Datasheet 206-8
9/20/2014

Eclipse ThermJet Burners for Preheated Combustion Air

Model TJPCA0300

Version 2

Parameter			Specifications		
			Natural Gas	Propane	Butane
Maximum Input, Btu/h (kW)[1]			3,000,000 (791)	3,000,000 (791)	3,000,000 (791)
Minimum Input, Btu/h (kW)[1]			300,000 (79)	300,000 (79)	300,000 (79)
Main Gas Inlet Pressure, "w.c. (mbar) *Fuel pressure at gas inlet* *Tap B (see page 3)*	Combustion Air Temperature	**Ambient**	6.0 (14.9)	6.8 (16.9)	6.0 (14.9)
		300°F (150°C)	7.8 (19.5)	8.6 (21.4)	7.8 (19.5)
		700°F (370°C)	11.2 (27.7)	12.0 (29.7)	11.2 (27.7)
		1000°F (540°C)	13.7 (34.1)	14.5 (35.9)	13.7 (34.1)
Air Inlet Pressure, "w.c. (mbar) *15% excess air at maximum input*		**Ambient**	4.5 (11.2)	4.5 (11.2)	4.5 (11.2)
		300°F (150°C)	6.3 (15.7)	6.3 (15.7)	6.3 (15.7)
		700°F (370°C)	9.7 (24.2)	9.7 (24.2)	9.7 (24.2)
		1000°F (540°C)	12.2 (30.4)	12.2 (30.4)	12.2 (30.4)
High Fire Visible Flame Length, inches (mm) *Measured from the outlet end of combustor*			<64.0 (1630)	<66.0 (1675)	<68.0 (1730)
Flame Detection			UV scanner available for all combustors.		
Fuels[2] *For any other mixed gas, contact Eclipse for orifice sizing.*			Natural gas, Propane, or Butane		
Approvals			АИ30		

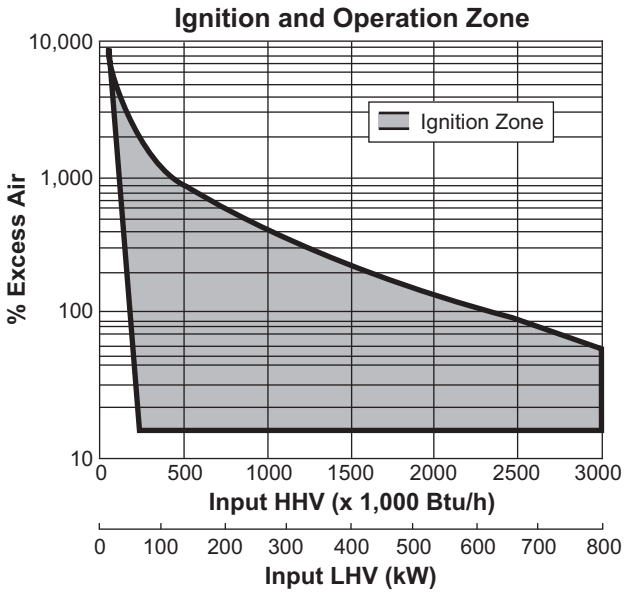
1. All imperial inputs based upon gross calorific values (HHV). All metric inputs based upon net calorific values (LHV).
2. See Design Guide 205 for more information about typical fuel composition and properties.

