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

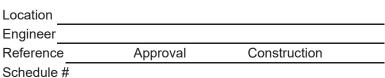
Job Name			
Purchaser			
Submitted t	0		
Unit Design	ation		
J		Specifications	
NA1 - 1	Indoor Unit Model N		AC030BNHDCH/AA (CNH30HDB)
Model	Outdoor Unit Model	Number (US Code)	AC030BXSCCH/AA (CXH30SCB)
	Nominal Capacity	Cooling / Heating (Btu/h)	30,000 / 32,000
	Capacity Range	Cooling (Btu/h)	14,00 - 36,000
Performance 1	SEER / EER	Heating (Btu/h)	10,500 - 40,000 18.3 / 12.0
Chomanec	COP (nominal heating)		3.3
	HSPF		11.1
	AHRI Certification Number		207698070
	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Ra	ange (VAC)	176 - 254 (max. 3% deviation from each)
Power	Operating Current	Cooling (A)	4.5 / 11.4 / 14.5
i owei	(min. / std. / max.)	Heating (A)	3.6 / 13.0 / 20.6
	Max. Breaker	Amps	40
	Min. Circuit Ampaci	ty (A)	31.7
	WXHXD	Indoor Unit	47 1/4 X 9 13/16 X 27 9/16
	(in.)	Outdoor Unit	37 X 55 7/8 X 13
Dimensions	Duct Connections	Supply (in.)	45 5/16 X 8 11/16
	(W X H)	Return (ID, in.)	45 5/16 X 8 11/16 76.1
	Weight (lbs.)	Indoor Unit Outdoor Unit	220.5
			1
Sound Pressure	Indoor Unit dB(A)	L/M/H	33 / 37 / 41
Level	Outdoor Unit dB(A)	Cooling / Heating (high)	49 / 50
	Outdoor	Cooling	23 ~ 122°F (-5 ~ 50°C)
Operating			-4 ~ 122°F (-20 ~ 50°C) w/ baffle
Temperatures	Indoor	Heating Cooling	-13 ~ 75°F (-25 ~ 24°C) 61 ~ 90°F (16 ~ 32°C)
		Heating	T ≤ 80°F (27°C)
	Indoor & Outdoor		
		High side (flare) Low side (flare)	3/8" 5/8"
Pipe Connections	Maximum (ft.)	Low side (liale)	246
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Maximum Vertical S	Separation (ft.)	98.4
	Condensate Connection (with included adapter)		1 1/16" ID for 3/4" PVC
	Туре		R410A
	Control Method		Electronic Expansion Valve
Refrigerant	Factory Charge	lbs.	8.82
	Charged for		24.6 ft
	Additional Refrigerant		0.11 oz/ft over 24.6 ft
	Manufacturer		Samsung
Compressor	_		Inverter Driven, Twin BLDC Rotary
	Туре		mirono Birron, rimi BEBO notary
	RLA	Amps	21.0
		Amps	
	RLA	Amps CFM (L/M/H)	21.0
Evaporator Fan	RLA Type	CFM (L/M/H)	21.0 BLDC (1) With Sirocco Fan (3)
Evaporator Fan	RLA Type Air Volume	CFM (L/M/H)	21.0 BLDC (1) With Sirocco Fan (3) 600 / 759 / 918 (at standard ESP) 153 W / 2.10 A 0.58
Evaporator Fan	RLA Type Air Volume Output (W) / FLA (A	CFM (L/M/H)	21.0 BLDC (1) With Sirocco Fan (3) 600 / 759 / 918 (at standard ESP) 153 W / 2.10 A
	RLA Type Air Volume Output (W) / FLA (A	CFM (L/M/H)	21.0 BLDC (1) With Sirocco Fan (3) 600 / 759 / 918 (at standard ESP) 153 W / 2.10 A 0.58
Evaporator Fan Condenser Fan	RLA Type Air Volume Output (W) / FLA (A	CFM (L/M/H) s) Standard ("WC) Min. / Max. ("WC)	21.0 BLDC (1) With Sirocco Fan (3) 600 / 759 / 918 (at standard ESP) 153 W / 2.10 A 0.58 0.1 - 0.79

¹Certified in accordance with the AHRI Unitary Small Air-Source Heat Pumps (USHP) Certification Program which is based on the latest edition of AHRI Standard 210/240.

