Eclipse Combustion

ImmersoJet Burners
Model 3” IJ
Version 2

Main Specifications

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>BLOWER SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blower Type</td>
<td>6” w.c. Packaged (60Hz)</td>
</tr>
<tr>
<td></td>
<td>10” w.c. Packaged (60Hz)</td>
</tr>
<tr>
<td></td>
<td>Remote Blower</td>
</tr>
<tr>
<td>Maximum Input (Btu/hr)</td>
<td>440,000</td>
</tr>
<tr>
<td>Minimum Input (Btu/hr)</td>
<td>28,000</td>
</tr>
<tr>
<td>Air Inlet Pressure (&quot;w.c.&quot;) @Max. Input</td>
<td>7.7</td>
</tr>
<tr>
<td>– Air pressure at burner inlet (Tap &quot;A&quot;)</td>
<td></td>
</tr>
<tr>
<td>Blower Motor Horse Power</td>
<td>.33</td>
</tr>
<tr>
<td>Main Gas Pressure (&quot;w.c.&quot;) into regulator</td>
<td>Max. 27.7</td>
</tr>
<tr>
<td></td>
<td>Min. 10</td>
</tr>
<tr>
<td>Tube Backpressure (&quot;w.c.&quot;)</td>
<td>1.6</td>
</tr>
<tr>
<td>Weight-less actuator (lbs)</td>
<td>95</td>
</tr>
<tr>
<td>CO emissions (ppm)</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Piping</td>
<td>N.P.T. or B.S.P.</td>
</tr>
<tr>
<td>Flame Detection</td>
<td>Flamerod or U.V. Scanner.</td>
</tr>
<tr>
<td>Fuel (1)</td>
<td>Natural gas, Propane, Butane</td>
</tr>
<tr>
<td></td>
<td>For any other mixed gas, contact Eclipse for orifice sizing.</td>
</tr>
</tbody>
</table>

(1) Different fuels require different nozzles and orifices.
• All information is based on laboratory testing with a tube effective length of 22 feet. Different tube sizes and conditions may affect the data.
• All information is based on standard tube design. Changes in the tube will alter performance and pressures.
• All inputs based upon gross caloric 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 Data

Typical Operational Curve & Ignition Zone
(Nat. Gas, Propane & Butane)

- **Low Fire**
  - 28,000 Btu/hr.
  - (Regardless of Blower)

- **High Fire**:
  - 440,000 Btu/hr (6” w.c. Blower)
  - 550,000 Btu/hr (10” w.c. Blower)
  - 850,000 Btu/hr (Remote Blower)

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Gas Orifice $\Delta P$ vs. Input
Measured from Tap "B" to Tap "D"

- Natural Gas
- Propane Gas
- Butane Gas

Air Orifice $\Delta P$ vs. Input @ 3% O$_2$
Measured from Tap "A" to Tap "C"

- Natural Gas
- Propane Gas
- Butane Gas
**Dimensions & Specifications**

**Dimensions in mm (inches)**

- **View A A**
  - $\Phi 230$ (9.06)
  - $\Phi 200$ (7.87)
  - $\Phi 86.5$ (3.41)
  - 4x $\Phi 12$ (.47)
  - $4 \times 90^\circ$

- **Dimensions**
  - $A = 428$ (16.85), $B = 301$ (11.84), $C = 352$ (13.84), $D = 120$ (4.72), $A = 6$ (0.236)

- **Filter/silencer option shown in gray. (High velocity only.)**

- **Remote Blower**

- **Tap locations**
  - Tap "A"
  - Tap "B"
  - Tap "C"
  - Tap "D"

- **Note:** See Remote Blower drawing below for Tap locations.

**Table: Specifications**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>60Hz</th>
<th>50 Hz</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure Blower</td>
<td>324</td>
<td>291</td>
<td>234</td>
<td>638</td>
<td>430</td>
</tr>
<tr>
<td>High Pressure Blower</td>
<td>353</td>
<td>291</td>
<td>255</td>
<td>698</td>
<td>490</td>
</tr>
</tbody>
</table>

**Remote Blower**

- **1" NPT or BSP (Gas Inlet)**
- **2-1/2" NPT or BSP Air Inlet**
- **96.89 SQ (3.81)**
- **92.8 (3.65)**
- **289 (11.37)**
- **120 (4.72)**
- **169 (6.65)**
- **403.5 (15.78)**
- **68 (2.67)**