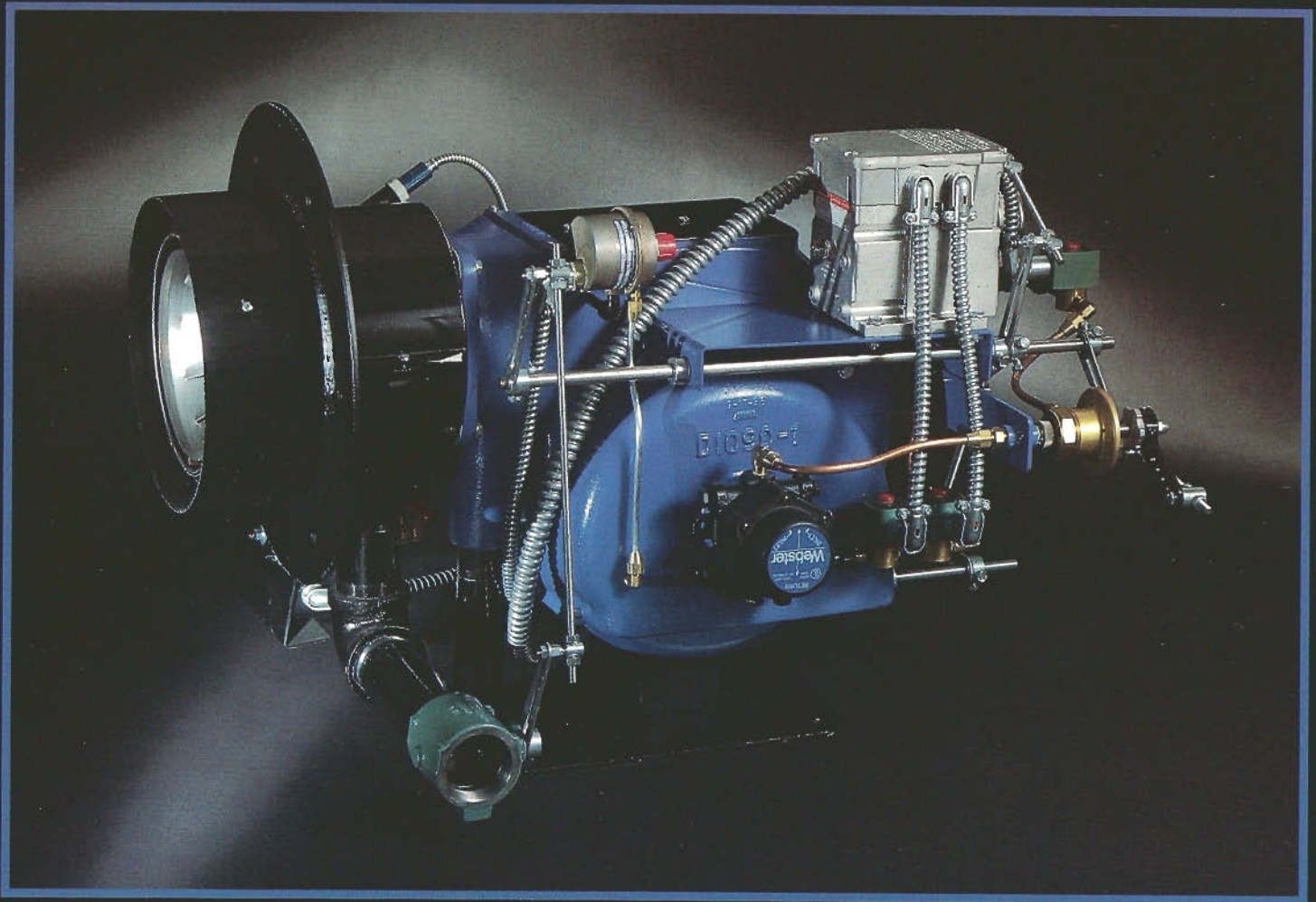


Johnson
★
★
Burners

JOHNSON

Model DHF

*Gas - Light Oil - Combination Fuel Units
Pressure Atomizing Oil Systems*



CAPACITIES:

10 to 250 Boiler Horsepower
400,000 to 10,500,000 BTU/Hr

FUELS:

Gases

- ◆ Natural Gas
- ◆ LPG
- ◆ Digester
- ◆ Others

Oils

- ◆ No. 2 or lighter

Combination

- ◆ Gas/Oil or Gas/Gas

U.L LISTED

Control options to meet IRI, FM, CSD-1, NFPA and other agency requirements are available. Low NOx systems are available to meet any EPA, state or local requirements.

JOHNSON Model DHF

Diffuser Head Forced-Draft

Staged air design results in exceptional flame retention and intimate fuel and air mixing for optimum efficiency and performance.

Reliable Quality

Johnson DHF burners are designed for use whenever efficient, quiet and smooth combustion is required from a compact packaged system.

Quality construction and state-of-the-art design assures years of efficient and reliable service.

Top Performance!

Johnson DHF burners are offered in eleven sizes for optimum performance. A variety of standard and custom control configurations are available to suit any application.

A field-adjustable premix firing head ensures superior mixing of fuel and air, as well as custom shaping of the flame.

Reduced Installation Costs

All packaged DHF units are fully assembled, pre-wired and factory tested. A circular firing head and integral mounting flange allows direct mounting to the boiler or furnace front plate without requiring special cut-outs, or additional support.

To complete installation, bring the power supply to the control panel; connect the main gas valve and boiler mounted controls.

Approvals

The DHF burner is listed by U.L. Systems are available to meet IRI, FM, CSD-1, NFPA and other special agency approvals.

Take a look at the Jo

JOHNSON NAME!

