Data 111-9 2/26/2010

# Eclipse Winnox

## Burners

Model WX0850

Version 2

Parameter		Specifications	
Blower Type		Packaged Blower	Remote Blower
Maximum Input, MMBTU/hr (kW) <sup>1</sup> 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 1.5 psig (100 mbar)
	-5.0 (-12.5)	9.7 (2840)	13.6 (3985)
	-3.0 (-7.5)	9.2 (2694)	13.2 (3868)
	0.0	8.5 (2490)	12.5 (3660)
	1.0 (2.5)	8.2 (2416)	12.2 (3575)
	2.0 (5.0)	7.98 (2337)	12.0 (3516)
Minimum Input, BTU/hr (kW)	Natural Gas	500,000 (146)	500,000 (146)
	Propane, Butane	600,000 (175)	600,000 (175)
Fuel Inlet Pressure at Ratio	Maximum	82 (207)	110 (273)
Regulator, "w.c. (mbar) <sup>2</sup>	Minimum	27.7 (69)	55.4 (138)
<b>Maximum Chamber Temperature, °F (°C)</b> Tube temperatures should be reduced 150°F when using propane or butane.		Standard combustion tube: 1300 (704) High temperature combustion tube: 1400 (800)	
Flame Length		Flame is inside tube at all times.	
Excess Air,% at High Fire		40% - 70%	
Pipe Connections		NPT or BSP/DN Flange connections available.	
Flame Detection		Flame rod or UV scanner.	
Fuels		Natural gas, Propane, Butane <sup>3</sup>	
For any other mixed gas, contact Eclipse I	пс.		
Blower Motor Power, Hp		15	-
Weight, lbs (kg)⁴		1435 (651)	1135 (515)
Approvals		P	130

<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.

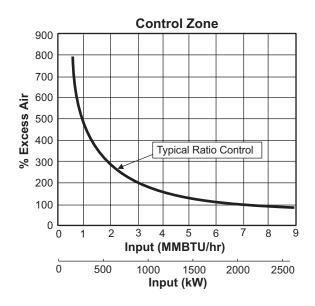
<sup>&</sup>lt;sup>3</sup> See Design Guide 111 for more information about typical fuel composition and properties.

<sup>&</sup>lt;sup>4</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**

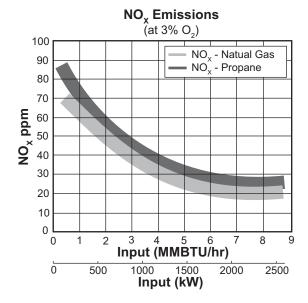
System design must include fuel flow measurement upstream of the burner. Eclipse recommends its 12-5 FOM (Fuel Orifice Meter) assembly number 302050-5 for natural gas. See Bulletin 930 for details.

#### Secondary By-Pass Fuel Setting:

Fuel	∆P "w.c. (mbar)*		
Natural Gas	4.0 (10.0)		
Propane	4.0 (10.0)		
Butane	4.0 (10.0)		

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

**<u>NOTE</u>**: Input at low fire changes with ratio regulator adjustment.



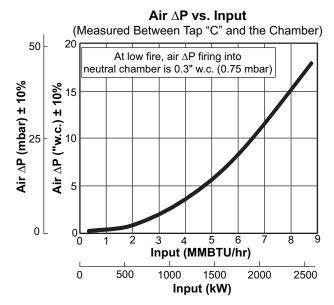
#### NO<sub>x</sub> emission data is given for:

- Ambient combustion air (~70°F, 20°C)
- Less than 1000°F (540°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 500,000 BTU/hr (88 kW)
- Neutral chamber pressure

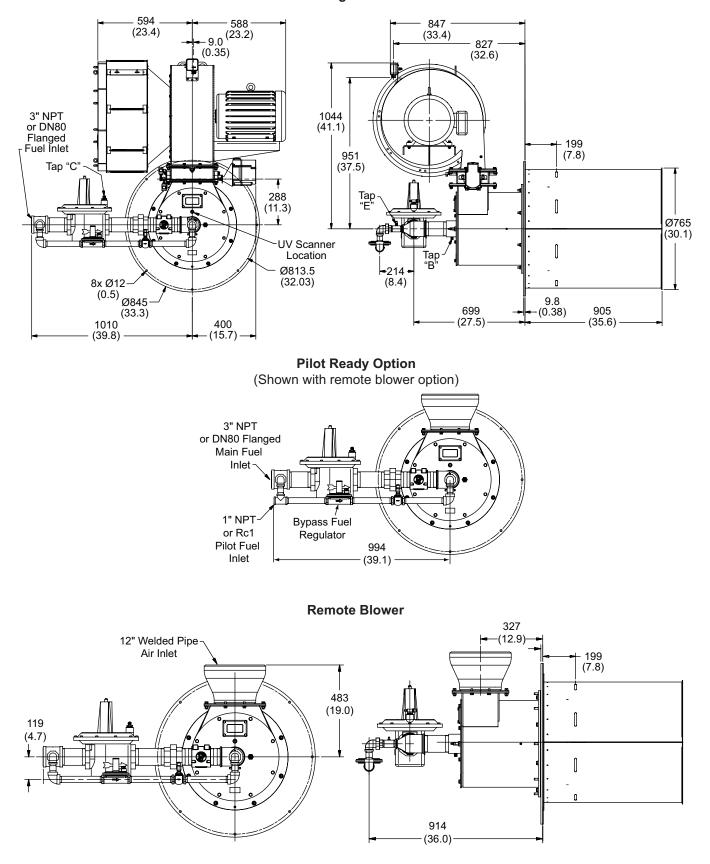
#### Emissions are influenced by:

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

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



### Dimensions in mm (inches) Packaged Blower





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

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