

# SAMSUNG

## Submittal Data

AC018DN6DCG/AA (CNG186DD) / AC018DXSCCG/AA (CXG18SCD)

360 Cassette, Single Zone, Heat Pump, Split System (Premium)

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

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

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

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

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

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

Reference ☐ Approval ☐ Construction ☐

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

### General Information

- The system shall provide high heating capacity at -4°F (-20°C) with heating operation down to -13°F (-25°C).
- The outdoor unit shall have a base pan heater as standard for optimal defrost cycle water drainage.
- The system shall feature comfort humidity control. Utilizing an integral humidity sensor, the system optimizes the indoor unit coil temperature according to the dew point, maximizing energy savings while still providing space dehumidification and occupant comfort.
- The indoor unit shall have an integral condensate pump with maximum 29" lift from bottom of the unit with check valve and float switch to disable unit in the event of condensate overflow.
- The indoor unit fascia panel shall have a built-in Wi-Fi adapter as standard to allow control and monitoring using the Samsung SmartThings app.
- Auto-restart after power loss
- Soft-start compressor minimizing inrush current
- The outdoor unit shall provide 208/230V power to the indoor unit via 14 AWG X 3 interconnect power cable.

### Construction

- Outdoor unit: Galvanized steel with a baked-on powder-coated finish for durability.
- Indoor unit: Insulated, HIPS chassis and fascia panel certified to UL94 V0.
- Indoor unit: Knock-out for outside air capability (booster fan connection).
- All heat exchangers shall be mechanically boded aluminum fin to copper tube.

### Refrigerant System

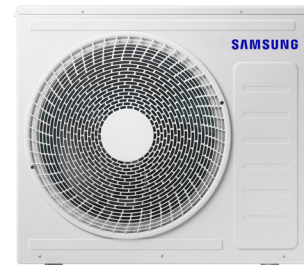
- The system shall utilize low-GWP R-32 refrigerant
- Refrigerant flow shall be controlled by an electronic expansion valve at the outdoor unit.

### Indoor Fan

- Three fan speed settings and auto settings
- Washable filter as standard
- The indoor unit shall have LED indicator lights and an infrared receiver
- The indoor unit shall not have air louvers or blades allowing full airflow without restriction
- Air direction control shall be achieved by creating a low-pressure area near air outlet causing discharge air to change direction angle
- Fixed or auto-swing air direction shall be possible with local and central controller options (10° ~ 60° angle).
- Independent air distribution control shall be possible with wireless or premium wired controller (three directions, 10° ~ 60° angle)

### Controls

- Control wiring shall be 2 X 16 AWG.
- The unit shall be operated via a wireless or wired remote control with DDC-type signal (purchased separately)
- Dual set temperature support when connected to supported controllers.
- No additional interface modules/adapters are required when connecting to Samsung central control options.
- Wired or wireless controllers must be purchased separately.



Note: Unit appearance may vary slightly

### 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).
- 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).
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- Emergency heat functionality allows the system to continue controlling the external heat source even when system errors prevent the heat pump from operating

### Convenience

- The outdoor unit shall have a 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 a configurable temperature level, the system outputs a signal to an external source (e.g., backup system, building management system, alert device like status light, warning lamp, or buzzer).
- The system can be configured 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 controls.



