

Samsung FJM Series, 5 Port Condensing Unit

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

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



Model	US Code	JXH48J5B
	Model Number	AJ048BXJ5CH/AA

Performance*	Capacity (standard / max.)	Cooling (Btu/h)	47,000 / 48,500
		Heating (Btu/h)	48,500 / 53,600
	Minimum Cooling Capacity (Btu/h)		6,500
	Minimum Heating Capacity (Btu/h)		7,000
	SEER (Ducted / Mixed / Non-ducted)		16.0 / 17.85 / 19.7
	EER (Ducted / Mixed / Non-ducted)		8.6 / 9.55 / 10.5
	HSPF (Ducted / Mixed / Non-ducted)		9.2 / 9.75 / 10.3

Power	Voltage	(øV/Hz)	1 / 208-230 / 60
	Nominal Current ¹	Cooling (A)	21.4
		Heating (A)	18.1
	Max. Breaker	Amps	40
	Minimum Circuit Ampacity (A)		37.0

Dimensions	W X H X D	Inches	37 X 47 5/8 X 13
	Weight	lbs.	192.9

Noise Level	Cooling (Max.)	dB (A)	52
	Heating (Max.)	dB (A)	55

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 5	
	Low Side (suction)		3/8" X 2 + 1/2" X 3	
	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			3 - 1/2" X 3/8", 2 - 1/2" X 5/8"	

Condenser Fan	Motor		BLDC With Propeller Fan (2)
	Output	Watts / FLA	125 x 2 / 1.28 X 2
		CFM	3,885

Compressor	Type		Twin BLDC Rotary Inverter
	RLA	Amps	25.6

Heat Exchanger	Type	Aluminum Fin - Copper Tube
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Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge		134.44 oz
	Charged for		164 ft
	Additional Refrigerant		0.11 oz/ft over 164 ft

Accessories	Wall Bracket		CKN-250
	Wind Baffle	Front	WBF-1M2
		Back	WBB-2M-B

Certifications	Safety		ETL (UL 1995)
	AHRI Certification Number	Non-Ducted	207349374
		Ducted	207350077
		Mixed	207698738

Warranty	10 Years compressor, 10 year parts, 1 year limited labor (registration required)
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- Auto or manual addressing of indoor units
- The outdoor unit shall supply power individually to the indoor units via 14 AWG X 3 power wire
- Soft-start to reduce current demand during compressor start
- Auto-restart after power loss
- System can be set up as heating/cooling, cooling only, or heating only via outdoor unit option setting.
- Available maximum current setting option to reduce maximum operating current.
- System energy consumption can be viewed using Samsung SmartThings mobile app (not revenue grade, for reference only).

Construction

The outdoor unit shall be galvanized steel with abaked 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

Interconnect control wire between outdoor and indoor units shall be 16AWG X 2

The system shall integrate with the 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 BLDC Rotary

Refrigerant flow shall be controlled by 5 separate electronic expansion valves at outdoor unit

Compatibility

Will only operate with Samsung evaporator model numbers:
 AR**TSFABWKNCV (RNS**ABT): 7,000 - 24,000 Btu/h models
 AR**BSFCMWKNCV (RNS**CMB): 7,000 - 24,000 Btu/h models
 AR**TSFYBWKNCV (RNS**YBT): 7,000 - 24,000 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
 AC0**BNZDCH/AA (CNH**ZDB): 12,000 - 24,000 Btu/h models
 AJ0**BNHDCH/AA (JNH**HDB): 9,000 - 18,000 Btu/h models

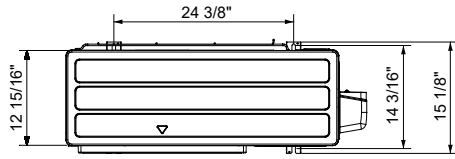
* Certified in accordance with the AHRI Unitary Small Air-Source Heat Pumps (USHP) Certification Program which is based on the latest edition of AHRI Standard 210/240. Refer to www.AHRIdirectory.org for current reference numbers.

¹ Rated current is based on highest combination ratio of non-ducted indoor units.

