

### FEATURES

- Durable aluminized steel tubular heat exchanger
- Hot-surface ignition for dependable operation
- Quiet multi-speed ECM blower motor
- Natural gas and propane (LP) convertible, kit included
- R454b refrigerant leakage sensor adaptable
- Designed for multi-position installation: Upflow, downflow, horizontal
- Industry-standard cabinet sizes for easy replacement, installation and add-on cooling
- Convenient left or right connection for gas and electric service
- Removable base for side or bottom return applications

#### California Only

This furnace does not meet the South Coast Air Quality Management District (SCAQMD) Rule 1111 and San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4905 NOx emission limit (14 ng/J) and cannot be installed within the SCAQMD or SJVAPCD and Bay Area.

## SGF80S SERIES

### SINGLE STAGE MULTI-POSITION GAS FURNACE

**80% AFUE**  
**Variable Speed**



Warranty—5 years on parts and 10 years on compressor and heat exchanger.  
(Limitations apply, see actual warranty for complete details.)  
visit [www.comfort-aire.com](http://www.comfort-aire.com)

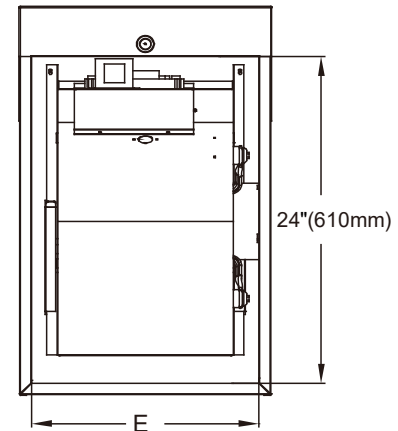
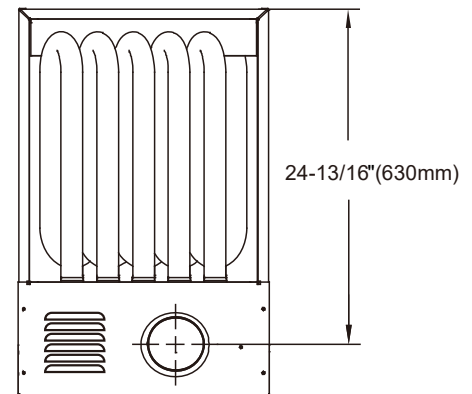
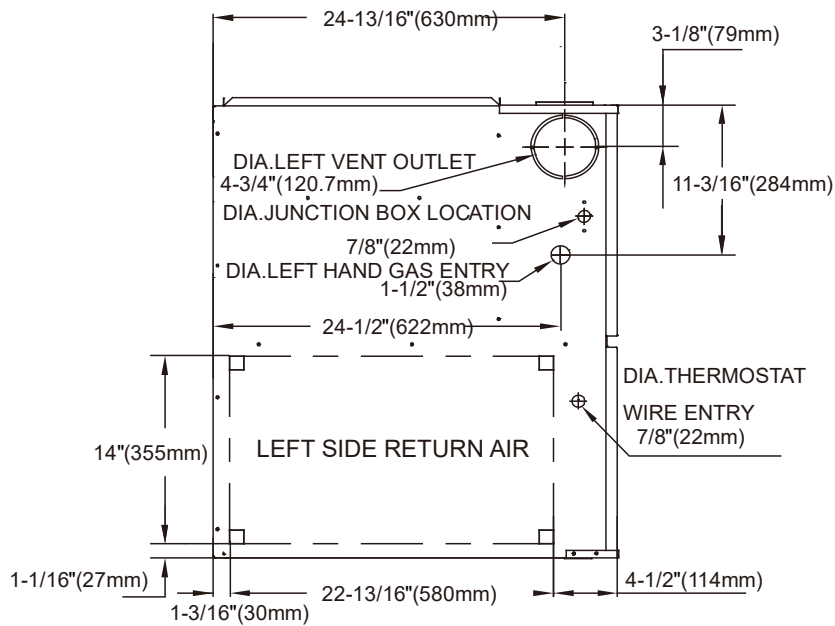
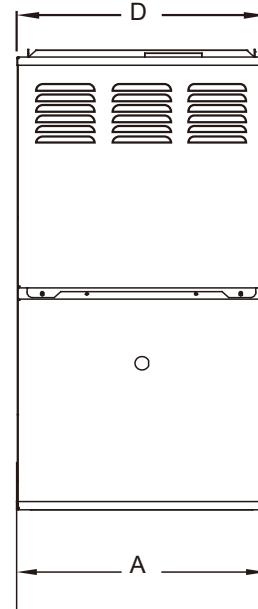
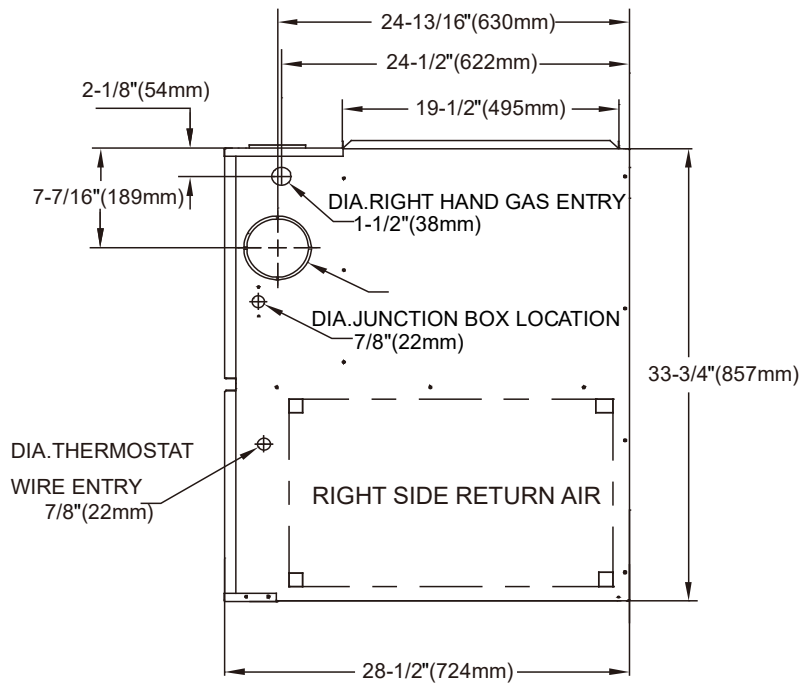


MODEL NUMBER GUIDE

| S         | GF          | 80           | S                             | 040                 | A                                                                    | 3            | S                   | 1                   | A              |
|-----------|-------------|--------------|-------------------------------|---------------------|----------------------------------------------------------------------|--------------|---------------------|---------------------|----------------|
| SE Series | Gas Furnace | Efficiency % | Number of Stages:<br>S=Single | Heating BTUH x 1000 | Cabinet Width:<br>A=14.5 in.<br>B=17.5 in.<br>C=21 in.<br>D=24.5 in. | Cooling Tons | Standard Efficiency | Power<br>1=115-1-60 | Revision Level |

SPECIFICATIONS

|                             | SGF80S040A3S1A | SGF80S060A3S1A | SGF80S060B4S1A | SGF80S080B4S1A | SGF80S080C4S1A | SGF80S100C5S1A | SGF80S120D5S1A |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| GAS HEATING PERFORMANCE     |                |                |                |                |                |                |                |
| Input (BTU/h)               | 40,000         | 60,000         | 60,000         | 80,000         | 80,000         | 100,000        | 120,000        |
| Output (BTU/h)              | 32,000         | 48,000         | 48,000         | 64,000         | 64,000         | 80,000         | 96,000         |
| ELECTRICAL DATA             |                |                |                |                |                |                |                |
| Voltage / Phase (60 Hz)     | 115/1          | 115/1          | 115/1          | 115/1          | 115/1          | 115/1          | 115/1          |
| Min. / Max. Voltage         | 104/127        | 104/127        | 104/127        | 104/127        | 104/127        | 104/127        | 104/127        |
| Min. Circuit Amps           | 6              | 6              | 6              | 6              | 6              | 12.3           | 13             |
| Max. Overcurrent Protection | 15             | 15             | 15             | 15             | 15             | 20             | 20             |
| BLOWER MOTOR                |                |                |                |                |                |                |                |
| Motor Type                  | ECM            | ECM            | ECM            | ECM            | ECM            | ECM            | ECM            |
| Horsepower                  | 1/2            | 1/2            | 1/2            | 1/2            | 1/2            | 1              | 1              |
| Rated RPM                   | 1050           | 1050           | 1050           | 1050           | 1050           | 1050           | 1050           |
| Full Load Amps (FLA)        | 8              | 8              | 8              | 8              | 8              | 14             | 14             |



|                                   | 40A3     | 60A3     | 60B4     | 80B4     | 80C4     | 100C5    | 120D5    |
|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|
| <b>DIMENSIONS AND WEIGHTS</b>     |          |          |          |          |          |          |          |
| <b>A - Cabinet Width (in.)</b>    | 14.5     | 14.5     | 17.5     | 17.5     | 21       | 21       | 24.5     |
| <b>D - Supply Air Width (in.)</b> | 13       | 13       | 16       | 16       | 19.5     | 19.5     | 23       |
| <b>E - Return Air Width (in.)</b> | 15-27/32 | 15-27/32 | 15-27/32 | 15-27/32 | 19-13/32 | 19-13/32 | 22-27/32 |
| <b>Shipping Weight (lbs.)</b>     | 119      | 119      | 126      | 139      | 146      | 159      | 170      |

## COMBUSTION SYSTEM SPECIFICATIONS

| Model                                          |                  |         | 040A3       | 060A3   | 060B4   | 080B4   | 080C4   | 100C5   | 120D5   |
|------------------------------------------------|------------------|---------|-------------|---------|---------|---------|---------|---------|---------|
| Max. Inlet Gas Press                           | Natural Gas      | in.w.c  | 10.5        | 10.5    | 10.5    | 10.5    | 10.5    | 10.5    | 10.5    |
|                                                | Propane Gas (LP) | in.w.c  | 13          | 13      | 13      | 13      | 13      | 13      | 13      |
| Min. Inlet Gas Press                           | Natural Gas      | in.w.c  | 4.5         | 4.5     | 4.5     | 4.5     | 4.5     | 4.5     | 4.5     |
|                                                | Propane Gas (LP) | in.w.c  | 11          | 11      | 11      | 11      | 11      | 11      | 11      |
| Natural Gas Manifold Pressure                  |                  | in.w.c  | 3.0         | 3.5     | 3.5     | 3.8     | 3.8     | 3.8     | 3.9     |
| Propane Gas Manifold Pressure                  |                  | in.w.c  | 10          | 10      | 10      | 10      | 10      | 10      | 10.5    |
| Natural Gas Factory Orifice (0-2000 feet)      |                  | #       | 50          | 45      | 45      | 49      | 49      | 49      | 49      |
| Propane Gas (LP) Factory Orifice (0-2000 feet) |                  | #       | 59          | 55      | 55      | 56      | 56      | 56      | 56      |
| Gas Connection Size                            |                  | in. NPT | 3/4         | 3/4     | 3/4     | 3/4     | 3/4     | 3/4     | 3/4     |
| Igniton Device                                 |                  |         | Hot surface |         |         |         |         |         |         |
| Number of Burners                              |                  | #       | 3           | 3       | 3       | 5       | 5       | 6       | 7       |
| Primary Heat exchanger Diameter                |                  | Inch    | 1-1/2       | 1-1/2   | 1-1/2   | 1-1/2   | 1-1/2   | 1-1/2   | 1-1/2   |
| Safety Switch Settings                         |                  |         |             |         |         |         |         |         |         |
| Pressure Switch Factory Setting                |                  | Low     | in.w.c      | 0.55    | 0.55    | 0.55    | 0.55    | 0.55    | 0.55    |
| Rollout switch - resettable                    |                  | Off/On  | °F          | 300     | 300     | 300     | 300     | 300     | 300     |
| Inlet High Temperature Limit switch - fixed    |                  | Off/On  | °F          | 180/150 | 180/150 | 180/150 | 150/120 | 180/150 | 180/150 |

