

# SAMSUNG

## Submittal Data

### AR09DXDABWKNCV (RNX09ABD) / AR09DXDABWKXCV (RXX09ABD)

### WindFree™\* Premium, Wall Mounted Evaporator, Heat Pump Split System

Job Name: \_\_\_\_\_

Location: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Engineer: \_\_\_\_\_

Submitted to: \_\_\_\_\_

Reference \_\_\_\_\_ Approval \_\_\_\_\_ Construction \_\_\_\_\_

Unit designation: \_\_\_\_\_

Schedule #: \_\_\_\_\_

#### General Information

- The indoor unit shall feature WindFree™\* mode. When activated in cooling mode 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 system shall have a built-in Wi-Fi adapter as standard to allow control and monitoring using the Samsung SmartThings app.
- The outdoor unit shall provide 208/230V power to the indoor unit via 14 AWG X 3 interconnect power cable.
- Interconnecting control wiring between the outdoor to indoor shall be 2-conductor/stranded copper/shielded cable between 18-16 AWG.
- 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 the 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 system shall utilize low-GWP R-32 refrigerant
- The compressor shall be hermetically sealed, inverter controlled, twin BLDC Rotary
- Refrigerant flow shall be controlled by an electronic expansion valve at the outdoor unit

#### Indoor Fan

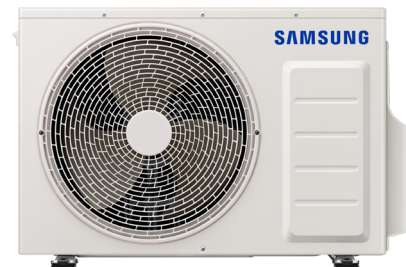
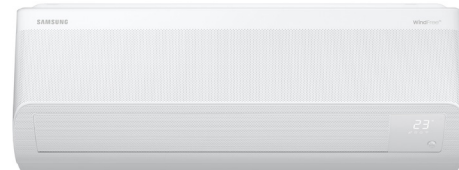
- The indoor fan shall be a single cross-flow type
- Three fan speed settings and auto settings
- Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

#### Controls

- The indoor unit shall ship with a rechargeable, solar-cell wireless controller. The wireless controller battery shall be charged with a USB C cable or the integral solar panel.
- The included wireless controller shall have a pixel display that is visible in low light conditions.
- Dual set temperature support when connected to supported wired controllers.
- The indoor unit shall include an integral humidity sensor for improved humidity control functions.
- The indoor unit shall have a simple connection for condensate overflow detection devices or any normally closed contact for simple unit shutdown.
- Samsung central control compatible (accessory required)

#### External Heat Control

- External heat control functionality allows for configuration of fan operation during auxiliary heat operation, defrost, and emergency heat (MIM-B14U accessory required).
- External heat control configuration settings include outside ambient external heat lockout, outside ambient compressor lockout, and time delay options (MIM-B14U accessory required).



Note: Unit appearance may vary slightly

- Emergency heat functionality allows the system to continue controlling the external heat source even when system errors prevent the heat pump from operating (MIM-B14U accessory required).

#### Convenience

- 7-segment digital display on the front of the unit to display temperature and unit status
- Washable main filter as standard accessible from the top of the unit
- System energy consumption can be viewed using the Samsung SmartThings mobile app or on the indoor unit display using the included wireless controller (conditions apply).
- AI (artificial intelligence) Auto Mode technology monitors factors such as indoor temperature, outdoor temperature, set temperature, and operating time to learn the patterns within your home to automatically adjust system operation to maximize occupant comfort and efficiency (Wi-Fi connection required).
- AI Energy mode technology enhances energy saving operation using advanced compressor control techniques
- 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 after power loss
- Other Features and functions: Auto changeover, Auto Clean Function, Freeze Wash Function, MAX mode to quickly reach set temperature, Good sleep mode, Quiet mode, Dry mode, Simple ON/OFF time function (activated with wireless controller), Filter cleaning reminder



Intertek



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.

