

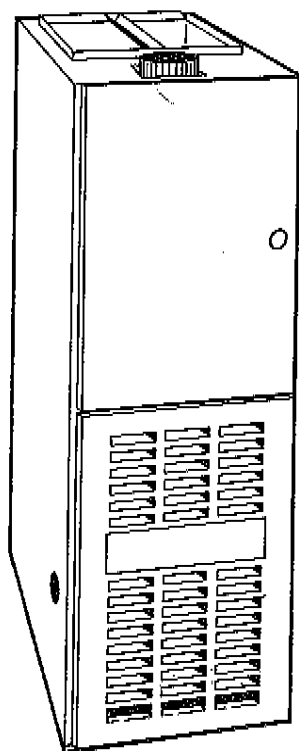


HIGH EFFICIENCY 2-SPEED DOWNFLOW/HORIZONTAL INDUCED-COMBUSTION FURNACE

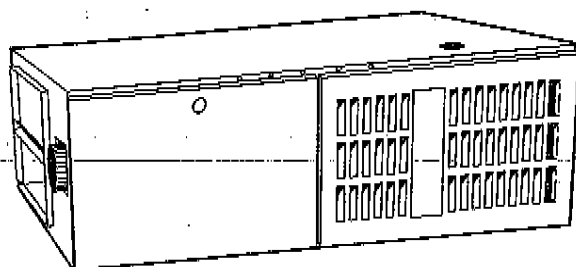
331AAV

Sizes 065 thru 125

Series A



DOWNFLOW



HORIZONTAL

The model 331AAV Two-Speed 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 331AAV Two-Speed Gas Furnace has the kind of overall performance needed in today's homes.

FEATURES

EFFICIENCY — The 331AAV Two-Speed 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 — The 331AAV Furnace has an Intelligent control that monitors the operation of the furnace. This control also has a component-test feature that enables the servicing technician to verify operation of the control; high and low inducer; hot surface ignitor; and low-, medium-, and high-speed blower operation. The control features a 3-amp fuse that protects the transformer and control. We guarantee the reliability of the control with a 3-year Limited Warranty.

40-IN. HEIGHT — The 331AAV Induced-Combustion Furnace with a 40-in. cabinet height simplifies installation in attics, closets, and crawlspaces, especially with a high-efficiency cooling coil.

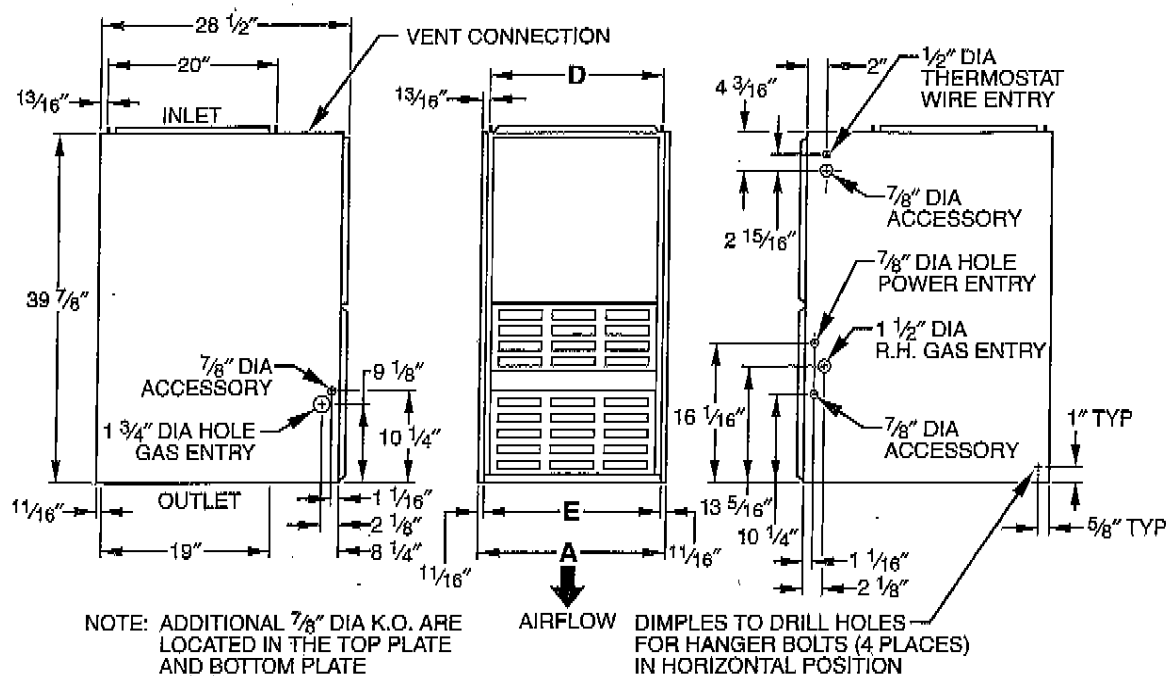
MULTIPOISED DOWNFLOW OR HORIZONTAL — Our furnace can be used in a downflow, horizontal left, or horizontal right configuration.

PREPAINTED CABINET — The 331AAV 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 331AAV Furnace.

EASY INSTALLATION — The model 331AAV has many features that make installation easier: left or right gas and electrical connections, heating and cooling blower speed selector, matching coil sizes, accessory low-voltage connections, and many more.

QUIET OPERATION — A soft mount inducer assembly and 2-stage slow-opening gas valve reduces sound level. The 2-speed operation capability minimizes furnace and air noise for total home comfort.

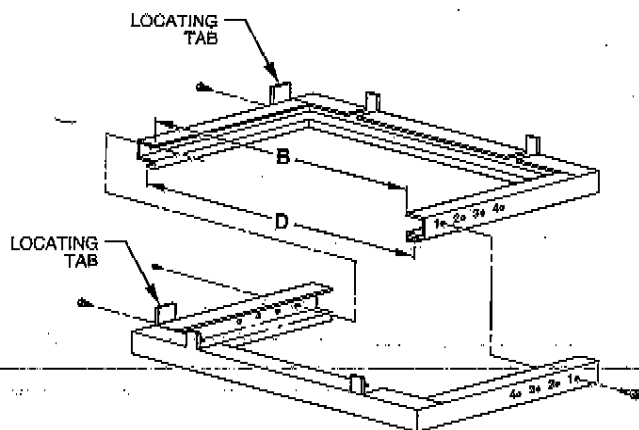


A88324

DIMENSIONS (In.)

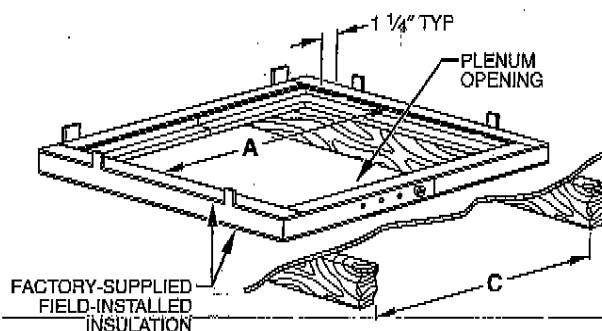
UNIT SIZE	A	D	E	VENT CONN	SHIP. WT (LB)
024065	14-3/16	12-9/16	12-11/16	4	141
036065	14-3/16	12-9/16	12-11/16	4	145
036085	17-1/2	15-7/8	16	4	154
048085	17-1/2	15-7/8	16	4	154
060105	21	19-3/8	19-1/2	4	181
060125	24-1/2	22-7/8	23	5	192

ACCESSORY DOWNFLOW SUBBASE



A88207

mbled



A88208

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		024065	036065	036085	048085	060105	060125
RATINGS AND PERFORMANCE							
Gas Input Btuh*	High Stage	63,000	63,000	84,000	84,000	105,000	123,000
	Low Stage	40,500	40,500	54,000	54,000	67,500	81,000
Output Capacity (Btuh)†	High Stage	51,000	52,000	69,000	69,000	86,000	101,000
	Low Stage	33,000	33,000	44,000	44,000	55,000	66,000
Nonweatherized ICS							
AFUE‡		Nonweatherized ICS 80.0					
Certified Temperature Rise Range Range (°F)	High Stage	55—85	30—60	40—70	30—60	35—65	45—75
	Low Stage	30—60	15—45	25—55	15—45	20—50	25—55
Certified External Static Pressure		Heat/Cool	0.12/0.50	0.10/0.50	0.15/0.50	0.15/0.50	0.20/0.50
Airflow CFM	Heating High/Low	660/585	1165/985	1060/900	1355/1170	1735/1500	1690/1480
	Cooling	930	1195	1255	1580	1950	2055
ELECTRICAL							
Unit Volts—Hertz—Phase		115—60—1					
Operating Voltage Range		Min—Max 104—127					
Maximum Unit Amps		8.0	11.0	12.0	13.2	17.2	18.4
Maximum Wire Length (Measured 1 Way)		Ft 46	33	30	28	33	31
Minimum Wire Size		14				12	
Maximum Fuse Size		15				20	
Transformer (24v)		40va					
External Control		Heating	19va				
Power Available		Cooling	35va				
Air Conditioning Blower Relay		Standard					
CONTROLS							
Limit Control		SPST (Auto-Reset)					
Heating Blower Control		Solid-State Time Operation					
Inducer		2-Speed					
Burners (Monoport)		3	3	4	4	5	6
Gas Connection Size		1/2-in. NPT					
GAS CONTROLS							
2-Stage Gas Valve (Redundant)		White-Rodgers					
Min Inlet Pressure (In. wc)		4.5 (Natural Gas)					
Max Inlet Pressure (In. wc)		13.6 (Natural Gas)					
Ignition Device		Hot Surface					
BLOWER DATA							
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					
Blower Wheel Diameter x Width (In.)		10 x 6		10 x 7	10 x 8	10 x 6	10 x 10
Filter Size (In.)—Permanent Washable (Supplied)		(2) 14 x 20 x 1				(2) 16 x 20 x 1	
DEALER-INSTALLED ACCESSORIES							
Accessory Downflow Subbase**		KGASB0201ALL					
High-Altitude Pressure Switch Kit‡		KGAAH5601PSW					
Gas Conversion Kit—Natural-to-Propane		KGANP24012SP					
Gas Conversion Kit—Propane-to-Natural		KGAPN20012SP					

* 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 F4. 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. California Seasonal Efficiency based on California-specified procedures.

‡ 5500 ft and higher above sea level.

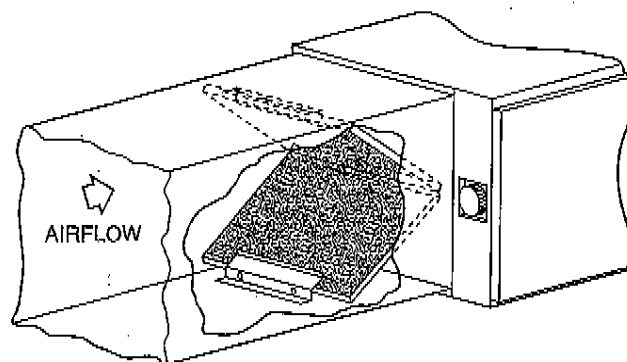
** Required for installation on combustible floors when no coil box is used, or when any coil box other than a BDP cased coil is used.

ICS—Isolated Combustion System

AIR DELIVERY—CFM (With Filter)

UNIT SIZE	BLOWER MOTOR HP	EXTERNAL STATIC PRESSURE (IN. WC)								
		SPEED	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
024065	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
		Low	590	570	545	510	470	405	360	295
036065	1/3 PSC	High	1435	1385	1320	1265	1195	1145	1080	1000
		Med-High	1300	1265	1230	1185	1135	1070	1010	940
		Med-Low	1185	1140	1100	1055	1005	975	920	850
		Low	985	950	945	920	890	850	810	745
036085	1/3 PSC	High	1445	1420	1380	1320	1255	1180	1075	940
		Med-High	1255	1250	1220	1180	1140	1085	975	830
		Med-Low	1080	1055	1045	1025	975	915	820	680
		Low	900	895	890	870	830	760	665	545
048085	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
060105	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
060125	3/4 PSC	High	—	2250	2190	2130	2055	1980	1875	1780
		Med-High	—	2000	1980	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.



**Filter Retainers
(Field Supplied)**

A94307

UNIT SIZE	065 and 085	105 and 125
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

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

† 18-in. front clearance required for alcove.

‡ Clearance shown is for the outlet end. The inlet end must maintain 6-in. clearance from flue to combustible materials 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.

UNIT SIZE	065 and 085	105 and 125
HORIZONTAL (In Alcove, Attic, or Crawlspace)		
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



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

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



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE
WITH INSTALLATION INSTRUCTIONS

Cancel: PDS 331AAV.40.5B