# Energy Sabre™ 600
Single-Ended Radiant Tube Burner

## Parameter

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Typical Burner Input 1000's BTU/h (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50 (13)</td>
</tr>
<tr>
<td></td>
<td>120 (31.2)</td>
</tr>
<tr>
<td></td>
<td>200 (52)*</td>
</tr>
<tr>
<td>Air Inlet Pressure, &quot;w.c. (mbar)&quot;</td>
<td>8.2 (20.4)</td>
</tr>
<tr>
<td>15% excess air at maximum input</td>
<td>25.5 (63.5)</td>
</tr>
<tr>
<td>Based on 1700ºF (926ºC) Furnace Temperature</td>
<td>33.3 (82.9)</td>
</tr>
<tr>
<td>Gas Inlet Pressure, &quot;w.c. (mbar)&quot;</td>
<td>7.4 (18.4)</td>
</tr>
<tr>
<td>Maximum Chamber Temperature, ºF (ºC)</td>
<td>23.2 (57.8)</td>
</tr>
<tr>
<td>Contact Selas Engineering for higher temperatures</td>
<td>30.3 (75.5)</td>
</tr>
<tr>
<td></td>
<td>2000 (1093)</td>
</tr>
<tr>
<td>Piping</td>
<td>NPT, BSP, JIS interfaces available</td>
</tr>
<tr>
<td>Ignition</td>
<td>Direct Spark</td>
</tr>
<tr>
<td>Flame Detection</td>
<td>Flame Rod, UV Scanner</td>
</tr>
<tr>
<td>Fuel</td>
<td>Natural Gas</td>
</tr>
<tr>
<td>For any other gas, contact Selas</td>
<td></td>
</tr>
<tr>
<td>Weight, lbs (kg) Burner Assembly Only (mounting flange/tube set)</td>
<td>65 (29.5)</td>
</tr>
</tbody>
</table>

*Contact Selas Application Engineering for maximum firing rate given specific tube configuration and furnace temperature.

1) All imperial inputs are based on gross calorific values (HHV). All metric inputs are based on net calorific values (LHV).

2) All information is based on laboratory testing with neutral (0.0” w.c.) exhaust conditions.

3) All inputs are based on standard conditions: 1 atmosphere, 70ºF (21ºC).

4) Air and fuel pressure data provided is based on 15% excess air and 1700ºF (926ºC) furnace temperature.

5) Selas reserves the right to change the construction and/or configuration of our products at any time without being obliged to adjust earlier supplies accordingly.

www.selas.com / sales@selas.com

The Heat Technology Company™
Performance Graphs Page 1

Energy Sabre 600 Efficiency vs. Input (HHV)

- 1600º F Furnace
- 2000º F Furnace

Input HHV (x 1000 btu/h)

Energy Sabre 600 Static Air Pressure vs. Input (HHV)

Energy Sabre 600 Static Gas Pressure vs. Input (HHV)

Energy Sabre 600 Radiant Tube Temperature Uniformity (ºF)

Average Tube Temp. 1790º F

Distance From Burner (inches)

www.selas.com / sales@selas.com

The Heat Technology Company™
Performance Graphs Page 2

Energy Sabre 600 Efficiency vs. Input (LHV)

Energy Sabre 600 Static Air Pressure vs. Input (LHV)

Energy Sabre 600 Static Gas Pressure vs. Input (LHV)

Energy Sabre 600 Radiant Tube Temperature Uniformity (ºC)
Mounting Options - Horizontal

Burner Mounted Horizontally
Specifications and Dimensions
Dimensions in [mm] inches

www.selas.com / sales@selas.com
Mounting Options - Vertical

Burner Mounted Vertically
Specifications and Dimensions
Dimensions in [mm] inches

** Dimension can be adjusted to suit application

Gas Inlet
1/2” NPT

Air Inlet
1-1/4” NPT

Exhaust Outlet
2” NPT

Spark Rod
Flame Rod or UV Scanner
Peep sight

Dual Finned Combustor Tube
Application Specific

Effective Length
application specific

Selas
The Heat Technology Company™

www.selas.com / sales@selas.com