



RatioMatic Burners

Model RM400

Version 3.10

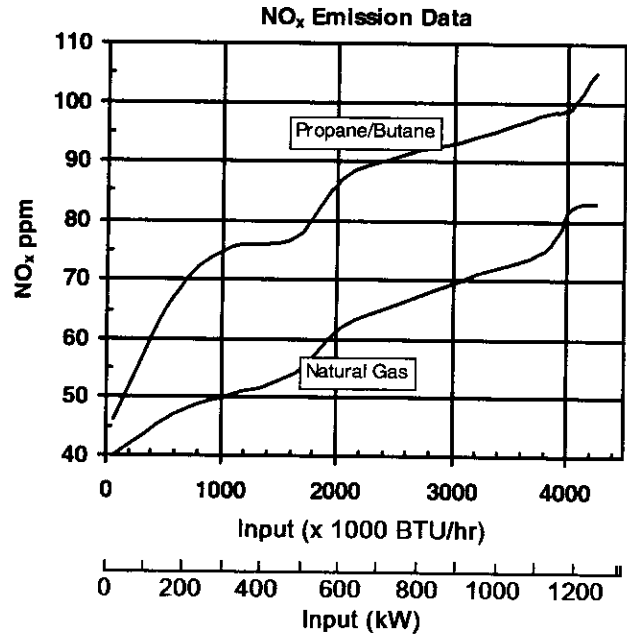
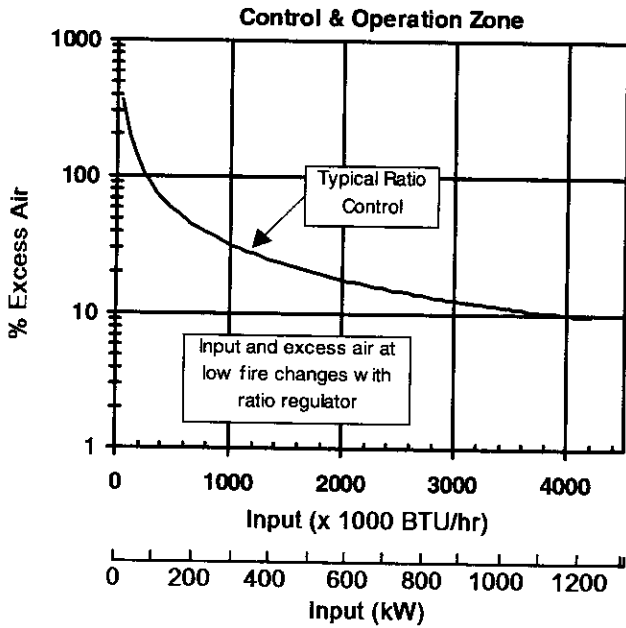
Main Specifications - RM400

PARAMETER		SPECIFICATIONS			
		English		Metric	
		Capacity @ Chamber Pressure			
		BTU/hr	@ "w.c.	kW	@ mbar
Maximum input	60 Hz packaged blower	4,600,000	-4.0	1360	-10,0
		4,380,000	-2.0	1280	-5,0
		4,100,000	0.0	1200	0,0
		3,800,000	2.0	1110	5,0
		3,230,000	5.0	940	12,4
	50 Hz packaged blower	4,500,000	-4.0	1310	-10,0
		4,280,000	-2.0	1250	-5,0
		4,000,000	0.0	1170	0,0
		3,700,000	2.0	1080	5,0
		3,130,000	5.0	910	12,4
Note: Contact factory for varying chamber pressures or pressures outside the range: -4.0 to 5.0" w.c. (-10,0 to 12,4 mbar)					
Minimum input		BTU/hr		kW	
		65,000		19	
Main gas inlet pressure • fuel pressure at ratio regulator inlet		"w.c.		mbar	
Natural gas		20 to 55		50 to 140	
Propane or Butane		20 to 35		50 to 90	
High fire flame length • measured from the outlet end of the combustor		inches		mm	
Natural gas		65 in		1650 mm	
Propane or Butane		70 in		1800 mm	
Maximum chamber temperature		°F		°C	
Alloy tube		1500		815	
Block & Holder		1900		1040	
Flame detection		Alloy tube Block & Holder			
		Flame rod or UV scanner UV scanner only			
Fuel		Natural Gas, Propane or Butane. For any other mixed gas, contact Eclipse Combustion for orifice sizing			

