

Hot Water Generation – Boiler Water/Water Single Wall

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

Model DF90WE80

DF90WE80 is a complete pre-piped single wall instantaneous boiler water/water heater. The package includes a properly sized plate and frame heat exchanger packaged with a Digital Recirculating Valve (DRV80).

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



- Maximum boiler water temp: 160°F
 Maximum domestic pressure: 150 PSI
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- Minimum recirculation flow: 10 GPM
 Design and distance Demonstration 00 GPM
- Design conditions: Domestic-90 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 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

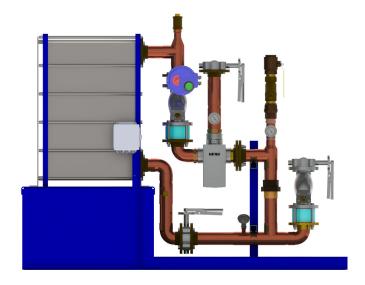
Connectivity

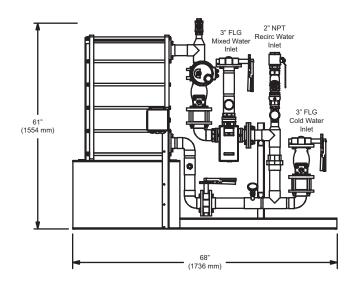
SPCO Relay Outputs – Relay which is energized during operation.

LCD Display – Provides information on set point, delivered temperature, error messages and alert conditions.

RS485 Serial Port – Connects the DRV to either Modbus or BrainScan®. (See DF90WE80BS for package with BrainScan®.)

Modbus – DRV can be configured to communicate directly with Building Automation Systems (BAS) using Modbus protocols.





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