

V - SERIES

FORCED DRAFT DUAL FUEL BURNERS

- Advanced Technology
- High Turndown
- 30 PPM Low NOx



INNOVATION FUELING PERFORMANCE

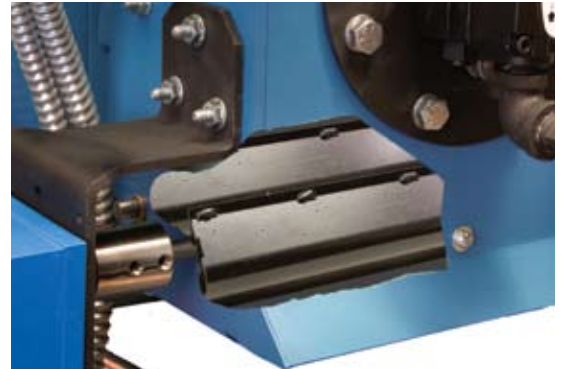
**INDUSTRIAL
COMBUSTION**

THE V - SERIES OFFER

Suitable for firetube, watertube and cast iron boilers; the V/ Series features a unique aerodynamic air damper design which permits accurate air-to-fuel settings for maximum combustion efficiency. The V/ Series offers natural gas, propane gas, pressure atomized #2 oil and combination gas/oil fuel options at capacities from 1,300,000 to 16,800,000 Btu/hour. Through the use of advanced technology, the V/ Series offers high turndown up to 10:1 on natural gas, and low emission capabilities with turndown up to 5:1.

UNIQUE AIR DAMPER DESIGN

- Dual blade configuration offers precise control of combustion air flow throughout entire firing range
- The unique profile of the damper blades restricts air flow at lowering firing ranges leading to increased turn-down capability



OPTIONAL PARALLEL POSITIONING W/SERVO MOTORS

- Eliminates the need for linkage and reduces set-up time
- Better control throughout the firing range for increased efficiency
- UL/cUL listed along with the burner

UP TO 10:1 TURNDOWN ON NATURAL GAS

- Reduced heat loss due to short cycling
- Faster response time to meet load demands
- Less mechanical cycling of load components



UL LISTED CONTROL OPTIONS

- Honeywell Controlinks
- Fireye Nexus
- Fireye PPC 6000

RS HIGH TURNDOWN

< 30 PPM DESIGN FEATURES

- Induced FGR
- FGR modulating valve
- Cam trim with 14-point adjustment range on FGR
- No. 2 oil capability for back-up fuel
- Parallel positioning available
- Up to 5:1 turndown



V/ SERIES MODEL CHART

Frame	Model Range	Boiler HP	Capacities		Modes of Operation	Fuel	Direct Spark on Oil
			Gas Mbtu/hr	#2 Oil GPH			
Size 1	V13-34	30-80	1,300-3,400	9.3-24.3	On-Off*	Gas/Oil/Comb.	Optional
Size 2	V35-55	83-130	3,500-5,500	25.0-39.3	Low-High-Off**	Gas/Oil/Comb.	Optional
Size 3	V60-110	143-262	6,000-11,000	42.4-78.6	Low-High-Off/Full Mod***	Gas/Oil/Comb.	N/A
Size 4	V120-168	286-400	12,000-16,800	85.7-120.0	Full Mod	Gas/Oil/Comb.	N/A

* On-Off and Low-High Optional

** Full Modulation Optional

*** Full Modulation is Standard on Models V70 and Above

LNV/ SERIES MODEL CHART

Frame	Model Range	Boiler HP	Capacities		Modes of Operation	Fuel	Direct Spark on Oil
			Gas Mbtu/hr	#2 Oil GPH			
Size 1	LNV13-25	30-60	1,300-2,500	9.3-17.9	Full Mod*	Gas/Comb.	Optional
Size 2	LNV30-50	71-119	3,000-5,000	21.4-35.7	Full Mod	Gas/Comb.	Optional
Size 3	LNV54-90	129-214	5,400-9,000	38.6-64.3	Full Mod	Gas/Comb.	N/A
Size 4	LNV100-147	238-350	10,000-14,700	71.4-105.0	Full Mod	Gas/Comb.	N/A

* Low-High Optional

CAPACITIES AND SPECIFICATIONS

V/ SERIES

	Size 1								Size 2						
Burner Sizes	13	15	17	20	21	25	30	34	35	40	42	45	50	54	55
Gas Input (MBtu/hr)	1,300	1,500	1,700	2,000	2,100	2,500	3,000	3,400	3,500	4,000	4,200	4,500	5,000	5,400	5,500
Oil Input (US gph)	9.3	10.7	12.1	14.3	15.0	17.9	21.4	24.3	25.0	28.6	30.0	32.1	35.7	38.6	39.3
Boiler HP @ 80% Eff.	31	36	40	48	50	60	71	81	83	95	100	107	119	129	131
Blower Motor HP	1/2	1/2	1/2	3/4	3/4	3/4	3/4	3/4	1	1	1 1/2	2	2	3	3
Shipping Weight (lbs)	450	450	450	450	450	450	450	450	600	600	600	600	700	700	700

	Size 3									Size 4			
Burner Sizes	60	63	70	80	84	90	100	105	110	120	126	147	168
Gas Input (MBtu/hr)	6,000	6,300	7,000	8,000	8,400	9,000	10,000	10,500	11,000	12,000	12,600	14,700	16,800
Oil Input (US gph)	42.9	45.0	50.0	57.1	60.0	64.3	71.4	75.0	78.6	85.7	90.0	105.0	120.0
Boiler HP @ 80% Eff.	143	150	167	190	200	214	238	250	262	286	300	350	400
Blower Motor HP	5	5	5	5	7 1/2	7 1/2	10	10	10	15	15	15	15
Shipping Weight (lbs)	700	700	700	700	700	800	800	800	800	1450	1450	1450	1450

LNV/ SERIES

	Size 1						Size 2						
Burner Sizes	13	15	17	20	21	25	30	34	35	40	42	45	50
Gas Input (MBtu/hr)	1,300	1,500	1,700	2,000	2,100	2,500	3,000	3,400	3,500	4,000	4,200	4,500	5,000
Oil Input (US gph)	9.3	10.7	12.1	14.3	15.0	17.9	21.4	24.3	25.0	28.6	30.0	32.0	35.7
Boiler HP @ 80% Eff.	31	36	40	48	50	60	71	81	83	95	100	107	119
Blower Motor HP	3/4	3/4	3/4	3/4	3/4	3/4	2	3	3	3	3	3	3
Shipping Weight (lbs)	550	550	550	550	550	550	600	600	700	700	700	700	700

	Size 3								Size 4					
Burner Sizes	54	55	60	63	70	80	84	90	100	105	110	120	126	147
Gas Input (MBtu/hr)	5,400	5,500	6,000	6,300	7,000	8,000	8,400	9,000	10,000	10,500	11,000	12,000	12,600	14,700
Oil Input (US gph)	38.6	39.3	42.9	45.0	50.0	57.1	60.0	64.3	71.4	75.0	78.6	85.7	90.0	105.0
Boiler HP @ 80% Eff.	129	131	143	150	167	190	200	214	238	250	262	286	300	350
Blower Motor HP	5	5	5	5	7 1/2	7 1/2	7 1/2	7 1/2	10	15	15	15	15	15
Shipping Weight (lbs)	800	800	800	800	800	800	800	800	1550	1550	1550	1550	1550	1550

Notes:

1. Firing rates based on 60 cycle and altitudes up to 2000 ft. above sea level. For blower wheel and motor sizes at higher altitudes, and 50 cycle applications, consult factory.
2. Oil input based on No. 2 oil @ 140,000 Btu/gal
3. Gas input based on Natural Gas @ 1,000 Btu/cu.ft. and 0.60 specific gravity.
4. Boiler overall efficiency of 80% estimated.
5. Blower Motor HP is for gas only burners. Consult factory for multi-fuel HP's.



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