

THERMOLATOR® MICROTEMP (MTC-1) WATER TEMPERATURE CONTROLLER



Model MTC-1

COMPACT, RELIABLE TEMPERATURE CONTROLLER

The microTemp water temperature controller is designed to maintain the process temperature with circulated water that has been heated or cooled to the required setpoint.

The microTemp is manufactured specifically for small processing machines, such as 80-ton or smaller injection molding machines.

SOLID CONSTRUCTION, EASY MAINTENANCE

The microTemp is a direct injection, single-zone unit that can heat or cool water to 250°F {121°C}. Pump sizes are available to 1/2 Hp, heaters to 6 kW.

Three-piece cast construction nearly eliminates leak-prone pipe fittings.

IEC rated contactors are field tested and offer proven reliability.

The microprocessor control is a full function, automatic tuning PID controller designed for precise temperature control.

Options include high-temperature safety switch; prewired alarm package with audible and visual warnings; SPI communications; and a compressed air purge circuit to speed up mold changes and help conserve water.

■ Compact, low-profile cabinet

Save valuable floor space with one of the smallest temperature controllers available.

■ Lift-off access panel

Convenient access to internal components. Turn one fastener by hand, and the cabinet lifts away for easy servicing. The hinged operator console offers tool-free access to electrical components.

■ State-of-the-art controls

The off-the-shelf, plug-in microprocessor control is easy to use and simultaneously displays process and setpoint temperatures.

■ Incoloy heaters

Standard on the microTemp, incoloy heaters offer better resistance to chemical degradation than stainless steel and better heat strength characteristics than copper.

■ Two-Year warranty

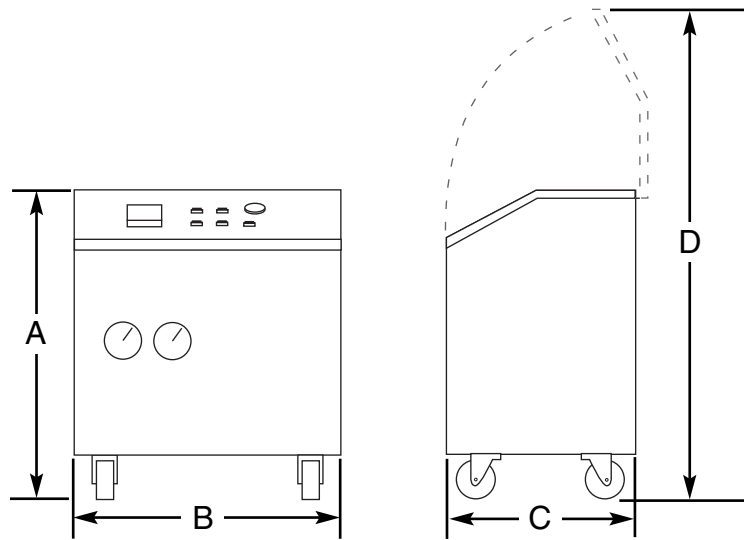
From the casters up, there is a two-year warranty.



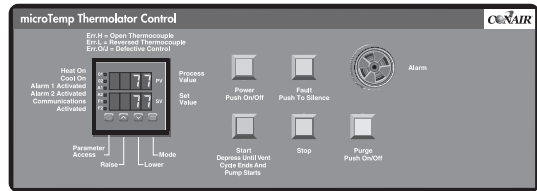
SPECIFICATIONS

TEMPERATURE CONTROL UNIT

**THERMOLATOR® MICROTEMP (MTC-1)
WATER TEMPERATURE CONTROLLER**



MODEL	MTC-1	
Performance characteristics		
Minimum operating temperature*	20°F {-7°C} above cooling water	
Minimum setpoint temperature	32°F {0°C}	
Maximum setpoint temperature	250°F {121°C}	
Pump performance		
Pump Hp {kW}	1/3 Hp {0.25}	1/2 Hp {0.37}
Heater element	3 kW 6 kW	3 kW 6 kW
Nominal flow gpm {l/min}	10 {38}	25 {95}
Pressure@nominal flow psi {bar}	15 {1.0}	13 {0.9}
Dimensions inches {mm}		
A - Height	18 {457}	
B - Width	15.5 {394}	
C - Depth	11 {279}	
D - Height with hinged console open	29 {737}	
Weight lb {kg}		
Pump size	1/3 Hp {0.25}	1/2 Hp {0.37}
Operating	75 {34}	79 {36}
Shipping	85 {39}	89 {40}
Water connections NPT (female)		
Process	3/4 inch	
Cooling	1/2 inch	



Digital microprocessor control provides simultaneous display of process and setpoint temperatures. This waterproof, durable control is operator friendly.

Standard features:

- Process temperature display
- Setpoint temperature display
- Status lights indicate heating and cooling cycles and high or low deviation alarms.
- Auto-tune of PID parameters for precise temperature control

Optional features:

- SPI communications port
- Visual and audible alarms
- Compressed air mold-water purge

TOTAL FULL LOAD AMPS (all voltages are 3 phase, 60 Hz)						
Heater	3 kW			6 kW		
	208V	230V	460V	208V	230V	460V
Pump						
1/3 Hp {0.25 kW}	13.7	12.4	6.2	23.7	21.4	10.7
1/2 Hp {0.37 kW}	14.2	12.8	6.4	24.2	21.8	10.9

SPECIFICATION NOTES:	
*Requires 25 psi cooling water supply for normal operation.	
Specifications may change without notice. Check with a Conair representative for the most current information.	

