# *Comfort and Energy Savings.*

## An Unbeatable Combination!


## 95% Gas Furnace

Comfort-Aire®

mars® Delivering Confidence

# Comfort, efficiency, and dependability make an unbeatable combination in the 95% gas furnace!

## Energy Savings

Two heat exchangers make this one of the most efficient furnaces on the market today. The primary exchanger pulls about three-quarters of the available heat from the burner, then the secondary heat exchanger captures most of what's remaining. Using 95% or more of the heat output from each cubic foot of gas, this furnace produces not just greater comfort, but also significant fuel savings.

## A Perfect Fit

At only 34 ½" in height, the furnace is ideal for renovations and replacements. It will fit in virtually any space where a furnace was previously installed, including basements and utility closets. For contractors and architects, the low profile design is a distinct advantage, offering many placement options.


## Simple Installation

Our 95% furnace comes assembled and pre-wired, with a color-coded wiring harness and quick connect fittings. An integrated control board simplifies hook-ups, and all components are easy to reach. Because of its small size, the furnace is a snap to load and unload on a truck or van, and easily fits through doors, halls and stairways.

## Quiet Operation

Inherent in the proven design of the furnace are quality components that are not only dependable but that keep operational sound to a minimum. The blower compartment has a sealed insulated door, while a sealed vestibule reduces burner and inducer sound levels for clean, efficient, quiet combustion.

## Outstanding Warranty

The primary and secondary heat exchangers are covered by a limited lifetime warranty; other components are covered for twelve years.

(Some limitations apply; see printed warranty for details.)

## Reliability You Can Trust

Heat Controller, Comfort-Aire's parent company, has been in the furnace business since its founding in 1933–in fact, the company can trace its roots to the Wingert Furnace Co. which began building coal, gas and oil furnaces in 1907. Air conditioning equipment was later added to round out the product line.

Known today for efficient, reliable equipment for both heating and cooling, Comfort-Aire® continues to keep homes and businesses comfortable, season after season.

AHRI CERTIFIED

**For year-'round comfort, ask your dealer about our line of central air conditioners—the perfect match for energy savings!**

# *Upflow/Horizontal Specifications*

| GUH95A Models | -038B4 | -054B4 | -072C5 | -090C5 | -108D5 | -120D5 |
|---|---|---|---|---|---|---|
| Input-BTUH[1] | 38,000 | 54,000 | 72,000 | 90,000 | 108,000 | 120,000 |
| Heating Cap. BTUH | 36,100 | 51,300 | 68,400 | 85,500 | 102,600 | 114,000 |
| AFUE | 95.0 | 95.0 | 95.0 | 95.0 | 95.0 | 95.0 |
| Blower D x W | 10 x 8 | 11 x 8 | 10 x 10 | 11 x 10 | 11 x 10 | 11 x 10 |
| Motor HP/Speed/Type | 1/2-4-PSC | 1/2-4-PSC | 1/2-4-PSC | 1.0-4-PSC | 1.0-4-PSC | 1.0-4-PSC |
| Heating Speed* | Med-Low | Med-Low | Med-High | Med-High | Med-High | Med-High |
| Cooling Speed* | High | High | High | High | High | High |
| Motor FLA | 8.60 | 8.60 | 8.0 | 13.75 | 13.75 | 13.75 |
| Rated Ext. SP in W.C. | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Temp. Rise Range ºF | 30-60 | 30-60 | 35-65 | 35-65 | 40-70 | 40-70 |
| Shipping Weight (lbs/kg) | 100/45.4 | 120/54.4 | 130/59 | 135/61.2 | 155/70.3 | 155/70.3 |

* Factory setting
Gas connection for all models is 1/2" N.P.T.

