

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

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

## Specifications

|                           |                                        |                                                                                                                                                                                      |                                         |
|---------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Model                     | Indoor Unit Model Number (US Code)     |                                                                                                                                                                                      | AC024BN6DCH/AA (CNH246DB)               |
|                           | Outdoor Unit Model Number (US Code)    |                                                                                                                                                                                      | AC024BXADCH/AA (CXH24ADB)               |
| Performance               | Nominal Capacity <sup>1</sup>          | Cooling / Heating (Btu/h)                                                                                                                                                            | 24,000 / 27,000                         |
|                           | Capacity Range                         | Cooling (Btu/h)                                                                                                                                                                      | 8,000 - 32,000                          |
|                           |                                        | Heating (Btu/h)                                                                                                                                                                      | 7,000 - 40,000                          |
|                           | SEER / EER                             |                                                                                                                                                                                      | 21.0 / 12.70                            |
|                           | COP (nominal heating)                  |                                                                                                                                                                                      | 3.20                                    |
|                           | HSPF                                   |                                                                                                                                                                                      | 10.8                                    |
| AHRI Certification Number |                                        | 207465453                                                                                                                                                                            |                                         |
| Power                     | Voltage                                | ø / V / Hz                                                                                                                                                                           | 1 / 208-230 / 60                        |
|                           | Working Voltage Range (VAC)            |                                                                                                                                                                                      | 176 - 254 (max. 3% deviation from each) |
|                           | Operating Current (min. / std. / max.) | Cooling (A)                                                                                                                                                                          | 2.3 / 8.6 / 14.0                        |
|                           |                                        | Heating (A)                                                                                                                                                                          | 2.4 / 11.1 / 23.6                       |
|                           | Max. Breaker                           | Amps                                                                                                                                                                                 | 30                                      |
| Min. Circuit Ampacity (A) |                                        | 24.1                                                                                                                                                                                 |                                         |
| Dimensions                | W X H X D (in.)                        | Indoor Unit                                                                                                                                                                          | 37 1/4 X 11 X 37 1/4                    |
|                           |                                        | Outdoor Unit                                                                                                                                                                         | 37 X 39 5/8 X 13                        |
|                           | Weight (lbs.)                          | Indoor Unit                                                                                                                                                                          | 44.1                                    |
|                           |                                        | Outdoor Unit                                                                                                                                                                         | 118.4                                   |
| Sound Pressure Level      | Indoor Unit dB(A)                      | L / M / H                                                                                                                                                                            | 29 / 32 / 35                            |
|                           | Outdoor Unit dB(A)                     | Cooling / Heating (high)                                                                                                                                                             | 50 / 52                                 |
| Operating Temperatures    | Outdoor                                | Cooling                                                                                                                                                                              | 23 ~ 122°F (-5 ~ 50°C)                  |
|                           |                                        | Heating                                                                                                                                                                              | 0 ~ 122°F (-18 ~ 50°C) W/Baffle         |
|                           | Indoor                                 | Cooling                                                                                                                                                                              | -13 ~ 75°F (-25 ~ 24°C)                 |
|                           |                                        | Heating                                                                                                                                                                              | 61 ~ 90°F (16 ~ 32°C)                   |
| Pipe Connections          | Indoor & Outdoor                       | High side (flare)                                                                                                                                                                    | 1/4"                                    |
|                           |                                        | Low side (flare)                                                                                                                                                                     | 5/8"                                    |
|                           | Maximum (ft.)                          |                                                                                                                                                                                      | 164.0                                   |
|                           | Maximum Vertical Separation (ft.)      |                                                                                                                                                                                      | 98.4                                    |
| Refrigerant               | Condensate Connection                  |                                                                                                                                                                                      | 1 1/4" OD, 1" ID                        |
|                           | Type                                   | R410A                                                                                                                                                                                |                                         |
|                           | Factory Charge                         | lbs.                                                                                                                                                                                 | 5.7                                     |
|                           | Charged for                            | 25 ft                                                                                                                                                                                |                                         |
| Compressor                | Additional Refrigerant                 |                                                                                                                                                                                      | 0.11 oz./ft. over 24.6 ft               |
|                           | Manufacturer                           |                                                                                                                                                                                      | Samsung                                 |
|                           | Type                                   | Inverter Driven, Twin BLDC Rotary                                                                                                                                                    |                                         |
| Evaporator Fan            | RLA                                    | Amps                                                                                                                                                                                 | 15.9                                    |
|                           | Type                                   | BLDC (1) With Turbo Type Fan (1)                                                                                                                                                     |                                         |
|                           | Air Volume                             | CFM (L/M/H)                                                                                                                                                                          | 526 / 632 / 745                         |
| Condenser Fan             | Output                                 | Watts                                                                                                                                                                                | 65 W / 0.79 A                           |
|                           | Motor                                  | BLDC With Axial Type Fan (1)                                                                                                                                                         |                                         |
| Fascia Panel              | FLA / Watts / CFM (max.)               |                                                                                                                                                                                      | 1.25A / 125W / 2.684 CFM                |
|                           | Ceiling Type (Square)                  | L X W X H                                                                                                                                                                            | 39 3/8 X 39 3/8 X 2 5/8                 |
|                           | Weight                                 | 7.94                                                                                                                                                                                 |                                         |
|                           | Open Type (Round)                      | Diameter X H                                                                                                                                                                         | 41 15/16 X 3 3/8                        |
| Safety                    | Certifications                         | ETL (UL 1995)                                                                                                                                                                        |                                         |
|                           |                                        | PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing |                                         |
|                           | Devices                                |                                                                                                                                                                                      |                                         |

