

VT.3[®] WATER BOILER

1,500,000 to 2,000,000 BTU

STANDARD FEATURES AND EQUIPMENT

PERFORMANCE

- 84% thermal efficiency per DOE 10 CFR 431
- Low NOx emissions - SCAQMD complaint < 20 ppm
- Ducts direct combustion air up to 100 equivalent feet through 6-inch diameter material (requires UL approved vent cap, see optional equipment list)

PRESSURE VESSEL AND HEATING TUBES

- Vertical fire tube, 3-pass
- Duplex stainless steel vessel and firetubes
- Medium water mass design
- ASME "H" stamped and National Board Registered for 80 psi MAWP
- Boiler water pressure gauge on tank
- ASME safety relief valve (50 psi installed as standard)
- Hand hole cleanout
- Blowdown valve
- Fiberglass tank insulation
- Steel jacket with industrial finish

WARRANTY AND SERVICE POLICY

- 10-Year pressure vessel workmanship, materials and thermal shock warranty (34-2D) ①
- "Service Advantage Plan" covering parts, materials, freight and labor on any repair or replacement for the first year of operation (34-27) ①

BURNER, COMBUSTION CONTROLS AND OPERATING CONTROLS

- Pre-mix surface burner with proportional gas/air control and variable speed blower motor
- Electronic ignition control with pre- and post-purge
- Programmable electronic operating control with digital temperature readout
- Firing cycle status panel lights
- 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)
- Flame failure audible alarm and indicating light with remote contacts
- High and low gas pressure switches
- Seamless VFD modulation S

REMOTE/NETWORK BAS INTERFACE

- MODBUS protocol on operating control with 485 serial connection
- Remote on/off terminals
- Remote 4-20mA or 0-10V modulation control terminals

CODES AND STANDARDS

- Intertek / ETL listed to US and Canadian safety standards
- Intertek / ETL listed for use with listed Category I, B vent material
- Intertek / ETL listed for use with listed Category III or IV stainless steel vent material
- CSD-1 compliant, FM compliant
- ASHRAE 90.1 compliant

MISCELLANEOUS

- Factory authorized startup
- Direct inlet air filter
- Draft regulator

OPTIONAL FEATURES AND EQUIPMENT

- Extended "Service Advantage Plan" covers freight and labor on a vessel replacement for 5 years (34-28) ①
- L.P. gas operation (LPGAS)
- Dual fuel: Natural gas and LP gas operation (dual gas trains, switchable) (consult factory) (DFBRN)
- Alternate safety relief valve 30 psi 75 psi
- Relay (10A max) and proving terminals for remote equipment, louvers and fresh air damper (LOUVR)
- Configured for Category III or IV stainless steel positive pressure venting (removes Category I components) (CAT34)
- Float-type low-water cutoff with blowdown and air vent valve (requires additional clearance, consult factory) (FLWCO)
- 4" ANSI flange (150#) for supply and return connections (4INOU)
- High water pressure safety switch (HWPL)
- Low water pressure safety switch (LWPL)
- Water flow switch (field installed) (FLOSW)
- Gas pressure gauge (GASPG)
- Pounds to ounces gas regulator (for source pressures above cataloged standards) (field installed) (LB-OZ)
- Main electrical disconnect switch (field installed) (MDISC)
- Vent termination cap for direct inlet air duct, 6-inch diameter (PN 58850)
- Upsized vent termination cap for direct inlet air duct, 8-inch diameter (PN 102608)
- Supply Side Boiler Control Option for variable flow and low flow operation (SSBCO)

ELECTRONIC OPERATING CONTROL OPTIONS—Select all that apply

- Alarm on any failure, including MODBUS 485 serial cable for connecting to a building automation system and local audible alarm (approx. 72dB from TempTrac control) (ALMMB)
- 95dB local audible alarm for noisier environments, including silencing switch (requires ALMMB option) (BUZ95)
- Protocol gateway (consult factory) Modbus TCP/IP BacNet IP BacNet MSTP LonWorks

① See complete warranty and/or service policy for details



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