[1]Ratings to 2,000 ft. Over 2,000 ft, reduce 4% for each 1,000 ft. above sea level.

| GUH 95A-Model | Htg Input BTUH | Motor Speed | External Static Pressure (Inches Water Column) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0.1 | | 0.2 | | 0.3 | | 0.4 | | 0.5 | | 0.6 | | 0.7 | | 0.8 | |
| | | | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise |
| -038B4 | 38K | High* | 1664 | 18 | 1631 | 21 | 1596 | 21 | 1546 | 22 | 1489 | 23 | 1433 | 24 | 1366 | 25 | 1285 | 26 |
| | | Med Hi | 1272 | 26 | 1255 | 27 | 1249 | 27 | 1217 | 28 | 1189 | 29 | 1145 | 30 | 1096 | 31 | 1036 | 33 |
| | | M-Low† | 1130 | 29 | 1114 | 31 | 1100 | 31 | 1079 | 31 | 1048 | 33 | 1025 | 33 | 987 | 35 | 944 | 36 |
| | | Low | 869 | 39 | 839 | 42 | 809 | 42 | 790 | 44 | 764 | 45 | 739 | 47 | 711 | 48 | 664 | 52 |
| -054B4 | 54K | High* | 1664 | 30 | 1631 | 31 | 1596 | 31 | 1546 | 32 | 1489 | 34 | 1433 | 35 | 1366 | 37 | 1285 | 39 |
| | | Med Hi | 1272 | 39 | 1255 | 40 | 1249 | 40 | 1217 | 41 | 1189 | 42 | 1145 | 44 | 1096 | 46 | 1036 | 48 |
| | | M-Low† | 1130 | 44 | 1114 | 45 | 1100 | 45 | 1079 | 46 | 1048 | 48 | 1025 | 49 | 987 | 51 | 944 | 53 |
| | | Low | 869 | 58 | 839 | 60 | 809 | 62 | 790 | 63 | 764 | 65 | 739 | 68 | 711 | 70 | 664 | 75 |
| -072C5 | 72K | High* | 1916 | 35 | 1848 | 36 | 1773 | 38 | 1692 | 39 | 1613 | 41 | 1515 | 44 | 1426 | 47 | 1316 | 51 |
| | | Med Hi† | 1815 | 37 | 1771 | 38 | 1711 | 39 | 1641 | 41 | 1533 | 43 | 1468 | 45 | 1373 | 49 | 1270 | 52 |
| | | M-Low | 1259 | 53 | 1241 | 54 | 1224 | 54 | 1192 | 56 | 1063 | 57 | 1115 | 60 | 1056 | 63 | 982 | 68 |
| | | Low | 1139 | 59 | 1120 | 60 | 1096 | 61 | 1075 | 62 | 1047 | 64 | 1014 | 66 | 959 | 70 | 884 | 75 |
| -090C5 | 90K | High* | 2273 | 37 | 2222 | 38 | 2164 | 39 | 2098 | 40 | 2052 | 41 | 1947 | 43 | 1864 | 45 | 1780 | 47 |
| | | Med Hi† | 2084 | 40 | 2039 | 41 | 2007 | 42 | 1955 | 43 | 1895 | 44 | 1832 | 45 | 1750 | 48 | 1665 | 50 |
| | | M-Low | 1784 | 47 | 1777 | 47 | 1749 | 48 | 1725 | 48 | 1679 | 50 | 1629 | 51 | 1576 | 53 | 1501 | 56 |
| | | Low | 1482 | 56 | 1470 | 57 | 1444 | 58 | 1432 | 58 | 1405 | 59 | 1375 | 61 | 1339 | 62 | 1286 | 65 |
| -108D5 | 108K | High* | 2306 | 43 | 2247 | 45 | 2192 | 46 | 2121 | 47 | 2044 | 49 | 1979 | 51 | 1892 | 53 | 1787 | 56 |
| | | Med Hi† | 2135 | 47 | 2103 | 50 | 2050 | 51 | 1995 | 53 | 1935 | 54 | 1858 | 57 | 1778 | 59 | 1690 | 62 |
| | | M-Low | 1845 | 54 | 1834 | 57 | 1805 | 58 | 1776 | 59 | 1719 | 61 | 1663 | 63 | 1605 | 66 | 1533 | 69 |
| | | Low | 1543 | 65 | 1521 | 69 | 1502 | 70 | 1477 | 71 | 1452 | 73 | 1412 | 75 | 1368 | 77 | 1314 | 80 |
| -120D5 | 120K | High* | 2306 | 48 | 2247 | 49 | 2192 | 51 | 2121 | 52 | 2044 | 54 | 1979 | 56 | 1892 | 59 | 1787 | 62 |
| | | Med Hi† | 2135 | 52 | 2103 | 53 | 2050 | 54 | 1995 | 56 | 1935 | 57 | 1858 | 60 | 1778 | 62 | 1690 | 66 |
| | | M-Low | 1845 | 60 | 1834 | 61 | 1805 | 62 | 1776 | 63 | 1719 | 65 | 1663 | 67 | 1605 | 69 | 1533 | 72 |
| | | Low | 1543 | 72 | 1521 | 73 | 1502 | 74 | 1477 | 75 | 1452 | 77 | 1412 | 79 | 1368 | 81 | 1314 | 85 |

