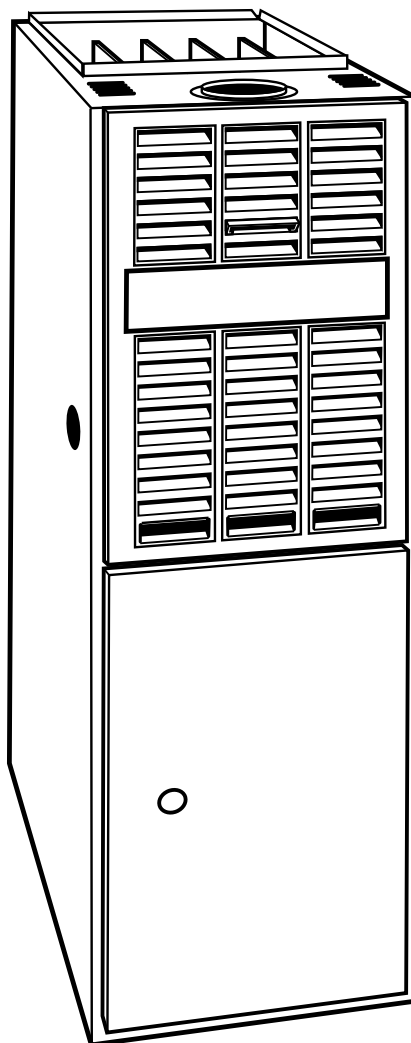




## Product Data

# 58TUA WeatherMaker® 8000 2-Speed Energy-Efficient Upflow Furnace

Input Capacities:  
40,000 thru 135,000 Btuh



### Two-Speed Heating for Energy-Efficient Gas Furnaces

Carrier leads the industry with our new WeatherMaker® 8000 Two-Speed Induced-Draft Gas Furnace. This furnace can operate at 2 different speed settings which provide outstanding home comfort. The WeatherMaker 8000 furnace is built with the most advanced manufacturing equipment, processes, and technology available in order to ensure top quality. Packed into the cabinet are the industry's foremost dealer and homeowner features. The 58TUA Upflow Furnace is a great asset to Carrier's list of product leadership in the gas furnace industry.

These 2-speed induced-combustion, gas-fired furnaces offer not only low installation costs, but fuel economy as well—delivering an Annual Fuel Utilization Efficiency (AFUE) rating of 80.0 percent. The Carrier WeatherMaker 8000 Two-Speed utilizes a hot surface, silicon carbide ignition system to save energy and increase reliability.

Our design uses the patented S-shaped 4-pass heat exchanger, a soft mount 2-speed inducer assembly, and a 2-stage slow-opening gas valve to minimize sound level. The Super-S heat exchanger provides better heat transfer while enabling us to make a compact furnace. This provides more room in closet, utility room, and short basement installations. The heat exchanger is constructed of aluminized steel and is backed by a 20-year Limited Warranty.

The Carrier WeatherMaker 8000 Two-Speed Gas Furnace will meet your

home heating requirements. This furnace family provides the widest range of heating capacities available.

The superior attention to cabinet detail is obvious. The Carrier WeatherMaker 8000 Two-Speed features 1-piece, seamless, wrap-around construction. There are no spot welds on the exterior surfaces of the WeatherMaker 8000 Two-Speed Furnace. There is also double protection for the cabinet. First, a galvanized steel substrate provides resistance to rusting. Then the cabinet is constructed of prepainted steel—the same high-quality finish found on refrigerators and dishwashers.

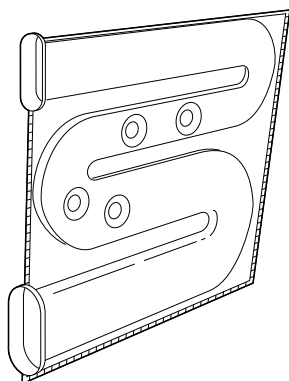
Perhaps the most advanced feature of the WeatherMaker 8000 Two-Speed is the state-of-the-art microprocessor

control center which shows true leadership in furnace technology. The simplified electronics in this control provide high reliability while performing many of the functions of older, electro-mechanical devices in other furnaces. Advanced features of the control show Carrier's true leadership in furnace technology. The control provides blower delay at start-up and shutdown, while monitoring furnace operations and functions. In the unlikely event of a service call, in less than a minute, the technician can use the self-test feature to determine if a major component has failed. The control will check itself, then the low and high inducers, silicon carbide ignition, and low-, medium-, and high-speed blower. The control

also features a 3-amp fuse that protects the transformer and control.

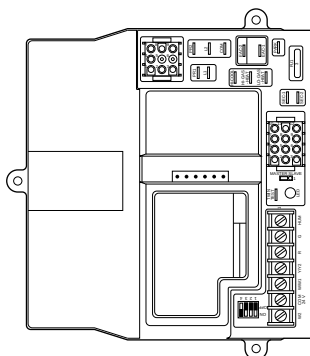
Our induced-combustion furnace has a patented draft safeguard switch. The draft safeguard switch will stop furnace operation if the vent system becomes blocked or is not operating properly.

Best of all, the Carrier WeatherMaker 8000 two-speed is easily installed. Many features make this furnace the easy choice for replacement or new construction markets. Left and right connections are provided for gas and electrical supplies. An easy-to-remove bottom, heating and cooling blower speed selector, cased or uncased cooling coils, low-voltage humidifier, and electronic air cleaner terminal connections are among other features.



