


# Eclipse RatioMatic

## Burners

Model RM0300

Version 5

| Parameter  | Specifications   |                        |                  |
|--|--|------------------------|------------------|
|  | Chamber Pressure<br>"w.c. (mbar)   | 50 Hz                  | 60 Hz            |
| <b>Blower Type</b>   |  |                        |                  |
| <b>Maximum Input, Btu/h (kW)<sup>1</sup></b>   | -5.0 (-12.4)   | 3,500,000 (1020)       | 3,550,000 (1040) |
| <i>For chamber pressures outside the given range or for varying chamber pressure conditions, contact Eclipse, Inc.</i> | -2.0 (-5.0)  | 3,170,000 (920)        | 3,220,000 (940)  |
|  | 0 (0.0)  | 2,950,000 (860)        | 3,000,000 (880)  |
|  | 2.0 (5.0)  | 2,690,000 (780)        | 2,740,000 (800)  |
|  | 5.0 (12.4)   | 2,250,000 (660)        | 2,300,000 (670)  |
|  | <b>Minimum Input, Btu/h (kW)<sup>2</sup></b><br><i>For lower inputs, contact Eclipse, Inc.</i> | 65,000 (19)            |                  |
| <b>Main Gas Inlet Pressure, "w.c. (mbar)<sup>3</sup></b><br><i>Fuel pressure at ratio regulator inlet</i>              | Natural Gas  | 20 to 55 (50 to 140)   |                  |
|  | Propane/Butane   | 20 to 35 (50 to 90)    |                  |
| <b>High Fire Visible Flame Length, inches (mm)</b><br><i>Measured from the outlet end of the combustor</i>             | Natural Gas  | 60 (1524)              |                  |
|  | Propane/Butane   | 65 (1650)              |                  |
| <b>Maximum Chamber Temperature, °F (°C)</b>  | Alloy Tube   | 1500 (815)             |                  |
|  | Block and Holder   | 1900 (1038)            |                  |
| <b>Flame Detection</b>   | Alloy Tube   | Flamerod or UV Scanner |                  |
|  | Block and Holder   | UV scanner only        |                  |
| <b>Fuel<sup>4</sup></b><br><i>For any other mixed gas, contact Eclipse, Inc.</i>                                       | Natural Gas, Propane, Butane   |                        |                  |
| <b>Blower Motor Power, Hp (kW)</b>   |  | 2.0 (1.5)              | 1.5 (1.1)        |
| <b>Weight, lbs (kg)<sup>5</sup></b>  | Alloy Tube   | 90 (41)                |                  |
|  | Refractory   | 214 (97)               |                  |
| <b>Approvals</b>   |           |                        |                  |

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

<sup>2</sup> Turndown input based on neutral chamber conditions. Contact Eclipse for other chamber pressures.

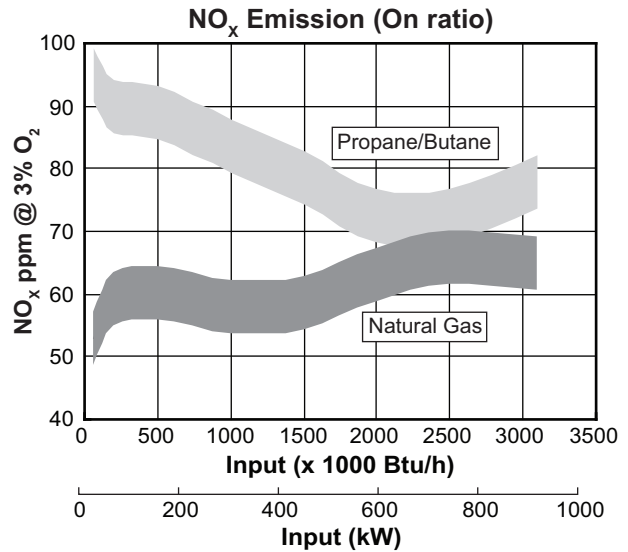
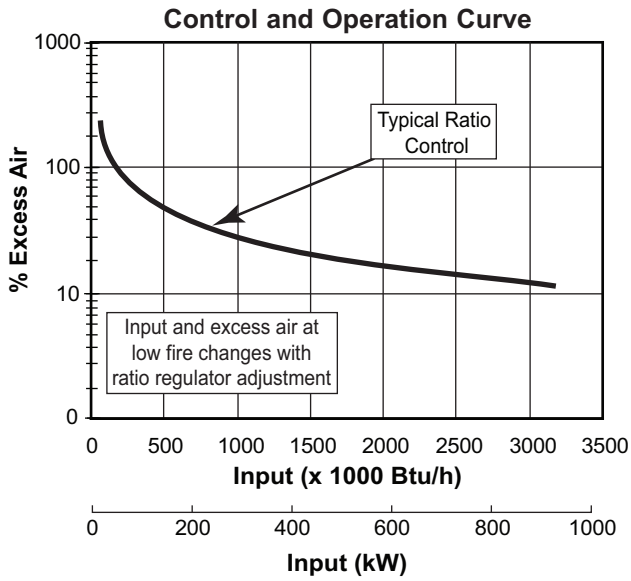
<sup>3</sup> For proper performance, this pressure must be kept constant across the burner operating range.

