

95G2E

PRODUCT SPECIFICATIONS

95% TWO-STAGE CONSTANT TORQUE GAS FURNACES

FORM NO. 95G2E-100 (08/2015)



CONFIGURATIONS

- Upflow / Horizontal
- Downflow

HEAT EXCHANGER DESIGN

- Aluminized steel primary heat exchanger with crimped non-welded construction
- AL29-4C Stainless steel secondary heat exchanger
- Non-welded crimped S-curve primary heat exchanger design for maximum durability

BURNERS

- Aluminized steel in shot burners for smooth ignition
- Isolated burner enclosure for quiet operation

CABINET CONSTRUCTION

- Compact 33" height
- Standardized widths for easy coil fit
- Unitized construction for cabinet integrity
- Heat exchanger compartment is insulated to increase efficiency and reduce sound levels
- Baked on prepainted steel cabinet finish

CONSTANT TORQUE ECM

- Efficient blower motor
- Easily removable slide-out blower design
- Dynamically balanced blower wheel with resilient motor mounts for smooth and quiet operation

CONTROLS

- Two stage gas valve
- Integrated ignition and fan control
- Control board retains last ten (10) fault codes with push button memory recall and 7 segment LED display, regardless of power interruption
- Hot surface ignition system uses silicon nitride ignitor
- Control features 120 volt electronic air cleaner and humidifier terminals
- Control circuit is fuse protected
- Color coded control wiring
- Compatible with single or two stage thermostats for heating. Two stage thermostat is recommended when installed with two stage cooling unit.

VENTING

- 2-speed induced draft motor with stainless steel shaft, steel ball bearings, and fan cooled for long life
- Vent materials for Canadian applications must comply with ULC S636
- Certified for direct vent and indirect vent (1 and 2 pipe) applications

INSTALLATION FEATURES

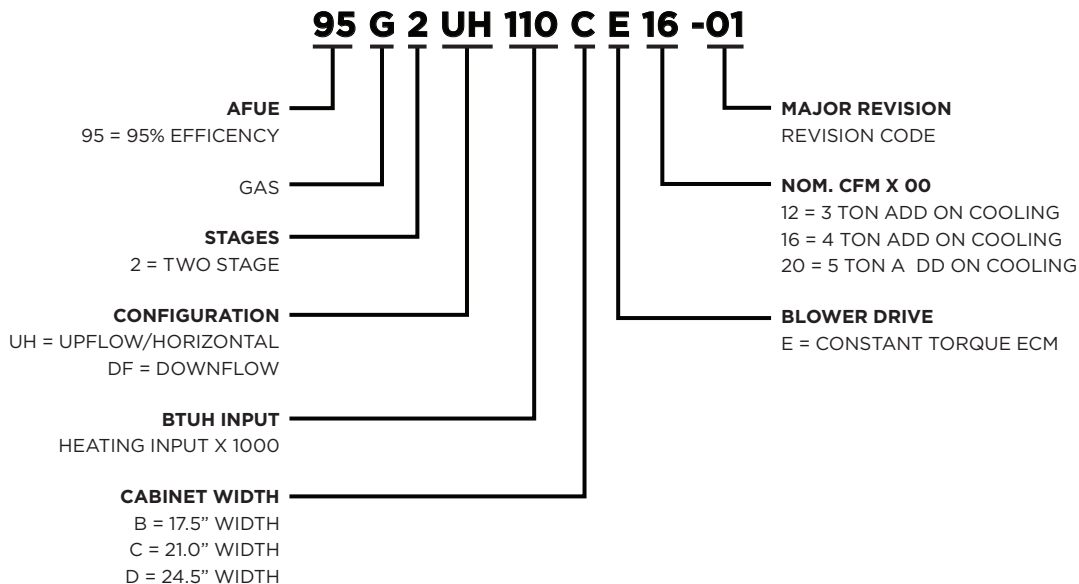
- Left or right gas and electric entry
- Zero step horizontal conversion
- Removable floor base (upflow/horizontal units) for bottom return air
- All models comply with California's South Coast Air Quality Management district Low NOx requirements

WARRANTY

10 year limited parts warranty / lifetime heat exchanger warranty available. See limited warranty document for details.



