


Eclipse Linnox Burner

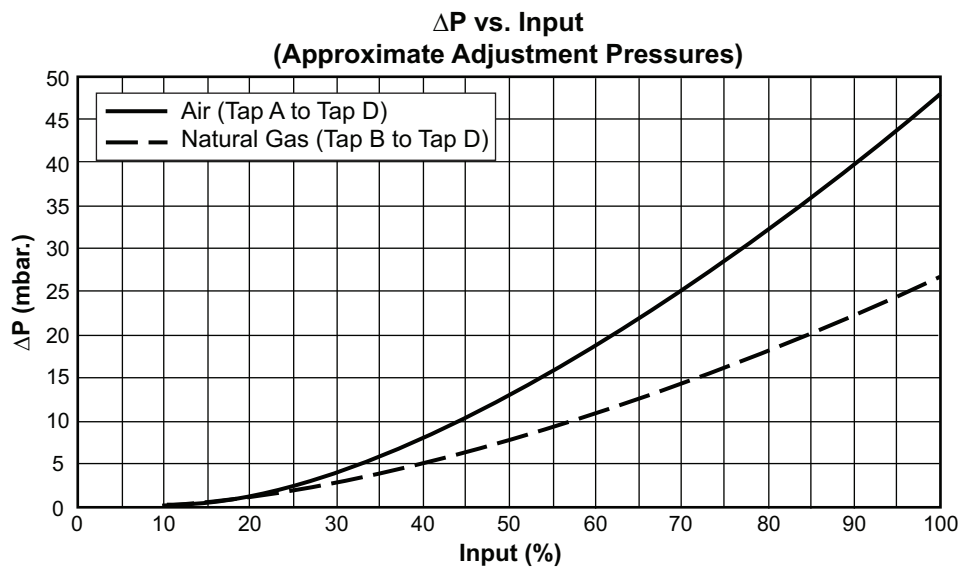
Model ULE

Version 1

Parameter	Specifications (Metric Customary Units)										
	Module ID	Input per module	Quantity of Modules (Burner Length, mm) ¹								
			300	600	900	1200	1500	1800	2100	2400	2700
Maximum Input, kW ²	24	26	-	-	-	-	-	158	185	211	237
	36	40	-	-	-	158	198	237	277	316	356
	48	53	-	-	158	211	264	316	369	422	475
	60	66	-	-	198	264	330	396	461	527	593
	72	79	-	158	237	316	396	475	554	633	712
	96	105	-	211	316	422	527	633	738	844	949
	120	132	-	264	396	527	659	791	923	1055	1187
	144	158	158	316	475	633	791	949	1108	1266	1424
	240	264	264	527	791	1055	1319	1582	-	-	-
	360	396	396	791	1187	1582	-	-	-	-	-
	480	527	527	1055	1582	-	-	-	-	-	-
	720	791	791	1582	-	-	-	-	-	-	-
Turndown from Maximum Input	8:1 or 10:1										
Fuels <i>For any other gas, contact Eclipse, Inc.</i>	Natural Gas ³										
Main Gas Inlet Pressure <i>Fuel pressure at ratio regulator inlet</i>	Minimum 100 mbar										
Pilot Gas and Air Pressure Requirements	Minimum 20 mbar										
Combustion Air Pressure	50 mbar at mixer inlet (Neutral chamber pressure, Ambient combustion air)										
Optimal Excess Air	40-50%										
Flame Monitoring	UV Scanner Only										
Ignition	Pilot only										
High Fire Flame Length <i>Measured from the outlet end of the burner shields</i>	250-380 mm										
Emissions (estimated)⁴	< 15 ppm NOx at 3% O2 (< 3 ppm NOx at 17% O2) natural gas < 100 ppm CO at 3% O2 (22 ppm CO at 17% O2)										
Maximum Recirculation Temperature	450°C Maximum										
Maximum Outlet Temperature	800°C Maximum										
Maximum Combustion Air Preheat	200°C Maximum										
Process Air Velocity	5 m/s minimum; 15 m/s maximum Recommended velocity is 12 m/s ⁵										
Approvals											

1. Contact Eclipse for situations outside these limits.
 2. All inputs based upon gross calorific values, natural gas specific gravity of 0.6, and normal conditions; 1 atmosphere, 0°C.
 3. See Design Guide 159 for more information about typical fuel composition and properties.
 4. The estimated emissions are not to be used as guaranteed values. These values can be influenced by process conditions.
 5. **WARNING:** Velocity perpendicular to the flame is not allowed
WARNING: High air flow past burner will affect emissions
- All information is based on laboratory testing. Different chamber conditions will affect the data.
 - CO emission is largely influenced by chamber conditions. Contact your local Eclipse representative for an estimate of CO emission on your application.
 - Eclipse reserves the right to change the construction and/or configuration of our products at any time without being obliged to adjust earlier supplies accordingly.