<sup>4</sup> See Design Guide 110 for more information about typical fuel composition and properties.

<sup>5</sup> 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



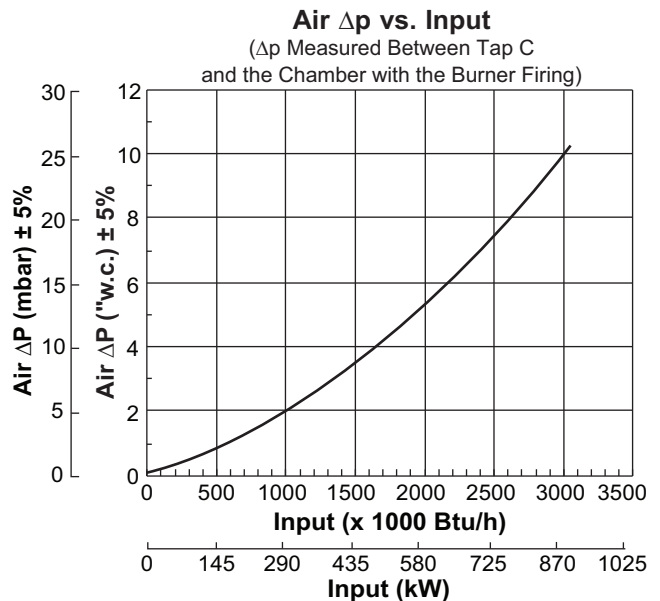
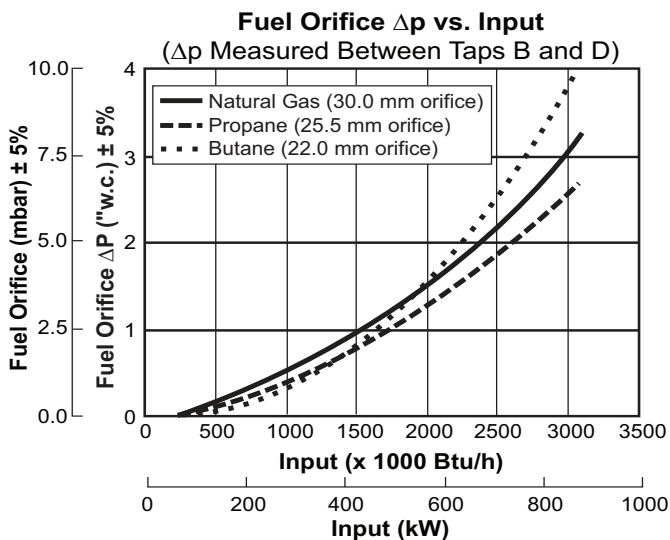
### NO<sub>x</sub> Emission data is given for:

- 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% O<sub>2</sub>
- Neutral chamber pressure

