SAMSUNG

SUBMITTAL AC048KNZDCH/AA

Samsung Multi-position Air Handler, Single Zone, Split System

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☐ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

Specifications

Model	Indoor Unit Model Number		AC048KNZDCH/AA
	Outdoor Unit Model Number		AC048JXADCH/AA
Performance	Nominal Capacity [1]	Cooling / Heating (Btu/h)	48,000 / 53,000
	Capacity Range	Cooling (Btu/h)	19,000 - 50,000
		Heating (Btu/h)	16,000 - 55,000
	SEER / EER		18.0 / 9.6
	COP (nominal heating)		10.71
	HSPF		9.7
	AHRI Certification Number		8950574
	Condensate (pints/hour)		11.2
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)	7.9 / 21.3 / 23.0
		Heating (A)	7.5 / 21.6 / 23.5
	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	38 / 41 / 43
	Outdoor Unit dB(A)	Cooling / Heating (high)	53 / 55
Operating Temperatures (^{0}F)	Outdoor	Cooling	23 ≤ T ≤ 115
			0 ≤ T ≤ 115 W/Baffle
		Heating	-4 ≤ T ≤ 76
	Indoor	Cooling	61 ≤ T ≤ 90
		Heating	T ≤ 80
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)	1,130 / 1,271 / 1,413 (at standard ESP)
		Total CFM Range [2]	415 - 1,739
	HP		3/4
	Motor Amps	A	2.09
	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		

[1] Nominal cooling capacities are based on: Indoor temperature: 80^{0}F DB, 67^{0}F WB. Outdoor temperature: 95^{0}F DB, 75^{0}F WB.
Nominal heating capacities are based on: Indoor temperature: 70^{0}F DB, 60^{0}F WB. Outdoor temperature: 47^{0}F DB, 43^{0}F WB.

[2] Refer to installation manual for full fan curve details

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 inter 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)

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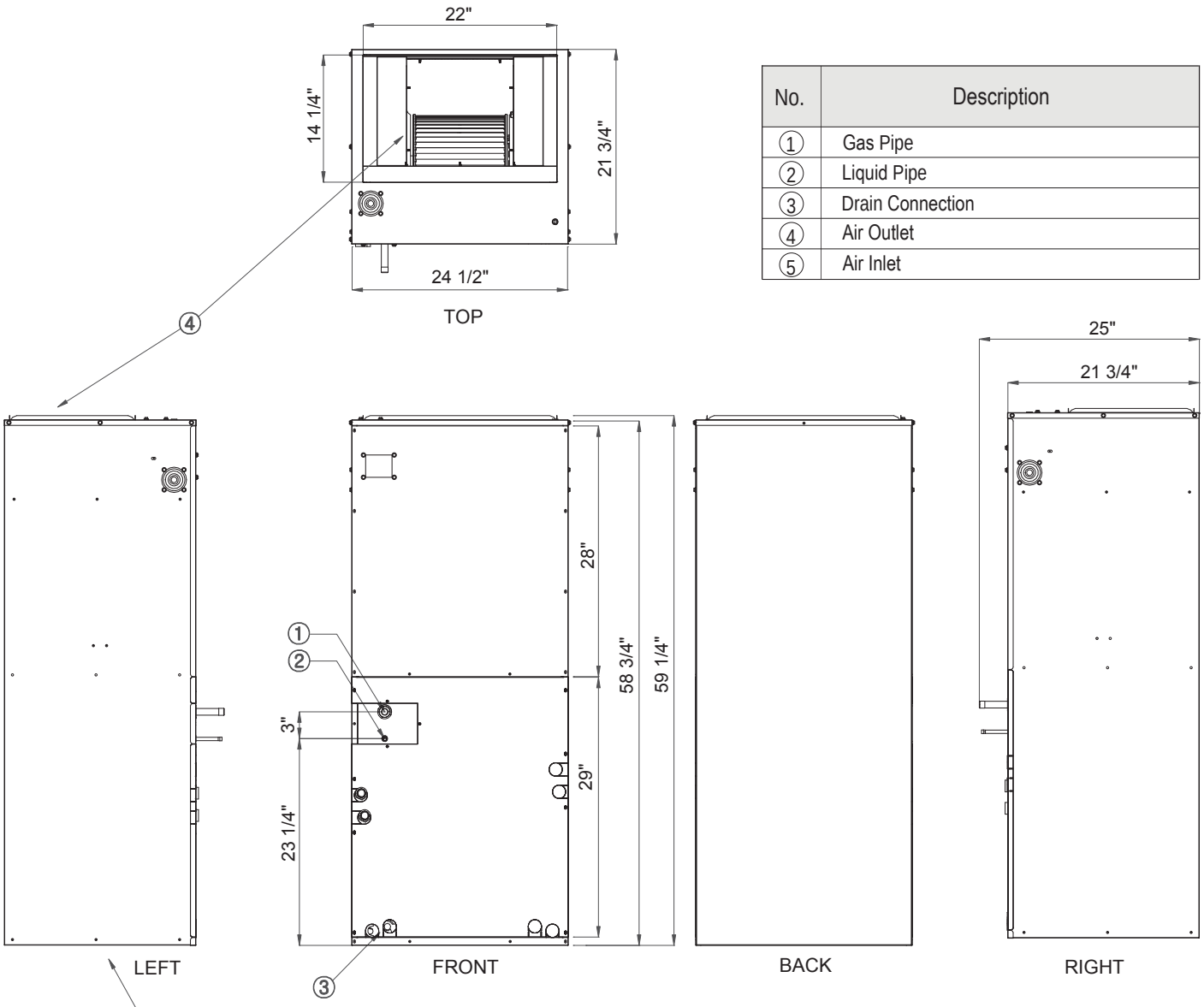
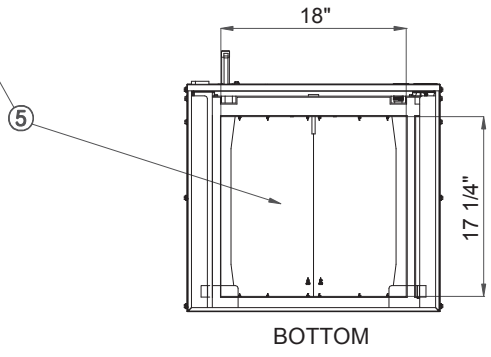
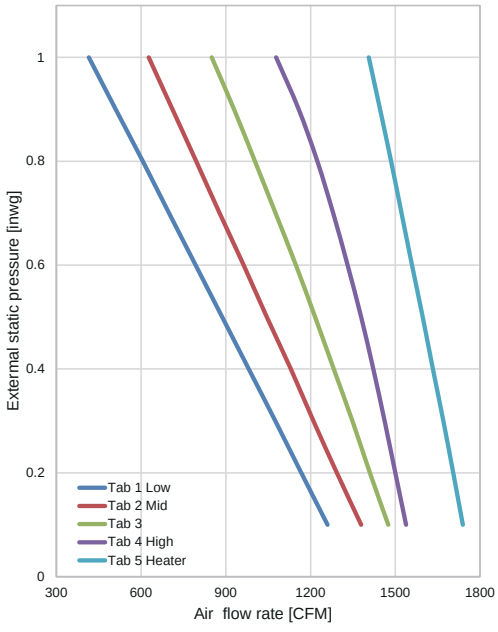
AC048KNZDCH/AA Dimensional Drawing



