

TraceMate" Series

**HEAT TRACE CONTROLLERS** 

TraceMate<sup>™</sup> ADVANTAGES

# **Early Warning**

- TraceCheck<sup>™</sup>
- 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<sup>™</sup>
- Alarm status indicators
- Separate fail-safe alarms, local and remote

System Fault Alarm Package

**Compatible for** 

**Laptop Programming** 

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

TraceMate<sup>™</sup> 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.





SAI GLOBAL

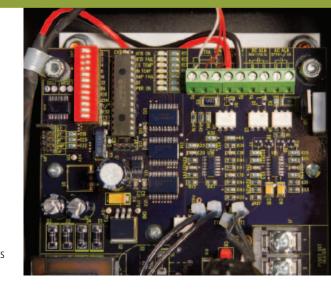


TraceMate™ Series Controllers provide outstanding reliability ensuring that your time is spent producing, not troubleshooting. Comprehensive ALARM PACKAGES provide quick fault detection, and the Ground Fault Trip provides optimal performance and safety.

TraceMate<sup>™</sup> Series Controllers have a temperature range of -50°C to 500°C (-58°F to 932°F) within  $\pm 2$ °C ( $\pm 3.6$ °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 $^{\text{TM}}$  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:  $\pm 2^{\circ}\text{C}$ ,  $\pm 3.6^{\circ}\text{F}$ Absolute Accuracy: 2.5°C, 4.5°F Repeatability:  $\pm 1^{\circ}\text{C}$ ,  $\pm 1.8^{\circ}\text{F}$ 

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 Control power from heater voltage

Requirements Single-pole 120 VAC and 277 VAC, 10VA Dual-pole 208-240 VAC and 277 VAC, 10VA

: Control power from heater voltage protected

Protection: Control po 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°C, 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™ Heater Current Ratings** 120 VAC/208-240 VAC Heater Current Rating 277 VAC Heater Current Rating 1-Pole Switching O 2-Pole Switching 1-Pole Switching 2-Pole Switching 35 35 30 30 Heater Current (Amps) Heater Current (Amps) 25 25 20 20 15 15

20

Ambient Air Temp (°C)

30

40

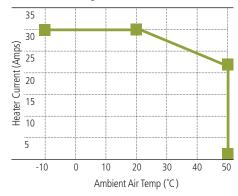
## TraceMate II-CTR™ Heater Current Ratings

**Heater Current Rating** 

10

5

-10





10

5

-10

0

10

20

Ambient Air Temp (°C)

30

40



Scan this code for more information.

Manufactured by:



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