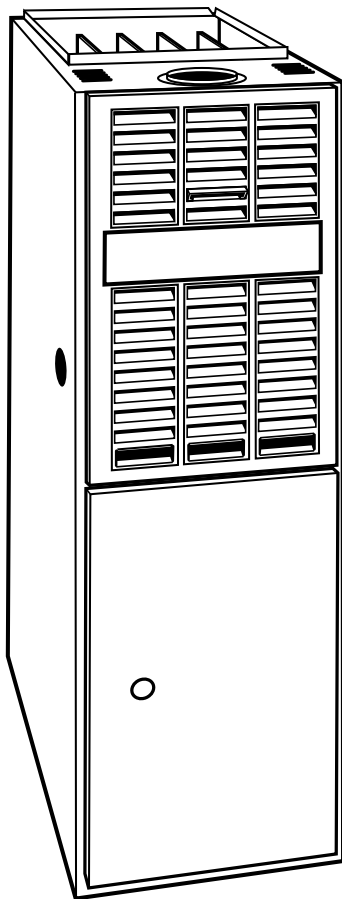




The 393AAV's ability to vent into many tile-lined exterior masonry chimneys with a chimney adapter kit puts it in a class well ahead of the competition. The model 393AAV Gas Furnace has the kind of overall performance needed in today's homes.

FEATURES

EFFICIENCY—The 393AAV Induced-Combustion Gas Furnace provides the efficiency customers want with 78.0 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—The 393AAV Furnace has an intelligent control with an LED status indicator light to ensure top furnace performance. This control also has a self-test feature that enables the servicing technician to verify operation of the control itself, the inducer, the hot surface ignitor, both heating- and cooling-speed blower operation, and the electronic air cleaner. The control also features a 3-amp fuse that protects the transformer and control. We guarantee the reliability of the control with a 3-year Limited Warranty.

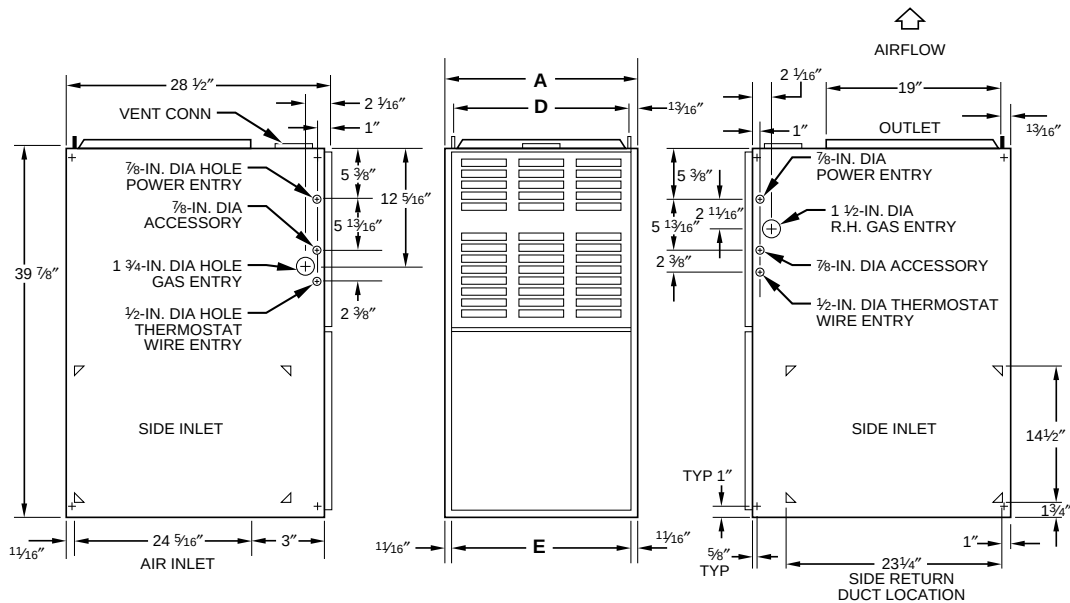
40-IN. HEIGHT—The 393AAV Induced-Combustion Furnace with a 40-in. cabinet height simplifies installation in alcoves, attics, basements (ideal for low basement), closets, and utility rooms, especially with a high-efficiency cooling coil.

PREPAINTED CABINET—The 393AAV 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 (DRAFT SAFEGUARD SWITCH)—Our induced-combustion furnace has a patented blocked vent (draft safeguard switch). The safeguard switch will stop furnace operation if the vent system becomes blocked or is not operating properly.

EASY INSTALLATION—The model 393AAV 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 improves sound level.



- NOTES:** 1. Two additional $\frac{7}{8}$ -in. dia holes are located in the top plate.
 2. Minimum return-air opening at furnace:
 a. For 800 CFM—16-in. round or $14\frac{1}{2}$ x 12-in. rectangle.
 b. For 1200 CFM—20-in. round or $14\frac{1}{2}$ x $19\frac{1}{2}$ -in. rectangle.
 c. For 1600 CFM—22-in. round or $14\frac{1}{2}$ x $23\frac{1}{4}$ -in. rectangle.
 d. For airflow requirements above 1800 CFM, use both side inlets, a combination of 1 side inlet and the bottom, or the bottom only.

A98025

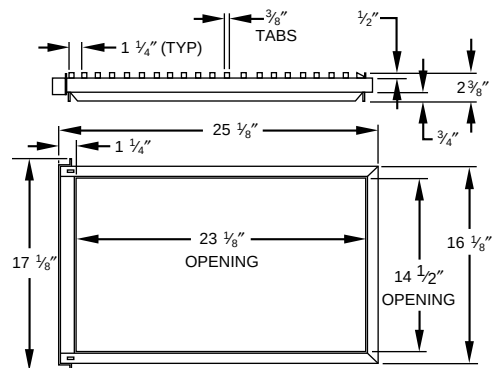
DIMENSIONS (In.)

UNIT SIZE	A	D	E	VENT CONN* (Dia)	SHIP. WT (Lb)
024070	14-3/16	12-9/16	11-11/16	4	132
036070	14-3/16	12-9/16	11-11/16	4	134
042091	17-1/2	15-7/8	16	4	150
048111	21	19-3/8	18-1/2	4	166
060136	24-1/2	22-7/8	22	5	194
060155	24-1/2	22-7/8	22	5†	204

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

† Oval collar

OPTIONAL SIDE FILTER RACK



A80199

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.

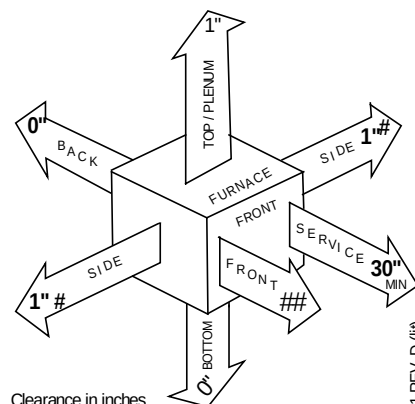
This furnace may be used with a Type B-1 Vent and may be vented in common with other gas-fired appliances.

- # For furnaces wider than 14.25 inches (362mm) may be 0 inches.
 ## For single wall vent type 6 inches. For Type B-1 vent type 3 inches.

INSTALLATION WITH CHIMNEY ADAPTER KIT

Chimney Adapter Kits: No. KGACA01014FC or No. KGACA01015FC may be required for some exterior masonry chimney applications. See Installation Instructions.

This furnace is approved for UPFLOW installations only.



Clearance in inches

Vent Clearance to combustibles:
 For Single Wall vents 6 inches (6 po).
 For Type B-1 vent type 1 inch (1 po).

