


# Eclipse Winnox

## Burners

Model WX0100

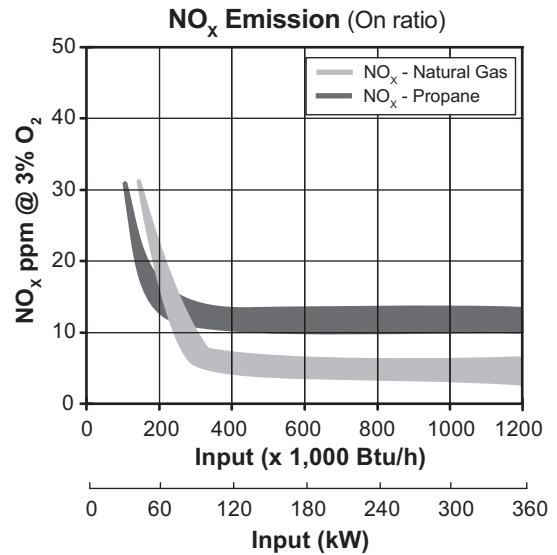
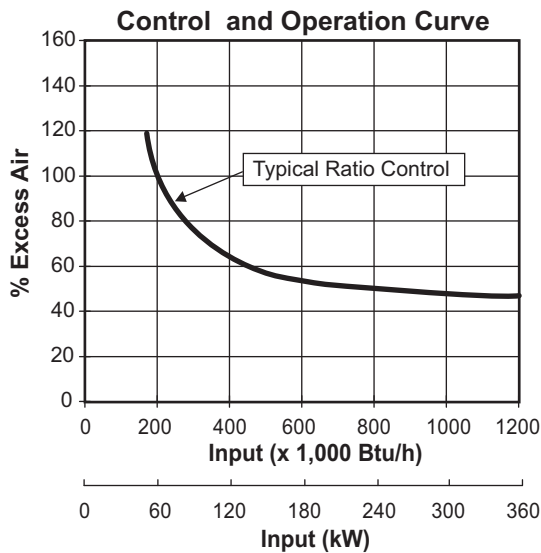
Version 3

Parameter		Specifications	
<b>Blower Type</b>		<b>Packaged Blower</b>	<b>Remote Blower</b>
<b>Maximum Input, Btu/h (kW)<sup>1</sup></b>	Chamber Pressure "w.c. (mbar)	Nominal (60Hz)	Pressure at Air Inlet 1 psig (70 mbar)
<i>For chamber pressures outside the given range or for varying chamber pressure conditions, contact Eclipse, Inc.</i>	-5.0 (-12.5)	1,130,000 (333)	1,300,000 (381)
	-3.0 (-7.5)	1,080,000 (316)	1,260,000 (371)
	0.0	1,000,000 (293)	1,200,000 (352)
	1.0 (2.5)	970,000 (284)	1,180,000 (346)
	2.0 (5.0)	940,000 (275)	1,150,000 (338)
<b>Minimum Input, Btu/h (kW)</b>		143,000 (42)	143,000 (42)
<i>For lower inputs, contact Eclipse, Inc.</i>			
<b>Main Gas Inlet Pressure, "w.c. (mbar)<sup>2</sup></b>	Maximum	27.7 (70)	27.7 (70)
	Minimum	22.0 (55)	26.0 (65)
<b>Maximum Chamber Temperature, °F (°C)</b>		Standard combustion tube: 1300 (705)	
<i>Maximum tube temperatures should be reduced 150°F (66°C) when using propane or butane.</i>		High temperature combustion tube: 1550 (845)	
		Refractory plug: 1800 (985) <sup>3</sup>	
<b>High Fire Visible Flame Length, inches (mm)</b>	Alloy Tube	Flame is inside tube at all times.	
<i>Measured from the outlet end of the combustor</i>			
<b>% Excess Air at High Fire</b>		40% - 70%	
<b>Piping</b>		NPT or BSP connections available.	
<b>Flame Detection</b>		Flame rod or UV scanner.	
<b>Fuels<sup>4</sup></b>		Natural gas, Propane	
<i>For any other mixed gas, contact Eclipse, Inc.</i>			
<b>Blower Motor Power, Hp</b>		1.5	-
<b>Weight, lbs (kg)<sup>5</sup></b>	Alloy Tube	192 (87)	124 (56)
	Refractory Plug	175 (79)	107 (48)
<b>Approvals</b>		 AI30	

