

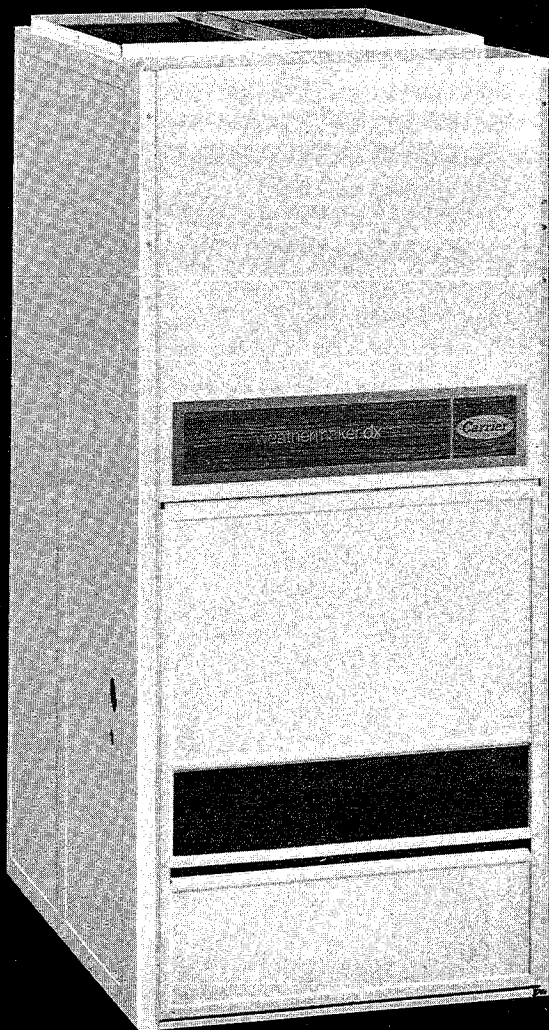


Product Data

58DX Deluxe Downflow Gas Furnace

41,000 — 103,000 Btuh Input

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A milestone in heating efficiency and economy

Carrier presents the 58DX — This downflow condensing furnace is superb for low operating cost and maximum energy savings. The 58DX is a technically advanced furnace that has been designed and engineered to provide the owner with highly dependable, efficient, and economical heating.

The design goal was accomplished in several ways. First, the 58DX Furnace uses a pilot relite system to eliminate wasteful gas usage — a common characteristic of older furnaces with continuous pilot. The pilot burns only during the heating cycle to ignite the burners that heat the aluminized steel serpentine heat exchanger.

Then the 58DX uses induced combustion to increase the heat transfer that occurs inside the furnace. The induced combustion system is a sealed system which uses 100% outdoor air for combustion. Since the combustion air is piped directly into the furnace, infiltration of outside air into home to support combustion is eliminated. This precludes cold drafts in the house and improves living comfort. Additionally, this isolates the noise of operation to make the 58DX Furnace one of the quietest in the industry.

The final touch is the special secondary heat exchanger that extracts most of the remaining heat that is available in the furnace to heat the house. The result is economical and comfortable heating with an AFUE of 91.3. The secondary heat exchanger is a special design of the serpentine clam-shell heat exchanger. This design reduces pressure drop in

the furnace and minimizes the risk of airflow blockage from a dirty coil as experienced by competitive products.

The 58DX Furnace is easy to install. At only 46 inches tall, it can be conveniently applied in a new or replacement application. The furnace has left- or right-hand gas, electrical, vent pipe, combustion-air pipe connections, and adjustable blower speeds to fit most applications. Carrier makes it easy to adjust the blower speed with a speed-tap selector location on the blower housing. No need to remove the blower or perform other complex procedures.

When using a Carrier gas furnace, you have the option of expanding your comfort system to include air conditioning, humidifier, and electronic air cleaner. A factory-installed 40-VA transformer, air conditioner relay, and multispeed blower motor simplifies installation of add-on options.

The 58DX Downflow Condensing Furnace heat exchangers are backed by Carrier's lifetime Warranty. See Warranty Card for more details.

58DX FEATURES/BENEFITS

Insulated Blower Compartment — The acoustical insulation reduces air and motor noise to promote quiet operation.

Certifications — The 58DX units are A.G.A. design certified for use with natural gas. The efficiency is GAMA efficiency rating certified. The 58DX surpasses California minimum seasonal efficiency requirements, and meets the oxides of nitrogen (NO_x) emission levels set by South Coast and Bay Area Air Quality Management Districts in California.

