

FD68 Series

Axial-Flow Packaged Burners

MODELS: FD68 / FD68-LN / FD68-RF

SIZE RANGE: 50 - 1,500 HP

Features of the FD68 Series



RUGGED INDUSTRIAL DESIGN

► SUPERIOR HOUSING

Cylindrical windbox design provides greater stability than the square geometries of competitors' burners.

► HEAVY-DUTY MATERIALS

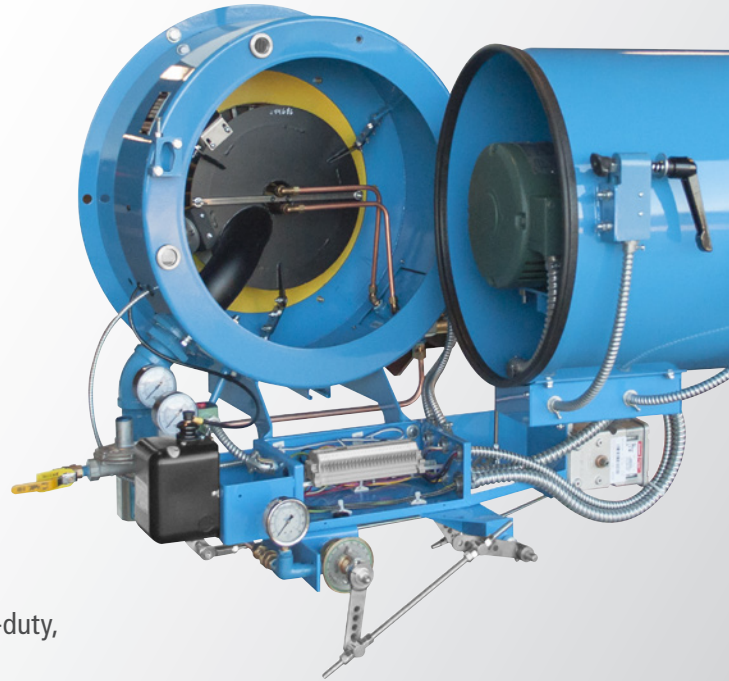
Our flanges are 1/4-inch, our rolled steel is 3/16-inch. Using thicker steel provides greater durability, safety, and service-life.

► EASY TO SERVICE & MAINTAIN

Our swing-open housing provides easy access to the burner head, simplifying routine maintenance and adjustment.

► QUIET BURNER OPERATION

Burners feature an integrated silencer, axial flow burner and heavy-duty, cylindrical housing to achieve industry-leading sound attenuation.



HIGH-PERFORMANCE MULTI-PORT FIRING HEAD

- FD68 gas burners include a multi-port, register-type combustion head which can be adjusted to any furnace size and type.
- Flexible fuel options; Low-NOx with flue-gas recirculation; stainless steel diffuser.



CONTROL FEATURES*

- Combustion fan VFD
- Oxygen trim
- NEMA 4/12
- HMI touch-screen
- Parallel positioning
- Single-point power connection



