

SAMSUNG

Submittal Data

AJ048DXJ5CG/AA (JXG48J5D)

FJM Series, Standard, 5 Port Condensing Unit

Job name: _____

Purchaser: _____

Submitted to: _____

Unit designation: _____

Location: _____

Engineer: _____

Reference _____ Approval _____ Construction _____

Schedule #: _____

General Information

- Auto-restart after power loss
- Available maximum current setting option to reduce operating current.
- System energy consumption can be viewed using the Samsung SmartThings mobile app (not revenue grade, for reference only).
- Soft-start to reduce current demand during compressor start
- The outdoor unit shall supply power individually to the indoor units via 14 AWG X 3 power wire

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

Refrigerant System

- The system shall utilize low-GWP R-32 refrigerant
- Refrigerant flow shall be controlled by electronic expansion valves at the outdoor unit.
- The system shall include an R32 alarm output plug on indoor units with refrigerant leak detectors and outdoor unit for notification of R32 leak detection when refrigerant leak detectors are installed and configured (MIM-B14U accessories are required).

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 Central Controls solution



Intertek



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 ENERGY STAR criteria. Ask your contractor or visit www.energystar.gov.

Samsung HVAC maintains a policy of ongoing development. Specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

www.SamsungHVAC.com

Specifications

Model	Outdoor Unit Model Number (US Code)		AJ048DXJ5CG/AA (JXG48J5D)
Performance	Rated Capacity*	Cooling (Btu/h)	46,000
		Heating (Btu/h)	48,500
	SEER2 (Ducted / Mixed / Non-ducted)		20 / 20.5 / 21
	EER2 (Ducted / Mixed / Non-ducted)		11.7 / 11.7 / 11.7
	HSPF2 (Ducted / Mixed / Non-ducted)		8.6 / 8.8 / 9
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		187 - 253
	Nominal Current**	Cooling (A)	17.4
		Heating (A)	16.4
	Max. Breaker	Amps	40.0
Min. Circuit Ampacity	Amps	37.0	
Dimensions	W X H X D	In.	37 X 47 5/8 X 13
	Weight	lbs.	194.00
Sound Pressure Level	Cooling / Heating (high)		52 / 55
Operating Temperatures	Outdoor	Cooling	14 - 115°F (-10 - 46°C)
		Heating	5 - 75°F (-15 - 24°C)
Pipe Connections	High side		1/4" X 5
	Low side (suction)		3/8" X 2 + 1/2" X 3
	Max. Individual Line Set Length	ft.	82
	Max. Line Set Length (total)	ft.	230
	Max. Vertical Separation	Outdoor to indoor (ft.)	49
		Highest to lowest indoor (ft.)	25
Included Pipe Adapters		2 - 1/2" X 3/8", 2 - 1/2" X 5/8"	
Refrigerant	Type		R-32
	Control Method		Electronic Expansion Valve (5)
	Factory Charge	oz.	109.4
	Charged for	ft.	230
Compressor	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	23.4
Condenser Fan	Type		BLDC With Axial Type Fan (2)
	MOC / Watts / CFM (max.)		1.2A X 2 / 125W X 2 / 3,320
Corrosion Prevention	ISO-9227 - The condenser heat exchanger showed no unusual rust or corrosion development to 240 hours.		
Safety	Certifications	UL 60335-2-40	
	Devices	PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing	

*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.

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

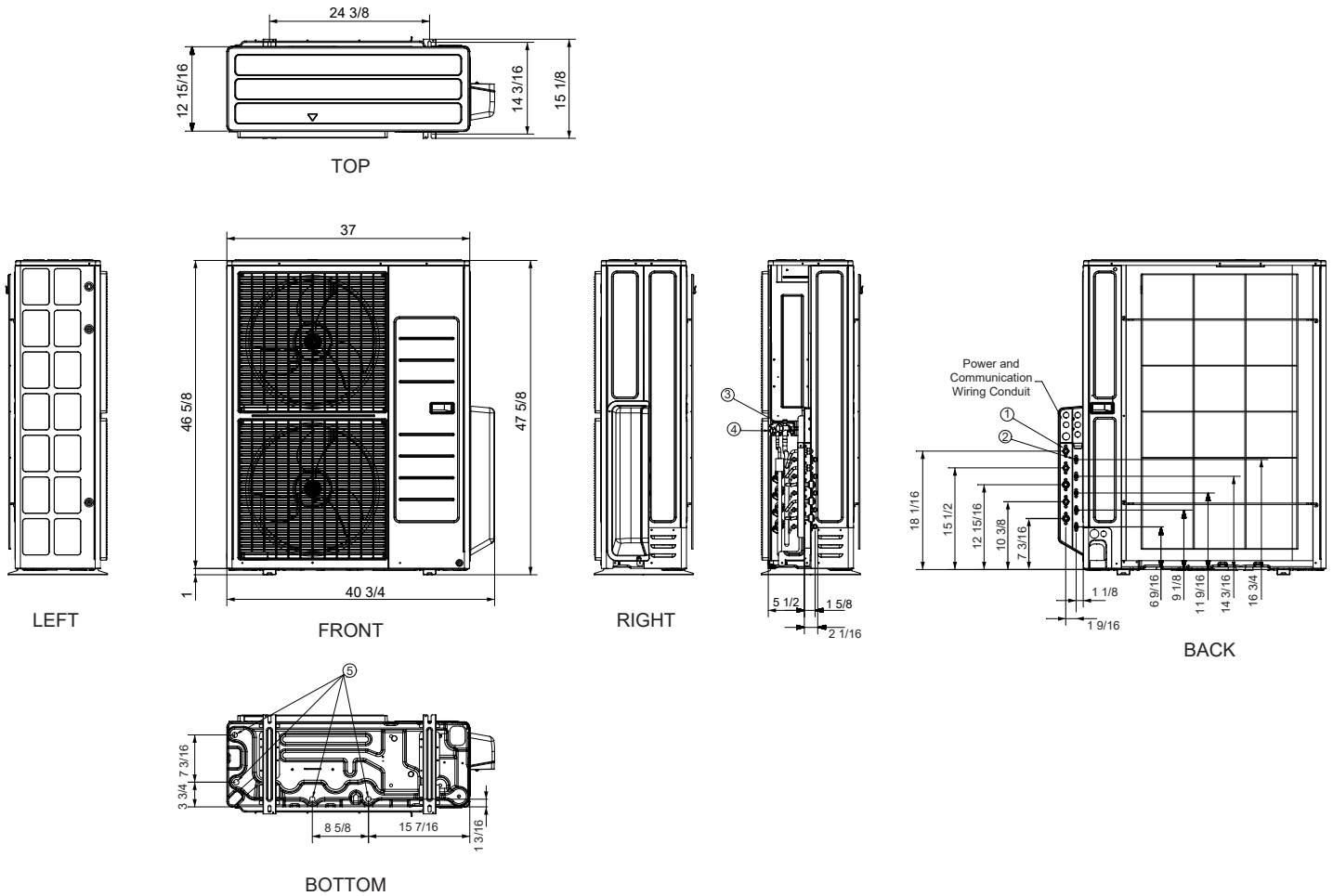
Accessories

Wind baffles	Front	WBF-1M2
	Back	WBB-2M-B
Hail guard kit (includes back and side guards)		HGK-4
Wall bracket		CKN-250

Dimensional Drawing

AJ048DXJ5CG/AA (JXG48J5D)

Unit: Inches



No.	Name	Description
1	Refrigerant suction pipes (ø)	3/8" X 2 + 1/2" X 3
2	Refrigerant liquid pipes (ø)	1/4" X 5
3	Service valve (suction)	-
4	Service valve (liquid)	-
5	Drain holes	Connection with provided drain fitting

Compatibility

Series	Type	Model	Capacity (K Btu/h)					
			7	9	12	15	18	24
RAC	WindFree™ Premium High-wall	AR**DXDABWKNCV	-	●	●	-	●	●
		AR**DXDAFWKNCV	●	-	-	●	-	-
	WindFree™ Standard High-wall	AR**DXFAMWKNCV	●	●	●	●	●	●
	WindFree™ IAQ High-wall	AR**DXKAPWKNCV	●	●	●	●	●	●
FJM	WindFree™ Standard High-wall W/Refrigerant Leak Detection	AJ0**DNADCG/AA	●	●	●	●	●	●
	Duct S**	AJ0**DNHDCG/AA	-	●	●	●	●	-
	Multi-Position AHU**	AJ0**DNZDCG/AA	-	-	●	-	●	●
CAC	Slim Duct	AC0**DNLDCG/AA	-	●	●	-	●	-
	WindFree™ Mini 4-Way Cassette	AC0**DNND CG/AA	-	●	●	-	●	-
	WindFree™ 1-Way Cassette	AC0**DN1DCG/AA	-	●	●	-	-	-
	Console	AC0**DNJDCG/AA	-	●	●	●	●	-

** Restrictions apply. Refer to supporting technical data book (TDB) for indoor unit compatibility available at www.SamsungHVAC.com. Samsung HVAC maintains a policy of ongoing development. Specifications are subject to change without notice.

Indoor Unit Connection Options

AJ048DXJ5CG/AA (Capacity Index: 48)															
Unit Qty.	Indoor Nominal Capacity (K Btu/h)					Duct S / MPAH Compatibility*	Connected Capacity (K Btu/h)	Unit Qty.	Indoor Nominal Capacity (K Btu/h)					Duct S / MPAH Compatibility*	Connected Capacity (K Btu/h)
	A	B	C	D	E				A	B	C	D	E		
2	7	7					14	3	7	15	15			O	37
	7	9				O	16		7	15	18			O	40
	7	12				O	19		7	15	24			O	46
	7	15				O	22		7	18	18			O	43
	7	18				O	25		7	18	24				49
	7	24				O	31		7	24	24				55
	9	9				O	18		9	9	9			O	27
	9	12				O	21		9	9	12			O	30
	9	15				O	24		9	9	15			O	33
	9	18				O	27		9	9	18			O	36
	9	24				O	33		9	9	24			O	42
	12	12				O	24		9	12	12			O	33
	12	15				O	27		9	12	15			O	36
	12	18				O	30		9	12	18			O	39
	12	24				O	36		9	12	24			O	45
	15	15				O	30		9	15	15			O	39
	15	18				O	33		9	15	18			O	42
	15	24				O	39		9	15	24			O	48
	18	18				O	36		9	18	18			O	45
	18	24				O	42		9	18	24				51
24	24				O	48	9	24	24				57		
3	7	7	7				21	12	12	12			O	36	
	7	7	9			O	23	12	12	15			O	39	
	7	7	12			O	26	12	12	18			O	42	
	7	7	15			O	29	12	12	24			O	48	
	7	7	18			O	32	12	15	15			O	42	
	7	7	24			O	38	12	15	18			O	45	
	7	9	9			O	25	12	15	24				51	
	7	9	12			O	28	12	18	18			O	48	
	7	9	15			O	31	12	18	24				54	
	7	9	18			O	34	15	15	15			O	45	
	7	9	24			O	40	15	15	18			O	48	
	7	12	12			O	31	15	15	24				54	
	7	12	15			O	34	15	18	18				51	
	7	12	18			O	37	15	18	24				57	
	7	12	24			O	43	18	18	18				54	

Combination tables are continued on the following page.

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*Duct S and MPAH Connection Notes

- Combatale combination that includes up to two (2) X MPAH (AJ0**DNZDCG/AA) or Duct S (AJ0**DNHDCG/AA) units.
- If the combination includes two (2) X MPAH (AJ0**DNZDCG/AA) or Duct S (AJ0**DNHDCG/AA) units, no other indoor units can be connected.
- If one (1) X MPAH (AJ0**DNZDCG/AA) or Duct S (AJ0**DNHDCG/AA) unit is connected, other indoor unit types (Slim Duct, cassette, high-wall, console) can be connected and the total sum of the indoor unit nominal capacity cannot exceed the system index noted above and the maximum indoor unit quantity will be reduced by one (1) unit.

Indoor Unit Connection Options

AJ048DXJ5CG/AA - Continued (Capacity Index: 48)															
Unit Qty.	Indoor Nominal Capacity (K Btu/h)					Duct S / MPAH Compatibility*	Connected Capacity (K Btu/h)	Unit Qty.	Indoor Nominal Capacity (K Btu/h)					Duct S / MPAH Compatibility*	Connected Capacity (K Btu/h)
	A	B	C	D	E				A	B	C	D	E		
4	7	7	7	7			28	4	7	12	12	18			49
	7	7	7	9		O	30		7	12	12	24			55
	7	7	7	12		O	33		7	12	15	15			49
	7	7	7	15		O	36		7	12	15	18			52
	7	7	7	18		O	39		7	12	18	18			55
	7	7	7	24		O	45		7	15	15	15			52
	7	7	9	9		O	32		7	15	15	18			55
	7	7	9	12		O	35		9	9	9	9		O	36
	7	7	9	15		O	38		9	9	9	12		O	39
	7	7	9	18		O	41		9	9	9	15		O	42
	7	7	9	24		O	47		9	9	9	18		O	45
	7	7	12	12		O	38		9	9	9	24			51
	7	7	12	15		O	41		9	9	12	12		O	42
	7	7	12	18		O	44		9	9	12	15		O	45
	7	7	12	24			50		9	9	12	18		O	48
	7	7	15	15		O	44		9	9	12	24			54
	7	7	15	18		O	47		9	9	15	15		O	48
	7	7	15	24			53		9	9	15	18			51
	7	7	18	18			50		9	9	15	24			57
	7	7	18	24			56		9	9	18	18			54
	7	9	9	9		O	34		9	12	12	12		O	45
	7	9	9	12		O	37		9	12	12	15		O	48
	7	9	9	15		O	40		9	12	12	18			51
	7	9	9	18		O	43		9	12	12	24			57
	7	9	9	24			49		9	12	15	15			51
	7	9	12	12		O	40		9	12	15	18			54
	7	9	12	15		O	43		9	12	18	18			57
	7	9	12	18		O	46		9	15	15	15			54
	7	9	12	24			52		9	15	15	18			57
	7	9	15	15		O	46		12	12	12	12		O	48
	7	9	15	18			49		12	12	12	15			51
	7	9	15	24			55		12	12	12	18			54
7	9	18	18			52	12	12	15	15			54		
7	12	12	12		O	43	12	12	15	18			57		
7	12	12	15		O	46	12	15	15	15			57		

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	A	B	C	D	E				A	B	C	D	E		
5	7	7	9	9	15		47	5	9	9	9	12	12		51
	7	7	9	9	18		50		9	9	9	12	15		54
	7	7	9	9	24		56		9	9	9	12	18		57
	7	7	9	12	12		47		9	9	9	15	15		57
	7	7	9	12	15		50		9	9	12	12	12		54
	7	7	9	12	18		53		9	9	12	12	15		57
	7	7	9	15	15		53		9	12	12	12	12		57
	7	7	9	15	18		56		7	7	7	7	7		35
	7	7	12	12	12		50		7	7	7	7	9		37
	7	7	12	12	15		53		7	7	7	7	12		40
	7	7	12	12	18		56		7	7	7	7	15		43
	7	7	12	15	15		56		7	7	7	7	18		46
	7	9	9	9	9		43		7	7	7	7	24		52
	7	9	9	9	12		46		7	7	7	9	9		39
	7	9	9	9	15		49		7	7	7	9	12		42
	7	9	9	9	18		52		7	7	7	9	15		45
	7	9	9	12	12		49		7	7	7	9	18		48
	7	9	9	12	15		52		7	7	7	9	24		54
	7	9	9	12	18		55		7	7	7	12	12		45
	7	9	9	15	15		55		7	7	7	12	15		48
	7	9	12	12	12		52		7	7	7	12	18		51
	7	9	12	12	15		55		7	7	7	12	24		57
	7	12	12	12	12		55		7	7	7	15	15		51
	9	9	9	9	9		45		7	7	7	15	18		54
	9	9	9	9	12		48		7	7	7	18	18		57
	9	9	9	9	15		51		7	7	9	9	9		41
	9	9	9	9	18		54		7	7	9	9	12		44

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