

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

ReferenceApprovalConstruction

Schedule #

| Specifications | | | |
|------------------------|---|--|---|
| Model | Indoor Unit Model Number (US Code) | | AC018BNLDCH/AA (CNH18LDB) |
| | 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) | 5,500 - 22,000 |
| | | Heating (Btu/h) | 3,000 - 25,000 |
| | AHRI 210-240 2017 ¹ | SEER | 19.8 |
| | | EER | 12.1 |
| | | HSPF | 9.0 |
| | AHRI 210-240 2023 ² | SEER2 | 20.0 |
| | | EER2 | 12.1 |
| | | HSPF2 | 7.5 |
| Power | Voltage | ø / V / Hz | 1 / 208-230 / 60 |
| | Working Voltage Range (VAC) | | 187 - 253 |
| | Operating Current (min. / std. / max.) | Cooling (A) | 2.4 / 6.7 / 10.8 |
| | | Heating (A) | 1.8 / 8.2 / 16.0 |
| | Max. Breaker | Amps | 25 |
| | Min. Circuit Ampacity (A) | | 20.1 |
| Dimensions | W X H X D (in.) | Indoor Unit | 43 5/16 X 7 13/16 X 17 5/16 |
| | | Outdoor Unit | 34 5/8 X 31 7/16 X 12 1/4 |
| | Weight (lbs.) | Indoor Unit | 49.4 |
| | | Outdoor Unit | 118.4 |
| | Duct Connections (W X H) | Supply (in.) | 37 1/16 X 5 7/8 |
| | | Return (ID, in.) | 38 1/2 X 6 5/8 (inside) |
| Sound Pressure Level | Indoor Unit dB(A) | L / M / H | 28 / 32 / 35 |
| | 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 | 64 ~ 90°F (16 ~ 32°C) |
| | | Heating | T ≤ 86°F (30°C) |
| Pipe Connections | Indoor & Outdoor | High side | 1/4" |
| | | Low side | 1/2" |
| | Maximum (ft.) | | 164 |
| | Maximum Vertical Separation (ft.) | | 98.4 |
| | Condensate Connection (with included adapter) | | 1 1/4 in. OD, 1 in. ID |
| 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 Sirocco Fan (3) |
| | Air Volume | CFM (L/M/H) | 353 / 459 / 600 |
| | Output | Watts | 84 |
| | External Static Pressure | Standard ("WC) | 0.1 |
| | | Min. / Max. ("WC) | 0.0 / 0.24 |
| Condenser Fan | Motor | | BLDC With Axial Type Fan (1) |
| | FLA / Watts / CFM (max.) | | 1.25A X 1 / 125W X 1 / 2,154 CFM |
| 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 | |



- 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
 - Integral condensate pump with maximum 29" lift from bottom of the unit with check valve and float switch that disables indoor should condensate overflow be detected.
 - 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: ISO-9227 - the heat exchanger showed no unusual rust or corrosion development to 3,000 hours.
 - Base pan heater equipped as standard

- 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 set up 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 control

- Indoor Fan
- Indoor fan is sirocco type
 - Three fan speed settings and auto setting
 - Washable filter as standard

- Construction
- Outdoor unit shall be galvanized steel with a baked-on powder coated finish for durability
 - Indoor Unit: Insulated, galvanized steel.

- Controls
- Control wiring shall be 2 X 16 AWG wire
 - 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
 - Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller or central control options.
 - Wired or wireless controllers must be purchased separately

- 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 when registered

ATTENTION

This air handling unit is intended for free-air discharge or for connection to a duct supplying only one room. Improper installation could contribute to the spread of smoke or flame in the event of a fire.

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.

