

# Tabular Data Sheet



## LX Series Split System Air Conditioners

16+ SEER2 – R-454B – 1 Phase – 1.5 to 5 Nominal Ton

Models: YC618 to 60

### Physical and electrical data

| Model                                                           |                   | YC618E2S11                  | YC624E2S11     | YC636E2S11     | YC648E2S11     | YC660E2S11     |
|-----------------------------------------------------------------|-------------------|-----------------------------|----------------|----------------|----------------|----------------|
| Unit supply voltage                                             |                   | 208-230 V, 1 $\phi$ , 60 Hz |                |                |                |                |
| Normal voltage range <sup>1</sup>                               |                   | 187 to 252                  |                |                |                |                |
| Minimum circuit ampacity                                        |                   | 9.3                         | 13.6           | 19.2           | 27.3           | 31.6           |
| Maximum overcurrent device (A) <sup>2</sup>                     |                   | 15                          | 20             | 30             | 45             | 50             |
| Minimum overcurrent device (A) <sup>3</sup>                     |                   | 15                          | 15             | 20             | 30             | 35             |
| Compressor                                                      | Type <sup>4</sup> | 1-stage rotary              | 2-stage scroll | 2-stage scroll | 2-stage scroll | 2-stage scroll |
|                                                                 | Rated load (A)    | 6.7                         | 10.3           | 14.5           | 20.1           | 23.7           |
|                                                                 | Locked rotor (A)  | 33                          | 62             | 76             | 141            | 123            |
| Crankcase heater                                                |                   | No                          | No             | No             | No             | No             |
| Factory external discharge muffler                              |                   | No                          | No             | No             | No             | No             |
| Hard start kit required with TXV <sup>5</sup>                   |                   | No                          | No             | No             | No             | No             |
| Hard start kit part number (S1-2SA067*****)                     |                   | 22006                       | 10106          | 10106          | 10106          | 10106          |
| Fan diameter (in.)                                              |                   | 22                          | 22             | 26             | 26             | 26             |
| Fan motor                                                       | Type              | ECM                         | ECM            | ECM            | ECM            | ECM            |
|                                                                 | Rated HP          | 1/3                         | 1/3            | 1/3            | 1/3            | 1/3            |
|                                                                 | Rated load (A)    | 2.0                         | 2.0            | 1.4            | 2.0            | 2.0            |
|                                                                 | Nominal RPM       | 917                         | 917            | 682            | 917            | 917            |
|                                                                 | Nominal CFM       | 2575                        | 2575           | 3500           | 4275           | 4275           |
| Coil                                                            | Face area (sq ft) | 17.31                       | 13.79          | 23.33          | 25.88          | 27.98          |
|                                                                 | Rows deep         | 1                           | 1              | 1              | 1              | 1              |
|                                                                 | Fins per inch     | 23                          | 23             | 23             | 23             | 23             |
| Liquid refrigerant piping outdoor (field-installed)             |                   | 3/8                         | 3/8            | 3/8            | 3/8            | 3/8            |
| Vapor refrigerant piping outdoor (field-installed) <sup>6</sup> |                   | 3/4                         | 3/4            | 3/4            | 7/8            | 1 1/8†         |
| Unit charge (lb - oz) <sup>7</sup>                              |                   | 3-10                        | 3-0            | 3-8            | 4-11           | 5-8            |
| Charge (oz/ft)                                                  |                   | 0.57                        | 0.57           | 0.57           | 0.60           | 0.67           |
| Operating weight (lb)                                           |                   | 165                         | 150            | 235            | 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.

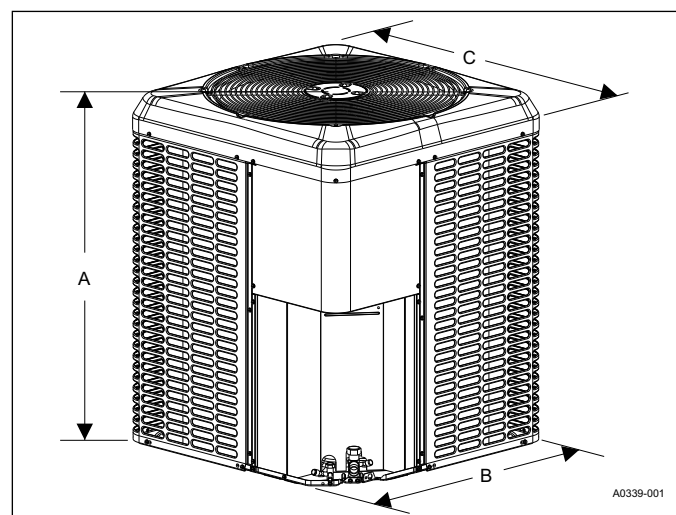
4. Rotary compressor models are limited to an equivalent length of refrigerant piping of 75 ft with no exceptions.

