

# **Brigade® Gas Condensing Dynamic Water Heater**

199 MBH • 25 Gal Buffer • AquaPLEX® Duplex Stainless Steel

### **Standard Features and Equipment**

#### **Performance**

- 96% thermal efficiency from 70°F to 140°F
- 97.5% thermal efficiency from 40°F to 140°F
- Low NOx compliant at <20 ppm</li>
- · Equipped for direct combustion air connection
- Vents through PVC, CPVC or Polypropylene
- · Condensate "P" trap

#### **Pressure Vessel**

- AquaPLEX construction (duplex stainless steel)
- · CSA and ASME rated T&P relief valve
- · Fiberglass insulation
- Durable polyethylene jacket (100% recycled material)
- · Bottom drain valve

#### **Heat Exchanger**

 AquaPLEX® combustion chamber and heating surfaces, patent-pending enhanced fire tubes, single pass, 100% submerged

#### **Burner, Operating Controls and Safeties**

- · Pre-mix, stainless steel burner with spark ignition
- Modulating burner with 7-to-1 turndown
- · ANSI Z21.10.3 compliant gas train
- Electronic operating system with integrated ignition and operating controls
  - Programmable electronic operator with digital temperature readouts, adjustable from 80°F to 180°F
  - · Plain text heater status and fault indication with fault history
  - · Alarm with remote contacts
  - · Visual modulation rate
  - · Manual-reset temperature limiting device
  - Modbus RTU (RS-485)
  - BACnet MSTP (RS-485)2
- · Electronic low water cutoff with manual reset and test switch
- · Remote on/off terminals
- · Louver or power venter relay and proving contacts

#### Warranty

- 6-year vessel and heating surfaces warranty covering waterside and condensate corrosion, leakage, production of rusty water, material defects and workmanship (PV8696)¹
- First Year Service Policy (PV551)<sup>1</sup> Startup form required

<sup>1</sup>See complete warranty and service policy for full details <sup>2</sup>Conversion to BACnet IP requires field supplied and field installed router or gateway.

#### **Codes and Standards**

- Listed in U.S. Department of Energy's Compliance Certification Database
- Intertek / ETL Listed Mark
  - ANSI Z21.10.3 CSA 4.3
  - NSF/ ANSI 372
  - NSF 5
  - PVC, CPVC or Centrotherm InnoFlue SW Polypropylene Category IV vent material
  - · Zero-clearance and combustible floor installation
- Complies with ASHRAE 90.1
- · Complies with SCAQMD Rule 1146.2 for ultra-low-NOx emissions
- · ENERGY STAR® certified

## **Optional Equipment**

- · Condensate Neutralization System (PN 150868)
- Pigtail Kit for 120V plug-in power cord, 14/3 AWG, 12 ft. length (PN 122042)
- · Concentric Vent Kit
  - (PN# 124574 for 3" PVC), (PN# 127319 for 3" CPVC)
- Installation Kit, includes ball valves, unions, pipe nipples, y-strainer and check valve for hot-cold connections and building return (PN 151033)















waterheatingdirect.com • help@waterheatingdirect.com • 401-552-HEAT