

Tabular Data Sheet

LX Series Split System Air Conditioners

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

Models: TCF2B18 to 60

Physical and electrical data

Model		TCF2B18S21S	TCF2B24S21S	TCF2B30S21S	TCF2B36S21S	TCF2B42T21S	TCF2B48T21S	TCF2B60T21S
Unit supply voltage		208-230 V, 1 ϕ , 60 Hz						
Normal voltage range ¹		187 to 252						
Minimum circuit ampacity		13.2	16.5	16.0	17.7	26.0	26.8	34.0
Maximum overcurrent device (A) ²		20	25	25	30	45	45	50
Minimum overcurrent device (A) ³		15	20	20	20	30	30	35
Compressor	Type	One-stage scroll	One-stage scroll	One-stage scroll	One-stage scroll	Two-stage scroll	Two-stage scroll	Two-stage scroll
	Rated load (A)	9.0	11.6	11.7	13.1	19.2	19.8	25.6
	Locked rotor (A)	42.6	59.5	71.3	83.1	123.5	126.5	158.0
Crankcase heater		No	No	No	No	No	No	No
Factory external discharge muffler		No	No	No	No	No	No	No
Hard start kit required with TXV ⁴		No	No	No	No	No	No	No
Hard start kit part number (S1-2SA067*****)		10106	10106	10106	10106	10106	10106	10106
Fan diameter (in.)		22	22	22	24	24	26	26
Fan motor	Type	ECM	ECM	ECM	ECM	ECM	ECM	ECM
	Rated HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Rated load (A)	2.0	2.0	1.4	1.4	2.0	2.0	2.0
	Nominal RPM	917	917	682	682	875	917	917
	Nominal CFM	2575	2575	2700	3000	4100	4275	4275
Coil	Face area (sq ft)	12.21	12.21	13.83	18.74	21.06	25.28	25.28
	Rows deep	1	1	1	1	1	1	1
	Fins per inch	23	23	23	23	23	23	23
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) ⁵		3/4	3/4	3/4	3/4	7/8	7/8	1 1/8 [‡]
Unit charge (lb - oz) ⁶		3 - 5	3 - 5	3 - 9	4 - 13	5 - 4	6 - 13	6 - 15
Charge (oz/ft)		0.62	0.62	0.62	0.62	0.67	0.67	0.75
Operating weight (lb)		140	140	160	175	205	250	255

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

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

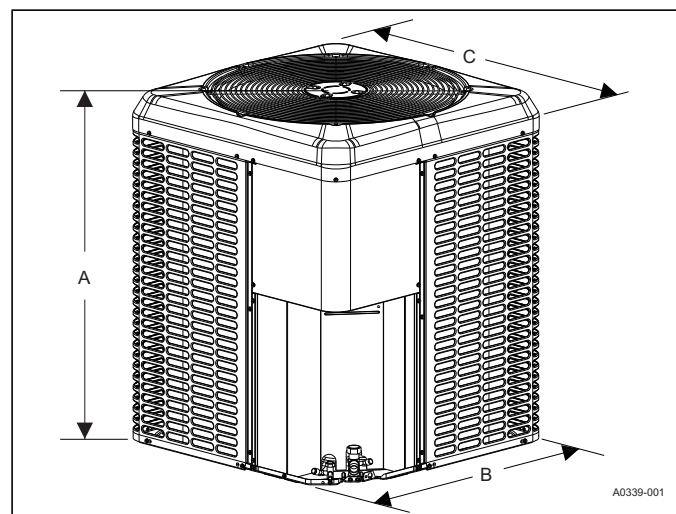
3. Dual element fuses or HACR circuit breaker. Minimum recommended overcurrent protection.

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.

‡ The adapter fitting must be field-installed for the required 1 1/8 in. refrigerant piping.



