Datasheet 310-1
2/12/2010

Eclipse Tube Firing Burner

Model TFB030

Version 2

Parameter		Burner Input 1000's Btu/h (kW)		
		100 (29.3)	**200 (58.6)**	**300 (87.8)**
Low Firing Rate, Btu/h (kW)[1] *At 100% excess air*	Without Flame Safety	5 (1.5)	5 (1.5)	5 (1.5)
	With Flame Safety	10 (2.9)	10 (2.9)	10 (2.9)
Differential Air Pressure, "w.c. (mbar)[2] *Between Tap A and B (see page 3 and 4)*		8.2 (20.4)	8.5 (21.2)	8.1 (20.2)
Air Flow, SCFH (Nm^3/h) *At 15% excess air*		1150 (32.6)	2300 (65.1)	3450 (97.7)
Differential Gas Pressure, "w.c. (mbar)[2] *Between Tap C and D (see page 3 and 4)*	Natural Gas	4.3 (10.7)	4.0 (10.0)	4.4 (11.0)
	Propane	1.7 (4.2)	3.8 (9.5)	4.0 (10.0)
	Butane	6.0 (15.0)	5.5 (13.7)	6.8 (16.9)
Piping		NPT or BSP burner piping is available		
Flame Detection		UV Scanner [3], Flamerod		
Ignition		Direct spark ignition (6 kVAC)		
Fuels *For any other mixed gas, contact Eclipse.*		Natural gas, propane, butane		
Maximum PCA Temperature		1000°F (540°C)		
Weight [4]		20 to 25 lbs (9 to 11,3 kg)		
Approvals		АИ30		

[1] The low firing rate represents the capability of the burner. Achievement of this rate will be affected by the control method and ratio-regulator used in the system design.

[2] Pressures shown are for system sizing only. The supply pressure at the burner inputs must be at least 3" w.c. higher than the differential pressure shown in the tables.

[3] When using the UV scanner, mounting adapter part number 10033 will prevent the UV scanner from detecting the ignition spark.

[4] All weights are approximate.

- All inputs based on gross calorific values.
- 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.
- Plumbing of air and gas will affect accuracy of orifice readings. All information is based on generally acceptable air and gas piping practices.

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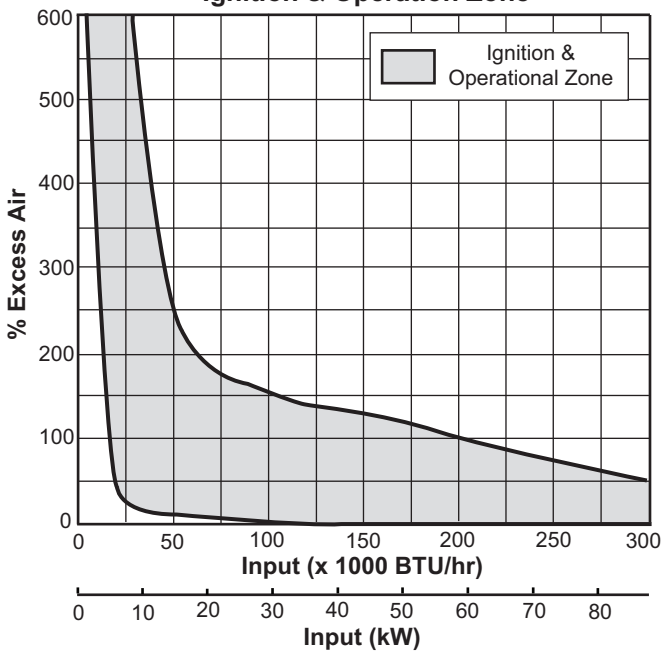
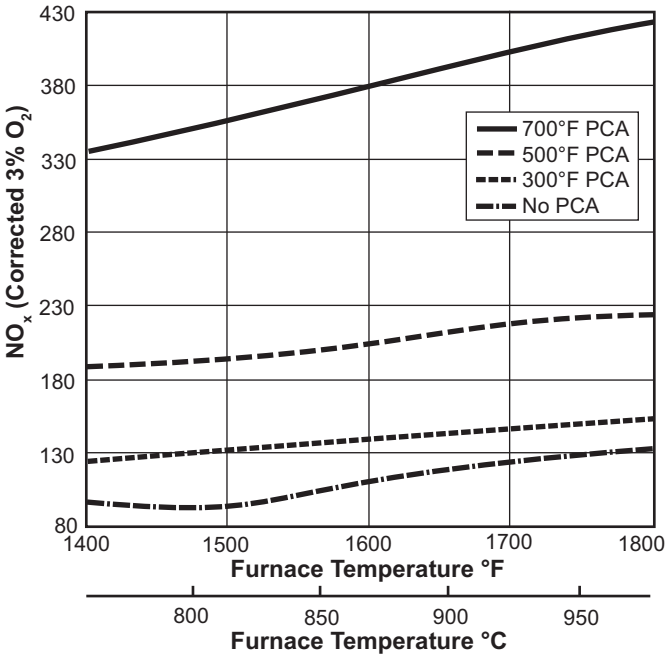
Performance Graphs

