

Job Name:

System Reference:

Date:

Indoor Unit:  
PVA-A30AA7



Outdoor Unit:  
PUZ-HA30NHA5



### INDOOR UNIT FEATURES

- Ducted air handler provides a solution to cool and heat large zones
- Highly efficient totally enclosed ECM motor
- Selectable external static pressure: 0.30, 0.50 and 0.80 in.WG with 3 fan speeds at each static setting
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency
- Positive pressure cabinet with air leakage of less than 1.0% at 1.0 in.WG
- Unique blow through design allows simple coil cleaning when the blower is removed
- Multi-position installation: horizontal (left or right), vertical (up or down). For downflow configurations, the CMA-1 is recommended for proper management of condensate to prevent water blow-off in certain conditions
- Optional electric heat kit for additional heat capacity
- Optional humidifier control and ERV control

### OUTDOOR UNIT FEATURES

- Variable speed INVERTER-driven compressor
- High heating capacity: flash injection circuit maintains 100% heating capacity at 5°F outdoor temperature
- Wide heating range: heating performance down to -13°F (average of 80% heating capacity)
- High speed heating at start up: Hyper-Heating INVERTER® reduces the time for heating at start up by about half compared to standard models
- Suction accumulator pre-charged with refrigerant volume for piping length up to 100 ft.
- Twinning of two indoor units possible with the 36 kBtu/h model
- High pressure/temperature protection

# SPECIFICATIONS: PVA-A30AA7 & PUZ-HA30NHA5

| Model Number                 | Indoor Unit                                                                                                     |         | PVA-A30AA7                 |
|------------------------------|-----------------------------------------------------------------------------------------------------------------|---------|----------------------------|
|                              | Outdoor Unit                                                                                                    |         | PUZ-HA30NHA5               |
| Cooling <sup>1</sup>         | Maximum Capacity                                                                                                | Btu/h   | 30,000                     |
|                              | Rated Capacity                                                                                                  | Btu/h   | 28,500                     |
|                              | Minimum Capacity                                                                                                | Btu/h   | 18,000                     |
|                              | Maximum Power Input                                                                                             | W       | 2,500                      |
|                              | Rated Power Input                                                                                               | W       | 2,280                      |
|                              | Moisture Removal                                                                                                | Pints/h | 7.0                        |
|                              | Sensible Heat Factor                                                                                            |         | 0.70                       |
|                              | Power Factor                                                                                                    | %       | 92.6                       |
| Heating at 47°F <sup>2</sup> | Maximum Capacity                                                                                                | Btu/h   | 34,000                     |
|                              | Rated Capacity                                                                                                  | Btu/h   | 32,000                     |
|                              | Minimum Capacity                                                                                                | Btu/h   | 18,000                     |
|                              | Maximum Power Input                                                                                             | W       | 3,240                      |
|                              | Rated Power Input                                                                                               | W       | 2,590                      |
|                              | Power Factor                                                                                                    | %       | 93.8                       |
| Heating at 17°F <sup>3</sup> | Maximum Capacity                                                                                                | Btu/h   | 32,000                     |
|                              | Rated Capacity                                                                                                  | Btu/h   | 22,600                     |
|                              | Maximum Power Input                                                                                             | W       | 4,930                      |
|                              | Rated Power Input                                                                                               | W       | 2,740                      |
| Heating at 5°F <sup>4</sup>  | Maximum Capacity                                                                                                | Btu/h   | 32,000                     |
|                              | Maximum Power Input                                                                                             | W       | 5,320                      |
| Efficiency                   | SEER                                                                                                            |         | 17.0                       |
|                              | EER <sup>1</sup>                                                                                                |         | 12.5                       |
|                              | HSPF (IV)                                                                                                       |         | 9.7                        |
|                              | COP at 47°F <sup>2</sup>                                                                                        |         | 3.62                       |
|                              | COP at 17°F in Maximum Capacity                                                                                 |         | 1.90                       |
|                              | COP at 5°F in Maximum Capacity                                                                                  |         | 1.76                       |
|                              | ENERGY STAR® Certified (ENERGY STAR products are third-party certified by an EPA-recognized Certification Body) |         | Yes                        |
| Electrical                   | Voltage, Phase, Frequency                                                                                       |         | 208 / 230V, 1-phase, 60 Hz |
|                              | Guaranteed Voltage Range                                                                                        | V AC    | 198 – 253                  |
|                              | Voltage: Indoor - Outdoor, S1-S2                                                                                | V AC    | 208V / 230                 |
|                              | Voltage: Indoor - Outdoor, S2-S3                                                                                | V DC    | 24                         |
|                              | Voltage: Indoor - Remote controller                                                                             | V DC    | 12                         |
|                              | Recommended Fuse/Breaker Size                                                                                   | A       | 30                         |
|                              | Recommended Wire Size (Indoor - Outdoor)                                                                        | AWG     | 14                         |
| Indoor Unit                  | MCA                                                                                                             | A       | 4.13                       |
|                              | Fan Motor Full Load Amperage                                                                                    | A       | 3.30                       |
|                              | Fan Motor Output                                                                                                | W       | 244                        |
|                              | Airflow Rate, Dry                                                                                               | CFM     | 613-744-875                |