Backed by over Ninety-five years of experience in the combustion industry. The Johnson name stands for top Quality, Performance & Reliability.

Easy Adjustments
Conveniently placed high and easily accessible



Durable Design--Built to Last
Stainless Steel Firing Head &
Rugged Cast Aluminum or
Fabricated Steel Housing.
This is no "Tin Can Burner"



Prewired Control Panel using the latest Flame Safeguard technology

Johnson Advantage. . .

ce
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ility.

ustable Premix Firing Head
erior fuel/air mixing and adaptability



Diffuser Head Design
Achieves excellent flame
retention and stability

Circular Blast Tube
with Internal Gas Pilot*
Requires no special cut-outs or
mounting plates

DHF-100-C



Remote Oil Pump
for larger oil-fired units



DHF-200-G

JOHNSON Lo-NOx Technology

*All the standout features of the DHF burner combined with a state-of-the-art Flue Gas Recirculating (FGR) system reduces NOx emissions well below all current and proposed EPA requirements.**

The Sensible Choice . . .

Environmentally & Economically

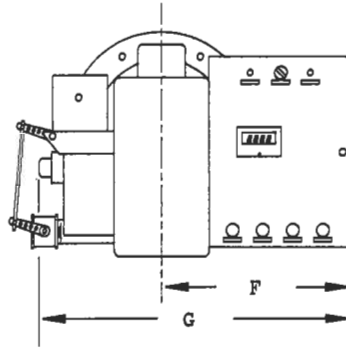
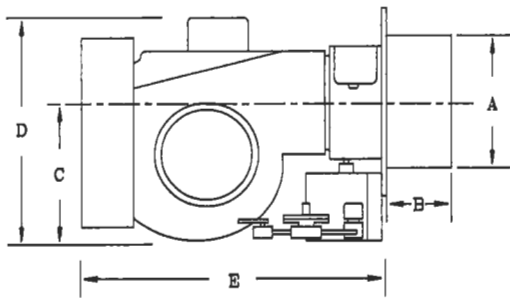
DHF-FGR Lo-NOx packaged burners are offered in all sizes currently affected by EPA regulations. Control Systems vary to suit applications firing Gas, or Gas and No. 2 or Amber Oil as a standby fuel.

Retrofit FGR packages are available to bring existing equipment into compliance with new regulations.

Johnson DHF-FGR Lo-NOx Advantages:

- ◆ Maintain full performance and rating rather than down-rating the capacity of the burner.
- ◆ Staged design maintains a constant and stable flame front for quiet, trouble-free combustion.
- ◆ Does not inject steam as a means of minimizing NOx formation, saving energy and costly boiler repairs.
- ◆ Does not rely on costly special heads or refractory devices.

*Guaranteed emissions of 30 ppm NOx, or lower, firing natural gas is corrected to 3% O2. Emissions of 50 ppm NOx is obtainable firing Amber Oil, and equal or slightly higher results firing No. 2 fuel oil.



JOHNSON Model DHF

DIMENSIONS - Model DHF & DHF-FGR (Inches)

Size	A	A	B	B	C	D	E	F	G
	DHF	DHF-FGR	DHF	DHF-FGR					
20	6 3/4	-	4 3/8	-	10	17	23	16 1/2	25 1/2
30-40	9 1/8	-	4 3/8	-	11	18 1/2	23	16 1/2	27 1/2
50-100	11 1/8	18	4 3/8	5 3/4	13	21	29	17 1/2	29 5/8
125-200-S	14	21	4 3/8	5 3/4	17 1/2	26 1/4	34	18 1/2	29 3/8

Note: Dimensions may vary with control system options and may change without notice.

BURNER RATINGS & SPECIFICATIONS

BURNER MODEL	CAPACITY ^①			Motor 3450 rpm HP ^②	Std. Gas Train Size
	CSG #2 Oil GPH	Natural Gas MBH	Boiler HP		
DHF 20	6	840	20	1/3	1"
DHF 30	9	1,260	30	1/2	1 1/4"
DHF 40	12	1,680	40	3/4	1 1/4"
DHF 50	15	2,100	50	3/4	1 1/2"
DHF 60	18	2,520	60	3/4	1 1/2"
DHF 80	24	3,360	80	1	1 1/2"
DHF 100	30	4,200	100	2	2"
DHF 125	38	5,250	125	3	2"
DHF 150	45	6,300	150	3	2 1/2"
DHF 200	60	8,400	200	5	2 1/2"
DHF 200-S	75	10,500	250	5	2 1/2"

- ① Firing rates and boiler output equivalents based on:
- ♦ Gas input based on 1,000 BTU/CF gas and 0.64 specific gravity
 - ♦ Oil input based on Diesel, No. 2 CSG, or lighter, 140,000 BTU/Gal. oil
 - ♦ Boiler capacity based on 80% combustion efficiency
 - ♦ Positive 0.75 in. w.c. firebox pressure
 - ♦ 60 cycle current at sea level atmospheric pressure

- ② Standard Motor Voltages:
- Sizes 20 to 60, 115/230, 1 phase
 - Sizes 80 to 200-S, 208, 230/460, 3 phase
 - Sizes 125 to 200-S oil burners an additional 3/4 HP Motor provided for separate oil pump, 208, 230/460, 3 phase

Options:

Firing rate control systems offered are: *Modulating; Low-High-Low with low fire start or proven low fire start; On-Off with low fire start or fixed air shutter.*

Lo-NOx packages are available to meet any current or proposed emission regulations.

Adapter front plates are available for all applications.

S.T. JOHNSON COMPANY, INC.

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(510)652-6000 (510)652-4302 fax

Your representative is: