

**TPEADA0181AA80A & TRUYA0181KA70NA**  
**MID STATIC HORIZONTAL-DUCTED INDOOR UNIT**  
**18,000 BTU/H COOLING ONLY OUTDOOR**



Job Name:

System Reference:

Date:



Indoor Unit.....TPEADA0181AA80A

Outdoor Unit.....TRUYA0181KA70NA



**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
- Pre-charged with refrigerant volume for piping length up to 70 ft
- Low ambient cooling down to -40°F providing 100% capacity (with wind baffles)
- 24-hour continuous operation (cooling mode)
- High pressure protection
- Fast restart
- Superior energy and operational efficiency
- Seacoast protection\*
  - 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 Heat exchanger coil to protect it against airborne contaminants.
  - Heat exchanger coil and base panel rated for 2,000 hours in accordance with ASTM B117 testing

\*Seacoast protection standard from 2022 production

# SPECIFICATIONS: TPEADA0181AA80A & TRUYA0181KA70NA

|                                          |                                              |                     |                                                                 |
|------------------------------------------|----------------------------------------------|---------------------|-----------------------------------------------------------------|
| Cooling at 95°F <sup>1</sup>             | Maximum Capacity                             | BTU/H               | 18,000                                                          |
|                                          | Rated Capacity                               | BTU/H               | 18,000                                                          |
|                                          | Minimum Capacity                             | BTU/H               | 8,000                                                           |
|                                          | Maximum Power Input                          | W                   | 1,660                                                           |
|                                          | Rated Power Input                            | W                   | 1,660                                                           |
|                                          | Moisture Removal                             | Pints/h             | 3.7                                                             |
|                                          | Sensible Heat Factor                         |                     | 0.77                                                            |
|                                          | Power Factor [208V / 230V]                   | %                   | 91.4 / 91.4                                                     |
| Efficiency                               | SEER                                         |                     | 19.9                                                            |
|                                          | EER <sup>1</sup>                             |                     | 10.8                                                            |
|                                          | 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                   | 15                                                              |
|                                          | Recommended Wire Size [Indoor - Outdoor]     | AWG                 | 14                                                              |
|                                          | Power Supply                                 |                     | Indoor unit is powered by the outdoor unit                      |
| Indoor Unit                              | MCA                                          | A                   | 2.44                                                            |
|                                          | Fan Motor Full Load Amperage                 | A                   | 1.95                                                            |
|                                          | Fan Motor Output                             | W                   | 121                                                             |
|                                          | Fan Motor Type                               |                     | DC Motor                                                        |
|                                          | Airflow Rate at Cooling, Dry                 | CFM                 | 424–512–600                                                     |
|                                          | Airflow Rate at Cooling, Wet                 | CFM                 | 382–461–540                                                     |
|                                          | Airflow Rate at Heating, Dry                 | CFM                 | 424–512–600                                                     |
|                                          | Sound Pressure Level [Cooling]               | dB[A]               | 29–34–37                                                        |
|                                          | Sound Pressure Level [Heating]               | dB[A]               | 29–34–37                                                        |
|                                          | 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] | 35-7/16 x 28-7/8 x 9-7/8 [900 x 732 x 250]                      |
| Outdoor Unit                             | Package Dimensions                           | W x D x H: In. [mm] | 46-1/16 x 35-7/16 x 13 [1,170 x 900 x 330]                      |
|                                          | Unit Weight                                  | Lbs. [kg]           | 60 [27]                                                         |
|                                          | Package Weight                               | Lbs. [kg]           | 71 [32]                                                         |
|                                          | Cooling Intake Air Temp [Maximum / Minimum]* | °F                  | 90 DB, 72 WB / 66 DB, 61 WB                                     |
|                                          | MCA                                          | A                   | 11.0                                                            |
