

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

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference _____ Approval _____ Construction _____
 Schedule # _____

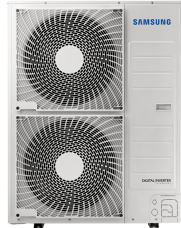
Specifications

| | | | |
|---------------------------|---|--|---|
| Model | Indoor Unit Model Number (US Code) | | AC048BN4DCH/AA (CNH484DB) |
| | Outdoor Unit Model Number (US Code) | | AC048BXADCH/AA (CXH48ADB) |
| Performance | Nominal Capacity ¹ | Cooling / Heating (Btu/h) | 48,000 / 54,000 |
| | Capacity Range | Cooling (Btu/h) | 12,000 - 52,000 |
| | | Heating (Btu/h) | 13,000 - 60,000 |
| | SEER / EER | | 17.2 / 8.3 |
| | COP (nominal heating) | | 3.10 |
| | HSPF | | 10.0 |
| | AHRI Certification Number | | 207465436 |
| 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) | 5.0 / 25.6 / 28.8 |
| | | Heating (A) | 3.7 / 22.7 / 32.0 |
| | Max. Breaker | Amps | 40 |
| Min. Circuit Ampacity (A) | | 29.5 | |
| Dimensions | W X H X D (in.) | Indoor Unit | 33 1/16 X 11 3/8 X 33 1/16 |
| | | Outdoor Unit | 37 X 47 11/16 X 13 |
| | Weight (lbs.) | Indoor Unit | 45.6 |
| | | Outdoor Unit | 191.8 |
| Sound Pressure Level | Indoor Unit dB(A) | L / M / H | 35 / 40 / 45 |
| | Outdoor Unit dB(A) | Cooling / Heating (high) | 56 / 58 |
| 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 ≤ 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.) | | 98.4 |
| | Condensate Connection | | 1 1/4" OD, 1" ID |
| Refrigerant | Type | | R410A |
| | Factory Charge | lbs. | 7.50 |
| | Charged for | | 25 ft |
| | Additional Refrigerant | | 0.11 oz./ft. over 24.6 ft |
| Compressor | Manufacturer | | Samsung |
| | Type | | Inverter Driven, Twin BLDC Rotary |
| | RLA | Amps | 20.9 |
| Evaporator Fan | Type | | BLDC (1) With Turbo Type Fan (1) |
| | Air Volume | CFM (L/M/H) | 749 / 996 / 1289 |
| | Output | Watts | 97 X 1 |
| Condenser Fan | Motor | | BLDC With Axial Type Fan (1) |
| | FLA / Watts / CFM (max.) | | 1.25 A / 125 W / 3,532 CFM |
| Fascia Panel | PC4NUFMUN | L X W X H (in.) | 37 3/8 X 37 3/8 X 2 1/2 |
| | | Weight (lbs.) | 13.9 |
| 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 | |

¹Certified 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 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.



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
- 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)

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 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

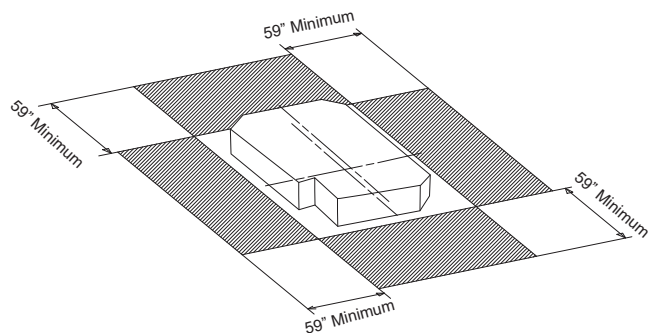
10 years compressor, 10 years parts, 1-year limited labor (conditions apply)

Required Accessories

| | | |
|--------------|----------------|-----------|
| Fascia panel | WindFree™ Type | PC4NUFMUN |
|--------------|----------------|-----------|

