

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

Reference

Approval

Construction

Schedule #

Specifications			
Model	Indoor Unit Model Number		AC024MNADCH/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		18.3 / 10.21
	COP (nominal heating)		3.08
	HSPF		10.8
AHRI Certification Number		10227625	
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)	2.5 / 10.4 / 10.5
		Heating (A)	2.5 / 11.4 / 14.5
	Max. Breaker	Amps	20
Min. Circuit Ampacity (A)	12.5		
Dimensions	W X H X D (in.)	Indoor Unit	41 7/8 X 11 5/8 X 11 7/8
		Outdoor Unit	37 X 39 5/16 X 13
	Weight (lbs.)	Indoor Unit	32.19
		Outdoor Unit	142.20
Heat Exchanger	Indoor & Outdoor Unit	Type	Aluminum Fin / Copper Tube
		FPI	18
		Pipe Diameter (in.)	1/4
	Outdoor Unit	Type	Aluminum, flat fin, micro channel
Sound Pressure Level	Indoor Unit dB(A)	(Silent) / L / M / H	32 / 35 / 39 / 43
	Outdoor Unit dB(A)	Cooling / Heating (high)	50 / 50
Operating Temperatures °F(°C)	Outdoor	Cooling	23 ~ 115°F(-5 ~ 46°C)
		Heating	0 ~ 115°F(-18 ~ 46°C) w/ baffle
	Indoor	Cooling	-4 ~ 76°F(-20 ~ 24°C)
		Heating	61 ~ 90°F(16 ~ 32°C)
			T ≤ 80(27°C)
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	5/8"
	Maximum (ft.)		164
	Maximum Vertical Separation (ft.)		98
Condensate Connection		11/16" OD	
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	oz.	74.08
	Charged for Additional Refrigerant		25 ft
			0.11 oz/ft over 25 ft
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, Twin BLDC, Rotary
	RLA	Amps	9.0
Evaporator Fan	Type		BLDC with Crossflow fan (1)
	Air Volume	CFM (L/M/H)	410 / 477 / 551
	Output (W) / FLA (A)		27 W / 0.70 A
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 Touch Controller	MWR-SH11UN
		Advanced Wired Controller	MWR-WG00UN
	Condensate pump	Aspen Mini Orange	ASP-MO-UNIV 110-250
		Blue Diamond	BD-BLUE230
	Wi-Fi Adapter		MIM-H04UN
	External Temperature Sensor		MRW-TA
	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-2M
		Back	WBB-3M
Line Sets - insulated and flared, interconnect cables included			25' - ILS2509
			50' - ILS5009
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		



- Wall-mounted evaporator
- 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 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

Indoor unit chassis shall be UL94 V0 with a galvanized steel mounting plate

The indoor unit shall have easy-access to wire, pipe, and drain connections via access panel on front of unit for easier installation and service

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 controls must be purchased separately

