



SUBMITTAL AC024JNHDCH/AA
Samsung, Single Zone Duct, Split System

Job Name _____
Purchaser _____
Submitted to _____
Unit Designation _____

Location _____
Engineer _____
Reference _____ Approval _____ Construction _____
Schedule # _____

Specifications

Model	Indoor Unit Model Number	AC024JNHDCH/AA
	Outdoor Unit Model Number	AC024JXADCH/AA
Performance	Nominal Capacity	Cooling / Heating (Btu/h) 24,000 / 27,000
	Capacity Range	Cooling (Btu/h) 7,000 - 27,000
		Heating (Btu/h) 5,200 - 31,000
	SEER / EER	20.0 / 12.10
	COP (nominal heating)	3.99
	HSPF	10.5
	AHRI Certification Number	8032088
Power	Condensate (pints/hour)	6.13
	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) 2.8 / 9.2 / 12.0 Heating (A) 2.5 / 10.8 / 14.5
	Max. Breaker Amps	20
Dimensions	Min. Circuit Ampacity (A)	11.7
	W X H X D (inches)	Indoor Unit 45 1/4 x 12 9/16 x 18 7/8 Outdoor Unit 37 X 39 11/16 X 12 3/4
	Weight (lbs.)	Indoor Unit 94.8 Outdoor Unit 142
	Duct Connections (W X H)	Supply (inches) 39 3/8 X 9 5/16 Return (ID, inches) 37 1/2 X 8 3/4
	Heat Exchanger	Type Aluminum Fin / Copper Tube FPI 18 Pipe Diameter (inches) 1/4
Sound Pressure Level	Indoor Unit dB(A)	L / M / H 28 / 32 / 36
	Outdoor Unit dB(A)	Cooling / Heating (high) 50 / 50
Operating Temperatures (°F)	Outdoor	Cooling 23 ≤ T ≤ 115
		Heating 0 ≤ T ≤ 115 w/wind baffle
	Indoor	Cooling -4 ≤ T ≤ 76
		Heating 61 ≤ T ≤ 90
Pipe Connections	Indoor & Outdoor Unit	High side (flare) 1/4" Low side (flare) 5/8"
		Maximum (ft.) 164
	Condensate Connection	Maximum Vertical Separation (ft.) 98
		Condensate Connection 1" OD, 3/4" ID
Refrigerant	Type	R410A
	Control Method	Electronic Expansion Valve
	Factory Charge oz.	74.08
	Charged for	25 feet
	Additional Refrigerant	0.11 oz/ft over 25 feet
Compressor	Manufacturer	Samsung
	Type	Inverter Driven, Twin BLDC, Rotary
	RLA	A 9.0
Evaporator Fan	Type	BLDC (1) With Sirocco Fan (2)
	Air Volume	CFM (L/M/H) 540 / 640 / 740
	Output (W) / FLA (A)	183 W / 0.85 A
	Static Pressure	Standard ("WC) 0.12 Min. / Max. ("WC) 0 - 0.6
Condenser Fan	Motor	BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)	0.48 A / 125 W / 2,190 CFM
Optional Accessories	Wired Controller	Simplified MWR-SH00N Premium w/scheduling MWR-WE10N
	Wi-Fi Adapter	MIM-H03UN
	Wireless Signal Control	Wireless Signal Receiver MRK-A00N Wireless Controller MR-DH00U
	External Temperature Sensor	MRW-TA
	Filter Box	FB-M3036
	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-1 Back WBF-3
	Line Sets - insulated and flared, interconnect cables included	25' - ILS-2509 50' - ILS-5009
	Certifications	ETL & ETLc
	Devices:	PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing

* 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.



- 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).

