

**PEAD-A42AA7 & PUZ-A42NKA7(-BS)
MID STATIC HORIZONTAL-DUCTED INDOOR UNIT
42,000 BTU/H HEAT PUMP UNIVERSAL OUTDOOR**



Job Name:

System Reference:

Date:



Indoor Unit.....PEAD-A42AA7

Outdoor Unit
Standard Model.....PUZ-A42NKA7

Seacoast Model.....PUZ-A42NKA7-BS

INDOOR UNIT FEATURES

- Unobtrusive ceiling-concealed design for short-run ductwork
- Wide ranging external static pressure (0.14-0.60 in. WG)
- Built-in condensate lift mechanism (up to 27-9/16")
- Auto fan speed mode
- Optional FB Series filter boxes for easy access and service
- Ideal for residential homes, retail shopping centers, larger classrooms, office complexes, conference rooms, ballrooms, fitness centers, and more
- 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 100 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: PEAD-A42AA7 & PUZ-A42NKA7(-BS)

| | | | |
|---|--|---------------------|--|
| Cooling at 95°F ¹ | Maximum Capacity | BTU/H | 42,000 |
| | Rated Capacity | BTU/H | 42,000 |
| | Minimum Capacity | BTU/H | 16,000 |
| | Maximum Power Input | W | 3,920 |
| | Rated Power Input | W | 3,920 |
| | Moisture Removal | Pints/h | 9.0 |
| | Sensible Heat Factor | | 0.76 |
| Heating at 47°F ² | Power Factor | % | 93.6/93.6 |
| | Maximum Capacity | BTU/H | 48,000 |
| | Rated Capacity | BTU/H | 45,000 |
| | Minimum Capacity | BTU/H | 18,100 |
| | Maximum Power Input | W | 3,700 |
| | Rated Power Input | W | 3,290 |
| Heating at 17°F ³ | Power Factor | % | 92.9/92.9 |
| | Maximum Capacity | BTU/H | 33,700 |
| | Rated Capacity | BTU/H | 30,600 |
| | Maximum Power Input | W | 3,080 |
| Heating at 5°F ⁴ | Rated Power Input | W | 3,040 |
| | Maximum Capacity | BTU/H | 29,400 |
| Heating at 5°F ⁴ | Maximum Power Input | W | 3,000 |
| | SEER | | 16.1 |
| Efficiency | EER ¹ | | 10.7 |
| | HSPF [IV] | | 10.0 |
| | COP at 47°F ² | | 4.0 |
| | COP at 17°F at Maximum Capacity ³ | | 3.21 |
| | COP at 5°F at Maximum Capacity ⁴ | | 2.87 |
| | ENERGY STAR® Certified | | No |
| Electrical | 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 | 30 |
| | Recommended Wire Size [Indoor - Outdoor] | AWG | 14 |
| | Power Supply | | Indoor unit is powered by the outdoor unit |
| Indoor Unit | MCA | A | 3.5 |
| | Fan Motor Full Load Amperage | A | 2.8 |
| | Fan Motor Output | W | 244 |
| | Fan Motor Type | | DC Motor |
| | Airflow Rate at Cooling, Dry | CFM | 1042-1254-1483 |
| | Airflow Rate at Cooling, Wet | CFM | 1002-1214-1443 |
| | Airflow Rate at Heating, Dry | CFM | 1042-1254-1483 |
| | Sound Pressure Level [Cooling] | dB[A] | 36-40-44 |
| | Sound Pressure Level [Heating] | dB[A] | 36-40-44 |
| | External Static Pressure | in.WG | 0.14-0.2-0.28-0.4-0.6 |
| | Drain Pipe Size | In. [mm] | 1-1/4 [32] |
| | Condensate Lift Mechanism, Maximum Distance | In. [mm] | 27-9/16 [700] |
| | Coating on Heat Exchanger | | — |
| | External Finish Color | | Galvanized |
| | Unit Dimensions | W x D x H: In. [mm] | 55-1/8 x 28-7/8 x 9-7/8 [1400 x 732 x 250] |
| | Package Dimensions | W x D x H: In. [mm] | 65 x 34-11/16 x 13-7/16 [1650 x 880 x 341] |
| Unit Weight | Lbs. [kg] | 91 [41] | |
| Package Weight | Lbs. [kg] | 106 [48] | |
| Indoor Unit Operating Temperature Range | Cooling Intake Air Temp [Maximum / Minimum]* | °F | 90 DB, 72 WB / 66 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)

| | | |
|--|----|------------------------------|
| ¹ Cooling (Indoor // Outdoor) | °F | 80 DB, 67 WB // 95 DB, 75 WB |
| ² Heating at 47°F (Indoor // Outdoor) | °F | 70 DB, 60 WB // 47 DB, 43 WB |
| ³ Heating at 17°F (Indoor // Outdoor) | °F | 70 DB, 60 WB // 17 DB, 15 WB |

