

Samsung WindFree™ 4-Way Cassette, Single Zone, Split System

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

Reference

Approval

Construction

Schedule #

Specifications

| | | | |
|------------------------|--|--|---|
| Model | Indoor Unit Model Number (US Code) | | AC018BN4DCH/AA (CNH184DB) |
| | Outdoor Unit Model Number (US Code) | | AC018BXADCH/AA (CXH18ADB) |
| Performance | Nominal Capacity | Cooling / Heating (Btu/h) | 18,000 / 20,000 |
| | Capacity Range | Cooling (Btu/h) | 6,000 - 26,000 |
| | | Heating (Btu/h) | 5,500 - 31,000 |
| | AHRI 210-240 2017 ¹ | SEER | 22.8 |
| | | EER | 13.8 |
| | | HSPF | 10.50 |
| | AHRI 210-240 2023 ² | SEER2 | 23.6 |
| | | EER2 | 13.8 |
| | | HSPF2 | 8.5 |
| Power | Voltage | ø / V / Hz | 1 / 208-230 / 60 |
| | Working Voltage Range (VAC) | | 187 - 253 |
| | Operating Current (min. / std. / max.) | Cooling (A) | 3.2 / 5.9 / 10.8 |
| | | Heating (A) | 1.9 / 6.4 / 20.0 |
| | Max. Breaker | Amps | 25 |
| Dimensions | W X H X D (in.) | Indoor Unit | 33 1/16 X 9 11/16 X 33 1/16 |
| | | Outdoor Unit | 34 5/8 X 31 7/16 X 12 1/4 |
| | Weight (lbs.) | Indoor Unit | 35.1 |
| | | Outdoor Unit | 118.4 |
| Sound Pressure Level | Indoor Unit dB(A) | L / M / H | 30 / 33 / 36 |
| | Outdoor Unit dB(A) | Cooling / Heating (high) | 48 / 48 |
| Operating Temperatures | Outdoor | Cooling | 23 ~ 122°F (-5 ~ 50°C) 0 ~ 122°F (-18 ~ 50°C) W/Baffle |
| | | Heating | -13 ~ 75°F (-25 ~ 24°C) |
| | Indoor | Cooling | 61 ~ 90°F (16 ~ 32°C) |
| | | Heating | T ≤ 86°F (30°C) |
| Pipe Connections | Indoor & Outdoor | High side (flare) | 1/4" |
| | | Low side (flare) | 1/2" |
| | Maximum (ft.) | | 164 |
| | Maximum Vertical Separation (ft.) | | 98.4 |
| Refrigerant | Type | | R410A |
| | Factory Charge | lbs. | 4.41 |
| | Charged for | | 24.6 ft. |
| Compressor | Manufacturer | | Samsung |
| | Type | | Inverter Driven, Twin BLDC Rotary |
| | RLA | Amps | 12.7 |
| Evaporator Fan | Type | | BLDC (1) With Turbo Type Fan (1) |
| | Air Volume | CFM (L/M/H) | 636 / 742 / 848 |
| | Output | Watts | 65 X 1 |
| Condenser Fan | Motor | | BLDC With Axial Type Fan (1) |
| | FLA / Watts / CFM (max.) | 1.25A X 1 / 125W X 1 / 2,154 CFM | |
| Fascia Panel | WindFree™ Type | L X W X H (in.) | 37 3/8 X 37 3/8 X 2 1/2 in. |
| | | Weight (lbs.) | 13.88 |
| Safety | Certifications | UL 60335-2-40 | |
| | Devices | PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing | |

This publication reflects both the 1987 Appendix M metric (SEER) and the 2023 Appendix M1 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to www.AHRInet.org for more information about updated energy metrics.

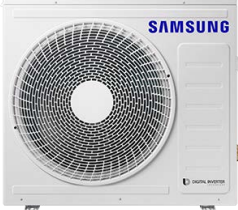
¹Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.

²Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.

* The WindFree™ unit delivers an air current that is under 0.15 m/s while in WindFree™ 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)

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

Select models are ENERGY STAR labeled. Proper sizing and installation of equipment is critical to achieve optimal 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.



General Information

- The indoor unit shall feature WindFree™* mode. In cooling mode, as room temperature nears set temperature, the unit will close its louver and will disperse air into the space through thousands of micro-holes on the front of the indoor unit preventing cold air drafts on occupants
- 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: ASTM-B117-18 - The heat exchanger showed no unusual rust or corrosion development to 2,280 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.
- Knock-out for outside air capability (with booster fan connection)
- System shall provide 100% heating capacity at -4°F (-20°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 evening hours (*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
- Fascia panel shall have LED display, infrared receiver, and motorized louver(s)
- The WindFree™* 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 WindFree™ feature is optional and can be enabled using central or local control options.
- The WindFree™ indoor unit has an integral humidity sensor that will open the louver for standard cool mode when space conditions could potentially cause condensation formation on the chassis surface.

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
- 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)

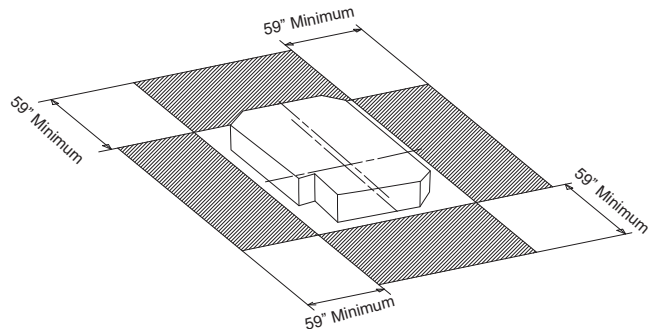
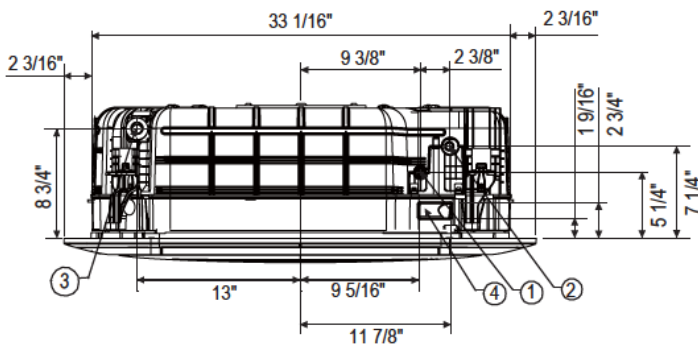
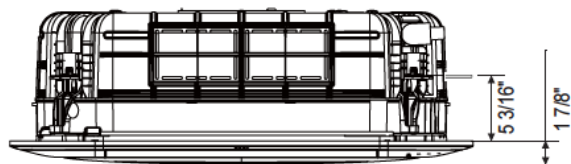
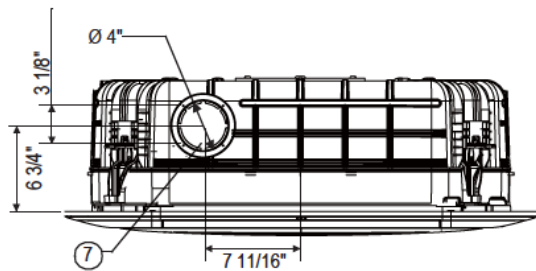
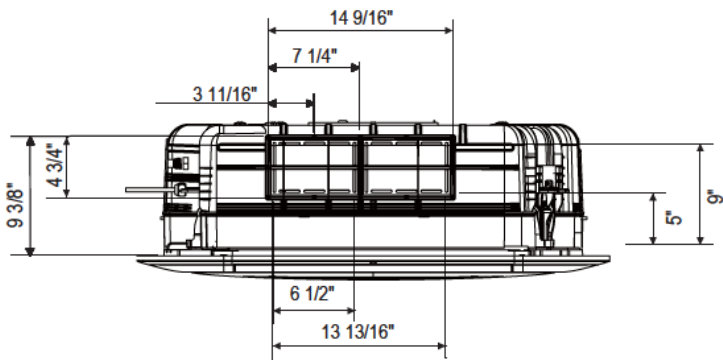
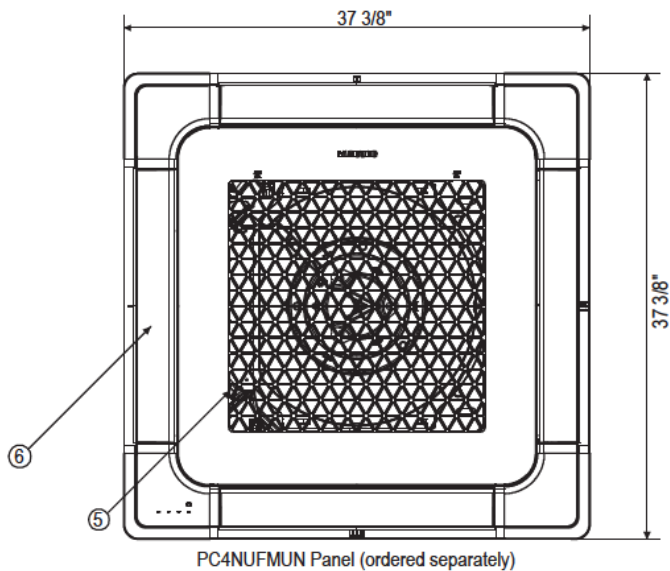
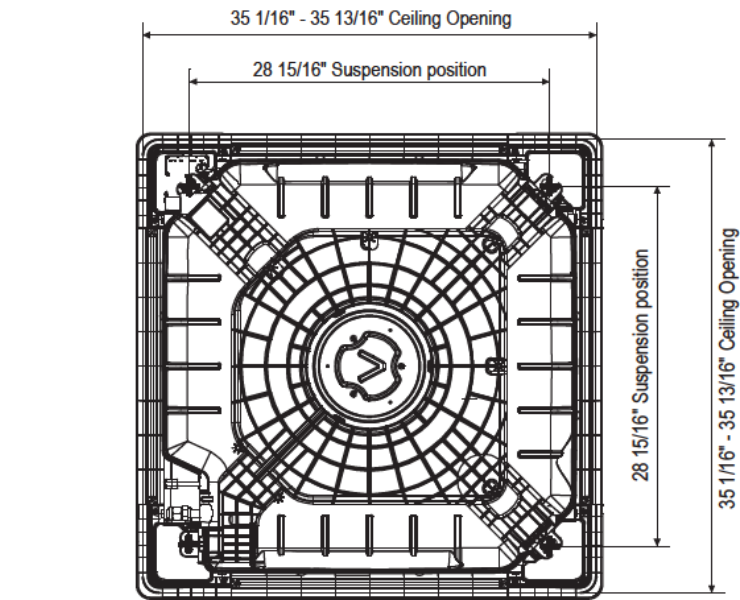
Required Accessories

