Eclipse Linnox Burners

Model Straight ULE

Data sheet Edition 12.14

Version 1

Maximum Burner Inputs[1] (kW)

Specifications (Metric Customary Units)										
Module ID	**Input per module, (kW)**	**Quantity of Modules[2]**								
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
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[3] *For any other gas, contact Eclipse, Inc.*	Natural Gas
Main Gas Inlet Pressure *Fuel pressure at ratio regulator inlet*	100 to 125 mbar
Pilot Gas and Air Inlet Pressure	20 to 30 mbar
Excess Air	40-50%
Flame Detection	UV Scanner Only
Ignition	Pilot only (Interrupted)
High Fire Visible Flame Length *Measured from the outlet end of the burner shields*	250-380 mm
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	450°C Maximum
Maximum Process Air Outlet Temperature	800°C Maximum
Maximum Combustion Air Temperature	200°C Maximum
Process Air Axial Velocity	5 m/s minimum; 15 m/s maximum Recommended velocity is 12 m/s[5]
Combustion Air Filtration Requirement	99% Removal Efficiency down to 100 microns
Approvals	АИ30

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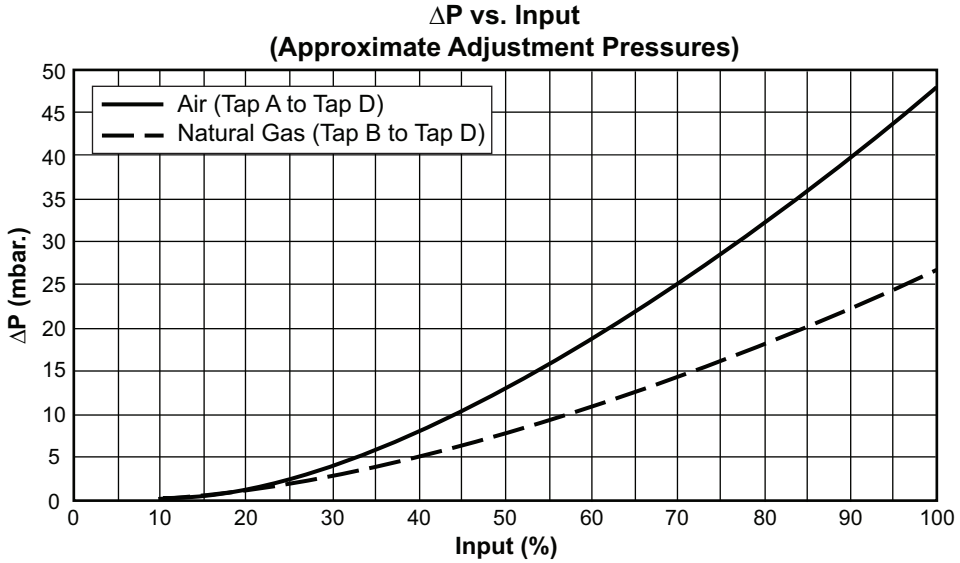
Thermal Solutions

1. All inputs based upon gross calorific values, natural gas specific gravity of 0.6, and normal conditions; 1 atmosphere, 0°C.
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 prependicular 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

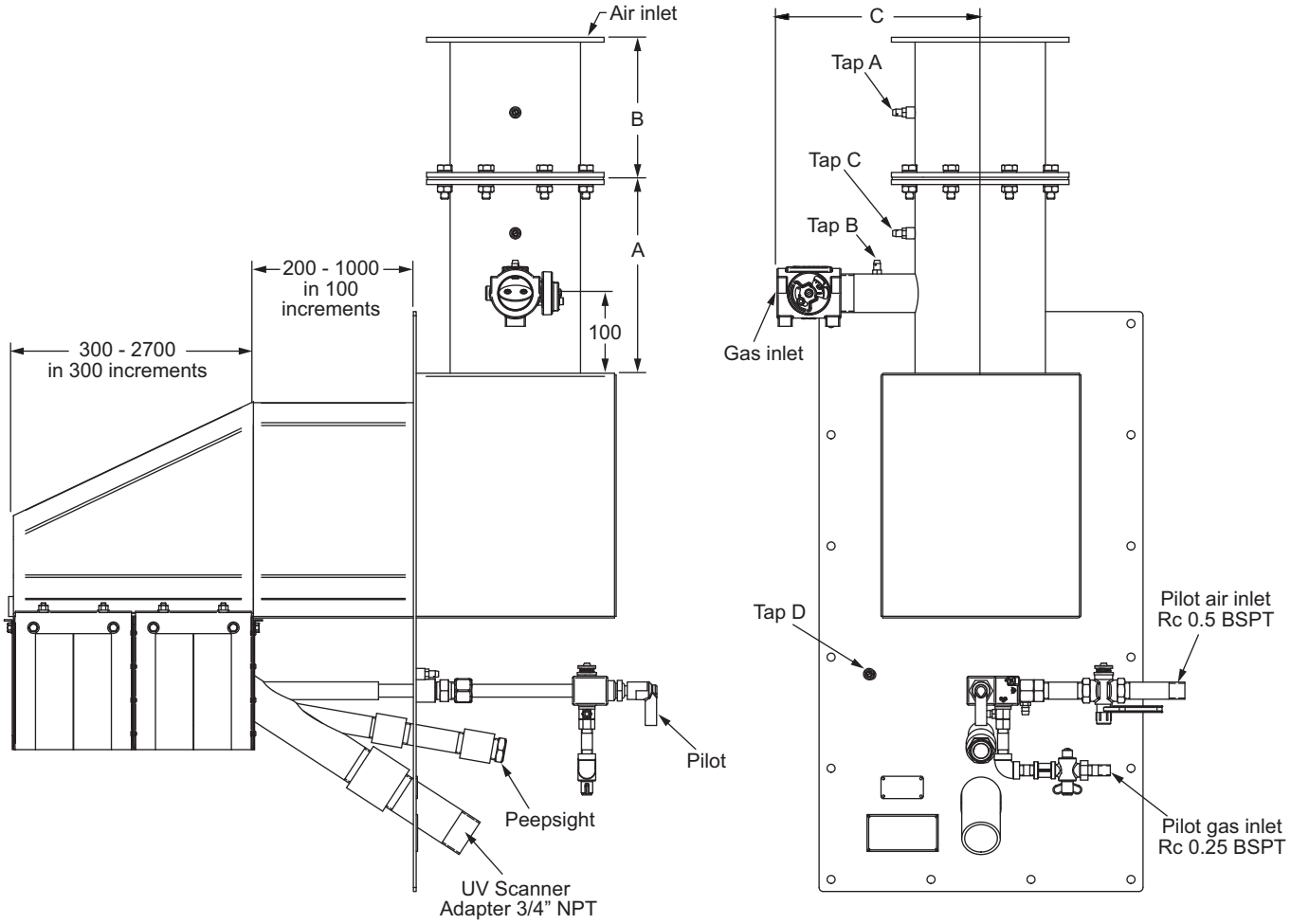


Air and gas differential pressures shown in the graph above are based on 40% excess air in laboratory conditions. These curves are intended to serve as a guideline to begin burner setup. Further adjustments may be required based on flame appearance (see Installation Guide 159).

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.

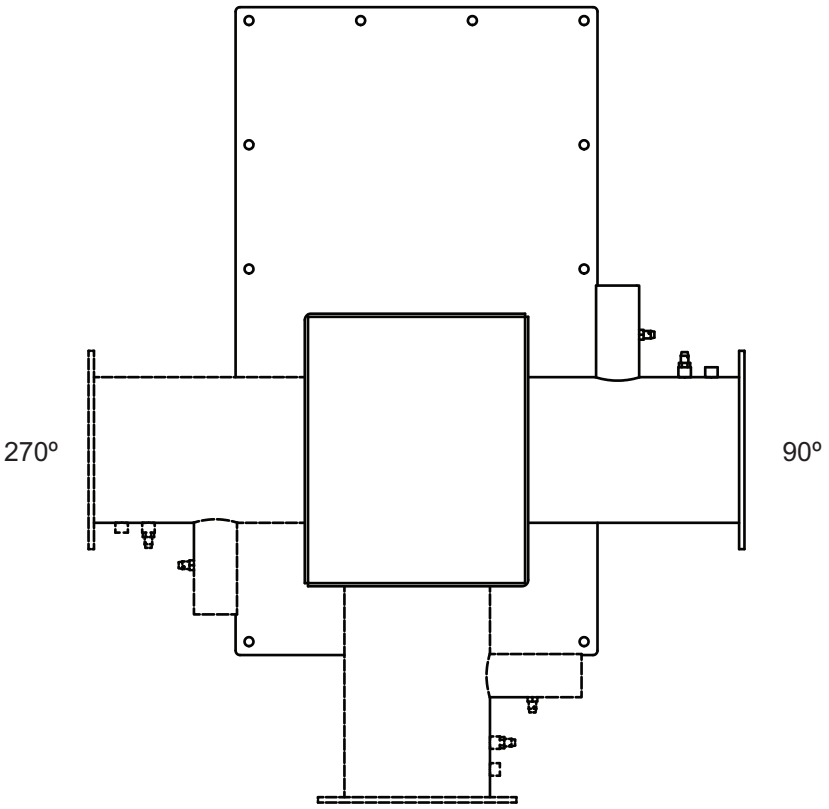
Dimensions and Specifications

Dimensions in mm

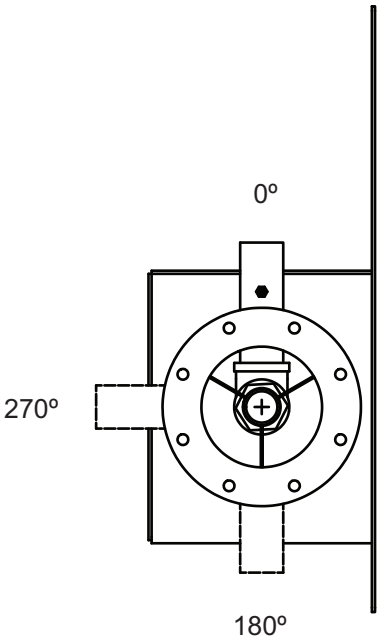


Input kW, HHV (LHV)	A	B	C	Gas Inlet Size - BSPT
158 (142) - 475 (428)	242	175	250	Rc 1.5
527 (474) - 593 (534)	362			
633 (570) - 1108 (997)	362	243	305	Rc 2.0
1187 (1068) - 1319 (1187)	502			
1424 (1282) - 1582 (1424)	642			

Gas and Air Orientations



Air Orientation
(Firing Position shown at 0º)



Gas Orientation
(Firing Position shown at 0º)