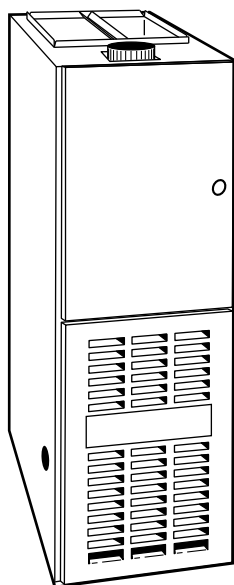




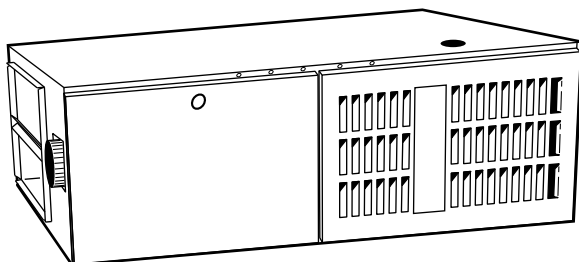
Product Data

58TMA WeatherMaker® 8000 2-Speed High-Efficiency Downflow/Horizontal Gas Furnace

Input Capacities:
65,000 thru 125,000 Btuh



DOWNFLOW



HORIZONTAL

Two-Speed Heating for High-Efficiency Gas Furnaces

Carrier continues to lead the industry with our new WeatherMaker® 8000 Two-Speed Induced-Combustion Gas Furnace. Our furnace operates at 2 different speeds which provide outstanding home comfort. 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.

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%. The Carrier WeatherMaker 8000 Two-Speed utilizes a hot surface, silicon carbide ignition system to save energy and increase reliability.

Our engineers have incorporated 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, providing 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.

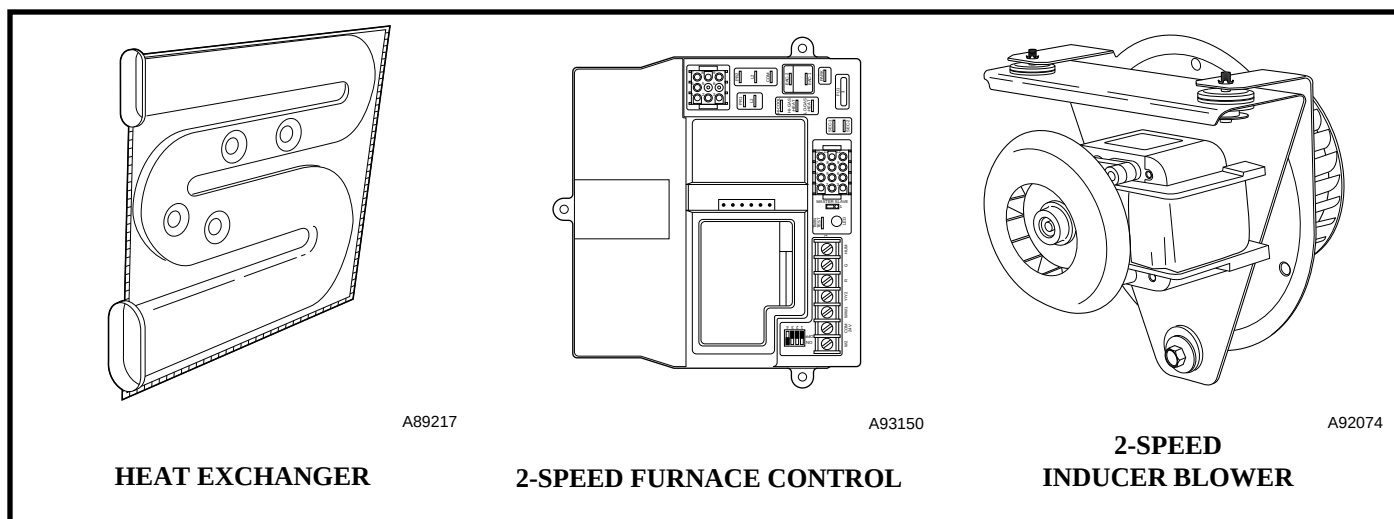
The superior attention to cabinet detail is obvious. The Carrier WeatherMaker 8000 Two-Speed features 1-piece, seamless, wrap-around construction. There are no spot welds on the exterior surfaces of the furnace. There is also double protection for the cabinet. First, a galvanized steel substrate provides 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 Carrier WeatherMaker 8000 Two-Speed is the state-of-the-art micro-