|                                          | MOCP                                         | A                   | 28                                                              |
|                                          | Fan Motor Full Load Amperage                 | A                   | 0.5                                                             |
|                                          | Fan Motor Output                             | W                   | 46                                                              |
|                                          | Airflow Rate [Cooling / Heating]             | CFM                 | 1590                                                            |
|                                          | Refrigerant Control                          |                     | LEV                                                             |
|                                          | Defrost Method                               |                     | Reverse Cycle                                                   |
|                                          | Coating on Heat Exchanger                    |                     | Blue Fin Coating***                                             |
|                                          | Sound Pressure Level, Cooling <sup>1</sup>   | dB(A)               | 44                                                              |
|                                          | Compressor Type                              |                     | INVERTER-driven twin rotary                                     |
|                                          | Compressor Model                             |                     | SNB130FQCMC-L1                                                  |
| Indoor Unit Operating Temperature Range  | Compressor Rated Load Amps                   | A                   | 7                                                               |
|                                          | Compressor Locked Rotor Amps                 | A                   | 12.0                                                            |
|                                          | Compressor Oil [Type // Charge]              | oz.                 | FV50S // 16                                                     |
|                                          | External Finish Color                        |                     | Ivory Munsell 3Y 7.8/1.1                                        |
|                                          | Base Pan Heater                              |                     | N/A                                                             |
|                                          | Unit Dimensions                              | W x D x H: In. [mm] | 31-13/16 (2+7/16) x 11-13/16 x 24-13/16 [809 (+62) x 300 x 630] |
|                                          | Package Dimensions                           | W x D x H: In. [mm] | 37-1/16 x 16-3/16 x 27-7/16 [941 x 411 x 697]                   |
|                                          | Unit Weight                                  | Lbs. [kg]           | 99 [44]                                                         |
|                                          | Package Weight                               | Lbs. [kg]           | 111 [50]                                                        |
|                                          | Cooling Air Temp [Maximum / Minimum]*        | °F                  | 115 DB / -40 DB                                                 |
|                                          | MCA                                          | A                   | 11.0                                                            |
|                                          | MOCP                                         | A                   | 28                                                              |
|                                          | Fan Motor Full Load Amperage                 | A                   | 0.5                                                             |
|                                          | Fan Motor Output                             | W                   | 46                                                              |
|                                          | Airflow Rate [Cooling / Heating]             | CFM                 | 1590                                                            |
| Outdoor Unit Operating Temperature Range | Refrigerant Control                          |                     | LEV                                                             |
|                                          | Defrost Method                               |                     | Reverse Cycle                                                   |
|                                          | Coating on Heat Exchanger                    |                     | Blue Fin Coating***                                             |
|                                          | Sound Pressure Level, Cooling <sup>1</sup>   | dB(A)               | 44                                                              |
|                                          | Compressor Type                              |                     | INVERTER-driven twin rotary                                     |
|                                          | Compressor Model                             |                     | SNB130FQCMC-L1                                                  |
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|                                          | Package Weight                               | Lbs. [kg]           | 111 [50]                                                        |

NOTES:  
 AHRI Rated Conditions  
 (Rated data is determined at a fixed compressor speed)    <sup>1</sup>Cooling (Indoor // Outdoor)    °F    80 DB, 67 WB // 95 DB, 75 WB

\*Indoor/Outdoor Unit Operating Temperature Range (Cooling Air Temp [Maximum / Minimum]):  
 • Wind baffles required to operate below 23°F DB in cooling mode.  
 • Cooling-only system with advanced wind baffle: -40°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.

