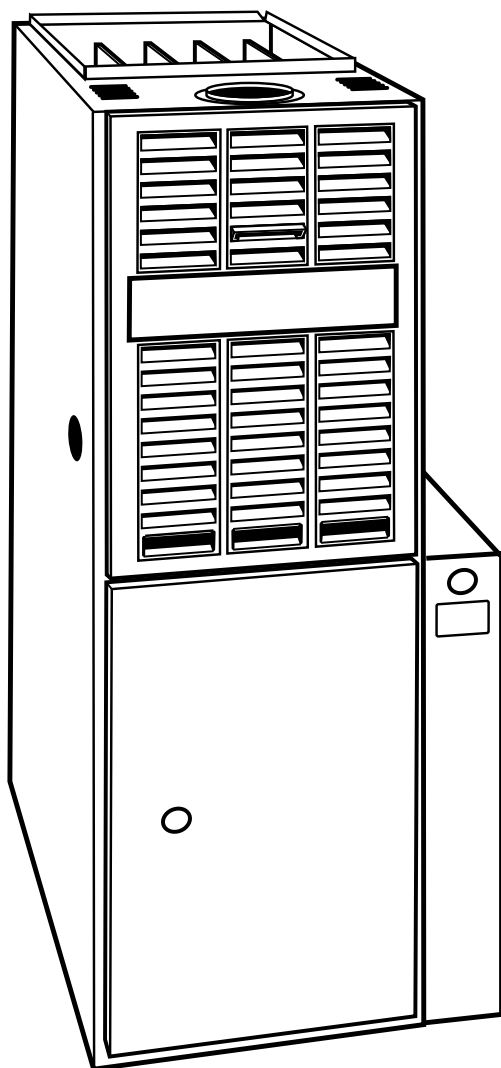




Product Data

58WAV WeatherMaker® 8000 Energy-Efficient Deluxe Upflow Furnace

Series 150 and 160
Input Capacities:
45,000 thru 155,000 Btuh



Advanced Technology for Energy-Efficient Gas Furnaces

Carrier leads the industry with its new WeatherMaker® 8000 Induced-Draft Gas Furnace. This 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. All models are GAMA efficiency rating certified and certified for use in California Air Quality Management Districts.

These 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 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 inducer assembly, and a slow opening gas valve to improve 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 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 features 1-piece,

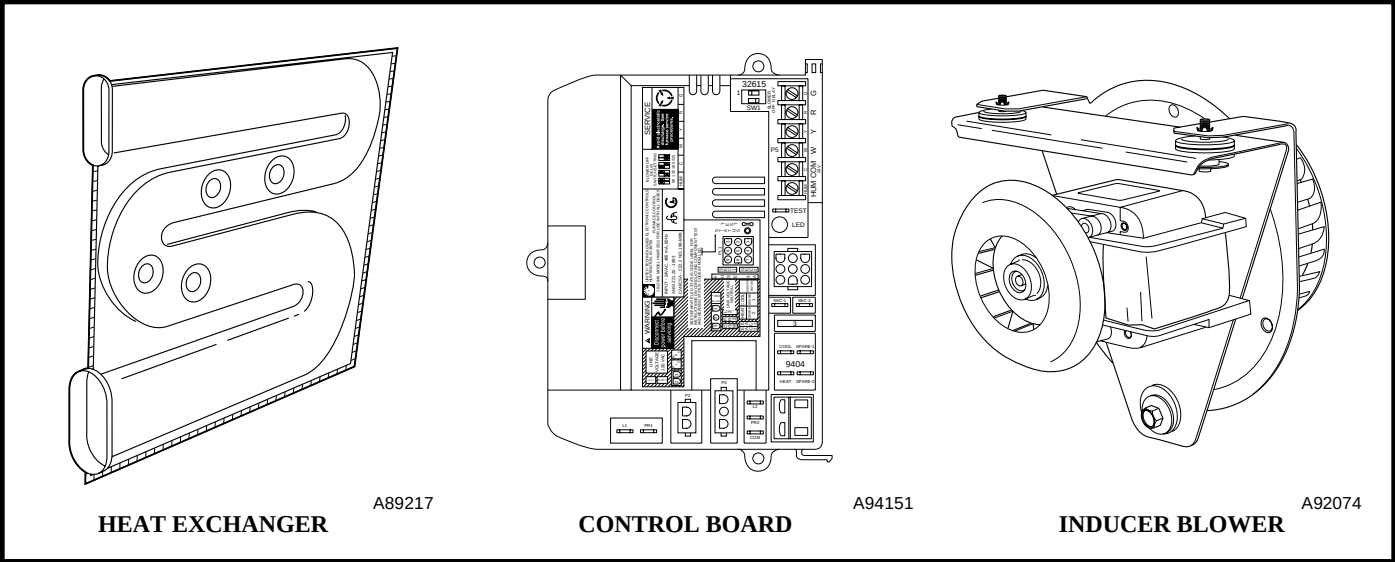
seamless, wrap-around construction. There are no spot welds on the exterior surfaces of the WeatherMaker 8000 Furnace. There is also double protection for the cabinet. First, a galvanized steel substrate provides resistance to rusting. Then the cabinet is constructed of prepainted steel—the same high-quality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