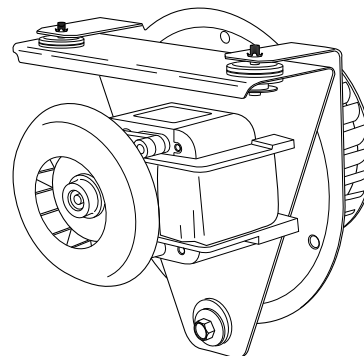
A89217

**HEAT EXCHANGER**



A93150

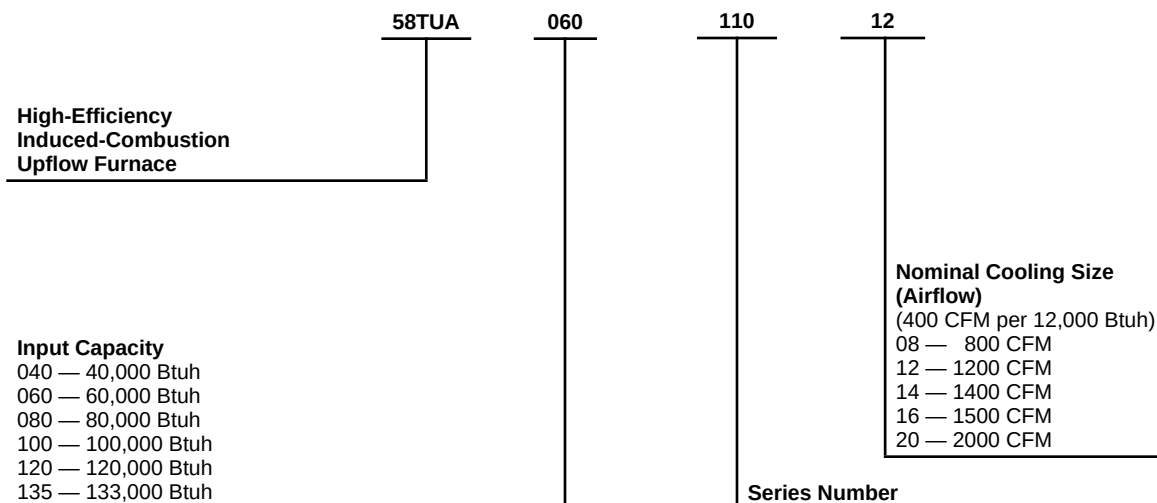
**2-SPEED FURNACE CONTROL**

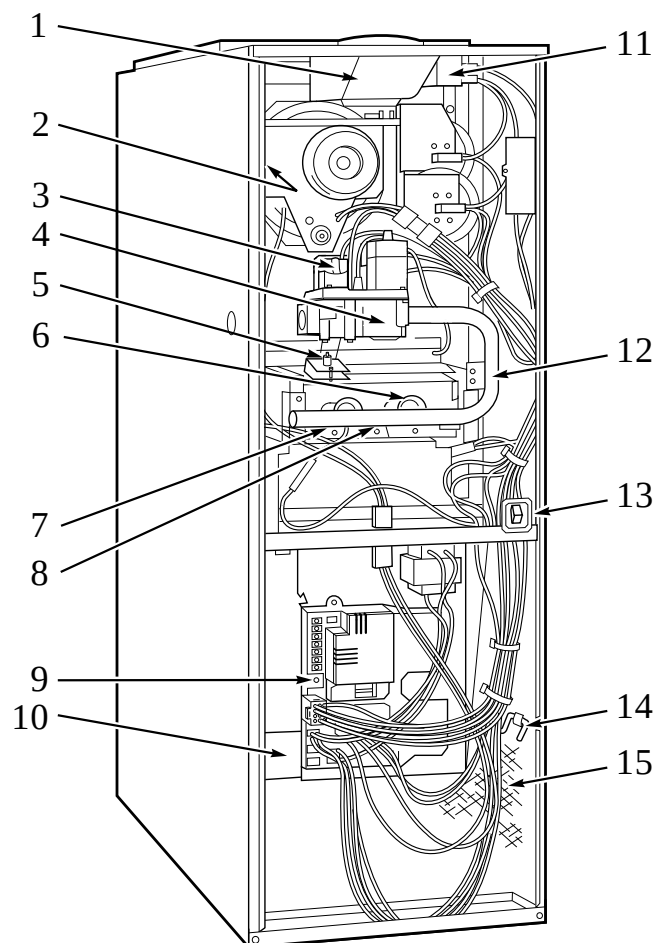


A92074

**2-SPEED  
INDUCER BLOWER**

## Model number nomenclature





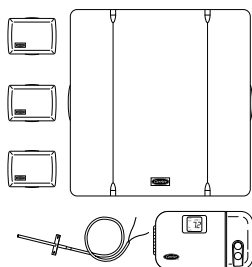
A97506

**NOTE:** The 58TUA Furnaces are for use with natural gas, but can be field-converted for propane gas with a factory-authorized and listed accessory conversion kit.

**NOTE:** Control location and actual control may be different than shown above.

- |                                                         |                                   |
|---------------------------------------------------------|-----------------------------------|
| ❶ Relief Box                                            | ❸ Hot Surface Ignitor.            |
| ❷ Rating Plate                                          | ❹ Status LED Light and Control    |
| ❸ Gas Valve Control Knob or<br>Electric Switch (On/Off) | ❺ Blower and Blower Motor         |
| ❹ 2-Stage Gas Valve                                     | ❻ Draft Safeguard Tube and Switch |
| ❺ Manual Reset Flame Rollout Switch                     | ❼ Gas Manifold                    |
| ❻ Gas Burner                                            | ❽ Blower Door Safety Switch.      |
| ❼ Flame Sensor                                          | ❾ Filter Retainer                 |
|                                                         | ❿ Air Filter                      |

# Carrier accessories\*

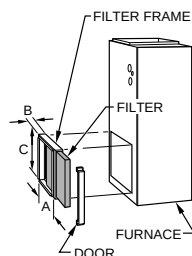


A97432

## CONTROLS: THERMOSTATS AND ZONING

Available in programmable and non-programmable models, Carrier thermostats maintain a constant, comfortable temperature level in the home.

For the ultimate in home comfort, Carrier's 2, 4 and 8-zone systems allow temperature control of individual "zones" of the home. This is accomplished through a series of electronic dampers and remote room sensors. The 4-zone system is shown.

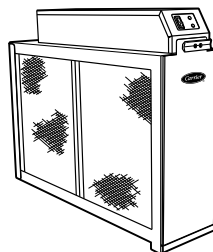


A93068

## SIDE FILTER RACK

Custom-made filter rack for easy connection when a return plenum already exists. Provides easy access for cleaning filter.

|   |            |
|---|------------|
| A | 23-1/8 in. |
| B | 2-3/8 in.  |
| C | 14-1/2 in. |

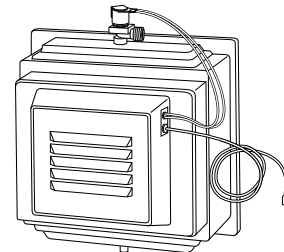


A97380

## ELECTRONIC OR MECHANICAL AIR CLEANER

Cleans the air of smoke, dirt, and many pollens commonly found. Saves decorating and cleaning expenses by keeping carpets, furniture, and drapes cleaner.

Electronic air cleaner is shown.



