

**PCA-A24KA7 & PUZ-A24NHA7(-BS)**  
**24,000 BTU/H CEILING-SUSPENDED INDOOR UNIT**  
**24,000 BTU/H HEAT PUMP UNIVERSAL OUTDOOR**



Job Name:

System Reference:

Date:



Indoor Unit.....PCA-A24KA7

Outdoor Unit  
Standard Model.....PUZ-A24NHA7

Seacoast Model.....PUZ-A24NHA7-BS

**INDOOR UNIT FEATURES**

- Airflow settings for high and low ceiling applications
- Knock-out for outside-air intake
- Optional i-see Sensor™ for air distribution and energy saving
- Auto fan speed mode
- Filter status indicator
- Easy-to-clean, washable filter
- Suspends from ceiling for quick and easy installation
- Ideal for larger retail stores, classrooms, and restaurants
- Multiple control options available:
  - kumo cloud® smart device app for remote access
  - Third-party interface options
  - Wired or wireless controllers

**OUTDOOR UNIT FEATURES**

- Variable speed INVERTER-driven compressor
- Power receiver pre-charged with refrigerant volume for piping length up to 70 ft
- Low ambient cooling down to 0°F providing 100% capacity
- 24-hour continuous operation (cooling mode)
- High pressure protection
- Fast restart
- Superior energy and operational efficiency

# SPECIFICATIONS: PCA-A24KA7 & PUZ-A24NHA7(-BS)

|   |  |                     |  |
|---|--|---------------------|--|
| Cooling at 95°F <sup>1</sup>            | Maximum Capacity                             | BTU/H               | 24,000   |
|   | Rated Capacity                               | BTU/H               | 24,000   |
|   | Minimum Capacity                             | BTU/H               | 10,000   |
|   | Maximum Power Input                          | W                   | 1,960  |
|   | Rated Power Input                            | W                   | 1,960  |
|   | Moisture Removal                             | Pints/h             | 5.8  |
|   | Sensible Heat Factor                         |                     | 0.73   |
| Heating at 47°F <sup>2</sup>            | Maximum Capacity                             | BTU/H               | 28,000   |
|   | Rated Capacity                               | BTU/H               | 26,000   |
|   | Minimum Capacity                             | BTU/H               | 8,800  |
|   | Maximum Power Input                          | W                   | 2,230  |
|   | Rated Power Input                            | W                   | 1,800  |
|   | Power Factor [208V / 230V]                   | %                   | 94.3 / 94.3                                    |
| Heating at 17°F <sup>3</sup>            | Maximum Capacity                             | BTU/H               | 17,900   |
|   | Rated Capacity                               | BTU/H               | 15,400   |
|   | Maximum Power Input                          | W                   | 1,770  |
|   | Rated Power Input                            | W                   | 1,700  |
| Heating at 5°F <sup>4</sup>             | Maximum Capacity                             | BTU/H               | 14,900   |
|   | Maximum Power Input                          | W                   | 1,900  |
| Efficiency                              | SEER   |                     | 21.2   |
|   | EER <sup>1</sup>                             |                     | 12.2   |
|   | HSPF [IV]                                    |                     | 10.8   |
|   | COP at 47°F <sup>2</sup>                     |                     | 4.23   |
|   | COP at 17°F at Maximum Capacity <sup>3</sup> |                     | 2.97   |
|   | COP at 5°F at Maximum Capacity <sup>4</sup>  |                     | 2.3  |
| Electrical                              | ENERGY STAR® Certified                       |                     | No   |
|   | Voltage, Phase, Frequency                    |                     | 208/230, 1, 60                                 |
|   | Guaranteed Voltage Range                     | V AC                | 198 - 253                                      |
|   | Voltage: Indoor - Outdoor, S1-S2             | V AC                | 208/230  |
|   | Voltage: Indoor - Outdoor, S2-S3             | V DC                | 24   |
|   | Short-circuit Current Rating [SCCR]          | kA                  | 5  |
|   | Recommended Fuse/Breaker Size (Outdoor)      | A                   | 25   |
|   | Recommended Wire Size [Indoor - Outdoor]     | AWG                 | 14   |
|   | Power Supply                                 |                     | Indoor unit is powered by the outdoor unit     |
|   | Indoor Unit                                  | MCA                 | A  |
| Fan Motor Full Load Amperage            |  | A                   | 0.54   |
| Fan Motor Type                          |  |                     | DC Motor                                       |
| Airflow Rate at Cooling, Dry            |  | CFM                 | 530-565-600-670                                |
| Airflow Rate at Cooling, Wet            |  | CFM                 | 495-530-565-635                                |
| Airflow Rate at Heating, Dry            |  | CFM                 | 530-565-600-670                                |
| Sound Pressure Level [Cooling]          |  | dB[A]               | 33-35-37-40                                    |
| Sound Pressure Level [Heating]          |  | dB[A]               | 33-35-37-40                                    |
| Drain Pipe Size                         |  | In. [mm]            | 1-1/32 [26]                                    |
| Coating on Heat Exchanger               |  |                     | —  |
| External Finish Color                   |  |                     | White Munsell 6.4Y 8.9/0.4                     |
| Unit Dimensions                         |  | W x D x H: In. [mm] | 50-3/8 x 26-3/4 x 9-1/16 [1,280 x 680 x 230]   |
| Package Dimensions                      |  | W x D x H: In. [mm] | 53-1/8 x 29-15/16 x 12-5/8 [1,350 x 760 x 320] |
| Unit Weight                             |  | Lbs. [kg]           | 71 [32]  |
| Package Weight                          |  | Lbs. [kg]           | 82 [37]  |
| Indoor Unit Operating Temperature Range | Cooling Intake Air Temp [Maximum / Minimum]* | °F                  | 90 DB, 72 WB / 68 DB, 61 WB                    |
|   | Heating Intake Air Temp [Maximum / Minimum]  | °F                  | 77 DB / 59 DB                                  |