<sup>1</sup>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.

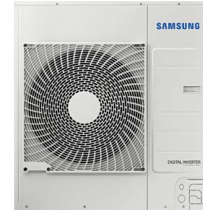
Select models are ENERGY STAR Labeled. Proper sizing and installation of equipment is critical to achieve performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit [www.energystar.gov](http://www.energystar.gov).



Shown with PC4NUNMUN  
(open type panel)



Shown with PC4NUDMUN  
(ceiling type panel)



## General Information

- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- High-voltage terminal block temperature sensor to disable unit in the event of power connection overheating
- Auto-restart after power loss
- Soft-start compressor minimizing current inrush
- Base pan heater equipped as standard
- All heat exchangers shall be mechanically bonded aluminum fin to copper tube.
- The condensing unit heat exchanger salt spray test method: ISO-9227 - The heat exchanger showed no unusual rust or corrosion development to 3,000 hours
- Integral condensate pump with maximum 29" lift from bottom of the unit with check valve and float switch to disable unit in the event of condensate overflow.
- The system shall provide 100% heating capacity at -4°F (24°C)

## Option settings

- The outdoor unit shall have snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- Night-time Quiet Mode: reduction of operational sound during *(automatic or manual activation)*
- Emergency Temperature Output (ETO) function: when indoor unit is in error status or when room temperature exceeds configurable temperature level, the system outputs a signal to an external source, e.g., backup system, building management system, alert device (ex: status light, warning lamp, buzzer).
- System can be configured as heating/cooling, cooling only, or heating only via outdoor unit option setting
- Maximum Current Control configurable from 50% - 100% via outdoor unit, wired controller or central controls

## Indoor Fan

- Indoor fan is a single turbo type
- Three fan speed settings and auto setting
- Washable filter as standard
- Knock-out for outside air capability (with booster fan connection)
- 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)

## Construction

- Outdoor unit: Galvanized steel with a baked-on powder coated finish for durability
- Indoor unit: Insulated, HIPS chassis and fascia panel certified to UL94 V0

## Controls

- Control wiring shall be 2 X 16 AWG
- Wireless controller included as standard.
- Wired controllers must be purchased separately
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller or central control options.
- No additional interface modules/adapters are required when connecting to Samsung central control options.
- The unit shall be operated via a wireless or wired remote control with DDC type signal

## Refrigerant System

- The compressor shall be hermetically sealed, inverter-controlled BLDC rotary type
- Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

## Warranty

10 years compressor, 10 years parts, 1-year limited labor (conditions apply)