\*\*\*Blue Fin Coating Standard from 2022 production:  
 • PU(Y/Z)-A(12/18)NKA7 - Beginning with serial number 12U\*\*\*\*\*  
 • PU(Y/Z)-A(24/30/36/42)NKA7 - Beginning with serial number 12U\*\*\*\*\*

## SPECIFICATIONS: TPEADA0181AA80A & TRUYA0181KA70NA

|             |                                                            |               |             |
|-------------|------------------------------------------------------------|---------------|-------------|
| Refrigerant | Type                                                       |               | R410A       |
|             | Maximum Charge Quantity                                    | Lbs, oz       | 4.0, 14.0   |
|             | Initial Charge Quantity                                    | Ft. [m]       | 70.0 [21.0] |
|             | Additional Refrigerant Charge Per Additional Piping Length | oz./Ft. [g/m] | 0.1 [10]    |
| Piping      | Gas Pipe Size O.D. [Flared]                                | In.[mm]       | 1/2 [12.7]  |
|             | Liquid Pipe Size O.D. [Flared]                             | In.[mm]       | 1/4 [6.35]  |
|             | Maximum Piping Length                                      | Ft. [m]       | 165 [50]    |
|             | Maximum Height Difference                                  | Ft. [m]       | 100 [30]    |
|             | Maximum Number of Bends                                    |               | 15          |

### NOTES:

AHRI Rated Conditions

(Rated data is determined at a fixed compressor speed)    °Cooling (Indoor // Outdoor)    °F    80 DB, 67 WB // 95 DB, 75 WB

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

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## INDOOR UNIT ACCESSORIES: TPEADA0181AA80A

