Data 114-2
10/1/2008

Eclipse ThermAir Burners

Model TA025

Version 1

Parameter		Blower Size							
Maximum Input (BTU/hr)	Frequency	3" w.c. Packaged*				6" w.c. Packaged			
		Capacity at Chamber Pressure				Capacity at Chamber Pressure			
	60 Hz Packaged Blower	**BTU/hr**	**" w.c.**	**kW**	**mbar**	**BTU/hr**	**" w.c.**	**kW**	**mbar**
		268,000	-1.0	78	-2,5	262,000	-1.0	77	-2,5
		250,000	0.0	73	0,0	250,000	0.0	73	0,0
		230,000	1.0	67	2,5	226,000	1.0	66	2,5
	50 Hz Packaged Blower	Not Available				260,000	-1.0	76	-2,5
						246,000	0.0	72	0,0
						225,000	1.0	66	2,5
Minimum Input		**BTU/hr**		**kW**		**BTU/hr**		**kW**	
Natural Gas, Propane, Butane		6,000		1,8		8,333		2,3	
Main Gas Inlet Pressure *Fuel pressure at gas inlet (Tap B)*		**" w.c.**		**mbar**		**" w.c.**		**mbar**	
	Natural Gas	3.7		9		6.5		16	
	Propane	7.5		19		6.7		17	
	Butane	7.8		19		6.6		17	
High Fire Flame Length *Measured from outlet end of combustor*		**inches**		**mm**		**inches**		**mm**	
	Natural Gas	30		762		27		686	
	Propane	33		838		27		686	
	Butane	36		914		27		686	
Maximum Chamber Temperature *Note: For higher temperatures, contact Eclipse.*		**Tube**		**°F**		**°C**			
		Alloy Tube		1500		820			
		SiC Tube		1900		1040			
Flame Detection		Flame rod or UV scanner							
Fuel		Natural gas, propane, or butane *For any other gas, contact Eclipse.*							

* Ratio regulator is not available with 3" blower.

- All information is based on laboratory testing in neutral (0.0" w.c.) chamber with standard combustion design. Different chamber conditions and/or combustor design will affect the data.
- Maximum inputs are given for the standard combustion air blower without an air filter.
- All inputs based upon gross calorific values and standard conditions: 1 atmosphere, 70°F (21°C).
- Blower motor service factors greater than 1.0 may be required when firing into negative chamber pressure applications. For specific application questions, contact Eclipse.
- Eclipse reserves the right to change the construction and/or configuration of out products at any time without being obliged to adjust earlier supplies accordingly.

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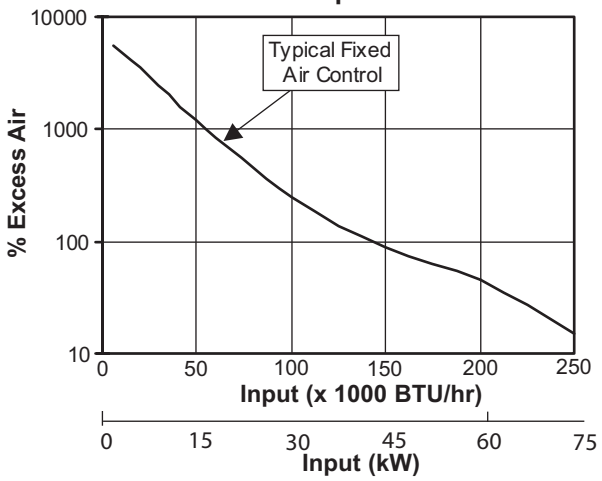
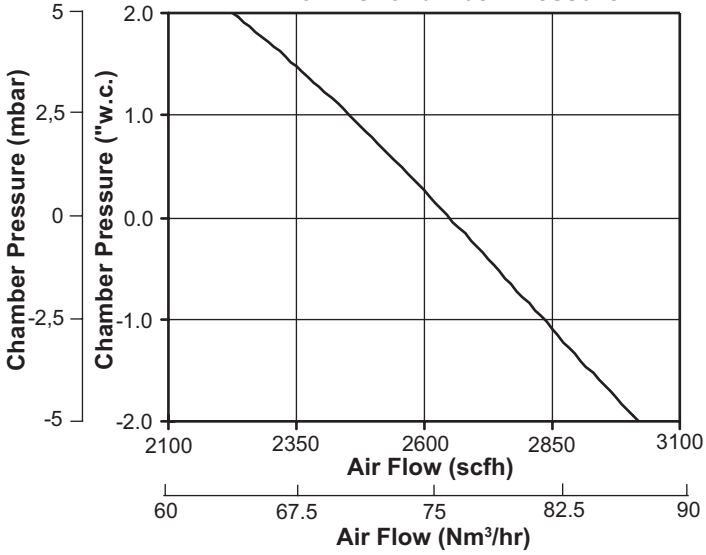
Innovative Thermal Solutions

