Engineering Data

FXMQ-PBVJU
Ceiling Mounted Duct Type
1. Features and Benefits

The ceiling mounted DC Ducted unit is ideal for small to large spaces in need of a concealed air-conditioning system. Its compact design allows it to be completely concealed and makes it perfect for retail stores, classrooms, offices, banks, restaurants, shops and hotels.

- Models range from 0.6 up to 4.5 Ton
- Energy efficient thanks to the specially developed DC fan motor
- Ideal to use together with the optional Daikin Zoning Kit, DZK
- Configurable auxiliary heater control logic
- Advanced economizer control logic
- Enhanced indoor air quality and LEED ready with MERV 13 filter options
- Ease of installation with auto adjusting airflow at commissioning based on external static pressure
- Flexible ductwork design with ESP capabilities up to 0.8" W.G.
- Installation flexibility with a low profile, compact design at less than 12" in height
- Easy maintenance with complete service access from below
- Standard built-in drain pump increases flexibility and installation speed
### 2. Specifications

#### Ceiling Mounted Duct Type

<table>
<thead>
<tr>
<th>Model</th>
<th>FXMQ07PBVJU</th>
<th>FXMQ09PBVJU</th>
<th>FXMQ12PBVJU</th>
<th>FXMQ15PBVJU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>1 phase, 60Hz, 208/230V</td>
<td>1 phase, 60Hz, 208/230V</td>
<td>1 phase, 60Hz, 208/230V</td>
<td>1 phase, 60Hz, 208/230V</td>
</tr>
<tr>
<td><strong>1.</strong> Cooling capacity Blh (kW)</td>
<td>7,500 (2.2)</td>
<td>9,500 (2.8)</td>
<td>12,000 (3.5)</td>
<td>15,000 (4.4)</td>
</tr>
<tr>
<td><strong>2.</strong> Heating capacity Blh (kW)</td>
<td>8,500 (2.5)</td>
<td>10,500 (3.1)</td>
<td>13,500 (4.0)</td>
<td>17,000 (5.0)</td>
</tr>
<tr>
<td>Casing / Color</td>
<td>Galvanized steel plate</td>
<td>Galvanized steel plate</td>
<td>Galvanized steel plate</td>
<td>Galvanized steel plate</td>
</tr>
<tr>
<td>Dimensions: (H×W×D) in.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air filter</td>
<td>11-13/16×21-5/8×27-9/16 (300×550×700)</td>
<td>11-13/16×21-5/8×27-9/16 (300×550×700)</td>
<td>11-13/16×27-9/16×27-9/16 (300×700×700)</td>
<td>11-13/16×39-3/8×27-9/16 (300×1,000×700)</td>
</tr>
<tr>
<td>Cole (Cross fin coil)</td>
<td>3x16x15</td>
<td>3x16x15</td>
<td>3x16x15</td>
<td>3x16x15</td>
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<tr>
<td>Face area (ft²)</td>
<td>0.05 (0.098)</td>
<td>0.05 (0.098)</td>
<td>0.15 (0.249)</td>
<td>0.28 (0.449)</td>
</tr>
<tr>
<td>Fan connections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>Sirocco fan</td>
<td>Sirocco fan</td>
<td>Sirocco fan</td>
<td>Sirocco fan</td>
</tr>
<tr>
<td>Type</td>
<td>Sirocco fan</td>
<td>Sirocco fan</td>
<td>Sirocco fan</td>
<td>Sirocco fan</td>
</tr>
<tr>
<td>Motor output W</td>
<td>90</td>
<td>90</td>
<td>140</td>
<td>360</td>
</tr>
<tr>
<td>Airflow rate (HH/H/L) cfm</td>
<td>317/264/229 (9.0/7.5/6.5)</td>
<td>317/264/229 (9.0/7.5/6.5)</td>
<td>450/410/388 (12.7/11.6/11.0)</td>
<td>560/530/500 (15.8/15.0/14.2)</td>
</tr>
<tr>
<td>External static pressure in. H₂O</td>
<td>Standard 0.20 (0.40-0.12)</td>
<td>Standard 0.20 (0.40-0.12)</td>
<td>Standard 0.20 (0.40-0.12)</td>
<td>Standard 0.40 (0.80-0.20)</td>
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<tr>
<td>Drive</td>
<td>Direct drive</td>
<td>Direct drive</td>
<td>Direct drive</td>
<td>Direct drive</td>
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<tr>
<td>Temperature control</td>
<td>Microprocessor thermostat for cooling and heating</td>
<td>Microprocessor thermostat for cooling and heating</td>
<td>Microprocessor thermostat for cooling and heating</td>
<td>Microprocessor thermostat for cooling and heating</td>
</tr>
<tr>
<td>Air filter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid pipes in. (mm)</td>
<td>φ1/4 (6.4)</td>
<td>φ1/4 (6.4)</td>
<td>φ1/4 (6.4)</td>
<td>φ1/4 (6.4)</td>
</tr>
<tr>
<td>Gas pipes in. (mm)</td>
<td>φ1/2 (12.7)</td>
<td>φ1/2 (12.7)</td>
<td>φ1/2 (12.7)</td>
<td>φ1/2 (12.7)</td>
</tr>
<tr>
<td>Drain up lift in.</td>
<td>18-3/8 (467)</td>
<td>18-3/8 (467)</td>
<td>18-3/8 (467)</td>
<td>18-3/8 (467)</td>
</tr>
<tr>
<td>Weight lbs (kg)</td>
<td>55 (25)</td>
<td>55 (25)</td>
<td>62 (28)</td>
<td>80 (36)</td>
</tr>
<tr>
<td><strong>5.</strong> Sound pressure levels (HH/H/L) dBA</td>
<td>33.0/31.0/29.0</td>
<td>33.0/31.0/29.0</td>
<td>39.0/37.0/35.0</td>
<td>40.0/38.0/37.0</td>
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<tr>
<td><strong>6.</strong> Sound power level dBA</td>
<td>56</td>
<td>56</td>
<td>65</td>
<td>61</td>
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<tr>
<td>Safety devices</td>
<td>Fan driver overload protector</td>
<td>Fan driver overload protector</td>
<td>Fan driver overload protector</td>
<td>Fan driver overload protector</td>
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<tr>
<td>Refrigerant control</td>
<td>Electronic expansion valve</td>
<td>Electronic expansion valve</td>
<td>Electronic expansion valve</td>
<td>Electronic expansion valve</td>
</tr>
<tr>
<td>Connectable outdoor unit</td>
<td>R410A VRV series</td>
<td>R410A VRV series</td>
<td>R410A VRV series</td>
<td>R410A VRV series</td>
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<tr>
<td>Drawing No.</td>
<td>C: 3D066803C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

1. Nominal cooling capacities are based on the following conditions:
   - Return air temperature: 80.0°FDB (26.7°CDB), 67.0°FWB (19.4°CWB)
   - Outdoor temperature: 95.0°FDB (35.0°CDB)
   - Equivalent ref. piping length: 25ft (7.6 m) (Horizontal)

2. Nominal heating capacities are based on the following conditions:
   - Return air temperature: 70.0°FDB (31.0°CDB)
   - Outdoor temperature: 47.0°FDB (8.3°CDB), 43.0°FWB (6.1°CWB)
   - Equivalent ref. piping length: 25ft (7.6 m) (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 in 7 (FXMQ07, 09, 12PBVJU), 14 (FXMQ15, 18, 24, 30, 36, 48PBVJU), 10 (FXMQ54PBVJU) stages within the ( ) range by remote controller.

5. Air filter is not standard accessory, but please mount it in the duct system of the suction side.

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

7. Refer to Electric Characteristics for the power input.
## Ceiling Mounted Duct Type

<table>
<thead>
<tr>
<th>Model</th>
<th>FXMQ18PBVJU</th>
<th>FXMQ24PBVJU</th>
<th>FXMQ30PBVJU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>1 phase, 60Hz, 208/230V</td>
<td>1 phase, 60Hz, 208/230V</td>
<td>1 phase, 60Hz, 208/230V</td>
</tr>
<tr>
<td><strong>1.</strong> Cooling capacity</td>
<td>18,000 (5.3)</td>
<td>24,000 (7.0)</td>
<td>30,000 (8.8)</td>
</tr>
<tr>
<td><strong>2.</strong> Heating capacity</td>
<td>20,000 (5.9)</td>
<td>27,000 (7.9)</td>
<td>34,000 (10.0)</td>
</tr>
<tr>
<td>Casing / Color</td>
<td>Galvanized steel plate</td>
<td>Galvanized steel plate</td>
<td>Galvanized steel plate</td>
</tr>
<tr>
<td>Dimensions: (H×WxD)</td>
<td>11-13/16 × 39-3/8 × 27-9/16 (300 × 1,000 × 700)</td>
<td>11-13/16 × 39-3/8 × 27-9/16 (300 × 1,000 × 700)</td>
<td>11-13/16 × 55-1/8 × 27-9/16 (300 × 1,400 × 700)</td>
</tr>
<tr>
<td>Coils (Cross fin coil)</td>
<td>Rows</td>
<td>Stages</td>
<td>FPI</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Face area</td>
<td>2.68 (0.249)</td>
<td>2.68 (0.249)</td>
<td>4.12 (0.383)</td>
</tr>
<tr>
<td>Fan</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Model</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Type</td>
<td>Sirocco fan</td>
<td>Sirocco fan</td>
<td>Sirocco fan</td>
</tr>
<tr>
<td>Motor output</td>
<td>W</td>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>Airflow rate (HH/H/L)</td>
<td>cfm (m³/min)</td>
<td>635/582/529 (18.0/16.5/15.0)</td>
<td>688/618/569 (19.5/17.5/16.0)</td>
</tr>
<tr>
<td>External static pressure</td>
<td>In. H₂O (Pa)</td>
<td>Standard 0.40 (0.80-0.20 ★4) (100-200-50)</td>
<td>Standard 0.40 (0.80-0.20 ★4) (100-200-50)</td>
</tr>
<tr>
<td>Drain up lift</td>
<td>in. (mm)</td>
<td>18-3/8 (467)</td>
<td>18-3/8 (467)</td>
</tr>
<tr>
<td>Weight</td>
<td>lbs (kg)</td>
<td>80 (36)</td>
<td>80 (36)</td>
</tr>
<tr>
<td>Sound pressure levels (HH/H/L)</td>
<td>dB(A)</td>
<td>41.0/39.0/37.0</td>
<td>42.0/40.0/38.0</td>
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<tr>
<td>Sound power level</td>
<td>dB(A)</td>
<td>64</td>
<td>64</td>
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<tr>
<td>Safety devices</td>
<td>Fuse</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Refrigerant control</td>
<td>Electronic expansion valve</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Connectable outdoor unit</td>
<td>R410A VRV series</td>
<td>R410A VRV series</td>
<td>R410A VRV series</td>
</tr>
<tr>
<td>Drawing No.</td>
<td>C: 3D086833C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:

1. Nominal cooling capacities are based on the following conditions:
   - Return air temperature: 80.0°FDB (26.7°CDB), 67.0°FWB (19.4°CWB)
   - Outdoor temperature: 95.0°FDB (35.0°CDB)

2. Nominal heating capacities are based on the following conditions:
   - Return air temperature: 70.0°FDB (21.1°CDB), 67.0°FWB (19.4°CWB)
   - Outdoor temperature: 47.0°FDB (8.3°CDB), 43.0°FWB (6.1°CWB)

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

4. External static pressure is changeable in 7 (FXMQ07, 09, 12PBVJU), 14 (FXMQ15, 18, 24, 30, 36, 48PBVJU), 10 (FXMQ54PBVJU) stages within the ( ) range by remote controller.