processor 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. 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 component-test feature to determine if a major component has failed. The control will check itself; then the low and high inducer; silicon carbide ignition; low-, medium-, and high-speed blower. Another benefit of the control is the 3-amp fuse that protects the transformer

and control. Our control is backed by a 3-year Limited Warranty.

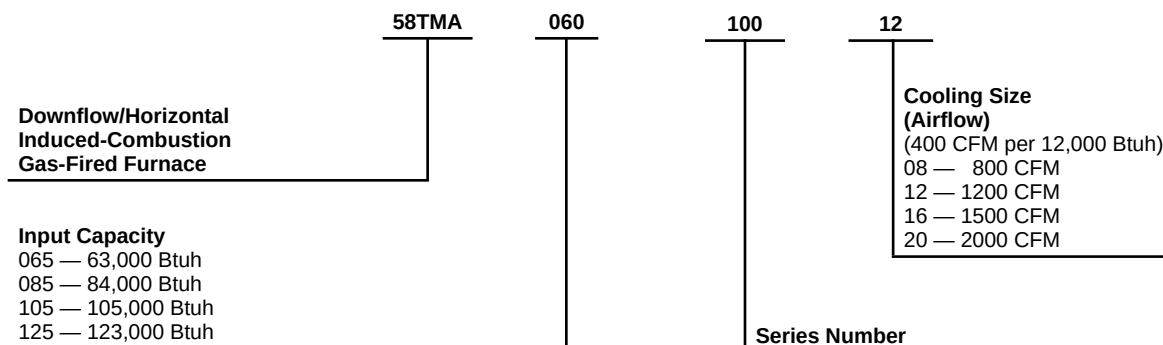
Best of all, the Carrier WeatherMaker 8000 Two-Speed is easily installed. Many features make this furnace the easy choice for replacement or new construction markets. Left and right connections are provided for gas and electrical supplies. An easy-to-remove bottom, blower speed selector, cased or uncased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



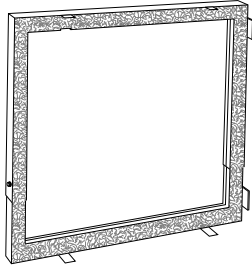
MEETS DOE RESIDENTIAL CONSERVATION SERVICES PROGRAM STANDARDS.

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

Model number nomenclature



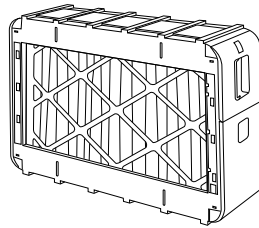
Carrier accessories*



A88202

DOWNFLOW SUBBASE

One base fits all furnace sizes. The base is designed to be installed between the furnace or coil box and a combustible floor. It is A.G.A. design certified for use with Carrier 58TMA furnaces.

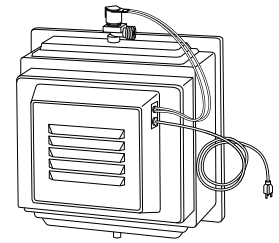


A95432

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.

Mechanical air cleaner is shown.



A91365

MODEL 49FH 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	065-08 and 12	085-12 and 16	105-20	125-20
AIR CLEANER	Model AIRA, KEACA, 31MF or MECH			
HUMIDIFIER	Model 49BF, 49BG, 49FH, 49FP or 49WS			
VENTILATOR	Model VA3B, VB5B, VC5B, or VL3A			
THERMOSTAT — NON-PROGRAMMABLE	For Use With Air Conditioner — TSTATCCNAC01-A For Use With Heat Pump — TSTATCCNHP01-A			
THERMOSTAT — PROGRAMMABLE	For Use With Air Conditioner — TSTATCCPAC01-A For Use With Heat Pump — TSTATCCPHP01-A			
DOWNFLOW SUBBASE‡	KGASB0201ALL			
HIGH-ALTITUDE PRESSURE SWITCH KIT†	KGAHA5601PSW			
GAS CONVERSION KIT—NATURAL-TO-PROPANE	KGANP24012SP			
PROPANE-TO-NATURAL	KGAPN20012SP			

*Factory authorized and field installed. Gas conversion kits are A.G.A. recognized.