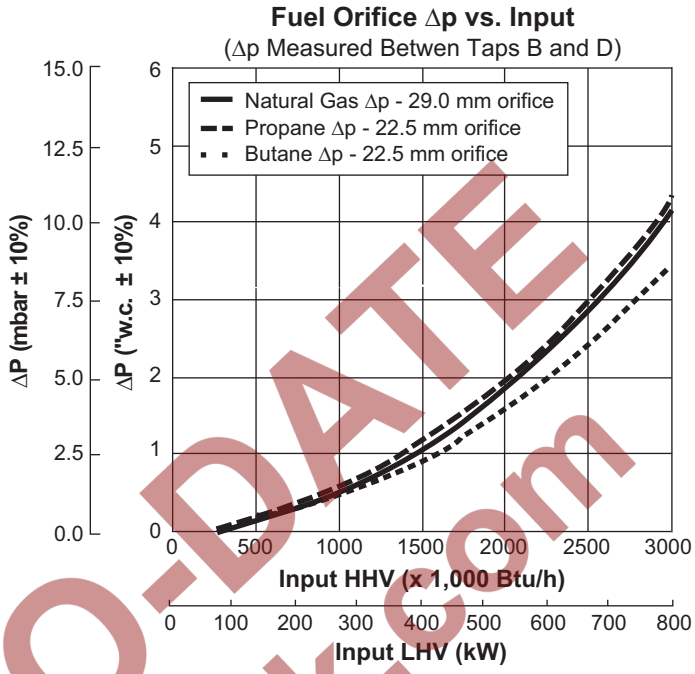
- All information is based on laboratory testing in neutral (0 "w.c., 0 mbar) pressure chamber. Different chamber conditions may affect the data.
- All information is based on standard combustor design. Changes in combustor will alter performance and pressures.
- All inputs based upon standard conditions; 1 atmosphere, 70°F (21°C).
- 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



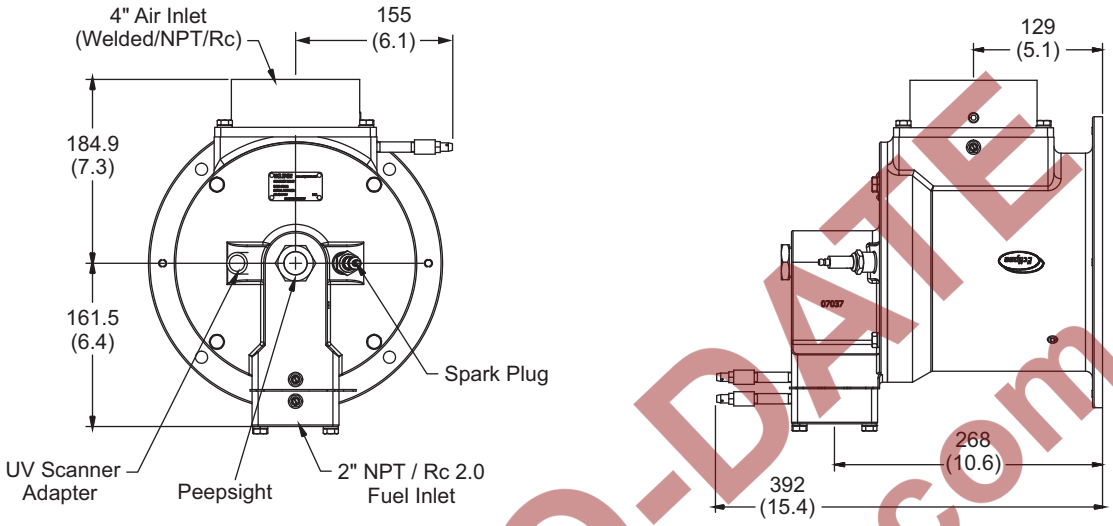


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Dimensions and Specifications