Perhaps the most advanced feature of the WeatherMaker 8000 is the microprocessor control board. The simplified electronics in this control board provide high reliability while performing many of the functions of older, electro-mechanical devices in other furnaces. Advanced features of the board show true leadership in furnace technology. The control board

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 board will check itself, then the inducer, silicon carbide ignition, low- and high-speed blower, and the humidifier connections. The control board also features a 3-amp fuse that protects the transformer and control board. Another feature on the control board is an LED status indicator light to ensure top furnace performance.

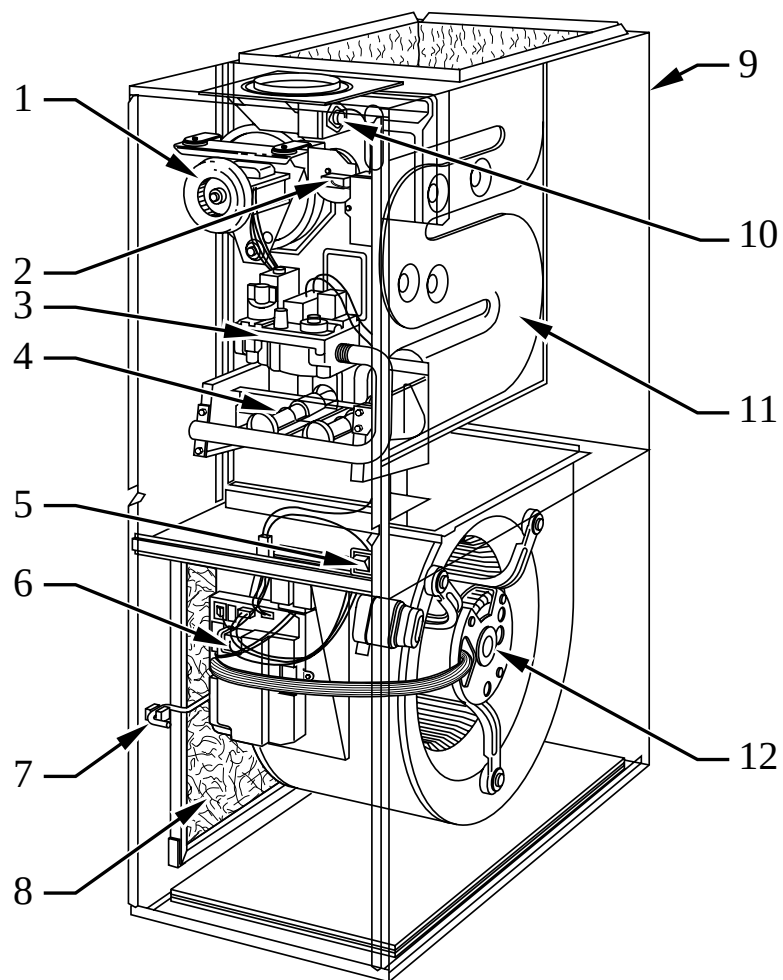
Our induced-combustion furnace has a patented draft safeguard switch. The draft safeguard switch will stop furnace operation if the vent system becomes

blocked or is not operating properly. Enhanced indoor air quality in your home is made easier with our media filter cabinet—a standard accessory on all deluxe upflow furnaces. When installed as a part of your system, this cabinet allows for easy and convenient addition of a Carrier high-efficiency air filter. Best of all, the Carrier Weather-Maker 8000 is made to be 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, blower speed selector, cased or uncased cooling coils, low-voltage humidifier, and electronic air cleaner terminal connections are among other features.



Model number nomenclature

58WAV		045	150	08
High-Efficiency Induced-Combustion Upflow Furnace				Nominal Cooling Size (Airflow) (400 CFM per 12,000 Btuh)
Input Capacity				08 — 800 CFM
045 — 44,000 Btuh	111 — 110,000 Btuh			12 — 1200 CFM
070 — 66,000 Btuh	136 — 132,000 Btuh			14 — 1400 CFM
091 — 88,000 Btuh	155 — 154,000 Btuh			16 — 1600 CFM
				20 — 2000 CFM
			Series Number	



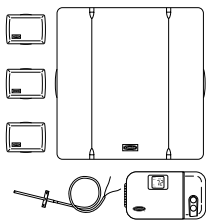
A98062

NOTE: The 58WAV Furnaces are for use with natural gas. These furnaces 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 Inducer Assembly | ❷ Air Filter Retainer |
| ❷ Pressure Switch | ❸ Air Filter |
| ❸ Gas Control Valve | ❹ Wrap-Around Casing |
| ❹ Burner Assembly | ❺ Draft Safeguard Switch |
| ❺ Blower Door Safety Switch | ❻ Heat Exchanger |
| ❻ Control Board | ❼ Blower and Blower Motor |

Carrier accessories*

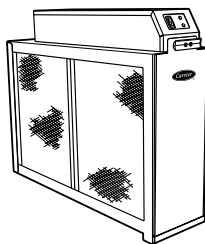


A97432

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.

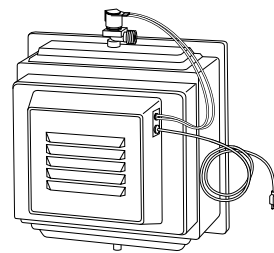


A97380

MECHANICAL OR ELECTRONIC 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 the 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	045-08 & 12	070-08 & 12	091-14 & 16	111-12, 16 & 20	136-16 & 20	155-20
ELECTRONIC AIR CLEANER (EAC)	Model AIRA					
MECHANICAL AIR CLEANER	Model 31MF					
HUMIDIFIER	Model HUM					
HEAT RECOVERY VENTILATOR	Models HRVCCLHU, HRVCCSVU, or HRVCCLVU					
ENERGY RECOVERY VENTILATOR	Models ERVCCLHU, ERVCCLVU, or ERVCCSVU					
THERMOSTAT — NON-PROGRAMMABLE	Auto Changeover, °F/°C, 1-Stage Heat/1-Stage Cool — TSTATCCNAC01-B Auto Changeover, °F/°C, 2-Stage Heat/1-Stage Cool — TSTATCCNHP01-B Auto Changeover, °F/°C, 2-Stage Heat/2-Stage Cool — TSTATCCN2S01-B in AC Mode, 3-Stage Heat in AC Mode/2-Stage Cool in HP Mode Air Conditioner, 1-Stage Heat/1-Stage Cool, Manual Changeover, °F/°C — TSTATCCBAC01 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 Auto Changeover, 7-Day Programmable, °F/°C, 2-Stage Heat/1-Stage Cool — TSTATCCPHP01-B Auto Changeover, 7-Day Programmable, °F/°C, 2-Stage Heat/2-Stage Cool — TSTATCCP2S01-B in AC Mode, 3-Stage Heat/2-Stage Cool in HP Mode Dual Fuel Thermostat, Includes Outdoor Air Temperature Sensor — TSTATCCPDF01-B** Thermostat Control — Non-Programmable/Programmable Thermostat — TSTATCCPRH01-B** with Humidity Control (For use in Dual Fuel, AC, HP, and 2S applications. Includes Outdoor Air Temperature Sensor.)					
ZONING — 2 ZONE	ZONECC2KIT01, ZONEKIT2ZCAR					
ZONING — 4 ZONE	ZONECC4KIT01-B					
ZONING — 8 ZONE	ZONECC8KIT01-B					
TWINNING KIT†	KGATW0401HSI					
GAS CONVERSION KIT* — NATURAL-TO-PROPANE	KGANP2001ALL					
PROPANE-TO-NATURAL	KGAPN1601ALL					

* Factory-authorized and field installed. Gas conversion kits are CSA (A.G.A. and C.G.A.) recognized.

† 16 and 20 sizes only.

** Do not use in zoning heat pump applications.

Physical data

UNIT SIZE	045		070		091		111			136		155
	08	12	08	12	14	16	12	16	20	16	20	20
OUTPUT CAPACITY (BTUH)† Nonweatherized ICS	35,000	35,000	53,000	53,000	71,000	71,000	89,000	89,000	89,000	107,000	107,000	124,000
INPUT BTUH*	44,000	44,000	66,000	66,000	88,000	88,000	110,000	110,000	110,000	132,000	132,000	154,000
SHIPPING WEIGHT (Lb)	122	124	132	134	150	154	160	166	184	179	194	204
CERTIFIED TEMP RISE RANGE (°F)	25-55	15-45	40-70	30-60	40-70	30-60	55-85	45-75	25-55	50-80	40-70	50-80
CERTIFIED EXT STATIC PRESSURE	Heating	0.10	0.10	0.12	0.12	0.15	0.15	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	855	980	830	1140	1170	1445	1175	1410	1750	1645	1775
	Cooling	880	1250	880	1195	1360	1740	1205	1575	2225	1620	2055
LIMIT CONTROL	SPST											
HEATING BLOWER CONTROL	Solid-State Time Operation											
BURNERS (Monoport)	2	2	3	3	4	4	5	5	5	6	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 in accordance with U.S. Government DOE test procedures.

‡ Airflow shown is for bottom only return-air supply with factory-supplied 1-in. washable filter(s).

- For air delivery above 1800 CFM, see Air Delivery table for other options.
- An airflow reduction of up to 7% may occur when using the factory specified 4-5/16-inch wide, high efficiency media filter.
- For best furnace efficiency when using the 4-5/16-inch wide media filter, adjust the blower speed tap to near the mid-point of the rise range.

ICS—Isolated Combustion System

Performance data

UNIT SIZE	045		070		091		111			136		155
	08	12	08	12	14	16	12	16	20	16	20	20
DIRECT-DRIVE MOTOR Hp (PSC)	1/5	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	2.9	5.8	2.9	5.8	5.8	7.9	5.8	7.9	11.1	7.9	11.1	11.1
RPM (Nominal) — SPEEDS	1075-3	1075-4	1075-3	1075-4	1075-4	1075-4	1075-4	1075-4	1075-4	1075-4	1075-4	1075-4
BLOWER WHEEL DIAMETER x WIDTHS (In.)	10 x 6	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	—	1	—	—	—	—	—
WASHABLE 20 x 25 x 1-In. FILTER Qty	—	—	—	—	—	1	—	1	—	1	—	—
WASHABLE 24 x 25 x 1-In. FILTER Qty	—	—	—	—	—	—	—	—	1	—	1	1

PSC—Permanent Split Capacitor

ENERGY EFFICIENCY

UNIT SIZE	045		070		091		111			136		155
	08	12	08	12	14	16	12	16	20	16	20	20
CAPACITY BTUH* Nonweatherized ICS	35,000	35,000	53,000	53,000	71,000	71,000	89,000	89,000	89,000	107,000	107,000	124,000
AFUE%* Nonweatherized ICS	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0

