



EDUS 39 - 800 - F9_a

R-410A

Engineering Data

FXZQ-M
4 Way Ceiling Mounted Cassette Unit
(2' × 2')



DAIKIN AC (AMERICAS), INC.

FXZQ-M

4 Way Ceiling Mounted Cassette Unit

(2' × 2')

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1. External Appearance



FXZQ07-18M

2. Specifications

4 Way Ceiling Mounted Cassette Unit (2' x 2')

Model			FXZQ07M7VJU	FXZQ09M7VJU	FXZQ12M7VJU
★1 Cooling Capacity	Btu/h		7,500	9,500	12,000
★2 Heating Capacity	Btu/h		8,700	11,100	14,000
Casing / Color			Galvanized Steel / Non Painted	Galvanized Steel / Non Painted	Galvanized Steel / Non Painted
Dimensions: (HxWxD)		in	10.24 (11.26) × 22.64 × 22.64 (): include El. Compo box	10.24 (11.26) × 22.64 × 22.64 (): include El. Compo box	10.24 (11.26) × 22.64 × 22.64 (): include El. Compo box
Coil (Cross Fin Coil)	Rows×Stages×FPI		2 × 10 × 17	2 × 10 × 17	2 × 10 × 17
	Face Area	ft ²	2.9	2.9	2.9
Fan	Model		QST32C15M	QST32C15M	QST32C15M
	Type		Turbo Fan	Turbo Fan	Turbo Fan
	Motor Output (High)	W	55	55	55
	Air Flow Rate (H/L)	cfm	320/247	335/265	495/353
Drive			Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	in	φ1/4 (Flare Connection)	φ1/4 (Flare Connection)	φ1/4 (Flare Connection)
	Gas Pipes	in	φ1/2 (Flare Connection)	φ1/2 (Flare Connection)	φ1/2 (Flare Connection)
	Drain Pipe	in	VP20 (External Dia. 1.02) (Internal Dia. 0.79)	VP20 (External Dia. 1.02) (Internal Dia. 0.79)	VP20 (External Dia. 1.02) (Internal Dia. 0.79)
Machine Weight (Mass)	Lbs	42	42	42	
★4 Sound Level (H/L)	dBA		31/29	33/29	41/34
Safety Devices			Fuse	Fuse	Fuse
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable outdoor unit			R-410A Series	R-410A Series	R-410A Series
Decoration Panels (Option)	Model		BYFQ60BU	BYFQ60BU	BYFQ60BU
	Color		White (RAL 9010)	White (RAL 9010)	White (RAL 9010)
	Dimensions: (HxWxD)	in	2.17 × 27.56 × 27.56	2.17 × 27.56 × 27.56	2.17 × 27.56 × 27.56
	Weight	Lbs	6	6	6
Standard Accessories			Installation and Operation manual, Paper pattern for installation, Drain hose, Clamp metal, Washer fixing plate, Sealing pads, Clamps, Screws, Washer for hanger bracket, Insulation for fitting.	Installation and Operation manual, Paper pattern for installation, Drain hose, Clamp metal, Washer fixing plate, Sealing pads, Clamps, Screws, Washer for hanger bracket, Insulation for fitting.	Installation and Operation manual, Paper pattern for installation, Drain hose, Clamp metal, Washer fixing plate, Sealing pads, Clamps, Screws, Washer for hanger bracket, Insulation for fitting.
Drawing No.			C:3TW30721-1		

Notes:

- ★ 1 Nominal cooling capacities are based on the following conditions:
Return air temperature: 80°FDB, 67°FWB
Outdoor temperature: 95°FDB
Equivalent ref. piping length: 25ft (Horizontal)
- ★ 2 Nominal heating capacities are based on the following conditions:
Return air temperature: 70°FDB.
Outdoor temperature: 47°FDB, 43°FWB
Equivalent ref. piping length: 25ft (Horizontal)
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★ 4 Anechoic chamber conversion value, measured under JISB8616 conditions. During actual operation, these values are normally somewhat higher as a result of installation conditions.
- 5 Refer to page 9 for Power Input.

4 Way Ceiling Mounted Cassette Unit (2' x 2')

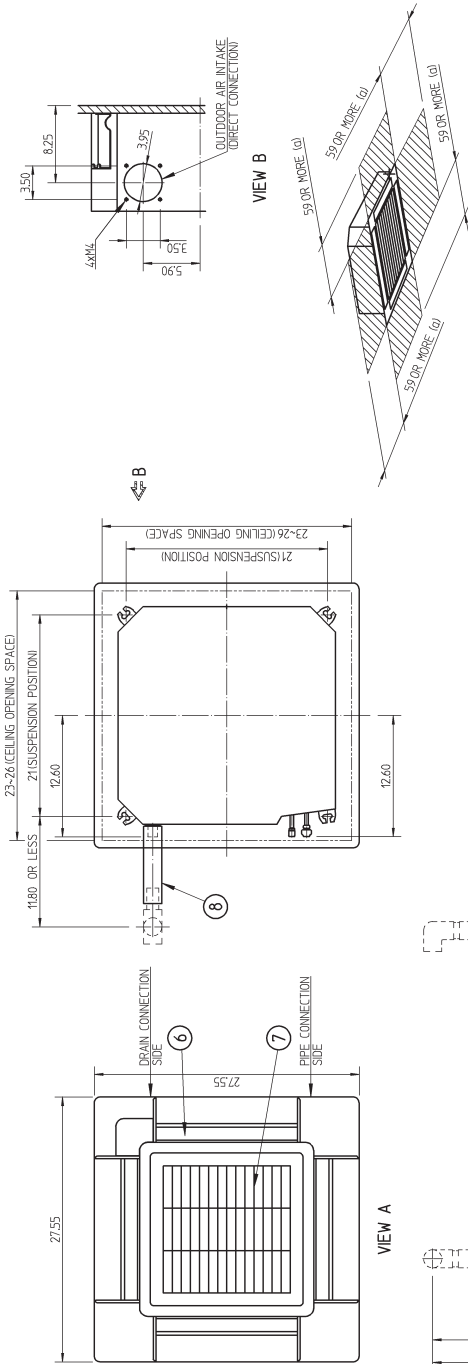
Model			FXZQ18M7VJU
★1 Cooling Capacity		Btu/h	18,000
★2 Heating Capacity		Btu/h	21,000
Casing / Color			Galvanized Steel / Non Painted
Dimensions: (HxWxD)		in	10.24 (11.26) x 22.64 x 22.64
Coil (Cross Fin Coil)	RowsxStagesxFPI		2 x 10 x 17
	Face Area	ft ²	2.9
Fan	Model		QST32C15M
	Type		Turbo Fan
	Motor Output (High)	W	55
	Air Flow Rate (H/L)	cfm	495/353
Drive		Direct Drive	
Temperature Control			Microprocessor Thermostat for Cooling and Heating
Air Filter			Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	in	φ1/4 (Flare Connection)
	Gas Pipes	in	φ1/2 (Flare Connection)
	Drain Pipe	in	VP20 (External Dia. 1.02) (Internal Dia. 0.79)
Machine Weight (Mass)		Lbs	42
★4 Sound Level (H/L)		dBA	41/34
Safety Devices			Fuse
Refrigerant Control			Electronic Expansion Valve
Connectable outdoor unit			R-410A Series
Decoration Panels (Option)	Model		BYFQ60BU
	Color		White (RAL 9010)
	Dimensions: (HxWxD)	in	2.17 x 27.56 x 27.56
	Weight	Lbs	6
Standard Accessories			Installation and Operation manual, Paper pattern for installation, Drain hose, Clamp metal, Washer fixing plate, Sealing pads, Clamps, Screws, Washer for hanger bracket, Insulation for fitting.
Drawing No.			C:3TW30721-1

Notes:

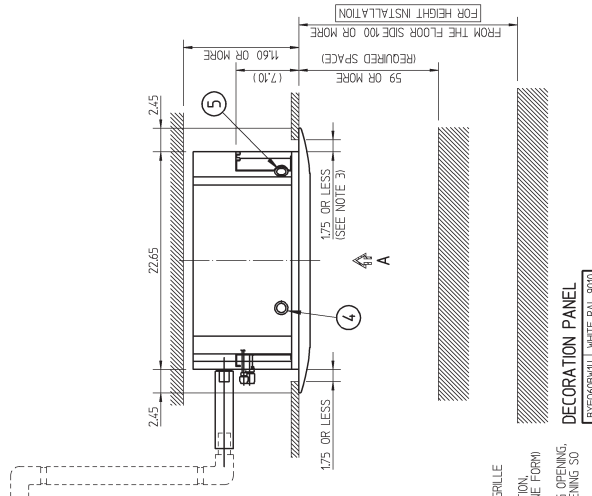
- ★ 1 Nominal cooling capacities are based on the following conditions:
Return air temperature: 80°FDB, 67°FWB
Outdoor temperature: 95°FDB
Equivalent ref. piping length: 25ft (Horizontal)
- ★ 2 Nominal heating capacities are based on the following conditions:
Return air temperature: 70°FDB.
Outdoor temperature: 47°FDB, 43°FWB
Equivalent ref. piping length: 25ft (Horizontal)
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★ 4 Anechoic chamber conversion value, measured under JISB8616 conditions. During actual operation, these values are normally somewhat higher as a result of installation conditions.
- 5 Refer to page 9 for Power Input.

3. Dimensions

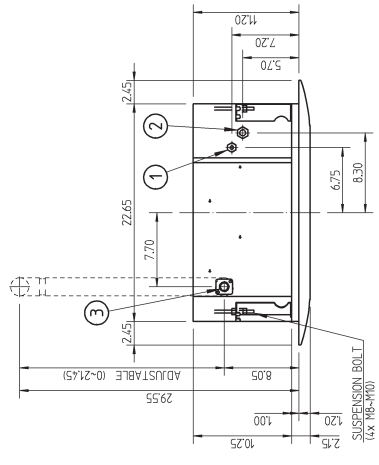
FXZQ07M7VJU
 FXZQ09M7VJU
 FXZQ12M7VJU
 FXZQ18M7VJU



(G) WHEN THE DISCHARGE GRILL IS COVERED BY AN OPTION KIT THE REQUIRED SPACE IS 7.62IN OR MORE.



DECORATION PANEL
 BT2626R20U | WHITE RAL 9010

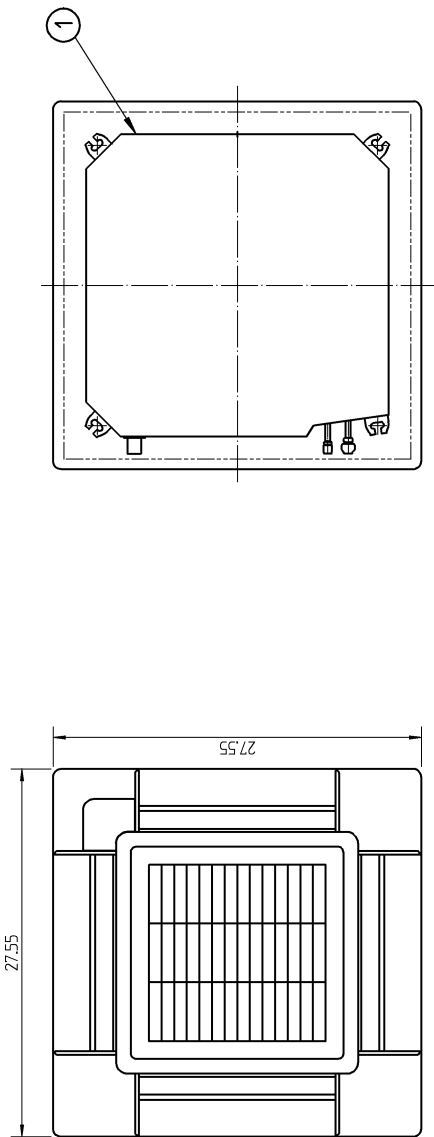


- NOTES:
1. STICKING LOCATION FOR MANUFACTURERS LABEL. MANUFACTURERS LABEL FOR INDOOR UNIT: ON THE BELL MOUTH INSIDE SUCTION GRILLE. MANUFACTURERS LABEL FOR DECORATION PANEL: ON THE INNER FRAME BEHIND SUCTION GRILLE.
 2. THE FRESH AIR IS INDUCTED INTO THE CEILING OF THE UNIT CONTINUOUS 24 HOUR OPERATION. AN ADDITIONAL INSULATION (THICKNESS 0.39IN OR MORE OF GLASSWOL OR POLYETHYLENE FORM) IS REQUIRED.
 3. THROUGH THE INSTALLATION IS ACCEPTABLE UP TO A MAXIMUM OF 25.98in SQUARE CEILING OPENING. THROUGH THE INSTALLATION IS ACCEPTABLE UP TO A MAXIMUM OF 11.81in SQUARE CEILING OPENING. THAT THE PANEL OVERLAP ALLOWANCE CAN BE ENSURED.
 4. ALL MEASUREMENTS ARE IN INCH

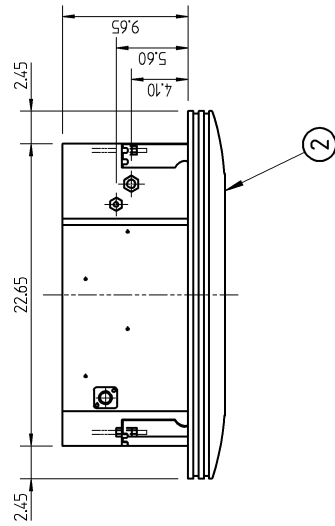
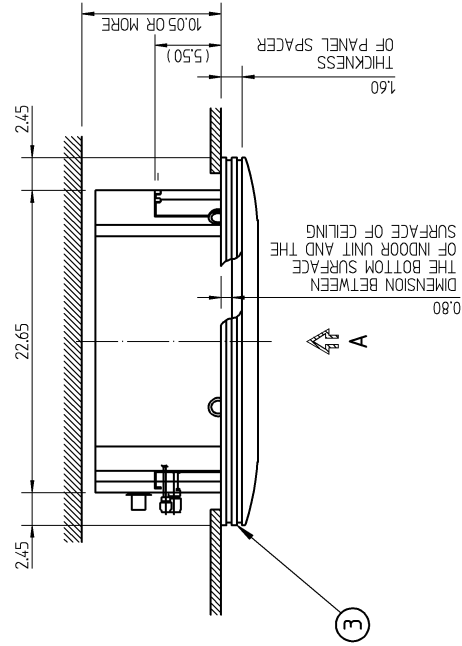
ITEM	PART NAME	REMARK
8	DRAIN HOSE (ACCESSORY)	(Ø 9") (OUTLET)
7	SUCTION GRILL	
6	AIR DISCHARGE GRILL	
5	REMOTE CONTROL CODE AND CONTROL WIRING CONNECTION	
4	POWER SUPPLY CONNECTION	
3	DRAIN PIPE CONNECTION	VP20 (Ø 0.81027)
2	GAS PIPE CONNECTION	Ø1/2" FLARE CONNECTION
1	LIQUID PIPE CONNECTION	Ø1/4" FLARE CONNECTION

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FXZQ07~18M7VJU+ BYFQ60B8W1
 BYFQ60B8W1U



