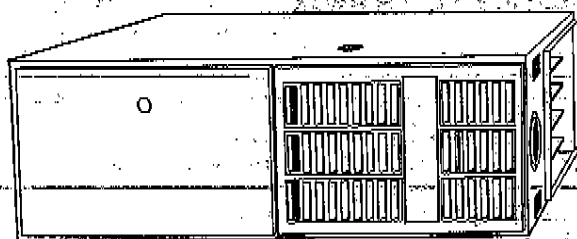
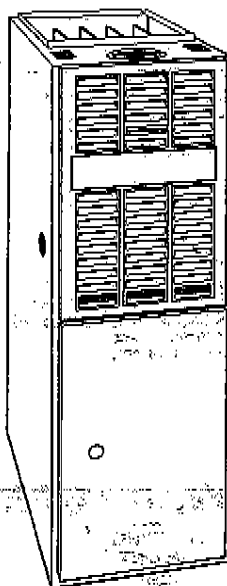




PLUS 80 TWO-SPEED UPFLOW/HORIZONTAL INDUCED COMBUSTION FURNACE

330JAV

 Sizes 060 thru 120
Series A


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 Plus 80 Two-Speed Upflow/Horizontal Furnace achieves an 80% Annual Fuel Utilization Efficiency (AFUE) rating. The benefits of 2-speed operation in reducing sound and improving comfort put it in a class well ahead of the competition. The Plus 80 Two-Speed has the kind of overall performance needed in today's homes. All models are GAMA efficiency rating certified and certified for use in California Air Quality Management Districts.

FEATURES

EFFICIENCY — The Plus 80 Two-Speed Induced-Combustion Gas Furnace provides the efficiency customers want with 80.0% AFUE.

HOT SURFACE IGNITION — No pilot to waste gas with this field-proven ignition system.

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 Plus 80 Two-Speed 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, the high and low inducer, the hot surface ignitor, and high-, medium-, and low-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.

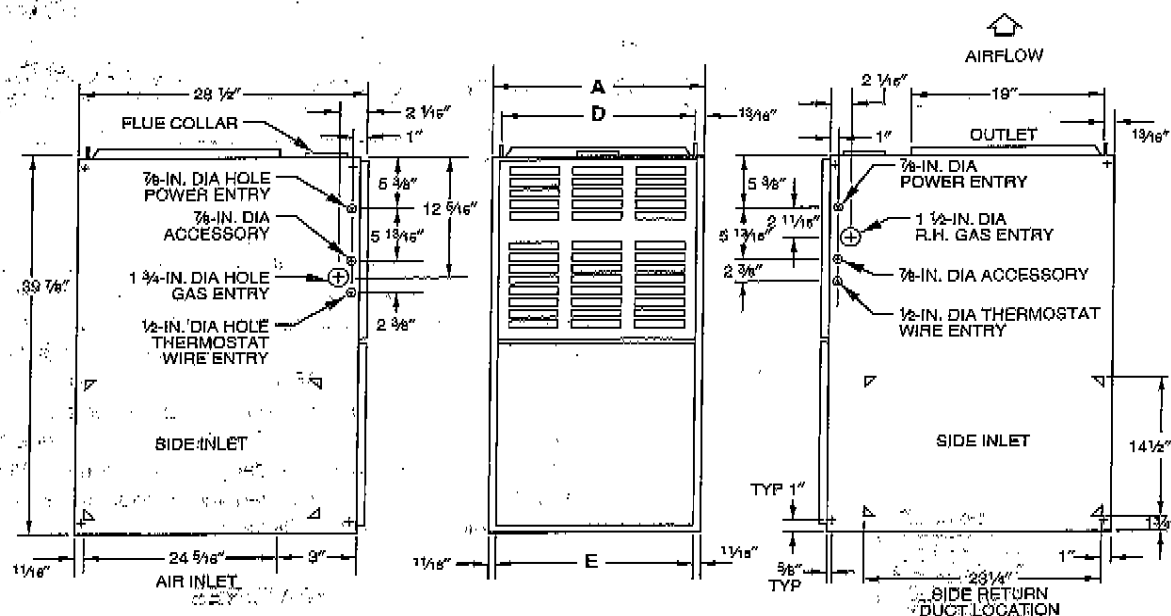
40-IN. HEIGHT — The Plus 80 Two-Speed cabinet height is only 40 in. This simplifies installation in alcoves, attics, basements (ideal for short basement), closets, and utility rooms, especially with a taller high-efficiency cooling coil.

PREPAINTED CABINET — The Plus 80 Two-Speed uses pre-painted 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 Plus 80 Two-Speed furnace.

EASY INSTALLATION — The Plus 80 Two-Speed 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 reduce sound level. The 2-speed operation capability minimizes furnace and air noise for total home comfort.



- NOTES: 1. Two additional 7/8-in. dia holes are located in the top plate.
 2. Minimum return-air opening at furnace:
 a. For 800 CFM—16-in. round or 14 1/2 x 12-in. rectangle.
 b. For 1200 CFM—20-in. round or 14 1/2 x 19 1/2-in. rectangle.
 c. For 1600 CFM—22-in. round or 14 1/2 x 23 1/4-in. rectangle.
 d. For airflow requirements above 1600 CFM, use both side inlets, a combination of 1 side inlet and the bottom, or the bottom only.

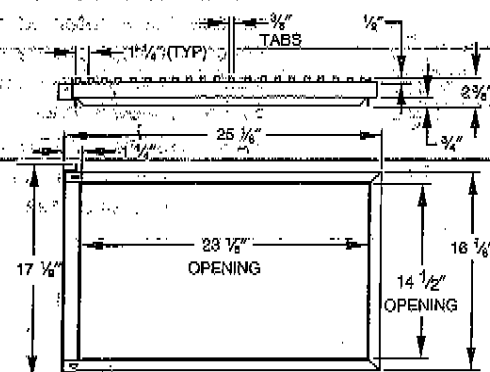
A88367

DIMENSIONS (In.)

UNIT SIZE	A	D	E	VENT CONNECTION*	SHIPPING WEIGHT (LB)
036060	14-3/16	12-9/16	12-11/16	4	134
048080	21	19-3/8	19-1/2	4	154
048100	21	19-3/8	19-1/2	4	166
060100	24-1/2	22-7/8	23	4	184
080120	24-1/2	22-7/8	23	5	194

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

DIMENSIONAL DRAWINGS OF OPTIONAL SIDE FILTER RACK



A80199

SPECIFICATIONS

UNIT SIZE		036060	048080	048100	060100	060120
RATINGS AND PERFORMANCE						
Gas Input (Btuh)*	High Stage	60,000	80,000	100,000	100,000	117,000
	Low Stage	39,000	52,000	65,000	65,000	78,000
Output Capacity (Btuh)†	High Stage	48,000	64,000	80,000	81,000	94,000
	Low Stage	31,000	42,000	52,000	52,000	63,000
Nonweatherized ICS						
AFUE%‡	Nonweatherized ICS	80.0	80.0	80.0	80.0	80.0
Certified Temperature Rise Range (°F)	High Stage	25—55	30—60	40—70	25—55	40—70
	Low Stage	15—45	15—45	20—50	15—45	25—55
Certified External Static Pressure		Heat/Cool	0.12/0.50	0.15/0.50	0.20/0.50	0.20/0.50
Airflow CFM‡	Heating High/Low	1140/990	1445/1260	1410/1265	1720/1515	1730/1525
	Cooling	1195	1740	1575	2210	1980
ELECTRICAL						
Unit Volts—Hertz—Phase		115—60—1				
Operating Voltage Range		104—127				
Maximum Unit Amps		11.4	13.5	13.2	19.0	18.2
Maximum Wire Length (Measured 1 Way) Ft		32	27	28	30	31
Minimum Wire Size		14				
Maximum Fuse Size		15				
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	4	5	6	
Gas Connection Size		1/2-In. NPT				
GAS CONTROLS						
2-Stage Redundant Gas Valve		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)		1/3	1/2	1/2	3/4	3/4
Motor Full Load Amps		5.8	7.9	7.9	11.1	11.1
RPM (Nominal)—Speeds		1075—4	1075—4	1075—4	1075—4	1075—4
Blower Wheel Diameter x Width (In.)		10 x 6	10 x 6	10 x 8	11 x 10	11 x 10
Filter Size (In.)—Permanent Washable (Supplied)		(1) 16 x 25 x 1	(1) 20 x 25 x 1	(1) 20 x 25 x 1	(2) 16 x 25 x 1	(2) 16 x 25 x 1
FACTORY-AUTHORIZED DEALER-INSTALLED ACCESSORIES						
Twinnig Kit		N/A	KGATW0301HSI			
High-Altitude Pressure Switch Kit**		KGAHA5501PSW				
Gas Conversion Kit—Natural-to-Propane		KGANP24012SP				
Gas Conversion Kit—Propane-to-Natural		KGAPN20012SP				
Slide Filter Rack (Accepts 1 Filter)		KGAFR0201ALL (Filter Size 16 x 25 x 1)				
Return Filter Cabinet (With Washable Filters)		KGARP0201ALL (Filter Size 2—20 x 25 x 1)				

* 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.

‡ Air delivery above 1800 CFM requires that both sides, or a combination of 1 side and bottom, or bottom only of the furnace be used for return air. A filter is required for each return-air supply.

** 5500 ft and higher above sea level.

ICS—Isolated Combustion System

N/A—Not Applicable



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

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

AIR DELIVERY—CFM (With Filter)*

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
036060	1/3 PSC	High	1430	1380	1325	1265	1195	1125	1045	945
		Med-High	1310	1275	1235	1190	1135	1065	990	900
		Med-Low	1140	1130	1100	1065	1000	965	910	815
		Low	990	985	960	935	905	855	800	710
048080	1/2 PSC	High	2010	1950	1875	1810	1740	1660	1550	1455
		Med-High	1675	1660	1625	1600	1545	1490	1395	1295
		Med-Low	1445	1430	1415	1400	1370	1325	1265	1170
		Low	1260	1260	1260	1250	1210	1180	1115	1030
048100	1/2 PSC	High	1880	1815	1745	1690	1575	1500	1400	1265
		Med-High	1660	1615	1570	1505	1435	1355	1260	1170
		Med-Low	1455	1410	1375	1350	1290	1235	1145	985
		Low	1265	1265	1240	1210	1180	1110	995	855
060100	3/4 PSC	High	2475	2405	2330	2265	2210	2130	2040	1945
		Med-High	2055	2025	2000	1965	1930	1865	1795	1720
		Med-Low	1725	1720	1705	1685	1665	1630	1585	1525
		Low	1500	1515	1510	1500	1480	1460	1415	1370
060120	3/4 PSC	High	—	2210	2130	2055	1980	1895	1795	1680
		Med-High	2015	1975	1925	1880	1805	1735	1655	1555
		Med-Low	1730	1710	1670	1635	1590	1535	1470	1385
		Low	1525	1520	1495	1450	1410	1375	1315	1245

* Air delivery above 1800 CFM requires that both sides, or a combination of 1 side and bottom, or bottom only of the furnace to be used for return air.

A filter is required for each return-air supply opening.

— Indicates unstable operating conditions.

CLEARANCES FROM COMBUSTIBLE MATERIALS (In.)

UNIT SIZE		060	060-120
UPFLOW			
Furnace Sides	Single-Wall Vent	1	0
	Type B-1 Double-Wall Vent	0	0
Furnace Back		0	0
Plenum Top		1	1
Furnace Front (See Notes)	Single-Wall Vent	6	6
	Type B-1 Double-Wall Vent	3	6
Vent	Single-Wall Vent	6	6
	Type B-1 Double-Wall Vent	1	1

HORIZONTAL POSITION (IN ALCOVE, ATTIC, AND CRAWLSPACE)		
Sides†‡	1	1
Back	0	0
Top	Single-Wall Vent	1
	Type B-1 Double-Wall Vent	1
Furnace Front† (See Notes)	Single-Wall Vent	6
	Type B-1 Double-Wall Vent	3
Vent	Single-Wall Vent	6
	Type B-1 Double-Wall Vent	1
HORIZONTAL POSITION (IN CLOSET)		
Sides†‡	1	1
Back	3	3
Top	Single-Wall Vent	2
	Type B-1 Double-Wall Vent	2
Furnace Front (See Notes)	Single-Wall Vent	6
	Type B-1 Double-Wall Vent	3
Vent	Single-Wall Vent	6
	Type B-1 Double-Wall Vent	1

* 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.

† 18 in. front clearance required for alcove.

‡ 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.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE WITH INSTALLATION INSTRUCTIONS

Cancels: PDS 330J.60.18

