

Job Name:

Schedule Reference:

Date:

### OUTDOOR VRF SYSTEM FEATURES

- Single-phase outdoor unit with variable refrigerant flow (VRF) zoning technology
- Inverter-driven (variable speed) compressor
- Total refrigerant piping length of 984' (300 m)
- Connects up to 12 indoor units
- Uses CITY MULTI indoor units and Controls Network
- Low ambient cooling operation down to -40°C available as an option(\*5 \*6)

### UNIT OPTION

- Standard Model.....PUMY-P48NKMU3
- Sea Coast (-BS) Model.....PUMY-P48NKMU3-BS

### OPTIONAL PARTS

- Branch Joint (T-Branch) ..... CMY-Y62-G-E
- Header - Four Branch ..... CMY-Y64-G-E
- Header - Eight Branch ..... CMY-Y68-G-E
- Base Heater ..... PAC-SJ20BH-E
- Snow/Wind Guard (x2) ..... CM-S-FR-NKMU
- Snow/Wind Guard Rear ..... SG-1-RE
- Snow/Wind Guard Side ..... SG-1-SD
- Snow/Wind Guard Blocker ..... CM-S-BLK-NKMU

**Note: Mitsubishi Electric (MESCA) supports the use of only MESCA supplied and approved Snow Guard / Wind Deflectors / Windscreens and accessories for proper functioning of the unit(s). Use of non-MESCA supported Snow Guard / Wind Deflectors / Windscreens and accessories will affect warranty coverage.**

| Specifications                      |                         | Model Name  |
|-------------------------------------|-------------------------|---|
| Unit Type                           |                         | PUMY-P48NKMU3 (-BS)   |
| Nominal Cooling Capacity            | Btu/h *1 (kW)           | 48,000 (14.1)   |
| Nominal Heating Capacity            | Btu/h *2 (kW)           | 54,000 (15.8)   |
| Operating Temperature Range         | Cooling (Outdoor) *3 *4 | 23°F ~ 115°F (-5°C ~ +46°C) DB  |
|                                     | Heating (Outdoor)       | -13°F ~ +59°F (-25°C ~ +15°C) WB  |
| External Dimensions (H x W x D)     | In. / mm                | 52-11/16 x 41-11/32 x 13 (+1) / 1,338 x 1050 x 330 (+25)                |
| External Finish / Colour            |                         | Galvanized sheets (+power coating for -BS type) / Munsell No.3Y 7.8/1.1 |
| Net Weight                          | Lbs. / kg               | 267 / 121   |
| Electrical Power Requirements       | Voltage, Phase, Hertz   | 208 / 230V, 1-phase, 60Hz   |
| Minimum Circuit Ampacity (MCA) *    | A                       | 29  |
| Maximum Overcurrent Protection      | A                       | 44  |
| Piping Diameter (Flared) (In. / mm) | Liquid (High Pressure)  | 3/8 / 9.52  |
|                                     | Gas (Low Pressure)      | 5/8 / 15.88   |
| Indoor Unit                         | Total Capacity          | 50 to 130% of Outdoor Unit Capacity                                     |
|                                     | Model / Quantity        | P04 to P54 / 1 to 12  |
| Sound Pressure Levels               | dB(A) Clg / Htg         | 51 / 54   |
| Fan                                 |                         |   |
| Type x Quantity (kW)                |                         | Propeller Fan x 2 - (0.074 + 0.074)                                     |
| Airflow Rate                        | CFM (m3/min)            | 3,885 (110)   |
| Compressor Operating Range          | Cooling                 | 29% to 100%   |
|                                     | Heating                 | 24% to 100%   |
| Compressor Type x Quantity          |                         | INVERTER-driven Scroll Hermetic x 1                                     |
| Compressor Motor Output             | kW                      | 3.4   |
| Refrigerant                         |                         | R410A: 10lbs. + 9oz. (4.8kg)  |
| Lubricant                           |                         | FV50S (2.3 liters)  |
| High-pressure Protection Device     |                         | High pressure Switch, High pressure Sensor                              |
| Compressor Protection Device        |                         |   |
| Inverter Circuit Protection Device  |                         | Overcurrent detection, Overheat detection (Heat sink thermistor)        |
| AHRI Ratings<br>Ducted / Non-Ducted | EER                     | 11.3 / 13.1   |
|                                     | SEER                    | 16.5 / 22.6   |
|                                     | COP                     | NA  |
|                                     | HSPF                    | 11.0 / 12.0   |