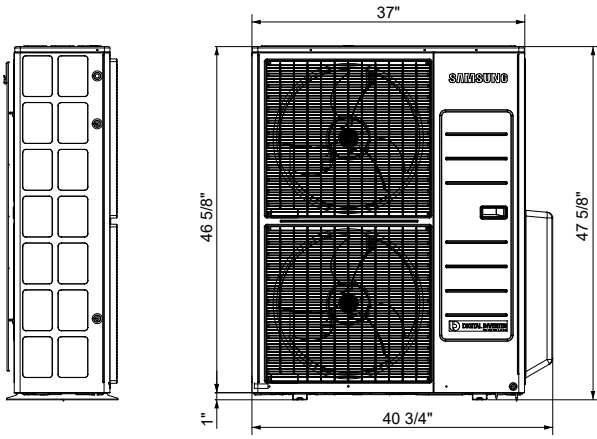
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

Samsung FJM, 5 Port Condensing Unit

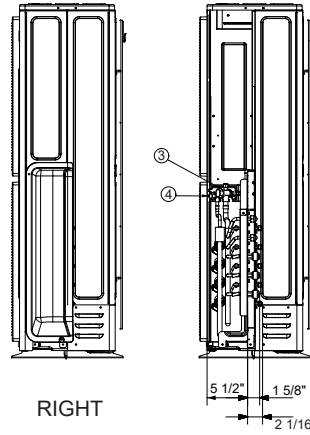
Dimensional drawing



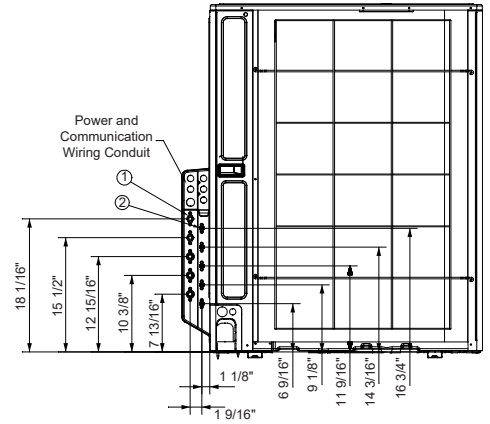
TOP



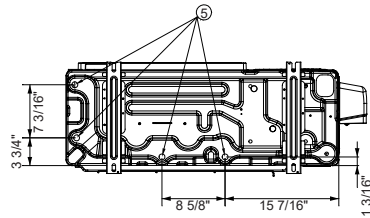
FRONT



RIGHT



BACK



BOTTOM

No.	Name	Description
1	Refrigerant suction pipes	$\varnothing 3/8$ " x 2, $\varnothing 1/2$ " x 3
2	Refrigerant liquid pipes	$\varnothing 1/4$ " x 5
3	Service Valve (suction)	5/8"
4	Service Valve (liquid)	3/8"
5	Drain holes	Connection with provided drain fitting

Indoor Unit Connection Options

		Indoor Unit Capacity (Btu/h)				
		A	B	C	D	E
2 Indoor Units	7,000	7,000				
	7,000	9,000				
	7,000	12,000				
	7,000	15,000				
	7,000	18,000				
	7,000	24,000				
	9,000	9,000				
	9,000	12,000				
	9,000	15,000				
	9,000	18,000				
	9,000	24,000				
	12,000	12,000				
	12,000	15,000				
	12,000	18,000				
	12,000	24,000				
	15,000	15,000				
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24,000	24,000					

