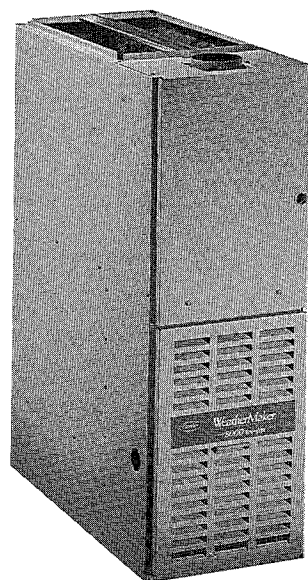




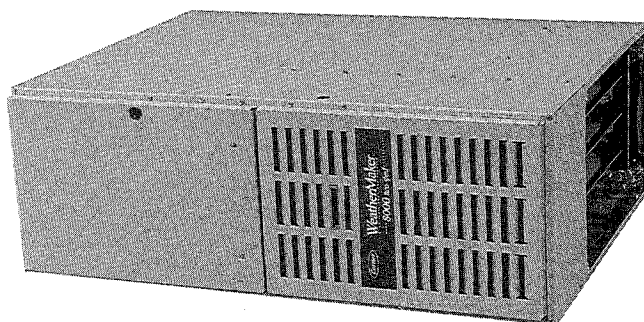
Product Data

58TMA Weathermaker® 8000 Two-Speed Deluxe Mid-Efficiency Downflow/Horizontal Gas Furnace

Heating Inputs:
84,000 Btuh



DOWNFLOW



HORIZONTAL

Two-Speed Heating for Mid-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. The 58TMA Downflow/Horizontal Furnace is the latest addition 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%. 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.

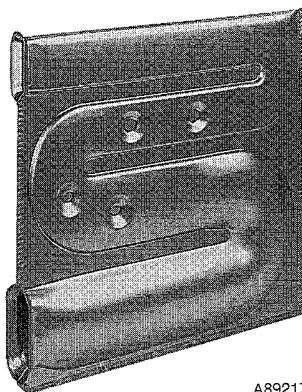
The superior attention to cabinet detail is obvious. The Carrier Weathermaker® 8000 two-speed features 1-piece, seamless, wrap-around construction. There are no spot welds on the exterior surfaces of the furnace. There is also double protection for the cabinet. First, a galvanized steel substrate provides 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 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. The control provides blower delay at start up and shut down, while monitoring furnace operations and functions. In the unlikely event of a service call, in less than a minute the technician can use the components-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, and the humidifier connections. Another benefit of the control is the 3-amp fuse that protects the transformer and control. Our control is backed by a 3-year warranty.

Best of all, the Carrier Weathermaker® 8000 two-speed 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, Molex 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. For added installation flexibility, these furnaces can be vented Category I (vertical) or with a minor field modification kit Category III (horizontal) using high temperature plastic pipe.



