


Eclipse Winnox

Burners

Model WX0050

Version 2

Parameter		Specifications	
Blower Type		Packaged Blower	Remote Blower
Maximum Input, Btu/h (kW)¹ <i>Contact factory for chamber pressures outside the given range, or varying chamber pressure conditions.</i>	Chamber Pressure "w.c. (mbar)	Nominal (60Hz)	Pressure at Air Inlet 9" w.c. (22.5 mbar)
	-2.0 (-5.0)	620,000 (181)	650,000 (190)
	-1.0 (-2.5)	580,000 (171)	630,000 (183)
	0.0	550,000 (161)	590,000 (173)
	1.0 (2.5)	510,000 (149)	560,000 (163)
	2.0 (5.0)	470,000 (137)	520,000 (152)
Minimum Input On-Ratio, Btu/h (kW) <i>Lower inputs may be achieved. Contact factory.</i>		75,000 (22)	75,000 (22)
Main Gas Inlet Pressure Fuel at ratio regulator inlet, "w.c. (mbar)²	Maximum	27.7 (70)	27.7 (70)
	Minimum	22.0 (55)	26.0 (65)
Maximum Chamber Temperature, °F (°C) <i>Maximum tube temperatures should be reduced 150°F (66°C) when using propane or butane.</i>		Standard combustion tube: 1300 (704) High temperature combustion tube: 1550 (843) Refractory plug: 1800 (982) ³	
High Fire Flame Length <i>Measured from the outlet end of the combustor</i>	Alloy Tube	Flame is inside tube at all times.	
Excess Air,% at High Fire		40% - 70%	
Pipe Connections		NPT or BSP connections available.	
Flame Detection		Flame rod or UV scanner.	
Fuels <i>For any other mixed gas, contact Eclipse, Inc.</i>		Natural gas ⁴	
Blower Motor Power, Hp		0.75	-
Weight, lbs (kg)⁵	Alloy Tube	146 (66)	107 (49)
	Refractory Plug	137 (62)	98 (45)
Approvals			

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.

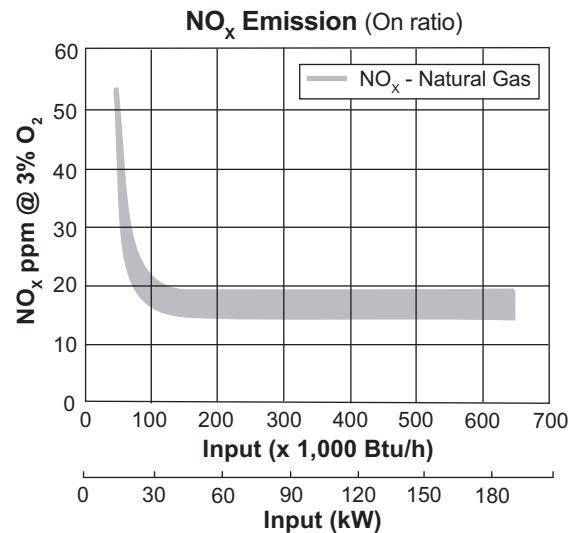
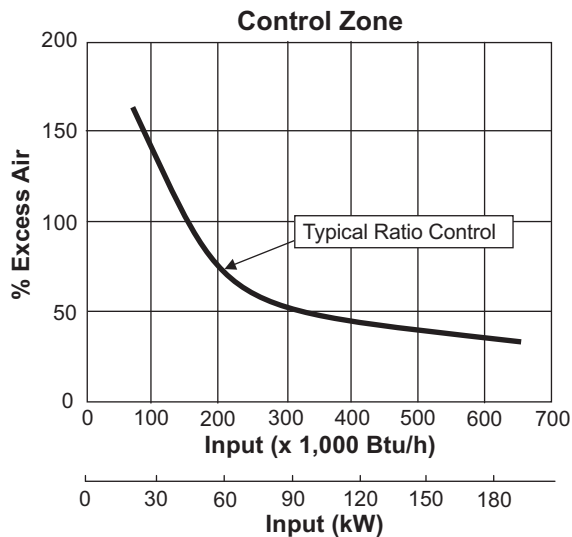
³ See page 3 of this datasheet and Installation Guide 111 for "Refractory Plug Only" installation.

⁴ See Design Guide 111 for more information about typical fuel composition and properties.

⁵ All weights are approximate.

- All inputs are based on gross calorific values and standard conditions: one atmosphere, 70°F (21°C).
- All information is based on laboratory testing. Different chamber conditions will affect the data.
- Eclipse reserves the right to change the construction and/or configurations of our products at any time without being obliged to adjust earlier supplies accordingly.

Performance Graphs



Fuel/Input Measurement

System design must include fuel flow measurement upstream of the burner. Eclipse recommends its 4-5 FOM (Fuel Orifice Meter) assembly number 302084-5 for natural gas. See Bulletin 930 for details.

Secondary By-Pass Fuel Setting:

Fuel	Flame Detection	ΔP "w.c. (mbar)*
Natural Gas	UV Scanner	0.5 (1.2)
	Flame Rod	1.5 (3.7)

*Measured between Tap "E" and the chamber at low fire.

NOTE: Input at low fire changes with ratio regulator adjustment.

