

Eclipse ThermAir Burners

Model TA040

Version 1

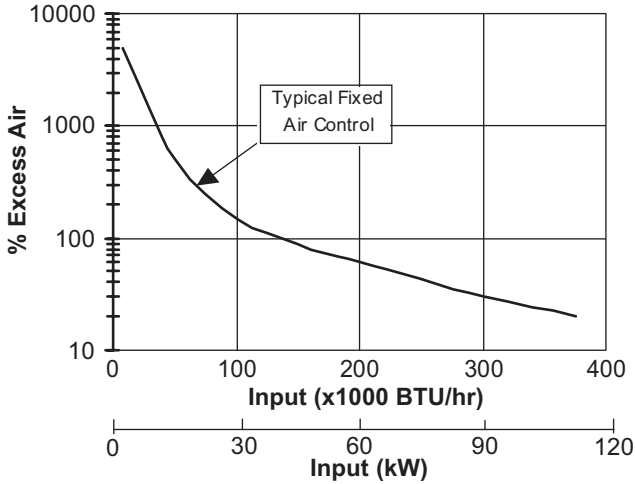
Main Specifications - TA040

Parameter	Blower Size									
	Frequency	3" w.c. Packaged				6" w.c. Packaged				
		Capacity at Chamber Pressure				Capacity at Chamber Pressure				
Maximum Input (BTU/hr)	60 Hz Packaged Blower	BTU/hr	" w.c.	kW	mbar	BTU/hr	" w.c.	kW	mbar	
		403,000	-1.0	118	-2,5	467,000	-1.0	137	-2,5	
		375,000	0.0	110	0,0	400,000	0.0	117	0,0	
	345,000	1.0	101	2,5	370,000	1.0	108	2,5		
	50 Hz Packaged Blower	Not Available				434,000	-1.0	127	-2,5	
						406,000	0.0	119	0,0	
376,000						1.0	110	2,5		
Minimum Input		BTU/hr	kW	BTU/hr	kW					
Natural gas, Propane/Butane		8,000	2,3	13,000	3,8					
Main Gas Inlet Pressure		" w.c.	mbar	" w.c.	mbar					
• Fuel pressure at gas inlet (Tap "B")		Natural Gas	4.1	14,7	5.8	16				
		Propane	7.7	19,2	6.7	17				
		Butane	6.5	16,2	6.7	17				
High Fire Flame Length		inches	mm	inches	mm					
• Measured from the outlet end of combustor		Natural Gas	35	889	31	787				
		Propane	39	991	31	787				
		Butane	39	991	28	711				
Maximum Chamber Temperature		°F			°C					
(Alloy & SIC Tubes) Note: For higher temperatures, contact Eclipse.		1500			820					
Flame Detection		Flame Rod or UV Scanner								
Fuel		Natural Gas, Propane, or Butane For any other mixed gas, contact Eclipse for orifice sizing								

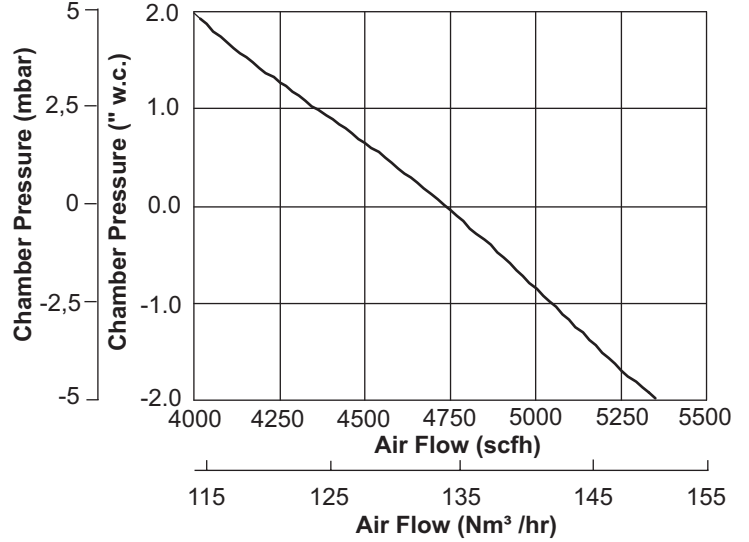
- All information is based on laboratory testing in neutral (0.0" w.c.) chamber with standard combustor design. Different chamber conditions and/or combustor design will affect the data.
- Maximum inputs are given for the standard combustion air blower without an air filter.
- All inputs based upon gross 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 your Eclipse representative.
- Eclipse reserves the right to change the construction and/or configuration of our products at any time without being obliged to adjust earlier supplies accordingly.

