

# SAMSUNG

## Submittal Data

### AC018DNHDCG/AA (CNG18HDD) / AC018DXSCCF/AA (CXF18SCD)

Duct S, Single Zone, Low Ambient, Cooling Only, Split System

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

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

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

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

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

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

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

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

#### General Information

- Low ambient cooling down to -40°F
- 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: 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.
- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire.

#### Refrigerant System

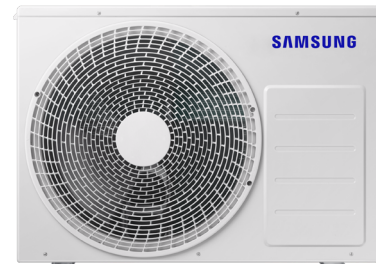
- The system shall utilize low-GWP R-32 refrigerant
- Refrigerant flow shall be controlled by electronic expansion valve at the outdoor unit.
- The system shall include an R32 alarm output plug on the indoor unit and outdoor unit for notification of R32 leak detection when the optional refrigerant leak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

#### Indoor Fan

- Smart pressure control feature that adjusts fan speed based on ESP delivering consistent heating and cooling power
- The indoor unit shall have a smart-tuning function that can provide optimized comfort by allowing the occupant to offset the fan CFM curve to increase or decrease airflow.
- The indoor unit shall have automatic air volume scanning for simple setup and optimized comfort settings for the occupant

#### 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.



Note: Unit appearance may vary slightly

- Wired or wireless controllers must be purchased separately.

#### 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).
- 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. Refer to [www.AHRIdirectory.org](http://www.AHRIdirectory.org) for current reference numbers.

