

SAMSUNG

Submittal Data

AC018DNADCG/AA (CNG18ADD) / AC018DXSCCG/AA (CXG18SCD)

WindFree™* High-Wall, Single Zone, Heat Pump, Split System (Premium)

Job Name: _____

Purchaser: _____

Submitted to: _____

Unit designation: _____

Location: _____

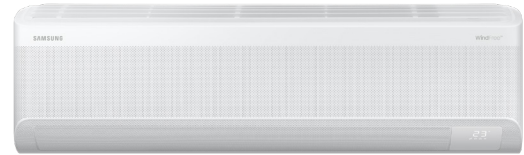
Engineer: _____

Reference _____ Approval _____ Construction _____

Schedule #: _____

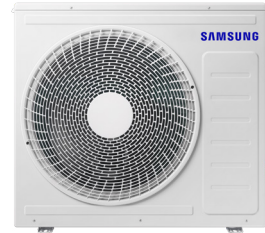
General Information

- 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 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.



Construction

- Outdoor unit: Galvanized steel with a baked-on powder-coated finish for durability.
- The indoor unit chassis shall be UL94 V0 with a galvanized steel mounting bracket
- All heat exchangers shall be mechanically boded aluminum fin to copper tube.
- 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



Note: Unit appearance may vary slightly

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
- Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

Controls

- 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.

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).
- External heat control functionality allows for configuration of fan operation during auxiliary heat operation, defrost, and emergency heat
- Emergency heat functionality allows the system to continue controlling the external heat source even when system errors prevent the heat pump from operating

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
- 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.

*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 for current reference numbers.

