

Job Name \_\_\_\_\_  
 Purchaser \_\_\_\_\_  
 Submitted to \_\_\_\_\_  
 Unit Designation \_\_\_\_\_

Location \_\_\_\_\_  
 Engineer \_\_\_\_\_  
 Reference \_\_\_\_\_ Approval \_\_\_\_\_ Construction \_\_\_\_\_  
 Schedule # \_\_\_\_\_

**Specifications**

|                                    |   |   |   |  |
|------------------------------------|---|---|---|--|
| Model                              | Indoor Unit Model Number (US Code)  | AC036KNZDCH/AA (CNH36ZDK)                                 |   |  |
|                                    | Outdoor Unit Model Number (US Code)   | AC036JXADCH/AA (CXH36ADJ)                                 |   |  |
| Performance                        | Nominal Capacity <sup>1</sup>   | Cooling / Heating (Btu/h)                                 | 36,000 / 40,000   |  |
|                                    | Capacity Range  | Cooling (Btu/h)   | 14,000 - 39,000   |  |
|                                    |   | Heating (Btu/h)   | 12,000 - 43,000   |  |
|                                    | SEER / EER  | 19.0 / 11.4   |   |  |
|                                    | COP (nominal heating)   | 3.24  |   |  |
|                                    | HSPF  | 10.2  |   |  |
|                                    | AHRI Certification Number   | 8950568   |   |  |
| Condensate (pints/h)               | 8.03  |   |   |  |
| Power (without optional heat kits) | 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)   | 5.1 / 14.1 / 18.2                                       |  |
|                                    |   | Heating (A)   | 4.5 / 15.8 / 23.0                                       |  |
|                                    | Max. Breaker  | Amps  | 40  |  |
| Min. Circuit Ampacity (A)          | 26.4  |   |   |  |
| Dimensions                         | W X H X D (in.)   | Indoor Unit   | 21 X 48 X 21  |  |
|                                    |   | Outdoor Unit  | 37 X 48 X 13  |  |
|                                    | Weight (lbs.)   | Indoor Unit   | 123.5   |  |
|                                    |   | Outdoor Unit  | 194   |  |
| Sound Pressure Level               | Indoor Unit dB(A)   | L / M / H   | 36 / 39 / 42  |  |
|                                    | Outdoor Unit dB(A)  | Cooling / Heating (high)                                  | 49 / 51   |  |
| Operating Temperatures °F(°C)      | Outdoor   | Cooling   | 23 ~ 115°F(-5 ~ 46°C)<br>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              | 3/4" FNPT   |   |   |  |
| Refrigerant                        | Factory Charge  | oz.   | 98.77   |  |
|                                    | Charged for   | 25 ft   |   |  |
|                                    | Additional Refrigerant  | 0.355 oz./ft. over 25 ft                                  |   |  |
| Compressor                         | Type  | Inverter Driven, Twin BLDC Rotary                         |   |  |
|                                    | RLA   | A   | 17.0  |  |
| Evaporator Fan                     | Type  | Double-inlet, forward curve, centrifugal (with ECM motor) |   |  |
|                                    | Air Volume  | CFM (L/M/H)   | 883 / 1,042 / 1,165 (at standard ESP)                   |  |
|                                    |   | Total CFM Range <sup>2</sup>                              | 419 - 1,314   |  |
|                                    | HP  | 1/2   |   |  |
|                                    | Motor Amps  | A   | 1.66  |  |
|                                    | External Static Pressure ("WC)  | Standard  | 0.24  |  |
| Pressure ("WC)                     | Min. / Max.   | 0 / 1.0   |   |  |
| 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                        |   |  |
| 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 |   |   |  |



**General Information**

- Auto-restart after power loss
- The indoor unit shall be capable of being field convertible to downflow configuration with optional downflow conversion kit.
- The outdoor unit shall have a snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- The indoor and outdoor units shall have a removable EEPROM that stores system programming information, unit name, and other data
- The outdoor unit shall have a night time quiet mode option to reduce operating sound during the night (automatic or manual activation with dry contact signal).
- The pipe connections at the outdoor unit shall be internal allowing pipes to enter the chassis through the front, right side, bottom, or back.
- Air handler has an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.
- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire when optional heat kits are not installed. If VHK-\*\*\*A supplemental heat kits are installed, power to the heat kits must be provided from a dedicated circuit with proper overcurrent protection per NEC (refer to VHK-\*\*\*A supporting documents for heat kit electrical data).

