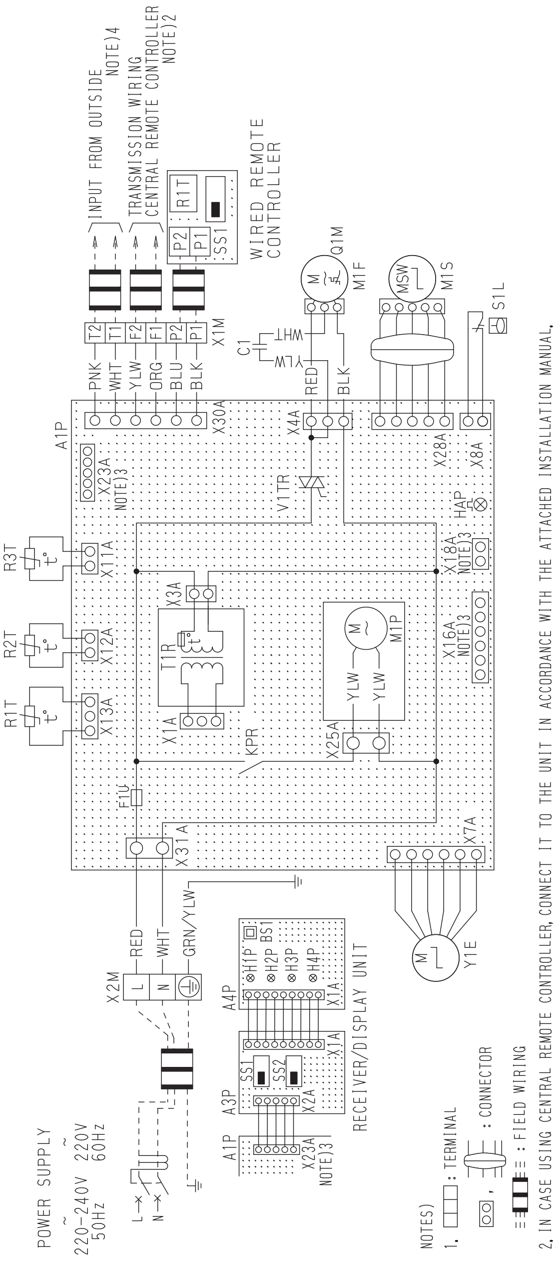


NOTES)

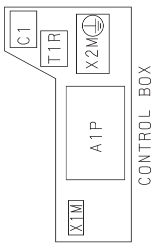
1. : TERMINAL

 , : CONNECTOR

 : FIELD WIRING

2. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTALLATION MANUAL.
3. X16A, X18A AND X23A ARE CONNECTED WHEN THE OPTIONAL ACCESSORIES ARE BEING USED.
4. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER. IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED THE UNIT.
5. REMOTE CONTROLLER MODEL VARIES ACCORDING TO THE COMBINATION SYSTEM, CONFIRM ENGINEERING MATERIALS AND CATALOGS, ETC. BEFORE CONNECTING.
6. SYMBOLS SHOW AS FOLLOWS: RED:RED BLK:BLACK WHT:WHITE YLW:YELLOW PNK:PINK ORG:ORANGE GRN:GREEN BLU:BLUE

