

QUICK REFERENCE DATA

*SH1BE4M1 SERIES RESIDENTIAL SPLIT SYSTEM HEAT PUMP WITH MICROCHANNEL COILS 14 SEER

MODEL NUMBER: *SH1BE4M1SP-		18K	24K	30K	36K	42K	48K	60K	
ELECTRICAL DATA	Volts-Cycles-Phase (1)	208/230-60-1							
	Total Amps	9.9	14.4	13.7	15.1	19.4	21.3	27.7	
	Delay Fuse Max. (2)	20	30	25	30	40	45	60	
	Min. Circuit Ampacity	12.1	17.7	16.9	18.6	23.9	26.3	34.3	
CONDENSER DATA	Coil	Area	17.5	17.5	22.5	25.0	24.4	24.4	24.4
		Rows-FPI	1 - 14	1 - 14	1 - 14	1 - 14	1 - 14	1 - 14	1 - 16
		Tube Dia	MC						
	Fan Motor	Type	PSC						
		Amps	0.9	0.9	0.9	1.0	1.5	1.5	1.5
		HP	0.13	0.13	0.13	0.20	0.25	0.25	0.25
	Compressor Data	RLA	9.0	13.4	12.8	14.1	17.9	19.8	26.2
LRA		46.0	58.3	64.0	77.0	112.0	109.0	134.0	
Recommended Refrigerant suction line O.D.*		0-24 ft.	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"	7/8"
NOTE: Liquid line is 3/8" O.D. for entire length.		25-39 ft.	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"	1-1/8" (3)
		40-75 ft.	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"	1-1/8" (3)
Refrigerant charge: (R-410A) in ounces for outdoor unit, indoor unit and 15' line set. (4)		96	93	97	98	115	115	114	
Weight Approximate (lbs.)	Net	167	166	182	192	227	225	231	
	Ship	190	188	206	217	252	250	256	

- (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 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.

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

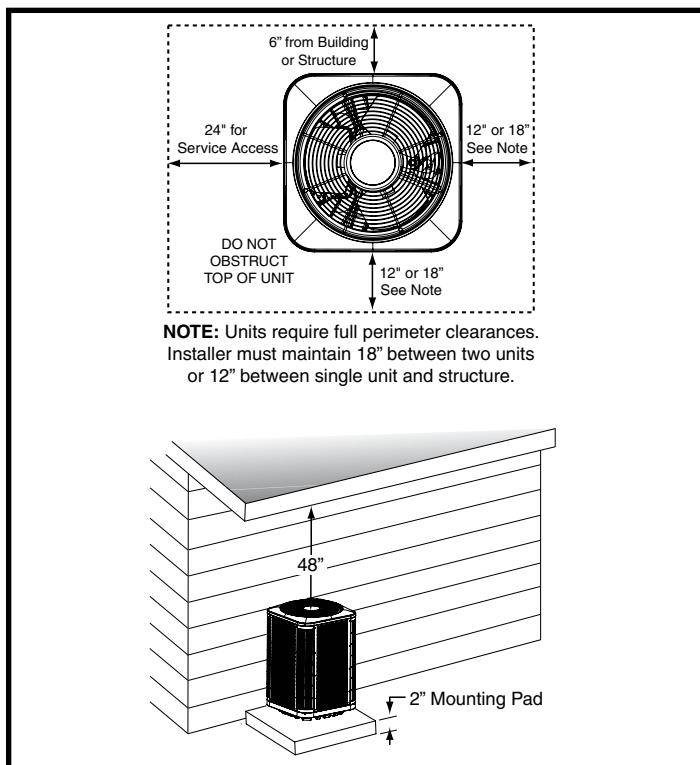
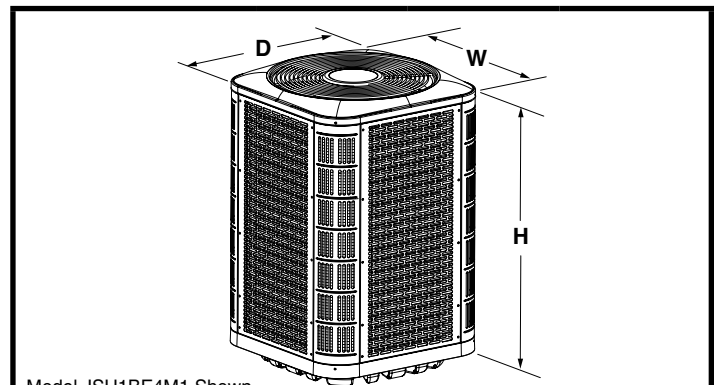


