

# PACKAGED SYSTEMS

## microTHERM<sup>®</sup> CMX

### Water Circulating Temperature Controller

- Water and Water/Glycol Solutions to 250°F
- 4.5 - 24 kW (15 - 82 Mbh)
- 240 and 480V, 3 Phase, 60 Hz
- 125 Lb Carbon Steel Construction
- Heavy Duty 0.430" Dia. INCOLOY<sup>®</sup> Sheath Elements
- 3/4 HP Cast Iron Bronze Fitted Centrifugal Pump (30 gpm @ 20 psi TDH)
- Electronic PID Temperature and Process Control (Dual Display)
- Built-in Diagnostics with Indicators for Pump Overload, Low Water Pressure and Overtemperature
- Compact, Portable Cabinet with Casters
- Features Easy Access Service
- NEMA 1 Electrical Enclosure with 120V Control Transformer
- Dual Pressure Gauges Monitor Pressure To and From Process
- Open or Closed-Loop Cooling (3.8 Ft<sup>2</sup> Heat Exchanger)
- Automatic Air Purge Valve
- Large Diameter (1-1/4" NPT) Process Piping Connections
- ASME 125 psig Relief Valve

#### Applications

Chromalox microTHERM<sup>™</sup> CMX Series Circulating Water Temperature Controllers are compact, versatile and completely self-contained water heating and cooling systems. The CMX series products can be used in any application where precision temperature control of a heating and cooling water circulation system is needed. They are particularly useful in the plastics industry as mold temperature controllers.

- Injection Molding Machines — Thermoplastics and Thermosets
- Platens and Dies
- Rolls, Laminating and Calendering
- Pipeline Heating and Tracing
- Jacketed Vessels and Tanks

The built-in electronic temperature and process controller features separate PID algorithms for heat and cool control modes, dual display of setpoint and process temperatures and simple configuration parameters with alphanumeric cues. Even though microTHERM<sup>™</sup> systems are sophisticated and state of the art, they are easy to use and require very little training to program and operate. Standard NPT threaded piping connections provide for convenient hook up to external piping.



#### Options

- **Alternate Voltages** available for 208 and 575V, 3 Phase, 60 Hz, and 240, 380 and 415V, 3 Phase, 50 Hz distribution systems
- **Alternate Pumps** rated 1.5, 3, 5 or 7.5 hp with pumping capacities to 80 gpm @ 70 psi TDH
- **Power Controllers** — Electronic Solid State (SCR)
- Surge Reduction Valve
- Digital Communication Interface
- Expanded Open or Closed-loop Cooling
- High Temperature Operation to 275°F
- Electrical Enclosure Door Interlock

HEAT TRANSFER

#### Specifications and Ordering Information

kW	Volts	Phase	Pump Motor (HP)	DIM (In.)			Cooling Type	Model	Stock	Part Number	Wt. (Lbs.)
				H	W	D					
4.5	240	3	3/4	29	15	25	Open Loop	CMX-250-4	NS	307418-032	200
4.5	480	3	3/4	29	15	25	Open Loop	CMX-250-4	NS	307418-033	200
4.5	240	3	3/4	29	15	25	Closed Loop	CMX-250-4C	NS	307418-042	215
4.5	480	3	3/4	29	15	25	Closed Loop	CMX-250-4C	NS	307418-043	215
9	240	3	3/4	29	15	25	Open Loop	CMX-250-9	NS	307418-034	200
9	480	3	3/4	29	15	25	Open Loop	<b>CMX-250-9</b>	<b>S</b>	<b>307418-035</b>	200
9	240	3	3/4	29	15	25	Closed Loop	CMX-250-9C	NS	307418-044	215
9	480	3	3/4	29	15	25	Closed Loop	<b>CMX-250-9C</b>	<b>S</b>	<b>307418-045</b>	215
12	240	3	3/4	29	15	25	Open Loop	CMX-250-12	NS	307418-036	200
12	480	3	3/4	29	15	25	Open Loop	<b>CMX-250-12</b>	<b>S</b>	<b>307418-037</b>	200
12	240	3	3/4	29	15	25	Closed Loop	CMX-250-12C	NS	307418-046	215
12	480	3	3/4	29	15	25	Closed Loop	<b>CMX-250-12C</b>	<b>S</b>	<b>307418-047</b>	215
18	240	3	3/4	29	15	25	Open Loop	CMX-250-18	NS	307418-038	200
18	480	3	3/4	29	15	25	Open Loop	<b>CMX-250-18</b>	<b>S</b>	<b>307418-039</b>	200
18	240	3	3/4	29	15	25	Closed Loop	CMX-250-18C	NS	307418-048	215
18	480	3	3/4	29	15	25	Closed Loop	<b>CMX-250-18C</b>	<b>S</b>	<b>307418-049</b>	215
24	240	3	3/4	29	15	25	Open Loop	CMX-250-24	NS	307418-040	200
24	480	3	3/4	29	15	25	Open Loop	<b>CMX-250-24</b>	<b>S</b>	<b>307418-041</b>	200
24	240	3	3/4	29	15	25	Closed Loop	CMX-250-24C	NS	307418-050	215
24	480	3	3/4	29	15	25	Closed Loop	<b>CMX-250-24C</b>	<b>S</b>	<b>307418-051</b>	215
36	480	3	3/4	29	15	25	N/A	CMX-250-36H	NS	307418-052	215
48	280	3	3/4	29	15	25	N/A	<b>CMX-250-48H</b>	<b>S</b>	<b>307418-053</b>	215

**Stock Status:** S = stock NS = non-stock  
**To Order—**Specify model, volts, phase, kW, PCN, options and quantity.

*“Under the U.S. Federal Safe Drinking Water Act, it is unlawful to install or use this product in any service that comes into contact with water for human consumption (including drinking, food or beverage preparation, hand washing, or teeth brushing). This product is intended exclusively for use in non-potable service.”*