SAMSUNG

SUBMITTAL AC030MNHDCH/AA (Low Ambient Heating)

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

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Purchaser _ Submitted to			
Unit Design	ation		
		Specifications	
Model	Indoor Unit Model N Outdoor Unit Model		AC030MNHDCH/AA AC030JXSCCH/AA
		-	
	Nominal Capacity	Cooling / Heating (Btu/h) Cooling (Btu/h)	30,000 / 32,000 14,000 - 36,000
	Capacity Range	Heating (Btu/h)	11,500 - 39,000
Performance 1	SEER / EER		19.0 / 11.0
	COP (nominal heati	ng)	3.81
	HSPF AHRI Certification N	Jumher	10.1 10347730
	Voltage Working Voltage Ra	ø / V / Hz	1 / 208-230 / 60 176 - 254 (max. 3% deviation from each)
5	Operating Current	Cooling (A)	4.8 / 12.3 / 14.0
Power	(min. / std. / max.)	Heating (A)	3.7 / 11.7 / 22.5
	Max. Breaker	Amps	45
	Min. Circuit Ampaci	ty (A)	32
	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	Weight (lbs.)	Indoor Unit Outdoor Unit	89.3 211.64
	Duct Connections	Supply (in.)	45 15/16 X 8 11/16
	(W X H)	Return (ID, in.)	45 15/16 X 8 11/16
	T	Indoor Unit	Aluminum Fin / Copper Tube
Heat Exchanger	Туре	Outdoor Unit	Aluminum, flat fin, micro channe
Sound Pressure	Indoor Unit dB(A)	L/M/H	29 / 33 / 37
Level	Outdoor Unit dB(A)	Cooling / Heating (high)	49 / 51
			23 ~ 115°F(-5 ~ 46°C)
Operating	Outdoor	Cooling	-4 ~ 115°F(-20 ~ 46°C) w/ baffle
Temperatures		Heating	-13 ~ 75°F(-25 ~ 24°C)
°F(°C)	Indoor	Cooling	61 ~ 90°F(16 ~ 32°C)
		Heating	T ≤ 80°F(27°C)
	Indoor & Outdoor	High side (flare)	3/8"
Dina Cannactions	Maximum (ft)	Low side (flare)	5/8"
Pipe Connections	Maximum (ft.) Maximum Vertical Separation (ft.)		246 98
	Condensate Connection (with included adapter)		1 1/16" ID for 3/4" PVC
	Туре		R410A
	Control Method		Electronic Expansion Valve
Refrigerant	Factory Charge	OZ.	102.24
	Charged for		25 ft
	Additional Refrigera	int	0.269 oz/ft over 25 ft
Compressor	Туре	T.	Inverter Driven, Twin BLDC, Rotary
	RLA	Amps	20.0
	Туре		BLDC (1) With Sirocco Fan (3)
Г	Air Volume	CFM (L/M/H)	671 / 777 / 883 (at standard ESP)
Evaporator Fan	Output (W) / FLA (A	Total CFM Range ²	670 - 1,220 153 W / 1.5 A
	, , ,	Standard ("WC)	0.16
	Static Pressure	Min. / Max. ("WC)	0.12 - 0.8
	Motor	•	BLDC With Axial Type Fan (2)
Condenser Fan	FLA / Watts / CFM ((max.)	0.48 A X 2 / 125 W X 2 / 4,415 CFM
		Simplified Touch Controller	MWR-SH11UN
	Wired Controller	Advanced Wired Controller	MWR-WG00UN
	Wi-Fi Adapter	<u> </u>	MIM-H04UN
	Wireless Signal	Wireless Signal Receiver	MRK-A10N
	Control	Wireless Controller	AR-EH03U
Optional	External Temperatu	ire Sensor	MRW-TA
Optional Accessories	External Contact Control		FB-DS2 MIM-B14
, 10000001160	Central Control Interface Module for Connection		
	to DVM Plus Controls (non-NASA)		MIM-N01
	Wall Bracket (for ou	tdoor unit)	CKN-250
	Wind Baffles	Front	WBF-6M
		Back d and flared, interconnect	WBB-4M
		and ligred interconnect	25' - ILS-2510
		a and harea, interconnect	
	cables included Certifications		50' - ILS-5010 'L (UL 1995)

Location
Engineer
Reference Approval Construction
Schedule #





- Horizontal discharge airflow
- High heating performance at -13°F(-25°C)
- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- · Auto-restart after power loss
- The outdoor unit shall have a snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- The indoor and outdoor units shall have a removable EEPROM that stores system programming information, unit name, and other data
- All indoor unit addressing and option settings shall be done digitally; the indoor unit does not contain rotary dials or setting switches.
- The indoor unit shall have a built-in condensate pump as standard with a 29" lift (from bottom of unit) and float switch that disables indoor unit during overflow detection.
- The indoor unit shall have automatic air volume scanning for simple setup and optimized comfort settings for the occupant.
- The indoor unit shall have smart-tuning function that can provide optimized comfort by allowing the occupant to offset the fan CFM curve with a wired remote controller (MWR-SH10N, MWR-WE13UN, MWR-SH11UN, MWR-WG00UN) to increase or decrease airflow.
- The indoor unit shall allow service access from four sides (top, bottom, left, right).
- Pipe connections at the outdoor unit shall be made inside the unit chassis. Refrigerant pipes can exit through the front, side, rear, or bottom sides of the outdoor unit.
- The outdoor unit shall have a night time quiet mode option to reduce operating sound during the night (automatic or manual activation with dry contact signal).
- The outdoor unit shall have a base pan heater as standard (150W)

Construction

The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

The indoor unit shall be insulated, galvanized steel.

Heat Exchanger

The indoor unit heat exchanger shall be mechanically bonded fin to copper tube

The outdoor unit heat exchanger shall be aluminum, flat fin, micro channel

Controls

Control signal shall be a DDC type signal

Interconnect control wire between outdoor indoor unit shall be 16AWG X 2 shielded

Wired or wireless controls must be purchased separately

Connection to optional wired controllers shall be 2 X 16AWG shielded wire

Controls shall integrate with a BMS system

The system shall integrate with the Samsung NASA Controls Solution

No additional interface modules/adapters are required when connecting to Samsung NASA DVM S central control options.

Refrigerant System

The refrigerant shall be R410A

The compressor shall be hermetically sealed, inverter controlled, twin BLDC Rotary Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit Soft-start to reduce current demand during compressor start

Warranty

10 years compressor, 10 years parts, 1 year limited labor (conditions apply)

latest edition of AHRI Standard 210/240.



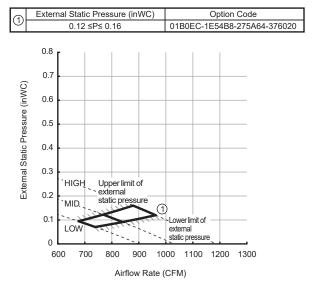
CERTIFIED.



Samsung Low Ambient Heating "Max Heat" Duct S, Single Zone, Split System AC030MNHDCH/AA Fan Characteristics (P-Q Curve)

Fan performance characteristics based on installation option setting (6 fan options)

Option Code



2	External Static Pressure (inWC)	Option Code		
	0.16 < P≤ 0.30	01B0EC-1E5920-275A64-376020		
	0.8			
(Ç	0.7			
External Static Pressure (inWC)	0.6			
ressur	0.5			
Static F	0.4 HIGH Upper limit of external			
ernal S	0.3 static pressure	2		
Ĕ	0.2 LOW			
	0.1	Lower limit of external static pressure		
	600 700 800 900 10	000 1100 1200 1300		
	Airflow Rate (CFM)			

Option Code

01B0EC-1E5D0E-275A64-376020

(3)	0.00 + D + 0.47	040000 455007 075404 070000
	0.30 < P≤ 0.47	01B0EC-1E5997-275A64-376020
External Static Pressure (inWC)	0.1	Company Lower limit of external static pressure 1100 1200 1300 (CFM)

External Static Pressure (inWC)

3

	0.8	[
Ô	0.7	-`HIGH—Upper limit of
(inW	0.6	static pressure (4)
essure	0.5	MID
External Static Pressure (inWC)	0.4	Lower limit of external
nal St	0.3	LOW static pressure
Exter	0.2	
	0.1	
	0	

External Static Pressure (inWC)

