SAMSUNG

SUBMITTAL AC030KNZDCH/AA / AC030BXADCH/AA (CNH30ZDK / CXH30ADB)

Samsung Multi-Position Air Handler, Single Zone Duct, Split System

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☐ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

Specifications

Model	Indoor Unit Model Number (US Code)		AC030KNZDCH/AA (CNH30ZDK)
	Outdoor Unit Model Number (US Code)		AC030BXADCH/AA (CXH30ADB)
Performance [1]	Nominal Capacity	Cooling / Heating (Btu/h)	30,000 / 32,000
	Capacity Range	Cooling (Btu/h)	8,500 – 34,000
		Heating (Btu/h)	7,200 – 37,000
	SEER / EER		18.8 / 10.7
	COP (nominal heating)		3.00
	HSPF		10.5
	AHRI Certification Number		207598069
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)	4.6 / 12.6 / 18.5
		Heating (A)	3.6 / 14.0 / 24.0
	Max. Breaker	Amps	30
	Min. Circuit Ampacity (A)		23.2
Dimensions	W X H X D (in.)	Indoor Unit	21 X 48 X 21
		Outdoor Unit	37 X 39 5/16 X 13
	Duct Connections (W X H)	Supply (in.)	12 1/2 X 18 3/4
		Return (ID, in.)	17 1/2 X 21
	Weight (lbs.)	Indoor Unit	123.46
		Outdoor Unit	159.8
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	35 / 38 / 41
	Outdoor Unit dB(A)	Cooling / Heating (high)	50 / 52
Operating Temperatures	Outdoor	Cooling	23 ~ 122°F (-5 ~ 50°C)
			0 ~ 122°F (-18 ~ 50°C) w/ baffle
		Heating	-4 ~ 75°F (-20 ~ 24°C)
	Indoor	Cooling	61 ~ 90°F (16 ~ 32°C)
		Heating	T ≤ 80°F (27°C)
Pipe Connections	Indoor & Outdoor	High side (flare)	3/8"
		Low side (flare)	5/8"
	Maximum (ft.)		164
	Maximum Vertical Separation (ft.)		98.4
	Condensate Connection (with included adapter)		FPT 3/4" PVC
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	lbs.	5.73
	Charged for		24.6 ft
	Additional Refrigerant		0.11 oz/ft over 24.6 ft
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	16.2
Evaporator Fan	Type		Double-inlet, forward curve, centrifugal (with ECM motor)
	Air Volume	CFM (L/M/H)	847/ 918 / 1,006 (at standard ESP)
	Output (W) / FLA (A)		410 W / 1.66 A
	Static Pressure	Standard ("WC)	0.24
		Min. / Max. ("WC)	0.01 - 0.98
Condenser Fan	Motor		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		1.25 A / 125 W / 2,684 CFM
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		

[1] 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.





General Information

- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- High-voltage terminal block temperature sensor to disable unit in the event of power connection overheating
- Auto-restart after power loss
- Soft-start compressor minimizing current inrush
- All heat exchangers shall be mechanically bonded aluminum fin to copper tube
- The condensing unit heat exchanger salt spray test method: ASTM-B117-18 - the heat exchanger showed no unusual rust or corrosion development to 2,280 hours.

Option settings

- The outdoor unit shall have snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- Night-time Quiet Mode: reduction of operational sound during *(automatic or manual activation).*
- System can be set up as heating/cooling, cooling only, or heating only via outdoor unit option setting.
- Maximum Current Control configurable from 50% - 100% via outdoor unit, wired controller, or central controller

Indoor Fan

- Indoor fan is a double Inlet, forward curve, centrifugal type
- Three fan speed settings and auto setting
- Field configurable for downflow operation with optional conversion kit

Construction

- Outdoor unit shall be galvanized steel with a baked-on powder coated finish for durability
- Indoor Unit: Insulated, galvanized steel.

Controls

- Control wiring shall be 2 X 16 AWG
- No additional interface modules/adapters are required when connecting to Samsung central control options.
- The unit shall be operated via a wireless or wired remote control with DDC type signal
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller or central control options.
- Wired or wireless controllers must be purchased separately

Refrigerant System

- The compressor shall be hermetically sealed, inverter-controlled BLDC rotary type.
- Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Warranty

10 Years compressor, 10 years parts, 1 year limited labor when registered

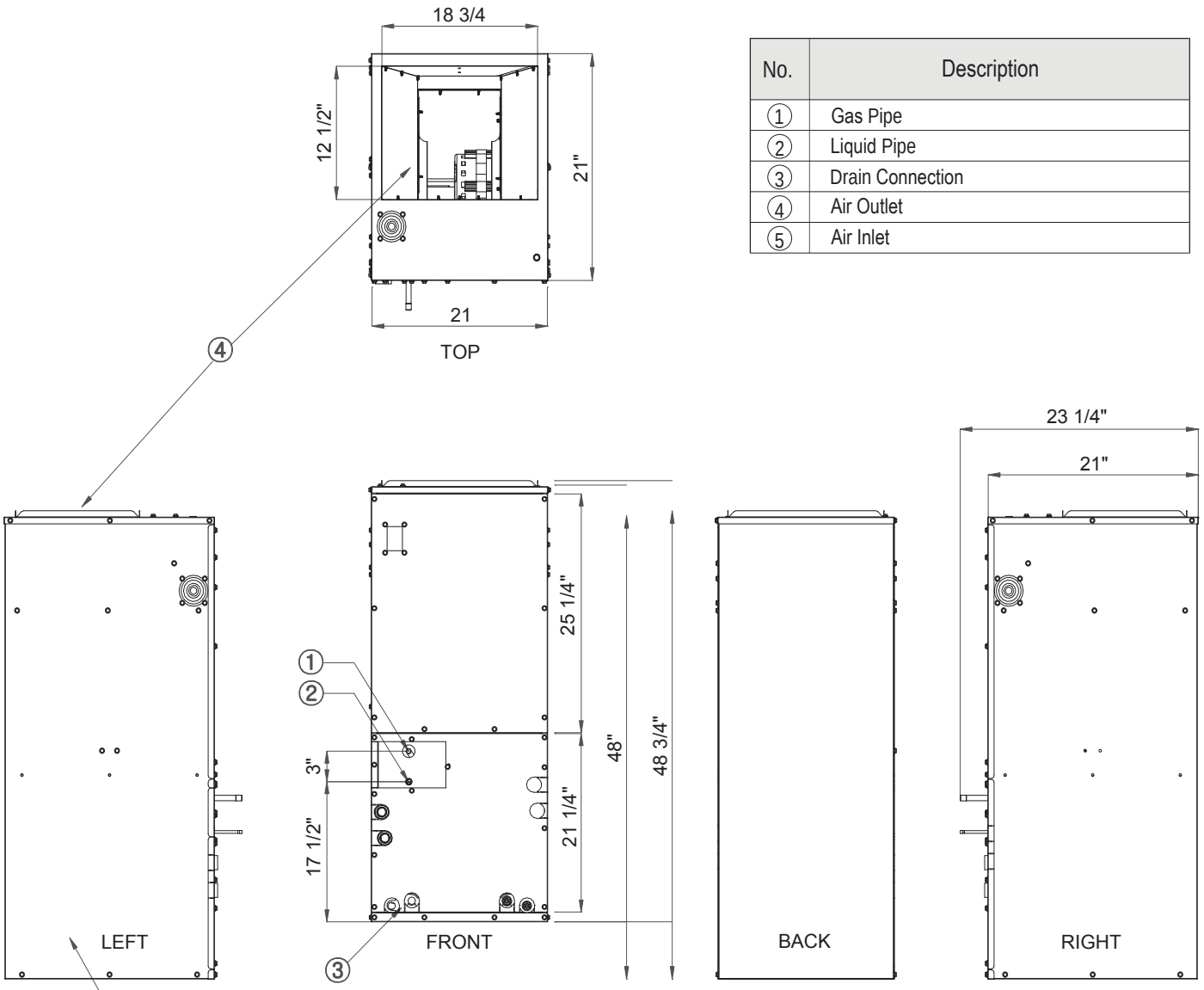
© 2021 Samsung HVAC

Optional Accessories

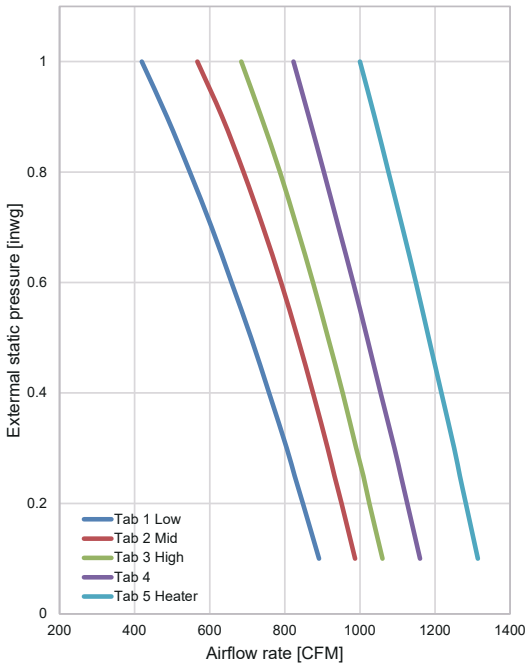
Wired Controller	Advanced	☐ MWR-WG00UN
	Touchscreen	☐ MWR-SH11UN
Thermostat Adaptor (for connection to a standard 24VAC thermostat)		☐ MIM-A60UN
Wireless Signal Control	Wireless Signal Receiver	☐ MRK-A10N
	Wireless Controller	☐ AR-EH04U
Wi-Fi Adapter		☐ MIM-H04UN
External Temperature Sensor		☐ MRW-TA
Filter Base (includes 1" MERV 8 filter)		☐ VFB-2
External Contact Control		☐ MIM-B14
Wall Bracket (for outdoor unit)		☐ CKN-250
Wind Baffles	Front	☐ WBF-2MB
	Back	☐ WBB-3M
Hail Guard		☐ TBD
Line Sets - insulated and flared, interconnect cables included		☐ 25' - ILS-2510
		☐ 50' - ILS-5010
Supplemental Electric Heat Kit		☐ VHK-205A (5 kW)
		☐ VHK-210A (10 kW)
Downflow Conversion Kit		☐ VDK-2

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

AC030KNZDCH/AA Dimensional Drawing

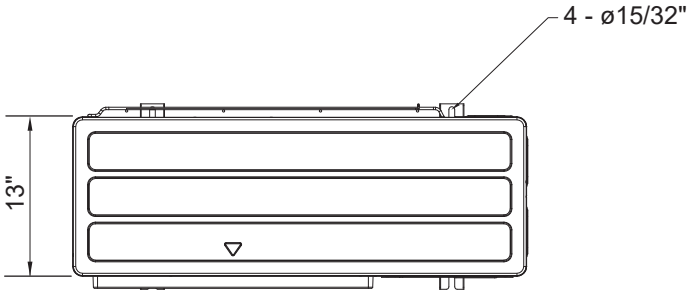


No.	Description
①	Gas Pipe
②	Liquid Pipe
③	Drain Connection
④	Air Outlet
⑤	Air Inlet

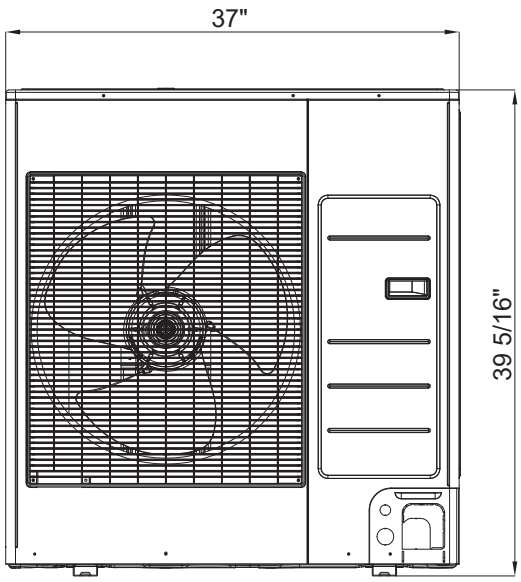


Samsung Multi-Position Air Handler, Single Zone, Split System

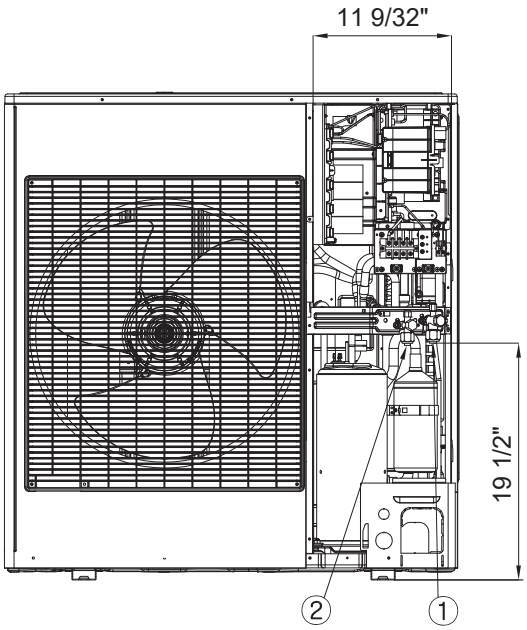
AC030BXADCH/AA Dimensional Drawing



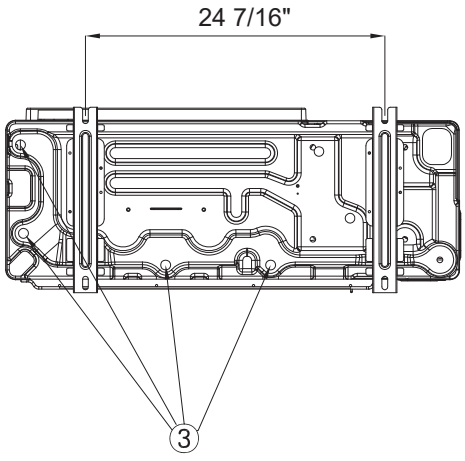
TOP



FRONT



FRONT WITHOUT SERVICE COVER



No.	Name	Description
1	Refrigerant liquid pipe	Ø 3/8
2	Refrigerant gas pipe	Ø 5/8
3	Drain hole	Connect with provided drain plug