Conditions

| | | |
|---|----|--------------------------------|
| ⁴ Heating at 5°F (Indoor // Outdoor) | °F | 70 DB, 60 WB // 5 DB, 4 WB |
| ⁵ Heating at -4°F (Indoor // Outdoor) | °F | 70 DB, 60 WB // -4 DB, -5 WB |
| ⁶ Heating at -5°F (Indoor // Outdoor) | °F | 70 DB, 60 WB // -5 DB, -6 WB |
| ⁷ Heating at -13°F (Indoor // Outdoor) | °F | 70 DB, 60 WB // -13 DB, -14 WB |

*Outdoor Unit Operating Temperature Range (Cooling Air Temp (Maximum / Minimum)):

- 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: PEAD-A42AA7 & PUZ-A42NKA7(-BS)

| | | | |
|--|--|---------------------|---|
| Outdoor Unit | MCA | A | 25.0 |
| | MOCP | A | 31 |
| | Fan Motor Full Load Amperage | A | 0.5 + 0.5 |
| | Fan Motor Output | W | 74 |
| | Airflow Rate | CFM | 3880/3880 |
| | Refrigerant Control | | LEV |
| | Defrost Method | | Reverse Cycle |
| | Coating on Heat Exchanger | | Blue Fin Coating (BS Model only) |
| | Sound Pressure Level, Cooling ¹ | dB(A) | 52 |
| | Sound Pressure Level, Heating ² | dB(A) | 53 |
| | Compressor Type | | INVERTER-driven twin rotary |
| | Compressor Model | | MNB33FBRMC-L |
| | Compressor Rated Load Amps | A | 8 |
| | Compressor Locked Rotor Amps | A | 13.0 |
| | 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 x D x H: In. [mm] | 41-5/16 x 13 (+1-3/16) x 52-11/16 [1050 x 330 (+30) x 1338] |
| | Package Dimensions | W x D x H: In. [mm] | 42-15/16 x 17-11/16 x 56-4/16 [1091 x 450 x 1429] |
| | Unit Weight | Lbs. [kg] | 214 [97] |
| | Package Weight | Lbs. [kg] | 245 [111] |
| 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 | Type | | R410A |
| | Charge | Lbs, oz | 10, 6.0 |
| | Chargeless Piping Length | Ft. [m] | 0.0 [30.0] |
| | 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 |

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INDOOR UNIT ACCESSORIES: PEAD-A42AA7

| | | |
|----------------------------|---|-------------------|
| Control Interface | BACnet® and Modbus® Interface | PAC-UKPRC001-CN-1 |
| | CN24 Relay Kit | CN24RELAY-KIT-CM3 |
| | Connector cable for remote display | PAC-SA88HA-EP |
| | 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 |
| Remote Sensor | USNAP Adapter | PAC-WHS01UP-E |
| | 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 |
| | Airzone ZBS Wired Blueface Principal Controller White | AZZBSBLUEFACECB |
| | Airzone ZBS Wired Lite Controller White | AZZBSLITECB |
| | Airzone ZBS Wired Think Controller White | AZZBSTHINKCB |
| | Airzone ZBS Wireless Lite Controller White | AZZBSLITERB |
| | Airzone ZBS Wireless Think Controller White | AZZBSTHINKRB |
| | Deluxe Wired MA Remote Controller† | PAR-40MAAU |
| | Simple MA Remote Controller† | PAC-YT53CRAU-J |
| Wireless Remote Controller | Touch MA Controller† | PAR-CT01MAU-SB |
| | kumo touch™ RedLINK™ Wireless Controller | MHK2 |
| | Wireless MA Controller | PAR-FA32MA-W |
| Condensate | Wireless MA Remote Controller | PAR-FL32MA-E |
| | 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 |
| Control Wire | Blue Diamond Sensor Extension Cable — 15 Ft. | C13-103 |
| | 20/2PR, 1PR shielded + 1PR plenum wire for Airzone, 100 ft reel | CW2042S2-100 |
| Disconnect Switch | 20/2PR, shielded + 1PR plenum wire for Airzone, 500 ft reel | CW2042S2-500 |
| | (30A/600V/UL) [fits 2" X 4" utility box] - Black | TAZ-MS303 |
| Filter Box | (30A/600V/UL) [fits 2" X 4" utility box] - White | TAZ-MS303W |
| | Filter Box with MERV 13 Filter | FBM2-4-A |
| 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 |

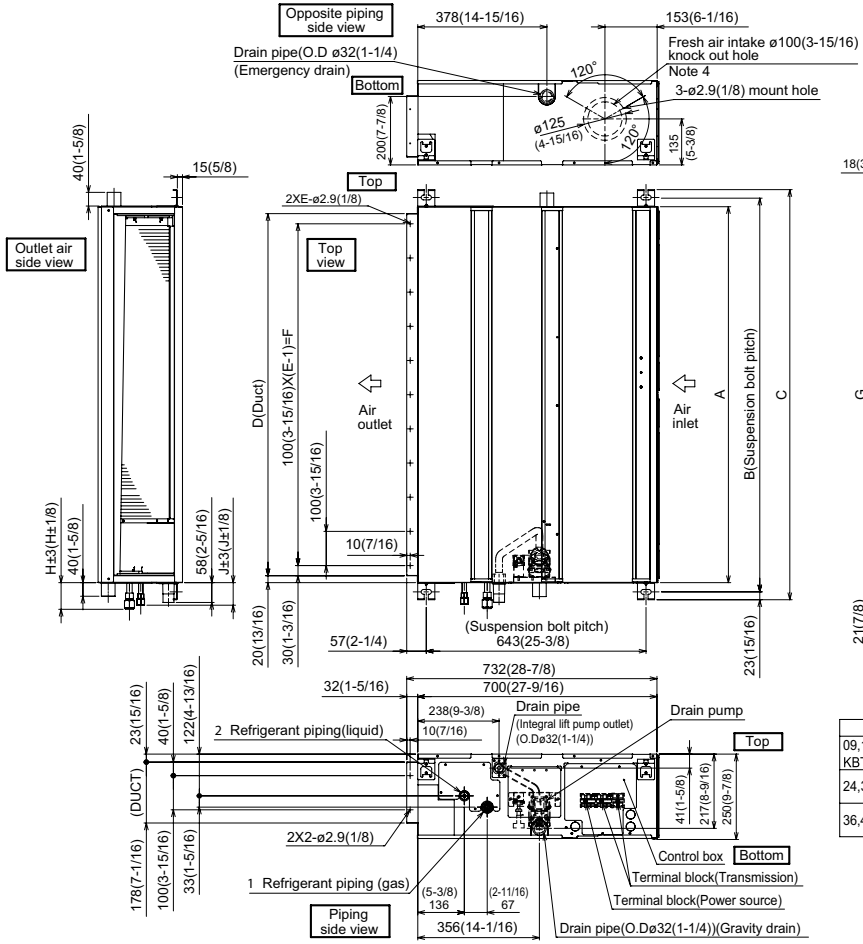
NOTES:

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

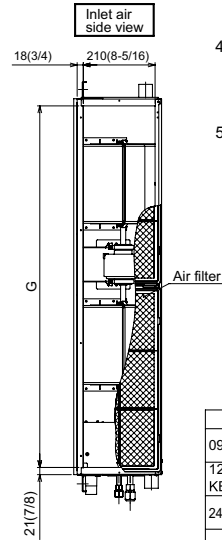
OUTDOOR UNIT ACCESSORIES: PUZ-A42NKA7(-BS)

| | | |
|----------------------|--|--|
| Air Outlet Guide | Air Outlet Guide (1 Piece) | PAC-SG59SG-E |
| | Air Outlet Guide (1 Piece) | PAC-SH96SG-E (two pieces are required) |
| 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 |
| Drain Socket | Drain Socket | PAC-SG61DS-E |
| 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" Dual Fan Stand | QSMS1802M |
| | 24" Dual Fan Stand | QSMS2402M |
| | Condenser Wall Bracket | QSWB2000M-1 |
| | Condenser Wall Bracket -Stainless Steel Finish | QSWBSS |
| | Outdoor Unit Stand — 12" High | QSMS1202M |
| Wind Baffle | Front Wind Baffle | WB-PA3 (two pieces are required) |
| | Rear Wind Baffle | WB-RE6 |
| | Side Advanced Wind Baffle | WB-SD6 |

INDOOR UNIT DIMENSIONS: PEAD-A42AA7



- Note 1. Use an M10 screw for the suspension bolt (field supply).
 2. Keep the service space for maintenance at the bottom.
 3. This drawing is for 24·30·36·42 KBTU/H models, which have 2 fans.
 09·12·15·18 KBTU/H models have 1 fan.
 4. If the inlet duct is used, remove the air filter (supplied with the unit), then install the filter (field supply) at the suction side.
 5. Heat air to 0°C (32°F) or higher when taking fresh air with a fresh air intake.



Unit:mm(in.)