Side Wall Venting — The combustion-air and vent pipes can terminate through a side wall or through the roof when used with a factory-authorized vent termination kit.

Blower Door Switch — Shuts off all power and fuel to furnace whenever blower door is opened.

Redundant Gas Valve — Shuts off gas to burners if one of the valves (pilot or main gas) fails to close completely for any reason.

Insulation — Foil-faced insulation in heat exchanger section of the casing minimizes heat loss.

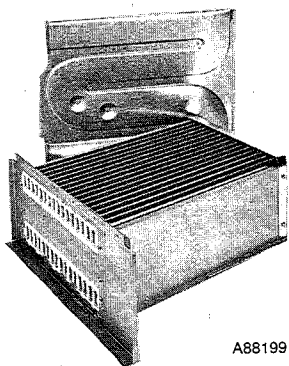
Aluminized Steel Slotted-Port Burners — Provide balanced, quiet combustion.

Printed-Circuit Board — Controls sequencing and furnace operation. Solid-state blower control actuates blower after main burners ignite, to eliminate cold air blowing into rooms.

Adjustable Blower Speed — For precise airflow selection.

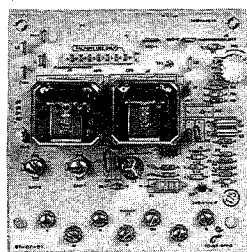
Direct Vent Sealed Combustion System — Model 58DX uses 100% outdoor air, which results in especially quiet operation. Direct venting also minimizes the possibility of chloride contamination which can result in heat exchanger corrosion. Also reduces air infiltration into the home.

Monoport Burners — The burners are finely tuned for smooth, quiet combustion plus economical gas usage.



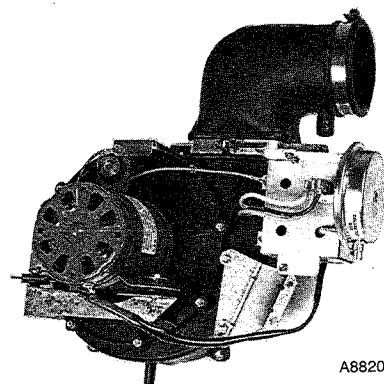
A88199

HEAT EXCHANGERS



A88200

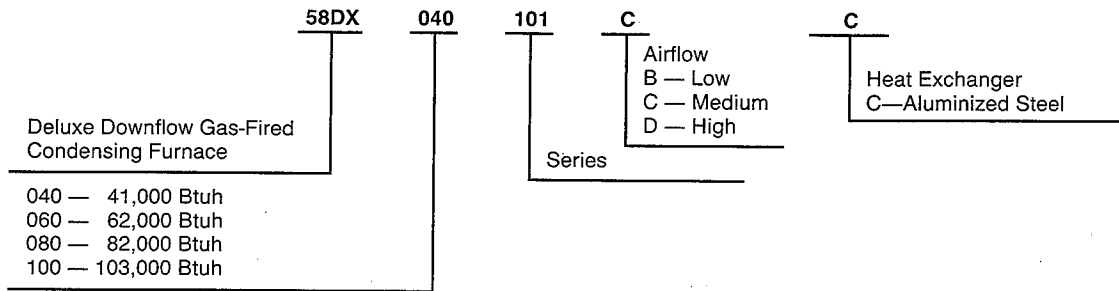
PRINTED-CIRCUIT BOARD



A88201

INDUCER BLOWER

Model number nomenclature



Physical data

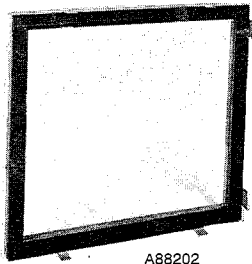
FURNACE MODEL 58DX		040	060	080	100
OUTPUT CAPACITY BTUH†		41,000	62,000	82,000	103,000
INPUT BTUH*		44,000	66,000	88,000	110,000
SHIPPING WEIGHT (lb)		179	187	202	241
CERTIFIED TEMP RISE RANGE (F)		20—50	40—70	40—70	35—65
CERTIFIED EXT STATIC PRESSURE	Heating	0.10	0.12	0.15	0.20
	Cooling	0.50	0.50	0.50	0.50
AIRFLOW CFM	Heating	1335	1330	1615	2000
	Cooling	1275	1185	1570	2065
SECONDARY LIMIT CONTROL		Manual Reset			
LIMIT CONTROL		SPST			
HEATING BLOWER CONTROL		Solid-State Time Operation			
BURNERS (Monoport)		2	3	4	5
GAS CONNECTION SIZE		1/2-inch NPT			
GAS VALVE (Redundant) Manufacturer/Model		White Rodgers/Model 36E			
Minimum Inlet Pressure (in. wc)		4.5			
Maximum Inlet Pressure (in. wc)		13.6			
PILOT SAFETY Manufacturer/Model		BDP/740A			