Performance Graphs ThermAir TA040

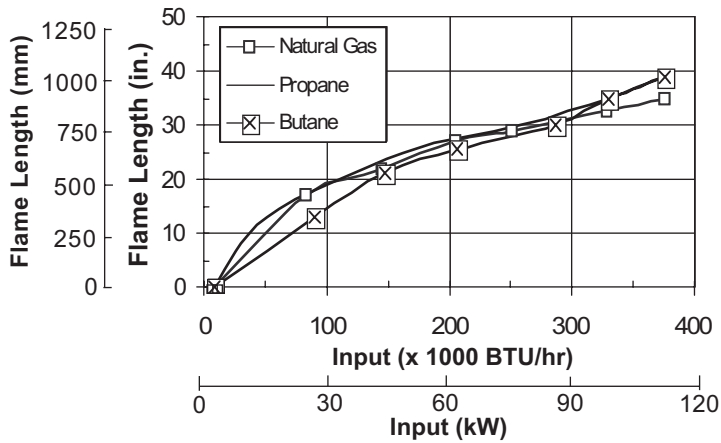
Control & Operation Zone



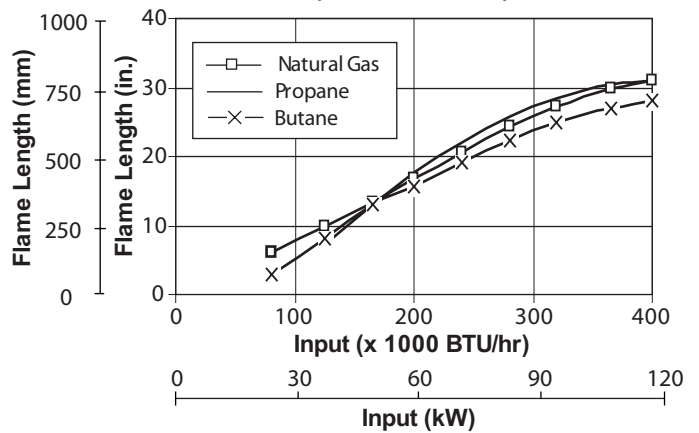
Air Flow vs. Chamber Pressure



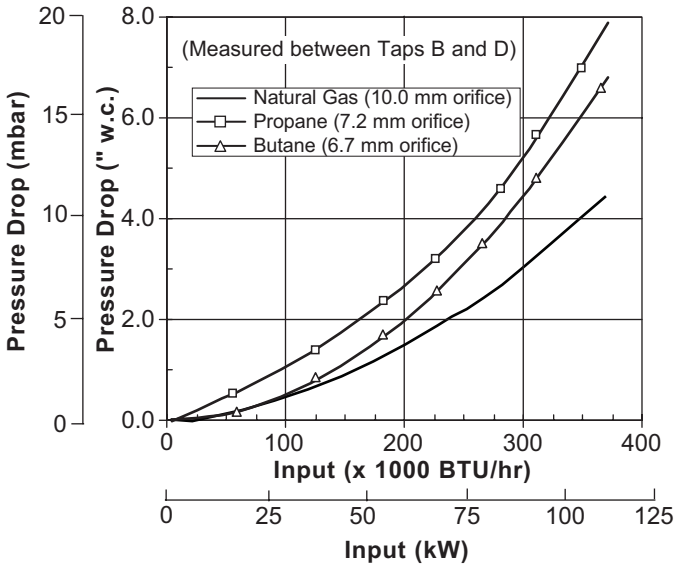
Burner Flame Length (3" w.c. Blower)



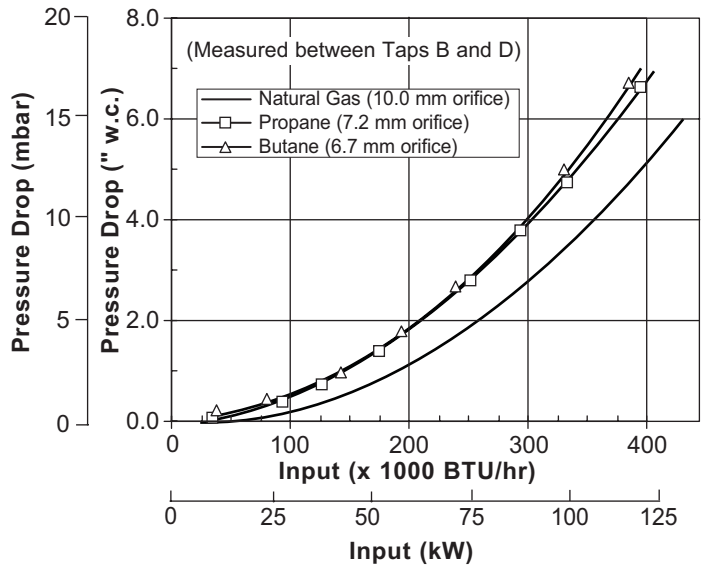
Burner Flame Length (6" w.c. Blower)