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

ICS—Isolated Combustion System

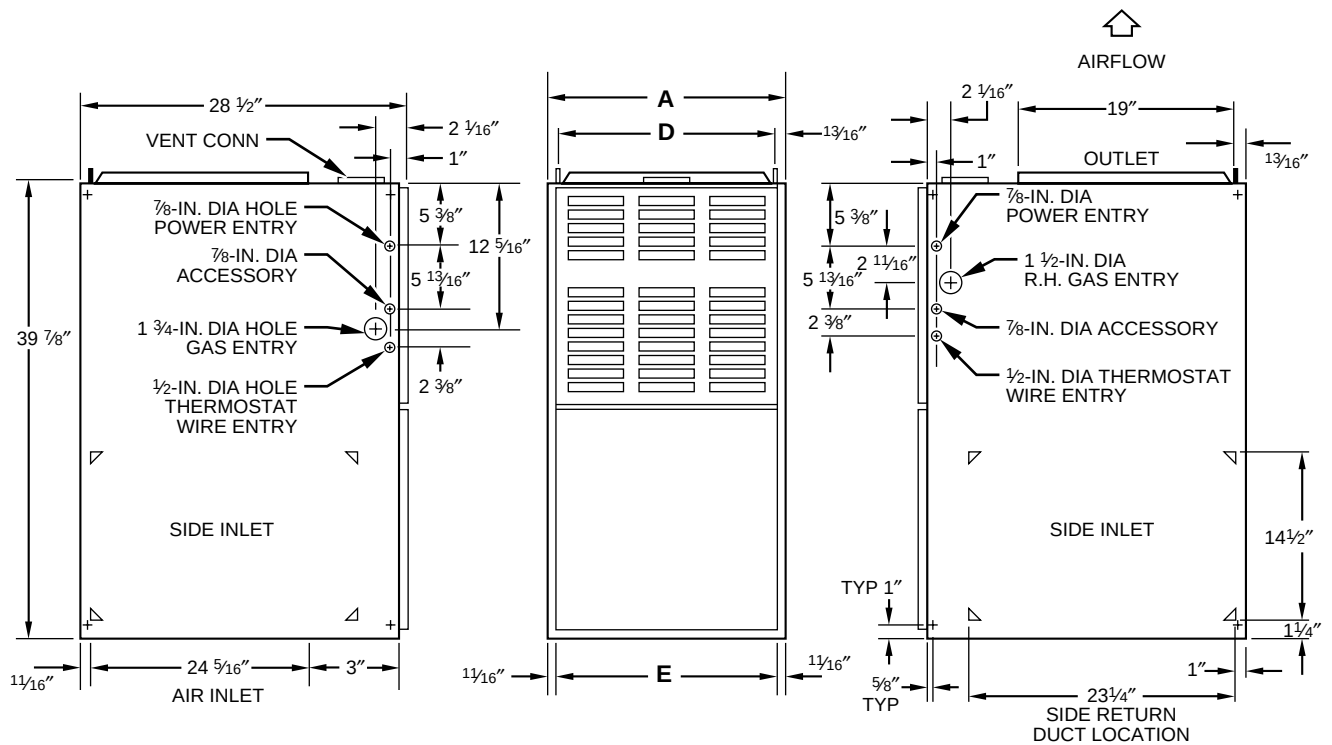
AIR DELIVERY—CFM (With Filter)*

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
045-08	Bottom or 1 Side	High	1030	1005	970	925	880	815	745	615
		Med-High	855	830	800	765	720	670	595	485
		Med-Low	755	725	695	650	605	555	475	400
045-12	Bottom or 1 Side	High	1490	1430	1385	1325	1250	1175	1085	975
		Med-High	1335	1305	1270	1230	1160	1090	1005	915
		Med-Low	1140	1130	1105	1075	1030	975	900	830
070-08	Bottom or 1 Side	High	1040	1010	975	935	880	810	735	640
		Med-High	855	830	800	765	715	660	600	490
		Med-Low	745	715	690	650	605	550	475	385
070-12	Bottom or 1 Side	High	1430	1380	1325	1265	1195	1125	1045	945
		Med-High	1310	1275	1235	1190	1135	1065	990	900
		Med-Low	1140	1130	1100	1065	1000	965	910	815
091-14	Bottom or 1 Side	High	1570	1535	1480	1415	1360	1280	1185	1070
		Med-High	1370	1355	1330	1290	1240	1170	1080	955
		Med-Low	1170	1165	1150	1115	1085	1035	970	880
091-16	Bottom or 1 Side	High	2010	1950	1875	1810	1740	1660	1550	1455
		Med-High	1675	1660	1625	1600	1545	1490	1395	1295
		Med-Low	1445	1430	1415	1400	1370	1325	1265	1170
111-12	Bottom or 1 Side	High	2260	2260	2260	2250	2210	2180	2115	2030
		Med-High	1845	1845	1845	1845	1845	1845	1845	1845
		Med-Low	1615	1615	1615	1615	1615	1615	1615	1615
111-16	Bottom or 1 Side	High	2475	2465	2425	2365	2305	2230	2145	2015
		Med-High	2100	2080	2075	2055	2015	1940	1865	1765
		Med-Low	2050	2050	2050	2050	2050	2050	2050	2050
111-20	Bottom Only	High	—	2465	2385	2305	2225	2125	2020	1910
		Med-High	2125	2120	2075	2040	1985	1900	1825	1715
		Med-Low	1745	1750	1740	1720	1685	1635	1565	1500
136-16	Bottom or 1 Side	High	1545	1545	1545	1520	1495	1450	1390	1330
		Med-High	2475	2465	2425	2365	2305	2230	2145	2015
		Med-Low	2100	2080	2075	2055	2015	1940	1865	1765
136-20	Bottom Only	High	2415	2340	2250	2170	2070	2000	1890	1780
		Med-High	2080	2050	2010	1955	1885	1805	1745	1645
		Med-Low	2050	2050	2050	2050	2050	2050	2050	2050
155-20	Bottom Only	High	2245	2175	2070	1980	1900	1805	1695	1575
		Med-High	2050	1985	1925	1850	1765	1690	1585	1480
		Med-Low	2050	2050	2050	2050	2050	2050	2050	2050

* A filter is required for each return-air supply. Airflow shown is with factory supplied 1-in. washable filter(s). An airflow reduction of up to 7% may occur when using the factory specified 4-5/16-inch wide, high-efficiency media filter. For best furnace efficiency when using the 4-5/16-inch wide media filter, adjust the blower speed tap to near the mid-point of the rise range.

—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.

A98520

DIMENSIONS (In.)

UNIT SIZE	A	D	E	VENT CONN* (Dia)
045-08	14-3/16	12-9/16	11-11/16	4
045-12	14-3/16	12-9/16	11-11/16	4
070-08	14-3/16	12-9/16	11-11/16	4
070-12	14-3/16	12-9/16	11-11/16	4
091-14	17-1/2	15-7/8	16	4
091-16	21	19-3/8	18-1/2	4
111-12	17-1/2	15-7/8	16	4
111-16	21	19-3/8	18-1/2	4
111-20	24-1/2	22-7/8	22	4
136-16	21	19-3/8	18-1/2	5†
136-20	24-1/2	22-7/8	22	5†
155-20	24-1/2	22-7/8	22	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).

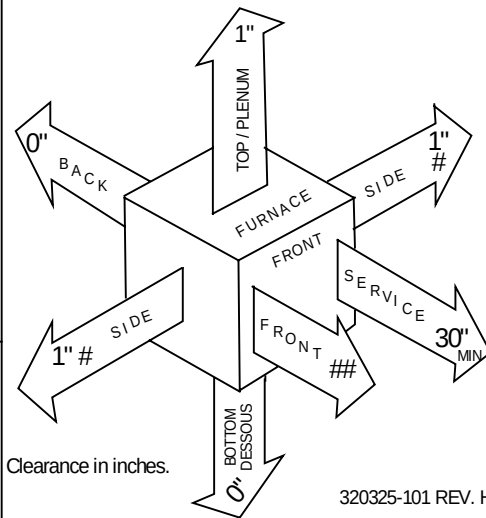
An accessory kit, supplied by the manufacturer, shall be used to convert to propane gas use or may be required for some natural gas applications.

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.

This furnace is approved for UPFLOW installations only.



320325-101 REV. H

Vent Clearance to combustibles:
For Single Wall vents 6 inches (6 po).
For Type B-1 vent type 1 inch (1 po).

- # 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.