# System Specifications

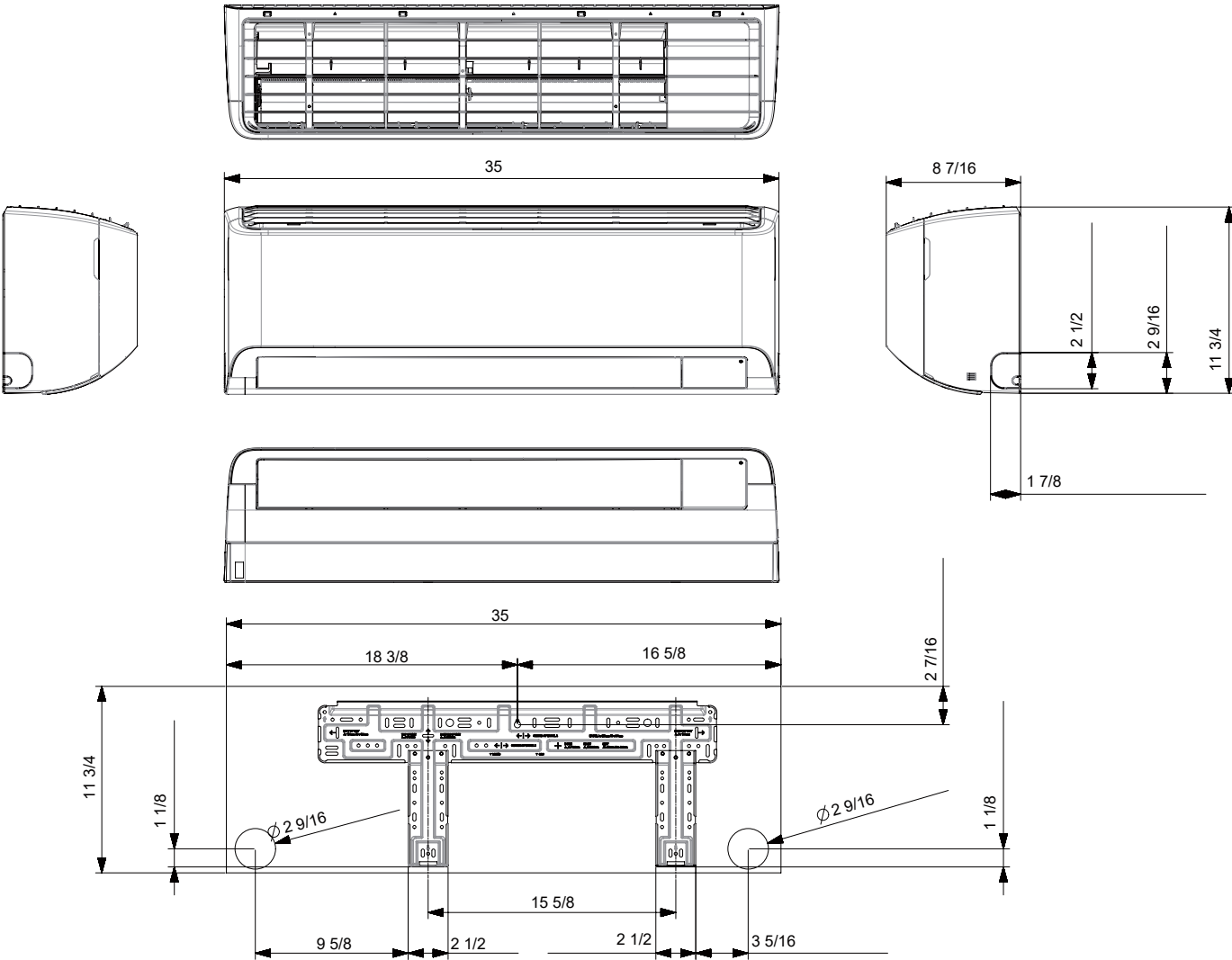
|                        |                                                                                                       |                                                                                                                                                                                      |                                   |
|------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Model                  | Indoor Unit Model Number (US Code)                                                                    |                                                                                                                                                                                      | AR09DXDABWKNCV (RNX09ABD)         |
|                        | Outdoor Unit Model Number (US Code)                                                                   |                                                                                                                                                                                      | AR09DXDABWKXCV (RXX09ABD)         |
| Performance            | Nominal Capacity                                                                                      | Cooling / Heating (Btu/h)                                                                                                                                                            | 9,000 / 11,000                    |
|                        | Capacity Range                                                                                        | Cooling (Btu/h)                                                                                                                                                                      | 3,000 - 13,000                    |
|                        |                                                                                                       | Heating (Btu/h)                                                                                                                                                                      | 2,400 - 23,000                    |
|                        | AHRI 210-240 2023                                                                                     | SEER2                                                                                                                                                                                | 25.00                             |
|                        |                                                                                                       | EER2                                                                                                                                                                                 | 16.35                             |
|                        |                                                                                                       | HSPF2 (region IV)                                                                                                                                                                    | 10.50                             |
|                        |                                                                                                       | 5°F COP                                                                                                                                                                              | 2.19                              |
| Power                  | Voltage                                                                                               | ø / V / Hz                                                                                                                                                                           | 1 / 208-230 / 60                  |
|                        | Working Voltage Range (VAC)                                                                           |                                                                                                                                                                                      | 187 - 253                         |
|                        | Operating Current<br>(min. / standard / max.)                                                         | Cooling (A)                                                                                                                                                                          | 1.1 / 2.8 / 4.5                   |
|                        |                                                                                                       | Heating (A)                                                                                                                                                                          | 1 / 3.4 / 9                       |
|                        | Max. Breaker                                                                                          | Amps                                                                                                                                                                                 | 20.0                              |
|                        | Min. Circuit Ampacity                                                                                 | Amps                                                                                                                                                                                 | 12.0                              |
| Dimensions             | W X H X D (in.)                                                                                       | Indoor Unit                                                                                                                                                                          | 35 X 11 3/4 X 8 7/16              |
|                        |                                                                                                       | Outdoor Unit                                                                                                                                                                         | 31 1/8 X 21 9/16 X 11 1/4         |
|                        | Weight (lbs.)                                                                                         | Indoor Unit                                                                                                                                                                          | 23.10                             |
|                        |                                                                                                       | Outdoor Unit                                                                                                                                                                         | 69.20                             |
| Sound Pressure Level   | Indoor Unit dB(A)                                                                                     | Silent / High                                                                                                                                                                        | 22 / 38                           |
|                        | Outdoor Unit dB(A)                                                                                    | Cooling (high)                                                                                                                                                                       | 45                                |
| Operating Temperatures | Outdoor                                                                                               | Cooling                                                                                                                                                                              | 14 - 115°F (-10 - 46°C)           |
|                        |                                                                                                       | Heating                                                                                                                                                                              | -5 - 75°F (-20.6 - 24°C)          |
|                        | Indoor                                                                                                | Cooling                                                                                                                                                                              | 64 ~ 90°F (16 ~ 32°C)             |
|                        |                                                                                                       | Heating                                                                                                                                                                              | T ≤ 86°F (30°C)                   |
| Pipe Connections       | Indoor & Outdoor                                                                                      | High side (In.)                                                                                                                                                                      | 1/4                               |
|                        |                                                                                                       | Low side (In.)                                                                                                                                                                       | 3/8                               |
|                        | Maximum (ft.)                                                                                         |                                                                                                                                                                                      | 66                                |
|                        | Maximum Vertical Separation (ft.)                                                                     |                                                                                                                                                                                      | 49                                |
|                        | Condensate Connection                                                                                 |                                                                                                                                                                                      | 11/16" OD                         |
| Refrigerant            | Type                                                                                                  |                                                                                                                                                                                      | R-32                              |
|                        | A2L Leak Detection                                                                                    |                                                                                                                                                                                      | Not Included                      |
|                        | Factory Charge                                                                                        | oz.                                                                                                                                                                                  | 34.0                              |
|                        | Charged for                                                                                           |                                                                                                                                                                                      | 24.6 ft.                          |
| Compressor             | Type                                                                                                  |                                                                                                                                                                                      | Inverter Driven, Twin BLDC Rotary |
|                        | RLA                                                                                                   | Amps                                                                                                                                                                                 | 9.2                               |
| Evaporator Fan         | Type                                                                                                  |                                                                                                                                                                                      | BLDC motor with cross-flow fan    |
|                        | FLA                                                                                                   | Amps                                                                                                                                                                                 | 0.12                              |
|                        | Output                                                                                                | Watts                                                                                                                                                                                | 27.0                              |
| Airflow                | Air Volume (L/M/H/Turbo)                                                                              | Cooling (CFM)                                                                                                                                                                        | 251 / 304 / 357 / 392             |
|                        |                                                                                                       | Heating (CFM)                                                                                                                                                                        | 286 / 339 / 392 / 427             |
| Condenser Fan          | Type                                                                                                  |                                                                                                                                                                                      | BLDC With Axial Type Fan (1)      |
|                        | FLA / Watts / CFM (max.)                                                                              |                                                                                                                                                                                      | 0.42 / 40 / 1,589                 |
| Corrosion Prevention   | ISO-9227 - The condenser heat exchanger showed no unusual rust or corrosion development to 240 hours. |                                                                                                                                                                                      |                                   |
| 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 |                                   |
|                        | Battery Chemistry                                                                                     | (Remote Control only) Lithium Ion                                                                                                                                                    |                                   |