Ignition & Operation Zone



NOx Emissions
(Natural Gas Fuel, 300,000 BTU/hr Input)

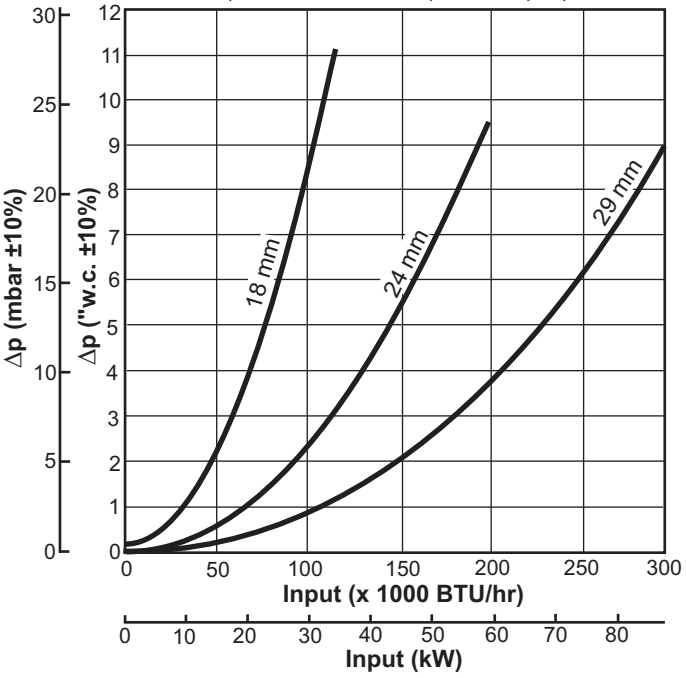


Emissions from the burner are influenced by:

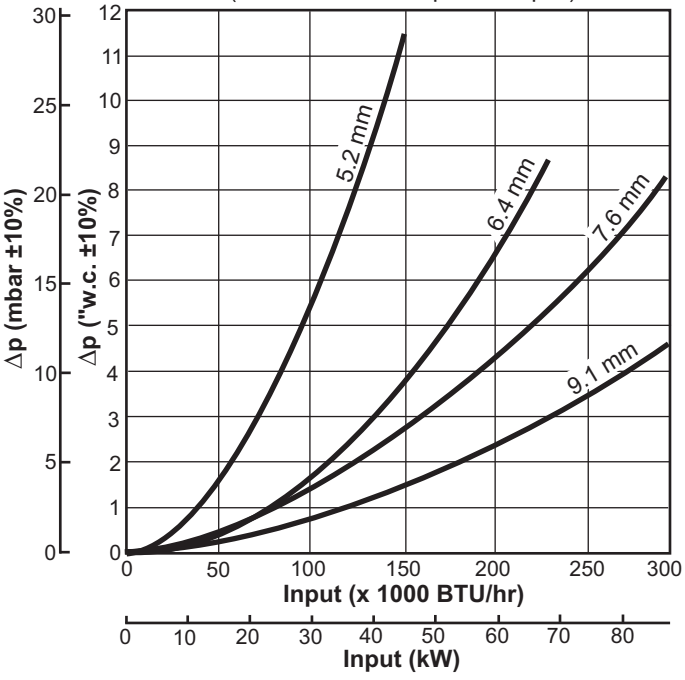
- fuel type
- combustion air temperature
- chamber conditions
- percent of excess air

For estimates of other emissions, contact Eclipse Inc.

Air Orifice ∆p vs Input @ 3% O_2
(Measured from Tap A to Tap B)