A98122E

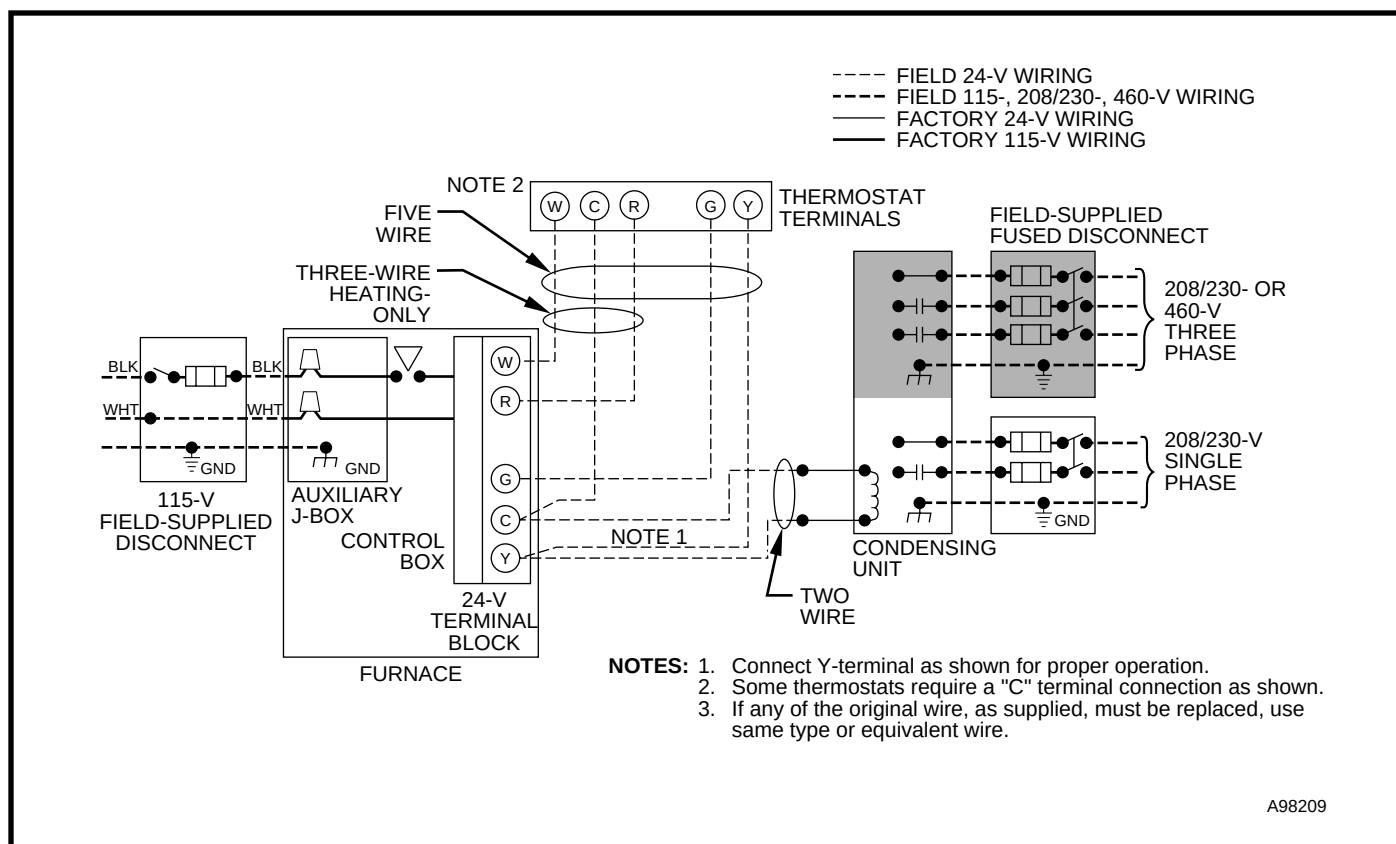


MEETS DOE RESIDENTIAL CONSERVATION SERVICES PROGRAM STANDARDS.

