

WATER-CIRCULATING TEMPERATURE CONTROLLER

CMX Series

- ✓ Water and Water/Glycol Solutions to 121°C (250°F)
- ✓ 4.5 to 24 kW (15 to 82 Mbh)
- ✓ 240 and 480V, 3-Phase, 60 Hz
- ✓ 57 kg (125 lb) Carbon Steel Construction
- ✓ Heavy-Duty 0.430" Dia. Incoloy Sheath Elements
- ✓ ¾ hp Cast-Iron Bronze Fitted Centrifugal Pump (30 GPM @ 20 psi TDH)
- ✓ Dual Digital Display: PID Temperature and Process Control
- ✓ Built-In Indicators for Pump Overload, Low Water Pressure, and Overtemperature
- ✓ Portable Cabinet with Casters
- ✓ Easy-to-Access Service Features
- ✓ NEMA 1 (IP23) Electrical Enclosure with 120V Control Transformer and Magnetic Contactors
- ✓ Dual Pressure Gauges Monitor Pressure to and From Process
- ✓ Open- or Closed-Loop Cooling (3.8 ft² Heat Exchanger)
- ✓ Automatic Air Purge Valve
- ✓ Large-Diameter (1¼ NPT) Piping Connections
- ✓ ASME 125 psig Relief Valve

APPLICATIONS

OMEGA's CMX Series water-circulating temperature controllers are compact, versatile, and completely self-contained water heating and cooling systems. They can be used for any application that requires precise temperature control of a heating and cooling water circulation system, but are particularly useful in the plastics industry as mold temperature controllers. Applications include the following:

- 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 these systems are sophisticated and state of the art, they are still easy to use and require very little training to program and operate. Standard NPT-threaded piping connections allow for convenient hook-up to external piping.



CMX-250-4/240-NM shown smaller than actual size.

OPTIONS

- Alternative voltages available for 208 and 575V, 3-phase, 60 Hz, and 240, 380 and 415V, 3-phase, 50 Hz distribution systems
- Alternative 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
- IEC-style "dry contact" power contactor

To Order

Model No.	kW	V	Phase	Pump Motor (hp)	Dimensions: (inch)			Cooling Type	Wt. (lb)
					H	W	D		
CMX-250-4/240-NM	4.5	240	3	¾	29	15	25	Open loop	200
CMX-250-4/480-NM	4.5	480	3	¾	29	15	25	Open loop	200
CMX-250-4C/240-NM	4.5	240	3	¾	29	15	25	Closed loop	215
CMX-250-4C/480-NM	4.5	480	3	¾	29	15	25	Closed loop	215
CMX-250-9/240-NM	9	240	3	¾	29	15	25	Open loop	200
CMX-250-9/480-NM	9	480	3	¾	29	15	25	Open loop	200
CMX-250-9C/240-NM	9	240	3	¾	29	15	25	Closed loop	215
CMX-250-9C/480-NM	9	480	3	¾	29	15	25	Closed loop	215
CMX-250-12/240-NM	12	240	3	¾	29	15	25	Open loop	200
CMX-250-12/480-NM	12	480	3	¾	29	15	25	Open loop	200
CMX-250-12C/480-NM	12	480	3	¾	29	15	25	Closed loop	215
CMX-250-12C/240-NM	12	240	3	¾	29	15	25	Closed loop	215
CMX-250-18/240-NM	18	240	3	¾	29	15	25	Open loop	200
CMX-250-18/480-NM	18	480	3	¾	29	15	25	Open loop	200
CMX-250-18C/240-NM	18	480	3	¾	29	15	25	Closed loop	215
CMX-250-18C/480-NM	18	480	3	¾	29	15	25	Closed loop	215
CMX-250-24/240-NM	24	240	3	¾	29	15	25	Open loop	200
CMX-250-24/480-NM	24	480	3	¾	29	15	25	Open loop	200
CMX-250-24C/240-NM	24	240	3	¾	29	15	25	Closed loop	215
CMX-250-24C/480-NM	24	480	3	¾	29	15	25	Closed loop	215

Ordering Examples: CMX-250-12/240-NM, 12 kW, 240V.
CMX-250-4/480-NM, 4.5 kW, 480V.