†5500 ft and higher above sea level.

‡ Required for installation on combustible floors when no coil box is used, or when any coil box other than a Carrier cased coil is used.

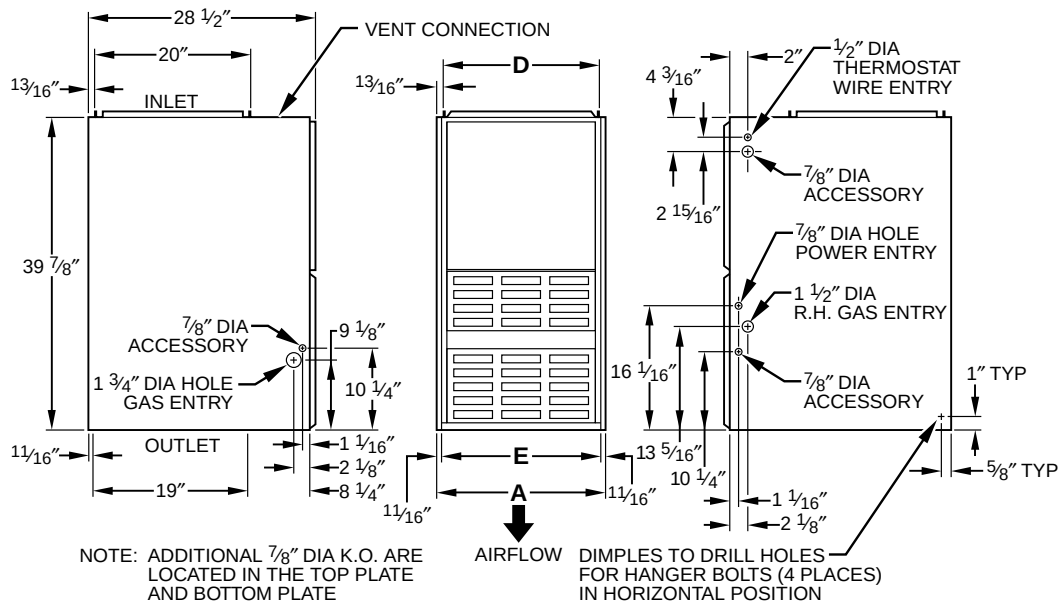
Physical data

UNIT SIZE	065-08	065-12	085-12	085-16	105-20	125-20
OUTPUT CAPACITY (BTUH) High/Low† Nonweatherized ICS	51,000/33,000	52,000/33,000	69,000/44,000	69,000/44,000	86,000/55,000	101,000/66,000
INPUT BTUH* High/Low	63,000/40,500	63,000/40,500	84,000/54,000	84,000/54,000	105,000/67,500	123,000/81,000
SHIPPING WEIGHT (Lb)	141	145	154	154	181	192
CERTIFIED TEMP RISE RANGE (°F)	High Stage	55—85	30—60	40—70	25—55	35—65
	Low Stage	30—60	15—45	25—55	15—45	20—50
CERTIFIED EXT STATIC PRESSURE	Heating	0.12	0.10	0.15	0.15	0.20
	Cooling	0.50	0.50	0.50	0.50	0.50
AIRFLOW CFM	Heating High/Low	660/585	1165/985	1060/900	1355/1170	1735/1500
	Cooling	930	1195	1255	1580	1950
SECONDARY LIMIT CONTROL	Manual Reset					
LIMIT CONTROL	SPST (Auto-Reset)					
HEATING BLOWER CONTROL	Solid-State Time Operation					
INDUCER	2-Speed					
BURNERS (Monoport)	3		4		5	6
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)					
MAIN BURNER IGNITER	Hot Surface					

* Gas input ratings are certified for elevations to 2000 ft. For elevations above 2000 ft, reduce ratings 4% for each 1000 ft above sea level. Refer to National Fuel Gas Code Table 10-2. In Canada, derate the unit 10% for elevations 2000 ft to 4500 ft above sea level.