Performance Graphs

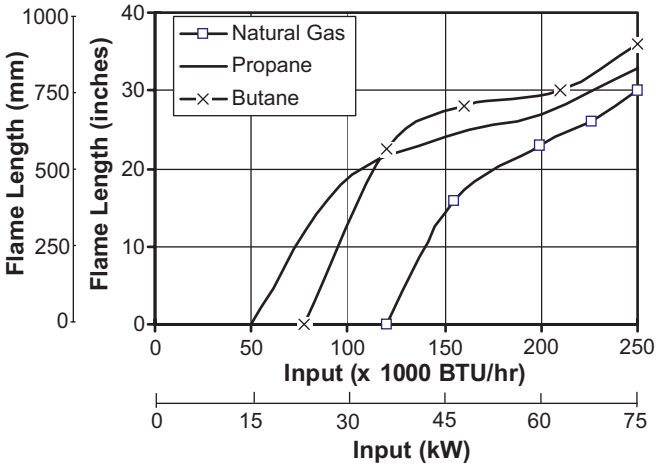
Control & Operation Zone



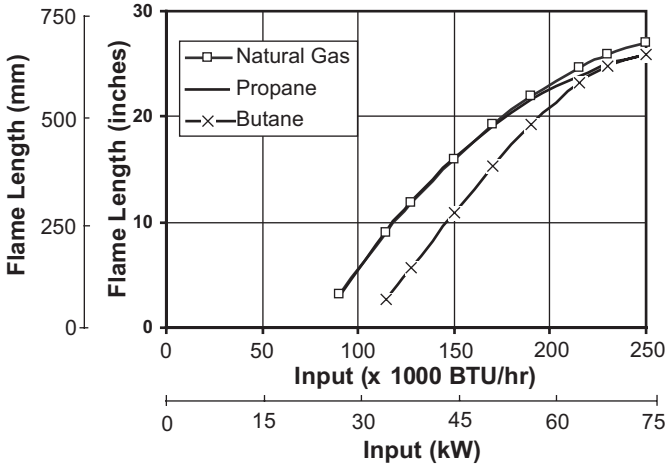
Air Flow vs. Chamber Pressure



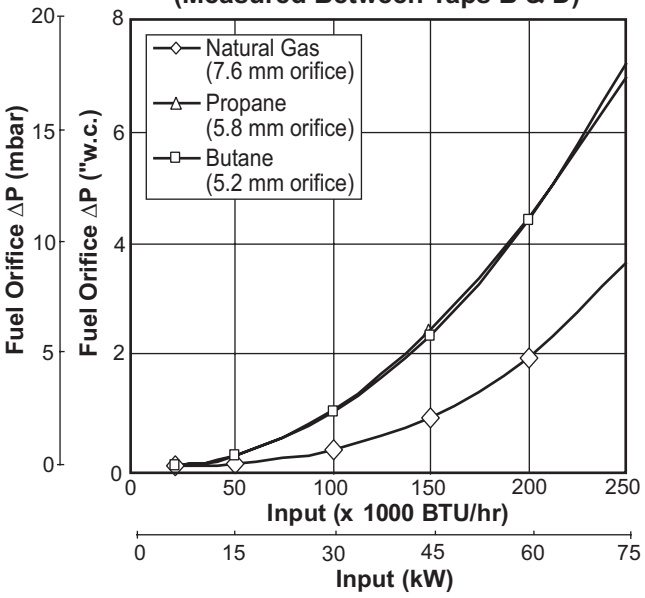
Burner Flame Length - 3" w.c. Blower



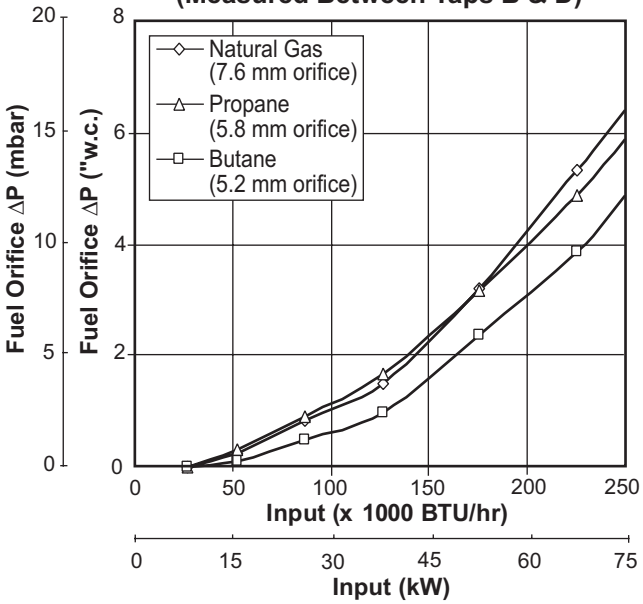
Burner Flame Length - 6" w.c. Blower



Fuel Orifice ΔP vs. Input - 3" w.c. Blower (Measured Between Taps B & D)

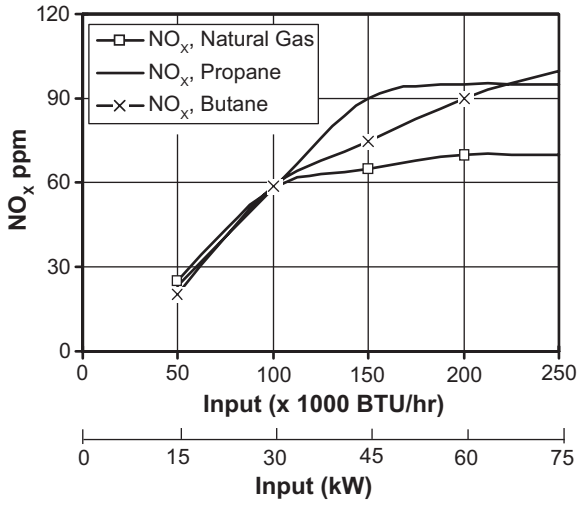


Fuel Orifice ΔP vs. Input - 6" w.c. Blower (Measured Between Taps B & D)



