Samsung, WindFree™, Low Ambient, 4-Way Cassette, Cooling, Single Zone, Split System

Job Name	Location			
Purchaser	Engineer			
Submitted to	Reference	Approval	Construction	
Unit Designation	Schedule #			





		Specifications		
Model	Indoor Unit Model Number (US Code)		AC030BN4DCH/AA (CNH304DB)	
Wiodei	Outdoor Unit Model N	umber (US Code)	AC030BXSCCC/AA (CXC30SCB)	
	Nominal Capacity	Cooling (Btu/h)	30,000	
	Capacity Range	Cooling (Btu/h)	9,000 - 36,000	
Performance	ALIDI 040 040 00471	SEER	21.0	
Performance	AHRI 210-240 2017 ¹	EER	11.0	
	ALIDI 240 240 2022 ²	SEER2	21.5	
	AHRI 210-240 2023 ²	EER2	11.0	
	Voltage	ø / V / Hz	1 / 208-230 / 60	
	Working Voltage Range (VAC)		187 - 253	
Power	Operating Current	(min. / std. / max.)	3.10 / 12.11 / 20.2	
	Max. Breaker	Amps	30	
	Min. Circuit Ampacity (A)		23.5	
	M V II V D (im)	Indoor Unit	33 1/16 X 11 5/16 X 33 1/16	
Dimensions	W X H X D (in.)	Outdoor Unit	37 X 39 5/16 X 13	
Dimensions	Maight (lba)	Indoor Unit	41.9	
	Weight (lbs.)	Outdoor Unit	156.5	
Sound Pressure	Indoor Unit dB(A) L / M / H 30		30 / 34 / 37	
Level	Outdoor Unit dB(A)	High	52	
			23 ~ 122°F (-5 ~ 50°C)	
Operating	Outdoor	°F (°C)	-40 ~ 122°F (-40~ 50°C) W/Baffle	
Temperatures	Indoor	°F (°C)	61 ~ 90°F (16 ~ 32°C)	
		High side (flare)	3/8"	
İ	Indoor & Outdoor	Low side (flare)	5/8"	
Pipe Connections	Maximum (ft.)		164	
Connections	Maximum Vertical Separation (ft.)		98	
	Condensate Connection		1 1/4" OD, 1" ID	
	Туре		R410A	
Refrigerant	Factory Charge lbs.		5.29	
	Charged for		24.6 ft.	
	Manufacturer		Samsung	
Compressor	Туре		Inverter Driven, Twin BLDC Rotary	
	RLA	Amps	16.2	
	Туре		BLDC (1) With Turbo Type Fan (1)	
Evaporator Fan	Air Volume	CFM (L/M/H)	629 / 833 / 996	
	Output	Watts	97	
Condenser	Motor		BLDC With Axial Type Fan (1)	
Fan	FLA / Watts / CFM (max.)		0.97A X 1 / 125W X 1 / 2,755 CFM	
	WindFree™* Type	L X W X H (in.)	37 3/8 X 37 3/8 X 2 1/2 in.	
Fascia Panel		Weight (lbs.)	13.88	
	Certifications	UL	. 60335-2-40	
Safety	Devices	PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sens		

This publication reflects both the 1987 Appendix M metric (SEER) and the 2023 Appendix M1 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to www.AHRInet.org for more information about updated energy metrics.

¹Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.

²Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

*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)

Notice: US Federal law requires that the above model to be installed in all U.S. states and territories except in AZ, CA, NM, and NV. Federal law prohibits installation of this unit in these states.

General Information

- The indoor unit shall feature "WindFree™* mode. In cooling mode, as room temperature nears set temperature, 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
- Low ambient cooling to -40°F
- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- High-voltage terminal block temperature sensor to disable unit in the event of power connection overheating
- Auto-restart after power loss
- Soft-start compressor minimizing current inrush
- All heat exchangers shall be mechanically bonded aluminum fin to copper tube
- The condensing unit heat exchanger salt spray test method: ISO-9227- the heat exchanger showed no unusual rust or corrosion development to 3,000 hours.

Option settings

- 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 controls

Indoor Fan

- Indoor fan is a single Turbo type
- Three fan speed settings and auto setting
- Washable filter as standard
- The WindFree™* function will close the supply air outlet louver while in cooling mode to gently disperse cool air into the space without blowing directly onto occupants. The WindFree™* feature is optional and can be enabled using central or local control options
- The WindFree^{™*} indoor unit has an integral humidity sensor that will open the louvers for standard cool mode when space conditions could potentially cause condensation formation on the chassis surface

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

Controls

- Control wiring shall be 2 X 16 AWG
- Wired controllers must be purchased separately
- 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

Refrigerant System

- The compressor shall be hermetically sealed, inverter-controlled Twin BLDC rotary type
- Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Warranty

