EDUS39-900B-F11
202103

DAIKIN

Engineering Data

Ceiling Mounted Duct Unit

FXMQ-MVJU

60 Hz

R-410A

VRV

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1. Features and Benefits

Concealed, Powerful, Comfortable

The HSP high-capacity concealed ducted unit is ideal for larger open space floor plans usually found in offices, retails, hotels, or education facilities. It performs well across multiple spaces that can benefit from the same mode of operation, limiting equipment and installation cost.

- Design flexibility with a capacity range up to 96 MBH
- Improved ductwork and filtration flexibility with ESP capability of up to 1.1” W.G
- Low profile design of less than 19” high to reduce required installation space
- Ideal for Hotels, Schools, Retail

FXMQ72-96MVJU

2. Specifications

Ceiling mounted duct unit

Model			FXMQ72MVJU	FXMQ96MVJU
Power supply			1 phase, 60 Hz, 208/230 V	1 phase, 60 Hz, 208/230 V
★1, ★3 Cooling capacity		Btu/h	72,000	96,000
★2, ★3 Heating capacity		Btu/h	81,000	108,000
Casing/Color			Galvanized steel plate	Galvanized steel plate
Dimensions: (H × W × D)		in.	18-1/8 × 54-3/8 × 43-5/16	18-1/8 × 54-3/8 × 43-5/16
Coil (cross fin coil)	Rows × Stages × FPI		3 × 26 × 13	3 × 26 × 13
	Face area	ft²	7.32	7.32
Fan	Model		D13/4G2DA1 × 2	D13/4G2DA1 × 2
	Type		Sirocco fan	Sirocco fan
	Motor output	W	380 × 2	380 × 2
	Airflow rate (H/L)	cfm	2,047/1,764	2,541/2,188
	External static pressure (208 V)	in. H_2O	0.95-0.38 ★4	0.95-0.44 ★4
	Drive		Direct drive	Direct drive
Temperature control			Microprocessor thermostat for cooling and heating	Microprocessor thermostat for cooling and heating
Air filter			— ★5	— ★5
★6 Sound pressure level (reference data) (H/L)		dBA	49.0/46.0	49.0/46.0
Weight		lbs	302	302
Piping connections	Liquid pipes	in.	ϕ3/8 (flare connection)	ϕ3/8 (flare connection)
	Gas pipes	in.	ϕ3/4 (brazing connection)	ϕ7/8 (brazing connection)
	Drain pipe	in.	PS1B	PS1B
Safety devices			Fuse, Thermal protector for fan motor	Fuse, Thermal protector for fan motor
Refrigerant control			Electronic expansion valve	Electronic expansion valve
Connectable outdoor unit			R410A ***VRV*** series	R410A ***VRV*** series
Standard accessories			Operation manual, Installation manual, Sealing pads, Connection pipes, Screws, Clamps	Operation manual, Installation manual, Sealing pads, Connection pipes, Screws, Clamps

Note:

★1. Nominal cooling capacities are based on the following conditions:
Return air temperature: 80°FDB, 67°FWB
Outdoor temperature: 95°FDB
Equivalent refrigerant piping length: 25 ft (horizontal)

★2. Nominal heating capacities are based on the following conditions:
Return air temperature: 70°FDB.
Outdoor temperature: 47°FDB, 43°FWB
Equivalent refrigerant piping length: 25 ft (horizontal)

★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

★4. External static pressure is changeable to change over the connectors inside electrical box, this pressure means “High static pressure-Standard static pressure”.

★5. Air filter is not standard accessory, but please mount it in the duct system of the suction side.
Select its dust collection efficiency (gravity method) 50% or more.

★6. Anechoic chamber conversion value, measured under JIS conditions. During actual operation, these values may be higher as a result of installation conditions.

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3. Simplified Dimensions

FXMQ72-96MVJU

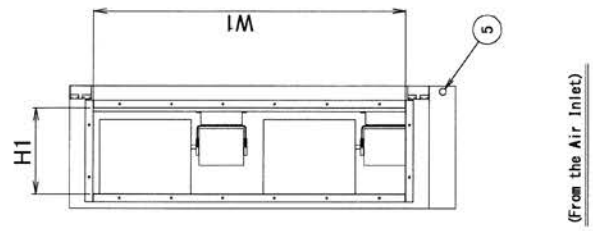
Unit: in. (mm)

