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

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



		Specifications	
Model	Indoor Unit Model Number (US Code)		AC030BNHDCH/AA (CNH30HDB
wodei	Outdoor Unit Model N	lumber (US Code)	AC030BXSCCC/AA (CXC30SCB
	Nominal Capacity Cooling (Btu/h)		30,000
	Capacity Range	Cooling (Btu/h)	8,600 - 36,000
Performance	AHRI 210-240 2017 ¹	SEER	17.7
Chomianoc	AHRI 210-240 2017	EER	10.3
	AHRI 210-240 2023 ²	SEER2	17.9
	ARRI 210-240 2023	EER2	10.3
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		187 - 253
	Operating Current	(min. / std. / max.)	3.5 / 13.0 / 20.4
	Max. Breaker Amps		30
	Min. Circuit Ampacity	(A)	23.5
	MYLLYD (in)	Indoor Unit	47 1/4 X 9 13/16 X 27 9/16
	W X H X D (in.)	Outdoor Unit	37 X 39 5/16 X 13
Dimensions	Weight (lbs.)	Indoor Unit	77.2
Diffierisions	weight (lbs.)	Outdoor Unit	156.5
	Duct Connections	Supply (in.)	45 15/16 X 8 11/16
	(W X H)	Return (ID, in.)	45 15/16 X 8 11/16
Sound Pressure	Indoor Unit dB(A)	L/M/H	33 / 37 / 41
Level	Outdoor Unit dB(A)	High	52
	Outdoor	°F (°C)	23 ~ 122°F (-5 ~ 50°C)
Operating Temperatures			-40 ~ 122°F (-40~ 50°C) W/Baffle
remperatures	Indoor	°F (°C)	61 ~ 90°F (16 ~ 32°C)
		High side (flare)	3/8"
	Indoor & Outdoor	Low side (flare)	5/8"
Pipe Connections	Maximum (ft.)		164
Connections	Maximum Vertical Separation (ft.)		98
	Condensate Connection		1 1/4 in. OD, 1 in. ID
	Туре		R410A
Refrigerant	Factory Charge Ibs.		5.29
Ü	Charged for		24.6 ft.
	Manufacturer		Samsung
Compressor	Туре		Inverter Driven, Twin BLDC Rotar
	RLA Amps		16.2
Evaporator Fan	Туре		BLDC (1) With Sirocco Fan (3)
	Air Volume	CFM (L/M/H)	600 / 759 / 918
	Output	Watts	153
	External Static	Standard ("WC)	0.58
	Pressure Min. / Max. ("WC)		0.1 / 0.8
Condenser			BLDC With Axial Type Fan (1)
Fan	FLA / Watts / CFM (max.)		0.97A X 1 / 125W X 1 / 2,755 CFM
			1

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.

temperature limit protection logic, compressor overload sensing

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.

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

General Information

- 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
- Integral condensate pump with maximum 29" lift from bottom of the unit with check valve and float switch that disables indoor should condensate overflow be detected.
- · 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.
- Low ambient cooling to -40°F
- The outdoor unit shall have snow accumulation prevention option setting toprevent snow drifting against an idle outdoor unit.

Option settings

- 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 controller

Indoor Fan

- · Indoor fan is Centrifugal type
- Three fan speed settings and auto setting
- · Smart pressure control feature that adjusts fan speed based on ESP delivering consistent 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 with a wired remote controller (MWR-WG00UN) to increase or decrease airflow.
- The indoor unit shall have automatic air volume scanning for simple setup and optimized comfort settings for the occupant.

- Outdoor unit shall be galvanized steel with a baked-on powder coated finish for durability
- Indoor Unit: Insulated, galvanized steel.

Controls

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

Refrigerant System

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

- · Air filtration shall be field provided
- Pressure drop across field-supplied filter must be factored into the total ESP.

