

# VT.3 WATER BOILER

## 399,000 to 1,000,000 BTU

### STANDARD FEATURES AND EQUIPMENT

#### Performance

- 85% thermal efficiency
- Seamless modulation through a 4-to-1 turndown
- Low NOx emissions (<20 ppm 399 to 900 MBH)
- Ducts direct combustion air up to 100 equivalent feet through 6" diameter material (requires UL approved vent cap, see optional equipment list)

#### Burner, Combustion Controls & Operating Controls

- Pre-mix burner with proportional gas/air control and variable speed blower motor
- Electronic ignition control with pre- and post-purge
- Electronic operating control with digital 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)
- Indicating light for flame failure with remote indication contacts
- Pressure gauge on tank
- High and low gas pressure switches
- CSD-1 compliant, FM compliant
- Intertek / ETL listed to U.S. and Canadian standards
- Maximum 240°F operating limit
- Combustion air filter
- Draft regulator

#### Pressure Vessel and Heating Tubes

- Vertical fire tube, 3 pass, steel boiler construction
- Medium water mass design
- ASME "H" stamped and National Board Registered for 150 psi design pressure
- ASME safety relief valve (50 psi installed as standard)
- Handhole cleanout
- Blowdown valve
- 3/4" condensate drain
- Steel skids
- Fiberglass tank insulation
- Steel jacket with industrial finish

#### Remote/Network BAS Interface

- MODBUS protocol on operating control through a 485 serial connection (optional cable required)
- Remote on/off terminals
- Remote 4-20mA or 0-10V modulation control terminals

#### Warranty and Service Policy

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

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#### OPTIONAL EQUIPMENT

- Extended "Service Advantage Plan" covers freight and labor on a vessel replacement for 10 years \*
- LP gas operation
- Dual fuel, combination natural and LP gas
- \_\_\_\_ psi safety relief valve (30, 75, 100, 125 or 150)
- Cable for operating control MODBUS connection (includes alarm on any failure, remote indication contacts and audible indication of alarm)
- 'Plain Language' diagnostic readout for safety circuit faults with a remote alarm relay
- Combustion air interlock
- Remote equipment switch (120V, 10A max.)
- Float-type low-water cutoff with blowdown and 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)
- 240V single phase blower motor
- 208/230 three phase blower motor
- 480V three phase blower motor
- 120V control circuit transformer (avoids a separate 120V connection when 3-phase power is used)
- UL approved vent cap for direct combustion air

\* see warranty or service policy for details