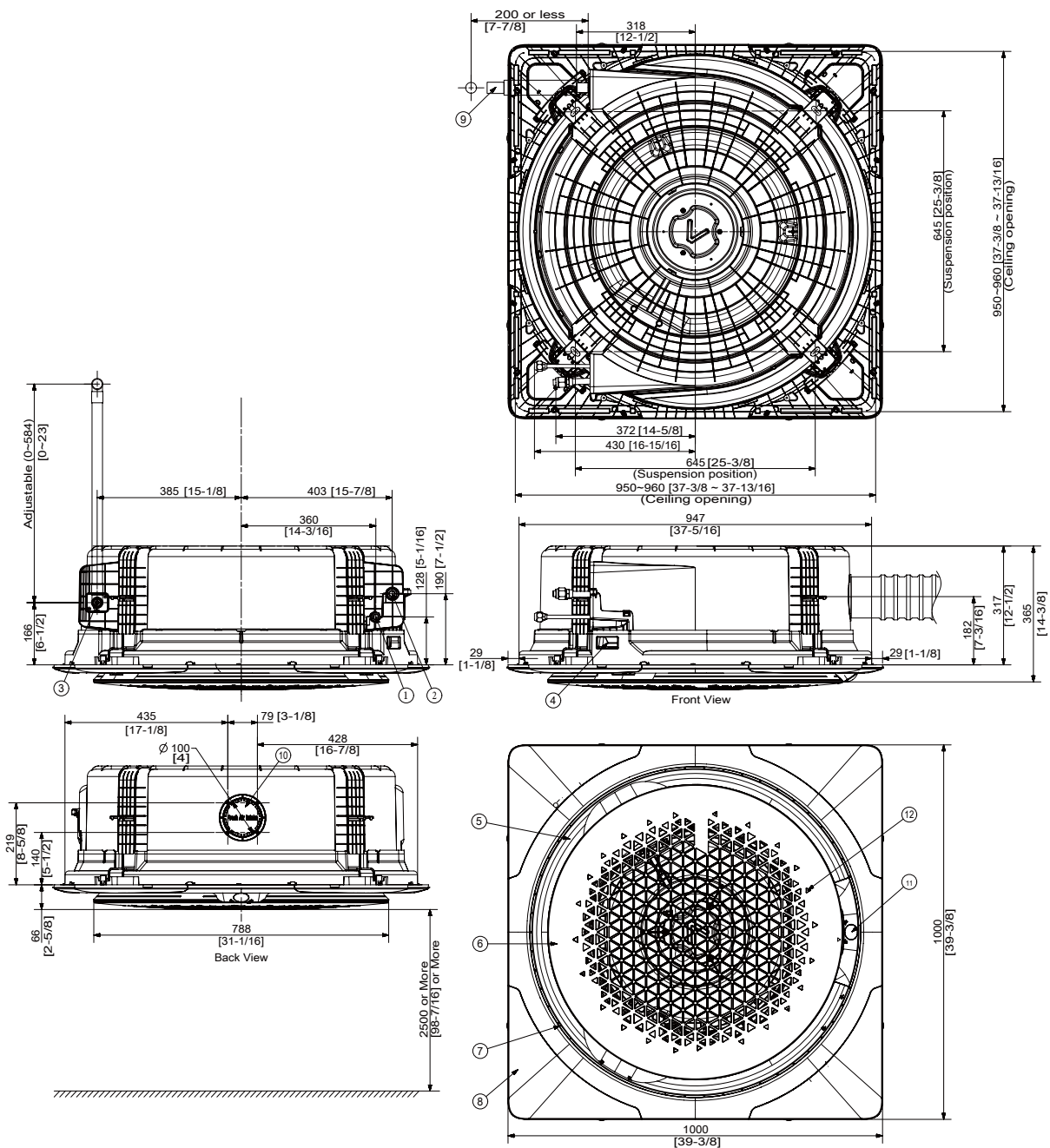
Required Accessories

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

Optional Accessories

|                                                                    |                             |            |
|--------------------------------------------------------------------|-----------------------------|------------|
| Wired Controller                                                   | Simplified Touch Controller | MWR-SH11UN |
|                                                                    | Advanced Wired Controller   | MWR-WG00UN |
| Wi-Fi Adapter                                                      | Single Indoor Unit          | MIM-H14UN  |
|                                                                    | 1-16 Indoor Units           | MIM-H05UN  |
| External Temperature Sensor                                        |                             | MRW-TA     |
| Wireless Controller                                                |                             | AR-KH04U   |
| External Contact Control                                           |                             | MIM-B14    |
| Wall Bracket (for outdoor unit)                                    |                             | CKN-250    |
| Wind Baffles                                                       | Front                       | WBF-2M-B   |
|                                                                    | Back                        | WBB-3M     |
| Hail guard kit (includes back and side guards)                     |                             | HGK-3      |
| Line Sets - insulated and flared, interconnect cables included     | 25' - ILS-2507              |            |
|                                                                    | 50' - ILS-5007              |            |
| Thermostat Adaptor (for connection to a standard 24VAC thermostat) |                             | MIM-A60UN  |
| Motion Detection Sensor <i>(For use with PC4NUDMUN panels)</i>     |                             | MCR-SME    |