Figure 1. Clearance Requirements



MODEL NUMBER	HEIGHT (H)	WIDTH (W)	DEPTH (D)
*SH1BE4M1SP18K	33 1/4"	31 3/4"	31 3/4"
*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"
*SH1BE4M1SP60K	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 / B6BMM030K-A match, the appropriate restrictor is the 0.062" and no additional charge is necessary (NO CHANGES REQUIRED).
- For the *SH1BE4M1SP60K / B6BMM060K-C match, the indoor restrictor will need to be changed to the 0.091", the outdoor restrictor must be changed to the 0.074", and 3 ounces of refrigerant must be added (CHANGE IN INDOOR RESTRICTOR, OUTDOOR RESTRICTOR, AND CHARGE ADDITION).

MODEL NUMBER: *SH1BE4M1SP		18K	24K	30K	36K	42K	48K	60K
ID RESTRICTOR SUPPLIED WITH OD UNIT:		0.050	0.057	0.061, 0.062	0.066	0.075	0.076	0.091
OD RESTRICTOR INSTALLED IN OD UNIT:		0.040	0.041	0.048	0.055	0.059	0.062	0.076
OUTDOOR UNIT BOM CHARGE (OZ.)		96	93	97	98	115	115	114
MODELS	SUPPLIED WITH ID	REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW (SCFM))						
B6BMM0								
B6BMM024K-A	0.055	0.050 (3 / 650)	0.057 (6 / 825)	--	--	--	--	--
B6BMM024K-B	0.055	0.050 (3 / 650)	0.057 (6 / 825)	--	--	--	--	--
B6BMM030K-A	0.062	--	--	0.062 (0 / 1040)	--	--	--	--
B6BMM030K-B	0.062	--	--	0.062 (0 / 1040)	--	--	--	--
B6BMM042K-B	0.074	--	--	--	0.067 (2 / 1195)	0.075 (5 / 1275)	--	--
B6BMM060K-C	0.087	--	--	--	--	--	0.076 (4 / 1555)	0.091 (3 / 1615)
B6BMMX								
B6BMMX24K-A	669564	669564 (0 / 645)	669564 (0 / 840)	--	--	--	--	--
B6BMMX24K-B	669564	669564 (0 / 645)	669564 (0 / 860)	--	--	--	--	--
B6BMMX30K-A	669565	--	--	669565 (0 / 1040)	--	--	--	--
B6BMMX30K-B	669565	--	--	669565 (0 / 1040)	--	--	--	--
B6BMMX36K-B	669566	--	--	--	669566 (0 / 1250)	--	--	--
B6BMMX48K-C	669568	--	--	--	--	669568 (3 / 1515)	--	--
B6BMMX60K-C	669578	--	--	--	--	--	669578 (7 / 1510)	669578 (0 / 1600)
B6BW								
B6BW-018K(*)	0.048	--	--	--	--	--	--	--
B6BW-024K(*)	0.057	--	0.057 (-7 / 805) ‡	--	--	--	--	--
B6BW-030K(*)	0.060	--	--	0.061 (-25 / 1010) ‡	--	--	--	--
B6BW-036K(*)	0.069	--	--	--	0.066 (-11 / 1145) ‡	--	--	--

NOTES:

- ‡ Requires **REMOVAL** of refrigerant from unit.
- Gray cells require the outdoor restrictor to be changed as well. See Table 5.
- 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. Restrictor or TXV / Charge Addition (Oz)

