

Job Name _____
Purchaser _____
Submitted to _____
Unit Designation _____

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

Specifications

Model	Indoor Unit Model Number		AC042JN4DCH/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		19.6 / 10.4
	COP (nominal heating)		3.17
	HSPF		9.5
	AHRI Certification Number		7918789
Power	Voltage		1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254 (max. 3% deviation from each)
	Operating Current (min. / std. / max.)	Cooling (A)	5.6 / 18.7 / 21.0
		Heating (A)	4.3 / 20.1 / 25.0
	Max. Breaker Amps		35
	Min. Circuit Ampacity (A)		25.5
	Condensate (pints/h)		11.2
Dimensions	W X H X D (in.)	Indoor Unit	33 X 11 5/16 X 33
		Outdoor Unit	37 X 48 X 13
	Weight (lbs.)	Indoor Unit	41.89
		Outdoor Unit	194
Heat Exchanger	Indoor & Outdoor Unit	Type	Aluminum Fin / Copper Tube
		FPI	18
	Outdoor Unit	Pipe Diameter (inches)	1/4
		Type	Aluminum, flat fin, micro channel
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	34 / 40 / 44
	Outdoor Unit dB(A)	Cooling / Heating (high)	51 / 53
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	High side (flare)	3/8"
		Low side (flare)	5/8"
	Maximum (ft.)		246
	Maximum Vertical Separation (ft.)		98
	Condensate Connection		1 1/4" OD, 1" ID
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	oz.	98.77
	Charged for		25 ft
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, Twin BLDC, Rotary
	RLA	A	17.0
Evaporator Fan	Type		BLDC With Turbo Type Fan (1)
	Air Volume	CFM (L/M/H)	900 / 1010 / 1250
	Output	Watts	97
	Operating Current	Amps	0.35
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
Fascia Panel	Model Number		PC4NUSKFN (purchased separately)
	L X W X H	in.	37 3/8 X 37 3/8 X 1
	Weight	lbs.	13
Optional Accessories	Wired Controller	Simplified	MWR-SH00N
		Simplified Touch Controller	MWR-SH10N
		Premium w/scheduling	MWR-WE11N
	Wi-Fi Adapter		MIM-H03UN
	External Temperature Sensor		MRW-TA
	Wireless Controller		MR-EH00U
	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
		Back	WBB-2M
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	



- 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.
- Electro-static, washable, pleated filter as standard (included with fascia panel).
- Built in condensate pump and check valve with maximum 29" lift, check valve, and float switch that disables indoor unit during overflow detection.
- Knock-out for outside air capability (with booster fan connection)
- Fascia panel shall have LED indicator lights, IR receiver, and 4 motorized louvers (independent louver control is possible with wireless or premium wired controller).
- 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 have a galvanized steel frame with HIPS chassis and fascia panel certified to UL94 V0.

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 16 AWG X 2 shielded

Wired or wireless controls must be purchased separately

Connection to optional wired controllers shall be 16 AWG X 2 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-*****N).