MODEL NUMBER GUIDE



PHYSICAL AND ELECTRICAL DATA

| | Model | 1st Stage | | 2nd Stage | | AFUE (ICUS) | Nom. Cooling Capacity (tons) | Gas Inlet (in.) | Volts/ Hz/ Phase | Min. Time Delay Breaker or Fuse | Nominal F.L.A. | Trans. (V.A.) | Approx. Weight (lbs.) |
|---------------------|---------------|--------------|---------------|--------------|---------------|-------------|------------------------------|-----------------|------------------|---------------------------------|----------------|---------------|-----------------------|
| | | Input (Btuh) | Output (Btuh) | Input (Btuh) | Output (Btuh) | | | | | | | | |
| UPFLOW / HORIZONTAL | 95G2UH045BE12 | 29,000 | 28,000 | 44,000 | 42,000 | 95.0 | 3 | 1/2 | 120-60-1 | 15 | 6.8 | 40 | 130 |
| | 95G2UH070BE12 | 43,000 | 41,000 | 66,000 | 62,000 | 95.0 | 3 | 1/2 | 120-60-1 | 15 | 6.8 | 40 | 136 |
| | 95G2UH090CE16 | 57,000 | 55,000 | 88,000 | 85,000 | 95.0 | 4 | 1/2 | 120-60-1 | 15 | 8.4 | 40 | 164 |
| | 95G2UH110CE20 | 72,000 | 70,000 | 110,000 | 105,000 | 95.0 | 5 | 1/2 | 120-60-1 | 15 | 10.9 | 40 | 174 |
| | 95G2UH135DE20 | 88,000 | 84,000 | 135,000 | 126,000 | 95.0 | 5 | 1/2 | 120-60-1 | 20 | 10.9 | 40 | 189 |
| DOWNFLOW | 95G2DF045BE12 | 29,000 | 28,000 | 44,000 | 43,000 | 95.0 | 3 | 1/2 | 120-60-1 | 15 | --- | 40 | 131 |
| | 95G2DF070BE16 | 43,000 | 42,000 | 66,000 | 64,000 | 95.0 | 4 | 1/2 | 120-60-1 | 15 | --- | 40 | 136 |
| | 95G2DF090CE20 | 57,000 | 56,000 | 88,000 | 85,000 | 95.0 | 5 | 1/2 | 120-60-1 | 20 | 10.9 | 40 | 164 |
| | 95G2DF110CE20 | 72,000 | 70,000 | 110,000 | 106,000 | 95.0 | 5 | 1/2 | 120-60-1 | 20 | 10.9 | 40 | 176 |

Note: For vent length and clearances to combustibles, please reference installation instructions.

FILTER REQUIREMENT DATA

| Airflow Descriptor | Disposable Filters | Cleanable Filters |
|--------------------|------------------------|-----------------------|
| | Minimum Area (sq. in.) | Minimum Area (sq.in.) |
| 12 | 576 | 288 |
| 16 | 768 | 384 |
| 20 | 960 | 480 |

1. The Airflow Descriptor is the two digits following the "B", "C", or "D" in the model number; e.g. "20" is the Airflow Descriptor.
 2. Areas shown for permanent filters are based on filters rated at 600 feet per minute face velocity.