**Construction**

- The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability
- The indoor unit shall be constructed of insulated, powder coated, galvanized steel
- Indoor Fan**  
 The indoor fan is a double-inlet, forward curve, centrifugal type with a single constant-torque (ECM) fan motor
- The indoor unit shall have low, medium, high, and auto fan speed setting options.
- The evaporator fan motor shall have five speed taps

**Heat Exchanger**

- The indoor unit heat exchanger shall be mechanically bonded aluminum 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 and indoor unit shall be 16AWG X 2 shielded
- Controllers must be purchased separately
- Controls shall integrate with a BMS system

No additional interface modules/adapters are required when connecting to Samsung NASA DVM S central controllers.

**Refrigerant System**

- The refrigerant type shall be R410A
- The compressor shall be hermetically sealed, inverter controlled, twin BLDC Rotary made by Samsung
- Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit
- Soft-start to reduce current demand during compressor start

**Warranty**

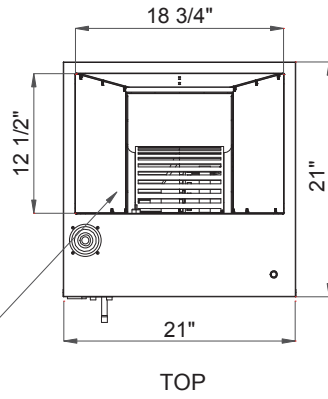
10 Years compressor, 10 years parts, 1 year limited labor when registered (conditions apply)

<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.  
<sup>2</sup> Refer to installation manual for full fan curve details

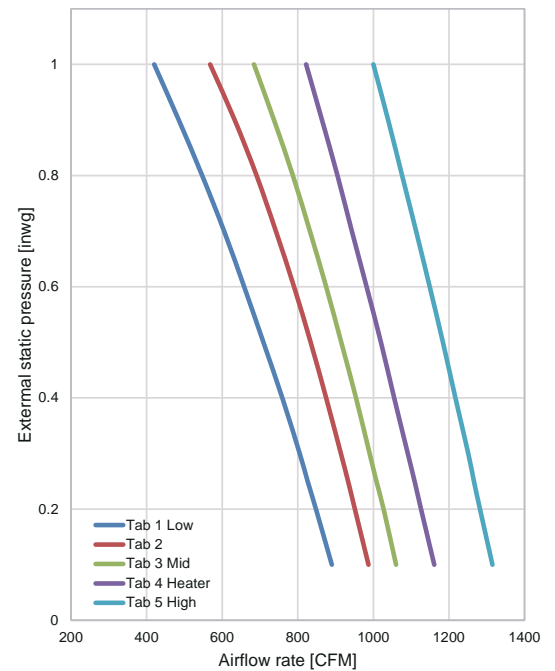
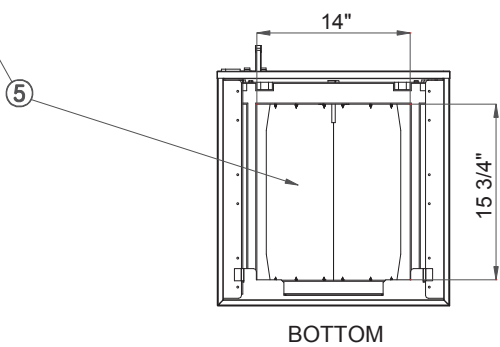
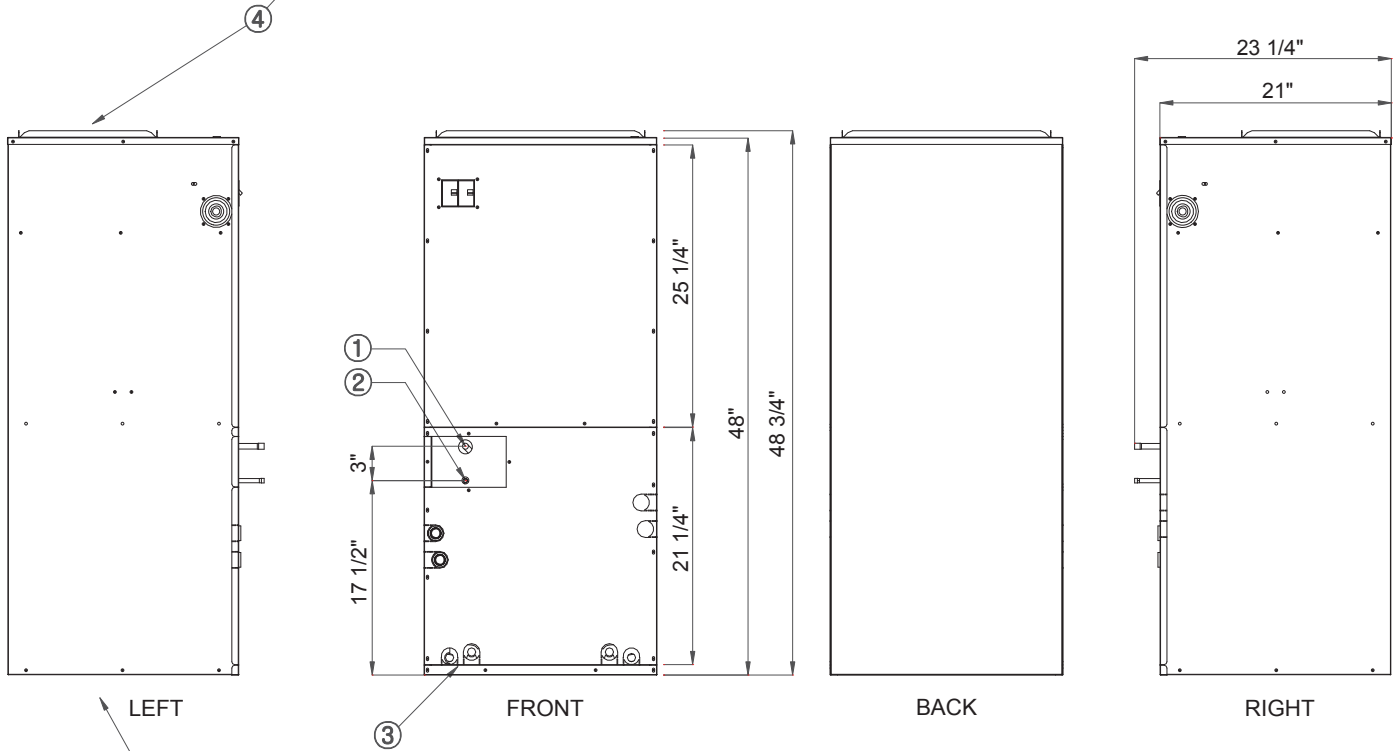


