

**SVZ-KP18NA & SUZ-KA18NA2**  
**18,000 BTU/H MULTI-POSITION AIR HANDLER**  
**18,000 BTU/H HEAT PUMP UNIVERSAL OUTDOOR UNIT**



Job Name:

System Reference:

Date:

Indoor Unit.....SVZ-KP18NA

Outdoor Unit.....SUZ-KA18NA2



**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 2.0% at 1.0 In.WG (Tested per ASHRAE Standard 193)
- Unique blow through design allows simple coil cleaning when the blower is removed
- Multi-position installation: horizontal (left or right), vertical (up or down)
- Optional electric heat kit for additional heat capacity
- Optional humidifier control and ERV control
- Built-in humidifier control, ERV control and auxiliary heat control
- Optional downflow kit
- 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
- Innovative Joint Lap DC Motor leads to high efficiency and reliability
- Pulse Amplitude Modulation technology
- High-performance grooved piping for increased heat exchange efficiency

# SPECIFICATIONS: SVZ-KP18NA & SUZ-KA18NA2

|   |  |                     |  |
|---|--|---------------------|--|
| Cooling at 95°F <sup>1</sup>            | Maximum Capacity                             | BTU/H               | 18,000                                     |
|   | Rated Capacity                               | BTU/H               | 18,000                                     |
|   | Minimum Capacity                             | BTU/H               | 6,200                                      |
|   | Maximum Power Input                          | W                   | 1,360                                      |
|   | Rated Power Input                            | W                   | 1,360                                      |
|   | Moisture Removal                             | Pints/h             | 2.4  |
|   | Sensible Heat Factor                         |                     | 0.85                                       |
| Heating at 47°F <sup>2</sup>            | Power Factor [208V / 230V]                   | %                   | 96.0 / 96.0                                |
|   | Maximum Capacity                             | BTU/H               | 26,000                                     |
|   | Rated Capacity                               | BTU/H               | 21,600                                     |
|   | Minimum Capacity                             | BTU/H               | 8,300                                      |
|   | Maximum Power Input                          | W                   | 2,160                                      |
|   | Rated Power Input                            | W                   | 1,600                                      |
| Heating at 17°F <sup>3</sup>            | Power Factor [208V / 230V]                   | %                   | 97.0 / 97.0                                |
|   | Maximum Capacity                             | BTU/H               | 14,000                                     |
|   | Rated Capacity                               | BTU/H               | 14,000                                     |
|   | Maximum Power Input                          | W                   | 1,460                                      |
| Heating at 5°F <sup>4</sup>             | Rated Power Input                            | W                   | 1,460                                      |
|   | Maximum Capacity                             | BTU/H               | 12,200                                     |
| Heating at -4°F <sup>5</sup>            | Maximum Power Input                          | W                   | 1,240                                      |
|   | Maximum Capacity                             | BTU/H               | 9,000                                      |
| Efficiency                              | SEER   SEER2                                 |                     | 18.0   21.0                                |
|   | EER <sup>1</sup>   EER2 <sup>1</sup>         |                     | 13.2   13.2                                |
|   | HSPF [IV]   HSPF2 [IV]                       |                     | 12.6   10.7                                |
|   | COP at 47°F <sup>2</sup>                     |                     | 3.9  |
|   | COP at 17°F at Maximum Capacity <sup>3</sup> |                     | 2.81                                       |
|   | COP at 5°F at Maximum Capacity <sup>4</sup>  |                     | 2.88                                       |
| Electrical                              | Voltage, Phase, Frequency                    |                     | 208/230, 1, 60                             |
|   | Guaranteed Voltage Range                     | V AC                | 187 - 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                   | 3.0  |
|   | Fan Motor Full Load Amperage                 | A                   | 2.4  |
|   | Fan Motor Type                               |                     | DC Motor                                   |
|   | Airflow Rate at Cooling, Dry                 | CFM                 | 471-573-675                                |
|   | Airflow Rate at Heating, Dry                 | CFM                 | 471-573-675                                |
|   | Sound Pressure Level [Cooling]               | dB[A]               | 33-36-41                                   |
|   | Sound Pressure Level [Heating]               | dB[A]               | 33-36-41                                   |
|   | External Static Pressure                     | in.WG               | 0.30-0.5-0.8                               |
|   | Drain Pipe Size                              | In. [mm]            | 3/4 [19.05]                                |
|   | Coating on Heat Exchanger                    |                     | —  |
|   | External Finish Color                        |                     | Hot-dip coated steel (ZAM)                 |
|   | Unit Dimensions                              | W x D x H: In. [mm] | 17 x 21-5/8 x 39-13/16 [432 x 549 x 1,011] |
|   | Package Dimensions                           | W x D x H: In. [mm] | 17 x 28-3/4 x 44-3/8 [460 x 730 x 1,011]   |
|   | Unit Weight                                  | Lbs. [kg]           | 93 [42]                                    |
| Package Weight                          | Lbs. [kg]                                    | 106 [48]            |  |
| 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)         | °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 | °F | 70 DB, 60 WB // 5 DB, 4 WB   |
|            | °F | 70 DB, 60 WB // -4 DB, -5 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.