*Gas input ratings are certified for elevations to 2000 feet. For elevations above 2000 feet, reduce ratings 4% for each 1000 feet above sea level.
 †Capacity in accordance with U.S. Government DOE test procedures. California Seasonal Efficiencies based on California-specified procedures.

Accessories

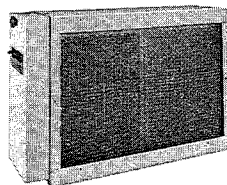
ITEM	ACCESSORY*
Downflow Subbase	X
Electronic Air Cleaner	X
Humidifier	X

*Factory-authorized and listed, field-installed.



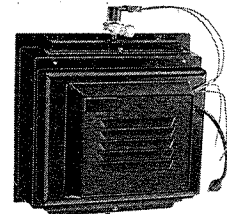
DOWNFLOW SUBBASE

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 58DX furnaces.



ELECTRONIC AIR CLEANER

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



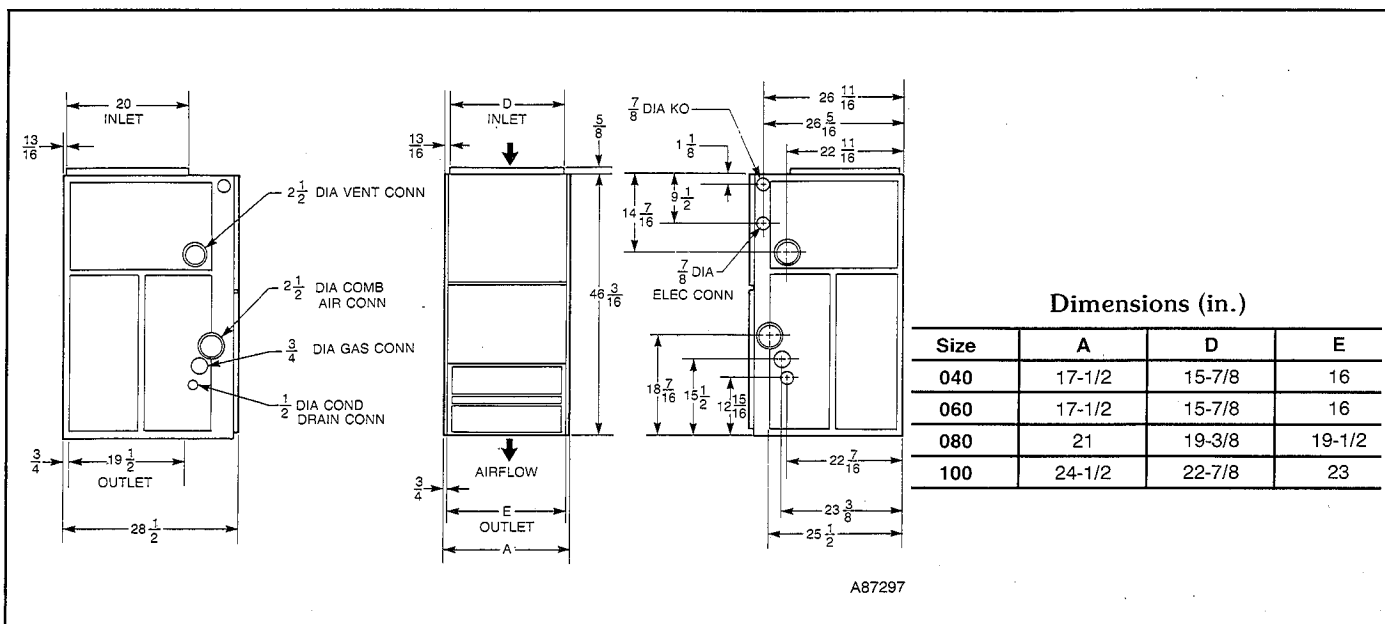
HUMIDIFIER

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.

Dimensions

CLEARANCES (in.)

