SAMSUNG

SUBMITTAL AC018MNHDCH/AA
Samsung Duct S, Single Zone Duct, Split System

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

Specifications

Model	Indoor Unit Model Number		AC018MNHDCH/AA
	Outdoor Unit Model Number		AC018JXADCH/AA
Performance [1]	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,000
	Capacity Range	Cooling (Btu/h)	5,000 - 21,000
		Heating (Btu/h)	3,800 - 25,000
	SEER / EER		18.6 / 9.4
	COP (nominal heating)		3.1
	HSPF		10.6
	AHRI Certification Number		10146781
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254 (max. 3% deviation from each)
	Operating Current	Cooling (A)	2.1 / 8.6 / 10.0
	(min. / std. / max.)	Heating (A)	1.7 / 8.4 / 12.0
	Max. Breaker	Amps	15
	Min. Circuit Ampacity (A)		10.0
Dimensions	W X H X D	Indoor Unit	33 1/2 X 9 13/16 X 27 9/16
	(in.)	Outdoor Unit	34 5/8 X 25 1/8 X 12 1/4
	Weight	Indoor Unit	68.8
	(lbs.)	Outdoor Unit	99.2
	Duct Connections	Supply (in.)	32 3/16 X 8 11/16
	(W X H)	Return (ID, in.)	32 3/16 X 8 11/16
Heat Exchanger	Type	Indoor Unit	Aluminum Fin / Copper Tube
		Outdoor Unit	Aluminum, flat fin, micro channel
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	26 / 30 / 34
	Outdoor Unit dB(A)	Cooling / Heating (high)	48 / 48
Operating Temperatures °F(°C)	Outdoor	Cooling	23 ~ 115°F(-5 ~ 46°C)
			0 ~ 115°F(-18 ~ 46°C) w/ baffle
		Heating	-4 ~ 76°F(-20 ~ 24°C)
	Indoor	Cooling	61 ~ 90°F(16 ~ 32°C)
		Heating	T ≤ 80°F(27°C)
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	1/2"
	Maximum (ft.)		98
	Maximum Vertical Separation (ft.)		66
	Condensate Connection (with included adapter)		1 1/16" ID for 3/4" PVC
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	oz.	45.86
	Charged for		25 ft
	Additional Refrigerant		0.11 oz/ft over 25 ft
Compressor	Type		Inverter Driven, Twin BLDC, Rotary
	RLA	Amps	6.1
Evaporator Fan	Type		BLDC (1) With Sirocco Fan (2)
	Air Volume	CFM (L/M/H)	353 / 477 / 600 (at standard ESP)
		Total CFM Range [2]	350 - 790
	Output (W) / FLA (A)		153 W / 1.1 A
	Static Pressure	Standard ("WC)	0.10
		Min. / Max. ("WC)	0.1 - 0.6
Condenser Fan	Motor		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		0.13 A / 39 W / 1,550 CFM
Optional Accessories	Wired Controller	Simplified Touch Controller	☐ MWR-SH11UN
		Advanced Wired Controller	☐ MWR-WG00UN
	Wi-Fi Adapter		☐ MIM-H04UN
	Wireless Signal Control	Wireless Signal Receiver	☐ MRK-A10N
		Wireless Controller	☐ AR-EH03U
	External Temperature Sensor		☐ MRW-TA
	Filter Box		☐ FB-DS1
	External Contact Control		☐ MIM-B14
	Central Control Interface Module for Connection to DVM Plus Controls (non-NASA)		☐ MIM-N01
	Wall Bracket (for outdoor unit)		☐ CKN-250
	Wind Baffles	Front	☐ WBF- 4M
		Back	☐ WBB-6M
	Line Sets - insulated and flared, interconnect cables included		☐ 25' - ILS-2507 ☐ 50' - ILS-5007
Safety	Certifications	ETL (UL 1995)	
	Devices: PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing		

[1] Certified 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.
[2] Refer to installation manual for full fan curve details
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

- Horizontal discharge airflow
- Low ambient control built in
- 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 unit 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).
- The outdoor unit shall have a night time quiet mode option to reduce operating sound during the night.

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

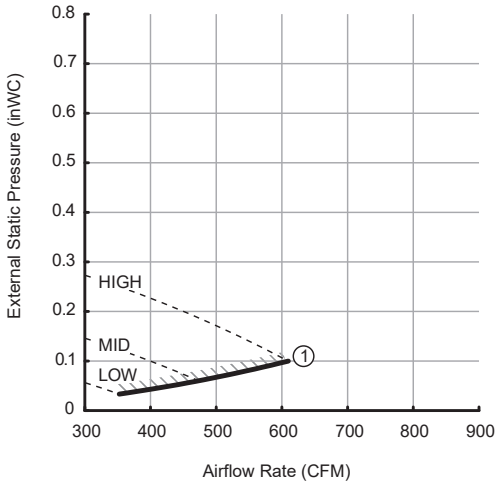
Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Soft-start to reduce current demand during compressor start

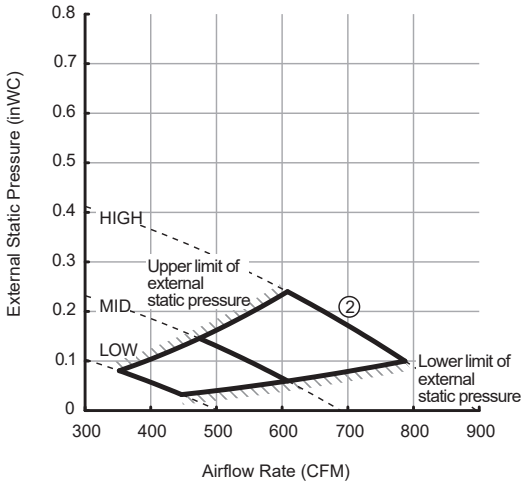
Warranty
10 years compressor, 10 years parts, 1 year limited labor (conditions apply)

Fan performance characteristics based on installation option setting (5 fan options)

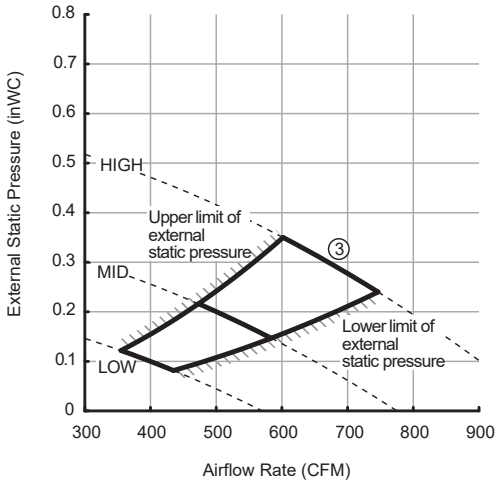
①	External Static Pressure (inWC)	Option Code
	P=0.10 (Default)	01B0EC-1E5411-27343B-374000



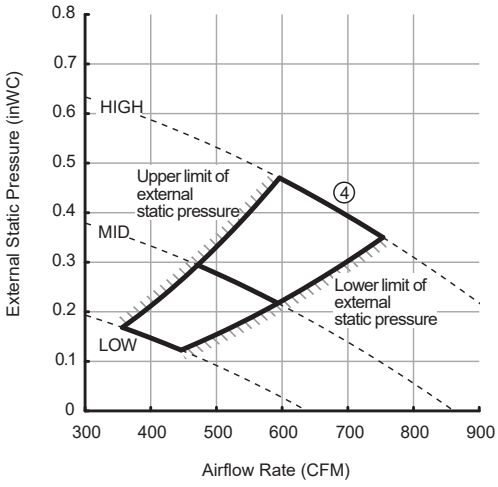
②	External Static Pressure (inWC)	Option Code
	0.10 < P≤ 0.24	01B0EC-1E54AA-27343B-374000



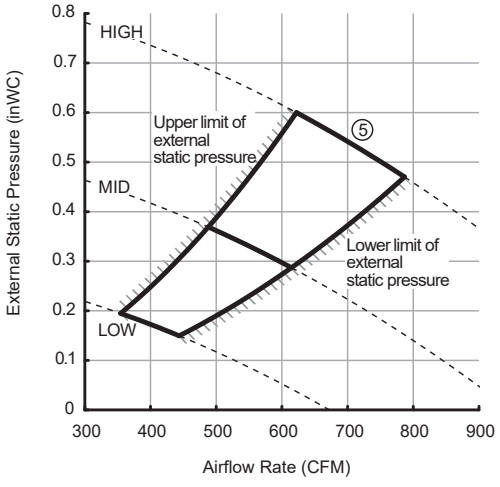
③	External Static Pressure (inWC)	Option Code
	0.24 < P≤ 0.35	01B0EC-1E5933-27343B-374000



④	External Static Pressure (inWC)	Option Code
	0.35 < P≤ 0.47	01B0EC-1E59CC-27343B-374000



⑤	External Static Pressure (inWC)	Option Code
	0.47 < P≤ 0.60	01B0EC-1E5E44-27343B-374000

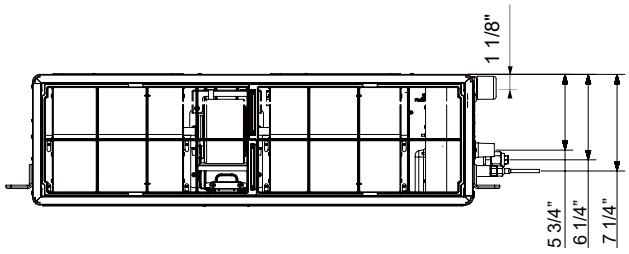


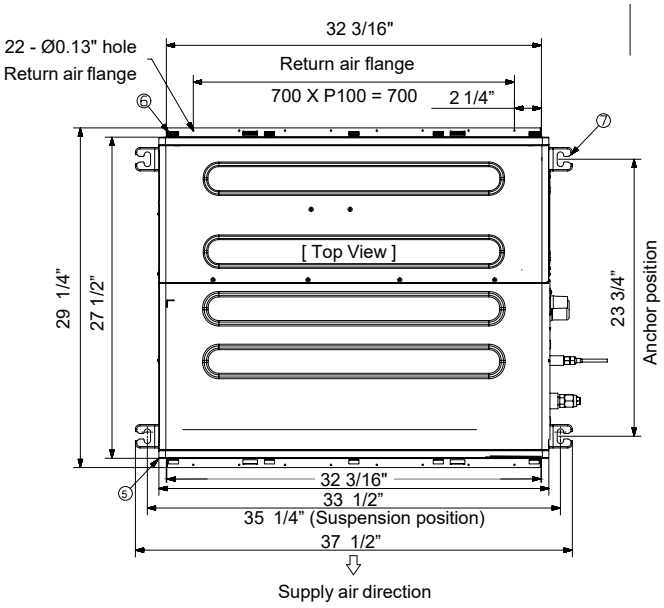
SAMSUNG

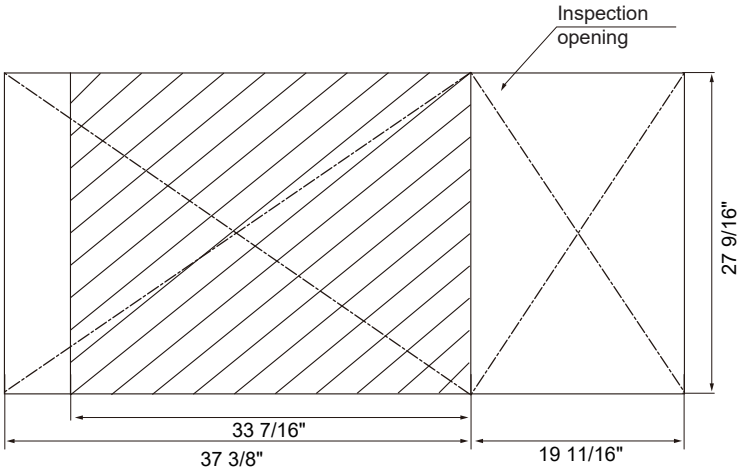
SUBMITTAL AC018MNHDCH/AA

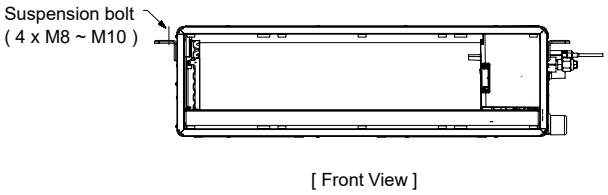
Samsung Duct S, Single Zone Duct, Split System

AC018MNHDCH/AA Dimensional Drawing

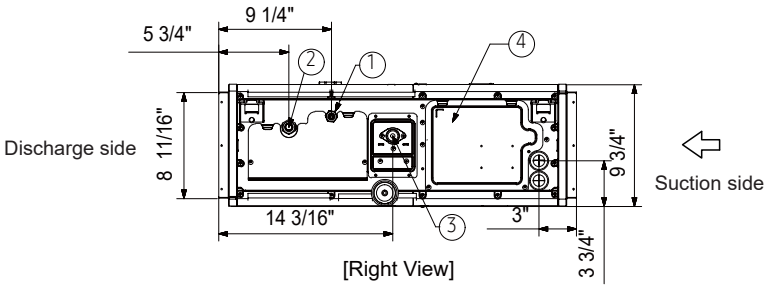








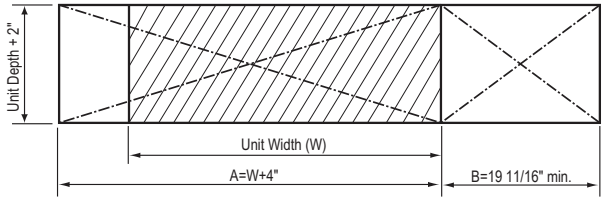
[Front View]