\*\*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.

## SPECIFICATIONS: SVZ-KP18NA & SUZ-KA18NA2

|  |  |  |   |                |
|--|--|--|---|----------------|
| Outdoor Unit                                       | MCA  | A  | 14.0                                    |                |
|  | MOCP   | A  | 24                                      |                |
|  | Fan Motor Full Load Amperage                               | A  | 0.7                                     |                |
|  | Fan Motor Output   | W  | 77                                      |                |
|  | Airflow Rate [Cooling / Heating]                           | CFM  | 1691 / 1691                             |                |
|  | Refrigerant Control  |  | LEV                                     |                |
|  | Defrost Method   |  | Reverse Cycle                           |                |
|  | Coating on Heat Exchanger                                  |  | Blue Fin Coating                        |                |
|  | Sound Pressure Level, Cooling <sup>1</sup>                 | dB(A)  | 54                                      |                |
|  | Sound Pressure Level, Heating <sup>2</sup>                 | dB(A)  | 55                                      |                |
|  | Compressor Type  |  | DC INVERTER-driven Twin Rotary          |                |
|  | Compressor Model   |  | SNB130FQBMT                             |                |
|  | Compressor Rated Load Amps                                 | A  | 10                                      |                |
|  | Compressor Locked Rotor Amps                               | A  | 12.5                                    |                |
|  | Compressor Oil [Type // Charge]                            | oz.  | FV50S //11.8                            |                |
|  | External Finish Color                                      |  | Ivory Munsell 3Y 7.8/1.1                |                |
|  | Base Pan Heater  |  | Optional                                |                |
|  | Unit Dimensions  | W x D x H: In. [mm]                                | 33-1/16 x 13 x 34-5/8 [840 x 330 x 880] |                |
|  | Package Dimensions   | W x D x H: In. [mm]                                | 38-3/4 x 16-3/4 x 39 [980 x 420 x 990]  |                |
|  | Unit Weight  | Lbs. [kg]  | 127 [58]                                |                |
|  | Package Weight   | Lbs. [kg]  | 145 [66]                                |                |
|  | Outdoor Unit Operating Temperature Range                   | Cooling Air Temp [Maximum / Minimum]*              | °F                                      | 115 DB / 14 DB |
|  |  | Cooling Thermal Lock-out / Re-start Temperatures** | °F                                      | -1 / 3         |
| Heating Air Temp [Maximum / Minimum]               |  | °F   | 75 DB, 65 WB / -4 DB, -5 WB             |                |
| Heating Thermal Lock-out / Re-start Temperatures** |  | °F   | -14 / -4                                |                |
| Refrigerant  | Type   |  | R410A                                   |                |
|  | Pre-Charged Refrigerant Amount                             | Lbs, oz  | 3.0, 9.0                                |                |
|  | Maximum Pre-Charged Piping Length                          | Ft. [m]  | 25.0 [7.5]                              |                |
|  | Additional Refrigerant Charge Per Additional Piping Length | oz./Ft. [g/m]                                      | 0.216 [20]                              |                |
| 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]  | 100 [30]                                |                |
|  | Maximum Height Difference                                  | Ft. [m]  | 50 [15]                                 |                |
|  | Maximum Number of Bends                                    |  | 10                                      |                |

**NOTES:**

AHRI Rated Conditions  
(Rated data is determined at a fixed compressor speed)

|  |    |                              |
|--|----|------------------------------|
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| <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   |
| <sup>5</sup> Heating at -4°F (Indoor // Outdoor) | °F | 70 DB, 60 WB // -4 DB, -5 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.