5. Air filter is not standard accessory, but please mount it in the duct system of the suction side.

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

7. Refer to Electric Characteristics for the power input.
### Ceiling Mounted Duct Type

#### Model

<table>
<thead>
<tr>
<th>Model</th>
<th>FXMQ36PBVJU</th>
<th>FXMQ48PBVJU</th>
<th>FXMQ54PBVJU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>1 phase, 60Hz, 208/230V</td>
<td>1 phase, 60Hz, 208/230V</td>
<td>1 phase, 60Hz, 208/230V</td>
</tr>
<tr>
<td><strong>1</strong> Cooling capacity</td>
<td>Btu/h (kW)</td>
<td>36,000 (10.6)</td>
<td>48,000 (14.1)</td>
</tr>
<tr>
<td><strong>2</strong> Heating capacity</td>
<td>Btu/h (kW)</td>
<td>40,000 (11.7)</td>
<td>54,000 (15.8)</td>
</tr>
<tr>
<td>Casing/Color</td>
<td>Galvanized steel plate</td>
<td>Galvanized steel plate</td>
<td>Galvanized steel plate</td>
</tr>
</tbody>
</table>

#### Notes:

1. Nominal cooling capacities are based on the following conditions:
   - Return air temperature: 80.0°FDB (26.7°CDB), 67.0°FWB (19.4°CWB)
   - Outdoor temperature: 95.0°FDB (35.0°CDB)
   - Equivalent ref. piping length: 25ft (7.6 m) (Horizontal)

2. Nominal heating capacities are based on the following conditions:
   - Return air temperature: 70.0°FDB (21.1°CDB)
   - Outdoor temperature: 47.0°FDB (8.3°CDB), 43.0°FWB (6.1°CWB)
   - Equivalent ref. piping length: 25ft (7.6 m) (Horizontal)

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

4. External static pressure is changeable in 7 (FXMQ07, 09, 12PBVJU), 14 (FXMQ15, 18, 24, 30, 36, 48PBVJU), 10 (FXMQ54PBVJU) stages within the ( ) range by remote controller.

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.

7. Refer to Electric Characteristics for the power input.
3. Dimensions

FXMQ07PBVJU / FXMQ09PBVJU
## FXMQ-PBVJU

### Dimensions

<table>
<thead>
<tr>
<th>Part</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10 cm</td>
</tr>
<tr>
<td>2</td>
<td>20 cm</td>
</tr>
<tr>
<td>3</td>
<td>30 cm</td>
</tr>
<tr>
<td>4</td>
<td>40 cm</td>
</tr>
</tbody>
</table>

**Notes:**
- All dimensions are in centimeters (cm).
- Refer to the diagram for exact measurements and positions.

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*Image details and specific dimensions not transcribed as per the image.*
4. Piping Diagrams

FXMQ07PBVJU / FXMQ09PBVJU / FXMQ12PBVJU / FXMQ15PBVJU / FXMQ18PBVJU / FXMQ24PBVJU / FXMQ30PBVJU / FXMQ36PBVJU / FXMQ48PBVJU / FXMQ54PBVJU

<table>
<thead>
<tr>
<th>Model</th>
<th>Gas</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>FXMQ07PBVJU</td>
<td>φ 1/2 (12.7)</td>
<td>φ 1/4 (6.4)</td>
</tr>
<tr>
<td>FXMQ09PBVJU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FXMQ12PBVJU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FXMQ15PBVJU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FXMQ18PBVJU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FXMQ24PBVJU</td>
<td>φ 5/8 (15.9)</td>
<td>φ 3/8 (9.5)</td>
</tr>
<tr>
<td>FXMQ30PBVJU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FXMQ36PBVJU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FXMQ48PBVJU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FXMQ54PBVJU</td>
<td></td>
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</tbody>
</table>

Unit: in. (mm)

C: 4D034245L
5. Wiring Diagrams

FXMQ07PBVJU / FXMQ09PBVJU / FXMQ12PBVJU / FXMQ15PBVJU / FXMQ18PBVJU / FXMQ24PBVJU / FXMQ30PBVJU / FXMQ36PBVJU / FXMQ48PBVJU / FXMQ54PBVJU
6. Electric Characteristics

<table>
<thead>
<tr>
<th>Model</th>
<th>Power supply</th>
<th>[FM]</th>
<th>Input(W)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hz/Volts</td>
<td>Voltage range</td>
<td>MCA</td>
</tr>
<tr>
<td>FXMQ07PBVJU</td>
<td>0.6 15</td>
<td>0.090</td>
<td>0.5</td>
</tr>
<tr>
<td>FXMQ09PBVJU</td>
<td>0.6 15</td>
<td>0.090</td>
<td>0.5</td>
</tr>
<tr>
<td>FXMQ12PBVJU</td>
<td>1.4 15</td>
<td>0.140</td>
<td>1.1</td>
</tr>
<tr>
<td>FXMQ15PBVJU</td>
<td>1.5 15</td>
<td>0.350</td>
<td>1.2</td>
</tr>
<tr>
<td>FXMQ18PBVJU</td>
<td>60 208V/230V</td>
<td>Max, 253V</td>
<td>Min, 187V</td>
</tr>
<tr>
<td>FXMQ24PBVJU</td>
<td>1.8 15</td>
<td>0.350</td>
<td>1.4</td>
</tr>
<tr>
<td>FXMQ30PBVJU</td>
<td>2.8 15</td>
<td>0.350</td>
<td>2.2</td>
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<td>2.9 15</td>
<td>0.350</td>
<td>2.3</td>
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<td>FXMQ48PBVJU</td>
<td>3.4 15</td>
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<td>2.7</td>
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<tr>
<td>FXMQ54PBVJU</td>
<td>3.4 15</td>
<td>0.350</td>
<td>2.7</td>
</tr>
</tbody>
</table>

**Symbols:**  
MCA: Min. Circuit Amps (A)  
MOP: Max. Overcurrent Protective Device(A)  
KW: Fan Motor Rated Output(kW)  
FLA: Full Load Amps(A)  
[FM]: Indoor Fan Motor

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

C: 4D086914B
## 7. Safety Devices Setting

<table>
<thead>
<tr>
<th>Model</th>
<th>FXMQ07PBVJU</th>
<th>FXMQ09PBVJU</th>
<th>FXMQ12PBVJU</th>
<th>FXMQ15PBVJU</th>
<th>FXMQ18PBVJU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed circuit board fuse</td>
<td>250V 3.15A</td>
<td>250V 3.15A</td>
<td>250V 3.15A</td>
<td>250V 3.15A</td>
<td>250V 3.15A</td>
</tr>
<tr>
<td>Printed circuit board fuse (Fan driver)</td>
<td>250V 5A</td>
<td>250V 5A</td>
<td>250V 5A</td>
<td>250V 6.3A</td>
<td>250V 6.3A</td>
</tr>
<tr>
<td>Drain pump thermal fuse °F (°C)</td>
<td>293 (145)</td>
<td>293 (145)</td>
<td>293 (145)</td>
<td>293 (145)</td>
<td>293 (145)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>FXMQ24PBVJU</th>
<th>FXMQ30PBVJU</th>
<th>FXMQ36PBVJU</th>
<th>FXMQ48PBVJU</th>
<th>FXMQ54PBVJU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed circuit board fuse</td>
<td>250V 3.15A</td>
<td>250V 3.15A</td>
<td>250V 3.15A</td>
<td>250V 3.15A</td>
<td>250V 3.15A</td>
</tr>
<tr>
<td>Printed circuit board fuse (Fan driver)</td>
<td>250V 6.3A</td>
<td>250V 6.3A</td>
<td>250V 6.3A</td>
<td>250V 6.3A</td>
<td>250V 6.3A</td>
</tr>
<tr>
<td>Drain pump thermal fuse °F (°C)</td>
<td>293 (145)</td>
<td>293 (145)</td>
<td>293 (145)</td>
<td>293 (145)</td>
<td>293 (145)</td>
</tr>
</tbody>
</table>
### 8. Capacity Tables

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Indoor air temp. °FDB (Te: 43°F (6°C))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>TC</td>
</tr>
<tr>
<td></td>
<td>MBH</td>
</tr>
<tr>
<td>FXMQ07PBVJU</td>
<td>9.9</td>
</tr>
<tr>
<td>FXMQ09PBVJU</td>
<td>12.3</td>
</tr>
<tr>
<td>FXMQ12PBVJU</td>
<td>15.8</td>
</tr>
<tr>
<td>FXMQ15PBVJU</td>
<td>19.2</td>
</tr>
<tr>
<td>FXMQ18PBVJU</td>
<td>23.3</td>
</tr>
<tr>
<td>FXMQ24PBVJU</td>
<td>31.5</td>
</tr>
<tr>
<td>FXMQ30PBVJU</td>
<td>38.7</td>
</tr>
<tr>
<td>FXMQ36PBVJU</td>
<td>46.7</td>
</tr>
<tr>
<td>FXMQ48PBVJU</td>
<td>63.0</td>
</tr>
<tr>
<td>FXMQ54PBVJU</td>
<td>70.0</td>
</tr>
</tbody>
</table>

**Notes:**
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.

#### 8.2 Heating Capacity

<table>
<thead>
<tr>
<th>Model</th>
<th>Indoor air temp. °FDB (Te: 115°F (46°C))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>TC</td>
</tr>
<tr>
<td></td>
<td>MBH</td>
</tr>
<tr>
<td>FXMQ07PBVJU</td>
<td>9.9</td>
</tr>
<tr>
<td>FXMQ09PBVJU</td>
<td>12.3</td>
</tr>
<tr>
<td>FXMQ12PBVJU</td>
<td>15.8</td>
</tr>
<tr>
<td>FXMQ15PBVJU</td>
<td>19.2</td>
</tr>
<tr>
<td>FXMQ18PBVJU</td>
<td>23.3</td>
</tr>
<tr>
<td>FXMQ24PBVJU</td>
<td>31.5</td>
</tr>
<tr>
<td>FXMQ30PBVJU</td>
<td>38.7</td>
</tr>
<tr>
<td>FXMQ36PBVJU</td>
<td>46.7</td>
</tr>
<tr>
<td>FXMQ48PBVJU</td>
<td>63.0</td>
</tr>
<tr>
<td>FXMQ54PBVJU</td>
<td>70.0</td>
</tr>
</tbody>
</table>

**Notes:**
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.
8.3 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 your VRV system.