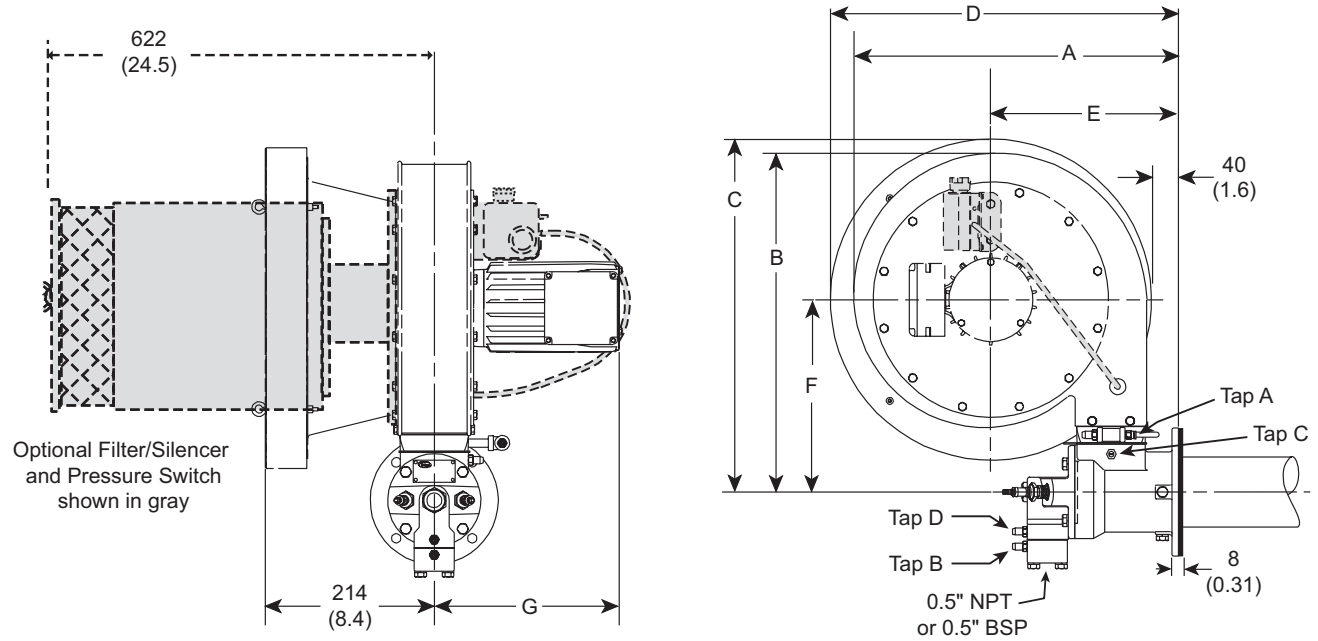
Performance Graphs

NO_x Emission Data



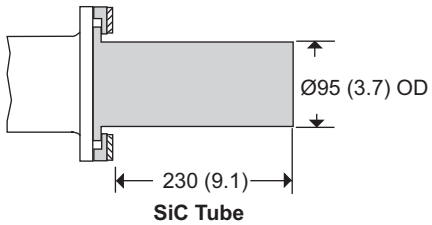
Notes on Emission Data
NO_x emission data is given for: • Ambient combustion air ~70° F (20° C) • Minimal process air velocity • ppm volume dry at 3% O_2 • Neutral chamber pressure **Emissions are influenced by:** • Chamber conditions • Fuel type • Firing rate • Combustion air temperature
CO emission is largely influenced by chamber conditions. Contact Eclipse for an estimate of CO emission on your application.

Dimensions mm (inches)

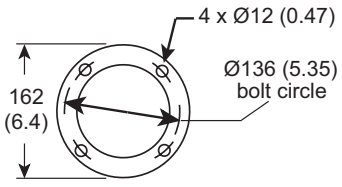


Port Connection		
Spark Plug	14mm	
Flamerod or Scanner	0.5" NPT	
Peepsight	0.75" NPT	
Weights	**lbs**	**kg**
Burner with blower	65	29
Burner less blower	24	11
Filter/Silencer	21	10

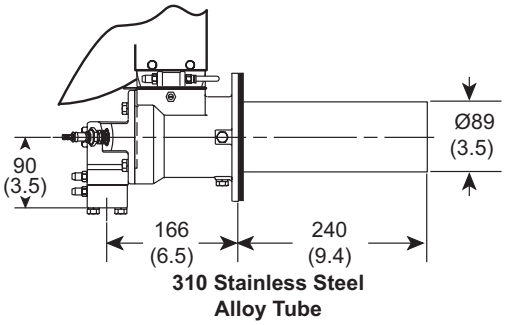
Blower 6" w.c.														
	A		B		C		D		E		F		G	
Hz	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