VIEW A

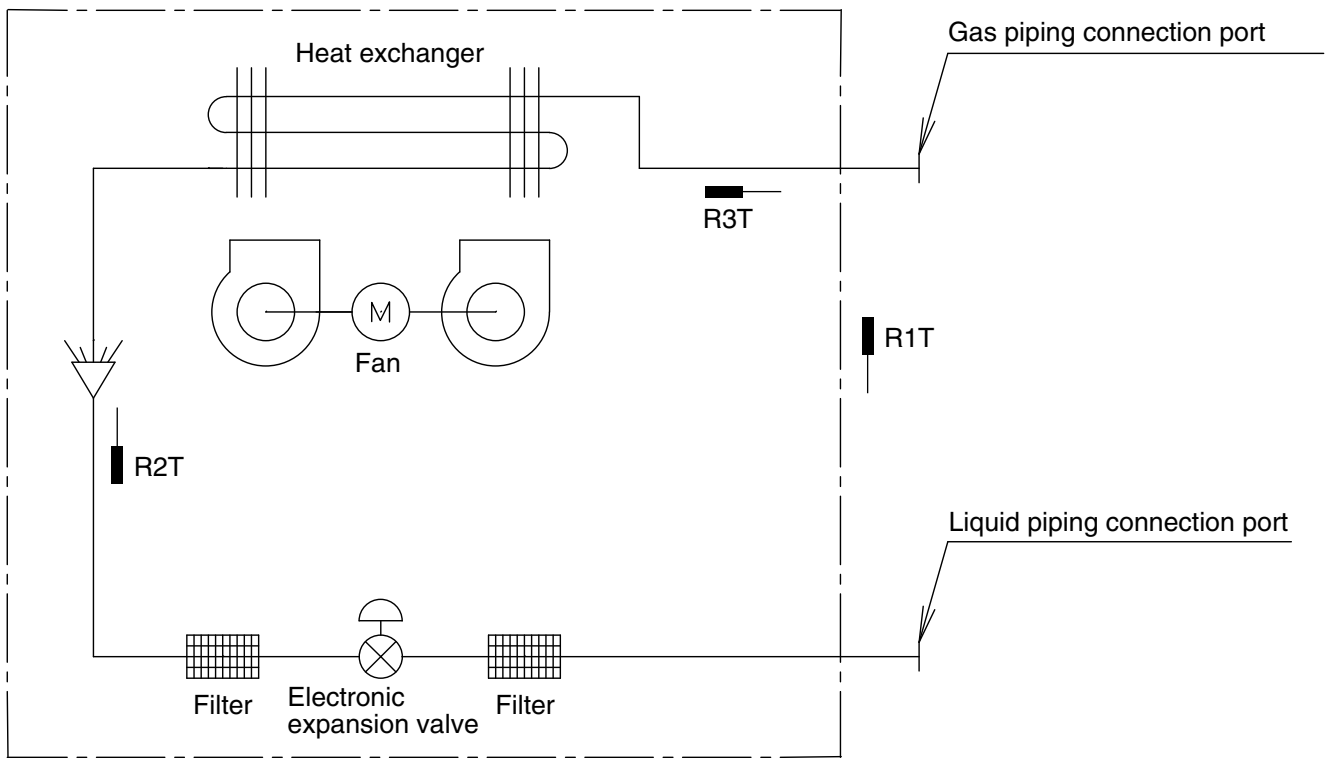


NOTE: ALL MEASUREMENTS ARE IN INCH

ITEM	PART NAME	REMARK
3	PANEL SPACER	
2	DECORATION PANEL	
1	INDOOR UNIT	

3TW30724-3

4. Piping Diagrams



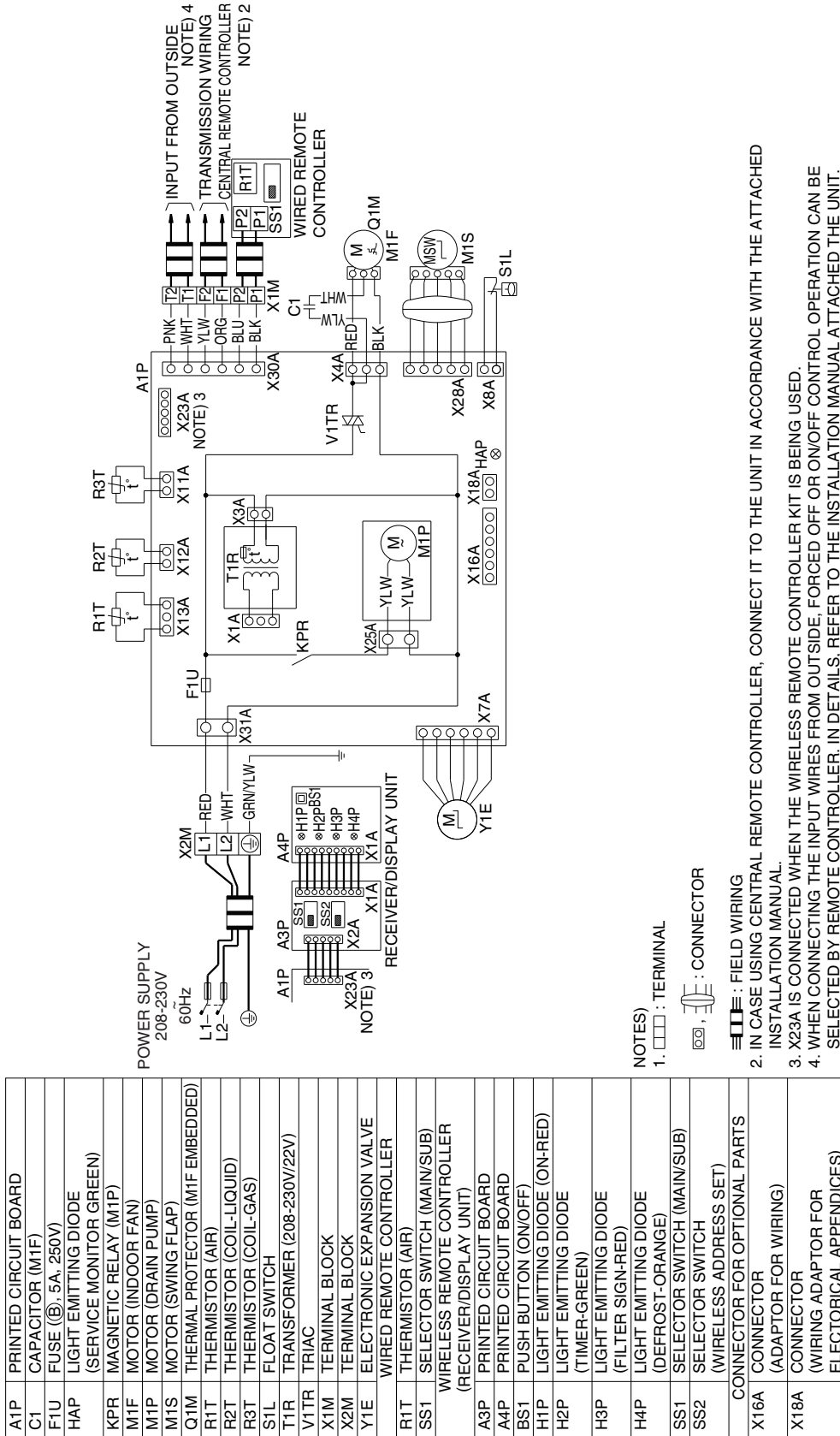
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- R1T : Thermistor for suction air temperature
- R2T : Thermistor for liquid line temperature
- R3T : Thermistor for gas line temperature

Capacity	GAS	Liquid
07/09/12/18M	φ1/2	φ1/4

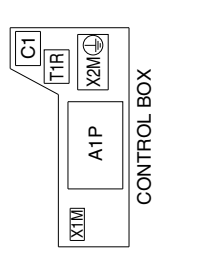
5. Wiring Diagrams

FXZQ07M/09M/12M/18M7VJU



A1P	PRINTED CIRCUIT BOARD
C1	CAPACITOR (M1F)
F1U	FUSE (B, 5A, 250V)
HAP	LIGHT EMITTING DIODE (SERVICE MONITOR GREEN)
KPR	MAGNETIC RELAY (M1P)
M1F	MOTOR (INDOOR FAN)
M1P	MOTOR (DRAIN PUMP)
M1S	MOTOR (SWING FLAP)
Q1M	THERMAL PROTECTOR (M1F EMBEDDED)
R1T	THERMISTOR (AIR)
R2T	THERMISTOR (COIL-LIQUID)
R3T	THERMISTOR (COIL-GAS)
S1L	FLOAT SWITCH
T1R	TRANSFORMER (208-230V/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
BS1	PUSH BUTTON (ON/OFF)
H1P	LIGHT EMITTING DIODE (ON-RED)
H2P	LIGHT EMITTING DIODE (TIMER-GREEN)
H3P	LIGHT EMITTING DIODE (FILTER SIGN-RED)
H4P	LIGHT EMITTING DIODE (DEFROST-ORANGE)
SS1	SELECTOR SWITCH (MAIN/SUB)
SS2	SELECTOR SWITCH (WIRELESS ADDRESS SET)
CONNECTOR FOR OPTIONAL PARTS	
X16A	CONNECTOR (ADAPTOR FOR WIRING)
X18A	CONNECTOR (WIRING ADAPTOR FOR ELECTORICAL APPENDICES)

- POWER SUPPLY
208-230V
60Hz
- NOTES
1. □ : TERMINAL
⊞ : CONNECTOR
 2. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTALLATION MANUAL.
 3. X23A IS CONNECTED WHEN THE WIRELESS REMOTE CONTROLLER KIT IS 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



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C:3TW30726-1

6. Electric Characteristics

Model	Units			Power supply		IFM		Input (W)	
	Hz	Volts	Voltage range	MCA	MFA	kW	FLA	Cooling	Heating
FXZQ07M7VJU	60	208-230	MAX. 253 MIN. 187	0.8	15	0.055	0.6	75	69
FXZQ09M7VJU				0.8	15	0.055	0.6	75	69
FXZQ12M7VJU				0.8	15	0.055	0.6	80	73
FXZQ18M7VJU				0.9	15	0.055	0.7	128	122

Notes:

- Voltage range**
Units are suitable for use on electrical systems where voltage supplied to units terminals is not below or above listed range limits.
- Maximum allowable voltage unbalance between phases is 2%.
- MCA/MFA**
MCA = 1.25 x FLA
MFA ≤ 4 x FLA
(Next lower standard fuse rating, Min. 15A)
- Select wire size based on the MCA.
- Instead of fuse, use circuit breaker.

Symbols:

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

C:4TW30729-5

7. Capacity Tables

7.1 Cooling Capacity

FXZQ-M

Unit size	Outdoor air temp. °FDB	Indoor Air Temp. °FWB											
		61		64		67		70		72		75	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH
07	75	5.9	5.0	6.7	5.5	7.5	5.9	8.3	6.1	8.8	6.0	8.9	5.4
	79	5.9	5.0	6.7	5.5	7.5	5.9	8.3	6.1	8.6	5.9	8.8	5.3
	83	5.9	5.0	6.7	5.5	7.5	5.9	8.3	6.1	8.5	5.8	8.6	5.2
	87	5.9	5.0	6.7	5.5	7.5	5.9	8.2	6.1	8.3	5.7	8.5	5.1
	91	5.9	5.0	6.7	5.5	7.5	5.9	8.1	6.0	8.2	5.6	8.4	5.0
	95	5.9	5.0	6.7	5.5	7.5	5.9	8.0	5.9	8.1	5.5	8.2	4.9
	99	5.9	5.0	6.7	5.5	7.5	5.9	7.8	5.8	7.9	5.4	8.1	4.8
	103	5.9	5.0	6.7	5.5	7.5	5.9	7.7	5.7	7.8	5.3	7.9	4.8
09	75	7.5	6.0	8.5	6.5	9.5	6.7	10.5	7.0	11.1	6.9	11.3	6.4
	79	7.5	6.0	8.5	6.5	9.5	6.7	10.5	7.0	10.9	6.8	11.1	6.3
	83	7.5	6.0	8.5	6.5	9.5	6.7	10.5	7.0	10.7	6.7	10.9	6.2
	87	7.5	6.0	8.5	6.5	9.5	6.7	10.4	7.0	10.6	6.6	10.9	6.2
	91	7.5	6.0	8.5	6.5	9.5	6.7	10.3	6.9	10.4	6.4	10.6	6.0
	95	7.5	6.0	8.5	6.5	9.5	6.7	10.1	6.8	10.2	6.3	10.4	5.9
	99	7.5	6.0	8.5	6.5	9.5	6.7	9.9	6.6	10.0	6.2	10.2	5.8
	103	7.5	6.0	8.5	6.5	9.5	6.7	9.7	6.5	9.9	6.1	10.0	5.7
12	75	9.5	6.8	10.7	7.6	12.0	8.0	13.3	8.2	14.0	8.1	14.3	7.8
	79	9.5	6.8	10.7	7.6	12.0	8.0	13.3	8.2	13.8	8.0	14.0	7.7
	83	9.5	6.8	10.7	7.6	12.0	8.0	13.3	8.2	13.6	7.9	13.8	7.6
	87	9.5	6.8	10.7	7.6	12.0	8.0	13.2	8.2	13.3	7.7	13.6	7.5
	91	9.5	6.8	10.7	7.6	12.0	8.0	13.0	8.0	13.1	7.6	13.4	7.4
	95	9.5	6.8	10.7	7.6	12.0	8.0	12.7	7.9	12.9	7.5	13.1	7.2
	99	9.5	6.8	10.7	7.6	12.0	8.0	12.5	7.8	12.7	7.3	12.9	7.1
	103	9.5	6.8	10.7	7.6	12.0	8.0	12.3	7.6	12.4	7.2	12.7	7.0
18	75	14.2	11.4	16.1	12.2	18.0	13.0	19.9	13.7	21.0	13.9	21.4	12.8
	79	14.2	11.4	16.1	12.2	18.0	13.0	19.9	13.7	20.7	13.7	21.1	12.6
	83	14.2	11.4	16.1	12.2	18.0	13.0	19.9	13.7	20.4	13.4	20.7	12.4
	87	14.2	11.4	16.1	12.2	18.0	13.0	19.8	13.6	20.0	13.2	20.4	12.2
	91	14.2	11.4	16.1	12.2	18.0	13.0	19.4	13.4	19.7	13.0	20.1	12.0
	95	14.2	11.4	16.1	12.2	18.0	13.0	19.1	13.2	19.3	12.8	19.7	11.8
	99	14.2	11.4	16.1	12.2	18.0	13.0	18.8	12.9	19.0	12.5	19.4	11.6
	103	14.2	11.4	16.1	12.2	18.0	13.0	18.4	12.7	18.7	12.3	19.0	11.4

C: 3TW30722-1

TC : Total capacity ; MBH
 SHC : Sensible heat capacity ; MBH



Refer to Outdoor Unit Capacity Tables : for the actual performance data of each indoor and outdoor unit combination.

