

# QUICK REFERENCE DATA

## \*SA1BD4M1 Series Split System Air Conditioner for Manufactured Housing

13 SEER

MODEL NUMBER: *SA1BD4M1SN			18K	24K	30K	36K	42K	48K	60K
ELECTRICAL DATA	Volts-Cycles Phase (1)		208 / 230 - 60 - 1						
	Total Amps		9.3	13.5	14.8	18.0	19.4	23.2	27.8
	Delay Fuse Max. (2)		20	25	30	35	40	50	60
	Min. Circuit Ampacity		11.6	16.7	18.3	22.2	23.9	28.7	34.4
COMPONENT DATA	Coil	Area	8.3	8.3	10.0	10.0	15.3	15.3	17.9
		Rows-FPI	1-18						
		Tube Dia.	Micro-Channel						
	Fan Motor	Type	PSC						
		Amps	0.35	0.7	0.7	1.4	1.5	1.5	1.5
		HP	0.05	0.1	0.1	0.25	0.25	0.25	0.25
	Compressor Data	RLA	9.0	12.8	14.1	16.6	17.9	21.8	26.4
		LRA	48.0	58.3	73.0	79.0	112.0	117.0	134.0
RECOMMENDED REFRIGERANT SUCTION LINE O.D NOTE: Liquid line is 3/8" O.D. for entire length.		0 - 24 ft.	3/4"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
		25 - 39 ft.	3/4"	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (4)
		40 - 75 ft.	3/4"	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (4)
REFRIGERANT CHARGE R-410A in ounces for outdoor unit & 15' Lineset. (5)			50.0	50.0	51.0	51.0	81.0	76.0	111.6
APPROXIMATE WEIGHT (LBS.)		Net	DATA UNAVAILABLE AT TIME OF PRINT						
		Ship							

- (1) Operating Voltage Range: 187v min. — 253v max.
- (2) HACR Type Circuit Breakers may be used.
- (3) Requires 7/8" to 3/4" reducer from line to unit.
- (4) Requires 7/8" to 1-1/8" reducer from line to unit.
- (5) Additional charge for line sets above 15 feet. Values based on suction line as follows with 3/8" liquid line.
  - (a) 3/4" = 0.6 oz. per additional foot.
  - (b) 7/8" = 0.7 oz. per additional foot.
  - (c) 1 1/8" = 0.8 oz. per additional foot.

Table 1. Electrical Specifications & Physical Data

WIRE GAUGE	RECOMMENDED MAXIMUM WIRE LENGTH (FT) FROM UNIT TO THERMOSTAT
22	45
20	70
18	115
16	180

Table 2. Control Wiring (24V)