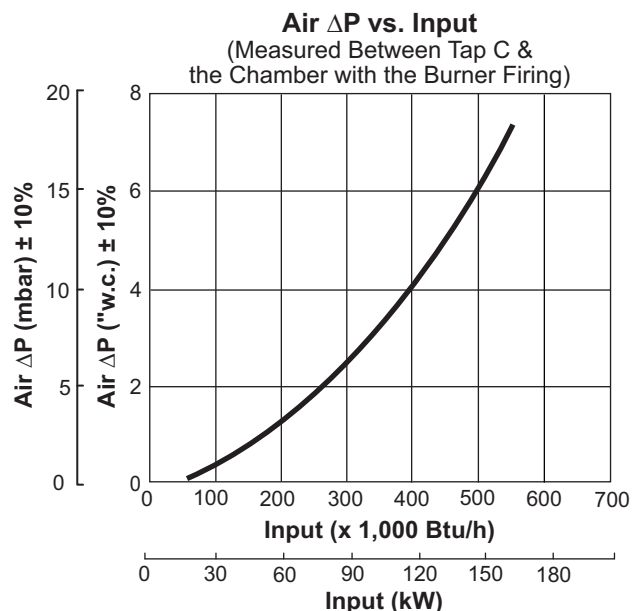
NO_x emission data is given for:

- Ambient combustion air (~70°F, 21°C)
- Less than 1000°F (540°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 75,000 Btu/h (15 kW)
- Neutral chamber pressure

Emissions from the burner are influenced by:

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

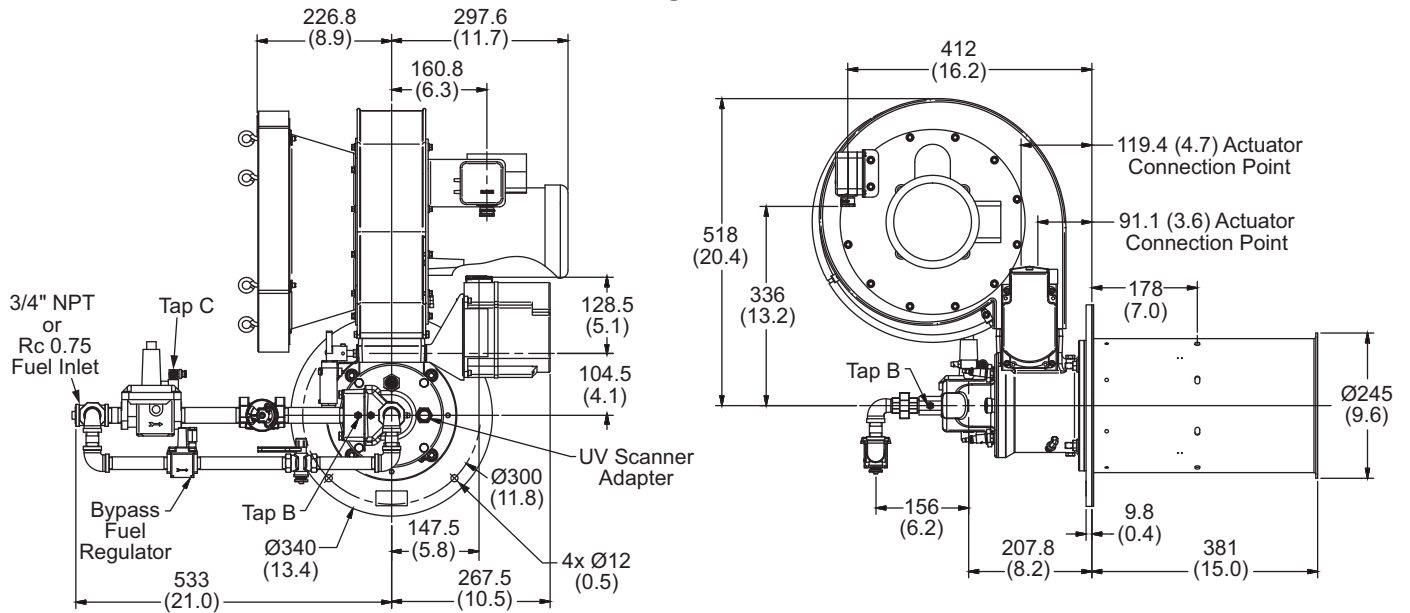
CO emission is largely influenced by chamber conditions. Contact your local Eclipse representative for an estimate of CO emission on your application.



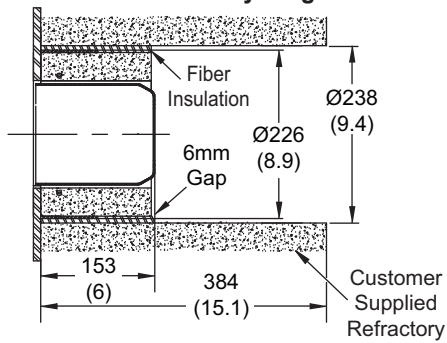
Dimensions and Specifications

Dimensions in mm (inches)

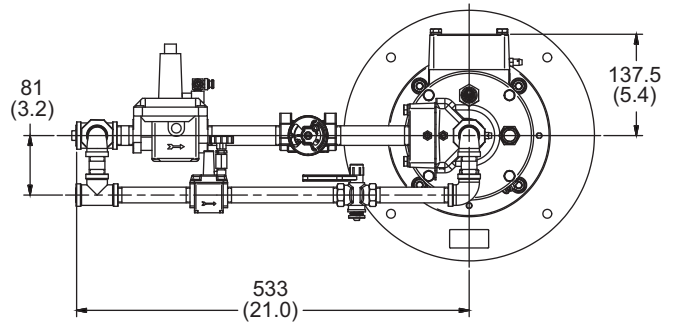
Packaged Blower



Refractory Plug



Pilot Ready Option (Shown for remote blower option)



Remote Blower

