

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

Reference

Approval

Construction

Schedule #

Specifications			
Model	Indoor Unit Model Number	AC042JNHDCH/AA	
	Outdoor Unit Model Number	AC042JXADCH/AA	
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	42,000 / 47,000
	Capacity Range	Cooling (Btu/h)	16,300 - 45,000
		Heating (Btu/h)	13,400 - 50,000
	SEER / EER		19.0 / 10.5
	COP (nominal heating)		3.46
	HSPF		10.0
	AHRI Certification Number		8032174
Condensate (pints/hour)		9.37	
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254 (max. 3% deviation from each)
	Operating Current (min. / std. / max.)	Cooling (A)	5.6 / 16.4 / 21.0
		Heating (A)	4.3 / 17.3 / 25.0
	Max. Breaker		Amps 40
	Min. Circuit Ampacity (A)		25.5
Dimensions	W X H X D (inches)	Indoor Unit	47 1/4 X 14 3/16 X 25 9/16
		Outdoor Unit	37 X 48 X 13
	Weight (lbs.)	Indoor Unit	128
		Outdoor Unit	194
	Duct Connections (W X H)	Supply (inches)	45 3/4 X 10 15/16
		Return (ID, inches)	45 5/8 X 10 1/4
Heat Exchanger	Indoor & Outdoor Unit	Type	Aluminum Fin / Copper Tube
		FPI	18
		Pipe Diameter (inches)	1/4
	Outdoor Unit	Type	Aluminum, flat fin, micro channel
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	34 / 37 / 40
	Outdoor Unit dB(A)	Cooling / Heating (high)	51 / 53
Operating Temperatures (°F)	Outdoor	Cooling	23 ≤ T ≤ 115
		Heating	0 ≤ T ≤ 115 w/wind baffle
		Heating	-4 ≤ T ≤ 76
	Indoor	Cooling	61 ≤ T ≤ 90
		Heating	T ≤ 80
Pipe Connections	Indoor & Outdoor	High side (flare)	3/8"
		Low side (flare)	5/8"
	Maximum (ft.)		246
	Maximum Vertical Separation (ft.)		98
	Condensate Connection		1" OD, 3/4" ID
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	oz.	98.77
	Charged for		25 feet
	Additional Refrigerant		0.355 oz/ft over 25 feet
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, Twin BLDC, Rotary
	RLA	Amps	17.0
Evaporator Fan	Type		BLDC (2) With Sirocco Fan (2)
	Air Volume	CFM (L/M/H)	1160 / 1280 / 1400
	Output (W) / FLA (A)		183 W X 2 / 1.9 A X 2
	Static Pressure	Standard ("WC)	0.12
		Min. / Max. ("WC)	0.16 - 0.8
Condenser Fan	Motor		BLDC With Axial Type Fan (2)
	FLA / Watts / CFM (max.)		0.48 A X 2 / 125 W X 2 / 3,040 CFM
Optional Accessories	Wired Controller	Simplified	MWR-SH00N
		Simplified Touch Controller	MWR-SH10N
		Premium w/scheduling	MWR-WE11N
	Wi-Fi Adapter		MIM-H03UN
	Wireless Signal Control	Wireless Signal Receiver	MRK-A10N
		Wireless Controller	MR-EH00U
	External Temperature Sensor		MRW-TA
	Filter Box		FB-M48/H3648
	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-1M2 (requires 2)
		Back	WBB-2M
	Line Sets - insulated and flared, interconnect cables included		25' - ILS-2510 50' - ILS-5010
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		



- 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 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.
- 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).

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 (MIM-D00AN, MIM-B17N, MIM-B18N, MCM-A300N).

Refrigerant System
The refrigerant shall be R410A

The compressor shall be hermetically sealed, inverter controlled, twin BLDC Rotary

