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## **Water Temperature Control - Recirculation Systems**

### **Digital**

## The Brain® Model DMC40BS Flex Zone PHE VOSAGE

DMC40BS 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.

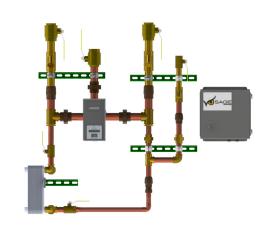
Mobile connectivity features smart hot water system dashboard monitoring, secure remote programming, multi-location view, temperature and system diagnostic alerts, with unlimited digital documentation and automated report generation. Mobile connectivity may be enabled by a customer activated subscription.

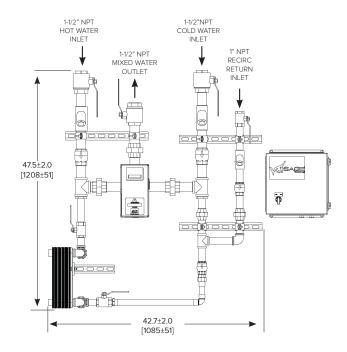
#### Operational Specifications (DRV40)

- +/-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
- LCD display which indicates: set point, delivered temperature, error codes and alarm conditions capable of BAS and mobile connectivity
- Programmable set point range of 81-158°F (27-70°C) capable of BAS or mobile monitoring and adjustment
- Programmable thermal disinfection range of 158-185°F (70-85°C)
- Programmable 1st level hi/lo temp alarm display capable of BAS or mobile alerting
- 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 (DRV40)**

- 100-240V AC
- Polymer Electronics Enclosure
- Stainless Steel Valve Construction
- Lead Free compliant
- Maximum inlet HW supply temperature 185°F (85°C)
- Minimum Continuous Recirculation 5 GPM (19 LPM)
- Minimum System Draw Off 0 GPM
- Conforms to ASSE 1017, CSA B125.3-11, UL E357437, and CE
- Operational water pressure of 10-150 psig (.7-10 barg)
- · Display in °C or °F
- · SAGE® (BS) for BAS or Mobile Connectivity
- Shipping weight 98 lbs (44 kg)
- Stainless steel brazed plate double wall PHE (Custom PHE options available)
  - 2 Standard Configurations Available; Customs Available upon Request
- Standard #1 = PHE-410-38 (see Specification & Submittal Drawing-D133234 for System Parameters)
- Standard #2 = PHE-415-32 (see Specification & Submittal Drawing-D133236 for System Parameters)





	Recirculation Systems - Digital (GPM and PSIG)								
	Model		Pressure D	rop (PSIG)		Minimum System Draw-Off	C <sub>v</sub>		
L	DMC40BS Flex	5	10	15	20				
	GPM	48	70	85	98	0	22		

Recirculation Systems - Digital (LPM and BARG)									
Model		Pressure D	rop (BARG)		Minimum System Draw-Off	r			
DMC40BS Flex	0.3	0.7	1.0	1.4	Willing System Braw-on	U <sub>V</sub>			
LPM	181.7	265.0	321.8	371.0	0	22			

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