**Blue Fin Anti-corrosion Protection:** Cellulose- and polyurethane-resin coating treatment applied to condenser coil that protects it from air contaminants; ≥1µm thick; Salt Spray/Test Method - no unusual rust development to 960 hours.

Notes:

- \*1. Nominal cooling conditions (subject to ISO 15042)  
Indoor: 27°C D.B./19°C W.B. (81°F D.B./66°F W.B.), Outdoor: 35°C D.B. (95°F D.B.)  
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- \*2. Nominal heating conditions (subject to ISO 15042)  
Indoor: 20°C D.B. (68°F D.B.), Outdoor: 7°C D.B./6°C W.B. (45°F D.B./43°F W.B.)  
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- \*3. 50 to 115°F (-15 to 46°C) D.B.: When connecting PKFY-P06NBMU, PKFY-P08NHMU, PFFY-P06/08/12NEMU, and PFFY-P06/08/12NRMU type indoor unit.
- \*4. 5 to 115°F (-15 to 46°C) D.B.: When using an optional front wind baffle.  
However, this condition does not apply to the indoor units listed in \*3.
- \*5. For -40°C cooling ONLY operation a low ambient kit is required along with a front wind deflector. Heating operation is not permitted.
- \*6. For Low-Ambient Cooling operation, dip switch SW 3 #1 must be switched to the ON position in the indoor unit to disable heating mode.

\* All electrical work shall comply with National (NEC) and local codes and regulations.

\*Should this document be altered or changed without MESCA's permission, it becomes null and void. MESCA assumes no responsibility for any consequences in such cases.