BLOWER PERFORMANCE DATA

| | Model | Motor Size (hp) | Blower Size | Temp Rise (F°) | | Blower Speed | CFM @ external static pressure - "w.c. | | | | | | |
|---------------|---------------|-----------------|---------------|---------------------|----------|--------------|--|------|------|------|------|------|------|
| | | | | High Fire | Low Fire | | .20 | .30 | .40 | .50 | .60 | .70 | .80 |
| | | | | UPFLOW / HORIZONTAL | | | | | | | | | |
| | 95G2UH045BE12 | 1/2 | 10 x 8 | 35 - 65 | 20 - 50 | High | 1290 | 1275 | 1220 | 1215 | 1190 | --- | --- |
| | | | | | | Med/High | 1190 | 1150 | 1120 | 1090 | 1060 | 1015 | 1000 |
| | | | | | | Med | 1080 | 1045 | 1015 | 980 | 950 | 900 | 870 |
| | | | | | | Med/Low | 825 | 785 | 735 | 705 | 650 | 620 | 580 |
| | | | | | | Low | 780 | 720 | 690 | 635 | 600 | 555 | 520 |
| | 95G2UH070BE12 | 1/2 | 10 x 8 | 50 - 80 | 25 - 55 | High | 1310 | 1275 | 1250 | 1215 | 1200 | 1145 | --- |
| | | | | | | Med/High | 1250 | 1205 | 1175 | 1145 | 1100 | 1070 | 1035 |
| | | | | | | Med | 1130 | 1100 | 1065 | 1045 | 995 | 960 | 925 |
| | | | | | | Med/Low | 880 | 835 | 795 | 745 | 705 | 670 | 610 |
| | | | | | | Low | 815 | 775 | 730 | 670 | 640 | 585 | 550 |
| | 95G2UH090CE16 | 3/4 | 10 x 10 | 45 - 75 | 30 - 60 | High | 1660 | 1615 | 1590 | 1560 | 1525 | 1475 | --- |
| | | | | | | Med/High | 1435 | 1390 | 1350 | 1310 | 1255 | 1220 | 1170 |
| | | | | | | Med | 1290 | 1240 | 1200 | 1155 | 1105 | 1065 | 1010 |
| | | | | | | Med/Low | 1195 | 1140 | 1110 | 1055 | 1005 | 960 | 920 |
| | | | | | | Low | 1045 | 995 | 945 | 895 | 855 | 805 | 760 |
| | 95G2UH110CE20 | 1 | 11 - 1/2 x 10 | 45 - 75 | 30 - 60 | High | 2130 | 2095 | 2065 | 2030 | 1995 | 1955 | 1930 |
| | | | | | | Med/High | 1865 | 1835 | 1785 | 1755 | 1705 | 1660 | 1635 |
| | | | | | | Med | 1670 | 1640 | 1600 | 1560 | 1525 | 1475 | 1445 |
| | | | | | | Med/Low | 1560 | 1525 | 1465 | 1425 | 1380 | 1350 | 1300 |
| | | | | | | Low | 1345 | 1285 | 1250 | 1215 | 1150 | 1100 | 1050 |
| 95G2UH135DE20 | 1 | 11 - 1/2 x 10 | 55 - 85 | 40 - 70 | High | 2330 | 2295 | 2275 | 2225 | 2185 | --- | --- | |
| | | | | | Med/High | 2180 | 2120 | 2075 | 2035 | 2020 | 1940 | 1890 | |
| | | | | | Med | 1950 | 1925 | 1885 | 1845 | 1815 | 1735 | 1715 | |
| | | | | | Med/Low | 1745 | 1690 | 1640 | 1605 | 1565 | 1520 | 1465 | |
| | | | | | Low | 1535 | 1480 | 1445 | 1395 | 1330 | 1310 | 1285 | |

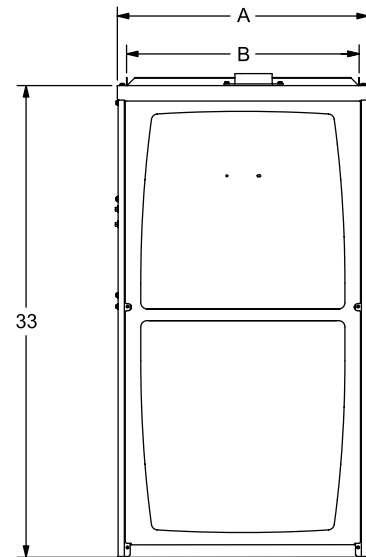
BLOWER PERFORMANCE DATA (CONTINUED)

| | Model | Motor Size (hp) | Blower Size | Temp Rise (F°) | | Blower Speed | CFM @ external static pressure - "w.c. | | | | | | |
|--|---------------|-----------------|---------------|----------------|----------|--------------|--|------|------|------|------|------|------|
| | | | | High Fire | Low Fire | | .20 | .30 | .40 | .50 | .60 | .70 | .80 |
| | | | | DOWNFLOW | | | | | | | | | |
| | 95G2DF045BE12 | 1/2 | 10 x 8 | 35 - 65 | 20 - 50 | High | 1320 | 1285 | 1275 | 1230 | 1185 | --- | --- |
| | | | | | | Med/High | 1215 | 1165 | 1150 | 1095 | 1060 | 1020 | 980 |
| | | | | | | Med | 1090 | 1065 | 1025 | 985 | 935 | 915 | 860 |
| | | | | | | Med/Low | 825 | 795 | 750 | 705 | 655 | 590 | 555 |
| | | | | | | Low | 785 | 735 | 705 | 650 | 605 | 545 | 485 |
| | 95G2DF070BE16 | 3/4 | 11 - 1/2 x 10 | 35 - 65 | 25 - 55 | High | 1705 | 1665 | 1605 | 1585 | 1540 | --- | --- |
| | | | | | | Med/High | 1470 | 1430 | 1390 | 1335 | 1300 | 1260 | 1220 |
| | | | | | | Med | 1265 | 1235 | 1185 | 1155 | 1100 | 1050 | 1015 |
| | | | | | | Med/Low | 1165 | 1120 | 1070 | 1015 | 970 | 915 | 865 |
| | | | | | | Low | 895 | 835 | 775 | 690 | 625 | 570 | 520 |
| | 95G2DF090CE20 | 3/4 | 10 x 10 | 40 - 70 | 30 - 60 | High | 1685 | 1630 | 1620 | 1570 | 1540 | --- | --- |
| | | | | | | Med/High | 1455 | 1415 | 1370 | 1335 | 1295 | 1260 | 1210 |
| | | | | | | Med | 1310 | 1285 | 1245 | 1185 | 1145 | 1110 | 1060 |
| | | | | | | Med/Low | 1220 | 1165 | 1125 | 1080 | 1045 | 990 | 940 |
| | | | | | | Low | 1080 | 1035 | 985 | 925 | 875 | 825 | 760 |
| | 95G2DF110CE20 | 1 | 11 x 11 | 45 - 75 | 35 - 65 | High | 2185 | 2150 | 2085 | 2060 | 2005 | 1970 | 1910 |
| | | | | | | Med/High | 1910 | 1850 | 1810 | 1765 | 1700 | 1665 | 1620 |
| | | | | | | Med | 1720 | 1670 | 1605 | 1565 | 1510 | 1460 | 1420 |
| | | | | | | Med/Low | 1575 | 1525 | 1465 | 1420 | 1370 | 1325 | 1275 |
| | | | | | | Low | 1360 | 1290 | 1255 | 1190 | 1160 | 1100 | 1045 |

