


Eclipse Linnox Burners

Model Straight ULE

Data sheet Edition 12.14

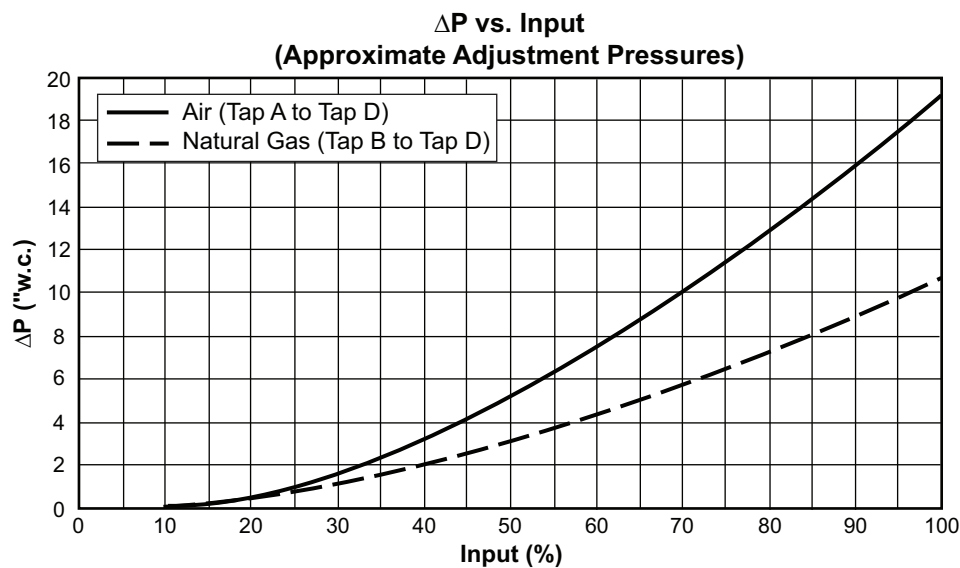
Version 1

Maximum Burner Inputs¹ (kBtu/h)

Specifications (US Customary Units)										
Module ID	Input per module, (kBtu/h)	Quantity of Modules ²								
		1	2	3	4	5	6	7	8	9
24	90	-	-	-	-	-	540	630	720	810
36	135	-	-	-	540	675	810	945	1080	1215
48	180	-	-	540	720	900	1080	1260	1440	1620
60	225	-	-	675	900	1125	1350	1575	1800	2025
72	270	-	540	810	1080	1350	1620	1890	2160	2430
96	360	-	720	1080	1440	1800	2160	2520	2880	3240
120	450	-	900	1350	1800	2250	2700	3150	3600	4050
144	540	540	1080	1620	2160	2700	3240	3780	4320	4860
240	900	900	1800	2700	3600	4500	5400	-	-	-
360	1350	1350	2700	4050	5400	-	-	-	-	-
480	1800	1800	3600	5400	-	-	-	-	-	-
720	2700	2700	5400	-	-	-	-	-	-	-
Turndown from Maximum Input		8:1 or 10:1								
Fuels³ <i>For any other gas, contact Eclipse, Inc.</i>		Natural Gas								
Main Gas Inlet Pressure <i>Fuel pressure at ratio regulator inlet</i>		40 to 50" w.c.								
Pilot Gas and Air Inlet Pressure		8 to 12" w.c.								
Excess Air		40-50%								
Flame Detection		UV Scanner Only								
Ignition		Pilot only (Interrupted)								
High Fire Visible Flame Length <i>Measured from the outlet end of the burner shields</i>		10-15 inches								
Emissions (estimated)⁴		< 15 ppm NOx at 3% O2 (< 3 ppm NOx at 17% O2) < 100 ppm CO at 3% O2 (22 ppm CO at 17% O2)								
Maximum Process Air Inlet Temperature		840°F Maximum								
Maximum Process Air Outlet Temperature		1470°F Maximum								
Maximum Combustion Air Temperature		390°F Maximum								
Process Air Axial Velocity		1000 fpm minimum; 3000 fpm maximum Recommended velocity is 2500 fpm ⁵								
Combustion Air Filtration Requirement		99% Removal Efficiency down to 100 microns								
Approvals										