- All information is based on laboratory testing. Different chamber size and conditions 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).
- 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

RatioMatic RM400



Notes on emission data

NO_x emission data is given for:

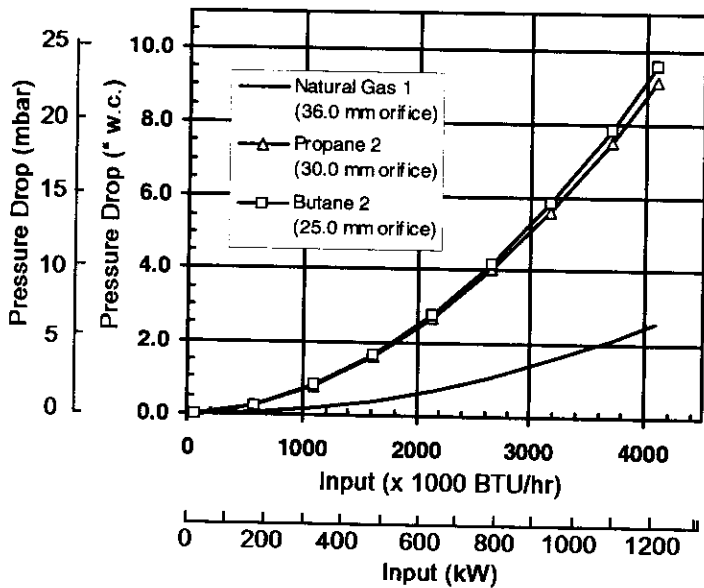
- Ambient combustion air ~70° F (20° C)
- Less than 1000°F (540°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 65,000 BTU/hr (19kW)
- ppm volume dry at 3% O₂
- Neutral chamber pressure

Emissions are influenced by:

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

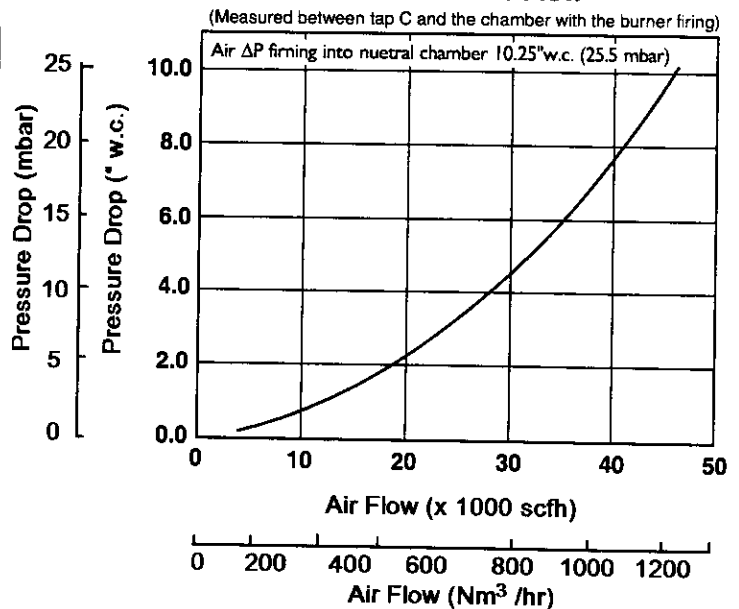
CO emission is largely influenced by chamber conditions.
Contact your local Eclipse Combustion representative for an estimate of CO emission on your application.