A91365

## MODEL HUMCCLFP HUMIDIFIER

By adding moisture to winter-dry air, a Carrier humidifier can often improve comfort and keep furniture, rugs, and draperies in better condition. Moisturizing household air also helps to retain normal body heat and provides comfort at lower temperatures.

| UNIT SIZE                                         | 040-12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 060-08 and 12 | 080-14, 16, and 20 | 100-12 and 16 | 120-16 and 20 | 135-20 |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------|---------------|---------------|--------|
| ELECTRONIC AIR CLEANER (EAC)                      | Model AIRA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |               |               |        |
| MECHANICAL AIR CLEANER                            | Model 31MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |               |               |        |
| HUMIDIFIER                                        | Model HUM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |               |                    |               |               |        |
| HEAT RECOVERY VENTILATOR                          | Models VA3B, VB5B, or VC5B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |               |               |        |
| ENERGY RECOVERY VENTILATOR                        | Model VL3A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |               |               |        |
| THERMOSTAT — NON-PROGRAMMABLE                     | Auto Changeover, °F/°C, 1-Stage Heat/1-Stage Cool — TSTATCCNAC01-B<br>Auto Changeover, °F/°C, 2-Stage Heat/1-Stage Cool — TSTATCCNHP01-B<br>Auto Changeover, °F/°C, 2-Stage Heat/2-Stage Cool — TSTATCCN2S01-B<br>in AC Mode, 3-Stage Heat/2-Stage Cool in HP Mode<br>Air Conditioner, 1-Stage Heat/1-Stage Cool, Manual Changeover, °F/°C — TSTATCCBAC01<br>Heat Pump, 2-Stage Heat/1-Stage Cool, Manual Changeover, °F/°C — TSTATCCBHP01**                                                                                                                                                                                  |               |                    |               |               |        |
| THERMOSTAT — PROGRAMMABLE                         | Auto Changeover, 7-Day Programmable, °F/°C, 1-Stage Heat/1-Stage Cool — TSTATCCPAC01-B<br>Auto Changeover, 7-Day Programmable, °F/°C, 2-Stage Heat/1-Stage Cool — TSTATCCPHP01-B<br>Auto Changeover, 7-Day Programmable, °F/°C, 2-Stage Heat/2-Stage Cool — TSTATCCP2S01-B<br>in AC Mode, 3-Stage Heat/2-Stage Cool in HP Mode<br>Dual Fuel Thermostat, Includes Outdoor Air Temperature Sensor — TSTATCCPDF01-B**<br>Thermostat Control — Non-Programmable/Programmable Thermostat with Humidity Control — TSTATCCPRH01-B**<br>(For use in Dual Fuel, AC, HP, and 2S applications. Includes Outdoor Air Temperature Sensor.) |               |                    |               |               |        |
| ZONING — 2 ZONE                                   | ZONECC2KIT01, ZONEKIT2ZCAR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                    |               |               |        |
| ZONING — 4 ZONE                                   | ZONECC4KIT01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               |                    |               |               |        |
| ZONING — 8 ZONE                                   | ZONECC8KIT01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               |                    |               |               |        |
| SIDE FILTER RACK (Accepts one 16 x 25 x 1 Filter) | KGAFR0201ALL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               |                    |               |               |        |
| TWINNING KIT†                                     | KGATW0401HSI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               |                    |               |               |        |
| HIGH-ALTITUDE PRESSURE SWITCH KIT‡                | KGAHA5501PSW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               |                    |               |               |        |
| GAS CONVERSION KIT*—<br>NATURAL-TO-PROPANE        | KGANP25012SP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               |                    |               |               |        |
| PROPANE-TO-NATURAL                                | KGAPN20012SP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               |                    |               |               |        |

\* Factory-authorized and field-installed. Gas conversion kits are A.G.A. and C.G.A. approved.

† 16 and 20 models only.

‡ 5500 ft and higher above sea level.

\*\* Do not use in zoning heat pump applications.

# Physical data

| UNIT SIZE                              |                  | 040-12                     | 060-08  | 060-12    | 080-14    | 080-16    | 100-12    | 100-16    | 100-20    | 120-16    | 120-20    | 135-20    |
|----------------------------------------|------------------|----------------------------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| OUTPUT CAPACITY (BTUH)†                | High Stage       | 32,000                     | 49,000  | 49,000    | 65,000    | 65,000    | 81,000    | 81,000    | 81,000    | 98,000    | 98,000    | 108,000   |
|                                        | Low Stage        | 21,000                     | 31,000  | 31,000    | 42,000    | 42,000    | 52,000    | 52,000    | 52,000    | 63,000    | 63,000    | 73,000    |
| GAS INPUT (BTUH)*                      | High Stage       | 40,000                     | 60,000  | 60,000    | 80,000    | 80,000    | 100,000   | 100,000   | 100,000   | 120,000   | 120,000   | 133,000   |
|                                        | Low Stage        | 26,000                     | 39,000  | 39,000    | 52,000    | 52,000    | 65,000    | 65,000    | 65,000    | 78,000    | 78,000    | 91,000    |
| SHIPPING WEIGHT (Lb)                   |                  | 124                        | 132     | 134       | 150       | 154       | 160       | 166       | 184       | 178       | 194       | 204       |
| CERTIFIED TEMP RISE RANGE (°F)         | High Stage       | 15-45                      | 45-75   | 25-55     | 35-65     | 30-60     | 50-80     | 40-70     | 25-55     | 45-75     | 40-70     | 45-75     |
|                                        | Low Stage        | 5-35                       | 30-60   | 15-45     | 20-50     | 15-45     | 30-60     | 20-50     | 15-45     | 30-60     | 25-55     | 30-60     |
| CERTIFIED EXT STATIC PRESSURE (In. wc) | Heating          | 0.10                       | 0.12    | 0.12      | 0.15      | 0.15      | 0.20      | 0.20      | 0.20      | 0.20      | 0.20      | 0.20      |
|                                        | Cooling          | 0.5                        | 0.5     | 0.5       | 0.5       | 0.5       | 0.5       | 0.5       | 0.5       | 0.5       | 0.5       | 0.5       |
| AIRFLOW CFM‡                           | Heating High/Low | 1095/875                   | 740/600 | 1170/1000 | 1170/1010 | 1445/1260 | 1185/1015 | 1410/1265 | 1800/1460 | 1415/1260 | 1775/1500 | 1770/1525 |
|                                        | Cooling          | 1250                       | 880     | 1195      | 1360      | 1740      | 1205      | 1575      | 2250      | 1620      | 2025      | 2055      |
| LIMIT CONTROL                          |                  | SPST (Auto-Reset)          |         |           |           |           |           |           |           |           |           |           |
| HEATING BLOWER CONTROL                 |                  | Solid-State Time Operation |         |           |           |           |           |           |           |           |           |           |
| INDUCER                                |                  | 2-Speed                    |         |           |           |           |           |           |           |           |           |           |
| BURNERS (Monoport)                     |                  | 2                          | 3       |           | 4         |           | 5         |           | 6         |           | 7         |           |
| GAS CONNECTION SIZE                    |                  | 1/2-in. NPT                |         |           |           |           |           |           |           |           |           |           |
| GAS VALVE (Redundant) Manufacturer     |                  | White-Rodgers              |         |           |           |           |           |           |           |           |           |           |
| Minimum Inlet Pressure (In. wc)        |                  | 4.5 (Natural Gas)          |         |           |           |           |           |           |           |           |           |           |
| Maximum Inlet Pressure (In. wc)        |                  | 13.6 (Natural Gas)         |         |           |           |           |           |           |           |           |           |           |
| IGNITION DEVICE                        |                  | Hot Surface                |         |           |           |           |           |           |           |           |           |           |

\* Gas input ratings are certified for elevations to 2000 ft. For elevations above 2000 ft, reduce ratings 4 percent for each 1000 ft above sea level. Refer to National Fuel Gas Code Table F4 or furnace Installation Instructions. In Canada, derate the unit 10 percent for elevations 2000 ft to 4500 ft above sea level.