*Notes for Upflow Blower Specifications*

* Factory set cooling speed
† Factory set heating speed

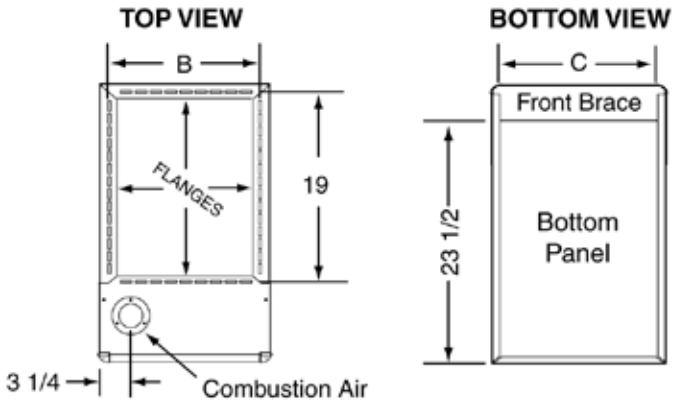
NOTES:
1. Temperature rises in the table are approximate; actual temperature rises may vary.
2. Temperature rises in shaded areas are for reference only; these conditions are not recommended.
3. Two openings are recommended for airflows above 1600 CFM if filter(s) adjacent to furnace. Specifications shown for side return.

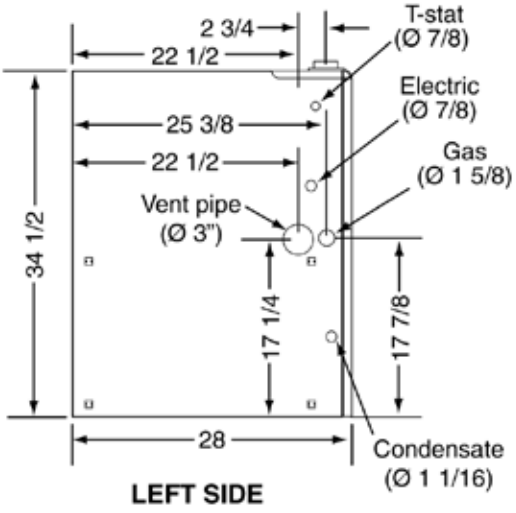
**WARNING**
THIS FURNACE IS NOT APPROVED OR RECOMMENDED FOR USE IN MOBILE HOMES

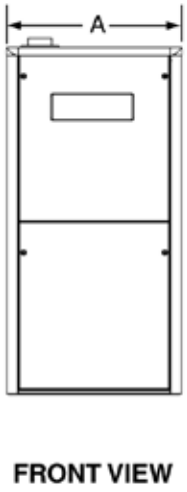
# Upflow/Horizontal Dimensions

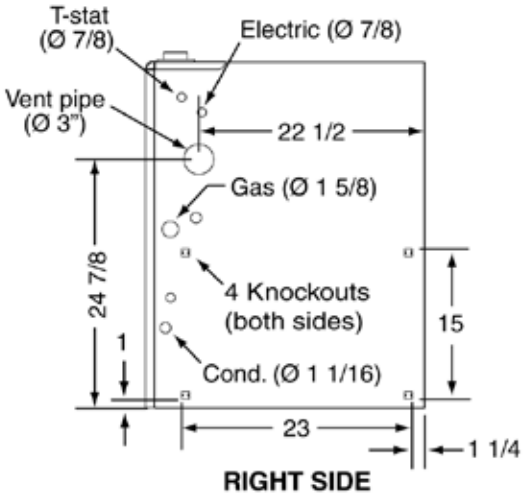
## 95% Gas Furnace Upflow/Horizontal

| GUH95A Models | A | B | C |
|---|---|---|---|
| -038B4 | 17 1/2 | 15 7/8 | 16 1/8 |
| -054B4 | | | |
| -072C5 | 21 | 19 3/8 | 19 5/8 |
| -090C5 | | | |
| -108D5 | 24 1/2 | 22 7/8 | 23 1/8 |
| -120D5 | | | |




# Model Nomenclature

| G | UH | 95 | A | 038 | B | 3 | X | E |
|---|---|---|---|---|---|---|---|---|
| Gas Furnace | UH=Upflow/ Horizontal<br>DD=Dedicated Downflow<br>UU = Upflow Only<br>DH = Downflow/Horizonal | AFUE 95% | A=Single Stage/ Fixed Speed PSC | Heating Input BTUH<br>038=38,000<br>120=120,000 | Cabinet Width<br>A=14 1/2"<br>B=17 1/2"<br>C=21"<br>D=24 1/2" | Max. CFM Cooling*<br>2 = 800 CFM<br>3=1200 CFM<br>4=1600 CFM<br>5=2000 CFM<br>*Airflow @ 0.5 ESP or 400 CFM/ton | X=Low Nox | Series/ Revision |

Category IV Venting: All models may be vertically or horizontally vented using either a one-pipe or two-pipe system. See the IOM for details.

# Downflow Specifications

| GDD95A Models | -054B4 | -072C5 | -090C5 | -118D5 |
|---|---|---|---|---|
| Input-BTUH[1] | 54,000 | 72,000 | 90,000 | 118,000 |
| Heating Cap. BTUH | 51,300 | 68,400 | 85,500 | 112,100 |
| AFUE | 95.0 | 95.0 | 95.0 | 95.0 |
| Blower D x W | 11 x 8 | 11 x 10 | 11 x 10 | 11 x 10 |
| Motor HP-Speed-Type | 1/2-4-PSC | 1.0-4-PSC | 1.0-4-PSC | 1.0-4-PSC |
| Heating Speed* | Med-Low | Med-High | Med-High | Med-High |
| Cooling Speed* | High | High | High | High |
| Motor FLA | 8.60 | 13.70 | 13.70 | 13.75 |
| Rated Ext. SP in W.C. | 0.5 | 0.5 | 0.5 | 0.5 |
| Temp. Rise Range °F | 30-60 | 35-65 | 35-65 | 40-70 |
| Shipping Weight (lbs/kg) | 120/54.4 | 125/56.7 | 135/61.2 | 155/70.3 |

* Factory setting
Gas connection for all models is 1/2" N.P.T.
[1]Ratings to 2,000 ft. Over 2,000 ft, reduce 4% for each 1,000 ft. above sea level.