<table>
<thead>
<tr>
<th>Model</th>
<th>Indoor air temp. °F/WB (Te: 48°F (9°C))</th>
<th>61</th>
<th>64</th>
<th>67</th>
<th>70</th>
<th>72</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TC</td>
<td>SHF</td>
<td>TC</td>
<td>SHF</td>
<td>TC</td>
<td>SHF</td>
<td>TC</td>
</tr>
<tr>
<td>FXMQ07PBVJU</td>
<td>0.69</td>
<td>1.18</td>
<td>0.75</td>
<td>1.12</td>
<td>0.78</td>
<td>1.09</td>
<td>0.80</td>
</tr>
<tr>
<td>FXMQ09PBVJU</td>
<td>0.69</td>
<td>1.18</td>
<td>0.75</td>
<td>1.12</td>
<td>0.78</td>
<td>1.09</td>
<td>0.80</td>
</tr>
<tr>
<td>FXMQ12PBVJU</td>
<td>0.71</td>
<td>1.15</td>
<td>0.77</td>
<td>1.10</td>
<td>0.80</td>
<td>1.08</td>
<td>0.81</td>
</tr>
<tr>
<td>FXMQ15PBVJU</td>
<td>0.70</td>
<td>1.16</td>
<td>0.76</td>
<td>1.11</td>
<td>0.79</td>
<td>1.08</td>
<td>0.81</td>
</tr>
<tr>
<td>FXMQ18PBVJU</td>
<td>0.71</td>
<td>1.16</td>
<td>0.77</td>
<td>1.11</td>
<td>0.79</td>
<td>1.08</td>
<td>0.81</td>
</tr>
<tr>
<td>FXMQ24PBVJU</td>
<td>0.71</td>
<td>1.16</td>
<td>0.77</td>
<td>1.10</td>
<td>0.79</td>
<td>1.08</td>
<td>0.81</td>
</tr>
<tr>
<td>FXMQ30PBVJU</td>
<td>0.71</td>
<td>1.16</td>
<td>0.77</td>
<td>1.11</td>
<td>0.79</td>
<td>1.08</td>
<td>0.81</td>
</tr>
<tr>
<td>FXMQ36PBVJU</td>
<td>0.71</td>
<td>1.16</td>
<td>0.77</td>
<td>1.10</td>
<td>0.80</td>
<td>1.08</td>
<td>0.81</td>
</tr>
<tr>
<td>FXMQ48PBVJU</td>
<td>0.71</td>
<td>1.15</td>
<td>0.78</td>
<td>1.10</td>
<td>0.80</td>
<td>1.08</td>
<td>0.81</td>
</tr>
<tr>
<td>FXMQ54PBVJU</td>
<td>0.72</td>
<td>1.15</td>
<td>0.78</td>
<td>1.10</td>
<td>0.80</td>
<td>1.08</td>
<td>0.82</td>
</tr>
</tbody>
</table>

TC: Total capacity  
SHF: Sensible heat factor
9. Fan Performance

Notes:
1. As for this machine, setting is possible by 7 position or ESP.
2. Fan characteristic shows a fan characteristic at the time of the "maximum ESP" "rating ESP" "minimum ESP" as a representative.
3. Fan characteristic shows a fan characteristic of each ESP of air flow "HH".
4. Please choose ESP setting by using fan characteristic and fan characteristics by the resistance of a connected duct.
5. The remote controller can be used to change "HH" "M" and "L".
6. ESP - external static pressure
7. The value in this figure shows ESP in rating air flow.
Notes:
1. As for this machine, setting is possible by 7 position of ESP.
2. Fan characteristics (1) shows a fan characteristic at the time of the "maximum ESP" rating ESP "minimum ESP" as a representative.
3. Fan characteristics (2) (for field setting of remote controller) shows a fan characteristic of each ESP of field setting possible air flow "HH".
4. Please choose ESP setting by using Fan characteristics (1) and Fan characteristics (2) by the resistance of a connected duct.
5. The remote controller can be used to change "HH", "M" and "L".
6. ESP: external static pressure
7. The value in this figure shows ESP in rating air flow.
Fan characteristics

(For local setting of remote controller)

Notes:
1. As for this machine, setting is possible by 14 position of ESP.
2. Fan characteristics (a) shows a fan characteristic at the time of the "maximum ESP" and rating ESP, "minimum ESP" as a representative.
3. Fan characteristics (b) (for field setting of remote controller) shows a fan characteristic of each ESP of field setting possible air flow "HH".
4. Please choose ESP setting by using fan characteristics (a) and fan characteristics (b) by the resistance of a connected duct.
5. The remote controller can be used to change "HR", "H", and "L".
6. ESP: external static pressure
7. The value in this figure (a) shows ESP in rating air flow.
8. Please set the external static pressure of the suction duct at 0.6m, 0.4mg(150Pa) or less.
Fan characteristics ①

(For local setting of remote controller)

Notes:
1. As for the machine, setting is possible by 14 position of ESP.
2. Fan characteristics ① shows a fan characteristic at the time of the "maximum ESP", "rating ESP" and "minimum ESP" as a representative.
3. Fan characteristics ② (for field setting of remote controller) shows a fan characteristic of each ESP of field setting possible air flow "HF".
4. Please choose ESP setting by using fan characteristics ① and fan characteristics ② by the resistance of a connected duct.
5. The remote controller can be used to change "HF", "F" and "L".
6. ESP: external static pressure.
7. The value in this figure ② shows ESP in rating air flow.
8. Please set the external static pressure of the suction duct at 0.5 kPa (150 Pa) or less.
Fan characteristics

For local setting of remote controller

Notes:
1. As for this machine, setting is possible by 16 positions of ESP.
2. Fan characteristics shows a fan characteristic at the time of the "maximum ESP" rating ESP" "minimum ESP" as a representative.
3. Fan characteristics (for field setting of remote controller) shows a fan characteristic of each ESP of field setting possible air flow "HF".
4. Please choose ESP setting by using fan characteristics and fan characteristics by the resistance of a connected duct.
5. The remote controller can be used to change "HF" "H" and "L".
6. ESP: external static pressure
7. The value in this figure shows ESP in rating air flow,
8. Please set the external static pressure of the suction duct at 0.6bar, WG(150Pa) or less.
Fan characteristics for local setting of remote controller.

Notes:
1. As for this machine, setting is possible by 14 position of ESP.
2. Fan characteristics ① shows a fan characteristic at the time of the "minimum ESP" rating ESP "minimum ESP" as a representative.
3. Fan characteristics ② (for field setting of remote controller) shows a fan characteristic of each ESP of field setting possible air flow "HH".
4. Please choose ESP setting by using Fan characteristics ① and Fan characteristics ② by the resistance of a connected duct.
5. The remote controller can be used to change "HH" "H" and "L".
6. ESP: external static pressure
7. The value in this figure ① shows ESP in rating air flow.
8. Please set the external static pressure of the suction duct at 0, 6in, W.G(150Pa) or less.
Fan characteristics (1)

For local setting of remote controller

Range of available air flow rate: In [H]n

Notes:
1. As for this machine, setting is possible by 14 position of ESP.
2. Fan characteristics (1) shows a fan characteristic at the time of the "maximum ESP" rating ESP. "Minimum ESP" as a representative.
3. Fan characteristics (2) (for field setting of remote controller) shows a fan characteristic of each ESP of field setting possible air flow "HH".
4. Please choose ESP setting by using Fan characteristics (1) and Fan characteristics (2) by the resistance of a connected duct.
5. The remote controller can be used to charge "HH", "G", and "I".
6. ESP: external static pressure
7. The value in this figure (2) shows ESP in rating air flow.
8. Please set the external static pressure of the suction duct at 0, 601 (w, W, 150Pa) or less.
Fan Performance

**Notes:**

1. As for this machine, setting is possible by 10 position of ESP.
2. Fan characteristics ① shows a fan characteristic at the time of the "maximum ESP" (rating ESP) "minimum ESP" as a representative.
3. Fan characteristics ② (for field setting of remote controller) shows a fan characteristic of each ESP of field setting possible air flow "HM".
4. Please choose ESP setting by using fan characteristics ② and fan characteristics ① by the resistance of a connected duct.
5. The remote controller can be used to change "HM", "M", and "L".
6. ESP: external static pressure
7. The value in this figure shows ESP in rating air flow,
10. Airflow Auto Adjustment Characteristics

Notes:
1. This indoor unit has the "Automatic airflow rate adjustment" function, which automatically adjusts the airflow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform local setting “airflow auto adjustment” by remote controller.
3. About the local setting method of the "airflow auto adjustment", look at the installation manual which is attached to an indoor unit.
4. External static pressure that can adjust by "airflow auto adjustment" function is 0.2 in.WG(50Pa) - 0.4 in.WG(100Pa) (When air flow is HH).
5. If the unit is used beyond the range of the above-mentioned external static pressure, the airflow rate can not be well-adjusted automatically, and the unit will operate with the airflow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "HH", "H" and "L".
7. The remote controller can be used to change "HH", "H" and "L".
8. ESP: external static pressure.
Notes:
1. This indoor unit has the "Automatic air flow rate adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform local setting *airflow auto adjustment* by remote controller.
3. About the local setting method of the "airflow auto adjustment", look at the installation manual which is attached to an indoor unit.
4. External static pressure that can adjust by "airflow auto adjustment" function is 0.12in.WG(30Pa)~0.4in.WG(100Pa) (When air flow is HH).
5. If the unit is used beyond the range of the above-mentioned external static pressure, the air flow rate cannot be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "HH" "H" and "L".
7. The remote controller can be used to change "HH" "H" and "L".
8. ESP: external static pressure,
Notes:
1. This indoor unit has the "Automatic airflow rate adjustment" function, which automatically adjusts the airflow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform local setting "airflow auto adjustment" by remote controller.
3. About the local setting method of the "airflow auto adjustment", look at the installation manual which is attached to an indoor unit.
4. External static pressure that can adjust by "airflow auto adjustment" function is 0.2 in, WG(50Pa) - 0.8 in, WG(200Pa) (When airflow is HH).
5. If the unit is used beyond the range of the above-mentioned external static pressure, the airflow rate cannot be well-adjusted automatically, and the unit will operate with the airflow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "HH", "H" and "L".
7. The remote controller can be used to change "HH", "H" and "L".
8. ESP: external static pressure.
9. Please set the external static pressure of the suction duct at 0.6 in, WG(150Pa) or less.
Notes:
1. This indoor unit has the "Automatic air flow rate adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform local setting "airflow auto adjustment" by remote controller.
3. About the local setting method of the "airflow auto adjustment", look at the installation manual which is attached to an indoor unit.
4. External static pressure that can adjust by "airflow auto adjustment" function is 0.2 in.WG(50Pa) – 0.8 in.WG(200Pa) (When airflow is HH).
5. If the unit is used beyond the range of the above-mentioned external static pressure, the airflow rate cannot be well-adjusted automatically, and the unit will operate with the airflow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "HH", "H", and "L".
7. The remote controller can be used to change "HH", "H", and "L".
8. ESP: external static pressure.
9. Please set the external static pressure of the suction duct at 0.6 in.WG(150Pa) or less.
Notes:
1. This indoor unit has the "Automatic air flow rate adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform local setting "airflow auto adjustment" by remote controller.
3. About the local setting method of the "airflow auto adjustment", look at the installation manual which is attached to an indoor unit.
4. External static pressure that can adjust by "airflow auto adjustment" function is 0.2 in.WG(50Pa) - 0.8 in.WG(200Pa) (When air flow is HH).
5. If the unit is used beyond the range of the above-mentioned external static pressure, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "HH", "H" and "L".
7. The remote controller can be used to change "HH", "H" and "L".
8. ESP: external static pressure.
9. Please set the external static pressure of the suction duct at 0.6 in.WG(150Pa) or less.
Notes:
1. This indoor unit has the "Automatic air flow rate adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform local setting "airflow auto adjustment" by remote controller.
3. About the local setting method of the "airflow auto adjustment", look at the installation manual which is attached to an indoor unit.
4. External static pressure that can adjust by "airflow auto adjustment" function is 0.2 in. WG (50Pa) - 0.8 in. WG (200Pa) (When air flow is BH).
5. If the unit is used beyond the range of the above-mentioned external static pressure, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "HH", "H", and "L".
7. The remote controller can be used to change "HH", "H", and "L".
8. ESP: external static pressure.
9. Please set the external static pressure of the suction duct at 0.6 in. WG (150Pa) or less.
Notes:
1. This indoor unit has the "Automatic air flow rate adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform local setting "airflow auto adjustment" by remote controller.
3. About the local setting method of the "airflow auto adjustment", look at the installation manual which is attached to an indoor unit.
4. External static pressure that can adjust by "airflow auto adjustment" function is 0.2 in.WG(50Pa) ~ 0.8 in.WG(200Pa) (When air flow is HH).
5. If the unit is used beyond the range of the above-mentioned external static pressure, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "HH" "H" and "L".
7. The remote controller can be used to change "HH" "H" and "L".
8. ESP: external static pressure.
9. Please set the external static pressure of the suction duct at 0.6 in.WG(150Pa) or less.
Notes:
1. This indoor unit has the "Automatic air flow rate adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform local setting "airflow auto adjustment" by remote controller.
3. About the local setting method of the "airflow auto adjustment", look at the installation manual which is attached to an indoor unit.
4. External static pressure that can adjust by "airflow auto adjustment" function is 0.2 in. WG(50Pa) - 0.8 in. WG(200Pa) (When air flow is HH).
5. If the unit is used beyond the range of the above-mentioned external static pressure, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "HH", "H", and "L".
7. The remote controller can be used to change "HH", "H", and "L".
8. ESP : external static pressure.
9. Please set the external static pressure of the suction duct at 0.6 in. WG(150Pa) or less.
11. Sound Levels (Reference Data)