Refrigerant System

The refrigerant shall be R410A

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

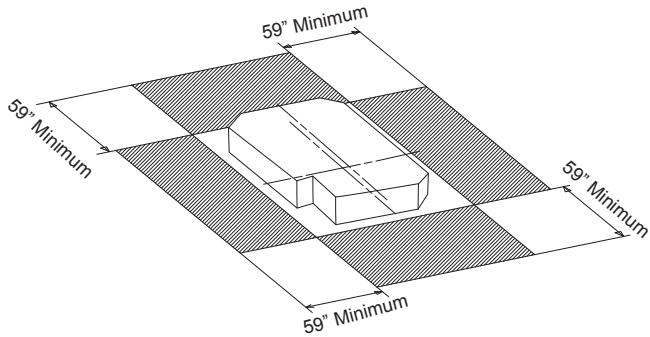
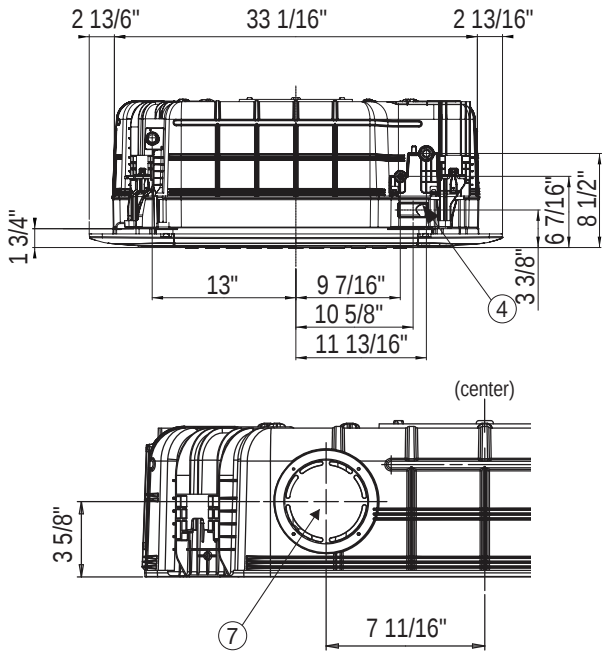
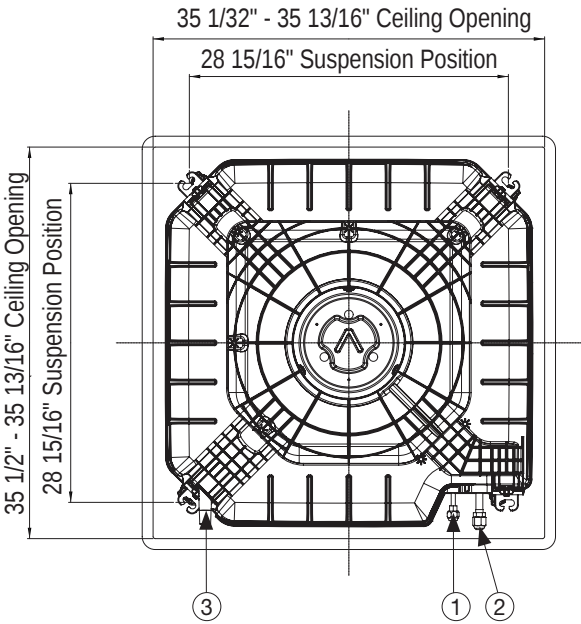
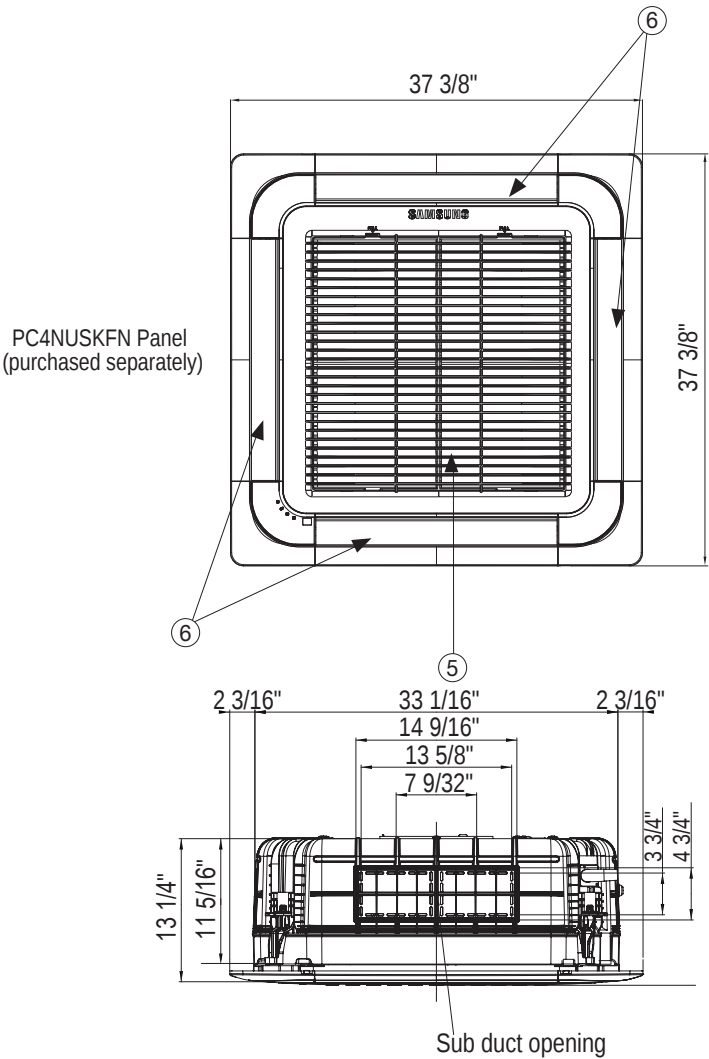
Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Soft-start to reduce current demand during compressor start