# System Specifications

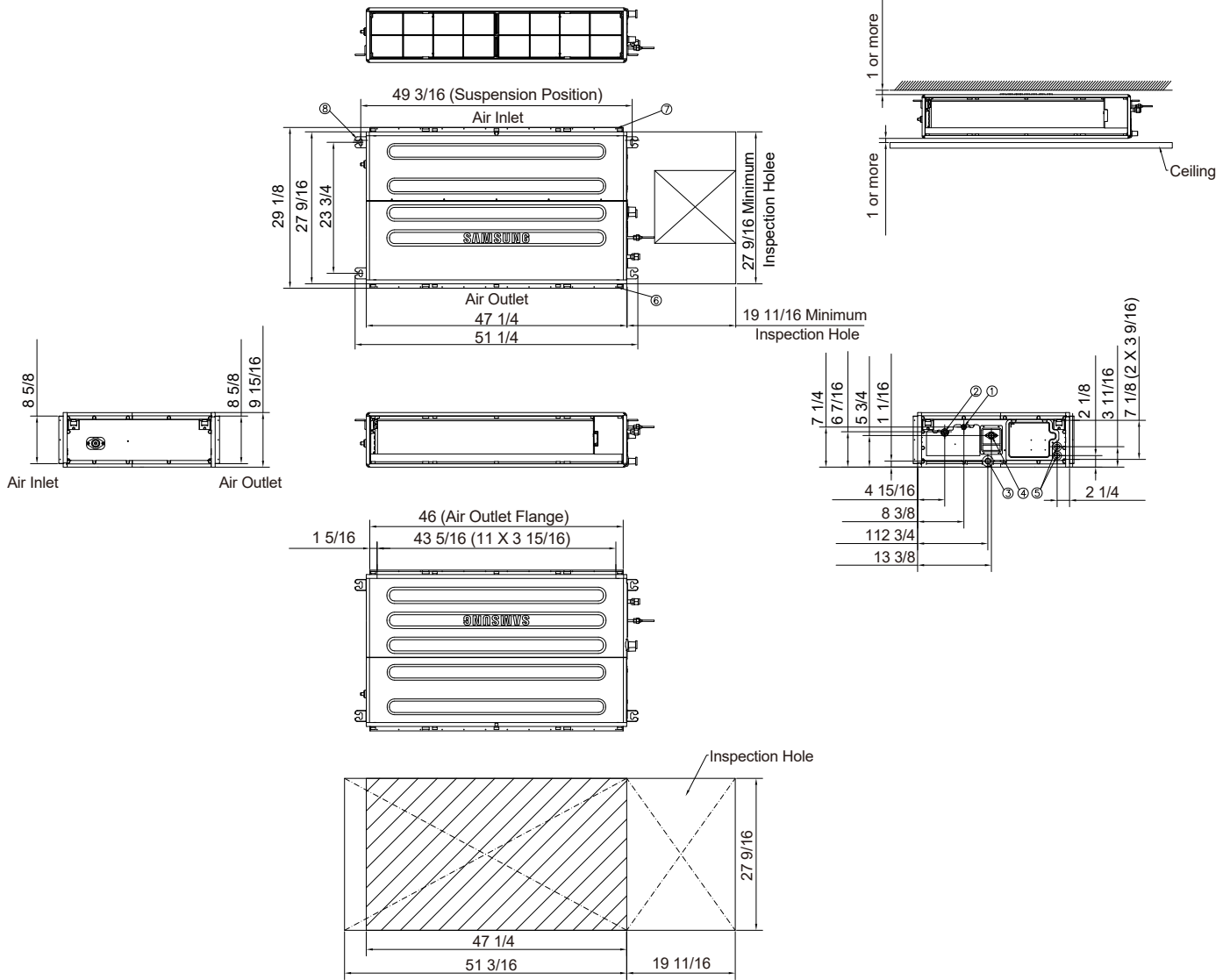
Model	Indoor Unit Model Number (US Code)		AC018DNHDCG/AA (CNG18HDD)
	Outdoor Unit Model Number (US Code)		AC018DXSCCF/AA (CXF18SCD)
Performance	Nominal Capacity	Cooling (Btu/h)	18,000
	Capacity Range	Cooling (Btu/h)	4,000 - 22,000
	AHRI 210-240 2023	SEER2	18.60
		EER2	12.00
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		187 - 253
	Operating Current (A)	Min. / Standard / Max.	2.1 / 6.7 / 9.7
	Max. Breaker	Amps	15.0
	Min. Circuit Ampacity	Amps	13.7
Dimensions	W X H X D (in.)	Indoor Unit	47 3/16 X 9 13/16 X 27 5/8
		Outdoor Unit	34 5/8 X 25 1/8 X 12 3/16
	Weight (lbs.)	Indoor Unit	73.90
		Outdoor Unit	88.20
	Duct Connections (W X H)	Supply (in.)	45 15/16 X 8 11/16
		Return (ID, in.)	46 15/16 X 8 11/16
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	32 / 36 / 40
	Outdoor Unit dB(A)	High	58
Operating Temperatures	Outdoor		23 - 122°F (-5 - 50°C)
			-40 - 122°F (-40 - 50°C) W/Baffle
	Indoor		64 ~ 90°F (16 ~ 32°C)
Pipe Connections	Indoor & Outdoor	High side (In.)	1/4
		Low side (In.)	1/2
	Maximum (ft.)		98
	Maximum Vertical Separation (ft.)		66
	Condensate Connection		1 1/4 in. OD, 1 in. ID
Refrigerant	Type		R-32
	A2L Leak Detection		Optional Accessory
	Factory Charge	oz.	45.9
	Charged for		24.6 ft.
Compressor	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	8.2
Evaporator Fan	Type		BLDC (1) With Sirocco Fan (3)
	Output	Watts	153
	External Static Pressure	Standard ("WC)	0.58
		Min. / Max. ("WC)	0.1 / 0.79
Airflow	Air Volume	CFM (L/M/H)	593 / 735 / 841
Condenser Fan	Type		BLDC With Axial Type Fan (1)
	MOC / Watts / CFM (max.)		1.2A X 1 / 125W X 1 / 1,766
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	
	Devices	PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing	

## Accessories

R32 Refrigerant leak detector (RDS)		MRS-H32U
Wired controller	Advanced	MWR-WG01UN
	Touchscreen	MWR-SH12UN
Thermostat adapter (for connection to standard 24VAC thermostats)		MIM-A60UN
Wireless 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-DS2
Wall bracket (for outdoor unit)		CKN-250
Wind baffles	Front	WBF-5M
	Back	WBB-6M-B
Hail guard kit (includes back and side guards)		HGK-6
Line set - insulated and flared, interconnect cables included	25'	ILS2507
	50'	ILS5007

