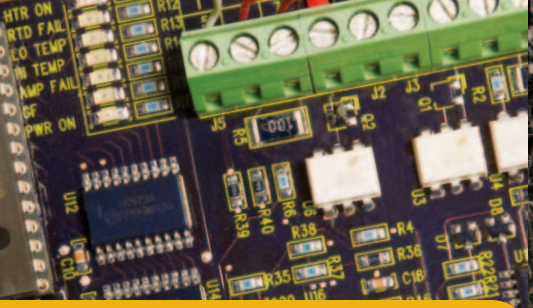


TraceMate™ Series

HEAT TRACE CONTROLLERS

NEXTRON

TraceMate™ ADVANTAGES

Early Warning
- TraceCheck™
- Alarm status indicators
- Separate fail-safe alarms, local and remote

System Fault Alarm Package

Remote Monitoring
- Form C alarm dry contact output for digital alarm interface

Available in:
- 120 VAC
- 208-240 VAC
- 277 VAC

Hazardous or Non-Hazardous Area Useage

Built-in Ground Fault

RTD Included

Low Installed Cost

TraceMate II-CTR™ FEATURES

2-Circuit Monitoring and Control

2 RTD Sensors (included)

Liquid Crystal Display (LCD)

Early Warning System
- TraceCheck™
- Alarm status indicators
- Separate fail-safe alarms, local and remote

System Fault Alarm Package

Compatible for Laptop Programming

NEXTRON

ISO 9001

SAI GLOBAL

TraceMate™ Series Controllers from Nextron meet all your heat tracing control and monitoring needs in one convenient, compact and economically priced package.

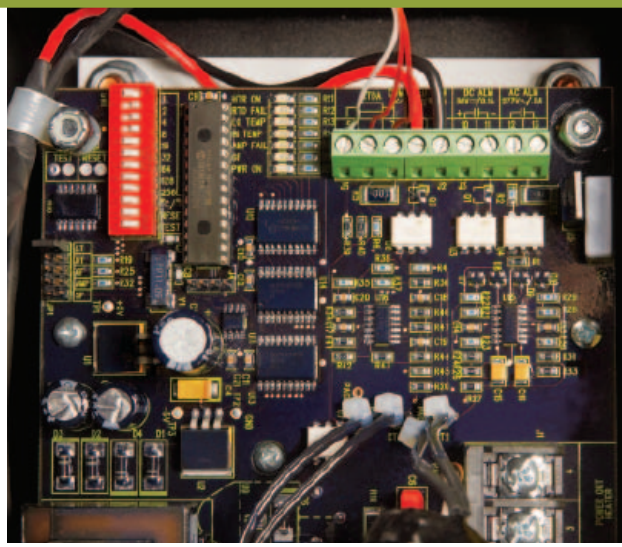
TraceMate™ Series Controllers from Nextron are advanced electronic thermostats designed for indoor or outdoor use in non-hazardous, general purpose areas, or for use in hazardous Class I, Division 2 / Zone II areas.

TraceMate™ Series Controllers not only control and monitor temperature but they also monitor your heat trace system for current and ground leakage. TraceMate™ Series Controllers are compatible with every type of electric heat trace and tubing bundle available.

All TraceMate™ Series Controllers are complete packages that come with a built-in Ground Fault Protection Device (GFPD), eliminating the need for separate ground fault breaker panels and their associated costs of installation. Temperature sensing is through the included 100-ohm, 3-wire platinum RTD, which you can mount on the pipe, or use for ambient sensing.

With TraceCheck™, a feature of the controllers, you can be sure your heat tracing is working when you need it because the feature exercises dormant lines every 24 hours for early warning for shutdown prevention.

TraceMate™ Series



TraceMate™ Series Controllers provide outstanding reliability ensuring that your time is spent producing, not troubleshooting. Comprehensive ALARM PACKAGES provide quick fault detection, and the Ground Fault Trip provides optimal performance and safety.

