SAMSUNG

SUBMITTAL AC024BNADCH/AA / AC024BXSCCC/AA (CNH24ADB / CXC24SCB)
Samsung WindFree™, Low Ambient Cooling, High-Wall Evaporator, Split System

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☐ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

Specifications

Model	Indoor Unit Model Number (US Code)		AC024BNADCH/AA (CNH24ADB)
	Outdoor Unit Model Number (US Code)		AC024BXSCCC/AA (CXC24SCB)
Performance	Nominal Capacity	Cooling (Btu/h)	24,000
	Capacity Range	Cooling (Btu/h)	6,000 - 27,000
	AHRI 210-240 2017[1]	SEER	18.5
		EER	9.6
	AHRI 210-240 2023[2]	SEER2	19
		EER2	9.6
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		187 - 253
	Operating Current	(min. / std. / max.)	2.0 / 11.1 / 15.4
	Max. Breaker	Amps	25
	Min. Circuit Ampacity (A)		20.1
Dimensions	W X H X D (in.)	Indoor Unit	41 9/16 X 8 7/16 X 11 3/4
		Outdoor Unit	34 9/16 X 31 7/16 X 12 3/16
	Weight (lbs.)	Indoor Unit	28
		Outdoor Unit	115.7
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	35 / 39 / 44
	Outdoor Unit dB(A)	High	50
Operating Temperatures	Outdoor	°F (°C)	23 ~ 122°F (-5 ~ 50°C)
			-40 ~ 122°F (-40~ 50°C) W/Baffle
	Indoor	°F (°C)	64 ~ 90°F (16 ~ 32°C)
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	5/8"
	Maximum (ft.)		164
	Maximum Vertical Separation (ft.)		98
	Condensate Connection		11/16 in. OD
Refrigerant	Type		R410A
	Factory Charge	lbs.	4.41
	Charged for		24.6 ft.
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	13.5
Evaporator Fan	Type		BLDC With Crossflow Fan (1)
	Air Volume	CFM (L/M/H)	466 / 537 / 629
	Output	Watts	27
Condenser Fan	Motor		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		0.97A X 1 / 125W X 1 / 1,801 CFM
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

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.

[1]Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.
[2]Performance 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 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: ASTM-B117-18 - the heat exchanger showed no unusual rust or corrosion development to 3,000 hours.
- Low ambient cooling to -40°F

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 crossflow 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 louver 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: UL94 V0 with a galvanized steel mounting plate
- The indoor unit shall have easy access to wire, pipe, and drain connections via access panel on the front of the unit for easier installation and service

Controls

- Control wiring shall be 2 X 16 AWG
- Wireless controller included as standard
- 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

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AHRI CERTIFIED™ www.ahridirectory.org Unitary Small AC AHRI Standard 210/240

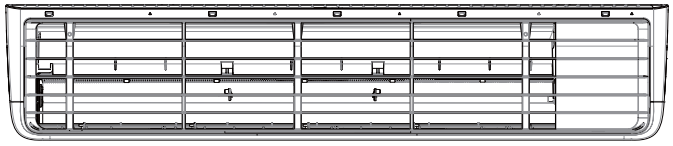
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Optional Accessories

Wired Controller	Simplified Touch Controller	☐ MWR-SH11UN
	Advanced Wired Controller	☐ MWR-WG00UN
Thermostat Adaptor (for connection to a standard 24VAC thermostat)		☐ MIM-A60UN
Condensate pump	Aspen Mini Orange	☐ ASP-MO-UNIV 110-250
	Blue Diamond	☐ BD-BLUE230
Wi-Fi Adapter		☐ MIM-H05UN
External Temperature Sensor		☐ MRW-TA
External Contact Control		☐ MIM-B14
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 Sets - insulated and flared, interconnect cables included		☐ 25' - ILS-2509
		☐ 50' - ILS-5009