A1P	PRINTED CIRCUIT BOARD	BS1	PUSH BUTTON(ON/OFF)
C1	CAPACITOR(M1F)	H1P	LIGHT EMITTING DIODE (ON-RED)
F1U	FUSE(B), 5A, 250V)	H2P	LIGHT EMITTING DIODE (TIMER-GREEN)
HAP	LIGHT EMITTING DIODE (SERVICE MONITOR GREEN)	H3P	LIGHT EMITTING DIODE (FILTER SIGN-RED)
KPR	MAGNETIC RELAY(M1P)	H4P	LIGHT EMITTING DIODE (DEFROST-ORANGE)
M1F	MOTOR(INDOOR FAN)	SS1	SELECTOR SWITCH (MAIN/SUB)
M1P	MOTOR(DRAIN PUMP)	SS2	SELECTOR SWITCH (WIRELESS ADDRESS SET)
M1S	MOTOR(SWING FLAP)	CONNECTOR FOR OPTIONAL PARTS	
Q1M	THERMAL PROTECTOR(M1F EMBEDDED)	X16A	CONNECTOR (ADAPTOR FOR WIRING)
R1T	THERMISTOR(AIR)	X18A	CONNECTOR (WIRING ADAPTOR FOR ELECTRICAL APPENDICES)
R2T	THERMISTOR(COIL-LIQUID)	X23A	CONNECTOR (WIRELESS REMOTE CONTROLLER)
R3T	THERMISTOR(COIL-GAS)		
S1L	FLOAT SWITCH		
T1R	TRANSFORMER(220-240V/22V)		
V1TR	TRIAC		
X1M	TERMINAL BLOCK		
X2M	TERMINAL BLOCK		
Y1E	ELECTRONIC EXPANSION VALVE		
WIRED REMOTE CONTROLLER			
R1T	THERMISTOR(AIR)		
SS1	SELECTOR SWITCH(MAIN/SUB)		
WIRELESS REMOTE CONTROLLER (RECEIVER/DISPLAY UNIT)			
A3P	PRINTED CIRCUIT BOARD		
A4P	PRINTED CIRCUIT BOARD		



CONTROL BOX

6. Electric Characteristics

FXZQ20MVE / FXZQ25MVE / FXZQ32MVE / FXZQ40MVE / FXZQ50MVE

Units				Power supply		IFM		Input(W)	
Model	Hz	Volts	Voltage range	MCA	MFA	kW	FLA	Cooling	Heating
FXZQ20MVE	50	220-240	MAX. 264 Min. 198	0.8	15	0.055	0.6	73	64
FXZQ25MVE				0.8	15	0.055	0.6	73	64
FXZQ32MVE				0.8	15	0.055	0.6	76	68
FXZQ40MVE				0.8	15	0.055	0.6	89	80
FXZQ50MVE				0.9	15	0.055	0.7	115	107
FXZQ20MVE	60	220	MAX. 242 Min. 198	0.8	15	0.055	0.6	75	69
FXZQ25MVE				0.8	15	0.055	0.6	75	69
FXZQ32MVE				0.8	15	0.055	0.6	80	73
FXZQ40MVE				0.8	15	0.055	0.6	95	88
FXZQ50MVE				0.9	15	0.055	0.7	128	122

Symbols:

MCA : Min. Circuit Amps (A)
MFA : Max. Fuse Amps (See note 5)
kW : Fan Motor Rated Output(kW)
FLA : Full Load Amps(A)
IFM : Indoor Fan Motor

Note:

1. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
2. Maximum allowable voltage unbalance between phases is 2%.
3. MCA/MFA
   MCA = 1.25 X FLA
   MFA ≦ 4 X FLA
   (Next lower standard fuse rating. Min.15A)
4. Select wire size based on the MCA.
5. Instead of fuse, use Circuit Breaker.

C: 4D040159B

7. Safety Devices Setting

Model		FXZQ20MVE	FXZQ25MVE	FXZQ32MVE
PCB fuse		250 V, 5 A	250 V, 5 A	250 V, 5 A
Fan motor thermal fuse	°C	–	–	–
Fan motor thermal protector	°C	OFF : 130±5 ON : 83±20	OFF : 130±5 ON : 83±20	OFF : 130±5 ON : 83±20

Model		FXZQ40MVE	FXZQ50MVE
PCB fuse		250 V, 5 A	250 V, 5 A
Fan motor thermal fuse	°C	–	–
Fan motor thermal protector	°C	OFF : 130±5 ON : 83±20	OFF : 130±5 ON : 83±20

