SAMSUNG

SUBMITTAL AC018BNHDCH/AA / AC018BXSCCCAA (CNH18HDB / CXC18SCB) Samsung Duct S, Low Ambient Cooling, Single Zone Duct, Split System

Job Name

Purchaser

Submitted to

Unit Designation

Specifications AC018BNHDCH/AA (CNH18HDB) Indoor Unit Model Number (US Code) Model Outdoor Unit Model Number (US Code) AC018BXSCCC/AA (CXC18SCB) 18,000 Nominal Capacity Cooling (Btu/h) 4,000 - 22,000 Capacity Range Cooling (Btu/h) 20.5 SEER Performance AHRI 210-240 2017 11.5 FFR SEER2 17.9 AHRI 210-240 2023 EER2 10.6 ø / V / Hz 1 / 208-230 / 60 Voltage Working Voltage Range (VAC) 187 - 253 Operating Current 1.7 / 7.1 / 9.7 Power (min. / std. / max.) Max. Breaker Amps 15 Min. Circuit Ampacity (A) 13.5 47 1/4 X 9 13/16 X 27 9/16 Indoor Unit WXHXD(in.) 34 9/16 X 25 1/8 X 12 3/16 Outdoor Unit 76.9 ndoor Unit Dimensions Weight (lbs.) 89.3 Outdoor Unit Duct Connections Supply (in.) 45 15/16 X 8 11/16 (W X H) 45 15/16 X 8 11/16 Return (ID, in.) Sound Pressure Indoor Unit dB(A) L/M/H 26 / 30 / 34 Level Outdoor Unit dB(A) High 48 23 ~ 122°F (-5 ~ 50°C) Outdoor °F (°C) Operating -40 ~ 122°F (-40~ 50°C) W/Baffle Temperatures 61 ~ 90°F (16 ~ 32°C) Indoor °F (°C) 1/4" High side (flare) Indoor & Outdoor Low side (flare) 1/2' Pipe Maximum (ft.) 98 Connections Maximum Vertical Separation (ft.) 66 Condensate Connection 1 1/4 in. OD, 1 in. ID R410A Type Refrigerant Factory Charge 2 87 lbs 24 6 ft Charged for Manufacturer Samsung Compresso Туре Inverter Driven, Twin BLDC Rotary RLA Amps 8.2 Type BLDC (1) With Sirocco Fan (3) CFM (L/M/H) 477 / 537 / 618 Air Volume Evaporator Fan Watts 153 Output External Static Standard ("WC) 0.18 Pressure 0.1 / 0.8in. WC Min. / Max. ("WC) BLDC With Axial Type Fan (1) Motor Condenser Fan FLA / Watts / CFM (max.) 0.97A X 1 / 125W X 1 / 1.413 CFM Certifications UL 60335-2-40 PCB fuses, indoor unit terminal block thermal fuse, current Safety transformer, over-voltage protection, crankcase heating. Devices 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.

Performance 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 states.

Location

Engineer

Reference

Construction

Schedule #

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Approval



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.

Construction

- · 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

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

Warranty

7 Years compressor, 5 years parts with registration



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Optional Accessories

Wired Controller	Advanced	MWR-WG00UN
	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-5M
	Back	WBB-6M-B
Hail guard kit (includes back and side guards)		HGK-6
Line Sets - insulated and flared, interconnect cables included		25' - ILS-2507
		50' - ILS-5007

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SUBMITTAL AC018BNHDCH/AA / AC018BXSCCCAA (CNH18HDB / CXC18SCB) Samsung Duct S, Low Ambient Cooling, Single Zone Duct, Split System AC018BNHDCH/AA Dimensional Drawing

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No.	Name	Description
1	Liquid pipe connection	Ø 1/4"
2	Gas pipe connection	Ø 1/2"
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).



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