

## Armstrong Hot Water Generation – Steam/Water Single Wall

# Flo-Rite-Temp® Steam/Water Shell and Tube Heat Exchanger Pre-Piped Tempered Water Recirculating

#### Model FRT53540

FRT53540 is a complete pre-piped single wall instantaneous steam/water shell and tube heater. The assembly includes a 535 instantaneous Flo-Rite-Temp water heater with a Digital Recirculating Valve (DRV40).

Digital technology provides enhanced water temperature control accuracy and enhanced user safety in a single control component.

#### **Operational Specifications**

- +/-2°F water temperature control at points of use 25' downstream during demand
- +/-2°F water temperature control during zero system demand "idling" periods
- 2°F minimum valve inlet to outlet temperature requirement (system recirculation temperature loss)
- Automatic shutoff of hot water flow upon cold water inlet supply failure
- Automatic shutoff of hot water flow in the event of a power failure
- Programmable set point range of 81-158°F (27-70°C)
- · Programmable 1st level hi/lo temp alarm display
- · Programmable temperature error level for safety shutdown

### **Technical Specifications**

- Maximum steam pressure: 15 PSIGMaximum domestic pressure: 150 PSI
- · Minimum recirculation flow: 5 GPM
- Design conditions: Domestic-41 GPM at 100°F delta T using 15 PSIG steam
- · Complete assembly Lead Free Compliant
- All domestic side valve fittings and isolation valves, strainers, inlet/return check valves, inlet system blend and return thermometers pre-piped.
- · DRV all wetted parts 316 stainless steel
- · DRV to be UL Listed
- Heat exchanger tubes shall be straight 5/8" OD admiralty brass expanded into Navel Brass tube sheets with a free floating bolted end cover
- Water pipe of type L copper
- Fabricated carbon steel frame with machine grade enamel paint
- · 120 volt power supply required
- ModBus RTU Connectivity to communicate directly with BAS (Building Automation System)

#### Standard Materials of Construction

- · Control Valve: Lead Free Bronze
- Water pipe: Type L Copper
- Fittings: Lead Free Brass/Bronze
- Tube bundle: Admiralty Brass tubes expanded into Navel Brass tube sheets
- · Heat Exchanger Shell: Carbon Steel
- · Steam Trap: Model 813 Cast Iron
- Air Vent: Model TS-2 angle-pattern-bronze
- · Vacuum Breaker: Brass
- · Digital Mixing Valve: Stainless Steel