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

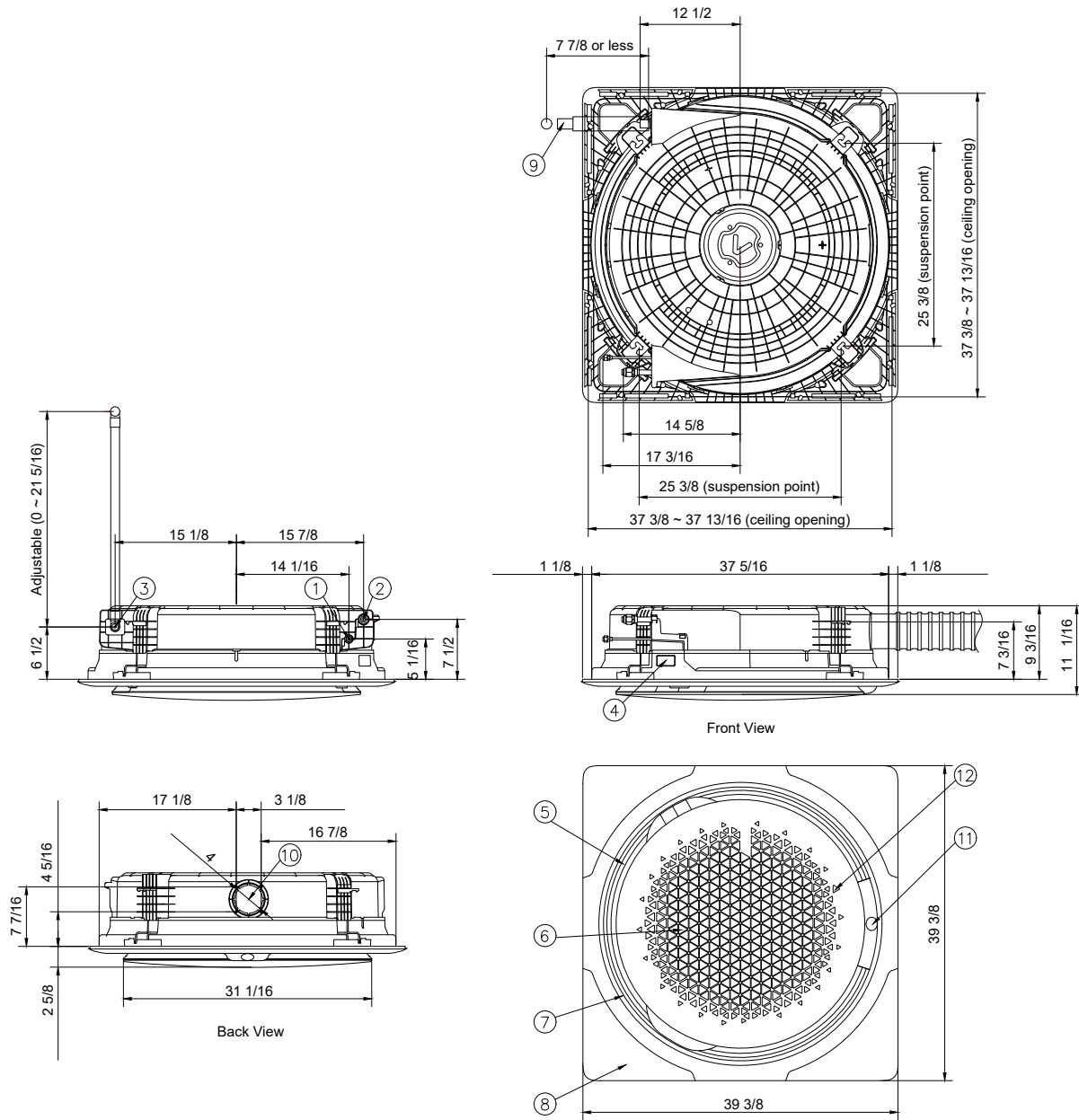
|                        |                                                                                                         |                           |                                   |
|------------------------|---------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------------|
| Model                  | Indoor Unit Model Number (US Code)                                                                      |                           | AC018DN6DCG/AA (CNG186DD)         |
|                        | Outdoor Unit Model Number (US Code)                                                                     |                           | AC018DXSCCG/AA (CXG18SCD)         |
| Performance            | Nominal Capacity                                                                                        | Cooling / Heating (Btu/h) | 18,000 / 20,000                   |
|                        | Capacity Range                                                                                          | Cooling (Btu/h)           | 6,000 - 25,000                    |
|                        |                                                                                                         | Heating (Btu/h)           | 4,900 - 28,000                    |
|                        | AHRI 210-240 2023                                                                                       | SEER2                     | 22.50                             |
|                        |                                                                                                         | EER2                      | 13.50                             |
|                        |                                                                                                         | HSPF2 (region IV)         | 9.50                              |
|                        |                                                                                                         | 5°F COP                   | 1.80                              |
| Power                  | Voltage                                                                                                 | ø / V / Hz                | 1 / 208-230 / 60                  |
|                        | Working Voltage Range (VAC)                                                                             |                           | 187 - 253                         |
|                        | Operating Current<br>(min. / standard / max.)                                                           | Cooling (A)               | 2.3 / 6.1 / 10.7                  |
|                        |                                                                                                         | Heating (A)               | 1.9 / 7.5 / 18.8                  |
|                        | Max. Breaker                                                                                            | Amps                      | 25.0                              |
|                        | Min. Circuit Ampacity                                                                                   | Amps                      | 22.7                              |
| Dimensions             | W X H X D (in.)                                                                                         | Indoor Unit               | 37 5/16 X 11 1/8 X 37 5/16        |
|                        |                                                                                                         | Outdoor Unit              | 34 5/8 X 31 3/8 X 12 3/16         |
|                        | Weight (lbs.)                                                                                           | Indoor Unit               | 44.10                             |
|                        |                                                                                                         | Outdoor Unit              | 116.84                            |
| Sound Pressure Level   | Indoor Unit dB(A)                                                                                       | L / M / H                 | 30 / 33 / 36                      |
|                        | Outdoor Unit dB(A)                                                                                      | Cooling / Heating (high)  | 58 / 58                           |
| Operating Temperatures | Outdoor                                                                                                 | Cooling                   | 23 - 122°F (-5 - 50°C)            |
|                        |                                                                                                         | Heating                   | -4 - 122°F (-20 - 50°C) W/Baffle  |
|                        | Indoor                                                                                                  | Heating                   | -13 - 75°F (-25 - 24°C)           |
|                        |                                                                                                         | 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.)            | 1/2                               |
|                        | Maximum (ft.)                                                                                           |                           | 164                               |
|                        | Maximum Vertical Separation (ft.)                                                                       |                           | 98                                |
|                        | Condensate Connection                                                                                   |                           | 1 1/4 in. OD, 1 in. ID            |
| Refrigerant            | Type                                                                                                    |                           | R-32                              |
|                        | A2L Leak Detection                                                                                      |                           | Not Included                      |
|                        | Factory Charge/Max Charge                                                                               | oz.                       | 60 / 82.4                         |
|                        | Charged for                                                                                             |                           | 24.6 ft.                          |
|                        | Trim Charge                                                                                             | oz./ft                    | 0.161                             |
| Compressor             | Type                                                                                                    |                           | Inverter Driven, Twin BLDC Rotary |
|                        | RLA                                                                                                     | Amps                      | 14.1                              |
| Evaporator Fan         | Type                                                                                                    |                           | BLDC (1) With Turbo Type Fan (1)  |
|                        | Output                                                                                                  | Watts                     | 65                                |
| Airflow                | Air Volume (L/M/H)                                                                                      | Cooling (CFM)             | 480 / 547 / 646                   |
|                        |                                                                                                         | Heating (CFM)             | 480 / 547 / 646                   |
| Condenser Fan          | Type                                                                                                    |                           | BLDC With Axial Type Fan (1)      |
|                        | MOC / Watts / CFM (max.)                                                                                |                           | 1.2A X 1 / 125W X 1 / 2,154       |
| Fascia Panel           | Open Type (Round)                                                                                       | L X W X H (in.)           | 41 3/8 X 3 3/8                    |
|                        |                                                                                                         | Weight (lbs.)             | 8.85                              |
|                        | Ceiling Type (Square)                                                                                   | L X W X H (in.)           | 39 3/8 X 39 3/8 X 2 5/8           |
|                        |                                                                                                         | Weight (lbs.)             | 6.62                              |
| Corrosion Prevention   | ISO-9227 - The condenser heat exchanger showed no unusual rust or corrosion development to 2,280 hours. |                           |                                   |
| Safety                 | Certifications                                                                                          | UL 60335-2-40             |                                   |

