


Eclipse RatioMatic

Burners

Model RM0400

Version 5

Parameter	Specification		
	Chamber Pressure "w.c. (mbar)	50 Hz	60 Hz
Blower Type			
Maximum Input, Btu/h (kW)¹ <i>Contact factory for chamber pressures outside the given range, or varying chamber pressure conditions.</i>	-4.0 (-10.0)	4,500,000 (1310)	4,600,000 (1350)
	-2.0 (-5.0)	4,280,000 (1250)	4,380,000 (1280)
	0.0 (0.0)	4,000,000 (1170)	4,100,000 (1200)
	2.0 (5.0)	3,700,000 (1080)	3,800,000 (1110)
	5.0 (12.4)	3,130,000 (910)	3,230,000 (940)
Minimum Input On-Ratio, Btu/h (kW) <i>Lower inputs may be achieved. Contact factory.</i>	65,000 (19)		
Main Gas Inlet Pressure, "w.c. (mbar)² <i>Fuel pressure at ratio regulator inlet</i>	Natural Gas	20 to 55 (50 to 140)	
	Propane/Butane	20 to 35 (50 to 90)	
High Fire Flame Length, inches (mm) <i>Measured from the outlet end of the combustor</i>	Natural Gas	65 (1650)	
	Propane/Butane	70 (1780)	
Maximum Chamber Temperature, °F (°C)	Alloy Tube	1500 (815)	
	Block and Holder	1900 (1038)	
Flame Detection	Alloy Tube	Flamerod or UV Scanner	
	Block and Holder	UV scanner only	
Fuel <i>For any other mixed gas, contact Eclipse, Inc.</i>	Natural Gas, Propane, Butane ³		
Blower Motor Power, Hp	2.0		
Weight, lbs (kg)⁴	Alloy Tube	143 (65)	
	Refractory	267 (121)	
Approvals	 AN30		

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

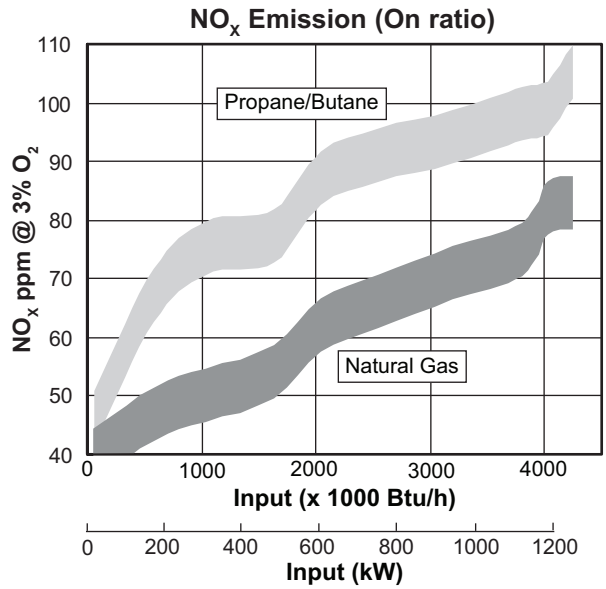
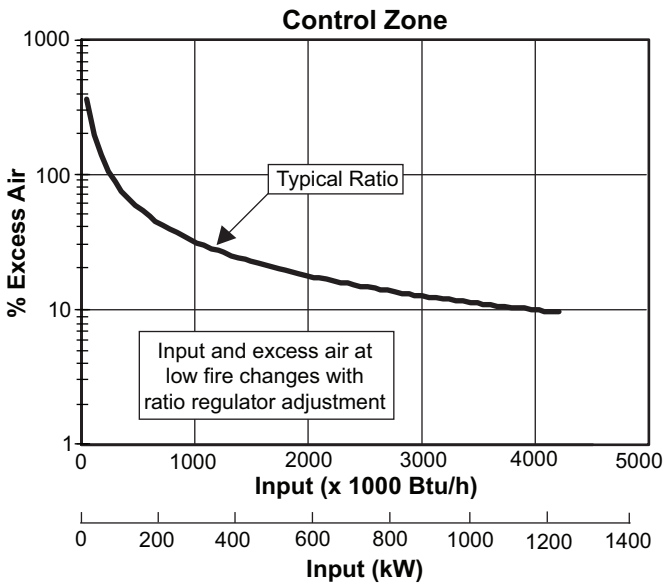
² For proper performance, this pressure must be kept constant across the burner operating range.