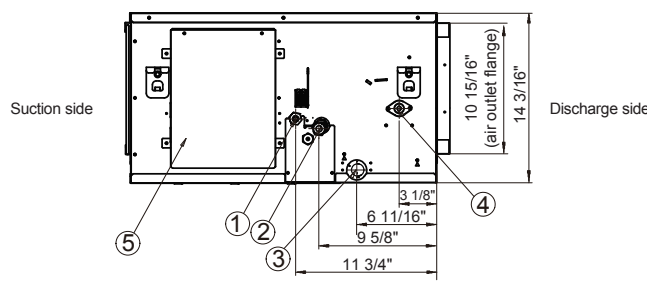
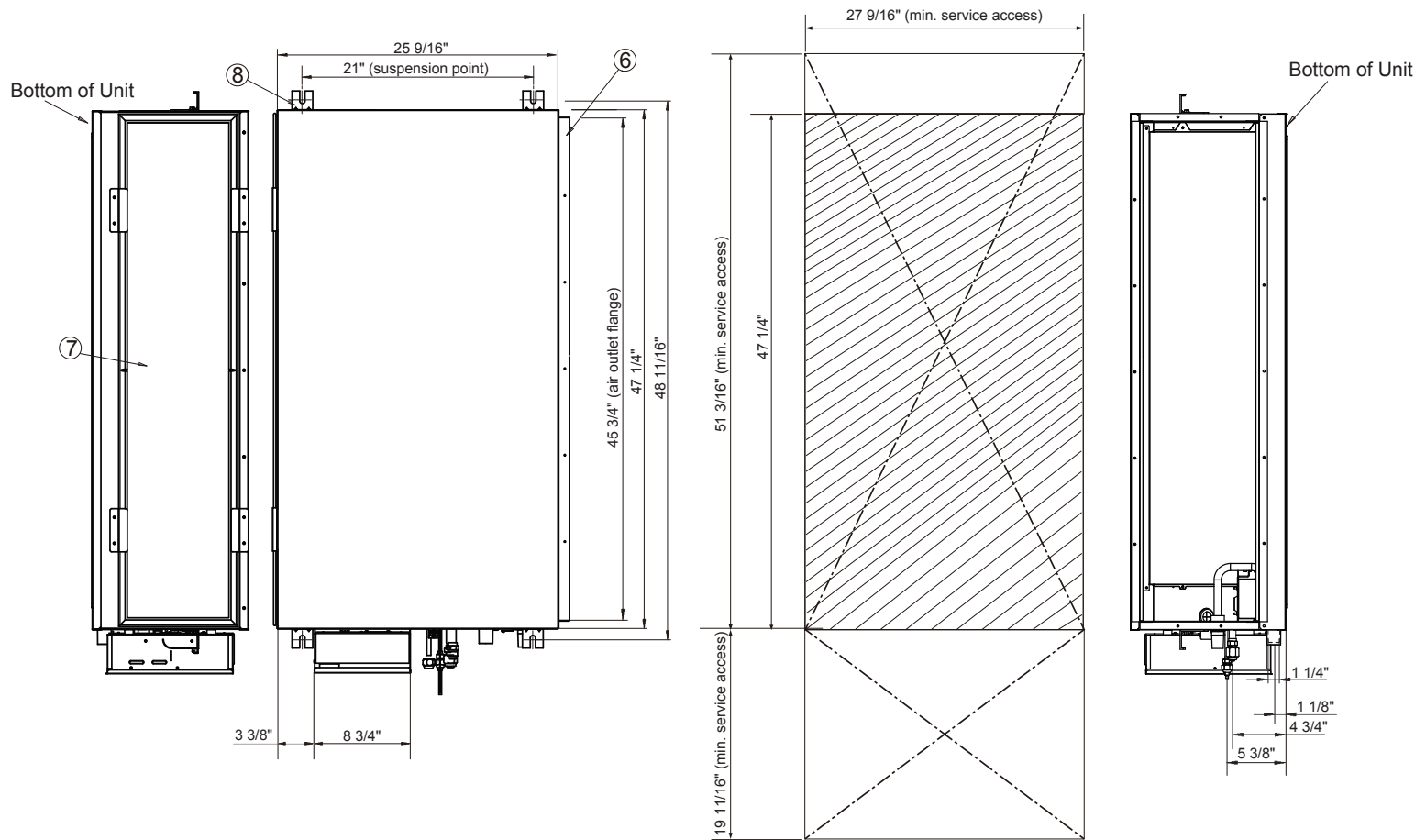
Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Soft-start to reduce current demand during compressor start

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

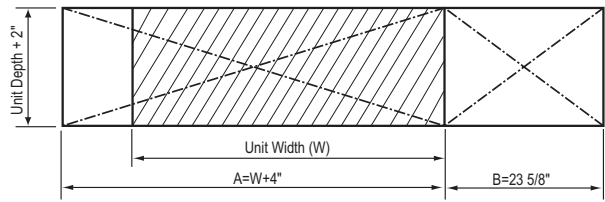
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

* Nominal cooling capacities are based on: Indoor temperature: 80°F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB.
* Nominal heating capacities are based on: Indoor temperature: 70 F DB, 60 F WB. Outdoor temperature: 47 F DB, 43 F WB.



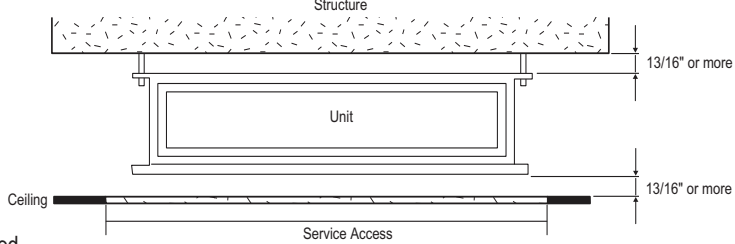
No.	Name	Description
①	Liquid Pipe Connection	Ø 3/8" Flare
②	Gas Pipe Connection	Ø 5/8" Flare
③	Drain Pipe Connection (gravity drain)	OD 1", ID 3/4"
④	Drain Pipe Connection (condensate pump)	OD 1", ID 3/4"
⑤	Control Box	-
⑥	Air Discharge Flange	-
⑦	Air Inlet	-
⑧	Suspension Hook	5/16" - 3/8"