† Tentative capacity in accordance with U.S. Government DOE test procedures.

ICS—Isolated Combustion System



A88324

DIMENSIONS (In.)

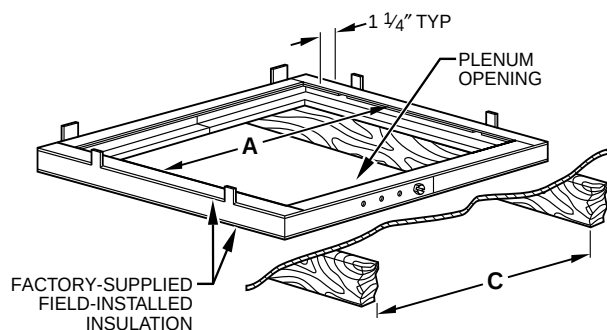
UNIT SIZE	A	D	E	VENT CONN	SHIP. WT (LB)
065-08	14-3/16	12-9/16	12-11/16	4	141
065-12	14-3/16	12-9/16	12-11/16	4	124
085-12	17-1/2	15-7/8	16	4	154
085-16	17-1/2	15-7/8	16	4	154
105-20	21	19-3/8	19-1/2	4	181
125-20	24-1/2	22-7/8	23	5	192

Accessory downflow subbase

DIMENSIONAL DATA (In.)

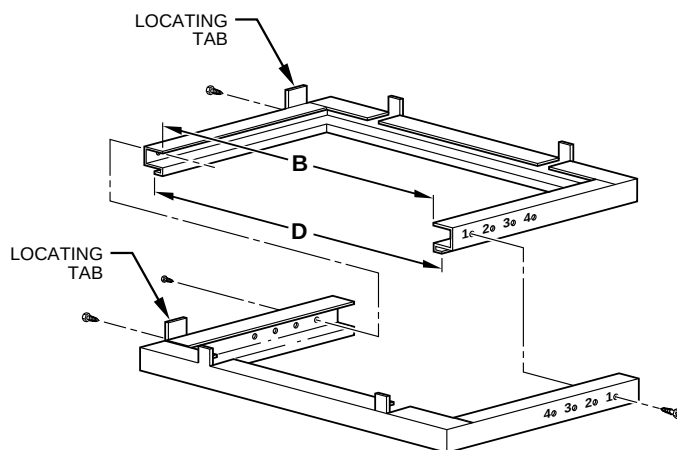
FURNACE WIDTH	PLENUM OPENING*		FRAMED FLOOR HOLE		HOLE NO. FOR WIDTH ADJUSTMENT
	A	B	C	D	
14-3/16	11-13/16	19	13-7/16	20-3/8	4
11-1/2	15-1/8	19	16-3/4	20-3/8	3
21	18-5/8	19	20-1/4	20-3/8	2
24-1/2	22-1/8	19	23-3/4	20-3/8	1

* The plenum should be constructed 1/4 in. smaller in width and depth than the plenum dimensions shown above.



Assembled

A88206



Disassembled

A88207

Dimensions

CLEARANCES (In.)

DOWNFLOW (Alcove or Closet)	065 and 085	105 and 125
Sides — Single-Wall Vent	1*	0
Type B-1 Double-Wall Vent	0	0
Back	0	0
Top	1	1
Front† — Single-Wall Vent	6	6
Type B-1 Double-Wall Vent	3	3
Vent — Single-Wall Vent	6	6
Type B-1 Double-Wall Vent	1	1

* For casing widths larger than 14-1/4 in., 0 clearance may be used.

† 18-in. clearance is required for alcove.

‡ Clearance shown is for the outlet end. The inlet end must maintain 6-in. clearance from flue to combustible material when using single-wall vent.