Wireless controller included

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

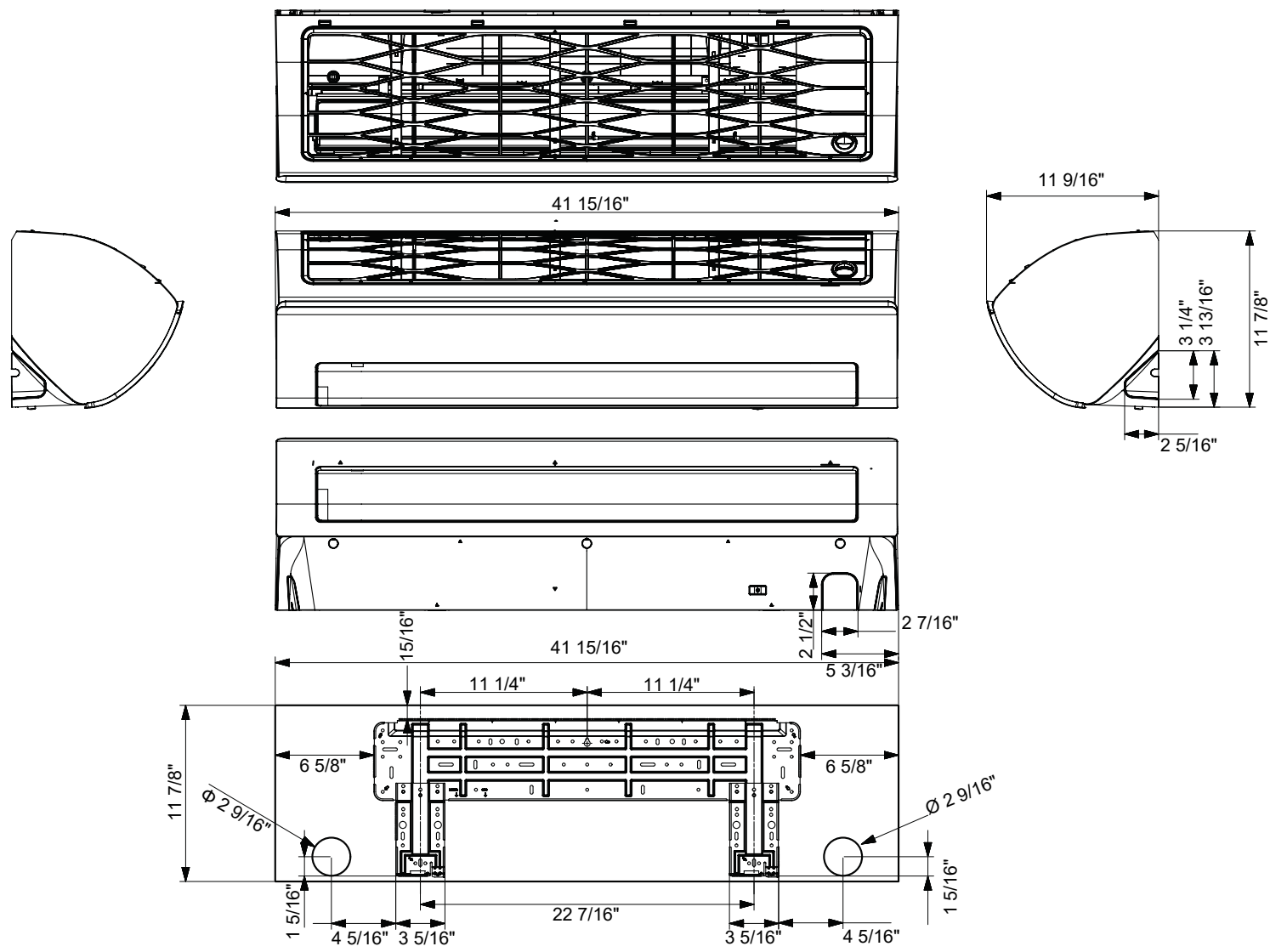
The compressor shall be hermetically sealed, inverter controlled, twin BLDC Rotary