7.2 Heating Capacity

FXZQ-M

Unit size	Outdoor Air Temp.		Indoor Air Temp. °FDB					
			62	65	68	70	72	75
	°FDB	°FWB	TC	TC	TC	TC	TC	TC
			MBH	MBH	MBH	MBH	MBH	MBH
07	22.0	20.0	7.3	7.3	7.3	7.3	7.3	7.2
	26.0	24.0	7.6	7.6	7.6	7.6	7.6	7.6
	30.0	28.0	8.0	8.0	8.0	8.0	7.9	7.7
	35.0	32.0	8.3	8.3	8.3	8.3	8.1	7.7
	39.0	36.0	8.7	8.7	8.7	8.4	8.1	7.7
	44.0	40.0	9.0	9.0	8.7	8.5	8.1	7.7
	47.0	43.0	9.3	9.2	8.7	8.5	8.1	7.7
	51.0	47.0	9.6	9.2	8.7	8.5	8.1	7.7
	54.0	50.0	9.7	9.2	8.7	8.5	8.1	7.7
	57.0	53.0	9.7	9.2	8.7	8.5	8.1	7.7
60.0	56.0	9.7	9.2	8.7	8.5	8.1	7.7	
09	22.0	20.0	9.2	9.2	9.2	9.2	9.2	9.2
	26.0	24.0	9.7	9.7	9.6	9.6	9.6	9.6
	30.0	28.0	10.1	10.1	10.1	10.1	10.1	9.7
	35.0	32.0	10.6	10.5	10.5	10.5	10.3	9.7
	39.0	36.0	11.0	11.0	11.0	10.5	10.3	9.7
	44.0	40.0	11.4	11.4	11.1	10.5	10.3	9.7
	47.0	43.0	11.8	11.7	11.1	10.5	10.3	9.7
	51.0	47.0	12.2	11.7	11.1	10.5	10.3	9.7
	54.0	50.0	12.3	11.7	11.1	10.5	10.3	9.7
	57.0	53.0	12.3	11.7	11.1	10.5	10.3	9.7
60.0	56.0	12.3	11.7	11.1	10.5	10.3	9.7	

Unit size	Outdoor Air Temp.		Indoor Air Temp. °FDB					
			62	65	68	70	72	75
	°FDB	°FWB	TC	TC	TC	TC	TC	TC
			MBH	MBH	MBH	MBH	MBH	MBH
12	22.0	20.0	11.7	11.7	11.6	11.6	11.6	11.6
	26.0	24.0	12.2	12.2	12.2	12.2	12.2	12.1
	30.0	28.0	12.8	12.8	12.7	12.7	12.7	12.3
	35.0	32.0	13.3	13.3	13.3	13.3	13.0	12.3
	39.0	36.0	13.9	13.9	13.9	13.5	13.0	12.3
	44.0	40.0	14.5	14.4	14.0	13.5	13.0	12.3
	47.0	43.0	14.9	14.7	14.0	13.5	13.0	12.3
	51.0	47.0	15.4	14.7	14.0	13.5	13.0	12.3
	54.0	50.0	15.5	14.7	14.0	13.5	13.0	12.3
	57.0	53.0	15.5	14.7	14.0	13.5	13.0	12.3
60.0	56.0	15.5	14.7	14.0	13.5	13.0	12.3	
18	22.0	20.0	17.5	17.5	17.4	17.4	17.4	17.4
	26.0	24.0	18.3	18.3	18.3	18.3	18.2	18.2
	30.0	28.0	19.2	19.1	19.1	19.1	19.1	18.4
	35.0	32.0	20.0	20.0	19.9	19.9	19.5	18.4
	39.0	36.0	20.8	20.8	20.8	20.0	19.5	18.4
	44.0	40.0	21.7	21.6	21.0	20.0	19.5	18.4
	47.0	43.0	22.3	22.1	21.0	20.0	19.5	18.4
	51.0	47.0	23.1	22.1	21.0	20.0	19.5	18.4
	54.0	50.0	23.2	22.1	21.0	20.0	19.5	18.4
	57.0	53.0	23.2	22.1	21.0	20.0	19.5	18.4
60.0	56.0	23.2	22.1	21.0	20.0	19.5	18.4	

c: 3TW30722-2

TC : Total capacity ; MBH



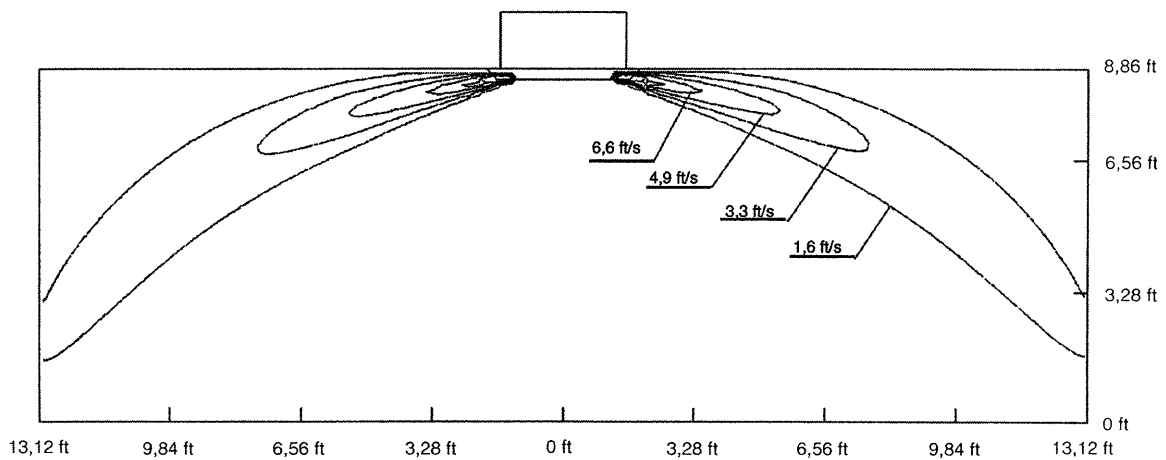
Refer to Outdoor Unit Capacity Tables : for the actual performance data of each indoor and outdoor unit combination.

