SAMSUNG

# SUBMITTAL AC036NN4DCH/AA

Samsung Wind-Free™ 4-Way Cassette, Single Zone, Split System

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☐ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

## Specifications

| | | | |
|---|---|---|---|
| Model | Indoor Unit Model Number | | AC036NN4DCH/AA |
| | Outdoor Unit Model Number | | AC036JXADCH/AA |
| Performance | Nominal Capacity | Cooling / Heating (Btu/h) | 36,000 / 40,000 |
| | Capacity Range | Cooling (Btu/h) | 14,000 - 41,000 |
| | | Heating (Btu/h) | 11,500 - 48,000 |
| | SEER / EER | | 20.50 / 12.10 |
| | COP (nominal heating) | | 3.36 |
| | HSPF | | 9.50 |
| | AHRI Certification Number | | 202087968 |
| 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) | 4.8 / 13.8 / 17.0 |
| | | Heating (A) | 3.7 / 16.1 / 23.0 |
| | Max. Breaker | Amps | 35 |
| | Min. Circuit Ampacity (A) | | 22.08 |
| Dimensions | W X H X D (in.) | Indoor Unit | 33 1/16 X 11 3/8 X 33 1/16 |
| | | Outdoor Unit | 37 X 48 X 13 |
| | Weight (lbs.) | Indoor Unit | 40.79 |
| | | Outdoor Unit | 194 |
| Heat Exchanger | Indoor Unit | Type | Aluminum Fin / Copper Tube |
| | | FPI | 18 |
| | | Pipe Diameter (in.) | 1/4 |
| | Outdoor Unit | Type | Aluminum, flat fin, micro channel |
| Sound Pressure Level | Indoor Unit dB(A) | L / M / H | 33 / 38 / 43 |
| | Outdoor Unit dB(A) | Cooling / Heating (high) | 49 / 51 |
| Operating Temperatures °F(°C) | Outdoor | Cooling | 23 ~ 115°F(-5 ~ 46°C) |
| | | | 0 ~ 115°F(-18 ~ 46°C) w/ baffle |
| | | Heating | -4 ~ 76°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.) | | 246 |
| | Maximum Vertical Separation (ft.) | | 98 |
| | Condensate Connection | | 1 1/4" OD, 1" ID |
| Refrigerant | Type | | R410A |
| | Control Method | | Electronic Expansion Valve |
| | Factory Charge | oz. | 98.77 |
| | Charged for | | 25 ft |
| | Additional Refrigerant | | 0.355 oz/ft over 25 ft |
| Compressor | Manufacturer | | Samsung |
| | Type | | Inverter Driven, Twin BLDC, Rotary |
| | RLA | A | 17 |
| Evaporator Fan | Type | | BLDC With Turbo Type Fan (1) |
| | Air Volume | CFM (L/M/H) | 620 / 840 / 1020 |
| | Output | Watts | 93 |
| | Operating Current | Amps | 0.35 |
| Condenser Fan | Motor | | BLDC With Axial Type Fan (2) |
| | FLA / Watts / CFM (max.) | | 0.48 A X 2 / 125 W X 2 / 3,040 CFM |
| Fascia Panels | Model Number | PC4NUFMUN (Wind-Free™) | PC4NUSKUN (standard) |
| | L X W X H (in.) | 37 3/8 X 37 3/8 X 2 1/2 | 37 3/8 X 37 3/8 X 1 3/4 |
| | Weight (lbs.) | 13.89 | 12.79 |
| Safety | Certifications | ETL (UL 1995) | |
| | 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.

*The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

**Warranty**

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






- 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).
- Knock-out for outside air capability (with booster fan connection)
- Fascia panel shall have LED indicator lights, IR receiver, and 4 motorized louvers (independent louver control is possible with wireless or premium wired controller).
- The outdoor unit shall have a night time quiet mode option to reduce operating sound during the night.
- 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
- Wind-Free™ function will close the supply air outlet louver while in cooling mode to gently disperse cool air into the space without blowing directly onto occupants. The Wind-Free™ feature is optional and can be enabled using central or local control options (MWR-SH11UN, MWR-WE13N, MWR-WG00UN, AR-EH03U only).
- The Wind-Free™ panel (PC4NUFMUN) has an integral humidity sensor that will open the louvers for standard cool mode when space conditions could potentially cause condensation formation on the panel surface.
- The Wind-Free™ 4-way cassette can be configured for 2-stage operation, cooling the space with the louver open (fixed or swing) until the room temperature nears set temperature. Once room temperature is near set temperature, Wind-Free™ operation will start automatically, closing the louver and using the face of the fascia panel to gently cool the space with still air*.
- 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.

**Construction**

The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

The indoor unit shall be 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 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

Interconnect control wire between outdoor indoor unit shall be 16 AWG X 2

shielded Wired or wireless controls must be purchased separately

The system shall integrate with the Samsung NASA Controls Solution

**Refrigerant System**

The refrigerant shall be R410A

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

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Samsung Wind-Free™ 4-Way Cassette, Single Zone, Split System

AC036NN4DCH/AA Accessories and Dimensional Drawing

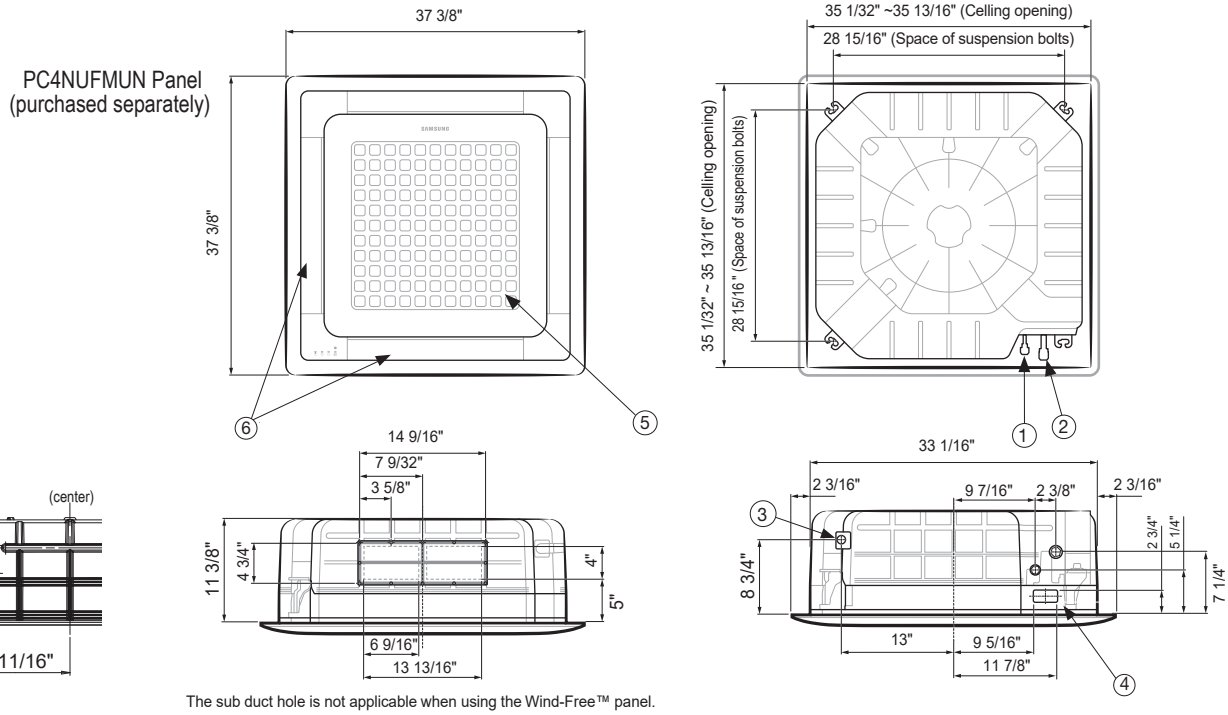
## Required Accessories

| | | |
|---|---|---|
| Fascia Panel | Wind-Free™ | ☐ PC4NUFMUN |
| | Standard | ☐ PC4NUSKUN |

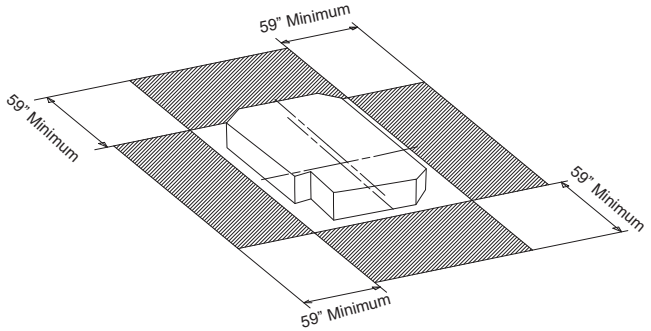
**A fascia panel is required for cassette unit operation and is sold separately. PC4NUFMUN is required to use the Wind-Free™ functions.*

## 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-EH03U |
| External Contact Control | | ☐ MIM-B14 |
| Central Control Interface Module for Connection to DVM Plus Controls (non-NASA) | | ☐ MIM-N01 |
| Wall Bracket (for outdoor unit) | | ☐ CKN-250 |
| Wind Baffles | Front | ☐ WBF-1M2 |
| | Back | ☐ WBB-2M |
| Line Sets - insulated and flared, interconnect cables included | | ☐ 25' - ILS-2510 |
| | | ☐ 50' - ILS-5010 |
| Thermostat Adaptor | | ☐ TADPT2 |
| Motion Detection Sensor | | ☐ MCR-SMC |



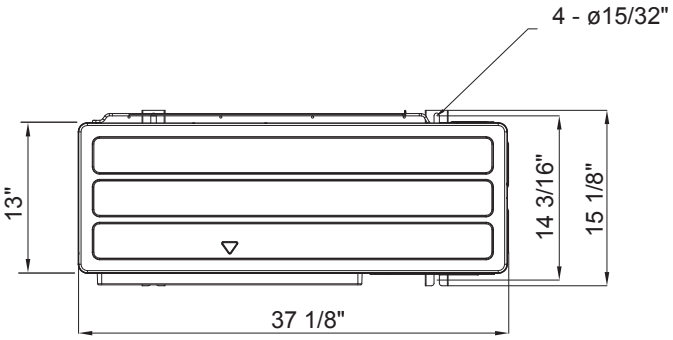

The sub duct hole is not applicable when using the Wind-Free™ panel.



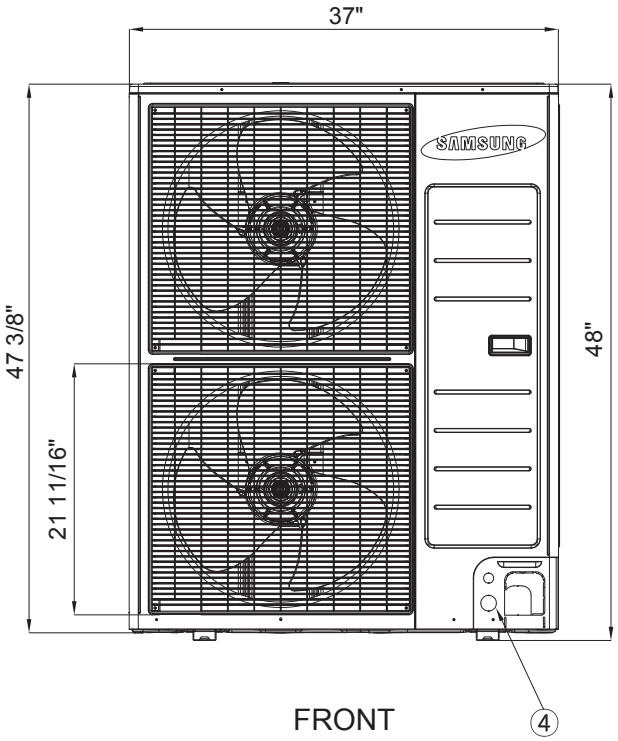

Proper clearance must be maintained around unit for proper operation.

| No. | Name | Description |
|---|---|---|
| ① | Liquid Pipe Connection | Ø 3/8" Flare |
| ② | Gas Pipe Connection | Ø 5/8" Flare |
| ③ | Drain Pipe Connection | OD 1 1/4", ID 1" |
| ④ | Conduit for Power & Communication Wiring | - |
| ⑤ | Air Inlet Grille | - |
| ⑥ | Air Outlet Louver | - |
| ⑦ | Fresh Air Inlet | Ø 4" |

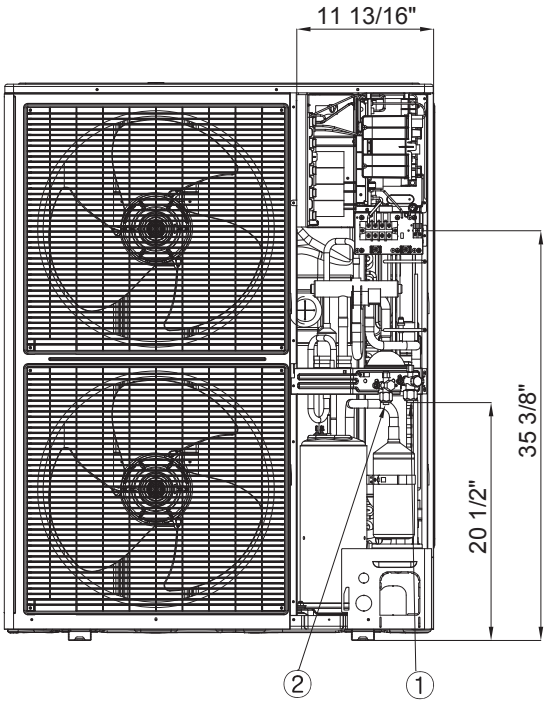
Samsung Wind-Free™ 4-Way Cassette, Single Zone, Split System
AC036JXADCH/AA Dimensional Drawing



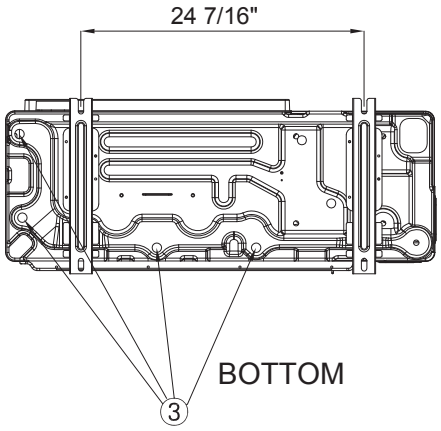

TOP




FRONT




FRONT WITHOUT SERVICE COVER




BOTTOM

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