Fuel Orifice ΔP vs. Input (3" w.c. Blower)



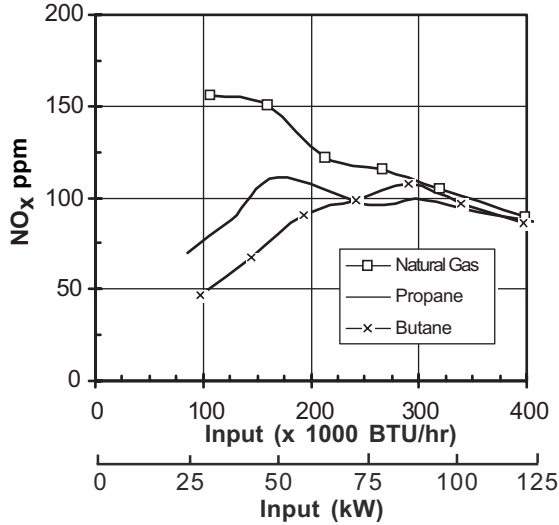
Fuel Orifice ΔP vs. Input (6" w.c. Blower)



Performance Graphs (Continued)

ThermAir TA040

NOx Emission Data



Notes on emission data

NOx emission data is given for:

- Ambient combustion air ~70° F (20° C)
- Minimal process air velocity
- ppm volume dry at 3% O₂
- Neutral chamber pressure

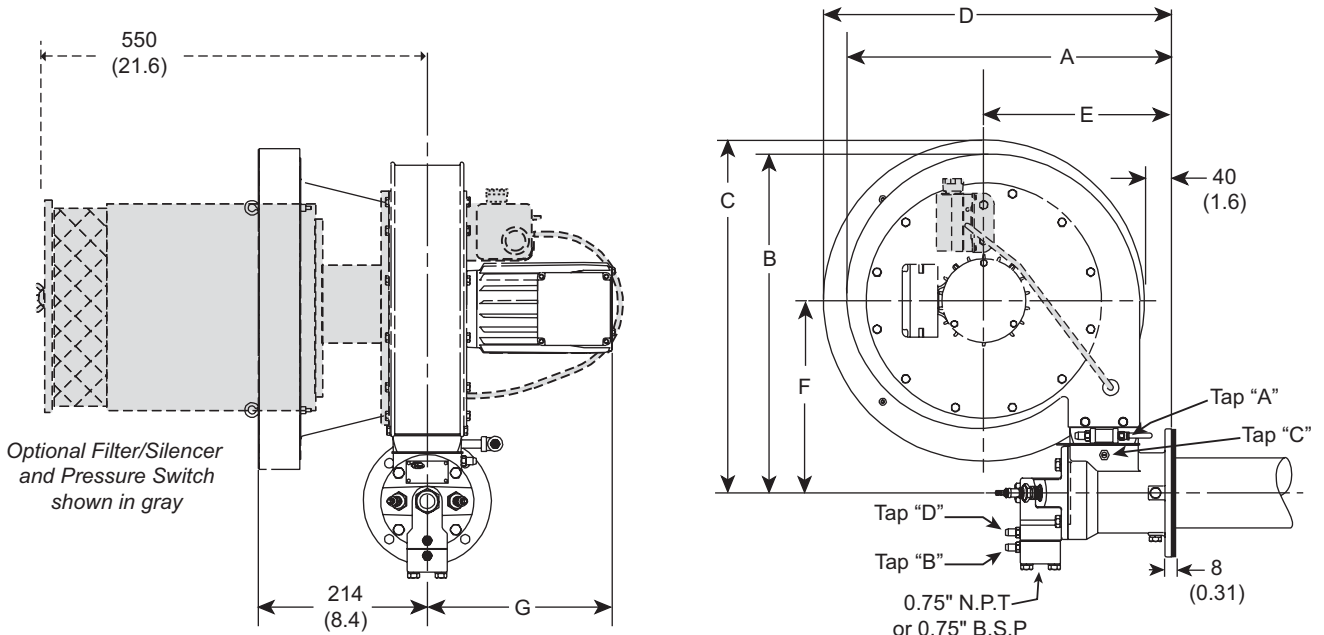
Emissions are influenced by:

- Chamber conditions
- Fuel type
- Firing rate
- Combustion air temperature

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

Dimensions-TA040

mm (in)

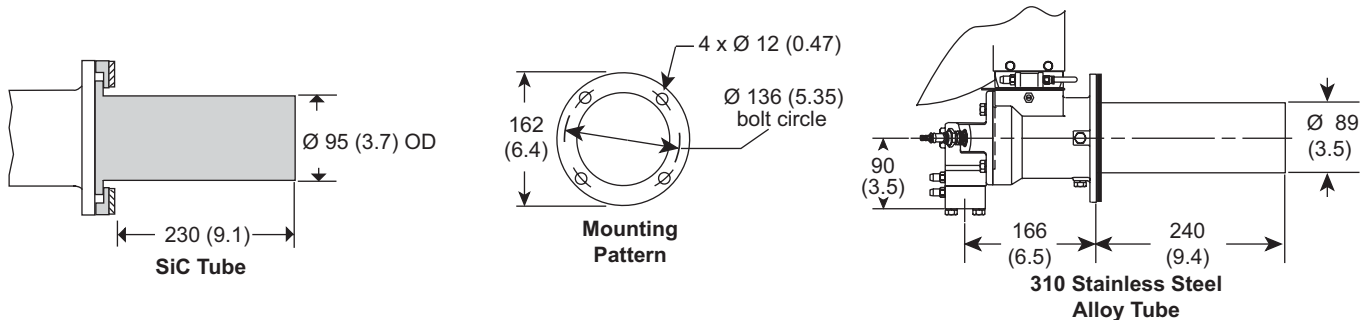


Optional Filter/Silencer and Pressure Switch shown in gray

Port Connection	
Sparkplug	14 mm
Flamerod or scanner	0.5" N.P.T.
Peepsight	0.75" N.P.T.

Weights		
	lbs	kg
Burner, w/ 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



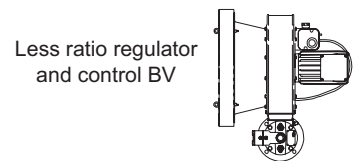
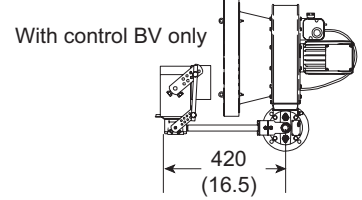
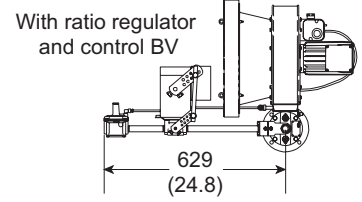
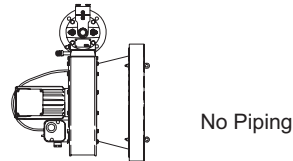
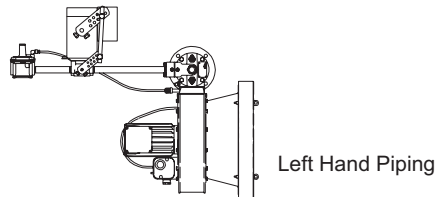
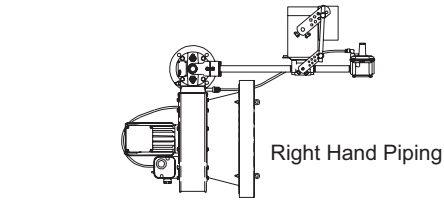
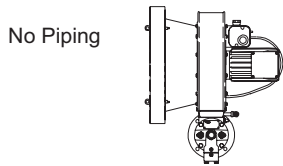
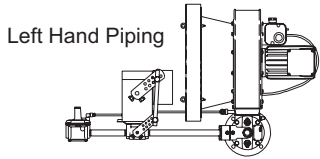
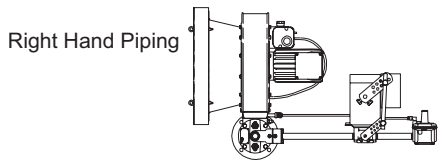
Piping

Orientation

Piping Options

Upright

Inverted





Offered By:

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