

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

Reference

Approval

Construction

Schedule #

Specifications

|                        |  |                           |  |
|------------------------|--|---------------------------|--|
| Model                  | Indoor Unit Model Number (US Code)     |                           | AR18CSDABWKNCV (RNS18ABC)  |
|                        | Outdoor Unit Model Number (US Code)    |                           | AR18CSDAEWKXCV (RXS18AEC)  |
| Performance            | Nominal Capacity                       | Cooling / Heating (Btu/h) | 18,000 / 20,000  |
|                        | Capacity Range                         | Cooling (Btu/h)           | 7,500 - 25,000   |
|                        |  | Heating (Btu/h)           | 7,500 - 41,000   |
|                        | SEER2 / EER2                           |                           | 21 / 13.15   |
| Power                  | HSPF2 (Region IV)                      |                           | 9.7  |
|                        | Voltage                                | ø / V / Hz                | 1 / 208-230 / 60   |
|                        | Working Voltage Range (VAC)            |                           | 187 - 253  |
|                        | Operating Current (min. / std. / max.) | Cooling (A)               | 2.5 / 6.2 / 11.2   |
|                        |  | Heating (A)               | 2.6 / 7.0 / 18.0   |
|                        | Max. Breaker                           | Amps                      | 30   |
| Dimensions             | Min. Circuit Ampacity (A)              |                           | 21   |
|                        | W X H X D (in.)                        | Indoor Unit               | 41-9/16 x 11-3/4 x 8-7/16  |
|                        |  | Outdoor Unit              | 37 x 39-5/16 x 13  |
|                        | Weight (lbs.)                          | Indoor Unit               | 27.6   |
| Sound Pressure Level   | Outdoor Unit dB(A)                     | High                      | 51   |
|                        | Indoor Unit dB(A)                      | H / Silent                | 42 / 25  |
| Operating Temperatures | Outdoor                                | Cooling                   | 0 ~ 115°F (-18 ~ 46°C)   |
|                        |  | Heating                   | -22 ~ 75°F (-30 ~ 24°C)  |
|                        | Indoor                                 | Cooling                   | 61 ~ 90°F (16 ~ 32°C)  |
|                        |  | Heating                   | 50 ~ 86°F (27 ~ 30°C)  |
| Pipe Connections       | Indoor & Outdoor                       | High side (flare)         | 1/4"   |
|                        |  | Low side (flare)          | 1/2"   |
|                        | Maximum (ft.)                          |                           | 98   |
|                        | Maximum Vertical Separation (ft.)      |                           | 66   |
| Refrigerant            | Condensate Connection                  |                           | 11/16" OD  |
|                        | Type                                   |                           | R410A  |
|                        | Control Method                         |                           | Electronic Expansion Valve   |
|                        | Factory Charge                         | lbs.                      | 5.51   |
| Compressor             | Charge for                             |                           | 25 ft.   |
|                        | Additional Refrigerant Charge          |                           | 0.16 oz. / ft. over 25 ft.   |
|                        | Manufacturer                           |                           | Samsung  |
| Evaporator Fan         | Type                                   |                           | BLDC Rotary  |
|                        | RLA                                    | Amps                      | 15.2   |
|                        | Type                                   |                           | BLDC motor with cross-flow fan   |
|                        | Air Volume (L/M/H/Turbo)               | Cooling (CFM)             | 399 / 466 / 533 / 579  |
| Condenser Fan          |  | Heating (CFM)             | 424 / 491 / 554 / 600  |
|                        | Output                                 | Watts                     | 27   |
|                        | FLA                                    | Watts                     | 0.12   |
|                        | Motor                                  |                           | BLDC With Axial Type Fan (1)   |
| Safety                 | Output                                 | Watts                     | 125  |
|                        | FLA                                    | Amps                      | 0.48   |
|                        | Air Volume                             | CFM (max.)                | 2,825  |
|                        | Certifications                         |                           | UL 60335-2-40  |
| Safety                 | Devices                                |                           | PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing |



(actual equipment appearance may vary)

General Information

- The Samsung Max Heat system shall provide 100% heating capacity at -4°F outdoor temperature and high heating capacity at -22°F outdoor temperature.
- The outdoor unit shall include a base pan heater as standard to ensure optimal defrost cycle water drainage.
- 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 indoor unit shall have Wi-Fi capability as standard.
- Outdoor unit shall provide 208/230V power to indoor unit via 14 AWG X 3 interconnect power cable.
- Built-in motion sensor for airflow direction control and energy saving operation.