³ See Design Guide 110 for more information about typical fuel composition and properties.

⁴ 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



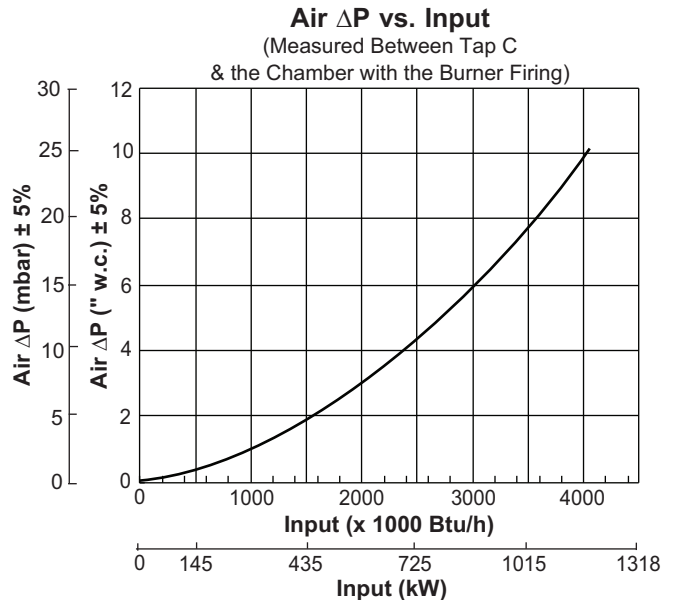
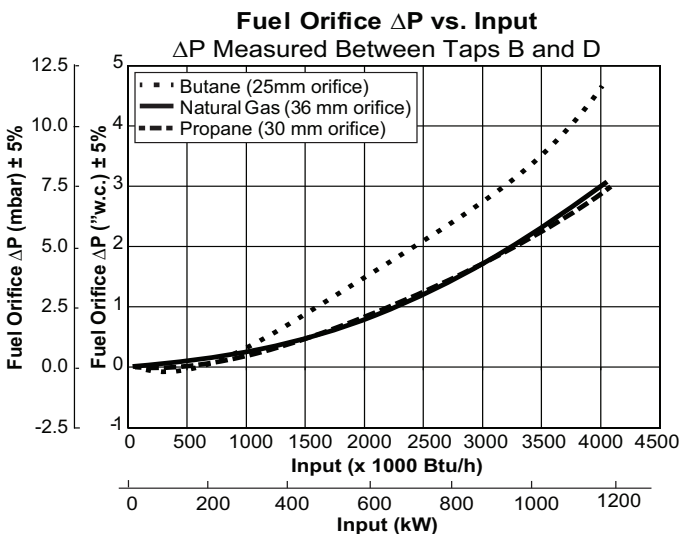
NO_x Emission data is given for:

- Ambient combustion air ~70°F (21°C)
- Less than 1000°F (540°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 65,000 Btu/h (19 kW)
- ppm volume, dry @ 3% O₂
- Neutral chamber pressure

Emissions from the burner are influenced by:

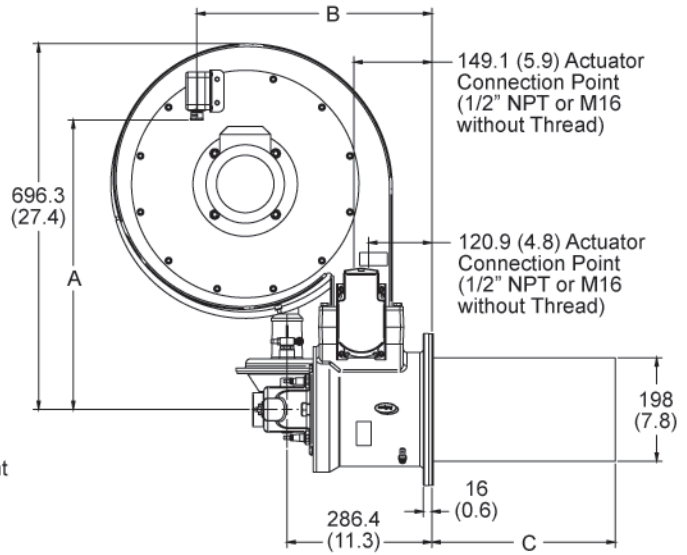
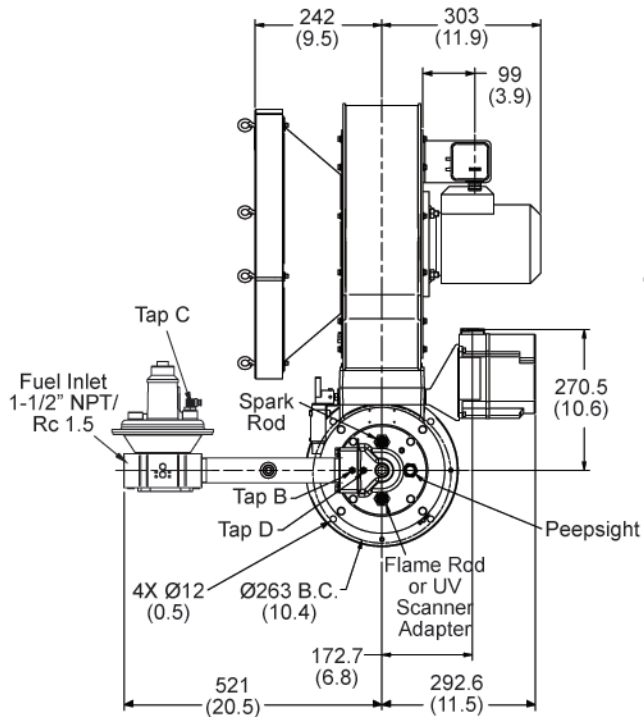
- Chamber conditions
- Fuel type
- Firing rate
- Ratio regulator adjustment
- Combustion air temperature

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



Dimensions and Specifications

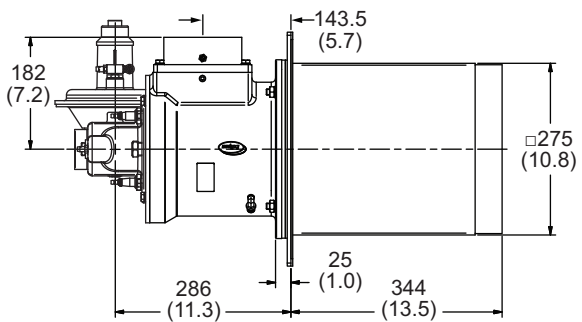
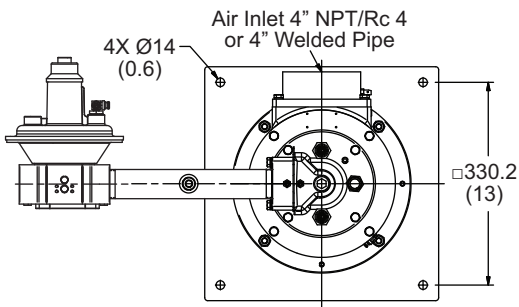
Dimensions in mm (in)



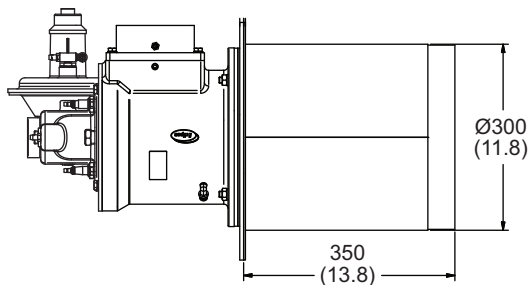
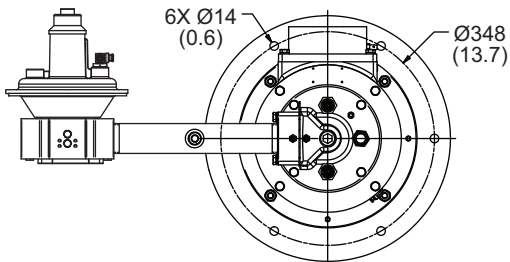
Shown with Alloy Combustor