FXMQ07PBVJU / FXMQ09PBVJU

<table>
<thead>
<tr>
<th>SCALE</th>
<th>AIR FLOW RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>HH</td>
</tr>
<tr>
<td></td>
<td>33.0</td>
</tr>
</tbody>
</table>

(8, Q, N IS ALREADY RECTIFIED)

MEASURING PLACE
ANECHOIC CHAMBER

OVERALL (dB)

OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

COOLING
RETURN AIR TEMPERATURE: 85.0°F (29.4°C) 35.0°F (1.7°C) 10.0°F (10.0°C) 35.0°F (1.7°C) NO OUTDOOR TEMPERATURE: 55.0°F (12.8°C) 35.0°F (1.7°C) NO

HEATING
RETURN AIR TEMPERATURE: 100.0°F (37.8°C) 50.0°F (10.0°C) 25.0°F (−3.9°C) 50.0°F (10.0°C) NO OUTDOOR TEMPERATURE: 45.0°F (7.2°C) 50.0°F (10.0°C) NO

EXTERNAL STATIC PRESSURE 0.24 kgf(0.25kPa)

6.6ft (2m) 3.3ft (1m)

DISCHARGE DUCT DUCT SUCTION

MICROPHONE

NOTE: Operation noise differs with operation and ambient conditions.
OVER ALL (dB)

<table>
<thead>
<tr>
<th>SCALE</th>
<th>AIR FLOW RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>HH</td>
</tr>
<tr>
<td></td>
<td>39.0</td>
</tr>
</tbody>
</table>

(If G, N is already rectified)

MEASURING PLACE
ANECOIC CHAMBER

OPERATING CONDITIONS
POWER SOURCE 208/230V 60Hz
COOLING
RETURN AIR TEMPERATURE: 80. 9% (26.7°C) 36, 67, 9% (18.4°C) W
OUTDOOR TEMPERATURE: 55, 5% (13.5°C) 36, 75, 5% (22.9°C) W

HEATING
RETURN AIR TEMPERATURE: 70, 9% (21.1°C) 36, 68, 9% (15.6°C) W
OUTDOOR TEMPERATURE: 47, 9% (18.3°C) 36, 60, 9% (11.6°C) W

EXTERNAL STATIC PRESSURE 0.2 in. WC (50Pa)

6.6 ft (2m)    3.3 ft (1m)
DISCHARGE DUCT DUCT SUCTION

NOTE: Operation noise differs with operation and ambient conditions.
OVER ALL (dB)

SCALE
A  40.0  38.0  37.0

AIR FLOW RATE
HH  H  L

(B, Q, N IS ALREADY RECTIFIED)

MEASURING PLACE
ANECHOIC CHAMBER

OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

RETURN AIR TEMPERATURE: 80, 67, 67°F (26, 20, 20°C)
OUTDOOR TEMPERATURE: 90, 75, 67°F (32, 24, 20°C)

RETURN AIR TEMPERATURE: 70, 60, 50°F (21, 16, 10°C)
OUTDOOR TEMPERATURE: 47, 32, 20°F (8, 0, 4°C)

EXTERNAL STATIC PRESSURE 0.4 in, 100Pa

6.6 ft (2m) 3.3 ft (1m)

DISCHARGE DUCT DUCT SUCTION

MICROPHONE

NOTE: Operation noise differs with operation and ambient conditions.

4D067549B
OVER ALL (dB)

<table>
<thead>
<tr>
<th>SCALE</th>
<th>AIR FLOW RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HH</td>
</tr>
<tr>
<td>A</td>
<td>41.0</td>
</tr>
</tbody>
</table>

(B, G, N IS ALREADY RECTIFIED)

MEASURING PLACE
ANECHOIC CHAMBER

OPERATING CONDITIONS
POWER SOURCE 208/230V 60Hz

COOLING
RETURN AIR TEMPERATURE: 80, 97°C (176, 206°F) 36, 67, 97°C (97, 196°F) NO
OUTDOOR TEMPERATURE: 55, 7°C (131, 11°F) 36, 75, 9°C (91, 16°F) NO

HEATING
RETURN AIR TEMPERATURE: 70, 97°C (158, 206°F) 36, 69, 97°C (97, 196°F) NO
OUTDOOR TEMPERATURE: 47, 9°C (116, 11°F) 36, 49, 9°C (118, 1°F) NO

EXTERNAL STATIC PRESSURE 0.4 in, 100 Pa

NOTE: Operation noise differs with operation and ambient conditions.
Sound Levels (Reference Data)

OVER ALL (dB)

<table>
<thead>
<tr>
<th>SCALE</th>
<th>AIR FLOW RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HH</td>
</tr>
<tr>
<td>A</td>
<td>42.0</td>
</tr>
</tbody>
</table>

(Note: G, N is already rectified)

MEASURING PLACE

ANECHOIC CHAMBER

OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

COOLING
RETURN AIR TEMPERATURE: 80, 97°F (26.7, 31°C) 38, 67, 97°F (18, 4°C) W
OUTDOOR TEMPERATURE: 55, 77°F (13.3, 25°C) 30, 75, 97°F (22, 31°C) W

HEATING
RETURN AIR TEMPERATURE: 70, 97°F (21, 31°C) 38, 68, 97°F (15, 4°C) W
OUTDOOR TEMPERATURE: 45, 77°F (7.8, 25°C) 30, 68, 97°F (1, 4°C) W

EXTERNAL STATIC PRESSURE 0.4 in. W.G (100Pa)

4.6 ft (2m)  
3.3 ft (1m)

DISCHARGE DUCT DUCT SUCTION MICROPHONE

NOTE: Operation noise differs with operation and ambient conditions.

FXMQ-PBVJU
FXMQ30PBVJU / FXMQ36PBVJU

**OVER ALL (dB)**

<table>
<thead>
<tr>
<th>SCALE</th>
<th>AIR FLOW RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>HH</td>
</tr>
<tr>
<td></td>
<td>43.0</td>
</tr>
</tbody>
</table>

(8, Q, N IS ALREADY RECTIFIED)

**MEASURING PLACE**

ANECOIC CHAMBER

**OPERATING CONDITIONS**

- **POWER SOURCE**: 208/230V 60Hz
- **COOLING**
  - RETURN AIR TEMPERATURE: 80, 92°F(26.7°C) 80, 67, 55°F(18, 4°C) W
  - OUTDOOR TEMPERATURE: 95, 77°F(35, 3°C) 90, 75, 67°F(22, 9°C) W
- **HEATING**
  - RETURN AIR TEMPERATURE: 70, 69°F(21.1°C) 80, 69, 57°F(15, 6°C) W
  - OUTDOOR TEMPERATURE: 47, 54°F(8, 3°C) 38, 43, 39°F(1°C) W

**EXTERNAL STATIC PRESSURE**: 2, 4 in. (50mm)
- DISCHARGE DUCT
- DUCT SUCTION

NOTE: Operation noise differs with operation and ambient conditions.
OVER ALL (dB)

<table>
<thead>
<tr>
<th>SCALE</th>
<th>AIR FLOW RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>44.0 42.0 40.0</td>
</tr>
</tbody>
</table>

(B, G, N is already rectified)

MEASURING PLACE
ANECOIC CHAMBER

OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

COOLING
RETURN AIR TEMPERATURE: 80.9°F (27.2°C) 80.6°F (26.9°C) 80.3°F (26.2°C) 80.0°F (25.6°C)
OUTDOOR TEMPERATURE: 85.9°F (29.9°C) 80.6°F (26.9°C) 75.6°F (24.2°C) W8

HEATING
RETURN AIR TEMPERATURE: 70.9°F (21.6°C) 69.6°F (20.9°C) 68.3°F (20.0°C) 67.0°F (19.4°C) W8
OUTDOOR TEMPERATURE: 47.9°F (8.3°C) 60.0°F (15.6°C) 62.6°F (17.0°C) 65.2°F (18.4°C) W8

EXTERNAL STATIC PRESSURE 0.4 in. wg (100Pa)

6.6 ft (2m) 3.3 ft (1m)

DISCHARGE DUCT DUCT SUCTION

MICROPHONE

NOTE: Operation noise differs with operation and ambient conditions.
**OVER ALL (dB)**

<table>
<thead>
<tr>
<th>SCALE</th>
<th>AIR FLOW RATE</th>
<th>HH</th>
<th>H</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>46.0</td>
<td>45.0</td>
<td>43.0</td>
<td></td>
</tr>
</tbody>
</table>

\( R, Q, N \) IS ALREADY RECTIFIED

**MEASURING PLACE**

ANECHOIC CHAMBER

**OPERATING CONDITIONS.**

- **POWER SOURCE:** 208/232V 50Hz
- **COOLING**
  - RETURN AIR TEMPERATURE: 80, 79 (26, 72) °C 38, 67, 67 (13, 94) °C W3
  - OUTDOOR TEMPERATURE: 95, 77 (35, 72) °C 36, 75, 69 (22, 96) °C W3
- **HEATING**
  - RETURN AIR TEMPERATURE: 70, 69 (21, 68) °C 38, 66, 66 (15, 68) °C W3
  - OUTDOOR TEMPERATURE: 47, 57 (8, 35) °C 55, 63, 63 (12, 72) °C W3
- **EXTERNAL STATIC PRESSURE:** 0.4 in. Wg (100Pa)

**NOTE:** Operation noise differs with operation and ambient conditions.
12. Center of Gravity

<table>
<thead>
<tr>
<th>MODEL NAME</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>FXMQ07PBVJU</td>
<td>21-5/8</td>
<td>8-1/4</td>
</tr>
<tr>
<td></td>
<td>(550)</td>
<td>(210)</td>
</tr>
<tr>
<td>FXMQ12PBVJU</td>
<td>27-5/8</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(700)</td>
<td>(280)</td>
</tr>
<tr>
<td>FXMQ15PBVJU</td>
<td>39-3/8</td>
<td>18-1/8</td>
</tr>
<tr>
<td></td>
<td>(1000)</td>
<td>(460)</td>
</tr>
<tr>
<td>FXMQ30PBVJU</td>
<td>55-1/8</td>
<td>23-5/8</td>
</tr>
<tr>
<td></td>
<td>(1400)</td>
<td>(600)</td>
</tr>
</tbody>
</table>