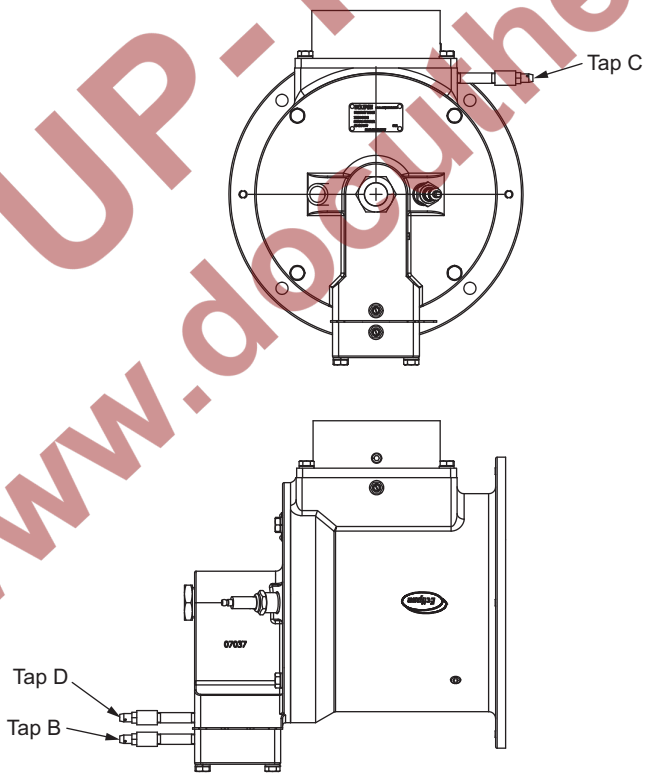
Dimensions in mm (inches)

Burner Housing



Burner weight less combustor: 89 lbs (40 kg)

Tap Locations

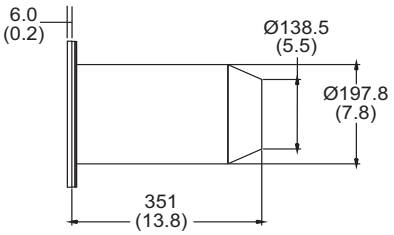


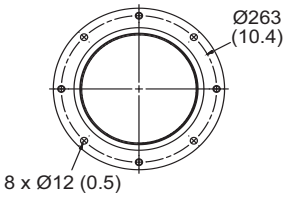
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Dimensions and Specifications

Dimensions in mm (inches)

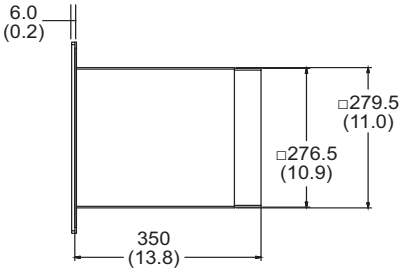
Combustors

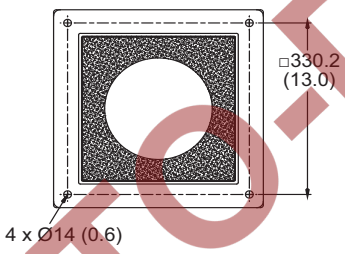




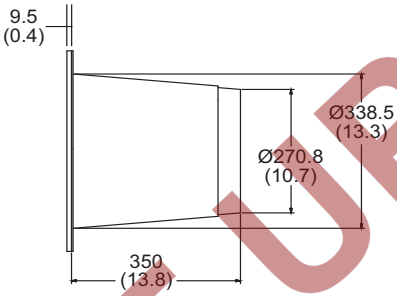
Alloy Combustor (AISI 310)
Weight: 13.5 lbs (6 kg)
Maximum Chamber Temp: 1,750°F (950°C)

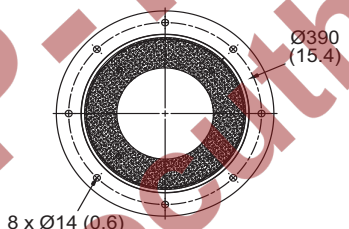
[Not Suitable for Preheated Air Over 700F (371C)]





Refractory Combustor with AISI 330 wrapper
Weight: 131.4 lbs (60 kg)
Maximum Chamber Temp: 2,800°F (1,538°C)





Down Firing Block with AISI 330 wrapper
Weight: 135 lbs (61.2 kg)
Maximum Chamber Temp: 2,800°F (1,538°C)

NOTE: Mounting gasket shown on right side of combustor flange. Dimensions shown do not account for mounting gasket.

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