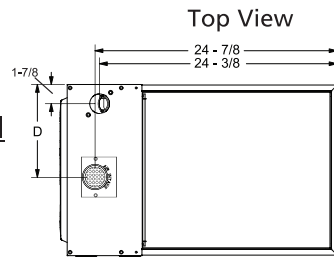
DIMENSIONS (IN.)

| | Model | A | B | C | D |
|---------------------|---------------|--------|--------|--------|--------|
| UPFLOW / HORIZONTAL | 95G2UH045BE12 | 17-1/2 | 16-3/8 | 16 | 7-5/8 |
| | 95G2UH070BE12 | 17-1/2 | 16-3/8 | 16 | 7-5/8 |
| | 95G2UH090CE16 | 21 | 19-7/8 | 19-1/2 | 9-3/8 |
| | 95G2UH110CE20 | 21 | 19-7/8 | 19-1/2 | 9-3/8 |
| | 95G2UH135DE20 | 24-1/2 | 23-3/8 | 23 | 11-1/8 |
| DOWNFLOW | 95G2DF045BE12 | 17-1/2 | 16-3/8 | 16 | 15-1/2 |
| | 95G2DF070BE16 | 17-1/2 | 16-3/8 | 16 | 15-1/2 |
| | 95G2DF090CE20 | 21 | 19-7/8 | 19-1/2 | 19 |
| | 95G2DF110CE20 | 21 | 19-7/8 | 19-1/2 | 19 |

