**Eclipse Tube Firing Burner**

**Model TFB200**

**Version 2**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Burner Input 1000’s Btu/h (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>800 (234.3)</td>
</tr>
<tr>
<td><strong>Low Firing Rate, Btu/h (kW)</strong></td>
<td></td>
</tr>
<tr>
<td>At 100% excess air</td>
<td>Without UV Scanner</td>
</tr>
<tr>
<td></td>
<td>With UV Scanner</td>
</tr>
<tr>
<td><strong>Differential Air Pressure, &quot;w.c. (mbar)</strong></td>
<td></td>
</tr>
<tr>
<td>Between Tap A and B (see pg 3-4)</td>
<td>5.6 (14.0)</td>
</tr>
<tr>
<td><strong>Recommended Air Orifice Plate in (mm)</strong></td>
<td>2.13 (54.1)</td>
</tr>
<tr>
<td><strong>Air Flow, SCFH (Nm³/h)</strong></td>
<td></td>
</tr>
<tr>
<td>At 15% excess air</td>
<td>9200 (260.5)</td>
</tr>
<tr>
<td><strong>Differential Gas Pressure, &quot;w.c. (mbar)</strong></td>
<td></td>
</tr>
<tr>
<td>Between Tap C and D (see pg 3-4)</td>
<td>Natural Gas</td>
</tr>
<tr>
<td></td>
<td>Propane</td>
</tr>
<tr>
<td></td>
<td>Butane</td>
</tr>
<tr>
<td><strong>Recommended Gas Orifice Plate, in (mm)</strong></td>
<td>Natural Gas</td>
</tr>
<tr>
<td></td>
<td>Propane</td>
</tr>
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<td></td>
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</tr>
</tbody>
</table>

**Piping**

NPT or BSP burner piping is available

**Flame Detection**

UV Scanner only*

**Ignition**

Direct spark ignition (6 kVAC)

**Fuels**

For any other mixed gas, contact Eclipse.

Natural gas, propane, butane

**Approvals**

*When using the UV scanner, it is necessary to use mounting adapter part number 10033 to ensure that the UV scanner will not detect the ignition spark.

**NOTE:** Pressures shown are for system sizing only. The supply pressure at the burner inlets must be at least 3” w.c. higher than the differential pressure shown in the tables.

- 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.
- 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.
Performance Graphs

Ignition and Operation Zone

Input (x 1000 Btu/h)

Input (kW)

% Excess Air

Furnace Temperature (ºF)

Furnace Temperature (ºC)

Furnace Temperature (ºF)

Furnace Temperature (ºC)

NOx and CO Emissions
(ambient air burner)

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.

NOx and CO Emissions
(pre-heated air burner)
Performance Graphs

Air Orifice DP vs Input
(Measured from Tap A to Tap B)

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

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

Propane Orifice DP vs Input
(Measured from Tap C to Tap D)
Dimensions & Specifications

Dimensions in inches (mm)

- 8-5/8
- Ø 0.47
- 7-1/2
- 5-1/2
- 3-1/4
- 5-1/2

1-1/2"
NPT or BSP
Gas Inlet

3"
NPT or BSP
Air Inlet

Total Weight (lb) 42 - 47