C: 3D006691V

8. Capacity Tables

8.1 Cooling Capacity for Te: Auto

Model	Capacity indication	Indoor air temp.													
		14°CWB		16°CWB		18°CWB		19°CWB		20°CWB		22°CWB		24°CWB	
		20°CDB		23°CDB		26°CDB		27°CDB		28°CDB		30°CDB		32°CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
FXZQ20MVE	20	1.9	1.7	2.1	1.8	2.2	1.8	2.2	1.7	2.2	1.6	2.3	1.5	2.3	1.4
FXZQ25MVE	25	2.5	2.0	2.6	2.1	2.8	2.2	2.8	2.0	2.8	1.9	2.9	1.8	3.0	1.7
FXZQ32MVE	32	3.2	2.6	3.4	2.5	3.5	2.6	3.6	2.4	3.6	2.2	3.7	2.2	3.8	2.1
FXZQ40MVE	40	4.0	3.1	4.2	3.3	4.4	3.5	4.5	3.3	4.6	3.2	4.7	3.1	4.8	2.9
FXZQ50MVE	50	4.9	3.9	5.3	4.2	5.5	4.4	5.6	4.1	5.7	4.1	5.8	3.9	5.9	3.7

TC: Total capacity: kW
SHC: Sensible heat capacity: kW

Notes:

1. These capacity tables are for use when selecting a ***VRV*** indoor unit. The actual capacity of the ***VRV*** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the ***VRV*** system satisfies the required heat load.
2. ▭ shows rated condition.

8.2 Cooling Capacity for Te: 6°C

Model	Capacity indication	Indoor air temp.													
		14°CWB		16°CWB		18°CWB		19°CWB		20°CWB		22°CWB		24°CWB	
		20°CDB		23°CDB		26°CDB		27°CDB		28°CDB		30°CDB		32°CDB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
FXZQ20MVE	20	1.5	1.3	1.8	1.5	2.1	1.7	2.2	1.7	2.2	1.6	2.3	1.5	2.3	1.4
FXZQ25MVE	25	1.9	1.5	2.3	1.8	2.6	2.0	2.8	2.0	2.8	1.9	2.9	1.8	3.0	1.7
FXZQ32MVE	32	2.4	1.9	2.9	2.1	3.4	2.4	3.6	2.4	3.6	2.2	3.7	2.2	3.8	2.1
FXZQ40MVE	40	3.0	2.5	3.6	2.9	4.2	3.2	4.5	3.3	4.6	3.2	4.7	3.1	4.8	2.9
FXZQ50MVE	50	3.8	3.1	4.5	3.6	5.2	4.0	5.6	4.1	5.7	4.1	5.8	3.9	5.9	3.7

TC: Total capacity: kW
SHC: Sensible heat capacity: kW

Notes:

1. These capacity tables are for use when selecting a ***VRV*** indoor unit. The actual capacity of the ***VRV*** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the ***VRV*** system satisfies the required heat load.
2. ▭ shows rated condition.

8.3 Heating Capacity

Model	Capacity indication	Indoor air temp.					
		16°CDB	18°CDB	20°CDB	21°CDB	22°CDB	24°CDB
		kW	kW	kW	kW	kW	kW
FXZQ20MVE	20	2.6	2.6	2.5	2.4	2.3	2.2
FXZQ25MVE	25	3.4	3.4	3.2	3.1	3.0	2.8
FXZQ32MVE	32	4.2	4.2	4.0	3.9	3.7	3.5
FXZQ40MVE	40	5.2	5.2	5.0	4.8	4.7	4.4
FXZQ50MVE	50	6.6	6.6	6.3	6.1	5.9	5.5