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

REGISTERED
QUALITY SYSTEM

Typical wiring schematic



Electrical data

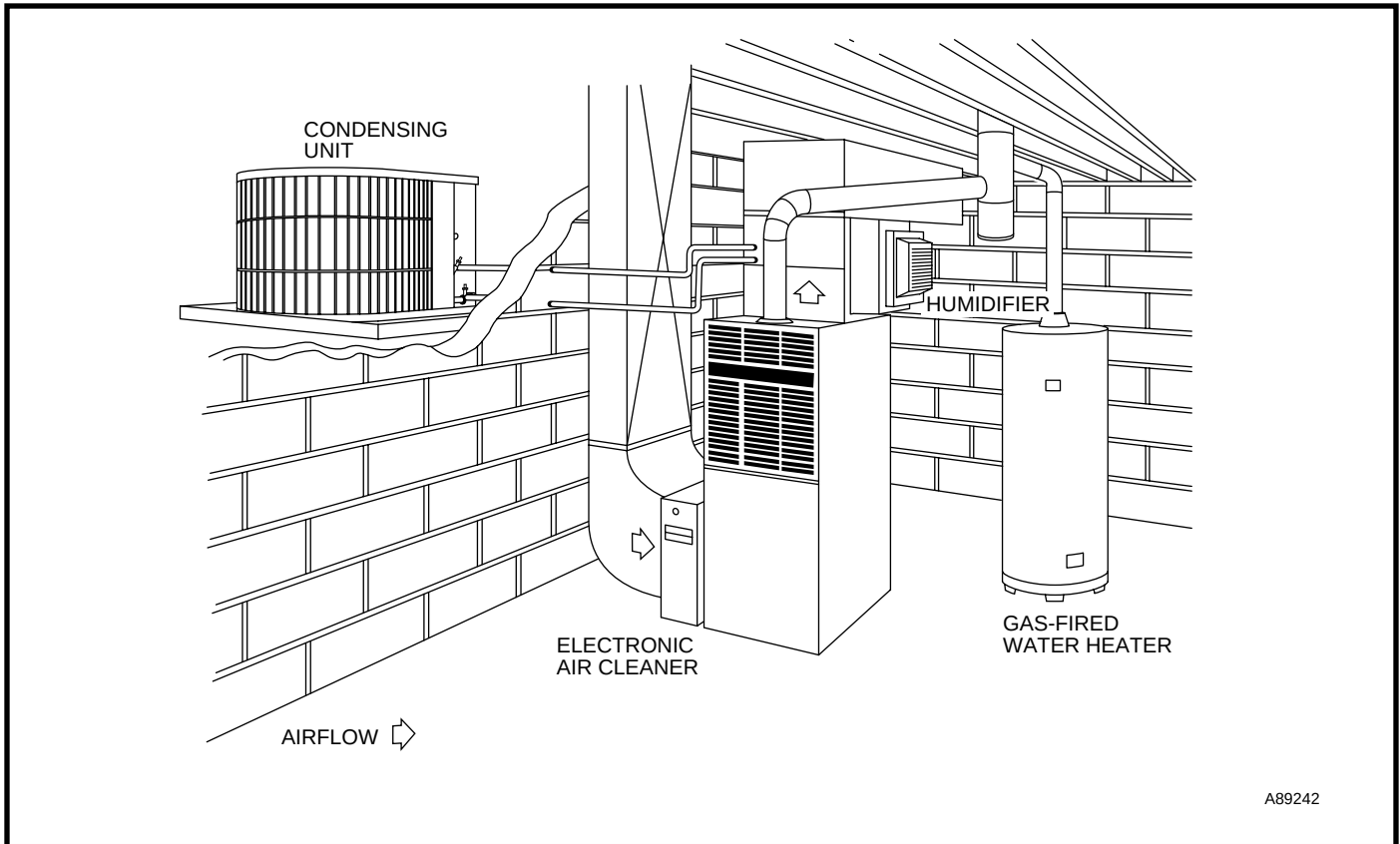
UNIT SIZE	045-08	045-12	070-08	070-12	091-14	091-16	111-12	111-16	111-20	136-16	136-20	155-20
UNIT VOLTS — HERTZ — PHASE	115 — 60 — 1											
MINIMUM WIRE SIZE	14	14	14	14	14	14	14	14	12	14	12	12
MAXIMUM WIRE LENGTH (Ft)*	47	34	47	32	31	27	35	28	31	28	33	31
MAXIMUM UNIT AMPS	6.0	8.3	5.9	8.7	9.0	10.4	8.0	10.1	14.4	10.1	13.3	14.0
OPERATING VOLTAGE RANGE (Min—Max)†	104—127											
MAX FUSE OR CKT BKR (Amps)‡	15	15	15	15	15	15	15	15	20	15	20	20
TRANSFORMER (24v)	40va											
EXTERNAL CONTROL POWER AVAILABLE	Heating											
	Cooling											
AIR CONDITIONING BLOWER RELAY	Standard											

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

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

‡ Time-delay type is recommended.

Typical installation





Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.