

E SERIES

TECHNICAL DATA INFORMATION PACKET

**INDUSTRIAL
COMBUSTION**

Technical Data
E Series

Uncontrolled Emissions Configuration (EG, EL, ELG)
16.8 - 63.0 MM BTU/H NG; 120 - 450 GPH #2 OIL

UL listed (E84-420) with choice of NFPA, CSD-1, GAP, and FM for U.S. or Canadian units

Table with 3 columns: Standard equipment, Combustion Control System options, Fuel options.

Series Features

Optional Feature

Table with 5 columns: Feature, E-168 to E-210, E-252 to E-294, E-336 to E-420, E-462 to E-630. Rows include Flame Safeguard, Turndown, Mode of Operation, Refractory, Ignition, Oil Components, Gas Components.

1 Standard for full modulation; optional on select parallel positioning systems
2 Refractory dry ovens are required for burner mounting, consult factory for options
Note: UL/cUL Listed from 8.4 to 42.0 MM BTU/H only.

Standard Ratings
E Series

EG - EL - ELG: Gas, #2 Oil, Gas/Oil Configuration

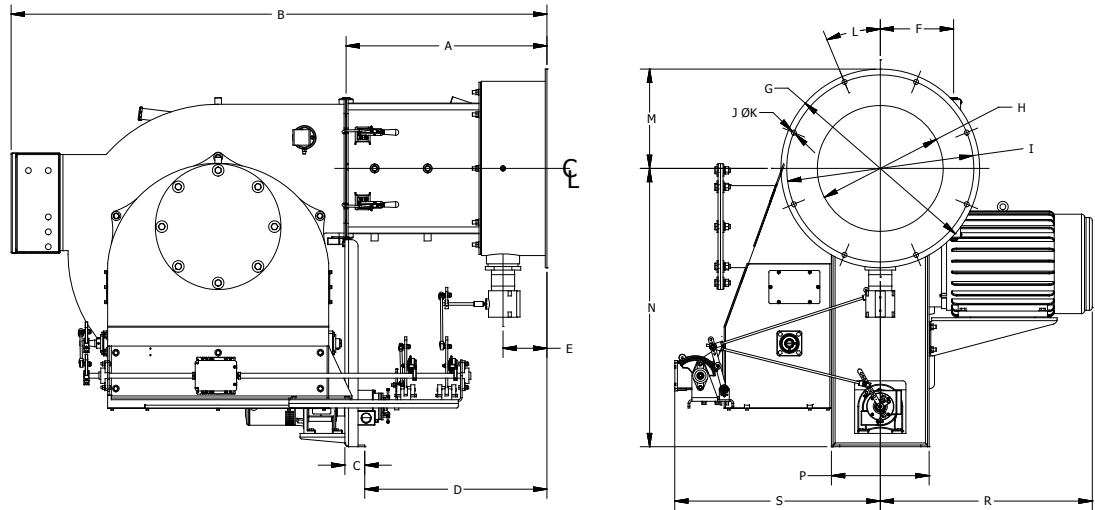
Table with 10 columns: Gas Input MBH, #2 Oil Input GPH, BHP @ 80% Eff., Blower Motor HP, Separate Compressor Module Motor HP 3 Phase, Oil Metering System Motor HP 3 Phase, Furnace Pressure (w.c.), Standard Gas Train Pipe Size (in.), Gas Pressure Required (PSI). Includes a Model No. & Frame Size column and a vertical index column on the right.

Input is based on fuel BTU content, listed furnace pressure and altitude of 2,000 feet or less. If altitude > 2,000 feet and < 8,000 feet, derate capacity 4% per 1,000 feet over 2,000. Consult factory for higher altitudes. If furnace pressure exceeds listed value, derate capacity 5% for every 0.5" w.c. of pressure in excess of stated. Consult factory if derate exceeds 20%. Gas input is based on natural gas with 1,000 BTU/cu.ft. and 0.60 gravity. For total pressure at manifold, add furnace pressure. Oil input based on 140,000 BTU/gal. Consult factory for 50 Hz. applications.