**WARNING**
THIS FURNACE IS NOT APPROVED OR RECOMMENDED FOR USE IN MOBILE HOMES

# Blower Performance - Downflow

| GDD 95A- Model | Htg Input BTUH | Motor Speed | External Static Pressure (Inches Water Column) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0.1 | | 0.2 | | 0.3 | | 0.4 | | 0.5 | | 0.6 | | 0.7 | | 0.8 | |
| | | | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise |
| -054B4 | 54K | High* | 1590 | 31 | 1563 | 32 | 1538 | 33 | 1513 | 33 | 1477 | 34 | 1430 | 35 | 1370 | 36 | 1312 | 38 |
| | | Med Hi | 1228 | 41 | 1207 | 41 | 1193 | 42 | 1169 | 43 | 1157 | 43 | 1127 | 44 | 1084 | 46 | 1037 | 48 |
| | | M-Low† | 1096 | 46 | 1079 | 46 | 1061 | 47 | 1038 | 48 | 1010 | 50 | 986 | 51 | 957 | 52 | 919 | 54 |
| | | Low | 855 | 58 | 825 | 61 | 800 | 63 | 777 | 64 | 753 | 66 | 723 | 69 | 696 | 72 | 665 | 75 |
| -072C5 | 72K | High* | 2235 | 30 | 2176 | 31 | 2121 | 31 | 2067 | 32 | 2010 | 33 | 1936 | 34 | 1864 | 36 | 1783 | 37 |
| | | Med Hi† | 2095 | 32 | 2052 | 32 | 2005 | 33 | 1957 | 34 | 1906 | 35 | 1852 | 36 | 1781 | 37 | 1709 | 39 |
| | | M-Low | 1871 | 36 | 1838 | 36 | 1797 | 37 | 1761 | 38 | 1716 | 39 | 1667 | 40 | 1602 | 42 | 1536 | 43 |
| | | Low | 1568 | 43 | 1552 | 43 | 1527 | 44 | 1485 | 45 | 1457 | 46 | 1418 | 47 | 1370 | 49 | 1343 | 50 |
| -090C5 | 90K | High* | 2208 | 38 | 2150 | 39 | 2089 | 40 | 2026 | 41 | 1959 | 43 | 1893 | 44 | 1825 | 46 | 1738 | 48 |
| | | Med Hi† | 2065 | 40 | 2015 | 41 | 1970 | 42 | 1910 | 44 | 1866 | 45 | 1805 | 46 | 1737 | 48 | 1668 | 50 |
| | | M-Low | 1802 | 46 | 1773 | 47 | 1750 | 48 | 1703 | 49 | 1670 | 50 | 1623 | 51 | 1556 | 54 | 1490 | 56 |
| | | Low | 1490 | 56 | 1482 | 56 | 1464 | 57 | 1436 | 58 | 1407 | 59 | 1380 | 60 | 1329 | 63 | 1271 | 66 |
| -118D5 | 118K | High* | 2358 | 46 | 2299 | 48 | 2253 | 48 | 2191 | 50 | 2130 | 51 | 2060 | 53 | 1990 | 55 | 1903 | 57 |
| | | Med Hi† | 2176 | 50 | 2135 | 51 | 2102 | 52 | 2046 | 53 | 1985 | 55 | 1932 | 57 | 1862 | 59 | 1777 | 61 |
| | | M-Low | 1873 | 58 | 1852 | 59 | 1816 | 60 | 1790 | 61 | 1750 | 62 | 1699 | 64 | 1643 | 66 | 1571 | 70 |
| | | Low | 1544 | 71 | 1528 | 72 | 1514 | 72 | 1499 | 73 | 1462 | 75 | 1441 | 76 | 1429 | 76 | 1386 | 79 |

* Factory set cooling speed
† Factory set heating speed

NOTE: 1. Temperature rises shown are approximate; actual temperature rises may vary.
2 Temperture rises in shaded areas are for reference only; these conditions are not recommended.
3. Two openings are recommended for airflows above 1600 CFM if filter(s) adjacent to furnace. Downflow built with top return configuration.

