

The TRACEMATE™

The only thermostat
you will ever need

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™ facilitates significant, low-cost system upgrades. It is also readily customizable to meet your specific system requirements.

TRACEMATE™ ADVANTAGES

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

A QUALITY COMPANY



ISO 9001 REGISTERED



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
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 Dual-pole Dual SCR per phase
Ratings	Single-pole 120 VAC @ 30 Amps Dual-pole 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	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

Approvals	CSA NRTL / C and FM Class I, Division II, Groups A, B, C, D Class I, Zone II, Groups IIC
Operating Range	Single-pole -40°C to +50°C / -40°F to +122°F 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°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	E5: 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 knockouts 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	Switch Shorted Current Fail Alarm
Configuration	NC Contacts
Alarm Output	AC Contact: 12-240 VAC @ 0.5A maximum DC Contact: 30VDC/0.1A, 500mW maximum 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



Manufactured by

NEXTRON CORPORATION

#14, 6120 - 11 Street S.E.

Calgary, Alberta Canada T2H 2L7

PHONE (403) 735-9555

FAX (403) 735-9559

WEBSITE www.nextron.ca

Distributed by



The manufacturer believes the information provided by the manufacturer and describing the manufacturer's products is correct. However, users of the manufacturer's information accept all risk of any damages or loss whatsoever that a user may suffer from using the manufacturer's information and the manufacturer's products (including, without limitation, defects in the manufacturer's products), whether the action is based in contract or not (including negligence). Therefore, users should evaluate the product and the suitability of the product for the user's applications.
Without limiting the above, in no event shall the manufacturer be liable for special, indirect, incidental, consequential, exemplary or punitive damages for any breach of our obligations or warranties of any sort, express or implied, resulting from the user's use of the manufacturer's products or the manufacturer's information.
The user hereby agrees to save and hold the manufacturer harmless from any loss, damage or product liability claim of any sort resulting from the user's use of manufacturer's information or the manufacturer's products.

HEATER CURRENT RATING 1 and 2 Pole Switching