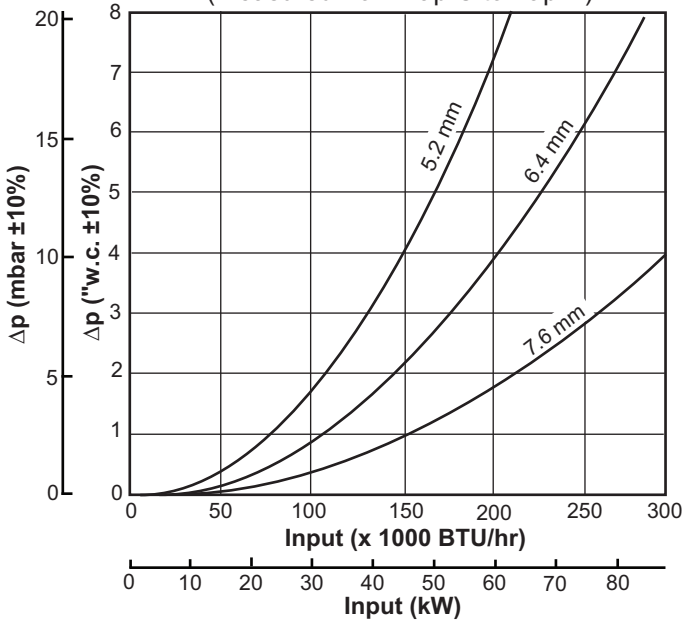


Natural Gas Orifice ∆p vs Input
(Measured from Tap C to Tap D)

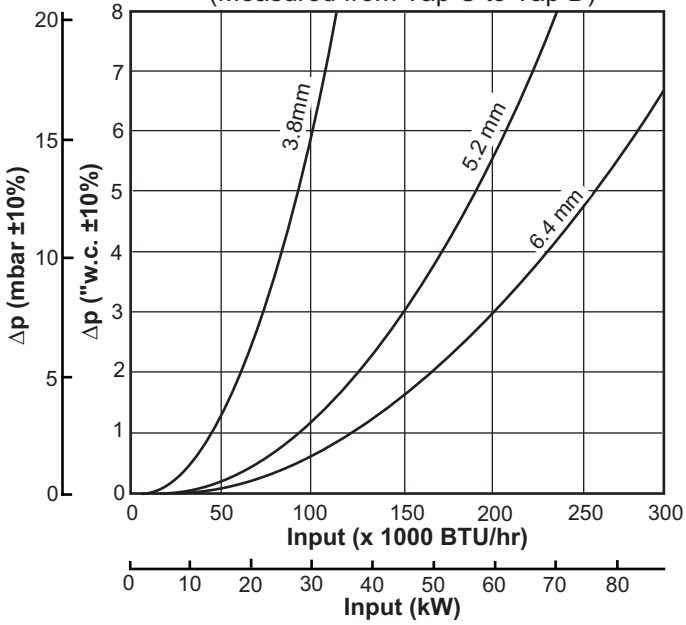


Performance Graphs (Continued)

Propane Orifice ∆p vs. Input
(Measured from Tap C to Tap D)

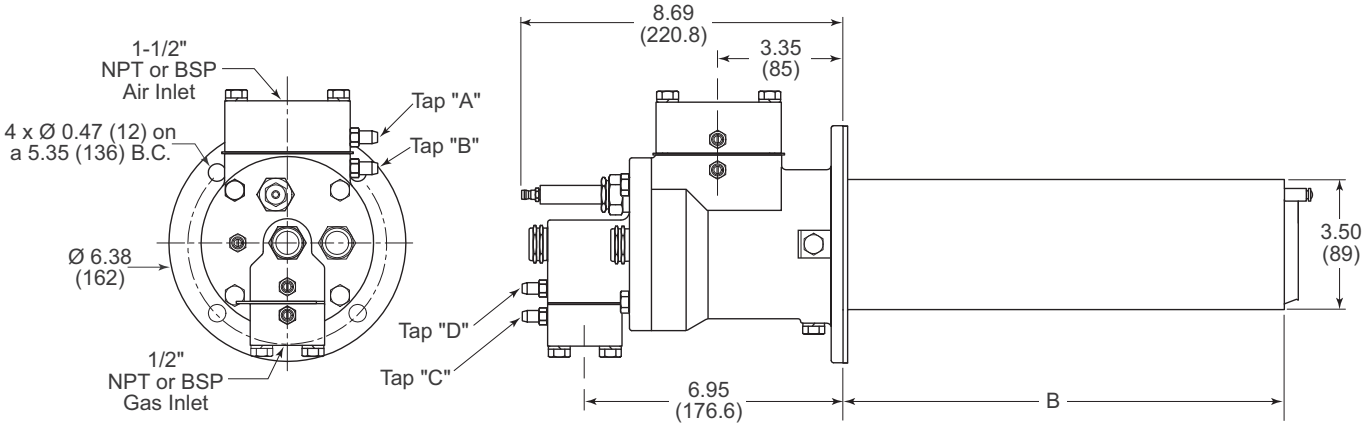


Butane Orifice ∆p vs Input
(Measured from Tap C to Tap D)



Dimensions & Specifications

Dimensions in inches (mm)



Dimension "B"

Each Tube Firing Burner is available in a number of variants which have different air tube lengths (dimension "B"). Based on your application, choose the dimension closest to you requirements. Dimension "B" can be from 3" to 24" in one inch increments.

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