

EPVL

LOW NOx CONDENSING WATER BOILER STANDARD FEATURES AND EQUIPMENT

Performance

- 93% thermal efficiency per DOE / BTS 2000
- Up to 97% efficiency at low fire with low return temp
- Staged firing with 3-to-1 turndown (28 hp. only)
- Ducts direct combustion air up to 100 equivalent feet through 6" diameter material (requires vent cap from Riverside Hydronics, see options list)
- Category IV, positive pressure venting through single-wall stainless material. (4" vent cap supplied. 6" vent cap, if needed, must be provided by Riverside Hydronics, see options list.)
- NO_x emissions < 55 ppm for inputs less or equal to 399 MBtu/h
- NO_x emissions < 30 ppm for inputs greater than 399 MBtu/h

Burner, Combustion Controls & Operating Controls

- UL795, FM and CSD-1 compliant gas train
- Spark ignition system
- Electronic flame safeguard control with pre- and post-purge
- Programmable electronic operating control with digital temperature readout. Connects to Building Automation System for read/write over 485 serial connection using ModBus RTU protocol (requires optional serial cable)
- Dual temperature limits with manual-reset on high-limit temperature control
- Manual-reset, electronic low-water cutoff with test switch (no lockout on power loss)
- Pressure gauge on supply outlet
- High and low gas pressure switches
- CSD-1 compliant
- FM compliant
- Third Party safety listed to standard UL 795 "Commercial-Industrial Gas Heating Equipment"
- Maximum 210°F operating limit

Pressure Vessel and Heating Tubes

- Vertical fire tube, steel boiler construction
- Medium water mass design
- ASME "H" stamped and National Board Registered for 125 psi design pressure
- Condensing fire tubes are vertically oriented and coated with PVDF polymer
- ASME safety relief valve (50 psi installed as standard)
- Handhole cleanout
- Blowdown valve
- Brass condensate drain
- Steel skirts
- Fiberglass tank insulation
- Steel jacket with industrial finish

Remote Interface and Alarms

- Remote on/off terminals for all burner stages
- Visible and audible local alarm on ignition control lockout with silencing switch
- Remote terminals for lockout alarm, call for heat and burner on

Warranty and Service Policy

- Ten-year pressure vessel workmanship, materials and thermal shock warranty *
- "Service Advantage Plan" covering parts, materials, freight and labor on any repair or replacement for the first year of operation *

OPTIONAL EQUIPMENT

- Extended "Service Advantage Plan" covers freight and labor on a vessel replacement for 10 years *
- LP gas operation
- _____ psi safety relief valve (30, 75, 100 or 125)
- Alarm on any failure with silencing switch. Includes local audible signal, remote alarm switched contacts, and notification through ModBus (serial cable included)
- Combustion air interlock
- Remote equipment switch (120V, 10A max.)
- Condensate neutralization device
- 4-inch flange connection at supply and return
- Temperature gauge on supply outlet
- Float-type low-water cutoff with blowdown

- Air vent valve
- High water pressure safety switch
- Low water pressure safety switch
- Water flow switch (field installed)
- Gas pressure gauge
- Pounds to ounces gas regulator (for source pressures above cataloged standards) (field installed)
- Main electrical disconnect switch (field installed)
- 150 psi design pressure
- 6-inch vent cap for direct air duct termination
- 6-inch vent cap for exhaust termination

* see warranty or service policy for details

RIVERSIDE HYDRONICS RESERVES THE RIGHT TO CHANGE THE DESIGN AND SPECIFICATION WITHOUT NOTICE.