† Capacity and AFUE in accordance with U.S. Government DOE test procedures.

‡ Airflow shown is for bottom only return-air supply. For air delivery above 1800 CFM, see Air Delivery table for other options.

ICS — Isolated Combustion System

# Performance data

| UNIT SIZE                             | 040-12 | 060-08 | 060-12 | 080-14 | 080-16 | 100-12 | 100-16 | 100-20  | 120-16 | 120-20  | 135-20  |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|---------|--------|---------|---------|
| DIRECT-DRIVE MOTOR Hp (PSC)           | 1/3    | 1/5    | 1/3    | 1/3    | 1/2    | 1/3    | 1/2    | 3/4     | 1/2    | 3/4     | 3/4     |
| MOTOR FULL LOAD AMPS                  | 5.1    | 2.9    | 5.1    | 5.8    | 7.4    | 5.8    | 7.9    | 11.0    | 7.9    | 11.1    | 11.1    |
| RPM (Nominal) — SPEEDS                | 1075-5 | 1075-4 | 1075-5 | 1075-4 | 1075-5 | 1075-4 | 1075-4 | 1075-5  | 1075-4 | 1075-4  | 1075-4  |
| BLOWER WHEEL DIAMETER X WIDTHS (In.)  | 10 x 6 | 10 x 6 | 10 x 6 | 10 x 7 | 10 x 8 | 10 x 7 | 10 x 8 | 11 x 10 | 10 x 8 | 11 x 10 | 11 x 10 |
| WASHABLE 16 x 25 x 1-in. FILTER — QTY | 1      | 1      | 1      | 1      | —      | 1      | —      | 2       | —      | 2       | 2       |
| WASHABLE 20 x 25 x 1-in. FILTER — QTY | —      | —      | —      | —      | 1      | —      | 1      | —       | 1      | —       | —       |

PSC — Permanent Split Capacitor

## EFFICIENCY

| UNIT SIZE                  |            | 040-12 | 060-08 | 060-12 | 080-14 | 080-16 | 100-12 | 100-16 | 100-60 | 120-16 | 120-20 | 135-20  |
|----------------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| CAPACITY*                  | High Stage | 32,000 | 49,000 | 49,000 | 65,000 | 65,000 | 81,000 | 81,000 | 81,000 | 98,000 | 98,000 | 108,000 |
|                            | Low Stage  | 21,000 | 31,000 | 31,000 | 42,000 | 42,000 | 52,000 | 52,000 | 52,000 | 63,000 | 63,000 | 73,000  |
| AFUE %* Nonweatherized ICS |            | 80.0   | 80.0   | 80.0   | 80.0   | 80.0   | 80.0   | 80.0   | 80.0   | 80.0   | 80.0   | 80,000  |

\*Capacity and AFUE in accordance with U.S. Government DOE test procedures.

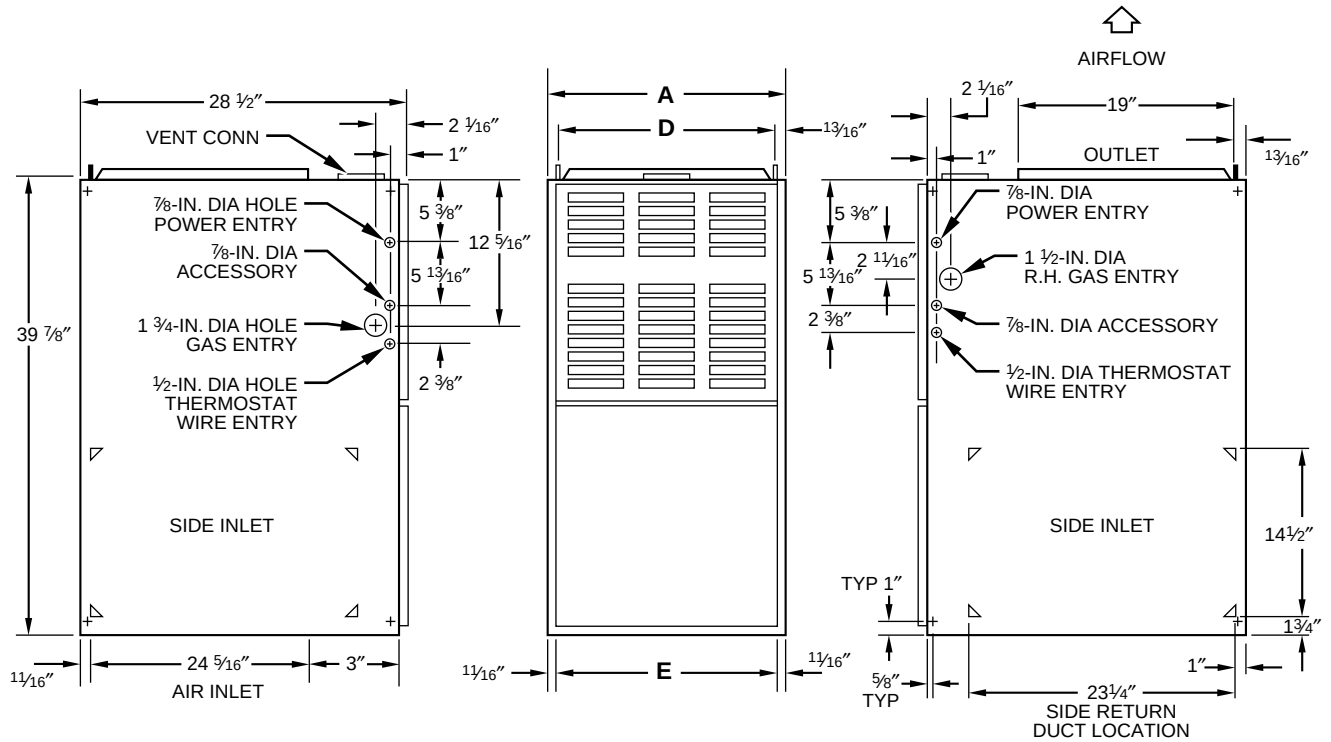
ICS — Isolated Combustion System

# AIR DELIVERY — CFM\* (With Filter)

| UNIT SIZE | RETURN-AIR SUPPLY               | SPEED    | EXTERNAL STATIC PRESSURE (In. wc) |      |      |      |      |      |      |      |
|-----------|---------------------------------|----------|-----------------------------------|------|------|------|------|------|------|------|
|           |                                 |          | 0.1                               | 0.2  | 0.3  | 0.4  | 0.5  | 0.6  | 0.7  | 0.8  |
| 040-12    | Bottom or 1 Side                | High     | 1490                              | 1430 | 1385 | 1325 | 1250 | 1175 | 1085 | 975  |
|           |                                 | Med-High | 1095                              | 1055 | 1050 | 1035 | 1000 | 950  | 895  | 820  |
|           |                                 | Med      | 875                               | 895  | 900  | 885  | 860  | 825  | 770  | 700  |
|           |                                 | Med-Low  | 770                               | 765  | 760  | 745  | 725  | 695  | 640  | 580  |
|           |                                 | Low      | 600                               | 590  | 575  | 565  | 540  | 510  | 470  | 420  |
| 060-08    | Bottom or 1 Side                | High     | 1040                              | 1010 | 975  | 935  | 880  | 810  | 735  | 640  |
|           |                                 | Med-High | 855                               | 830  | 800  | 765  | 715  | 660  | 600  | 490  |
|           |                                 | Med      | 745                               | 715  | 690  | 650  | 605  | 550  | 475  | 385  |
|           |                                 | Med-Low  | 610                               | 590  | 565  | 535  | 485  | 425  | 375  | 310  |
|           |                                 | Low      | 610                               | 590  | 565  | 535  | 485  | 425  | 375  | 310  |
| 060-12    | Bottom or 1 Side                | High     | 1430                              | 1380 | 1325 | 1265 | 1195 | 1125 | 1045 | 945  |
|           |                                 | Med-High | 1170                              | 1150 | 1135 | 1105 | 1055 | 995  | 925  | 845  |
|           |                                 | Med      | 1000                              | 1000 | 990  | 970  | 935  | 885  | 835  | 750  |
|           |                                 | Med-Low  | 865                               | 870  | 855  | 840  | 815  | 780  | 720  | 655  |
|           |                                 | Low      | 685                               | 690  | 680  | 665  | 645  | 610  | 570  | 500  |
| 080-14    | Bottom or 1 Side                | High     | 1570                              | 1535 | 1480 | 1415 | 1360 | 1280 | 1185 | 1070 |
|           |                                 | Med-High | 1370                              | 1355 | 1330 | 1290 | 1240 | 1170 | 1080 | 955  |
|           |                                 | Med      | 1170                              | 1165 | 1150 | 1115 | 1085 | 1035 | 970  | 880  |
|           |                                 | Med-Low  | 1010                              | 1005 | 990  | 965  | 905  | 845  | 785  | 705  |
|           |                                 | Low      | 1010                              | 1005 | 990  | 965  | 905  | 845  | 785  | 705  |
| 080-16    | Bottom or 1 Side                | High     | 2010                              | 1950 | 1875 | 1810 | 1740 | 1660 | 1550 | 1455 |
|           |                                 | Med-High | 1675                              | 1660 | 1625 | 1600 | 1545 | 1490 | 1395 | 1295 |
|           |                                 | Med      | 1445                              | 1430 | 1415 | 1400 | 1370 | 1325 | 1265 | 1170 |
|           |                                 | Med-Low  | 1260                              | 1260 | 1260 | 1250 | 1210 | 1180 | 1115 | 1030 |
|           |                                 | Low      | 950                               | 985  | 985  | 970  | 950  | 915  | 845  | 740  |
| 100-12    | Bottom or 1 Side                | High     | 1470                              | 1415 | 1340 | 1270 | 1205 | 1115 | 985  | 845  |
|           |                                 | Med-High | 1340                              | 1305 | 1245 | 1185 | 1130 | 1045 | 915  | 780  |
|           |                                 | Med-Low  | 1185                              | 1175 | 1140 | 1075 | 1030 | 950  | 835  | 705  |
|           |                                 | Low      | 1015                              | 1010 | 980  | 955  | 910  | 840  | 725  | 600  |
|           |                                 | Low      | 1015                              | 1010 | 980  | 955  | 910  | 840  | 725  | 600  |
| 100-16    | Bottom or 1 Side                | High     | 1880                              | 1815 | 1745 | 1690 | 1575 | 1500 | 1400 | 1265 |
|           |                                 | Med-High | 1660                              | 1615 | 1570 | 1505 | 1435 | 1355 | 1260 | 1170 |
|           |                                 | Med-Low  | 1455                              | 1410 | 1375 | 1350 | 1290 | 1235 | 1145 | 985  |
|           |                                 | Low      | 1265                              | 1265 | 1240 | 1210 | 1180 | 1110 | 995  | 855  |
|           |                                 | Low      | 1265                              | 1265 | 1240 | 1210 | 1180 | 1110 | 995  | 855  |
| 100-20    | Bottom Only                     | High     | 2485                              | 2480 | 2405 | 2330 | 2250 | 2155 | 2025 | 1905 |
|           |                                 | Med-High | 2165                              | 2135 | 2105 | 2055 | 1995 | 1915 | 1830 | 1735 |
|           |                                 | Med      | 1785                              | 1800 | 1785 | 1760 | 1725 | 1665 | 1600 | 1490 |
|           |                                 | Med-Low  | 1465                              | 1460 | 1470 | 1460 | 1425 | 1385 | 1330 | 1255 |
|           |                                 | Low      | 1220                              | 1215 | 1210 | 1195 | 1180 | 1150 | 1095 | 1020 |
|           | Both Sides or 1 Side and Bottom | High     | —                                 | 2465 | 2420 | 2355 | 2265 | 2165 | 2065 | 1940 |
|           |                                 | Med-High | 2145                              | 2145 | 2135 | 2090 | 2025 | 1955 | 1870 | 1780 |
|           | 1 Side Only                     | High     | 2410                              | 2345 | 2275 | 2185 | 2095 | 1995 | 1875 | 1760 |
|           |                                 | Med-High | 2140                              | 2100 | 2050 | 1985 | 1920 | 1835 | 1740 | 1635 |
| 120-16    | Bottom or 1 Side                | High     | 1900                              | 1845 | 1780 | 1705 | 1620 | 1530 | 1445 | 1320 |
|           |                                 | Med-High | 1695                              | 1645 | 1580 | 1520 | 1460 | 1385 | 1280 | 1155 |
|           |                                 | Med-Low  | 1460                              | 1415 | 1375 | 1340 | 1290 | 1205 | 1110 | —    |
|           |                                 | Low      | 1275                              | 1260 | 1245 | 1230 | 1180 | 1135 | —    | —    |
|           |                                 | Low      | 1275                              | 1260 | 1245 | 1230 | 1180 | 1135 | —    | —    |
| 120-20    | Bottom Only                     | High     | —                                 | 2260 | 2185 | 2085 | 2025 | 1935 | 1835 | 1730 |
|           |                                 | Med-High | 2110                              | 2070 | 2015 | 1960 | 1885 | 1810 | 1715 | 1620 |
|           |                                 | Med-Low  | 1790                              | 1775 | 1755 | 1720 | 1670 | 1610 | 1535 | 1455 |
|           |                                 | Low      | 1495                              | 1500 | 1515 | 1485 | 1450 | 1400 | 1345 | 1270 |
|           |                                 | Low      | 1495                              | 1500 | 1515 | 1485 | 1450 | 1400 | 1345 | 1270 |
|           | Both Sides or 1 Side and Bottom | High     | 2425                              | 2360 | 2275 | 2195 | 2095 | 2010 | 1890 | 1775 |
|           |                                 | Med-High | 2055                              | 2035 | 1995 | 1945 | 1880 | 1810 | 1735 | 1640 |
|           | 1 Side Only                     | High     | 2245                              | 2175 | 2070 | 1980 | 1900 | 1805 | 1695 | 1575 |
|           |                                 | Med-High | 2050                              | 1985 | 1925 | 1850 | 1765 | 1690 | 1585 | 1480 |
| 135-20    | Bottom Only                     | High     | —                                 | 2300 | 2235 | 2155 | 2055 | 1980 | 1870 | 1775 |
|           |                                 | Med-High | —                                 | 2050 | 2005 | 1945 | 1880 | 1805 | 1720 | 1640 |
|           |                                 | Med-Low  | 1790                              | 1770 | 1740 | 1710 | 1635 | 1580 | 1520 | 1440 |
|           |                                 | Low      | 1520                              | 1525 | 1505 | 1485 | 1450 | 1410 | 1350 | 1290 |
|           |                                 | Low      | 1520                              | 1525 | 1505 | 1485 | 1450 | 1410 | 1350 | 1290 |
|           | Both Sides or 1 Side and Bottom | High     | 2405                              | 2385 | 2310 | 2220 | 2140 | 2045 | 1945 | 1825 |
|           |                                 | Med-High | 2090                              | 2090 | 2040 | 1990 | 1925 | 1850 | 1765 | 1660 |
|           | 1 Side Only                     | High     | 2325                              | 2260 | 2175 | 2085 | 2000 | 1900 | 1805 | 1705 |
|           |                                 | Med-High | 2085                              | 2045 | 1985 | 1920 | 1855 | 1765 | 1680 | 1570 |

