The **TRACEMATE**™



The new TRACEMATE[™] from Nextron Corporation meets all your heat tracing control and monitoring needs in one convenient, compact, competitively priced package.

The TRACEMATE™ is an electronic thermostat designed for indoor or outdoor use in general purpose non-hazardous or Class 1, Division II / Zone II hazardous areas. It not only controls and monitors the temperature, but also monitors your heating process for current and ground leakage. The TRACEMATE™ is compatible with every type of electronic heat trace and tubing bundle on the market.

Temperature sensing is achieved through a 100-ohm, 3-wire platinum Resistance Temperature Detector (RTD) mounted on the pipe. Wiring costs are minimized by installing the TRACEMATE™ close to the pipe or vessel being traced. The TraceMate can also be installed remotely from the pipe.

The TRACEMATE™ comes complete with a built-in Ground Fault Protection Device (GFPD), eliminating the need for a separate ground fault breaker and the associated installation costs.

TraceMate's outstanding reliability ensures your time is spent producing, not troubleshooting. A comprehensive alarm package provides quick fault identification and a ground fault trip for optimal performance and safety. Spotting fault conditions is easy with the TraceMate's SYSTEM OK NO FAULT green LCD alarm light on the front door. You can also use the NO/NC alarm contacts to send a signal to a remote location.

The TRACEMATE™

controls your heat tracing to a differential of only 3°C using solid-state controls and microprocessor-driven commands. The digital temperature setpoint offers fast, precise settings over a wide range. No mechanical thermostat can come close to matching the TraceMate's performance. The unit is self-contained, easy to configure and easy to install, with no special maintenance staff training required.

By combining the control, system monitoring and testing requirements of a heat trace control system into a single package, the TRACEMATE $^{\text{TM}}$ facilitates significant, low-cost system upgrades. It is also readily customizable to meet your specific system requirements.



TRACEMATE^M ADVANTAGES

- Temperature Control
- System
 Fault Alarm
- Early Warning
- Remote Monitoring
- Hazardous / Non-hazardous Area Usage
- Low Installed
 Cost



TRACEMATE ™

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

Ground fault trip Low temperature High temperature 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

LED Alarm indicator viewable on door

Hazardous / Non-hazardous Area Usage

CSA approved for non-hazardous or

Class 1, Division II,

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 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

TEMPERATURE RANGE

Range -50°C to 500°C, -58°F to 932°F

±2°C, ±3.2°F Hysteresis 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

Dual-pole

Dual SCR per phase

Single-pole 120 VAC @ 30 Amps

Dual-pole 208-240 VAC @ 30 Amps

250 Amp 1/2 cycle inrush

50 or 60 HZ Line Frequency

CONTROL POWER

Ratings

Power Control power from heater voltage

Requirements Single-pole 120 VAC, 10VA

Dual-pole 280-240 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

CSA NRTL / C and FM Approvals

Class I, Division II, Groups A, B, C, D

Class I, Zone II, Groups IIC

Single-pole -40°C to +50°C / -40°F to +122°F Operating Range

Dual-pole -40°C to +40°C / -40°F to +104°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

E5: NEMA-4X steel, powder coat painted (black) Type

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

Heater current < current fail alarm setpoint Current Fail

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

ALARM FUNCTION

Low Temperature Alarm Temperature

High Temperature Alarm

Current Fail Alarm Current **Ground Fault** Ground Fault Trip

Hardware RTD Open, RTD Short, Switch Shorted



Manufactured by

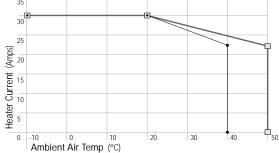
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HEATER CURRENT RATING 1 and 2 Pole Switching



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