- 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

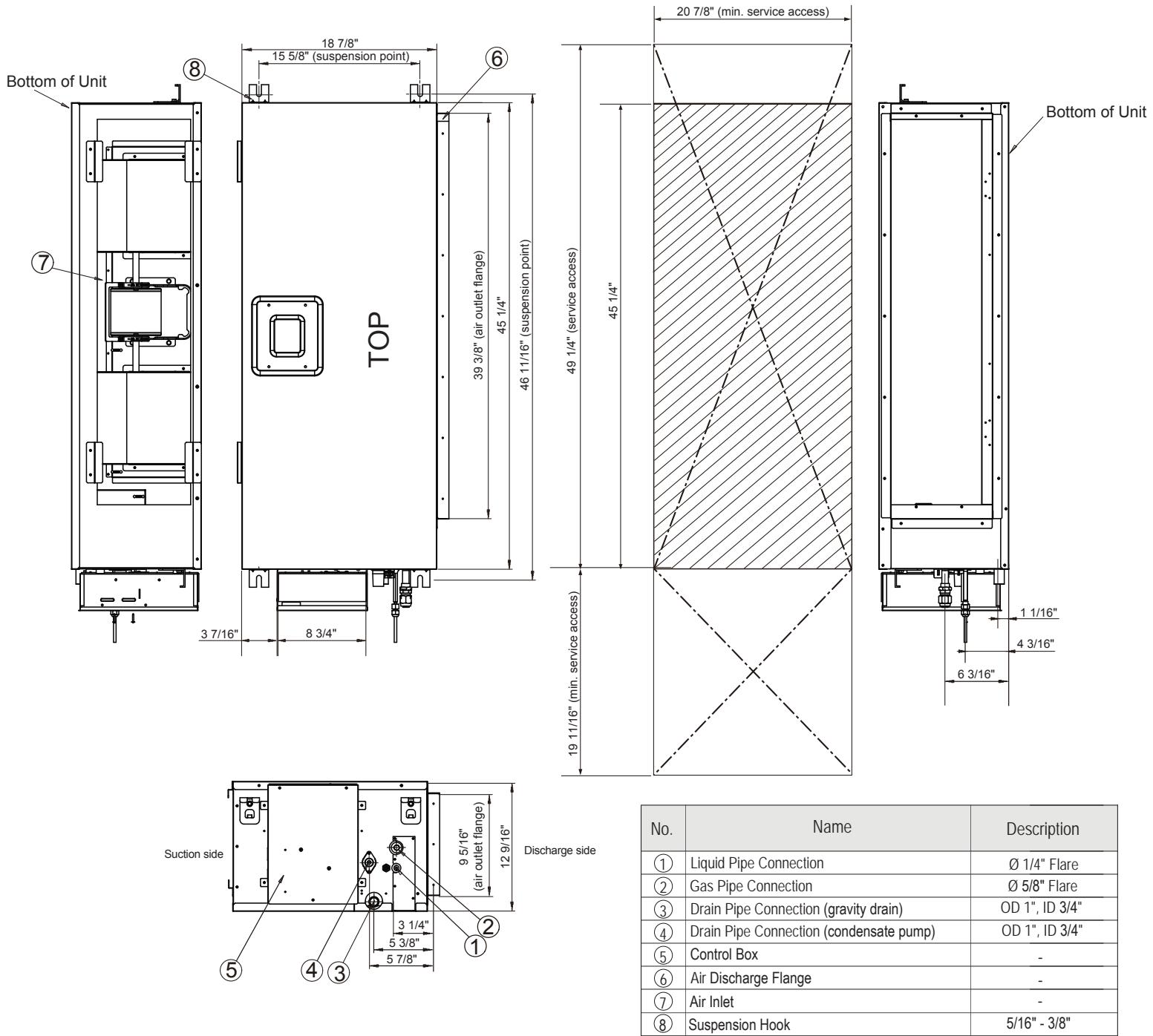
The outdoor unit shall be compatible with AC024JN4DCH/AA (cassette) and AC024JNHDCH/AA (duct) indoor units.

Warranty

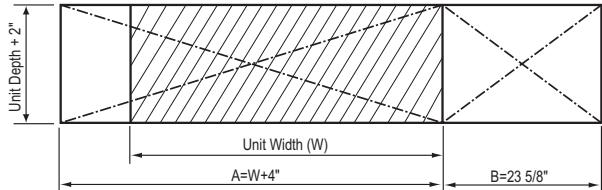
10 years compressor, 10 years parts, 1 year limited labor

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





Inspection Opening Requirements



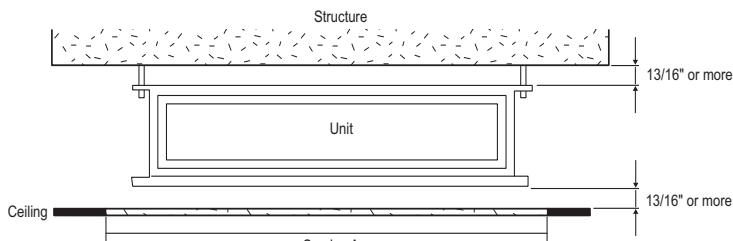
In applications where there is not a tile ceiling, an inspection hole is required.