|                            |                                                                                             |                                            |
|----------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------|
| Control Interface          | 3-Pin Connector                                                                             | <input type="checkbox"/> PAC-715AD         |
|                            | Airzone ZBS Wired Blueface Principal Controller White                                       | <input type="checkbox"/> AZZBSBLUEFACECB   |
|                            | Airzone ZBS Wired Blueface Principal Controller White                                       | <input type="checkbox"/> AZZBSBLUEZEROCB   |
|                            | Airzone ZBS Wired Lite Controller White                                                     | <input type="checkbox"/> AZZBSLITECB       |
|                            | Airzone ZBS Wireless Lite Controller White                                                  | <input type="checkbox"/> AZZBSLITERB       |
|                            | Airzone ZBS Wireless Think Controller White                                                 | <input type="checkbox"/> AZZBSTHINKRB      |
|                            | BACnet® and Modbus® Interface                                                               | <input type="checkbox"/> PAC-UKPRC001-CN-1 |
|                            | CN24 Relay Kit                                                                              | <input type="checkbox"/> CN24RELAY-KIT-CM3 |
|                            | IT Extender                                                                                 | <input type="checkbox"/> PAC-WHS01IE-E     |
|                            | kumo station® for kumo cloud®                                                               | <input type="checkbox"/> TAC-WHS01HC-E     |
|                            | Remote Operation Adapter†                                                                   | <input type="checkbox"/> PAC-SF40RM-E      |
|                            | Thermostat Interface                                                                        | <input type="checkbox"/> PAC-US444CN-1     |
|                            | Thermostat Interface                                                                        | <input type="checkbox"/> PAC-US445CN-1     |
|                            | USNAP Adapter                                                                               | <input type="checkbox"/> PAC-WHS01UP-E     |
| Remote Sensor              | Wireless Interface for kumo cloud®                                                          | <input type="checkbox"/> PAC-USWHS002-WF-2 |
|                            | Flush Mount Remote Temperature Sensor                                                       | <input type="checkbox"/> PAC-USSEN002-FM-1 |
|                            | Flush Mount Temperature Sensor                                                              | <input type="checkbox"/> PAC-USSEN001-FM-1 |
|                            | Remote Temperature Sensor                                                                   | <input type="checkbox"/> PAC-SE41TS-E      |
| Wired Remote Controller    | Wireless temperature and humidity sensor for kumo cloud®                                    | <input type="checkbox"/> PAC-USWHS003-TH-1 |
|                            | Deluxe Wired MA Remote Controller†                                                          | <input type="checkbox"/> TAR-40MAAU        |
|                            | Simple Ductless Wired Remote Controller                                                     | <input type="checkbox"/> PAC-SDW01RC-1     |
|                            | Simple MA Remote Controller†                                                                | <input type="checkbox"/> TAC-YT53CRAU-J    |
| Wireless Remote Controller | Touch MA Controller†                                                                        | <input type="checkbox"/> TAR-CT01MAU-SB    |
|                            | kumo touch™ RedLINK™ Wireless Controller                                                    | <input type="checkbox"/> MHK2              |
|                            | Lockdown bracket for remote controller                                                      | <input type="checkbox"/> RCMKP1CB          |
|                            | Wireless MA Receiver                                                                        | <input type="checkbox"/> PAR-SR32MA-E      |
| Condensate                 | Wireless MA Remote Controller                                                               | <input type="checkbox"/> TAR-FL32MA-E      |
|                            | Blue Diamond (Advanced) Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended] | <input type="checkbox"/> X87-721           |
|                            | Blue Diamond (MegaBlue Advanced) Condensate Pump w/ Reservoir & Sensor                      | <input type="checkbox"/> X87-835           |
|                            | Blue Diamond Sensor Extension Cable — 15 Ft.                                                | <input type="checkbox"/> C13-103           |
| Control Wire               | Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H                                     | <input type="checkbox"/> COMBI             |
|                            | 20/2PR, 1PR shielded + 1PR plenum wire for Airzone, 100 ft reel                             | <input type="checkbox"/> CW2042S2-100      |
| Disconnect Switch          | 20/2PR, shielded + 1PR plenum wire for Airzone, 500 ft reel                                 | <input type="checkbox"/> CW2042S2-500      |
|                            | (30A/600V/UL) [fits 2" X 4" utility box] - Black                                            | <input type="checkbox"/> TAZ-MS303         |
| Filter Box                 | (30A/600V/UL) [fits 2" X 4" utility box] - White                                            | <input type="checkbox"/> TAZ-MS303W        |
|                            | Filter Box with MERV 13 Filter                                                              | <input type="checkbox"/> FBM2-2-A          |
| Lineset                    | 100' x 1/4" x 100' / 1/2" Lineset (Twin-Tube Insulation)                                    | <input type="checkbox"/> MLS141212T-100    |
|                            | 15' x 1/4" x 15' / 1/2" Lineset (Twin-Tube Insulation)                                      | <input type="checkbox"/> MLS141212T-15     |
|                            | 30' x 1/4" x 30' / 1/2" Lineset (Twin-Tube Insulation)                                      | <input type="checkbox"/> MLS141212T-30     |
|                            | 50' x 1/4" x 50' / 1/2" Lineset (Twin-Tube Insulation)                                      | <input type="checkbox"/> MLS141212T-50     |
|                            | 65' x 1/4" x 65' / 1/2" Lineset (Twin-Tube Insulation)                                      | <input type="checkbox"/> MLS141212T-65     |

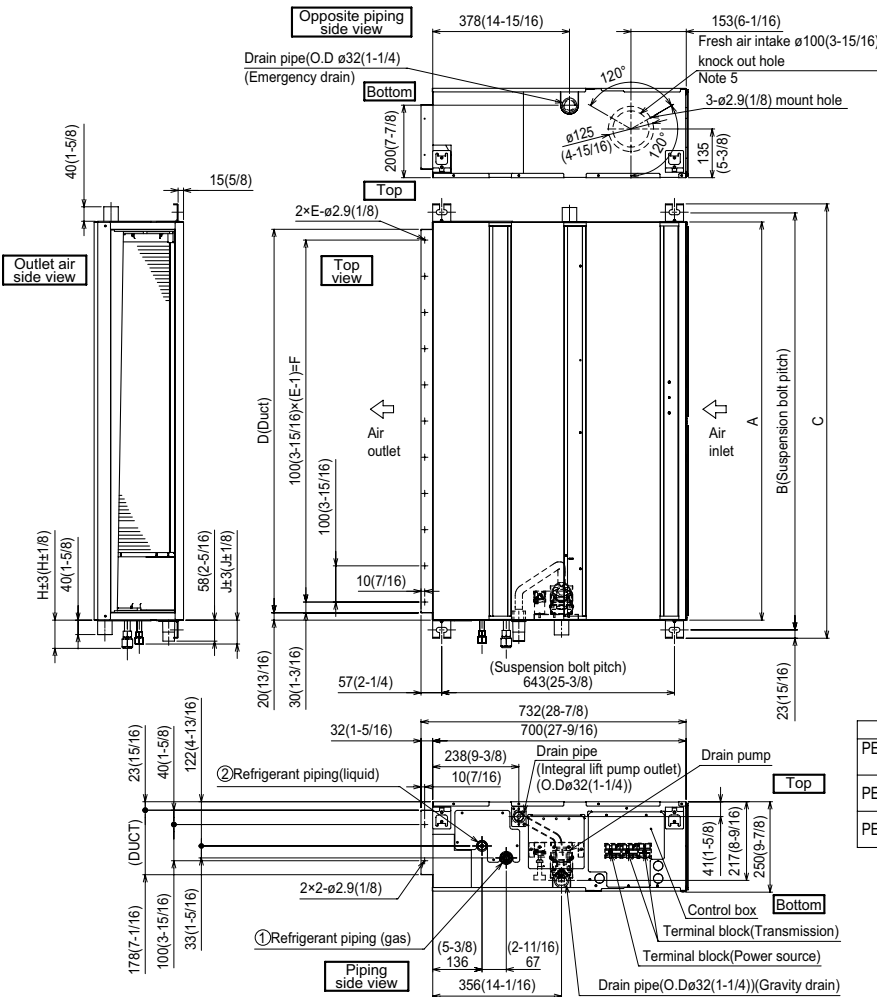
**NOTES:**

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

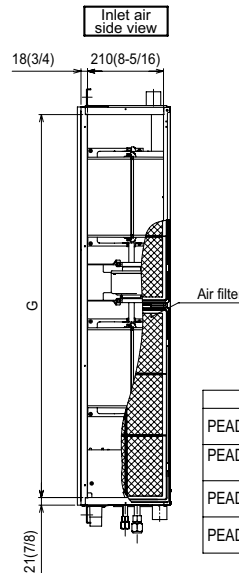
## OUTDOOR UNIT ACCESSORIES: TRUYA0181KA70NA

|                       |                                                                |                                       |
|-----------------------|----------------------------------------------------------------|---------------------------------------|
| Air Outlet Guide      | Air Outlet Guide                                               | <input type="checkbox"/> PAC-SJ07SG-E |
| Centralized Drain Pan | Centralized Drain Pan                                          | <input type="checkbox"/> PAC-SG63DP-E |
|                       | Drain Pan                                                      | <input type="checkbox"/> PAC-SG64DP-E |
| Control/Service Tool  | Control/Service Tool                                           | <input type="checkbox"/> PAC-SK52ST   |
|                       | M- & P-Series Maintenance Tool Cable Set                       | <input type="checkbox"/> M21EC0397    |
|                       | USB/UART Conversion Cable (Required for all laptop connection) | <input type="checkbox"/> M21EC1397    |
| Drain Socket          | Drain Socket                                                   | <input type="checkbox"/> MAC-871DS    |
| Hail Guards           | Hail Guard                                                     | <input type="checkbox"/> HG-A5        |
| M-NET Converter       | M-NET Converter                                                | <input type="checkbox"/> PAC-SJ96MA-E |
| Mini-Split Wire       | 14 Gauge, 4 wire MiniSplit Cable—250 ft. roll                  | <input type="checkbox"/> S144-250     |
|                       | 14 Gauge, 4 wire MiniSplit Cable—50 ft. roll                   | <input type="checkbox"/> S144-50      |
|                       | 16 Gauge, 4 wire MiniSplit Cable—250 ft. roll                  | <input type="checkbox"/> S164-250     |
|                       | 16 Gauge, 4 wire MiniSplit Cable—50 ft. roll                   | <input type="checkbox"/> S164-50      |
| Mounting Pad          | Condensing Unit Mounting Pad: 16" x 36" x 3"                   | <input type="checkbox"/> ULTRILITE1   |
| Stand                 | 18" Single Fan Stand                                           | <input type="checkbox"/> QSMS1801M    |
|                       | 24" Single Fan Stand                                           | <input type="checkbox"/> QSMS2401M    |
|                       | Condenser Wall Bracket                                         | <input type="checkbox"/> QSWB2000M-1  |
|                       | Condenser Wall Bracket - Stainless Steel Finish                | <input type="checkbox"/> QSWBSS       |
|                       | Outdoor Unit Stand — 12" High                                  | <input type="checkbox"/> QSMS1201M    |
| Wind Baffle           | Front Wind Baffle                                              | <input type="checkbox"/> WB-PA4       |
|                       | Rear Wind Baffle                                               | <input type="checkbox"/> WB-RE4       |
|                       | Side Advanced Wind Baffle                                      | <input type="checkbox"/> WB-SD4       |

**INDOOR UNIT DIMENSIONS: TPEADA0181AA80A**



- Notes 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 PEAD-A09-12-15-18-24-30AA8 models, which have 2 fans.  
PEAD-A36AA8 model has 3 fans.
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.

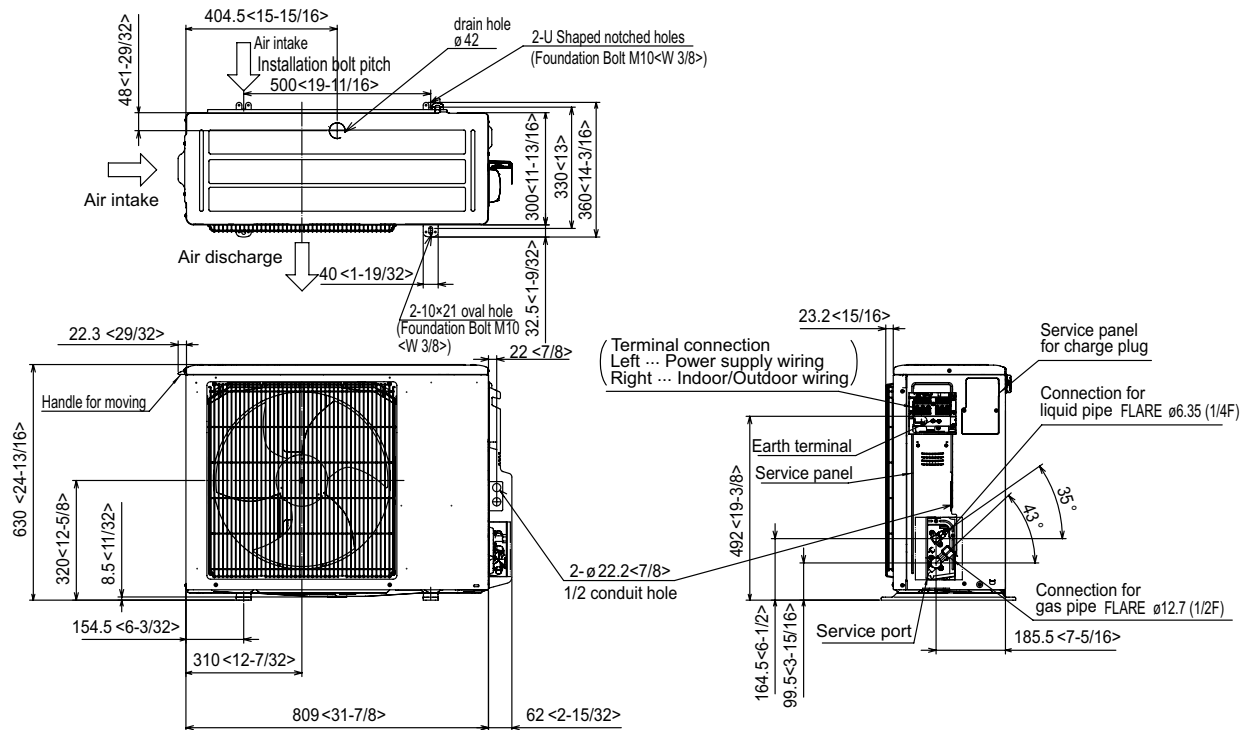


| Unit:mm(in.)          |               |                 |                |
|-----------------------|---------------|-----------------|----------------|
| Model                 | J             | ①Gas pipe       | ②Liquid pipe   |
| PEAD-A09AA8           | 62<br>(2-1/2) | ø9.52<br>(3/8)  | ø6.35<br>(1/4) |
| PEAD-A12.15,<br>18AA8 | 62<br>(2-1/2) | ø12.7<br>(1/2)  | ø6.35<br>(1/4) |
| PEAD-A24.30AA8        | 66<br>(2-5/8) | ø15.88<br>(5/8) | ø9.52<br>(3/8) |
| PEAD-A36AA8           |               |                 |                |

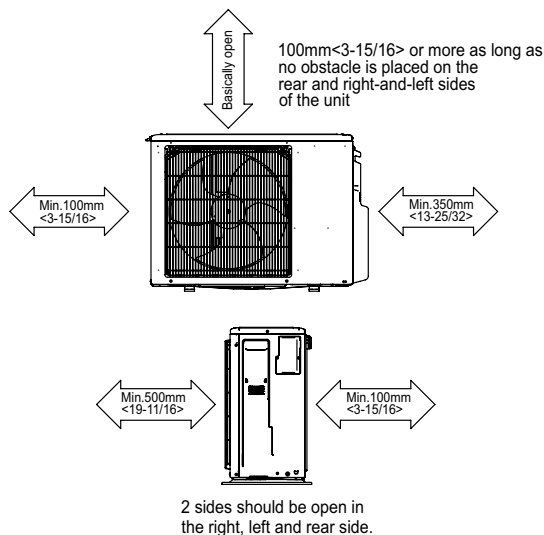
| Unit:mm(in.)             |                   |                   |                   |                  |    |                   |                    |               |
|--------------------------|-------------------|-------------------|-------------------|------------------|----|-------------------|--------------------|---------------|