8. Air Velocity and Temperature Distributions (Reference Data)

FXZQ07, 09M <Cooling mode>

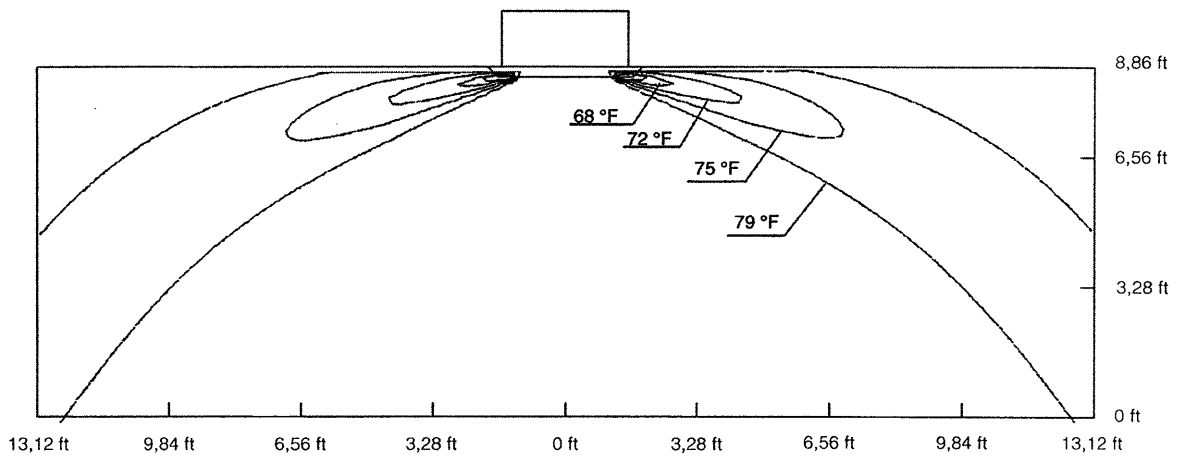
COOLING AIR VELOCITY DISTRIBUTION

4-way discharge, air flow direction: horizontal



COOLING AIR TEMPERATURE DISTRIBUTION

4-way discharge, air flow direction: horizontal

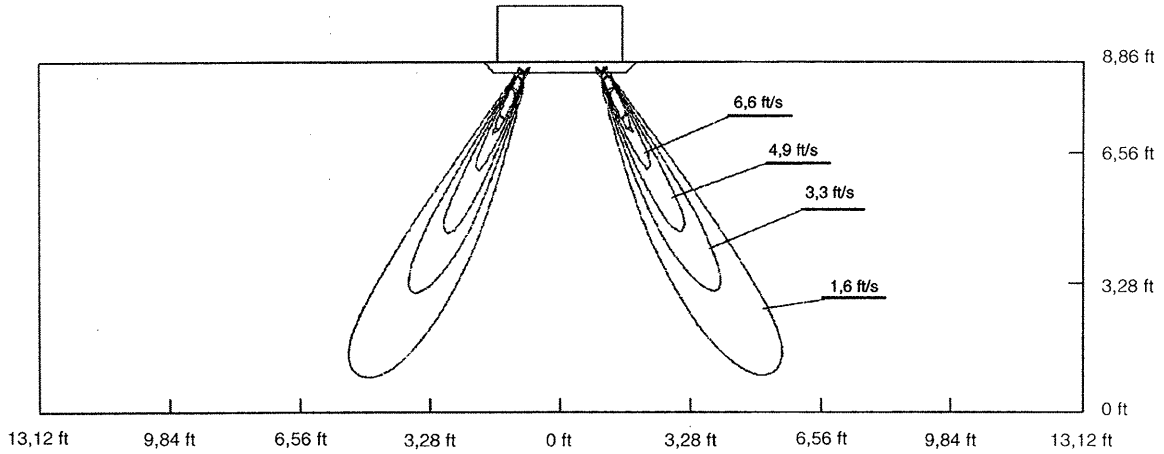


4TW30729-1

FXZQ07, 09M <Heating mode>

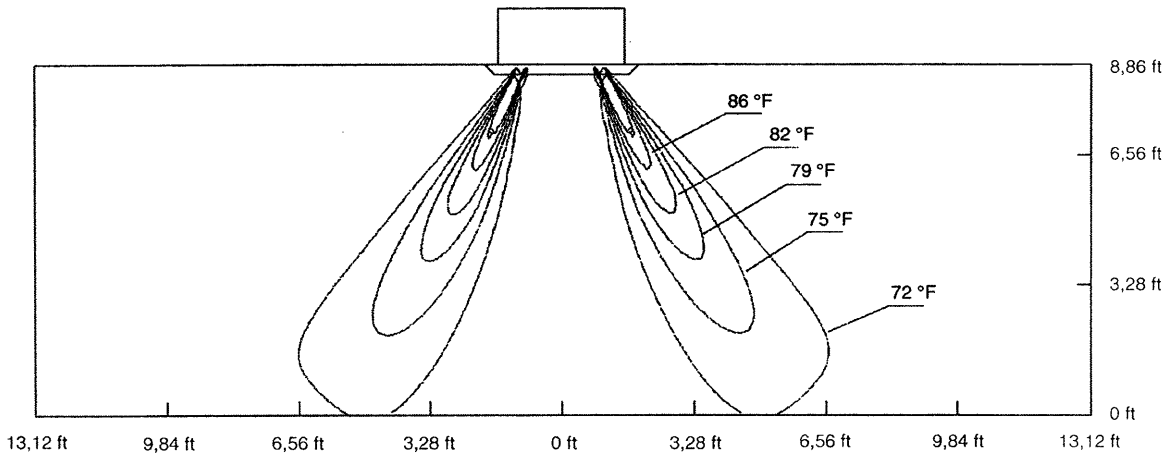
HEATING AIR VELOCITY DISTRIBUTION

4-way discharge, air flow direction: down



HEATING AIR TEMPERATURE DISTRIBUTION

4-way discharge, air flow direction: down

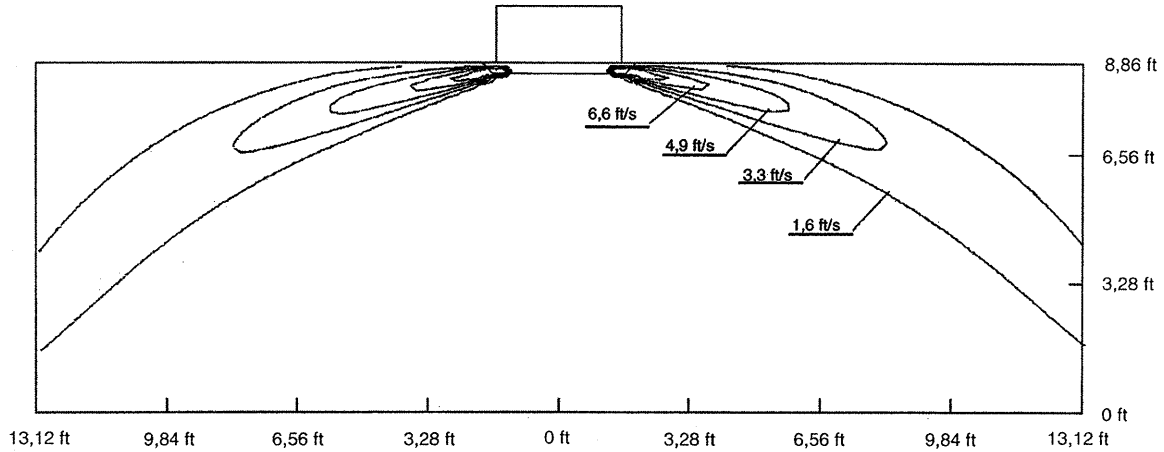


4TW30729-2

FXZQ12M <Cooling mode>

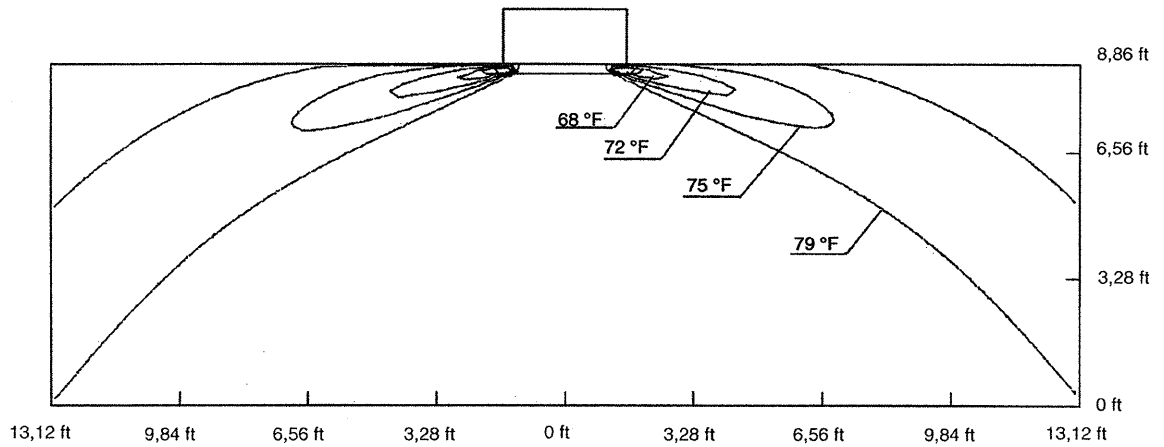
COOLING AIR VELOCITY DISTRIBUTION

4-way discharge, air flow direction: horizontal



COOLING AIR TEMPERATURE DISTRIBUTION

4-way discharge, air flow direction: horizontal

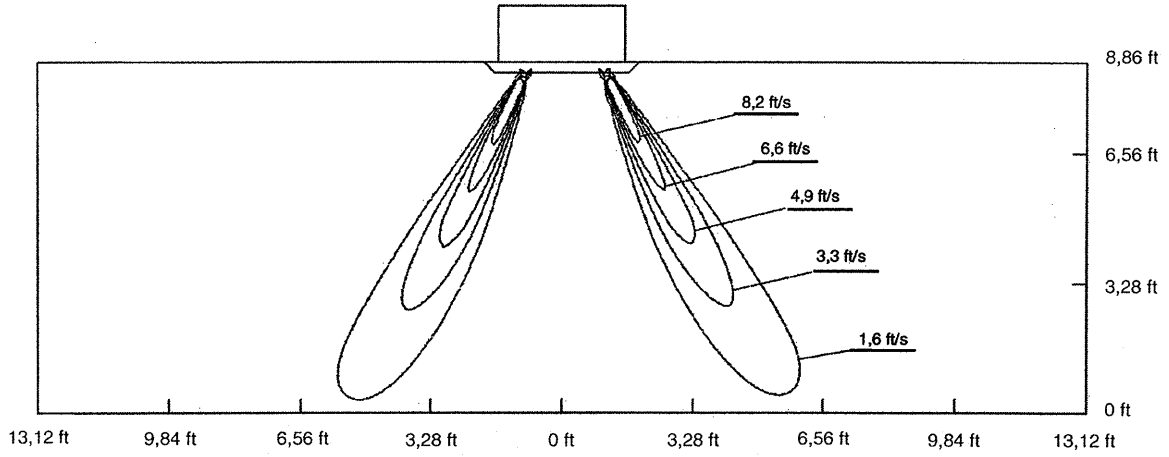


4TW30749-1

FXZQ12M <Heating mode>

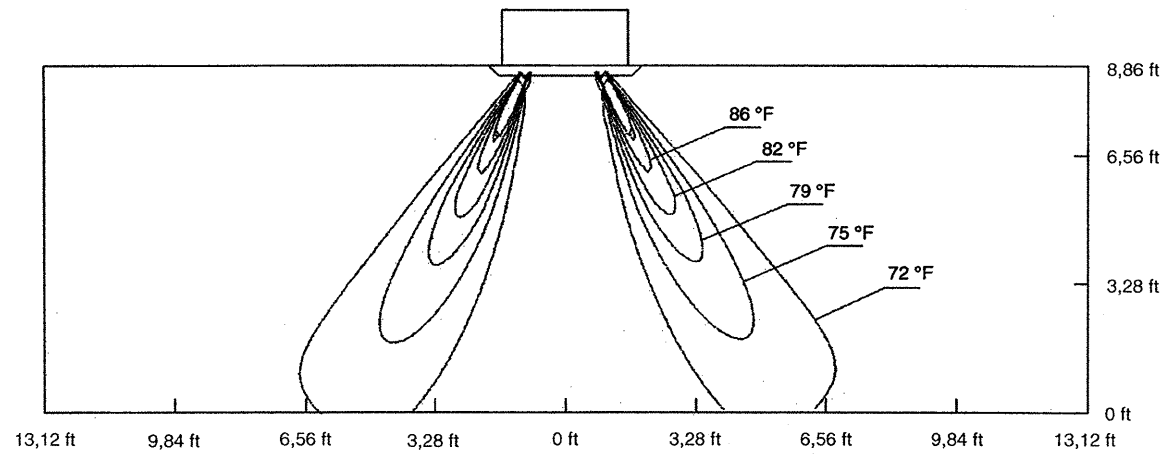
HEATING AIR VELOCITY DISTRIBUTION

4-way discharge, air flow direction: down



HEATING AIR TEMPERATURE DISTRIBUTION

4-way discharge, air flow direction: down

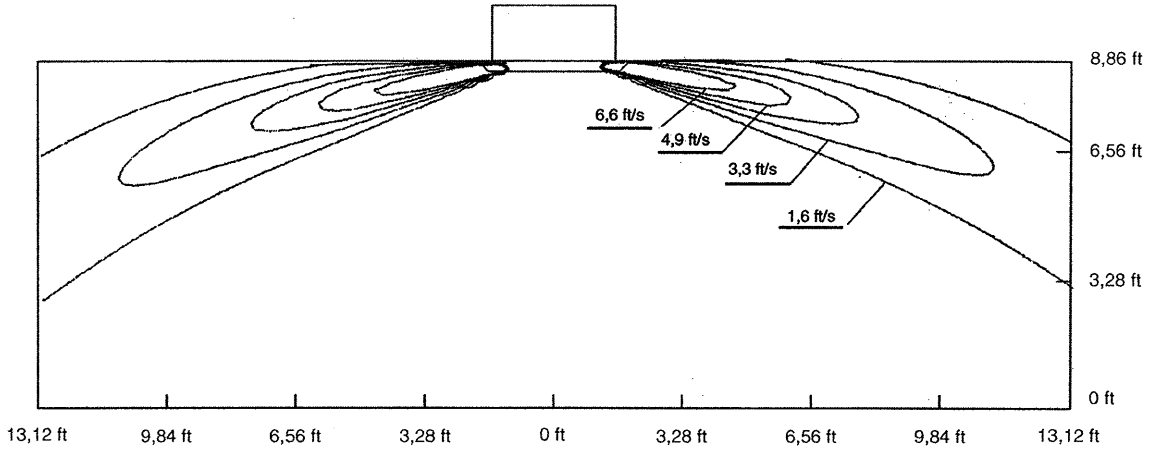


4TW30749-2

FXZQ18M <Cooling mode>

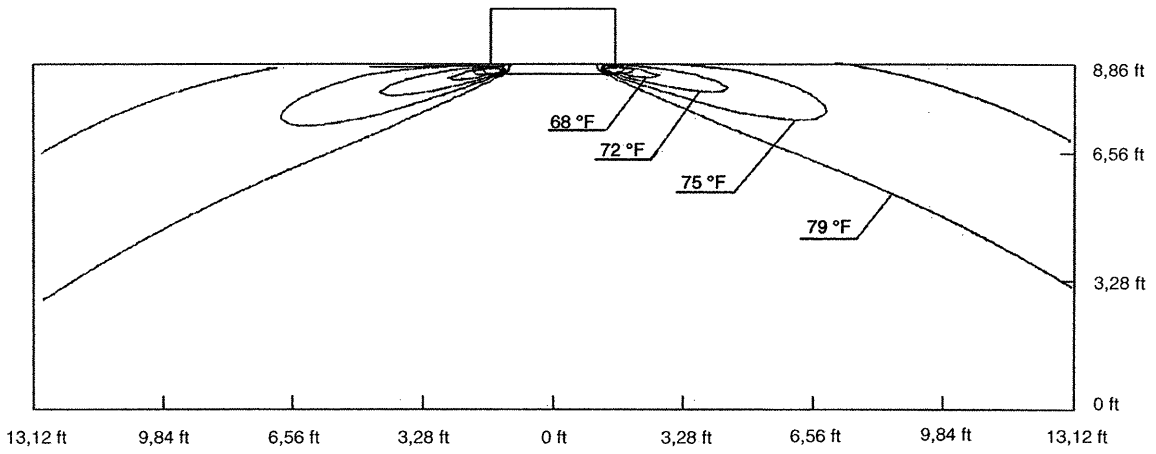
COOLING AIR VELOCITY DISTRIBUTION

4-way discharge, air flow direction: horizontal



COOLING AIR TEMPERATURE DISTRIBUTION

4-way discharge, air flow direction: horizontal

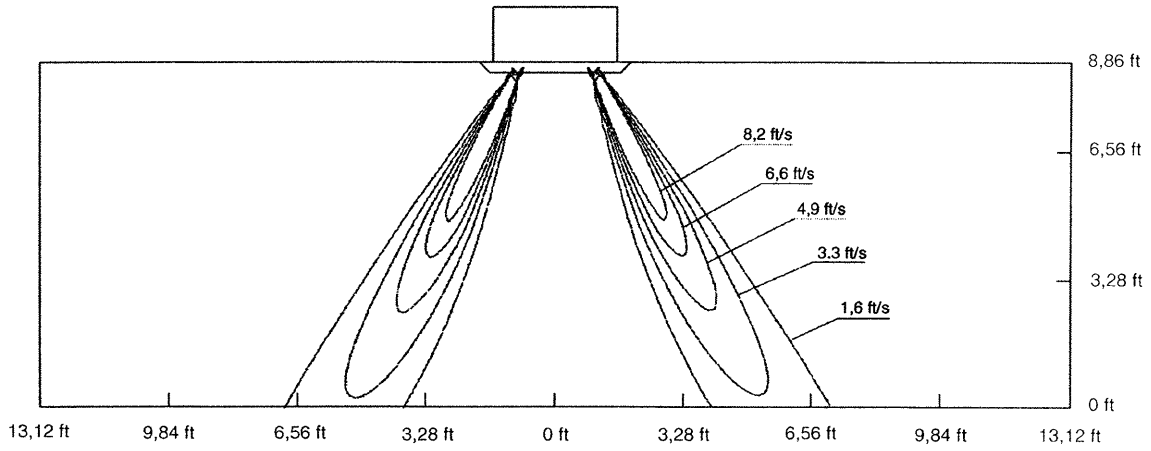


4TW30759-1

FXZQ18M <Heating mode>

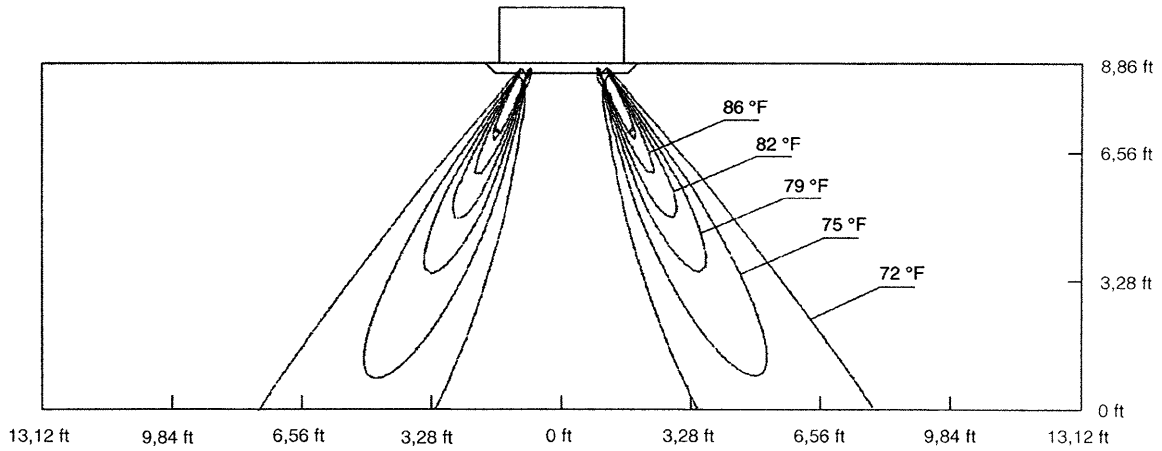
HEATING AIR VELOCITY DISTRIBUTION

4-way discharge, air flow direction: down



HEATING AIR TEMPERATURE DISTRIBUTION

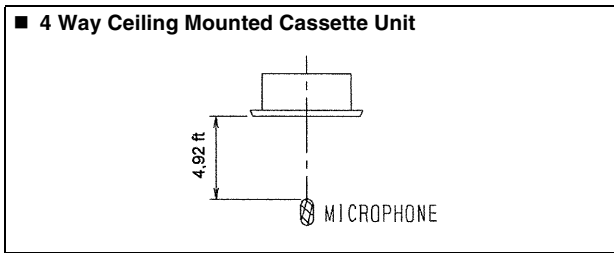
4-way discharge, air flow direction: down



4TW30759-2

9. Sound Levels

Overall



Notes:

Operation noise differs with operation and ambient conditions.

dBA

Model	208~230V, 60Hz	
	H	L
FXZQ07M7VJU	32	29
FXZQ09M7VJU	32	29
FXZQ12M7VJU	33	29
FXZQ18M7VJU	41	34

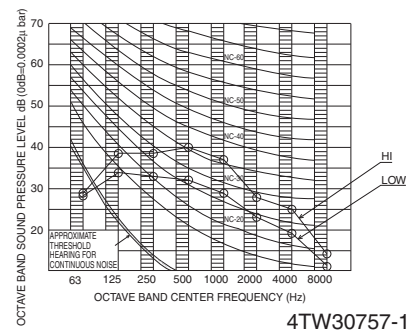
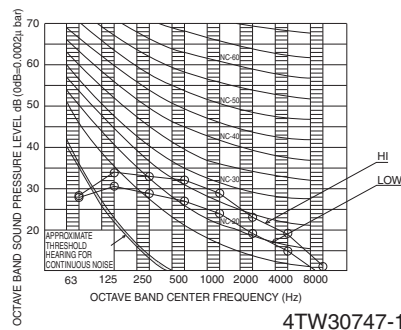
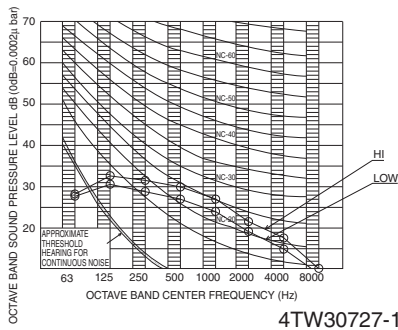
Octave Band Level

○ — ○ 208V~230V

FXZQ07/09M7VJU

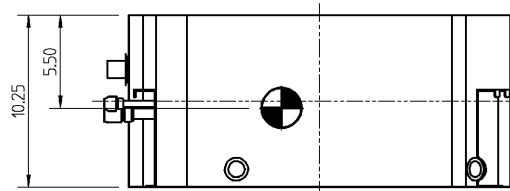
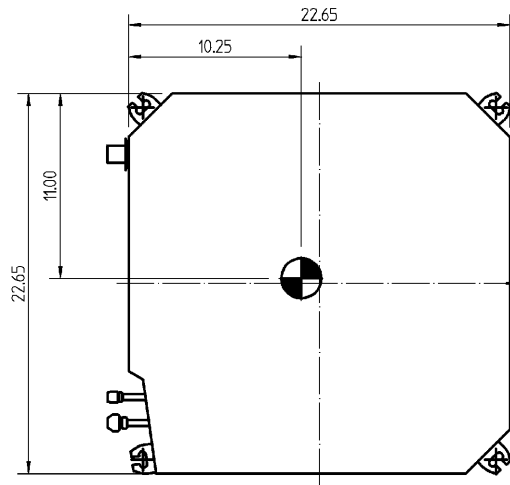
FXZQ12M7VJU

FXZQ18M7VJU



10. Installation and Operation

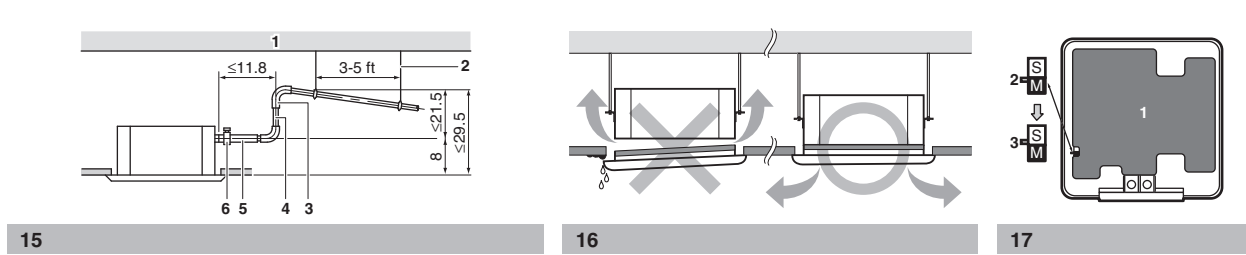
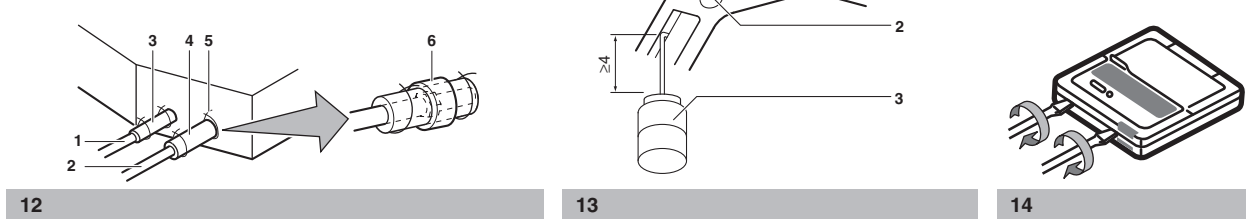
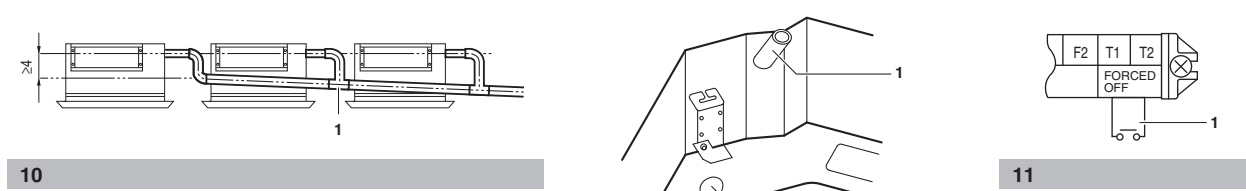
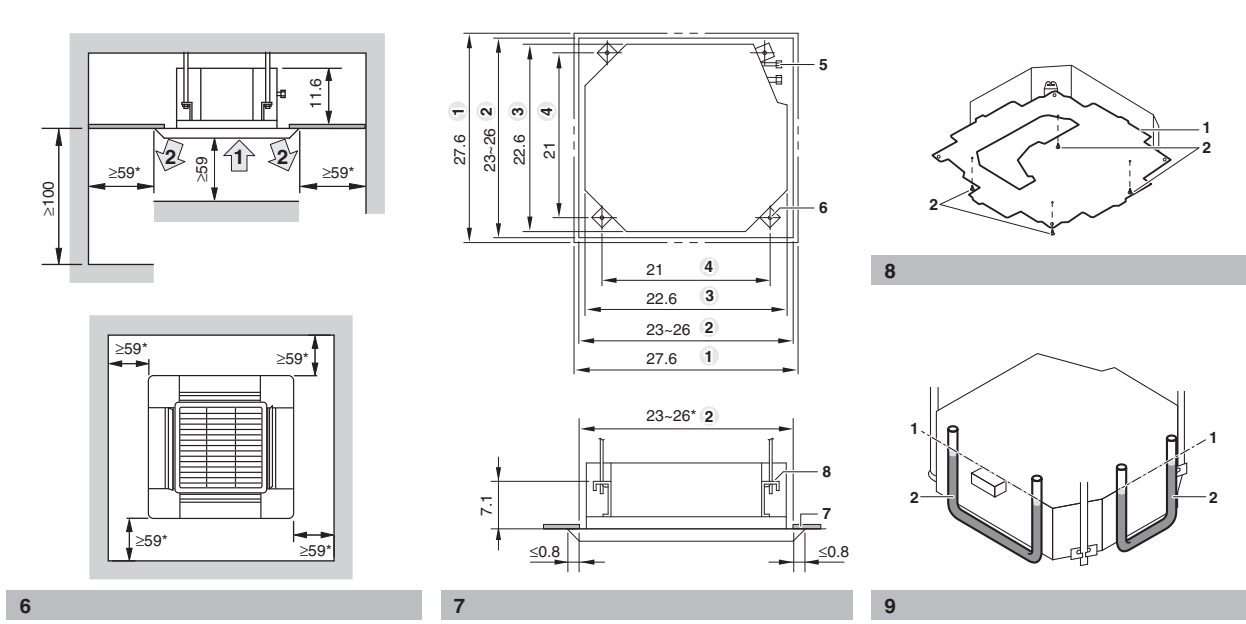
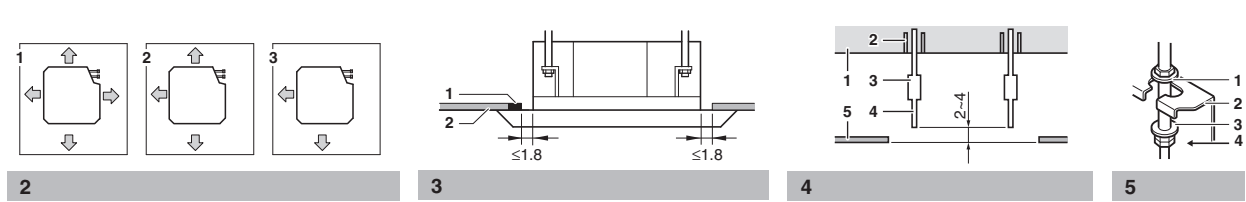
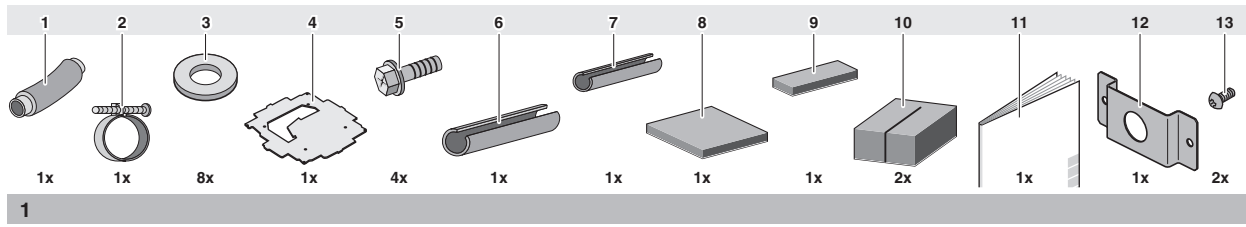
10.1 Center of Gravity

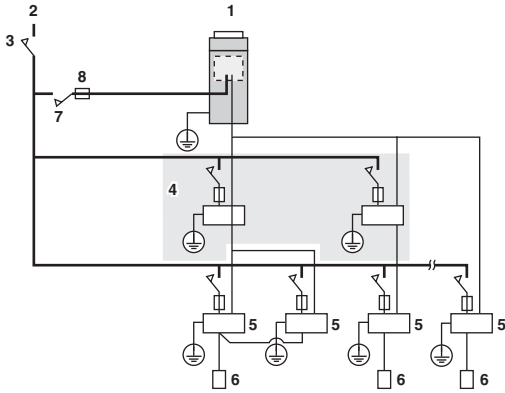


4TW30729-4

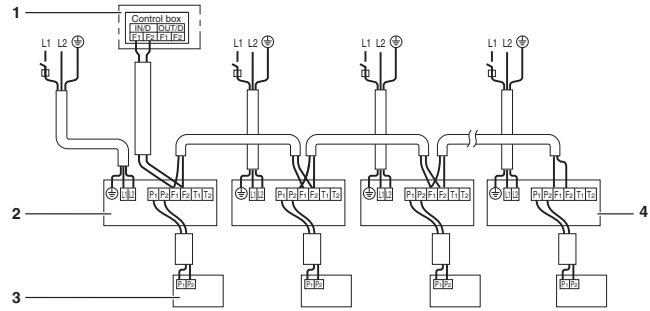
10.2 Installation Manual / Indoor Unit

FXZQ07M7VJU~18M7VJU

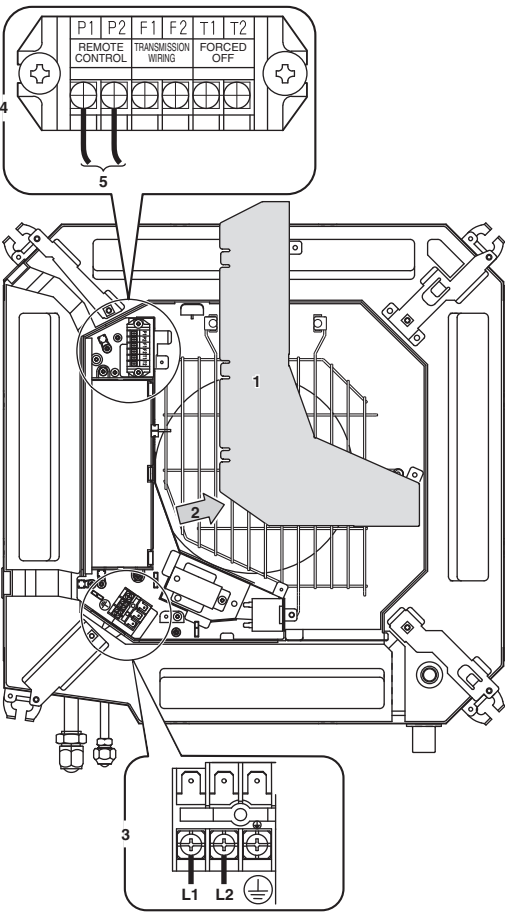




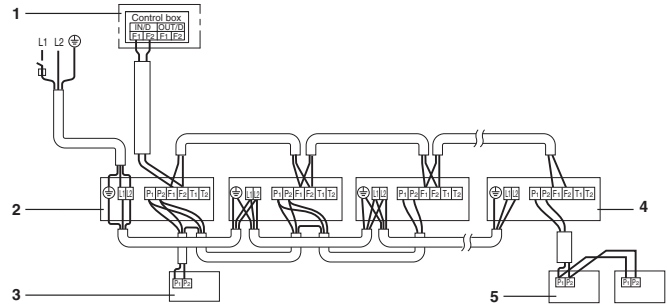
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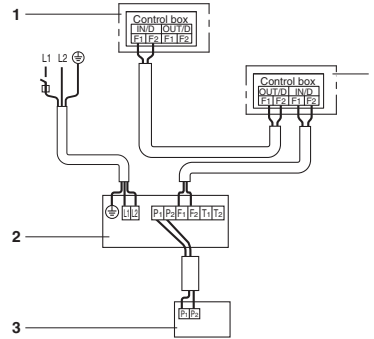
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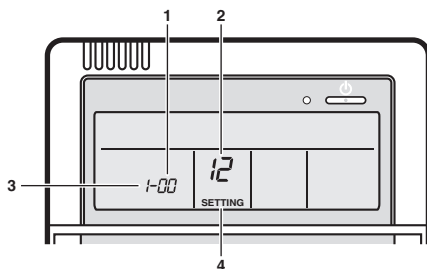
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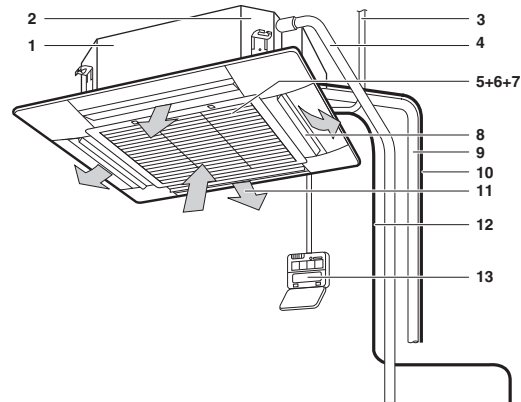
20




21



23



24

 READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION. KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

IMPROPER INSTALLATION OR ATTACHMENT OF EQUIPMENT OR ACCESSORIES COULD RESULT IN ELECTRIC SHOCK, SHORT-CIRCUIT, LEAKS, FIRE OR OTHER DAMAGE TO THE EQUIPMENT. BE SURE ONLY TO USE ACCESSORIES MADE BY DAIKIN WHICH ARE SPECIFICALLY DESIGNED FOR USE WITH THE EQUIPMENT AND HAVE THEM INSTALLED BY A PROFESSIONAL.


IF UNSURE OF INSTALLATION PROCEDURES OR USE, ALWAYS CONTACT YOUR DAIKIN DEALER FOR ADVICE AND INFORMATION.


1. SAFETY CONSIDERATIONS


Please read these safety precautions carefully before installing the air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.


Inform customers that they should store this operation manual along with the installation manual for future reference. This air conditioner comes under the term "appliances not accessible to the general public".

The safety considerations listed here are divided into the following types and cover very important topics, so be sure to follow them carefully.

 **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

 **NOTE** Indicates situation that may result in equipment or property-damage-only accidents.

Keep these warning sheets handy so that you can refer to them when needed.

If this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

DANGER

■ **Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.**

■ **Any abnormalities in the operation of the air conditioner such as smoke or fire could result in severe injury or death.**

Turn off the power and contact your dealer immediately for instructions.

■ **If refrigerant gas comes in contact with fire such as from a fan, heater, stove or cooking device, it may produce toxic gases. Exposure to these gases could cause severe injury or death.**

■ **If there is a refrigerant leakage, consult your dealer.**
Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.

■ **If equipment utilizing a burner is used in the same room as the air conditioner, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death.**
Be sure to ventilate the room sufficiently to avoid this hazard.

■ **Safely dispose of packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.

Tear apart and throw away plastic packaging bags so that children can not play with them. Children playing with plastic bags face the danger of death by suffocation.

WARNING

■ **It is not good for your health to expose your body to the air flow for a long time.**

■ **Ask your dealer**

■ **for installation of the air conditioner.**

■ **for improvement, repair, and maintenance of the air conditioner.**

■ **to move and reinstall the air conditioner.**

Incomplete installation performed by yourself may result in a water leakage, electric shock or fire.

■ **Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.**

■ **Never let the indoor unit or the remote controller get wet.**

It may cause an electric shock or a fire.

■ **Never use a flammable spray such as hair spray, lacquer or paint near the unit.**

These products may cause a fire.

■ **Never replace a fuse with a fuse of wrong ampere rating or wires when a fuse is blown.**

Not replacing a blown fuse by a fuse of correct ampere rating may cause the unit to break down or cause a fire.

■ **Never remove the fan guard of the unit.**

A fan rotating at high speed without the fan guard is very dangerous.

- **Never inspect or service the unit by yourself.**
Ask an authorized service person to perform this work.
- **Cut off all electric waves before maintenance.**
- **To avoid the risk of serious electrical shock, never sprinkle or spill water or liquids on the unit.**
Placing a flower vase or other containers with water or other liquids on the unit could result in a shock hazard or fire if a spill occurs.
- **Operating the air conditioner with wet hands could result in a shock hazard.**
- **Do not allow children to play on or around the unit as they could be injured.**
- **Check the unit stand for damage on a continuous basis.**
If left in a damaged condition the unit may fall and cause injury.
- **The heat exchanger fins are sharp enough to cut.**
To avoid injury wear gloves or cover the fins while working around them.
- **Do not put a finger or other objects into the air inlet or air outlet.**
The fan is rotating at high speed and will cause injury.
- **Do not touch the air outlet or the horizontal flaps while the swing flap is in operation as fingers may get caught and injured.**
- **Be sure to install an earth leakage breaker.**
Failure to install an earth leakage breaker may result in electric shocks or fire.
- **Never touch the internal parts of the controller.**
Do not remove the front panel because some parts inside the controller are dangerous to touch. In addition, some parts may be damaged. For checking and adjusting the internal parts, contact your dealer.



CAUTION

- **Do not use the air conditioner for other purposes.**
In order to avoid any quality deterioration, do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- **Do not place items under the indoor unit which may be damaged by water.**
Condensation may form if the humidity is above 80% or if the drain outlet gets blocked.
- **Avoid placing the controller in a spot splashed with water.**
Water coming inside the unit may cause an electric leak or may damage the internal electronic parts.
- **Do not operate the air conditioner when using a room fumigation - type insecticide.**
Chemicals from the insecticide deposited into the unit, could endanger the health of those who are hypersensitive to chemicals.
- **Do not turn off the power immediately after stopping operation.**
Always wait at least 5 minutes before turning off the power. Otherwise, water leakage and trouble may occur.
- **The appliance is not intended for use by young children or infirm persons without supervision.**
- **The remote controller must be installed in such a way that children can not play with it.**

- **Consult with the installation contractor for cleaning the inside of the air conditioner.**
Wrong cleaning may be the cause for plastic parts to break, water leakage or electric shock.
- **Do not touch the air inlet or aluminium fins of the air conditioner.**
Otherwise, injury may be caused.
- **Do not place objects in direct proximity of the outdoor unit and do not let leaves and other debris accumulate around the unit.**
Leaves are a hotbed for small animals which can enter the unit. Once in the unit, such animals can cause malfunctions, smoke or fire when contact with electrical parts.



NOTE

- **Never press the button of the remote controller with a hard, pointed object.**
The remote controller may be damaged.
 - **Never pull or twist the electric wire of the remote controller.**
Pulling or twisting the electric wire may cause the unit to malfunction.
 - **Do not place appliances which produce open fire in places exposed to the air flow from the unit or under the indoor unit.**
Not following this advice may cause incomplete combustion or deformation of the unit due to the heat.
 - **Arrange the drain hose to ensure smooth drainage.**
Incomplete drainage may cause wetting of the building, furniture etc.
 - **Do not place the controller exposed to direct sunlight.**
The LCD display may get discolored, failing to display the data.
 - **Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.**
The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Wipe it a second time with another dry cloth.
 - **Dismantling of the unit, treatment of the refrigerant, oil, and eventual other parts, should be done in accordance with the relevant local and national regulations.**
 - **Do not dry the filter by exposing it to direct sunlight or warming it using fire, etc. Doing so can result in the deformation of the filter.**
-

2. BEFORE INSTALLATION

- When moving the unit while removing it from the carton box, be sure to lift it by holding on to the four lifting lugs without exerting any pressure on other parts, especially on the swing flap, the refrigerant piping, drain piping, and other resin parts.
- Leave the unit inside its packaging until you reach the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, this to avoid damage or scratches to the unit.
- Especially, do not unfasten the packing case (top) guarding the switch box until suspending the unit.
- Refer to the installation manual of the outdoor unit for items not described in this manual.
- Caution concerning refrigerant series R-410A:
The connectable outdoor units must be designed exclusively for R-410A.
- Do not place objects in direct proximity of the outdoor unit and do not let leaves and other debris accumulate around the unit.
Leaves are a hotbed for small animals which can enter the unit.
Once in the unit, such animals can cause malfunctions, smoke or fire when making contact with electrical parts.

2-1 Precautions

- Do not install or operate the unit in rooms mentioned below.
 - Places with mineral oil, or filled with oil vapor or spray like in kitchens. (Plastic parts may deteriorate.)
 - Where corrosive gas like sulphurous gas exists. (Copper tubing and brazed spots may corrode.)
 - Where volatile flammable gas like thinner or gasoline is used.
 - Where machines generating electromagnetic waves exist. (Control system may malfunction.)
 - Where the air contains high levels of salt such as air near the ocean and where voltage fluctuates a lot (e.g. in factories). Also in vehicles or vessels.
- When selecting the installation site, use the supplied paper pattern for installation.
- Do not install accessories on the casing directly. Drilling holes in the casing may damage electrical wires and consequently cause fire.

