

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

Reference

Schedule #

Approval

Construction

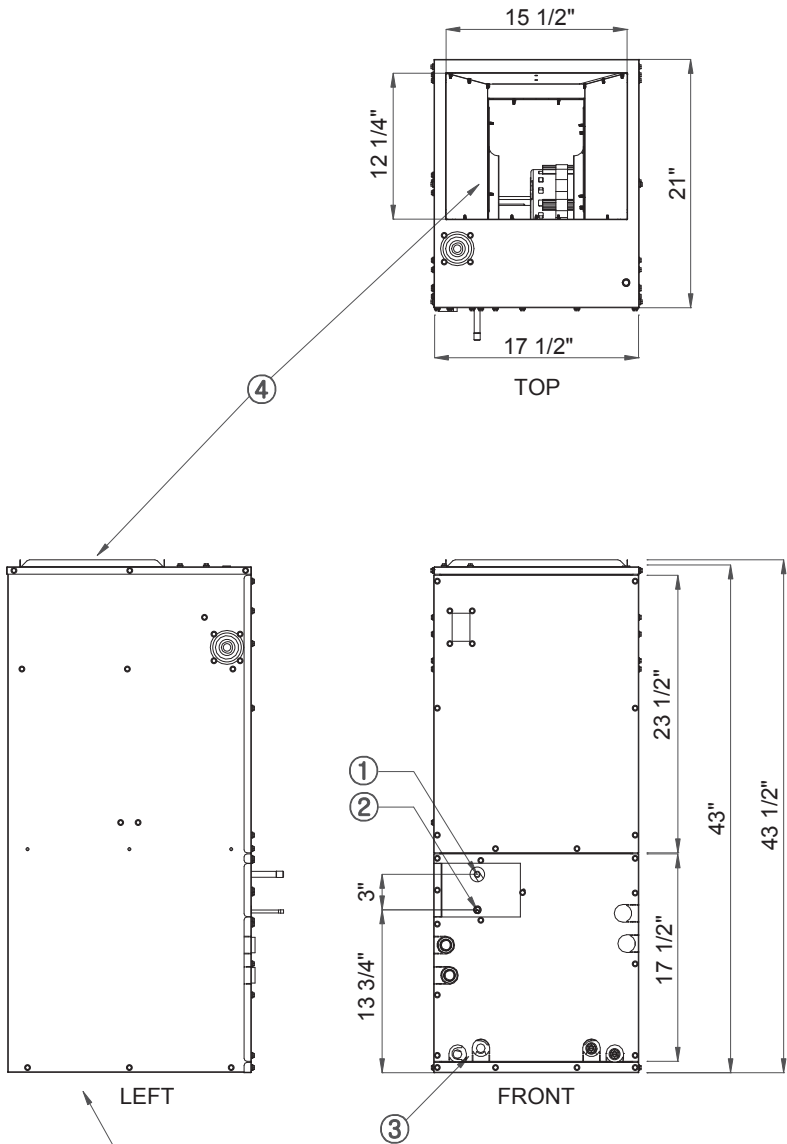
Specifications			
Model	Indoor Unit Model Number		AC024KNZDCH/AA
	Outdoor Unit Model Number		AC024JXADCH/AA
Performance	Nominal Capacity ¹	Cooling / Heating (Btu/h)	24,000 / 27,000
	Capacity Range	Cooling (Btu/h)	7,000 - 27,000
		Heating (Btu/h)	6,700 - 29,000
	SEER / EER		19.5 / 11.00
	COP (nominal heating)		3.0
	HSPF		11.5
	AHRI Certification Number		8950560
Condensate (pints/h)		6.13	
Power (without optional heat kits)	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)	3.8 / 9.8 / 12.0
		Heating (A)	3.6 / 11.6 / 12.8
	Max. Breaker	Amps	20
Min. Circuit Ampacity (A)	13.58		
Dimensions	W X H X D (in.)	Indoor Unit	17 1/2 X 43 X 21
		Outdoor Unit	37 X 39 11/16 X 13
	Weight (lbs.)	Indoor Unit	98.1
		Outdoor Unit	142.2
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	35 / 38 / 41
	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°F(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		3/4" FNPT
Refrigerant	Factory Charge	oz.	74.08
	Charged for		25 ft
	Additional Refrigerant		0.11 oz./ft. over 25 ft
Compressor	Type	Inverter Driven, Twin BLDC Rotary	
	RLA	A	9.0
Evaporator Fan	Type	Double-inlet, forward curve, centrifugal (with ECM motor)	
	Air Volume	CFM (L/M/H)	547 / 636 / 760 (at standard ESP)
		Total CFM Range ²	262 - 888
	HP	1/3	
	Motor Amps	A	0.72
	External Static Pressure ("WC)	Standard	0.2
	Min. / Max.	0 / 0.8	
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	Advanced Wired Controller	MWR-WG00UN
		Simplified Touch Controller	MWR-SH11UN
	Wi-Fi Adapter		MIM-H04UN
	Wireless Signal Control	Wireless Signal Receiver	MRK-A10N
		Wireless Controller	AR-EH03U
	External Temperature Sensor		MRW-TA
	External Contact Control		MIM-B14
	Central Control Interface Module for Connection to DVM Plus Controls (non-NASA)		MIM-N01
	Filter Box (includes 1" MERV 8 filter)		VFB-1
	Supplemental	3kW	VHK-103A
	Electric Heat Kits	5kW	VHK-105A
	Wall Bracket (for outdoor unit)		CKN-250
	Wind Baffles	Front	WBF-2M
		Back	WBB-3M
	Line Sets - insulated and flared, interconnect cables included		
		50' - ILS5009	
Downflow Conversion Kit		VDK-1	
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		



