

TYPE JA  
FORCED DRAFT  
BURNERS

GAS

300,000-  
2,200,000  
BTU/HR.

# Power Flame® Type JA



## Power Flame's Versatile Small to Medium Range Gas Burner

**Totally Enclosed Control Cabinet**  
Protection with easy access to operating components for JA (Optional panel for JRA shown above)

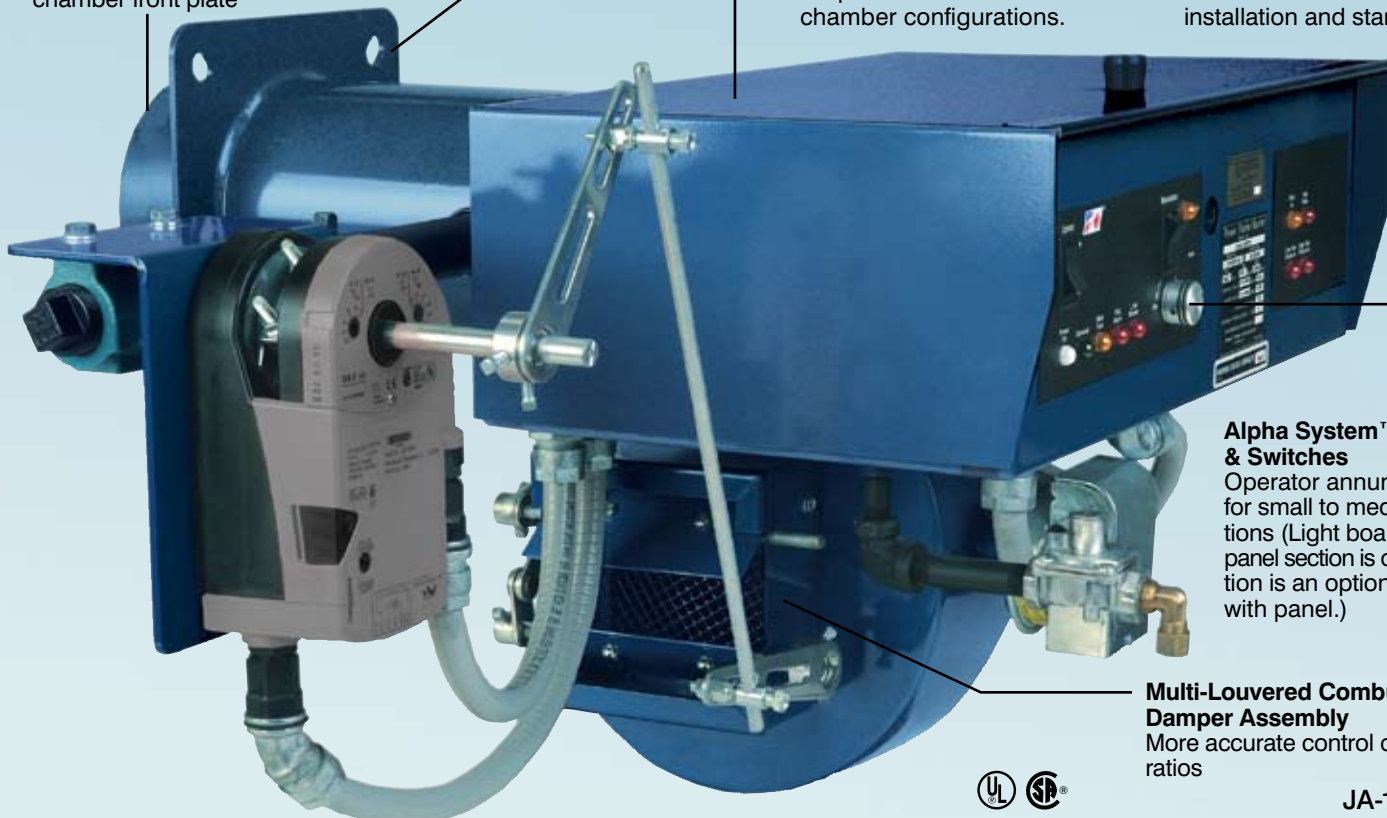
**Mounting Flange Flexibility**  
Easily adapted to varying firing head insertion depths

**Circular Furnace Opening**  
No special cutting of combustion chamber front plate

The Power Flame Type JA gas burner presents optimum, state-of-the-art design for maximum combustion efficiency and operating dependability. These packaged combustion systems will fire natural, L.P. and a full range of waste or other gaseous fuels. The flame retention firing head incorporates a premix combustion zone with stainless steel, multiport diffusor to produce full range stable performance in both positive and negative combustion chambers. The JA burner is capable of firing high pressure drop and confined combustion chamber configurations.

Operating system adjustments have been minimized to provide trouble-free start up and operating performance.

The Type JA produces efficient combustion without the aid of refractory or other costly flame support devices. The integrally mounted control cabinet on the JA (optional on the JRA) provides annunciation features usually found on larger industrial size systems. The modular design produces added flexibility in the choice of optional features. All Power Flame packaged combustion systems are factory fire-tested to ensure cost effective installation and start up.



**Alpha System™ LED Indicators & Switches**  
Operator annunciation is unique for small to medium size applications (Light board shown on right panel section is optional. Annunciation is an optional feature for JRA with panel.)