2-2 Accessories

Check if the following accessories are included with your unit. See figure 1

- 1 Drain hose
- 2 Metal clamp
- 3 Washer for hanger bracket
- 4 Paper pattern for installation
- 5 Screws (M5) for paper pattern for installation
- 6 Insulation for gas pipe fitting
- 7 Insulation for liquid pipe fitting
- 8 Large sealing pad
- 9 Small sealing pad
- 10 Sealing material
- 11 Installation and operation manual
- 12 Conduit mounting plate
- 13 Screws (M4) for conduit mounting plate

2-3 Optional accessories

- Wired remote controller.
- A decoration panel is required for this indoor unit.

2-4 Measurements

Dimensions in inch (in).

For the following items, take special care during construction and check after installation is finished

Tick ✓ when checked	
<input type="checkbox"/>	Is the indoor unit fixed firmly? The unit may drop, vibrate or make noise.
<input type="checkbox"/>	Is the gas leak test finished? It may result in insufficient cooling.
<input type="checkbox"/>	Is the unit fully insulated? Condensate water may drip.
<input type="checkbox"/>	Does drainage flow smoothly? Condensate water may drip.
<input type="checkbox"/>	Does the power supply voltage correspond to that shown on the name plate? The unit may malfunction or components may burn out.
<input type="checkbox"/>	Are wiring and piping correct? The unit may malfunction or components may burn out.
<input type="checkbox"/>	Is the unit safely grounded? Dangerous at electric leakage.
<input type="checkbox"/>	Is the wiring size according to specifications? The unit may malfunction or components may burn out.
<input type="checkbox"/>	Is nothing blocking the air outlet or inlet of either the indoor or outdoor units? It may result in insufficient cooling.
<input type="checkbox"/>	Are refrigerant piping length and additional refrigerant charge noted down? The refrigerant charge in the system might not be clear.

2-5 Notes to the installer

- Read this manual carefully to ensure correct installation. Be sure to instruct the customer how to properly operate the system and show him/her the enclosed operation manual.
- Explain to the customer what system is installed on the site. Be sure to fill out the appropriate installation specifications in the chapter "What to do before operation" of the outdoor unit operation manual.

3. IMPORTANT INFORMATION REGARDING THE REFRIGERANT USED

This product contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Refrigerant type: R-410A

GWP ⁽¹⁾ value: 1975

⁽¹⁾ GWP = global warming potential

Periodical inspections for refrigerant leaks may be required depending on European or local legislation. Please contact your local dealer for more information.

4. SELECTING INSTALLATION SITE

When the conditions in the ceiling are exceeding 86°F and a relative humidity of 80%, or when fresh air is inducted into the ceiling, an additional insulation is required (minimum 0.8 in thickness, polyethylene foam).

For this unit you can select different air flow directions. It is necessary to purchase an optional blocking pad kit to discharge the air in 2 or 3 directions.

(1) Select an installation site where the following conditions are fulfilled and that meets your customer's approval.

- Where optimum air distribution can be ensured.
- Where nothing blocks air passage.
- Where condensate water can be properly drained.
- Where the false ceiling is not noticeably on an incline.
- Where sufficient clearance for maintenance and service can be ensured.
- Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual of the outdoor unit.)
- This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
- Keep indoor unit, outdoor unit, power supply wiring and transmission wiring at least 3.28 ft away from televisions and radios. This is to prevent image interference and noise in those electrical appliances.
(Noise may be generated depending on the conditions under which the electric wave is generated, even if 3.28 ft is kept.)

(2) Ceiling height

Install this unit where the height of bottom panel is more than 8.2 ft so that the user cannot easily touch.

(3) Air flow directions

Select the air flow directions best suited to the room and point of installation. (For air discharge in 2 or 3 directions, it is necessary to make field settings by means of the remote controller and to close the air outlet(s). Refer to the installation manual of the optional blocking pad kit and to the chapter "Field setting" on page 10.) (See figure 2 (↑= air flow direction))

- 1 Air discharge in 4 directions
- 2 Air discharge in 3 directions
- 3 Air discharge in 2 directions

(4) Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the indoor unit. If there is a risk, reinforce the ceiling before installing the unit.

(The installation pitch is marked on the paper pattern for installation. Refer to it to check for points requiring reinforcing.) Space required for installation see figure 6 (↑= air flow direction)

- 1 Air inlet
- 2 Air outlet

NOTE

Leave 8 in or more space where marked with * on sides where the air outlet is closed.

! DANGER

Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.

! WARNING

If the basis underneath the unit is not strong enough to support the weight of the unit, the unit could be fall out of place and cause serious injury.

5. PREPARATIONS BEFORE INSTALLATION

(1) Relation of ceiling opening to unit and suspension bolt position. (See figure 7)

- 1 Decoration panel dimensions
- 2 Ceiling opening dimensions
- 3 Indoor unit dimensions
- 4 Suspension bolt pitch dimensions
- 5 Refrigerant piping
- 6 Suspension bolt (x4)
- 7 False ceiling
- 8 Hanger bracket

! NOTE

Installation is possible with a ceiling opening dimension of 26 in (marked with *). However, to achieve a ceiling-panel overlapping dimension of 0.8 in, the spacing between the ceiling and the unit should be 1.8 in; or less. If the spacing between ceiling and the unit is over 1.8 in, attach sealing material in the part marked ■ or recover the ceiling. (See figure 3)

- 1 Sealing material
- 2 False ceiling


(2) Make the ceiling opening needed for installation where applicable. (For existing ceilings.)

- Refer to the paper pattern for installation for the ceiling opening dimensions.
- Create the ceiling opening required for installation. From the side of the opening to the casing outlet, implement the refrigerant and drain piping and wiring for remote controller and indoor-outdoor unit wiring. Refer to each piping or wiring section.
- After making an opening in the ceiling, it may be necessary to reinforce ceiling beams to keep the ceiling level and to prevent it from vibrating. Consult the builder for details.

(3) Install the suspension bolts. (Use either a M8 or M10 size bolt.)

Use anchors for existing ceilings, and a sunken insert, sunken anchors or other field supplied parts for new ceilings to reinforce the ceiling in order to bear the weight of the unit. Adjust clearance from the ceiling before proceeding further.
Installation example see figure 4.

- 1 Ceiling slab
- 2 Anchor
- 3 Long nut or turn-buckle
- 4 Suspension bolt
- 5 False ceiling

—  **NOTE** —

All the above parts are field supplied.
 For other installation than standard installation, contact your Daikin dealer for details.

6. INDOOR UNIT INSTALLATION

When installing optional accessories, read also the installation manual of the optional accessories. Depending on the field conditions, it may be easier to install optional accessories before the indoor unit is installed (except for the decoration panel). However, for existing ceilings, install fresh air inlet component kit and branch duct before installing the unit.

(1) Install the indoor unit temporarily.

- Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and washer from the upper and lower sides of the hanger bracket.

Securing the hanger bracket see figure 5.

- 1 Nut (field supply)
- 2 Hanger bracket
- 3 Washer (supplied with the unit)
- 4 Tighten with double nuts (field supply)

(2) Fix the paper pattern for installation. (For new ceilings only.)

- The paper pattern for installation corresponds with the measurements of the ceiling opening. Consult the builder for details.
- The centre of the ceiling opening is indicated on the paper pattern for installation. The centre of the unit is indicated on the paper pattern for installation.
- After removing the packaging material from the paper pattern for installation, attach the paper pattern for installation to the unit with the supplied screws as shown in figure 8.

- 1 Paper pattern for installation (supplied with the unit)
- 2 Screws (supplied with the unit)

(3) Adjust the unit to the right position for installation.

(Refer to the chapter "Preparations before installation" on page 5.)


(4) Check if the unit is horizontally levelled.

- Do not install the unit tilted. The indoor unit is equipped with a built-in drain pump and float switch. (If the unit is tilted against condensate flow, the float switch may malfunction and cause water to drip.)
- Check if the unit is levelled at all four corners with a water level or a water-filled vinyl tube as shown in figure 9.

- 1 Water level
- 2 Vinyl tube

(5) Remove the paper pattern for installation. (For new ceilings only.)

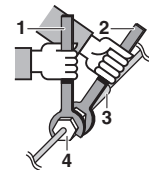
7. REFRIGERANT PIPING WORK

—  **NOTE** —

All field piping must be provided by a licensed refrigeration technician and must comply with the relevant local and national codes.

- For refrigerant piping of outdoor unit, refer to the installation manual supplied with the outdoor unit.
- Execute heat insulation work completely on both sides of the gas piping and the liquid piping. Otherwise, this can sometimes result in water leakage. (When using a heat pump, the temperature of the gas piping can reach up to approximately 250°F. Use insulation which is sufficiently resistant.)
- Also, in cases where the temperature and humidity of the refrigerant piping sections might exceed 86°F or RH 80%, reinforce the refrigerant insulation (0.8 in or thicker). Condensation may form on the surface of the insulating material.
- Before rigging tubes, check which type of refrigerant is used.
- Use a pipe cutter and flare suitable for the used refrigerant.
- Apply ether oil or ester oil around the flare portions before connecting.
- To prevent dust, moisture or other foreign matter from infiltrating the tube, either pinch the end, or cover it with tape.
- Use copper alloy seamless pipes (ISO 1337).
- The outdoor unit is charged with refrigerant.
- Be sure to use both a spanner and torque wrench together when connecting or disconnecting pipes to/from the unit.

- 1 Torque wrench
- 2 Spanner
- 3 Piping union
- 4 Flare nut



- Do not mix anything other than the specified refrigerant, such as air, etc., inside the refrigerant circuit.
- Refer to the table below for the dimensions of flare nuts and the appropriate tightening torque. (Overtightening may damage the flare and cause leaks.)

Pipe gauge (in)	Tightening torque (ft-lbf)	Flare dimension A (in)	Flare shape
Ø1/4	10.5~12.7	0.343~0.358	
Ø3/8	24.1~29.4	0.504~0.520	
Ø1/2	36.5~44.5	0.638~0.654	
Ø5/8	45.6~55.6	0.760~0.776	

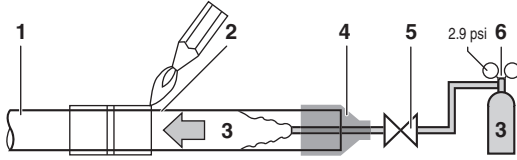
—  **CAUTION** —

to be taken when brazing refrigerant piping

Do not use flux when brazing refrigerant piping. Therefore, use the phosphor copper brazing filter metal (BCuP) which does not require flux.

Flux has an extremely negative effect on refrigerant piping systems. For instance, if chlorine based flux is used, it will cause pipe corrosion. If the flux contains fluorine, it will damage the refrigerant oil.

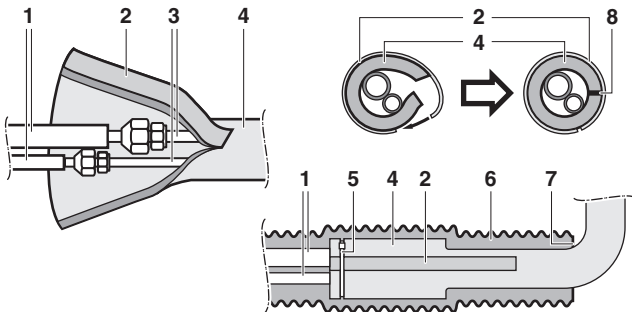
- When brazing the refrigerant piping, only begin brazing after having carried out nitrogen substitution (refer to the manual for multi installation for buildings for directions on how to carry out nitrogen substitution) or while inserting nitrogen into the refrigerant piping (refer to the figure below). Once this is done, connect the indoor unit with a flared or a flanged connection.



- 1 Refrigerant piping
- 2 Part to be brazed
- 3 Nitrogen
- 4 Taping
- 5 Hands valve
- 6 Pressure reducing valve

The nitrogen must be set to 2.9 psi when brazing while inserting nitrogen into the piping

- After checking for gas leaks, be sure to insulate the pipe connections using supplementary piping insulation and insulating tape as shown in the figure below. The insulating tape must be wrapped starting from the L-shaped bend in the piping all the way to the end of the pipe inside the unit.



- 1 Local piping
- 2 Insulation tape
- 3 Indoor unit piping
- 4 Indoor unit piping insulation
- 5 Clamp (field supply)
- 6 Insulating tape
- 7 Starting point for taping the insulation
- 8 Attach the insulation tape so that there are no gaps in the insulation seam

CAUTION

Be sure to insulate all field piping all the way to the piping inside the unit. Exposed piping may produce condensation or cause burns if touched.

NOTE

Not recommended but in case of emergency.

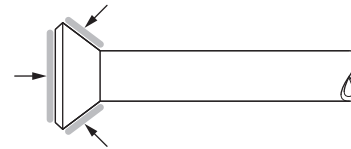
You must use a torque wrench but if you are obliged to install the unit without a torque wrench, you may follow the installation method mentioned below.

After the work is finished, make sure to check that there is no gas leak.

When you keep on tightening the flare nut with a spanner, there is a point where the tightening torque suddenly increases. From that position, further tighten the flare nut within the angle shown below:

Pipe size (in)	Further tightening angle	Recommended arm length of tool (in)
Ø1/4	60~90°	±5 7/8
Ø3/8	60~90°	±7 7/8
Ø1/2	30~60°	±9 13/16
Ø5/8	30~60°	±11 13/16

- When connecting the flare nut, coat the flare both inside and outside with refrigerating ether or ester oil and initially tighten by hand 3 or 4 turns before tightening firmly. Coat here with ether oil or ester oil



- Check the pipe connector for gas leaks, then insulate it as shown in figure 12.

- 1 Liquid pipe
- 2 Gas pipe
- 3 Insulation for fitting of liquid line (supplied with the unit)
- 4 Insulation for fitting of gas line (supplied with the unit)
- 5 Clamps (use 2 clamps per insulation)
- 6 Small sealing pad (supplied with the unit)

- Wrap the sealing pad only around the insulation for the joints on the gas piping side.

CAUTION

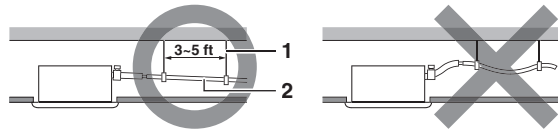
Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.

DANGER

- If refrigerant gas leaks during the work, ventilate the area. A toxic gas is emitted by the refrigerant gas being exposed to a fire and could result in severe injury or death.
- Finally make sure there is no refrigerant gas leak. A toxic gas may be released by the refrigerant gas leaking indoor and being exposed to flames from an area heater, cooking stove, etc. and could result in severe injury or death.

8. DRAIN PIPING WORK

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

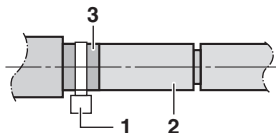


- 1 Hanging bar
- 2 $\geq 1/100$ gradient

(1) Install the drain pipes.

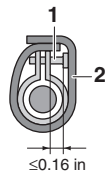
- Keep piping as short as possible and slope it downwards so that air may not remain trapped inside the pipe.
- Keep pipe size equal to or greater than that of the connecting pipe (PVC pipe, nominal diameter 0.8 in, outside diameter 1 in).
- Insert the drain hose into the drain socket up to the base, and tighten the clamp securely within the portion of a grey tape.
- Tighten the clamp until the screw head is less than 0.16 in from the hose.

- 1 Metal clamp (supplied with the unit)
- 2 Drain hose (supplied with the unit)
- 3 Grey tape (field supply)



- Insulate the drain hose inside the building.
- If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).
- Make sure that heat insulation work is executed on the following 2 spots to prevent any possible water leakage due to dew condensation.
 - Indoor drain pipe
 - Drain socket
- Wrap the supplied sealing pad over the clamp and drain hose to insulate.