1. All inputs based upon gross calorific values, natural gas specific gravity of 0.60, and standard conditions; 1 atmosphere, 70°F.
 2. Contact Eclipse for situations outside these limits.
 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

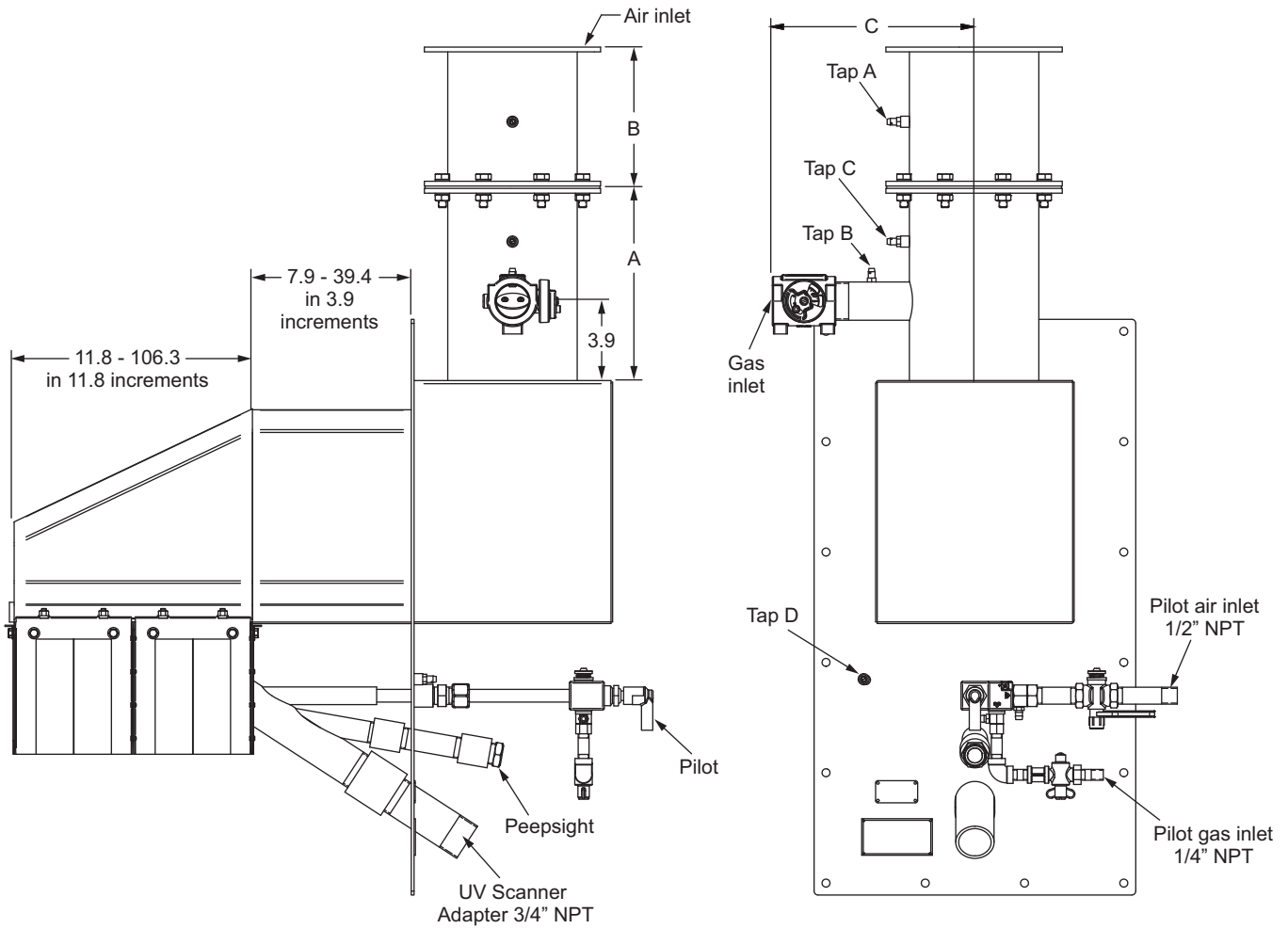


Air and gas differential pressures shown in the graph above are based on 40% excess air in laboratory conditions. These curves are intended to serve as a guideline to begin burner setup. Further adjustments may be required based on flame appearance (see Installation Guide 159).