Unit: in. (mm)
# 13. Accessories

## 13.1 Optional Accessories (For Controls)

<table>
<thead>
<tr>
<th>No.</th>
<th>Option</th>
<th>Note</th>
<th>FXMQ07PBVJU</th>
<th>FXMQ09PBVJU</th>
<th>FXMQ12PBVJU</th>
<th>FXMQ16PBVJU</th>
<th>FXMQ24PBVJU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Remote controller</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wireless</td>
<td>3</td>
<td>BRC4C82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wired</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Simplified</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Navigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Remote sensor (For wireless remote controller)</td>
<td>KRC4S01-4B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Unified ON/OFF controller</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-1</td>
<td>Electrical box</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Central remote controller</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-1</td>
<td>Electrical box</td>
<td></td>
<td></td>
<td></td>
<td>KJB212AA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Schedule timer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Intelligent Touch Manager</td>
<td></td>
<td></td>
<td></td>
<td>DCM601A71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>DIII-NET expander adaptor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Wiring adaptor printed circuit board</td>
<td></td>
<td></td>
<td></td>
<td>DTA109A51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>External control adaptor printed circuit board for outdoor unit</td>
<td>*KRP4A71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Group control adaptor printed circuit board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Fixing plate</td>
<td>4, 5</td>
<td>KRP4A96</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
1. Fixing plate (No.11) is necessary for each adaptor marked *.
2. Electrical box (No.3-1/4-1) is required for controller (No.3/4).
3. Only 2 speeds (HH, L) are available.
4. Up to 2 adaptor printed circuit boards can be installed in the fixing plate.
5. Only 1 fixing plate can be installed for each indoor unit.
14. Auxiliary Electric Heater Setting

Auxiliary electric heater ON/OFF temperature setting

- While in heating operation, the heater control (ON/OFF) is conducted as shown below;

```
ON                        Set temperature
                             <Toff: F˚>
                             <Ton: F˚>

OFF
```

- Perform field setting using the remote controller.

<table>
<thead>
<tr>
<th>Mode No.</th>
<th>FIRST CODE NO.</th>
<th>CODE</th>
<th>SECOND CODE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 (20)</td>
<td>7</td>
<td>&lt;Ton&gt;</td>
<td>-7.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;Toff&gt;</td>
<td>-3.6</td>
</tr>
</tbody>
</table>

* factory set
Appendix

1. Installation Manual ........................................................................................................1
1. Installation Manual

FXMQ07PBVJU / FXMQ09PBVJU / FXMQ12PBVJU / FXMQ15PBVJU / FXMQ18PBVJU / FXMQ24PBVJU / FXMQ30PBVJU / FXMQ36PBVJU / FXMQ48PBVJU / FXMQ54PBVJU

---

**CONTENTS**

1. SAFETY CONSIDERATIONS .............................................. 1
2. BEFORE INSTALLATION .................................................. 3
3. SELECTING INSTALLATION SITE ........................................ 4
4. PREPARATIONS BEFORE INSTALLATION ............................ 5
5. INDOOR UNIT INSTALLATION .......................................... 6
6. REFRIGERANT PIPING WORK .......................................... 7
7. DRAIN PIPING WORK ..................................................... 8
8. DUCT WORK ................................................................ 10
9. ELECTRIC WIRING WORK ............................................. 11
10. WIring EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER ................................. 11
11. FIELD SETTING .......................................................... 14
12. TEST OPERATION ........................................................ 16

---

**SAFETY CONSIDERATIONS**

Read these SAFETY CONSIDERATIONS for installation carefully before installing air conditioning equipment. After completing the installation, make sure that the unit operates properly during the startup operation.

Inform customers that they should store this Installation Manual with the Operation Manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leaks, leading to serious injury or death.

Improper installation may result in water or refrigerant leaks, which may result in death or serious injury.

Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.

CAUTION

Improper installation may result in water or refrigerant leaks, which may result in death or serious injury.

NOTE

Improper installation may result in water or refrigerant leaks, which may result in death or serious injury.

---

**WARNING**

Only qualified personnel must carry out the installation work. Improper installation may result in water leakage, electric shock, or fire.

- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.

- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shocks, fire, or the unit failing.

- Install the air conditioner on a foundation strong enough to withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.

- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.

- When wiring, position the wires so that the control box cover can be securely fastened. Improper positioning of the control box cover may result in electric shocks, fire, or the terminals overheating.

---

**DANGERS**

- Refrigerant gas is heavier than air and replaces oxygen.
- A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.

---

English 1

3PN14093-18K
• Before touching electrical parts, turn off the unit.
• This equipment can be installed with a Ground-Fault Circuit Interrupter (GFCI). Although this is a recognized measure for additional protection, with the grounding system in North America, a dedicated GFCI is not necessary.
• Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
• When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
• Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

— CAUTION —
• Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
• Do not allow children to play on or around the unit to prevent injury.
• Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
• Heat exchanger fins are sharp enough to cut. To avoid injury wear glove or cover the fins when working around them.
• Install drain piping to proper drainage. Improper drain piping may result in water leakage and property damage.
• Insulate piping to prevent condensation.
• Be careful when transporting the product.
• Do not turn off the power supply immediately after stopping operation. Always wait for at least 5 minutes before turning off the power supply. Otherwise, water leakage may occur.
• Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
• Refrigerant R410A in the system must be kept clean, dry, and tight.
  (a) Clean and Dry – Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
  (b) Tight – R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth’s protection against harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter Refrigerant Piping Work and follow the procedures.

— NOTE —
• Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
• The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
• Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
• Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
• Do not install the air conditioner in the following locations:
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
• Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the customer to keep the area around the unit clean.

• Install the power supply and transmission wires for the indoor and outdoor units at least 3.5 feet away from televisions or radios to prevent image interference or noise. Depending on the radio waves, a distance of 3.5 feet may not be sufficient to eliminate the noise.
• Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
• Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
  (a) If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
  (b) This air conditioner is an appliance that should not be accessible to the general public.
  (c) The wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.
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, the refrigerant piping, drain piping, flanges and other resin parts.
- Be sure to check the type of R410A refrigerant to be used before installing the unit. (Using an incorrect refrigerant will prevent normal operation of the unit.)
- The accessories needed for installation must be retained in your custody until the installation work is completed. Do not discard them!
- Decide upon a line of transport.
- Leave the unit inside its packaging while moving, until reaching the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, to avoid damage or scratches to the unit.
- When moving the unit or after opening, hold the unit by the hanger brackets (× 4). Do not apply force to the refrigerant piping, drain piping, flanges or plastic parts.
- For the installation of outdoor unit, refer to the installation manual attached to the outdoor unit.
- Do not install or operate the unit in rooms mentioned below.
  - Laden with mineral oil, or filled with oil vapor or spray like in kitchens. (Plastic parts may deteriorate which could eventually cause the unit to fall out of place, or could lead to leaks.)
  - Where corrosive gas like sulfurous gas exists. (Copper tubing and brazed spots may corrode which could eventually lead to refrigerant leaks.)
  - Where exposed to combustible gases and where volatile flammable gas like thinner or gasoline is used. (Gas in the vicinity of the unit could ignite.)
  - Where machines can generate electromagnetic waves. (Control system may malfunction.)
  - Where the air contains high levels of salt such as that near the ocean and where voltage fluctuates greatly such as that in factories.
  - Also in vehicles or vessels.

This unit, both indoor and outdoor, is suitable for installation in a commercial and light industrial environment. If installed as a household appliance it could cause electromagnetic interference.

2-1 PRECAUTIONS

- Be sure to read this manual before installing the indoor unit.
- Entrust installation to the place of purchase or a qualified serviceman. Improper installation could lead to leaks and, in worse cases, electric shock or fire.
- Use only parts provided with the unit or parts satisfying required specifications. Unspecified parts could cause the unit to fail out of place, or could lead to leaks and, in worse cases, electric shock or fire.
- Be sure to mount an air filter (part to be procured in the field) in the suction air passage in order to prevent water leaking, etc.

2-2 ACCESSORIES

Check that the following accessories are provided and that each accessory is correct in amount. Refer to the Fig. 1 of this page.

[PRECAUTION]
The accessories are required for the installation of the air conditioner. Be sure to keep them until the installation work is completed.

---

<table>
<thead>
<tr>
<th>Name</th>
<th>Metal clamp (1)</th>
<th>Drain hose (2)</th>
<th>Screws for duct flanges (3)</th>
<th>Insulation for fitting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>1 pc.</td>
<td>1 pc.</td>
<td>As described in table below</td>
<td>1 each</td>
</tr>
<tr>
<td>Shape</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(17 + 09 type)</td>
<td>(12 type)</td>
<td>(15 + 18 type)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>10</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>24</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>30 + 36 + 48</td>
<td>34 type</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Sealing pad</th>
<th>Clamp (8)</th>
<th>Washer fixing plate (9)</th>
<th>Wire sealing material (10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>–</td>
<td>11 pcs.</td>
<td>4 pcs.</td>
<td>2 pcs.</td>
</tr>
<tr>
<td>Shape</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 pc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Large (Dark gray) (6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 pcs.</td>
<td>Middle (Dark gray) (7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Small (Gray)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Washer (11)</th>
<th>Insulation tube (12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>8 pcs.</td>
<td>2 pcs.</td>
</tr>
<tr>
<td>Shape</td>
<td></td>
<td>(Other)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Operation manual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Installation manual</td>
</tr>
</tbody>
</table>

---

Thick
Thin
M6x5/8
Fig. 1
Name Metal clamp (1) Drain hose (2) Screws for duct flanges (3) Insulation for fitting
Quantity 1 pc. 1 pc. As described in table below 1 each
Shape 17 + 09 type 12 type 15 + 18 type 18
18 24 type 18
26
30 + 36 + 48 34 type 26
18
10
07 • 09 type 6
26
12 type
12 type
Thin
Thick
2-3 OPTIONAL ACCESSORIES
• There is one type of remote controller: wired.

NOTE
• If you wish to use a remote controller that is different from the above, select a suitable remote controller after consulting catalogs and technical materials.

FOR THE FOLLOWING ITEMS, TAKE SPECIAL CARE DURING CONSTRUCTION AND CHECK AFTER INSTALLATION IS FINISHED.

a. Items to be checked after completion of work

<table>
<thead>
<tr>
<th>Items to be checked</th>
<th>If not properly done, what is likely to occur.</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the indoor and outdoor units fixed firmly?</td>
<td>The units may drop, vibrate or make noise.</td>
<td></td>
</tr>
<tr>
<td>Was the installation of the outdoor unit completed?</td>
<td>The unit may malfunction or the components burn out.</td>
<td></td>
</tr>
<tr>
<td>Is the gas leak test finished?</td>
<td>No cooling or heating.</td>
<td></td>
</tr>
<tr>
<td>Is the unit fully insulated? (Refrigerant piping, drain piping, and duct)</td>
<td>Condensate water may drip.</td>
<td></td>
</tr>
<tr>
<td>Does the power supply voltage conform to the indication on the name plate?</td>
<td>The unit may malfunction or the components burn out.</td>
<td></td>
</tr>
<tr>
<td>Are wiring and piping correct?</td>
<td>The unit may malfunction or the components burn out.</td>
<td></td>
</tr>
<tr>
<td>Is the air conditioner properly grounded?</td>
<td>Dangerous in case of current leakage.</td>
<td></td>
</tr>
<tr>
<td>Is wiring size according to specifications?</td>
<td>The unit may malfunction or the components burn out.</td>
<td></td>
</tr>
<tr>
<td>Is something blocking the air outlet or inlet of either the indoor or outdoor units?</td>
<td>No cooling or heating.</td>
<td></td>
</tr>
<tr>
<td>Did you set the external static pressure?</td>
<td>No cooling or heating.</td>
<td></td>
</tr>
<tr>
<td>Are refrigerant piping length and additional refrigerant charge noted down?</td>
<td>The refrigerant charge in the system is not clear.</td>
<td></td>
</tr>
<tr>
<td>Did you check that no wiring connection screws were loose?</td>
<td>Electric shock or fire.</td>
<td></td>
</tr>
</tbody>
</table>

Also review the SAFETY CONSIDERATIONS.

b. Items to be checked at time of delivery

<table>
<thead>
<tr>
<th>Items to be checked</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you sure the control box cover, air filter, air inlet grille, and air outlet grille are mounted?</td>
<td></td>
</tr>
<tr>
<td>Did you explain about operations while showing the operation manual to your customer?</td>
<td></td>
</tr>
<tr>
<td>Did you deliver the operation manual along with the installation manual to the customer?</td>
<td></td>
</tr>
<tr>
<td>Did you explain the customer the handling and cleaning methods of the field supplies (e.g., the air filter, air inlet grilles, and air outlet grille)?</td>
<td></td>
</tr>
<tr>
<td>Did you deliver instruction manual, if any, for the field supplies to the customer?</td>
<td></td>
</tr>
</tbody>
</table>

c. Points for explanation about operations

The items with *WARNING* and *CAUTION* marks in the operation manual are the items pertaining to possibilities for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your customers to read the operation manual.

2-4 NOTE TO INSTALLER
• Be sure to instruct customers how to properly operate the unit (especially cleaning filters, operating different functions, and adjusting the temperature) by having them carry out operations themselves while looking at the manual.

3. SELECTING INSTALLATION SITE

(Encourage the hanging brackets in the case of moving the indoor and outdoor units at the time of and after opening the packages. Do not impose undue force on other parts, such as the refrigerant piping, drain piping, or flanges, in particular.)

(Add heat insulation material to the indoor unit if the temperature above the ceiling is likely to exceed 86°F (30°C) and a relative humidity of 80%.)

(Make sure that the insulation material is made of glass wool or polyethylene foam, has a minimum thickness of 3/8 in. (10 mm), and can be accommodated in the opening on the ceiling.)

1. Select an installation site where the following conditions are fulfilled and that meets with your customer's approval.
   • A place where cool (warm) air is delivered to the entire room.
   • Where nothing blocks the air passage.
   • Where condensate can be properly drained.
   • If supporting structural members are not strong enough to take the unit's weight, the unit could fall out of place and cause serious injury.
   • Where the false ceiling is not noticeably on an incline.
   • Where there is no risk of flammable gas leakage.
   • Where sufficient clearance for maintenance and service can be ensured. (Refer to Fig. 2-1)
   • Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual of the outdoor unit.)
CAUTION

- Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.3 ft (1 m) away from televisions or radios in order to prevent wave interference or noise. (Depending on the radio waves, a distance of 3.3 ft (1 m) may not be sufficient enough to eliminate the noise.)
- In the case of the installation of a wireless remote controller, the transmission distance of the wireless remote controller may be shortened if the room has a fluorescent light of electronic lighting type (i.e., an inverter or rapid-start fluorescent light). Keep the distance between the receiver and the fluorescent light as far as possible.

(2) Use hanging bolts to install the indoor unit. Check that the place of installation withstands the weight of the indoor unit. Secure the hanging bolts with proper beams if necessary.

4. PREPARATIONS BEFORE INSTALLATION

(1) Check the positional relationship between the ceiling opening hole and the hanging bolt of the unit.
- For the maintenance, inspection, and other servicing purposes of the control box and drain pump, prepare one of the following service spaces.
  1. Inspection hatch 1 (17-3/4 in. (450 mm) × 17-3/4 in. (450 mm)) for the control box and a minimum space of 12 in. (300 mm) for the lower part of the product. (Refer to Fig. 2-2)
  2. Inspection hatch 1 (17-3/4 in. (450 mm) × 17-3/4 in. (450 mm)) for the control box and inspection hatch 2 for the lower part of the product (see arrow view A-1).
  (Refer to Fig. 2-3)
  3. Inspection hatch 3 for the lower part of the product and the lower part of the control box (see arrow view A-2). (Refer to Fig. 2-3)

- Determine the H3 dimension by maintaining a downward slope of at least 1/100 as specified in 7. DRAIN PIPING WORK.
(2) Mount the canvas ducts to the air outlet and inlet so that the vibration of the air conditioner will not be transmitted to the duct or ceiling. Apply a sound-absorbing material (insulation material) to the inner wall of the duct and vibration insulation rubber to the hanging bolts (refer to 8. DUCT WORK).

(3) Open installation holes (if the ceiling already exists).
- Open the installation holes on the ceiling. Lay the refrigerant piping, drain piping, power line, transmission wiring, and remote controller wiring for the piping and wiring connection port of the unit.
- In the case of the installation of a wireless remote controller, refer to the installation manual provided with the wireless remote controller.
- Refer to 6. REFRIGERANT PIPING WORK, 7. DRAIN PIPING WORK, and 10. WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER.
- The ceiling framework may need reinforcement in order to keep the ceiling horizontal and prevent the vibration of the ceiling after the installation holes are opened. For details, consult your construction or interior contractor.

(4) Install the hanging bolts. Make sure that the hanging bolts are M10 in size.
- Use hole-in anchors if the hanging bolts already exist; otherwise use embedded inserts and embedded foundation bolts so that they can withstand the weight of the unit.
- Adjust the distance from the ceiling surface in advance.

5. INDOOR UNIT INSTALLATION

(1) Temporarily install the indoor unit.
- Connect the hanging brackets to the hanging bolts. Be sure to use and tighten the nut and washer (11) for each hanging bracket from both upper and lower sides of the hanging bracket. (Refer to Fig. 3) At that time, the fall of the washer (11) for the hanging bracket can be prevented if the washer fixing plate (9) is used.

![Fixing hanging brackets](image)

![Fixing method of washers](image)

**CAUTION**
- During the installation work, perform the curing of the air outlet and protect the resin drain pan of the indoor unit from the intrusion of foreign substances, such as welding spatters.
- Otherwise, water leakage may occur as a result of damage, such as hole damage, to the resin drain pan.

(2) Make adjustments so that the unit will be in the right position.
(3) Check the level of the unit.
(4) Remove the washer fixing plates for the falling prevention of the washers for the hanging brackets, tighten the nuts on the upper side, and securely fix the unit.

![Adjustments and fixing](image)
6. REFRIGERANT PIPING WORK

(As for the refrigerant piping of the outdoor unit, refer to the installation manual provided to the outdoor unit.)

(Perform heat insulation work on both gas piping and liquid piping, or otherwise water leakage may result.)

(Use the insulation material that withstands a temperature of 248°F (120°C).)

(Reinforce the insulation material for the refrigerant piping if the ambient temperature is high, or otherwise dew condensation may result on the surface of the insulation material.)

(Make sure that the refrigerant is R410A before refrigerant piping work. If the refrigerant is different, the air conditioner will not operate normally.)

CAUTION

This product uses new refrigerant (R410A) only. Be sure to keep the following items and conduct the installation work.

• Use a dedicated pipe cutter and flare tool for R410A.
• When connecting the flare, apply ether oil or ester oil only to inner side of the flare.
• Be sure to use the flare nut provided with the unit. (Do not use a different flare nut (such as a type-1 flare nut), or otherwise refrigerant leakage may result.)
• Perform the curing of the piping with pinching or taping of the piping in order to prevent the intrusion of dirt, dust, and moisture into the piping.

CAUTION

• Do not excessively tighten the flare nut. Doing so will break the flare nut and refrigerant leakage may result.

• Make sure that all parts around the flare are free of oil. The drain pan and the resin part may be deteriorated in the presence of oil.

• If no torque wrenches are available, refer to Table 2 as a standard. When the flare nut is tightened with the spanner, the tightening torque should increase suddenly. Tighten the flare nut further for the corresponding angle shown in Table 2.

(1) Connect the piping.

• The outdoor unit is filled with refrigerant.
• When connecting or disconnecting piping to or from the unit, be sure to use a spanner and a torque wrench. (Refer to Fig. 4)

---

Table 1

<table>
<thead>
<tr>
<th>Piping size [in. (mm)]</th>
<th>Tightening torque [lbf·ft. (N·m)]</th>
<th>Dimension for processing flare [in. (mm)]</th>
<th>Flare shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>10.4 – 12.7 (15.7±1.5)</td>
<td>0.342 – 0.358 (8.9±0.2)</td>
<td>R0.016-0.031</td>
</tr>
<tr>
<td>3/8</td>
<td>24.1 – 29.4 (36.3±3.6)</td>
<td>0.504 – 0.520 (13.0±0.2)</td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td>36.5 – 44.5 (54.9±5.4)</td>
<td>0.638 – 0.654 (16.4±0.2)</td>
<td></td>
</tr>
<tr>
<td>5/8</td>
<td>45.6 – 55.6 (68.6±6.8)</td>
<td>0.760 – 0.776 (19.5±0.2)</td>
<td></td>
</tr>
</tbody>
</table>

---

(Refer to Table 1 for the processing dimensions of the flare.
• Use the flare nut provided with the unit.
• Apply ether oil or ester oil only to inner side of the flare and screw in the flare nut three to four turns first by hand at the time of connecting the flare nut. (Refer to Fig. 5)

Apply ether oil or ester oil only to inner side of flare.

---

English 7
(2) On completion of installation work, **check that there is no gas leakage**.

(3) Refer to the following illustration and be sure to perform heat insulation work on the piping joints after gas leakage checks. **(Refer to Fig. 6)**

- Use the insulation for fitting (4) and (5) provided to the liquid piping and gas piping, respectively, and conduct heat insulation work. (Tighten both edges of the insulation for fitting (4) and (5) for each joint with the clamp (8)).
- Make sure that the joint of the insulation for fitting (4) and (5) for the joint on the liquid piping and gas piping side faces upward.

**CAUTION**
- Be sure to perform the heat insulation of the local piping up to the piping joint. If the piping is exposed, dew condensation may result. Furthermore, a burn may be caused if a human body comes in contact with the piping.

- Wrap the middle sealing material (7) around the insulation for fitting (4) and (5) for the joint (flare nut part).

**NOTE**
1. At the time of brazing, set the pressure of nitrogen to approximately 2.9 PSI (0.02 MPa) (close to the pressure of a breeze coming in contact with the cheek) with a pressure reducing valve.
2. Do not use flux at the time of brazing and connecting the refrigerant piping. Use a copper phosphorus brazing alloy (BCuP-2/BCu 93P-710/795), which does not require flux, for brazing. (Flux has a bad influence on the refrigerant piping. Chlorine-based flux will cause piping corrosion. Furthermore, if it contains fluorine, the flux will deteriorate refrigerant oil.)
- As for the branching of the refrigerant piping or refrigerant, refer to the installation manual provided with the outdoor unit.

7. **DRAIN PIPING WORK**

(1) Conduct drain piping work. **Check that the piping ensures proper draining.**

- Make sure that the diameter of the piping excluding the rising part is the same as or larger than the diameter of the connecting pipe (vinyl chloride pipe with an outer diameter of 1-1/4 in. (32 mm) and a nominal inner diameter of 31/32 in. (25 mm)).
- Make sure that the piping is short enough with a downward slope of at least 1/100 and that there is no air bank formed. No drain trap is required.
**CAUTION**

- The drain piping will be clogged with water and water leakage may result if the water is accumulated in the drain piping.

