



TRACEMATE

Product Overview

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 20 ohms maximum lead resistance

Heater Switching

Configuration	TM-1SIH1-xx: Single-pole, one SCR TM-1SIH1-xx-277V: Single-pole, one SCR TM-1DIH2-xx: Dual-pole, two SCRs, one per phase
Ratings:	TM-1SIH1-xx: 120Vac @ 30A TM-1SIH1-xx-277V: 277Vac @ 30A TM-1DIH2-xx: 208~240VAC @ 30A 250 amp 1/2 cycle inrush
Line Frequency	50 or 60Hz

Control Power

Power Requirements	Control power from heater voltage TM-1SIH1-xx: 120Vac, 10VA TM-1SIH1-xx-277V: 277Vac, 10VA TM-1DIH2-xx: 208~240Vac, 10VA
Protection	Control power from heater voltage protected by 2A fuse. MOV transient protection and RC snubber

User Interface

Heater Setpoint	12 position dip switch
Reset/Heater Test	dip switch
Panel Indicators	Power on Heater on Low temperature alarm High temperature alarm Current fail alarm Ground fault trip alarm RTD fail alarm

Environment

Approvals:	CSA NRTL/C and FM Class I, Div.2, Groups A,B,C,D Class I, Zone 2, Groups IIC
Operating Range:	Single-pole: -40°C to +50°C Dual-pole: -40°C to +40°C Heater current derated
Conformal Coating:	Boards conformal coated for hostile environments.

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:	E5: Nema-4X steel, painted black E3: Nema-4X stainless steel, painted black
Size:	Single-pole: 8"Hx6"Wx4"D Dual-pole: 10"Hx8"Wx4"D
Features:	Quick release latches to open door One 3/4" conduit knockout for power and two 1/2" conduit knocks for RTD and signal wiring.

Alarms

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/NO Contacts
Alarm Output Rating:	Form C dry contact: 12-277Vac@ 0.5A, 30VDC/0.1A. LED Indicator: 6VDC/50mA

Alarm Function

Temperature:	Low Temperature Alarm High Temperature Alarm
Current:	Current Fail Alarm
Ground Fault	Ground Fault Trip
Hardware	RTD Open, RTD Short

