



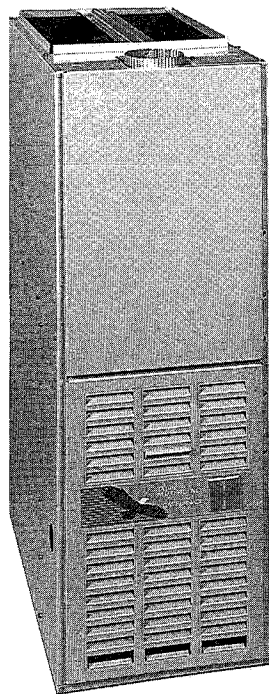
Bryant
Air Conditioning

Indianapolis, IN

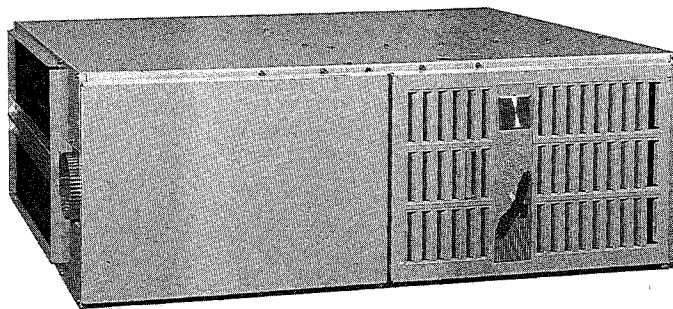
DELUXE MID-EFFICIENCY DOWNFLOW/HORIZONTAL INDUCED-COMBUSTION FURNACE

MODEL 376CAV

Sizes 050 through 135
Series D



DOWNFLOW



HORIZONTAL

With a unique approach to induced-combustion design, a 40-in. tall cabinet, a 4-pass heat exchanger, an inshot burner system, and its safety features; this furnace is without peer. The model 376CAV Deluxe Downflow/Horizontal Furnace achieves one of the higher Annual Fuel Utilization Efficiency (AFUE) ratings available in a noncondensing, induced-combustion furnace. Its ease and economy of installation, ease of serviceability, economical initial cost, and short payback time put it in a class well ahead of the competition. The model 376CAV Gas Furnace has the kind of overall performance needed in today's homes.

FEATURES

EFFICIENCY—The 376CAV Deluxe Induced-Combustion Gas Furnace provides the efficiency customers want with 80.0% AFUE.

HOT SURFACE IGNITION—This field-proven ignition system will save energy and improve reliability.

ALUMINIZED HEAT EXCHANGER—The patented 4-pass heat exchanger is made of aluminized steel and backed by a 20-year Limited Warranty.

INTELLIGENT CONTROL BOARD—The 376CAV Furnace has an intelligent control board that monitors the operation of the furnace. This control board also has a self-test feature that enables the servicing person to verify operation of the board itself, inducer, hot surface ignitor, high- and low-speed blower operation, and humidifier. The board features a 3-amp fuse that protects the transformer and board. We guarantee the reliability of the control board with a 3-year Limited Warranty.

40-IN. HEIGHT—The 376CAV Induced-Combustion Furnace with a 40-in. cabinet height simplifies installation in attics, closets, and crawl spaces, especially with a high-efficiency cooling coil.

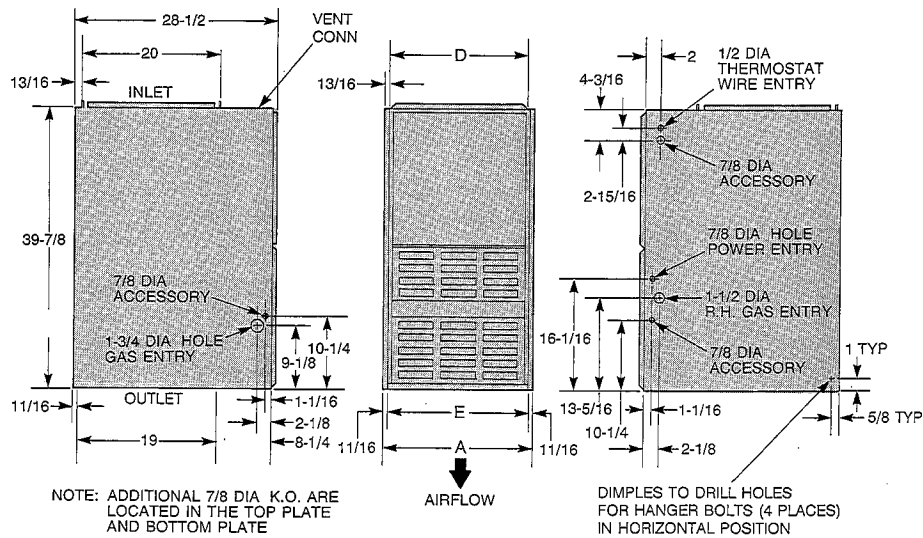
MULTIPOISED DOWNFLOW OR HORIZONTAL—Our furnace can be used in a downflow, horizontal left, or horizontal right configuration.

