

Job Name \_\_\_\_\_  
Purchaser \_\_\_\_\_  
Submitted to \_\_\_\_\_  
Unit Designation \_\_\_\_\_

Location \_\_\_\_\_  
Engineer \_\_\_\_\_  
Reference \_\_\_\_\_ Approval \_\_\_\_\_ Construction \_\_\_\_\_  
Schedule # \_\_\_\_\_

| Specifications                    |                                           |                                                                                                                                                                                      |                                                           |
|-----------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Model                             | Indoor Unit Model Number (US Code)        |                                                                                                                                                                                      | AC030KN4DCH/AA (CNH304DK)                                 |
|                                   | Outdoor Unit Model Number (US Code)       |                                                                                                                                                                                      | AC030JXADCH/AA (CXH30ADJ)                                 |
| Performance                       | Nominal Capacity                          | Cooling / Heating (Btu/h)                                                                                                                                                            | 30,000 / 32,000                                           |
|                                   | Capacity Range                            | Cooling (Btu/h)                                                                                                                                                                      | 9,300 - 35,000                                            |
|                                   |                                           | Heating (Btu/h)                                                                                                                                                                      | 9,000 - 38,000                                            |
|                                   | SEER / EER                                |                                                                                                                                                                                      | 19.20 / 10.40                                             |
|                                   | COP (nominal heating)                     |                                                                                                                                                                                      | 3.06                                                      |
|                                   | HSPF                                      |                                                                                                                                                                                      | 9.9                                                       |
|                                   | AHRI Certification Number                 |                                                                                                                                                                                      | 8856696                                                   |
| Power                             | Condensate (pints/h)                      |                                                                                                                                                                                      | 7.5                                                       |
|                                   | Voltage                                   | ø / V / Hz                                                                                                                                                                           | 1 / 208-230 / 60                                          |
|                                   | Working Voltage Range (VAC)               |                                                                                                                                                                                      | 176 - 254 (max. 3% deviation from each)                   |
|                                   | Operating Current<br>(min. / std. / max.) | Cooling (A)                                                                                                                                                                          | 4.00 / 13.40 / 17.00                                      |
|                                   |                                           | Heating (A)                                                                                                                                                                          | 3.40 / 14.40 / 21.80                                      |
|                                   | Max. Breaker                              |                                                                                                                                                                                      | Amps 30                                                   |
|                                   | Min. Circuit Ampacity (A)                 |                                                                                                                                                                                      | 19.71                                                     |
| Dimensions                        | W X H X D<br>(in.)                        | Indoor Unit                                                                                                                                                                          | 37 1/4 X 14 3/8 X 37 1/4                                  |
|                                   |                                           | Outdoor Unit                                                                                                                                                                         | 37 X 39 11/16 X 13                                        |
|                                   | Weight<br>(lbs.)                          | Indoor Unit                                                                                                                                                                          | 52.91                                                     |
|                                   |                                           | Outdoor Unit                                                                                                                                                                         | 154.8                                                     |
| Sound Pressure Level              | Indoor Unit dB(A)                         | L / M / H                                                                                                                                                                            | 31 / 35 / 38                                              |
|                                   | Outdoor Unit dB(A)                        | Cooling / Heating (high)                                                                                                                                                             | 50 / 52                                                   |
| Operating Temperatures<br>°F (°C) | Outdoor                                   | Cooling                                                                                                                                                                              | 23 ~ 115°F (-5 ~ 46°C)                                    |
|                                   |                                           | Heating                                                                                                                                                                              | 0 ~ 115°F (-18 ~ 46°C) W/Baffle<br>-4 ~ 75°F (-20 ~ 24°C) |
|                                   | Indoor                                    | Cooling                                                                                                                                                                              | 61 ~ 90°F (16 ~ 32°C)                                     |
|                                   |                                           | Heating                                                                                                                                                                              | T ≤ 80°F (27°C)                                           |
| Pipe Connections                  | Indoor & Outdoor                          | High side (flare)                                                                                                                                                                    | 3/8"                                                      |
|                                   |                                           | Low side (flare)                                                                                                                                                                     | 5/8"                                                      |
|                                   | Maximum (ft.)                             |                                                                                                                                                                                      | 164                                                       |
|                                   | Maximum Vertical Separation (ft.)         |                                                                                                                                                                                      | 98                                                        |
| Refrigerant                       | Condensate Connection                     |                                                                                                                                                                                      | 1 1/4" OD, 1" ID                                          |
|                                   | Type                                      | R410A                                                                                                                                                                                |                                                           |
|                                   | Factory Charge                            | oz.                                                                                                                                                                                  | 91.71                                                     |
|                                   | Charged for                               | 25 ft                                                                                                                                                                                |                                                           |
| Compressor                        | Additional Refrigerant                    |                                                                                                                                                                                      | 0.24 oz./ft. over 25 ft                                   |
|                                   | Manufacturer                              |                                                                                                                                                                                      | Samsung                                                   |
|                                   | Type                                      | Inverter Driven, Twin BLDC Rotary                                                                                                                                                    |                                                           |
| Evaporator Fan                    | RLA                                       | Amps                                                                                                                                                                                 | 15.1                                                      |
|                                   | Type                                      | BLDC (1) With Turbo Type Fan (1)                                                                                                                                                     |                                                           |
|                                   | Air Volume                                | CFM (L/M/H)                                                                                                                                                                          | 632 / 741 / 904                                           |
|                                   | Output                                    | Watts                                                                                                                                                                                | 97 X 1                                                    |
| Condenser Fan                     | FLA                                       | Amps                                                                                                                                                                                 | 0.35                                                      |
|                                   | Motor                                     | BLDC With Axial Type Fan (1)                                                                                                                                                         |                                                           |
| Fascia Panel                      | FLA / Watts / CFM (max.)                  |                                                                                                                                                                                      | 0.48 A / 125 W / 2,219 CFM                                |
|                                   | Ceiling Type                              | L X W X H                                                                                                                                                                            | 39 3/8 X 39 3/8 X 2 5/8                                   |
|                                   | (Square)                                  | Weight                                                                                                                                                                               | 7.94                                                      |
|                                   | Open Type                                 | Diameter X H                                                                                                                                                                         | 41 15/16 X 3 3/8                                          |
| Safety                            | (Round)                                   | Weight                                                                                                                                                                               | 5.95                                                      |
|                                   | Certifications                            | ETL (UL 1995)                                                                                                                                                                        |                                                           |
| Safety                            | Devices                                   | PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing |                                                           |

Certified in accordance with the AHRI Unitary Small Air-Source Heat Pumps (USHP) Certification Program which is based on the latest edition of AHRI Standard 210/240.  
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to [www.AHRIdirectory.org](http://www.AHRIdirectory.org) for current reference numbers.



General Information

- The indoor unit shall be a round ceiling cassette with 360°, even air distribution
- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- Auto-restart after power loss
- The outdoor unit shall have a snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- The indoor unit shall have a removable EEPROM that stores system programming information, unit name, and other data
- Electro-static, washable, pleated filter as standard (included with fascia panel).
- Built in condensate pump with maximum 29" lift from the bottom of the unit, check valve, and float switch that disables indoor unit during overflow detection
- Knock-out for outside air capability (with booster fan connection)
- Pipe connections at the outdoor unit shall be made inside the unit chassis. Refrigerant pipes can exit through the front, side, rear, or bottom sides of the outdoor unit.
- Fascia panel shall have LED indicator lights and an infrared receiver
- The indoor unit shall not have air louvers or blades allowing full airflow without restriction. Air direction control shall be achieved by creating a low pressure area near air outlet causing discharge air to change direction angle.
- Fixed or auto-swing air direction shall be possible with wireless, touch, or premium wired controller (10° ~ 60° angle)
- Independent air distribution control shall be possible with wireless or premium wired controller (three directions, 10° ~ 60° angle)
- The outdoor unit shall have a night time quiet mode option to reduce operating sound during the night (automatic or manual activation with dry contact signal).

Construction

The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability  
The indoor unit shall have a galvanized steel frame with HIPS chassis and fascia panel certified to UL94 V0.

Heat Exchanger

The indoor unit heat exchanger shall be mechanically bonded aluminum fin to copper tube  
The outdoor unit heat exchanger shall be aluminum, flat fin, micro channel

Controls

Control signal shall be a DDC type signal  
The indoor unit shall have a 12VDC output that is interlocked with fan to activate external devices (fan ON = 12VDC ON, fan OFF = 12VDC OFF, pigtail adapter plug required)  
Interconnect control wire between outdoor and indoor unit shall be 16AWG X 2 shielded  
Wired or wireless controllers must be purchased separately

No additional interface modules/adapters are required when connecting to Samsung NASA DVM S central control options.

Refrigerant System

The compressor shall be hermetically sealed, inverter controlled, twin BLDC Rotary  
Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit  
Soft-start to reduce current demand during compressor start

Warranty

10 Years compressor, 10 years parts, 1 year limited labor when registered

Required Accessories

|              |                              |           |
|--------------|------------------------------|-----------|
| Fascia Panel | Ceiling Type (square, white) | PC4NUDMUN |
|              | Ceiling Type (square, black) | PC4NBDMUN |
|              | Open Type (round, white)     | PC4NUNMUN |
|              | Open Type (round, black)     | PC4NBNMUN |

\*A fascia panel is required for cassette unit operation and is sold separately.

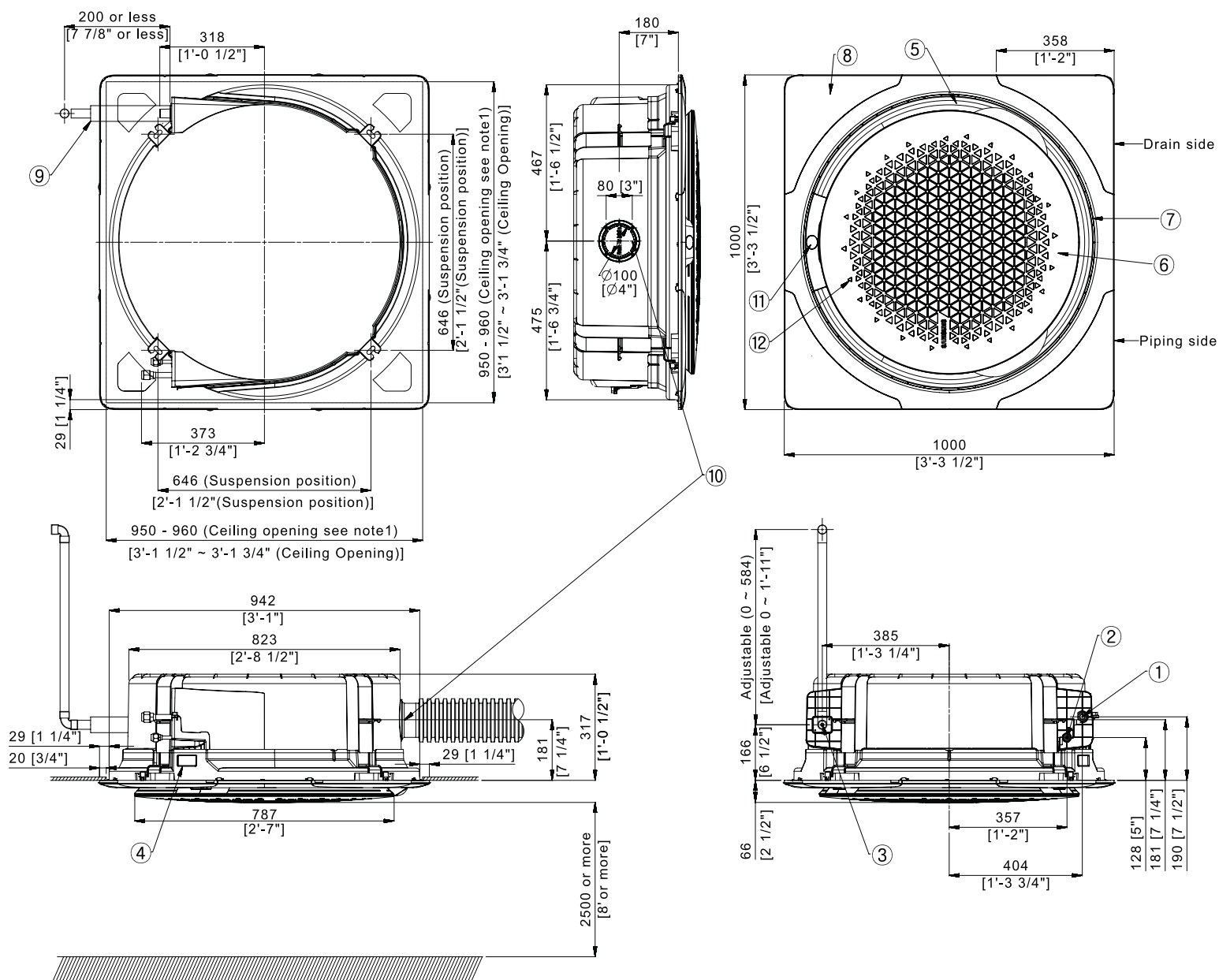
Optional Accessories

|                                                                    |                             |                |
|--------------------------------------------------------------------|-----------------------------|----------------|
| Wired Controller                                                   | Simplified Touch Controller | MWR-SH11UN     |
|                                                                    | Advanced Wired Controller   | MWR-WG00UN     |
| Wi-Fi Adapter                                                      |                             | MIM-H04UN      |
| External Temperature Sensor                                        |                             | MRW-TA         |
| Wireless Controller                                                |                             | AR-KH03U       |
| External Contact Control                                           |                             | MIM-B14        |
| Wall Bracket (for outdoor unit)                                    |                             | CKN-250        |
| Wind Baffles                                                       | Front                       | WBF-2M-B       |
|                                                                    | Back                        | WBB-3M         |
| Line Sets - insulated and flared, interconnect cables included     |                             | 25' - ILS-2510 |
|                                                                    |                             | 50' - ILS-5010 |
| Thermostat Adaptor (for connection to a standard 24VAC thermostat) |                             | MIM-A60UN      |
| Motion Detection Sensor                                            |                             | MCR-SME        |

### Samsung 360 Cassette, Single Zone, Split System

### AC030KN4DCH/AA Dimensional Drawing With Ceiling Type Fascia Panel

Units: mm [inches]



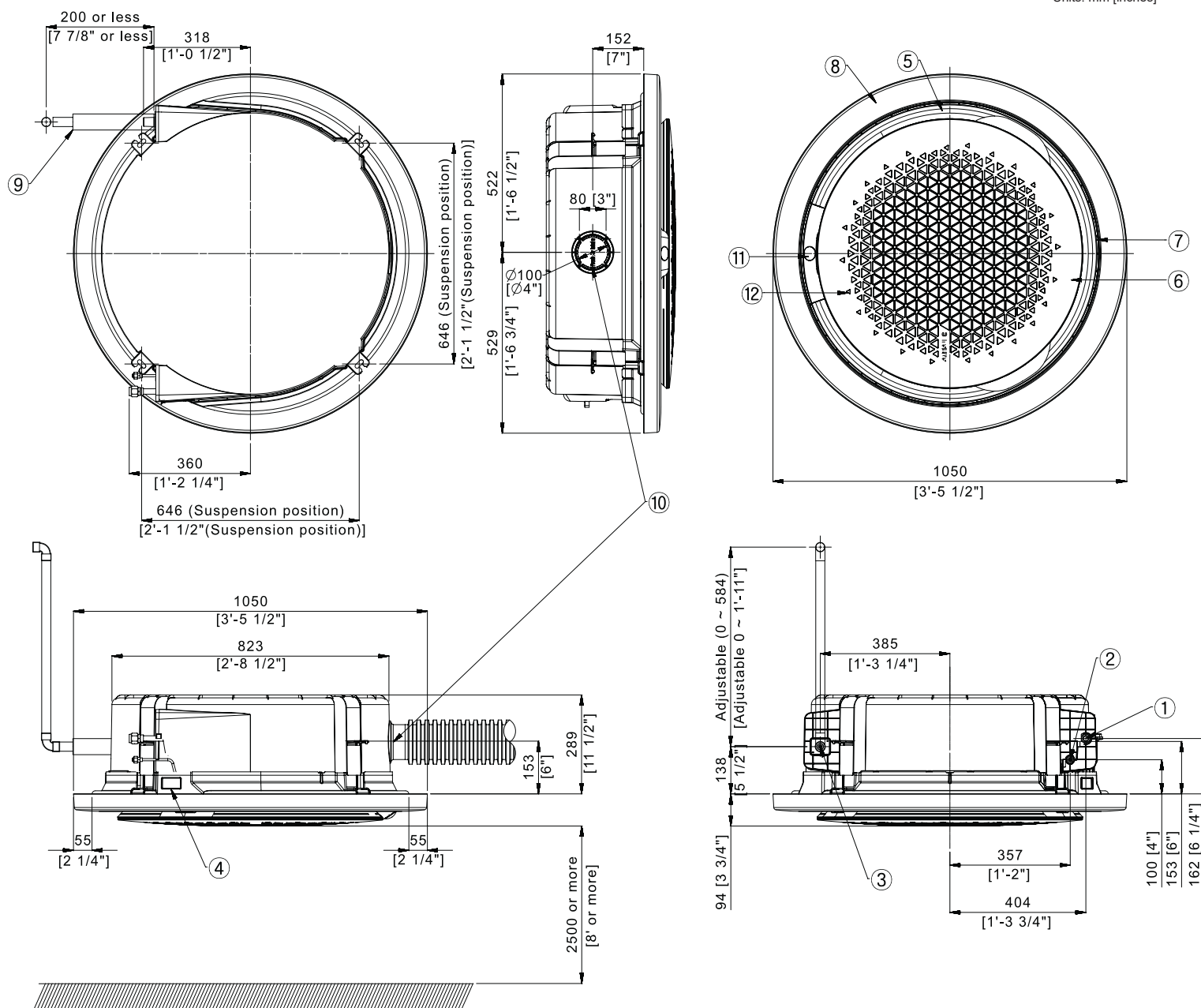
| No. | Description             |
|-----|-------------------------|
| 1   | Refrigerant Gas Pipe    |
| 2   | Refrigerant Liquid Pipe |
| 3   | Condensate drain        |
| 4   | Power and wiring entry  |
| 5   | Air discharge opening   |
| 6   | Air suction grille      |

| No. | Description                               |
|-----|-------------------------------------------|
| 7   | Suction rim for air direction booster fan |
| 8   | Decoration fascia panel                   |
| 9   | Drain hose                                |
| 10  | Fresh air knockout hole                   |
| 11  | Status display                            |
| 12  | Infrared receiver                         |

### Samsung 360 Cassette, Single Zone, Split System

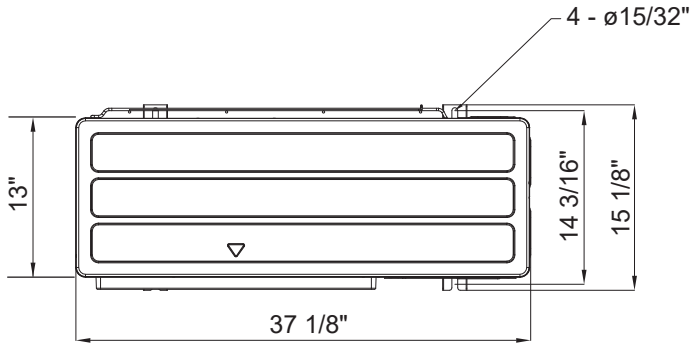
### AC030KN4DCH/AA Dimensional Drawing With Open Type Fascia Panel

Units: mm [inches]

