

**iWorx**<sup>®</sup>  
by Taco Electronic Solutions

# BLMC

## Boiler Modulating/Staging Controller



**Web-based building  
management made easy**

# BLMC

BOILER MODULATING / STAGING CONTROLLER

Feature	Benefit
<b>Controls up to 4 stages of equipment</b>	Can be used to sequence and / or stage boilers or geothermal heat pumps
<b>Can be cascaded with another BLMC controller to control up to 8 stages of equipment.</b>	Scalable for current use and future expansions. Significantly reduces installation costs and equipment upgrades at a later date.
<b>Provides 4 modulated outputs and 4 on/off outputs</b>	Can be used to control modulating or on/off boilers or hybrid systems where both on/off and modulating boilers are installed. Simplifies installations on new or existing boiler systems.
<b>Provides direct control of individual boiler pumps</b>	All pump outputs can be energized through the boiler controller when required. With the use of pilot duty relays, all pump size amperage outputs can be controlled. Facilitates field wiring and integrates system functions.
<b>Sequential or parallel operation</b>	Can be used as a sequential control to lead/lag the boilers based on equal run time, fixed lead/fixed last, or parallel operation. Parallel operation increases condensing efficiency when used with modulating/condensing boilers by operating all boilers at the same modulating level rather than having 1 or 2 boilers at 100% output.
<b>0-10VDC Modulated outputs</b>	Provides precision control of modulating boilers for higher operating efficiencies
<b>Provides multiple reset curves or setpoint control for primary / auxiliary loops</b>	Allows use of "smart calc" reset to maximize system efficiencies when reset is used with primary heating loops, or hybrid systems where the auxiliary demand can be controlled to a setpoint and the primary loop controlled by a reset curve. Provides complete system flexibility for reset or setpoint demands for both the primary and auxiliary outputs.
<b>Demand inputs are configurable as either a switch (dry contact) or temperature input (thermistor)</b>	Simplifies installations on retrofits and allows inputs to be field configured
<b>Boiler condensation protection</b>	Allows a minimum return temperature to be selected so that return water does not cause condensation in non-condensing boilers. Feature is disabled when using condensing boilers. Significantly reduces installation costs by eliminating the need for multiple bypass or 3-way valves to protect boilers in low temperature and mixing applications.

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<b>Night set back capability</b>	Allows night time or unoccupied time shift of the reset curve on both the primary and auxiliary loops to provide energy savings by lowering system output during unoccupied times
<b>Warm weather shutdown</b>	System can be operated in an energy efficient mode so that boilers automatically shut down during warm weather periods. Pumps can also be scheduled or run continuously and de-energized on warm weather shutdown. Eliminates wasteful energy usage.
<b>Boiler status alarms for all connected boilers</b>	All boilers are monitored for operation. Alarms are automatically communicated over the web to prevent catastrophic failures or freeze ups. Provides system security and peace-of-mind.
<b>Cascading functions are fully networked</b>	Provides seamless integration of all functions from one BLMC to another. Ensures that all load demands and modulating functions are properly calculated for maximum system operating efficiency.
<b>Can be used in stand alone mode or fully networked</b>	Allows boiler systems to be controlled as stand alone equipment, or fully integrated with other iWorx products on projects where full building automation is required. When used in the stand alone mode, the BLMR model provides a keyboard and iView display for easy system configuration. Provides big system features in a stand alone model.
<b>Alarm / event reporting</b>	All system alarms are annunciated both locally and over the internet. Assures building safety and prevents costly equipment damage and freeze ups. Event reporting keeps a running log of boiler operational history and calculates aggregated run time so that boiler operation can be monitored.
<b>Post purge options</b>	Allows pumps to be operated in a post purge mode so that all latent heat is extracted from the system. Increases condensing efficiencies by reducing return water temperatures. Post purge period is fully adjustable for maximum application flexibility.



Visit [www.taco-hvac.com](http://www.taco-hvac.com) for more information about the iWorx® product line.

# iWorx®

by Taco Electronic Solutions

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