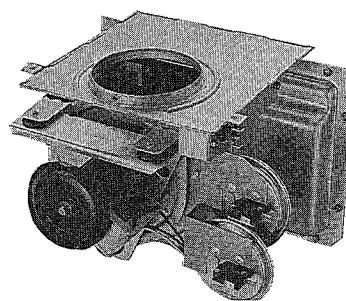
A89217

HEAT EXCHANGER



A93150

2-SPEED FURNACE CONTROL



A93149

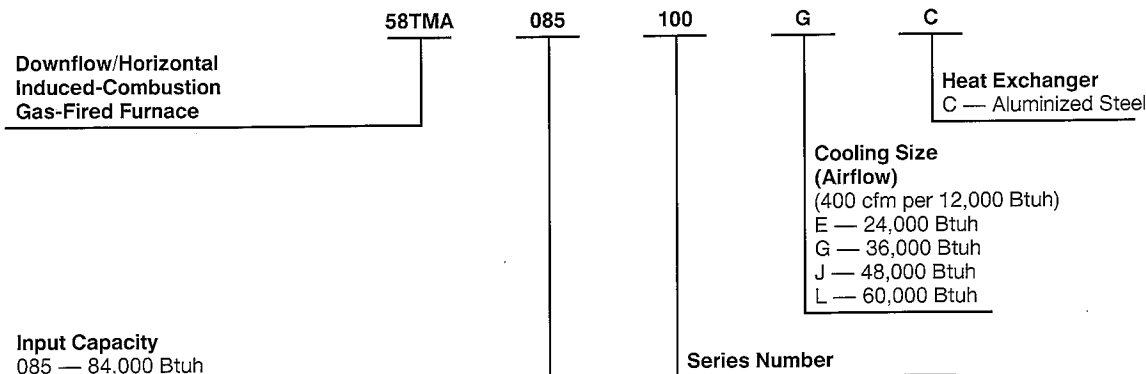
2-SPEED
INDUCER BLOWER



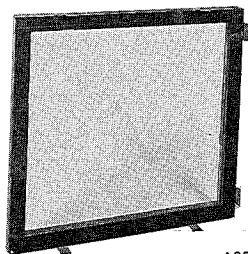
MEETS DOE RESIDENTIAL CONSERVATION SERVICES PROGRAM STANDARDS.

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

Model number nomenclature



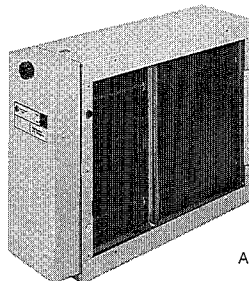
Carrier accessories*



A88202

DOWNFLOW SUBBASE

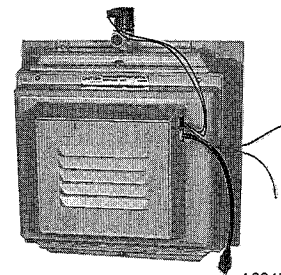
One base fits all furnace sizes. The base is designed to be installed between the furnace or coil box and a combustible floor. It is A.G.A. design certified for use with Carrier 58TMA furnaces.



A89239

MODEL 31KAX ELECTRONIC AIR CLEANER

Cleans the air of smoke, dirt, and many pollens commonly found. Saves decorating and cleaning expenses.



A89459

MODEL 49FH 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.

MODEL 58TMA	085-GC & JC
ELECTRONIC AIR CLEANER	Model 31KAX
HUMIDIFIER	Model 49FH
THERMOSTAT (1- or 2-stage)	See Master Price Pages
DOWNFLOW SUBBASE	KGASB010ALL
DUCT FLANGE KIT	KGARF0110ALL
HIGH ALTITUDE PRESSURE SWITCH KIT (5,500 ft and above)	KGAAH5601PSW
CATEGORY III VENT CONVERSION KIT	KGASW01012SP
GAS CONVERSION KIT — NATURAL-TO-PROPANE	KGANP24012SP
PROPANE-TO-NATURAL	KGAPN20012SP