MODEL NUMBER: *SH1BE4M1SP		18K	24K	30K	36K	42K	48K	60K
ID RESTRICTOR SUPPLIED WITH OD UNIT:		0.050	0.057	0.061, 0.062	0.066	0.075	0.076	0.091
OD RESTRICTOR INSTALLED IN OD UNIT:		0.040	0.041	0.048	0.055	0.059	0.062	0.076
OUTDOOR UNIT BOM CHARGE (OZ.)		96	93	97	98	115	115	114
MODELS	SUPPLIED WITH ID	REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW (SCFM))						
B6EM								
B6EMMX24K-A	669564	669564 (0 / 650)	669564 (0 / 820)	--	--	--	--	--
B6EMMX24K-B	669564	669564 (0 / 650)	669564 (0 / 820)	--	--	--	--	--
B6EMMX30K-A	669565	--	--	669565 (0 / 980)	--	--	--	--
B6EMMX30K-B	669565	--	--	669565 (0 / 980)	--	--	--	--
B6EMMX36K-B	669566	--	--	--	669566 (12 / 1140)	--	--	--
B6EMMX42K-B	669567	--	--	--	--	669567 (11 / 1205)	--	--
B6EMMX48K-C	669852	--	--	--	--	--	669852 (7 / 1510)	--
B6EMMX60K-C	669578	--	--	--	--	--	--	669578 (0 / 1600)
B6EW								
B6EW-X18K	669564	669564 (-9 / 650) ‡	--	--	--	--	--	--
B6EW-X25K	669564	--	669564 (-14 / 865) ‡	--	--	--	--	--
B6EW-X30K	669565	--	--	669565 (-20 / 1000) ‡	--	--	--	--
B6EW-X36K	669566	--	--	--	669566 (-11 / 1100) ‡	--	--	--
B6VMMX								
B6VMMX24K-A	669564	669564 (0 / 650)	669564 (0 / 820)	--	--	--	--	--
B6VMMX24K-B	669564	669564 (0 / 650)	669564 (0 / 820)	--	--	--	--	--
B6VMMX30K-A	669565	--	--	669565 (0 / 980)	--	--	--	--
B6VMMX30K-B	669565	--	--	669565 (0 / 980)	--	--	--	--
B6VMMX36K-B	669566	--	--	--	669566 (0 / 1140)	--	--	--
B6VMMX42K-B	669567	--	--	--	--	669567 (0 / 1205)	--	--
B6VMMX48K-C	669568	--	--	--	--	--	669568 (7 / 1510)	--
B6VMMX60K-C	669578	--	--	--	--	--	--	669578 (0 / 1600)

NOTES:

‡ Requires **REMOVAL** of refrigerant from unit.

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- 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.
- Bold part numbers beginning with a 9 are TXV kit numbers and must be ordered separately.

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

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 / B6BMM030K-A match, the appropriate restrictor is the 0.062" and no additional charge is necessary (NO CHANGES REQUIRED).
- For the *SH1BE4M1SP60K / B6BMM060K-C match, the indoor restrictor will need to be changed to the 0.091", the outdoor restrictor must be changed to the 0.074", and 3 ounces of refrigerant must be added (CHANGE IN INDOOR RESTRICTOR, OUTDOOR RESTRICTOR, AND CHARGE ADDITION).