**NOTES:**

AHRI Rated Conditions

(Rated data is determined at a fixed compressor speed)

<sup>1</sup>Cooling (Indoor // Outdoor)

<sup>2</sup>Heating at 47°F (Indoor // Outdoor)

<sup>3</sup>Heating at 17°F (Indoor // Outdoor)

°F 80 DB, 67 WB // 95 DB, 75 WB

°F 70 DB, 60 WB // 47 DB, 43 WB

°F 70 DB, 60 WB // 17 DB, 15 WB

Conditions

<sup>4</sup>Heating at 5°F (Indoor // Outdoor)

°F 70 DB, 60 WB // 5 DB, 4 WB

\*Indoor/Outdoor Unit Operating Temperature Range (Cooling Air Temp [Maximum / Minimum]):

- Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.
  - » Wind baffles required to operate below 23°F DB in cooling mode.
  - » Heat pump system with wind baffle: 0°F - 115°F.
  - » Refer to wind baffle documentation for further information.

\*\*Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures; Heating Thermal Lock-out / Re-start Temperatures):

- System cuts out in heating mode to avoid thermistor error and automatically restarts at these temperatures.

SEACOAST PROTECTION (-BS MODELS)

- External Outer Panel: Phosphate coating + Acrylic-Enamel coating
- Fan Motor Support: Epoxy resin coating (at edge face)
- Separator Assembly Valve Bed: Epoxy resin coating (at edge face)
- Blue Fin treatment is an anti-corrosion treatment that is applied to the condenser coil to protect it against airborne contaminants.