## Accessories

|                                                                                 |                                          |                     |
|---------------------------------------------------------------------------------|------------------------------------------|---------------------|
| Condensate pump                                                                 | Aspen Mini Orange                        | ASP-MO-UNIV 110-250 |
|                                                                                 | Blue Diamond MaxiBlue                    | BD-BLUE-230         |
|                                                                                 | Blue Diamond MicroBlue w/slim fascia kit | X86-011             |
| Wired controller (sub-PCB model MIM-A00UN is required)                          | Advanced                                 | MWR-WG01UN          |
|                                                                                 | Touchscreen                              | MWR-SH12UN          |
| Wired controller sub-PCB                                                        |                                          | MIM-A00UN           |
| 24 VAC Thermostat adapter (sub-PCB model MIM-A00UN is required)                 |                                          | MIM-A60UN           |
| External temperature sensor                                                     |                                          | MRW-TAU             |
| External contact control interface module (sub-PCB model MIM-A00UN is required) |                                          | MIM-B14U            |
| Central control interface module                                                |                                          | MIM-R10UN           |
| Wall bracket (for outdoor unit)                                                 |                                          | CKN-250             |
| Wind baffles                                                                    | Front                                    | WBF-3M-B            |
|                                                                                 | Back                                     | WBB-5M              |
| Hail guard kit (includes back and side guards)                                  |                                          | HGK-1               |
| Line set - insulated and flared, interconnect cables included                   | 25'                                      | ILS2506             |
|                                                                                 | 50'                                      | ILS5006             |

Dimensional Drawing  
AR09DXDABWKNCV (RNX09ABD)

Unit: Inches



Dimensional Drawing  
AR09DXDABWKXCV (RXX09ABD)

Unit: Inches