Note: The combustion air pressure required at the air inlet is higher than the pressure measured at the mixer inlet (Tap A to Tap D) and is a function of the valves furnished with the burner and the final layout of the combustion air valves supplied by Eclipse. Consult Eclipse for an estimate of the air pressure required at the air inlet.

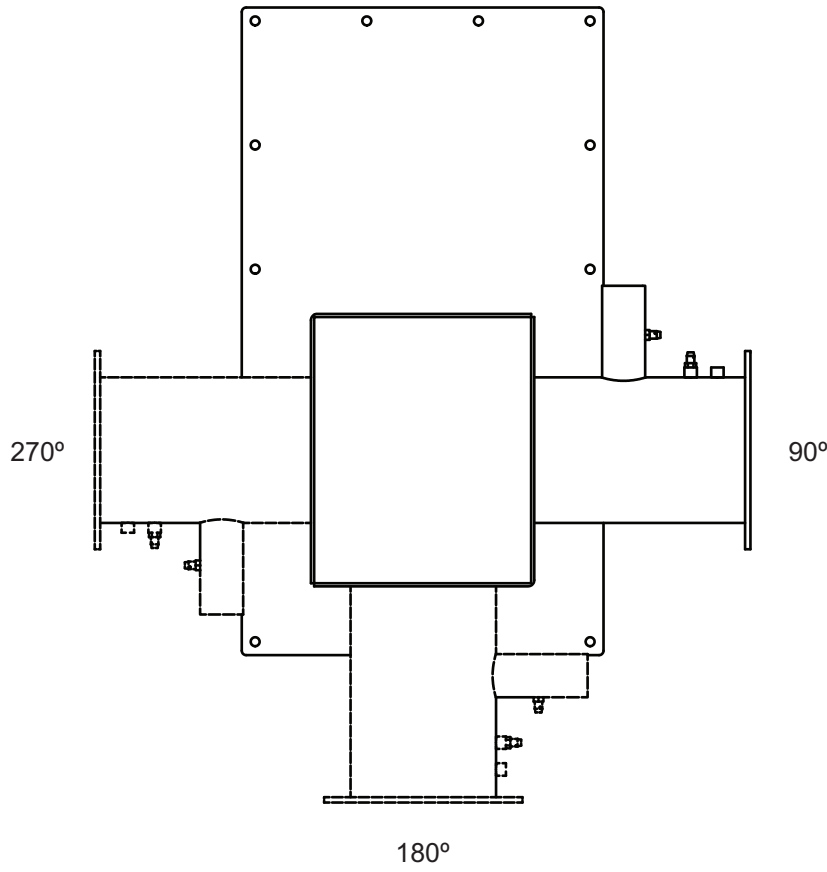
Dimensions and Specifications

Dimensions in inches

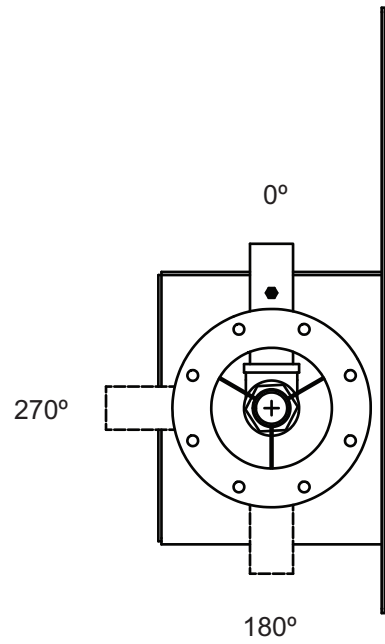


Input, kBtu/h	A	B	C	Gas Inlet Size - NPT
540 - 1620	9.5	6.9	9.8	1-1/2
1800 - 2025	14.3			
2160 - 3780	14.3	9.6	12.0	2
4050 - 4500	19.8			
4860 - 5400	25.3			

Gas and Air Orientations



Air Orientation
(Firing Position shown at 0°)



Gas Orientation
(Firing Position shown at 0°)