### Emissions from the burner are influenced by:

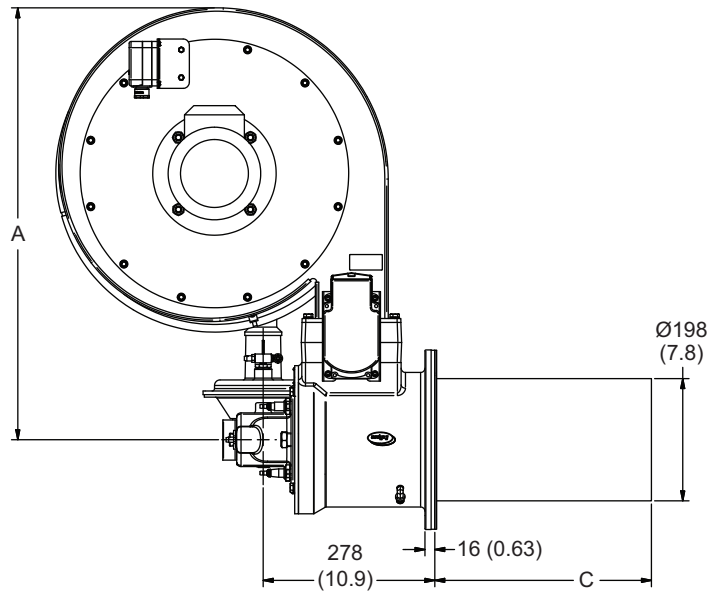
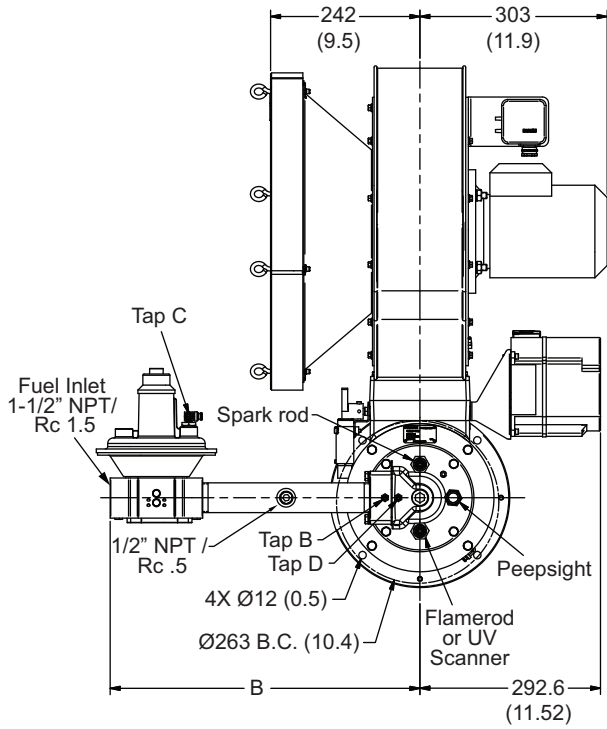
- Chamber conditions
- Fuel type
- Firing rate
- Ratio regulator adjustment
- Combustion air temperature

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



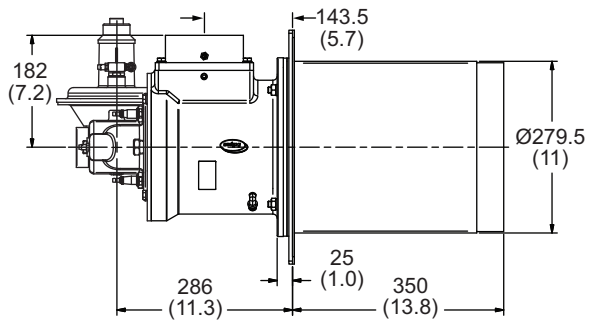
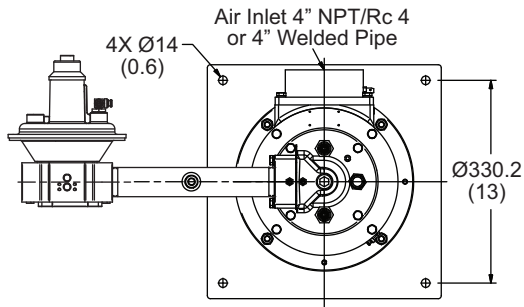
## Dimensions and Specifications

Dimensions in mm (inches)

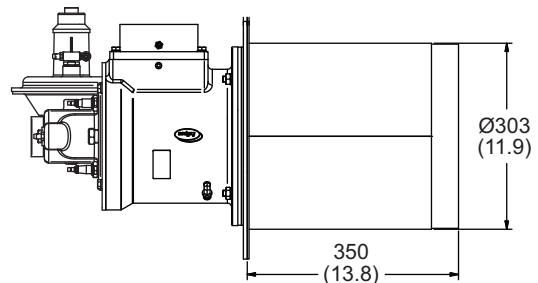
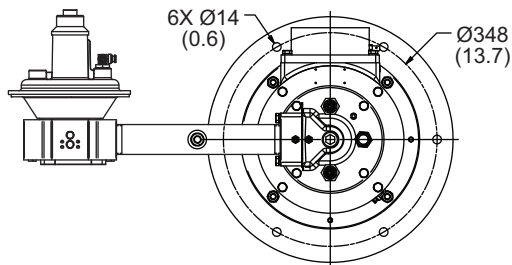


| Blower Size | A          |
|-------------|------------|
| 50 Hz       | 700 (27.6) |
| 60 Hz       | 663 (26.1) |

| Combustor Type                      | B          | C          |
|-------------------------------------|------------|------------|
| Straight Stainless Steel Alloy Tube | 502 (19.8) | 351 (13.8) |
| Straight Stainless Steel Alloy Tube | 502 (19.8) | 427 (16.8) |