Blower Size	A	B
50 Hz	533 (21)	394 (15.5)
60 Hz	488 (19.2)	363 (14.3)

Combustor Type	C
Straight Stainless Steel Alloy Tube	351 (13.8)
Straight Stainless Steel Alloy Tube	427 (16.8)



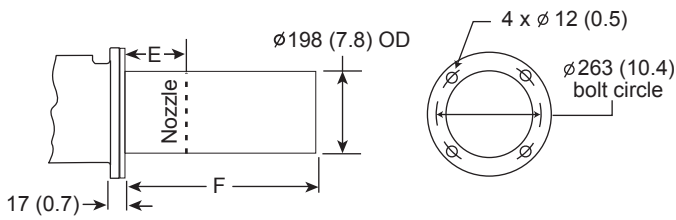
Square Block and Holder



Round Block and Holder

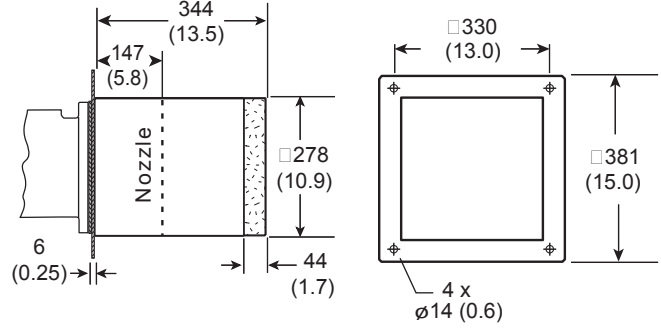
Combustor Options

Alloy Tube

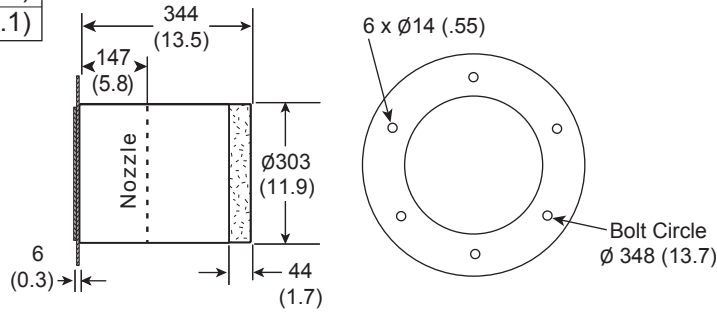


F	E
350 (13.8)	154 (6.1)
426 (16.8)	230 (9.1)

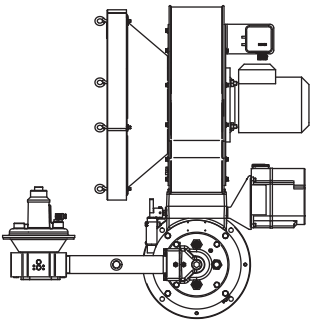
Square Block & Holder



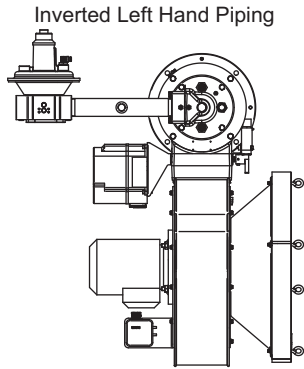
Round Block & Holder



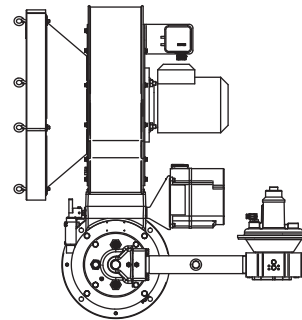
Burner Configuration



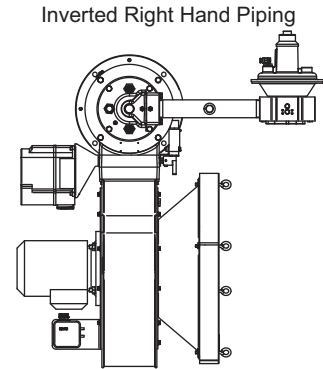
Upright Left Hand Piping



Inverted Left Hand Piping



Upright Right Hand Piping



Inverted Right Hand Piping