System Specifications

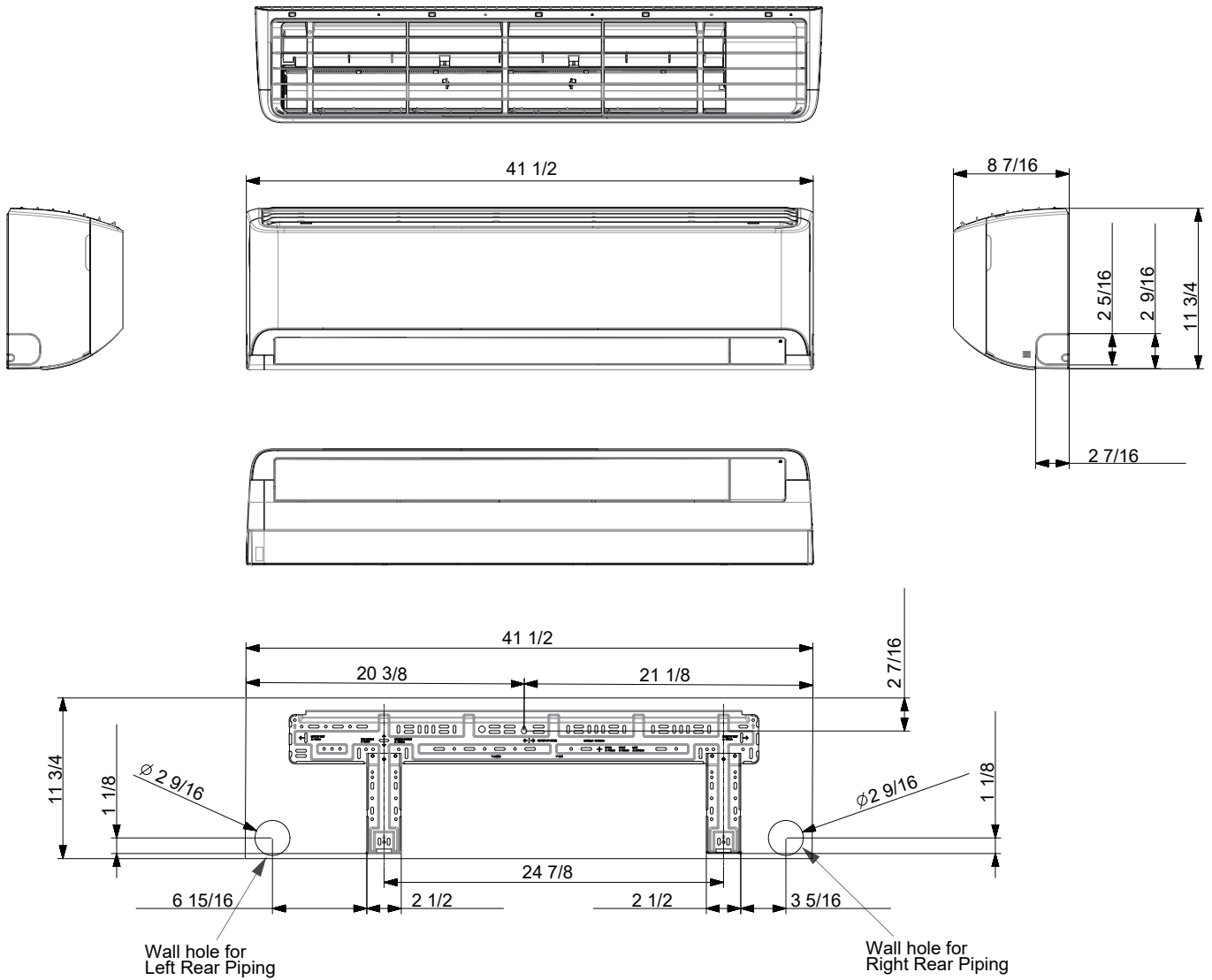
Model	Indoor Unit Model Number (US Code)		AC018DNADCG/AA (CNG18ADD)	
	Outdoor Unit Model Number (US Code)		AC018DXSCCG/AA (CXG18SCD)	
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,000	
	Capacity Range	Cooling (Btu/h)	6,100 - 22,500	
		Heating (Btu/h)	3,400 - 29,000	
	AHRI 210-240 2023	SEER2		20.50
		EER2		12.20
HSPF2 (region IV)			9.50	
5°F COP			1.80	
Power	Voltage	ϕ / V / Hz	1 / 208-230 / 60	
	Working Voltage Range (VAC)		187 - 253	
	Operating Current (min. / standard / max.)	Cooling (A)		2.1 / 6.9 / 9.7
		Heating (A)		2.5 / 10.6 / 12.9
	Max. Breaker	Amps		25.0
Min. Circuit Ampacity	Amps		22.7	
Dimensions	W X H X D (in.)	Indoor Unit	41 1/2 X 8 1/2 X 11 13/16	
		Outdoor Unit	34 5/8 X 31 3/8 X 12 3/16	
	Weight (lbs.)	Indoor Unit		25.80
		Outdoor Unit		116.84
Sound Pressure Level	Indoor Unit dB(A)	L / M / H / Turbo	29 / 32 / 37 / 42	
	Outdoor Unit dB(A)	Cooling / Heating (high)	58 / 58	
Operating Temperatures	Outdoor	Cooling	23 - 122°F (-5 - 50°C) -4 - 122°F (-20 - 50°C) W/Baffle	
		Heating	-13 - 75°F (-25 - 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.)	1/2	
	Maximum (ft.)		164	
	Maximum Vertical Separation (ft.)		98	
Condensate Connection			11/16" OD	
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 motor with cross-flow fan	
	Output	Watts	27	
Airflow	Air Volume (L/M/H)	Cooling (CFM)	441 / 540 / 615	
		Heating (CFM)	441 / 540 / 615	
Condenser Fan	Type		BLDC With Axial Type Fan (1)	
	MOC / Watts / CFM (max.)		1.2A X 1 / 125W X 1 / 2,154	
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

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	Advanced	MWR-WG01UN
	Touchscreen	MWR-SH12UN
Wireless controller		AR-CH01U
Thermostat adapter (for connection to standard 24VAC thermostats)		MIM-A60UN
External temperature sensor		MRW-TAU
External contact control interface module		MIM-B14U
Wall bracket (for outdoor unit)		CKN-250
Wind baffles	Front	WBF-7M
	Back	WBB-7M-B
Hail guard kit (includes back and side guards)		HGK-2
Line set - insulated and flared, interconnect cables included	25'	ILS2507
	50'	ILS5007

Dimensional Drawing AC018DNADCG/AA (CNG18ADD)

Unit: Inches



Dimensional Drawing AC018DXSCCG/AA (CXG18SCD)

Unit: Inches

