

# TABULAR DATA SHEET

## Outdoor Split System Air Conditioner 1.5 Thru 5 Tons

MODELS: GCGD18\* THRU 60

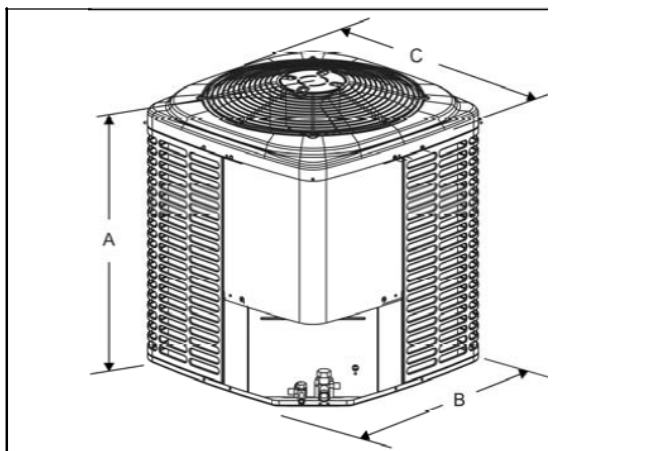
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### Physical and Electrical Data

| MODEL                                     | GCGD18S<br>21S2X  | GCGD24S<br>21S2X | GCGD30S<br>21S2 | GCGD36S<br>21S2 | GCGD42S<br>21S2 | GCGD48S<br>21S2 | GCGD60S<br>21S2 |
|---|-------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Unit Supply Voltage                       | 208-230V, 1, 60Hz |                  |                 |                 |                 |                 |                 |
| Normal Voltage Range <sup>1</sup>         | 187 to 252        |                  |                 |                 |                 |                 |                 |
| Minimum Circuit Ampacity                  | 8.5               | 13.2             | 14.0            | 18.2            | 19.9            | 22.7            | 33.5            |
| Max. Overcurrent Device Amps <sup>2</sup> | 15                | 20               | 20              | 30              | 30              | 35              | 50              |
| Min. Overcurrent Device Amps <sup>3</sup> | 15                | 15               | 15              | 20              | 25              | 25              | 35              |
| Compressor Type                           | Recip             | Recip            | Recip           | Recip           | Recip           | Recip           | Scroll          |
| Compressor Amps                           | Rated Load        | 6.4              | 9.9             | 10.6            | 13.4            | 14.7            | 25.6            |
|   | Locked Rotor      | 36               | 54              | 61              | 78              | 78              | 150             |
| Crankcase Heater                          | No                | No               | No              | No              | No              | No              | No              |
| Factory External Discharge Muffler        | No                | No               | Yes             | Yes             | Yes             | Yes             | No              |
| Factory External Check Valve              | No                | No               | No              | No              | No              | No              | No              |
| HS Kit Required with TXV <sup>4</sup>     | Yes               | Yes              | Yes             | Yes             | Yes             | Yes             | No              |
| Fan Motor Amps                            | Rated Load        | 0.5              | 0.8             | 0.80            | 1.4             | 1.5             | 1.5             |
|   |                   |                  |                 |                 |                 |                 |                 |
| Fan Diameter Inches                       | 18                | 18               | 18              | 18              | 22              | 22              | 22              |
| Fan Motor                                 | Rated HP          | 1/12             | 1/8             | 1/8             | 1/4             | 1/4             | 1/4             |
|   | Nominal RPM       | 1100             | 1075            | 1075            | 1100            | 850             | 850             |
|   | Nominal CFM       | 1550             | 1850            | 1950            | 2400            | 3000            | 3300            |
| Coil                                      | Face Area Sq. Ft. | 9.60             | 9.60            | 11.30           | 12.10           | 16.50           | 19.75           |
|   | Rows Deep         | 1                | 1               | 1               | 1               | 1               | 1               |
|   | Fin /Inches       | 23               | 23              | 23              | 23              | 23              | 23              |
| Liquid Line Set OD (Field Installed)      | 3/8               | 3/8              | 3/8             | 3/8             | 3/8             | 3/8             | 3/8             |
| Vapor Line Set OD (Field Installed)       | 5/8               | 3/4              | 3/4             | 3/4             | 7/8             | 7/8             | 1-1/8           |
| Unit Charge (Lbs.-Oz.) <sup>5</sup>       | See Note 5 Below  |                  |                 |                 |                 |                 |                 |
| Charge Per Foot, Oz.                      | 0.66              | 0.68             | 0.68            | 0.68            | 0.70            | 0.70            | 0.76            |
| Operating Weight Lbs.                     | 130               | 130              | 150             | 160             | 175             | 176             | 200             |

Models with "E" on the end of the model number have an ElectroFm® coating on the outdoor coil.

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. See Hard Start Kit Accessory Installation Manual for Hard Start Kit part number for each model.
5. Units have been shipped without refrigerant. Remove nitrogen holding charge, evacuate, and charge to the system charge listed on the second page of the data sheet. System charges listed include 15 feet of line set.



All dimensions are in inches. They are subject to change without notice. Certified dimensions will be provided upon request.

| Unit Model | Dimensions (Inches) |        |        | Refrigerant Connection Service Valve Size |       |
|------------|---------------------|--------|--------|---|-------|
|            | A1                  | B      | C      | Liquid                                    | Vapor |
| 18         | 28                  | 23-1/2 | 23-1/2 | 3/8"                                      | 3/4"  |
| 24         | 28                  | 23-1/2 | 23-1/2 |   |       |
| 30         | 32                  | 23-1/2 | 23-1/2 |   |       |
| 36         | 34                  | 23-1/2 | 23-1/2 |   | 7/8"  |
| 42         | 34                  | 29     | 29     |   |       |
| 48         | 34                  | 29     | 29     |   |       |
| 60         | 40                  | 29     | 29     | 7/8" <sup>2</sup>                         |       |

1. Overall height from bottom of base pan to top of fan guard.
2. Adapter fitting required for 1-1/8" line set.

| System Charge for Various Matched Systems  |                         |                  |                 |                 |                  |                 |                 |
|--|-------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|
| Outdoor Unit   | GCGD18<br>S21S2X        | GCGD24<br>S21S2X | GCGD30<br>S21S2 | GCGD36<br>S21S2 | GCGD42<br>S21S2X | GCGD48<br>S21S2 | GCGD60<br>S21S2 |
| Required Orifice or TXV <sup>1,2</sup>   | 0.052/2A1               | 0.059/2A1        | 0.065/2A1       | 0.073/2A1       | 0.081/2C1        | 0.084/2C1       | 0.096/2C1       |
| Units have been shipped without refrigerant. Remove nitrogen holding charge, select Indoor Unit, select orifice or TXV, evacuate, and charge to the system charge listed below for matching Indoor Unit. System charges listed include 15 feet of lineset. |                         |                  |                 |                 |                  |                 |                 |
| Indoor Unit  | System Charge, lbs - oz |                  |                 |                 |                  |                 |                 |
| MC18   | 3-1                     | --               | --              | --              | --               | --              | --              |
| MC35   | --                      | --               | 3-11            | --              | --               | --              | --              |
| MC43   | --                      | --               | --              | 4-3             | 4-2              | --              | --              |
| MC62   | --                      | --               | --              | --              | --               | --              | 5-4-            |

**Footnotes:**

1. for applications requiring a TXV use S1-1TVM...series kit.
2. Approved orifice(s) shipped with outdoor unit.
3. Systems matched with furnaces or air handlers not equipped with blower-off delays may require blower Time Delay Kit S1-2FD06700224.
4. PC coils cannot be used in downflow or horizontal applications. FC coils cannot be used in horizontal applications.

**Procedures:**

1. Units are shipped from the factory without refrigerant. Remove nitrogen holding charge.
2. Verify the TXV or orifice for the specific matched indoor unit in the system using the above table.
3. System charge weights shown are for the outdoor unit, matched indoor unit, and 15 feet of refrigerant tubing.
4. Add or subtract charge for the amount of interconnecting line tubing less than or greater than 15 feet at the rate specified in Physical and Electrical Data Table.
5. Weigh in the Total System Charge for the specific matched indoor unit and lineset length.
6. Permanently mark the unit nameplate with the Total System Charge. Total System Charge = Base Charge (as shipped) + charge adder for matched indoor unit + charge adder for lineset.

**Important:**

Models 18-48 require Hard Start Kits for TXV matches. Refer to the Hard Start Kit Accessory Installation Manual for the Hard Start Kit part number for each model.