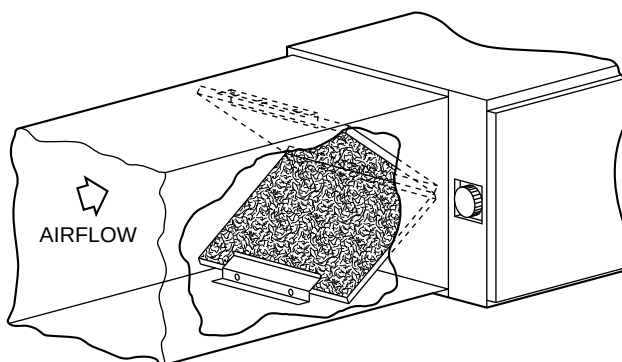
** Indicates supply or return sides when furnace is in the horizontal position.

NOTES:

1. Provide 30-in. front clearance for servicing. An open door in front of the furnace can meet this requirement.
2. A minimum clearance of 3 in. must be provided in front of the furnace for combustion air and proper operation.

HORIZONTAL (In Alcove, Attic, or Crawlspace)	065 and 085	105 and 125
Sides‡**	1	1
Back	0	0
Top — Single-Wall Vent	1	1
Type B-1 Double-Wall Vent	1	1
Front† — Single-Wall Vent	6	6
Type B-1 Double-Wall Vent	3	3
Vent — Single-Wall Vent	6	6
Type B-1 Double-Wall Vent	1	1
HORIZONTAL (In Closet)		
Sides‡**	1	1
Back	3	3
Top — Single-Wall Vent	2	2
Type B-1 Double-Wall Vent	2	2
Front — Single-Wall Vent	6	6
Type B-1 Double-Wall Vent	3	3
Vent — Single-Wall Vent	6	6
Type B-1 Double-Wall	1	1

Filter arrangement



**Filter Retainers
(Field Supplied)**

A94307

Performance data

UNIT SIZE	065-08	065-12	085-12	085-16	105-20	125-20
DIRECT-DRIVE MOTOR HP (PSC)	1/5	1/3	1/3	1/2	3/4	3/4
MOTOR FULL LOAD AMPS	2.9	5.8	5.8	7.9	11.1	11.1
RPM (Nominal)—SPEEDS	1075—4	1075—4	1075—4	1075—4	1075—4	1075—4
BLOWER WHEEL DIAMETER x WIDTH (in.)	10 x 6	10 x 6	10 x 7	10 x 8	11 x 10	11 x 10
FILTER SIZE (in.)—(WASHABLE, SUPPLIED)	(2) 14 x 20 x 1				(2) 16 x 20 x 1	

PSC—Permanent Split Capacitor

ENERGY EFFICIENCY

UNIT SIZE		065-08	065-12	085-12	085-16	105-20	125-20
CAPACITY BTUH (Low/High)*	Nonweatherized ICS	33,000/52,000	33,000/52,000	44,000/69,000	44,000/69,000	55,000/86,000	66,000/101,000
AFUE %*	Nonweatherized ICS	80.0	80.0	80.0	80.0	80.0	80.0

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

ICS—Isolated Combustion System

AIR DELIVERY (CFM)

UNIT SIZE	SPEED	EXTERNAL STATIC PRESSURE (in. wc)							
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
065-08	High	—	—	1010	975	930	885	825	745
	Med-High	—	815	800	765	725	685	620	550
	Med-Low	—	660	645	620	590	545	480	415
	Low	590	570	545	510	470	405	360	295
065-12	High	1435	1385	1320	1265	1195	1145	1080	1000
	Med-High	1300	1265	1230	1185	1135	1070	1010	940
	Med-Low	1165	1140	1100	1055	1005	975	920	850
	Low	985	950	945	920	890	850	810	745
085-12	High	1445	1420	1380	1320	1255	1180	1075	940
	Med-High	1255	1250	1220	1180	1140	1065	975	830
	Med-Low	1060	1055	1045	1025	975	915	820	680
	Low	900	895	890	870	830	760	665	545
085-16	High	1855	1765	1710	1665	1580	1570	1410	1310
	Med-High	1595	1570	1530	1485	1410	1355	1280	1200
	Med-Low	1355	1345	1305	1270	1220	1170	1110	1025
	Low	1170	1170	1140	1110	1075	1025	965	890
105-20	High	2235	2185	2110	2030	1950	1835	1700	1540
	Med-High	1995	1970	1915	1845	1765	1680	1545	1415
	Med-Low	1735	1735	1675	1625	1565	1480	1370	1265
	Low	1510	1500	1485	1455	1400	1320	1230	1130
125-20	High	—	2250	2190	2130	2055	1960	1875	1760
	Med-High	—	2000	1960	1910	1850	1785	1710	1615
	Med-Low	1700	1690	1670	1650	1610	1560	1490	1435
	Low	1480	1480	1480	1460	1430	1380	1320	1255

