



**HEATING BOILER / HOT WATER SUPPLY BOILER**  
ASME H Stamp

**STANDARD EQUIPMENT AND FEATURES**

- Performance:* 85% efficiency  
Staged firing (2-to-1 turndown at 399 MBH)  
Full modulation with 3-to-1 turndown (540 through 2000 MBH)  
Operates on 4-1/2" W.C. minimum gas flow pressure  
Category I or Category III venting (consult factory with Cat. III)  
Low NOx emissions  
Remote combustion air capable (100 equivalent feet 399 to 1000 MBH)  
(180 equivalent feet 1200 to 2000 MBH)
- Certifications:* ETL listed to ANSI Z21.13 /CSA 4.9  
FM compliant  
1" clearance to combustible walls (consult local codes for clearance requirements)
- Heat Exchanger:* Multi-pass, finned copper tubing braze-welded  
into 100% non-ferrous headers (gasketless design)  
Integral tube baffling (no separate "v" baffles required)  
ASME H stamped for 160 psi working pressure
- Burner:* Pre-mix, woven metal-matrix surface burner  
Gas train includes gas pressure regulator(s), gas cock(s) and redundant gas valve(s)  
Single blower design  
Synchronous fuel-air balancing for optimum combustion (540 through 2000 MBH)
- Combustion Control:* Electronic flame safeguard with pre-purge and post-purge  
Hot surface ignition
- Operating Controls and Indicators:* Programmable digital temperature control accurate to 1°F, includes programmable setback  
and serial communication Modbus RTU protocol (option cable required)  
LED temperature readouts  
Firing sequence lights
- Safety Controls:* Redundant high-temperature-limit controls with manual reset  
Flow switch on heat exchanger (safety for both low flow and low water conditions)  
Blocked flue and air proving switch  
Low return water temperature alarm (condensation protection)  
Pressure relief valve, set at \_\_\_\_\_ psi (50 psi standard) (options; 30, 75, 125, and 150 psi)
- Warranty:* 10-year heat exchanger warranty including thermal shock \*  
(5-year warranty in domestic hot water supply applications)  
First-year "Service Advantage Plan" covering freight, labor and materials on any failed part \*

**OPTIONAL EQUIPMENT**

- CSD-1/GEGAP compliance
- Remote combustion air connection
- Remote alarm contacts
- Audible alarm
- Stacking skid
- Sway brace connections
- Outdoor installation kit
- Air intake filter (mechanical room only, not available for direct combustion air)
- Remote equipment switch (10 amp maximum)
- LP gas operation
- Temperature and Pressure relief valve (HWS applications)
- AGA relief valve(s)
- Extended "Service Advantage Plan" covering freight and labor on heat exchanger replacement for 10 years \* (not on HWS)
- cable for 485 serial connection /Modbus protocol. Includes alarm on any failure notification
- freeze protection

Some options may increase water heater space requirements.  
\* See warranty or service policy for full details.

**Riverside Hydronics reserves the right to change the design and specification without notice.**

