



**MICROTHERM
CIRCULATING OIL
TEMPERATURE CONTROLLER**

THE SOLUTION FOR YOUR CIRCULATING OIL TEMPERATURE CONTROL APPLICATIONS

Chromalox, a world leader in thermal technology

For over 100 years, Chromalox has been providing industrial electric heating solutions to users worldwide. Today, Chromalox combines those decades of experience with the latest in mechanical design and electronic control technology to bring you microTHERM, the answer to your circulating oil temperature control applications.

Your manufacturing process demands a circulating oil temperature controller that provides precise control and operating efficiency. microTHERM responds with many innovative design features. The three main components of the microTHERM system – the heat and cool assembly, pump and easy-to-use control panel ensure unsurpassed operation, reliability, durability and serviceability. Eliminating your down time and minimizing your manufacturing expenses are microTHERM's goals.

MicroTherm

Accurate, Efficient Control

Powerful control of oil temperature is delivered by microTHERM's custom heat and cool assembly, designed for cost effective heat transfer. The touchpad controller incorporates high-accuracy, fast-responding microprocessor-based temperature control technology. Digital display of oil temperature and setpoint, plus visual indication of heating and cooling outputs and system diagnostics to give you quick, easy to understand information.

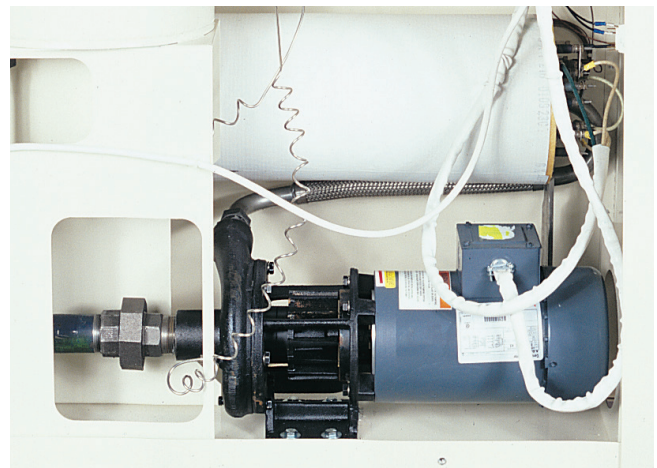
Compact, Rugged Design

microTHERM's compact design packs all of its high-performance design features into a portable, rugged cabinet for years of reliable service. With easy-to-read controls, NEMA1 electrical enclosure, rolling casters and a powder coated sheet metal cabinet, microTHERM works anywhere you need powerful control.

Heating Assembly

microTHERM's custom welded single heat and cool tank assembly eliminates traditional threaded pipe between heater and cooling parts, reducing the chance of oil dripping inside the product. Steel sheath Chromalox heating elements are integral to microTHERM's efficient heating assembly design.

microTHERM heating assembly utilizes an innovative yet simple design to reduce the chance of oil dripping inside the product.

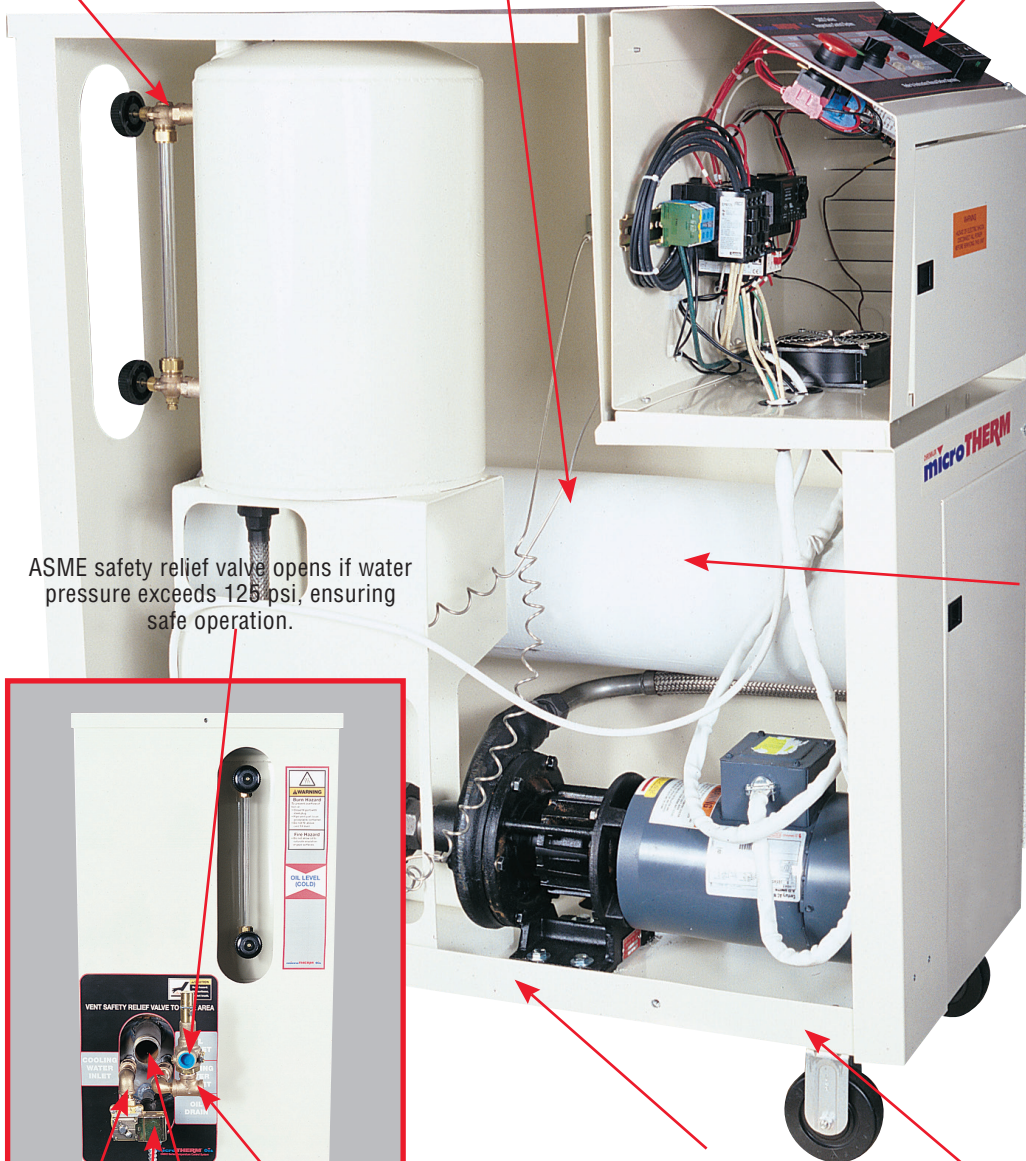


UNSURPASSED OPERATION RELIABILITY, DURABILITY AND SERVICEABILITY

Operating temperatures of 50° to 250°F for a wide variety of applications.

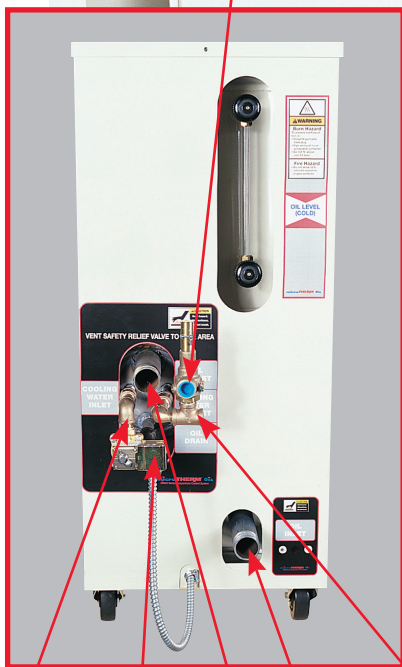
Steel sheath chromalox heating elements

Operating temperatures of 50° to 550°F for a wide variety of applications



ASME safety relief valve opens if water pressure exceeds 125 psi, ensuring safe operation.

3.2 sq. ft. heat exchanger for cooling integral with heating chamber.



Cabinet design allows access to all components

Compact, rugged cabinet fits into tight spaces. Rolling casters allow easy transfer between locations.

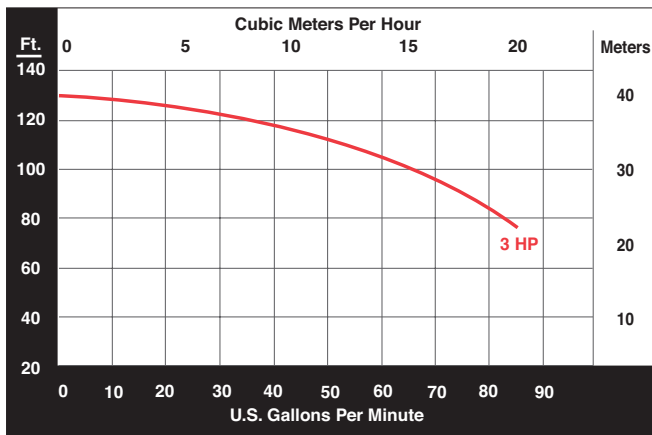
Cooling Water Inlet Oil Outlet Cooling Water Outlet
Oil Inlet

Integral solenoid valve for precise temperature control on cooling.

Specifications

Pump Size (HP)	Nominal Flow (gpm)	Heating Capacity (kW)	Standard Voltages	Process Connections (inches dia.)	Water Connections (inches dia.)	Approximate Dimensions (inches)
3	30	6	240 or 480	1-1/2 NPT	1/2 NPT*	45H x 38D x 19W
3	30	9	240 or 480	1-1/2 NPT	1/2 NPT*	45H x 38D x 19W
3	30	12	240 or 480	1-1/2 NPT	1/2 NPT*	45H x 38D x 19W
3	30	18	240 or 480	1-1/2 NPT	1/2 NPT*	45H x 38D x 19W
3	30	24	480	1-1/2 NPT	1/2 NPT*	45H x 38D x 19W

