**Eclipse ImmersoJet**  
**Burners**  
*Model 3"IJ*  
*Version 2*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Blower Type</th>
<th>Low Pressure Packaged Burner (60 Hz)</th>
<th>High Pressure Packaged Blower (60 Hz)</th>
<th>Remote Blower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blower Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Input BTU/hr (kW)</td>
<td></td>
<td>440,000 (129)</td>
<td>550,000 (161)</td>
<td>850,000 (249)</td>
</tr>
<tr>
<td>Minimum Input BTU/hr (kW)</td>
<td></td>
<td>28,000 (8.2)</td>
<td>28,000 (8.2)</td>
<td>28,000 (8.2)</td>
</tr>
<tr>
<td>Air Inlet Pressure (^{w.c. (mbar)}) @ Max Input</td>
<td>7.7 (19.1)</td>
<td>11.5 (28.6)</td>
<td>26.0 (64.7)</td>
<td></td>
</tr>
<tr>
<td>Blower Motor Hp (kW)</td>
<td>0.33 (0.25)</td>
<td>0.5 (0.37)</td>
<td>As Specified</td>
<td></td>
</tr>
<tr>
<td>Main Gas Pressure Supplied to Regulator (^{w.c. (mbar)})</td>
<td>10.0 - 27.7</td>
<td>14.0 - 27.7</td>
<td>27.0 - 27.7</td>
<td></td>
</tr>
<tr>
<td>Backpressure (^{w.c. (mbar)})</td>
<td>1.6 (3.9)</td>
<td>2.6 (6.4)</td>
<td>6.1 (15.1)</td>
<td></td>
</tr>
<tr>
<td>Weight lbs (kg)</td>
<td>95 (43)</td>
<td>100 (45)</td>
<td>60 (27)</td>
<td></td>
</tr>
<tr>
<td>CO Emissions (ppm)</td>
<td>&lt;100</td>
<td>&lt;100</td>
<td>&lt;100</td>
<td></td>
</tr>
<tr>
<td>Piping</td>
<td>N.P.T. or B.S.P.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flame Detection</td>
<td>Flamerod or UV Scanner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel(^{a})</td>
<td>Natural Gas, Propane, Butane</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{a}\)Different fuels require different nozzles and orifices.  
• All information is based on laboratory testing with a tube effective length of 22 feet (6.7 m). 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 calorific values (HHV).  
• 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.  
• Packaged blower performance data based on 60 Hz.
Performance Graphs

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

% Excess Air

Input as a percentage from low fire to high fire

Low Fire:
28,000 BTU/hr (8.2 kW)
(Regardless of Blower)

High Fire:
440,000 BTU/hr (128.9 kW) (6” w.c. Blower)
550,000 BTU/hr (161.2 kW) (10” w.c. Blower)
850,000 BTU/hr (249.1 kW) (Remote Blower)

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

Air Orifice $\Delta P$ vs. Input @ 3% $O_2$
Measured from Tap “A” to Tap “C”

Input x1000 BTU/hr

Input kW

Pressure Drop (mbar)

Pressure Drop (w.c.)

Natural Gas
Propane Gas
Butane Gas

Natural Gas
Propane Gas
Butane Gas
Dimensions & Specifications
Dimensions in mm (inches)

Note: See Remote Blower drawing below for Tap locations.

Remote Blower

1" NPT or BSP (Gas Inlet)
2-1/2" NPT or BSP
Air Inlet

Filter/silencer option shown in gray

775 (30.5)
428 (16.85)
301 (11.84)
352 (13.84)
120 (4.72)
42 (1.65)
68 (2.7)

96.89 SQ. (3.81)

2-1/2" NPT or BSP
Air Inlet

92.8 (3.65)

403.5 (15.78)

169 (6.65)

289 (11.37)

120 (4.72)

428 (16.85)

428 (16.85)

301 (11.84)

352 (13.84)

120 (4.72)

120 (4.72)

6 (0.236)

View AA

ø200 (7.87)
ø230 (9.06)
ø86.5 (3.41)
4x ø12 (.47)

45°
4x90°

Low Pressure Blower

<table>
<thead>
<tr>
<th>A</th>
<th>60Hz</th>
<th>50 Hz</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>324 (12.74)</td>
<td>291 (11.44)</td>
<td>234 (9.20)</td>
<td>638 (25.08)</td>
<td>430 (16.91)</td>
</tr>
</tbody>
</table>

High Pressure Blower

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<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>353 (13.88)</td>
<td>291 (11.44)</td>
<td>255 (10.02)</td>
<td>698 (27.45)</td>
<td>490 (19.27)</td>
</tr>
</tbody>
</table>

Note: See Remote Blower drawing below for Spark and Flame Rod dimension details.