- 1 Metal clamp (supplied with the unit)
- 2 Large sealing pad (supplied with the unit)



8-1 How to perform piping (See figure 15)

- 1 Ceiling slab
- 2 Hanger bracket
- 3 Drain raising pipe
- 4 Raising section
- 5 Drain hose (supplied with the unit)
- 6 Metal clamp (supplied with the unit)

8-2 Precautions

- Install the drain raising pipes at a height of less than 21 in.
- Install the drain raising pipes at a right angle to the indoor unit and no more than 11.5 in from the unit.

NOTE

- The incline of attached drain hose should be 3 in or less so that the drain socket does not have to stand additional force.
- To ensure a downward slope of 1:100, install hanging bars every 3 to 5 ft.
- If unifying multiple drain pipes, install the pipes as shown in figure 10. Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.
 - 1 T-joint converging drain pipes

2. After piping work is finished, check if drainage flows smoothly.

- Open the water inlet lid, add approximately 0.53 U.S. gallons of water gradually and check the drainage flow. Method of adding water. See figure 13.
 - 1 Drain pipe
 - 2 Service drain outlet with rubber plug. Use this outlet to drain water from the drain pan.
 - 3 Plastic container for pouring

NOTE

Drain piping connections






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.

Keep in mind that it will become the cause of getting drain pipe blocked if water collects on drain pipe.

When electric wiring work is finished

Check drainage flow during COOL running, explained in the chapter "Test operation" on page 12.

When electric wiring work is not finished

- Remove the switch box lid and connect the power supply and remote controller to the terminals. See figure 22.
 - 1 Switch box lid
 - 2 Remove the switch box lid (take off 2 screws)
 - 3 Power supply terminal block
 - 4 Remote controller terminal block
 - 5 Remote controller wiring
- Next, press the inspection/test operation button  on the remote controller. The unit will engage the test operation mode. Press the operation mode selector button  until selecting fan operation . Then, press the on/off button . The indoor unit fan and drain pump will start up. Check that the water has drained from the unit. Press  to go back to the first mode.
- Note that the fan also starts rotating.
- Attach the switch box lid as before.

9. ELECTRIC WIRING WORK

9-1 General instructions

- All field supplied parts and materials and electric works must conform to local codes.
- Use copper wire only.
- Follow the "Wiring diagram" attached to the unit body to wire the outdoor unit, indoor units and the remote controller. For details on hooking up the remote controller, refer to the "Installation manual of the remote controller".
- All wiring must be performed by an authorized electrician.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.
Note that the operation will restart automatically if the main power supply is turned off and then turned back on again.
- This system consists of multiple indoor units. Mark each indoor unit as unit A, unit B..., and be sure the terminal board wiring to the outdoor unit and BS unit are properly matched. If wiring and piping between the outdoor unit and an indoor unit are mismatched, the system may cause a malfunction.
- Refer to the installation manual attached to the outdoor unit for the size of power supply electric wire connected to the outdoor unit, the capacity of the circuit breaker and switch, and wiring instructions.
- Be sure to ground the air conditioner.

! DANGER

Do not connect the ground wire to water pipes, telephone wires or lightning rods because incomplete grounding could cause a severe electrical shock and hazard resulting in severe injury or death.

Do not connect the ground wire to gas pipes because a gas leak could result in an explosion and lead to severe injury or death.

9-2 Electrical characteristics

Model	Units			Power supply		Fan motor	
	Hz	Volts	Voltage range	MCA	MFA	kW	FLA
FXZQ07	60	208-230	≤253 ≤188	0.8	15	0.055	0.6
FXZQ09				0.8	15	0.055	0.6
FXZQ12				0.8	15	0.055	0.6
FXZQ18				0.9	15	0.055	0.7

MCA : Min. circuit Amps (A)

MFA : Max. Fuse Amps (A)

kW : Fan Motor Rated Output (kW)

FLA : Full Load Amps (A)

! NOTE

For details, refer to "Electrical data".

9-3 Specifications for field supplied fuses and wire

Power supply wiring			Remote controller wiring and Transmission wiring	
Model	Field fuses	Size, length	Wire	Size
FXZQ07	15A	Wire size and length must comply with local codes.	Sheathed wire (2 wire)	AWG18-16
FXZQ09				
FXZQ12				
FXZQ18				

! NOTE

- For details, refer to the chapter "Wiring example" on page 31.
- Allowable length of transmission wiring between indoor and outdoor units, and between the indoor unit and the remote controller is as follows:
 - Outdoor unit - indoor unit: ≤3280 ft (total wiring length: 6560 ft).
 - Indoor unit - remote controller: ≤1640 ft
 - Insulated thickness: ≥1/16 in

10. WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER

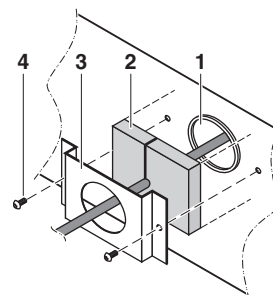
10-1 How to connect wiring (See figure 25)

- Power supply wiring and ground wire

Remove the switch box lid and connect wires of matching number to the power supply terminal block (3P) inside. (See E). And connect the ground wire to the terminal block. In doing this, pull the wires inside through the hole in conduit mounting plate and the hole in the side plate of the unit. Fix the wires securely with a field supplied clamp. (See B). Give enough slack to the wires between the clamp and power supply terminal block.

After connection, attach the sealing material. (See F). Be sure to attach it to prevent infiltration of water from the outside. Make sure that the slit in the sealing material is positioned vertically.

After attaching the sealing, screw the conduit mounting plate using the 2 delivered screws (M4) to the side of the unit where the power supply cables enter the unit. (See F and figure below).



- 1 Hole in the side plate of the unit
- 2 Sealing material
- 3 Conduit mounting plate
- 4 Screw (M4)

- Transmission wiring and remote controller wiring.
Remove the switch box lid and pull the wires inside through the hole and connect to the terminal block for remote controller (6P). (See C and A). (No polarity) Securely fix the remote controller cord with a field supplied clamp. Give enough slack to the wires between the clamp and the terminal block for the remote controller.
After connection, attach sealing material. (See D). Be sure to attach it to prevent the infiltration of water from the outside.
- A Remote controller and transmission wiring
- B Power supply wiring
- C How to connect power supply terminal block (6P) for remote controller and transmission wiring
- D Be sure to attach delivered sealing material to prevent the infiltration of water as well as any insects and other small creatures from the outside. Otherwise a short-circuit may occur inside the switch box.
- E How to connect terminal block with ground wire (3P)
 - 1 Switch box lid
 - 2 Wiring diagram label (on the backside of the switch box lid)
 - 3 Remote controller wiring
 - 4 Transmission wiring
 - 5 Terminal block for remote controller (6P)
 - 6 Power supply wiring
 - 7 Power supply terminal block
 - 8 Clamp (field supply)
 - 9 Clamp (field supply)
 - 10 Clamp material
 - 11 Sealing material (supplied with the unit)
 - 12 Wiring to outside
 - 13 Outside
 - 14 Inside
 - 15 Be sure to clamp the wire sheath.
After securing the clamp to the clamp material, cut off any extra material.
 - 16 Conduit mounting plate
 - 17 Screw for conduit mounting plate (M4)

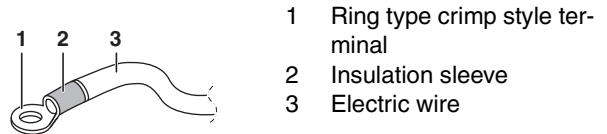
10-2 Precautions

- **! WARNING** —
- Never connect power supply wiring to the terminal block for remote controller wiring. This mistake could damage the entire system.
- Use only specified wire and connect wires to the terminal tightly. (Tightening torque 0.97 ft-lbf ±10%) Be careful not to place external stress on terminals.
- Keep wires in neat order so that they do not obstruct other equipment such as popping open of the service cover.
- Make sure that the lid of the electric component box fits tightly.
- Incomplete connections could result in overheating and result in electric shock or fire.
- To avoid a short circuit in the electric component box, be sure to apply sealing material or putty (field supply) to the wiring hole. By doing so you prevent infiltration of water and insects or other small creatures that could cause short circuit inside the electric component box.

- **! CAUTION** —
- When clamping the wiring, be sure no tension is applied to the wire connections by using the included clamp.
- Make sure the lid of the electric component box fits snugly by arranging wires neatly and attaching the service lid firmly. When attaching the service lid, make sure no wirings get caught in the edges. To prevent damage to the wiring, pass them through the foreseen wiring through holes.
- Make sure the remote controller wiring and transmission wiring between units and other electrical wiring do not pass through the same locations outside the unit. Separate these wirings by at least 5 in, otherwise electrical noise (external static) could cause incorrect operation or damage.

10-3 Wiring connection method

- Use ring-type crimp style terminals for connections to the power terminal block.



Insulate the crimped area by attaching an insulation sleeve, etc.

- If ring-type crimp style terminals are not available, connect the terminals to the terminal block as follows:
 - Wiring of different thicknesses can not be connected to the power terminal block. A loose connection could cause abnormal heating.
 - When connecting wires of the same diameter, make the connection to both sides of the same gauge.



- Use an appropriate screwdriver for tightening the terminal screw.
Using a screwdriver that is too small could damage the screw head and prevent proper tightening.
- Over tightening the terminal screw could damage the screw.
Refer to the table below for the terminal screw tightening torque.

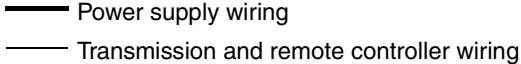
Terminal screw size	Location	Tightening torque (ft-lbf)
M3.5	Remote controller, transmission wiring and forced off terminal block (6P)	0.58~0.72
M4	Power supply and ground terminal block (3P)	0.87~1.06

- Do not connect wires of different gauge to the same ground terminal. Looseness in the connection may decrease the protection.

- Keep the transmission wiring and power supply wiring separated by at least 2.0 in. Not doing so could cause the transmission wiring to pick up electric noise (external noise) and result in a malfunction or breakdown.
- For remote controller wiring, refer to the installation manual delivered with the remote controller.

11. WIRING EXAMPLE

- Fit the power supply wiring of each unit with a switch and fuse as shown in figure 18.
 - 1 Outdoor unit
 - 2 Power supply
 - 3 Main switch
 - 4 BS unit (only for heat recovery system)
 - 5 Indoor unit
 - 6 Remote controller
 - 7 Switch
 - 8 Fuse



Complete system example (3 systems)

- See figures 19, 20 and 21.
 - 1 Outdoor unit
 - 2 Indoor unit
 - 3 Remote controller (Optional accessories)
 - 4 Most downstream indoor unit
 - 5 For use with 2 remote controllers
 - 6 BS unit

When using 1 remote controller for 1 indoor unit. (Normal operation.) (See figure 19).

For group control or use with 2 remote controllers (See figure 20).

When including BS unit (See figure 21).

NOTE

It is not necessary to designate indoor unit address when using group control. The address is automatically set when power is activated.

11-1 Precautions

1. A single switch can be used to supply power to units on the same system. However, branch switches and branch circuit breakers must be selected carefully.
2. For a group control remote controller, choose the remote controller that suits the indoor unit which has the most functions.
3. Do not ground the equipment on gas pipes, water pipes, lightning rods or cross ground with telephones. Improper grounding could result in electric shock.

12. FIELD SETTING

Field setting must be made on the remote controller in function of the installation condition.

- Setting can be made by changing the "Mode number", "First code No." and "Second code No.".

- For setting and operation, refer to the "Field settings" in the installation manual of the remote controller.

12-1 Summary of field settings

Mode No. (Note 1)	First code No.	Description of setting	Second code No. (Note 2)			
			01	02	03	04
10 (20)	0	Filter contamination - Heavy/Light = Setting to define time between 2 filter cleaning display indications. (When contamination is high, setting can be changed to half the time inbetween 2 filter cleaning display indications.)	Ultra-long-life filter ±10,000 hrs. Light Long-life filter ±2,500 hrs. Standard filter ±200 hrs.	Heavy ±5,000 hrs. ±1,250 hrs. ±100 hrs.	—	—
	1	Long-life filter type Change the setting when ultra-long-life filter is installed. This setting is important for time between 2 filter cleaning display indications (refer to 10-0-0X).	Long-life filter	Ultra-long-life filter	—	—
	2	Thermostat sensor selection	Use both the unit sensor (or remote sensor if installed) AND the remote controller sensor. (See note 5+6)	Use unit sensor only (or remote sensor if installed). (See note 5+6)	Use remote controller sensor only. (See note 5+6)	—
	3	Setting for display of time between 2 filter cleaning display indications	Display	Do not display	—	—
	5	Information to I-manager, I-touch controller	Only unit sensor value (or remote sensor value if installed).	Sensor value as set by 10-2-0X or 10-6-0X.	—	—
	6	Thermostat sensor in group control	Use unit sensor only (or remote sensor if installed). (See note 6)	Use both the unit sensor (or remote sensor if installed) AND the remote controller sensor. (See note 4+5+6)	—	—
12 (22)	0	Output signal X1-X2 of the optional KRP1B PCB kit	Thermostat-on+ compressor run	—	Operation	Mal-function
	1	ON/OFF input from outside (T1/T2 input) = Setting when forced ON/OFF is to be operated from outside.	Forced OFF	ON/OFF operation	—	—
	2	Thermostat differential changeover = Setting when remote sensor is used.	2°F	1°F	—	—
	3	Fan setting during thermostat OFF at heating operation	LL	Set speed	OFF (See note 3)	—
	4	Differential automatic changeover	0°F	1.8°F	3.6°F	5.4°F (See note 7)
	5	Auto-restart after power failure	Disabled	Enabled	—	—
	9	Fixed cool/heat master	Disabled	Enabled	—	—
13 (23)	0	Setting for air outlet velocity This setting is to be changed in function of ceiling height.	≤9 ft	>9 ≤10 ft	>10 ≤11.5 ft	—
	1	Selection for air flow direction This setting is to be changed when blocking pad optional kit is used.	4-way flow	3-way flow	2-way flow	—
	4	Airflow direction range setting This setting is to be changed when range of swing flap movement needs to be changed.	Upper	Normal	Lower	—
	5	Setting for adjustment of fan speed (phase control)	Standard	Option 1	Option 2	—
	15 (25)	3	Drain pump operation + humidifier interlock	Equipped	Not equipped	—

Note 1 : Setting is carried out in the group mode, however, if the mode number inside parentheses is selected, indoor units can also be set individually.

- Note 2** :Factory settings of the Second code No. are marked in grey backgrounds.
- Note 3** :Only use in combination with optional remote sensor or when setting 10-2-03 is used.
- Note 4** :If group control is selected and remote control sensor is to be used, then set 10-6-02 & 10-2-03.
- Note 5** :If setting 10-6-02 + 10-2-01 or 10-2-02 or 10-2-03 are set at the same time, then setting 10-2-01, 10-2-02 or 10-2-03 have priority.
- Note 6** :If setting 10-6-01 + 10-2-01 or 10-2-02 or 10-2-03 are set at the same time, then setting for group connection, 10-6-01 has priority and for individual connection, 10-2-01, 10-2-02 or 10-2-03 have priority.
- Note 7** :More settings for Differential automatic change over temperatures are:

Second code No.	05	7.2°F
	06	9°F

12-2 Control by 2 Remote Controllers (Controlling 1 indoor unit by 2 remote controllers)

When using 2 remote controllers, one must be set to "MAIN" and the other to "SUB".

12-3 Main/Sub changeover

1. Insert a wedge-head screwdriver into the recess between the upper and lower part of the remote controller and, working from the 2 positions, pry off the upper part. (See figure 14)
(The remote controller PC board is attached to the upper part of the remote controller.)
2. Turn the main/sub changeover switch on one of the two remote controller PC boards to "S". (See figure 17)
(Leave the switch of the other remote controller set to "M".)
 - 1 Remote controller PC board
 - 2 Factory setting
 - 3 Only one remote controller needs to be changed

12-4 Computerized control (forced off and on/off operation)

1. Wire specifications and how to perform wiring.
 - Connect input from outside to terminals T1 and T2 of the terminal board (remote controller to transmission wiring).

