## TABULAR DATA SHEET



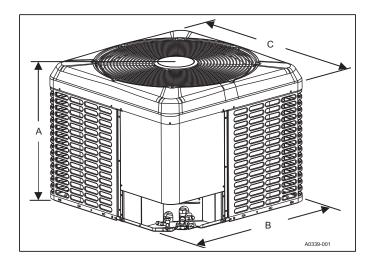
### LX SERIES SPLIT SYSTEM HEAT PUMPS

# 16.0 SEER - R-410A - 1 PHASE - 2 THRU 5 NOMINAL TONS MODELS: CH1618 THRU 60

#### PHYSICAL AND ELECTRICAL DATA

| MODEL  |                        | CH16B2421S         | CH16B3621S | CH16B4821S | CH16B6021S         |  |  |
|--|------------------------|--------------------|------------|------------|--------------------|--|--|
| Unit Supply Voltage                              |                        | 208-230V, 1φ, 60Hz |            |            |                    |  |  |
| Normal Voltage Range <sup>1</sup>                |                        | 187 to 252         |            |            |                    |  |  |
| Minimum Circuit Ampa                             | acity                  | 17.2               | 21.0       | 35.6       | 34.7               |  |  |
| Max. Overcurrent Dev                             | vice Amps <sup>2</sup> | 30.0               | 35.0       | 60.0       | 60                 |  |  |
| Min. Overcurrent Dev                             |                        | 20.0               | 25.0       | 40.0       | 50.0               |  |  |
| Compressor                                       | Туре                   | Rotary             | Rotary     | Rotary     | Rotary             |  |  |
|  | Rated Load             | 13.19              | 15.2       | 27.42      | 23.73              |  |  |
|  | Locked Rotor           | N/A                | N/A        | N/A        | N/A                |  |  |
| Crankcase Heater                                 |                        | Yes                | Yes        | Yes        | Yes                |  |  |
| Factory External Discharge Muffler               |                        | Yes                | Yes        | Yes        | Yes                |  |  |
| HS Kit Required with TXV                         |                        | N/A                | N/A        | N/A        | N/A                |  |  |
| Fan Diameter Inches                              |                        | 22                 | 22         | 24         | 24                 |  |  |
|  | Rated HP               | 1/8                | 1/4        | 1/3        | 1/3                |  |  |
| Fan Motor  | Rated Load Amps        | 1.0                | 1.0        | 1.3        | 1.3                |  |  |
| Fan Motor  | Nominal RPM            | 970                | 850        | 1000       | 1000               |  |  |
|  | Nominal CFM            | 2850               | 3715       | 4000       | 4100               |  |  |
| Coil   | Face Area Sq. Ft.      | 16.15              | 19.75      | 23.82      | 23.82              |  |  |
|  | Rows Deep              | 1                  | 1          | 1          | 2                  |  |  |
|  | Fins / Inch            | 22                 | 18         | 22         | 18                 |  |  |
| Liquid Line Set OD (Field Installed)             |                        | 3/8                | 3/8        | 3/8        | 3/8                |  |  |
| Vapor Line Set OD (Field Installed) <sup>4</sup> |                        | 3/4                | 7/8        | 7/8        | 1-1/8 <sup>‡</sup> |  |  |
| Unit Charge (Lbs Oz.) <sup>5</sup>               |                        | 5 - 9              | 7 - 2      | 8 - 6      | 14 - 14            |  |  |
| Charge Per Foot, Oz.                             |                        | 0.62               | 0.67       | 0.67       | 0.75               |  |  |
| Operating Weight Lbs.                            |                        | 166                | 204        | 214        | 239                |  |  |

- 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. For applications with non-standard vapor line sizes, see the "Applications & Accessories" section of this Technical Guide.
- 5. The Unit Charge is correct for the outdoor unit, smallest matched indoor unit, and 15 feet of refrigerant tubing. For tubing lengths other than 15 feet, add or subtract the amount of refrigerant, using the difference in actual lineset length (not the equivalent length) multiplied by the per foot value.



#### **DIMENSIONS**

| Unit<br>Model | Dimensions (Inches) |        |        | Refrigerant<br>Service V | Connection<br>alve Size |
|---------------|---------------------|--------|--------|--------------------------|-------------------------|
| Wiodei        | Α                   | В      | С      | Liquid                   | Vapor                   |
| CH16B2421S    | 33-1/4              | 29-1/4 | 29-1/4 |                          | 3/4                     |
| CH16B3621S    | 39-1/2              | 29-1/4 | 29-1/4 | 2/0                      | 7/8                     |
| CH16B4821S    | 39-1/2              | 35-1/4 | 31-3/4 | 3/8                      | 770                     |
| CH16B6021S    | 39-1/2              | 35-1/4 | 31-3/4 | 7/8 <sup>‡</sup>         | 7/8 <sup>‡</sup>        |

- ‡ Adapter fitting must be field installed for the required 1-1/8" line set. All dimensions are in inches and are subject to change without notice.
- Overall height is from bottom of base pan to top of fan guard.
- Overall length and width include screw heads.