# SPECIFICATIONS: PCA-A24KA7 & PUZ-A24NHA7(-BS)

|              |  |  |  |                             |
|--------------|--|--|--|-----------------------------|
| Outdoor Unit | MCA  | A  | 19.0   |                             |
|              | MOCP   | A  | 26   |                             |
|              | Fan Motor Full Load Amperage                               | A  | 0.4  |                             |
|              | Airflow Rate [Cooling / Heating]                           | CFM  | 1940 / 1940  |                             |
|              | Refrigerant Control  |  | LEV  |                             |
|              | Defrost Method   |  | Reverse Cycle  |                             |
|              | Coating on Heat Exchanger                                  |  | Blue Fin Coating (BS Model only)                         |                             |
|              | Sound Pressure Level, Cooling <sup>1</sup>                 | dB(A)  | 47   |                             |
|              | Sound Pressure Level, Heating <sup>2</sup>                 | dB(A)  | 48   |                             |
|              | Compressor Type  |  | INVERTER-driven twin rotary                              |                             |
|              | Compressor Model   |  | SNB172FWHM1  |                             |
|              | Compressor Rated Load Amps                                 | A  | 7  |                             |
|              | Compressor Locked Rotor Amps                               | A  | 11.0   |                             |
|              | Compressor Oil [Type // Charge]                            | oz.  | FV50S // 23  |                             |
|              | External Finish Color                                      |  | Ivory Munsell 3Y 7.8/1.1                                 |                             |
|              | Base Pan Heater  |  | N/A  |                             |
|              | Unit Dimensions  | W x D x H: In. [mm]                                | 37-13/32 x 13 (+1-3/16) x 37-1/8 [950 x 330 (+30) x 943] |                             |
|              | Package Dimensions   | W x D x H: In. [mm]                                | 40-15/16 x 17-11/16 x 40-11/16 [1040 x 450 x 1033]       |                             |
|              | Unit Weight  | Lbs. [kg]  | 153 [69]   |                             |
|              | Package Weight   | Lbs. [kg]  | 179 [81]   |                             |
|              | Outdoor Unit Operating Temperature Range                   | Cooling Air Temp [Maximum / Minimum]*              | °F   | 115 DB / 0 DB               |
|              |  | Heating Air Temp [Maximum / Minimum]               | °F   | 70 DB, 59 WB / -4 DB, -4 WB |
|              |  | Heating Thermal Lock-out / Re-start Temperatures** | °F   | -8 / -4                     |
| Refrigerant  | Maximum Charge Quantity                                    | Lbs, oz  | 7.0, 11.0  |                             |
|              | Initial Charge Quantity                                    | Ft. [m]  | 70.0 [20.0]  |                             |
|              | Additional Refrigerant Charge Per Additional Piping Length | oz./Ft. [g/m]                                      | 0.7 [50]   |                             |
| Piping       | Gas Pipe Size O.D. [Flared]                                | In.[mm]  | 5/8 [15.88]  |                             |
|              | Liquid Pipe Size O.D. [Flared]                             | In.[mm]  | 3/8 [9.52]   |                             |
|              | Maximum Piping Length                                      | Ft. [m]  | 165 [50]   |                             |
|              | Maximum Height Difference                                  | Ft. [m]  | 100 [30]   |                             |
|              | Maximum Number of Bends                                    |  | 15   |                             |

**NOTES:**

|   |  |    |                              |
|---|--|----|------------------------------|
| AHRI Rated Conditions<br>(Rated data is determined at a fixed compressor speed) | <sup>1</sup> Cooling (Indoor // Outdoor)         | °F | 80 DB, 67 WB // 95 DB, 75 WB |
|   | <sup>2</sup> Heating at 47°F (Indoor // Outdoor) | °F | 70 DB, 60 WB // 47 DB, 43 WB |
|   | <sup>3</sup> Heating at 17°F (Indoor // Outdoor) | °F | 70 DB, 60 WB // 17 DB, 15 WB |
| Conditions  | <sup>4</sup> Heating at 5°F (Indoor // Outdoor)  | °F | 70 DB, 60 WB // 5 DB, 4 WB   |

**\*Indoor/Outdoor Unit Operating Temperature Range (Cooling Air Temp [Maximum / Minimum]):**

- Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.
  - » Wind baffles required to operate below 23°F DB in cooling mode.
  - » Heat pump system with wind baffle: 0°F - 115°F.
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- External Outer Panel: Phosphate coating + Acrylic-Enamel coating
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## INDOOR UNIT ACCESSORIES: PCA-A24KA7

