



# Water Temperature Control - Recirculation Systems

## Digital

### The Brain® Model DMC25-25BS



DMC25-25BS is a fully Digital Mixing Center (DMC), with SAGE® hot water system monitoring and reporting tool, designed specifically to be the primary water temperature controller in a continuously pumped circulating hot water system.

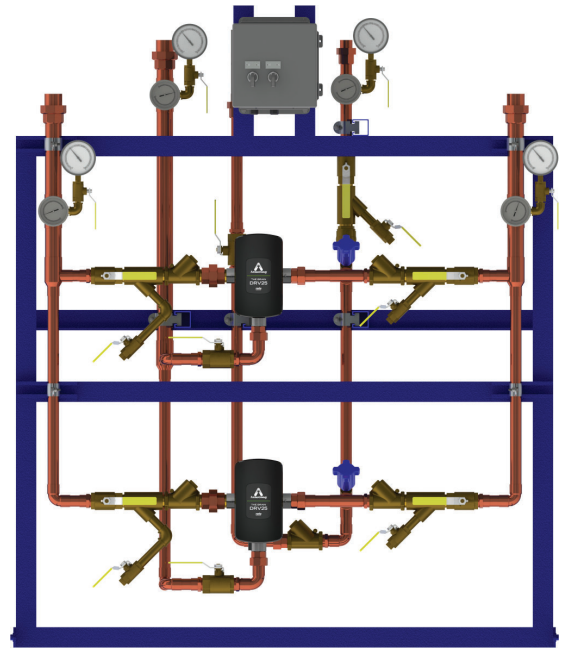
Digital technology provides enhanced water temperature control accuracy which resists zero system demand “Temperature Creep” without the use of a manual throttling valve or a temperature activated pump shut-off device (aquastat).

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.

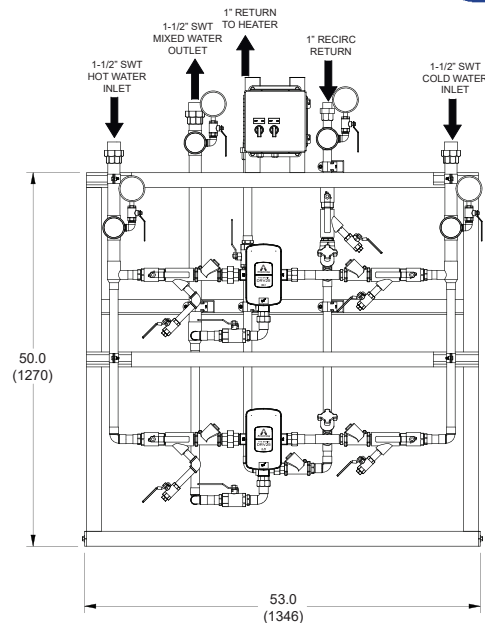
### Operational Specifications (DRV25)

- Ready to go out of the box or field adjustable via Bluetooth connectivity with the SAGE® 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) per DRV
- 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 305 lbs (138.3 kg)



For a submittal drawing, refer to D113046.

Recirculation Systems - Digital (GPM and PSIG)						
Model	Pressure Drop (PSIG)				Minimum System Draw-Off	C <sub>v</sub>
	5	10	15	20		
DMC25-25BS	5	10	15	20	0	19.6
GPM	44	62	73	90		

Recirculation Systems - Digital (LPM and BARG)						
Model	Pressure Drop (BARG)				Minimum System Draw-Off	K <sub>v</sub>
	0.3	0.7	1.0	1.4		
DMC25-25BS	0.3	0.7	1.0	1.4	0	17.0
LPM	167	235	295	341		