Samsung FJM Series, 2 Port Condensing Unit

Job Name	Location									
Purchaser	Engineer	Engineer								
Submitted to	Reference	Approval	Construction							
Unit Designation	Schedule #									

	US Code		JXH20J2B						
Model	Model Number	AJ020BXJ2CH/AA							
	Woder Namber								
	Capacity 1	Cooling (Btu/h) ¹ Heating (Btu/h) ¹	5,500 / 18,000 / 22,650						
	(min. / standard / max.)	3,500 / 22,000 / 27,600							
	SEER (Ducted / Mixed	18.0 / 18.75 / 19.5							
Performance	EER (Ducted / Mixed /	11.1 / 11.9 / 12.7							
	HSPF (Ducted / Mixed SEER2 (Ducted / Mixe	9.5 / 9.75 / 10.0 18.0 / 18.75 / 19.5							
	EER2 (Ducted / Mixed	18.0 / 18.75 / 19.5							
	HSPF2 (Ducted / Mixe	8.2 / 8.4 / 8.6							
	\/alta===	(~\) ((-)	4 / 200 200 / 60						
	Voltage	(ø/V/Hz)	1 / 208-230 / 60 6.8						
Power	Nominal Current ⁴	Cooling (A) Heating (A)	8.3						
	Max. Breaker	Amps	20						
	Minimum Circuit Ampa		16.5						
	W X H X D	Inches	34 5/8 X 31 7/16 X 12 3/16						
Dimensions	Weight	lbs.	116.8						
Noise Level	Cooling (Max.) Heating (Max.)	dB (A)	48 51						
		ub (rt)	-						
Operating	Cooling		14 ~ 114.8°F (-10 ~ 46.0°C)						
Temperatures	Heating		5 ~75°F (-15 ~ 24.0°C)						
High Side Low Side (suction) Maximum Individua	High Side	1/4" X 2							
	` '	3/8" X 1 + 1/2" X 1							
			82 ft						
Connections	Maximum Line Set Len	<u> </u>	164 ft						
	Maximum Vertical	Outdoor to Indoor	49 ft 25 ft						
	Included Pipe Adapter	Highest to Lowest Indoor	25 π 1 - 1/2" X 3/8"						
	Motor	T	BLDC With Propeller Fan (
ipe Sonnections Maximum L Maximum V Separation	Output	Watts / FLA	125 / 1.28						
		CFM	1,667						
Compressor	Туре		Twin BLDC Rotary Inverter						
Compressor	RLA	Amps	11.2						
Heat Exchanger	Туре		Aluminum Fin - Copper Tube						
	Туре		R410A						
	Control Method	Electronic Expansion Valve							
Refrigerant	Factory Charge		77.6 oz						
	Charged for	98 ft							
	Additional Refrigerant	0.11 oz/ft over 98 ft							
	Wall Bracket		CKN-250						
Accessories	Wind Boffle	Front	WBF-7M						
	Wind Baffle	Back	WBB-7M-B						
Certifications	Safety		ETL (UL 60335-2-40)						

¹ Standard capacity is based on non-ducted rated capacity. Minimum and maximum capacity will vary based on connected indoor unit type, capacity, and quantity along with indoor and outdoor temperatures. Refer to system capacity tables for full capacity details.

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

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

- 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
- 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
- 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

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







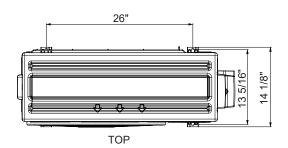
² Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.

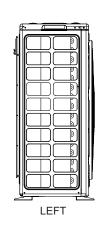
³ Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.

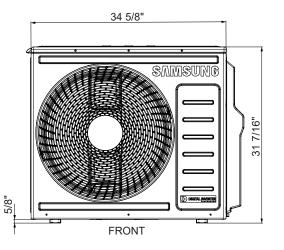
⁴ Rated current based on highest combination ratio of non-ducted indoor units.