|                            |   |                   |
|----------------------------|---|-------------------|
| Control Interface          | BACnet® and Modbus® Interface   | PAC-UKPRC001-CN-1 |
|                            | CN24 Relay Kit  | CN24RELAY-KIT-CM3 |
|                            | IT Extender   | PAC-WHS01IE-E     |
|                            | kumo station® for kumo cloud®   | PAC-WHS01HC-E     |
|                            | Lockdown bracket for remote controller  | RCMKP1CB          |
|                            | Remote Operation Adapter†   | PAC-SF40RM-E      |
|                            | Thermostat Interface  | PAC-US444CN-1     |
|                            | Thermostat Interface  | PAC-US445CN-1     |
| Remote Sensor              | USNAP Adapter   | PAC-WHS01UP-E     |
|                            | Flush Mount Remote Temperature Sensor   | PAC-USSEN002-FM-1 |
|                            | Flush Mount Temperature Sensor  | PAC-USSEN001-FM-1 |
|                            | Remote Temperature Sensor   | PAC-SE41TS-E      |
| Wired Remote Controller    | Wireless temperature and humidity sensor for kumo cloud®                                    | PAC-USWHS003-TH-1 |
|                            | Deluxe Wired MA Remote Controller†  | PAR-40MAAU        |
|                            | Simple MA Remote Controller†  | PAC-YT53CRAU-J    |
|                            | Touch MA Controller†  | PAR-CT01MAU-SB    |
| Wireless Remote Controller | kumo touch™ RedLINK™ Wireless Controller  | MHK2              |
|                            | Wireless MA Receiver  | PAR-FA32MA-W      |
|                            | Wireless MA Remote Controller   | PAR-FL32MA-E      |
|                            | Wireless Receiver Kit   | PAR-SL93B-E       |
|                            | Wireless Receiver Kit with i-See sensor™  | PAR-SA92MW-E      |
| Condensate                 | Blue Diamond (Advanced) Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended] | X87-721           |
|                            | Blue Diamond (MegaBlue Advanced) Condensate Pump w/ Reservoir & Sensor                      | X87-835           |
|                            | Blue Diamond Sensor Extension Cable — 15 Ft.  | C13-103           |
|                            | Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H                                     | COMBI             |
| Disconnect Switch          | (30A/600V/UL) [fits 2" X 4" utility box] - Black  | TAZ-MS303         |
|                            | (30A/600V/UL) [fits 2" X 4" utility box] - White  | TAZ-MS303W        |
| Filter                     | 65% Medium Efficiency Filter (MERV 8)   | PAC-SH89KF-E      |
| Lineset                    | 10' x 3/8" x 10' x 5/8" Lineset (Twin-Tube Insulation)††                                    | MPLS385812T-10    |
|                            | 100' x 3/8" x 100' x 5/8" Lineset (Twin-Tube Insulation)††                                  | MPLS385812T-100   |
|                            | 15' x 3/8" x 15' x 5/8" Lineset (Twin-Tube Insulation)††                                    | MPLS385812T-15    |
|                            | 30' x 3/8" x 30' x 5/8" Lineset (Twin-Tube Insulation)††                                    | MPLS385812T-30    |
|                            | 50' x 3/8" x 50' x 5/8" Lineset (Twin-Tube Insulation)††                                    | MPLS385812T-50    |
|                            | 65' x 3/8" x 65' x 5/8" Lineset (Twin-Tube Insulation)††                                    | MPLS385812T-65    |

**NOTES:**

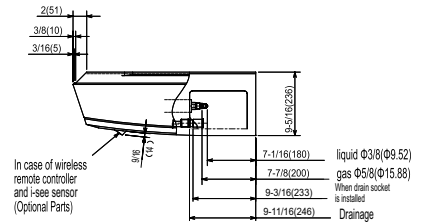
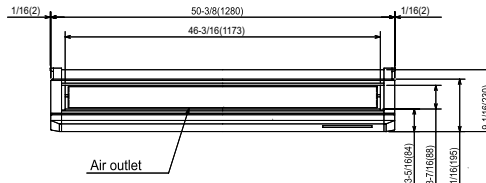
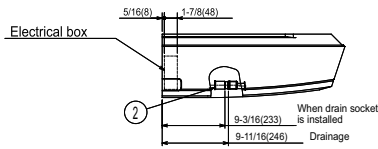
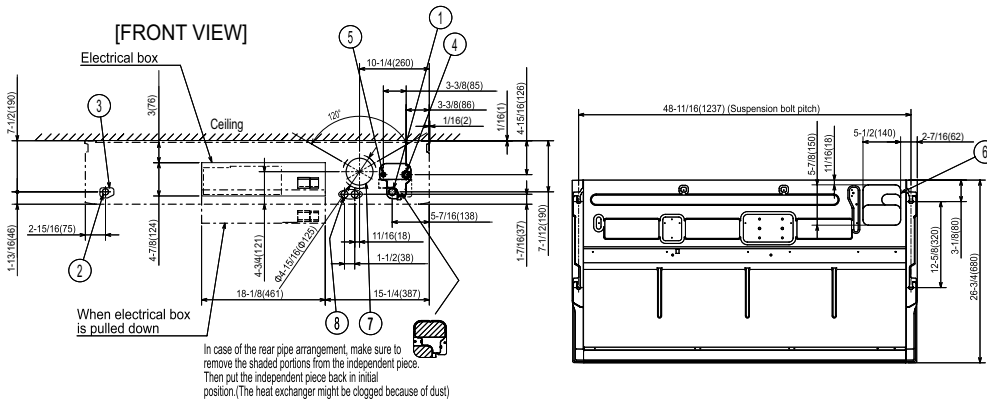
†PAC-SF40RM-E (Unable to use with wireless remote controller)

## OUTDOOR UNIT ACCESSORIES: PUZ-A24NHA7(-BS)

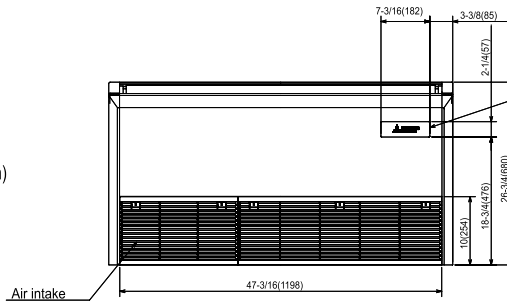
|                       |  |              |
|-----------------------|--|--------------|
| Air Outlet Guide      | Air Outlet Guide (1 Piece)                                     | PAC-SG59SG-E |
| Centralized Drain Pan | Centralized Drain Pan  | PAC-SG63DP-E |
|                       | Drain Pan  | PAC-SG64DP-E |
| Control/Service Tool  | Control/Service Tool   | PAC-SK52ST   |
|                       | M- & P-Series Maintenance Tool Cable Set                       | M21EC0397    |
|                       | USB/UART Conversion Cable (Required for all laptop connection) | M21EC1397    |
| Distribution pipe     | Twinning Distribution Pipe (50:50) <sup>††</sup>               | MSDD-50TR-E  |
| Drain Socket          | Drain Socket   | PAC-SG61DS-E |
| Hail Guards           | Hail Guard   | HG-A6        |
| M-NET Converter       | M-NET Converter  | PAC-SJ85MA-E |
|                       | M-NET Converter  | PAC-SJ95MA-E |
| Mini-Split Wire       | 14 Gauge, 4 wire MiniSplit Cable—250 ft. roll                  | S144-250     |
|                       | 14 Gauge, 4 wire MiniSplit Cable—50 ft. roll                   | S144-50      |
|                       | 16 Gauge, 4 wire MiniSplit Cable—250 ft. roll                  | S164-250     |
|                       | 16 Gauge, 4 wire MiniSplit Cable—50 ft. roll                   | S164-50      |
| Mounting Pad          | Condensing Unit Mounting Pad: 24" x 42" x 3"                   | ULTRILITE2   |
| Stand                 | 18" Single Fan Stand   | QSMS1801M    |
|                       | 24" Single Fan Stand   | QSMS2401M    |
|                       | Condenser Wall Bracket   | QSWB2000M-1  |
|                       | Condenser Wall Bracket - Stainless Steel Finish                | QSWBSS       |
|                       | Outdoor Unit Stand — 12" High                                  | QSMS1201M    |
| Wind Baffle           | Front Wind Baffle  | WB-PA5       |
|                       | Rear Wind Baffle   | WB-RE5       |
|                       | Side Advanced Wind Baffle                                      | WB-SD5       |

# INDOOR UNIT DIMENSIONS: PCA-A24KA7

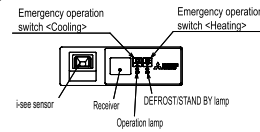
Unit: inch (mm)



- ① Drainage pipe connection(1(26mm)I.D.)
- ② Drainage pipe connection(for the left arrangement)
- ③ Knockout hole for left drain-piping arrangement
- ④ Refrigerant-pipe connection(gas pipe side/flared connection)
- ⑤ Refrigerant-pipe connection(liquid pipe side/flared connection)
- ⑥ Knockout hole for upper drain pipe arrangement
- ⑦ Knockout hole for fresh air intake Φ3-15/16(Φ100)
- ⑧ Knockout hole for wiring arrangement Φ7/8(Φ22)  
Accessory...Drain socket (1(26mm) I.D.)



