

Samsung FJM, 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 ¹ (min. / standard / max.)	Cooling (Btu/h) ¹	6,500 / 47,000 / 56,800
		Heating (Btu/h) ¹	7,000 / 48,500 / 60,800
	SEER (Ducted / Mixed / Non-ducted) ²		16.0 / 17.85 / 19.7
	EER (Ducted / Mixed / Non-ducted) ²		8.6 / 9.55 / 10.5
	HSPF (Ducted / Mixed / Non-ducted) ²		9.2 / 9.75 / 10.3
	SEER2 (Ducted / Mixed / Non-ducted) ³		16.5 / 18.75 / 21.0
	EER2 (Ducted / Mixed / Non-ducted) ³		8.6 / 9.55 / 10.5
	HSPF2 (Ducted / Mixed / Non-ducted) ³		8.3 / 8.65 / 9.0

Power	Voltage	(øV/Hz)	1 / 208-230 / 60
	Nominal Current ⁴	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 60335-2-40)
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Warranty	10 Years compressor, 10 year parts, 1 year limited labor (registration required)
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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.

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.

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.

**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

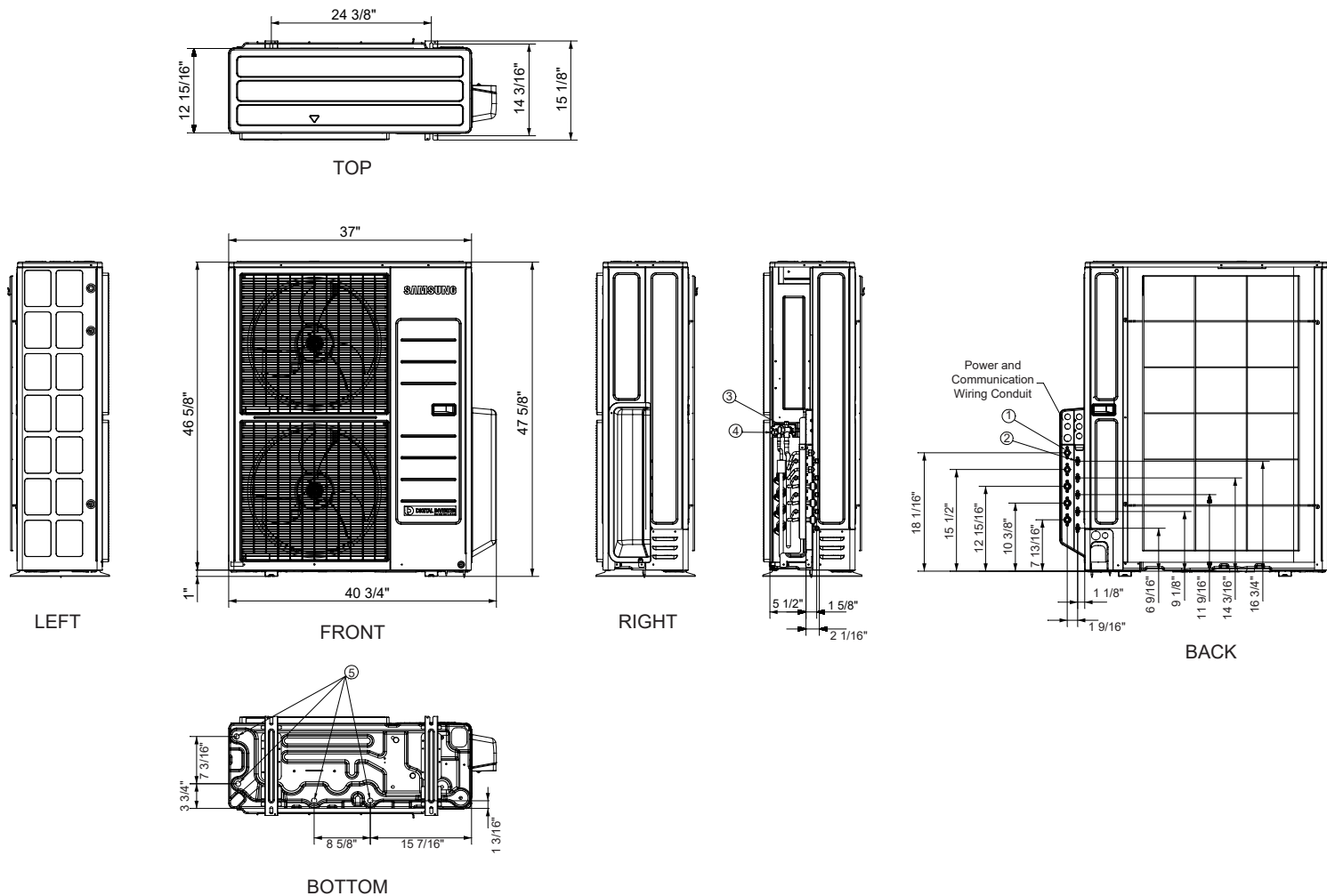
- The heat exchanger shall be mechanically bonded fin to copper tube

