Samsung Max Heat®, Low Ambient Heating, Duct S, Single Zone Duct, Split System

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





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General Information

- The system shall provide 100% heating capacity at -4°F(-20°C) and high heating performance at -13°F (-25°C)
- · Base pan heater equipped as standard
- 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.

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









		Specifications	T
Model	Indoor Unit Model Nu	mber (US Code)	AC030BNHDCH/AA (CNH30HDB)
Wiodei	Outdoor Unit Model Number (US Code)		AC030BXSCCH/AA (CXH30SCB)
	Nominal Capacity	Cooling / Heating (Btu/h)	30,000 / 32,000
	Capacity Range	Cooling (Btu/h)	14,000 - 36,000
	Capacity Nange	Heating (Btu/h)	10,500 - 40,000
		SEER	18.3
Performance	AHRI 210-240 2017 ¹	EER	12.0
		HSPF	11.10
	AHRI 210-240 2023 ²	SEER2	18.7
		EER2	12.0
		HSPF2	8.6
	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		187 - 253
Power	Operating Current	Cooling (A)	4.5 / 11.4 / 14.5
rowei	(min. / std. / max.)	Heating (A)	3.6 / 13.0 / 20.6
	Max. Breaker	Amps	40
	Min. Circuit Ampacity (A)		32.1
	W V H V D (in)	Indoor Unit	47 1/4 X 9 13/16 X 27 9/16
	W X H X D (in.)	Outdoor Unit	37 X 55 7/8 X 13

Dimensions			
	Weight (lbs.)	Indoor Unit	77.2
		Outdoor Unit	220.5
	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)	Cooling / Heating (high)	49 / 50

Operating Temperatures		Cooling	23 ~ 122°F (-5 ~ 50°C)
	Outdoor	Cooling	-4 ~ 122°F (-20 ~ 50°C) W/Baffle
		Heating	-13 - 75°F (-25 - 24°C)
	Indoor	Cooling	64 ~ 90°F (16 ~ 32°C)
		Heating	T ≤ 86°F (30°C)
	1		1

Pipe Connections	Indoor & Outdoor	High side (flare)	3/8"
		Low side (flare)	5/8"
	Maximum (ft.)		246
	Maximum Vertical Separation (ft.)		98.4
	Condensate Connection (with included adapter)		1 1/4 in. OD, 1 in. ID

lbs

R410A

8.82

	Charged for		24.6 ft.
	Manufacturer		Samsung
Compressor	Туре		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	21
	Туре		BLDC (1) With Sirocco Fan (3)
	Air Volume	CFM (L/M/H)	600 / 759 / 918
Evaporator Fan	Output	Watts	153
	External Static	Standard ("WC)	0.58
	Pressure	Min. / Max. ("WC)	0.1 / 0.8

Condenser Motor			BLDC With Axial Type Fan (2)
Fan	FLA / Watts / CFM (max.)		1.25A X 2 / 125W X 2 / 4,415 CFM
	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 sensi	

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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Type

Factory Charge

Refrigerant

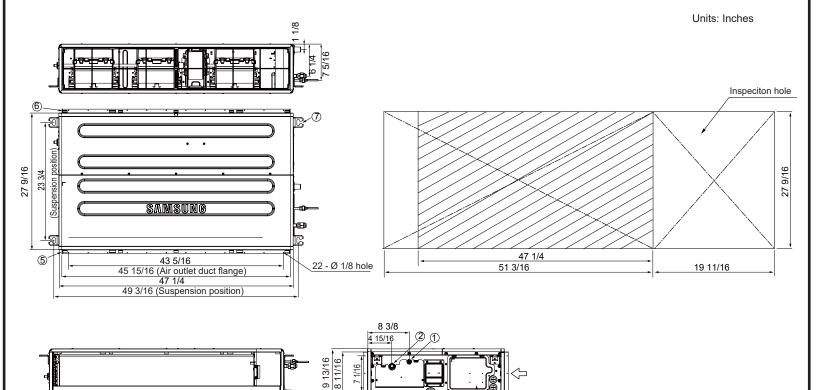
SHA-CAC-HS030-2212A

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	Wireless Signal Receiver	MRK-A10N
Control	Wireless Controller	AR-EH04U
Wi-Fi Adapter		MIM-H05UN
External Temperature	Sensor	MRW-TA
Filter Box		FB-DS2
External Contact Cont	rol	MIM-B14
Wall Bracket (for outdoor unit)		CKN-250
Wind Baffles	Front	WBF-6M
Wind bailles	Back	WBB-4M
Hail Guard Kit (include	es back and side guards)	HGK-5
Line Sets - insulated and flared, interconnect cables included		25' - ILS-2510
		50' - ILS-5010

Suction side

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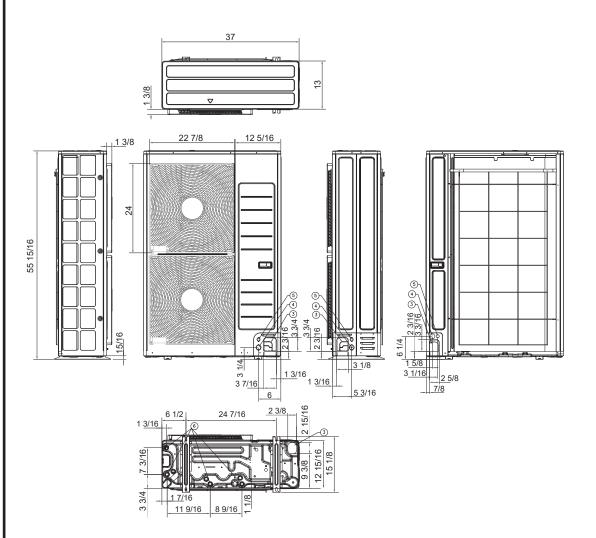
No.	Name	Description
1	Refrigerant Liquid Pipe	Ø 3/8"
2	Refrigerant Gas Pipe	Ø 5/8"
3	Condensate Drain	3/4" (OD 1.05")
4	Power & Comm. Wiring Conduits	-
5	Supply Air Flange	-
6	Return Air Flange	-
7	Hook	-

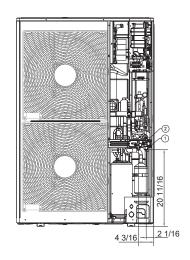
12 11/16

Discharge side -

Units: Inches

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No.	Name	Description
1	Refrigerant Liquid Pipe	Ø 3/8"
2	Refrigerant Gas Pipe	Ø 5/8"
3	Pipe Knockout Hole	-
4	Power Wiring Conduits	-
(5)	Comm. Wiring Conduits	-
6	Drain Hole	-