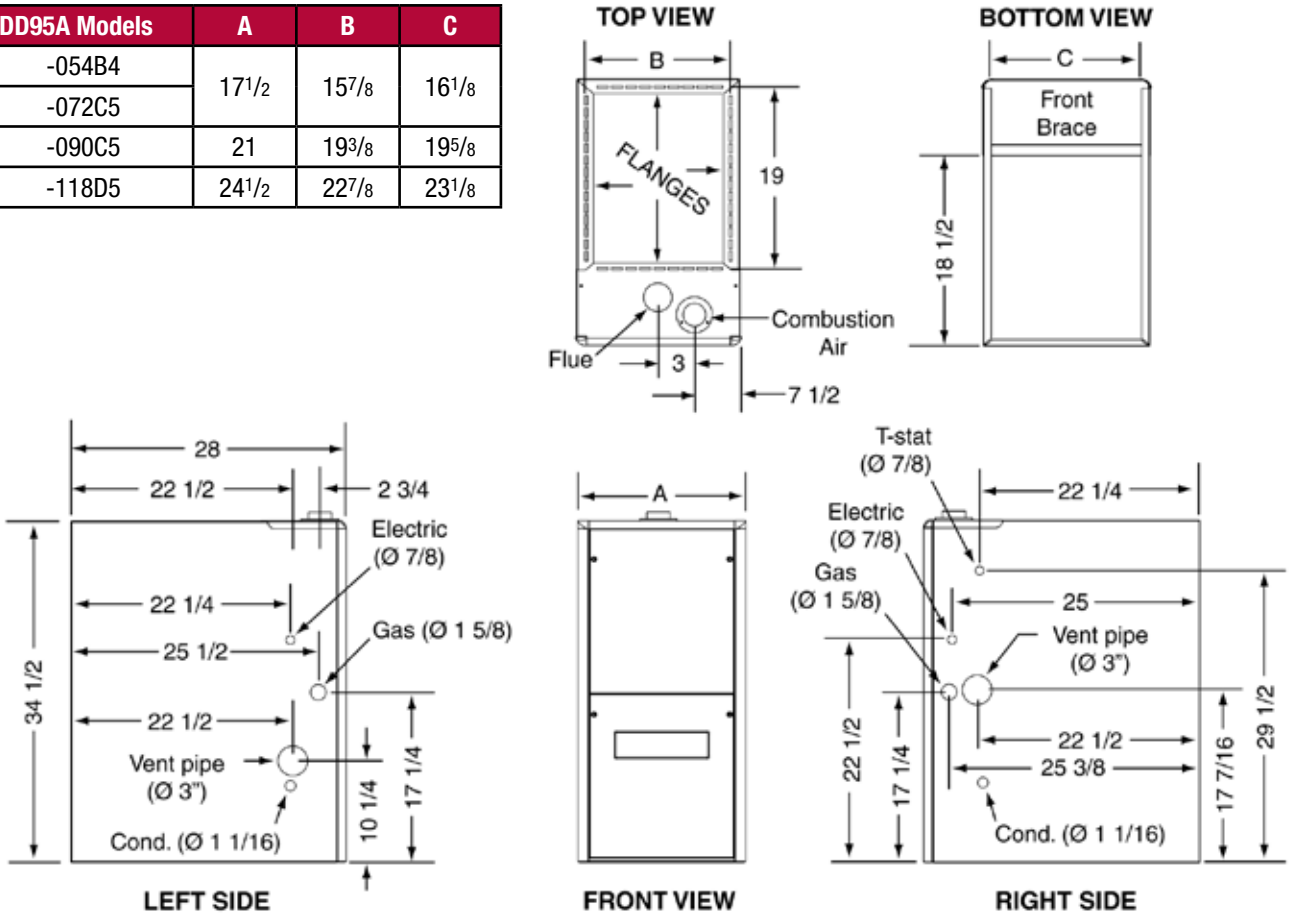
NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.
All models can be converted by a qualified distributor or local service dealer to use L.P. (propane) gas. Factory approved kits must be used to convert from natural to L.P. (propane) gas and may be ordered as options.
For L.P. (propane) operation, refer to Conversion Kit instructions.

Comfort-Aire®

# Downflow Dimensions

## 95% Gas Furnace Downflow

| GDD95A Models | A | B | C |
|---|---|---|---|
| -054B4 | 17 1/2 | 15 7/8 | 16 1/8 |
| -072C5 | | | |
| -090C5 | 21 | 19 3/8 | 19 5/8 |
| -118D5 | 24 1/2 | 22 7/8 | 23 1/8 |




# 95% Single Stage Accessories

| PART NO. | DESCRIPTION |
|---|---|
| 904952 | 2" Concentric vent kit |
| 904953 | 3" Concentric vent kit |
| 904911 | Downflow sub base kit |
| 904617 | 2" Side wall vent kit |
| 904347 | 3" Side wall vent kit |
| 905028 | U.S. LP conversion kit (0 - 10,000 ft.) |
| 905029 | Canada LP conversion kit (0 - 4500 ft.) |
| 541036 | Side return filter kit |

| PART NO. | DESCRIPTION |
|---|---|
| 902377 | Neutralizer kit |
| 904873 | Hi efficiency blower kit 17½" - fixed speed |
| 904874 | Hi efficiency blower kit 21" - fixed speed |
| 905875 | Hi efficiency blower kit 24½" - fixed speed |
| 904877 | Hi efficiency blower kit 17½" - variable speed |
| 904878 | Hi efficiency blower kit 21" - variable speed |
| 904879 | Hi efficiency blower kit 24½" - variable speed |

