# **ECLIPSE RATIOMATIC BURNERS**

### Model 1500 RM

## **Specifications**

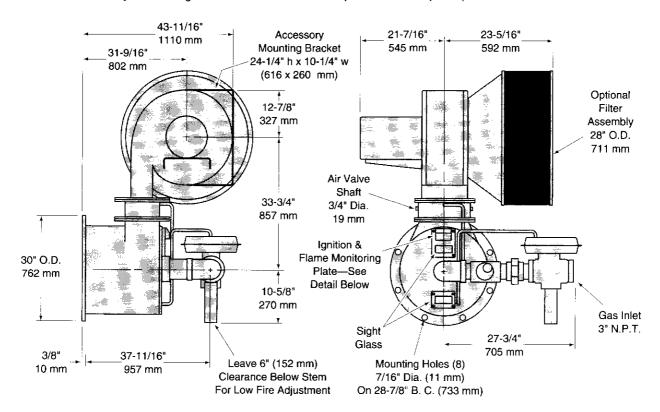
Opcomodition.		
Input vs. Chamber Pressure	17,700,000 Btu/hr. @ -5.0" w.c. 5188 kW @-12.5 mbar 16,700,000 Btu/hr. @ -3.0" w.c. 4895 kW @ -7.5 mbar 15,600,000 Btu/hr. @ -1.0" w.c. 4572 kW @ -2.5 mbar 15,000,000 Btu/hr. @ 0.0" w.c. 4397 kW @ 0.0 mbar 14,400,000 Btu/hr. @ +1.0" w.c. 4221 kW @ +2.5 mbar 13,700,000 Btu/hr. @ +2.0" w.c. 4015 kW @ +5.0 mbar Input may be increased by 20% if sufficient secondary air is available to	
	complete combustion.	
Minimum Input	150,000 Btu/hr. (44 kW) With neutral chamber. Will be slightly higher with negative chamber pressure.	
Turndown	100:1 with neutral chamber pressure.	
Configurations	Burner Configuration Burner with alloy tube Burner with refractory block  Max. Chamber Temp.  1500° F (538° C)  1800° F (982° C)	
	Maximums shown are for average installations. Depending on conditions, higher temperatures can be obtained. Contact Eclipse for details.	
Fuel	Standard nozzle burns natural gas, propane, propane/air mixes without changing internals. Contact Eclipse for other fuels.	
Gas Inlet Pressure at the proportionator inlet	Minimum: 22" w.c. (55 mbar) natural gas, .65 s.g. Maximum: 2 psig (138 mbar) natural gas, .65 s.g.	
Pilot Gas Pressure at the pilot cock inlet	Minimum: 6" w.c. (15 mbar) natural gas, .65 s.g.	
High Fire Flame Length	144" (3.66 m)  Measured from the end of the firing tube, firing parallel to air flow with neutra chamber pressure. When firing perpendicular to air flow, flame length will be shorter. Contact your local Eclipse representative for details.	
Piloting	Integral spark-ignited pilot; ignition plug included.	
Flame Monitoring	By UV scanner only. Scanners & mounting kits are available from Eclipse.	
Control Motor Requirements	90° travel with full stroke timing of 15 seconds or longer. Ovens with high chamber drafts or backpressures may require less than a full 90° stroke. In these cases, use adjustable stroke motors or motors equipped with travel-limiting auxiliary switches.	
Emissions	Ratiomatics produce low $\mathrm{NO}_{\mathrm{x}}$ , CO and aldehydes. Emissions performance depends not only on the burner, but also factors such as chamber temperature, chamber design, and heat loading. For estimates of Ratiomatic performance in your application, call Eclipse.	
Packaging Options	Available with FM, IRI, or NFPA type valve trains. UL recognized and UL listed packages are also available.	

**CAUTION:** It is dangerous to use any fuel burning equipment unless it is equipped with suitable flame sensing devices and automatic fuel shut-off valves. Eclipse can supply such equipment or information on alternate sources.



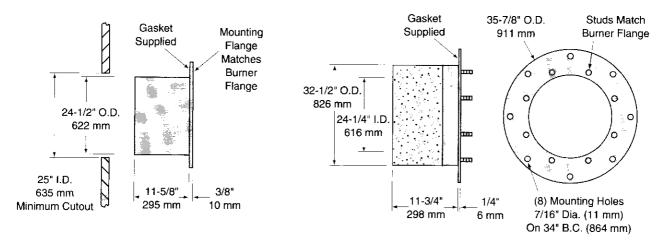
# Dimensions, 1500 RM

Dimensions are subject to change without notice. Contact Eclipse for certified prints prior to fabrication or installation.

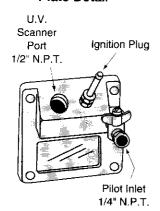


#### Alloy Tube Assembly—#110281

#### Block & Holder Assembly—#187297-61



#### Flame Monitoring Plate Detail



#### Component Information

Item	•	Part #
1500 RM Burner Assembly		
w/Alloy Tube; Left Hand Blower (shown)		110413
w/Alloy Tube; Right Hand Blower (motor opposite side)		110403
w/Block & Holder; Left Hand Blower (shown)		110443
w/Block & Holder; Right Hand Blower (motor opposite side)		110433
Air Filter Assembly	Optional	110287
Replacement Filter Elements		15608 & 10411
Spark Plug¹	For burner with tube or block.	150000-12
Blower Motor <sup>1</sup>	15 hp, 230/460/3/60 TEFC, 3600	15545
Proportionator <sup>1</sup>	Eclipse ABP, 3"	500628
Pilot Cock <sup>1</sup>	Eclipse lever handle, 1/4"	12659
Gas Adjusting Butterfly <sup>t</sup>	Eclipse 112 BV, 3"	500993

<sup>1</sup> Included with burner assembly.

Bock & Holder and Alloy Tube are interchangeable in the field.



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