

## Specifications

### Temperature Range

Range: -50°C to 500°C, -58°F 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

Installation/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

Installation/Overvoltage CAT. III; Pollution Degree 2  
 Power Requirements 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 knocks 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 **if the alarm is enabled**  
 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**

