

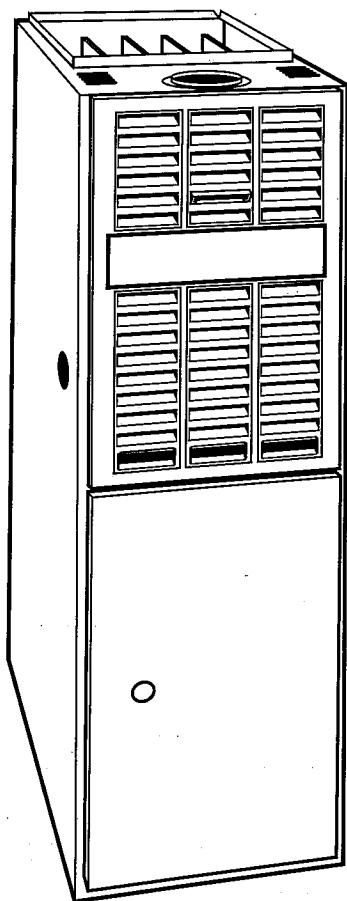


Heating & Cooling

INDUCED-COMBUSTION UPFLOW FURNACE

393AAV

Sizes 070 thru 155
Series A



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% 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.

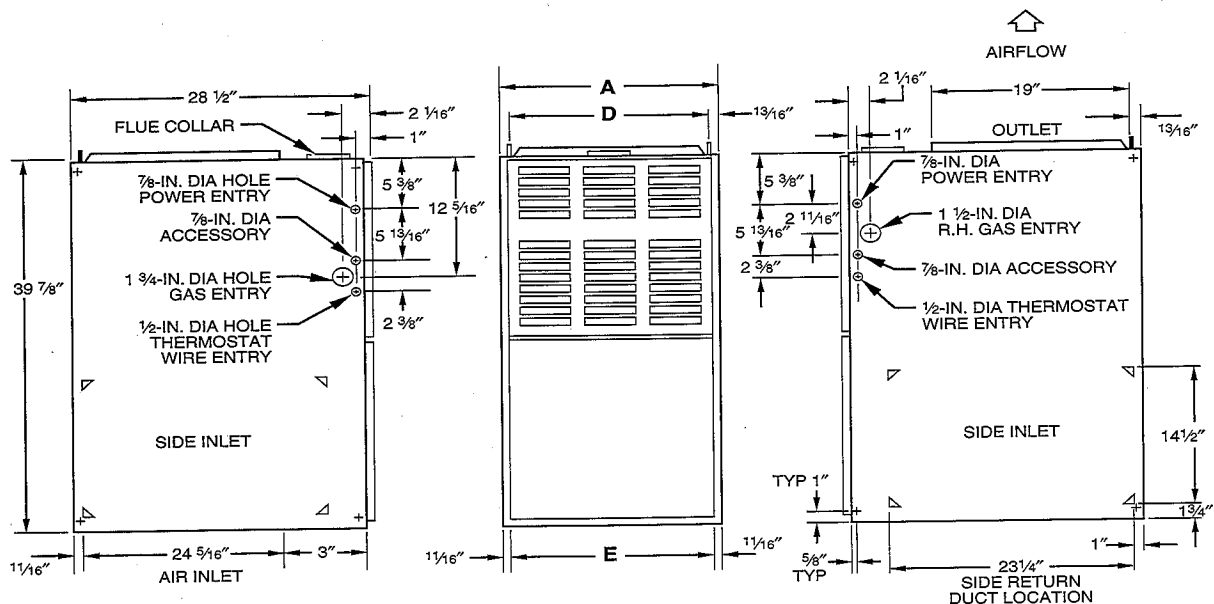
40-IN. HEIGHT—The 393AAV Induced-Combustion Furnace with a 40-in. cabinet height simplifies installation in alcoves, attics, basements (ideal for short basement), closets, and utility rooms, especially with a high-efficiency cooling coil.

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 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.

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:**
- Two additional 7/8-in. dia holes are located in the top plate.
 - Minimum return-air opening at furnace:
 - For 800 CFM—16-in. round or 14 1/2 x 12-in. rectangle.
 - For 1200 CFM—20-in. round or 14 1/2 x 19 1/2-in. rectangle.
 - For 1600 CFM—22-in. round or 14 1/2 x 23 1/4-in. rectangle.
 - For airflow requirements above 1800 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)
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.

CLEARANCES (In.)

UNIT SIZE	070	091-155
Sides—Single-Wall Vent	1	0
Type B-1 Double-Wall Vent	0	0
Back	0	0
Top of Plenum	1	1
Vent Connector—Single-Wall Vent	6	6
Type B-1 Double-Wall	1	1
Front*—Single-Wall Vent	6	6
Type B-1 Double-Wall Vent	3	3
Service	30	30

* The 3-in. front clearance is needed for combustion-air and ventilation-air entry.



MEETS DOE RESIDENTIAL CONSERVATION SERVICES PROGRAM STANDARDS.

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

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)†	52,000	52,000	70,000	87,000	105,000	122,000
AFUE†	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	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	830	1140	1170	1410	1975‡	1695‡
	880	1195	1360	1575	1980‡	1905‡
ELECTRICAL						
Unit Volts—Hertz—Phase	115—60—1					
Operating Voltage Range	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	12va					
Power Available	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.)	KGAFR0206ALL (Filter Size 16 x 25 x 1)					
Return-Air Filter Cabinet With Washable Filters (In.)	KGARP0201ALL (Filter Size 2—20 x 25 x 1)					
Air Cleaner	Model AIRA, KEACA, 902B, or MECH					
Humidifier	Model 912D, 912E, 913B, 913C, or 914A					
Ventilator	Model VA3B, VB5B, VC5B, or VL3A					
Thermostat—Programmable††	For Use With Air Conditioner—TSTATXXPAC01-A For Use With Heat Pump — TSTATXXPHP01-A					

* 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 the installation instructions.

† Tentative capacity and AFUE in accordance with U.S. government DOE test procedures.

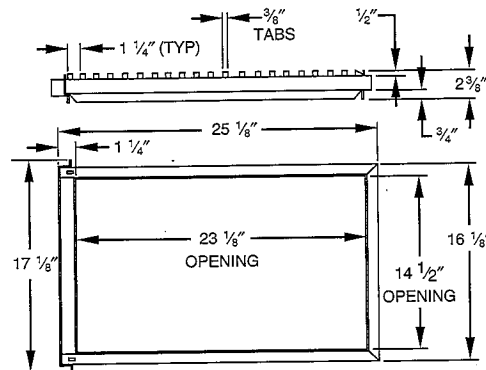
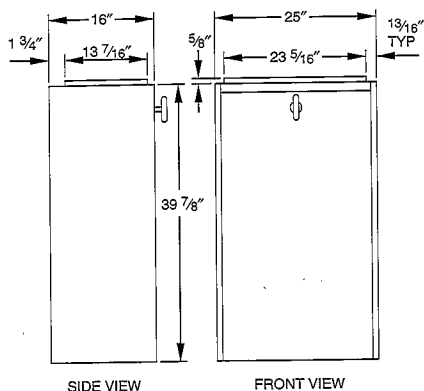
‡ Air delivery above 1800 CFM requires that both sides, or a combination of 1 side and bottom, or bottom only of the furnace be used for return air. A filter is required for each return-air inlet.

** Time-delay fuse is recommended.

†† Where XX appears, insert BB for Bryant brand, DD for Day & Night brand, or PP for Payne brand.

ICS—Isolated Combustion System

DIMENSIONAL DRAWINGS OF OPTIONAL RETURN-AIR FILTER CABINET AND SIDE FILTER RACK



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	—	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
060155	3/4 PSC	High	—	2145	2060	1975	1905	1800	1680	1565
		Med-High	—	1950	1885	1815	1710	1645	1545	1435
		Med-Low	1730	1695	1660	1600	1540	1465	1400	1305
		Low	1520	1500	1460	1410	1360	1310	1245	1155

* 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.

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

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE
WITH INSTALLATION INSTRUCTIONS

Cancels: New