\* A filter is required for each return-air supply opening.  
 —Indicates unstable operating conditions.

# Dimensions



- NOTES:**
- Two additional 7/8-in. dia holes are located in the top plate.
  - Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations for equivalent diameters.
  - Minimum return-air opening at furnace:
    - For 800 CFM—16-in. round or 14 1/2 x 12-in. rectangle.
    - For 1200 CFM—20-in. round or 14 1/2 x 19 1/2-in. rectangle.
    - For 1600 CFM—22-in. round or 14 1/2 x 23 1/4-in. rectangle.
    - For airflow requirements above 1800 CFM, see Air Delivery table in Product Data literature for specific use of single side inlets. The use of both side inlets, a combination of 1 side and the bottom, or the bottom only will ensure adequate return air openings for airflow requirements above 1800 CFM.

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## DIMENSIONS (In.)

| UNIT SIZE | A       | D       | E        | VENT CONN* (Dia) |
|-----------|---------|---------|----------|------------------|
| 040-12    | 14-3/16 | 12-9/16 | 12-11/16 | 4                |
| 060-08    | 14-3/16 | 12-9/16 | 12-11/16 | 4                |
| 060-12    | 14-3/16 | 12-9/16 | 12-11/16 | 4                |
| 080-14    | 17-1/2  | 15-7/8  | 16       | 4                |
| 080-16    | 21      | 19-3/8  | 19-1/2   | 4                |
| 100-12    | 17-1/2  | 15-7/8  | 16       | 4                |
| 100-16    | 21      | 19-3/8  | 19-1/2   | 4                |
| 100-20    | 24-1/2  | 22-7/8  | 23       | 4                |
| 120-16    | 21      | 19-3/8  | 19-1/2   | 5†               |
| 120-20    | 24-1/2  | 22-7/8  | 23       | 5†               |
| 135-20    | 24-1/2  | 22-7/8  | 23       | 5†               |

\* Refer to the furnace Installation Instructions for proper venting procedures.

† Oval collar

## MINIMUM INCHES CLEARANCE TO COMBUSTIBLE CONSTRUCTION

This forced air furnace is equipped for use with natural gas at altitudes 0 - 10,000 ft (0-3,050m).

An accessory kit, supplied by the manufacturer, shall be used to convert to propane gas use or may be required for some natural gas applications.

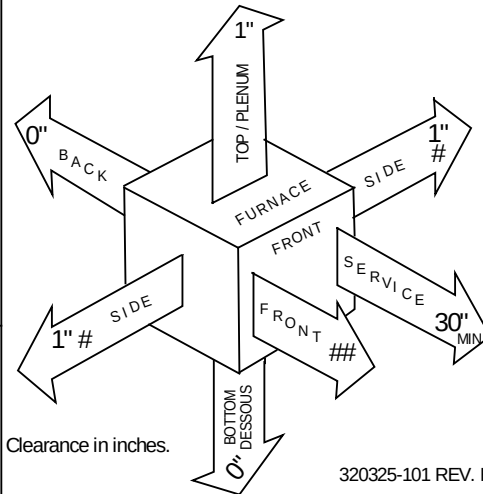
This furnace is for indoor installation in building constructed on site.

This furnace may be installed on combustible flooring in alcove or closet at minimum clearance from combustible material.

This furnace may be used with a Type B-1 Vent and may be vented in common with other gas-fired appliances.

- # For furnaces wider than 14.25 inches (362mm) may be 0 inches.
- ## For single wall vent type 6 inches.
- ### For Type B-1 vent type 3 inches.

This furnace is approved for UPFLOW installations only.



Vent Clearance to combustibles:

For Single Wall vents 6 inches (6 po).

For Type B-1 vent type 1 inch (1 po).