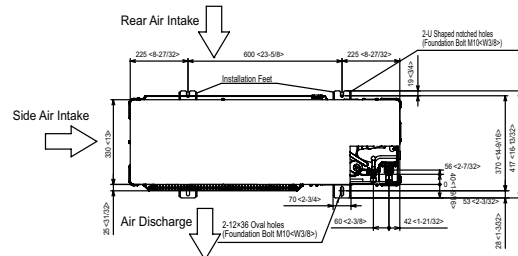
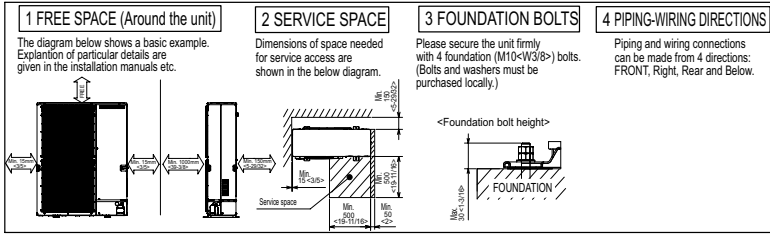
| Model | J | 1 Gas pipe | 2 Liquid pipe |
|-------------------|---------------|-----------------------|----------------------|
| 09 KBTU/H | 62 (2-1/2) | $\phi 9.52$ (3/8) | $\phi 6.35$ (1/4) |
| 12, 15, 18 KBTU/H | 62 (2-1/2) | $\phi 12.7$ (1/2) | $\phi 6.35$ (1/4) |
| 24, 30 KBTU/H | 66 (2-5/8) | $\phi 15.88$ (5/8) | $\phi 9.52$ (3/8) |
| 36, 42 KBTU/H | | | |

Unit:mm(in.)

| Model | A | B | C | D | E | F | G | H |
|-----------------------|-------------------|-------------------|-------------------|-------------------|----|-------------------|--------------------|---------------|
| 09, 12, 15, 18 KBTU/H | 900 (35-7/16) | 954 (37-9/16) | 1000 (39-3/8) | 860 (33-7/8) | 9 | 800 (31-1/2) | 858 (33-13/16) | 72 (2-7/8) |
| 24, 30 KBTU/H | 1100 (43-5/16) | 1154 (45-7/16) | 1200 (47-1/4) | 1060 (41-3/4) | 11 | 1000 (39-3/8) | 1058 (41-11/16) | 78 (3-1/8) |
| 36, 42 KBTU/H | 1400 (55-1/8) | 1454 (57-1/4) | 1500 (59-1/16) | 1360 (53-9/16) | 14 | 1300 (51-3/16) | 1358 (53-1/2) | |

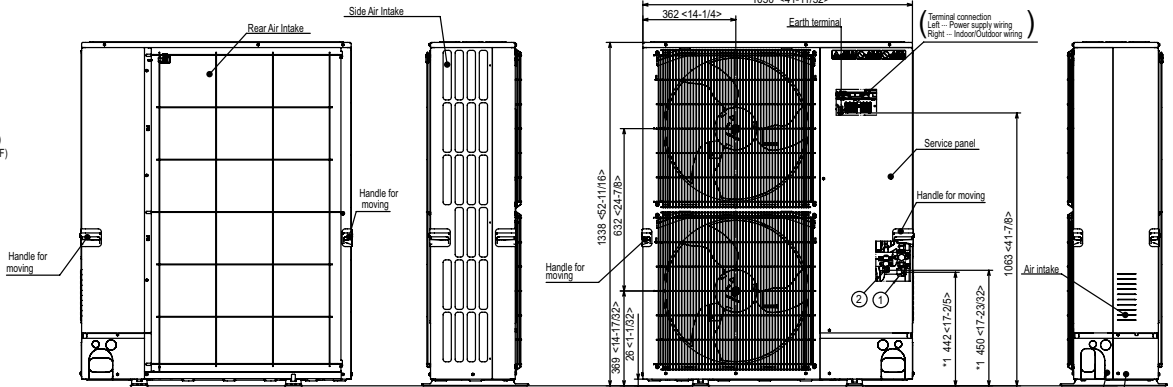
OUTDOOR UNIT DIMENSIONS: PUZ-A42NKA7(-BS)

Unit: mm<in>

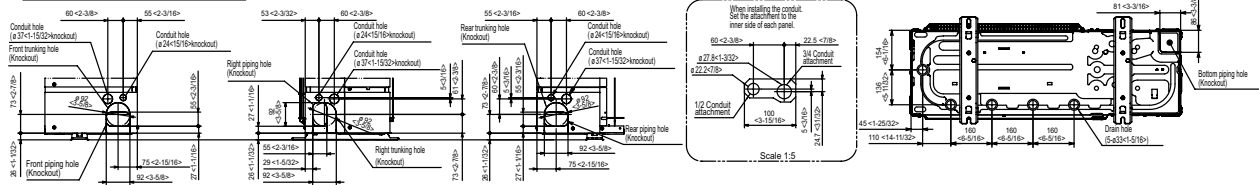


Example of Notes

- 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

