

# **E110SR Condensing Boiler**

### Standard Features

- Factory Installed Boiler/System Modulating Pump
- Onboard Outdoor Reset Control System with Sensor Standard
- Integrated Control for External Domestic Hot Water (DHW) Indirect Tank
- Modulating Ceramic Premix Burner
- 4.2:1 Turndown Ratio
- Spark Ignition
- Exceeds SCAQMD 1146.2 Low NO<sub>x</sub> Requirements
- Stainless Steel Water Tube Condensing Heat Exchanger
- Concentric Venting System
- Twin Pipe Venting Adapters Included
- Approved for Room and Closet Installations (Zero Clearance to Combustibles)

## **Optional Accessories**

- RS100 Single Zone Controller
- Flue Gas Temperature Sensor
- Room Air Filter
- Low Loss Header Plumbing Kit
- Low Loss Header Side Mount Kit
- DHW Indirect Tank Temperature Sensor

## **SPECIFICATIONS**

General Specifications		
Water Content	1.3 Gal / 4.8 L	
Max. Supply Boiler Temperature	176 °F / 80 °C	
Max Operating Pressure	45 PSI / 310 kPa	
Relief Valve Rating	375 MBH/ 110 kWh	
Relief Valve Pressure Rating	30 PSI / 207 kPa	
Unit Weight	81 lbs / 37 kg	
Min Inlet Gas Pressure NG	4.0" / 10.0 mbar	
Max Inlet Gas Pressure NG	10.5"/26.2 mbar	
Min Inlet Gas Pressure LP	8.0" / 19.9 mbar	
Max Inlet Gas Pressure LP	13.5" / 33.6 mbar	
Electrical Voltage Mains	120 V / 60 Hz	
Electrical Voltage Controls	24 V	
Power Consumption Max Load	145 W	
Power Consumption Standby Load	14 W	
Recommended Circuit Breaker Rating	15 A	
Sound Level	49 dB	

Performance Specifications		
Fuel Types	NG and LP	
Input (Heating)	110 MBH / 32.2 kWh	
Heating Capacity	101 MBH / 29.6 kWh	
Input (DHW)	N/A	
Minimum Input	NG: 26 MBH / 7.6 kWh LP: 59 MBH / 17.4 kWh	
Turndown Ratio	4.2:1 / 1.9:1TDR	
System Pump Model	UPER 20-78	
Max Head Pressure at Flow Rate	14.2 ft at 5.0 GPM 4.3 m at 18.9 LPM	
AFUE	95.5%	
DHW Flow Rate 75°F ΔT	N/A	
DHW Minimum Activation	N/A	
Flow Restrictor Color	N/A	
Max Equivalent Exhaust Vent Length	100 ft / 30.5 m	
Max Equivalent Combustion Air Vent Length	100 ft / 30.5 m	
Approved Venting Materials	Polypropylene, Stainless Steel, PVC, CPVC	









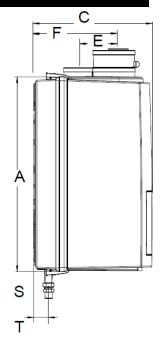


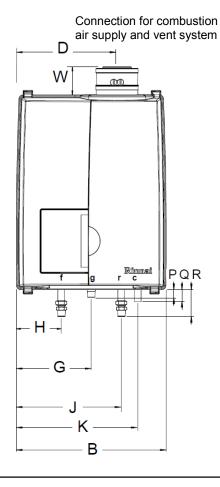
Rinnai is continually updating and improving products; therefore, specifications are subject to change without prior notice. Local, state, provincial and federal codes must be adhered to prior to installation.



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## **DIMENSIONS**





Α	Height	25.6" / 650 mm
В	Width	19.7" / 500 mm
С	Depth	15.6" / 395 mm
D	Left Side / Vent	13.2" / 335 mm
Е	Center to Center / Vent and Air Supply	4.7" / 120 mm
F	Back / Vent	10.6" / 270 mm
G	Left Side / Gas Pipe	9.8" / 250 mm
Н	Left Side / Supply Pipe	5.9" / 150 mm
J	Left Side / Return Pipe	13.8" / 350 mm
K	Left Side / Condensate Pipe	15.9" / 405 mm
Р	Pipe Length of G	1" / 26 mm
Q	Pipe Length of C	1.6" / 40 mm
S	Back / Center of Pipe C	1" / 26 mm
Т	Back / Center of Pipes F, G, and R	1.9" / 49 mm
V	Pipe Length Concentric Vent and Air Supply	7" / 177 mm

### Additional Information:

- If the boiler is to be installed in a system that utilizes zone circulators and not zone valves a low loss header plumbing kit is required to be installed.
- If the pressure drop in the loop/system is greater than the available head pressure from the boiler circulator a Low Loss Header Plumbing kit part number: 804000061 must be used.
- If the boiler is installed in a system with zone valves and the constant recirculation function is activated then a differential pressure bypass valve or a low loss header plumbing kit is required to be installed.

### **Clearances**

	Minimum required clearance to combustibles and non-combustibles	Recommended service clearances
Тор	2" / 50 mm	10" / 250 mm
Back	0	0
Front	6" / 150 mm	24" / 600 mm
Left Side	2" / 50 mm	2" / 50 mm
Right Side	2" / 50 mm	2" / 50 mm
Floor / Ground	12" / 300 mm	12" / 300 mm
Vent	0	0

### Shipping Specifications:

- Shipping Weight: 92 lbs (42 Kg)
- Shipping Dimensions: 34" x 17" x 22" (86 cm x 44 cm x 55 cm)

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