0.47 < P≤ 0.60

600

700

800

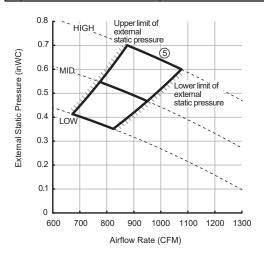
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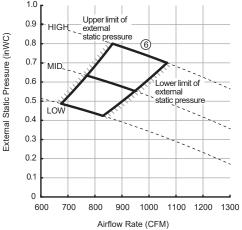
©	External Static Pressure (inWC)	Option Code
9	0.60 < P≤ 0.70	01B0EC-1E5E64-275A64-376020



Airflow Rate (CFM)

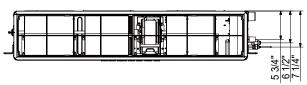
900 1000 1100 1200 1300



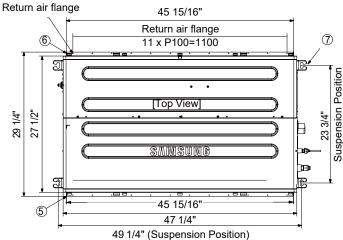


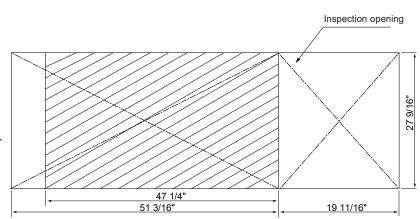
Samsung Low Ambient Heating "Max Heat" Duct S, Single Zone, Split System AC030MNHDCH/AA Dimensional Drawing

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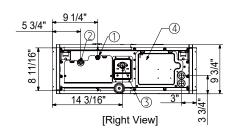
30-Ø 0.13" hole





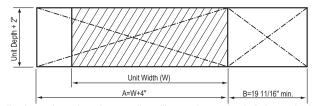
Suspension bolt(4xM8 ¬M10)

[Front View]



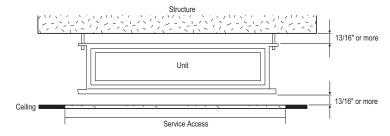
NO	Name	Description
1	Liquid pipe connection	Ø3/8"
2	Gas pipe connection	Ø5/8"
3	Drain pipe connection	1 1/16" ID for 3/4" PVC
4	Power supply connection	-
5	Air discharge flange	-
6	Air filter	-
7	Suspension point	5/16" ~ 3/8"

Inspection Opening Requirements

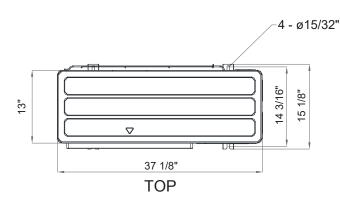


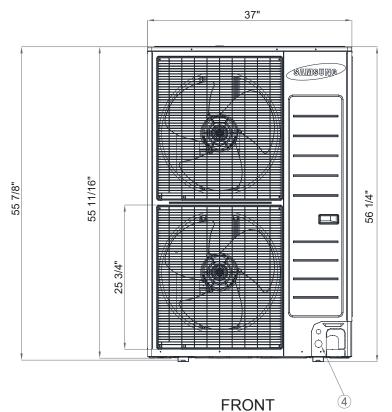
In applications where there is not a tile ceiling, an inspection hole is required. If height between ceiling and structure is 3.25' or more, inspection opening "B" is recommended. If height between ceiling and structure is less than 3.25', inspection opening "A" and "B" is recommended.(verify state and local codes).

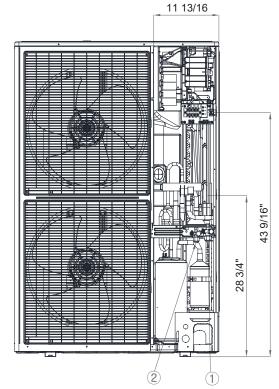
Unit Clearance From Structure



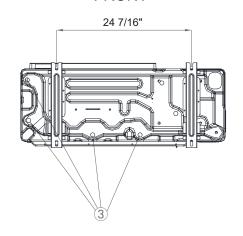
Samsung Low Ambient Heating "Max Heat" Duct S, Single Zone, Split System AC030JXSCCH/AA Dimensional Drawing







FRONT WITHOUT SERVICE COVER



No.	Description
1	Suction service valve
2	Liquid service valve
3	Drain opening
4	Power and communication conduit openings

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