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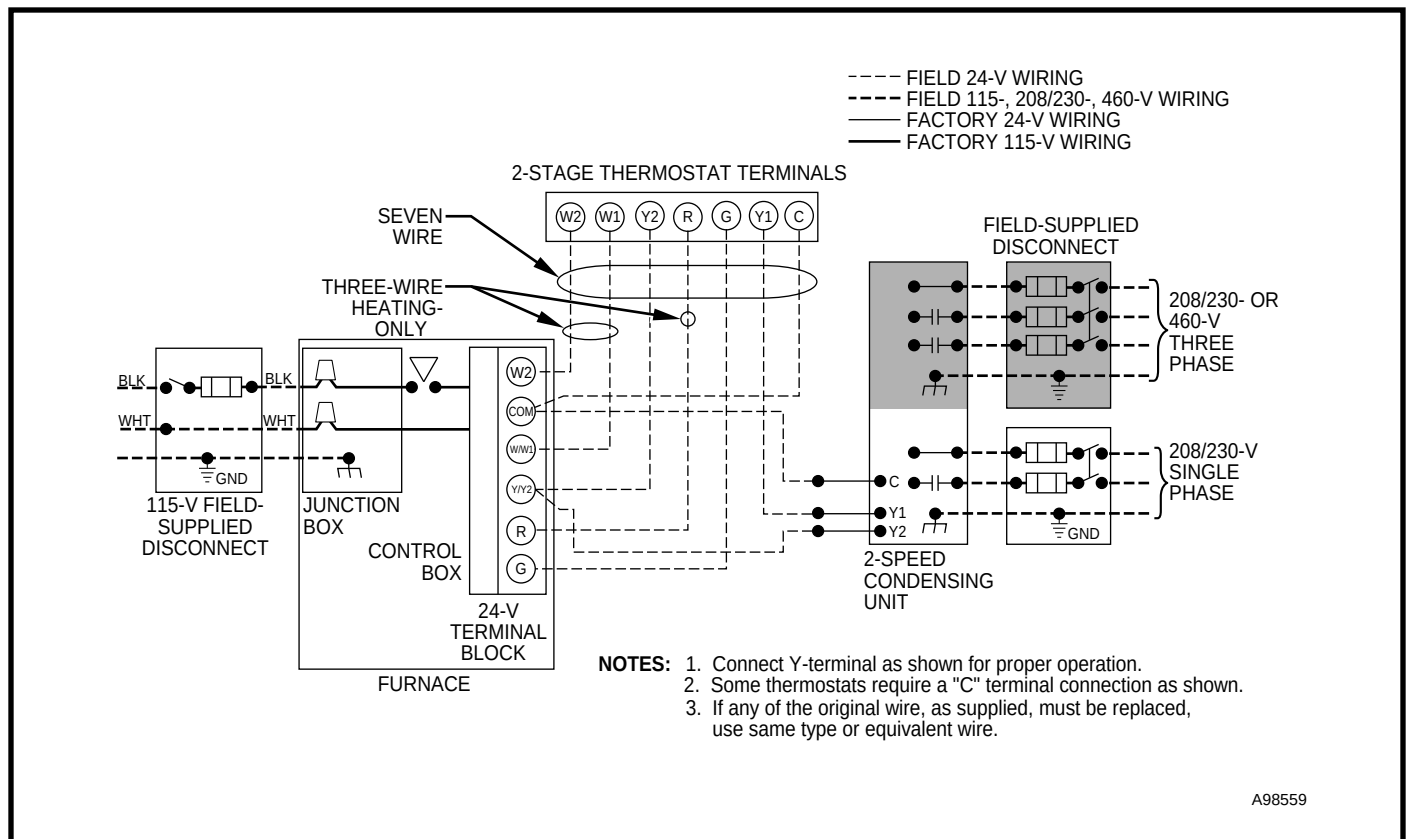
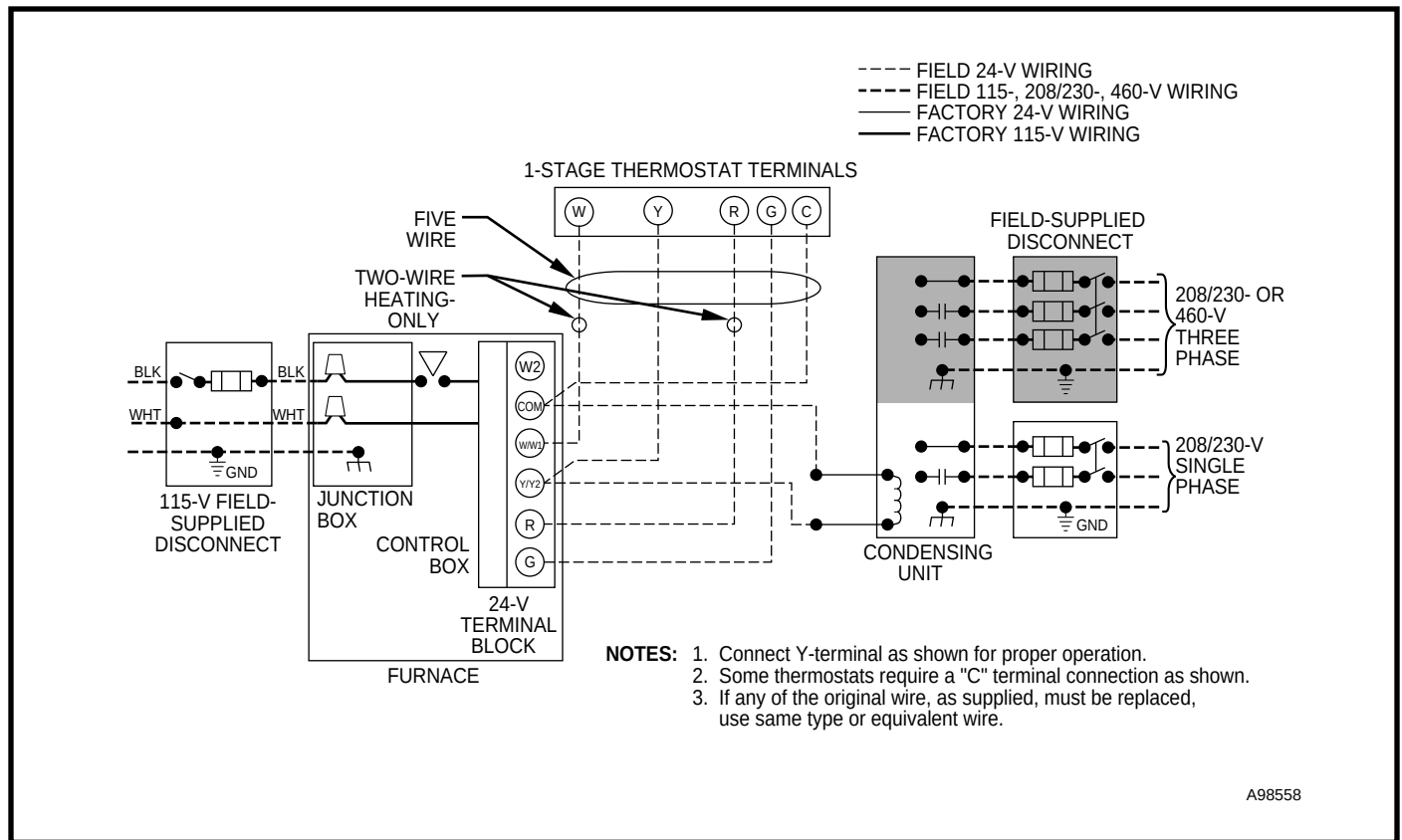


REGISTERED  
QUALITY SYSTEM

MEETS DOE RESIDENTIAL  
CONSERVATION SERVICES  
PROGRAM STANDARDS.