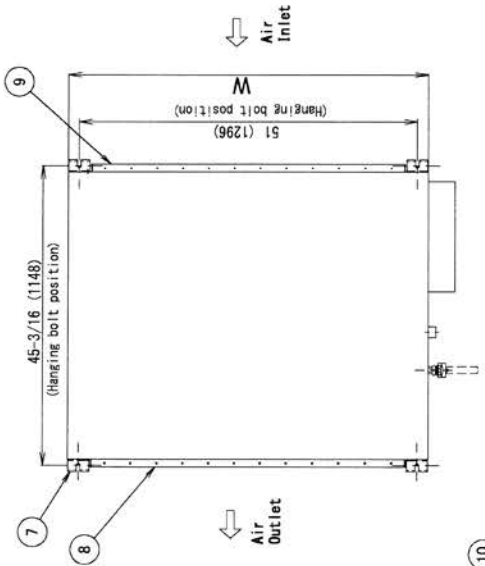
DFT5183493

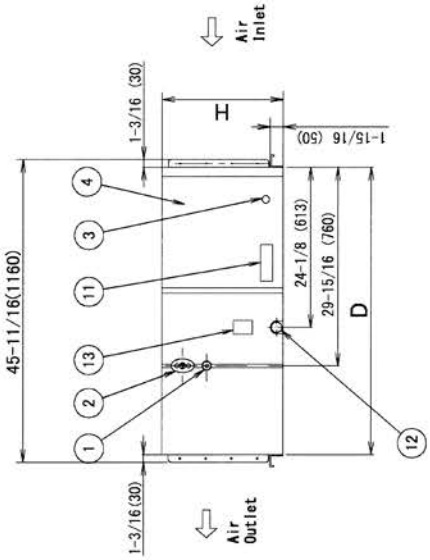
H		18-1/2 (470)
W		54-5/16 (1380)
D		43-5/16 (1100)
Air Inlet	H1	13 (330)
	W1	47-1/4 (1200)
Air Outlet	H2	13 (330)
	W2	47-1/4 (1200)

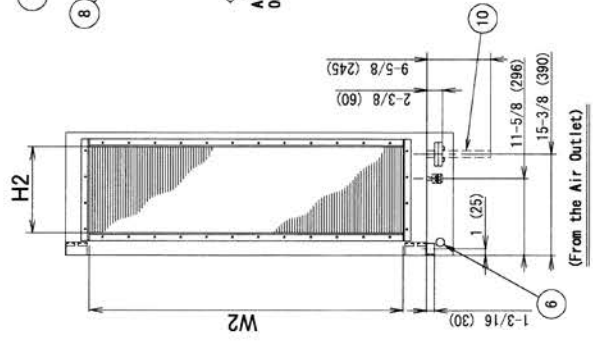
Indoor unit	Gas side	Liquid side
FXMQ72MVJU	φ3/4 attached piping	φ3/8
FXMQ96MVJU	φ7/8 attached piping	φ3/8

ITEM	PART NAME	REMARK
13	Water supply port	
12	Drain piping connection	PS1B Internal thread Major dia. φ1-5/16, Minor dia. φ1-3/16
11	Name plate	
10	Attached piping	Brazing
9	Air Inlet flange	
8	Air Outlet flange	
7	Hook	M10
6	Transmission wiring connection	
5	Power supply wiring connection	
4	Switch box	
3	Ground terminal	M5 (Inside switch box)
2	Gas pipe connection	Attendant piping connection
1	Liquid pipe connection	Flare connection



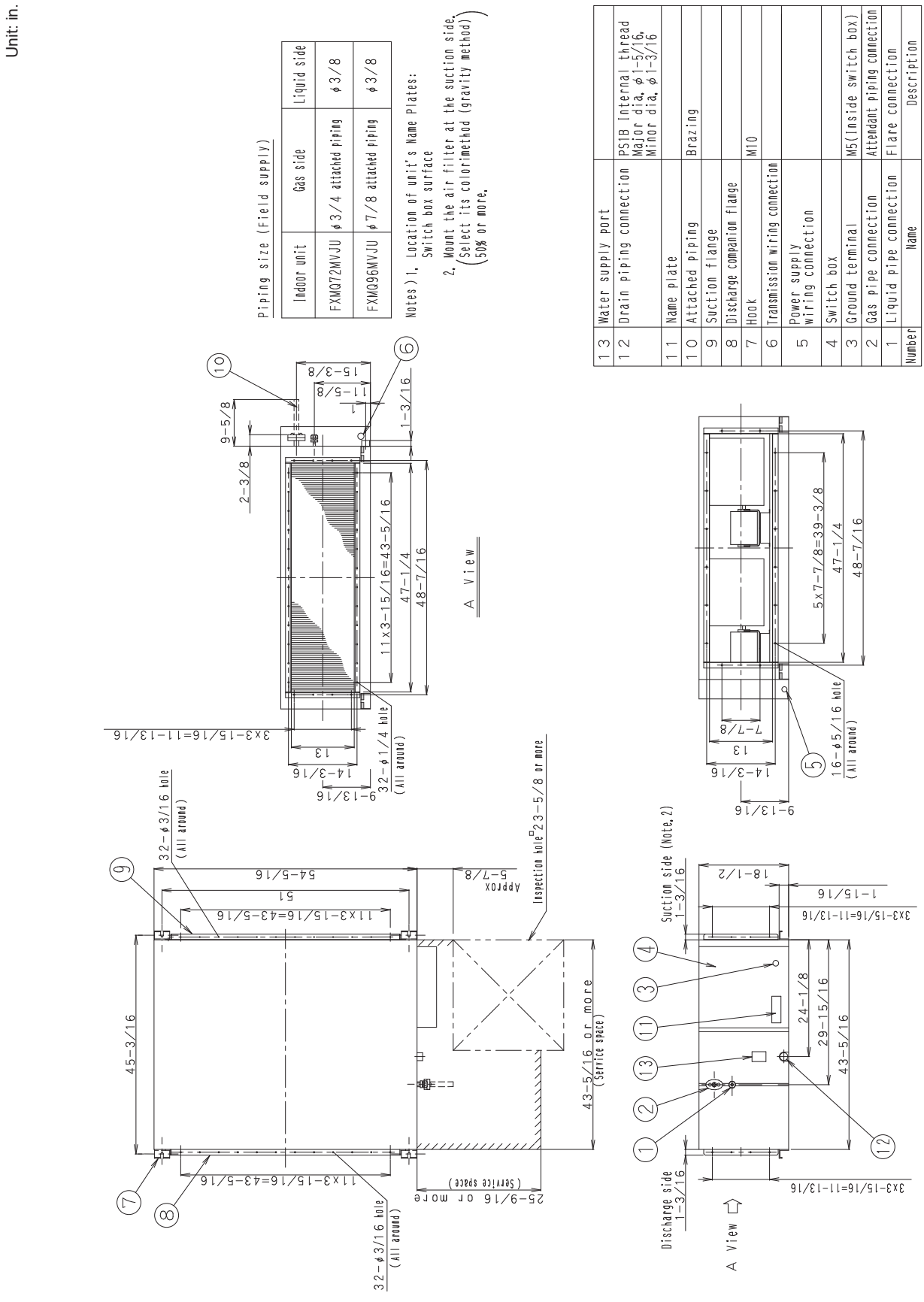






4. Dimensions

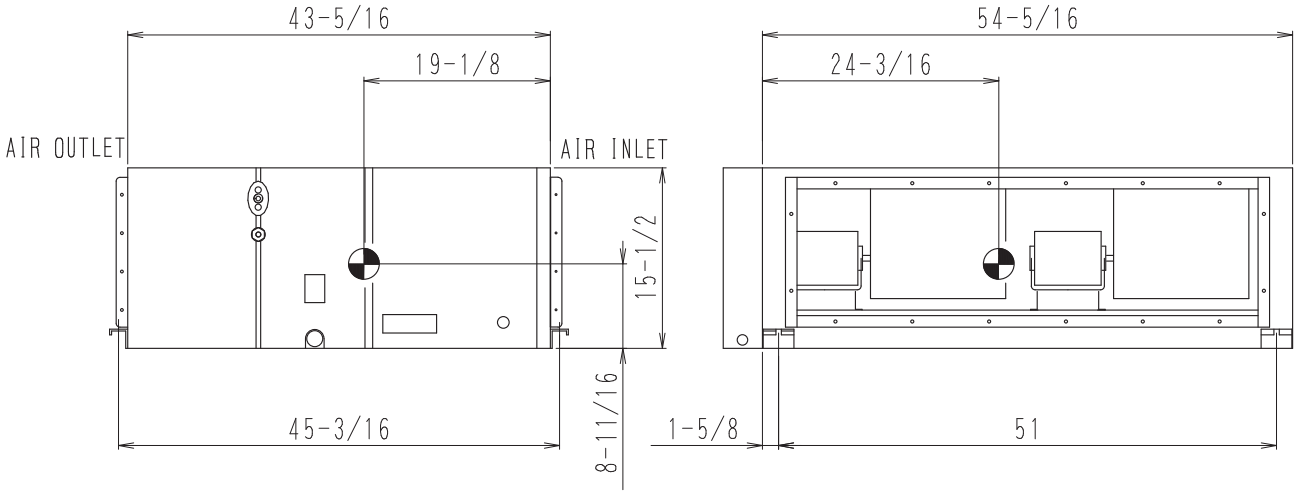
FXMQ72-96MVJU



5. Center of Gravity

FXMQ72-96MVJU

Unit: in.