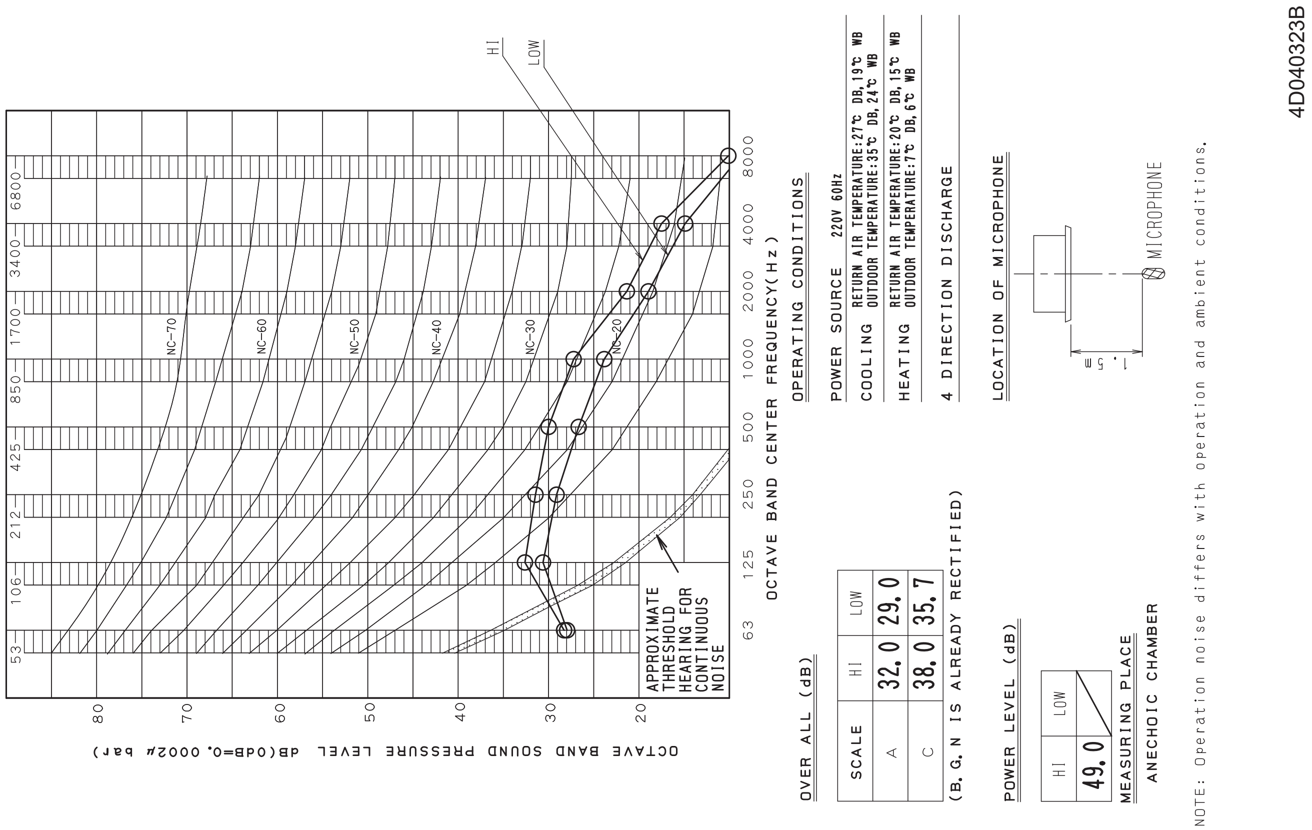
Notes:

1. These capacity tables are for use when selecting a ***VRV*** indoor unit. The actual capacity of the ***VRV*** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the ***VRV*** system satisfies the required heat load.
2. ▭ shows rated condition.

