

# SAMSUNG

## Submittal Data

### AC018DNLDCG/AA (CNG18LDD)

#### Slim Duct, Ducted Unit for FJM Multi-Zone Systems

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 indoor unit shall have an integral condensate pump with maximum 29" lift from bottom of the unit with check valve and float switch that disables indoor in the event of condensate overflow.
- 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 system 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 current inrush
- 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.

#### Construction

- Outdoor unit shall be galvanized steel with a baked-on powder coated finish for durability.
- Indoor unit: Insulated, galvanized steel.
- All heat exchangers shall be mechanically bonded aluminum fin to copper tube.

#### Refrigerant System

- The system shall utilize low-GWP R-32 refrigerant
- Refrigerant flow shall be controlled by electronic an expansion valve at the outdoor unit.
- The system shall include an R32 alarm output plug on the indoor unit and outdoor unit for notification of R32 leak detection when the optional refrigerant leak detector is installed and configured (leak detector and MIM-B14U accessories are required).

#### Indoor Fan

- Three fan speeds and auto setting

#### Controls

- 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 supported controllers.
- Wired or wireless controllers must be purchased separately.

#### 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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#### Convenience

- 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 evening hours (automatic or manual activation).
- Emergency Temperature Output (ETO) function: when indoor unit is in error status or when room temperature exceeds configurable temperature level, the system outputs a signal to an external source, e.g., backup system, building management system, alert device (ex: status light, warning lamp, 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 control.



Intertek

Samsung HVAC maintains a policy of ongoing development. Specifications are subject to change without notice.