# Model: PUMY-P48NKMU3 (-BS) - DIMENSIONS

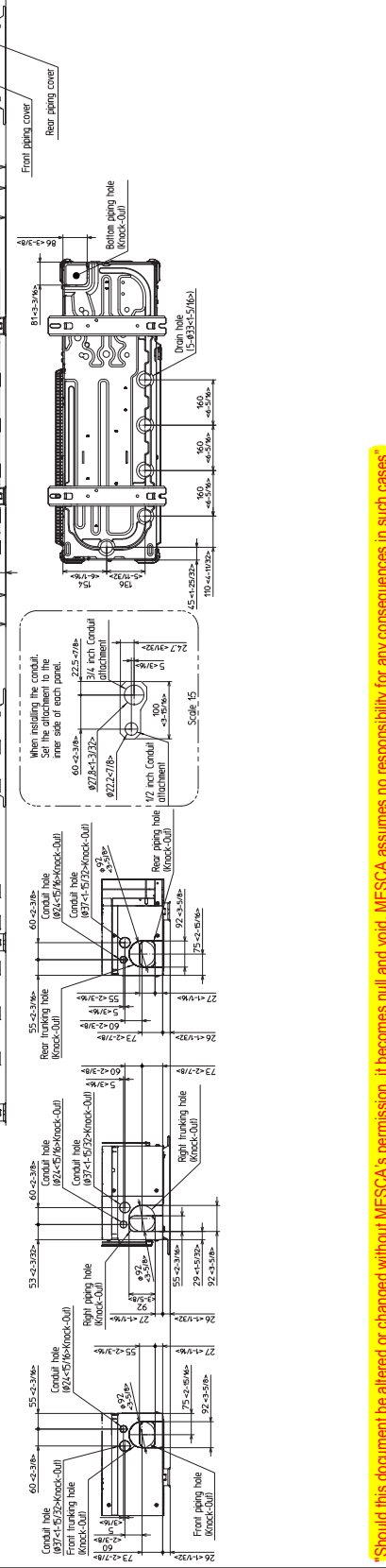
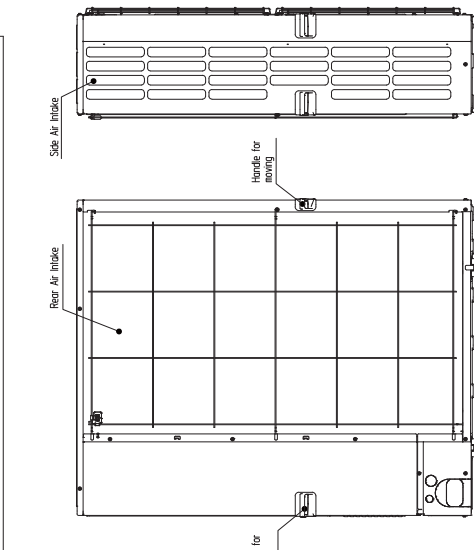
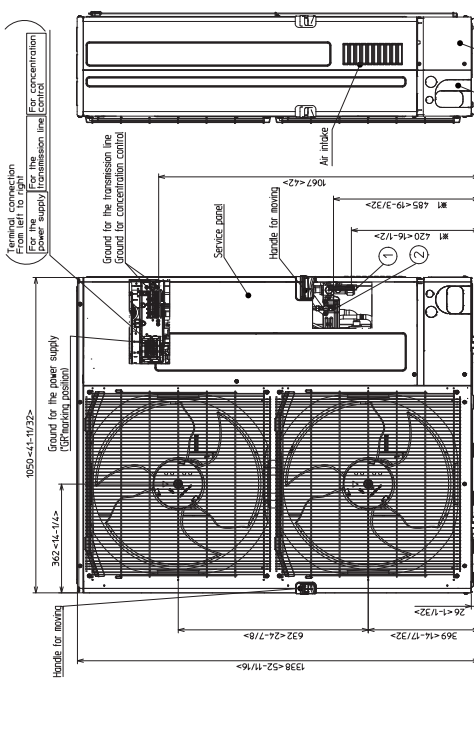
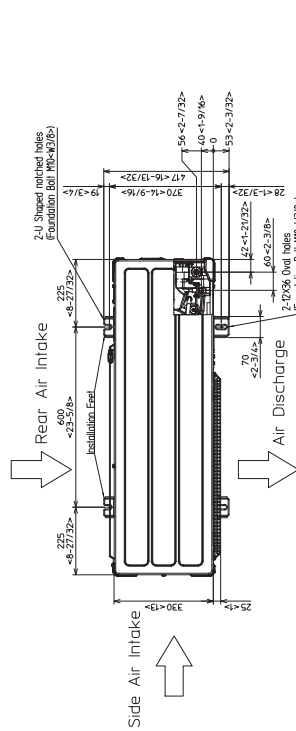
Unit: mm(in)

**1 FREE SPACE (Around the unit)**  
The diagram below shows a basic example. Explanation of particular details are given in the installation manuals etc.

**2 SERVICE SPACE**  
Dimensions of space needed for service access are shown in the below diagram.

**3 FOUNDATION BOLTS**  
Please secure the unit firmly with 4 foundation (FND-M2768) bolts. Bolts and washers must be purchased locally.

**4 PIPING-WIRING DIRECTIONS**  
Piping and wiring connections can be made from 4 directions: Front, Right, Rear and Below.



**Example of Notes**  
① ... Refrigerant GAS pipe connection (FLARE) φ 15.88 (5/8F)  
② ... Refrigerant LIQUID pipe connection (FLARE) φ 9.52 (3/8F)  
※ 1 ... Indication of STOP VALVE connection location.

## Piping Knock-Out Hole Details

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