PROFIRE®-Q SERIES BURNERS
0.4 - 2.5 MMBTU/HR

High-efficiency burner technology for the most stringent emissions requirements
Advanced Engineering

Ultra-Quiet Operation

Designed around efficiency and operational simplicity, the ProFire-Q series is perfect for cast iron sectional boilers, firebox, commercial watertube, firetube, furnace and oven applications. The standard ProFire-Q series features linkageless operation with DC pulse width modulation and parallel positioning gas actuator control for increased efficiencies and ease of use. The whisper quiet, compact design has a totally enclosed, hinged burner housing and allows provisions for sealed combustion or fresh air intake.

Compact design with **SIMPLICITY** and **cost savings** in mind.

**Modes of Operation**
Features on-off, low-high-low, or full modulation utilizing a parallel positioning gas flow ratio control.

**Easy Setup/Commissioning**
The parallel positioning gas actuator control with pulse width modulation make setup as easy as setting the main regulator and programming a curve.

**Linkageless System**
The linkageless system utilizes a DC pulse width modulation blower and gas actuator control to simplify burner setup and operation. The DC pulse width modulation reduces electrical and maintenance costs and produces a quiet operation; while the gas actuator controls the fuel and proportions the gas to a predetermined flow.

**Compact Design**
The fully enclosed air housing features a hinged cover which provides easy access to internal components and a whisper quiet operation.

**Low Blower Motor HP**
Advanced engineering provides increased combustion air fan efficiency requiring lower blower motor horsepower, thus increasing electrical savings.
The standard ProFire-Q series includes on/off, low-high-low, or full modulation linkageless operation with DC pulse width modulation and offers natural gas from 0.375 to 2.5 MM BTU per hour. Its totally enclosed, compact design allows provisions for sealed combustion or fresh air intake. Outside air can easily be connected to the blower inlet without any modifications to the burner.

**The Q Burner Explained:**

- **Linkageless System** standard for optimal control throughout the firing range
- **DC Pulse Width Modulation** allows full blower speed control without the use of air dampers
- **Fully Enclosed Air Housing** features a hinged cover for easy access to internal components and quiet operation
- **Combustion Air Fan** efficient airfoil blade design smoothly lifts airflow over the entire blade, resulting in less motor horsepower requirements and significant noise reduction when compared to standard force draft fans
- **Sealed Combustion** eliminates the need for outside air dampers and make-up air units typically required in every boiler room.
- **UL & cUL** listed
- **CSA Package** listed
### Capacities and Ratings

#### Uncontrolled Emissions Configuration

<table>
<thead>
<tr>
<th>Burner Model</th>
<th>Q6-037</th>
<th>Q6-055</th>
<th>Q6-075</th>
<th>Q6-100</th>
<th>Q6-130</th>
<th>Q6-150</th>
<th>Q8-175</th>
<th>Q8-200</th>
<th>Q8-250</th>
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</thead>
<tbody>
<tr>
<td>Gas Input (MBtu/hr)</td>
<td>375</td>
<td>550</td>
<td>750</td>
<td>1,000</td>
<td>1,250</td>
<td>1,500</td>
<td>1,750</td>
<td>2,000</td>
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<tr>
<td>BHP @ 80% Efficiency</td>
<td>9</td>
<td>13</td>
<td>18</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
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<tr>
<td>Blower Motor HP</td>
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<td>1/2</td>
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<td>1/2</td>
<td>3/4</td>
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<tr>
<td>Furnace Pressure (<em>w.c.</em>)</td>
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<td>1.0</td>
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<td>Min. Gas Pressure Required (<em>w.c.</em>)</td>
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<td>Low Pressure Gas Train Pipe Size (in.)</td>
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<td>Low Gas Pressure Inlet (<em>w.c.</em>)</td>
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</table>

Input is based on fuel Btu content and altitude of 2,000 feet or less. If altitude > 2,000 feet and < 8,000 feet, derate capacity 4% per 1,000 feet over 2,000. Consult factory for higher altitudes. Gas input is based on natural gas with 1,000 Btu/cu.ft. and 0.60 gravity. Consult factory for 50Hz. applications.

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**Total integration doesn’t stop with the burner.**

Only Cleaver-Brooks offers complete boiler systems, from fuel inlet to stack outlet, that are completely designed, engineered, manufactured, integrated, and serviced by one company.

Integration starts with the burners, and Cleaver-Brooks has been perfecting this integral element of the boiler system through innovation and expert engineering for more than 80 years.