

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

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

Specifications

Model	Indoor Unit Model Number	AC042KNZDCH/AA		
	Outdoor Unit Model Number	AC042JXADCH/AA		
Performance	Nominal Capacity ¹	Cooling / Heating (Btu/h)	42,000 / 47,000	
	Capacity Range	Cooling (Btu/h)	17,000 - 44,000	
		Heating (Btu/h)	14,000 - 49,000	
	SEER / EER	18.4 / 10.15		
	COP (nominal heating)	11.14		
	HSPF	9.6		
	AHRI Certification Number	8950573		
Condensate (pints/hour)	9.93			
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)	5.6 / 18.0 / 21.2	
		Heating (A)	5.5 / 18.3 / 22.5	
	Max. Breaker	Amps	40	
Min. Circuit Ampacity (A)	26.4			
Dimensions	W X H X D (inches)	Indoor Unit	24 1/2 X 58 3/4 X 21 3/4	
		Outdoor Unit	37 X 48 X 13	
	Weight (lbs.)	Indoor Unit	163.14	
		Outdoor Unit	194	
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	36 / 39 / 42	
	Outdoor Unit dB(A)	Cooling / Heating (high)	51 / 53	
Operating Temperatures (°F)	Outdoor	Cooling	23 ≤ T ≤ 115	
		Heating	0 ≤ T ≤ 115 W/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	3/4" FNPT		
Refrigerant	Factory Charge	oz.	98.77	
	Charged for	25 feet		
	Additional Refrigerant	0.355 oz./ft. over 25 feet		
Compressor	Type	Inverter Driven, Twin BLDC Rotary		
	RLA	A	17.0	
Evaporator Fan	Type	Double-inlet, forward curve, centrifugal (with ECM motor)		
	Air Volume	CFM (L/M/H)	1,060 / 1,165 / 1,271 (at standard ESP)	
		Total CFM Range ²	620 - 1,315	
	HP	1/2		
	Motor Amps	A	1.66	
External Static Pressure ("WC)	Standard	0.28		
	Min. / Max.	0.1 / 1.0		
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	
		Premium w/scheduling	MWR-WE10N	
		Simplified Touch Controller	MWR-SH10N	
	Wi-Fi Adapter	MIM-H03UN		
	Wireless Signal Control	Wireless Signal Receiver	MRK-A10N	
		Wireless Controller	MR-EH00U	
	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-3		
	Supplemental Electric Heat Kits	5kW	VHK-305A	
		10kW	VHK-310A	
	Wall Bracket (for outdoor unit)	CKN-250		
	Wind Baffles	Front	WBF-1 (requires 2)	
		Back	WBB-2	
Line Sets - insulated and flared, interconnect cables included	25' - ILS2510			
	50' - ILS5010			
Safety	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			



General Information

- 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 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.
- 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

Connection to optional wired controllers shall be 2 X 16AWG shielded wire

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

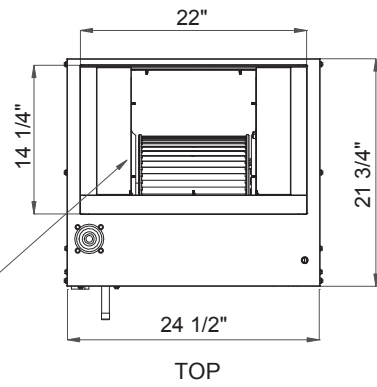
Soft-start to reduce current demand during compressor start

Warranty

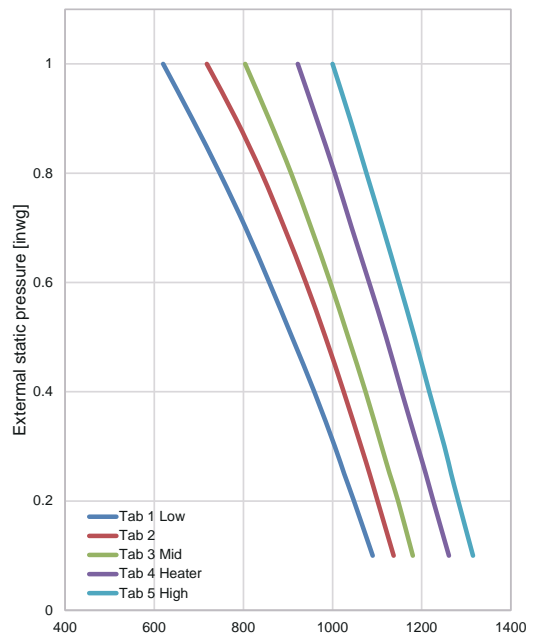
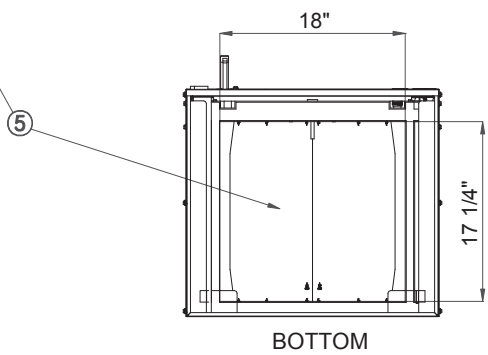
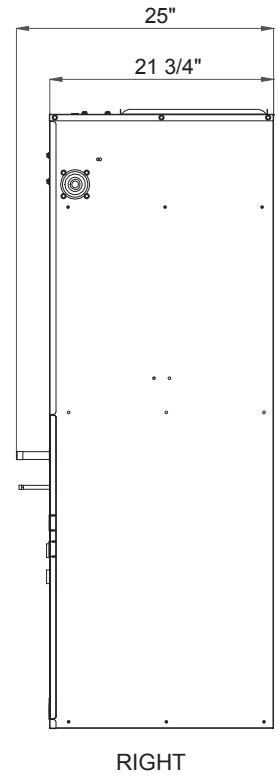
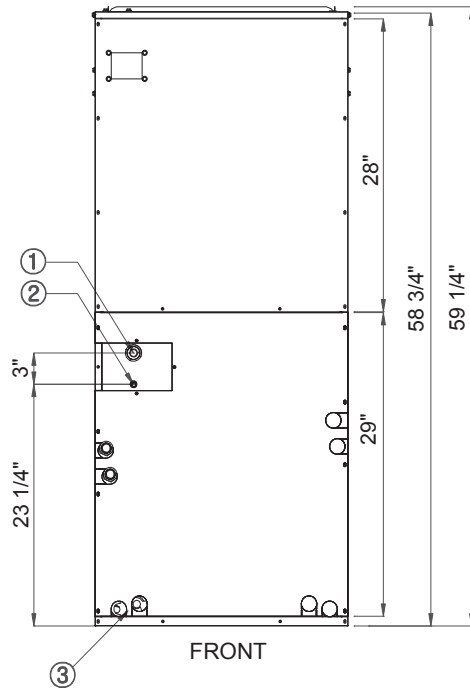
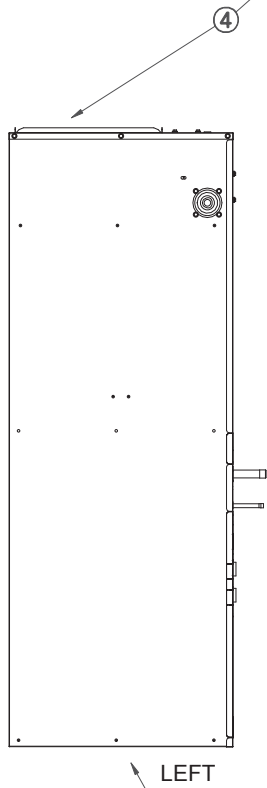
10 Years compressor, 10 years parts, 1 year limited labor when registered (conditions apply)

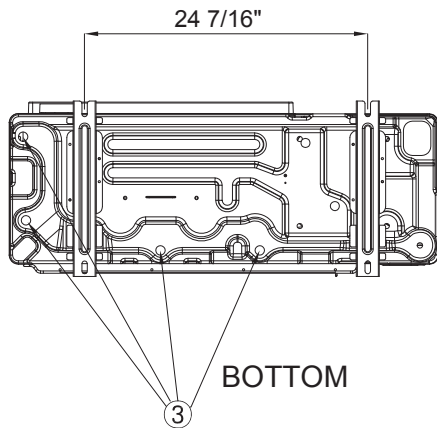
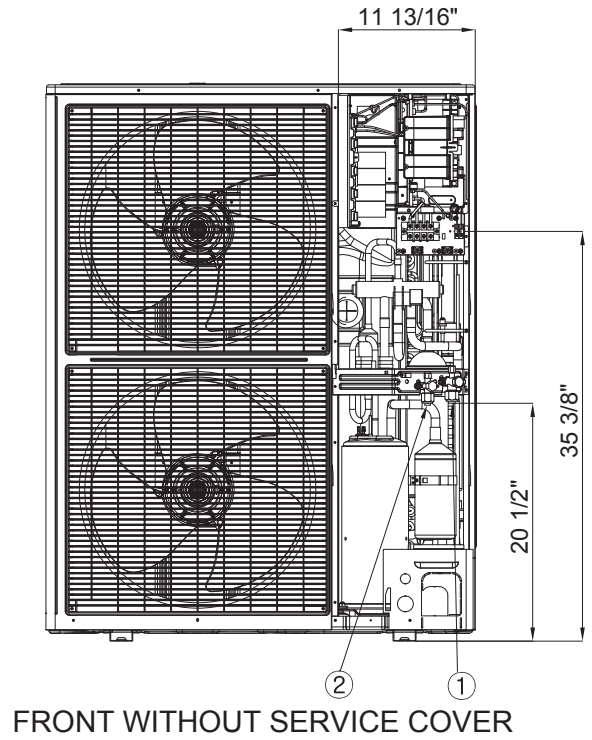
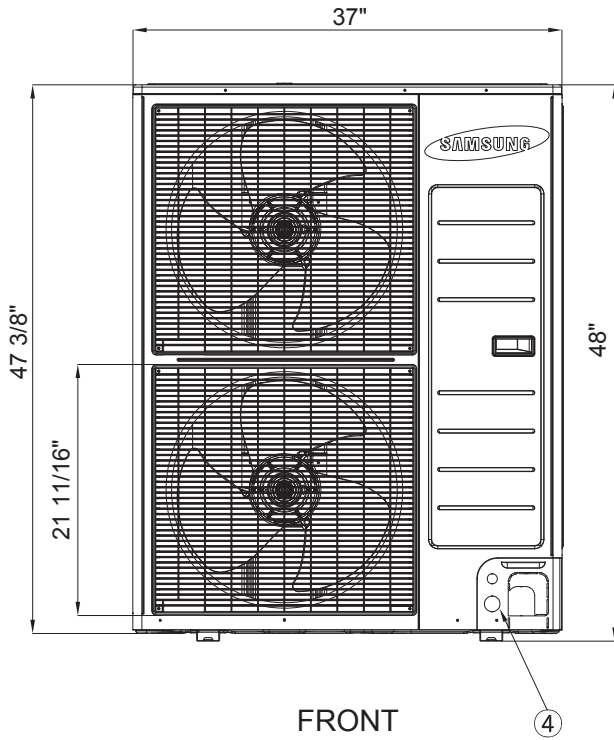
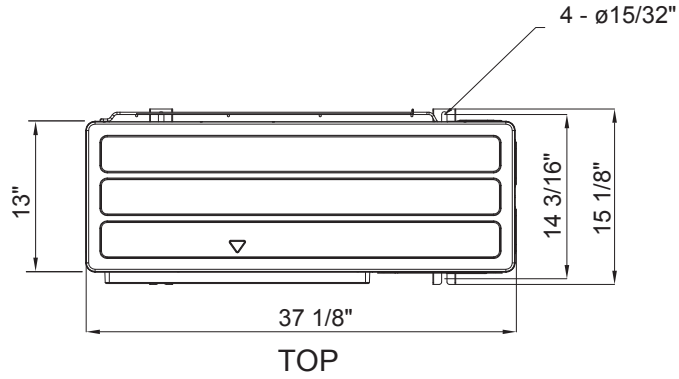
¹ Nominal cooling capacities are based on: Indoor temperature: 80°F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB.
 Nominal heating capacities are based on: Indoor temperature: 70°F DB, 60°F WB. Outdoor temperature: 47°F DB, 43°F WB.
² Refer to installation manual for full fan curve details





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





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