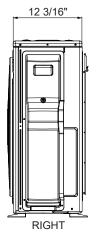
Samsung FJM, 2 Port Condensing Unit

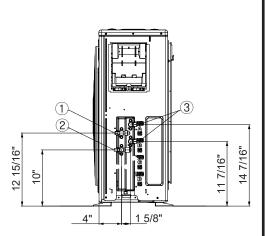
Dimensional drawing



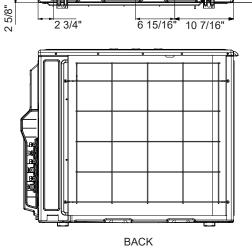








воттом



2 5/16"

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

4 3/8"



SUBMITTAL AJ020BXJ2CH/AA (JXH20J2B) Samsung FJM, 2 Port Condensing Unit

Indoor unit connection options

Indoor Unit Connection Options

Unit Qty.		Nominal (K Btu/h)	Duc MPAH Cor	Connected Capacity				
Qty.	Α	В	Duct S	MPAH	(K Btu/h)			
	7	7			14			
	7	9			16			
	7	12		•	19			
	7	15			22			
2	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.

	Indoor Unit Series																													
	WindFree [™] 3.0 RNS**A*C (AR**CSDA*WKNXCV)				WindFree [™] 3.0e RNS**CMC (AR**CSFCMWKNXCV)					WindFree TM 3.0i RNS**CPC (AR**CSKCPWKNXCV)							RNS*	ee [™] 2 **ABT ABWK			WindFree TM 2.0e RNS**CMB (AR**BSFCMWKNCV)									
	7	9	12	15	18	24	7	9	12	15	18	24	7	9	12	15	18	24	7	9	12	15	18	24	7	9	12	15	18	24
JXH20J2B (AJ020BXJ2CH/AA)	•	•	•	•			•	•	•	•			•	•	•	•			•	•	•	•			•	•	•	•		
JXH24J3B (AJ024BXJ3CH/AA)	•	•	•	•	•		•	•	•	•	•		•	•	•	•	•		•	•	•	•	•		•	•	•	•	•	
JXH36J4B (AJ036BXJ4CH/AA)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
.IXH48.I5B (A.I048BX.I5CH/AA)	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

	Indoor Unit Series																		
	CNH ¹	e [™] 1 Way **1DB 1DCH/AA)	1	WindFree [™] 4Way (2x2) CNH**NDB (AC***BNNDCH/AA)			Slim Duc CNH**LDI **BNLDCI	В	(AJ		Con CNH8 ***BN			MPAH CNH**ZDB (AC***BNZDCH/AA)					
	9	12	9	12	18	9	12	18	9	12	15	18	9	12	15	18	12	18	24
JXH20J2B (AJ020BXJ2CH/AA)	•	•	•	•		•	•		0	0			•	•	•		0		
JXH24J3B (AJ024BXJ3CH/AA)	•	•	•	•	•	•	•	•	0	0	0		•	•	•	•	0		
JXH36J4B (AJ036BXJ4CH/AA)	•	•	•	•	•	•	•	•	0	0	0	0	•	•	•	•	0	0	
JXH48J5B (AJ048BXJ5CH/AA)	•	•	•	•	•	•	•	•	0	0	0	0	•	•	•	•	0	0	0

Notes

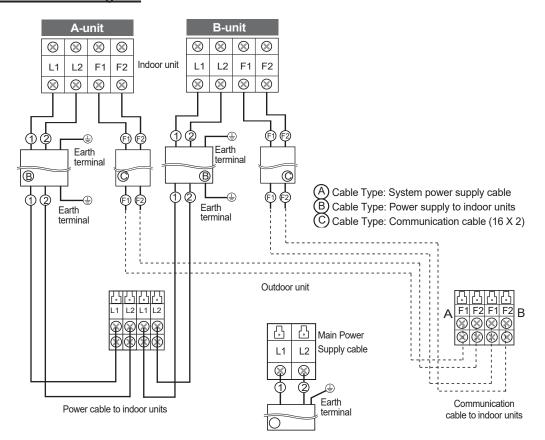
- 1. 2.0(e) and 3.0(e)(i) series may be mixed on the same system.
- Compatible
- O Only (1) Duct S or (1) MPAH may be connected to the same system. Refer to supporting technical data book (TDB) for complete compatibility, available at www.SamsungHVAC.com.



SUBMITTAL AJ020BXJ2CH/AA (JXH20J2B)

Samsung FJM, 2 Port Condensing Unit Wiring example

Basic Wire Connection Diagram



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