SAMSUNG

Page 1 of 4 SUBMITTAL AC018BNHDCH/AA / AC018BXADCH/AA (CNH18HDB / CXH18ADB) Samsung Duct S, Single Zone Duct, Split System

Approval

Purchaser

Submitted to

Unit Designation

		-	
Model	Indoor Unit Model Nu	mber (US Code)	AC018BNHDCH/AA (CNH18HDB
woder	Outdoor Unit Model Number (US Code)		AC018BXADCH/AA (CXH18ADB)
	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,000
		Cooling (Btu/h)	6,000 - 24,000
	Capacity Range	Heating (Btu/h)	5,000 - 30,000
		SEER	19.6
Performance	AHRI 210-240 20171	EER	12.5
		HSPF	10.60
	AHRI 210-240 2023 ²	SEER2	18.0
		EER2	12.0
		HSPF2	8.1
	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Ran	ge (VAC)	187 - 253
_	Operating Current	Cooling (A)	2.5 / 6.6 / 11.0
Power	(min. / std. / max.)	Heating (A)	2.0 / 7.0 / 19.0
	Max. Breaker	Amps	25
	Min. Circuit Ampacity	(A)	20.1
		Indoor Unit	47 1/4 X 9 13/16 X 27 9/16
	W X H X D (in.)	Outdoor Unit	34 5/8 X 31 7/16 X 12 1/4
		Indoor Unit	76.9
Dimensions	Weight (Ibs.)	Outdoor Unit	118.4
	Duct Connections	Supply (in.)	45 15/16 X 8 11/16
	(W X H)	Return (ID, in.)	45 15/16 X 8 11/16
	Indeer Linit dD(A)		26 / 30 / 34
Sound Pressure	Indoor Unit dB(A) Outdoor Unit dB(A)	L / M / H Cooling / Heating (high)	48 / 48
			23 ~ 122°F (-5 ~ 50°C)
	Outdoor	Cooling	, ,
Operating		Heating	0 ~ 122°F (-18 ~ 50°C) W/Baffle -13 ~ 75°F (-25 ~ 24°C)
Temperatures	Indoor	Heating Cooling	64 ~ 90°F (16 ~ 32°C)
		Heating	T ≤ 86°F (30°C)
			1/4"
	Indoor & Outdoor	High side	1/4
Pipe	Movimum (ft.)	Low side	1/2
Connections	Maximum (ft.) Maximum Vertical Se	poration (ft)	98.4
	Condensate Connecti	,	1 1/4 in. OD, 1 in. ID
	Condensate Connecti	011	
	Туре		R410A
Refrigerant	Factory Charge	lbs.	4.41
	Charged for		24.6 ft.
	Manufacturer		Samsung
Compressor	Туре	n	Inverter Driven, Twin BLDC Rotar
	RLA	Amps	12.7
	Туре		BLDC (1) With Sirocco Fan (3)
	Air Volume	CFM (L/M/H)	477 / 537 / 618
Evaporator Fan	Output	Watts	153
	External Static	Standard ("WC)	0.18
L	Pressure	Min. / Max. ("WC)	0.1 / 0.8in. WC
Condenser	Motor		BLDC With Axial Type Fan (1)
Fan	FLA / Watts / CFM (m	ax.)	1.25A X 1 / 125W X 1 / 2,154 CFM
	Certifications	11	L 60335-2-40
Safety	Devices	PCB fuses, indoor unit term	ninal block thermal fuse, current rotection, crankcase heating,

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.

Select models are ENERGY STAR Labeled. Proper sizing and installation of equipment is critical to achieve 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 for details or visit www.energystar.gov.

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Reference

Construction

Schedule #



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.
- Base pan heater equipped as standard
- System shall provide 100% heating capacity at -4°F(-20°C)

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).
- System can be set up 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 controller

Indoor Fan

- Indoor fan is sirocco type
- Three fan speed settings and auto setting
- Smart pressure control feature that adjusts fan speed based on ESP delivering consistent heating and 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
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller or central control options.
- · 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

10 Years compressor, 10 years parts, 1 year limited labor when registered





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Optional Accessories

Wired Controller	Advanced	MWR-WG00UN
Wired Controller	Touchscreen	MWR-SH11UN
Thermostat Adaptor (fo	or connection to a standard 24VAC thermostat)	MIM-A60UN
Wireless Signal	Wireless Signal Receiver	MRK-A10N
Control	Wireless Controller	AR-EH04U
Wi-Fi Adapter		MIM-H05UN
External Temperatu	re Sensor	MRW-TA
Filter Box		FB-DS2
External Contact Co	ntrol	MIM-B14
Wall Bracket (for out	tdoor unit)	CKN-250
Wind Baffles	Front	WBF-7M
wind bames	Back	WBB-7M-B
Hail Guard Kit (inclu	des back and side guards)	HGK-2
Line Sets - insulated	and flared, interconnect cables	25' - ILS-2507
included		50' - ILS-5007

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12 11/16

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Discharge side

(4) Suction side

No.	Name	Description
1	Refrigerant Liquid Pipe	Ø 1/4"
2	Refrigerant Gas Pipe	Ø 1/2"
3	Condensate Drain	3/4" (OD 1.05")
4	Power & Comm. Wiring Conduits	-
5	Supply Air Flange	-
6	Return Air Flange	-
\bigcirc	Hook	-



3 BOTTOM

Description

Ø 1/4

Ø 1/2

Connect with provided drain plug

Name

Refrigerant liquid pipe

Refrigerant gas pipe

Drain hole

No.

1

2

3