

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

Reference

Schedule #

Approval

Construction

| Specifications            |   |                           |  |
|---------------------------|---|---------------------------|--|
| Model                     | Indoor Unit Model Number (US Code)  |                           | AC018KNZDCH/AA (CNH18ZDK)                                  |
|                           | Outdoor Unit Model Number (US Code)   |                           | AC018BXADCH/AA (CXH18ADB)                                  |
| Performance <sup>1</sup>  | Nominal Capacity  | Cooling / Heating (Btu/h) | 18,000 / 20,000  |
|                           | Capacity Range  | Cooling (Btu/h)           | 5,000 - 22,000   |
|                           |   | Heating (Btu/h)           | 5,000 - 29,000   |
|                           | SEER / EER  |                           | 19.2 / 12.0  |
|                           | COP (nominal heating)   |                           | 3.10   |
|                           | HSPF  |                           | 10.0   |
| AHRI Certification Number |   |                           | 207598067  |
| Power                     | Voltage   | ø / V / Hz                | 1 / 208-230 / 60   |
|                           | Working Voltage Range (VAC)   |                           | 176 - 254 (max. 3% deviation from each)                    |
|                           | Operating Current<br>(min. / std. / max.)   | Cooling (A)               | 3.0 / 6.9 / 11.5   |
|                           |   | Heating (A)               | 2.6 / 8.6 / 20.0   |
|                           | Max. Breaker  | Amps                      | 25   |
| Min. Circuit Ampacity (A) |   |                           | 18.7   |
| Dimensions                | W X H X D<br>(in.)  | Indoor Unit               | 17 1/2 X 43 X 21   |
|                           |   | Outdoor Unit              | 34 5/8 X 31 7/16 X 12 1/4                                  |
|                           | Duct Connections<br>(W X H)   | Supply (in.)              | 12 1/4 X 15 1/2  |
|                           |   | Return (ID, in.)          | 17 1/2 X 21  |
|                           | Weight<br>(lbs.)  | Indoor Unit               | 98.1   |
|                           | Outdoor Unit  | 118.4                     |  |
| Sound Pressure Level      | Indoor Unit dB(A)   | L / M / H                 | 32 / 35 / 38   |
|                           | Outdoor Unit dB(A)  | Cooling / Heating (high)  | 48 / 48  |
| Operating Temperatures    | Outdoor   | Cooling                   | 23 ~ 122°F (-5 ~ 50°C)                                     |
|                           |   | Heating                   | 0 ~ 122°F (-18 ~ 50°C) w/ baffle<br>-4 ~ 75°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)         | 1/4"   |
|                           |   | Low side (flare)          | 1/2"   |
|                           | Maximum (ft.)   |                           | 164  |
|                           | Maximum Vertical Separation (ft.)   |                           | 98.4   |
|                           | Condensate Connection (with included adapter)   |                           | 1 1/16" ID for 3/4" PVC                                    |
| Refrigerant               | Type  |                           | R410A  |
|                           | Control Method  |                           | Electronic Expansion Valve                                 |
|                           | Factory Charge  | lbs.                      | 2.6  |
|                           | Charged for   |                           | 24.6 ft  |
|                           | Additional Refrigerant  |                           | 0.11 oz/ft over 24.6 ft                                    |
| Compressor                | Manufacturer  |                           | Samsung  |
|                           | Type  |                           | Inverter Driven, Twin BLDC Rotary                          |
|                           | RLA   | Amps                      | 12.7   |
| Evaporator Fan            | Type  |                           | Double-inlet, forward curve, centrifugal (with ECM motor)  |
|                           | Air Volume  | CFM (L/M/H)               | 495 / 530 / 600 (at standard ESP)                          |
|                           | Output (W) / FLA (A)  |                           | 290 W / .72 A  |
|                           | Static Pressure   | Standard ("WC)            | 0.20   |
|                           |   | Min. / Max. ("WC)         | 0.01 - 0.79  |
| Condenser Fan             | Motor   |                           | BLDC With Axial Type Fan (1)                               |
|                           | FLA / Watts / CFM (max.)  |                           | 1.25 A / 125 W / 2,154 CFM                                 |
| 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 |                           |  |

<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. Refer to [www.AHRIdirectory.org](http://www.AHRIdirectory.org) for current reference numbers.



- 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
  - 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.
  - Base pan heater equipped as standard
  - 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 (*automatic or manual activation*).
  - 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 controller

- Indoor Fan**
- Indoor fan is a double Inlet, forward curve, centrifugal type
  - Three fan speed settings and auto setting
  - Field configurable for downflow operation with optional conversion kit

- 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
  - 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