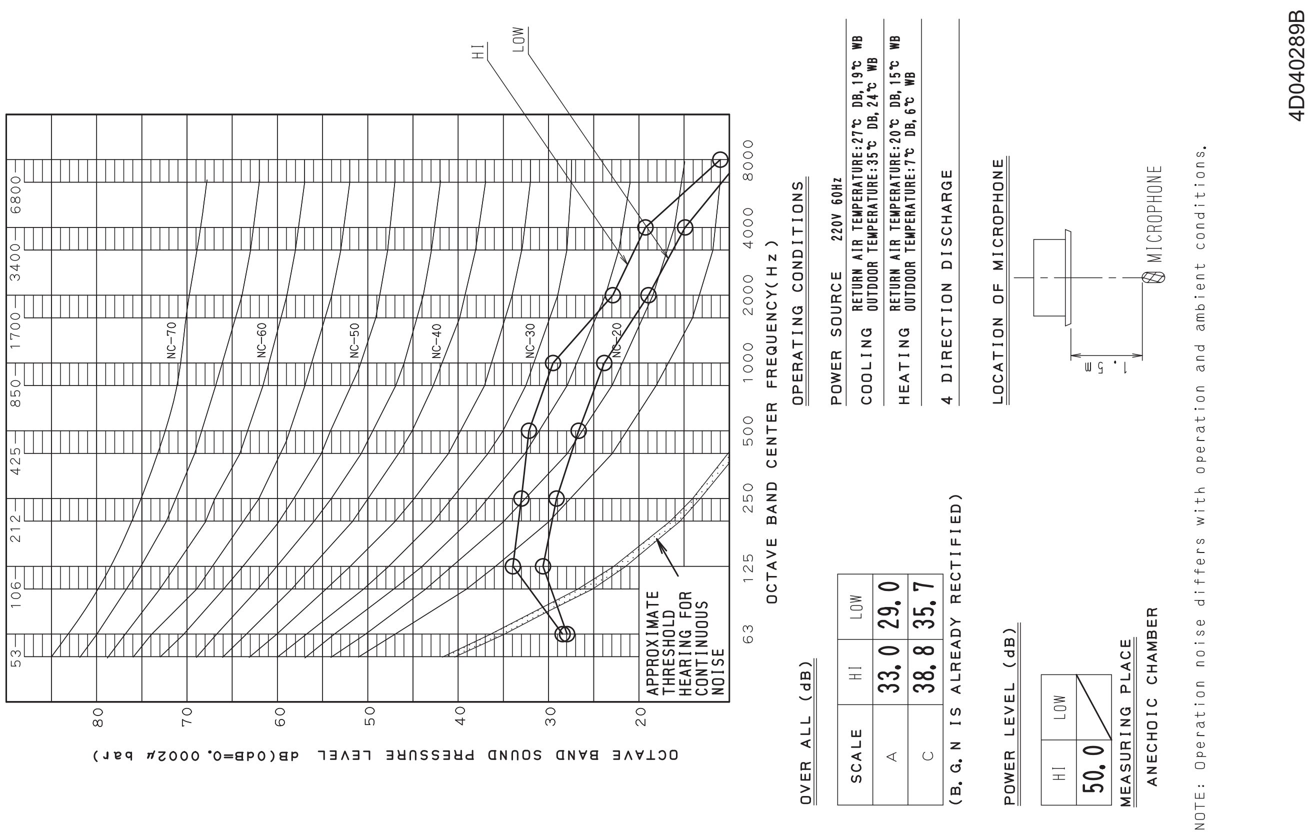
9.Sound Levels

9.1 220 V, 60 Hz

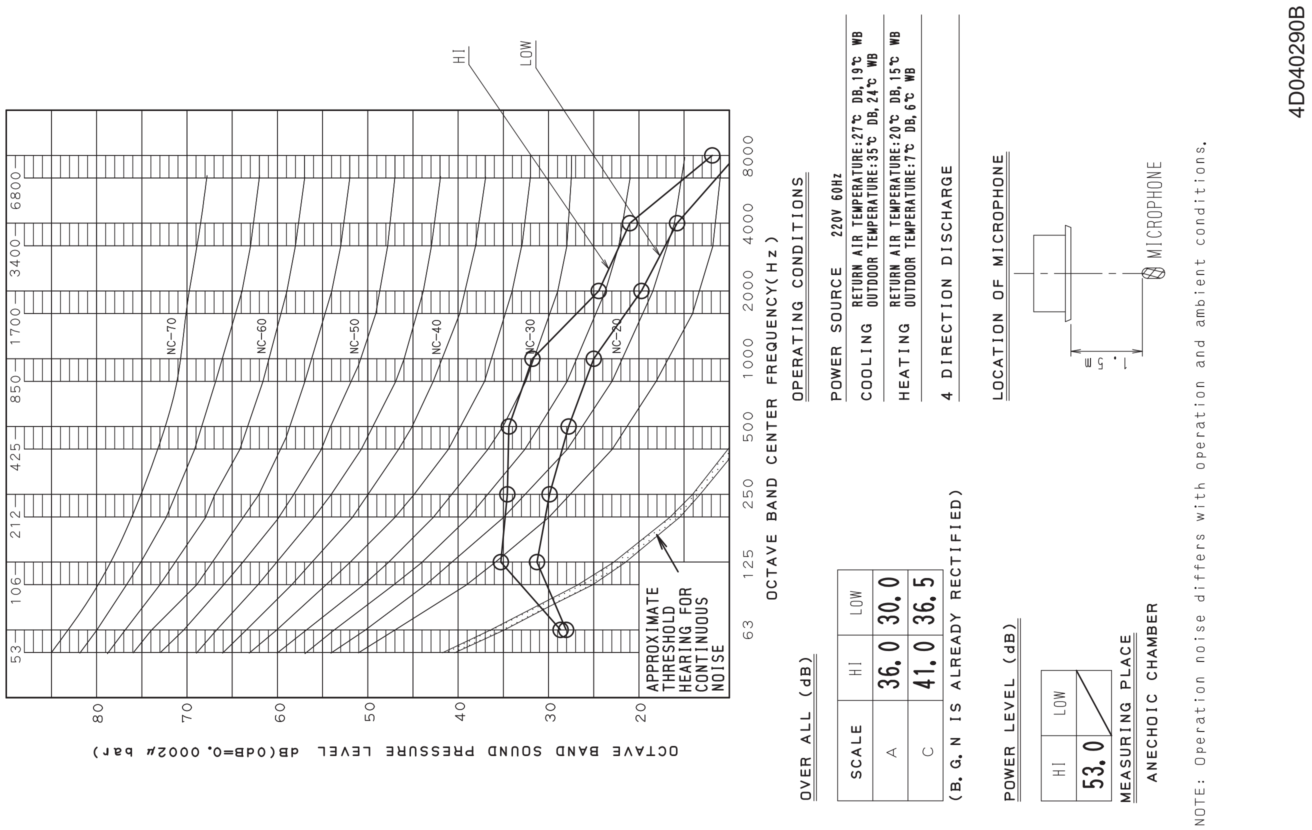
FXZQ20MVE / FXZQ25MVE



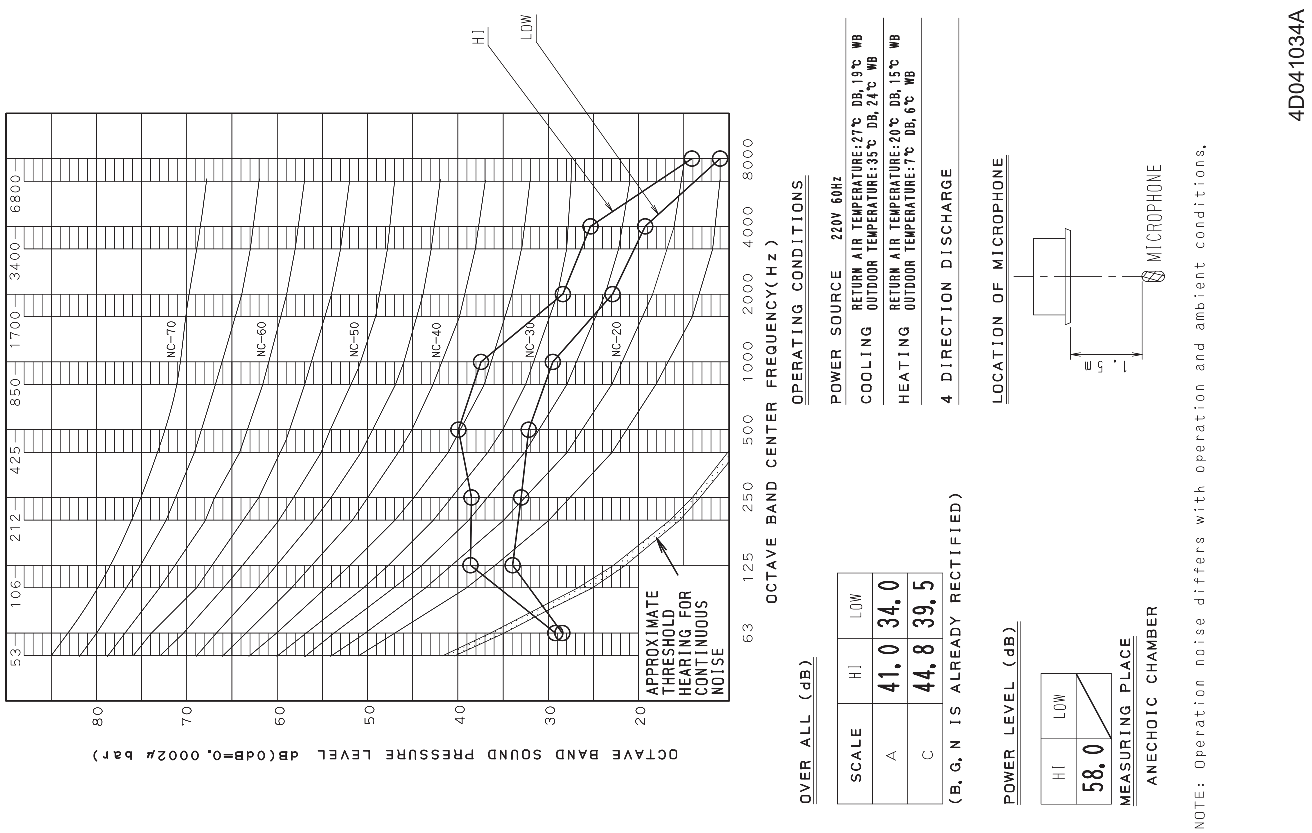
FXZQ32MVE



FXZQ40MVE



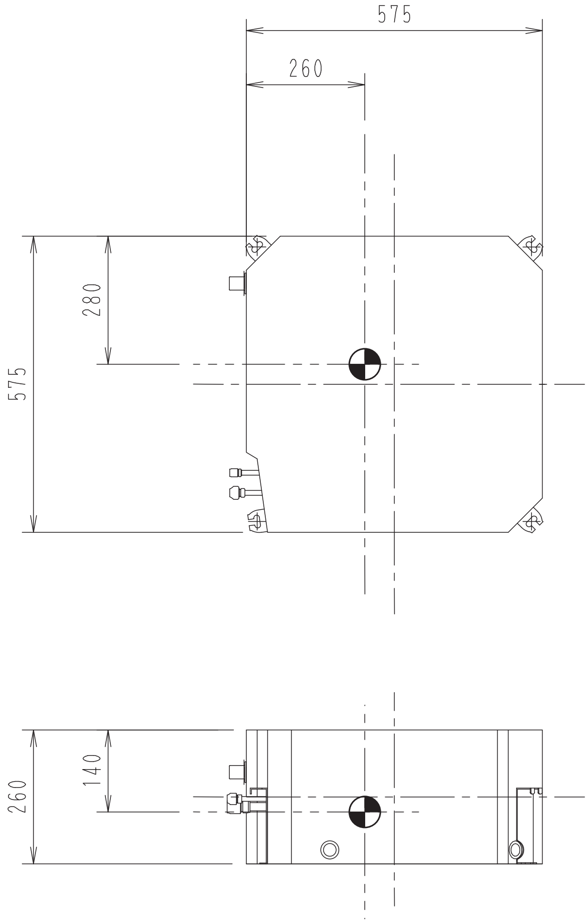
FXZQ50MVE



10.Centre of Gravity

FXZQ20MVE / FXZQ25MVE / FXZQ32MVE / FXZQ40MVE / FXZQ50MVE

Unit: mm



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