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

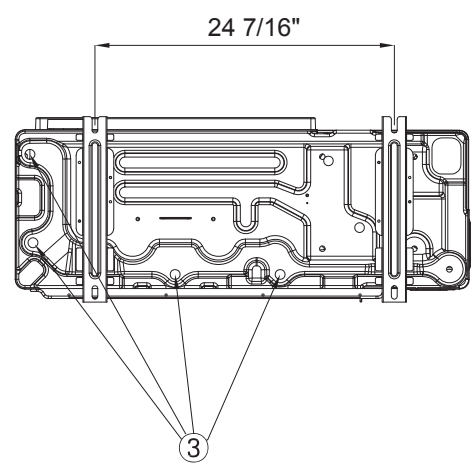
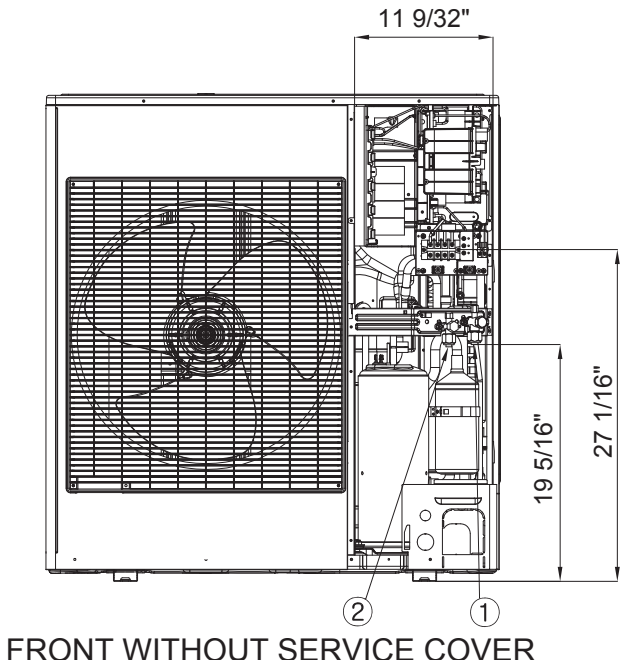
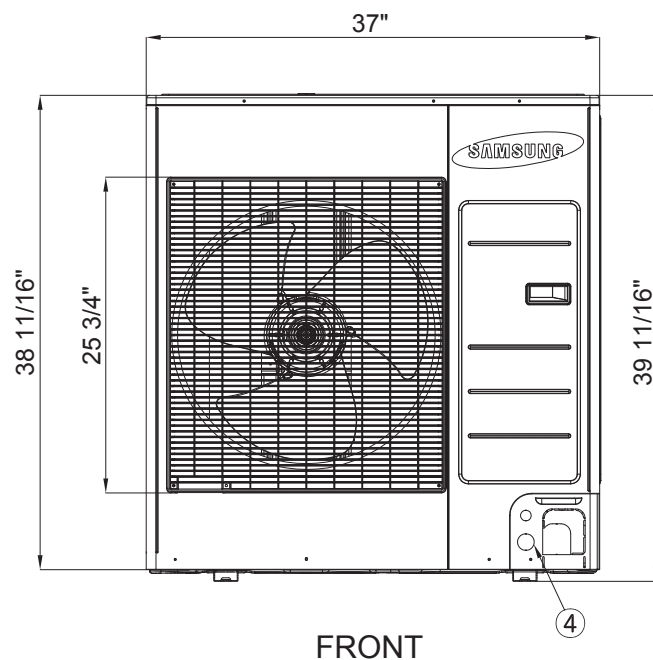
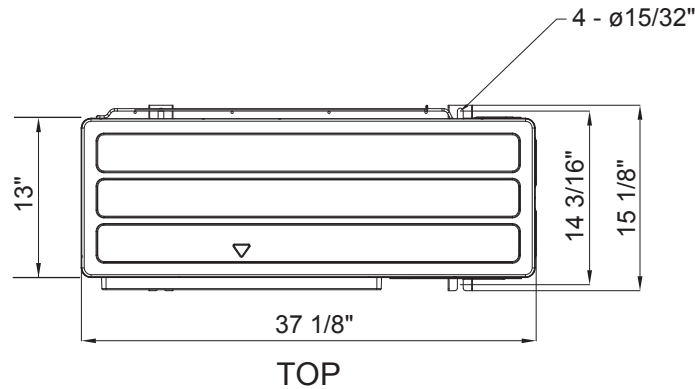
Soft-start to reduce current demand during compressor start

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

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



No.	Name	Description
1	Liquid pipe connection	1/4"
2	Gas pipe connection	5/8"
3	Drain pipe connection	11/16"
4	Power supply & Communication wiring conduit	-



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