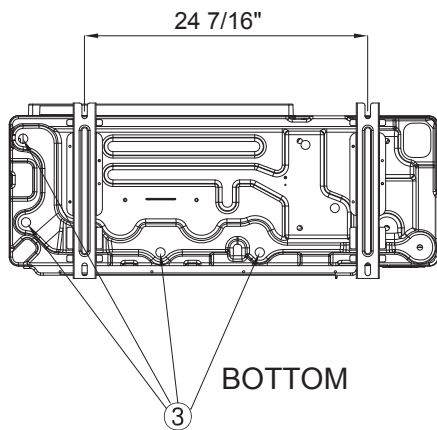
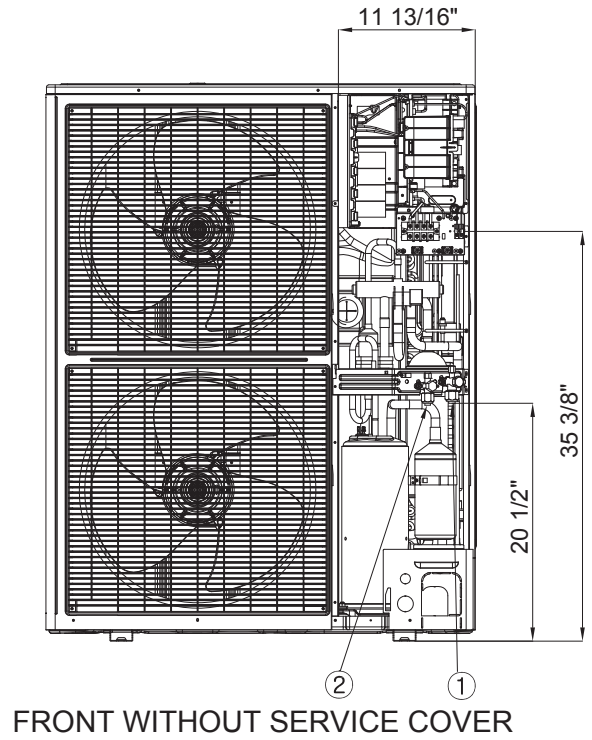
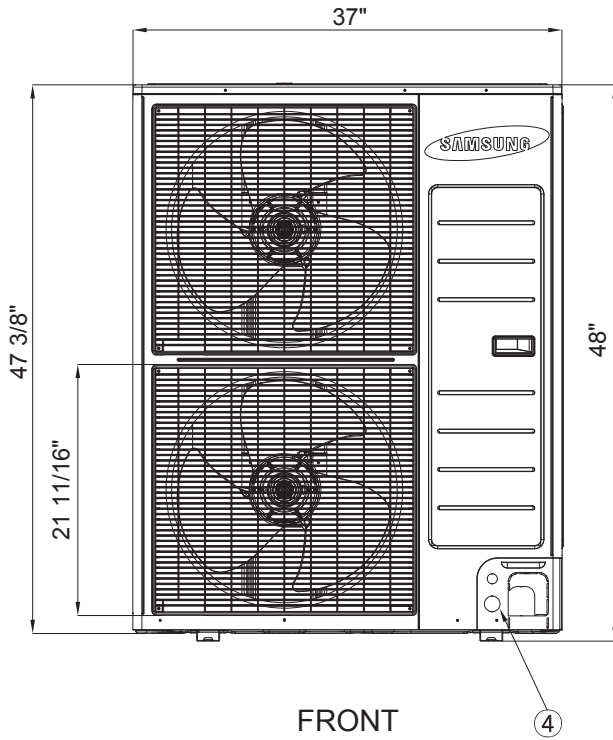
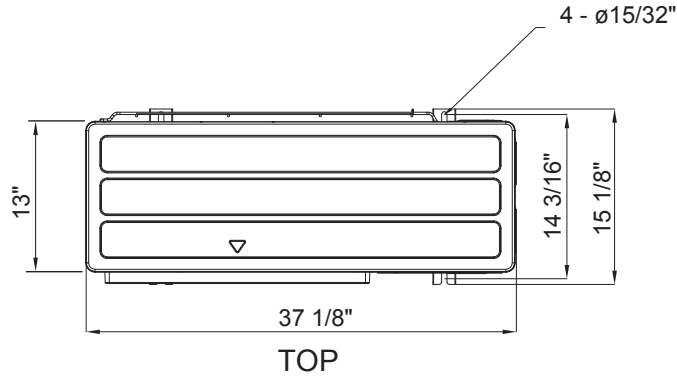
## Optional Accessories

