Samsung "Max Heat" FJM Series, 4 Port Condensing Unit

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

Jnit Designati	on		Sched
	US Code		JXH36S4B
Model	Model Number		AJ036BXS4CH/AA
	Model Number		
	Capacity	Cooling (Btu/h)	34,000 / 39,600
	(standard / max.)	Heating (Btu/h)	36,000 / 36,600
	Heating Capacity at 5°F OA, 70° Indoor DB (Btu/h)		36,600
D = = f = = = = *	Heating Capacity at -13°F OA, 70° Indoor DB (Btu/h)		25,590
Performance*	Minimum Cooling Capacity (Btu/h)		6,500
	Minimum Heating Capacity (Btu/h)		7,500
	SEER (Ducted / Mixed / Non-ducted)		18.0 / 19.0 / 20.0 11.0 / 11.75 / 12.5
	EER (Ducted / Mixed / Non-ducted) HSPF (Ducted / Mixed / Non-ducted)		9.1 / 9.8 / 10.5
	TISEF (Ducted / Mixed	17 Non-aucteu)	9.17 9.07 10.5
	Voltage	(ø/V/Hz)	1 / 208-230 / 60
	Nominal Current ¹	Cooling (A)	13.0
Power		Heating (A)	12.2
	Max. Breaker	Amps	40
	Minimum Circuit Amp	acity (A)	36.5
Dimonologo	WXHXD	Inches	37 x 47 5/8 x 13
Dimensions	Weight	lbs.	192.9
	Cooling	dB (A)	52
Noise Level	Heating	dB (A)	55
	-	(: 1)	
Operating	Cooling		14 ~ 114.8°F (-5 ~ 46.0°C)
Temperatures	Heating		-13 ~75°F (-25 ~ 24.0°C)
	High Side		1/4" X 4
	Low Side (suction)		3/8" X 2 + 1/2" X 2
Dina	Maximum Individual L	ine Set Length	82 ft
Pipe Connections	Maximum Line Set Le	ngth (total)	230 ft
Connections	Maximum Vertical	Outdoor to Indoor	49 ft
	Separation	Highest to lowest indoor	25 ft
	Included Pipe Adapter	rs	2 - 1/2" X 3/8", 2 - 1/2" X 5/8
	Motor		BLDC With Propeller Fan (2
Condenser Fan		Watts / FLA	125 X 2 / 1.28 X 2
	Output	CFM	3,885
	_		·
Compressor	Туре	T.	Twin BLDC Rotary Inverter
	RLA Amps		25.6
Heat Exchanger	Туре		Aluminum Fin - Copper Tub
	T. m.a		D440A
	Туре		R410A
Dofrigoront	Control Method		Electronic Expansion Valve
Refrigerant	Factory Charge		127 oz
	Charged for Additional Refrigerant		164 ft 0.22 oz/ft over 164 ft
	Additional Nemgerant		0.22 02/It 0Vei 104 It
Accessories	Wall Bracket		CKN-250
	Wind Baffle	Front	WBF-1M2
	Back		WBB-2M-B
	Safety		ETL (UL 1995)
	,	Non-Ducted	207349920
Certifications	AHRI Certification	Ducted	207350085
Commodiums	Number		
		Mixed	207350834

* 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.



General Information

- The Samsung Max Heat system shall provide high heating capacity at -13°F outside temperature
- The outdoor unit shall supply power individually to the indoor units via 14 AWG X 3 power wire
- The outdoor unit shall have a base pan heater as standard to ensure optimal defrost cycle water drainage
- · 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
- Auto or manual addressing of indoor 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
- Interconnect control wire between outdoor and indoor units shall be 16AWG X 2
- \bullet Controls shall integrate with a BMS system
- The system shall integrate with the Samsung Controls solution

Refrigerant System

- The refrigerant shall be R410A
- The compressor shall be hermetically sealed, inverter controlled, Twin BLDC Rotary
- Refrigerant flow shall be controlled by 4 separate electronic expansion valves at outdoor unit

Indoor 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

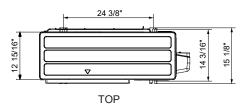
Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your contractor for details or visit www.energystar.gov.