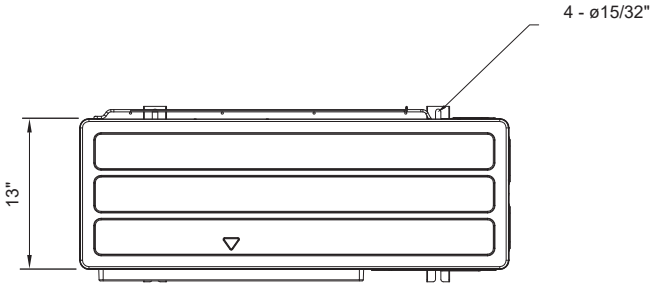
Optional Accessories

| | | |
|--|--------------------|------------|
| 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-H04UN |
| External temperature sensor | | MRW-TA |
| External contact control | | MIM-B14 |
| Wall bracket (for outdoor unit) | | CKN-250 |
| Wind baffle | Front | WBF-1M2 |
| | Back | WBB-2M-B |
| Hail guard | | TBD |
| Line sets - insulated and flared, interconnect cables included | 25' - ILS2510 | |
| | 50' - ILS5010 | |

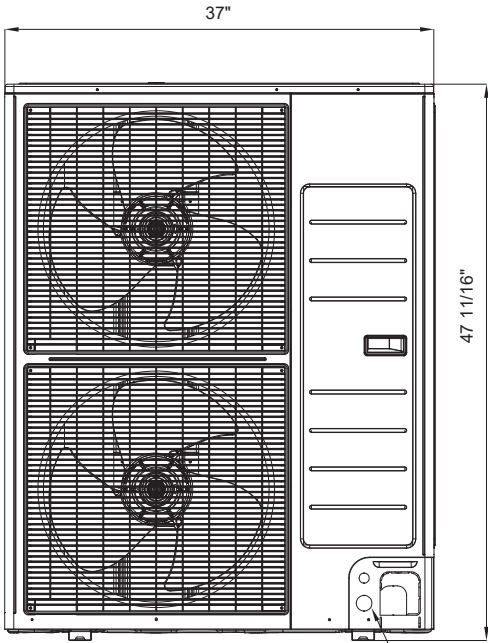


Proper clearance must be maintained around unit for proper operation.

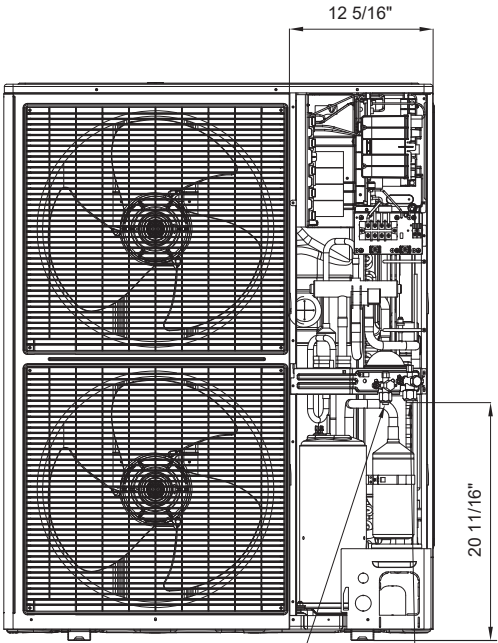
| No. | Name | Description |
|-----|--|------------------|
| ① | Liquid Pipe Connection | Ø 3/8" Flare |
| ② | Gas Pipe Connection | Ø 5/8" Flare |
| ③ | Drain Pipe Connection | OD 1 1/4", ID 1" |
| ④ | Conduit for Power & Communication Wiring | - |
| ⑤ | Air Inlet Grille | - |
| ⑥ | Air Outlet Louver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



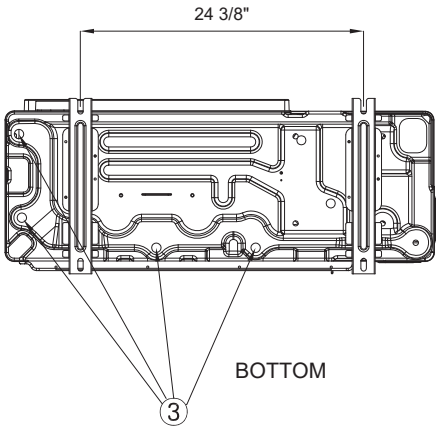
TOP



FRONT



FRONT WITHOUT SERVICE COVER



BOTTOM

| No. | Name | Description |
|-----|--|----------------------------------|
| 1 | Refrigerant liquid pipe | Φ 3/8 |
| 2 | Refrigerant gas pipe | Φ 5/8 |
| 3 | Drain hole | Connect with provided drain plug |
| 4 | Power and communication conduit openings | -- |