# SPECIFICATIONS: PVA-A30AA7 & PUZ-HA30NHA5

| Model Number                            | Indoor Unit                                 |             | PVA-A30AA7                                           |
|-----------------------------------------|---------------------------------------------|-------------|------------------------------------------------------|
|                                         | Outdoor Unit                                |             | PUZ-HA30NHA5                                         |
|                                         | Airflow Rate, Wet                           | CFM         | n/a                                                  |
|                                         | External Static Pressure                    | in.WG       | 0.30-0.50-0.80                                       |
|                                         | Sound Pressure Level                        | dB(A)       | 30-34-38                                             |
|                                         | Drain Pipe Size                             | In. (mm)    | 3/4 FPT (19.05)                                      |
|                                         | Condensate Lift Mechanism, Maximum Distance | Ft. (m)     | n/a                                                  |
|                                         | Heat Exchanger Type                         |             | Plate fin coil                                       |
|                                         | External Finish Color                       |             | Galvanized steel cabinet-Powder coated<br>Slate Gray |
|                                         | Unit Dimensions // Grille Dimensions        | W: In. (mm) | 21 (534)                                             |
|                                         |                                             | D: In. (mm) | 21-5/8 (548)                                         |
|                                         |                                             | H: In. (mm) | 54-1/4 (1378)                                        |
|                                         | Unit Weight                                 | Lbs. (kg)   | 141 (64)                                             |
| Indoor Unit Operating Temperature Range | Cooling Intake Air Temp (Maximum / Minimum) | °F          | 90 DB, 73 WB / 66 DB, 59 WB                          |
|                                         | Heating Intake Air Temp (Maximum / Minimum) | °F          | 82 DB / 50 DB                                        |
| Outdoor Unit                            | MCA                                         | A           | 28                                                   |
|                                         | MOCP                                        | A           | 40                                                   |
|                                         | Fan Motor Full Load Amperage                | A           | 0.4+0.4                                              |
|                                         | Fan Motor Output                            | W           | 86+86                                                |
|                                         | Airflow Rate                                | CFM         | 3,530                                                |
|                                         | Refrigerant Control                         |             | Electronic Expansion Valve                           |
|                                         | Defrost Method                              |             | Reverse Cycle                                        |
|                                         | Heat Exchanger Type                         |             | Cross fin                                            |
|                                         | Sound Pressure Level, Cooling <sup>1</sup>  | dB(A)       | 52                                                   |
|                                         | Sound Pressure Level, Heating <sup>2</sup>  | dB(A)       | 53                                                   |
|                                         | Compressor Type                             |             | INVERTER-Driven Twin Rotary                          |
|                                         | Compressor Model                            |             | ANB33FJEMT                                           |
|                                         | Compressor Rated Load Amps                  | A           | 18                                                   |
|                                         | Compressor Locked Rotor Amps                | A           | 27.5                                                 |
|                                         | Compressor Oil Type // Charge               | oz.         | FV50S // 45                                          |
|                                         | External Finish Color                       |             | Ivory Munsell 3Y 7.8/1.1                             |
|                                         | Base Pan Heater                             |             | n/a                                                  |
|                                         | Unit Dimensions                             | W: In. (mm) | 37-3/8 (950)                                         |
|                                         |                                             | D: In. (mm) | 13 + 1-3/16 (330 + 30)                               |
|                                         |                                             | H: In. (mm) | 53-1/8 (1,350)                                       |
|                                         | Package Dimensions                          | W: In. (mm) | 40-15/16 (1,040)                                     |
|                                         |                                             | D: In. (mm) | 17-11/16 (450)                                       |
|                                         |                                             | H: In. (mm) | 56-11/16 (1,440)                                     |
|                                         | Unit Weight                                 | Lbs. (kg)   | 265 (120)                                            |
|                                         | Package Weight                              | Lbs. (kg)   | 289 (131)                                            |