| Model                    | A                 | B                 | C                 | D                | E  | F                 | G                  | H             |
| PEAD-A09,12,<br>15,18AA8 | 900<br>(35-7/16)  | 954<br>(37-9/16)  | 1000<br>(39-3/8)  | 860<br>(33-7/8)  | 9  | 800<br>(31-1/2)   | 858<br>(33-13/16)  | 72<br>(2-7/8) |
| PEAD-A24,30AA8           | 1100<br>(43-5/16) | 1154<br>(45-7/16) | 1200<br>(47-1/4)  | 1060<br>(41-3/4) | 11 | 1000<br>(39-3/8)  | 1058<br>(41-11/16) | 78<br>(3-1/8) |
| PEAD-A36AA8              | 1400<br>(55-1/8)  | 1454<br>(57-1/4)  | 1500<br>(59-1/16) | 1360<br>(53-1/8) | 14 | 1300<br>(51-3/16) | 1358<br>(53-1/2)   |               |

**OUTDOOR UNIT DIMENSIONS: TRUYA0181KA70NA**

Unit: mm&lt;in&gt;



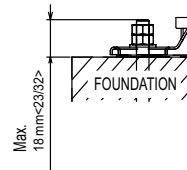
Free space around the outdoor unit  
(basic example)



## FOUNDATION BOLTS

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

<Foundation bolt height>



## PIPING-WIRING DIRECTION

Piping and wiring connection can be made from the rear direction only.