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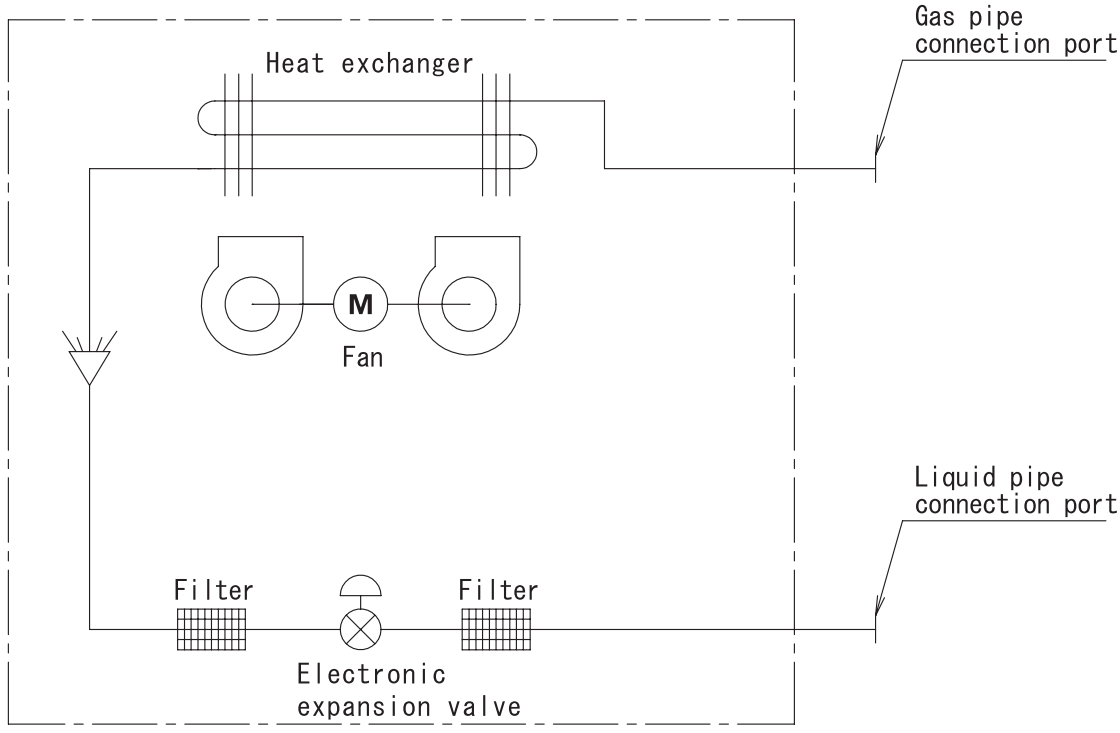
6. Piping Diagrams

FXMQ72-96MVJU



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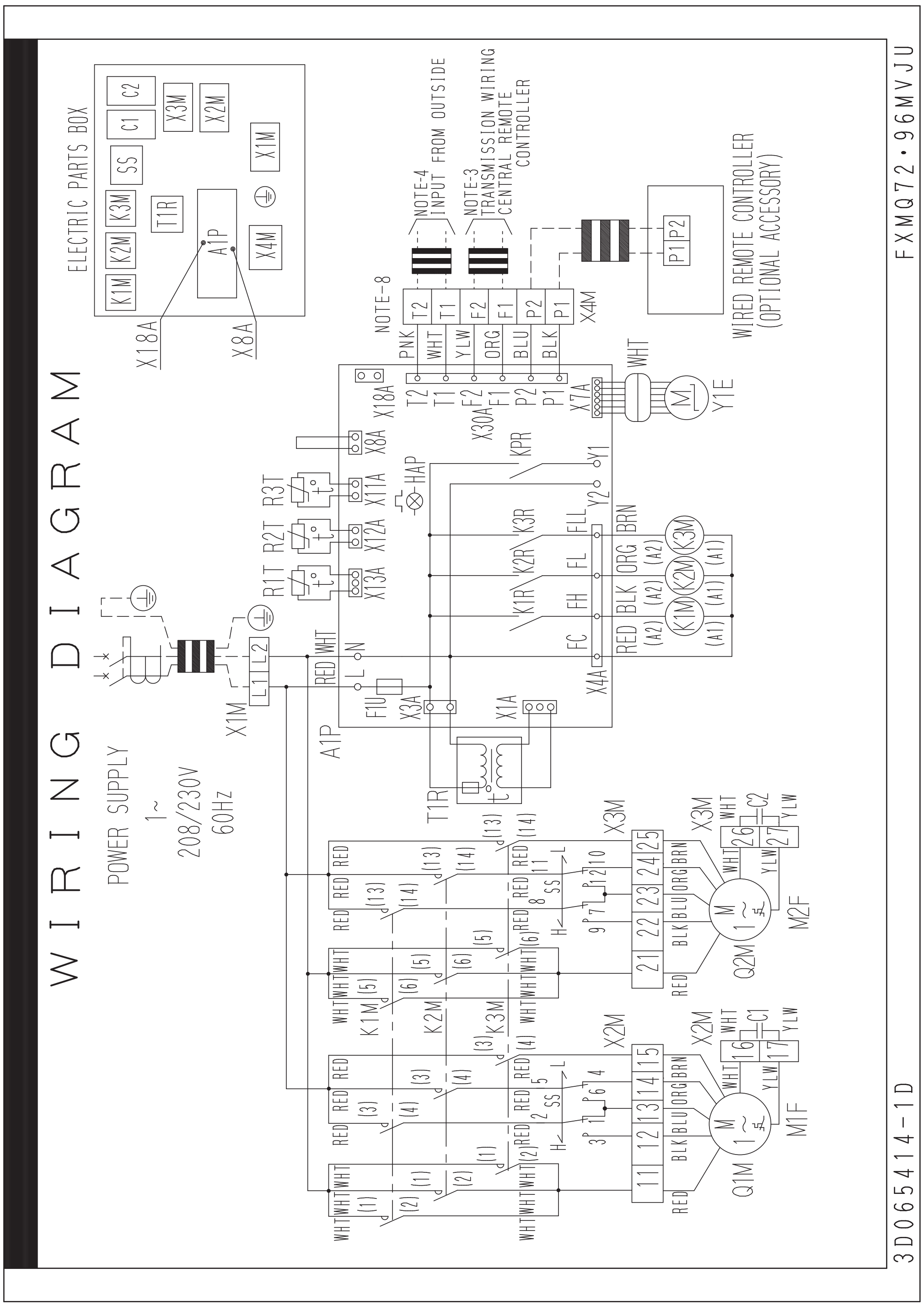
Unit: in.