MODEL NUMBER: *SH1BE4M1SP		18K	24K	30K	36K	42K	48K	60K
ID RESTRICTOR SUPPLIED WITH OD UNIT:		0.050	0.057	0.061, 0.062	0.066, 0.067	0.075	0.076	0.091
OD RESTRICTOR INSTALLED IN OD UNIT:		0.040	0.041	0.048	0.055	0.059	0.062	0.076
OUTDOOR UNIT BOM CHARGE (OZ.)		96	93	97	98	115	115	114
MODELS	SUPPLIED WITH ID	REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW (SCFM))						
C7-0								
C7B(A,H)M030(C,U)-C	0.061	--	--	0.062 (0 / 1040)	--	--	--	--
C7B(A,H)M03036(C,U)-A	0.061	--	--	0.062 (0 / 1040)	--	--	--	--
C7B(A,H)M03036(C,U)-B	0.067	--	--	0.062 (0 / 1040)	--	--	--	--
C7B(A,H)M03642(C,U)-B	0.071	--	--	--	0.067 (2 / 1195)	0.075 (5 / 1275)	--	--
C7B(A,H)M03648(C,U)-C	0.067	--	--	--	0.067 (2 / 1195)	0.075 (5 / 1275)	--	--
C7B(A,H)M042(C,U)-D	0.071	--	--	--	--	0.075 (5 / 1275)	--	--
C7-0 + TXV								
C7B(A,H)M01824(C,U)-A + TXV	0.048	920668A (0 / 650)	920668A (0 / 820)	--	--	--	--	--
C7B(A,H)M01824(C,U)-B + TXV	0.055	920668A (0 / 660)	920668A (0 / 820)	--	--	--	--	--
C7B(A,H)M030(C,U)-C + TXV	0.061	--	920668A (0 / 820)	920669A (0 / 980)	--	--	--	--
C7B(A,H)M03036(C,U)-A + TXV	0.061	--	--	920669A (0 / 980)	--	--	--	--
C7B(A,H)M03036(C,U)-B + TXV	0.067	--	--	920669A (0 / 980)	--	--	--	--
C7B(A,H)M03642(C,U)-B + TXV	0.071	--	--	--	920670A (11 / 1140)	920671A (13 / 1275)	--	--
C7B(A,H)M03648(C,U)-C + TXV	0.067	--	--	--	920670A (11 / 1140)	920671A (13 / 1275)	--	--
C7B(A,H)M042(C,U)-D + TXV	0.071	--	--	--	--	920671A (13 / 1275)	--	--
C7B(A,H)M048(C,U)-C + TXV	0.077	--	--	--	--	--	920672A (7 / 1510)	--
C7B(A,H)M048(C,U)-D + TXV	0.077	--	--	--	--	--	920672A (7 / 1510)	--
C7B(A,H)M060(C,U)-C + TXV	0.083	--	--	--	--	--	--	920673A (0 / 1600)

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- Bold part numbers beginning with a 9 are TXV kit numbers and must be ordered separately.

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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 / B6BMM030K-A match, the appropriate restrictor is the 0.062" and no additional charge is necessary (NO CHANGES REQUIRED).
- For the *SH1BE4M1SP60K / B6BMM060K-C match, the indoor restrictor will need to be changed to the 0.091", the outdoor restrictor must be changed to the 0.074", and 3 ounces of refrigerant must be added (CHANGE IN INDOOR RESTRICTOR, OUTDOOR RESTRICTOR, AND CHARGE ADDITION).

MODEL NUMBER: *SH1BE4M1SP		18K	24K	30K	36K	42K	48K	60K
ID RESTRICTOR SUPPLIED WITH OD UNIT:		0.050	0.057	0.061, 0.062	0.066	0.075	0.076	0.091
OD RESTRICTOR INSTALLED IN OD UNIT:		0.040	0.041	0.048	0.055	0.059	0.062	0.076
OUTDOOR UNIT BOM CHARGE (OZ.)		96	93	97	98	115	115	114
MODELS	SUPPLIED WITH ID	REQUIRED RESTRICTOR OR TXV (CHARGE ADDITION (OZ) / RATED AIRFLOW (SCFM))						
C7-X								
C7B(A,H)MX24(C,U)-A	669681	669681 (0 / 660)	669681 (0 / 810)	--	--	--	--	--
C7B(A,H)MX24(C,U)-B	669681	669681 (0 / 660)	669681 (0 / 810)	--	--	--	--	--
C7B(A,H)MX30(C,U)-A	669682	--	--	669682 (0 / 980)	--	--	--	--
C7B(A,H)MX30(C,U)-B	669682	--	--	669682 (0 / 980)	--	--	--	--
C7B(A,H)MX30(C,U)-C	669682	--	669682 (0 / 810)	669682 (0 / 980)	--	--	--	--
C7B(A,H)MX36(C,U)-B	669683	--	--	--	669683 (11 / 1140)	--	--	--
C7B(A,H)MX36(C,U)-C	669683	--	--	--	669683 (11 / 1140)	--	--	--
C7B(A,H)MX42(C,U)-C	669684	--	--	--	--	669684 (13 / 1205)	--	--
C7B(A,H)MX48(C,U)-C	669852	--	--	--	--	--	669852 (7 / 1510)	--
C7B(A,H)MX48(C,U)-D	669852	--	--	--	--	--	669852 (7 / 1510)	--
C7B(A,H)MX60(C,U)-C	669686	--	--	--	--	--	--	669686 (0 / 1545)
C8-0 (WHEN MATCHED WITH CSH1BE4M1 FOR MANUFACTURED HOUSING APPLICATIONS)								
C8(B,D)AM01830U-B	0.061	920668A (0 / 660)	920668A (0 / 820)	920669A (0 / 980)	--	--	--	--
C8(B,D)AM036U-B	0.067	--	--	--	920670A (7 / 1200)	--	--	--
C8-X (WHEN MATCHED WITH CSH1BE4M1 FOR MANUFACTURED HOUSING APPLICATIONS)								
C8(B,D)AMX24U-B	669564	669564 (0 / 660)	669564 (0 / 810)	--	--	--	--	--
C8(B,D)AMX30U-B	669565	--	--	669565 (0 / 980)	--	--	--	--
C8(B,D)AMX36U-B	669566	--	--	--	669566 (6 / 1200)	--	--	--
C8(B,D)AMX42U-B	669567	--	--	--	--	669567 (5 / 1355)	--	--
C8(B,D)AMX49U-B	669568	--	--	--	--	--	669568 (2 / 1500)	--

