

# Product Data

## 95% AFUE Single Stage Furnace Upflow/Horizontal

### FLEXIBILITY

- Dual certified venting (1 or 2 pipes) Direct Vent furnace
- 40" high with wider cabinets, for ease of installation
- Factory shipped for natural gas, with Propane
- Gas conversion kits available
- Upflow/horizontal installation
- Vent pipe can be run horizontally or vertically
- Internal condensate drain system

### SERVICE

- Self diagnostics
- Entire blower assembly mounted on rails

### COMFORT

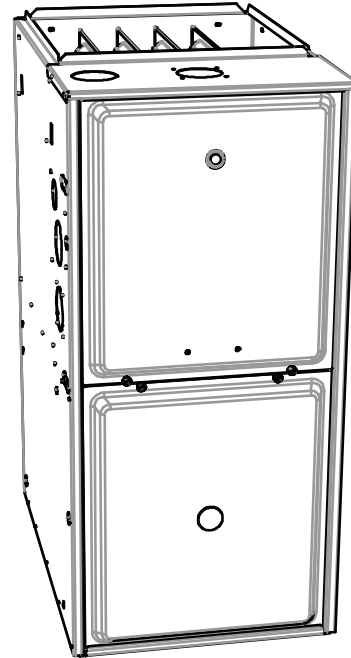
- Adjustable timed blower Off delay
- Thermal lined, one piece steel cabinet for noise reduction
- 24 and 115 VAC humidifier terminal
- Electronic air cleaner terminal
- Insulated blower compartment

### EFFICIENCY

- 95% AFUE, upflow
- Up to 95% AFUE, horizontal
- Single stage gas valve operation
- Single stage integrated control
- Multispeed, prelubricated PSC blower motors
- Induced draft blower
- In-shot burners
- California NOx approved

### QUALITY

- Stainless steel primary heat exchanger
- Stainless steel secondary heat exchanger
- High temperature limit control prevents overheating
- Dependable hot surface ignition with Silicon Nitride igniter
- Flame roll-out sensors standard



A07836

## **WARNING**

### APPLICATION HAZARD

Failure to follow this warning could result in personal injury or death

This furnace is not designed for use in mobile homes, trailers, or recreational vehicles.



As an ENERGY STAR® Partner, we have determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

| UPFLOW/HORIZONTAL (NATURAL GAS) |                   |  |                  |        |            |                                |
|---------------------------------|-------------------|--|------------------|--------|------------|--------------------------------|
| Model Number                    | Heat Exchangers * | Dimensions<br>H x W x D (In. / MM)                               | Input<br>(MBTUH) | AFUE   |            | Cooling Capacity @<br>.5 in wc |
|                                 |                   |  |                  | Upflow | Horizontal |                                |
| PG9YAA036060                    | 20 Year           | 40 x 19 <sup>1</sup> / <sub>8</sub> x 29<br>1016 x 486.8 x 736.6 | 60               | 95.0   | 94.4       | 2.0 - 3.0 TON                  |
| PG9YAA036080                    | 20 Year           | 40 x 22 <sup>3</sup> / <sub>4</sub> x 29<br>1016 x 577.9 x 736.6 | 80               | 95.0   | 94.4       | 3.0 TON                        |
| PG9YAA048080                    | 20 Year           | 40 x 22 <sup>3</sup> / <sub>4</sub> x 29<br>1016 x 572.9 x 736.6 | 80               | 95.0   | 95.0       | 3.0 - 4.0 TON                  |
| PG9YAA060100                    | 20 Year           | 40 x 24 <sup>1</sup> / <sub>2</sub> x 29<br>1016 x 622.3 x 736.6 | 100              | 95.0   | 94.4       | 3.5 - 5.0 TON                  |

