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

Model DF35W40
DF35W40 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 (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 shut-off of hot water flow upon cold water inlet supply failure
• Automatic shut-off 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: 220°F
• Maximum domestic pressure: 150 PSI
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• Minimum recirculation flow: 5 GPM
• Design conditions: Domestic-35 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 DF35W40BS for package with BrainScan®.)
Modbus – DRV can be configured to communicate directly with Building Automation Systems (BAS) using Modbus protocols.