- Conduct drain-up piping work if the gradient is insufficient.
- Attach a support bracket at 3.3 to 4.9 ft (1 to 1.5 m) intervals for the prevention of piping deflection.
- Be sure to use the drain hose (2) and metal clamp (1). Insert the drain hose (2) deep into the base of the drain socket, and securely fasten the metal clamp (1) within the taped part on the insertion front end of the hose. Be sure to fasten the screw of the metal clamp (1) until the margin of the screw thread decreases to 3/16 in. (4 mm) or less.

**NOTE**

Be sure to follow the instructions as below.
- Do not connect the drain piping directly to a sewer that smells of ammonia. The ammonia in the sewer may reach through the drain piping and corrode the heat exchanger of the indoor unit.
- Do not bend or twist the provided drain hose (2) in order not to impose excessive force on the hose. (Doing so may result in water leakage.)
- Take the procedure shown in the following illustration to perform concentrated drain piping.
- The Socket for maintenance can be used for natural drainage as shown below. As the drain pump operation does not need for natural drainage, it can be disable by field setting to reduce power consumption. (Refer to Table 6)

**CAUTION**

- Select the diameter of the concentrated drain piping to suit the capacity of equipment connecting to the concentrated drain piping.

(2) Check the smooth draining of the piping on completion of the installation of the piping.

**[Before electrical work]**

**CAUTION**

- A licensed electrical engineering technician must conduct electrical wiring work (including grounding work).
- If no licensed electrical engineering technician is available, take steps 3 and 4 after the test operation of the air conditioner is finished.

1. Remove the control box cover, and connect the single-phase electric wires to terminals L1 and L2 of the terminal block and the ground wiring to the ground terminal.

Perform wiring according to 10-1. CONNECTING POWER SUPPLY, GROUND, REMOTE CONTROLLER, AND TRANSMISSION WIRING in 10. WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER.
2. Check that the control box cover is closed before turning the air conditioner ON.

3. Provide approximately 61 in³ (1L) of water gradually into the drain pan through the water inlet on the bottom of the drain socket or the outlet. Make sure that the water is not spilled onto the drain pump.

4. The drain pump will operate with the power turned ON. Check that the pump drains water smoothly. (The drain pump will stop automatically in 10 minutes.) The drainage can be checked with the water level change in the drain pan through the water inlet.

8. DUCT WORK

Pay the utmost attention to the following items and conduct the ductwork.

- Check that the duct will not be in excess of the setting range of external static pressure for the unit. (Refer to the technical datasheet for the setting range. Each model has each setting range of external static pressure.)
- Attach a canvas duct each to the air outlet and air inlet so that the vibration of the equipment will not be transmitted to the duct or ceiling.
- Use a sound-absorbing material (insulation material) for the lining of the duct and apply vibration insulation rubber to the hanging bolts.
- At the time of duct welding, perform the curing of the duct so that the sputter will not come in contact with the drain pan for the filter.
- If the metal duct pass through a metal lath, wire lath, or metal plate of a wooden structure, separate the duct and wall electrically.
- Be sure to heat insulate the duct for the prevention of dew condensation. (Material: Glass wool or styrene foam; Thickness: 31/32 in. (25 mm))
- Be sure to attach the field supply air filter to the air inlet of the unit or field supply inlet in the air passage on the air suction side. (Be sure to select an air filter with a duct collection efficiency of 50 weight percent.)
- Explain the operation and washing methods of the locally procured components (i.e., the air filter, air inlet grille, and air outlet grille) to the customer.
- Locate the air outlet grille on the indoor side for the prevention of drafts in a position where indirect contact with people.
- The air conditioner incorporates a function to adjust the fan to rated speed automatically. (11. FIELD SETTING) Therefore, do not use booster fans midway in the duct.

Connection method of ducts on air inlet and outlet sides.
- Connect the field supply duct in alignment with the inner side of the flange.
- Connect the flange and unit with the flange connection screw (3).
- Wrap aluminum tape around the flange and duct joint in order to prevent air leakage.

3/16 in. (4 mm) max.
Connect the flange and unit with the flange connection screw (3) regardless of whether the duct is connected to the air inlet side.

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.
• For electric wiring work, refer to WIRING DIAGRAM attached to the control box cover.
• For remote controller wiring details, refer to the installation manual attached to the remote controller.
• All wiring must be performed by an authorized electrician.
• 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.
• A ground fault circuit interrupter capable of shutting down power supply to the entire system must be installed.
• Refer to the installation manual attached to the outdoor unit for the size of power supply wiring connected to the outdoor unit, the capacity of the ground fault circuit interrupter and switch, and wiring instructions.
• Be sure to ground the air conditioner.
• Do not connect the ground wiring to gas and water pipes, lightning rods, or telephone ground wires.
  - Gas pipes: might cause explosions or fire if gas leaks.
  - Water pipes: no grounding effect if hard vinyl piping is used.
  - Telephone ground wires or lightning rods: might cause abnormally high electric potential in the ground during lighting storms.

9-2 ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Model</th>
<th>Power supply wiring</th>
<th>Fan motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Frequency</td>
<td>Voltage</td>
</tr>
<tr>
<td>FXMQ07PBVJU</td>
<td>60 208V/230V</td>
<td>Max. 253V Min. 187V</td>
</tr>
<tr>
<td>FXMQ09PBVJU</td>
<td>1.4</td>
<td>15</td>
</tr>
<tr>
<td>FXMQ12PBVJU</td>
<td>1.5</td>
<td>15</td>
</tr>
<tr>
<td>FXMQ15PBVJU</td>
<td>1.6</td>
<td>15</td>
</tr>
<tr>
<td>FXMQ18PBVJU</td>
<td>1.8</td>
<td>15</td>
</tr>
<tr>
<td>FXMQ24PBVJU</td>
<td>2.3</td>
<td>15</td>
</tr>
<tr>
<td>FXMQ30PBVJU</td>
<td>2.9</td>
<td>15</td>
</tr>
<tr>
<td>FXMQ36PBVJU</td>
<td>3.4</td>
<td>15</td>
</tr>
<tr>
<td>FXMQ48PBVJU</td>
<td>3.4</td>
<td>15</td>
</tr>
<tr>
<td>FXMQ54PBVJU</td>
<td>3.4</td>
<td>15</td>
</tr>
</tbody>
</table>

MCA: Minimum Circuit Ampacity (A)
MOP: Maximum Overcurrent Protective Device (A)
Kw: Fan Motor Rated Output (kW)
FLA: Full Load Ampacity (A)

9-3 SPECIFICATIONS FOR FIELD SUPPLIED FUSES AND WIRE

<table>
<thead>
<tr>
<th>Model</th>
<th>Power supply wiring</th>
<th>Field fuses</th>
<th>Size</th>
<th>Wire</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FXMQ07PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>FXMQ09PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>FXMQ12PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>FXMQ15PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>FXMQ18PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>FXMQ24PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>FXMQ30PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>FXMQ36PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>FXMQ48PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>FXMQ54PBVJU</td>
<td>15A</td>
<td>Wiring size</td>
<td>Size</td>
<td>Wire</td>
<td>Size</td>
</tr>
<tr>
<td>NOTE 1</td>
<td>Shows only in case of protected pipes. Use H07RN-F in case of no protection.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE 2</td>
<td>2. Vinyl cord with sheath or cable (Insulated thickness : 1/16 in. (1 mm) or more)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. WIRING EXAMPLE AND HOW TO SET THE REMOTE CONTROLLER

10-1 CONNECTING POWER SUPPLY, GROUND, REMOTE CONTROLLER, AND TRANSMISSION WIRING
(Remove the control box cover as shown below and connect each wire.)

(1) Remove the control box cover.
(2) Lay the wires in the control box through the wire inlet on the side of the control box.

![Diagram of control box with wiring connections]

- **CAUTION**
- Do not lay the remote controller wiring or transmission wiring along with the power supply wiring or other electric wiring in the same route. Separate the remote controller wiring and transmission wiring at least 2 in. (50 mm) from the power supply wiring or other electric wiring, or otherwise malfunctions or failures may be caused by external electric noise that may interfere with the remote controller wiring and transmission wiring.
- For the installation and wiring of the remote controller, refer to the remote controller installation manual provided with the remote controller.
- Be sure to connect the remote controller wiring and transmission wiring correctly to the right terminal block.

(3) Follow the instructions below, and lay the wires in the control box.

![Diagram showing wire routing and connections]

- **WARNING**
- Trim and lay the wiring neatly and attach the control box cover securely. An electric shock or fire may result if the control box cover catches any wiring or the wires push up the cover.

Routing power supply wiring and transmission wiring
Let the power supply wiring with a conduit pass through one of the holes on the side cover, and let the transmission wiring with a conduit pass through another hole.

- For protection from uninsulated live parts, thread the power supply wiring or the transmission wiring through the included insulation tube and secure it with the included clamp.

When use the insulation tube
- Cut off the insulation tube as needed length.

PROHIBITED
- Never connect the power supply wiring.
- Remote controller wiring (No polarity)
- If stranded wires are used, do not solder the front end of the wires.

**Connection method of power supply terminals (X1M)**

> Twist and fix the upper part so that the wires will not drop out.
> Fix the cord with the clamp (8) to the wire fixing bracket provided to the control box.

**Connection method of remote controller terminals (X2M)**

- If stranded wires are used, do not solder the front end of the wires.

**Insulation tube (accessory (12))**
**Clamp (accessory (8))**
**Power supply wiring or Transmission wiring**

(3 in. (75 mm))

Cut off
(4) Put the control box cover, and wrap the wire sealing material (Small) (10) around the conduit so as to block the wire through holes.

**CAUTION**

- After all the wiring connections are done, fill in any gaps in the through holes with putty or insulation (procured locally) to prevent small animals and insects from entering the unit from outside. (If any do get in, they could cause short circuits in the control box.)

[Precautions for Power Supply Wiring]

- Connect round crimp-style terminals provided with insulation sleeves to the terminal block for power supply.

Be sure to follow the instructions provided below if the specified terminals cannot be used. Otherwise, abnormal heat may be generated as a result of the loosening of the wires.

- If stranded wires are used, do not solder the front end of the wires.
- Connect proper wires securely and fix the wires so that external force will not be imposed on the terminals.
- Use an appropriate screwdriver to tighten the terminal screws. The screw heads may be damaged if the screwdriver is too small and the terminal screws will not be tightened properly.
- Do not tighten the terminal screws excessively, or otherwise the screw heads may be damaged.
- Refer to the table below for the required tightening torque values of the terminal screws.

<table>
<thead>
<tr>
<th></th>
<th>Tightening torque [lb ft. (N-m)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal block for remote controller and transmission wires</td>
<td>0.58 - 0.72 (0.80 - 0.96)</td>
</tr>
<tr>
<td>Terminal block for power supply Ground wiring</td>
<td>0.87 - 1.06 (1.18 - 1.44)</td>
</tr>
</tbody>
</table>

**10-2 WIRING EXAMPLE**

No. 1 system: When using 1 remote controller for 1 indoor unit

No. 2 system: For group control or use with 2 remote controllers

**Note:** There is not need to set the indoor unit address when using group control. (It is automatically set when the power is turned on.)
[ PRECAUTIONS ]

1. Do not ground the equipment on gas pipes, water pipes or lightning rods, or crossground with telephones. Improper grounding could result in electric shock.

2. The remote controller wiring (P1 and P2) and transmission wiring (F1 and F2) have no polarity.

NOTE

This equipment can be installed with a Ground-Fault Circuit Interrupter (GFCI). Although this is a recognized measure for additional protection, with the grounding system in North America, a dedicated GFCI is not necessary.

