Samsung FJM Series, 4 Port Condensing Unit

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

	110.0-4-		IVI 100 145	
Model	US Code		JXH36J4B	
	Model Number		AJ036BXJ4CH/AA	
Performance*	Capacity (standard /	Cooling (Btu/h)	32,000 / 36,000	
	max.)	Heating (Btu/h)	36,000 / 42,000	
	Minimum Cooling Capacity (Btu/h)		6,500	
	Minimum Heating Capacity (Btu/h)		7,600	
	SEER (Ducted / Mixed / Non-ducted)		16.5 / 18.0 / 19.5	
	EER (Ducted / Mixed / Non-ducted)		9.3 / 10.9 / 12.5	
	HSPF (Ducted / Mixed	/ Non-ducted)	9.0 / 9.5 / 10.0	
	Voltage	(ø/V/Hz)	1 / 208-230 / 60	
	Nominal Current <sup>1</sup>	Cooling (A)	12.2	
Power		Heating (A)	12.2	
	Max. Breaker Amps		30	
	Minimum Circuit Ampacity (A)		26.0	
	WXHXD	Inches	37 X 39 5/16 X 13	
Dimensions	Weight	lbs.	168.7	
	Cooling (May)	4D (A)	EA	
Noise Level	Cooling (Max.) Heating (Max.)	dB (A) dB (A)	54 56	
	1	[45 (7.1)		
Operating	Cooling Heating		14 ~ 114.8°F (-10 ~ 46.0°C)	
Temperatures			5 ~75°F (-15 ~ 24.0°C)	
	High Side		1/4" X 4	
	Low Side (suction)		3/8" X 2 + 1/2" X 2	
Pipe	Maximum Individual Line Set Length		82 ft	
Connections	Maximum Line Set Length (total)		230 ft	
	Maximum Vertical	Outdoor to Indoor	49 ft	
	Separation Highest to Lowest Indoor		25 ft	
	Included Pipe Adapter		2 - 1/2" X 3/8", 2 - 1/2" X 5/8	
	Motor		BLDC With Propeller Fan (1)	
Condenser Fan	Output	Watts / FLA	125 / 1.28	
	Output	CFM	2,493	
	Туре		Twin BLDC Rotary Inverter	
Compressor	RLA	Amps	18.4	
	'			
Heat Exchanger	Туре		Aluminum Fin - Copper Tube	
	Туре		R410A	
	Control Method		Electronic Expansion Valve	
Refrigerant	Factory Charge		109.3 oz	
	Charged for		131 ft	
	Additional Refrigerant		0.22 oz/ft over 131 ft	
Accessories	Wall Bracket		CKN-250	
	Wind Baffle Front Back		WBF-2M-B	
			WBB-11M	
	Safety		ETL (UL 1995)	
	Salety	Non-Devil 1		
Certifications	AHRI Certification	Non-Ducted Ducted	207349916 207350072	

<sup>\*</sup> 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.

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



- · 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 outdoorunit 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 4 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\*\*BNJDCH/AA (CNH\*\*NDB): 9,000 - 12,000 Btu/h models AC0\*\*BNJDCH/AA (CNH\*\*JDB): 9,000 - 18,000 Btu/h models AC0\*\*BNJDCH/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

