

## Technical Data Sheet

# Boiler Valve Controller

Designed for variable flow heating systems, the AERCO Boiler Valve Controller automatically sequences each motor operated valve\* (MOV) – reducing the system's minimum flow requirement to a single boiler's minimum flow. For example, a four BMK2.0LN installation without MOV requires  $4 \times 25 = 100$  gpm minimum system flow, while the same installation with MOVs and the AERCO Boiler Valve Controller will only require 25 gpm minimum system flow. When system demand is satisfied, the Boiler Valve Controller opens all MOVs, preventing system pump dead head conditions.

A time delay function (default = 2 minutes; programmable up to 30 minutes) allows residual heat to be absorbed into the heating system prior to closing the boiler isolation valve, eliminating nuisance temperature faults of isolated boilers. The position of any MOV can be selected using the "Valves" Screen (if a boiler is firing, the corresponding valve cannot be moved to the "CLOSED" position to avoid temperature overshoot).

The AERCO Boiler Valve Controller operates independently from the AERCO Boiler Management System.

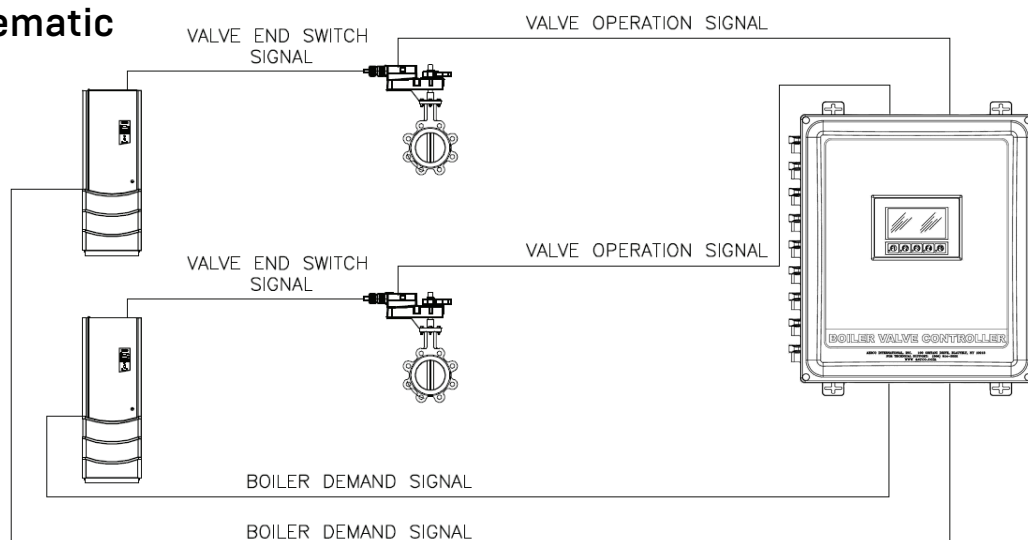
\*Separate boiler isolation valves shall be supplied – consult local codes when using motorized operated valves with manual mechanical override in lieu of separate manual isolation valves.



## Features

- 4-Boiler and 12-Boiler Valve Controllers available
- Models available for 120VAC and 24VAC valves
- For use with AERCO Benchmark and KC1000
- User-friendly PLC Control for easy set-up
- 3" high contrast digital display / touchscreen
- Valve closure time delay function
- Valve position over-ride NEMA type 4X fiberglass enclosure (for indoor use only)

## Application Schematic



### Application Notes

1. Boiler Valve Controller contacts rated for maximum of 2 amps.
2. Wires to be 16 AWG. Use 75° Copper Conductors only.
3. Nonmetallic Enclosure does not provide grounding between conduit connections. Use grounding bushings and jumper wires.
4. Preferred Motorized Valve shall be fail open/power closed.
5. Motorized Valve MUST have a proof of open end switch.
  1. End Switch makes when valve physically opens. This will close the delayed interlock in the I/O box and allow the boiler to fire.
  2. End Switch breaks when valve physically closes. This will open the delayed interlock in the I/O box and prohibit the boiler from firing.
6. The Aux Start On Delay must be programmed in the C-More controller (up to 120 seconds). The delayed interlock must be closed before this time lapses, otherwise, the boiler will lockout and go to a fault.

## Boiler Valve Controller Models / Specifications

| Part Number | Control Capability | Valve Power Supply | Maximum Load Per Valve | Maximum Inrush Current Per Valve | Dimensions WxHxD (Inch) | Weight (LBS) |
|-------------|--------------------|--------------------|------------------------|----------------------------------|-------------------------|--------------|
| 64095       | 4-Boiler           | 120 VAC            | 1 Amp                  | 30 Amp                           | 13.4 x 15.4 x 7.4       | 14           |
| 64096       | 12-Boiler          | 120 VAC            | 1 Amp                  | 30 Amp                           | 17.4 x 19.7 x 11.4      | 25           |
| 64097       | 4-Boiler           | 24VAC              | 1 Amp                  | 30 Amp                           | 15.4 x 17.7 x 9.4       | 35           |
| 64098       | 12-Boiler          | 24VAC              | 1 Amp                  | 30 Amp                           | 17.4 x 19.7 x 11.4      | 45           |

Power Supply Required: 120VAC/60Hz, 15 Amp

Enclosure: NEMA Type 4X (For Indoor Use Only)

Standard Listing and Approvals: UL Listed



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