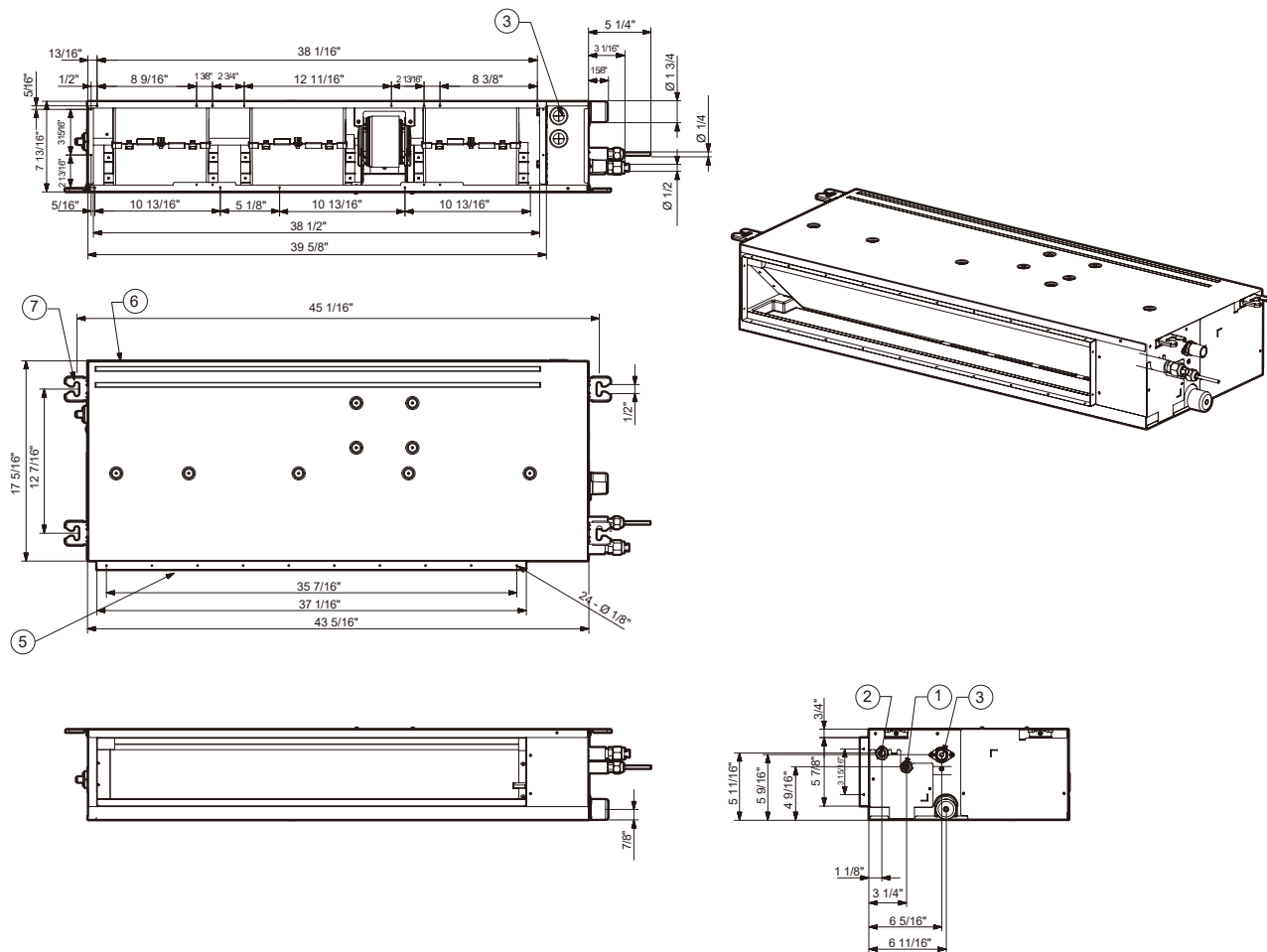
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

Optional Accessories

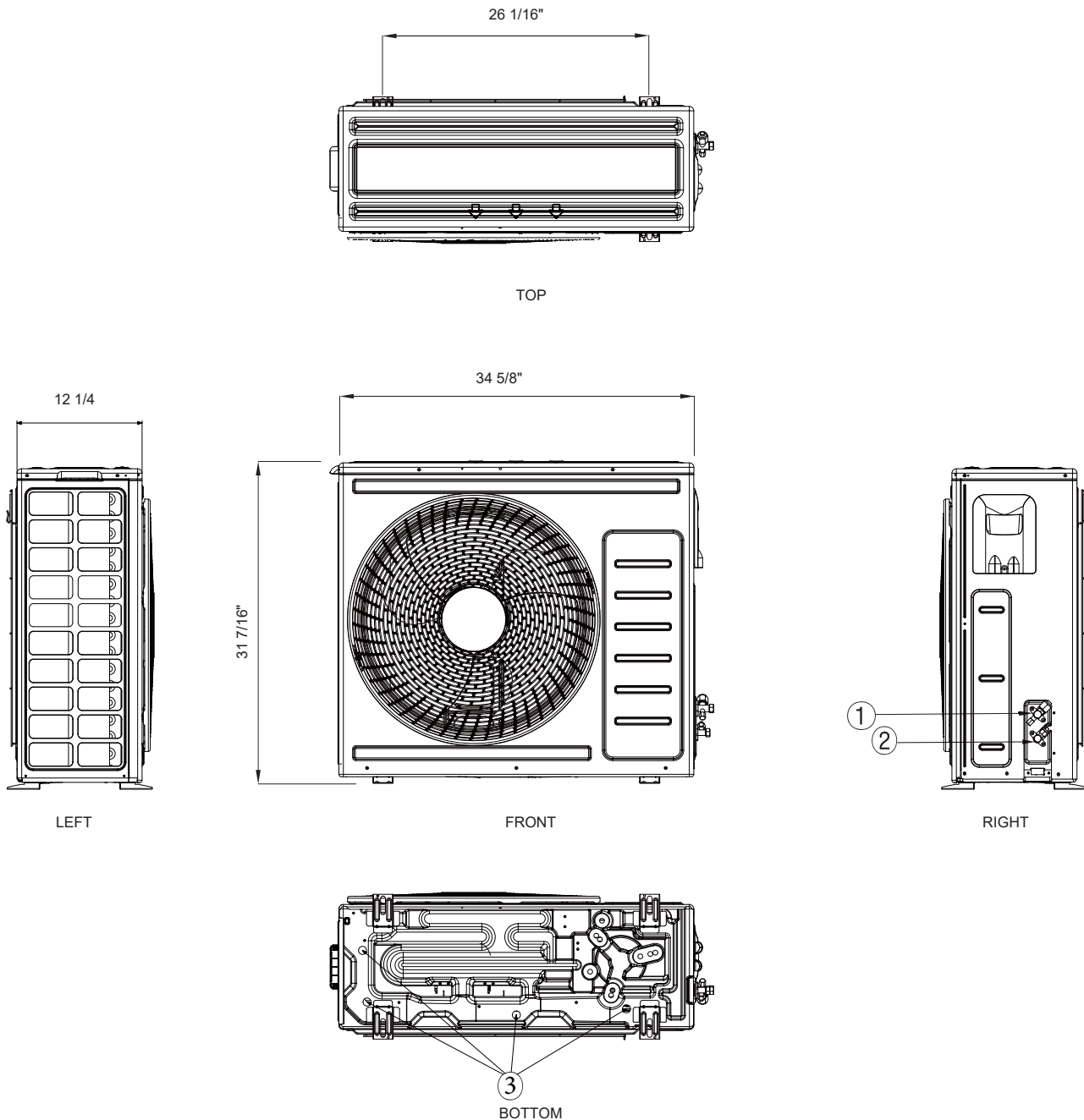
| | | |
|--|--------------------------|------------|
| Wired Controller | Advanced | MWR-WG00UN |
| | Touchscreen | MWR-SH11UN |
| Thermostat Adaptor (for connection to a standard 24VAC thermostat) | | MIM-A60UN |
| Wireless Signal | Wireless Signal Receiver | MRK-A10N |
| Control | Wireless Controller | AR-EH04U |
| Wi-Fi Adapter | | MIM-H05UN |
| External Temperature Sensor | | MRW-TA |
| Filter Box | | FB-SLIM3 |
| External Contact Control | | MIM-B14 |
| Wall Bracket (for outdoor unit) | | CKN-250 |
| Wind Baffles | 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' - ILS-2507 | |
| | 50' - ILS-5007 | |

Samsung Slim Duct, Single Zone Duct, Split System

AC018BNLDCH/AA Dimensional Drawing



| No. | Name | Description |
|-----|-------------------------------|-----------------|
| ① | Refrigerant Liquid Pipe | Ø 1/4" |
| ② | Refrigerant Gas Pipe | Ø 1/2" |
| ③ | Condensate Drain | 3/4" (OD 1.05") |
| ④ | Power & Comm. Wiring Conduits | - |
| ⑤ | Supply Air Flange | - |
| ⑥ | Return Air Flange | - |
| ⑦ | Hook | - |



| 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 |