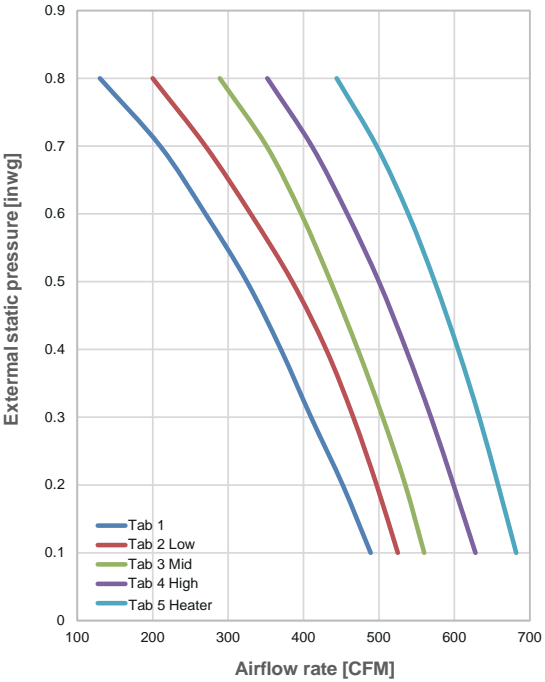
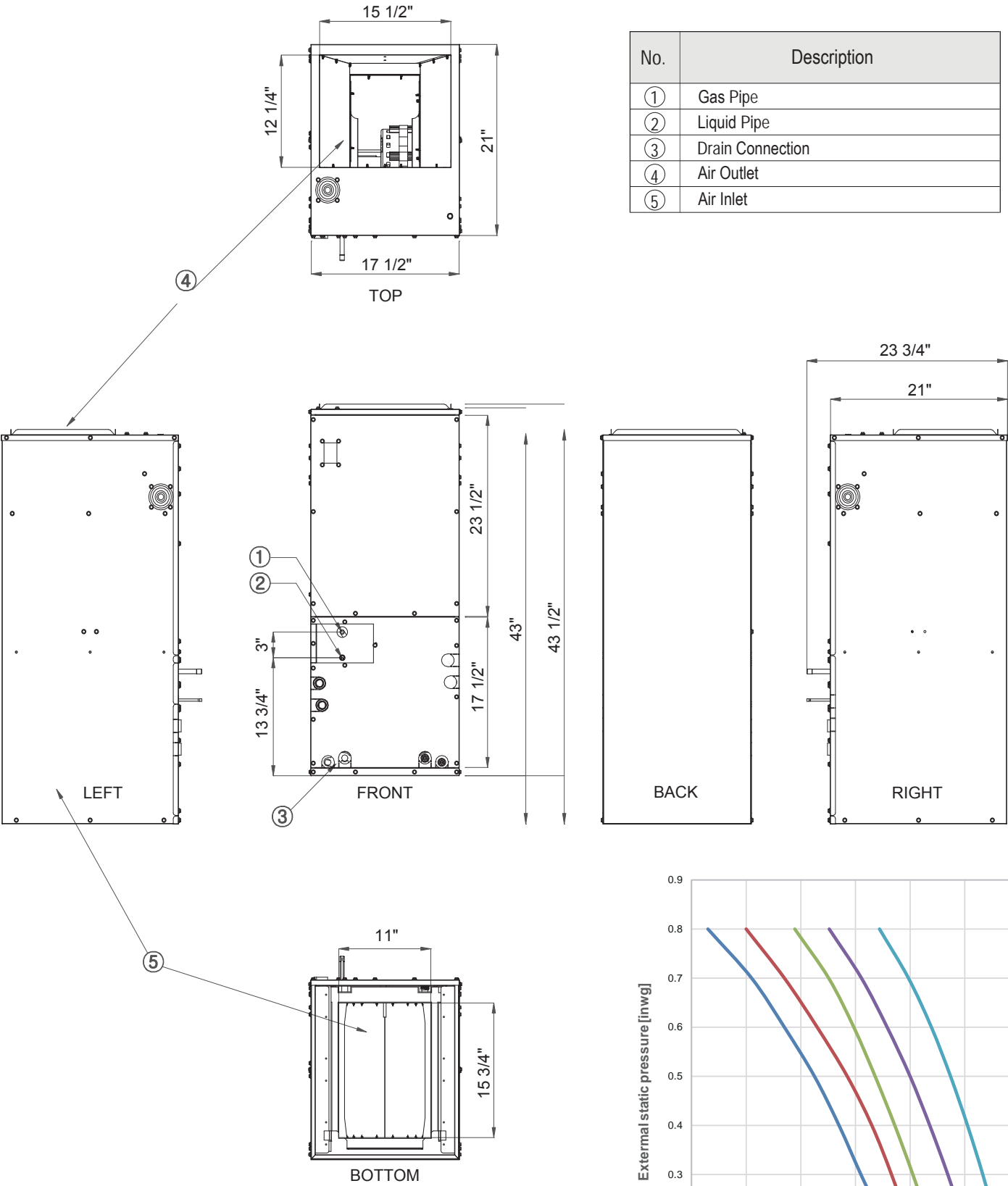
Optional Accessories