Before purchasing this appliance, read important  
energy cost and efficiency information available  
from your retailers.

# Typical wiring schematics



# Electrical data

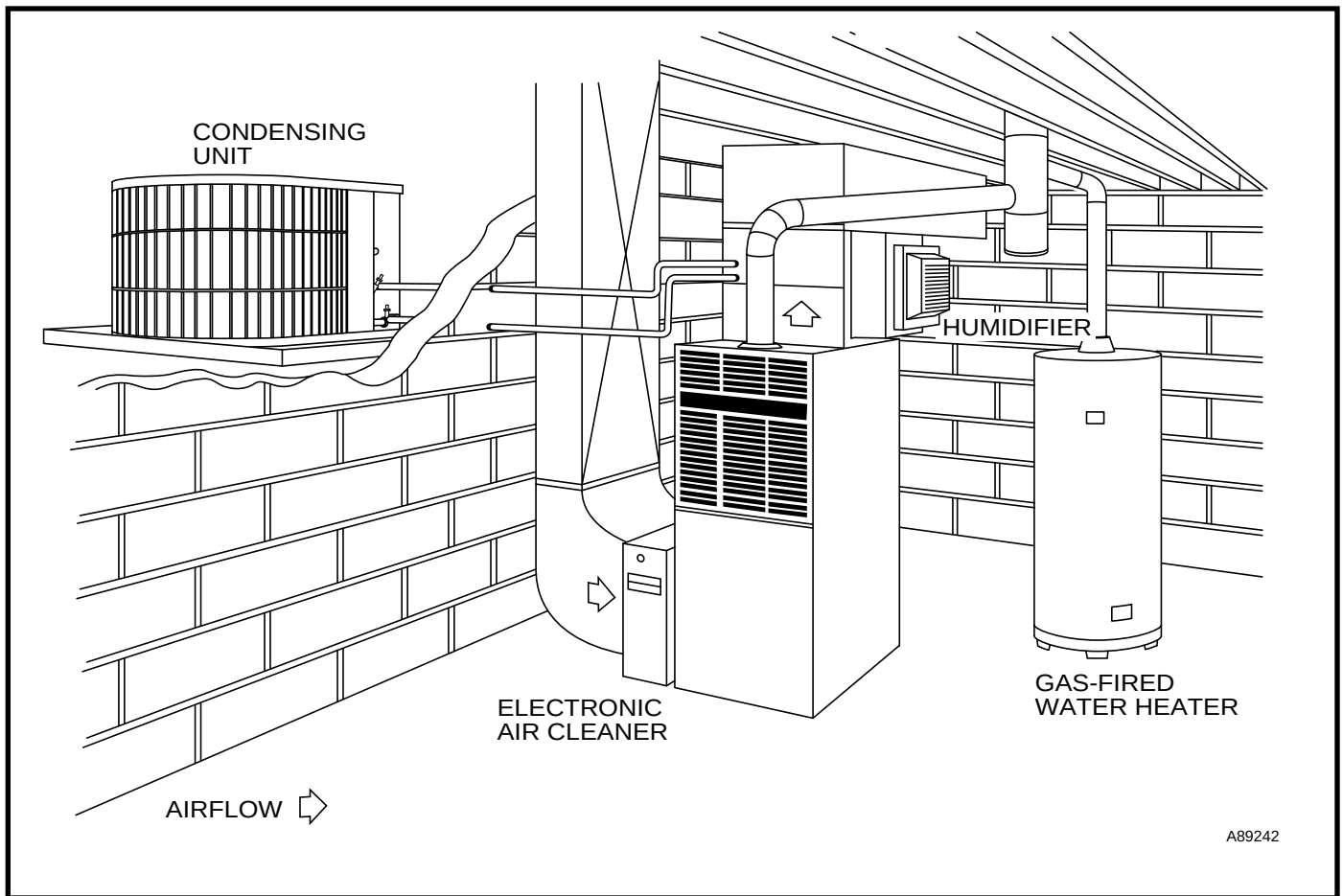
| UNIT SIZE                          | 040-12   | 060-08 | 060-12 | 080-14 | 080-16 | 100-12 | 100-16 | 100-20 | 120-16 | 120-20 | 135-20 |
|------------------------------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| UNIT VOLTS—HERTZ—PHASE             | 115—60—1 |        |        |        |        |        |        |        |        |        |        |
| MINIMUM WIRE SIZE                  | 14       | 14     | 14     | 14     | 14     | 14     | 14     | 12     | 14     | 12     | 12     |
| MAXIMUM WIRE LENGTH (Ft)*          | 32       | 45     | 34     | 31     | 27     | 35     | 28     | 32     | 28     | 31     | 33     |
| MAXIMUM UNIT AMPS                  | 11.4     | 8.2    | 10.6   | 11.7   | 13.4   | 10.5   | 13.2   | 17.7   | 13.2   | 18.2   | 17.4   |
| OPERATING VOLTAGE RANGE (Min—Max)† | 104—127  |        |        |        |        |        |        |        |        |        |        |
| MAX FUSE SIZE OR CKT BKR (Amps)‡   | 15       | 15     | 15     | 15     | 15     | 15     | 15     | 20     | 15     | 20     | 20     |
| TRANSFORMER (24v)                  | 40va     |        |        |        |        |        |        |        |        |        |        |
| EXTERNAL CONTROL POWER AVAILABLE   | Heating  |        |        |        |        |        |        |        |        |        |        |
|                                    | 19va     |        |        |        |        |        |        |        |        |        |        |
| EXTERNAL CONTROL POWER AVAILABLE   | Cooling  |        |        |        |        |        |        |        |        |        |        |
|                                    | 35va     |        |        |        |        |        |        |        |        |        |        |
| AIR CONDITIONING BLOWER RELAY      | Standard |        |        |        |        |        |        |        |        |        |        |

\* Length shown is as measured 1 way along wire path between unit and service panel for maximum 2 percent voltage drop.

† Permissible limits of the voltage range at which the unit will operate satisfactorily.

‡ Time-delay type is recommended.

# Typical installations



# SERVICE TRAINING

**Packaged Service Training** programs are an excellent way to increase your knowledge of the equipment discussed in this manual, including:

- Unit Familiarization
- Maintenance
- Installation Overview
- Operating Sequence

A large selection of product, theory, and skills programs is available, using popular video-based formats and materials. All include video and/or slides, plus companion book.

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