# Eclipse ThermJet Burners

for Preheated Combustion Air

**Model TJPCA0750**

Version 2

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameter</strong></td>
<td><strong>Natural Gas</strong></td>
</tr>
<tr>
<td>Maximum Input BTU/hr (kW)</td>
<td>7,500,000 (2198)</td>
</tr>
<tr>
<td>Minimum Input, On-Ratio BTU/hr (kW)</td>
<td>750,000 (220)</td>
</tr>
<tr>
<td>Gas Inlet Pressure Required &quot;w.c. (mbar) Fuel Pressure at Gas Inlet (Tap “B” - see page 3)</td>
<td>Ambient</td>
</tr>
<tr>
<td></td>
<td>300°F (150°C)</td>
</tr>
<tr>
<td></td>
<td>700°F (370°C)</td>
</tr>
<tr>
<td>Air Inlet Pressure Required &quot;w.c. (mbar) 15% Excess Air at Maximum Input (tap “a” - see page 3)</td>
<td>Ambient</td>
</tr>
<tr>
<td></td>
<td>300°F (150°C)</td>
</tr>
<tr>
<td></td>
<td>700°F (370°C)</td>
</tr>
<tr>
<td>Maximum Preheated Air Temperature</td>
<td>700°F (370°C)</td>
</tr>
<tr>
<td>High Fire Flame Length Inches (mm) (Measured from End of Combustor)</td>
<td>&lt;125.0 (3175)</td>
</tr>
<tr>
<td>Flame Detection</td>
<td>UV scanner available for all combustors.</td>
</tr>
<tr>
<td>Fuel</td>
<td>Natural gas, propane, or butane.</td>
</tr>
</tbody>
</table>

- All information is based on laboratory testing in neutral (0.0" w.c.) pressure chamber. Different chamber size and 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 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.
Emissions from the burner are influenced by:
- Fuel type
- Combustion air temperature
- Firing rate
- Chamber conditions
- Percent of excess air

For estimates of other emissions, contact Eclipse.
Burner Housing

- Ø 15.35 (390)
- 8 x Ø 0.47 (12)

Dimensions in inches (mm)

Burner weight less combustor: 133 lbs (60 kg)

Combustor

Exhaust Outlet Diameter - Medium Velocity: Ø 8.66 (220)

Alloy Tube (AISI 310)

- Weight: 21 lbs (9.5 kg)
- Max. Chamber Temp: 1,750°F (950°C)
  (Not suitable for preheated air over 700°F)

Refractory Block

(w/ 330 SS wrapper)

- Weight: 330 lbs (150 kg)
- Max. Chamber Temp: 2,800°F (1535°C)
Down Firing Block

- Weight: 310 lbs (140.61 kg)
- Max. Chamber Temp: 2800°F (1535°C)

Dimensions:
- Ø 15 (380.6)
- Ø 18.5 (471)
- Ø 20.9 (530)
- Ø 22.8 (580)
- 8 x Ø 0.55 (14)