[Right View]

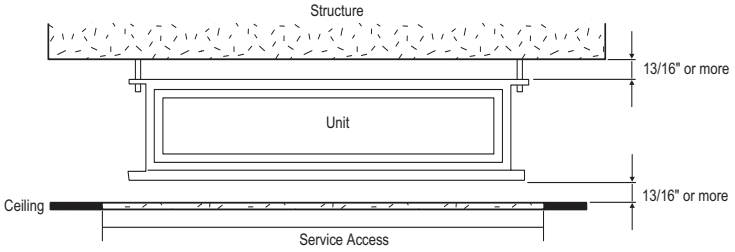
NO	Name	Description
1	Liquid pipe connection	Ø1/4"
2	Gas pipe connection	Ø1/2"
3	Drain pipe connection	1 1/16" ID for 3/4" PVC
4	Power supply connection	-
5	Air discharge flange	-
6	Air filter	-
7	Suspension point	5/16" ~ 3/8"

Inspection Opening Requirements



In applications where there is not a tile ceiling, an inspection hole is required. If height between ceiling and structure is 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).

Unit Clearance From Structure

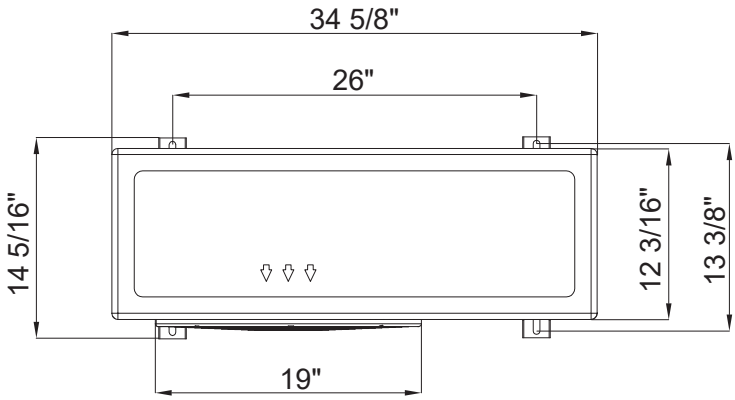


SAMSUNG

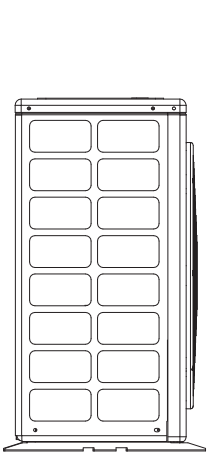
SUBMITTAL AC018MNHDCH/AA

Samsung Duct S, Single Zone Duct, Split System

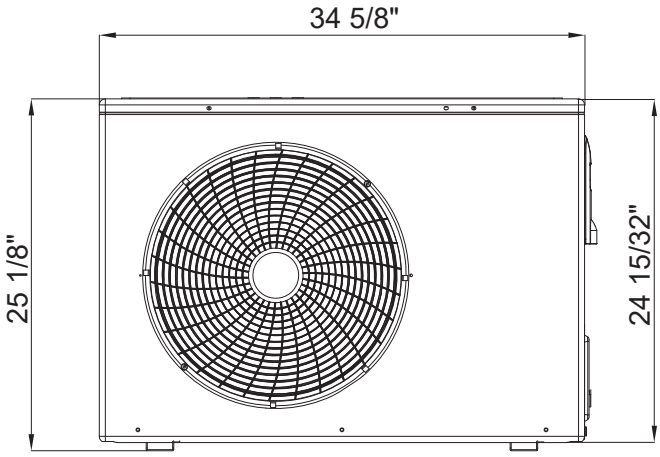
AC018JXADCH/AA Dimensional Drawing



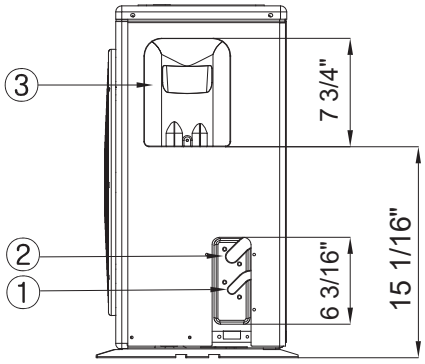
TOP



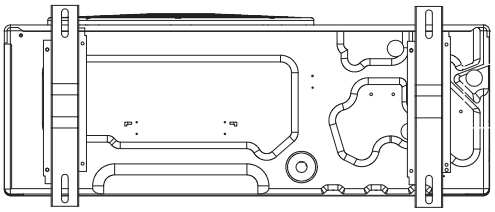
LEFT



FRONT



RIGHT



BOTTOM

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