

# Tabular Data Sheet

## LX Series Split System Heat Pumps

### 14.3 SEER2 – R-410A – Single-Phase – 1.5 to 5 Nominal Ton

#### Models: THE2B18 to 60

#### Physical and electrical data

Model		THE2B18S21S	THE2B24T21S	THE2B30T21S	THE2B36T21S	THE2B42T21S	THE2B48T21S	THE2B60T21S
Unit supply voltage		208-230 V, 1 $\phi$ , 60 Hz						
Normal voltage range <sup>1</sup>		187 to 252						
Minimum circuit ampacity		9.1	13.4	15.6	20.3	26.1	26.1	30.3
Maximum overcurrent device (A) <sup>2</sup>		15	20	25	35	45	45	50
Minimum overcurrent device (A) <sup>3</sup>		15	15	20	25	30	30	35
Compressor	Type	Single-stage scroll	Two-stage scroll	Two-stage scroll	Two-stage scroll	Two-stage scroll	Two-stage scroll	Two-stage scroll
	Rated load (A)	6.8	10.2	11.9	15.2	19.8	19.8	23.4
	Locked rotor (A)	41.7	55.2	78.0	78.1	94.0	109.0	118.0
Crankcase heater		No	No	No	No	No	No	No
Factory external discharge muffler		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hard start kit required with TXV <sup>4</sup>		No	No	No	No	No	No	No
Fan diameter (in.)		18	18	22	24	24	24	26
Fan motor	Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
	Rated HP	1/12	1/12	1/8	1/4	1/4	1/4	1/4
	Rated load (A)	0.64	0.64	0.70	1.30	1.30	1.30	1.05
	Nominal RPM	1000	1000	1075	850	850	850	850
	Nominal CFM	2100	2100	3000	3900	4100	4100	4700
Coil	Face area (sq ft)	13.1	14.5	14.4	18.9	23.1	23.1	31.2
	Rows deep	1	1	1	1	1	1	1
	Fins per inch	22	22	22	22	22	22	22
Liquid refrigerant piping outdoor (field-installed)		3/8	3/8	3/8	3/8	3/8	3/8	3/8
Vapor refrigerant piping outdoor (field-installed) <sup>5</sup>		3/4	3/4	3/4	3/4	7/8	7/8	7/8
Unit charge (lb - oz) <sup>6</sup>		4 - 8	5 - 6	5 - 12	7 - 4	9 - 0	8 - 14	9 - 10
Charge (oz/ft)		0.62	0.62	0.62	0.62	0.67	0.67	0.67
Operating weight (lb)		134	140	153	183	213	215	242

1. Rated in accordance with AHRI Standard 110-2012, utilization range A.

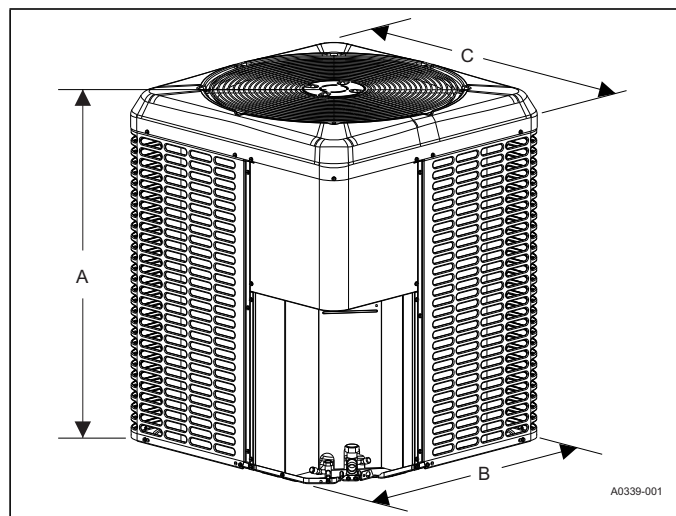
2. Dual element fuses or HACR circuit breaker. Maximum allowable overcurrent protection.

3. Dual element fuses or HACR circuit breaker. Minimum recommended overcurrent protection.

4. Refer to the *Hard Start Kit Accessory Installation Manual* for the hard start kit part number for each model. The hard start kit is a field-installed accessory.

5. For applications with non-standard vapor line sizes, refer to the *Applications and Accessories* section in the *Technical Guide*.

6. The unit charge is correct for the outdoor unit, smallest matched indoor unit, and 15 ft of refrigerant tubing. For tubing lengths other than 15 ft, add or subtract the amount of refrigerant, using the difference in actual refrigerant piping length (not the equivalent length) multiplied by the per foot value.



#### Dimensions

Unit model	Dimensions (in.)			Refrigerant connection service valve size (in.)	
	A	B	C	Liquid	Vapor
THE2B18S21S	33 1/4	24	24	3/8	3/4
THE2B24T21S	36 1/4	24	24		
THE2B30T21S	30	29 1/4	29 1/4		
THE2B36T21S	33 1/4	35 1/4	31 3/4		
THE2B42T21S	39 1/2	35 1/4	31 3/4		
THE2B48T21S	39 1/2	35 1/4	31 3/4	7/8	7/8
THE2B60T21S	46	38	34 1/4		

#### Notes:

All dimensions are in inches and are subject to change without notice.

Overall height is from the bottom of the base pan to the top of the fan guard.

