

## TRACEMATE II-CTR

The TraceMate II offers many of the same features as the original TraceMate with a few enhancements. The TraceMate II is a two-circuit electronic thermostat system that offers you outstanding heat tracing control and monitoring that can be conveniently programmed using your laptop. The interface features a liquid crystal display area on the outside of the panel. The system can be easily customized to meet the unique needs of your operation and come complete with 100 Ohm, 3-wire RTD with 7' lead.



### Specifications

#### Temperature Range

Range:	-50 to +500°C (-58 to 932°F)
Hysteresis:	±2°C, ±3.2°F
Absolute Accuracy:	±2.5°C, ±4.5°F
Repeatability:	±1°C, ±1.8°F
RTD:	100 ohm platinum, 3-wire 10 ohms maximum lead resistance

#### Heater Switching

Installaton/Overvoltage CAT. III; Pollution Degree 2	
Configuration:	TM-2SIH1-RTD: Single-pole TM-2SIH1-RTD-240V: Single-pole TM-2DIH2-RTD-208~240V: Dual-pole TM-2SIH1-RTD-277V: Single-pole
Ratings:	TM-2SIH1-RTD: 120Vac @ 30A TM-2SIH1-RTD-240V: 240VAC @30A TM-2DIH2-RTD-208~240V: 208~240VAC @30A TM-2SIH1-RTD-277V: 277VAC @30A 250 amp 1/2 cycle inrush
Line Frequency:	50 or 60Hz

#### Control Power

Installaton/Overvoltage CAT. III; Pollution Degree 2	
Power Requirement:	Control power from heater voltage TM-2SIH1-RTD: 120VAC, 10VA TM-2SIH1-RTD-240V: 240VAC, 10VA TM-2DIH2-RTD-208~240V: 208~240VAC, 10VA TM-2SIH1-RTD-277V: 277VAC, 10VA
Protection	Control power from heater voltage protected by non-replaceable 2A, time lag, 350 VAC fuse MOV transient protection and RC snubber

#### User Interface

DIP Switch & Jumper:	Change setpoints, Reset alarm, Heater test
Panel Indicators:	Power on, Heater on, Low temperature alarm, High temperature alarm, Current fail alarm, Ground fault trip alarm, RTD fail alarm
LCD Display:	A comprehensive display of system measurements, setpoint values, heater on/off and alarm status
RS232 Port:	Accessible to PDA, Laptop, PC

#### Environment

Approvals:	TM-2SIH1-RTD: CSA & FM TM-2SIH1-RTD-240V: CSA & FM TM-2DIH2-RTD-208~240V: CSA TM-2SIH1-RTD-277V: CSA & FM Class I, Div.2, Groups A,B,C,D Class I, Zone 2, Groups IIC
Operating Range:	TM-2SIH1-RTD: -40°C to +50°C TM-2SIH1-RTD-240V: -40°C to +50°C TM-2DIH2-RTD-208~240V: -40°C to +50°C TM-2SIH1-RTD-277V: -40°C to +50°C ( LCD display: -20°C to +50°C ) Heater current derated
Conformal Coating:	Boards conformal coated for hostile environments. Altitude: 0-2000m

#### User-Definable Options

Heater Setpoint:	
Low Temperature Alarm Setpoint:	
High Temperature Alarm Setpoint:	0°C-511°C, 1°C steps 0°F-511°F, 1°F steps
Temperature Units:	0°C or °F
Current Fail Alarm Setpoint:	0.0A-30.0A, 0.1 A steps
Ground Fault Trip Alarm Setpoint:	0mA-511mA, 1 mA steps

#### Enclosure

Type:	Nema-4 steel, painted black
Size:	TM-2SIH1-RTD: 10"Hx8"Wx4"D TM-2SIH1-RTD-240V: 10"Hx8"Wx4"D TM-2DIH2-RTD-208~240V: 10"Hx8"Wx4"D + 1 extra heatsink (3.5"x4.761"x1.9") on the left TM-2SIH1-RTD-277V: 10"Hx8"Wx4"D
Features:	Quick release latches to open door One 1.125" conduit knockout for power, two 0.843" conduit knockouts for RTD wiring, one 0.875" conduit knock for signal wiring, one 0.610" conduit knock for RS232 communication.

## Alarms

Installation/Overvoltage CAT. II; Pollution Degree 2

Low Temperature:	Actual temperature < low temperature alarm setpoint <b>if the alarm is enabled</b>
High Temperature:	Actual temperature > high temperature alarm setpoint
Current Fail:	Heater current < current fail alarm setpoint
Ground Fault Trip:	Ground fault current > Ground fault trip alarm setpoint
RTD Fail:	RTD Open, RTD Short
Hardware:	No incoming voltage
TraceCheck:	Current Fail Alarm
Configuration:	NC Contacts
Alarm Output Rating:	AC contact: 12-277Vac@ 0.5A max. 50/60 Hz, CAT. II DC contact: 30Vdc/0.1A, 500mW max. Form C dry contact: 12- 277VAC/0.5A, 30VDC/0.1A.

TraceMate II-CTR  
Heater Current Rating