|  |                             |               |
|--|-----------------------------|---------------|
| Wired Controller   | Advanced Wired Controller   | MWR-WG00UN    |
|  | Simplified Touch Controller | MWR-SH11UN    |
| Wi-Fi Adapter  |                             | MIM-H04UN     |
| Wireless Signal Control  | Wireless Signal Receiver    | MRK-A10N      |
|  | Wireless Controller         | AR-EH03U      |
| External Temperature Sensor  |                             | MRW-TA        |
| External Contact Control   |                             | MIM-B14       |
| Filter Box (includes 1" MERV 8 filter)                             |                             | VFB-2         |
| Supplemental Electric Heat Kits                                    | 5kW                         | VHK-205A      |
|  | 10kW                        | VHK-210A      |
| Wall Bracket (for outdoor unit)                                    |                             | CKN-250       |
| Wind Baffles   | Front                       | WBF-1M2       |
|  | Back                        | WBB-2M-B      |
| Line Sets - insulated and flared, interconnect cables included     |                             | 25' - ILS2510 |
|  |                             | 50' - ILS5010 |
| Downflow Conversion Kit  |                             | VDK-2         |
| Thermostat Adaptor (for connection to a standard 24VAC thermostat) |                             | MIM-A60UN     |



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





| No. | Description                              |
|-----|--|
| 1   | Suction service valve                    |
| 2   | Liquid service valve                     |
| 3   | Drainage hole                            |
| 4   | Power and communication conduit openings |