### INDUSTRIAL COMBUSTION



# Q SERIES

0.4 to 2.5 MM BTU/HR

# Advanced Engineering Ultra-Quiet Operation

Designed around efficiency and operational simplicity, the Q series is perfect for cast iron sectional boilers, firebox, commercial watertube, firetube, furnace and oven applications. The standard 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.

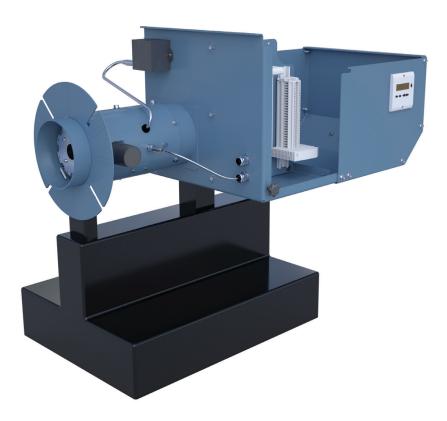
#### **Low Blower Motor HP**

Advanced engineering provides increased combustion air fan efficiency requiring lower blower motor horsepower, thus increasing electrical savings.

### The Q Burner Explained

The standard 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.

#### **Q** Burner



**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 and cUL** listed

**CSA Package** listed

#### **Uncontrolled Emissions Configuration**

Burner model	Q6-037	Q6-055	Q6-075	Q6-100	Q6-130	Q6-150	Q8-175	Q8-200	Q8-250
Gas input (MBTU/hr)	375	550	750	1,000	1,250	1,500	1,750	2,000	2,500
BHP @ 80% efficiency	9	13	18	24	30	36	42	48	60
Blower motor HP	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4
Furnace pressure (" w.c.)	1.0	1.0	1.0	1.0	1.0	0.75	1.0	1.0	0.75
Standard gas train pipe size (in.)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Min. gas pressure required (" w.c.)	4.0	4.0	4.0	4.0	4.0	6.0	6.0	6.0	10
Low pressure gas train pipe size (in.)	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0
Low gas pressure inlet (" w.c.)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.5
Air inlet orifice size (in.)	1.25	1.50	1.80	2.25	2.95	-	3.45	3.80	-
Fresh air inlet size (in.)	4.0	4.0	4.0	4.0	4.0	4.0	5.75	5.75	5.75
Shipping weight	100	100	100	100	100	100	125	125	125

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 50 Hz. applications.