## FURNACE SPECIFICATIONS

PG9YAA

| Model Number                       | NATURAL GAS | PG9YAA036060   | PG9YAA036080   | PG9YAA048080   | PG9YAA060100   |
|------------------------------------|-------------|--|--|--|--|
| INPUT (btuh)                       |             | 60,000   | 80,000   | 80,000   | 100,000  |
| HTG. CAP. (btuh)                   |             | 58,000   | 77,000   | 77,000   | 96,000   |
| UPFLOW AFUE % (ICS)                |             | 95.0   | 95.0   | 95.0   | 95.0   |
| HORIZONTAL AFUE % (ICS)            |             | 94.4   | 94.4   | 95.0   | 94.4   |
| NOx (Ng/J)                         |             | <40  | <40  | <40  | <40  |
| TEMP. RISE DEGREES (°F/°C)         |             | 30-60/17-33  | 35-65/19-46  | 30-60/17-33  | 30-60/17-33  |
| VOLTS/HZ/PH                        |             | 115/1/60   | 115/1/60   | 115/1/60   | 115/1/60   |
| MIN./MAX. VOLTAGE                  |             | 104/127  | 104/127  | 104/127  | 104/127  |
| RATING PLATE AMPS.                 |             | 10   | 10.5   | 13.6   | 14.8   |
| TRANSFORMER (V.A.)                 |             | 40   | 40   | 40   | 40   |
| GAS PIPE SIZE (IN.)                |             | 1/2  | 1/2  | 1/2  | 1/2  |
| VENT SIZE <sup>^</sup>             |             | 2" or 3" OD  | 3" OD  | 3" OD  | 3" OD  |
| COOLING CAP.                       |             | 3.0  | 3.0  | 4.0  | 5.0  |
| FILTER SIZE (IN / MM) (1 required) |             | 16X25X1<br>406.4 x 635.0 x 25.4                      | 16X25X1<br>406.4 x 635.0 x 25.4                      | 16X25X1(2)<br>406.4 x 635.0 x 25.4                   | 16X25X1(2)<br>406.4 x 635.0 x 25.4                   |
| DIMENSIONS (IN / MM) HEIGHT        |             | 40 / 1016.0  | 40 / 1016.0  | 40 / 1016.0  | 40 / 1016.0  |
| WIDTH X DEPTH (IN / MM)            |             | 19 <sup>1</sup> / <sub>8</sub> x 29<br>486.8 x 736.6 | 22 <sup>3</sup> / <sub>4</sub> x 29<br>572.9 x 736.6 | 22 <sup>3</sup> / <sub>4</sub> x 29<br>572.9 x 736.6 | 24 <sup>1</sup> / <sub>2</sub> x 29<br>622.3 x 736.6 |
| WEIGHT (Lbs.)                      |             | 153  | 172  | 180  | 193  |

<sup>^</sup> Vent size may vary depending on length, number of elbows, standard vent or direct vent. See Installation Instructions.

## PART NUMBER NOMENCLATURE

|   |   |   |   |   |   |    |     |   |
|---|---|---|---|---|---|----|-----|---|
| <b>Brand Identifier</b><br>PG   | 9 | Y | A | A | O | 36 | 080 | #   |
| <b>G = Gas Furnace</b><br><b>Model Efficiency</b><br>8 = Non-Condensing, 80+% Gas Furnace<br>9 = Condensing, 90+% Gas Furnace |   |   |   |   |   |    |     | <b>Engineering Rev.</b><br>Denotes minor change   |
| <b>Installation Configuration</b><br>Y = Upflow/Horizontal  |   |   |   |   |   |    |     | <b>Input</b><br>(Nominal MBtuh)<br>050 = 50,000<br>075 = 75,000<br>100 = 100,000<br>125 = 125,000 |
| <b>Electric</b><br>A = 110V, 60Hz, Single Stage   |   |   |   |   |   |    |     | <b>Cooling Airflow</b><br>36 = 1200 CFM<br>48 = 1600 CFM<br>60 = 2000 CFM                         |
|   |   |   |   |   |   |    |     | <b>Major Design Feature</b><br>O = PSC Motor<br>V = Variable Speed                                |
|   |   |   |   |   |   |    |     | <b>Major Series</b>   |