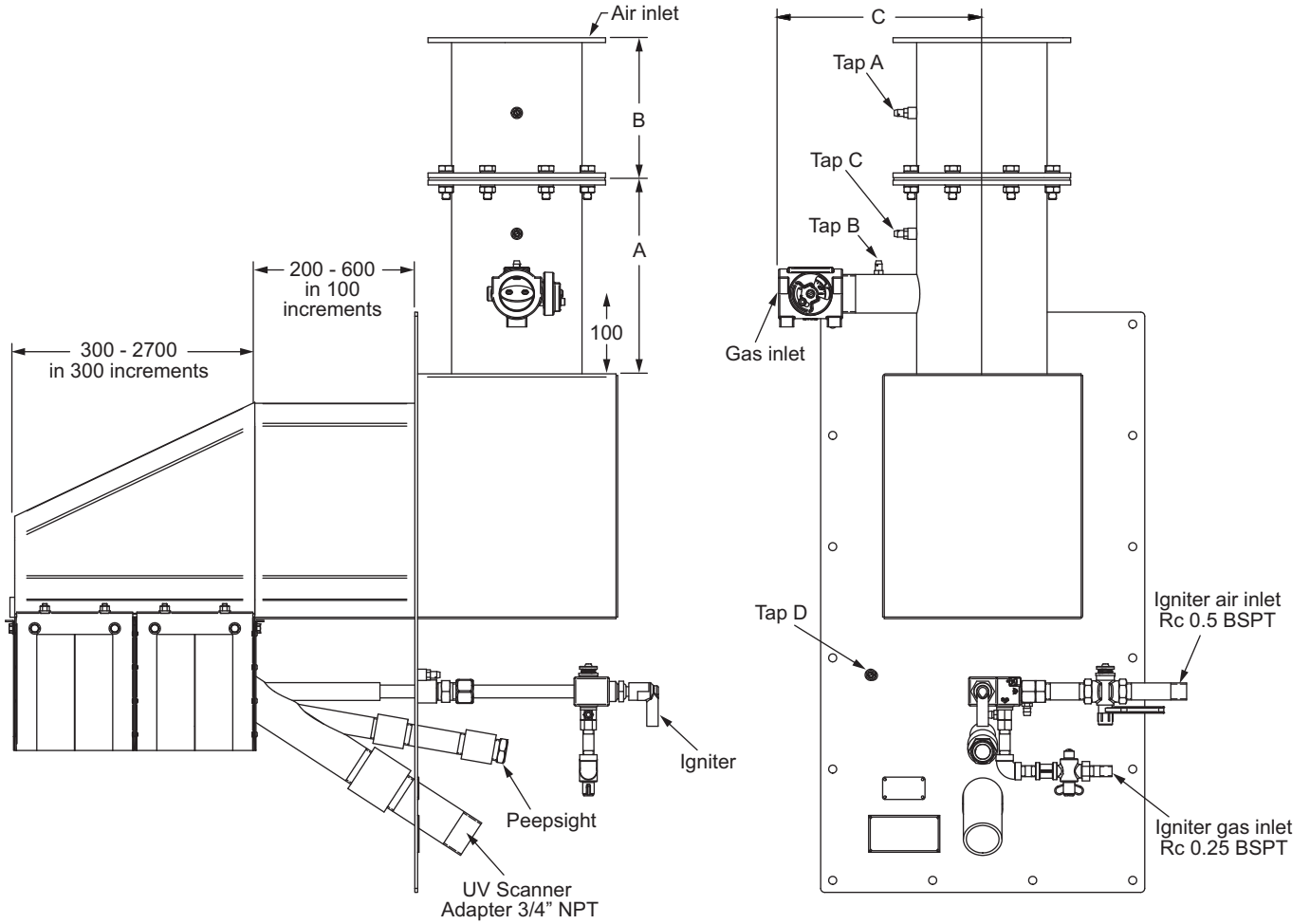
Performance Graphs



Air and gas differential pressures shown in the graph above are based on 40% excess air in laboratory conditions. These curves are intended to serve as a guideline to begin burner setup. Further adjustments may be required based on flame appearance (see Installation Guide 159).