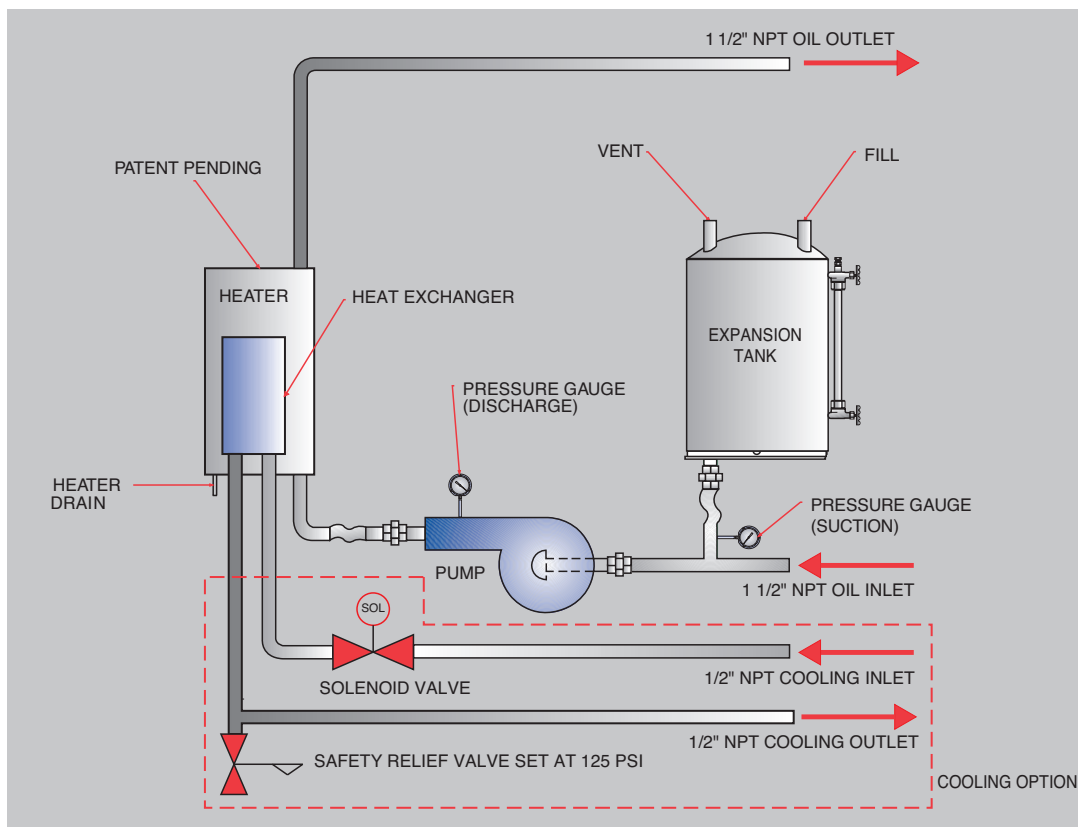
Pump Capacity



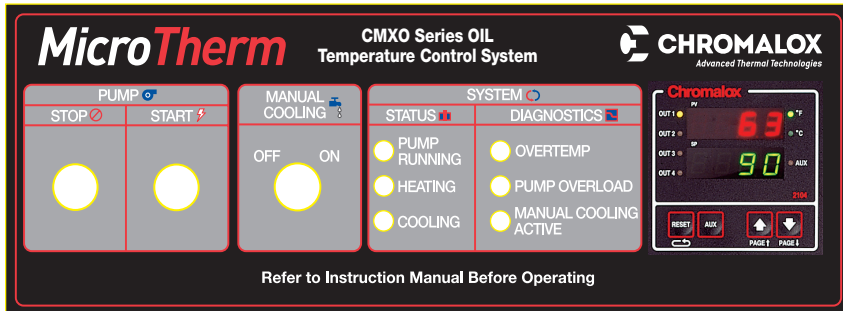
Other Options

As reported by pump manufacturer on Model HTO-80;
Size 1.5 x 1.25; Speed 3450 RPM; S.G. (.85)

Piping System Diagram



HIGH ACCURACY, FAST-RESPONDING, MICROPROCESSOR-BASED TEMPERATURE CONTROL TECHNOLOGY...



Chromalox's 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. Optional digital communications expand microTHERM's application flexibility.

microTHERM's easy-to-use temperature control system incorporates the temperature controller, pump push-buttons and diagnostic indicators in a rugged control console, and is designed for harsh industrial environments. The entire control console is designed for easy access and maximum serviceability.

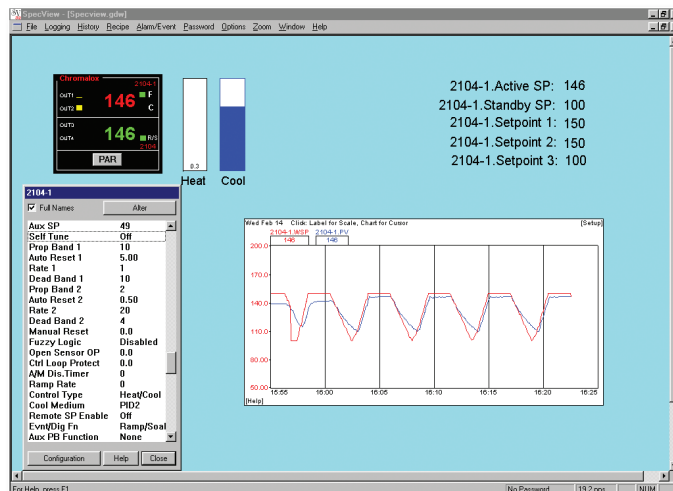
Status and diagnostic Indicators allow you to constantly monitor microTHERM's performance, providing detection of problems and simplifying maintenance.

Dual pressure gauges located on the side of the unit simplify monitoring of both to process and from process pressures. Gauges provide early indication of problems with process flow paths.

PLUS, REMOTE OPERATION AND NETWORKING THROUGH POWERFUL SOFTWARE

SpecView Plus®, our Windows®-based Remote Operator Interface Software, allows you to easily configure and monitor up to 255 different microTHERM control systems on one multi-drop loop. From a single, remote location personal computer, you can access all control parameters, save particular process settings, and load them whenever and wherever needed.

Windows® is a registered trademark of Microsoft Corporation.



Ordering Information

Model							
CMXO-550							
kW							
6, 9, 12, 18, 24* *24kW in 480V only							
Cooling							
H Heat Only							
C Heat/Cool							
Voltage							
240 240V 3PH							
480 480V 3PH							
Contactor or SCR							
0 Definite purpose contactor							
2 SCR							
Controller							
0 4081-UOSRR-23000 Controller							
2 4082-RPSRR-44010 Controller							
Enclosure disconnect							
0 None							
1 Enclosure disconnect							
Piping							
0 NPT							
1 Flange							
CMXO-550	24	C	480	2	0	0	0 Typical Model Number



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