# Dimensional Drawing AC018DNHDCG/AA (CNG18HDD)

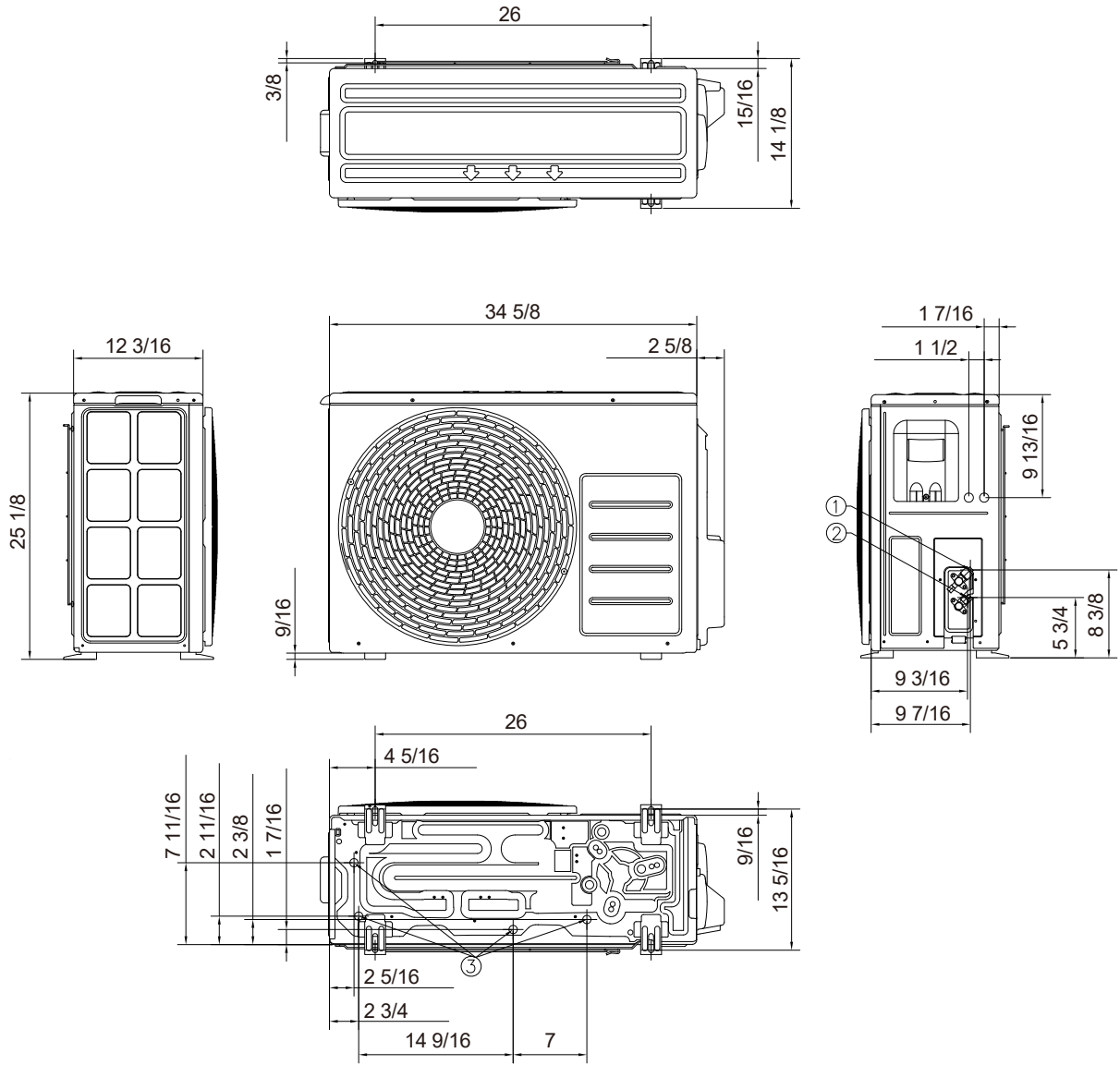
Unit: Inches



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

# Dimensional Drawing AC018DXSCCF/AA (CXF18SCD)

Unit: Inches



No.	Description
1	Gas pipe connection
2	Liquid pipe connection
3	Drain pipe connection