SIZE	040, 060, 080, & 100
SIDES	0
BACK	0
TOP OF PLENUM	1
VENT CONNECTOR	0
FRONT — Casing Ventilation	3
SERVICE	30



Performance data

FURNACE MODEL 58DX	040	060	080	100
DIRECT-DRIVE MOTOR Hp (PSC)	1/3	1/3	1/2	3/4
MOTOR FULL LOAD AMPS	6.6	6.6	7.9	11.1
RPM (Nominal) — SPEEDS	1075—4			
BLOWER WHEEL DIAMETER — WIDTHS (in.)	10 x 7	10 x 7	10 x 8	11 x 10
FILTER SIZE (in.) — (WASHABLE)	(2) 16 x 20 x 1			

PSC—Permanent Split Capacitor

EFFICIENCY

CAPACITY	Indoor	41,000	62,000	82,000	103,000
Nonweatherized (ICS)†		41,000	61,000	82,000	102,000
AFUE %*	Indoor	91.3	91.3	91.3	91.3
Nonweatherized (ICS)†		90.6	90.6	90.6	90.6

*Rated in accordance with U.S. Government DOE test procedures. California Seasonal Efficiencies based on California-specified 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
040-101CC	High	1475	1430	1380	1335	1275	1220	1145
	Med-High	1335	1300	1270	1230	1190	1140	1030
	Med-Low	1190	1170	1145	1120	1090	1045	995
	Low	1080	1065	1045	1020	990	950	890
060-101CC	High	1405	1355	1305	1250	1185	1120	1045
	Med-High	1340	1290	1240	1190	1135	1075	1005
	Med-Low	1275	1230	1185	1140	1085	1025	960
	Low	1140	1105	1070	1035	990	935	875
080-101CC	High	1880	1800	1725	1645	1570	1475	1375
	Med-High	1640	1585	1525	1465	1395	1325	1240
	Med-Low	1460	1420	1375	1330	1275	1220	1145
	Low	1315	1290	1260	1230	1190	1145	1080
100-101DC	High	2320	2280	2225	2155	2065	1980	1880
	Med-High	2005	2000	1970	1930	1875	1805	1725
	Med-Low	1700	1695	1685	1660	1615	1560	1495
	Low	1460	1450	1435	1415	1385	1355	1320

MEETS DOE RESIDENTIAL CONSERVATION SERVICES PROGRAM STANDARDS.

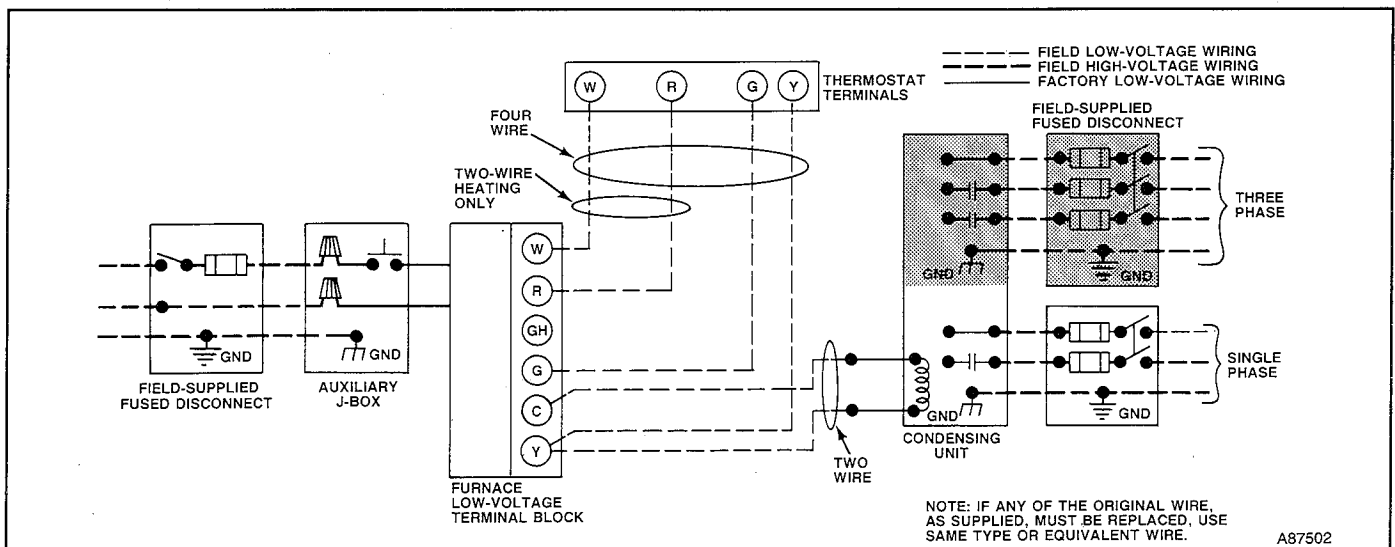
Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.



