

# QUICK REFERENCE DATA

## \*SA1BF4M SERIES RESIDENTIAL SPLIT SYSTEM AIR CONDITIONER

16 SEER

MODEL NUMBER *SA1BF4M		1SN24K	1SN30K	1SN36K	1SN42K	1SN48K	2SN60K	
<b>ELECTRICAL DATA</b>	Volts-Cycles-Phase (1)	208/230-60-1						
	Total Amps	14.1	13.7	15.1	19.4	22.4	31.4	
	Delay Fuse Max. (2)	30	25	30	40	45	60	
	Min. Circuit Ampacity	17.5	16.9	18.6	23.9	27.4	38.6	
<b>CONDENSER DATA</b>	Coil	Area	13.3	15.2	22.8	25.3	25.3	
		Rows-FPI	1-23	1-18	1-18	1-23	1-23	
		Tube Dia	MC					
	Fan Motor	Type	PSC			BLDC		
		Amps	0.7	0.9	1.0	1.5	2.6	2.6
		HP	0.10	0.13	0.20	0.25	0.33	0.33
	Compressor Data	RLA	13.4	12.8	14.1	17.9	19.8	28.8
LRA		58.3	64.0	77.0	112.0	109.0	152.9	
<b>RECOMMENDED REFRIGERANT SUCTION LINE O.D.*</b> NOTE: Liquid line is 3/8" O.D. for entire length.		0-24 ft.	3/4"	3/4"	3/4"	7/8"	7/8"	
		25-39 ft.	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (4)
		40-75 ft.	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (4)
<b>REFRIGERANT CHARGE:</b> R-410A in ounces for outdoor unit, indoor unit and 15' line set. (5)		64.0	67.0	78.0	91.0	85.0	94.0	
<b>APPROXIMATE WEIGHT (LBS.)</b>		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.
- \* For other line set dimensions, refer to the Application Guidelines for Refrigerant Lines Addendum.

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

Table 1. Electrical Specifications & Physical Data

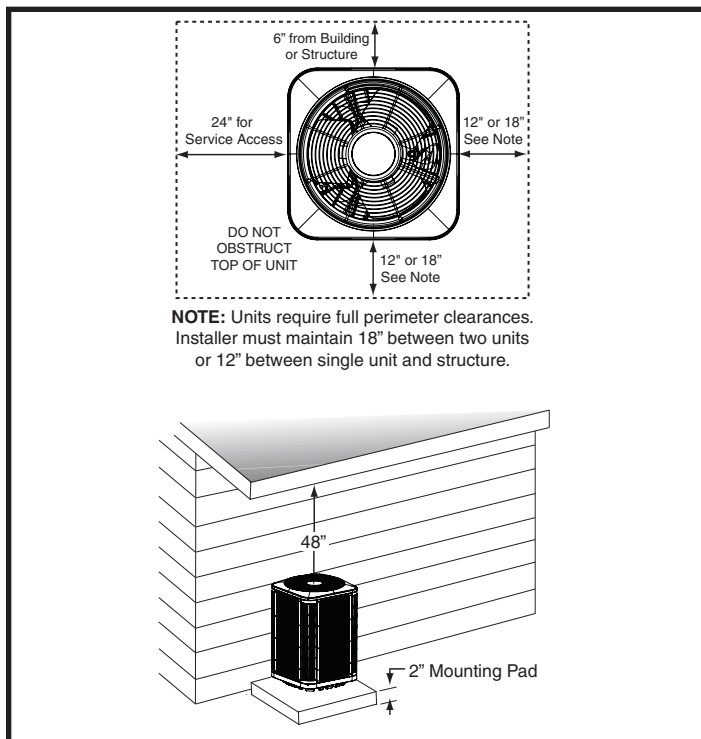


Figure 1. Clearance Requirements

Table 2. Control Wiring (24V)

MODEL NUMBER	HEIGHT (H)	WIDTH (W)	DEPTH (D)
*SA1BF4M1SN24K	36 1/2"	23 3/4"	23 3/4"
*SA1BF4M1SN30K	29 1/4"	31 3/4"	31 3/4"
*SA1BF4M1SN36K	41 1/4"	31 3/4"	31 3/4"
*SA1BF4M1SN42K	45 1/4"	31 3/4"	31 3/4"
*SA1BF4M1SN48K	45 1/4"	31 3/4"	31 3/4"
*SA1BF4M2SN60K	45 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 \*SA1BF4M1SN24K / B6EMMX24K-B match, the appropriate TXV is the 669564 and no additional charge needs to be added. (NO CHANGES ARE NECESSARY)
- For the \*SA1BF4M1SN24K / C7B(A,H)M01824(C,U)-B + TXV match, the 920668A TXV Kit is needed as well as an additional 3 ounces of charge (TXV KIT AND CHARGE ADJUSTMENT NEEDED).

