# Armstrong Hot Water Generation – Boiler Water/Water Double Wall

# Digital-Flo® Boiler Water/Water Plate and Frame Heat Exchanger

# Model DF120WEDW80BS

DF120WEDW80BS is a complete pre-piped instantaneous boiler water/water heater. The package includes a properly sized double wall plate and frame heat exchanger packaged with a Digital Recirculating Valve (DRV80) and BrainScan<sup>®</sup> hot water monitoring control module.

Digital technology provides enhanced water temperature control accuracy and enhanced user safety in a single control component. BrainScan<sup>®</sup> technology to control set point, data log and monitor inlet hot, inlet cold/return and mixed water outlet with multiple BAS interface options.

#### **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 thermal disinfection mode
- Programmable 1st level hi/lo temp alarm display
- Programmable temperature error level for double safety shutdown.

## **Technical Specifications**

- Maximum boiler water temp: 160°F
- Maximum domestic pressure: 150 PSI
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- · Minimum recirculation flow: 10 GPM
- Design conditions: Domestic-120 GPM at 100°F delta T Boiler side- 160°F at 30 deg delta T.
- Complete package Lead Free Compliant
- All domestic side valve fittings and isolation valves, strainers, Inlet/return check valves, inlet, system blend and return thermometers, pre-piped. Boiler side piping/fittings supplied by others.
- DRV all wetted parts 316 stainless steel
- DRV to be UL Listed
- Stainless steel liners on plate and frame exchanger
- Plates shall be single wall field replaceable 316 stainless steel
   Water nine of type L conner
- Water pipe of type L copper
- Fabricated carbon steel frame with machine grade enamel
  paint
- 120 volt power supply required
- · Secondary (double) safety shut-off valve included

## Connectivity

**BrainScan**<sup>®</sup> – Is an optionally selected control module from Armstrong which enables an interface with Building Automation Systems (BAS) which utilize Modbus, Bacnet<sup>™</sup> or LonWorks<sup>™</sup> protocols via the use of specific protocessor cards. BrainScan<sup>®</sup> also has an ethernet port and operates as a web server for remote network access.

BrainScan® has the following outputs:

- Set Point
- Inlet/Outlet Temperature
- Over Temperature Alert
- Error Messages

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.