NOTES:

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- Part numbers beginning with 669***are TXV part numbers and numbers listed as 0.*** are restrictor diameters.
- Bold part numbers beginning with a 9 are TXV kit numbers and must be ordered separately.

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

OD UNIT	ID UNIT	FACTORY INSTALLED RESTRICTOR	CORRECT OUTDOOR RESTRICTOR
*SH1BE4M1SP18K	B6BMM024K-A	0.040	0.039
	B6BMM024K-B		0.039
	B6EW-X18K		0.044
	C7B(A,H)M01824(C,U)-A + TXV		0.039
	C7B(A,H)M01824(C,U)-B + TXV		0.039
	C7B(A,H)MX24(C,U)-A		0.039
	C7B(A,H)MX24(C,U)-B		0.039
	C8(B,D)AM01830U-B		0.039
	C8(B,D)AMX24U-B		0.039
SH1BE4M1SP24K	B6BW-024K()	0.041	0.047
	B6EW-X25K		0.049
	C7B(A,H)M01824(C,U)-A + TXV		0.042
	C7B(A,H)M01824(C,U)-B + TXV		0.042
	C7B(A,H)M030(C,U)-C + TXV		0.042
	C7B(A,H)MX24(C,U)-A		0.042
	C7B(A,H)MX24(C,U)-B		0.042
	C7B(A,H)MX30(C,U)-C		0.042
	C8(B,D)AM01830U-B		0.042
	C8(B,D)AMX24U-B		0.042
SH1BE4M1SP30K	B6BW-030K()	0.048	0.051
	B6EW-X30K		0.053
	C7B(A,H)M030(C,U)-C + TXV		0.051
	C7B(A,H)M03036(C,U)-A + TXV		0.051
	C7B(A,H)M03036(C,U)-B + TXV		0.051
	C7B(A,H)MX30(C,U)-A		0.051
	C7B(A,H)MX30(C,U)-B		0.051
	C7B(A,H)MX30(C,U)-C		0.051
	C8(B,D)AM01830U-B		0.051
	C8(B,D)AMX30U-B		0.051
*SH1BE4M1SP36K	B6BMM042K-B	0.055	0.056
	B6BW-036K(*)		0.059
	B6EW-X36K		0.059
	C7B(A,H)M03642(C,U)-B		0.056
	C7B(A,H)M03648(C,U)-C		0.056
*SH1BE4M1SP42K	C8(B,D)AMX42U-B	0.059	0.057
*SH1BE4M1SP48K	B6BMM060K-C	0.062	0.059
	C8(B,D)AMX49U-B	0.062	0.060
*SH1BE4M1SP60K	B6BMM060K-C	0.076	0.074

Table 5. Outdoor Restrictor Changes