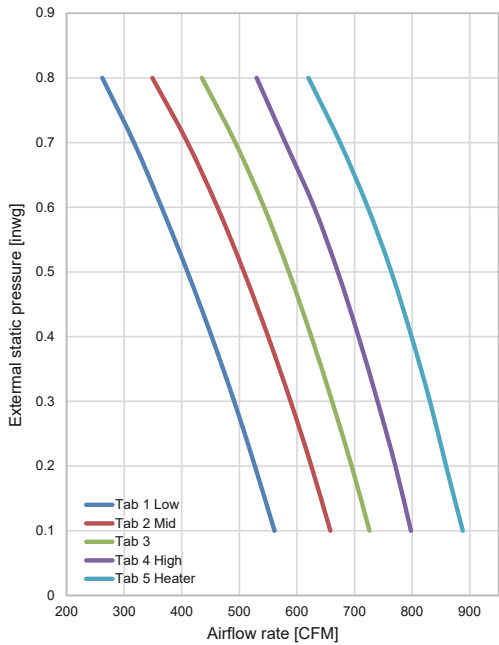
- General Information
- Auto-restart after power loss
 - The indoor unit shall be capable of being field convertible to downflow configuration with optional downflow conversion kit.
 - The outdoor unit shall have a snow accumulation prevention option setting to prevent snow drifting against an idle outdoor 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 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).
 - The pipe connections at the outdoor unit shall be internal allowing pipes to enter the chassis through the front, right side, bottom, or back.
 - Air handler has an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.
 - The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire when optional heat kits are not installed. If VHK-***A supplemental heat kits are installed, power to the heat kits must be provided from a dedicated circuit with proper overcurrent protection per NEC (refer to VHK-***A supporting documents for heat kit electrical data).

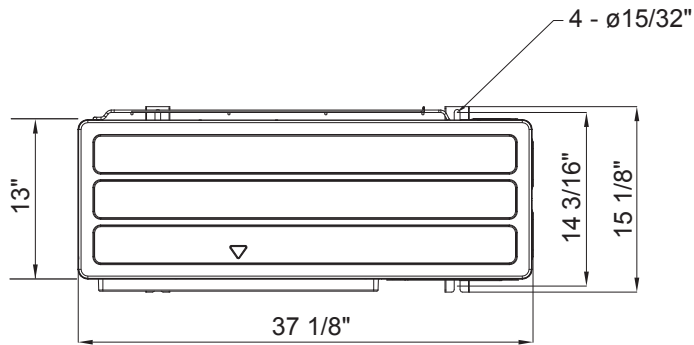
- Construction
- The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability
- The indoor unit shall be constructed of insulated, powder coated, galvanized steel
- Indoor Fan
- The indoor fan is a double-inlet, forward curve, centrifugal type with a single constant-torque (ECM) fan motor
- The indoor unit shall have low, medium, high, and auto fan speed setting options.
- The evaporator fan motor shall have five speed taps
- Heat Exchanger
- The indoor unit heat exchanger shall be mechanically bonded aluminum 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
- Controls must be purchased separately
- Controls shall integrate with a BMS system
- No additional interface modules/adapters are required when connecting to Samsung NASA DVM S central control.
- Refrigerant System
- The refrigerant type shall be R410A
- The compressor shall be hermetically sealed, inverter controlled, twin BLDC Rotary made by Samsung
- 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 when registered (conditions apply)

