

Samsung FJM Series, 3 Port Condensing Unit

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

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



Model	US Code	JXH24J3B	
	Model Number	AJ024BXJ3CH/AA	
Performance	Capacity (min. / standard / max.)	Cooling (Btu/h)	6,500 / 22,000 / 22,000
		Heating (Btu/h)	4,300 / 25,000 / 29,600
	SEER (Ducted / Mixed / Non-ducted) ¹	17.0 / 18.0 / 19.0	
	EER (Ducted / Mixed / Non-ducted) ¹	10.1 / 11.4 / 12.7	
	HSPF (Ducted / Mixed / Non-ducted) ¹	9.0 / 9.5 / 10.0	
	SEER2 (Ducted / Mixed / Non-ducted) ²	17.5 / 18.5 / 19.5	
	EER2 (Ducted / Mixed / Non-ducted) ²	10.1 / 11.4 / 12.7	
	HSPF2 (Ducted / Mixed / Non-ducted) ²	8.2 / 8.5 / 8.8	
Power	Voltage	(ø)V/Hz	1 / 208-230 / 60
	Nominal Current ³	Cooling (A)	8.3
		Heating (A)	8.5
	Max. Breaker	Amps	25
	Minimum Circuit Ampacity (A)	19.5	
Dimensions	W X H X D	Inches	34 5/8 X 31 7/16 X 12 3/16
	Weight	lbs.	125.7
Noise Level	Cooling (Max.)	dB (A)	48
	Heating (Max.)	dB (A)	51
Operating Temperatures	Cooling	14 ~ 114.8°F (-10 ~ 46.0°C)	
	Heating	5 ~ 75°F (-15 ~ 24.0°C)	
Pipe Connections	High Side	1/4" X 3	
	Low Side (suction)	3/8" X 1 + 1/2" X 2	
	Maximum Individual Line Set Length	82 ft	
	Maximum Line Set Length (total)	230 ft	
	Maximum Vertical Separation	Outdoor to Indoor	49 ft
Highest to Lowest Indoor		25 ft	
Included Pipe Adapter	2 - 1/2" X 3/8"		
Condenser Fan	Motor	BLDC With Propeller Fan (1)	
	Output	Watts / FLA	125 / 1.28
		CFM	1,667
Compressor	Type	Twin BLDC Rotary Inverter	
	RLA	Amps	13.3
Heat Exchanger	Type	Aluminum Fin - Copper Tube	
Refrigerant	Type	R410A	
	Control Method	Electronic Expansion Valve	
	Factory Charge	93.44 oz	
	Charged for	131 ft	
Additional Refrigerant	0.11 oz/ft over 131 ft		
Accessories	Wall Bracket	CKN-250	
	Wind Baffle	Front	WBF-7M
		Back	WBB-7M-B
Certifications	Safety	ETL (UL 60335-2-40)	
Warranty	10 Years compressor, 10 year parts, 1 year limited labor (registration required)		

General Information

- Auto or manual addressing of indoor units
- The outdoor unit shall supply power individually to the indoor units via 14/3 AWG power wire
- Auto-restart after power loss
- Available maximum current setting option to reduce operating current
- System energy consumption can be viewed using Samsung SmartThings mobile app (not revenue grade, for reference only)
- Soft-start to reduce current demand during compressor start
- Optional snow accumulation prevention setting to prevent snow drifting against idle outdoor units

Construction

- The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

Heat Exchanger

- The heat exchanger shall be mechanically bonded fin to copper tube

Controls

- Control signal shall be a DDC type signal
- Interconnecting control wire between outdoor and indoor units shall be 16/2 AWG
- The system shall integrate with Samsung Controls Solution without the use of an interface module

Refrigerant System

- The refrigerant shall be R410A
- The compressor shall be hermetically sealed, inverter controlled, Twin Rotary BLDC
- Refrigerant flow shall be controlled by 3 separate electronic expansion valves at outdoor unit

Compatibility

AR**TSFABWKNCV (RNS**ABT): 7,000 – 18,000 Btu/h models
 AR**BSFCMWKNCV (RNS**CMB): 7,000 – 18,000 Btu/h models
 AR**TSFYBWKNCV (RNS**YBT): 7,000 – 18,000 Btu/h models
 AC0**BNNDCH/AA (CNH**NDB): 9,000 – 18,000 Btu/h models
 AC0**BN1DCH/AA (CNH**1DB): 9,000 – 12,000 Btu/h models
 AC0**BNJDCH/AA (CNH**JDB): 9,000 – 18,000 Btu/h models
 AC0**BNLDCH/AA (CNH**LDB): 9,000 – 18,000 Btu/h models
 AC012BNZDCH/AA (CNH12ZDB)
 AJ0**BNHDCH/AA (JNH**HDB): 9,000 - 15,000 Btu/h models

Refer to the engineering Technical Data Book for allowed indoor unit combinations

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGYSTAR criteria. Ask your contractor for details or visit www.energystar.gov

¹Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.
²Performance data certified by AHRI to AHRI 210-240 (2023), Effective January 1st, 2023.
³Rated current based on highest combination ratio of non-ducted indoor units.

This publication reflects both the 1987 Appendix M metric (SEER) and the 2023 Appendix M1 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to www.AHRInet.org for more information about updated energy metrics.

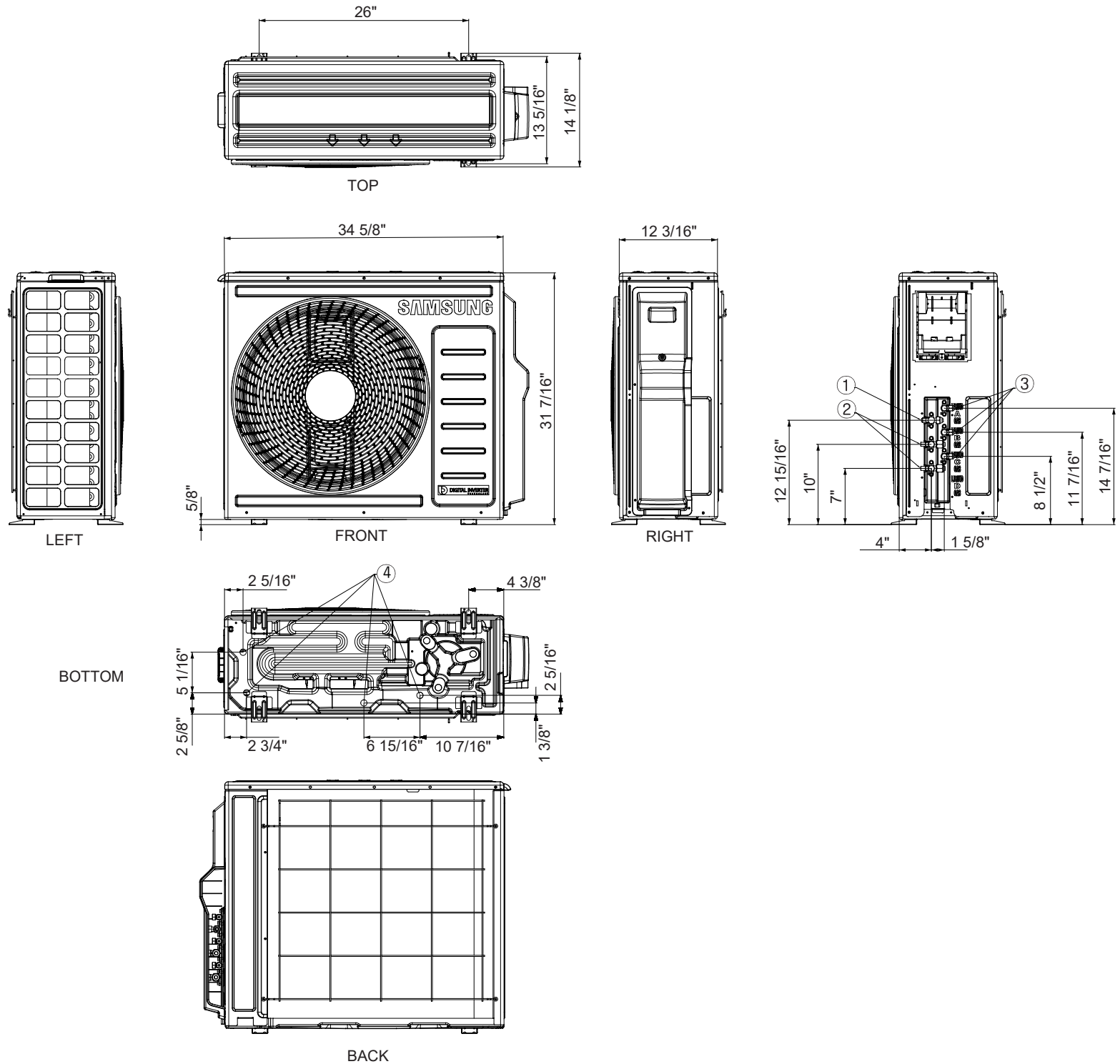
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

Note: Qualification for ENERGYSTAR requires use of non-ducted indoor units.



Samsung FJM Series, 3 Port Condensing Unit

Dimensional drawing



No.	Name	Description
1	Refrigerant suction pipes	ø3/8" x 1 each
2		ø1/2" x 2 each
3	Refrigerant liquid pipes	ø1/4" x 3 each
4	Drain holes	Connection with provided drain fitting

Indoor Unit Connection Options

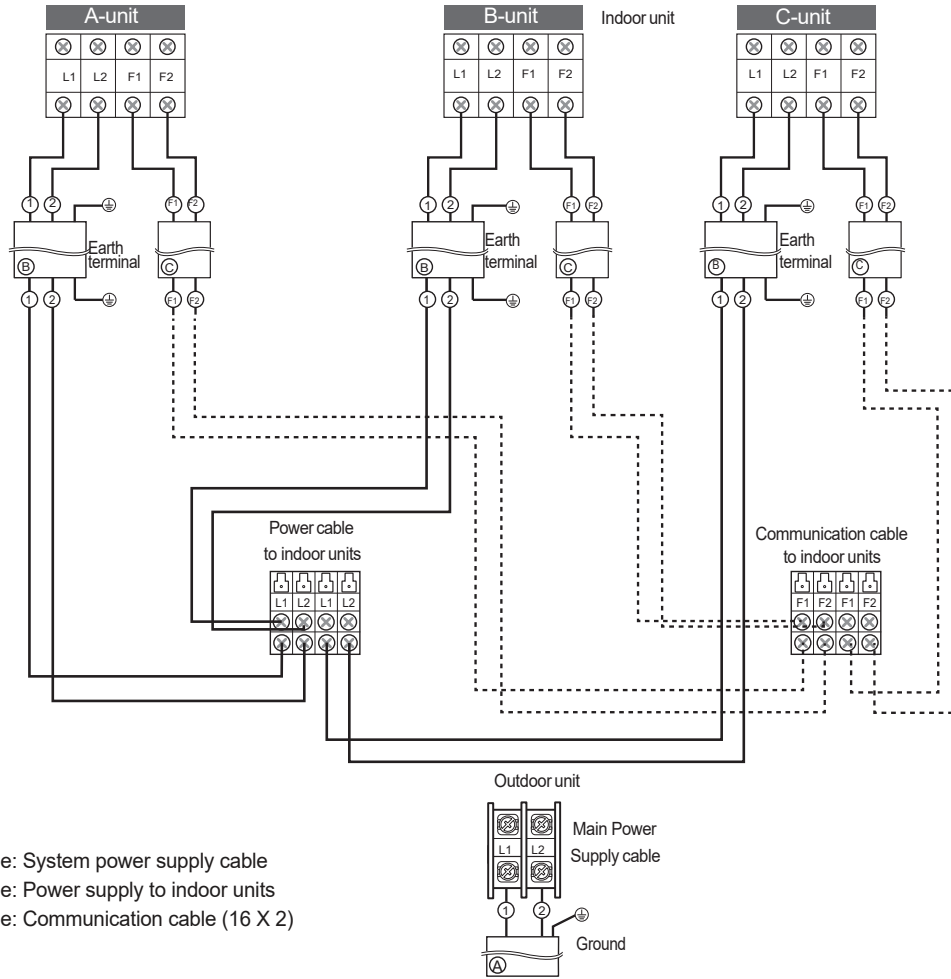
Unit Qty.	Indoor Nominal Capacity (K Btu/h)			Duct S / MPAH Compatibility*		Connected Capacity (K Btu/h)
	A	B	C	Duct S	MPAH	
2	7	7				14
	7	9		•		16
	7	12		•	•	19
	7	15		•		22
	7	18				25
	9	9		•		18
	9	12		•	•	21
	9	15		•		24
	9	18				27
	12	12		•	•	24
	12	15				27
	12	18				30
	15	15				30
3	7	7	7			21
	7	7	9			23
	7	7	12			26
	7	7	15			29
	7	9	9			25
	7	9	12			28
	7	9	15			31
	9	9	9			27
	9	9	12			30

* Combatale combination that includes 1 X MPAH (AC0**BNZDCH/AA) OR 1 X Duct S (AJ0**BNHDCH/AA) unit.

Notes

1. Only 1 X MPAH (AC0**BNZDCH/AA) OR 1 X Duct S (AJ0**BNHDCH/AA) unit can be connected to a single FJM outdoor unit.
2. Applies to outdoor units manufactured after 4/30/2022.
3. Refer to supporting technical data book (TDB) for indoor unit compatibility available at www.SamsungHVAC.com.

Basic Wire Connection Diagram



This simple wiring diagram is for reference only. Please refer to installation manuals for full details and requirements.