**Multi-Louvered Combustion Air Damper Assembly**  
More accurate control of fuel-air ratios



# Power Flame

*The Power to Manage Energy*



Model JR shown with optional prepiped, pre-wired, gas train.



Standard JR with stainless steel flame retention firing head.

## STANDARD EQUIPMENT

- 3450 RPM Motor, squirrel cage blower, cabinet with Alpha System™ LED indicators (power, demand, main fuel, FSG alarm, customer selectable) & control switch (A)
- Leakage test, pilot and main gas cocks
- Gas electric pilot and gas ignition transformer
- Pilot and main gas pressure regulators (14 in. W.C. inlet max)
- Flame safeguard with flame rod, intermittent pilot and prepurge (for natural gas only)
- Air safety switch

## ADDED FEATURES

X-Standard O-Optional

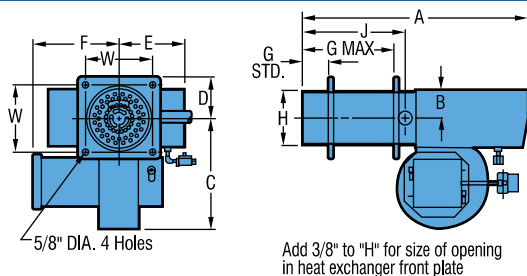
- Flame safeguard with UV and intermittent pilot for LP gas
- Flame safeguard with UV and intermittent pilot for natural gas
- Flame safeguard with UV and interrupted pilot
- On-Off diaphragm gas valve with separate gas pressure regulator
- Low-Hi-Off or Low-Hi-Low motorized gas valve, automatic air control
- Modulation with automatic air control
- Dual gas safety valves (B): one (1) combination diaphragm valve with pressure regulator and one (1) auxiliary valve
- Customized control systems and accessories

(A) Panel with 5 LED indicators and control switch is optional on JRA.  
 ■ Conforms to UL 795.

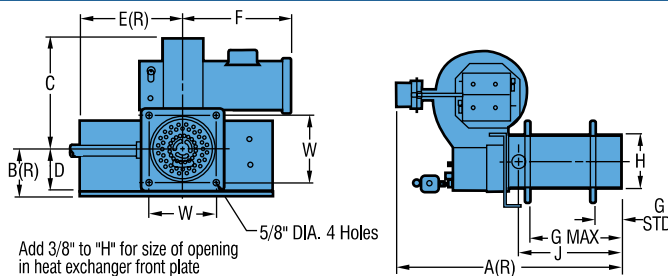
	J15A-10 J30A-10 J30A-12	J50A-15
Flame safeguard with UV and intermittent pilot for LP gas	O	O
Flame safeguard with UV and intermittent pilot for natural gas	O	O
Flame safeguard with UV and interrupted pilot	O	O
On-Off diaphragm gas valve with separate gas pressure regulator	O	O
Low-Hi-Off or Low-Hi-Low motorized gas valve, automatic air control	O	O
Modulation with automatic air control	O	O
Dual gas safety valves (B): one (1) combination diaphragm valve with pressure regulator and one (1) auxiliary valve	X	X
Customized control systems and accessories	O	O

(B) May be replaced by one (1) proof of closure valve and a separate pressure regulator.

## MODEL JA



## MODEL JRA (For low centerline applications)



## DIMENSIONS (Inches) Standard Models.

Burner Model	DIMENSIONS (Inches)													CAPACITY <sup>1</sup>		Blower Motor H.P. (3450 RPM)	Standard Gas Train Size (In.)	Gas Pressure Required (In. W.C.) <sup>2</sup>	
	A	A(R)	B	B(R)	C	D	E	E(R)	F	G Std.	G Max.	H	J	W	Natural Gas Max. MBH				Nominal Boiler H.P. Max.
J15A-10	25 <sup>1</sup> / <sub>4</sub>	24 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	5	12 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>4</sub>	3	10 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>	700	16.7	1/4	1	4.7
J30A-10	25 <sup>1</sup> / <sub>4</sub>	24 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	5	12 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	11 <sup>3</sup> / <sub>4</sub>	3	10 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>	1,075	25.6	1/3	1	5.6
J30A-12	25 <sup>1</sup> / <sub>4</sub>	24 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	5	12 <sup>1</sup> / <sub>2</sub>	4 <sup>5</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	11 <sup>3</sup> / <sub>4</sub>	3	10 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>4</sub>	1,260	30.0	1/3	1 <sup>1</sup> / <sub>4</sub>	4.9
J50A-15	29 <sup>3</sup> / <sub>4</sub>	27 <sup>3</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>8</sub>	14	5 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>4</sub>	11 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	12 <sup>1</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>8</sub>	13 <sup>5</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>4</sub>	2,200	52.3	1/3	1 <sup>1</sup> / <sub>2</sub>	5.9

## RATINGS & SPECIFICATIONS

1. PF certified capacities listed are based on +0.5" W.C. combustion chamber pressure.
2. At inlet to main manual shutoff cock to obtain P/F certified rating with standard U.L. gas train. Optional gas trains available for lower pressures.



## Power Flame Incorporated

2001 South 21st Street Phone 620-421-0480  
 Parsons, KS 67357 Fax 620-421-0948  
 Web Site: <http://www.powerflame.com>  
 E-Mail: [csd@powerflame.com](mailto:csd@powerflame.com)