TraceMate™ Series Controllers have a temperature range of -50°C to 500°C (-58°F to 932°F) within ±2°C (±3.6°F) using solid-state controls and microprocessor driven commands. The digital temperature setpoints offer fast, precise settings over a wide range.

No mechanical thermostat can come close to matching TraceMate™ performance. The units are self-contained and easy to install with no special maintenance staff training or special tools required.

By combining control, system monitoring and testing requirements of a heat trace controller in a single package, TraceMate™ Series Controllers offer you significant low-cost system upgrades and a controller that can be customized to meet your specific requirements.

FEATURES AND BENEFITS

Temperature Control

0°C to 511°C / 0°F to 511°F setpoint

Non-ambiguous, digital temperature setpoint

100-ohm platinum RTD* sensor

3-wire, lead resistance compensation

System Fault Alarms

Breaker off or tripped

Heater continuity or low current

Low temperature / high temperature

Ground fault trip / sensor fault

Early Warning

TraceCheck™ exercises dormant systems every 24 hours for early warning for shutdown prevention

Status indicators show cause of alarms

Separate fail-safe local and remote alarms

Remote Monitoring

Form C dry alarm contact for PLC or remote alarm indication

LED Alarm indicator viewable on door

Hazardous / Non-hazardous Area Usage

CSA approved for non-hazardous or Class I, Division 2, Groups A, B, C, D / Zone II hazardous area

Operating range: -40°C to +50°C / -40°F to +122°F

30 amps @120, 208 or 240, and 277 VAC rating

Weatherproof, NEMA-4X enclosure

Easy retrofit replacement for mechanical thermostat

Low Installed Cost

Competitively priced

Self contained, no control panel to build

Ground fault trip eliminates expensive ground fault circuit breaker

Standard model simplifies spare parts stocking

*Standard RTD rated to 200°C

TEMPERATURE RANGE

Range:	-50°C to 500°C, -58°F to 932°F
Hysteresis:	±2°C, ±3.6°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:	Single-pole 120 VAC and 277 VAC Dual-pole 208-240 VAC and 277 VAC Dual SCR per phase
Ratings:	Single-pole 120 VAC and 277 VAC @ 30 amps Dual-pole 208-240 VAC and 277 VAC @ 30 amps
Protection	Control power from heater voltage protected by 2A fuse MOV transient protection

CONTROL POWER

Power Requirements	Control power from heater voltage Single-pole 120 VAC and 277 VAC, 10VA Dual-pole 208-240 VAC and 277 VAC, 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 US / C and FM Class I, Division 2, Groups A, B, C, D Class I, Zone II, Groups IIC
Operating Range:	-40°C to +50°C / -40°F to +122°F **Heater current derated**

USER-DEFINABLE OPTIONS

Heater Setpoint =
Low temperature alarm setpoint:
High temperature alarm setpoint:
0°C to 511°C, 1°C steps
0°F to 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, 1mA steps

ENCLOSURE

Type:	NEMA-4X steel, powder coat painted (black)
Size:	Single-pole: 8"H x 6"W x 4"D Dual-pole: 10"H x 8"W x 4"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
High Temperature:	Actual temperature > high temperature alarm setpoint
Current Fail:	Heater current < current fail alarm setpoint Switch shorted
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:	Form C contact: 12-277 VAC/0.5A, 30VDC/0.1A
Rating:	LED indicator: 6VDC/50mA

ALARM FUNCTION

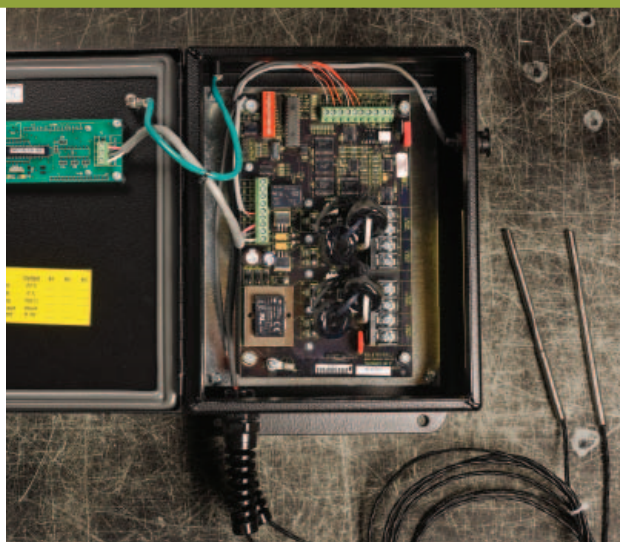
Temperature:	Low temperature alarm High temperature alarm
Current:	Current fail alarm
Ground Fault:	Ground fault trip
Hardware:	RTD open, RTD short, switch shorted

TraceMate II-CTR™

The TraceMate II-CTR™ offers a low-cost solution to two-circuit heat control and monitoring while also monitoring your heat process for current and ground leakage.

The system is designed for indoor or outdoor use in non-hazardous or Class I, Division 2, Groups A, B, C, D or Zone II hazardous areas.

Based on the outstanding reliability of Nextron's proven technology, the TraceMate II-CTR™ offers advanced monitoring features including an LCD display along with convenient programming capabilities. The unit can be programmed by a 12-point dipswitch located on the printed circuit board, or by laptop programming. Specialized software is downloaded into compatible PC devices for field communication to the thermostat unit.



FEATURES AND BENEFITS

Temperature Control

0°C to 511°C / 0°F to 511°F setpoint

Non-ambiguous, digital temperature setpoint

100-ohm platinum RTD sensor

3-wire, lead resistance compensation

System Fault Alarms

Breaker off or tripped

Heater continuity or low current

Low temperature / high temperature

Ground fault trip / sensor fault

Early Warning

TraceCheck™ exercises dormant systems every 24 hours for early warning for shutdown prevention

Status indicators show cause of alarms

Separate fail-safe local and remote alarms

Remote Monitoring

DC or AC alarm output for PLC or remote alarm indication

Form C dry contact alarm output

LCD display on the front door

Hazardous / Non-hazardous Area Usage

CSA approved for non-hazardous or Class I, Division 2, Groups A, B, C, D / Zone II hazardous area

Operating range: 40°C to +50°C / -40°F to +122°F

30 amps @ 120/277 VAC rating

Weatherproof, NEMA-4 enclosure

Easy retrofit replacement for mechanical thermostat

Low Installed Cost

Competitively priced

Self contained, no control panel to build

Ground fault trip eliminates expensive ground fault circuit breaker

Standard model simplifies spare parts stocking

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:	Single-pole one SCR per heater, or dual-pole, one SCR per phase
Ratings:	120/277 VAC @ 30 amps 208/240 VAC @ 30 amps 250 amp 1/2 cycle inrush
Line Frequency:	50 or 60 HZ

CONTROL POWER

Power:	Control power from heater voltage
Requirements:	120/208/240/277VAC, 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
LCD Display:	Heater status and setpoint values
RS232 Port:	Compatible PDA or laptop programming

ENVIRONMENT

Approvals:	CSA C US Class I, Division 2, Groups A, B, C, D Class I, Zone II, Groups IIC
Operating Range:	120/277V: -40°C to +50°C / -40°F to +122°F (LCD display: -20°C to +50°C / -4°F to +122°F) Heater current derated

USER-DEFINABLE OPTIONS

Heater Setpoint:
Low Temperature Alarm Setpoint:
High Temperature Alarm Setpoint:
0°C to 511°C, 1°C steps
0°F to 511°C, 1°F steps

Temperature Units: 0°C or °F

Current Fail Alarm Setpoint: 0.0 A - 30.0A, 0.1 A steps

Ground Fault Trip Alarm Setpoint: 0mA - 511mA, 1mA steps

ENCLOSURE

Type:	NEMA-4 steel, powder coated painted (black)
Size:	10"H x 8"W x 4"D
Features:	Quick release latches to open door One 3/4" conduit knockout for power wiring Two 3/8" or 1/2" conduit knockouts for RTD wiring One 3/8" or 1/2" conduit knockout for signal wiring One 0.610" knockout for RS232 communication