50	469	18.5	498	19.6	N/A	N/A	N/A	N/A	265	10.4	283	11.1	285	11.2
60	411	16.2	429	16.9	447	16.9	440	17.3	237	9.3	243	9.6	234	9.2
Blower 3" w.c.														
60	329	12.9	360	14.2	N/A	N/A	N/A	N/A	198	7.8	209	8.2	179	7.0



SiC Tube



Mounting Pattern



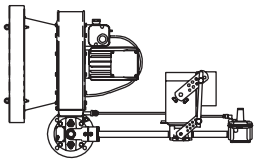
310 Stainless Steel Alloy Tube

Piping

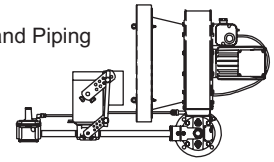
Orientation

Upright

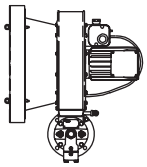
Right Hand Piping



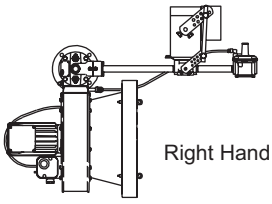
Left Hand Piping



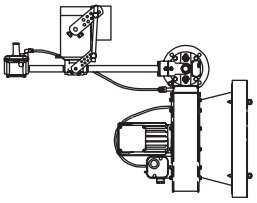
No Piping



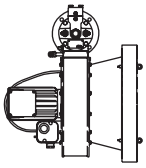
Inverted



Right Hand Piping



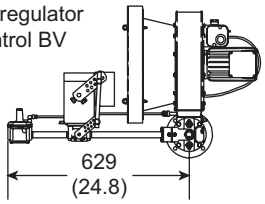
Left Hand Piping



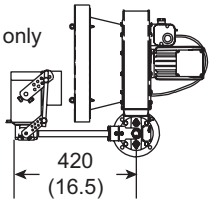
No Piping

Piping Options

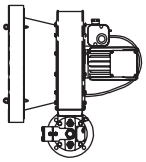
With ratio regulator and control BV



With control BV only



Less ratio regulator and control BV



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