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





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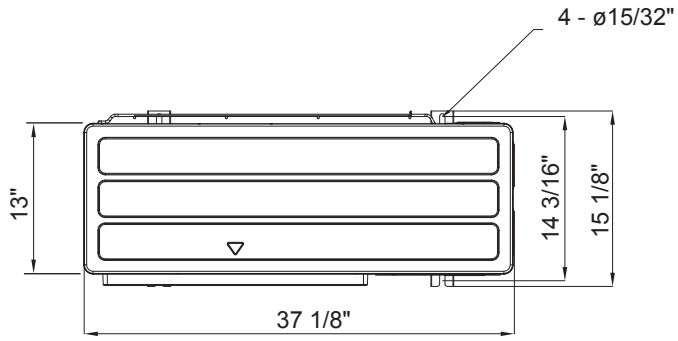
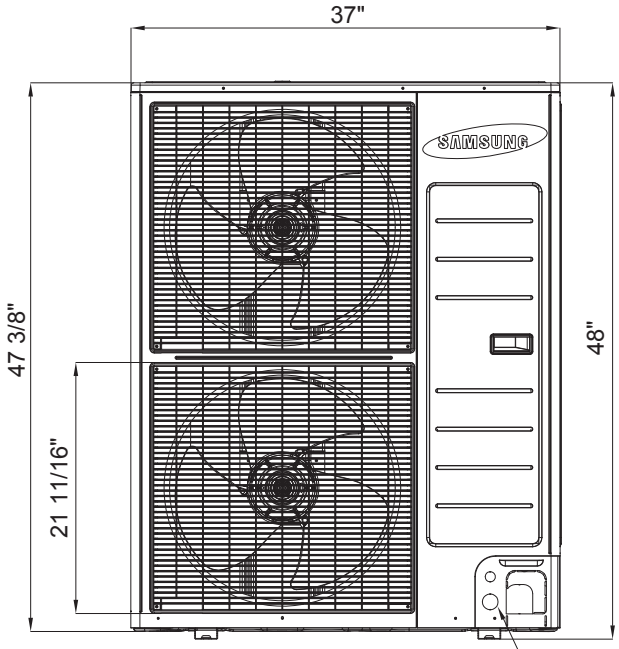
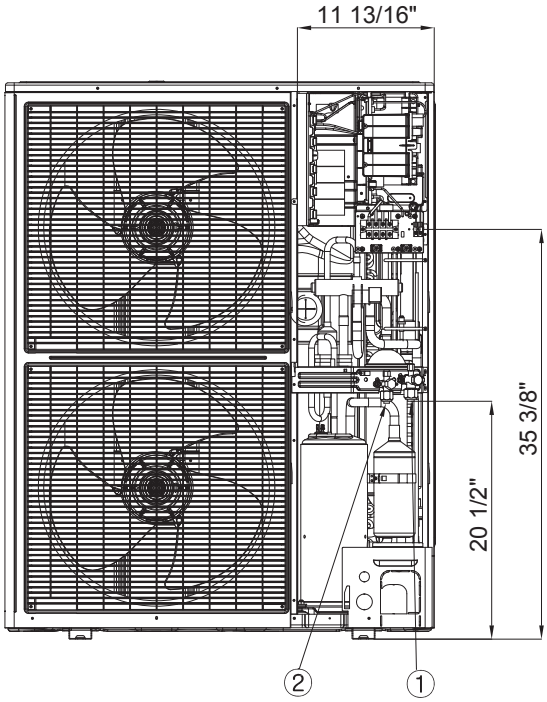
AC048JXADCH/AA Dimensional Drawing



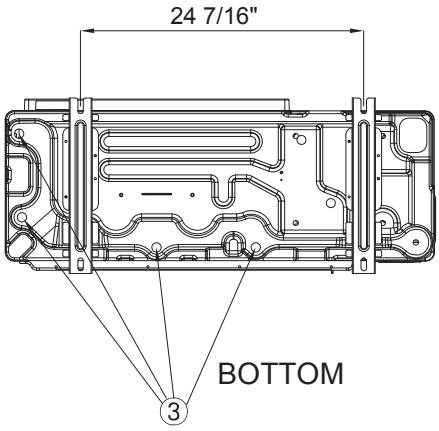
TOP



FRONT



FRONT WITHOUT SERVICE COVER



BOTTOM

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