In case of wireless remote controller and i-see Sensor(Optional Parts)



**NOTES.**

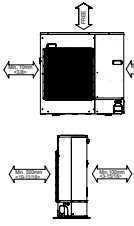
1. Use M10 or W3/8 screw for anchor bolt.
2. Please be sure when installing the drain pump (option parts), refrigerant pipe will be only upward.

# OUTDOOR UNIT DIMENSIONS: PUZ-A24NHA7(-BS)

Unit: mm<in>

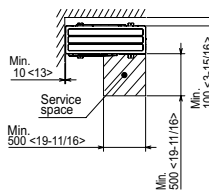
## 1 FREE SPACE (Around the unit)

The diagram below shows a basic example. Explanation of particular details are given in the installation manuals etc.



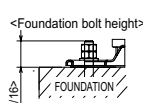
## 2 SERVICE SPACE

Dimensions of space needed for service access are shown in the below diagram.



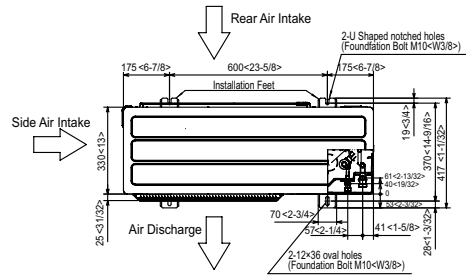
## 3 FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation (M10<W3/8>) bolts. (Bolts and washers must be purchased locally.)



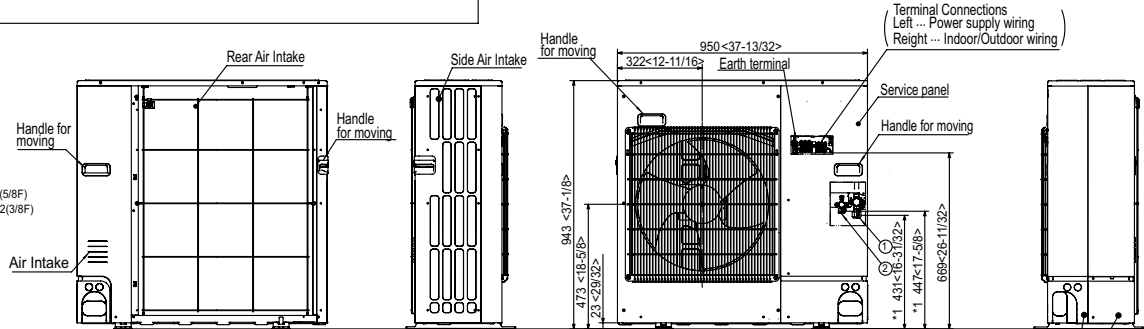
## 4 PIPING-WIRING DIRECTIONS

Piping and wiring connections can be made from 4 directions: FRONT, Right, Rear and Below.

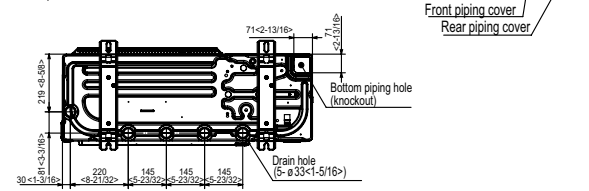
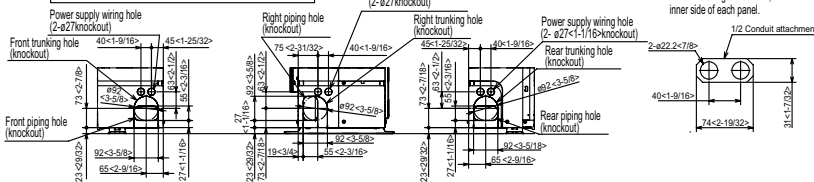


## Example of Notes

- ① ... Refrigerant GAS pipe connection (FLARE) ø15.88(5/8F)
- ② ... Refrigerant LIQUID pipe connection (FLARE) ø9.52(3/8F)
- \*1... Indication of STOP VALVE connection location.



## Piping knockout Hole Details



1340 Satellite Boulevard Suwanee, GA 30024  
Toll Free: 800-433-4822 www.mehvac.com



FORM# PCA-A24KA7 & PUZ-A24NHA7(-BS) - 202209