<sup>1</sup> Maximum inputs for packaged blower versions are given for the standard combustion air blower without an inlet air filter.  
<sup>2</sup> For proper performance, this pressure must be kept constant across the burner operating range.  
<sup>3</sup> See page 3 of this datasheet and Installation Guide 111 for "Refractory Plug Only" installation.  
<sup>4</sup> See Design Guide 111 for more information about typical fuel composition and properties.  
<sup>5</sup> 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	$\Delta P$ "w.c. (mbar)*
Natural Gas	4.0 (10.0)
Propane	1.0 (2.5)

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

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

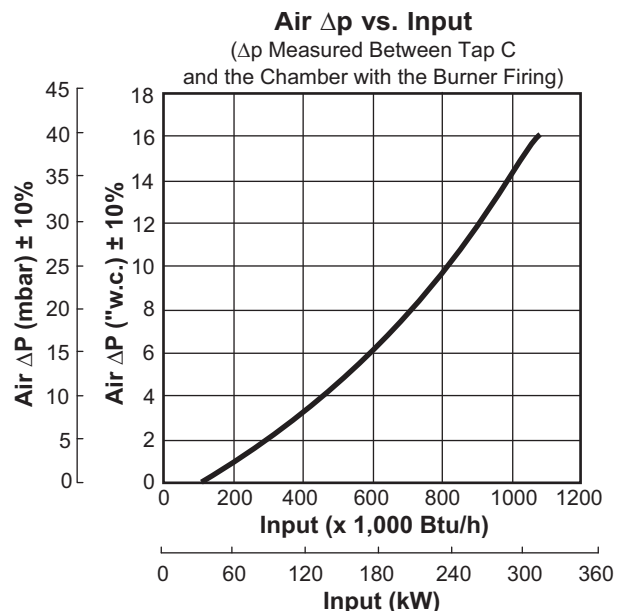
### NO<sub>x</sub> emission data is given for:

- Ambient combustion air (~70°F, 21°C)
- Less than 1000°F (540°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 143,000 Btu/h (42 kW)
- Neutral chamber pressure

### Emissions from the burner are influenced by:

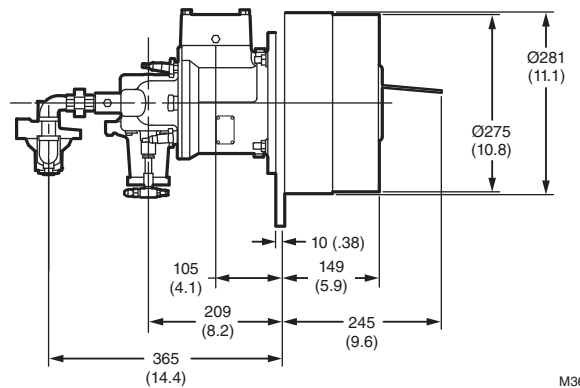
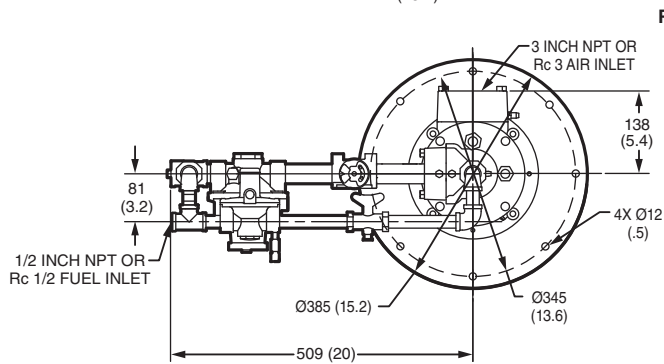
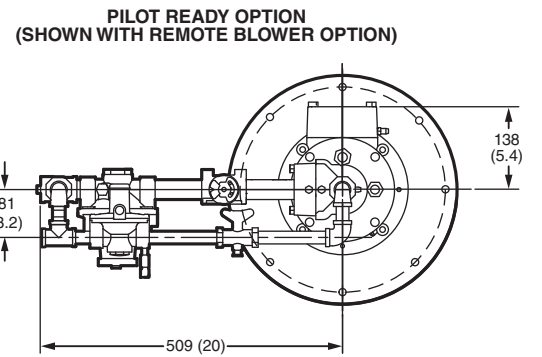
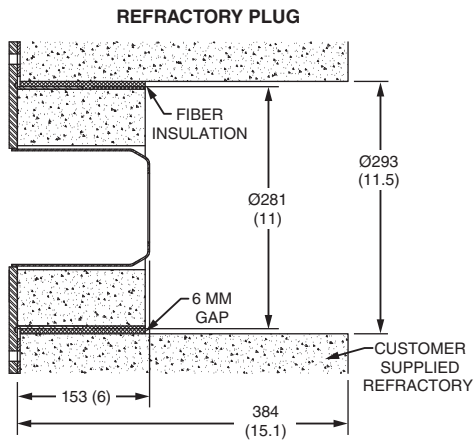
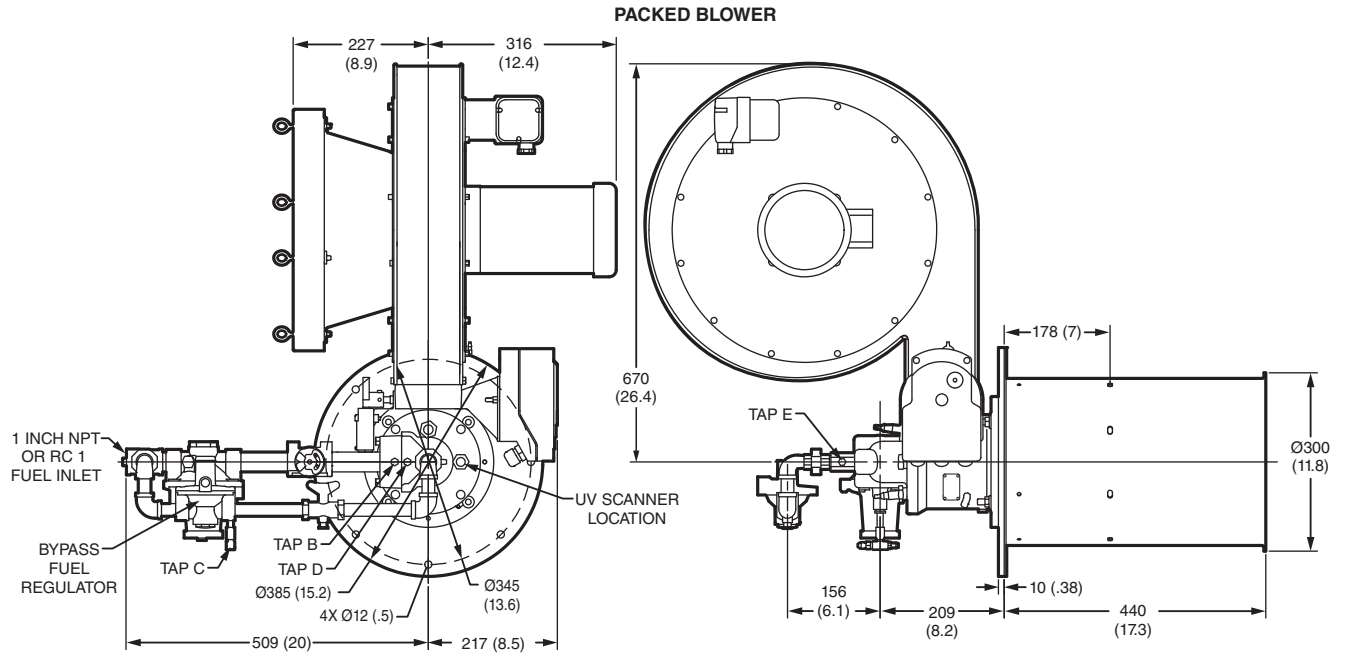
- Chamber conditions
- Fuel type
- Firing rate
- Ratio regulator adjustments
- Combustion air temperature

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)



M36748

