

**TWINNING REQUIREMENTS**  
FOR P-SERIES STANDARD AIR-CONDITIONING / HEAT-PUMP & HYPER HEAT-PUMP SYSTEMS

|                     |  |       |
|---------------------|--|-------|
| Job Name:           | Location:  | Date: |
| Purchaser:          | Engineer:  |       |
| Submitted to:       | For <input type="checkbox"/> Reference <input type="checkbox"/> Approval <input type="checkbox"/> Construction |       |
| System Designation: | Schedule No.:  |       |

Indoor Units:



Outdoor Units:



**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.**

**GENERAL FEATURES**

- Through twinning, operate two indoor units from one outdoor unit—ideal for single area and unusually shaped rooms/zones or long narrow rooms/zone applications
- One hard-wired, wall-mounted PAR-33MAA remote controller simultaneously controls both indoor units.
- Supply voltage (L1, L2) from the outdoor unit, supplies power to both indoor units through S1, S2, S3.
- A-Control: The S1, S2, S3 wire from the outdoor unit, goes directly to indoor unit 1 and then to indoor unit 2.
- Control signal is transmitted between outdoor unit and both indoor units via data over the power connections
- Required Accessory for Combining Indoor Units: MSDD-50TR-E Distribution Pipe Kit (includes one distribution pipe each for liquid and gas, and choice of joint adapters)

# TWINNING REQUIREMENTS

| Outdoor Units   | Indoor Units X 2 |            |              |            |
|-----------------|------------------|------------|--------------|------------|
| PUY/PUZ-A24NHA7 | PEAD-A12AA7      | PKA-A12KA7 | PLA-A12EA7*1 | PVA-A12AA7 |
| PUY/PUZ-A36NKA7 | PEAD-A18AA7      | PKA-A18KA7 | PLA-A18EA7*1 | PVA-A18AA7 |
| PUZ-HA36NHA5    | PEAD-A18AA7      | PKA-A18KA7 | PLA-A18EA7*1 | PVA-A18AA7 |

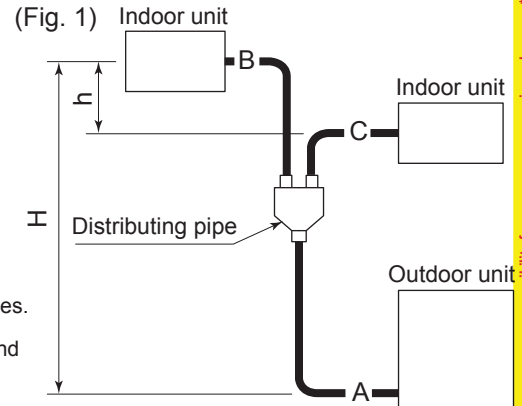
\*1 Refer to the piping length limitation

| Model            | PEAD-A12AA7 | PEAD-A18AA7 | PKA-A12HA7 | PKA-A18HA7 | PLA-A12EA7 | PLA-A18EA7 | PVA-A12AA7 | PVA-A18AA7 | PU(Y)(Z)-A24NHA7 | P(Y)(Z)-A36NKA7 | PUZ-HA36NHA5 |
|------------------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------------|-----------------|--------------|
| MCA (A)          | 1.45        | 1.69        | 1          | 1          | 1          | 1          | 3          | 3          | 19               | 25              | 28           |
| MOCP (A)         | -           | -           | -          | -          | -          | -          | -          | -          | 26               | 31              | 40           |
| Breaker Size (A) | -           | -           | -          | -          | -          | -          | -          | -          | 25               | 30              | 30           |

Please refer to Twinning Application Piping Information for special case rules.

## PIPE SIZE AND LIMIT TO REFRIGERANT PIPE

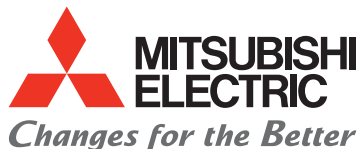
| Actual pipe length (m) |             | Height Difference (m)   |                    | Note *2<br>Number of bends |               |
|------------------------|-------------|-------------------------|--------------------|----------------------------|---------------|
| Indoor-Outdoor         | A + B + C = | Indoor-Indoor           | Indoor-Outdoor     |                            | Indoor-Indoor |
| PUZ-A24<br>PUZ-A36     | 50m or less | B - C   =<br>8m or less | H =<br>30m or less | h =<br>1m or less          | 15 or less    |
| PUY-A24/36<br>PUZ-HA36 | 75m or less |                         |                    |                            |               |



Note 2 Limit the number of bends for refrigerant pipes to 8 in each of the (A+B) and (A+C) ranges.

See the installation manual provided with the main unit for details on chargeless pipe length and refrigerant additional charge amount.

- Maximum total piping length for PUY/PUZ-A24,36:
  - with 2x PLA-A12EA7 is 59 ft (18m)
  - with 2x PLA-A18EA7 is 98 ft (30m)
  - All other combinations is 165 ft (50m)
- Maximum total piping length for PUZ-HA36 Outdoor Units: 245' (75 m)
- Maximum height difference from IDU to IDU: 3 ft (1 m)  
Maximum length difference from IDU to IDU: 26 ft (8 m)
- Maximum height difference from ODU to IDUs: 100' (31 m); note: piping lengths to each IDU unit do not have to be equal
- For the NH/KA7 generation: both IDUs must have the same capacity, but do not have to be the same style. (PEA, PEAD, PKA, PLA, and PVA IDUs can be combined for one system.
- Twinned IDUs operate simultaneously only; individual IDU control is not available
- One PAR-33MAA remote controller controls both IDUs simultaneously
- Temperature setpoint is set from the PAR-33MAA, choose one of three options on the controller to set the temperature sensing
  - Average of the data from both IDU return air sensors (factory setting)
  - Data from the return air sensor in the IDU directly connected to the PAR-33MAA
  - Data from the sensor in the PAR-33MAA only
- ODU is automatically controlled using Mitsubishi Electric's INVERTER Technology; compressor, frequency, and LEV position will be adjusted as needed to maintain selected room conditions
- Refer to P-Series Installation or Technical Service Manuals for wiring diagrams



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