Electrical data

ELECTRICAL DATA		ALL SIZES
VOLTS-PHASE-HERTZ		120-1-60
MINIMUM WIRE SIZE		14 AWG
MAXIMUM FUSE SIZE		15 Amps
TRANSFORMER (24v)		40 VA
EXTERNAL CONTROL POWER AVAILABLE — Heating		21 VA
Cooling		36 VA
AIR COND. BLOWER RELAY		Standard

Typical wiring schematic



Combustion-Air and Vent Pipe Diameter* (In Feet)

Altitude (feet)	Furnace Size	Pipe Size	Number of 90-Degree Elbows†‡				
			1	2	3	4	5
0–2000	036040	1-1/2	20	15	10	5	—
	036060	1-1/2	15	10	5	—	—
	036040 & 036060	2	35	35	35	35	35
	048080	2	25	20	15	10	5
	048080	2-1/2	35	35	35	35	35
	060100	2	10	5	—	—	—
	060100	2-1/2	25	20	15	10	5
2001–3000	060100	3	35	35	35	35	35
	036040	1-1/2	17	12	7	—	—
	036060	1-1/2	13	7	—	—	—
	036040 & 036060	2	31	30	30	29	29
	048080	2	22	16	12	6	—
	048080	2-1/2	31	30	30	29	29
	060100	2	8	—	—	—	—
3001–4000	060100	2-1/2	22	16	12	6	—
	060100	3	31	30	30	29	29
	036040	1-1/2	15	10	—	—	—
	036060	1-1/2	11	5	—	—	—
	036040 & 036060	2	28	27	26	25	24
	048080	2	20	14	9	—	—
	048080	2-1/2	28	27	26	25	24
4001–5000	060100	2	6	—	—	—	—
	060100	2-1/2	20	14	9	—	—
	060100	3	28	27	26	25	24
	036040	1-1/2	13	9	—	—	—
	036060	1-1/2	10	—	—	—	—
	036040 & 036060	2	26	25	24	23	22
	048080	2	18	12	8	—	—
5001–6000	048080	2-1/2	26	25	24	23	22
	060100	2-1/2	18	12	8	—	—
	060100	3	26	25	24	23	22
	036040	1-1/2	11	7	—	—	—
	036060	1-1/2	9	—	—	—	—
	036040 & 036060	2	24	22	21	19	18
	048080	2	16	10	6	—	—
6001–7000	048080	2-1/2	24	22	21	19	18
	060100	2-1/2	16	10	6	—	—
	060100	3	24	22	21	19	18
	036040	1-1/2	10	6	—	—	—
	036060	1-1/2	8	—	—	—	—
	036040 & 036060	2	22	20	19	17	16
	048080	2	15	8	—	—	—
7001–8000	048080	2-1/2	22	20	19	17	16
	060100	2-1/2	15	8	—	—	—
	060100	3	22	20	19	17	16
	036040	1-1/2	8	—	—	—	—
	036060	1-1/2	6	—	—	—	—
	036040 & 036060	2	19	17	15	13	11
	048080	2	13	6	—	—	—
8001–9000	048080	2-1/2	19	17	15	13	11
	060100	2-1/2	13	6	—	—	—
	060100	3	19	17	15	13	11
	036040	1-1/2	6	—	—	—	—
	036060	1-1/2	5	—	—	—	—
	036040 & 036060	2	17	15	13	11	9
	048080	2	11	—	—	—	—
9001–10,000	048080	2-1/2	17	15	13	11	9
	060100	2-1/2	11	—	—	—	—
	060100	3	17	15	13	11	9
	036040 & 036060	2	15	12	10	7	5
	048080	2	9	—	—	—	—
9001–10,000	048080	2-1/2	15	12	10	7	5
	060100	2-1/2	9	—	—	—	—
	060100	3	15	12	10	7	5