Model	Gas	Liquid
FXMQ72MVJU	ϕ3/4	ϕ3/8
FXMQ96MVJU	ϕ7/8	ϕ3/8

7. Wiring Diagrams

FXMQ72-96MVJU



NOTES)
1. : TERMINAL BLOCK , : CONNECTOR : SHORT CIRCUIT CONNECTOR : TERMINAL
2. : FIELD WIRING
3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.
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. SYMBOLS SHOW AS FOLLOWS. (PNK: PINK WHT: WHITE YLW: YELLOW ORG: ORANGE BLU: BLUE BLK: BLACK RED: RED BRN: BROWN)
6. USE COPPER CONDUCTORS ONLY.
7. IN CASE HIGH E. S. P. OPERATION, CHANGE THE SWITCH (SS) FOR "H".
8. CLASS 2 WIRE.

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FXMQ72-96MVJU

ELECTRICAL COMPONENTS AND WIRING CONNECTORS FOR INDOOR UNIT	
A1P	PRINTED CIRCUIT BOARD
C1·C2	CAPACITOR (M1F·2F)
F1U	FUSE (Ⓑ, 5 A, 250 V)
HAP	LIGHT EMITTING DIODE (SERVICE MONITOR-GREEN)
K1M	MAGNETIC CONTACTOR (M1F·2F)
K2M	MAGNETIC CONTACTOR (M1F·2F)
K3M	MAGNETIC CONTACTOR (M1F·2F)
K1R - K3R	MAGNETIC RELAY (M1F·2F)
KPR	MAGNETIC RELAY (M1P)
M1F·M2F	MOTOR (INDOOR FAN)
Q1M·Q2M	THERMO SWITCH (M1F·2F EMBEDDED)
R1T	THERMISTOR (AIR)
R2T·R3T	THERMISTOR (COIL)
SS	SELECTOR SWITCH (STATIC PRESSURE)
T1R	TRANSFORMER (208 V / 230 V 25 VA)
X1M	TERMINAL BLOCK (POWER)
X2M - X3M	TERMINAL BLOCK
X4M	TERMINAL BLOCK (CONTROL)
Y1E	ELECTRONIC EXPANSION VALVE
CONNECTOR FOR OPTIONAL PARTS	
X8A	CONNECTOR (FLOAT SWITCH)
X18A	CONNECTOR (WIRING ADAPTOR FOR ELECTRICAL APPENDICES)

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8. Electric Characteristics

FXMQ72-96MVJU

Model	Power supply					IFM		Input (W)		SCCR
	Hz	Volts	Voltage range	MCA	MOP	KW	FLA	Cooling	Heating	
FXMQ72MVJU	60	208/230 V	Max. 253 V Min. 187 V	9.5	15	0.380 × 2	7.6	1,490	1,490	SCCR kA rms, Symmetrical @600 V MAX: 5
FXMQ96MVJU				10.7	15	0.380 × 2	8.6	1,684	1,684	

Symbol:

MCA: Min. Circuit Amps (A)
MOP: Max. Overcurrent Protective Device (A)
KW: Fan Motor Rated Output (kW)
FLA: Full Load Amps (A)
IFM: Indoor Fan Motor
SCCR: Short-Circuit Current Rating

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 phase is 2%.
3. MCA/MOP
   MCA = 1.25 × FLA
   MOP ≤ 4 × FLA
   (Next lower standard fuse raring. Min. 15 A)
4. Select wire size based on the MCA.