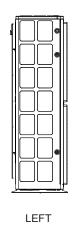


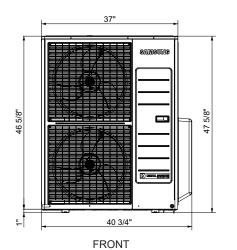
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

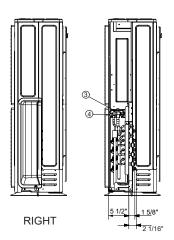
Samsung "Max Heat" FJM Series, 4 Port Condensing Unit

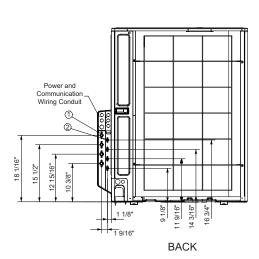
Dimensional drawing

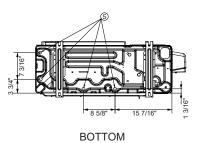












No.	Name	Description	
1	Refrigerant suction pipes	ø3/8" x 2, ø1/2" x 2	
2	Refrigerant liquid pipes	ø1/4" x 4	
3	Service Valve (suction)	5/8"	
4	Service Valve (liquid)	3/8"	
5	Drain holes	Connection with provided drain fitting	



Samsung "Max Heat" FJM Series, 4 Port Condensing Unit

Indoor unit connection options

Indoor Unit Connection Options

ſ	Indoor unit Capacity (Btu/h)			
	A	В	C C	D
	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		
2 Indoor Units	9,000	24,000		
	12,000	12,000		
	12,000	15,000		
	12,000	18,000		
	12,000	24,000		
	15,000	15,000		
ŀ	15,000	18,000		
	15,000	24,000		
ŀ	18,000	18,000		
	18,000	24,000		
-	24,000	24,000		
			7 000	
	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	
	9,000	9,000	9,000	
3 Indoor Units	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	
	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	18,000	18,000	
	15,000	15,000	15,000	
	15,000	15,000	18,000	
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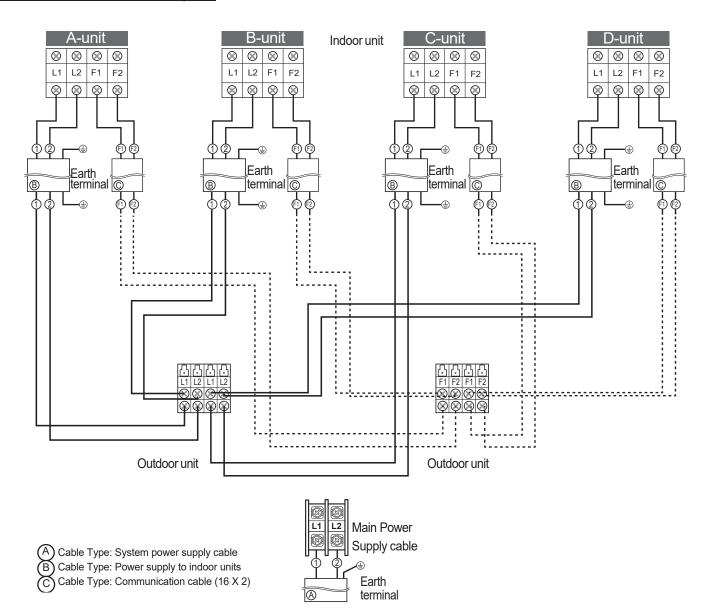
		Indoor unit C	apacity (Btu/h)	
	Α	В	С	D
	7,000	7,000	7,000	7,000
	7,000	7,000	7,000	9,000
	7,000	7,000	7,000	12,000
	7,000	7,000	7,000	15,000
	7,000	7,000	7,000	18,000
	7,000	7,000	7,000	24,000
	7,000	7,000	9,000	9,000
	7,000	7,000	9,000	12,000
	7,000	7,000	9,000	15,000
	7,000	7,000	9,000	18,000
	7,000	7,000	9,000	24,000
	7,000	7,000	12,000	12,000
	7,000	7,000	12,000	15,000
	7,000	7,000	12,000	18,000
	7,000	7,000	15,000	15,000
	7,000	7,000	15,000	18,000
	7,000	9,000	9,000	9,000
	7,000	9,000	9,000	12,000
4 Indoor Units	7,000	9,000	9,000	15,000
	7,000	9,000	9,000	18,000
	7,000	9,000	12,000	12,000
	7,000	9,000	12,000	15,000
	7,000	9,000	12,000	18,000
	7,000	9,000	15,000	15,000
	7,000	12,000	12,000	12,000
	7,000	12,000	12,000	15,000
	9,000	9,000	9,000	9,000
	9,000	9,000	9,000	12,000
	9,000	9,000	9,000	15,000
	9,000	9,000	9,000	18,000
	9,000	9,000	12,000	12,000
	9,000	9,000	12,000	15,000
	9,000	9,000	12,000	18,000
	9,000	9,000	15,000	15,000
	9,000	12,000	12,000	12,000
	9,000	12,000	12,000	15,000
	12,000	12,000	12,000	12,000

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 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**BNLDCH/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.

Samsung "Max Heat" FJM Series, 4 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.