PREPAINTED CABINET—The 376CAV uses prepainted sheet metal for the cabinet. This is the same high-quality finish found on refrigerators and other appliances today. We ensure its durability by using a galvanized steel substrate to provide superior rust protection.

PATENTED DRAFT SAFEGUARD—Our induced-combustion furnace has a patented draft safeguard switch. The safeguard switch will stop furnace operation if the vent system becomes blocked or is not operating properly. An exclusive with the 376CAV Furnace.

EASY INSTALLATION—The model 376CAV has many features that make installation easier; left or right gas and electrical connections, blower speed selector, matching coil sizes, accessory low-voltage connections, and many more.

QUIET OPERATION—A soft mount inducer assembly and slow opening gas valve reduce sound level.

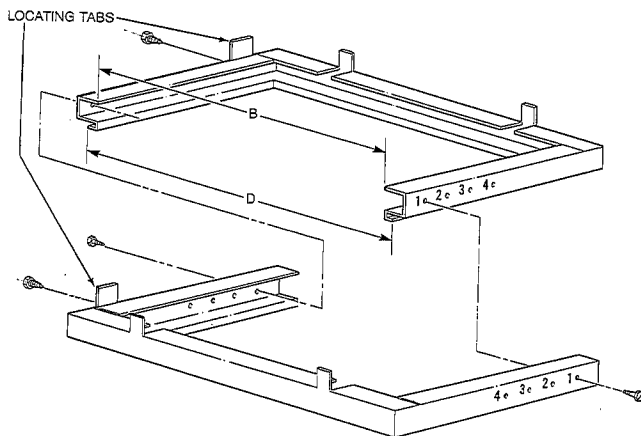


A88324

DIMENSIONS (In.)

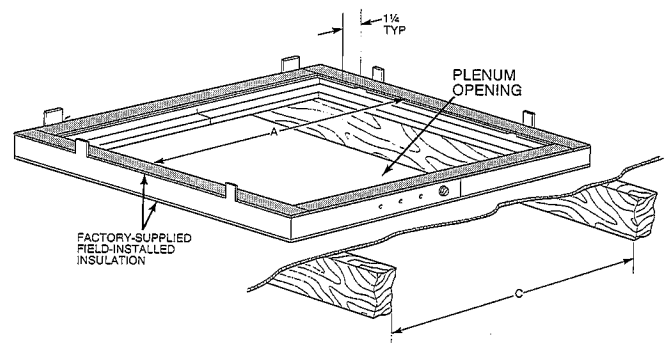
UNIT SIZE	A	D	E	VENT CONN	SHIP. WT
024050	14-3/16	12-9/16	12-11/16	4	124
036050	14-3/16	12-9/16	12-11/16	4	127
024070	14-3/16	12-9/16	12-11/16	4	141
036070	14-3/16	12-9/16	12-11/16	4	145
036096	17-1/2	15-7/8	16	4	154
048096	17-1/2	15-7/8	16	4	154
048115	17-1/2	15-7/8	16	4	171
060115	21	19-3/8	19-1/2	4	181
060135	24-1/2	22-7/8	23	5	192

ACCESSORY DOWNFLOW SUBBASE



A88207

Disassembled



A88206

Assembled

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
17-1/2	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.

SPECIFICATIONS

UNIT SIZE	024050	036050	024070	036070	036096	048096	048115	060115	060135	
RATINGS AND PERFORMANCE										
Input Btuh*	46,000	46,000	69,000	69,000	92,000	92,000	115,000	115,000	135,000	
Capacity†	Nonweatherized ICS‡	37,000	37,000	56,000	56,000	75,000	75,000	94,000	94,000	110,000
AFUE%‡	Nonweatherized ICS‡	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
Certified Temperature Rise Range °F		30—60	20—50	50—80	30—60	45—75	30—60	50—80	35—65	45—75
Certified External Static Pressure Heat/Cool		0.10/0.50	0.10/0.50	0.12/0.50	0.12/0.50	0.15/0.50	0.15/0.50	0.20/0.50	0.20/0.50	0.20/0.50
Airflow CFM	Heating	720	1170	660	1200	1155	1350	1400	1735	1690
	Cooling	895	1215	930	1300	1395	1580	1595	1950	2055
ELECTRICAL										
Unit Volts—Hertz—Phase	115—60—1									
Operating Voltage Range Min—Max	104—127									
Maximum Unit Amps	6.6	8.1	6.7	8.4	9.2	10.2	10.1	13.3	14.3	
Maximum Wire Length	Ft	42	34	42	33	30	28	28	33	31
Minimum Wire Size	14							12		
Maximum Fuse Size	15							20		
Transformer (24v)	40VA									
External Control	Heating	12VA								
Power Available	Cooling	35VA								
Air Conditioning Blower Relay	Standard									
CONTROLS										
Limit Control	SPST									
Heating Blower Control	Solid-State Time Operation									
Burners (Monoport)	2	2	3	3	4	4	5	5	6	
Gas Connection Size	1/2-in. NPT									
GAS CONTROLS										
Gas Valve (Redundant)	White-Rodgers									
	Min Inlet Pressure (in. wc)	4.5 (Natural Gas)								
	Max Inlet Pressure (in. wc)	13.6								
Main Burner Ignitor	Hot Surface									
BLOWER DATA										
Direct-Drive Motor HP—Type (PSC)	1/5	1/3	1/5	1/3	1/3	1/2	1/2	3/4	3/4	
Motor Full Load Amps	2.9	5.8	2.9	5.8	5.8	7.9	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	
Blower Wheel Dia x Width (in.)	10 x 6	10 x 6	10 x 6	10 x 6	10 x 7	10 x 8	10 x 8	11 x 10	11 x 10	
Filter Size—Permanent Washable (in.)	(2) 14 x 20 x 1							(2) 16 x 20 x 1		
FACTORY-AUTHORIZED DEALER-INSTALLED ACCESSORIES										
Accessory Downflow Subbase	KGASB0101ALL									
Gas Conversion Kit—Natural-to-Propane	KGANP2001ALL									
Gas Conversion Kit—Propane-to-Natural	KGAPN1601ALL									
Duct-Flange Kit	KGARF0110ALL									