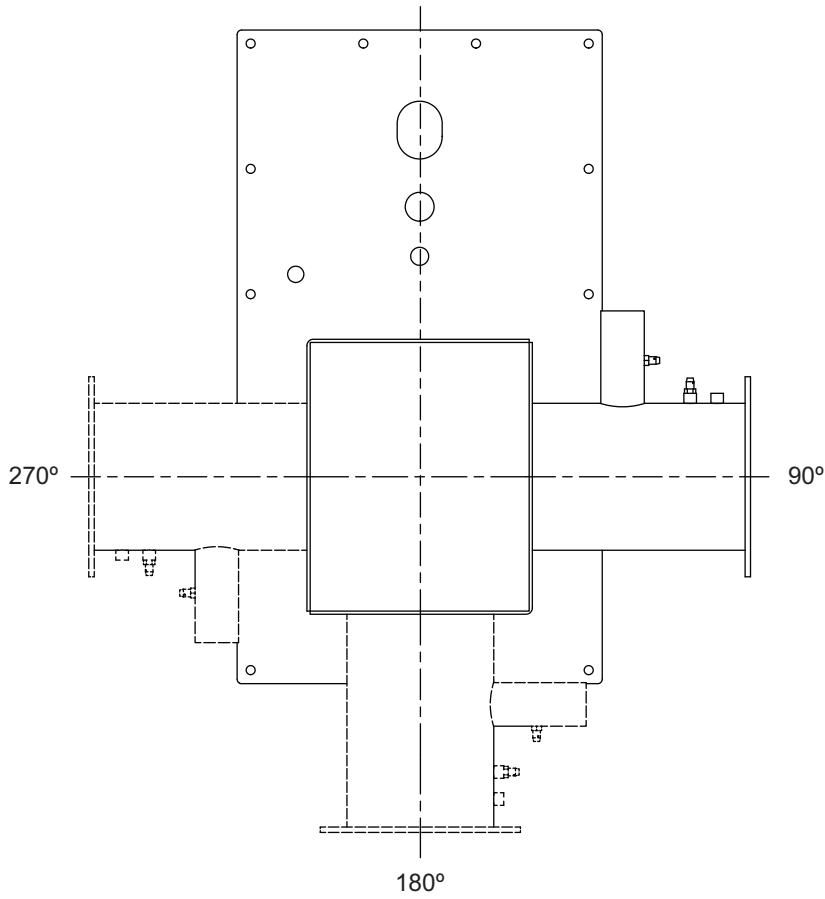
Dimensions and Specifications

Dimensions in mm

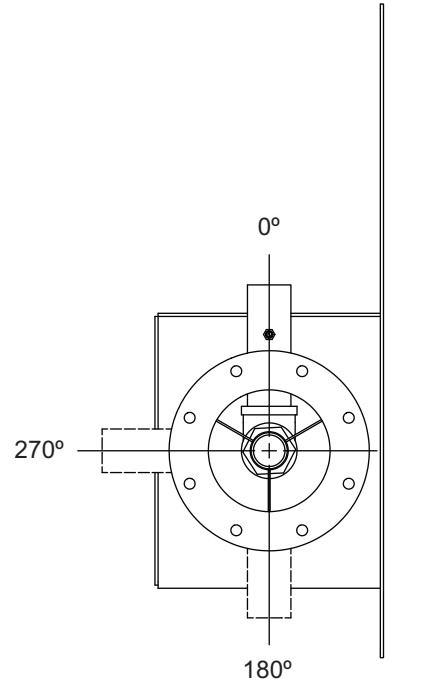


Required Input - kW = HHV (LHV)	A	B	C	Gas Inlet Size - BSPT
158 (142) - 475 (428)	242	175	250	1-1/2
527 (474) - 593 (534)	362			
633 (570) - 1108 (997)	362	243	305	2
1187 (1068) - 1319 (1187)	502			
1424 (1282) - 1582 (1424)	642			

Gas and Air Orientations



Air Orientation
(Firing Position shown at 0°)



Gas Orientation
(Firing Position shown at 0°)