* Some features optional

APPROVALS & STANDARDS

UL, CSD-1, GE Gap, FM or NFPA optional

Model FD68

QUIET & RELIABLE AXIAL-FLOW BURNER

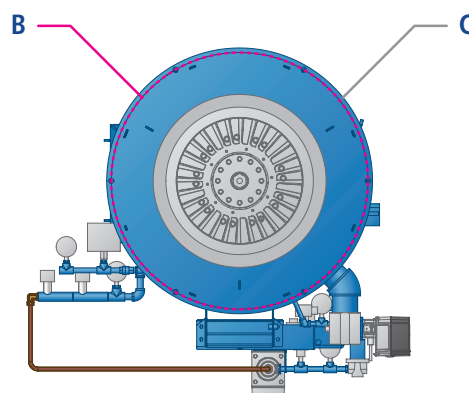
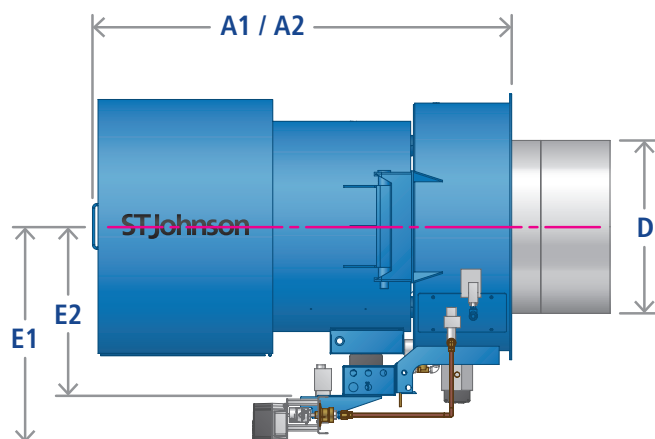


SIZE RANGE	50 – 1,200 HP
EMISSIONS	Uncontrolled
TURNDOWN	Up to 8:1
FUELS	NG, LPG, Biogas or Dual-Fuel (#2-6 Oil)



PRECISE COMBUSTION AIR CONTROL

FD68 burners feature a highly engineered damper with a triple-disc or inlet vane design. This helps to maintain optimum combustion throughout the firing range.



		MODEL:	50	75	100	125	150	200	250	300	400	500	625	800	1000	1200
SPECIFICATIONS	Boiler Output	HP	50	75	100	125	150	200	250	300	400	500	625	800	1000	1200
	Gas Capacity	MMBH	2,100	3,150	4,200	5,250	6,300	8,400	10,500	12,600	16,800	21,000	26,250	33,600	42,000	50,400
	Blower Motor	HP	1/2	3/4	1.5	2	2	5	7.5	7.5	15	20	25	30	40	75
	Gas Pressure	PSIG	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.5	2	2	2	2
	Furnace Pressure	IN W.C.	0.75	0.75	1	1	1.5	2	2	3	4	4	4	4	4	4
	Ship Weight	LBS	1,000	1,000	1,000	1,000	1,250	1,250	1,250	1,700	1,700	1,800	1,800	2,500	2,500	3,000
DIMENSIONS	A1 / A2 (Swing Length)	IN	36.3 / 41.2	36.3 / 41.2	36.3 / 41.2	36.3 / 41.2	44.5 / 50.7	44.5 / 50.7	44.5 / 50.7	53 / 61.4	53 / 61.4	57.6 / 69.5	57.6 / 69.5	67 / 80.5	67 / 80.5	78.5 / 92.5
	B	IN	21.25	21.25	21.25	21.25	25.25	25.25	25.25	30.25	30.25	35.25	35.25	39.5	39.5	39.5
	C	IN	22.5	22.5	22.5	22.5	26.5	26.5	26.5	31.5	31.5	36.5	36.5	41	41	41
	D	IN	16	16	16	16	19.125	19.125	19.125	20	22	22.75	23.75	28	28	32
	E1	IN	15.7	15.7	15.7	15.7	17.9	17.9	17.9	20.5	20.5	23.2	23.2	25.2	25.2	25.2
	E2	IN	22.3	22.3	22.3	22.3	24.5	24.5	24.5	27.1	27.1	29.8	29.8	31.8	31.8	31.8

Model FD68-LN

LOW EMISSIONS AXIAL-FLOW BURNER

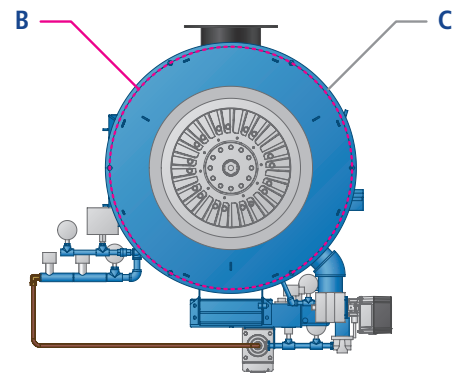
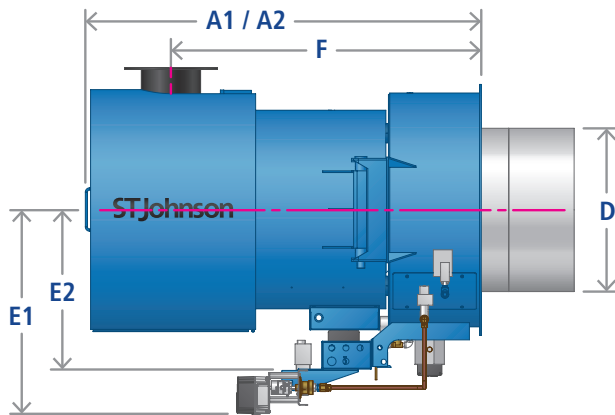


SIZE RANGE	50 – 1,200 HP
EMISSIONS	Sub 30 ppm NOx
TURNDOWN	Up to 8:1
FUELS	NG, LPG, Biogas or Dual-Fuel (#2-6 Oil)



PARALLEL POSITIONING

The LN model burner provides linkageless, parallel-positioning fuel-air modulation for better control of your fuel-air mix. This leads to increased combustion efficiency, higher turndown and maximized energy savings.

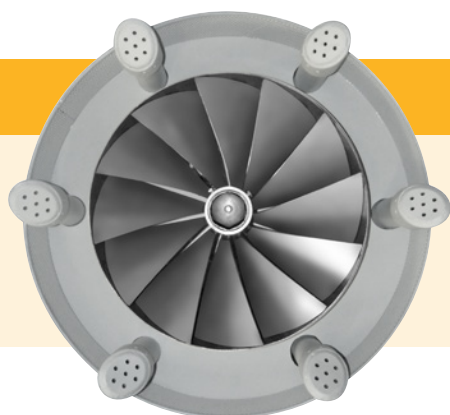


			MODEL:	150	200	250	300	400	500	625	800	1000	1200
SPECIFICATIONS	Boiler Output	HP		125	150	200	250	300	400	500	625	800	1,000
	Gas Capacity	MMBH		5,250	6,300	8,400	10,500	12,600	16,800	21,000	26,250	33,600	42,000
	Blower Motor	HP		2	5	7.5	7.5	15	20	25	30	40	75
	Gas Pressure	PSIG		1.0	1.0	1.0	1.0	1.0	1.5	2	2	2	2
	Furnace Pressure	IN W.C.		1.5	2	2	3	4	4	4	4	4	4
	Ship Weight	LBS		1,750	1,750	1,750	2,200	2,200	2,300	2,300	3,250	3,250	4,000
DIMENSIONS	A1 / A2 (Swing Length)	IN		46.7 / 63.4	46.7 / 63.4	46.7 / 63.4	51.1 / 59.9	51.1 / 59.9	57.6 / 69.5	57.6 / 69.5	80.8 / 93.3	80.8 / 93.3	95.8 / 106.3
	B	IN		25.25	25.25	25.25	30.25	30.25	35.25	35.25	39.5	39.5	39.5
	C	IN		26.5	26.5	26.5	31.5	31.5	36.5	36.5	41	41	41
	D	IN		19.125	19.125	19.125	20	22	22.75	23.75	28	28	32
	E1 / E2	IN		17.9 / 24.5	17.9 / 24.5	17.9 / 24.5	20.5 / 27.1	20.5 / 27.1	23.2 / 29.8	23.2 / 29.8	25.2 / 31.8	25.2 / 31.8	25.2 / 31.8
	F	IN		36	36	36	39.9	39.9	45.1	45.1	56.2	56.2	63.6

