

Single Boiler/Condensate Controller



Experts in Chemical Feed and Water Treatment

A Powerful Controller Integrating built-in diagnostics with realtime monitoring in a compact design.

AQUATRAC's microFLEX single boiler/condensate controller is the perfect economical solution providing the latest in water management technology.



Sensor Included

Standard Features

- Boiler or Condensate Conductivity Input
- Single Water Meter Input
- Boiler Status Input
- Chemical Feed Relay
- 5 Key Universal Keypad
- 2 Line, 16 Character Backlit Display
- Boiler Blowdown or Condensate Diverter Relay (solenoid valve or motorized ball valve)

MicroFlex Advantages & Benefits

- **Selectable Chemical Feed Mode:**
Provides 3 feed modes; feed on volume, blowdown & feed and percentage time.
- **Conductivity Control:**
Can be programmed using timed or continuous sampling.
- **Water Meter Input:**
Allows for chemical to be fed based on water volume versus timed pump control methods generally found on comparably priced controllers.
- **What and Why Information:**
Diagnostics shown on display are a valuable troubleshooting tool. Conductivity valve and chemical pump relays show complete status. Shows WHY the relay is on/off.
- **Single Point Calibration:**
For ease of start up and operation. Warning message immediately detects fouled or faulty sensors.
- **Controller Run Time:**
Gives total hours per day and total operating days since initial installation.
- **Robust Diagnostics:**
Provides complete 24 hour history of blowdown valve operation and chemical relay timing intervals.
- **Keypad Password:**
Eliminates unauthorized adjustments.
- **Communication Options:**
Includes Ethernet networking, dry contact alarm relay or 4-20mA output on conductivity.
- **Optional Web Browser User Interface with Networking Capability:**
Provides ability to direct connect to the controller from a portable workstation, such as a laptop computer. Can also view critical processes remotely through the use of a LAN. View our live boiler demo at <http://66.146.13.223>.

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Specifications

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Rating—Detail		Notes
Analog-Digital I/O		
Conductivity Sensor	Auto ranging from 100uS to 10,000uS, rated 250psi	Single point calibration
Water Meter Input	400Hz, 0,5mA @5VDC measurement current	Accepts paddlewheel or contacting head
Relay Outputs	1 SPST (Chemical feed), 1 SPDT (Bleed)	Powers either solenoid or motorized valve
4-20mA Output (optional)	Single DC isolated, loop powered	User definable span, alarms on open loop
Alarm Relay (optional)	500mA @ 24VDC dry contact set, un-fused	Normally closed contact, open on alarm
Communications User Interface		
Keypad—LCD	5 key tactile feedback, universal characters	Scan rate 100 mS nominal
	2 line x 16 character, backlit	User adjustable contrast
10Base T, TCP/IP Ethernet LAN (optional)	HTML, Micro Web Server with user definable IP address	Static IP
		Use browser to see I/O, edit program
Controls		
Relay ON/OFF	Captured sample & ON/OFF control	Relay 1 chemical feed, Relay 2 bleed valve
Volumetric feed	User set, measure volume & pump on time	
Interlocking	Contact set input	Blowdown & feed stop
Alarms—Feed limit timer	Minutes per day	Auto-reset @ midnight
System		
Electrical	120VAC, 60 Hz	
Fusing	5 Amps @ 120VAC	
Surge Suppression	Relay 2 N.O. contacts snubbed @ 0.1uF, 150 ohm	Varistor on AC line input
Accessory Power	15-22VDC, Unregulated, Thermally Fused @ 50mA	
Enclosure	Non-metallic, NEMA4X	5.9"W x 5.9"H x 3.5"D (150mm W x 150mm H x 90mm D)
Certifications		
CSA, CE, UL	CSA tested to comply with UL	

BB-IN Single Boiler Conductivity Control & Timed Chemical Feed*

Timed sampling boiler blowdown conductivity control, feed water meter

CM-AH Condensate Monitor and Bypass valve controller*

User set bypass valve ON/OFF conductivities

CL 4-20mA Out on Conductivity **

Fully isolated output, loop powered. Keypad adjustable 4-20mA levels

LB Ethernet Networking **

AR Alarm Contact **

* The microFlex has a 2 line LCD display and 5-key universal keypad, single status input, single water meter input and alarms on conductivity.

** Select only one communication option, LB, CL or AR, If desired. Communications options cannot be combined.

M2B-BB-IN-CL
(Example Only)