Fuel Orifice ΔP vs. Input



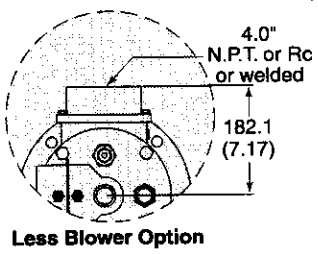
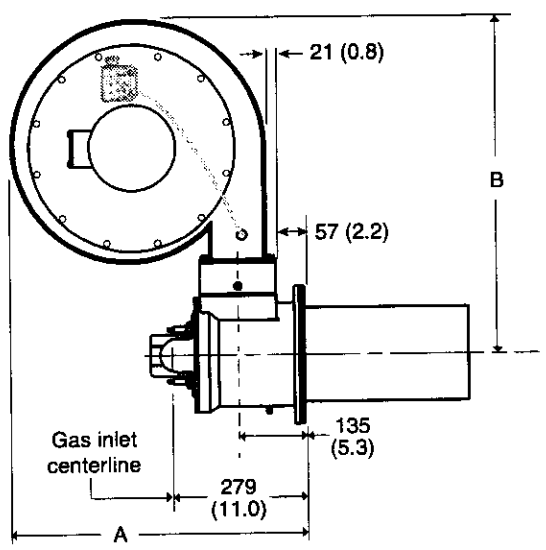
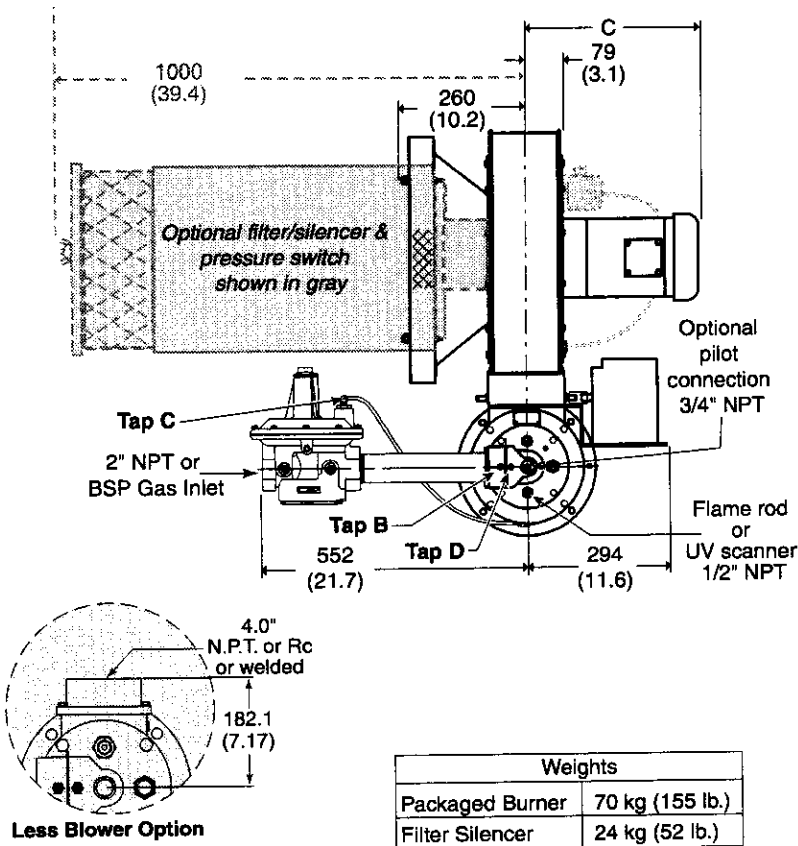
¹ Natural gas ΔP measured between taps B and D.
² Propane or Butane ΔP measured between tap B and chamber.