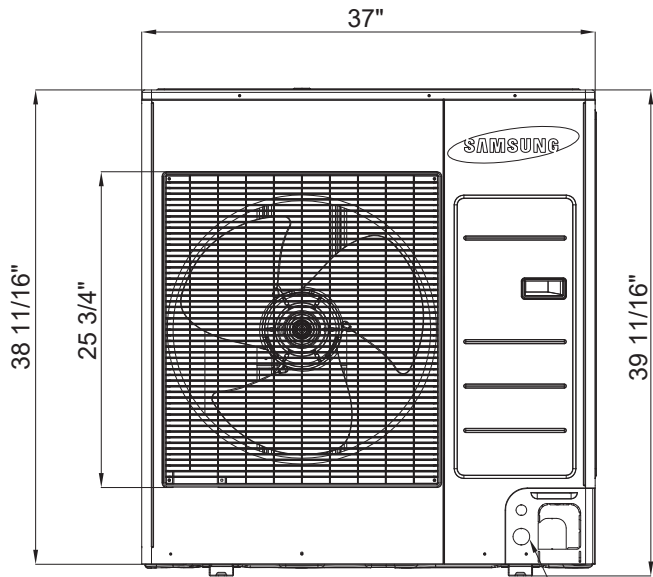


| No. | Description             |
|-----|-------------------------|
| 1   | Refrigerant Gas Pipe    |
| 2   | Refrigerant Liquid Pipe |
| 3   | Condensate drain        |
| 4   | Power and wiring entry  |
| 5   | Air discharge opening   |
| 6   | Air suction grille      |

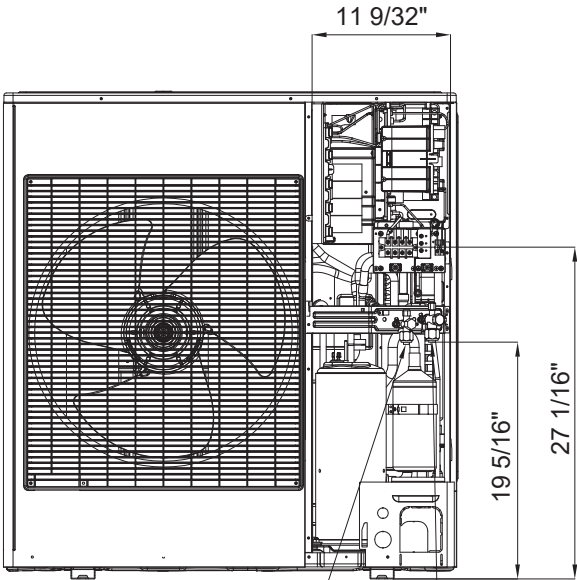
| No. | Description                               |
|-----|-------------------------------------------|
| 7   | Suction rim for air direction booster fan |
| 8   | Decoration fascia panel                   |
| 9   | Drain hose                                |
| 10  | Fresh air knockout hole                   |
| 11  | Status display                            |
| 12  | Infrared receiver                         |



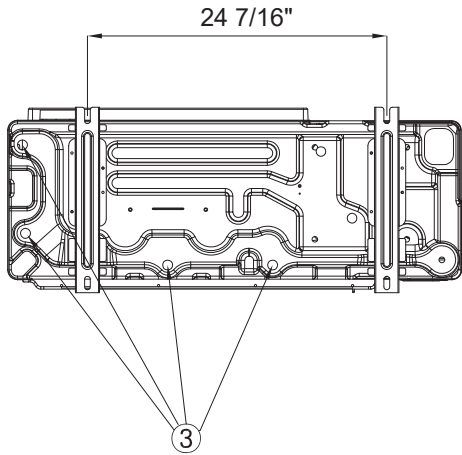
TOP



FRONT



FRONT WITHOUT SERVICE COVER



| No. | Description                              |
|-----|------------------------------------------|
| 1   | Suction service valve                    |
| 2   | Liquid service valve                     |
| 3   | Drainage hole                            |
| 4   | Power and communication conduit openings |