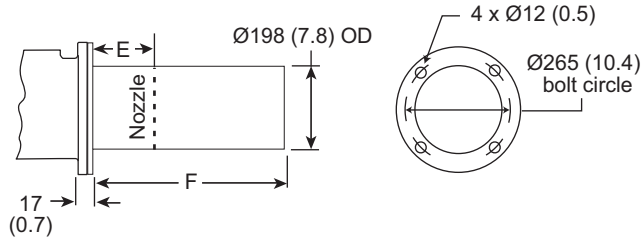
Square Block and Holder



Round Block and Holder

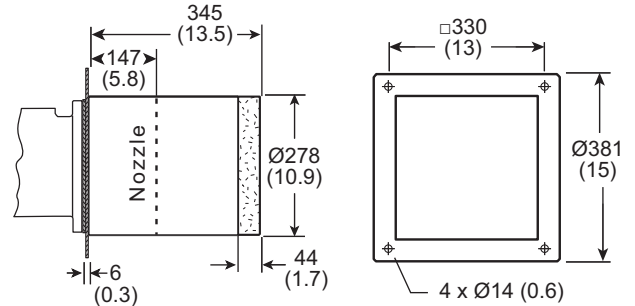
## Combustor Options

### Alloy Combustor

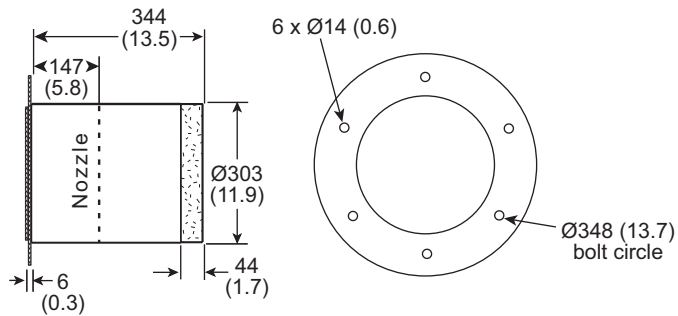


| E         | F          |
|-----------|------------|
| 154 (6.1) | 350 (13.8) |
| 230 (9.1) | 426 (16.8) |

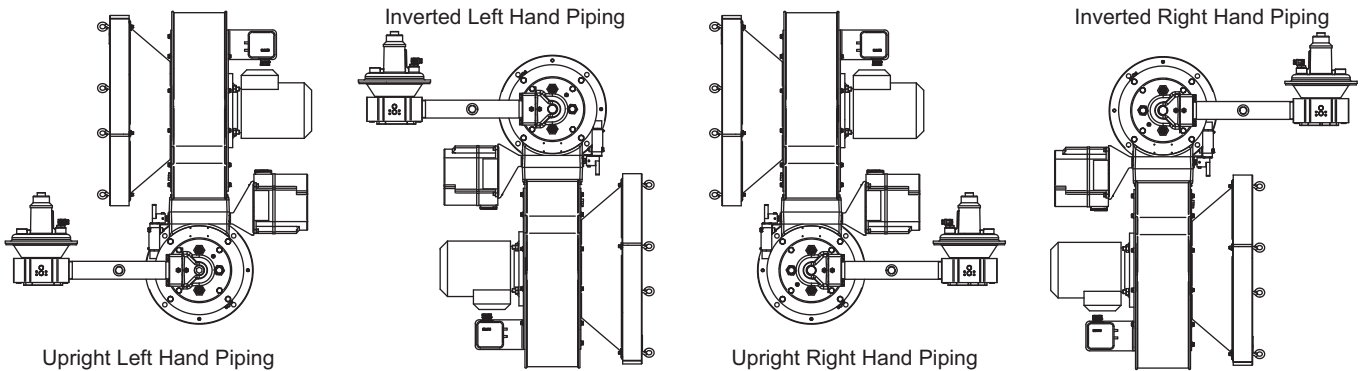
### Square Block & Holder



### Round Block & Holder



## Burner Configurations



Even though the blower motor is on the "left" side of the inverted units, it is still a "right hand" motor in relationship to the blower assembly.

### Offered By:



Power Equipment Company

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