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9. Safety Device Setting

Model		FXMQ72MVJU	FXMQ96MVJU
Printed circuit board fuse		250 V, 5 A	250 V, 5 A
Fan motor thermal fuse	°F	–	–
Fan motor thermal protector	°F	OFF: 275±14 (ON: 189±27)	OFF: 275±14 (ON: 189±27)

10. Capacity Tables

10.1 Cooling Capacity at Te: 43°F (6°C)

Model	Indoor air temp. °FWB (°CWB) (Te: 43°F (6°C))											
	61 (16.1)		64 (17.8)		67 (19.4)		70 (21.1)		72 (22.2)		75 (23.9)	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH
FXMQ72MVJU	56.9	50.8	64.4	53.8	72.0	56.9	73.4	56.5	74.4	55.0	75.8	52.8
FXMQ96MVJU	75.8	63.7	85.9	67.4	96.0	71.1	97.9	70.5	99.2	69.1	101.0	65.8

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

Note:

1. These capacity tables can be used 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.

10.2 Heating Capacity

Model	Indoor air temp. °FDB (°CDB) (Tc: 115°F (46°C))					
	62 (16.7)	65 (18.3)	68 (20.0)	70 (21.1)	72 (22.2)	75 (23.9)
	TC	TC	TC	TC	TC	TC
	MBH	MBH	MBH	MBH	MBH	MBH
FXMQ72MVJU	94.5	88.5	84.0	81.0	78.0	73.5
FXMQ96MVJU	126	118	112	108	104	98.0

TC: Total capacity: MBH

Note:

1. These capacity tables can be used 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.

10.3 Correction Factor for Cooling Capacity at Te: 48°F (9°C)

Refer to the correction factor table below when a mini-split indoor unit is connected to a ***VRV*** Heat Pump system using a Branch Port box.

Model	Indoor air temp. °FWB (°CWB) (Te: 48°F (9°C))													
	57 (13.9)		61 (16.1)		64 (17.8)		67 (19.4)		70 (21.1)		72 (22.2)		75 (23.9)	
	TC	SHF	TC	SHF	TC	SHF	TC	SHF	TC	SHF	TC	SHF	TC	SHF
FXMQ72MVJU	0.68	1.13	0.70	1.16	0.76	1.11	0.80	1.08	0.82	1.06	0.84	1.06	0.86	1.05
FXMQ96MVJU	0.68	1.13	0.72	1.15	0.78	1.10	0.81	1.08	0.83	1.06	0.84	1.05	0.86	1.06

TC: Total capacity
SHF: Sensible heat factor

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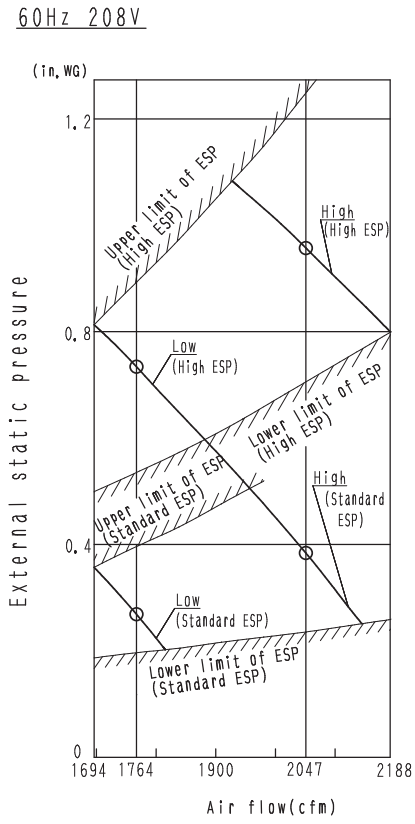
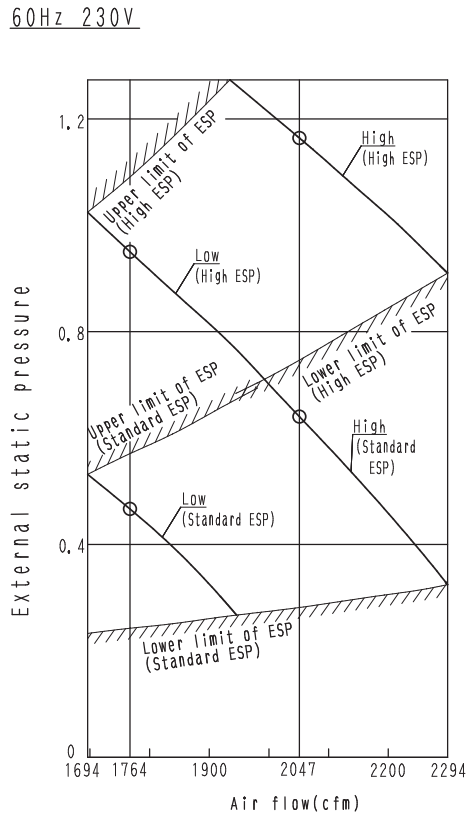
11. Fan Performances