Warranty

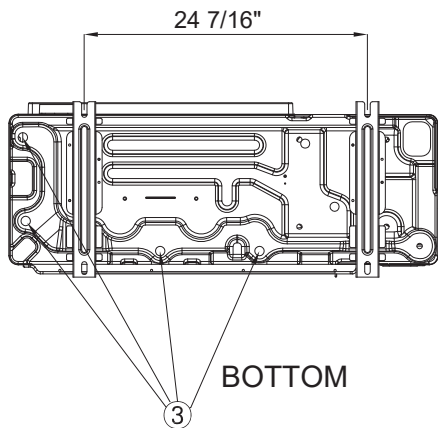
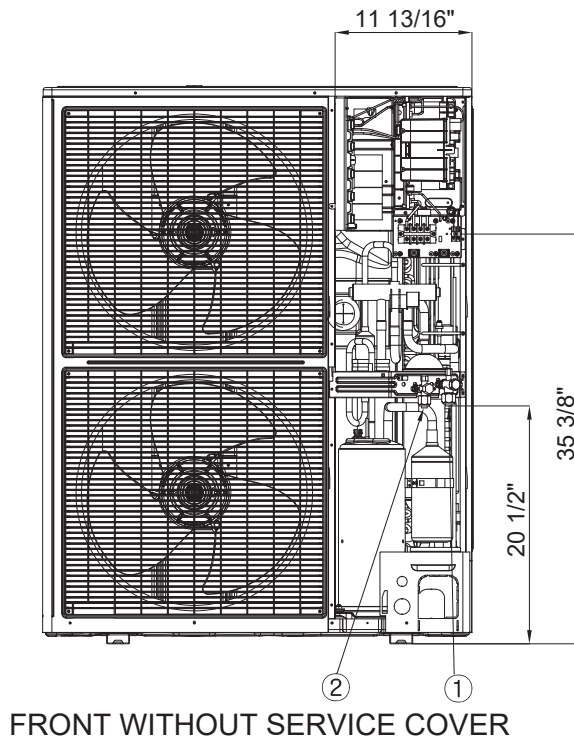
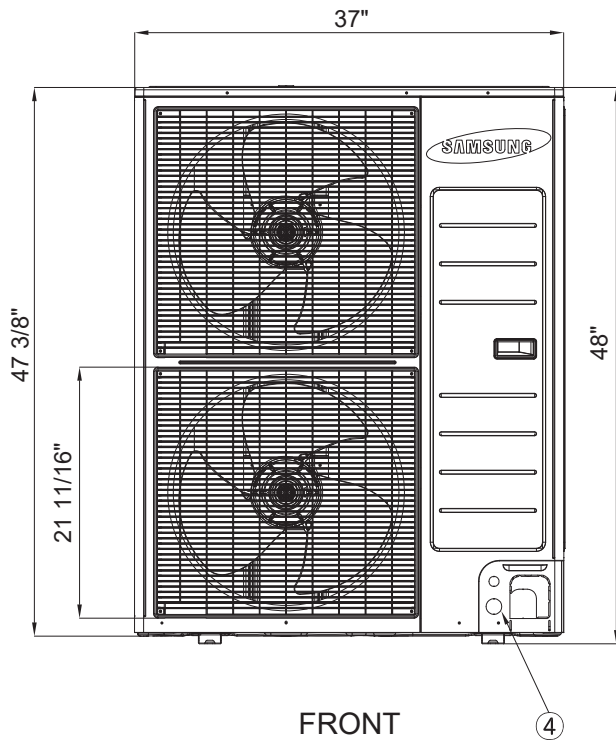
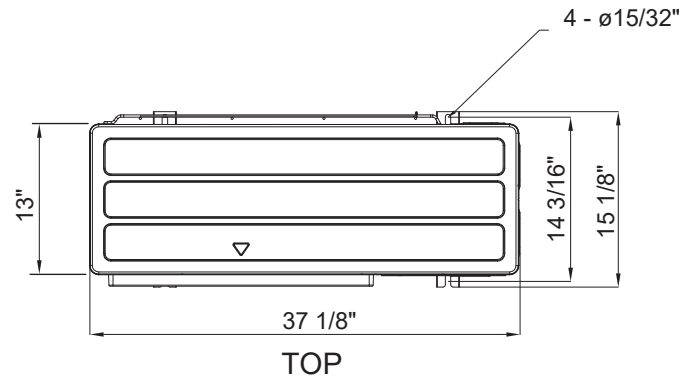
10 years compressor, 10 years parts, 1 year limited labor (conditions apply)

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



Proper clearance must be maintained around unit for proper operation.

No.	Name	Description
①	Liquid Pipe Connection	Ø 3/8" Flare
②	Gas Pipe Connection	Ø 5/8" Flare
③	Drain Pipe Connection	OD 1 1/4", ID 1"
④	Conduit for Power & Communication Wiring	-
⑤	Air Inlet Grille	-
⑥	Air Outlet Louver	-
⑦	Fresh Air Inlet	Ø 4"



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