

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.



Model MTC-1

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 (0.37 kW), heaters to 6 kW.

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

IEC rated contactors are field tested and offer proven reliability.

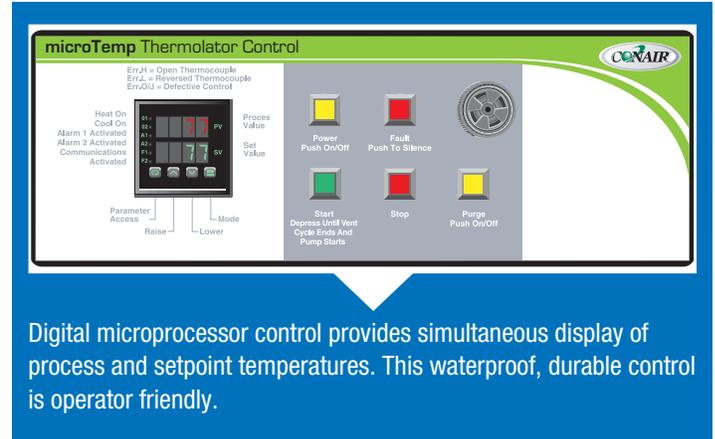
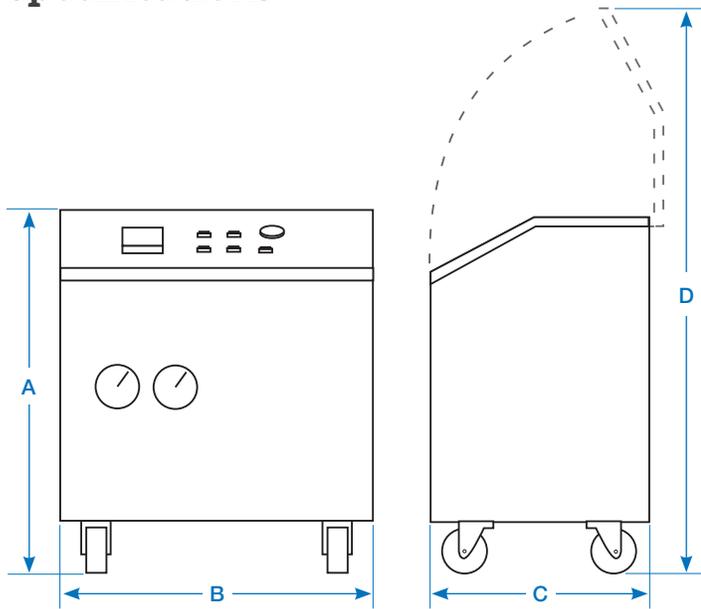
The microprocessor control is a full function, automatic tuning PID controller designed for precise temperature control.

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 toolfree 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



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

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}	
Installed	75 {34}		79 {36}	
Shipping	85 {39}		89 {40}	
Water connections NPT (female)				
Process	3/4 inch			
Cooling	1/2 inch			

Total Full Load Amps † (all voltages are 3 phase, 60 Hz)						
Heater	3 kW			6 kW		
Voltage	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

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.

Options

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

Specification Notes

* Requires 25 psi cooling water supply for normal operation.

† FLA data for reference purposes only. Does not include any options or accessories on equipment. For full FLA detail for power circuit design of specific machines and systems, refer to the electrical diagrams of the equipment order and the nameplate applied to the machine.

Specifications may change without notice. Consult with a Conair representative for the most current information.