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 5 separate electronic expansion valves at outdoor unit



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

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Indoor unit connection options

Indoor Unit Connection Options

Unit Qty.	Indoor Nominal Capacity (K Btu/h)					Duct S / MPAH Compatibility*		Connected Capacity (K Btu/h)
	A	B	C	D	E	Duct S	MPAH	
2	7	7						14
	7	9				•		16
	7	12				•	•	19
	7	15				•		22
	7	18				•	•	25
	7	24				•	•	31
	9	9				•		18
	9	12				•	•	21
	9	15				•		24
	9	18				•	•	27
	9	24				•	•	33
	12	12				•	•	24
	12	15				•	•	27
	12	18				•	•	30
	12	24				•	•	36
	15	15				•		30
	15	18				•	•	33
	15	24				•	•	39
	18	18				•	•	36
	18	24				•	•	42
	24	24					•	48
3	7	7	7					21
	7	7	9			•		23
	7	7	12			•	•	26
	7	7	15			•		29
	7	7	18			•	•	32
	7	7	24			•	•	38
	7	9	9			•		25
	7	9	12			•	•	28
	7	9	15			•		31
	7	9	18			•	•	34
	7	9	24			•	•	40
	7	12	12			•	•	31
	7	12	15			•	•	34
	7	12	18			•	•	37
	7	12	24			•	•	43
	7	15	15			•		37
	7	15	18			•	•	40
	7	15	24			•	•	46
	7	18	18			•	•	43
	7	18	24					49
	7	24	24					55
	9	9	9			•		27
	9	9	12			•	•	30
	9	9	15			•		33
	9	9	18			•	•	36
	9	9	24			•	•	42
	9	12	12			•	•	33
	9	12	15			•	•	36
	9	12	18			•	•	39
	9	12	24			•	•	45
	9	15	15			•		39
	9	15	18			•	•	42
	9	15	24			•	•	48
	9	18	18			•	•	45
	9	18	24					51
	9	24	24					57
	12	12	12			•	•	36
	12	12	15			•	•	39
	12	12	18			•	•	42
	12	12	24			•	•	48
	12	15	15			•	•	42
	12	15	18			•	•	45
	12	15	24					51
	12	18	18			•	•	48
	12	18	24					54
	15	15	15			•		45
	15	15	18			•	•	48
	15	15	24					54
	15	18	18					51
	15	18	24					57
	18	18	18					54

* Combattable combination that includes 1 X MPAH (AC0**BNZDCH/AA) OR 1 X Duct S (AJ0**BNHDCH/AA) unit.

Notes

- 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.
- Applies to outdoor units manufactured after 4/30/2022.
- Refer to supporting technical data book (TDB) for indoor unit compatibility available at www.SamsungHVAC.com.

Unit Qty.	Indoor Nominal Capacity (K Btu/h)					Duct S / MPAH Compatibility*		Connected Capacity (K Btu/h)
	A	B	C	D	E	Duct S	MPAH	
4	7	7	7	7				28
	7	7	7	9		•		30
	7	7	7	12		•	•	33
	7	7	7	15		•		36
	7	7	7	18		•	•	39
	7	7	7	24			•	45
	7	7	9	9		•		32
	7	7	9	12		•	•	35
	7	7	9	15		•		38
	7	7	9	18		•	•	41
	7	7	9	24		•	•	47
	7	7	12	12		•	•	38
	7	7	12	15		•	•	41
	7	7	12	18		•	•	44
	7	7	12	24				50
	7	7	15	15		•		44
	7	7	15	18		•	•	47
	7	7	15	24				53
	7	7	18	18				50
	7	7	18	24				56
	7	9	9	9		•		34
	7	9	9	12		•	•	37
	7	9	9	15		•		40
	7	9	9	18		•	•	43
	7	9	9	24				49
	7	9	12	12		•	•	40
	7	9	12	15		•	•	43
	7	9	12	18		•	•	46
	7	9	12	24				52
	7	9	15	15		•		46
	7	9	15	18				49
	7	9	15	24				55
	7	9	18	18				52
	7	12	12	12		•	•	43
	7	12	12	15		•	•	46
	7	12	12	18				49
	7	12	12	24				55
	7	12	15	15				49
	7	12	15	18				52
	7	12	18	18				55
	7	15	15	15				52
	7	15	15	18				55
	9	9	9	9		•		36
	9	9	9	12		•	•	39
	9	9	9	15		•		42
	9	9	9	18		•	•	45
	9	9	9	24				51
	9	9	12	12		•	•	42
	9	9	12	15		•	•	45
	9	9	12	18		•	•	48
	9	9	12	24				54
	9	9	15	15		•		48
	9	9	15	18				51
	9	9	15	24				57
	9	9	18	18				54
	9	12	12	12		•	•	45
	9	12	12	15		•	•	48
	9	12	12	18				51
	9	12	12	24				57
	9	12	15	15				51
	9	12	15	18				54
	9	12	18	18				57
	9	15	15	15				54
	9	15	15	18				57
	12	12	12	12		•	•	48
	12	12	12	15				51
	12	12	12	18				54
	12	12	15	15				54
	12	12	15	18				57
	12	15	15	15				57

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Unit Qty.	Indoor Nominal Capacity (K Btu/h)					Duct S / MPAH Compatibility*		Connected Capacity (K Btu/h)
	A	B	C	D	E	Duct S	MPAH	
5	7	7	7	7	7			35
	7	7	7	7	9			37
	7	7	7	7	12			40
	7	7	7	7	15			43
	7	7	7	7	18			46
	7	7	7	7	24			52
	7	7	7	9	9			39
	7	7	7	9	12			42
	7	7	7	9	15			45
	7	7	7	9	18			48
	7	7	7	9	24			54
	7	7	7	12	12			45
	7	7	7	12	15			48
	7	7	7	12	18			51
	7	7	7	12	24			57
	7	7	7	15	15			51
	7	7	7	15	18			54
	7	7	7	18	18			57
	7	7	9	9	9			41
	7	7	9	9	12			44
	7	7	9	9	15			47
	7	7	9	9	18			50
	7	7	9	9	24			56
	7	7	9	12	12			47
	7	7	9	12	15			50
	7	7	9	12	18			53
	7	7	9	15	15			53
	7	7	9	15	18			56
	7	7	12	12	12			50
	7	7	12	12	15			53
	7	7	12	12	18			56
	7	7	12	15	15			56
	7	9	9	9	9			43
	7	9	9	9	12			46
	7	9	9	9	15			49
	7	9	9	9	18			52
	7	9	9	12	12			49
	7	9	9	12	15			52
	7	9	9	12	18			55
	7	9	9	15	15			55
	7	9	12	12	12			52
	7	9	12	12	15			55
	7	12	12	12	12			55
	9	9	9	9	9			45
	9	9	9	9	12			48
	9	9	9	9	15			51
	9	9	9	9	18			54
	9	9	9	12	12			51
	9	9	9	12	15			54
	9	9	9	12	18			57
	9	9	9	15	15			57
	9	9	12	12	12			54
	9	9	12	12	15			57
	9	12	12	12	12			57

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Indoor unit connection options

	Indoor Unit Series																													
	WindFree™ 3.0 RNS**A*C (AR**CSDA*WKNXCV)						WindFree™ 3.0e RNS**CMC (AR**CSFCMWKNXCV)						WindFree™ 3.0i RNS**CPC (AR**CSKCPWKNXCV)						WindFree™ 2.0 RNS**ABT (AR**TSFABWKNCV)						WindFree™ 2.0e RNS**CMB (AR**BSFCMWKNXCV)					
	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)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
JXH48J5B (AJ048BXJ5CH/AA)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

	Indoor Unit Series																		
	WindFree™ 1 Way CNH**1DB (AC***BN1DCH/AA)		WindFree™ 4Way (2x2) CNH**NDB (AC***BNNDCH/AA)			Slim Duct CNH**LDB (AC***BNLDCH/AA)			Duct S JNH**HDB (AJ***BNHDCH/AA)				Console CNH8&JDB (AC***BNJDCH/AA)				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)	●	●	●	●		●	●		○	○			●	●	●		○		
JXH24J3B (AJ024BXJ3CH/AA)	●	●	●	●	●	●	●	●	○	○	○		●	●	●	●	○		
JXH36J4B (AJ036BXJ4CH/AA)	●	●	●	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	
JXH48J5B (AJ048BXJ5CH/AA)	●	●	●	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○