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

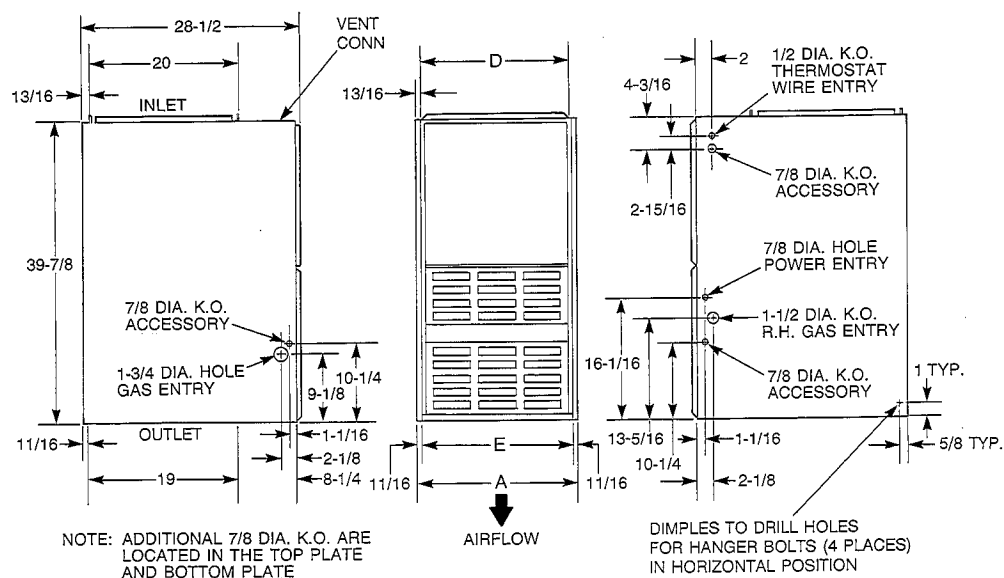
Physical data

FURNACE MODEL 58TMA		085-GC	085-JC
OUTPUT CAPACITY† High/Low	Nonweatherized ICS‡	67,000/43,000	67,000/43,000
INPUT BTUH*		84,000	84,000
SHIPPING WEIGHT (lb)		154	154
CERTIFIED TEMP RISE RANGE (°F)	High Fire	40 — 70	30 — 60
	Low Fire	25 — 55	15 — 45
CERTIFIED EXT STATIC PRESSURE	Heating	0.15	0.15
	Cooling	0.50	0.50
AIRFLOW CFM	Heating High/Low	1165/965	1355/1170
	Cooling	1395	1580
SECONDARY LIMIT CONTROL		Manual Reset	
LIMIT CONTROL		SPST	
HEATING BLOWER CONTROL		Solid-State Time Operation	
BURNERS (Monoport)		4	
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	
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.

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

‡ ICS — Isolated Combustion System



A88324

DIMENSIONS (In.)

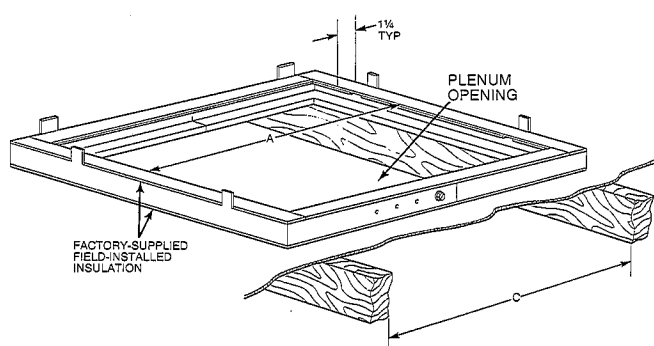
SIZE	A	D	E	VENT CONN
085-GC	17-1/2	15-7/8	16	4
085-JC	17-1/2	15-7/8	16	4

Accessory downflow subbase

DIMENSIONAL DATA

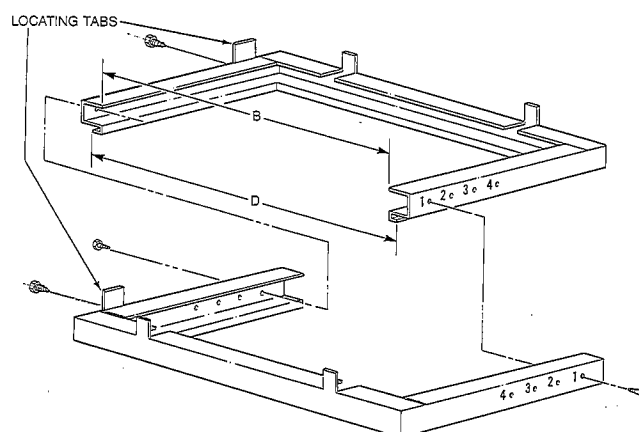
FURNACE WIDTH	PLENUM OPENING*		FRAMED FLOOR HOLE		HOLE NO. FOR WIDTH ADJUSTMENT
	A	B	C	D	
14-3/16	11-13/16	19	13-7/16	20-3/8	4
11-1/2	15-1/8	19	16-3/4	20-3/8	3
21	18-5/8	19	20-1/4	20-3/8	2
24-1/2	22-1/8	19	23-3/4	20-3/8	1

*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	085	
Sides — Single-Wall Vent	0	
Type B-1 Double-Wall Vent	0	0
Special Gas Vents* — Diameter	3	4
Clearance	0	3
Back	0	
Top	1	
Front — Single-Wall Vent	6	
Type B-1 Double-Wall Vent	3	
Special Gas Vents* — Diameter	3	4
Clearance	5	9
Vent — Single-Wall	6	
Type B-Double-Wall Vent	1	
Special Gas Vents* — Diameter	3	4
Clearance	5	9

*Listed for Category III appliances (high temperature plastic pipe)

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)	085	
Sides*	0	
Back	0	
Top — Single-Wall	1	
Type B-1 Double-Wall Vent	1	
Special Gas Vents† — Diameter	3	4
Clearance	5	9
Front	18	
Vent — Single-Wall	6	
Type B-1 Double-Wall	1	
Special Gas Vents† — Diameter	3	4
Clearance	0	0
HORIZONTAL (In Closet)		
Sides*	1	
Back	3	
Top — Single-Wall	2	
Type B-1 Double-Wall Vent	2	
Special Gas Vents† — Diameter	3	4
Clearance	2	3
Front — Single-Wall	6	
Type B-1 Double-Wall Vent	3	
Special Gas Vents† — Diameter	3	4
Clearance	5	9
Vent — Single-Wall	6	
Type B-1 Double-Wall Vent	1	
Special Gas Vents† — Diameter	3	4
Clearance	5	9

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

†Listed for Category III appliances (high temperature plastic pipe)

Performance data

FURNACE MODEL 58TMA	085-GC	085-JC
DIRECT-DRIVE MOTOR HP (PSC)	1/3	1/2
MOTOR FULL LOAD AMPS	5.8	7.9
RPM (Nominal)—SPEEDS	1075—4	1075—4
BLOWER WHEEL DIAMETER x WIDTH (in.)	10 x 7	10 x 8
FILTER SIZE (in.)—(WASHABLE)	(2) 14 x 20 x 1	

PSC — Permanent Split Capacitor

ENERGY EFFICIENCY

FURNACE MODEL 58TMA	085-GC	085-JC
CAPACITY BTUH* (Low/High) Nonweatherized ICS†	43,000/67,000	43,000/67,000
AFUE %* Nonweatherized ICS†	80.0	80.0

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

† ICS — Isolated Combustion System

AIR DELIVERY (cfm)

FURNACE SIZE	SPEED	EXTERNAL STATIC PRESSURE (in. wc)							
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
085-GC	High	—	1575	1515	1455	1395	1325	1230	1120
	Med-High	—	1380	1340	1285	1230	1165	1095	1005
	Med-Low	1165	1145	1130	1090	1055	1005	940	870
	Low	965	955	940	910	885	840	785	705
085-JC	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

— Indicates unstable operating conditions.