10-3 COMPUTERISED CONTROL (FORCED OFF AND ON/OFF OPERATION)

(1) Wire specifications and how to perform wiring
   - Connect the external input to terminals T1 and T2 of the terminal block for remote controller.

(2) Actuation
   - The following table explains FORCED OFF and ON/OFF OPERATIONS in response to Input A.

<table>
<thead>
<tr>
<th>FORCED OFF</th>
<th>ON/OFF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input ON stops operation (impossible by remote controllers.)</td>
<td>Input OFF → ON turns ON unit.</td>
</tr>
<tr>
<td>Input OFF enables control by remote controller.</td>
<td>Input ON → OFF turns OFF unit.</td>
</tr>
</tbody>
</table>

(3) How to select FORCED OFF and ON/OFF OPERATION
   - Turn the power on and then use the remote controller to select operation.

10-4 CENTRALIZED CONTROL

- For centralized control, it is necessary to designate the group No. For details, refer to the manual of each optional controllers for centralized control. (Refer to 11. FIELD SETTING)

11. FIELD SETTING

CAUTION

When performing field setting or test run without attaching the decoration panel, do not touch the drain pump. This may cause electric shock.

- Check that the outdoor unit has been wired properly.

1. Make sure the control box cover is closed on the indoor and outdoor units.

2. Field settings must be made from the remote controller and in accordance with installation conditions.
   - Settings can be made by changing the "Mode No.", "FIRST CODE NO." and "SECOND CODE NO.".
   - The "Field Settings" included with the remote control lists the order of the settings and method of operation. Setting is made in all units in a group. To set for individual indoor units or to check the setting, use the mode No. (with "2" in upper digit) in parentheses ( ).

(Refer to 11. FIELD SETTING)

With Wireless Remote Controller Used

Set the wireless remote controller address before using the wireless remote controller.

For the setting method of the address, refer to the operation manual provided with the wireless remote controller.

NOTE

- A MODE NO. is set on a group basis. To make a mode setting on a room unit basis or check the setting made, however, set the corresponding mode number in the parentheses.

1. Settings for Optional Accessories
   - In the case of connecting optional accessories, refer to the operation manuals provided with the optional accessories and make necessary settings.

2. External Static Pressure Settings
   - Make settings in either method (a) or method (b) as explained below.
   - (a) Use the airflow auto adjustment function to make settings. Airflow auto adjustment: The volume of blow-off air is automatically adjusted to the rated quantity.

Wire specification

- Sheathed vinyl cord or cable (2-wire)
- AWG18-16
- Max. 328 ft. (100 mm)
- Contact that can ensure the minimum applicable cable load of 15 V DC, 1 mA.
(1) Check that power supply wiring to the air conditioner is completed along with duct installation. If a closing damper is installed in the air-conditioning system, make sure that the closing damper is opened. Furthermore, check that the air filter as a field supply is attached to the air passage on the suction side.

(2) If there are a number of air outlets and inlets, adjust the throttles so that the airflow rate of each air outlet and inlet will coincide with the designed airflow rate. Furthermore, check that the air filter as a field supply is attached to the air passage on the suction side.

(3) Make settings for airflow automatic adjustment. After setting the air conditioner to FAN operation mode, the air conditioner will finish airflow adjustment automatically. Do not adjust the throttles of the air outlets or inlets during automatic adjustment of the air conditioner. After the air conditioner runs approximately one to eight minutes, the air conditioner will come to a stop.

(b) Select External Static Pressure with Remote Controller

Check that 01 (OFF) is set for the SECOND CODE NO. in MODE NO. 21 for airflow adjustment on an indoor unit basis in Table 3. The SECOND CODE NO. is set to 02 (an external static pressure of 0.20 inWG (50 Pa)) at factory set. The SECOND CODE NO. is set to 02 (an external static pressure of 0.20 inWG (50 Pa)) at factory set. The SECOND CODE NO. cannot be set to 0.12 inWG (30 Pa) or 0.60-0.80 inWG (150-200 Pa).

Table 4

<table>
<thead>
<tr>
<th>External Static Pressure</th>
<th>MODE NO.</th>
<th>FIRST CODE NO.</th>
<th>SECOND CODE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.12 inWG (30 Pa) (*)</td>
<td>13 (23)</td>
<td>01</td>
<td></td>
</tr>
<tr>
<td>0.20 inWG (50 Pa)</td>
<td>02</td>
<td>02</td>
<td>01</td>
</tr>
<tr>
<td>0.24 inWG (60 Pa)</td>
<td>03</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>0.28 inWG (70 Pa)</td>
<td>04</td>
<td>02</td>
<td>03</td>
</tr>
<tr>
<td>0.32 inWG (80 Pa)</td>
<td>05</td>
<td>02</td>
<td>04</td>
</tr>
<tr>
<td>0.36 inWG (90 Pa)</td>
<td>06</td>
<td>02</td>
<td>05</td>
</tr>
<tr>
<td>0.40 inWG (100 Pa)</td>
<td>07</td>
<td>02</td>
<td>06</td>
</tr>
<tr>
<td>0.44 inWG (110 Pa) (*)</td>
<td>08</td>
<td>02</td>
<td>07</td>
</tr>
<tr>
<td>0.48 inWG (120 Pa) (*)</td>
<td>09</td>
<td>02</td>
<td>08</td>
</tr>
<tr>
<td>0.52 inWG (130 Pa) (*)</td>
<td>10</td>
<td>02</td>
<td>09</td>
</tr>
<tr>
<td>0.56 inWG (140 Pa) (*)</td>
<td>11</td>
<td>02</td>
<td>10</td>
</tr>
<tr>
<td>0.60 inWG (150 Pa) (*)</td>
<td>12</td>
<td>02</td>
<td>11</td>
</tr>
<tr>
<td>0.64 inWG (160 Pa) (*)</td>
<td>13</td>
<td>02</td>
<td>12</td>
</tr>
<tr>
<td>0.72 inWG (180 Pa) (*)</td>
<td>14</td>
<td>02</td>
<td>13</td>
</tr>
<tr>
<td>0.80 inWG (200 Pa) (*)</td>
<td>15</td>
<td>02</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 3

<table>
<thead>
<tr>
<th>MODE NO.</th>
<th>FIRST CODE NO.</th>
<th>SECOND CODE NO.</th>
<th>Setting contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 (21)</td>
<td>7</td>
<td>01</td>
<td>Airflow adjustment</td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>03</td>
<td>Completion of airflow adjustment</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td></td>
<td>Start of airflow adjustment</td>
</tr>
</tbody>
</table>

(4) After the air conditioner stops operating, check with MODE NO. 21 on an indoor unit basis that 02 is set for the SECOND CODE NO. in Table 3. If the air conditioner stops operating automatically or the SECOND CODE NO. is not 02, repeat steps from (3). If the outdoor unit is not turned ON, U4 or UH as explained in Table 9 will be displayed. This display is not problematic, because this function is set for the indoor unit. Continue setting the function. After setting this function, be sure to turn ON the outdoor unit before the test operation of the outdoor unit. If any other error is displayed, refer to Table 9 and the operation manual provided with the outdoor unit and check the defective point.

CAUTION
- If there is any change after airflow adjustment in the ventilation paths (e.g., the duct and air outlet), be sure to make airflow auto adjustment again.
- Consult your Daikin representative if there is any change in the ventilation paths (e.g., the duct and air outlet) after the test operation of the outdoor unit is finished or the air conditioner is moved to another place.

3. Filter Sign Settings
- The remote controller is provided with an LCD that tells the time of air filter cleaning.
- If the air conditioner is used in places with excessive dust, change the SECOND CODE NO. as shown in Table 5. The SECOND CODE NO. is set to 01 (standard) at factory set.
Select No display under conditions in which the cleaning display is not required, such as the time of regular maintenance.

4. Drain Pump Operation Settings

- The drain pump operation can be disabled for natural drainage by changing the following field setting.

5. Computerized Control Settings

(FORCED OFF and ON/OFF OPERATION)

- Change the setting position number by referring to the table below in the case of computerized control.

12. TEST OPERATION

Refer to the installation manual of the outdoor unit.

- The operation lamp of the remote controller will flash when a malfunction occurs. Check the malfunction code on the liquid crystal display to identify the point of trouble. An explanation of malfunction codes and the corresponding trouble provided in the malfunction code list in the installation manual attached to the outdoor unit.

If any of the items in Table 9 are displayed, there may be a problem with the wiring or power, so check the wiring again.

### Table 5

<table>
<thead>
<tr>
<th>Dirt</th>
<th>Time for display</th>
<th>MODE NO.</th>
<th>FIRST CODE NO.</th>
<th>SECOND CODE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Approximately 2500 hours</td>
<td>10 (20)</td>
<td>0</td>
<td>01</td>
</tr>
<tr>
<td>Excessive dust</td>
<td>Approximately 1250 hours</td>
<td></td>
<td>0</td>
<td>02</td>
</tr>
<tr>
<td>No display (*)</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Select No display under conditions in which the cleaning display is not required, such as the time of regular maintenance.

### Table 6

<table>
<thead>
<tr>
<th>Drain Pump Operation</th>
<th>MODE NO.</th>
<th>FIRST CODE NO.</th>
<th>SECOND CODE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>15 (25)</td>
<td>0</td>
<td>02</td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td></td>
<td>03</td>
</tr>
</tbody>
</table>

### Table 7

<table>
<thead>
<tr>
<th>COMPUTERIZED CONTROL</th>
<th>MODE NO.</th>
<th>FIRST CODE NO.</th>
<th>SECOND CODE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORCED OFF OPERATION</td>
<td>12 (22)</td>
<td>1</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02</td>
</tr>
</tbody>
</table>

### Table 9

<table>
<thead>
<tr>
<th>Remote control display</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>A8 lit</td>
<td>Error in power supply voltage to indoor unit.</td>
</tr>
<tr>
<td>C1 lit</td>
<td>Fan driver printed circuit board of indoor unit &lt;&gt; indoor control printed circuit board transmission error.</td>
</tr>
<tr>
<td>C6 lit</td>
<td>Improper combination of fan driver printed circuit board of indoor unit or setting failure in control printed circuit board type.</td>
</tr>
<tr>
<td>U3 lit</td>
<td>Test operation of outdoor unit has not been finished.</td>
</tr>
</tbody>
</table>

Remote control display

- There is a short circuit at the FORCED OFF terminals (T1, T2)
- 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.
- 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.

CAUTION

If interior finish work is continuing on completion of the test operation of the air conditioner, explain to the customer not to operate the air conditioner until the interior finish work is completed for the protection of the air conditioner.

Otherwise, substances that will be generated from interior finish work materials, such as paint and adhesive agents, may contaminate the air conditioner.

NOTE

Performance of this unit is based on the following airflow rate.

<table>
<thead>
<tr>
<th>Model name</th>
<th>07 type</th>
<th>09 type</th>
<th>12 type</th>
<th>15 type</th>
<th>18 type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airflow rate [CFM (m³/min)]</td>
<td>317 (9.0)</td>
<td>317 (9.0)</td>
<td>450 (12.7)</td>
<td>560 (15.8)</td>
<td>635 (18.0)</td>
</tr>
<tr>
<td>24 type</td>
<td>36 type</td>
<td>48 type</td>
<td>54 type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airflow rate [CFM (m³/min)]</td>
<td>688 (19.5)</td>
<td>1094 (31.0)</td>
<td>1130 (32.0)</td>
<td>1377 (39.0)</td>
<td>1624 (46.0)</td>
</tr>
</tbody>
</table>
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 enquiries, 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.