## SPECIFICATIONS: PVA-A30AA7 & PUZ-HA30NHA5

| Model Number                             | Indoor Unit                                 |         | PVA-A30AA7                    |
|------------------------------------------|---------------------------------------------|---------|-------------------------------|
|                                          | Outdoor Unit                                |         | PUZ-HA30NHA5                  |
| Outdoor Unit Operating Temperature Range | Cooling Intake Air Temp (Maximum / Minimum) | °F      | 115 DB / 0* DB                |
|                                          | Heating Intake Air Temp (Maximum / Minimum) | °F      | 70 DB, 59 WB / -13 DB, -13 WB |
|                                          | Thermal Lock-out / Re-start Temperatures**  | °F      | n/a                           |
| Refrigerant                              | Type                                        |         | R410A                         |
|                                          | Charge                                      | Lbs, oz | 12                            |
| 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) | 245 (75)                      |
|                                          | 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 // -4 DB, -5 WB |

\*Wind baffles required to operate below 23°F DB in cooling mode. PUZ with wind baffle: 0°F - 115°F.

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

## ACCESSORIES: PVA-A30AA7

|                                                                                                                       |                         |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------|
| Signal Receiver                                                                                                       | □ PAR-SA9CA-E           |
| Wireless Remote Controller                                                                                            | □ PAR-FL32MA-E          |
| Wireless Remote Receiver                                                                                              | □ PAR-FA32MA-E          |
| Backlit, Wall-mounted, Wireless Controller                                                                            | □ MHK1                  |
| Portable Central Controller                                                                                           | □ MCCH1                 |
| Wired MA Controller                                                                                                   | □ PAR-33MAA             |
| Simple MA Controller                                                                                                  | □ PAC-YT53CRAU          |
| Touch MA Controller                                                                                                   | □ PAR-CT01MAU-SB        |
| Wired Remote Sensor                                                                                                   | □ PAC-SE41TS-E          |
| Wireless Temperature and Humidity Sensor                                                                              | □ PAC-USWHS003-TH-1     |
| Outside Air Sensor for MHK1                                                                                           | □ MOS1                  |
| Wireless Interface                                                                                                    | □ PAC-USWHS002-WF-1     |
| Thermostat Interface                                                                                                  | □ PAC-US444CN-1         |
| kumo station®                                                                                                         | □ PAC-WHS01HC-E         |
| USNAP Interface                                                                                                       | □ PAC-WHS01UP-E         |
| IT Extender                                                                                                           | □ PAC-WHS01IE-E         |
| BACnet® and Modbus Interface                                                                                          | □ PAC-UKPRC001-CN-1     |
| External Fan / Heater Control Relay Adapter                                                                           | □ CN24RELAY-KIT-CM3     |
| Connector cable for remote display                                                                                    | □ PAC-SA88HA-EP         |
| Connector for CN32 (remote on/off)                                                                                    | □ PAC-SE55RA-E          |
| Remote Operation Adapter (with wire terminals for remote ON/OFF and operation status/ error) <sup>1</sup>             | □ PAC-SF40RM-E          |
| Blue Diamond Sensor Extension Cable—15 Ft.                                                                            | □ C13-103               |
| MegaBlue Advanced Blue Diamond Condensate Pump w/ Reservoir & Sensor                                                  | □ X87-835 - 110 to 250V |
| MaxiBlue Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (208/230V) up to 48,000 Btu/h [recommended] | □ X87-721 - 208/230V    |
| MegaBlue Blue Diamond Condensate Pump (110-230V) up to 170,000 Btu/h                                                  | □ X87-835               |
| Drain Pan Level Sensor (Control for indoor unit shut off to prevent drain pan overflow)                               | □ DPLS2                 |
| 3 Pole Disconnect Switch (30A/600VUL) [fits 2"x4" utility] - Black                                                    | □ TAZ-MS303             |
| Separate Power Terminal Block Kit                                                                                     | □ SPTB1                 |
| Electric Heat Lockout Control                                                                                         | □ ETC-211000-MIT        |
| Electric Heat Kit for Multi-position AHU                                                                              | □ EH03-MPA-M(B)         |
| Electric Heat Kit for Multi-position AHU                                                                              | □ EH05-MPA-M(B)         |
| Electric Heat Kit for Multi-position AHU                                                                              | □ EH08-MPA-M(B)         |
| Electric Heat Kit for Multi-position AHU                                                                              | □ EH10-MPA-M(B)         |

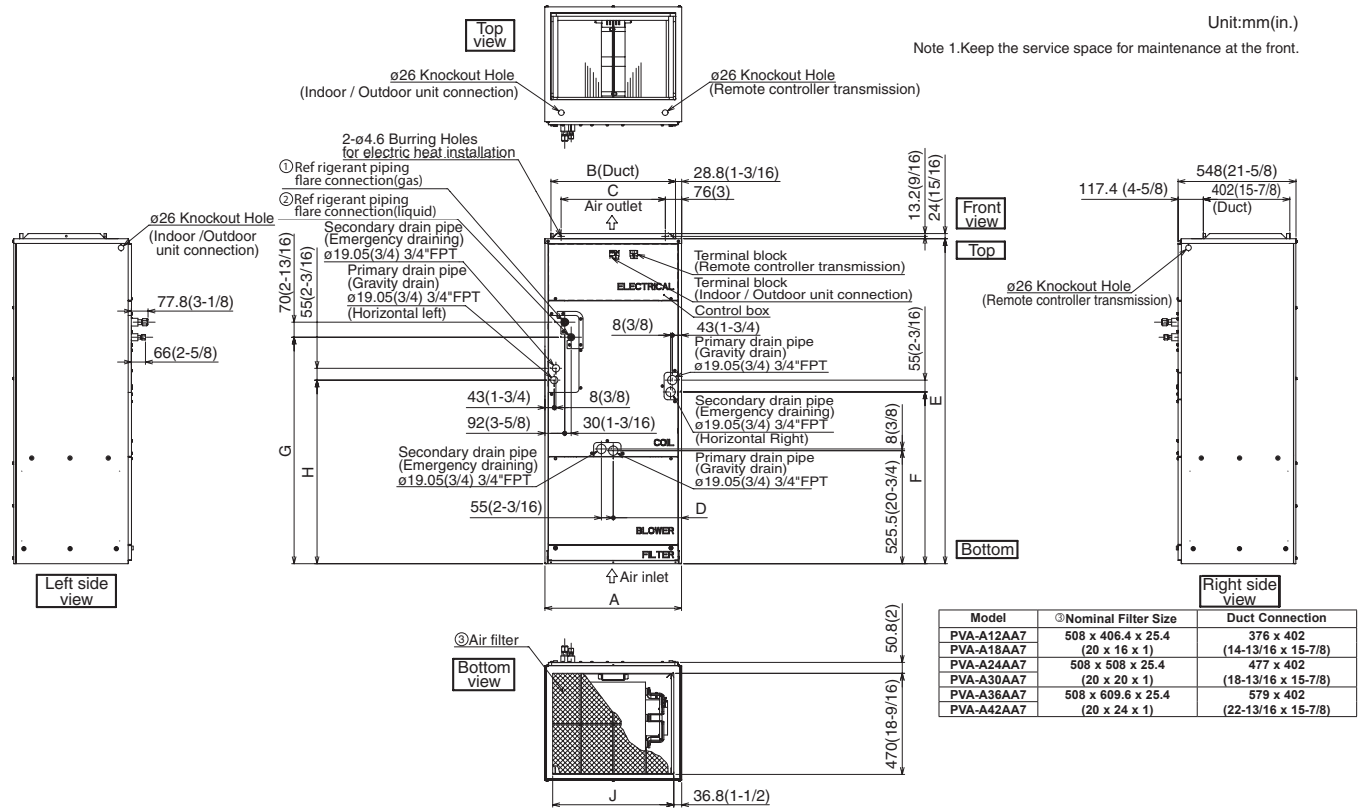
<sup>1</sup> Unable to use with wireless remote controller

## ACCESSORIES: PUZ-HA30NHA5

|                                                                               |                   |
|-------------------------------------------------------------------------------|-------------------|
| Air Outlet Guide                                                              | □ PAC-SG59SG-E    |
| Front Wind Baffle                                                             | □ WB-PA5          |
| Drain Socket                                                                  | □ PAC-SG61DS-E    |
| Centralized Drain Pan                                                         | □ PAC-SG63DP-E    |
| M-NET Converter                                                               | □ PAC-SF83MA-E    |
| M-NET Converter                                                               | □ PAC-SJ95MA-E    |
| Control/Service Tool                                                          | □ PAC-SK52ST      |
| Hail Guard                                                                    | □ HG-A2           |
| Condensing Unit Mounting Pad 24" x 42" x 3"                                   | □ ULTRILITE2      |
| Outdoor Unit Stand—12" High                                                   | □ QSMS1202M       |
| Outdoor Unit Stand—18" High                                                   | □ QSMS1802M       |
| Outdoor Unit Stand—24"High                                                    | □ QSMS2402M       |
| Heavy Duty Wall Mounting Bracket for Outdoor Units—Coated Steel               | □ QSWB2000M-1     |
| Heavy Duty Wall Mounting Bracket for Outdoor Units—316 Series Stainless Steel | □ QSWBSS          |
| 3/8" x 5/8" x 10' / 1/2" Lineset (Twin-Tube Insulation)                       | □ MPLS385812T-10  |
| 3/8" x 5/8" x 15' / 1/2" Lineset (Twin-Tube Insulation)                       | □ MPLS385812T-15  |
| 3/8" x 5/8" x 30' / 1/2" Lineset (Twin-Tube Insulation)                       | □ MPLS385812T-30  |
| 3/8" x 5/8" x 50' / 1/2" Lineset (Twin-Tube Insulation)                       | □ MPLS385812T-50  |
| 3/8" x 5/8" x 65' / 1/2" Lineset (Twin-Tube Insulation)                       | □ MPLS385812T-65  |
| 3/8" x 5/8" x 100' / 1/2" Lineset (Twin-Tube Insulation)                      | □ MPLS385812T-100 |

# DIMENSIONS: PVA-A30AA7 & PUZ-HA30NHA5

## PVA-A30AA7



| Model      | A        | B              | C              | D              | E             | F               | G               | H              | J             | Unit: mm (in.) |              |
|------------|----------|----------------|----------------|----------------|---------------|-----------------|-----------------|----------------|---------------|----------------|--------------|
|            |          |                |                |                |               |                 |                 |                |               | ①Gas Pipe      | ②Liquid Pipe |
| PVA-A12AA7 | 432 (17) | 376 (14-13/16) | 281 (11-1/8)   | 224 (8-7/8)    | 1275 (50-1/4) | 680 (26-13/16)  | 823 (32-7/16)   | 735.5 (29)     | 360 (14-3/16) | Φ 12.7 (1/2)   | Φ 6.35 (1/4) |
| PVA-A18AA7 | 534 (21) | 477 (18-13/16) | 382.6 (15-1/8) | 266.5 (10-1/2) | 1378 (54-1/4) | 737 (29-1/16)   | 953.5 (37-9/16) | 792 (31-3/16)  | 461 (18-3/16) | Φ 15.88 (5/8)  | Φ 9.52 (3/8) |
| PVA-A24AA7 | 635 (25) | 579 (22-13/16) | 484.6 (19-1/8) | 317.5 (12-1/2) | 1511 (59-1/2) | 798.5 (31-7/16) | 1053 (41-1/2)   | 853.5 (33-5/8) | 563 (22-3/16) |                |              |

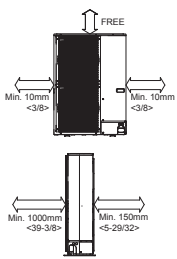
# DIMENSIONS: PVA-A30AA7 & PUZ-HA30NHA5

## PUZ-HA30NHA5

### 1 FREE SPACE (Around the unit) 2 SERVICE SPACE 3 FOUNDATION BOLTS 4 PIPING-WIRING DIRECTIONS

Unit : mm<inch>

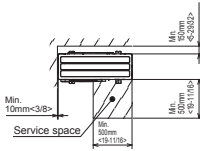
The diagram below shows a basic example.  
Explanation of particular details are given in the installation manuals, etc.



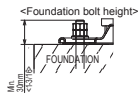
#### Example of Notes

- ①.....Refrigerant GAS pipe connection (FLARE)φ15.88<5/8>
- ②.....Refrigerant LIQUID pipe connection (FLARE)φ9.52<3/8>
- \*1.....Indication of STOP VALVE connection location.

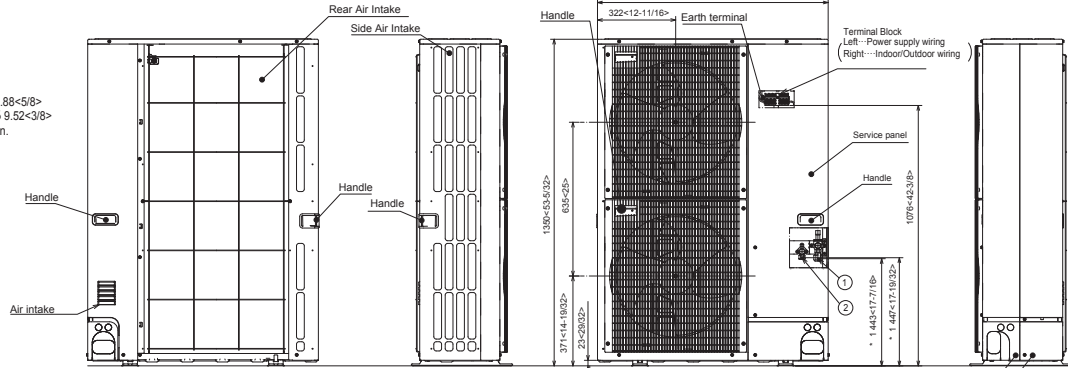
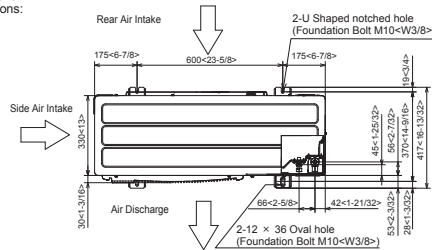
Dimensions of space needed for service access are shown in the below diagram.



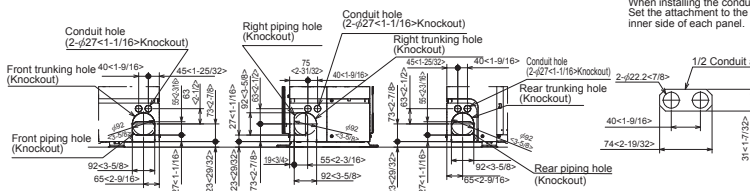
Please secure the unit firmly with 4 foundation (M10<W3/8>) bolts. (Bolts and washers must be purchased locally.)



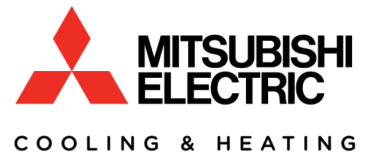
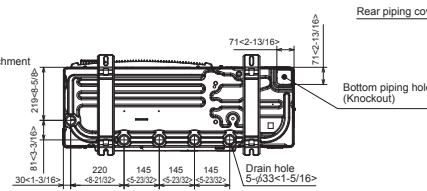
Piping and wiring connections can be made from 4 directions: front, right, rear and below.



#### Piping Knockout Hole Details



When installing the conduit.  
Set the attachment to the inner side of each panel.



1340 Satellite Boulevard, Suwanee, GA 30024  
Toll Free: 800-433-4822 [www.mehvac.com](http://www.mehvac.com)

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