## Accessories

|                                                                   |                              |                          |            |
|-------------------------------------------------------------------|------------------------------|--------------------------|------------|
| Fascia Panel                                                      | Open Type (round, black)     | <input type="checkbox"/> | PC6EBSMUNW |
|                                                                   | Open Type (round, white)     | <input type="checkbox"/> | PC6EUSMUNW |
|                                                                   | Ceiling Type (square, black) | <input type="checkbox"/> | PC6NBSMUNW |
|                                                                   | Ceiling Type (square, white) | <input type="checkbox"/> | PC6NUSMUNW |
| Wired controller                                                  | Advanced                     | <input type="checkbox"/> | MWR-WG01UN |
|                                                                   | Touchscreen                  | <input type="checkbox"/> | MWR-SH12UN |
| Thermostat adapter (for connection to standard 24VAC thermostats) |                              | <input type="checkbox"/> | MIM-A60UN  |
| Wireless controller                                               |                              | <input type="checkbox"/> | AR-CH01U   |
| Motion detect sensor (white, compatible with square panel only)   |                              | <input type="checkbox"/> | MCR-SMEU   |
| External temperature sensor                                       |                              | <input type="checkbox"/> | MRW-TAU    |
| External contact control interface module                         |                              | <input type="checkbox"/> | MIM-B14U   |
| Wall bracket (for outdoor unit)                                   |                              | <input type="checkbox"/> | CKN-250    |
| Wind baffles                                                      | Front                        | <input type="checkbox"/> | WBF-7M     |
|                                                                   | Back                         | <input type="checkbox"/> | WBB-7M-B   |
| Hail guard kit (includes back and side guards)                    |                              | <input type="checkbox"/> | HGK-2      |
| Line set - insulated and flared, interconnect cables included     | 25'                          | <input type="checkbox"/> | ILS2507    |
|                                                                   | 50'                          | <input type="checkbox"/> | ILS5007    |