* Gas inputs shown are for elevations up to 2000 ft. For elevations above 2000 ft, input should be reduced at the rate of 4% for each 1000 ft above sea level. Refer to National Fuel Gas Code Table F.4.

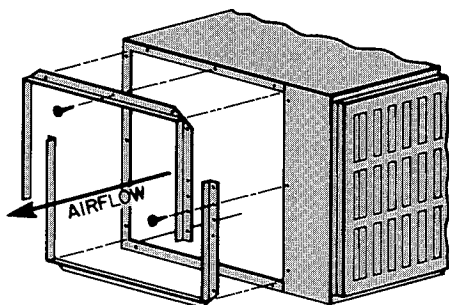
† Tentative capacity in accordance with U.S. Government DOE test procedures.

‡ Isolated Combustion System



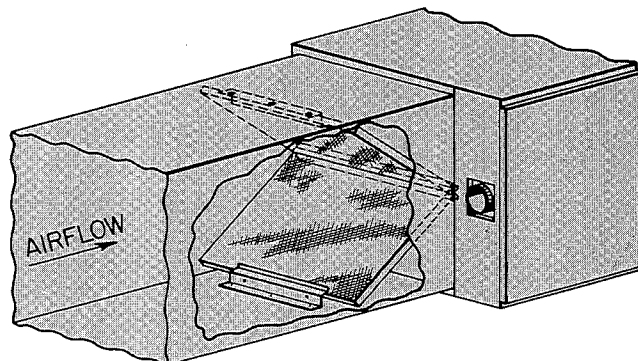
MEETS DOE RESIDENTIAL CONSERVATION SERVICES PROGRAM STANDARDS.

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



**Duct Flanges
(Accessory)**

A82172



**Filter Retainers
(Field Supplied)**

A82173

AIR DELIVERY—CFM (WITH FILTERS)

UNIT SIZE	BLOWER MOTOR HP	SPEED	EXTERNAL STATIC PRESSURE IN. WC							
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
024050	1/5 PSC	High	1100	1050	1000	950	895	840	760	650
		Med-High	860	820	790	760	710	655	580	480
		Med-Low	720	685	650	615	560	505	440	360
036050	1/3 PSC	High	—	1400	1355	1300	1215	1130	1050	960
		Med-High	—	1295	1255	1190	1115	1045	975	890
		Med-Low	1170	1150	1115	1060	1005	950	880	800
		Low	1020	1010	980	945	895	850	785	715
024070	1/5 PSC	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
036070	1/3 PSC	High	—	1490	1425	1365	1300	1240	1175	1100
		Med-High	—	1345	1300	1255	1200	1140	1075	1000
		Med-Low	1200	1180	1140	1100	1060	1015	960	895
		Low	1020	1000	985	950	915	880	835	780
036096	1/3 PSC	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
048096	1/2 PSC	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
048115	1/2 PSC	High	1930	1850	1770	1685	1595	1505	1405	1305
		Med-High	1685	1630	1580	1525	1445	1370	1285	1195
		Med-Low	1425	1400	1370	1325	1280	1225	1155	1070
		Low	1250	1240	1210	1170	1150	1095	1035	950
060115	3/4 PSC	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
060135	3/4 PSC	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.

MINIMUM CLEARANCES (IN. FROM COMBUSTIBLE MATERIALS)

SIZES	050 AND 070	096-135
DOWNFLOW (In Alcove or Closet)		
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

SIZES	050 AND 070	096-135
HORIZONTAL (In Attic, Alcove, or Crawl Space)		
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 Vent	1	1

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.

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

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

‡ Minimum 18-in. front clearance required for alcove.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE
WITH INSTALLATION INSTRUCTIONS