



Our boiler controllers are designed to monitor and control condensing or standard boilers

The AZPL-BLR-M-M Boiler controller is designed to control a variety of different boilers The on-board microcontroller offers precise digital control to maximize performance. The available control sequences are fully configured via Air Zoe engineering staff before shipment. (Optional on site and remote programing & system monitoring.)

The AZPL-BLR-M uses PI (Proportional-Integral) control loops to optimize HVAC management and offers a variety of functions.



## Features

- Pump activity based on outside temperature or call for heat (or both)
- Configurable pump exercise sequence for extended periods of inactivity
- · Supply water setpoint reset based on outside temperature

• Control up to 4 boiler stages (multiple boilers or a single multistage boiler or combination)

- Control up to 2 modulating boilers with optional backup stage
- Various lead-lag sequences for the pumps and boilers
- Internal clock with configurable schedules and calendars
- Offset the supply water setpoint based on a network received demand or occupancy
- Optional control sequence for a three-way valve
- A manual/off/auto switch for each of the eight outputs
- Remote monitoring and configuration with FREE Prolon
- Focus software
- Standalone or networked (up to 127 nodes)
- Proportional integral (PI) control loops maximize perfor mance
  5 digital outputs and 3 analog outputs equipped with
- resettable fuses
- Built-in protection sequences with configurable tempera ture limits and minimum delays
- Dedicated input that requests maximum heat setpoint upon contact closure
- Dedicated input that deactivates all boilers upon contact closure

Technical Specifications

- $\bullet$  Supply: 24 VAC ±10%, 50/60 Hz, Class 2  $\bullet$  Power: 5 VA (consumption), 40 VA (input)
- Inputs: 7 configurable analog inputs (outside temp / supply temp / return temp / dry contacts for proof of pumps, max heat request and boiler disable). Input signals (thermistor / dry contact / 4-20mA / 0-5 VDC) individually configurable for each input
- Digital Outputs: 5 triac outputs, 10-30 VAC source, 300 mA max (resettable fuse)
- Analog Outputs: 3 x 0-10 VDC outputs, 40 mA max (reset table fuse)
- Indication lights (LED): State of each output / Communication / Power
   / State of microprocessor
- Microprocessor: PIC18F6722, 8 bits, 40 MHz, 128Ko FLASH memory
- Casing: Molded ABS, UL94-HB Communication: Modbus RTU (RS485), up to 127 nodes.
- Baud Rates: 9600, 19200, 38400, 57600, 76800, 115200 Connection: Removable screw-type terminal blocks (16 AWG max) and RJ45 modular jacks.
- Dimensions: 5.39" x 4.41" x 2.25" (137mm x 112mm x 57mm) Weight: 1.05 lbs (0.48 kg) • Environment: -4 to 122 °F (-20 to 50 °C) Non-Condensing
- Certification: UL916 Energy Management Equipment, CAN/ CSA-C22.2, RoHS, FCC part 15: 2012 class B
  - DDC : DIRECT DIGITAL CONTROLLER DB : DISTRIBUTION BOARD (LIGHTING PA S/S : START/STOP ST : STATUS

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