IMPORTANT: Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

# Space Saving, Energy Saving Gas Heat Source

## Primary Heat Exchanger
The tubular design extracts heat from combustion gases; made of heavy gauge aluminized steel, it's resistant to corrosion and thermal fatigue, and is covered by a limited lifetime warranty

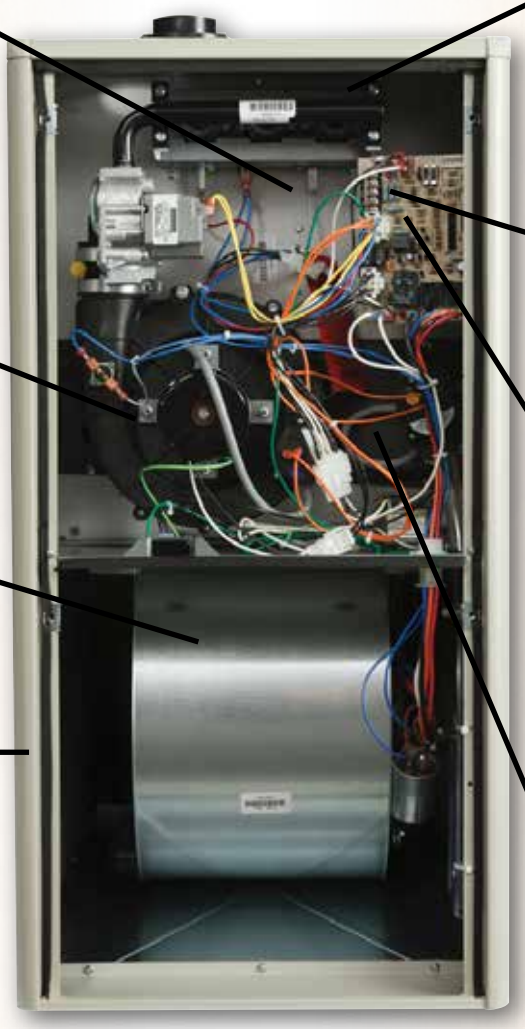
## Draft Inducer
Specially designed for the tubular heat exchanger, it pulls hot combustion gases through the exchanger; heated air is locked in while cold air is locked out

## Efficient Blower
Multi-speed, high static blower delivers warm air throughout the house quietly and efficiently, for a wide range of cooling capacities

## Low Profile Cabinet
Steel cabinet has corrosion-resistant finish; lightweight 34½" high design saves on space; upflow model is shown, two piece door has "captured" screws to prevent their loss

## 30 Second Blower Delay
The delay assures a warm duct temperature at furnace start-up; blower off settings can be adjusted to 60, 90 120 and 180 seconds

*Can be converted to LP gas by qualified contractor using a conversion kit shown in "Accessories" on page 6.*



## In-Shot Burner
Engineered to provide the most efficient air/gas mixture for combustion, the shutter-free design requires no adjustments to regulate the mix

## Hot Surface Ignition
Silicon nitride type igniter is quiet and automatic, eliminating the need for a standing pilot light, while offering improved efficiency

## Integrated Furnace Control (IFC)
Controls are integrated into one board set up for fast, easy installation, it includes connections for an electronic air cleaner and dehumidifier, and features on-board diagnostics with easy to recognize faults codes so there's no need to count flashes

## Secondary Heat Exchanger
Made of stainless steel for durability, the secondary heat exchanger extracts additional heat (which would be lost by less efficient furnaces); it is covered by a limited lifetime warranty

*NOTE: Upflow model shown. Downflow models feature the same components in a different configuration.*

