


Eclipse RatioMatic

Burners

Model RM0100

Version 5

| Parameter | Specification | | |
|---|---|-----------------|-----------------|
| | Chamber Pressure "w.c. (mbar) | 50 Hz | 60 Hz |
| Blower Type | | | |
| Maximum Input, Btu/h (kW)¹ | -2.0 (-5.0) | 1,375,000 (403) | 1,295,000 (379) |
| <i>Contact factory for chamber pressures outside the given range, or varying chamber pressure conditions.</i> | -1.0 (-2.5) | 1,295,000 (379) | 1,210,000 (354) |
| | 0.0 (0.0) | 1,210,000 (354) | 1,120,000 (328) |
| | 1.0 (2.5) | 1,120,000 (328) | 1,020,000 (298) |
| | 2.0 (5.0) | 1,020,000 (298) | 915,000 (268) |
| Minimum Input On-Ratio, Btu/h (kW)² | with high turndown ratio regulator | 30,000 (9) | |
| | with standard ratio regulator | 40,000 (12) | |
| Main Gas Inlet Pressure, "w.c. (mbar)³ <i>Fuel pressure at ratio regulator inlet</i> | 10 to 20 (25 to 50) | | |
| High Fire Flame Length, inches (mm) <i>Measured from the outlet end of the combustor</i> | Natural Gas | 32 (813) | |
| | Propane / Butane | 38 (965) | |
| Maximum Chamber Temperature, °F (°C) | Alloy Tube | 1500 (815) | |
| | SiC Tube | 1900 (1038) | |
| Flame Detection | Flame rod or UV Scanner | | |
| Fuel⁴ <i>For any other mixed gas, contact Eclipse, Inc.</i> | Natural Gas, Propane, Butane | | |
| Blower Motor Power, Hp (kW) | 0.5 (0.37) | | |
| Weight, lbs (kg)⁵ | 88 (40) | | |
| Approvals |  AN30 | | |

¹ Maximum inputs for packaged blower versions are given for the standard combustion air blower without an inlet air filter.

² Turndown input based on neutral chamber conditions. Contact Eclipse for other chamber pressures.

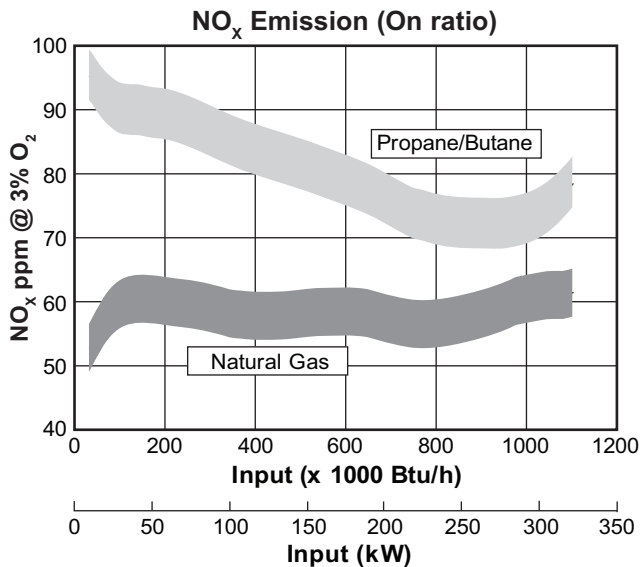
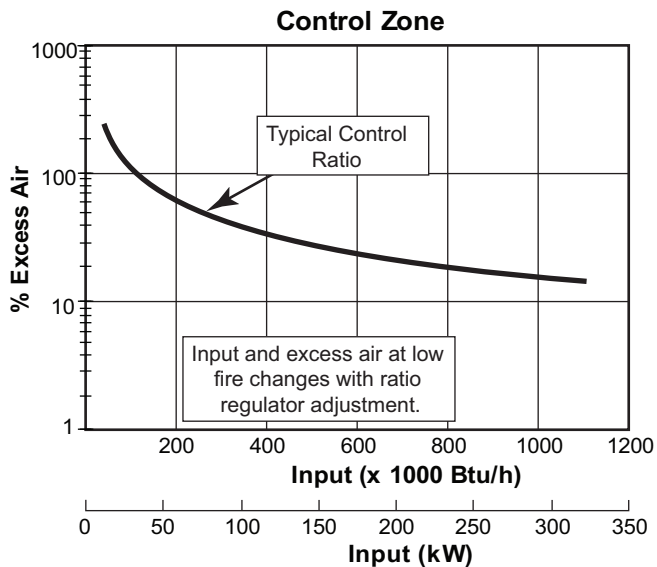
³ For proper performance, this pressure must be kept constant across the burner operating range.

⁴ See Design Guide 110 for more information about typical fuel composition and properties.