Electrical data

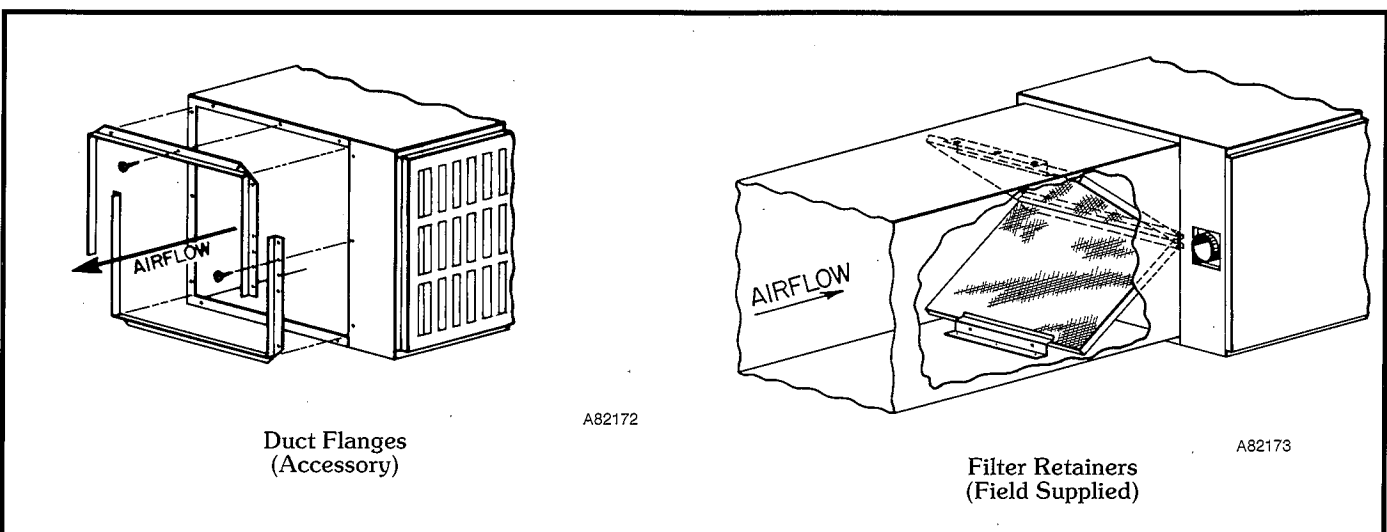
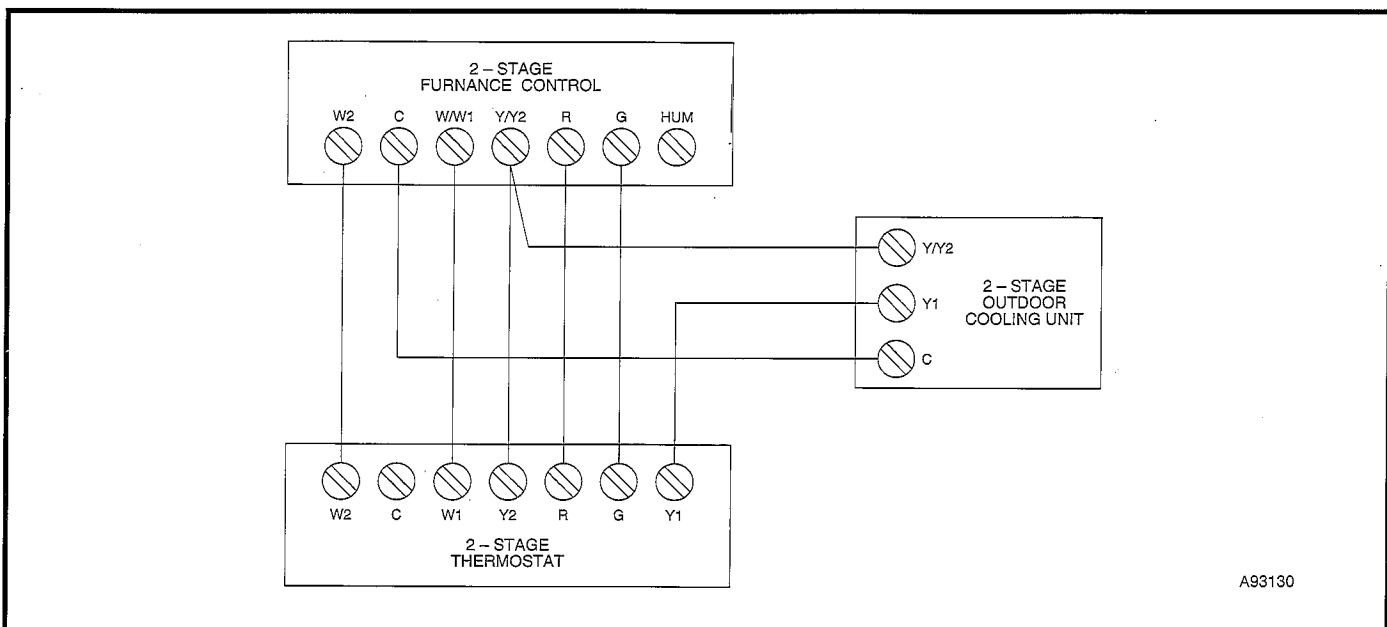
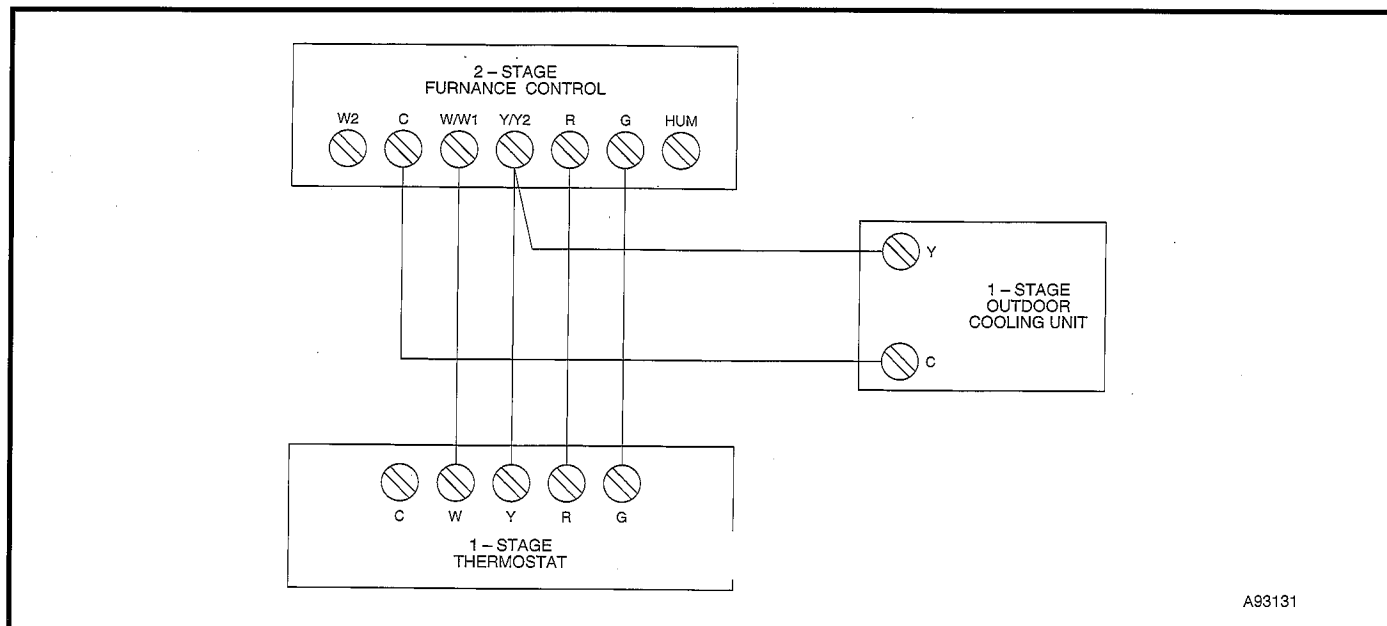
FURNACE MODEL 58TMA		085-GC	085-JC
UNIT VOLTS—HERTZ—PHASE		115—60—1	
MINIMUM WIRE SIZE		14	14
MAXIMUM WIRE LENGTH* (Ft.)		30	28
MAXIMUM UNIT AMPS		9.2	10.2
OPERATING VOLTAGE RANGE† (Min—Max)		104—127	
MAXIMUM FUSE SIZE OR HACR-TYPE CKT BRK‡ (Amps)		15	15
TRANSFORMER (24v)		40 VA	
EXTERNAL CONTROL POWER AVAILABLE	Heating	19 VA	
	Cooling	35 VA	
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



Typical installation

