

1. General Information

The Riva Heat Only is a high efficiency, non-condensing, wall mounted gas boiler which provides central heat. The boiler features a gas valve which modulates the energy input from 44,000 BTU/h to 108,000 BTU/h. The boiler is shipped fully assembled with the components listed on page 11. All units are pressure and combustion tested at the factory prior to shipping.

Key Features:

- Wall mountable - saving valuable floor space.
- Several flue options available
- Electronic spark ignition
- Safety flow switch - positioned on the main circuit, which monitors the flow and protects the main heat exchanger from thermal shock should there be a lack of water in the system.
- Frost protection - contains an integral frost protection system to prevent frost damage which can occur in areas susceptible to very cold weather conditions.
- Boiler operation recognition system - should the boiler not be used for longer than 24 hours, it then performs a controlled system test to ensuring the motorized components within the boiler do not become inoperable due to lack of use.
- Gas valve modulation - the gas input modulates based off central heating temperature to within ± 2 °F
- Diagnostic information system equipped with three LED diagnostic lights for quick error assessment.

2. Technical Information (M130.30CR)

GENERAL		
Height	in	27.7
Width	in	15.7
Depth	in	12.8
Weight	lb	79.4

CENTRAL HEATING		
Maximum working temp.	°F	185
Temp. Regulation range*	°F	100-176
Maximum pressure	psi	30.0
Minimum pressure	psi	4.35
Max head loss (at 4.4 GPM)	ft	10
*At the minimum useful output		

2. Technical Information Cont.

ENERGY CAPACITY

Nominal heat input (0/2000ft)	MBH	122.8
Nominal heat input (2000/4500ft)	MBH	116.7
Minimum heat input	MBH	49.5
Maximum useful output (0/2000ft)	MBH	100.7
Maximum useful output (2000/4500ft)	MBH	95.9
Minimum useful output	MBH	37.0

GAS SUPPLY PRESSURE

Gas		Normal	Min	Max
Natural	inwc	7.0	3.5	10.5
Propane	inwc	11.0	8.0	12.0

GAS PRESSURE AT BURNER

Gas		Min	Max	Ignition
Natural	inwc	0.8	5.3	2.4
Propane	inwc	1.4	9.0	5.2

FLUE DESIGN

Minimum Venturi pressure	inwc	0.64
Flue pipe diameter		
Coaxial	in	2.25/4 3.25/5
Twin split pipes	in	3.25/3.25
Nominal heat flow rate (0/2000ft)	MBH	122.8
Nominal heat flow rate (2000/4500ft)	MBH	116.7
Min Exhaust temperature	°F	262
Max Exhaust temperature	°F	324

INJECTORS

	No.	Size
Natural	14	130
Propane	14	89

GAS FLOW RATE

Gas		Min	Max
Natural	ft ³ /h	48.7	121.1
Propane	lb/h	2.23	5.55

ELECTRICAL

Voltage	V	120
Frequency	Hz	60
Current	A	< 1.6
Power consumption	W	176

FLUE GAS FIGURES

Gas	Min	Max
CO ₂	2.5%	7.2%
O ₂	16.5%	8.1%