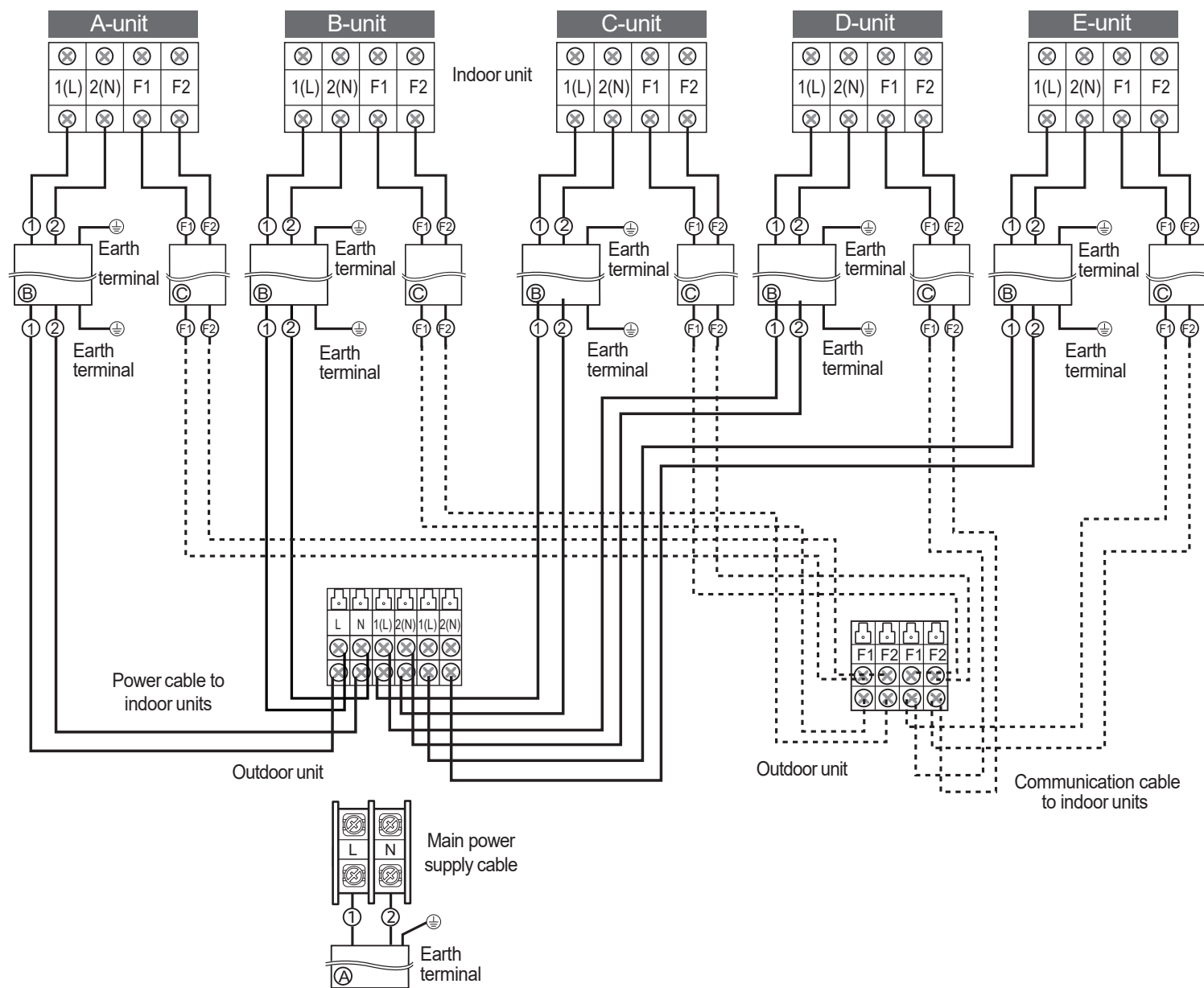
Notes

1. 2.0(e) and 3.0(e)(i) series may be mixed on the same system.

● Compatible

○ 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.

Basic Wire Connection Diagram



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