Dimensions

Unit model	Dimensions (in.)			Refrigerant connection service valve size (in.)	
	A	B	C	Liquid	Vapor
TCF2B18S21S	26 3/4	29 1/4	29 1/4	3/8	3/4
TCF2B24S21S	26 3/4	29 1/4	29 1/4		
TCF2B30S21S	30	29 1/4	29 1/4		
TCF2B36S21S	33 1/4	35 1/4	31 3/4		7/8
TCF2B42T21S	36 1/4	35 1/4	31 3/4		
TCF2B48T21S	39 1/2	38	34 1/4	7/8 [‡]	7/8 [‡]
TCF2B60T21S	39 1/2	38	34 1/4		

‡ Adapter fitting must be field-installed for the required 1 1/8 in. refrigerant piping.

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.

Overall length and width include screw heads.

System charge for various matched systems

Outdoor unit	TCF2B18S21S	TCF2B24S21S	TCF2B30S21S	TCF2B36S21S	TCF2B42T21S	TCF2B48T21S	TCF2B60T21S
Required indoor metering device ^{1,2}	BA1	BA1	BA1	BC1	BC1	BC1	BC1
Indoor unit ^{3,4,5}	Additional charge (oz)						
JHETB18B	0	—	—	—	—	—	—
JHETB24C	3	3	—	—	—	—	—
JHETB30D	—	10	6	—	—	—	—
JHETB36D	—	10	6	0	—	—	—
JHETC36D	—	10	6	0	—	—	—
JHETC42F	—	—	—	2	2	—	—
JHETC48G	—	—	—	—	4	5	—
JHETD48G	—	—	—	—	4	5	—
JHETC60H	—	—	—	—	—	8	6
JHETD60H	—	—	—	—	—	8	6
JHETD60J	—	—	—	—	—	—	10
JHVTB18B	0	0	—	—	—	—	—
JHVTB24C	3	3	—	—	—	—	—
JHVTB36D	—	10	6	0	—	—	—
JHVTC36D	—	10	6	0	—	—	—
JHVTC42F	—	—	—	2	2	—	—
JHVTD42F	—	—	—	—	2	—	—
JHVTC48G	—	—	—	—	4	5	—
JHVTD48G	—	—	—	—	4	5	—
JHVTC60H	—	—	—	—	—	8	6
JHVTD60H	—	—	—	—	—	8	6
JHVTD60J	—	—	—	—	—	—	10
XAF/XAU/XAHA18A	—	—	—	—	—	—	—
XAFB18A	—	—	—	—	—	—	—
XAF/XAU/XAHA24B	0	0	—	—	—	—	—
XAF/XAHB24B	0	0	—	—	—	—	—
XAFA30D	—	10	6	—	—	—	—
XAF/XAU/XAHB30C	3	3	0	—	—	—	—
XAF/XAHC30C	3	3	0	—	—	—	—
XAF/XAU/XAHB36D	—	10	6	0	—	—	—
XAFB36E	—	—	10	2	—	—	—
XAF/XAHC36D	—	10	6	0	—	—	—
XAF/XAU/XAHC42E	—	—	10	2	0	—	—
XAF/XAHD42E	—	—	10	2	0	—	—
XAF/XAU/XAHC48F	—	—	—	2	2	0	—
XAF/XAHD48F	—	—	—	2	2	0	—
XAF/XAU/XAHC60G	—	—	—	—	4	5	0
XAF/XAU/XAHD60G	—	—	—	—	4	5	0
XAF/XAHC60H	—	—	—	—	—	8	6
XAF/XAU/XAHD60H	—	—	—	—	—	8	6
XAF/XAHD60J	—	—	—	—	—	—	10

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*.

- For applications that require a TXV, use S1-1TVM*** series kit.
- Use a TXV kit with these indoor units to obtain system performance.
- Systems matched with furnaces or air handlers not equipped with blower-off delays may require blower time delay.
- Do not use XAF or XAU coils in horizontal applications.
- 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.

Charging

- 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.
- Verify the indoor metering device and additional charge required for the specific matched indoor unit in the system using the table above.
- 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.
- For installations requiring additional charge, weigh in refrigerant for the specific matching indoor unit and actual refrigeration piping length.
- 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. 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.
- 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.