| | | |
|--------------|----------------|---|
| Fascia panel | WindFree™ Type | <input checked="" type="checkbox"/> PC4NUFMUN |
|--------------|----------------|---|

Optional Accessories

| | | |
|--|--------------------|---------------|
| Wired controller | Advanced | MWR-WG00UN |
| | Touchscreen | MWR-SH11UN |
| Thermostat adapter (24vac) | | MIM-A60UN |
| Wireless controller | | AR-EH04U |
| Wi-Fi adapter | Single indoor unit | MIM-H14UN |
| | 1-16 indoor units | MIM-H05UN |
| Motion Detection Sensor | | MCR-SMC |
| External temperature sensor | | MRW-TA |
| External contact control | | MIM-B14 |
| Wall bracket (for outdoor unit) | | CKN-250 |
| Wind baffle | Front | WBF-7M |
| | Back | WBB-7M-B |
| Hail guard kit (includes back and side guards) | | HGK-2 |
| Line sets - insulated and flared, interconnect cables included | | 25' - ILS2507 |
| | | 50' - ILS5007 |

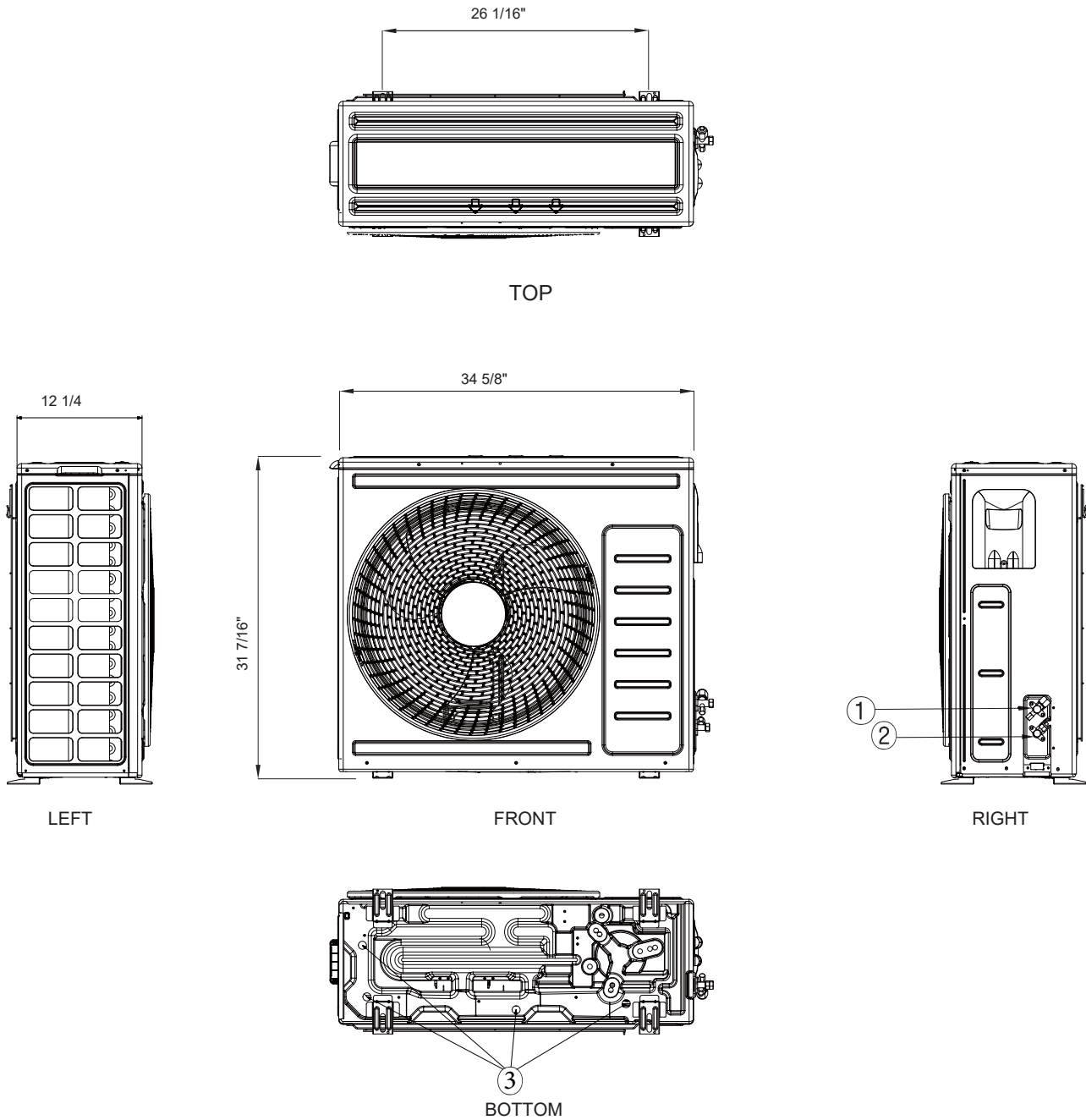
Samsung WindFree™ 4-Way Cassette, Single Zone, Split System
AC018BN4DCH/AA Dimensional Drawing



Proper clearance must be maintained around unit for proper operation.

| No. | Name | Description |
|-----|--|------------------|
| ① | Liquid Pipe Connection | Ø 1/4" Flare |
| ② | Gas Pipe Connection | Ø 1/2" 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 WindFree™ 4-Way Cassette, Single Zone, Split System
AC018BXADCH/AA Dimensional Drawing



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