Construction

- Indoor unit chassis shall be UL94 V0 with a galvanized steel mounting bracket
- The indoor unit shall have easy-access to wire, pipe, and drain connections via access panel on the bottom of the unit for simple installation and service
- The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

Heat Exchanger

- The heat exchangers shall be mechanically bonded fin to copper tube

Refrigerant System

- The compressor shall be hermetically sealed, inverter controlled, BLDC Rotary
- Refrigerant flow shall be controlled by an electronic expansion valve at the outdoor unit

Indoor Fan

- The indoor fan shall be a single, antibacterial cross-flow type
- Three fan speed settings and auto setting
- Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

Controls

- The system shall have a built in Wi-Fi adapter as standard to allow control and monitoring using the Samsung SmartThings app (Android, iOS)
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller.
- The indoor unit shall have a simple connection for overflow detection devices or any other normally closed contact for simple unit shutdown
- The indoor unit shall ship with a wireless controller, holder, and batteries
- Wired controller options available
- Samsung central control compatible (MIM-R10UN accessory required)
- Interconnect control wire between outdoor and indoor unit shall be 16AWG X 2

Convenience

- Eco Mode to reduce energy consumption during low demand operation
- Smart install mode - startup system diagnostics operation to ensure system readiness during initial operation
- Auto restart
- Auto Clean Function
- Freeze Wash Function
- 7-segment digital display on front of unit to display temperature and unit status
- "Fast" mode to quickly reach set temperature
- Auto changeover
- Good sleep mode
- Quiet mode
- Dry mode
- Simple ON/OFF time function – Using the wireless controller specify the ON and/or OFF times
- Electro-static, washable, main filter as standard accessible from the top of unit
- Filter cleaning reminder

<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.

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 or visit [www.energystar.gov](http://www.energystar.gov).

\*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](http://www.AHRIdirectory.org) for current reference numbers.