#### SYSTEM CHARGE FOR VARIOUS MATCHED SYSTEMS

| Outdoor Unit                         | CH16B2421S                         | CH16B3621S  | CH16B4821S | CH16B6021S |  |  |  |
|--------------------------------------|------------------------------------|-------------|------------|------------|--|--|--|
| Required TXV <sup>1,2</sup>          | BA1                                | BF1         | BC1        | BG1        |  |  |  |
| Indoor Unit <sup>3,4</sup>           | Additional Charge, oz              |             |            |            |  |  |  |
| AE24B                                | 0                                  | _           | -          | _          |  |  |  |
| AE30B                                | 4                                  | -           | -          | -          |  |  |  |
| AE36(B,C)                            | 6                                  | 0           | -          | -          |  |  |  |
| AE42C                                | _                                  | 8           | =          | -          |  |  |  |
| AE48(C,D)                            | _                                  | 8           | 0          | -          |  |  |  |
| AE60C                                | _                                  | -           | 8          | -          |  |  |  |
| AE60D                                | _                                  | -           | 9          | -          |  |  |  |
| AVC18B                               | _                                  | -           | =          | -          |  |  |  |
| AVC24B                               | 0                                  | -           | -          | -          |  |  |  |
| AVC30B                               | 4                                  | _           | _          | -          |  |  |  |
| AVC36(B,C)                           | 6                                  | 0           | _          | -          |  |  |  |
| AVC42C                               | _                                  | 8           | -          | -          |  |  |  |
| AVC48(C,D)                           | _                                  | 8           | 0          | -          |  |  |  |
| AVC60C                               | _                                  | _           | 8          | -          |  |  |  |
| AVC60D                               | _                                  | _           | 9          | -          |  |  |  |
| CF/CM/CU24(A,B)                      | 0                                  | -           | =          | -          |  |  |  |
| CF/CM/CU30(A,B,C)                    | 4                                  | -           | =          | -          |  |  |  |
| CF/CM/CU36(A,B,C)                    | 6                                  | 0           | -          | -          |  |  |  |
| CF/CM/CU42(B,C,D)                    | -                                  | 8           | -          | -          |  |  |  |
| CF/CM/CU48(C,D)                      | -                                  | 8           | 0          | -          |  |  |  |
| CF/CM/CU60(C,D)                      | -                                  | -           | 8          | -          |  |  |  |
| CF/CM64D                             | -                                  | -           | 9          | 0          |  |  |  |
| All of the combinations require Adva | nced Main Air Circulating Fan indo | or product. | •          |            |  |  |  |

#### FOOTNOTES:

- 1. For applications requiring a TXV, use S1-1TVM\*\*\* series kit.
- 2. A TXV kit must be used with these indoor units to obtain system performance.
- 3. CF coils cannot be used in horizontal applications.
- 4. Charge adders shown above do not indicate that coils are rated for every application. Refer to Performance Data Tables for actual performance for specified system matches. Obtain certified system ratings from www.ahridirectory.org.

#### **CHARGING PROCEDURES:**

- 1. Check the Factory Unit Charge listed on the unit data plate to verify the refrigerant charge for the outdoor unit, the smallest matched indoor unit, and the 15 feet of interconnecting lineset.
- 2. Verify the indoor metering device and additional charge required for the specific matched indoor unit in the system using the above table.
- 3. Make sure the unit is locked into high speed and the system stabilizes before charging. Return the heat pump main control jumper to normal when charging is complete. Add additional charge for the amount of interconnecting lineset greater than 15 feet 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 lineset length.
- 5. Once the charge adders for matched indoor unit and for lineset have been weighed in, verify the system operation against the temperatures and pressures in the Charging Chart for the outdoor unit. Locate Charging Charts on the outdoor unit and also in the Service Data Application Guide on www.upgnet.com. Follow the Subcool or the Superheat charging procedure in the Installation Manual according to the type of indoor metering device in the system, and allow ten minutes 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 data plate with the TOTAL SYSTEM CHARGE defined as follows: TOTAL SYSTEM CHARGE = Base Charge (as shipped) + charge adder for matched indoor unit (+ or -) charge adder for actual lineset length + charge adjustments to match the Charging Chart.

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