*Horizontal installation is for right side only with air supply on the left.*

| Upflow Models | Input BTUH | Heating Cap. BTUH | AFUE |
|---|---|---|---|
| GUH95A038B4 | 38,000 | 36,100 | 95.0% |
| GUH95A054B4 | 54,000 | 51,300 | 95.0% |
| GUH95A072C5 | 72,000 | 68,400 | 95.0% |
| GUH95A090C5 | 90,000 | 85,500 | 95.0% |
| GUH95A108D5 | 108,000 | 102,600 | 95.0% |
| GUH95A120D5 | 120,000 | 114,000 | 95.0% |

| Downflow Models | Input BTUH | Heating Cap. BTUH | AFUE |
|---|---|---|---|
| GDD95A054B4 | 54,000 | 51,300 | 95.0% |
| GDD95A072C5 | 72,000 | 68,400 | 95.0% |
| GDD95A090C5 | 90,000 | 85,500 | 95.0% |
| GDD95A118D5 | 118,000 | 112,100 | 95.0% |

## A.F.U.E. Ratings of 95% mean energy savings for you!

# *Our High Efficiency Furnace May Actually Pay For Itself in Energy Savings!*

A home is most people's biggest investment and making sure it's comfortable in all seasons is a primary concern. A Comfort-Aire gas furnace helps provide that comfortable environment. There are several types and a wide range of capacities to meet the home's specific requirements and the homeowner's individual preferences. Not only are the furnaces quality designed and constructed, they're energy efficient, helping to save on utility bills.

All Comfort-Aire products are backed by outstanding warranties and after-sales support. Experienced technicians can help solve operation and service issues over the phone. And our web site is another resource with owner's manuals and technical documentation for installers.

The compact size of our furnaces makes them ideal for replacements; builders and architects also appreciate the installation flexibility they offer for new construction. A Comfort-Aire dealer can evaluate the home and determine which furnace (and related equipment such as central air conditioning) is best suited to specific climates and needs.

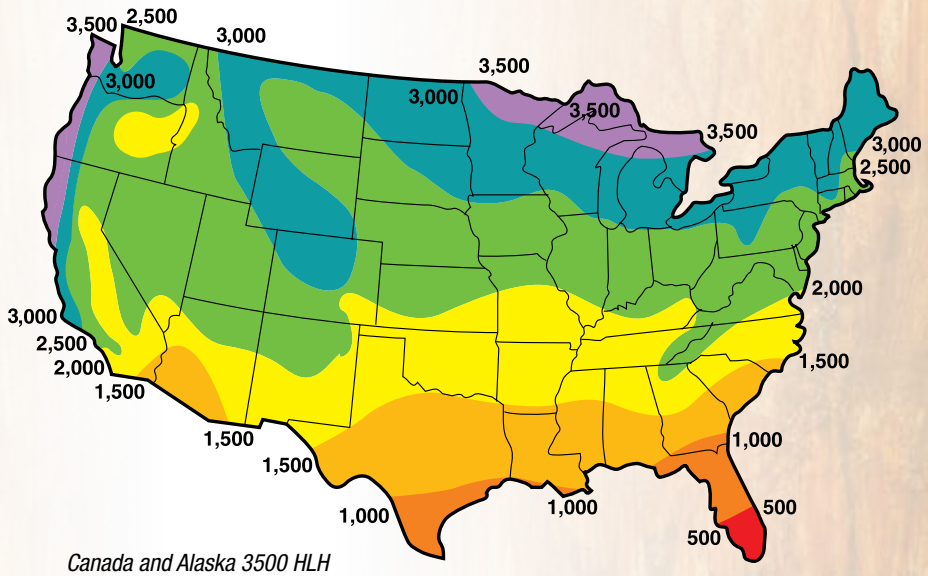
With our broad product range, Comfort-Aire has the model and accessories to suit just about any home's location and heating requirements.

Annual Fuel Utilization Efficiency (A.F.U.E. ratings) is your guide for comparing gas furnace efficiencies. The higher the number, the more efficient the furnace.

Beginning in 1992, the Federal Government required all gas furnaces to meet or exceed an A.F.U.E. (Annual Fuel Utilization Efficiency) rating of 78%. Although this was an improvement over previous furnace ratings of 65% or less, today's furnaces offer even greater efficiencies. Replacing your older gas furnace with a high efficiency 95% model can result in significant energy savings.

And the greater the number of heating load hours for your area (see chart) the greater the energy savings.

## *Regional Winter Heating Load Hours*




*Canada and Alaska 3500 HLH*

**Specifications and performance data subject to change without notice.**

Comfort-Aire®

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