# Eclipse Winnox

# Burners

### Model WX0050

Version 2

Parameter		Specifications	
Blower Type		Packaged Blower	Remote Blower
Maximum Input, BTU/hr (kW)¹  Contact factory for chamber pressures outside the given range, or varying chamber pressure conditions.	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, BTU/hr (kW)  Lower inputs may be achieved, contact factory.		75,000 (22)	75,000 (22)
Fuel Inlet Pressure at Ratio	Maximum	27.7 (70)	27.7 (70)
Regulator, "w.c. (mbar) <sup>2</sup>	Minimum	22.0 (55)	26.0 (65)
Maximum Chamber Temperature, °F (°C)  Tube and plug temperatures should be reduced 150°F when using propane or butane.		Standard combustion tube: 1300 (704) High temperature combustion tube: 1550 (843) Refractory plug: 1800 (982) <sup>3</sup>	
Flame Length 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 For any other mixed gas, contact Eclipse Inc.		Natural gas⁴	
Blower Motor Power, Hp		0.75	-
Weight, lbs (kg)⁵	Alloy Tube	146 (66)	107 (49)
	Refractory Plug	137 (62)	98 (45)
Approvals			AN30

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

<sup>•</sup> 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.



<sup>&</sup>lt;sup>2</sup> For proper performance, this pressure must be kept constant across the burner operating range.

<sup>&</sup>lt;sup>3</sup> See page 3 of this datasheet and Installation Guide 111 for "Refractory Plug Only" installation.

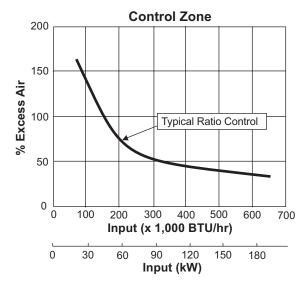
<sup>&</sup>lt;sup>4</sup> See Design Guide 111 for more information about typical fuel composition and properties.

<sup>&</sup>lt;sup>5</sup> All weights are approximate.

<sup>•</sup> All inputs are based on gross calorific values and standard conditions: one atmosphere, 70°F (21°C).

<sup>·</sup> All information is based on laboratory testing. Different chamber size and conditions will affect data.

#### **Performance Graphs**



#### **Fuel/Input Measurement**

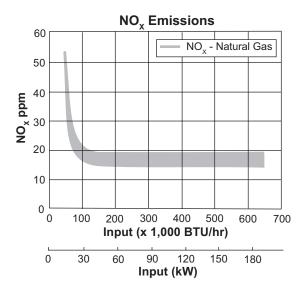
System design must include fuel flow measurement upstream of the burner. Eclipse recommends its 4-5 FOM (Fuel Orifice Meter) assembly number 302084-5 for natural gas. See Bulletin 930 for details.

#### 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)

<sup>\*</sup>Measured between Tap "E" and the chamber @ low fire.

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



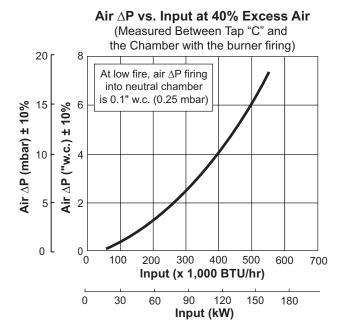
#### NO<sub>x</sub> emission data is given for:

- Ambient combustion air (~70°F, 20°C)
- Less than 1000°F (540°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 75,000 BTU/hr (15 kW)
- · Neutral chamber pressure

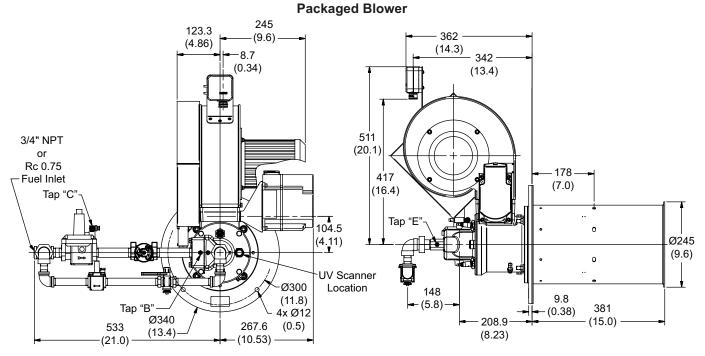
#### Emissions are influenced by:

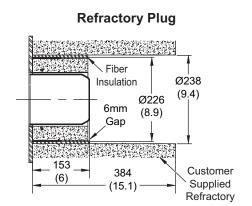
- · Chamber conditions
- Fuel type
- Firing rate
- Ratio regulator adjustments
- Combustion air temperature

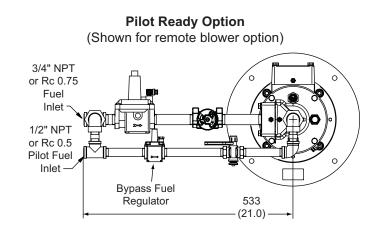
CO emissions are largely influenced by chamber conditions. Contact your local Eclipse representative for an estimate of CO emissions on your application.



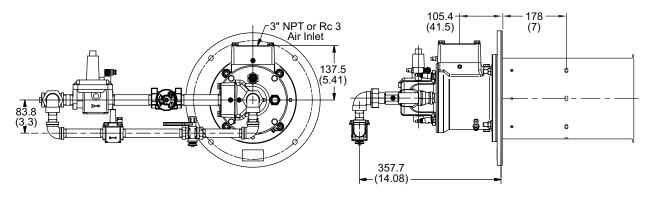
## Dimensions in mm (inches)







#### **Remote Blower**





### Offered By:

Power Equipment Company 2011 Williamsburg Road Richmond, Virginia 23231 Phone (804) 236-3800 Fax (804) 236-3882