MODEL NUMBER: *SA1BF4M		1SN24K	1SN30K	1SN36K	1SN42K	1SN48K	2SN60K
OUTDOOR UNIT BOM CHARGE (OZ.)		65	68	79	91	85	98
MODELS	SUPPLIED WITH ID	REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW -SCFM)					
<b>B6EM</b>							
B6EMMX24K-A	669564	669564 (0 / 835)	--	--	--	--	--
B6EMMX24K-B	669564	669564 (0 / 835)	--	--	--	--	--
B6EMMX30K-A	669565	--	669565 (0 / 995)	--	--	--	--
B6EMMX30K-B	669565	--	669565 (0 / 995)	--	--	--	--
B6EMMX36K-B	669566	--	--	669566 (2 / 1035)	--	--	--
B6EMMX48K-C	669852	--	--	--	669852 (0 / 1200)	669852 (0 / 1495)	--
<b>B6VM</b>							
B6VMAX24K-A	669564	669564 (7 / 840)	--	--	--	--	--
B6VMAX24K-B	669564	669564 (7 / 840)	--	--	--	--	--
B6VMAX30K-A	669565	--	669565 (6 / 980)	--	--	--	--
B6VMAX30K-B	669565	--	669565 (6 / 980)	--	--	--	--
B6VMAX36K-B	669566	--	--	669566 (10 / 1045)	--	--	--
B6VMAX48K-C	669568	--	--	--	669568 (23 / 1245)	669568 (21 / 1400)	--
B6VMAX60K-C	669578	--	--	--	--	--	669578 (23 / 1600)
<b>B6VMMX</b>							
B6VMMX24K-A	669564	669564 (0 / 835)	--	--	--	--	--
B6VMMX24K-B	669564	669564 (0 / 835)	--	--	--	--	--
B6VMMX30K-A	669565	--	669565 (0 / 995)	--	--	--	--
B6VMMX30K-B	669565	--	669686 (0 / 995)	--	--	--	--
B6VMMX36K-B	669566	--	--	669566 (2 / 1035)	--	--	--
B6VMMX48K-C	669568	--	--	--	669568 (0 / 1200)	669568 (0 / 1495)	--
B6VMMX60K-C	669578	--	--	--	--	--	669578 (0 / 1695)
<b>C6</b>							
C6B(A,H)-X60(C,U)-C	669686	--	--	--	--	--	669686 (23 / 1575)
C6B(A,H)-X60(C,U)-D	669686	--	--	--	--	--	669686 (23 / 1575)

**NOTES:**

- The charges listed are only valid for the standard 15' lineset.
- Part numbers beginning with 669\*\*\*are TXV part numbers and numbers listed as 0.\*\*\* are restrictor diameters.

**Table 4. REQUIRED RESTRICTOR OR TXV  
(CHARGE ADDITION (OZ) / RATED AIRFLOW -SCFM)**

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.

**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 \*SA1BF4M1SN24K / B6EMMX24K-B match, the appropriate TXV is the 669564 and no additional charge needs to be added. (NO CHANGES ARE NECESSARY)
- For the \*SA1BF4M1SN24K / C7B(A,H)M01824(C,U)-B + TXV match, the 920668A TXV Kit is needed as well as an additional 3 ounces of charge (TXV KIT AND CHARGE ADJUSTMENT NEEDED).

MODEL NUMBER: *SA1BF4M		1SN24K	1SN30K	1SN36K	1SN42K	1SN48K	2SN60K
OUTDOOR UNIT BOM CHARGE (OZ.)		65	68	79	91	85	98
MODELS	SUPPLIED WITH ID	REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW -SCFM)					
<b>C7-0 + TXV</b>							
C7B(A,H)M01824(C,U)-A + TXV	0.048	<b>920668A (3 / 745)</b>	--	--	--	--	--
C7B(A,H)M01824(C,U)-B + TXV	0.055	<b>920668A (3 / 845)</b>	--	--	--	--	--
C7B(A,H)M030(C,U)-C + TXV	0.061	--	<b>920669A (0 / 950)</b>	--	--	--	--
C7B(A,H)M03036(C,U)-A + TXV	0.061	--	<b>920669A (0 / 950)</b>	--	--	--	--
C7B(A,H)M03036(C,U)-B + TXV	0.067	--	<b>920669A (0 / 950)</b>	--	--	--	--
C7B(A,H)M03642(C,U)-B + TXV	0.071	--	--	<b>920670A (0 / 1310)</b>	--	--	--
C7B(A,H)M03648(C,U)-C + TXV	0.067	--	--	<b>920670A (0 / 1325)</b>	<b>920671A (0 / 1200)</b>	--	--
C7B(A,H)M048(C,U)-C + TXV	0.077	--	--	--	--	<b>920672A (16 / 1500)</b>	--
C7B(A,H)M048(C,U)-D + TXV	0.077	--	--	--	--	<b>920672A (16 / 1465)</b>	--
<b>C7-X</b>							
C7B(A,H)MX24(C,U)-A	669681	669681 (3 / 945)	--	--	--	--	--
C7B(A,H)MX24(C,U)-B	669681	669681 (3 / 1000)	--	--	--	--	--
C7B(A,H)MX30(C,U)-A	669682	--	669682 (0 / 950)	--	--	--	--
C7B(A,H)MX30(C,U)-B	669682	--	669682 (0 / 950)	--	--	--	--
C7B(A,H)MX30(C,U)-C	669682	--	669682 (0 / 950)	--	--	--	--
C7B(A,H)MX36(C,U)-B	669683	--	--	669683 (0 / 1000)	--	--	--
C7B(A,H)MX36(C,U)-C	669683	--	--	669683 (0 / 1000)	--	--	--
C7B(A,H)MX42(C,U)-C	669684	--	--	--	669684 (0 / 1200)	--	--
C7B(A,H)MX48(C,U)-C	669852	--	--	--	--	669852 (16 / 1500)	--
C7B(A,H)MX48(C,U)-D	669852	--	--	--	--	669852 (16 / 1465)	--
C7B(A,H)MX60(C,U)-C	669686	--	--	--	--	--	669686 (0 / 1695)
C7B(A,H)MX60(C,U)-D	669686	--	--	--	--	--	669686 (0 / 1585)
<b>C6</b>							
C6B(A,H)-X60(C,U)-C	669686	--	--	--	--	--	669686 (23 / 1575)

ID RESTRICTOR INSTALLED WITH ID UNIT

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