

# 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
- 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)<sup>2</sup>
- 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)<sup>1</sup>
- 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)
- Tie Down Kit (PN 155151)



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