FXMQ72MVJU





Note:

1. The remote controller can be used to switch between “high” and “low”.
2. The air flow is set to “standard” before leaving the factory.
   It is possible to switch between “standard ESP” and “high ESP” by changing the switch in the indoor unit electrical box.

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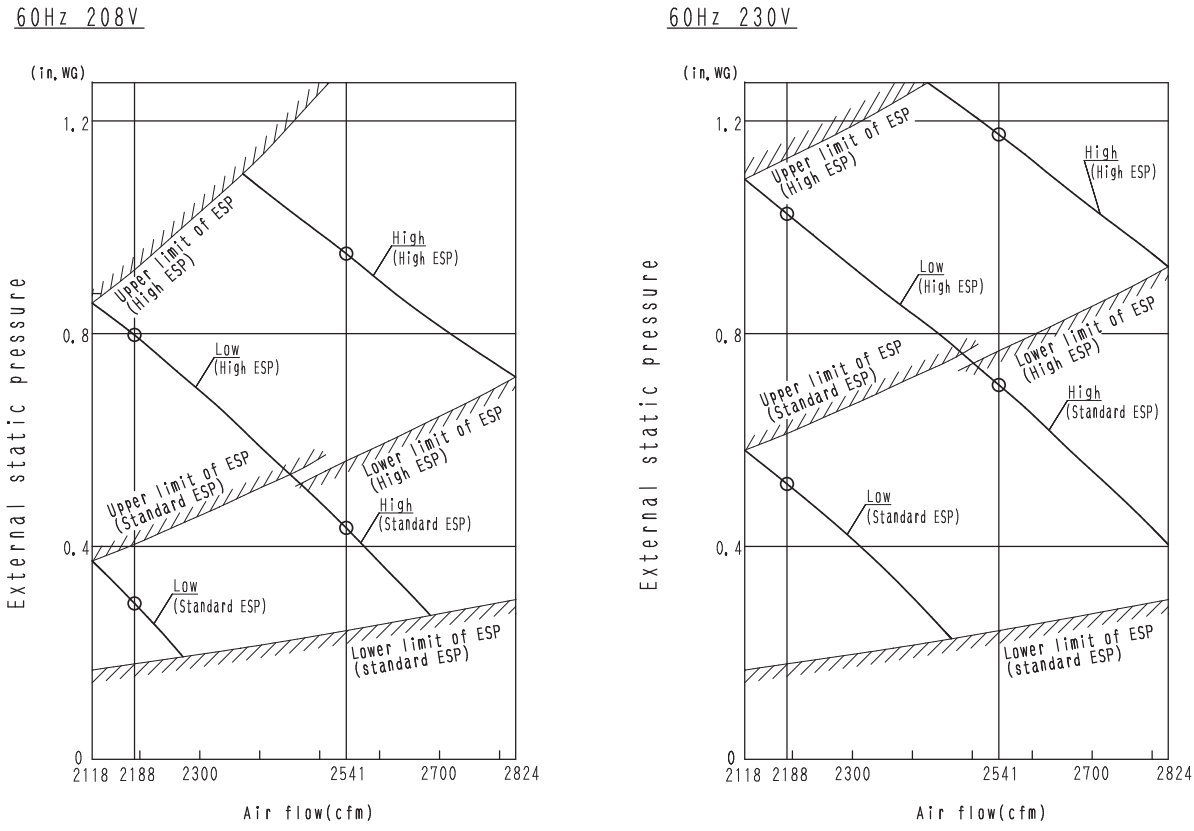
FXMQ96MVJU



Note:

1. The remote controller can be used to switch between “high” and “low”.
2. The air flow is set to “standard” before leaving the factory.
   It is possible to switch between “standard ESP” and “high ESP” by changing the switch in the indoor unit electrical box.