⁵ All weights are approximate.

- All information is based on laboratory testing. Different chamber conditions will affect the data.
- All inputs based upon gross calorific values and standard conditions; 1 atmosphere, 70°F (21°C).
- 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.

Performance Graphs



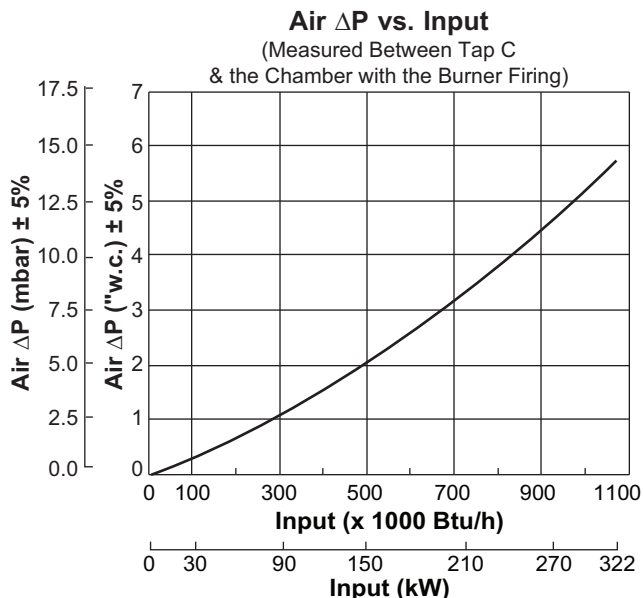
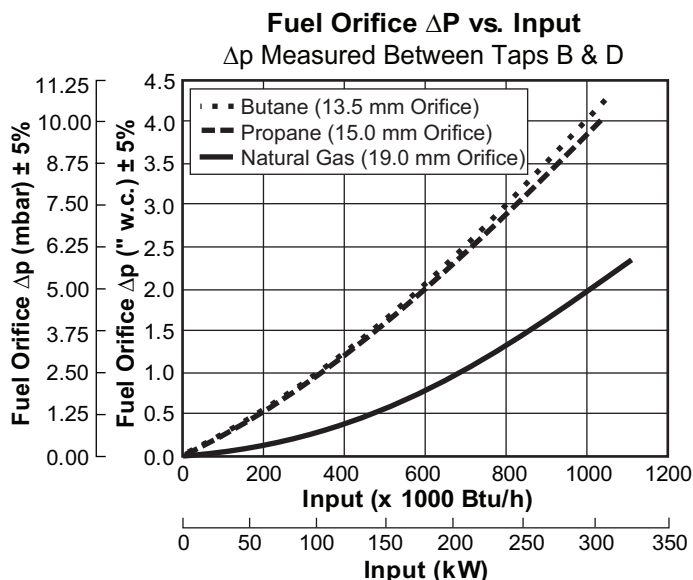
NO_x Emission data is given for:

- Ambient combustion air ~70°F (21°C)
- Less than 700°F (370°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 40,000 Btu/h (12 kW)
- ppm volume, dry @ 3% O₂
- Neutral chamber pressure

Emissions from the burner are influenced by:

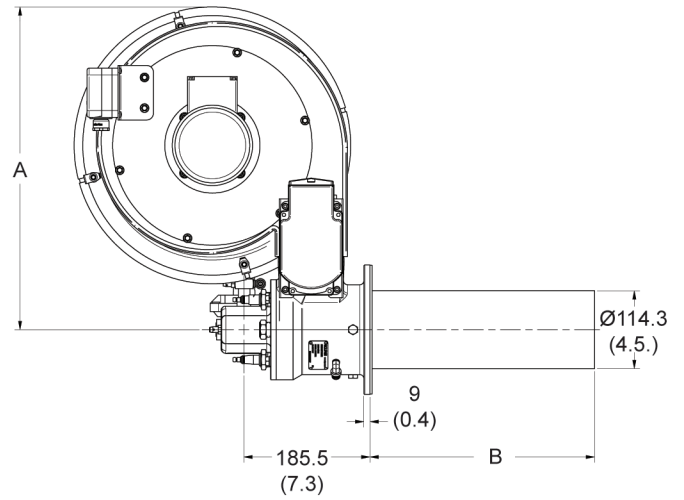
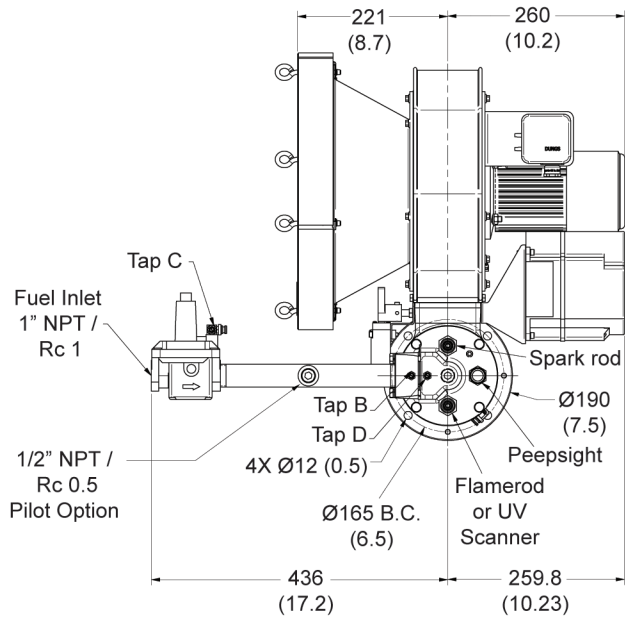
- Chamber conditions
- Fuel type
- Firing rate
- Ratio regulator adjustment
- Combustion air temperature