\*\*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.

## INDOOR UNIT ACCESSORIES: SVZ-KP18NA

|                            |   |                               |
|----------------------------|---|-------------------------------|
| Control Interface          | Airzone ZBS Wired Blueface Principal Controller White                                       | AZZBSBLUEFACECB               |
|                            | Airzone ZBS Wired Blueface Principal Controller White                                       | AZZBSBLUEZEROCB               |
|                            | Airzone ZBS Wired Lite Controller White   | AZZBSLITECB                   |
|                            | Airzone ZBS Wireless Lite Controller White  | AZZBSLITERB                   |
|                            | Airzone ZBS Wireless Think Controller White   | AZZBSTHINKRB                  |
|                            | 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                 |
|                            | Remote Operation Adapter†   | PAC-SF40RM-E                  |
|                            | Thermostat Interface  | PAC-US444CN-1                 |
|                            | Thermostat Interface  | PAC-US445CN-1                 |
|                            | USNAP Adapter   | PAC-WHS01UP-E                 |
| Remote Sensor              | Wireless Interface for kumo cloud®  | PAC-USWHS002-WF-2             |
|                            | 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 Ductless Wired Remote Controller   | PAC-SDW01RC-1                 |
|                            | Simple MA Remote Controller†  | PAC-YT53CRAU-J                |
| Wireless Remote Controller | Touch MA Controller†  | PAR-CT01MAU-SB                |
|                            | kumo touch™ RedLINK™ Wireless Controller  | MHK2                          |
|                            | Wireless MA Receiver  | 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 (MicroBlue) Mini Condensate Pump (110/208/230V) up to 18,000 BTU/H             | X86-003                       |
|                            | Blue Diamond Sensor Extension Cable — 15 Ft.  | C13-103                       |
| Control Wire               | Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H                                     | COMBI                         |
|                            | 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                     |
| Downflow Kit               | (30A/600V/UL) [fits 2" X 4" utility box] - White  | TAZ-MS303W                    |
|                            | Downflow Kit  | DFK-S                         |
| Electric Heat Lockout      | Electric Heat Lockout   | ETC-211020-MIT                |
|                            | 3kW Electric Heater   | EH03-SVZ-S                    |
|                            | 5kW Electric Heater   | EH05-SVZ-S                    |
| Electric Kit Heats         | 8kW Electric Heater   | EH08-SVZ-S                    |
|                            | 100' x 1/4" x 100' / 1/2" Lineset (Twin-Tube Insulation)                                    | MLS141212T-100                |
| Lineset                    | 15' x 1/4" x 15' / 1/2" Lineset (Twin-Tube Insulation)                                      | MLS141212T-15                 |
|                            | 30' x 1/4" x 30' / 1/2" Lineset (Twin-Tube Insulation)                                      | MLS141212T-30                 |
|                            | 50' x 1/4" x 50' / 1/2" Lineset (Twin-Tube Insulation)                                      | MLS141212T-50                 |
|                            | 65' x 1/4" x 65' / 1/2" Lineset (Twin-Tube Insulation)                                      | MLS141212T-65                 |
|                            | Terminal Block  | Separate Terminal Power Block |