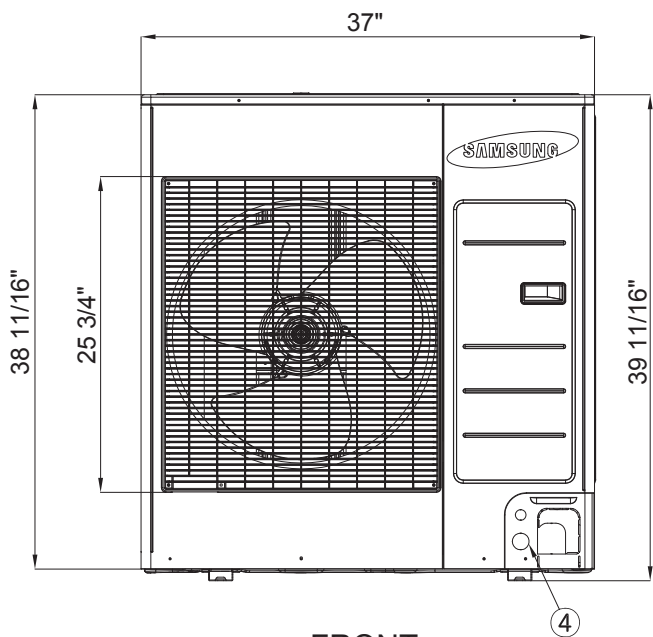


No.	Description
①	Gas Pipe
②	Liquid Pipe
③	Drain Connection
④	Air Outlet
⑤	Air Inlet

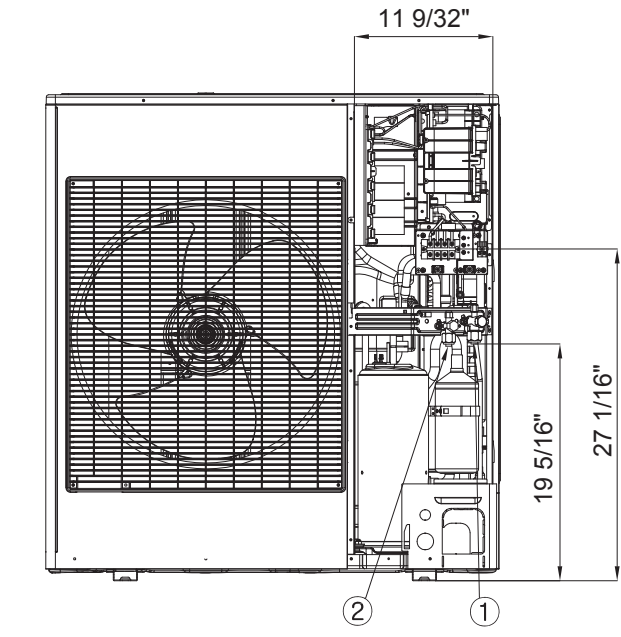




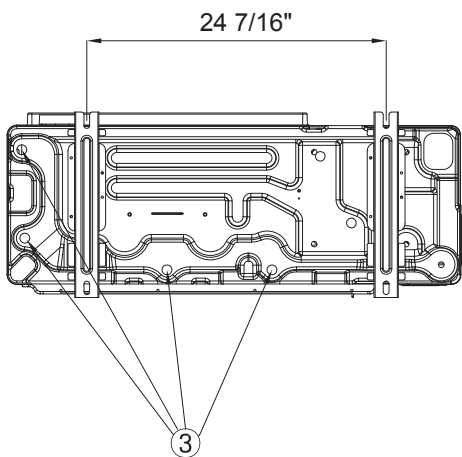
TOP



FRONT



FRONT WITHOUT SERVICE COVER



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