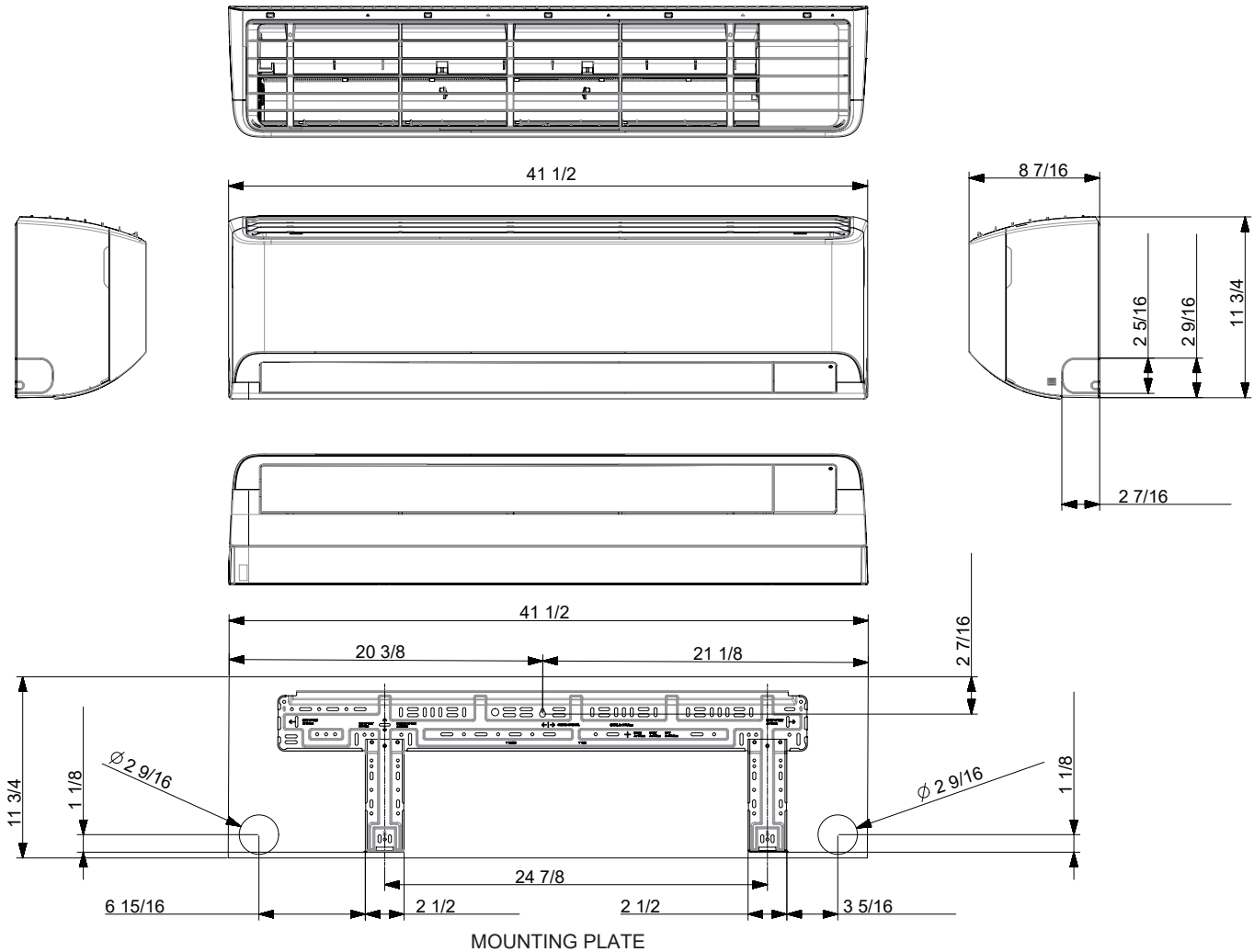
Optional Accessories

|  |                   |                     |
|--|-------------------|---------------------|
| Condensate pump  | Aspen Mini Orange | ASP-MO-UNIV 110-250 |
|  | Blue Diamond      | BD-BLUE-230         |
| Wired controller <sup>1</sup>                                  | Advanced          | MWR-WG00UN          |
|  | Simple Touch      | MWR-SH11UN          |
| Wired controller sub-PCB                                       |                   | MIM-A00UN           |
| 24 VAC thermostat adapter <sup>1</sup>                         |                   | MIM-A60UN           |
| External temperature sensor                                    |                   | MRW-TA              |
| Central control interface module                               |                   | MIM-R10UN           |
| External contact control interface module <sup>2</sup>         |                   | MIM-B14             |
| Line sets - insulated and flared, interconnect cables included | 25' - ILS2507     |                     |
|  | 50' - ILS5007     |                     |
| Wall bracket (for outdoor unit)                                |                   | CKN-250             |
| Wind Baffle / Guard  | Front             | WBF-2M-B            |
|  | Back              | WBB-3M              |

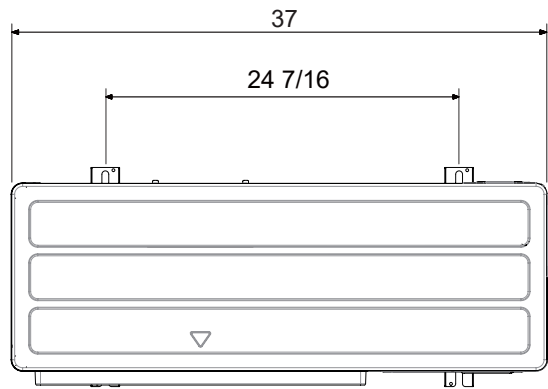
<sup>1</sup> Sub-PCB model MIM-A00UN is required when connecting optional wired controllers or MIM-A60UN 24VAC thermostat adapter.