Devices: PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage

protection, crankcase heating, temperature limit protection logic, compressor overload sensing

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.







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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
- 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: ASTM-B117-18 the heat exchanger showed no unusual rust or corrosion development to 2,280 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 (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

Warranty

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



Safety

SUBMITTAL AC030BNHDCH/AA / AC030BXSCCH/AA (CNH30HDB / CXH30SCB) Samsung Max Heat®, Low Ambient Heating, Duct S, Single Zone Duct, Split System

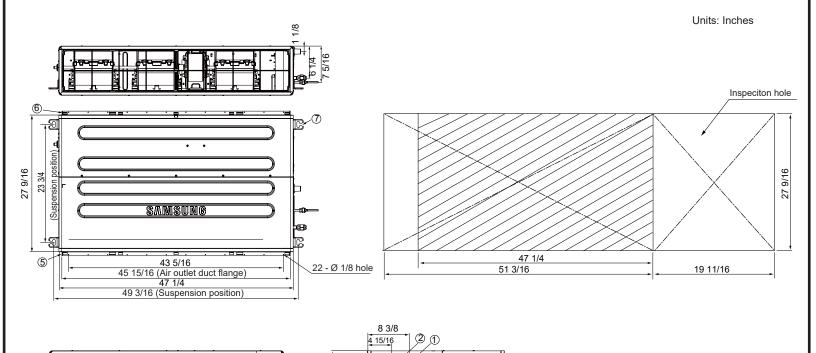
Optional Accessories

SAMSUNG

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 Control		MIM-B14
Wall Bracket (for outdoor unit)		CKN-250
Wind Baffles	Front	WBF-6M
Willu ballies	Back	WBB-4M
Hail Guard		TBD
Line Sets - insulated and flared, interconnect cables included		25' - ILS-2510
		50' - ILS-5010

Suction side

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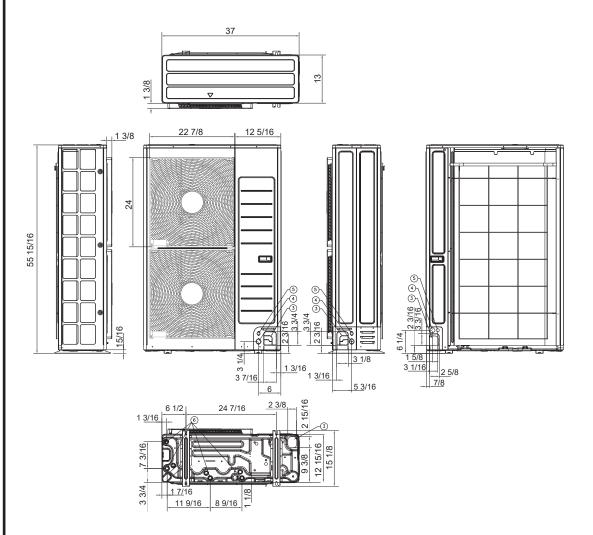
No.	Name	Description
1	Refrigerant Liquid Pipe	Ø 3/8"
2	Refrigerant Gas Pipe	Ø 5/8"
3	Condensate Drain	3/4" (OD 1.05")
4	Power & Comm. Wiring Conduits	-
(5)	Supply Air Flange	-
6	Return Air Flange	-
7	Hook	-

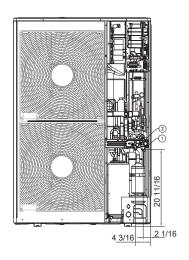
12 11/16

9 13/16

Discharge side -

Units: Inches





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	-