7 Years compressor, 5 years parts with registration





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Required Accessories

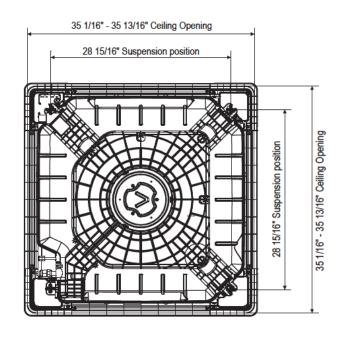
Fascia panel WindFree [™] Type ✓ PC4NUFMUN
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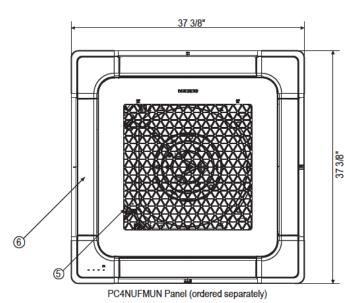
Optional Accessories

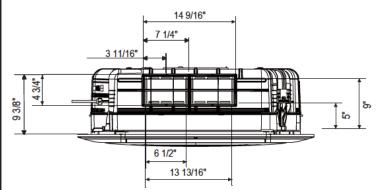
Wired Controller	Advanced	MWR-WG00UN	
Wired Controller	Touchscreen	MWR-SH11UN	
Thermostat Adapter (24vac)		MIM-A60UN	
Wireless Controller		AR-EH04U	
Wi-Fi Adapter	Single indoor unit	MIM-H14UN	
Wi-Fi Adaptei	1-16 indoor units	MIM-H05UN	
External Temperature Sensor		MRW-TA	
External Contact Control		MIM-B14	
Wall Bracket (for outdoor unit)		CKN-250	
Wind Baffle	Front	WBF-2M-B	
Willia Ballie	Back	WBB-3M	
Hail guard kit (includes back and side guards)		HGK-3	
Line sets - insulated and flared, interconnect cables included		25' - ILS2510	
		50' - ILS5010	

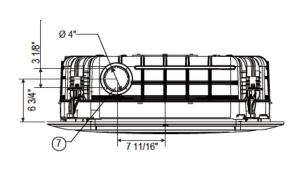
SAMSUNG

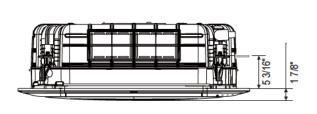
SUBMITTAL AC030BN4DCH/AA, AC030BXSCCC/AA (CNH304DB/CXC30SCB)
Samsung, WindFree™, Low Ambient, 4-Way Cassette, Cooling, Single Zone, Split System AC030BN4DCH/AA Dimensional Drawing

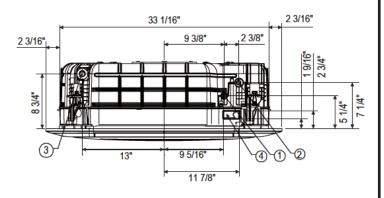


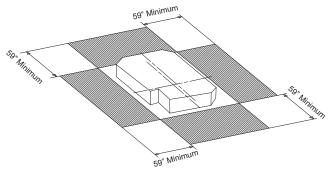








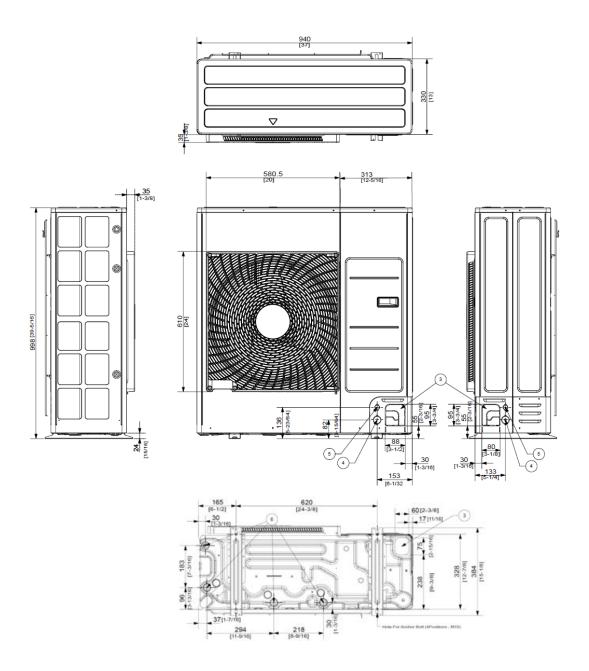




Dropor	alaaranaa	must be	maintained	around u	nit for prope	ronorotion

No.	Name	Description
1	Liquid Pipe Connection	Ø 3/8" Flare
2	Gas Pipe Connection	Ø 5/8" Flare
3	Drain Pipe Connection	OD 1 1/4", ID 1"
4	Conduit for Power & Communication Wil	ring _
5	Air Inlet Grille	-
6	Air Outlet Louver	-
7	Fresh Air Inlet	Ø 4"

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No.	Name	Description
1	Refrigerant liquid pipe	3/8"
2	Refrigerant gas pipe	5/8"
3	Drain hole	Connect with Provided Plug