<sup>2</sup> When applying MIM-B14 external contact control interface module, MIM-A00UN wired controller sub-PCB is required.

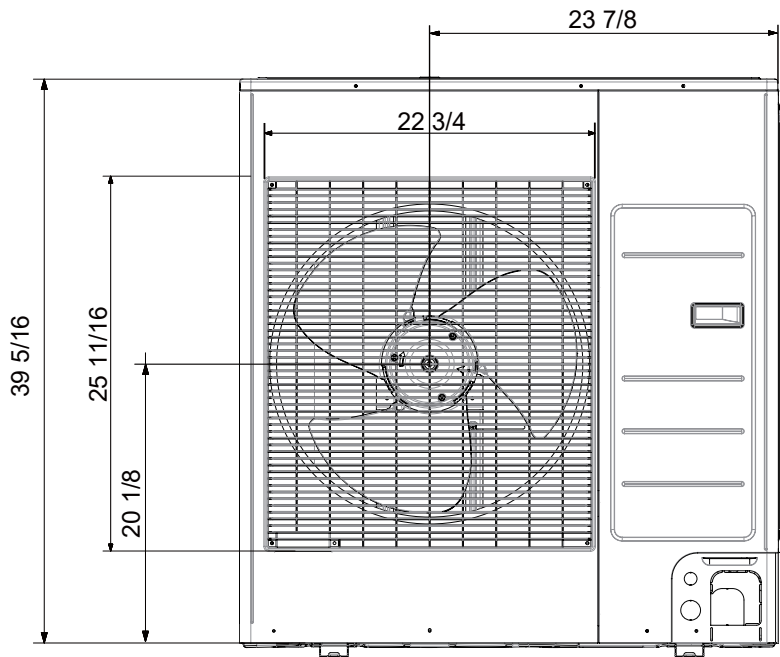
Unit: inches



Unit: inches

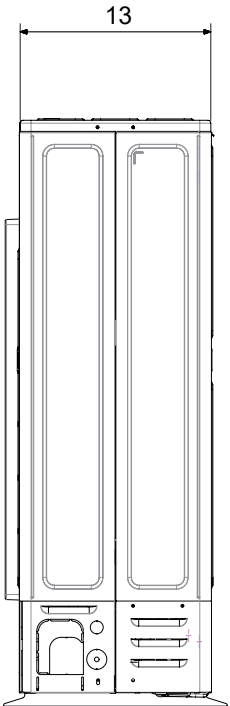


(pictured without valve/wire cover on right side)



FRONT

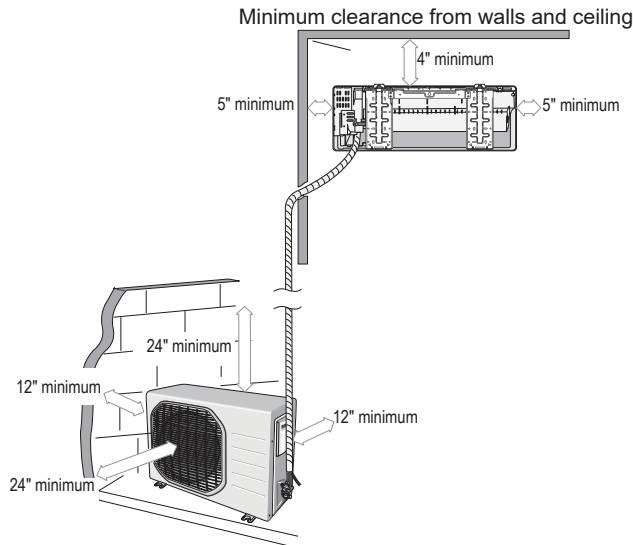
(pictured without valve/wire cover on right side)



RIGHT

(pictured without valve/wire cover)

For reference only. Always refer to installation manual for complete details.



Minimum clearance from nearby obstructions  
(See installation manual for full details. Be aware of national, state, and local codes)