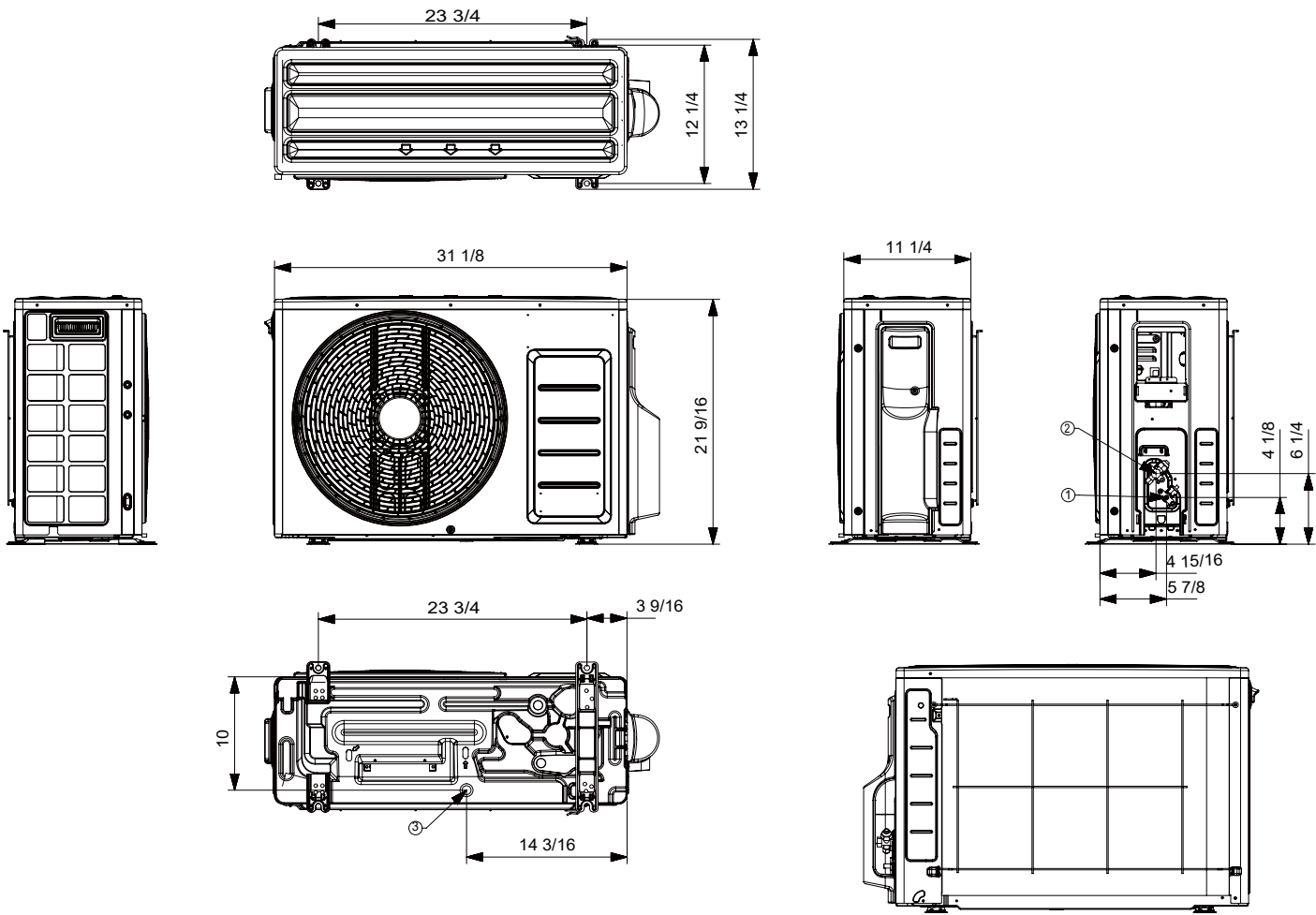
|  |                          |            |
|--|--------------------------|------------|
| Wired Controller   | Advanced                 | MWR-WG00UN |
|  | Touchscreen              | MWR-SH11UN |
| Thermostat Adaptor (for connection to a standard 24VAC thermostat) |                          | MIM-A60UN  |
| Wireless Signal Control  | Wireless Signal Receiver | MRK-A10N   |
|  | Wireless Controller      | AR-EH04U   |
| Wi-Fi Adapter  |                          | MIM-H04UN  |
| External Temperature Sensor  |                          | MRW-TA     |
| Filter Base (includes 1" MERV 8 filter)                            |                          | VFB-1      |
| External Contact Control   |                          | MIM-B14    |
| Wall Bracket (for outdoor unit)                                    |                          | CKN-250    |
| Wind Baffles   | Front                    | WBF-7M     |
|  | Back                     | WBB-7M-B   |
| Hail Guard   |                          | TBD        |
| Line Sets - insulated and flared, interconnect cables included     | 25' - ILS-2507           |            |
|  | 50' - ILS-5007           |            |
| Supplemental Electric Heat Kit                                     | VHK-103A (3 kW)          |            |
|  | VHK-105A (5 kW)          |            |
| Downflow Conversion Kit  |                          | VDK-1      |

Samsung Multi-Position Air Handler, Single Zone, Split System

AC018KNZDCH/AA Dimensional Drawing

| No. | Description      |
|-----|------------------|
| ①   | Gas Pipe         |
| ②   | Liquid Pipe      |
| ③   | Drain Connection |
| ④   | Air Outlet       |
| ⑤   | Air Inlet        |





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