# Specifications

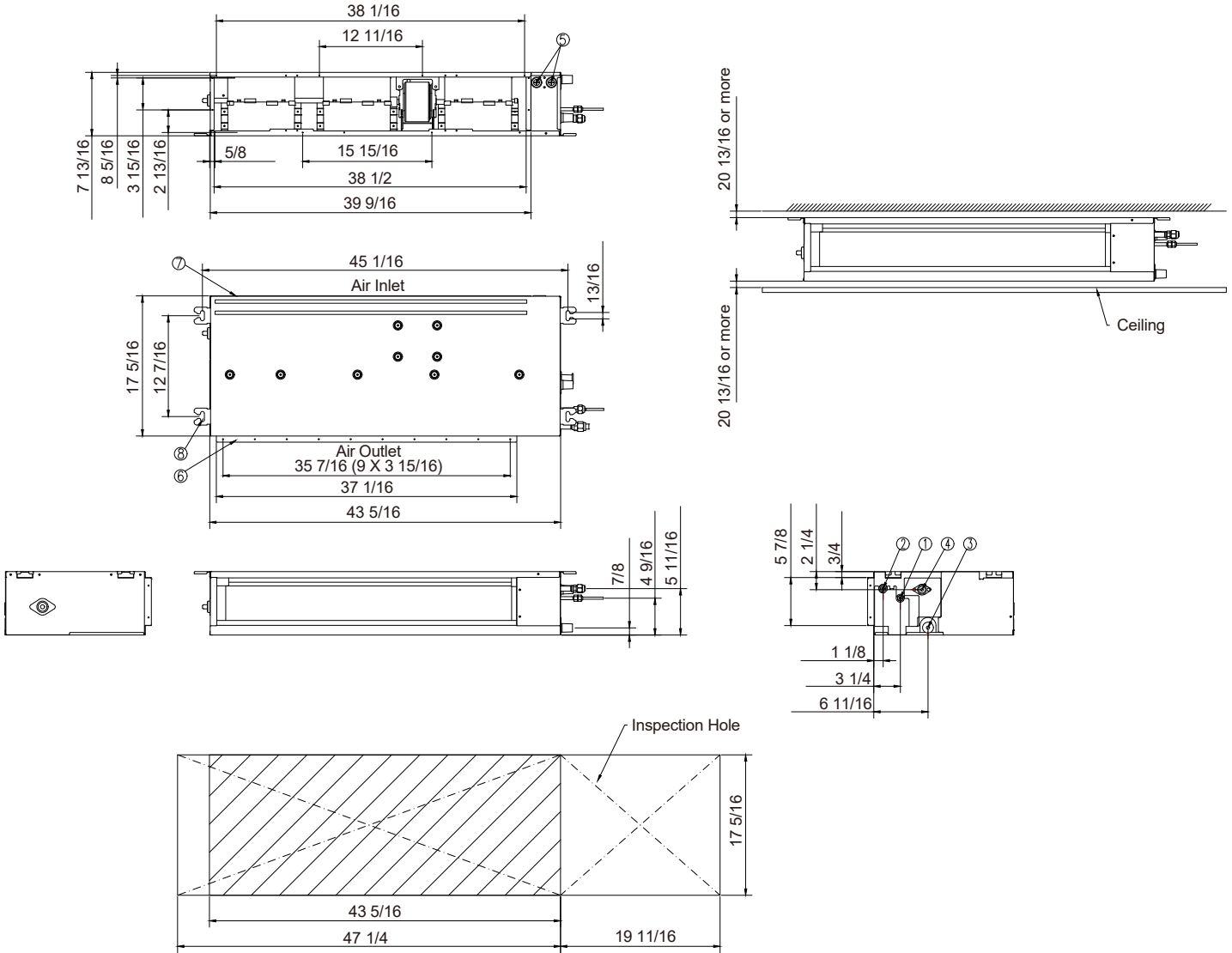
Model	US Code		CNG18LDD
	Model Number		AC018DNLDCG/AA
Performance	Nominal Capacity	Cooling (Btu/h)	17,500
		Heating (Btu/h)	20,000
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
		Operating Current (max.)	Cooling (A)
	Heating (A)		1.06
	Evaporator Fan	Type	
Consumption		Watts	84
External Static Pressure		Standard ("WC)	0.10
	Min. / Max. ("WC)	0.01 / 0.24	
Airflow	Air Volume (L/M/H/Turbo)	Cooling (CFM)	353 / 459 / 601
		Heating (CFM)	353 / 459 / 601
Refrigerant	Type		R-32
	A2L Leak Detection		Optional Accessory
Pipe Connections	Indoor & Outdoor	High side	1/4
		Low side	1/2
	Condensate Connection		1 1/4 in. OD, 1 in. ID
Dimensions	W X H X D	In.	43 5/16 X 7 13/16 X 17 5/16
	Weight	lbs.	49.60
	Duct Connections (W X H)	Supply (in.)	37 1/16 X 5 7/8
		Return (ID, in.)	38 1/2 X 6 5/8 (inside)
Operating Temperatures	Indoor	Cooling	64 ~ 90°F (16 ~ 32°C)
		Heating	T ≤ 86°F (30°C)
Sound Pressure Level	Low / Med. / High	dB(A)	28 / 32 / 35
Safety	Certifications		UL 60335-2-40

# Accessories

Wired controller	Advanced	MWR-WG01UN
	Touchscreen	MWR-SH12UN
Thermostat adapter (for connection to standard 24VAC thermostats)		MIM-A60UN
Wireless signal control	Wireless signal receiver	MRK-A10UN
	Wireless controller	AR-CH01U
External temperature sensor		MRW-TAU
External contact control interface module		MIM-B14U
Filter box		FB-SLIM3
Line set - insulated and flared, interconnect cables included	25'	ILS2507
	50'	ILS5007

# Dimensional Drawing AC018DNLDCG/AA (CNG18LDD)

Unit: Inches



No.	Description
1	Liquid pipe connection
2	Gas pipe connection
3	Gravity drain connection
4	Drain connection
5	Opening for power and communication wire conduit
6	Supply air outlet flange
7	Return air (air inlet)
8	Suspension bolt anchor point