

# QUICK REFERENCE DATA

## \*SH1BE4M1 SERIES SPLIT SYSTEM HEAT PUMP WITH MICROCHANNEL COILS FOR MANUFACTURED HOUSING

14 SEER

MODEL NUMBER: *SH1BE4M1SP-			24K	30K	36K	42K	48K
Electrical Data	Volts-Cycles-Phase (1)						
	Total Amps		14.4	13.7	15.1	19.4	21.3
	Delay Fuse Max. (2)		30	25	30	40	45
	Min. Circuit Ampacity		17.7	16.9	18.6	23.9	26.3
Condenser Data	Coil	Area	17.5	22.5	25.0	24.4	24.4
		Rows-FPI	1 - 14	1 - 14	1 - 14	1 - 14	1 - 14
		Tube Dia	MC				
	Fan Motor	Type	PSC				
		Amps	0.9	0.9	1.0	1.5	1.5
		HP	0.13	0.13	0.20	0.25	0.25
	Compressor Data	RLA	13.4	12.8	14.1	17.9	19.8
		LRA	58.3	64.0	77.0	112.0	109.0
Recommended Refrigerant suction line O.D* NOTE: Liquid line is 3/8" O.D. for entire length.		0-24 ft.	3/4"	3/4"	7/8"	7/8"	7/8"
		25-39 ft.	3/4"	3/4"	7/8"	7/8"	7/8"
		40-75 ft.	3/4"	3/4"	7/8"	7/8"	7/8"
Refrigerant charge: (R-410A) in ounces for outdoor unit, indoor unit and 20' line set. (4)			97	104	111	124	122
Weight Approximate (lbs.)		Net	167	182	191	227	226
		Ship	189	206	216	251	251

- (1) Operating Voltage Range: 187v min. - 253v max.  
 (2) HACR Type Circuit Breakers may be used.  
 (3) Requires 7/8" to 1-1/8" reducer from line to unit.  
 (4) Additional charge for line sets above 20 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.

Table 1. Electrical Specifications & Physical Data

THERMOSTAT WIRE GAUGE	RECOMMENDED T-STAT WIRE UNIT TO T-STAT (LENGTH IN FT)	
	2-WIRE (HEATING)	5-WIRE (HEATING/COOLING)
24	55	25
22	90	45
20	140	70
18	225	110

Table 2. Thermostat Wire Gauge

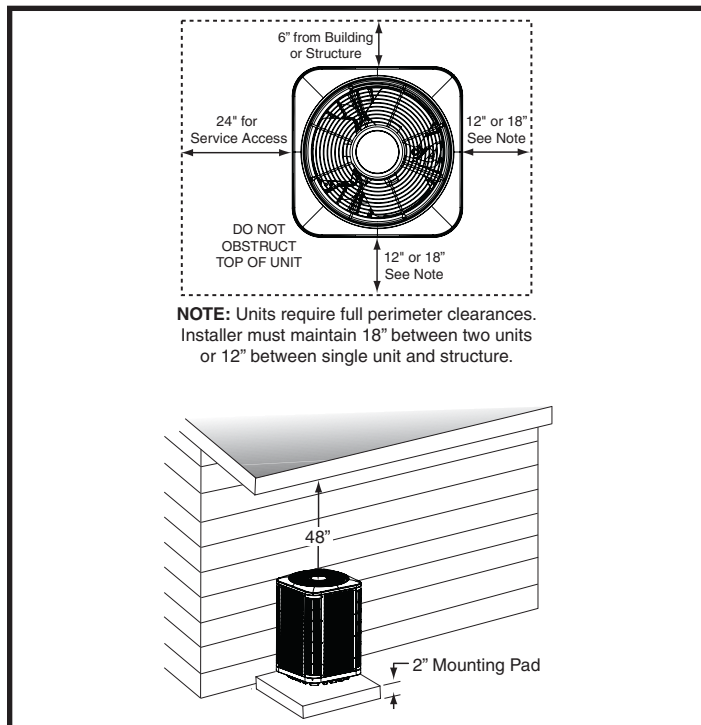


Figure 1. Clearance Requirements

<p>Model JSH1BE4M1 Shown</p>			
MODEL NUMBER	HEIGHT (H)	WIDTH (W)	DEPTH (D)
*SH1BE4M1SP24K	33 1/4"	31 3/4"	31 3/4"
*SH1BE4M1SP30K	41 1/4"	31 3/4"	31 3/4"
*SH1BE4M1SP36K	45 1/4"	31 3/4"	31 3/4"
*SH1BE4M1SP42K	45 1/4"	31 3/4"	31 3/4"
*SH1BE4M1SP48K	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 \*SH1BE4M1SP30K / C8(B,D)AMO1830U-B match, the appropriate TXV is the 920669A" and no additional charge is necessary (NO CHANGES REQUIRED).
- For the \*SH1BE4M1SP48K / C8(B,D)AMX49U-B match, the appropriate TXV is 669568 and no additional charge is necessary. ( NO CHANGES REQUIRED).

ID RESTRICTOR INSTALLED WITH ID UNIT	MODEL NUMBER: *SH1BE4M1SP		24K	30K	36K	42K	48K
	OD RESTRICTOR INSTALLED IN OD UNIT:		0.042	0.051	0.055	0.057	0.060
	OUTDOOR UNIT BOM CHARGE (OZ.)		97	104	111	124	122
	MODELS	SUPPLIED WITH ID	REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW (SCFM))				
	C7-X						
	C7B(A,H)MX24(C,U)-B	669681	669681 (4 / 810)	--	--	--	--
	C7B(A,H)MX30(C,U)-B	669682	--	669682 (3 / 980)	--	--	--
	C7B(A,H)MX30(C,U)-C	669682	669682 (4 / 810)	669682 (2 / 980)	--	--	--
	C7B(A,H)MX36(C,U)-B	669683	--	--	669683 (6 / 1140)	--	--
	C7B(A,H)MX36(C,U)-C	669683	--	--	669683 (6 / 1140)	--	--
	C7B(A,H)MX42(C,U)-C	669684	--	--	--	669684 (0 / 1205)	--
	C7B(A,H)MX48(C,U)-C	669852	--	--	--	--	669852 (0 / 1510)
	C8+TXV						
	C8(B,D)AM01830U-B+TXV	0.061	920668A (0 / 820)	920669A (0 / 980)	--	--	--
	C8(B,D)AM036U-B+TXV	0.067	--	--	920670A (0 / 1195)	--	--
	C8-X						
	C8(B,D)AMX24U-B	669564	669564 (0 / 810)	--	--	--	--
	C8(B,D)AMX30U-B	669565	--	669565 (0 / 980)	--	--	--
	C8(B,D)AMX36U-B	669566	--	--	669566 (0 / 1200)	--	--
	C8(B,D)AMX42U-B	669567	--	--	--	669567 (0 / 1355)	--
C8(B,D)AMX49U-B	669568	--	--	--	--	669568 (0 / 1500)	

**NOTES:**

- Gray cells require the outdoor restrictor to be changed as well. See Table 5.
- The charges listed are only valid for the standard 20' lineset.
- Part numbers beginning with 669\*\*\*are TXV part numbers and numbers listed as 0.\*\*\* are restrictor diameters.

**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.

