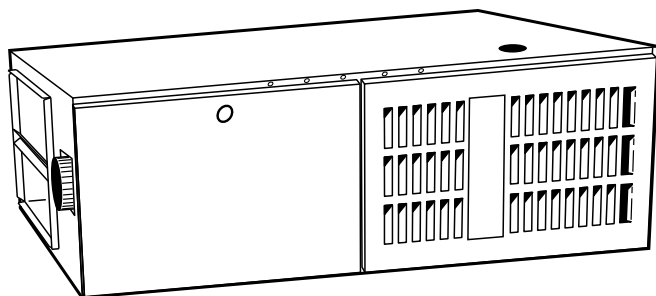


DOWNFLOW



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 percent 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 with an LED status indicator light to ensure top furnace performance. 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 crawlspaces, especially with a high-efficiency cooling coil.

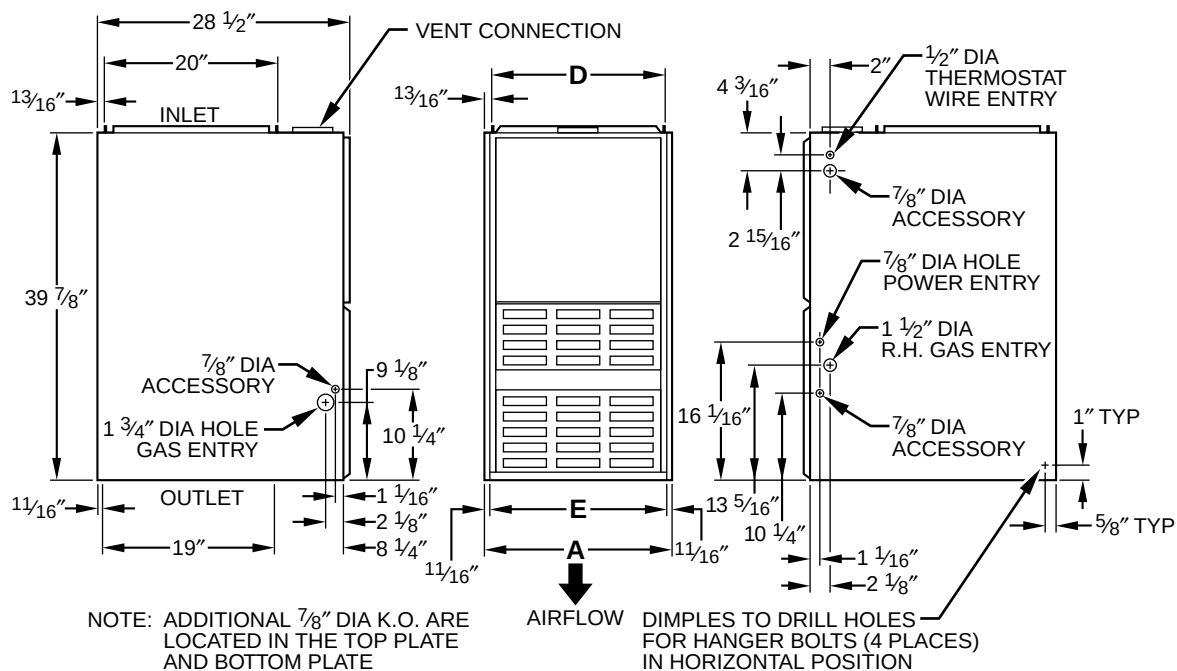
MULTIPOISE DOWNFLOW OR HORIZONTAL—Our furnace can be used in a downflow, horizontal left, or horizontal right configuration.

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 BLOCKED VENT SAFEGUARD—Our induced-combustion furnace has a patented blocked vent safeguard. 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.



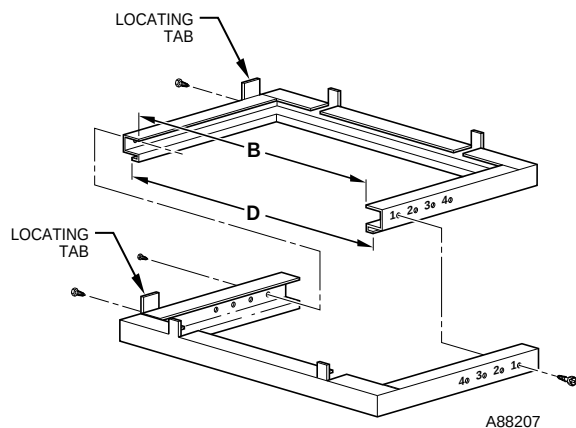
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DIMENSIONS (In.)

UNIT SIZE	A	D	E	VENT CONN* (Dia)	SHIP. WT (Lb)
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
066115	21	19-3/8	19-1/2	4	181
060135	24-1/2	22-7/8	23	5	192

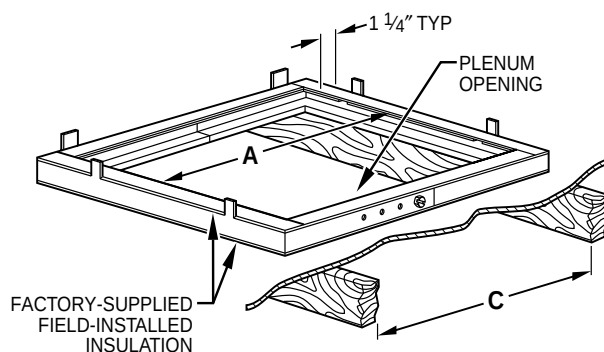
* Refer to the furnace Installation Instructions for proper venting procedures.

ACCESSORY DOWNFLOW SUBBASE



A88207

Disassembled



A88206

Assembled

DIMENSIONAL DATA (In.)

FURNACE CASING WIDTH	FURNACE IN DOWNFLOW APPLICATION	PLENUM OPENING*		FLOOR OPENING		HOLE NO. FOR WIDTH ADJUSTMENT
		A	B	C	D	
14-3/16	Furnace with or without CD5 or CK5 Coil Assembly or KCAKC Coil Box	11-13/16	19	13-7/16	20-3/8	4
17-1/2	Furnace with or without CD5 or CK5 Coil Assembly or KCAKC Coil Box	15-1/8	19	16-3/4	20-3/8	3
21	Furnace with or without CD5 or CK5 Coil Assembly or KCAKC Coil Box	18-5/8	19	20-1/4	20-3/8	2
24-1/2	Furnace with or without CD5 or CK5 Coil Assembly or KCAKC Coil Box	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.

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 a building constructed on site.

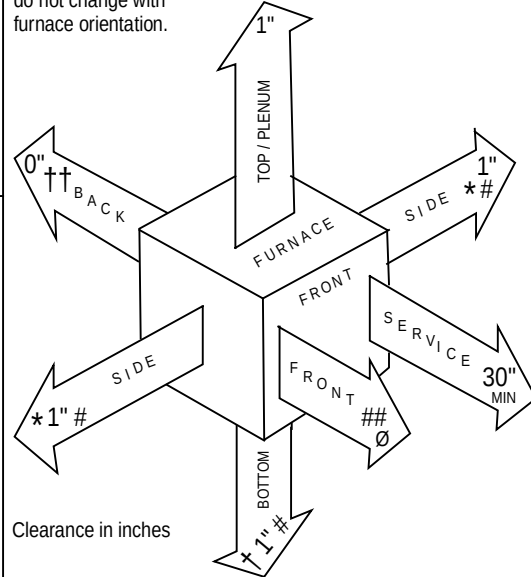
This furnace may be installed on combustible flooring in alcove or closet at minimum clearance from combustible material.

This furnace may be used with a Type B-1 Vent and may be vented in common with other gas-fired appliances.

- † For installation on non-combustible floors only.
For installation on combustible flooring only when installed on special base, Part No. KGASB0201ALL, Coil Assembly, Part No. CD5 or CK5, or Coil Casing, Part No. KCAKC.
- # For furnaces wider than 14.25 inches (362mm) may be 0 inches.
- Ø 18 inches front clearance required for alcove.
- * Indicates supply or return sides when furnace is in the horizontal position. Line contact only permissible between lines formed by intersections of the Top and two Sides of the furnace jacket, and building joists, studs or framing.
- ## For single wall vent type 6 inches.
For Type B-1 vent type 3 inches.
- †† Clearance to Back 0 inches (0 po) in downflow and horizontal (attic/alcove & crawlspace) positions and 3 inches (3 po) in horizontal closet positions.

This furnace is approved for DOWNFLOW and HORIZONTAL installations.

Clearance arrows do not change with furnace orientation.



Vent Clearance to combustibles:

For Single Wall vents 6 inches (6 po).

For Type B-1 vent type 1 inch (1 po).

322286-101 REV. E (LIT)

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CONTROLS—THERMOSTATS AND ZONING

THERMOSTAT—NON-PROGRAMMABLE	For Use with 1-Speed Air Conditioner—TSTATBHNAC01-A For Use with 2-Speed Air Conditioner—TSTATBHN2S01-A For Use with 2-Speed Heat Pump—TSTATBHN2S01-A
THERMOSTAT—PROGRAMMABLE	For Use with 1-Speed Air Conditioner—TSTATBHPAC01-A For use with 2-Speed Air Conditioner—TSTATBHP2S01-A For Use with 1-Speed Heat Pump—TSTATBHPDF01-A For Use with 2-Speed Heat Pump—TSTATBHP2S01-A or TSTATBHPDF01-A
THERMIDISTAT™—PROGRAMMABLE THERMOSTAT with Humidity Control	TSTATBHPRH01-A
ZONING—2-ZONE	ZONEBB2KIT01, ZONEKIT2ZBDP
ZONING—4-ZONE	ZONEBB4KIT01

SPECIFICATIONS

UNIT SIZE		024050	036050	024070	036070	036096	048096	048115	060115	066115	060135
RATINGS AND PERFORMANCE											
Input Btuh*		46,000	46,000	69,000	69,000	92,000	92,000	115,000	115,000	115,000	135,000
Output Capacity (Btuh)†		Nonweatherized ICS									
AFUE%†		Nonweatherized ICS									
Certified Temperature Rise Range °F		30—60	20—50	50—80	30—60	45—75	30—60	50—80	35—65	35—65	45—75
Certified External Static Pressure		Heat/Cool									
Airflow CFM		Heating									
		Cooling									
ELECTRICAL											
Unit Volts—Hertz—Phase		115—60—1									
Operating Voltage Range		Min—Max									
Maximum Unit Amps		6.6	8.1	6.7	8.4	9.2	10.2	10.1	13.3	15.2	14.3
Maximum Wire Length (Measured 1 Way in Ft)		42	34	42	33	30	28	28	33	29	31
Minimum Wire Size		14							12		
Maximum Fuse Size		15							20		
Transformer (24v)		40va									
External Control		Heating									
Power Available		Cooling									
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	5	6
Gas Connection Size		1/2-in. NPT									
GAS CONTROLS											
Gas Valve (Redundant)		White-Rodgers									
		Min Inlet Pressure (In. wc)									
		Max Inlet Pressure (In. wc)									
Ignition Device		Hot Surface									
BLOWER DATA											
Direct-Drive Motor HP (PSC)		1/5	1/3	1/5	1/3	1/3	1/2	1/2	3/4	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	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
Blower Wheel Diameter 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	11 x 10
Filter Size (In.)—Permanent Washable (Supplied)		(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									

* Gas inputs shown are for elevations up 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 and AFUE in accordance with U.S. Government DOE test procedures.

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

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

ICS—Isolated Combustion System

AIR DELIVERY—CFM (With Filters)

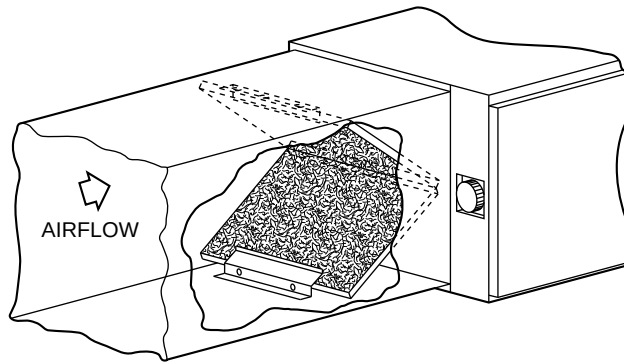
UNIT SIZE	BLOWER MOTOR HP	SPEED	EXTERNAL STATIC PRESSURE (IN. WC)							
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
024050	1/5 PSC	High	1100	1050	1000	950	895	840	760	650
		Med-High	860	820	790	760	710	655	580	480
		Med-Low	720	685	650	615	560	505	440	360
036050	1/3 PSC	High	1450	1385	1320	1245	1160	1060	970	855
		Med-High	1305	1270	1225	1160	1090	1000	910	810
		Med-Low	1165	1135	1090	1045	990	905	830	730
		Low	1005	980	955	915	870	810	740	650
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	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
036096	1/3 PSC	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
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
066115	3/4 PSC	High	2540	2460	2395	2310	2215	2115	2030	1925
		Med-High	2155	2125	2095	2050	1980	1910	1830	1745
		Med-Low	1800	1790	1780	1750	1705	1660	1600	1520
		Low	1565	1570	1565	1545	1515	1465	1410	1340
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.



**MEETS DOE RESIDENTIAL
CONSERVATION SERVICES
PROGRAM STANDARDS.**

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



**Filter Retainers
(Field Supplied)**

A94307

SERVICE TRAINING

Packaged Service Training programs are an excellent way to increase your knowledge of the equipment discussed in this manual, including:

- Unit Familiarization
- Maintenance
- Installation Overview
- Operating Sequence

A large selection of product, theory, and skills programs is available, using popular video-based formats and materials. All include video and/or slides, plus companion book.

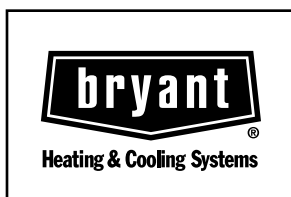
Classroom Service Training plus "hands-on" the products in our labs can mean increased confidence that really pays dividends in faster troubleshooting, fewer callbacks. Course descriptions and schedules are in our catalog.

CALL FOR FREE CATALOG 1-800-962-9212

☐ Packaged Service Training

☐ Classroom Service Training

A94328



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE
WITH INSTALLATION INSTRUCTIONS

Cancels: PDS 376CAV.50.1B