Standard Dimensions

E Series

EG - EL - ELG: Gas, #2 Oil, Gas/Oil Configuration



DIM	Burner Frame Size & Model Number	
	Size 2	Size 3
Length in inches		
Overall length	B	77 1/4
Width in inches		
Center line to right side	R	23
Center line to left side	S	26 1/8
Height in inches		
Center line to top	M	13
Center line to bottom	N	36 1/2
Hinge pivot point in inches		
Mounting flange to hinge	A	34
Center line to hinge	F	9 1/2
Mounting flange dimensions in inches		
Outer diameter	G	26
Inner diameter	H	16
Diameter of bolt circle	I	24
Number of mounting holes	J	12
Diameter of bolt hole	K	3/4
Offset of bolt circle starting point	L	15
Burner support in inches		
Support length	C	2 3/4
Support width	P	13
Mouting flange to support	D	31 1/2
Gas inlet dimensions in inches		
Mounting flange to gas inlet	E	15 1/8

Accompanying dimensions, while sufficiently accurate for layout purposes, must be confirmed for construction.

Technical Data

E Series

<30 PPM Low NOx Configuration (LNE, LNEG)

8.4 - 63.0 MM BTU/H NG; 60 - 450 GPH #2 OIL

UL (E84-420) listed with choice of NFPA, CSD-1, GAP, and FM for U.S. or Canadian units

Standard equipment:	Combustion Control System options:	Fuel options:
3450 RPM motor, panel signal lights (Power On, Main Fuel, Ignition, Flame Failure), FGR, combustion air proving switch, high fire air proving switch, 120/1/60 control circuit, burner mounted panel, hinged blast tube with left-hand swing. Gas and gas/oil units only: butterfly rate control valve, high/low gas pressure switches, two gas shutoff cocks, main gas regulator, shipped loose gas train.	Parallel Positioning Combustion Control System with O ₂ Trim and Variable Frequency Drive (VFD)	Main Fuel: Natural gas (LNEG), or Combination gas/ #2 oil - air atomized (LNELG). Igniter Fuel: Natural gas and/or propane. Fuel Changeover Switch: Combination gas/oil units only (LNELG).

Series Features

Optional Feature

	LNE-168 to 210	LNE-252 to 294	LNE-336 to 420	LNE-462 to 630
Flame Safeguard				
UV Scanner	•	•	•	•
Turndown				
Up to 8:1 on Natural Gas	•	•	•	•
Mode of Operation				
Full Modulation Firing	•	•	•	•
Auto-Manual Firing Rate Control	• ¹	• ¹	• ¹	• ¹
Refractory				
Dry Oven & Gasket	◇ ²	◇ ²	◇ ²	◇ ²
Ignition				
Gas/Electric Pilot and Ignition Transformer	•	•	•	•
Oil Components				
3-Way Solenoid Valve	•			
2-Way Solenoid Valve	•	•	•	•
3-Way Motorized POC Valve	◇	•	•	•
2-Way Motorized POC Valve	◇	◇	◇	◇
Atomizing Air Proving Switch	•	•	•	•
Low Oil Pressure Switch	•	•	•	•
Burner Mounted Oil Metering System	•	•	•	•
Separately Mounted Air Compressor Module	•	•	•	•
Gas Components				
Motorized Valve w/ POC & Solenoid Valve				
Motorized Valve w/ POC (2)	◇	◇	◇	◇
Motorized w/ POC & Motorized w/o POC	•	•	•	•
Normally Open Vent Valve	•	•	•	•

¹ Standard for full modulation; optional on select parallel positioning systems

² Refractory dry ovens are required for burner mounting, consult factory for options

Note: UL/cUL Listed from 8.4 to 42.0 MM BTU/H only.

Standard Ratings

E Series

LNEG - LNELG: <30 PPM Low NOx - Gas, Gas/Oil Configuration

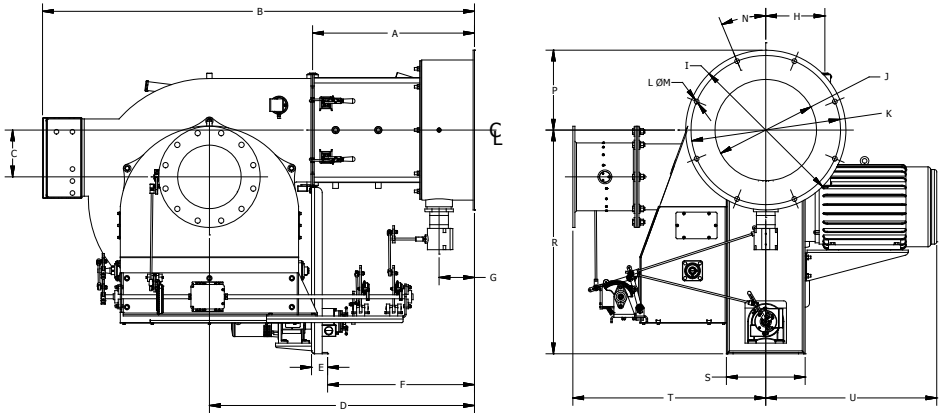
	Gas Input MBH	#2 Oil Input GPH	BHP @ 80% Eff.	Blower Motor HP	Separate Compressor Module Motor HP 3 Phase	Oil Metering System Motor HP 3 Phase	Furnace Pressure ("w.c.)	Standard Gas Train Pipe Size (in.)	Gas Pressure Required (PSI)	FGR Line Piping Size
Model No. & Frame Size										
LNE-168-2	16,800	120	400	15	5	1/2	6	3	3.0	8
LNE-210-2	21,000	150	500	20	5	3/4	6	3	3.9	8
LNE-252-2	25,200	180	600	25	7 1/2	3/4	6.5	3	4.3	8
LNE-294-3	29,400	210	700	30	7 1/2	3/4	8	3	2.6	10
LNE-336-3	33,600	240	800	40	7 1/2	3/4	9	3	3.1	10
LNE-378-3	37,800	270	900	40	15	1	8	3	3.6	12
LNE-420-3	42,000	300	1,000	50	15	1	8	4	3.7	12

Input is based on fuel BTU content, listed furnace pressure and altitude of 2,000 feet or less. If altitude > 2,000 feet and < 8,000 feet, derate capacity 4% per 1,000 feet over 2,000. Consult factory for higher altitudes. If furnace pressure exceeds listed value, derate capacity 5% for every 0.5" w.c. of pressure in excess of stated. Consult factory if derate exceeds 20%. Gas input is based on natural gas with 1,000 BTU/cu.ft. and 0.60 gravity. For total pressure at manifold, add furnace pressure. Oil input based on 140,000 BTU/gal. Consult factory for 50 Hz. applications.

Standard Dimensions

E Series

LNEG - LNELG: <30 PPM Low NOx - Gas, Gas/Oil Configuration



DIM	Burner Frame Size & Model Number	
	Size 2	Size 3
Length in inches		
Overall length	B	77 1/4
Width in inches		
Center line to left side	T	26 1/2
Center line to right side	U	32
Height in inches		
Center line to top	P	13
Center line to bottom	R	36 1/2
Hinge pivot point in inches		
Mounting flange to hinge	A	34
Center line to hinge	H	9 1/2
Mounting flange dimensions in inches		
Outer diameter	I	26
Inner diameter	J	16
Diameter of bolt circle	K	24
Number of mounting holes	L	12
Diameter of bolt hole	M	3/4
Offset of bolt circle starting point	N	15
Burner support in inches		
Support length	E	2 3/4
Support width	S	13
Mouting flange to support	F	31 1/2
Gas inlet dimensions in inches		
Mounting flange to gas inlet	G	15 1/8
FGR dimensions in inches		
Center line to center line of FGR	C	6
Mouting flange to center line of FGR	D	50

Accompanying dimensions, while sufficiently accurate for layout purposes, must be confirmed for construction.



351 21st Street, Monroe, WI 53566 USA
608.325.3141 · info@ind-comb.com
ind-comb.com