323653-101 REV D (11)

SPECIFICATIONS

For use With		024070	036070	042091	048111	060136	060155
RATINGS AND PERFORMANCE							
Input Btuh*		66,000	66,000	88,000	110,000	132,000	154,000
Output Capacity (Btuh)†	Nonweatherized ICS	52,000	52,000	69,000	87,000	105,000	122,000
AFUE†	Nonweatherized ICS	78.0	78.0	78.0	78.0	78.0	78.0
Certified Temperature Rise Range °F		40—70	30—60	40—70	45—75	40—70	50—80
Certified External Static Pressure	Heat/Cool	0.12/0.50	0.12/0.50	0.15/0.50	0.20/0.50	0.20/0.50	0.20/0.50
Airflow CFM	Heating	830	1140	1170	1415	1775‡	1770‡
	Cooling	880	1195	1360	1575	2025‡	2055‡
ELECTRICAL							
Unit Volts—Hertz—Phase		115—60—1					
Operating Voltage Range	Min—Max	104—127					
Maximum Unit Amps		5.9	8.7	9.0	10.1	13.3	14.0
Maximum Wire Length (Measured 1 Way in Ft)		47	32	31	28	33	31
Minimum Wire Size (AWG)		14				12	
Maximum Fuse Size or HACR-Type Ckt Bkr (Amps)**		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)		3	3	4	5	6	7
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 (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—3	1075—4	1075—4	1075—4	1075—4	1075—4
Blower Wheel Diameter x Width (In.)		10 x 6	10 x 6	10 x 7	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) 24 x 29 x 1	
FACTORY-AUTHORIZED DEALER-INSTALLED ACCESSORIES							
Exterior Chimney Adapter Kit		KGACA01014FC (6-In. Outlet)				KGACA01015FC (7-In. Outlet)	
Gas Conversion Kit—Natural-to-Propane††		KGANP2001ALL					
Gas Conversion Kit—Propane-to-Natural††		KGAPN1601ALL					
Side Filter Rack Accepts 1 Filter (In.)		KGAFR0201ALL (Filter Size 16 x 25 x 1)					
Air Cleaner		Model AIRA or 902B					
Humidifier		Model 912D, 912E, 913B, 913C, or 914A					
Ventilator		Model VA3B, VB5B, VC5B, or VL3A					

* Gas input ratings are certified for elevations 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.

‡ 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 inlet.

** Time-delay fuse is recommended.

†† Gas conversion kits are A.G.A. and C.G.A. approved.

ICS—Isolated Combustion System

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

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
024070	1/5 PSC	High	1040	1010	975	935	880	810	735	640
		Med-High	855	830	800	765	715	660	600	490
		Med-Low	745	715	690	650	605	550	475	385
036070	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	965	960	935	905	855	800	710
042091	1/3 PSC	High	1570	1535	1480	1415	1360	1280	1185	1070
		Med-High	1370	1355	1330	1290	1240	1170	1080	955
		Med-Low	1170	1165	1150	1115	1085	1035	970	880
		Low	1010	1005	990	965	950	905	845	745
048111	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
060136	3/4 PSC	High	—	2260	2185	2085	2025	1935	1835	1730
		Med-High	2110	2070	2015	1960	1885	1810	1715	1620
		Med-Low	1790	1775	1755	1720	1670	1610	1535	1455
		Low	1495	1500	1515	1485	1450	1400	1345	1270
060155	3/4 PSC	High	—	2300	2235	2155	2055	1980	1870	1775
		Med-High	—	2050	2005	1945	1880	1805	1720	1640
		Med-Low	1790	1770	1740	1710	1635	1580	1520	1440
		Low	1520	1525	1505	1485	1450	1410	1350	1290

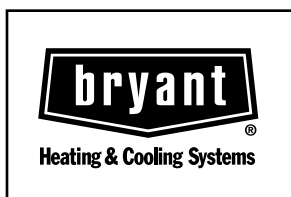
* Air delivery above 1800 CFM requires that both sides, or a combination of 1 side and bottom, or bottom only of the furnace to be used for return air. A filter is required for each return-air inlet.

— 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.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE WITH INSTALLATION INSTRUCTIONS

Cancels: PDS 393AAV.70.1B