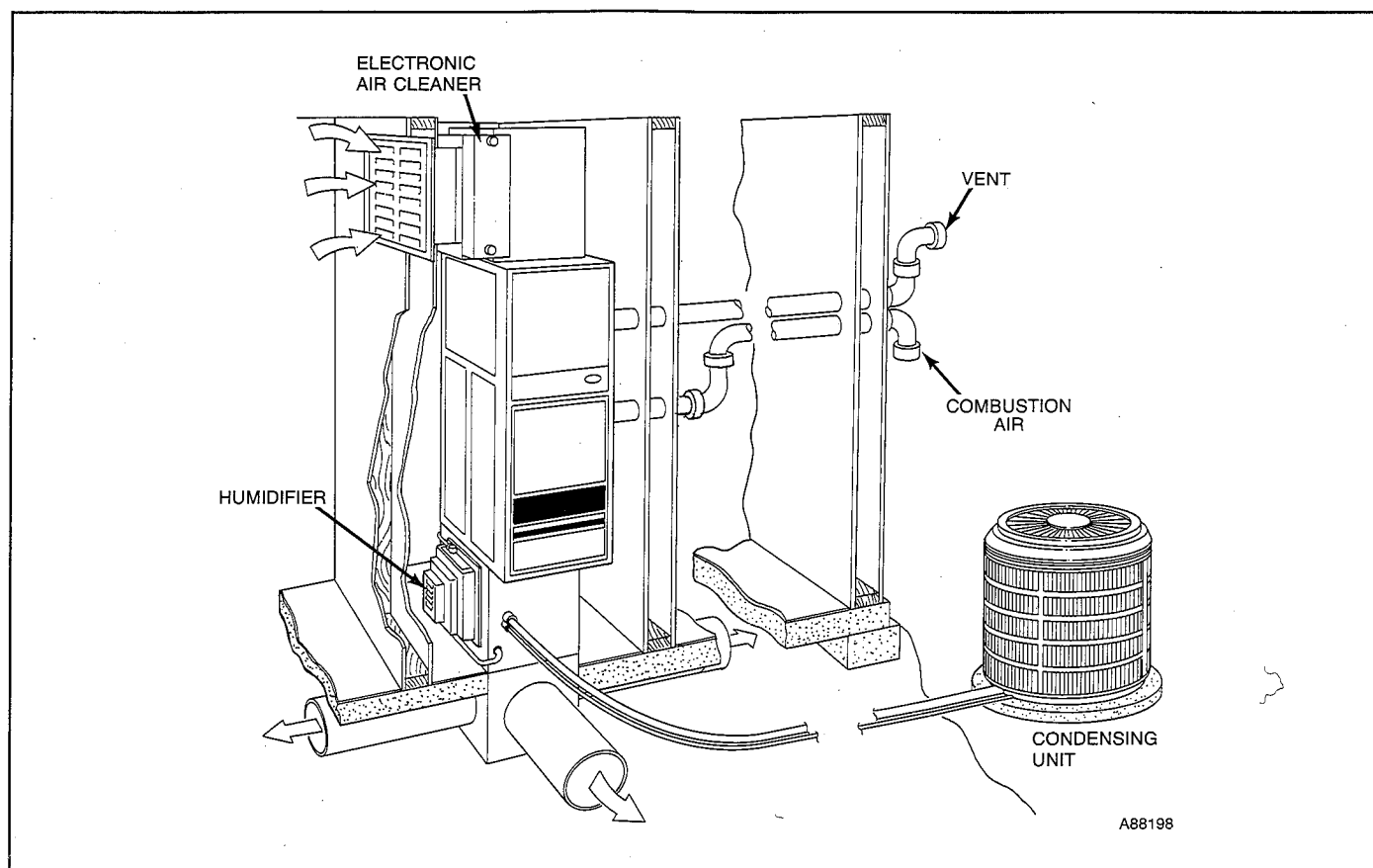
*Size both the combustion-air and vent pipe diameters independently, then use the larger diameter for both pipes. These diameters apply to installations up to 2000 feet above sea level. A vent terminal kit is required for each installation; use kit P/N No. 58SX900—001 for 1-1/2 and 2-inch diameter pipe and Part No. 58SX900—011 for 2-1/2 and 3-inch diameter pipe. Diameters listed are for schedule 40 PVC, SDR-21 PVC, SDR-26 PVC, PVC-DWV, or ABS-DWV pipe. Do not exceed 35 linear feet.

†Elbows and pipe sections within the furnace casing and supplied in the vent terminal kit should not be included in the count.

‡Two 45-degree elbows are equal to one 90-degree elbow. Long radius elbows are desirable.

NOTE: The installer may use any larger pipe size than what is specified above.

Typical installation





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