SAMSUNG

SUBMITTAL AJ020BXJ2CH/AA (JXH20J2B)

Samsung FJM Series, 2 Port Condensing Unit

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☐ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

Model	US Code		JXH20J2B
	Model Number		AJ020BXJ2CH/AA
Performance	Capacity (min. / standard / max.)	Cooling (Btu/h)	5,500 / 18,000 / 18,000
		Heating (Btu/h)	3,500 / 22,000 / 26,400
	SEER (Ducted / Mixed / Non-ducted)[1]		18.0 / 18.75 / 19.5
	EER (Ducted / Mixed / Non-ducted)[1]		11.1 / 11.9 / 12.7
	HSPF (Ducted / Mixed / Non-ducted)[1]		9.5 / 9.75 / 10.0
	SEER2 (Ducted / Mixed / Non-ducted)[2]		18.0 / 18.75 / 19.5
	EER2 (Ducted / Mixed / Non-ducted)[2]		11.1 / 11.9 / 12.7
	HSPF2 (Ducted / Mixed / Non-ducted)[2]		8.2 / 8.4 / 8.6
Power	Voltage	(ø/V/Hz)	1 / 208-230 / 60
	Nominal Current[3]	Cooling (A)	6.8
		Heating (A)	8.3
	Max. Breaker	Amps	20
	Minimum Circuit Ampacity (A)		16.5
Dimensions	W X H X D	Inches	34 5/8 X 31 7/16 X 12 3/16
	Weight	lbs.	116.8
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 2
	Low Side (suction)		3/8" X 1 + 1/2" X 1
	Maximum Individual Line Set Length		82 ft
	Maximum Line Set Length (total)		164 ft
	Maximum Vertical Separation	Outdoor to Indoor	49 ft
		Highest to Lowest Indoor	25 ft
	Included Pipe Adapter		1 - 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	11.2
Heat Exchanger	Type		Aluminum Fin - Copper Tube
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge		77.6 oz
	Charged for		98 ft
	Additional Refrigerant		0.11 oz/ft over 98 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)		

[1]Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.
[2]Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.
[3]Rated 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.

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SHA-FJM-*J020-2212A



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 2 separate electronic expansion valves at outdoor unit

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

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

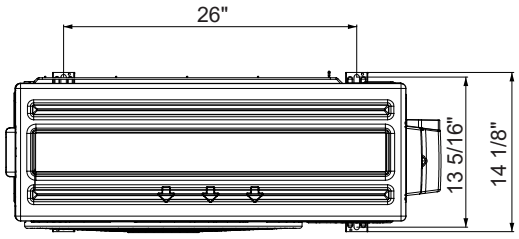
Note: Qualification for ENERGYSTAR requires use of non-ducted indoor units.

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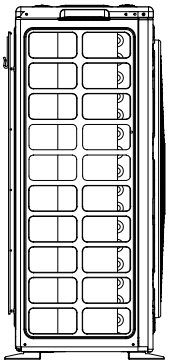
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Samsung FJM, 2 Port Condensing Unit

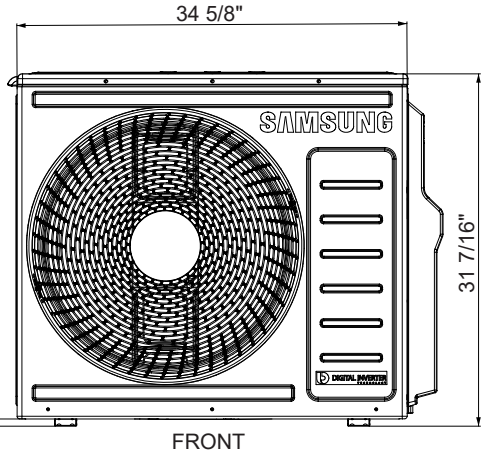
Dimensional drawing



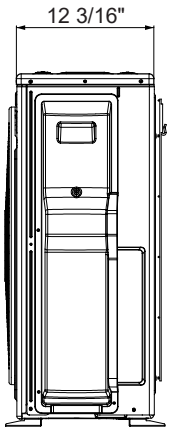
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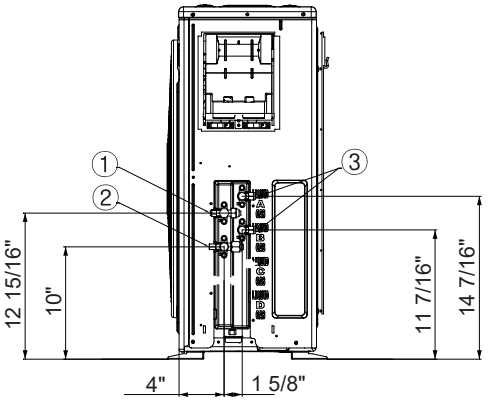
LEFT



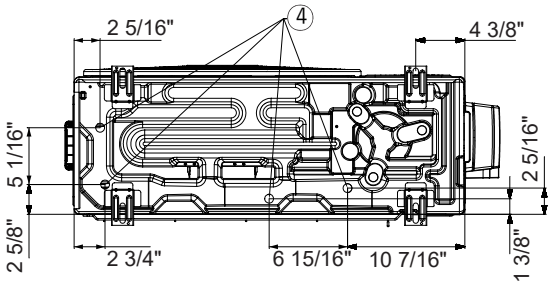
FRONT

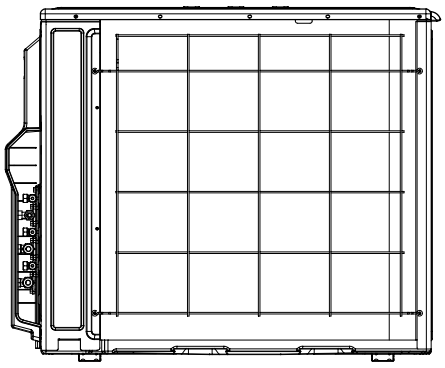


RIGHT



BOTTOM





BACK

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

Indoor Unit Connection Options

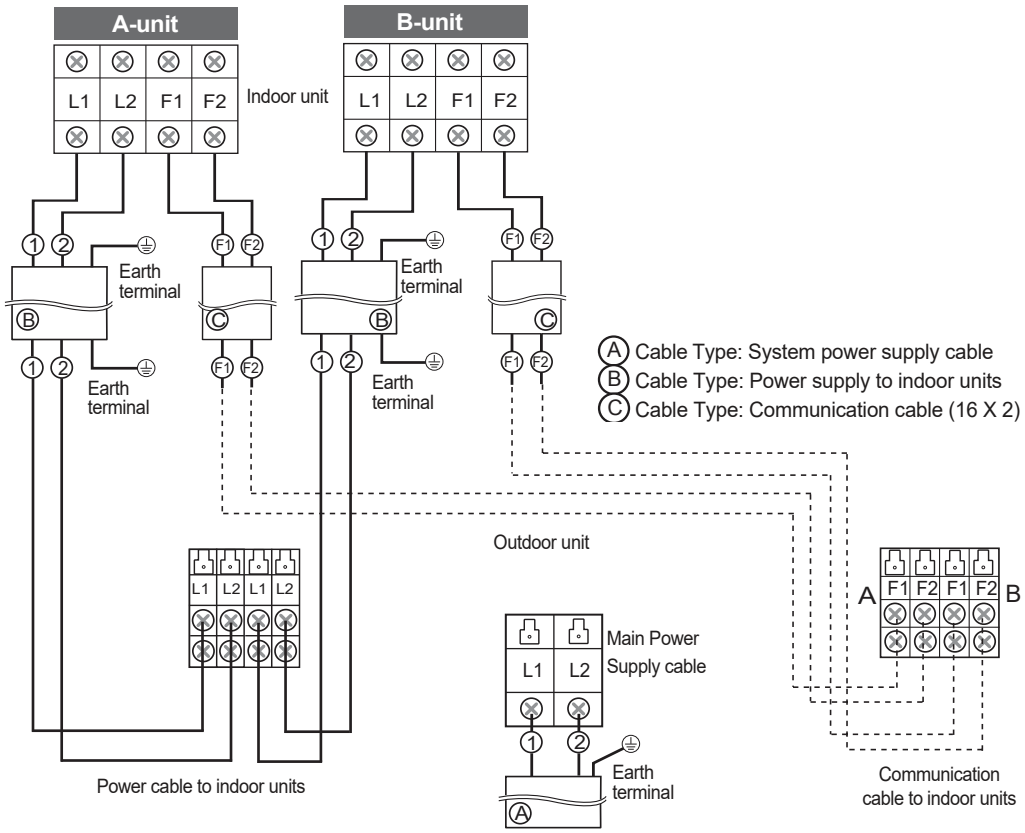
Unit Qty.	Indoor Nominal Capacity (K Btu/h)		Duct S / MPAH Compatibility*		Connected Capacity (K Btu/h)
	A	B	Duct S	MPAH	
2	7	7			14
	7	9			16
	7	12		•	19
	7	15			22
	9	9			18
	9	12		•	21
	9	15			24
	12	12			24
	12	15			27

* Combatable 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.