The overall length and width include screw heads.

## System charge for various matched systems

Charge adjustment	Upflow or horizontal left							Downflow or horizontal right <sup>1</sup>						
Outdoor unit	18	24	30	36	42	48	60	18	24	30	36	42	48	60
Required indoor metering device <sup>2,3</sup>	BA1	BA1	BA1	BC1	BC1	BC1	BC1	BA1	BA1	BA1	BC1	BC1	BC1	BC1
Indoor unit <sup>4,5,6</sup>	Additional charge (oz)													
XAF*24B	0	—	—	—	—	—	—	-4	—	—	—	—	—	—
XAF*30C	2	0	—	—	—	—	—	-5	-10	—	—	—	—	—
XAF*36D	—	—	0	0	—	—	—	—	—	-4	-12	—	—	—
XAF*48F	—	—	—	—	0	—	—	—	—	—	—	-7	—	—
XAF*60G	—	—	—	—	0	0	—	—	—	—	—	-5	-2	—
XAF*60H	—	—	—	—	—	2	0	—	—	—	—	—	-10	0
XAF*60J	—	—	—	—	—	—	8	—	—	—	—	—	—	11
XAH*24B	0	—	—	—	—	—	—	-4	—	—	—	—	—	—
XAH*30C	2	0	—	—	—	—	—	-5	-10	—	—	—	—	—
XAH*36D	—	—	0	0	—	—	—	—	—	-4	-12	—	—	—
XAH*48F	—	—	—	—	0	—	—	—	—	—	—	-7	—	—
XAH*60G	—	—	—	—	0	0	—	—	—	—	—	-5	-2	—
XAH*60H	—	—	—	—	—	2	0	—	—	—	—	—	-10	0
XAH*60J	—	—	—	—	—	—	8	—	—	—	—	—	—	11
JHET*18B	0	—	—	—	—	—	—	-4	—	—	—	—	—	—
JHET*24C	2	0	—	—	—	—	—	-5	-10	—	—	—	—	—
JHET*30D	—	—	0	—	—	—	—	—	—	-4	—	—	—	—
JHET*36D	—	—	0	0	—	—	—	—	—	-4	-12	—	—	—
JHET*42F	—	—	—	—	0	—	—	—	—	—	—	-7	—	—
JHET*48G	—	—	—	—	0	0	—	—	—	—	—	-5	-2	—
JHET*60H	—	—	—	—	—	2	0	—	—	—	—	—	-10	0
JHET*60J	—	—	—	—	—	—	8	—	—	—	—	—	—	11
JHVT*18B	0	—	—	—	—	—	—	-4	—	—	—	—	—	—
JHVT*24C	2	0	—	—	—	—	—	-5	-10	—	—	—	—	—
JHVT*36D	—	—	0	0	—	—	—	—	—	-4	-12	—	—	—
JHVT*42F	—	—	—	—	0	—	—	—	—	—	—	-7	—	—
JHVT*48G	—	—	—	—	0	0	—	—	—	—	—	-5	-2	—
JHVT*60H	—	—	—	—	—	2	0	—	—	—	—	—	-10	0
JHVT*60J	—	—	—	—	—	—	8	—	—	—	—	—	—	11

**Note:** Some of the combinations shown in this table require advanced main air circulating fan indoor product. For approved coil only matches, refer to the *System capacity - upflow, downflow, and horizontal furnaces and coils (coil only ratings)* table in the *Technical Guide*.

1. A negative number indicates that you remove that charge.
2. For applications that require a TXV, use S1-1TVM\*\*\* series kit.
3. Use a TXV kit with these indoor units to obtain system performance.
4. Systems matched with furnaces or air handlers not equipped with blower-off delays may require blower time delay.
5. Do not use XAF or XAU coils in horizontal applications.
6. Charge adders shown above do not indicate that coils are rated for every application. Refer to the performance data tables in the *Technical Guide* for actual performance for specified system matches. Obtain certified system ratings from [www.ahridirectory.org](http://www.ahridirectory.org).

## Charging

1. Check the factory unit charge listed on the unit nameplate to verify the refrigerant charge for the outdoor unit, the smallest matched indoor unit, and the 15 ft of interconnecting refrigeration piping.
2. Verify the indoor metering device and additional charge required for the specific matched indoor unit in the system using the table above.
3. Add additional charge for the amount of interconnecting refrigeration piping greater than 15 ft at the rate specified in the *Physical and electrical data* table.
4. For installations requiring additional charge, weigh in refrigerant for the specific matching indoor unit and actual refrigeration piping length.
5. After weighing in the charge adders for the matched indoor unit and refrigeration piping, verify the system operation against the temperatures and pressures in the charging chart for the outdoor unit. Locate the charging charts on the outdoor unit and also in the *Service Data Application Guide* on [www.simplygettingthejobdone.com](http://www.simplygettingthejobdone.com). Follow the subcool or superheat charging procedure in the *Installation Manual* according to the type of indoor metering device in the system, and allow 10 min after each charge adjustment for the system operation to stabilize. Record the charge adjustment made to match the charging chart.
6. Permanently stamp the unit nameplate with the total system charge defined as follows: total system charge = base charge (as shipped) + charge adder for matched indoor unit + charge adder for actual refrigeration piping length + charge adjustments to match the charging chart.