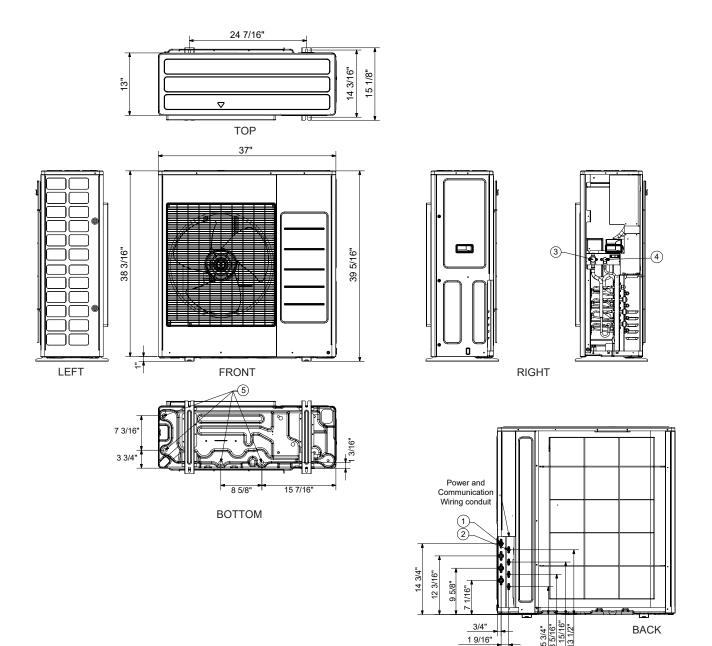
Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR<sup>®</sup> criteria. Ask your contractor for details or visit www.energystar.gov.





<sup>&</sup>lt;sup>1</sup> Rated current is based on highest combination ratio of non-ducted indoor units.

Dimensional drawing



No.	Name	Description	
1	Refrigerant suction pipes	ø3/8" x 1, ø1/2" x 3	
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	



# SUBMITTAL AJ036BXJ4CH/AA (JXH36J4B)

### Samsung FJM, 4 Port Condensing Unit

Indoor unit connection options

## **Indoor Unit Connection Options**

	Indoor unit Capacity (Btu/h)			
	Α	В	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		
2 Indoor	9,000	18,000		
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		
	15,000	18,000		
	15,000	24,000		
	18,000	18,000		
	18,000	24,000		
	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	
3 Indoor	7,000	18,000	18,000	
Units	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	18,000	18,000	
	12,000	12,000	12,000	
	12,000	12,000	15,000	
	12,000	12,000	18,000	
	12,000	15,000	15,000	
	12,000	15,000	18,000	
	15,000	15,000	15,000	
			, -	

	Indoor unit Capacity (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	12,000	12,000
	7,000	7,000	12,000	15,000
4 Indoor	7,000	7,000	12,000	18,000
Units	7,000	7,000	15,000	15,000
Office	7,000	9,000	9,000	9,000
	7,000	9,000	9,000	12,000
	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	12,000	12,000	12,000
	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	12,000	12,000	12,000

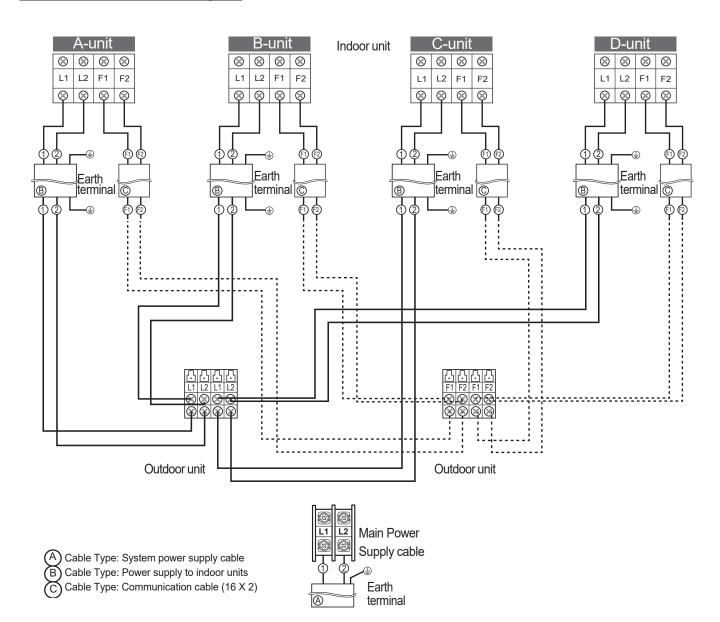
Must have a minimum of 2 indoor units connected. Will only operate with Samsung evaporator model numbers listed below:

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 - 24,000 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 AU0\*\*BNZDCH/AA (CNH\*\*ZDB): 12,000 - 24,000 Btu/h models 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.

Samsung FJM, 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.