

Single Cooling Tower Controller



AQUATRAC™ - The Leader in Technology by Design

A cooling tower controller that combines the latest technology with an economical solution!

Available only from Aquatrac, our breakthrough design offers a worry-free thermal flow switch that does not require any user adjustments or calibration.



Combination conductivity/thermal flow sensor

Standard Features

- Tower Conductivity and Temperature Input
- Flow Switch Status Input
- 5 Key Universal Keypad
- 2 Line, 16 Character Backlit Display
- Single Water Meter Input

MicroFlex Advantages & Benefits

- **Selectable Inhibitor Feed:**
Provides 4 feed modes; bleed and feed, bleed then feed, proportional to makeup water volume and percentage time.
- **Water Meter Input:**
Allows for chemical to be fed based on water volume versus timed pump control methods generally found on comparably priced controllers.
- **Single Point Calibration:**
For ease of start up and operation. Warning message immediately detects fouled or faulty sensors.
- **What and Why Information:**
On the controller display is a valuable troubleshooting tool. Solenoid and chemical pump relays show complete status. Shows WHY the relay is on/off.
- **Controller Run Time:**
Gives total hours per day and total operating days since initial installation.
- **Robust Diagnostics:**
Provide complete 24-hour history of bleed valve operation, relay run times and minimum/maximum temperatures.
- **Keypad Password:**
Eliminates unauthorized adjustments.
- **Communication Options:**
Include 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 demo at <http://66.146.13.222>.

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Specifications

	Rating—Detail	Notes
Analog-Digital I/O		
Conductivity Sensor	Auto ranging from 100uS to 10,000uS	Single point calibration, temperature compensated
Temperature Sensor	32F to 125F (0C to 50C)	Displayed as F or C
Thermal Flow Switch	1GPM trip within 30 seconds	Typically 10 second trip with in FLOW / NO FLOW
Water Meter Input	400Hz, 0,5mA @5VDC measurement current	Accepts paddlewheel or contacting head
Relay Outputs	1 SPST (Inhibitor), 1 SPDT (Bleed)	Single controller fuse
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	User definable static IP
		Browser shows controller in real time
Controls		
Relay ON/OFF	ON/OFF control	Relay 1 inhibitor, relay 2 bleed valve
Volumetric	User set, measure volume & pump on time	Sequential control, measures make-up volume then bleeds for user set volume
Interlocking	Flow switch contact set input	Relays OFF when contact set opens
Blocking	Inhibitor feed may be set to block on bleed	
Alarms—Feed Limit Timers	Minutes per day	auto-reset @ midnight
System		
Units of Measurement	US/Metric selectable	Option to use US or Metric units of measurement.
Electrical	120VAC, 50/60 Hz	
Internal Fusing	5 Amps @ 120VAC	
Surge Suppression	Relay 2 N.O. (bleed) contacts snubbed @ 0.1uF, 150ohm	Varistor on AC line input
Accessory Power	15-22VDC, unregulated, thermally fused @ 50mA	
Enclosure	Non-metallic, NEMA 4X	5.9"W x 5.9"H x 3.5"D 150mm W x 150mm H x 90mm D)
Certifications		
CSA: Pending		CSA tested to comply with UL, (Pending)

CO-IN Conductivity Control, Selectable Inhibitor Feed & Thermal Flow Sensor

Conductivity Sensor includes an 3/4" SCH40 PVC threaded 'T', make-up water meter input

- CL 4-20mA Out on Conductivity ***
Fully isolated output, loop powered. Keypad adjustable 4-20mA levels
- LB Ethernet Networking ***
- AR Alarm Contact ***

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

M2T-CO-IN-CL