—Indicates unstable operating conditions.

Electrical data

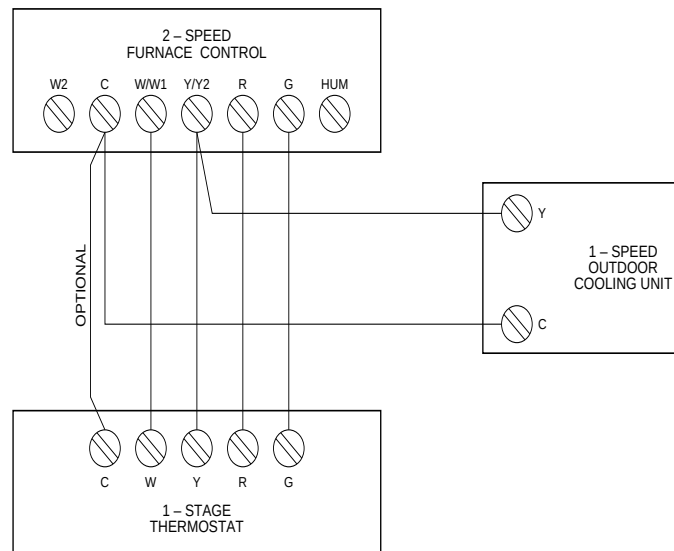
UNIT SIZE		065-08	065-12	085-12	085-16	105-20	125-20
UNIT VOLTS—HERTZ—PHASE		115—60—1					
MINIMUM WIRE SIZE		14	14	14	14	12	12
MAXIMUM WIRE LENGTH (Ft)*		46	33	30	28	33	31
MAXIMUM UNIT AMPS		8.0	11.0	12.0	13.2	17.2	18.4
OPERATING VOLTAGE RANGE (Min—Max)†		104—127					
MAXIMUM FUSE SIZE OR HACR-TYPE CKT BRK (Amps)‡		15	15	15	15	20	20
TRANSFORMER (24v)		40VA					
EXTERNAL CONTROL POWER AVAILABLE	Heating	19VA					
	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% voltage drop.

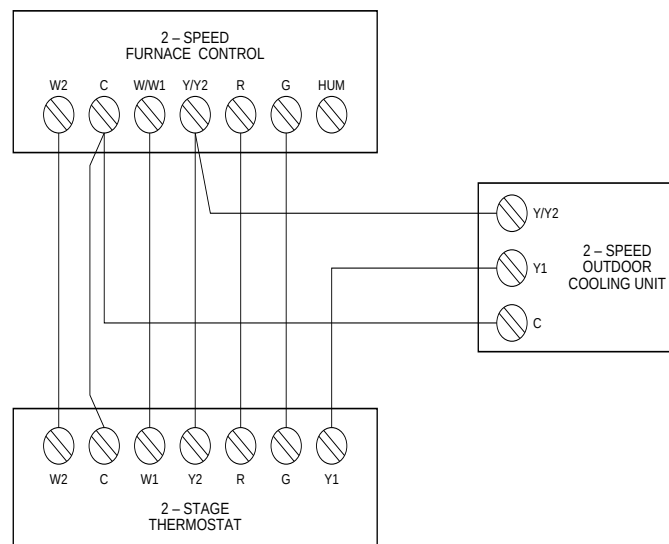
† Permissible limits of the voltage range at which the unit will operate satisfactorily.

‡ Time-delay fuse is recommended.

Typical wiring schematic



A93131



A93130

Typical installation