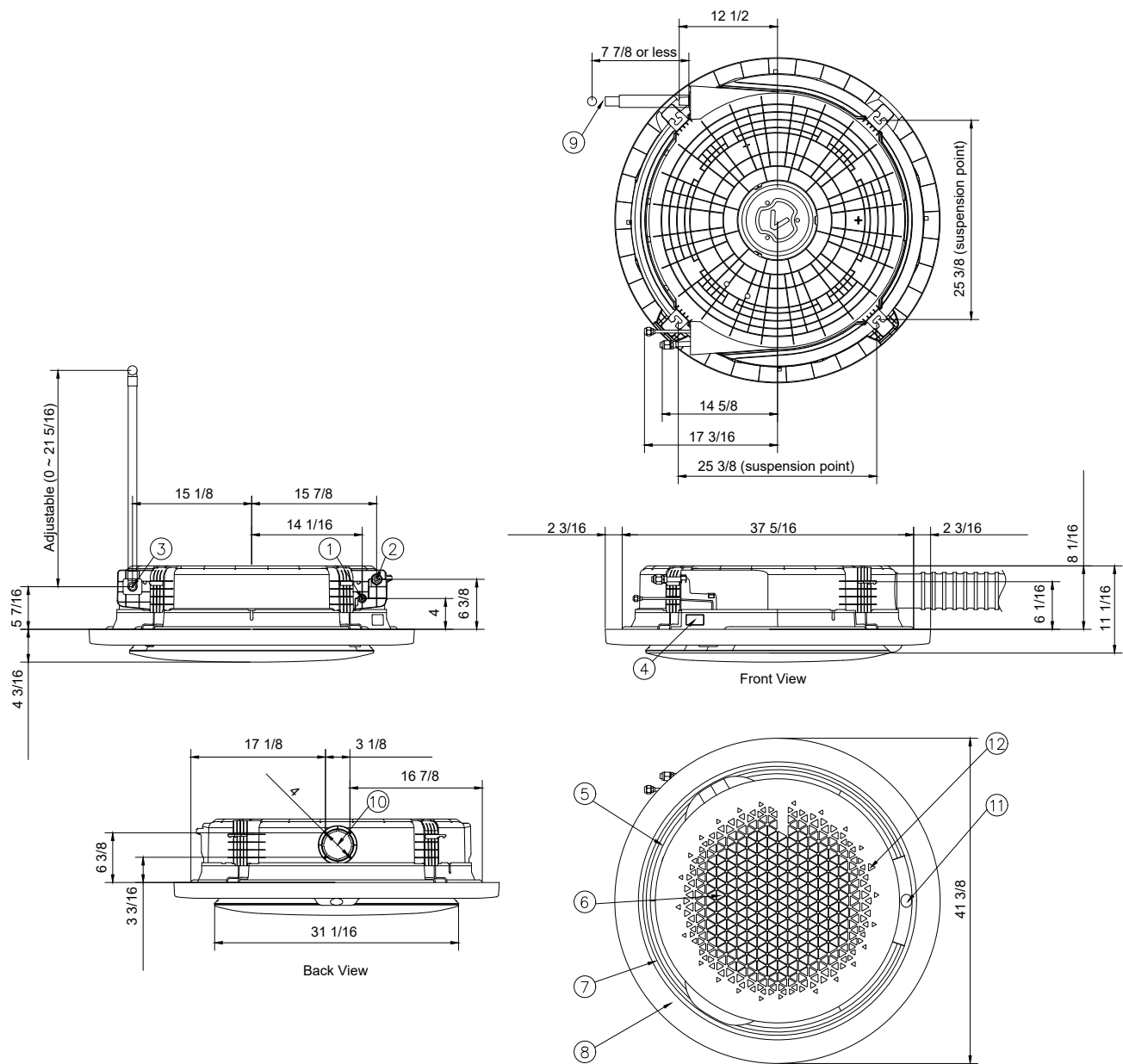
# Dimensional Drawing - With Ceiling Type Fascia Panel AC018DN6DCG/AA (CNG186DD)

Unit: Inches



Dimensional Drawing - With Open Type Fascia Panel  
AC018DN6DCG/AA (CNG186DD)

Unit: Inches



Dimensional Drawing  
AC018DXSCCG/AA (CXG18SCD)

Unit: Inches