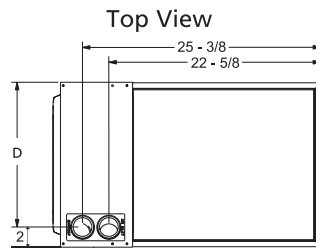
Front View



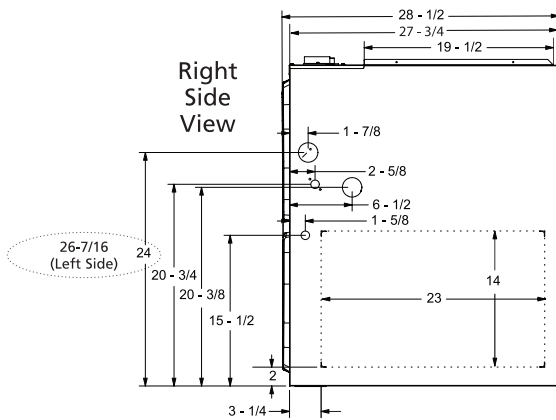
Upflow / Horizontal



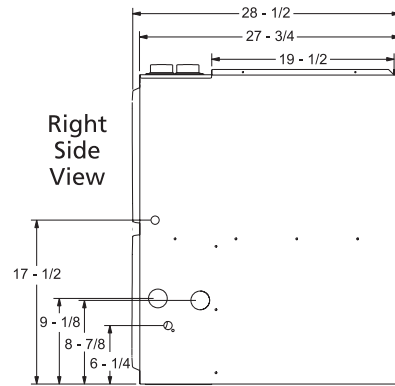
Downflow



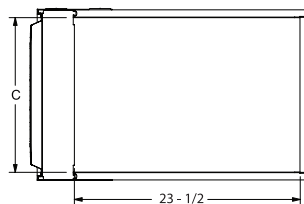
Right Side View



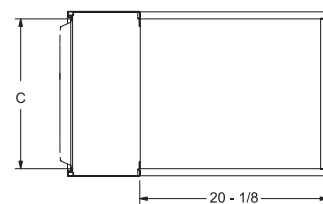
Right Side View



Bottom View



Bottom View



PRODUCT ENTERPRISE PROCESS**1.6.5. PRODUCT ACCESSORIES - PRODUCT MANAGEMENT**

| ACCESSORY | ALLIED CAT NUMBER |
|--|-------------------|
| RETURN AIR BASE | |
| Return Air Base 17.5 Inch | 68W62 |
| Return Air Base 21.0 Inch | 68W63 |
| Return Air Base 24.5 Inch | 68W64 |
| HIGH ALTITUDE PRESSURE SWICHES | |
| 2-Stage 95% UH/DF (4501 - 7500 ft) [110] | 14A46 |
| 2-Stage 95% UH/DF (4501 - 7500 ft) [045] | 14A47 |
| 2-Stage 95% UH (4501 - 7500 ft) [090] | 14A57 |
| 2-Stage 95% UH (4501 - 7500 ft) [135] | 14A49 |
| 2-Stage 95% UH/DF (7501 - 10,000 ft) [045] | 14A50 |
| 2-Stage 95% UH/DF (7501 - 10,000 ft) [110, 135] | 14A51 |
| 2-Stage 95% (7501 - 10,000 ft) UH [070] DF [090] | 14A53 |
| 2-Stage 95% DF (4501 -7500 ft) [070] | 14A55 |
| 2-Stage 95% DF (7501 - 10,000 ft) [070] | 14A56 |
| 2-Stage 95% (4501 -7500 ft) UH [070] DF [090] | 14A54 |
| 2-Stage 95% (7501 -10,000 ft) UH [090] | 14A54 |
| HIGH ALTITUDE ORIFICE KITS (7500'+) | |
| 2-Stage 95% UH/DF - Natural Gas | 51W01 |
| 2-Stage 95% UH/DF - Propane Gas | 78W97 |
| NATURAL TO LP KITS | |
| 2-Stage - 90 | 78W94 |
| LP TO NATURAL KITS | |
| 2-Stage - 90 | 77W10 |
| DOWNFLOW SPECIFIC AIR FILTERS | |
| 17.5" | 51W07 |
| 21.0" | 51W08 |
| 24.5" | 51W09 |
| NIGHT SERVICE KITS | |
| Two Stage | 10U95 |
| Safety Night Service Kit | 68W83 |
| HORIZONTAL SUSPENSION KIT | |
| 80% & 90% Kit | 51W10 |
| FLUSH MOUNT TERMINATION (90% FURNACES ONLY) | |
| 2" & 3.0 Vent - US Version | 51W11 |
| 2" & 3.0 Vent - ULC S636 Compliant (Canada) | 51W12 |
| Concentric Vent Kits | |

ACCESSORY LIST

| CATALOG NUMBER | DESCRIPTION |
|---|----------------------------|
| EXTERNAL FILTER RACK KITS | |
| 1.841018 | 1 pack (16 x 25) |
| 1.841039 | 10 pack (16 x 25) |
| RETURN AIR BASE | |
| 68W62 | 17.5" B Width |
| 68W63 | 21.0" C Width |
| 68W64 | 24.5" D Width |
| DOWNFLOW COMBUSTIBLE FLOORING BASE | |
| 11M60 | 17.5" B Width |
| 11M61 | 21.0" C Width |
| FLUSH MOUNT TERMINATION (90% FURNACES ONLY) US ONLY | |
| 51W11 | 2" & 3" Vent Version |
| CONCENTRIC VENT KIT (90% FURNACES ONLY) US ONLY | |
| 71M80 | 1-1/2" Vent Version |
| 69M29 | 2" Vent Version |
| 60L46 | 3" Vent Version |
| CONCENTRIC VENT KIT (90% FURNACES ONLY) CANADA | |
| 44W92 | 1-1/2" and 2" Vent Version |
| 44W93 | 3" Vent Version |

For vent length and clearances to combustibles, please reference installation instructions.



1-800-448-5872

All specifications and illustrations
subject to change without notice and
without incurring obligations.