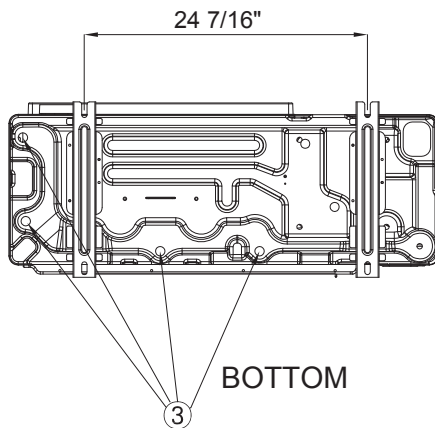
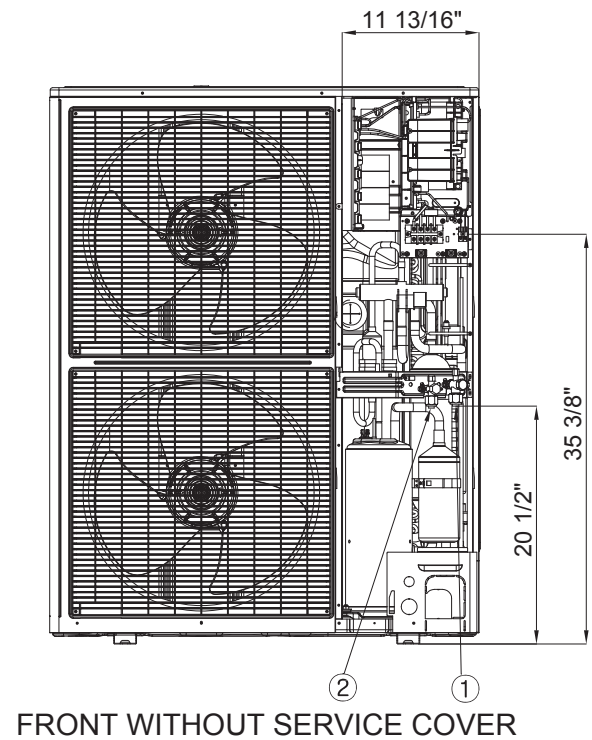
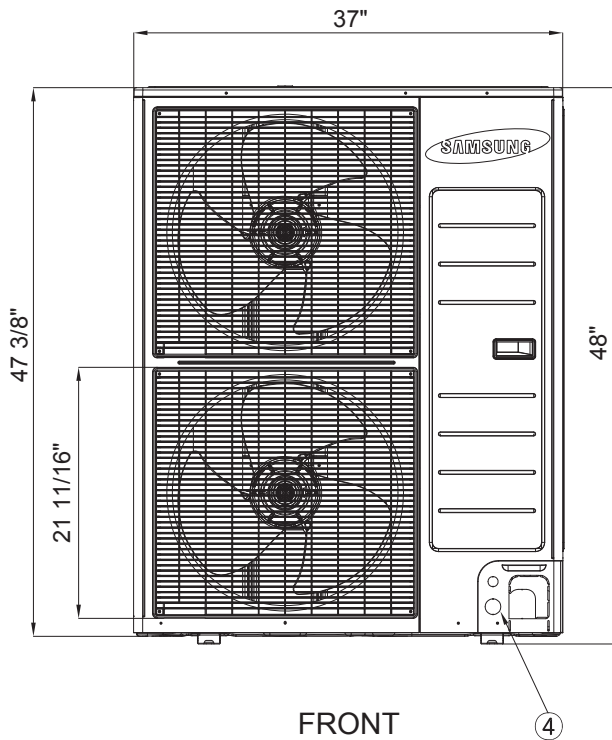
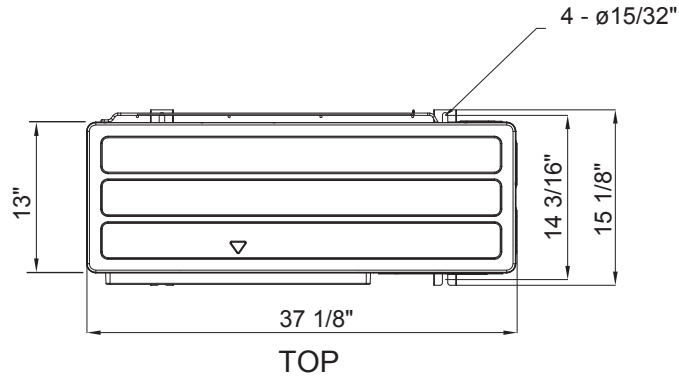
Inspection Opening Requirements



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





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