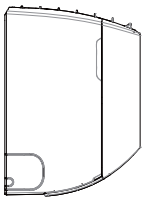
AC024BNADCH/AA Dimensional Drawing

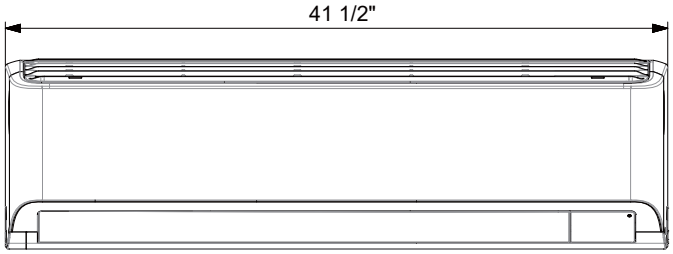
Units: Inches



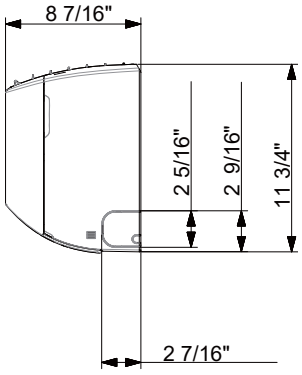
TOP

LEFT

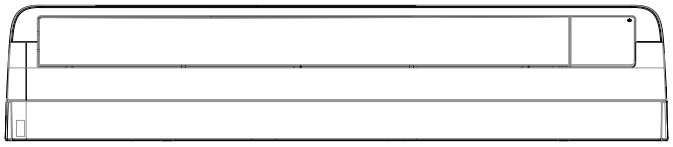




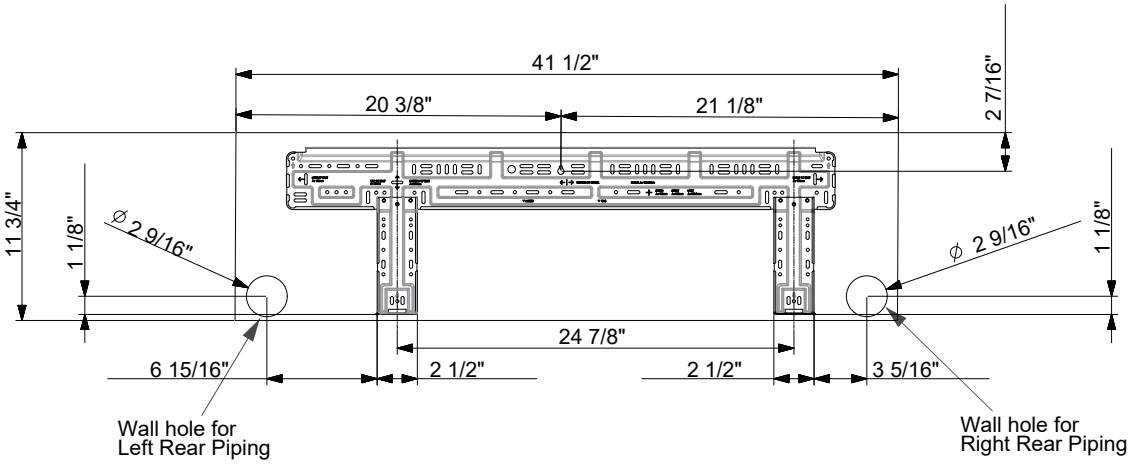
RIGHT



FRONT



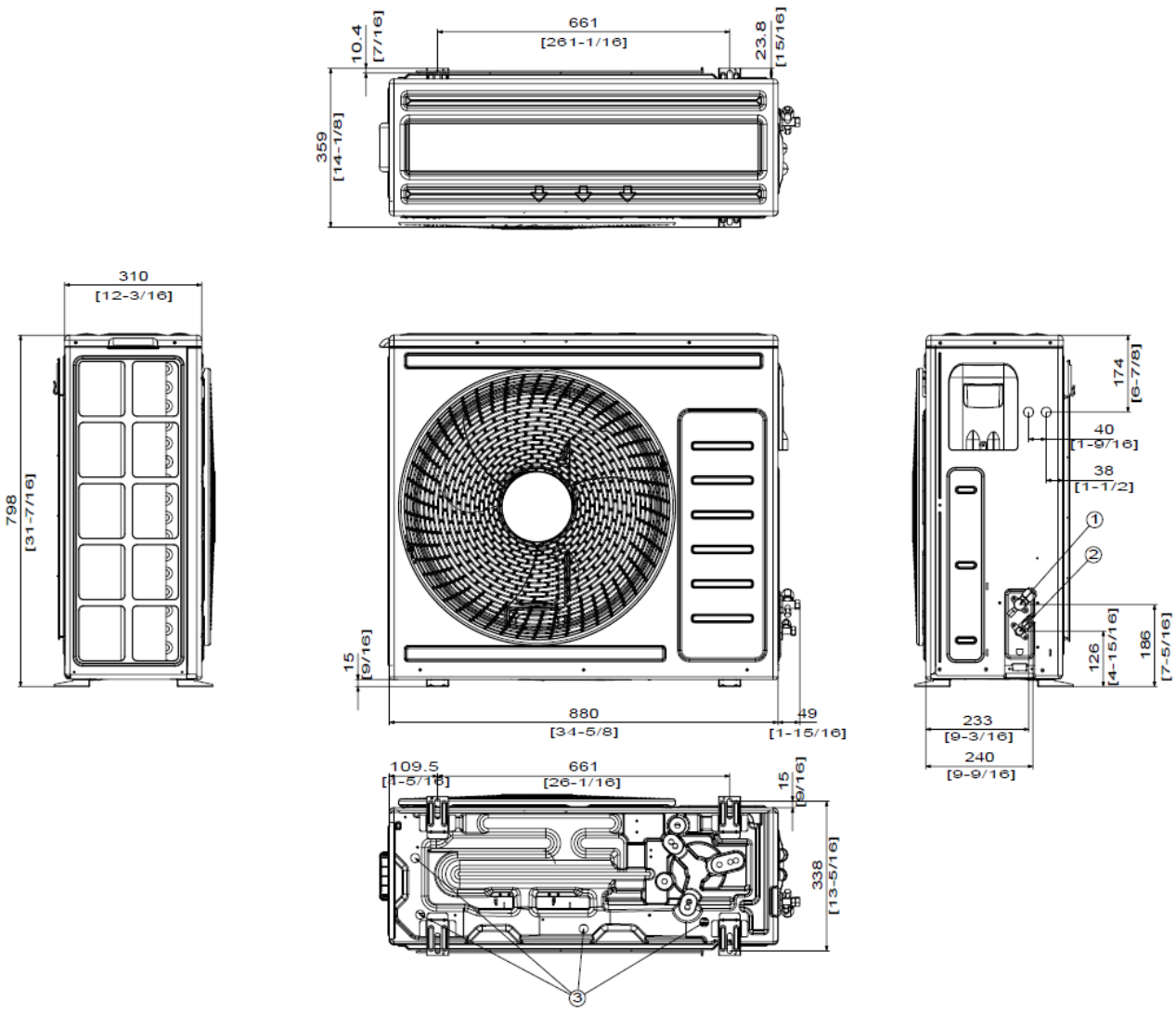
BOTTOM



No.	Name	Description
1	Liquid pipe connection	1/4"
2	Gas pipe connection	5/8"
3	Drain pipe connection	11/16" OD
4	Power supply & Communication wiring conduit	-

AC024BXSCCC/AA Dimensional Drawing

Units: mm [Inches]



No.	Name	Description
1	Refrigerant liquid pipe	1/4"
2	Refrigerant gas pipe	5/8"
3	Drain hole	Connect with Provided Plug