ALARMS

Low Temperature:	Actual temperature < low temperature alarm setpoint
High Temperature:	Actual temperature > high temperature alarm setpoint
Current Fail:	Heater current < current fail alarm setpoint Switch shorted
Ground Fault Trip:	Ground fault current > ground fault trip alarm setpoint
RTD Fail:	RTD open, RTD short
Hardware:	No incoming voltage
TraceCheck™:	Switch shorted
Current:	Fail alarm
Configuration:	NC contacts
Alarm Output:	AC contact: 12-240 VAC @ 0.5A maximum
Rating:	DC contact: 30VDC/0.1A, 500mW maximum LED indicator: 6VDC/50mA Form C contact: 12-277 VAC/0.5A, 30VDC/0.1A

ALARM FUNCTION

Temperature:	Low temperature alarm High temperature alarm
Current:	Current fail alarm
Ground Fault:	Ground fault trip
Hardware:	RTD open, RTD short, switch shorted

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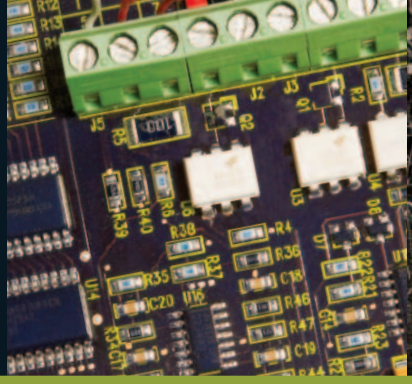
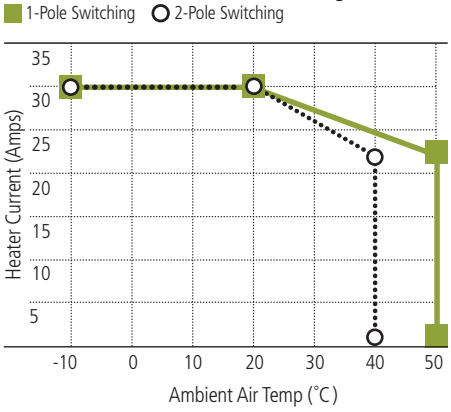


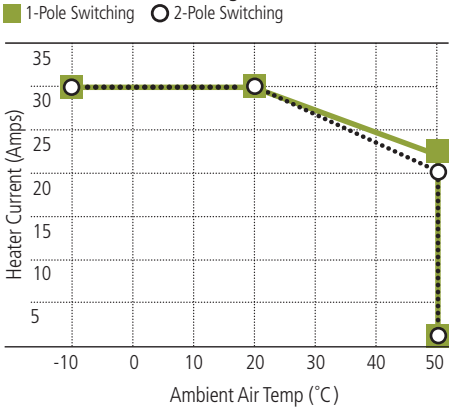
THE ONLY THERMOSTAT YOU WILL EVER NEED

TraceMate™ Heater Current Ratings

120 VAC/208-240 VAC Heater Current Rating

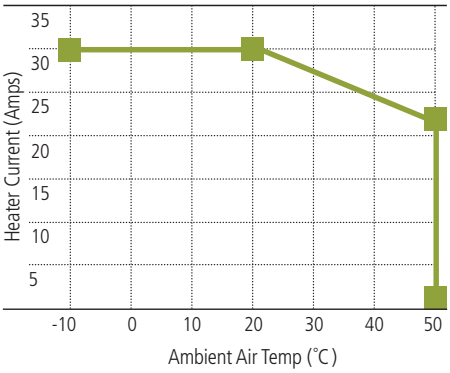


277 VAC Heater Current Rating



TraceMate II-CTR™ Heater Current Ratings

Heater Current Rating



Scan this code for more information.

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