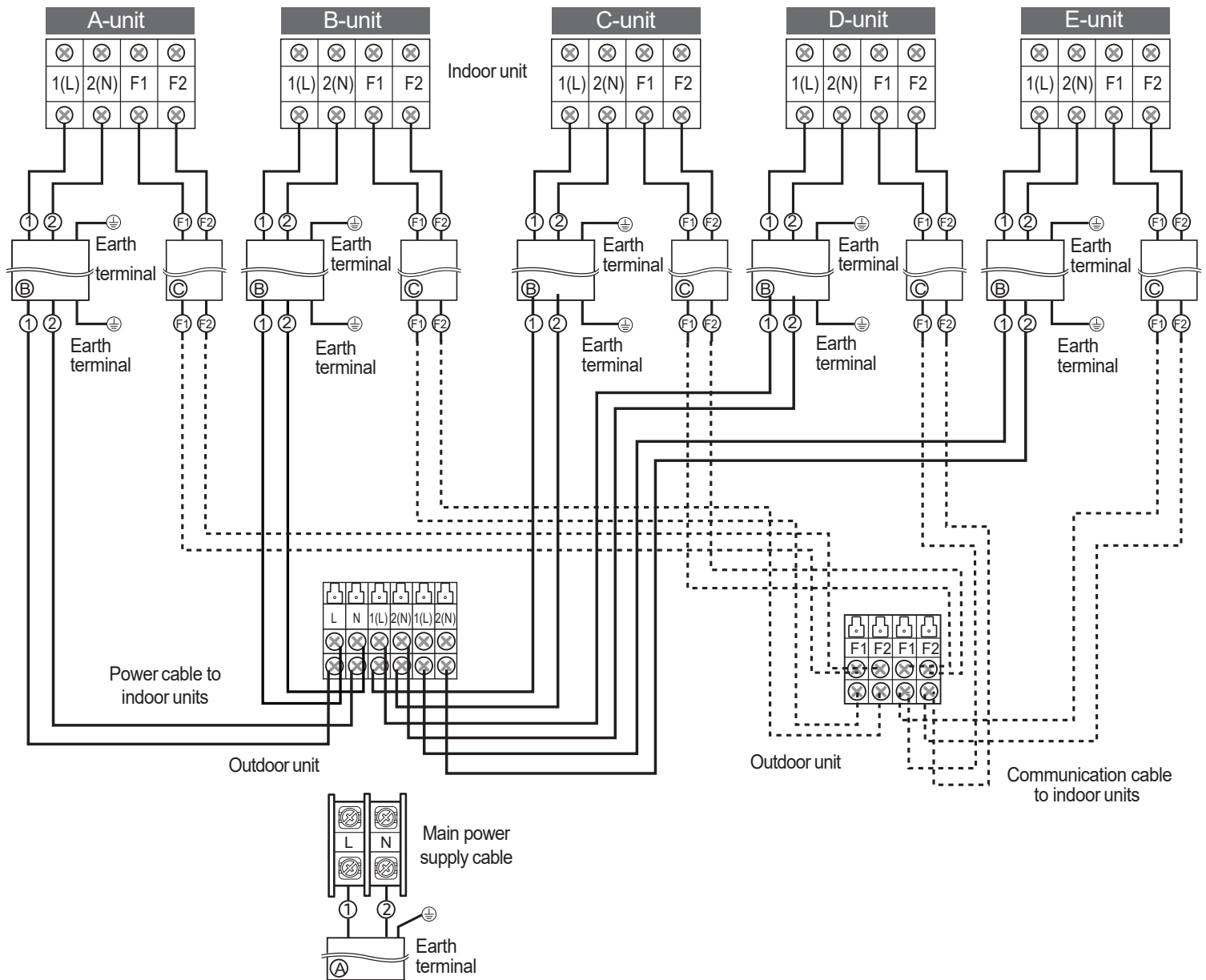
		Indoor Unit Capacity (Btu/h)				
		A	B	C	D	E
3 Indoor Units	7,000	7,000	7,000			
	7,000	7,000	9,000			
	7,000	7,000	12,000			
	7,000	7,000	15,000			
	7,000	7,000	18,000			
	7,000	7,000	24,000			
	7,000	9,000	9,000			
	7,000	9,000	12,000			
	7,000	9,000	15,000			
	7,000	9,000	18,000			
	7,000	9,000	24,000			
	7,000	12,000	12,000			
	7,000	12,000	15,000			
	7,000	12,000	18,000			
	7,000	12,000	24,000			
	7,000	15,000	15,000			
	7,000	15,000	18,000			
	7,000	15,000	24,000			
	7,000	18,000	18,000			
	7,000	18,000	24,000			
	7,000	24,000	24,000			
	9,000	9,000	9,000			
	9,000	9,000	12,000			
	9,000	9,000	15,000			
	9,000	9,000	18,000			
	9,000	9,000	24,000			
	9,000	12,000	12,000			
	9,000	12,000	15,000			
	9,000	12,000	18,000			
	9,000	12,000	24,000			
	9,000	15,000	15,000			
	9,000	15,000	18,000			
	9,000	15,000	24,000			
	9,000	18,000	18,000			
	9,000	18,000	24,000			
	9,000	24,000	24,000			
	12,000	12,000	12,000			
	12,000	12,000	15,000			
	12,000	12,000	18,000			
	12,000	12,000	24,000			
	12,000	15,000	15,000			
	12,000	15,000	18,000			
	12,000	15,000	24,000			
	12,000	18,000	18,000			
	12,000	18,000	24,000			
	15,000	15,000	15,000			
	15,000	15,000	18,000			
	15,000	15,000	24,000			
15,000	18,000	18,000				
15,000	18,000	24,000				
18,000	18,000	18,000				

Must have a minimum of 2 indoor units connected. Will only operate with Samsung evaporator model numbers listed below:

- AR**TSFABWKNCV (RNS**ABT): 7,000 - 24,000 Btu/h models
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- AJ0**BNHDCH/AA (JNH**HDB): 9,000 - 18,000 Btu/h models

ATTENTION: When connecting MPAH (AC0**BNZDCH/AA) and Duct S (AJ0**BNHDCH/AA) indoor units the sum of the connected indoor unit capacity is reduced. Other conditions apply. Refer to engineering manuals/technical data books and installation manuals for more information.

Basic Wire Connection Diagram



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