Wire specification	Sheathed vinyl cord or cable (2 wire)
Gauge	AWG18-16
Length	≤328 ft
External terminal	Contact that can ensure the minimum applicable load of 15 V DC, 10 mA

See figure 11
1 Input A

2. Actuation
 - The following table explains "forced off" and "on/off operations" in response to input A.

Forced off	on/off operation
Input "on" stops operation	input off → on: turns on the unit (impossible by remote controllers)
Input "off" enables control	input on → off: turns off the unit (by remote controller)

3. How to select forced off and on/off operation
 - Turn the power on and then use the remote controller to select operation.
 - Set the remote controller to the field set mode. For details, refer to the chapter "How to set in the field", in the manual of the remote controller.
 - When in the field set mode, select mode No. 12, then set the first code (switch) No. to "1". Then set second code (position) No. to "01" for forced off and to "02" for on/off operation. (forced off at factory set.) (See figure 23)

1	Second code No.	3	First code No.
2	Mode No.	4	Field set mode

12-5 Centralized control

For centralized control, it is necessary to designate the group No. For details, refer to the manual of each optional controller for centralized control.

13. INSTALLATION OF THE DECORATION PANEL

Read the chapter "Test operation" on page 32 before making a test run without attaching the decoration panel.

Refer to the installation manual delivered with the decoration panel.



After installing the decoration panel, ensure that there is no space between the unit body and decoration panel. Otherwise air may leak through the gap and cause dewdrop. (See figure 16)

14. TEST OPERATION

Refer to the installation manual of the outdoor unit.

- The operation lamp of the remote controller will blink when an error occurs. Check the error code on the liquid crystal display to identify the trouble. An explanation of error codes and the corresponding trouble are provided on "Caution for servicing" of the outdoor unit.

If any of the items in the table below are displayed, there may be a problem with the wiring or power, so check the wiring again.

Remote control display	Content
"Concentrated Management" is lit up	■ There is a short circuit at the FORCED OFF terminals (T1, T2)
"  " is lit up "  " is lit up	<ul style="list-style-type: none"> ■ The power on the outdoor unit is OFF. ■ The outdoor unit has not been wired for power supply. ■ Incorrect wiring for the transmission wiring and/or FORCED OFF wiring.
No display	<ul style="list-style-type: none"> ■ The power on the indoor unit is OFF. ■ The indoor unit has not been wired for power supply. ■ Incorrect wiring for the remote controller wiring, the transmission wiring and/or the FORCED OFF wiring.

15. MAINTENANCE

IMPORTANT

- ONLY A QUALIFIED SERVICE PERSON IS ALLOWED TO PERFORM MAINTENANCE.
- BEFORE OBTAINING ACCESS TO TERMINAL DEVICES, ALL POWER SUPPLY CIRCUITS MUST BE INTERRUPTED.
- DO NOT USE WATER OR AIR OF 120°F OR HIGHER FOR CLEANING AIR FILTERS AND OUTSIDE PANELS.
- WHEN CLEANING THE HEAT EXCHANGER, BE SURE TO REMOVE THE SWITCHBOX, FAN MOTOR AND DRAIN PUMP. WATER OR DETERGENT MAY DETERIORATE THE INSULATION OF ELECTRIC COMPONENTS AND RESULT IN BURN-OUT OF THESE COMPONENTS.

See figure 24

- 1 Indoor unit
- 2 Drain pumping out device (built-in)
Drain water removed from the room during cooling.
- 3 Power supply wiring
- 4 Drain pipe
- 5 Suction grille
- 6 Air filter (inside suction grille)
- 7 Model name label (inside suction grille)
- 8 Air flow flap (at air outlet)
- 9 Refrigerant pipe
- 10 Transmission wiring
- 11 Air outlet
- 12 Grounding wire
Conducts electricity from the unit into the ground to prevent electric shock.
- 13 Remote controller

15-1 How to clean the air filter

Clean the air filter when the display shows " " (TIME TO CLEAN AIR FILTER).

Increase the frequency of cleaning if the unit is installed in a room where the air is extremely contaminated.

(As a yardstick for yourself, consider cleaning the filter once a half year.)

If dirt becomes impossible to clean, change the air filter. (Air filter for exchange is optional.)

1. Open the suction grill.
Push both knobs simultaneously and carefully lower the grille. (Identical procedure for closing.) (See figure 26)
2. Remove the air filters.
Pull the hook of the air filter out diagonally downward and remove the filter. (See figure 27)
3. Clean the air filter.
Use a vacuum cleaner or wash the air filter with water. When the air filter is very dirty, use a soft brush and neutral detergent.



Remove water and dry in the shade.

4. Fix the air filter.
Attach the air filter to the suction grill by hanging it to the projected portion above the suction grill.
Press the bottom of the air filter against the projections on

the bottom of the grille to snap the air filter into its place. (See figure 28)

5. Shut the air inlet grill.
Refer to item No. 1.
6. After turning power on, press the FILTER SIGN RESET button. The "TIME TO CLEAN AIR FILTER" display disappears.
(For details, refer to the operation manual of the outdoor unit.)

! NOTE

Do not remove the air filter except when cleaning. Unnecessary handling may damage the filter.

15-2 How to clean the air outlet and outside panels

- Clean with a soft cloth.
- When it is difficult to remove stains, use water or neutral detergent.
- When the blade is extremely contaminated, remove it as below and clean it.

! NOTE

- Do not use gasoline, benzene, thinner, polishing powder nor liquid insecticide. It may cause discoloring or warping.
- Do not let the indoor unit get wet. It may cause electric shock or fire.

15-3 How to clean the suction grill

1. Open the suction grill.
Push both knobs simultaneously and carefully lower the grille. (Identical procedure for closing.) (See figure 26)
2. Detach the suction grill.
Open the suction grill 45 degrees and lift it upward. (See figure 29)
3. Detach the air filter.
See the figure in item No. 2 in chapter "How to clean the air filter" on page 33.
4. Clean the suction grill.
Wash it with a soft brush and neutral detergent, and dry thoroughly.



! NOTE

When the suction grill is very dirty, use a typical kitchen cleaner and let it sit for about 10 minutes. Then, wash it with water.

5. Fix the air filter.
See the figure in item No. 4 in chapter "How to clean the air filter" on page 33.
6. Re-attach the suction grill.
See item No. 2.
7. Close the suction grill.
See item No. 1.

16. DISPOSAL REQUIREMENTS

Dismantling of the unit, treatment of the refrigerant, of oil and of other parts must be done in accordance with relevant local and national legislation.

17. WIRING DIAGRAM

	: FIELD WIRING	BLK	: BLACK	PNK	: PINK
	: TERMINAL	BLU	: BLUE	RED	: RED
	: CONNECTOR	GRN	: GREEN	WHT	: WHITE
		ORG	: ORANGE	YLW	: YELLOW

- A1P PRINTED CIRCUIT BOARD
- C1..... CAPACITOR (M1F)
- F1U FUSE (B, 5 A, 250 V)
- HAP LIGHT EMITTING DIODE (SERVICE MONITOR - GREEN)
- KPR..... MAGNETIC RELAY (M1P)
- M1F MOTOR (INDOOR FAN)
- M1P MOTOR (DRAIN PUMP)
- M1S MOTOR (SWING FLAP)
- Q1M THERMAL PROTECTOR (M1F EMBEDDED)
- R1T THERMISTOR (AIR)
- R2T THERMISTOR (COIL LIQUID)
- R3T THERMISTOR (COIL GAS)
- S1L..... FLOAT SWITCH
- T1R TRANSFORMER (208~230 V/22 V)
- V1TR..... PHASE CONTROL CIRCUIT (TRIAC)
- X1M,X2M TERMINAL BLOCK
- Y1E ELECTRONIC EXPANSION VALVE

WIRED REMOTE CONTROLLER

- R1T THERMISTOR (AIR)
- SS1 SELECTOR SWITCH (MAIN/SUB)


RECEIVER/DISPLAY UNIT (ATTACHED TO WIRELESS REMOTE CONTROLLER)

- A3P,A4P PRINTED CIRCUIT BOARD
- BS1 ON/OFF BUTTON
- H1P LIGHT EMITTING DIODE (RED)
- H2P LIGHT EMITTING DIODE (GREEN)
- H3P LIGHT EMITTING DIODE (RED)
- H4P LIGHT EMITTING DIODE (ORANGE)
- SS1 SELECTOR SWITCH (MAIN/SUB)
- SS2 SELECTOR SWITCH (WIRELESS ADDRESS SET)

CONNECTOR FOR OPTIONAL PARTS

- X16A CONNECTOR (ADAPTOR FOR WIRING)
- X18A CONNECTOR (ADAPTOR FOR ELECTRICAL APPENDICES)

POWER SUPPLY	:
RECEIVER/DISPLAY UNIT	:
WIRED REMOTE CONTROLLER	:
CONTROL BOX	:
INPUT FROM OUTSIDE	:
TRANSMISSION WIRING	:
CENTRAL REMOTE CONTROLLER	:

 **NOTE**


- 1 WHEN USING THE CENTRAL REMOTE CONTROLLER, SEE INSTALLATION MANUAL FOR CONNECTION TO THE UNIT.
- 2 X23A IS CONNECTED WHEN THE WIRELESS REMOTE CONTROLLER IS USED.
- 3 WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY THE REMOTE CONTROLLER. SEE INSTALLATION MANUAL FOR MORE DETAILS.
- 4 REMOTE CONTROLLER VARIES ACCORDING TO THE COMBINATION SYSTEM. SEE TECHNICAL DATA AND CATALOGS, ETC., BEFORE CONNECTING.

10.3 Installation Manual / Decoration Panel

DECORATION PANEL

BYFQ60B8W1


BYFQ60B8W1U

-  Read this manual attentively before installation. Do not throw it away. Keep it in your files for future reference. Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin that are specifically designed for the use with the equipment and have them installed by a professional.

If unsure of installation procedures or use, always contact your dealer for advice and information.

1. BEFORE INSTALLATION

- Leave the unit inside its packaging until you reach the installation site.
- Refer to the warning symbols on the unit.


 **NOTE**

Rotary fan



Cut off the main power before opening the grille.



- Refer to the installation manual of the indoor unit for items not described in this manual.

 **NOTE**

To the installer

Be sure to instruct the customer how to properly operate the system showing him or her the operation manual of the indoor unit.

1-1 Accessories

Installation manual	
Screws (4x)	

2. PREPARATION BEFORE INSTALLATION

For this unit, you are able to select air flow directions. To discharge air in 2 or 3 directions, it is necessary to purchase the optional blocking pad kit.

2-1 Handling of the decoration panel

To prevent any damage to the decoration panel, take care of the following:

- Never place the panel with the front facing down.

- Never let the panel lean against a wall.
- Never put it down on a projecting object.
- Never touch or put pressure on the swing flap in order to prevent malfunction of the swing flap.

2-2 Preparing the decoration panel for installation

1. Remove the suction grille from the decoration panel.
 - Push the suction grille lever in the direction of the arrow and open the grille. (See figure 1)
 - Detach the suction grille from the decoration panel by lifting the grille up approximately 45 degrees so the grille can be removed. (See figure 2)

3. INSTALLATION OF THE DECORATION PANEL TO THE INDOOR UNIT

Refer to the installation manual of the indoor unit for details on installing the indoor unit.

- 1 Hold the decoration panel against the indoor unit by matching the and marks on the decoration panel with the position of the piping section and drain section of the indoor unit.
- 2 Install the decoration panel.
 - 1 Make sure that the swing flap motor lead wire does not come out of the groove for routing the wire inside the indoor unit (3 locations). If it has, put it back in. (Connecting the decoration panel with the wire out of the groove may cause water leakage.)
 - 2 Provisionally tighten the 2 supplied screws approximately 5 mm (0.2 in) into the indoor unit at the side opposite the switch box. (See figure 3)
 - 1 Supplied screws
 - 2 Groove for wire routing
 - 3 Switch box
 - 3 Slide the panel in the direction of the arrow, matching the 2 attachment holes () over the provisionally tightened screws. (See figure 4)
 - 4 Turn the decoration panel lever at the side of the indoor unit switch box over the hook located on that switch box. (See figure 5)
 - 1 Lever
 - 2 Switch box
 - 3 Hook
 - 5 Attach the remaining screws and tighten all 4 screws until the thickness of the sealing material between the decoration panel and the indoor unit is reduced to 6~8 mm (0.24~0.31 in). (See figure 6)
 - 1 Indoor unit
 - 2 Ceiling
 - 3 Sealing material
 - 4 Decoration panel
 - 5 Air outlet

3-1 Precautions

■ Improper tightening of the screws (see figure 7) may cause air to leak into the unit and air to escape between the ceiling and the decoration panel (1), resulting in contamination (2) and dew formation (3).

■ If there is a gap remaining between the ceiling and the decoration panel after tightening the screws, re-adjust the indoor unit body height.

3 Wiring of the decoration panel (See figure 8)

- 1 Screws (2)
 - 2 Switch box
 - 3 Swing flap motor lead wire
 - 4 Hang the swing flap motor lead wire on this tab
 - 5 Connector of the decoration panel swing flap motor
 - 6 Connector of the indoor unit
 - 7 Clamp
- Pass the swing flap motor lead wire through the clamp as shown. After connection, store the connector inside the switch box.

- 1 Remove the switch box cover after making sure that the power to the unit is off.
- 2 Connect the connectors of the swing flap motor lead wire.
- 3 Put the switch box cover back in place and fix it with the 2 screws again.

⚠ NOTE

- If the connectors are not connected properly, the swing flap will not work.
- Make sure that the swing flap motor lead wire is not caught between the indoor unit and the decoration panel.

4. INSTALLATION OF THE SUCTION GRILLE

Install the suction grille by reversing the procedure shown in "Preparing the decoration panel for installation" on page 1.

- The suction grille may be installed in 4 directions by simply turning it 90 degrees.
- Change the direction when adjusting the direction of the suction grille of multiple units or to comply with the demands of the customer.





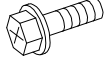
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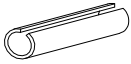
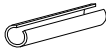
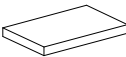

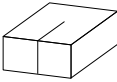
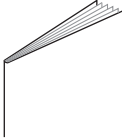
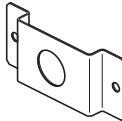

Be careful not to get the swing flap motor lead wire get caught when installing the suction grille.

11. Accessories

Standard Accessories

FXZQ07M~18M

Name	(1) Drain hose	(2) Metal Clamp	(3) Washer for hanger bracket	(4) Paper pattern for installation	(5) Screws (M5)
Quantity	1 x	1 x	8 x	1 x	4 x
Shape				Also used as packing material 	For paper pattern for installation 

Name	Insulation for fitting	Sealing pad	(10) Sealing material	(11) Installation and Operation manual	(12) Conduit mounting plate	(13) Screws (M4) for Conduit mounting plate
Quantity	1 x	1 x	2 x	1 x	1 x	2 x
Shape	(6) For gas pipe  (7) For liquid pipe 	(8) Large  (9) Small 				

Optional Accessories (For Unit)

Model		FXZQ07M7VJU	FXZQ09M7VJU	FXZQ12M7VJU	FXZQ18M7VJU
Item					
Decoration Panel				BYFQ60BU	
Sealing material of air Discharge outlet				KDBH44B60	
Panel Spacer				KDBQ44B60	
Filter related	Replacement long-life filter			KAFQ441BA60	
Fresh air intake kit	Direct installation type			KDDQ44XA60	

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Optional Accessories (For Controls): Refer to booklet of "Controls".

Warning



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- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire, or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire, or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor, or retailer.



Intertek

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JMI-0107



JQA-1452

About ISO 9001

ISO 9001 is a plant certification system defined by the International Organization for Standardization (ISO) relating to quality assurance. ISO 9001 certification covers quality assurance aspects related to the "design, development, manufacture, installation, and supplementary service" of products manufactured at the plant.



EC99J2044

About ISO 14001

ISO 14001 is the standard defined by the International Organization for Standardization (ISO) relating to environmental management systems. Our group has been acknowledged by an internationally accredited program of environmental protection procedures and activities to meet the requirements of ISO 14001.

Dealer

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