## ACCESSORIES

| Model Number           | Description  | Used With Models  |
|------------------------|--|---|
| KGANP45011HW           | Gas Conversion Kits - Natural gas to LP (propane) conversion Kit. Allows field conversion to LP (propane) gas. | PG9YAA  |
| KGAPN38011HW           | Gas Conversion Kits - LP (Propane) to natural gas conversion kit. Allows field conversion to natural gas.      | PG9YAA  |
| KGAFR0901P16           | Filter Kits - External filter frame. 16" x 25"   | Side Return (All Furnaces) Bottom Return (All 19 <sup>1</sup> / <sub>8</sub> " Furnaces under 1600 CFM) |
| KGAFR1001P20           | Filter Kits - Bottom return filter frame kit 20" x 25"   | (All 22 <sup>3</sup> / <sub>4</sub> " Furnaces)   |
| P908-0001 <sup>†</sup> | Condensate neutralizer kit - for condensing gas furnaces   | All *PG9YAA Furnaces If Required  |
| KGAVT0801CVT           | 3" Concentric vent kit - allows single wall penetration for 2 pipe direct vent applications (90+).             | PG9Y*060 (65' & (4) 90°elbows)<br>PG9Y*080 (35' & (4) 90°elbows)<br>PG9Y*100 (35' & (4) 90°elbows)      |
| KGAVT0701CVT           | 2" Concentric vent kit - allows single wall penetration for 2 pipe direct vent applications (90+).             | PG9Y*060 (35' & (4) 90°elbows)<br>PG9Y*080 (35' & (4) 90°elbows)<br>PG9Y*100 (25' & (4) 90°elbows)      |
| HK06NA007 <sup>†</sup> | High Altitude Pressure Switch Kit (1 Pressure Switch)  | PG9YAA036060  |
| HK06NA012 <sup>†</sup> | High Altitude Pressure Switch Kit (2 Pressure Switches)  | PG9YAA036080 & PG9YAA048080   |
| HK06NA017 <sup>†</sup> | High Altitude Pressure Switch Kit (2 Pressure Switches)  | PG9YAA060100  |
| IHK335909-001          | Upper Door Replacement Kit   | PG9YAA  |

<sup>†</sup> Must be ordered from Service Parts

| MAX CFM's for Factory Washable Filters |      |
|--|------|
| Filter Size (in. / mm)                 | CFM  |
| 14" X 25" (356 x 635)                  | 1400 |
| 16" X 25" (406 x 635)                  | 1600 |
| 20" X 25" (508 x 635)                  | 2000 |
| 24" X 25" (610 x 635)                  | 2500 |
| Max CFM based on 600 FPM               |      |

# CFM – Cubic Feet per Minute airflow.

Filter required for each return–air inlet. Airflow performance includes 1" washable (600 FPM max) filter media.

Disposable filters are typically rated at 300 FPM and only allow half of the airflow when compared to 600 FPM filters.

Example: 20 x 25 @ 600 FPM = 2000 CFM, @ 300 FPM = 1000 CFM.

# BLOWER PERFORMANCE

| Model Number                      | NATURAL GAS | PG9YAA036060 (1)(2) | PG9YAA036080 (1)(2) | PG9YAA048080 (1)(2) | PG9YAA060100 (1)(2) |
|-----------------------------------|-------------|---------------------|---------------------|---------------------|---------------------|
| BLOWER SIZE INCHES (DIA. x WIDTH) |             | 11-10               | 11-10               | 11-10               | 11-10               |
| MOTOR H.P. (TYPE)                 |             | PSC / 1/2           | PSC / 1/3           | PSC / 1/2           | PSC / 3/4           |
| MOTOR SPEEDS                      |             | 4                   | 4                   | 4                   | 4                   |