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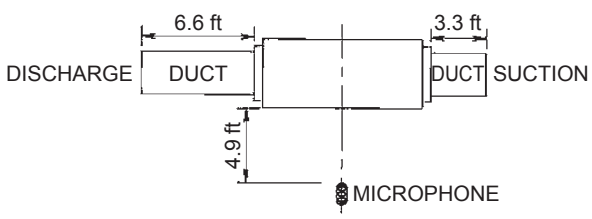
12.Sound Levels (Reference Data)

12.1 Overall

■ **Location of microphone**



dBA

Model	208/230 V, 60 Hz	
	H	L
FXMQ72MVJU	49.0	46.0
FXMQ96MVJU	49.0	46.0

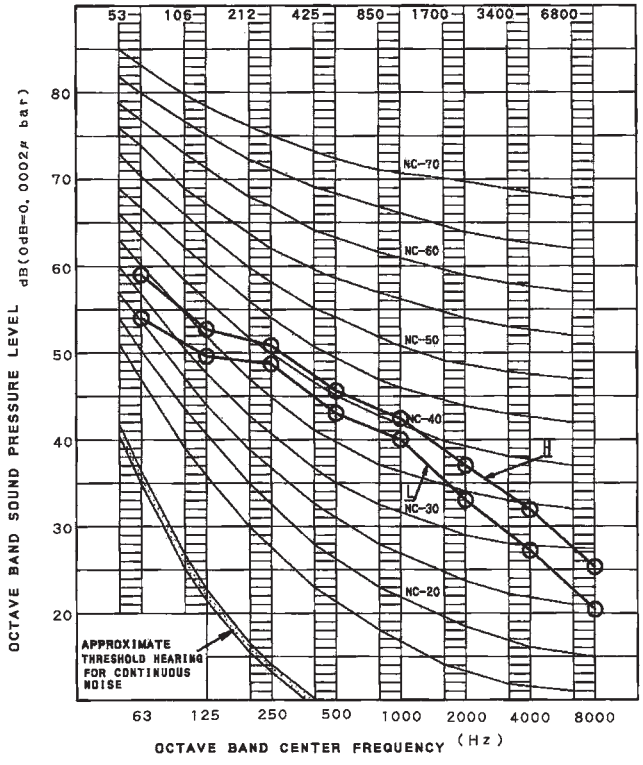
Note:

1. Operation noise differs with operation and ambient conditions.

12.2 Octave Band Level

○———○ 208/230 V, 60 Hz

FXMQ72MVJU



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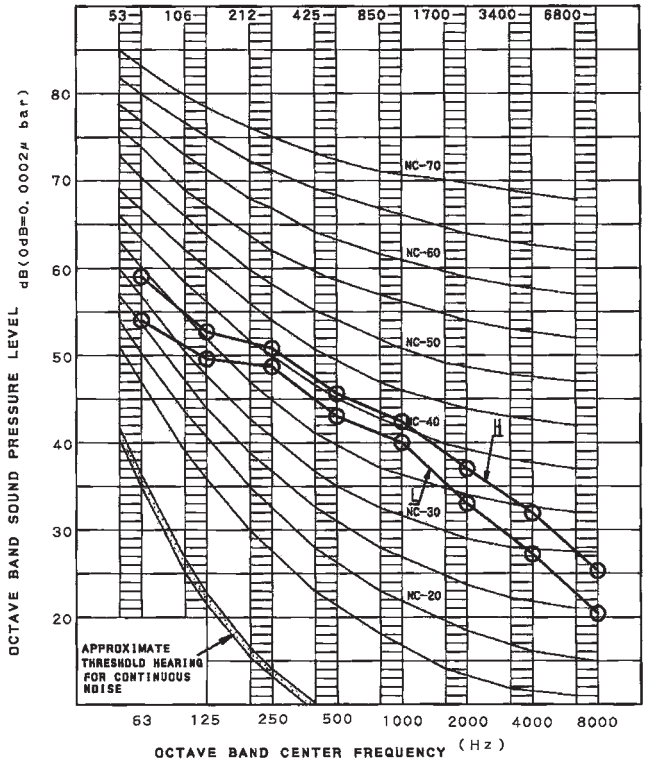
FXMQ96MVJU



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13.Accessories

13.1 Optional Accessories (for Unit)

Option		FXMQ72MVJU	FXMQ96MVJU
High efficiency filter	65%	KAF372M280	
	90%	KAF373M280	
Filter chamber		KDJ3705L280	
Long life replacement filter		KAF371M280	

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Warning

- 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 unauthorised 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 and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

●Specifications, designs and other content appearing in this brochure are current as of March 2021 but subject to change without notice.