Air ΔP vs. Air Flow



Dimensions-RM400

Dimensions mm (in)



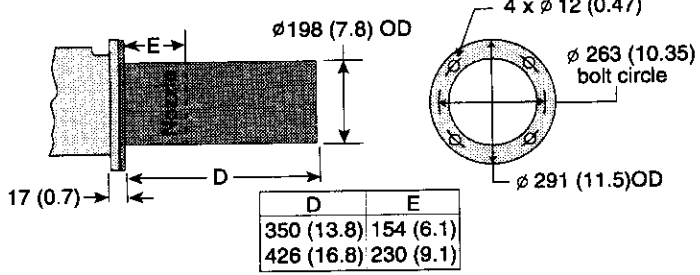
Weights	
Packaged Burner	70 kg (155 lb.)
Filter Silencer	24 kg (52 lb.)

	A	B	C
50 Hz	614 (24.2)	704 (27.7)	350 (13.8)
60 Hz	555 (21.8)	650 (25.6)	365 (14.4)
60 Hz (Auto)	555 (21.8)	650 (25.6)	407 (16.0)

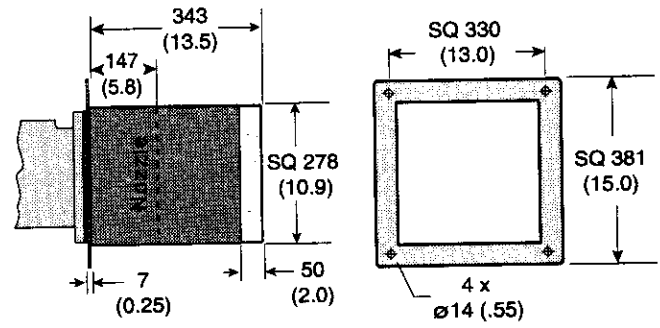
Note: See Price List 110 for available spare parts.

Combustor types

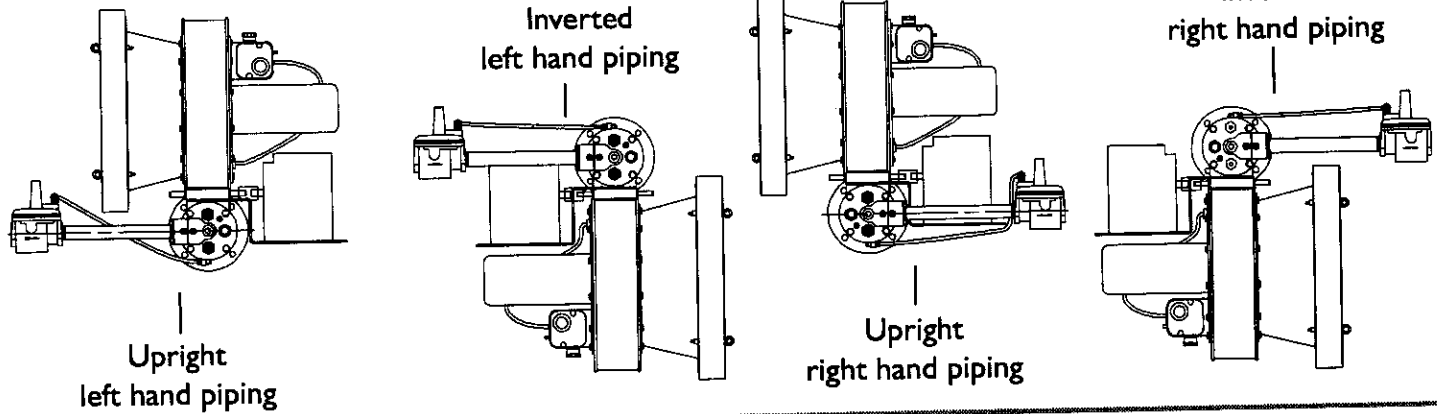
Alloy tube



Block & Holder



Burner configuration





Offered By:

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