5. 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.

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

7. 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 |
| YC618E2S11 | 36 1/4           | 29 1/4 | 29 1/4 | 3/8                                             | 3/4   |
| YC624E2S11 | 30               | 29 1/4 | 29 1/4 |                                                 |       |
| YC636E2S11 | 36 1/4           | 38     | 34 1/4 |                                                 | 7/8   |
| YC648E2S11 | 39 1/2           | 38     | 34 1/4 |                                                 |       |
| YC660E2S11 | 42 3/4           | 38     | 34 1/4 |                                                 | 7/8†  |

### Notes:

† 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                                   | YC618E2S11             | YC624E2S11 | YC636E2S11 | YC648E2S11 | YC660E2S11 |
|------------------------------------------------|------------------------|------------|------------|------------|------------|
| Required indoor metering device <sup>1,2</sup> | 5A1                    | 5A1        | 5A1        | 5C1        | 5C1        |
| Indoor unit <sup>3,4,5</sup>                   | Additional charge (oz) |            |            |            |            |
| CT(F,M)24B**B                                  | 3                      | 2          | —          | —          | —          |
| CT(F,M)30C**C                                  | 3                      | 3          | —          | —          | —          |
| CT(F,M)36C**D                                  | —                      | —          | 12         | —          | —          |
| CT(F,M)48D**F                                  | —                      | —          | —          | 16         | —          |
| CT(F,M)60C**H                                  | —                      | —          | —          | 28         | 22         |
| CT(F,M)60D**J                                  | —                      | —          | —          | —          | 22         |
| CT(F,M,U)24A**B                                | 3                      | 2          | —          | —          | —          |
| CT(F,M,U)30B**C                                | 3                      | 3          | —          | —          | —          |
| CT(F,M,U)42C**E                                | —                      | —          | 21         | —          | —          |
| CT(F,M,U)48C**F                                | —                      | —          | —          | 16         | —          |
| CT(F,M,U)60C**G                                | —                      | —          | —          | 24         | 4          |
| CT(F,M,U)60D**G                                | —                      | —          | —          | 24         | 4          |
| CT(F,M,U)60D**H                                | —                      | —          | —          | 28         | 22         |
| CT(F,U)36B**D                                  | —                      | —          | 12         | —          | —          |
| CTF36B**E                                      | —                      | —          | 21         | —          | —          |
| JHC18B**B                                      | 3                      | —          | —          | —          | —          |
| JHC24B**C                                      | 3                      | 3          | —          | —          | —          |
| JHC36C**D                                      | —                      | —          | 12         | —          | —          |
| JHC48(C,D)**G                                  | —                      | —          | —          | 24         | —          |
| JHC60(C,D)**H                                  | —                      | —          | —          | 28         | 22         |
| JHE18B**B                                      | 3                      | —          | —          | —          | —          |
| JHE24B**C                                      | 3                      | 3          | —          | —          | —          |
| JHE36C**D                                      | —                      | —          | 12         | —          | —          |
| JHE48(C,D)**G                                  | —                      | —          | —          | 24         | —          |
| JHE60(C,D)**H                                  | —                      | —          | —          | 28         | 22         |
| JHE60D**J                                      | —                      | —          | —          | —          | 22         |

**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 *Cooling capacity - upflow, downflow, and horizontal furnaces and coils* table in the *Technical Guide*.

1. For applications that require a TXV, use S1-1TVM\*\*\* series kit.

2. Use a TXV kit with these indoor units to obtain system performance.

3. Systems matched with furnaces or air handlers not equipped with blower-off delays may require blower time delay.

4. Do not use CTF, CTU, or CXF coils in horizontal applications.

5. 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.

## NOTICE

If an indoor metering device other than S1-1TVM5A1 is used on rotary compressor models, factory hard start kit S1-2SA06722006 is required.