CO emission is largely influenced by chamber conditions. Contact your local Eclipse Combustion representative for an estimate of CO emission on your application



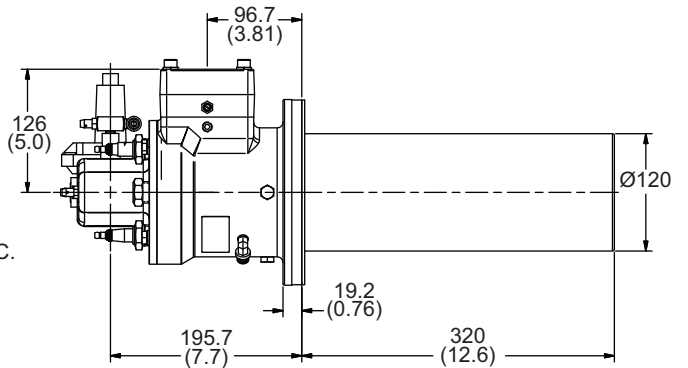
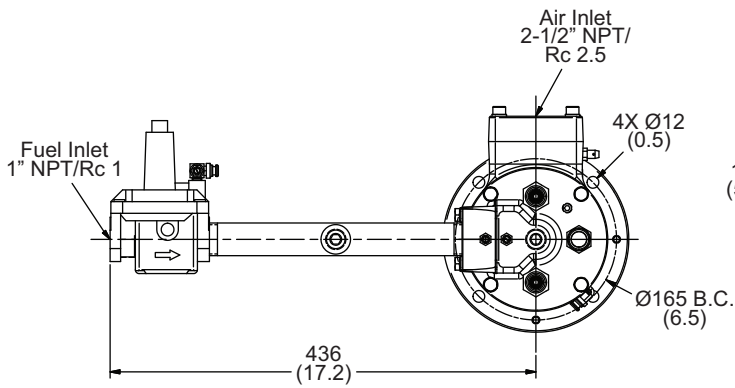
Dimensions and Specifications

Dimensions in mm (in)



| Blower Size | A |
|-------------|------------|
| 50 Hz | 534 (21.0) |
| 60 Hz | 481 (18.9) |

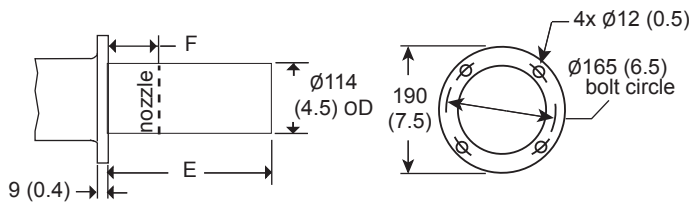
| Combustor Type | B |
|---|----------|
| Straight Stainless Steel Alloy Tube | 254 (10) |
| Straight Stainless Steel Alloy/Silicon Carbide Tube | 330 (13) |
| Straight Stainless Steel Alloy Tube | 406 (16) |



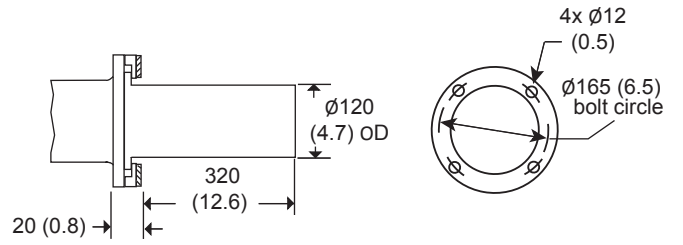
Shown with Silicon Carbide
Combustor and Flange

Combustor Options

Alloy Combustor



Silicon Carbide Combustor



| E | F |
|------------|-----------|
| 254 (10.0) | 84 (3.3) |
| 330 (13.0) | 160 (6.3) |
| 406 (16.0) | 236 (9.3) |

Burner Configurations