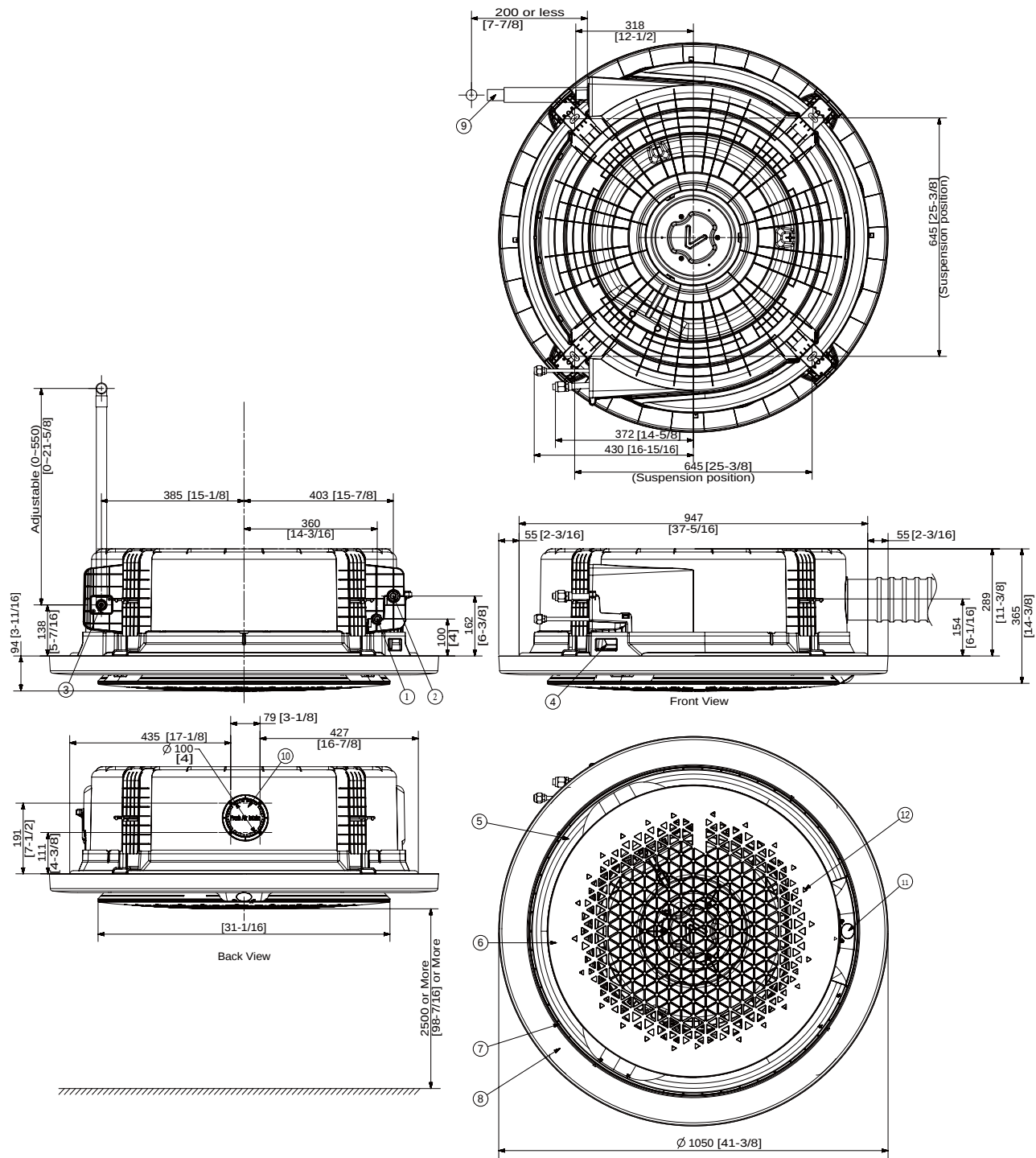
Units: mm (inches)



| 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      |

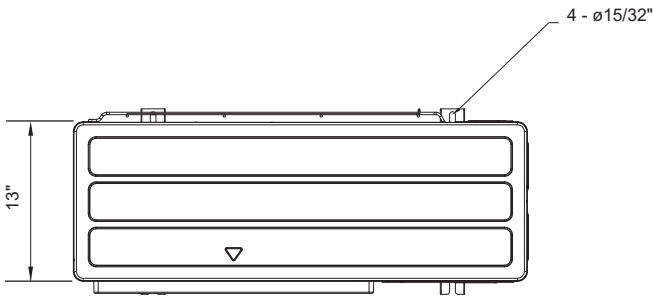
| No. | Description                               |
|-----|-------------------------------------------|
| 7   | Suction rim for air direction booster fan |
| 8   | Decoration fascia panel                   |
| 9   | Drain hose                                |
| 10  | Fresh air knockout hole         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

Units: mm (inches)

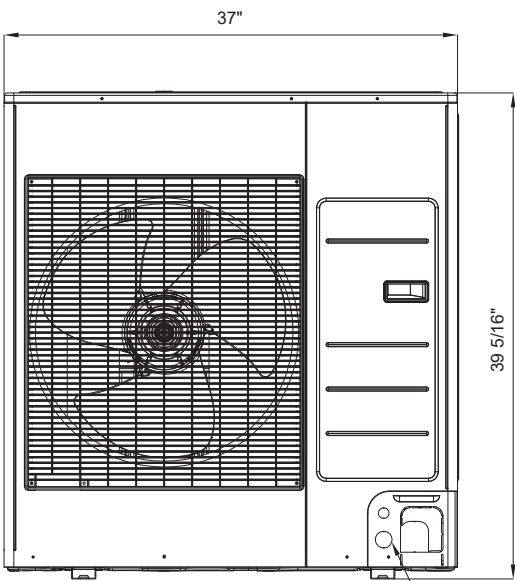


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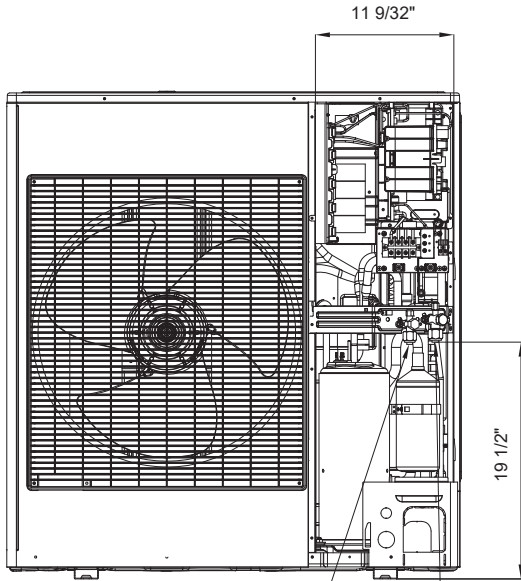
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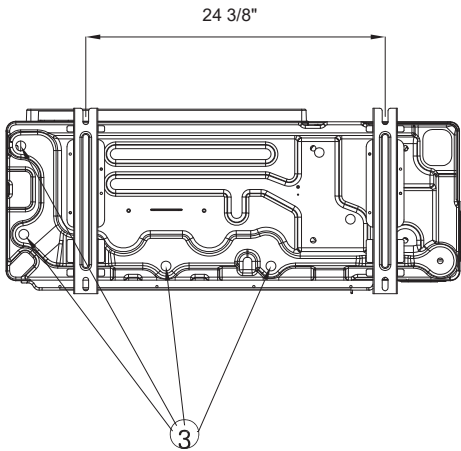
TOP



FRONT



FRONT WITHOUT SERVICE COVER



| No. | Name                    | Description                      |
|-----|-------------------------|----------------------------------|
| 1   | Refrigerant liquid pipe | Ø 1/4                            |
| 2   | Refrigerant gas pipe    | Ø 5/8                            |
| 3   | Drain hole              | Connect with provided drain plug |