**NOTES:**

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

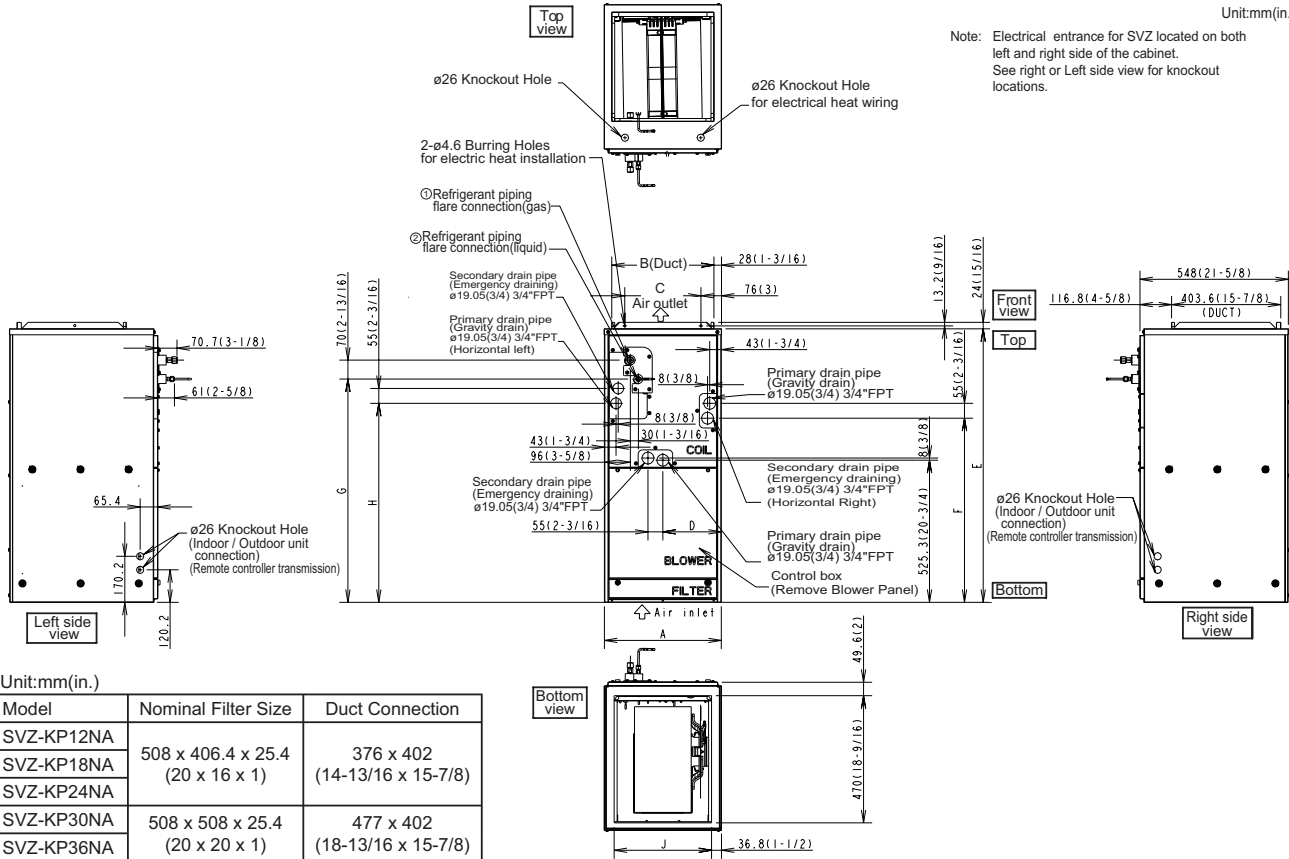
## OUTDOOR UNIT ACCESSORIES: SUZ-KA18NA2

|                         |  |              |
|-------------------------|--|--------------|
| Air Outlet Guide        | Air Outlet Guide   | MAC-886SG-E  |
| Control/Service Tool    | M- & P-Series Maintenance Tool Cable Set                       | M21EC0397    |
|                         | USB/UART Conversion Cable (Required for all laptop connection) | M21EC1397    |
| Mini-Split Wire         | 14 Gauge, 4 wire MiniSplit Cable—250 ft. roll                  | S144-250     |
|                         | 14 Gauge, 4 wire MiniSplit Cable—250 ft. roll                  | SW144-250    |
|                         | 14 Gauge, 4 wire MiniSplit Cable—50 ft. roll                   | S144-50      |
|                         | 14 Gauge, 4 wire MiniSplit Cable—50 ft. roll                   | SW144-50     |
|                         | 16 Gauge, 4 wire MiniSplit Cable—250 ft. roll                  | S164-250     |
|                         | 16 Gauge, 4 wire MiniSplit Cable—250 ft. roll                  | SW164-250    |
|                         | 16 Gauge, 4 wire MiniSplit Cable—50 ft. roll                   | S164-50      |
|                         | 16 Gauge, 4 wire MiniSplit Cable—50 ft. roll                   | SW164-50     |
| Mounting Pad            | Condensing Unit Mounting Pad: 16" x 36" x 3"                   | ULTRILITE1   |
|                         | Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic         | DSD-400P     |
| Optional Defrost Heater | Base Heater  | MAC-642BH-U1 |
| Stand                   | 18" Single Fan Stand   | QSMS1801M    |
|                         | 24" Single Fan Stand   | QSMS2401M    |
|                         | Condenser Wall Bracket   | QSWB2000M-1  |
|                         | Outdoor Unit Stand — 12" High                                  | QSMS1201M    |

# INDOOR UNIT DIMENSIONS: SVZ-KP18NA

Unit:mm(in.)

Note: Electrical entrance for SVZ located on both left and right side of the cabinet. See right or Left side view for knockout locations.



Unit:mm(in.)

| Model      | Nominal Filter Size                 | Duct Connection                  |
|------------|-------------------------------------|----------------------------------|
| SVZ-KP12NA | 508 x 406.4 x 25.4<br>(20 x 16 x 1) | 376 x 402<br>(14-13/16 x 15-7/8) |
| SVZ-KP18NA |                                     |                                  |
| SVZ-KP24NA |                                     |                                  |
| SVZ-KP30NA | 508 x 508 x 25.4<br>(20 x 20 x 1)   | 477 x 402<br>(18-13/16 x 15-7/8) |
| SVZ-KP36NA |                                     |                                  |

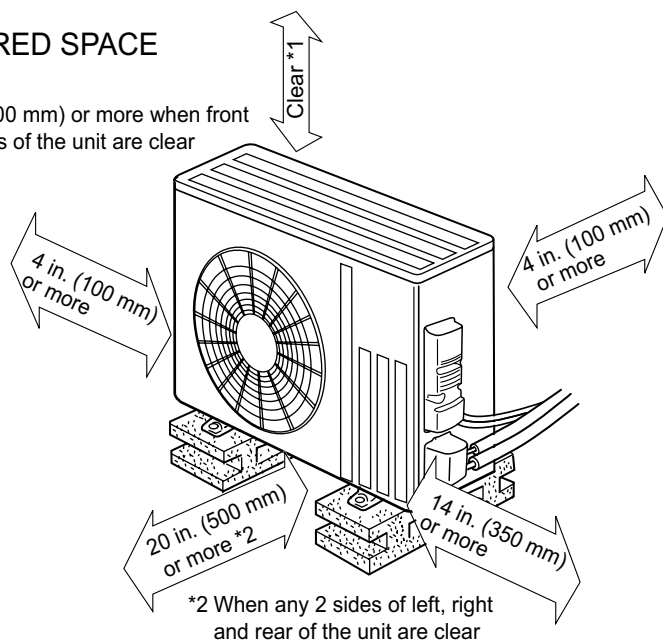
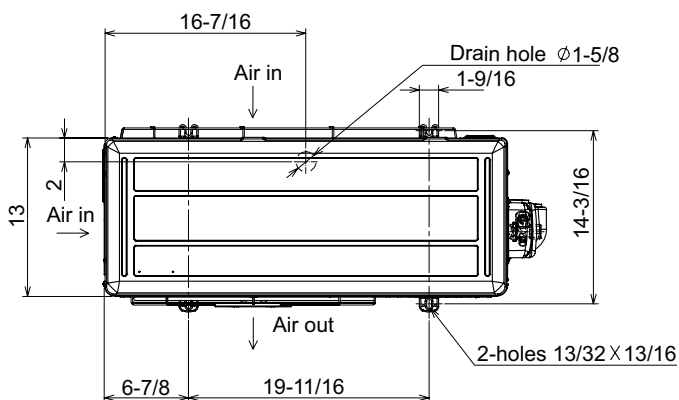
| Model      | A           | B                 | C                 | D                 | E                     | F                 | G                  | H                | J                | Gas Pipe              | Liquid pipe          |
|------------|-------------|-------------------|-------------------|-------------------|-----------------------|-------------------|--------------------|------------------|------------------|-----------------------|----------------------|
| SVZ-KP12NA | 432<br>(17) | 376<br>(14-13/16) | 281<br>(11-1/8)   | 224<br>(8-7/8)    | 1,010.8<br>(39-13/16) | 680<br>(26-13/16) | 823<br>(32-7/16)   | 735.5<br>(29)    | 360<br>(14-3/16) | $\phi$ 9.52 (3/8)     | $\phi$ 6.35<br>(1/4) |
| SVZ-KP18NA |             |                   |                   |                   |                       |                   |                    |                  |                  | $\phi$ 12.7 (1/2)     |                      |
| SVZ-KP24NA |             |                   |                   |                   |                       |                   |                    |                  |                  |                       |                      |
| SVZ-KP30NA | 534<br>(21) | 477<br>(18-13/16) | 382.6<br>(15-1/8) | 266.5<br>(10-1/2) | 1,113.8<br>(43-7/8)   | 737<br>(29-1/16)  | 953.5<br>(37-9/16) | 792<br>(31-3/16) | 461<br>(18-3/16) | $\phi$ 15.88<br>(5/8) | $\phi$ 9.52<br>(3/8) |
| SVZ-KP36NA |             |                   |                   |                   |                       |                   |                    |                  |                  |                       |                      |

# OUTDOOR UNIT DIMENSIONS: SUZ-KA18NA2

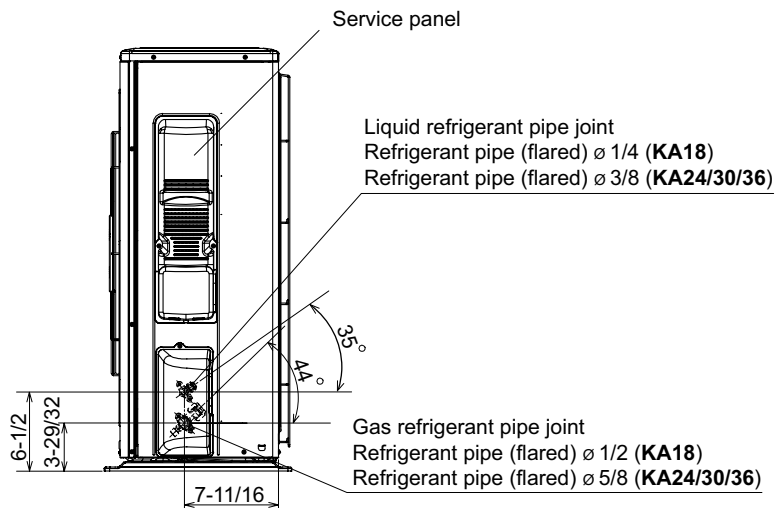
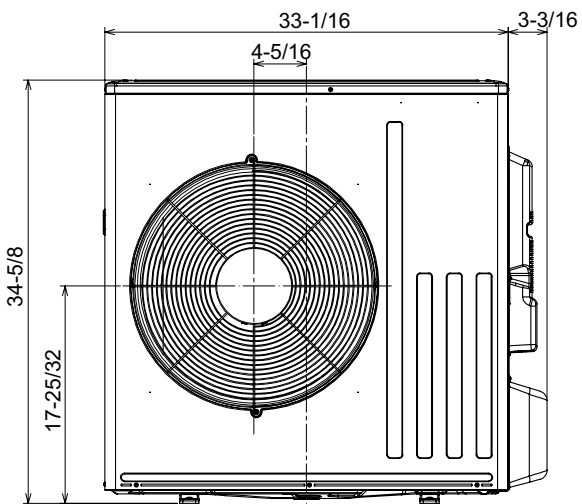
Unit: inch

## REQUIRED SPACE

\*1 20 in. (500 mm) or more when front and sides of the unit are clear



\*2 When any 2 sides of left, right and rear of the unit are clear



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