7 Years compressor, 5 years parts with registration



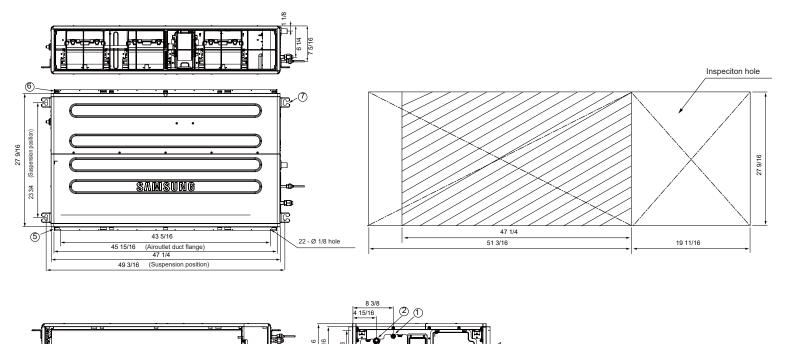


Optional Accessories

Wired Controller	Advanced	MWR-WG00UN	
Wired Controller	Touchscreen	MWR-SH11UN	
Thermostat Adaptor (for connection to a standard 24VAC thermostat)		MIM-A60UN	
Wireless Signal Control	Wireless Signal Receiver	MRK-A10N	
	Wireless Controller	AR-EH04U	
Wi-Fi Adapter		MIM-H05UN	
External Temperature Sensor		MRW-TA	
Filter Box		FB-DS2	
External Contact Control		MIM-B14	
Wall Bracket (for outdoor unit)		CKN-250	
Wind Baffles	Front	WBF-2M	
	Back	WBB-3M	
Hail guard kit (includes back and side guards)		HGK-3	
Line Sets - insulated and flared, interconnect cables included		25' - ILS-2510	
		50' - ILS-5010	

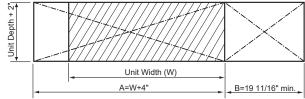
Units: Inches

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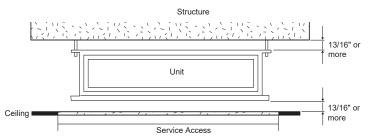
No.	Name	Description
1	Liquid pipe connection	Ø 3/8"
2	Gas pipe connection	Ø 5/8"
3	Drain pipe connection	3/4" (OD 1.05")
4	Power supply connection	-
5	Air discharge flange	-
6	Air filter	-
7	Hook	5/16" ~ 3/8"

Inspection Opening Requirements

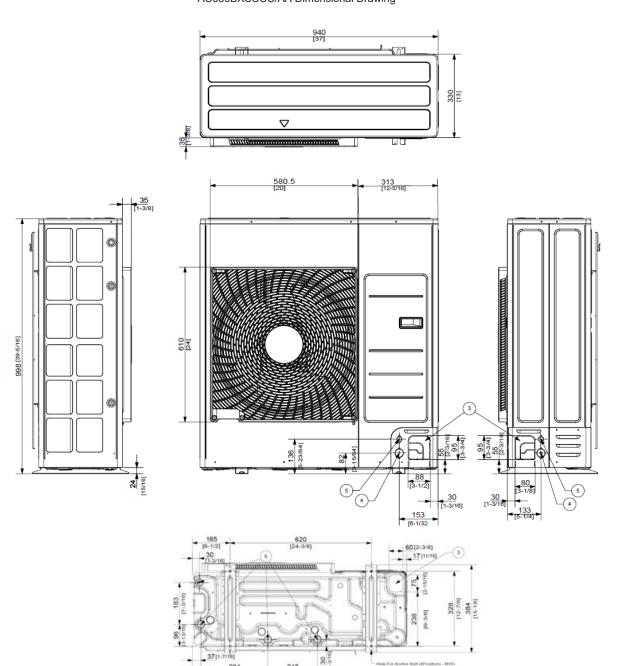


In applications where there is not a tile ceiling, an inspection hole is required. If height between ceiling and structure is 1.64' or more, inspection opening "B" is recommended. If height between ceiling and structure is less than 1.64', inspection opening "A" and "B" is recommended.(verify state and local codes).

Unit Clearance From Structure



SAMSUNG



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