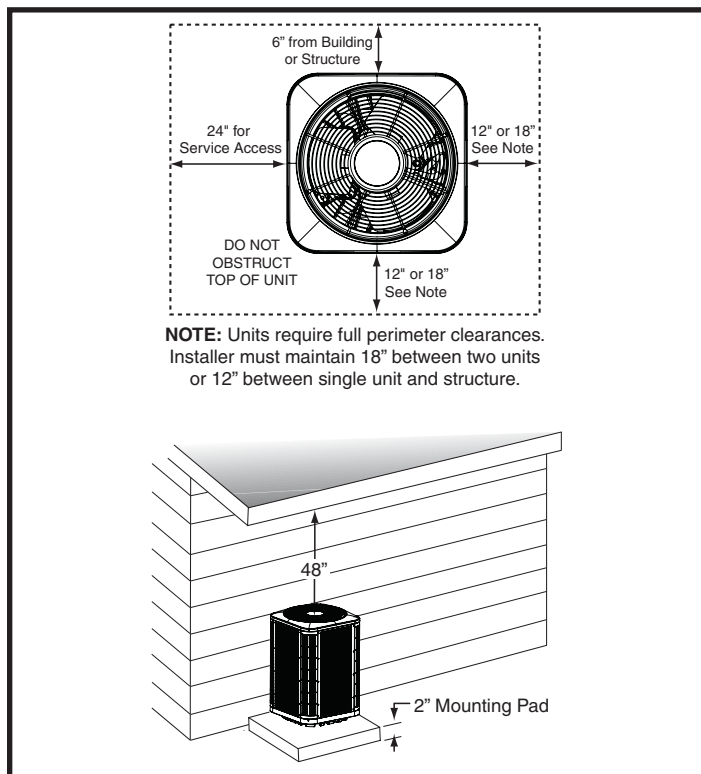


Figure 1. Clearance Requirements

Model JSA1BD4M1 Shown			
MODEL NUMBER	HEIGHT (H)	WIDTH (W)	DEPTH (D)
*SA1BD4M1SN18K	24 1/2"	23 3/4"	23 3/4"
*SA1BD4M1SN24K	24 1/2"	23 3/4"	23 3/4"
*SA1BD4M1SN30K	28 1/2"	23 3/4"	23 3/4"
*SA1BD4M1SN36K	28 1/2"	23 3/4"	23 3/4"
*SA1BD4M1SN42K	29 1/4"	31 3/4"	31 3/4"
*SA1BD4M1SN48K	29 1/4"	31 3/4"	31 3/4"
*SA1BD4M1SN60K	33 1/4"	31 3/4"	31 3/4"

Table 3. Unit Dimensions

**Instructions:**

1. Find the column for the model of outdoor unit that is being installed.
2. Find the row for the model of the indoor unit that is being installed.
3. Find the cell in the table in which this row and column meet. In this cell the appropriate orifice / TXV and charge addition for this match are listed. If the text in this cell is **BOLD**, then a change of orifice is necessary.
4. If a change in restrictor is necessary, then the appropriate restrictor will already be supplied with the outdoor unit.

**Examples:**

- For the \*SA1BD4M1S18K / C8(B,D)AM01830U-B match, the appropriate restrictor is the .048" and no additional charge needs to be added. (CHANGE IN RESTRICTOR)
- For the \*SA1BD4M1S48K / C8(B,D)VMX48U-C match, the appropriate TXV is the 669568 and 22 ounces of refrigerant should be removed. (CHARGE REDUCTION)

ID RESTRICTOR INSTALLED WITH ID UNIT	MODEL NUMBER: *SA1BD4M1SN		18K	24K	30K	36K	42K	48K	60K
	ID RESTRICTOR SUPPLIED WITH OD UNIT:		0.048	0.055					
	OUTDOOR UNIT BOM CHARGE (OZ.)		50.0	50.0	51.0	51.0	81.0	76.0	111.6
	MODELS	SUPPLIED WITH ID	REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW (SCFM))						
	C8								
	C8(B,D)AM01830U-B	0.061	0.048 (0 / 535)	0.055 (0 / 705)	0.061 (0 / 960)	--	--	--	--
	C8(B,D)AM036U-B	0.067	--	--	--	0.067 (0 / 1190)	--	--	--
	C8(B,D)AM042U-B	0.071	--	--	--	--	0.071 (-16 / 1290) ‡	--	--
	C8-X								
	C8(B,D)AMX24U-B	669564	669564 (0 / 530)	669564 (5 / 850)	--	--	--	--	--
	C8(B,D)AMX30U-B	669565	--	--	669565 (6 / 1080)	--	--	--	--
	C8(B,D)VMX42U-C	669567	--	--	--	--	669567 (-20 / 1265) ‡	--	--
	C8(B,D)VMX48U-C	669568	--	--	--	--	--	669568 (-15 / 1430) ‡	--
	CM4B								
	CM4B-53U	TXV	--	--	--	--	TXV (0 / 1250)	--	--
	CM4B-54U	TXV	--	--	--	--	--	TXV (0 / 1450)	TXV (0 / 1450)
	CM4B-56U	TXV	--	--	--	--	--	TXV (10 / 1500)	TXV (0 / 1600)

**NOTES:**

- The charges listed are only valid for the standard 15' lineset.
  - Numbers listed as 0.\*\*\* are restrictor diameters, while numbers listed as 669\*\*\* are TXV part numbers.
- ‡ Requires REMOVAL of refrigerant from unit.

**Table 4. Restrictor or TXV / Charge Addition (Oz)**

THE CHARGE ADDITIONS PROVIDED IN THIS DOCUMENT ARE ESTIMATES BASED ON TEST DATA AND SHOULD ONLY BE A STARTING POINT. AFTER FOLLOWING THESE DIRECTIONS PLEASE ADJUST THE REFRIGERANT AMOUNT BASED ON THE APPROPRIATE CHARGING TABLES OR CHARTS IN THE INSTALLATION INSTRUCTIONS OR CHARGING LABEL.

