

Water Temperature Control - Recirculation Systems

Digital

The Brain[®] Model DMC25BS Flex Zone PHE

DMC25BS Flex Zone PHE is a fully Digital Mixing Center (DMC) specifically designed to be the primary water temperature controller in a domestic hot water zone with independent continuous recirculation reheat generated by a plate heat exchanger (PHE).

Digital technology provides enhanced water temperature control accuracy which resists zero system demand "Temperature Creep" without the use of a manual throttling valve or a temperature activated pump shut-off device (aquastat).

SAGE[®] (BS) available with specific ProtoCessor cards for BAS connectivity to systems which operate on Modbus TCP, BACnet[™], or LonWorks[™] protocols.

Mobile connectivity features smart hot water system dashboard monitoring, secure remote programming, multi-location view, temperature and system diagnostic alerts, with unlimited digital documentation and automated report generation. Mobile connectivity may be enabled by a customer activated subscription.

Operational Specifications (DRV25)

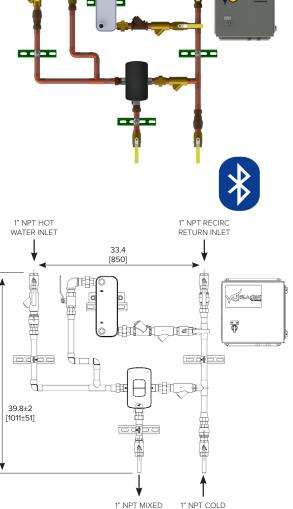
- Ready to go out of the box or field adjustable via Bluetooth connectivity with the SAGE $\ensuremath{^\circ}$ mobile app
- +/-2°F DRV water temperature control at peak, moderate or zero fixture demand on hot water system designed for continuous recirculation
- 1°F minimum recirculating water temperature differential
- Programmable set point range of 81-158°F (27-70°C) capable of BAS or SAGE[®] mobile app for monitoring and adjustment
- Programmable thermal disinfection range of 158-185°F (70-85°C)
- Automatic safe closure of hot water inlet in response to: inlet supply failure, 110V power failure, or programmable high temperature error
- Automatic safe closure of hot water inlet powered by a replaceable lithium battery monitored for low-level alerting

Technical Specifications

- 100-240V AC
- Polymer Electronics Enclosure
- Stainless Steel Valve Construction
- Lead Free compliant
- Maximum inlet HW supply temperature 185°F (85°C); 131°F (55°C) during Group Control
- Minimum Continuous Recirculation 2 GPM (7.6 LPM)
- Minimum System Draw Off 0 GPM; 2 GPM (7.6 LPM) during Group Control
- Conforms to ASSE 1017, CSA B125.3-11, UL E357437, and CE
- Operational water pressure of 10-150 psig (.7-10.3 barg)
- Bluetooth[®] (BLE) enabled for direct communication with the DRV25 via the SAGE[®] mobile app status dashboard and programming.
- SAGE® (BS) for BAS or Mobile Connectivity
- Shipping weight 30 lbs (16.8 kg)
- Stainless steel brazed plate double wall PHE (custom PHE options available).
- 2 Standard Configurations Available; Customs Available upon Request
 Standard #1 = PHE-410-18 (see Specification & Submittal Drawing-D133127 for System Parameters)
- Standard #2 = PHE-410-38 (see Specification & Submittal Drawing-D133129 for System Parameters)

Recirculation Systems - Digital (GPM and PSIG)										
Model		Pressure D	rop (PSIG)		Minimum System Draw-Off	C				
DMC25BS Flex	5	10	15	20	Minimum System Draw-On	υ _ν				
GPM	22	31	39	45	0	9.8				

Recirculation Systems - Digital (LPM and BARG)										
Model		Pressure D	rop (BARG)		Minimum System Draw-Off	v				
DMC25BS Flex	0.3	0.7	1.0	1.4	Minimum System Diaw-On	r _v				
LPM	81	118	145	171	0	8.5				



WATER OUTLET WATER INLET

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