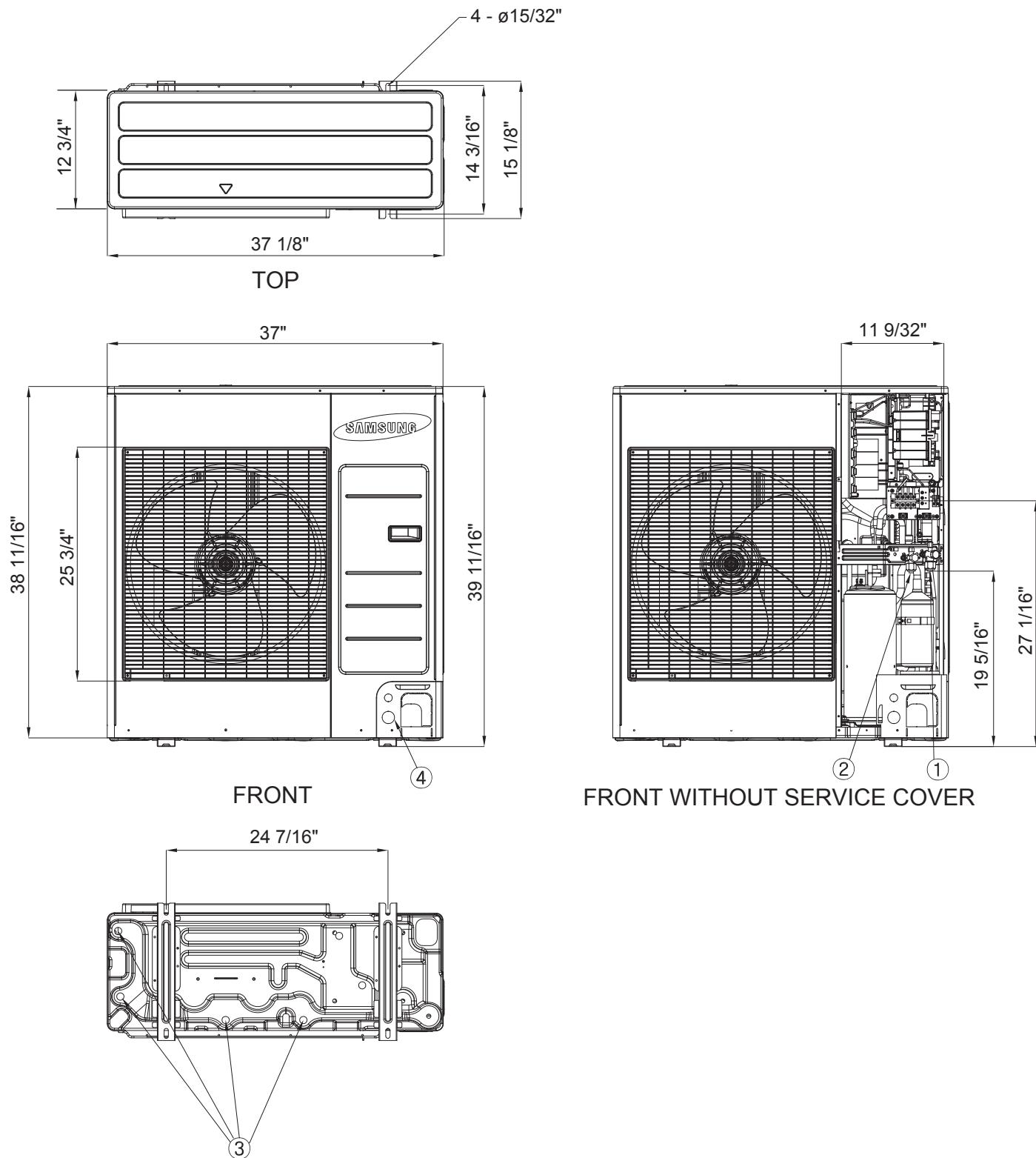
If height between ceiling and structure is 3.25' or more, inspection opening "B" is recommended.

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	Liquid service valve
2	Suction service valve
3	Power and communication conduit openings