

Type FD68 Gas & Oil 50Hz Performance Burner System



KEY FEATURES:

- Fuel flexibility with gas and oil fuel capabilities
- Efficient gas and oil combustion
- Energy efficient axial flow blower
- Swing-open housing for easy maintenance
- Proven reliability
- Quiet operation

DESCRIPTION:

Since its introduction, the Johnson type FD68 burner has been setting higher standards in commercial heating and industrial steam boiler markets throughout the world. Because of its unique design, the FD68 burner is widely used for new boilers, boiler retrofits, and applications involving high furnace pressure, high altitude and 50 Hz current.

Packaged 50Hz systems are available in sizes up to 700 HP for most boilers types and industrial process applications. Fuel capabilities include gas, No. 2 to 6 fuel oil, as well as many alternative fuels. Combination gas and oil burners change from one fuel to the other with the turn of a switch.

The axial flow blower and high performance combustion head combine to form a very compact and efficient burner with good turndown performance. The blower assembly includes either a triple-disc or vortex air shutter assembly and an integral air silencer. This results in the lowest noise levels of any packaged forced-draft system.

The hinged blower housing swings open without disconnecting any fuel piping or burner linkage. This unique feature allows easy inspection and maintenance of the firing head, diffuser, ignition assembly, flame detector and oil nozzle. Most internal burner components can be removed and serviced within minutes.

All packaged systems include a gas-electric ignition system, fuel safety valves and interlocks, control panel, and refractory burner tile. Oil systems include a remote mounted oil pump, basket strainer. Air atomizing systems include an air compressor set. Gas systems include a gas control valve and gas train components. Every burner is wired and tested prior to shipment.



Model FD68CA250LM installed on a new packaged boiler system in Shanghai.

S.T. Johnson Company is a worldwide leader in the combustion industry with more than 100 years experience.

Typical fuel applications:

**LNG, Town Gas, Propane
No. 2 and 6 oil**

Capacities range up to 700 boiler horsepower operating at 50 Hz.

Low NOx systems are also available.

Johnson Type FD68: Dependably Efficient, Quiet and Compact.

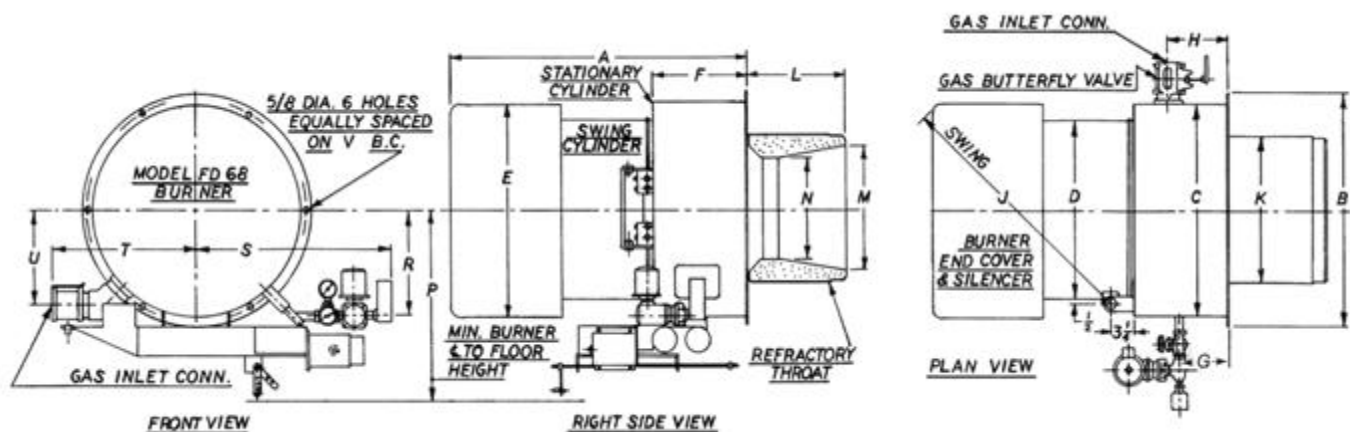
JOHNSON Type FD68 Capacities & Specifications

50 Hertz Operation

Burner Size	Burner Capacities (1)				Blower HP	Pump HP-RPM (2)			Air Compr. HP	Oil Heater (3) kW
	Kcal/Hr*10 ³	kg/Hr	kg/Hr	Boiler HP		Press.	Air	Air		
	Gas	#2 Oil	#6 Oil	HP		Atom. #2	Atom. # 2	Atom. #6		
100	840	88	90	80	1	0.75	0.33	0.75	2	5
125	1,050	104	108	100	1 1/2	0.75	0.33	0.75	2	5
150	1,313	134	140	125	1 1/2	0.75	0.33	0.75	2	8
200	1,575	186	194	150	5	1	0.33	0.75	2	8
250	2,100	208	216	200	5	1	0.50	0.75	2	10
300	2,625	277	288	250	5	1.5	0.50	0.75	2	14
300SP	3,150	309	324	300	10	1.5	0.50	0.75	3	14
400SP	4,200	414	428	400	10	n/a	0.75	0.75	3	20
500SP	5,250	547	565	500	20	n/a	0.75	0.75	3	20
625	6,300	586	612	600	20	n/a	0.75	1.50	3	20
1000	7,875	782	738	700	40	n/a	0.75	1.50	5	20

- (1) Gas input based on 8900 Kcal/m³ gas & 0.64 specific gravity. Oil input based on No. 2 CSG, 10,300 Kcal/Kg. Boiler capacity based on minimum 80% combustion efficiency. Capacity rated against +25 mmAq furnace pressure. 50 cycle current at sea level.
- (2) Oil burner pumps and atomizing air compressor sets are remote mounted and direct-driven.
- (3) Electric oil trim heater capacities in combined kW. Size 150 and up #6 oil units include two heaters.

Dimensions (mm)



Burner Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V
50-125	806	572	508	387	387	238	140	143	629	406	305	343	249	483	356	578	346	219	540
150-250	933	673	610	492	489	260	146	168	775	486	324	400	324	660	394	619	451	267	641
300	1121	800	737	619	730	330	171	203	1048	508	343	419	349	711	448	672	502	318	768
400	1121	800	737	619	730	330	171	203	1048	559	343	470	400	711	448	672	502	318	768
500	1245	927	864	733	889	330	171	203	1232	578	343	489	419	762	498	727	610	371	895
625	1245	927	864	733	889	330	171	203	1232	603	343	514	445	762	498	727	610	371	895
1000	1715	1041	965	835	991	445	267	254	1521	603	381	514	445	762	533	781	660	457	1003

Note: All specifications and dimensions are subject to change without notice. Always consult factory for up to date changes and information.

S.T. JOHNSON COMPANY

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