## AIRFLOW DATA (CFM)

PG9YAA

|                |             |      |      |      |      |
|----------------|-------------|------|------|------|------|
| .10 ESP in wc  | LOW         | 703  | 976  | 922  | 1820 |
|                | MEDIUM LOW  | 901  | 1123 | 1246 | 1993 |
|                | MEDIUM HIGH | 1204 | 1326 | 1690 | 2137 |
|                | HIGH        | 1478 | 1456 | 2032 | 2240 |
| .20 ESP in wc  | LOW         | 649  | 941  | 898  | 1768 |
|                | MEDIUM LOW  | 864  | 1112 | 1250 | 1934 |
|                | MEDIUM HIGH | 1154 | 1312 | 1650 | 2062 |
|                | HIGH        | 1418 | 1440 | 1952 | 2163 |
| .30 ESP in wc  | LOW         | 588  | 909  | 872  | 1722 |
|                | MEDIUM LOW  | 818  | 1085 | 1226 | 1872 |
|                | MEDIUM HIGH | 1103 | 1280 | 1601 | 1992 |
|                | HIGH        | 1350 | 1420 | 1874 | 2083 |
| .40 ESP in wc  | LOW         | 538  | 870  | 838  | 1656 |
|                | MEDIUM LOW  | 765  | 1043 | 1187 | 1801 |
|                | MEDIUM HIGH | 1053 | 1241 | 1533 | 1916 |
|                | HIGH        | 1280 | 1379 | 1785 | 2002 |
| .50 ESP in wc  | LOW         | 488  | 818  | 806  | 1590 |
|                | MEDIUM LOW  | 720  | 1002 | 1151 | 1723 |
|                | MEDIUM HIGH | 993  | 1209 | 1462 | 1833 |
|                | HIGH        | 1201 | 1325 | 1688 | 1912 |
| .60 ESP in wc  | LOW         | 459  | 784  | 769  | 1513 |
|                | MEDIUM LOW  | 672  | 952  | 1090 | 1636 |
|                | MEDIUM HIGH | 924  | 1155 | 1381 | 1745 |
|                | HIGH        | 1116 | 1261 | 1593 | 1821 |
| .70 ESP in wc  | LOW         | 408  | 714  | 711  | 1426 |
|                | MEDIUM LOW  | 620  | 893  | 1014 | 1547 |
|                | MEDIUM HIGH | 846  | 1082 | 1287 | 1654 |
|                | HIGH        | 1023 | 1208 | 1482 | 1727 |
| .80 ESP in wc  | LOW         | 365  | 640  | 643  | 1325 |
|                | MEDIUM LOW  | 558  | 792  | 918  | 1437 |
|                | MEDIUM HIGH | 764  | 1001 | 1182 | 1551 |
|                | HIGH        | 931  | 1115 | 1360 | 1618 |
| .90 ESP in wc  | LOW         | 317  | 567  | 570  | 1199 |
|                | MEDIUM LOW  | 489  | 702  | 790  | 1315 |
|                | MEDIUM HIGH | 683  | 868  | 1053 | 1430 |
|                | HIGH        | 825  | 1007 | 1231 | 1502 |
| 1.00 ESP in wc | LOW         | 233  | 491  | 488  | 1047 |
|                | MEDIUM LOW  | 428  | 608  | 678  | 1159 |
|                | MEDIUM HIGH | 590  | 746  | 850  | 1275 |
|                | HIGH        | 730  | 830  | 1052 | 1356 |

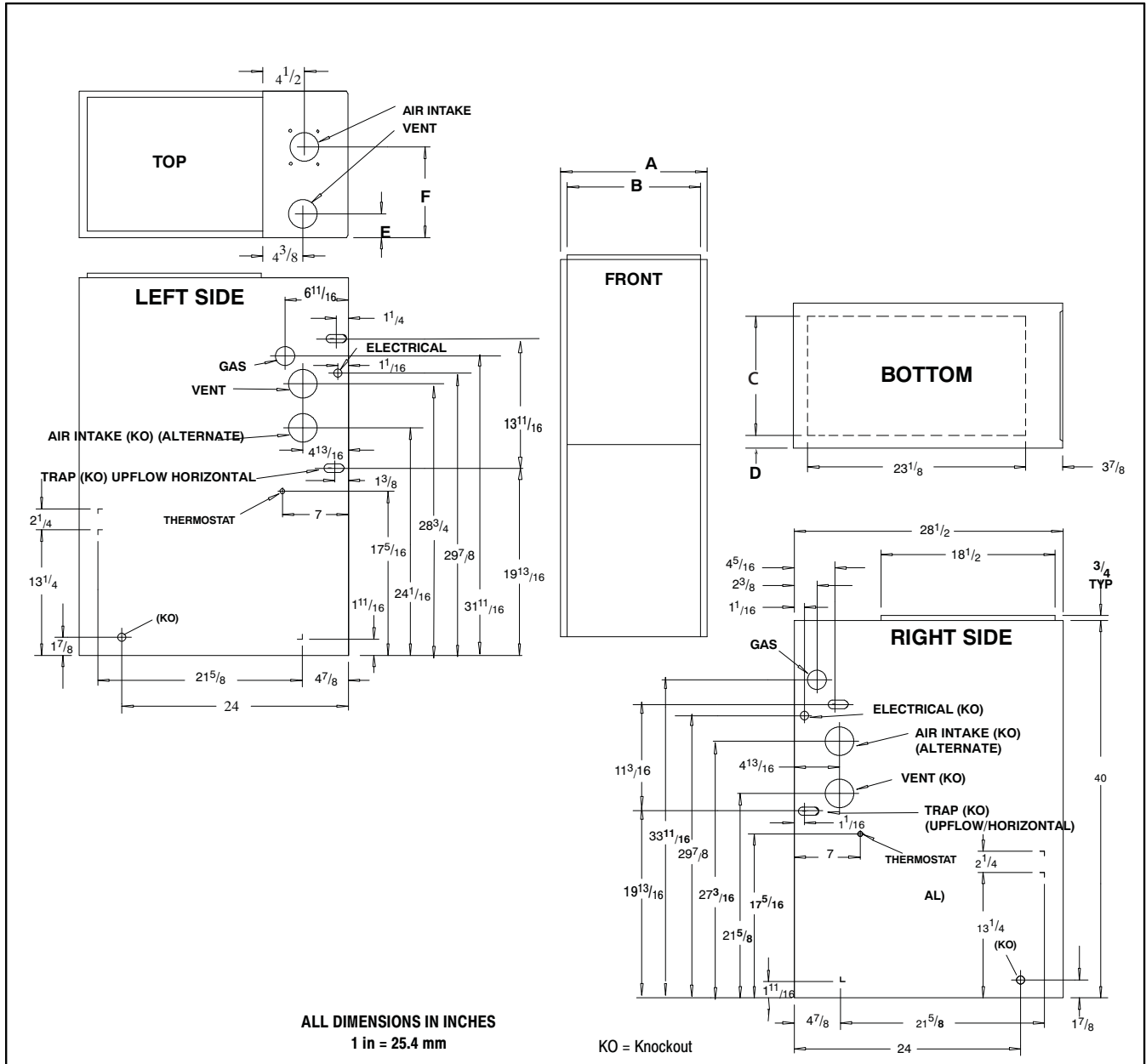
NOTE: (1) Data based on Bottom Only or One Side return.

NOTE: (2) Gray area is above maximum temperature rise range.

# DIMENSIONS

| Cabinet to Combustible Clearances |      |    |    |      |      |      |
|-----------------------------------|------|----|----|------|------|------|
| TOP                               | BOT. | RH | LH | BACK | FRNT | FLUE |
| 1"                                | 0"   | 0" | 0" | 0"   | 3"   | 0"   |

| Unit<br>Capacity | Cabinet                        |                                | Bottom                         |                                 | Top                           |                                |
|------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|-------------------------------|--------------------------------|
|                  | A                              | B                              | C                              | D                               | E                             | F                              |
| PG9YAA036060     | 19 <sup>1</sup> / <sub>8</sub> | 17 <sup>5</sup> / <sub>8</sub> | 14 <sup>3</sup> / <sub>4</sub> | 2 <sup>1</sup> / <sub>8</sub>   | 2 <sup>1</sup> / <sub>2</sub> | 9 <sup>1</sup> / <sub>2</sub>  |
| PG9YAA036080     | 22 <sup>3</sup> / <sub>4</sub> | 21 <sup>1</sup> / <sub>4</sub> | 18 <sup>3</sup> / <sub>4</sub> | 1 <sup>15</sup> / <sub>16</sub> | 2 <sup>5</sup> / <sub>8</sub> | 11 <sup>3</sup> / <sub>8</sub> |
| PG9YAA048080     | 22 <sup>3</sup> / <sub>4</sub> | 21 <sup>1</sup> / <sub>4</sub> | 18 <sup>3</sup> / <sub>4</sub> | 1 <sup>15</sup> / <sub>16</sub> | 2 <sup>5</sup> / <sub>8</sub> | 11 <sup>3</sup> / <sub>8</sub> |
| PG9YAA060100     | 24 <sup>1</sup> / <sub>2</sub> | 23                             | 23                             | 7 <sup>7</sup> / <sub>16</sub>  | 2 <sup>1</sup> / <sub>4</sub> | 12 <sup>1</sup> / <sub>4</sub> |



PG9YAA