## HIGH ALTITUDE DERATE ORIFICE SIZE CHART (NATURAL AND LP GAS\*)

| Input Rate<br>KBTU/H | Number of<br>Burners | Elevation(Ft) |    |           |    |           |    |           |    |            |    |
|----------------------|----------------------|---------------|----|-----------|----|-----------|----|-----------|----|------------|----|
|                      |                      | 0-2000        |    | 2000-4000 |    | 4000-6000 |    | 6000-8000 |    | 8000-10000 |    |
|                      |                      | Nat           | LP | Nat       | LP | Nat       | LP | Nat       | LP | Nat        | LP |
| 40A                  | 3                    | 50            | 59 | 51        | 61 | 52        | 62 | 53        | 64 | 54         | 65 |
| 60A                  | 3                    | 45            | 55 | 47        | 56 | 48        | 56 | 49        | 57 | 51         | 57 |
| 60B                  | 3                    | 45            | 55 | 47        | 56 | 48        | 56 | 49        | 57 | 51         | 57 |
| 80B                  | 5                    | 49            | 56 | 50        | 57 | 51        | 58 | 52        | 59 | 53         | 61 |
| 80C                  | 5                    | 49            | 56 | 50        | 57 | 51        | 58 | 52        | 59 | 53         | 61 |
| 100C                 | 6                    | 49            | 56 | 50        | 57 | 51        | 58 | 52        | 59 | 53         | 61 |
| 120D                 | 7                    | 49            | 56 | 50        | 57 | 51        | 58 | 52        | 59 | 53         | 61 |

\*LP orifice based on 10in.w.c manifold pressure  
The input to the furnace must be checked AFTER reorificing

*Comfort-Aire®*



# AIRFLOW DATA

| FURNACE SIZE | SPEED | Static Pressure | 0    | 0.2  | 0.4  | 0.6  | 0.8  | 1    |
|--------------|-------|-----------------|------|------|------|------|------|------|
| 40A          | H     | [SCFM]          | 1149 | 1121 | 1160 | 1153 | 1143 | 1169 |
|              |       | Temp.Rise °F    | 26   | 27   | 26   | 26   | 26   | 26   |
|              | MH    | [SCFM]          | 999  | 1008 | 994  | 1030 | 990  | 972  |
|              |       | Temp.Rise °F    | 30   | 30   | 30   | 29   | 30   | 31   |
|              | M     | [SCFM]          | 799  | 777  | 797  | 782  | 828  | 809  |
|              |       | Temp.Rise °F    | 37   | 38   | 37   | 38   | 36   | 37   |
|              | ML    | [SCFM]          | 600  | 611  | 622  | 611  | 577  | 632  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
|              | L     | [SCFM]          | 450  | 483  | 460  | 469  | 437  | 454  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
| 60A          | H     | [SCFM]          | 1149 | 1121 | 1160 | 1153 | 1143 | 1169 |
|              |       | Temp.Rise °F    | 39   | 40   | 39   | 39   | 39   | 38   |
|              | MH    | [SCFM]          | 999  | 1008 | 994  | 1030 | 990  | 972  |
|              |       | Temp.Rise °F    | 45   | 44   | 45   | 43   | 45   | 46   |
|              | M     | [SCFM]          | 799  | 777  | 797  | 782  | 828  | 809  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
|              | ML    | [SCFM]          | 600  | 611  | 622  | 611  | 577  | 632  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
|              | L     | [SCFM]          | 450  | 483  | 460  | 469  | 437  | 454  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
| 60B          | H     | [SCFM]          | 1301 | 1294 | 1313 | 1325 | 1301 | 1288 |
|              |       | Temp.Rise °F    | 34   | 35   | 34   | 34   | 34   | 35   |
|              | MH    | [SCFM]          | 1101 | 1106 | 1103 | 1106 | 1077 | 1142 |
|              |       | Temp.Rise °F    | 41   | 40   | 41   | 40   | 42   | 39   |
|              | M     | [SCFM]          | 901  | 899  | 889  | 886  | 879  | 918  |
|              |       | Temp.Rise °F    | 50   | 50   | 50   | 50   | 51   | 49   |
|              | ML    | [SCFM]          | 800  | 816  | 841  | 783  | 824  | 813  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
|              | L     | [SCFM]          | 600  | 631  | 635  | 612  | 601  | 610  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
| 80B          | H     | [SCFM]          | 1301 | 1294 | 1313 | 1325 | 1301 | 1288 |
|              |       | Temp.Rise °F    | 46   | 46   | 45   | 45   | 46   | 46   |
|              | MH    | [SCFM]          | 1101 | 1106 | 1103 | 1106 | 1077 | 1142 |
|              |       | Temp.Rise °F    | 54   | 54   | 54   | 54   | 55   | 52   |
|              | M     | [SCFM]          | 901  | 899  | 889  | 886  | 879  | 918  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
|              | ML    | [SCFM]          | 800  | 816  | 841  | 783  | 824  | 813  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
|              | L     | [SCFM]          | 600  | 631  | 635  | 612  | 601  | 610  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |

| FURNACE SIZE | SPEED | Static Pressure | 0    | 0.2  | 0.4  | 0.6  | 0.8  | 1    |
|--------------|-------|-----------------|------|------|------|------|------|------|
| 80C          | H     | [SCFM]          | 1301 | 1297 | 1271 | 1251 | 1343 | 1240 |
|              |       | Temp.Rise °F    | 46   | 46   | 47   | 48   | 44   | 48   |
|              | MH    | [SCFM]          | 1101 | 1113 | 1142 | 1141 | 1060 | 1168 |
|              |       | Temp.Rise °F    | 54   | 54   | 52   | 52   | 56   | 51   |
|              | M     | [SCFM]          | 901  | 855  | 905  | 938  | 874  | 924  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
|              | ML    | [SCFM]          | 800  | 785  | 815  | 823  | 798  | 863  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
|              | L     | [SCFM]          | 600  | 606  | 593  | 549  | 571  | 549  |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
| 100C         | H     | [SCFM]          | 1751 | 1739 | 1742 | 1739 | 1736 | 1733 |
|              |       | Temp.Rise °F    | 43   | 43   | 43   | 43   | 43   | 43   |
|              | MH    | [SCFM]          | 1501 | 1516 | 1492 | 1500 | 1499 | 1505 |
|              |       | Temp.Rise °F    | 50   | 49   | 50   | 50   | 50   | 50   |
|              | M     | [SCFM]          | 1351 | 1351 | 1364 | 1356 | 1347 | 1336 |
|              |       | Temp.Rise °F    | 55   | 55   | 55   | 55   | 55   | 56   |
|              | ML    | [SCFM]          | 1151 | 1154 | 1152 | 1132 | 1154 | 1142 |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
|              | L     | [SCFM]          | 1001 | 995  | 996  | 982  | 981  | 1013 |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |
| 120D         | H     | [SCFM]          | 1951 | 1910 | 1896 | 1929 | 1981 | 1917 |
|              |       | Temp.Rise °F    | 38   | 39   | 39   | 39   | 38   | 39   |
|              | MH    | [SCFM]          | 1751 | 1775 | 1749 | 1772 | 1786 | 1771 |
|              |       | Temp.Rise °F    | 43   | 42   | 43   | 42   | 42   | 42   |
|              | M     | [SCFM]          | 1501 | 1570 | 1575 | 1569 | 1543 | 1544 |
|              |       | Temp.Rise °F    | 50   | 48   | 47   | 48   | 48   | 48   |
|              | ML    | [SCFM]          | 1348 | 1420 | 1410 | 1416 | 1412 | 1400 |
|              |       | Temp.Rise °F    | 55   | 53   | 53   | 53   | 53   | 53   |
|              | L     | [SCFM]          | 1148 | 1210 | 1196 | 1174 | 1179 | 1175 |
|              |       | Temp.Rise °F    | /    | /    | /    | /    | /    | /    |



**SE Series**

"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."

Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product prior to beginning any installation preparations. Third party incentive and rebate programs have precise requirements as to product performance and certification. All products meet applicable regulations in effect on date of manufacture; however, certifications are not necessarily granted for the life of a product. Therefore, it is the responsibility of the applicant to determine whether a specific model qualifies for these incentive/rebate programs.