Model FD68-RF

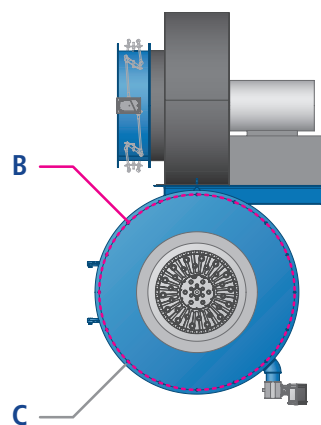
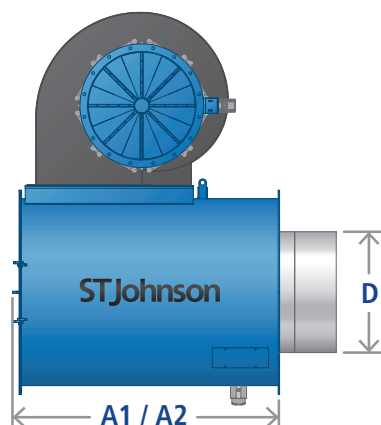
REMOTE FAN BURNER FOR LARGER APPLICATIONS

SIZE RANGE	800 – 1,500 HP
EMISSIONS	Uncontrolled or Sub 30 ppm NOx
TURNDOWN	Up to 8:1
FUELS	NG, LPG, Biogas or Dual-Fuel (#2-6 Oil)



DUAL-FUEL CONFIGURATION

All FD68 models are capable of dual-fuel configurations using #2-6 oil for emergency backup. This ensures redundancy for customers with critical heating processes in the event of a fuel disruption.




		MODEL:	800	1000	1200	1500	1800	2000
SPECIFICATIONS	Boiler Output	HP	800	1,000	1,200	1,500	1,800	2,000
	Gas Capacity	MMBH	33,600	42,000	50,400	63,000	75,600	84,000
	Blower Motor	HP	30	50	60	75	75	100
	Gas Pressure	PSIG	2	2	2	5	5	5
	Furnace Pressure	IN W.C.	4	4	4	4	4	4
	Ship Weight	LBS	*	*	*	*	*	*
DIMENSIONS	A1	IN	70.75	70.75	70.75	70.75	70.75	70.75
	A2 (Swing Length)	IN	124	124	124	124	124	124
	B	IN	39.5	39.5	39.5	51.75	51.75	51.75
	C	IN	41	41	41	54	54	54
	D	IN	28	28	32	34	34	34

*Consult Factory

Heat Transfer Heritage

We are a family-owned business that has been building better burners since 1903. We are experts in rugged and reliable burner designs with low-emissions and out-of-box compliance.

Use the table below to find the right model for your application.

BURNER MODELS	FUEL OPTIONS	NO _x LEVELS	SIZE RANGE (HP)																
			40	50	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
 FD68	NG, LPG, Biogas or Dual-Fuel (#2-6 Oil)	Uncontrolled		50 – 1,200 HP															
 FD68-LN	NG, LPG, Biogas or Dual-Fuel (#2-6 Oil)	Sub 30 ppm		50 – 1,200 HP															
 FD68-RF	NG, LPG, Biogas or Dual-Fuel (#2-6 Oil)	Uncontrolled or Sub 30 ppm															1,200 – 1,500 HP		
 NMV	Natural Gas	9 ppm	40 – 200 HP																
 NMA	Natural Gas or Dual-Fuel (#2 Oil)	5 - 9 ppm			100 – 800 HP														
 NM-RF	Natural Gas or Dual-Fuel (#2 Oil)	5 - 9 ppm											800 – 1,500 HP						

NOTE: All specifications and dimensions provided in this document are approximate and for reference only. S.T. Johnson practices continuous product improvement and reserves the right to change specifications and/or dimensions without notice. Graphics shown may not be representative of actual product.



S.T. Johnson Company
5160 Fulton Drive
Fairfield, CA 94534

Call: (510) 652-6000
Fax: (510) 652-4302
www.stjohnson.com

YOUR AUTHORIZED S.T. JOHNSON DISTRIBUTOR: