

HTLS

PDS HTLS

Heat Tracing Line Sensing Control Panel

Series 8000/12000/24000

Features:

- Color Touchscreen Operator Panel
- Eight/Twelve/Twenty Four Points of Independent Control
- NEMA 4/12 Enclosure
- High/Low Temperature Alarms
- Continuity Alarming
- Ground Fault Alarming/Trip
- Open Sensor Alarm
- Common Alarm Output
- Load Management
- Internal Power Distribution (Includes Circuit Breakers)
- 120, 240, and 277 Vac
- Global Programming
- Auto-Cycle Feature
- Current Display
- Failed Sensor Output Setting
- Loop Enable/Disable
- Hand/Off/Auto Selection
- Network Communications

Applications:

- Process Temperature Maintenance
- Freeze Protection
- Roof/Gutter De-Icing
- Tank and Vessel Heat Tracing
- Snow Melting
- Floor Heating
- Steam Condensate Return Systems
- Fire Protection Systems



Chromalox[®]
PRECISION HEAT AND CONTROL



IntelliTRACE™

Description

The IntelliTRACE HTLS Series is a microprocessor based control/monitoring and power management/distribution system for heat trace applications.

The IntelliTRACE 8, 12, 24 loop heat trace system provides alarms for high / low temperature, continuity, ground fault leakage, and sensor faults. The advanced features include a color touchscreen operator interface panel that provides simple programming with no keyboards or cryptic labels. The panel displays loop status, alarm conditions and graphics on process temperatures,

setpoints, and currents. Through the Global Programming feature, operator setup time is greatly reduced.

With the built-in power distribution, the IntelliTRACE multi-loop provides reduced material, installation, and maintenance costs. The load management eliminates the need for expensive ground fault breakers, limits inrush current and systematically interrogates all circuits for continuity, and ground fault leakage, sensor faults, and temperature alarms.

Technical Specifications

| | |
|-------------------------------|--|
| Supply Voltage: | 120, 240, and 277Vac, Three-Phase |
| Operating Environment: | 32-120°F (0-40°C) |
| Communications: | RS-485 MODBUS [®] |
| Input: | RTD 100 Ω Platinum Three-Wire |
| Output: | Two-Pole Contactors |
| Maximum Current: | 24 Amps/Ckt |
| Temperature Alarms: | High/Low 2°F Deadband Non-Latching |
| Ground Fault Alarm: | Adjustable 25-500 ma Factory Set @ 30 mA |
| Continuity Alarm: | < 2 amps Non-Latching |
| Load Management: | 15 sec. Non-Overlap to Reduce Inrush |
| Auto-Cycle: | Programmable to 720 Hrs (30 days) |
| Failed Sensor Output Setting: | 0-100% |
| Control Mode: | On/Off with adjustable deadband |

HTLS Series Line Sensing Heat Trace Panel



Advantages

Highest Value/ Lowest Installed Cost

- Easy Retrofit into Existing Systems.
- Eliminates Ammeter Panels.
- Eliminates Signal Light Kits.
- Eliminates Monitor Wire Alarm Panels.
- Monitors Continuity without the use of Monitor Wire.
- Reduced Material and Installation Costs.
- Temperature/Monitor and Power Management / Distribution in One Package.
- Built-in GFI eliminates the need for separate Ground Fault Breakers.

Lowest Learning Curve

- Simple Color Touchscreen
- Operator Panel (no Keyboards/no cryptic labels).

Reduced Maintenance/Troubleshooting Time/Cost

- Temperature/Monitor and Power Management in one Package.
- Periodic Auto-Test Function Checks Continuity, Alarms & GFI Status on each loop.
- Continuous Monitoring of Heat Trace Circuits.



HTLS Series Line Sensing Heat Trace Panel

Ordering Information

MODEL HTLS 8000 Series Line Sensing Heat Trace Panel Order Table

HTLS cUL Listed Eight Loop Line Sensing Temperature/Monitor Heat Trace Panel.

Nema 4 Steel Enclosure 36"H x 30"W x 8"D. Includes: Complete Prewired Controller, Two-Pole Contactors, Current Transformer to Measure Operating Currents, High/Low Temperature Alarms, On/Off Control, RTD Sensor Input, Color Touchscreen Programming, GFI Indication or Shutdown, Common Alarm Output, Hand/Off/Auto Selection, Loop Enable/Disable and Auto-Cycle Feature.

CODE Eight Independent Loops of Heat Trace Control

8

| CODE | Voltage |
|------|---------|
|------|---------|

| | |
|---|--|
| 0 | 120 Vac (Includes Single-Pole Circuit Breakers) 208Y/120 Vac Three-Phase Four-Wire |
| 1 | 240 Vac (Includes Double-Pole Circuit Breakers) 240 Vac Three-Phase Three-Wire Delta |
| 2 | 277 Vac (Includes Single-Pole Circuit Breakers) 480Y/277 Vac Three-Phase Four-Wire |

| CODE | Circuit Breaker Rating Selection |
|------|----------------------------------|
|------|----------------------------------|

| | |
|---|--|
| 1 | 15 amp Thermal Magnetic Circuit Breakers |
| 2 | 20 amp Thermal Magnetic Circuit breakers |
| 3 | 30 amp Thermal Magnetic Circuit Breakers |

| CODE | Cabinet Heater |
|------|----------------|
|------|----------------|

| | |
|---|--|
| 0 | None |
| 1 | Thermostat Controlled Enclosure Heater |

| CODE | Pressurization Control System |
|------|-------------------------------|
|------|-------------------------------|

| | |
|---|---|
| 0 | None |
| 1 | Type Z for Class I Division II Hazardous Location |

HTLS 8 2 3 1 1 Typical Model Number

HTLS Series Line Sensing Heat Trace Panel

Ordering Information

MODEL HTLS 12000 Series Line Sensing Heat Trace Panel Order Table

HTLS cUL Listed Twelve Loop Line Sensing Temperature/Monitor Heat Trace Panel.

Nema 4 Steel Enclosure 48"H x 36"W x 10"D. Includes: Complete Prewired Controller, Two-Pole Contactors, Current Transformer to Measure Operating Currents, High/Low Temperature Alarms, On/off Control, RTD Sensor Input, Color Touchscreen Programming, GFI Indication or Shutdown, Common Alarm Output, Hand/Off/Auto Selection, Loop Enable/Disable and Auto-Cycle Feature Loop Disable and Auto-Cycle Feature.

CODE Twelve Independent Loops of Heat Trace Control

12

CODE Voltage

| | |
|---|--|
| 0 | 120 Vac (Includes Single-Pole Circuit Breakers) 208Y/120 Vac Three-Phase Four-Wire |
| 1 | 240 Vac (Includes Double-Pole Circuit Breakers) 240 Vac Three-Phase Three-Wire Delta |
| 2 | 277 Vac (Includes Single-Pole Circuit Breakers) 480Y/277 Vac Three-Phase Four-Wire |

CODE Circuit Breaker Rating Selection

| | |
|---|--|
| 1 | 15 amp Thermal Magnetic Circuit Breakers |
| 2 | 20 amp Thermal Magnetic Circuit breakers |
| 3 | 30 amp Thermal Magnetic Circuit Breakers |

CODE Cabinet Heater

| | |
|---|--|
| 0 | None |
| 1 | Thermostat Controlled Enclosure Heater |

CODE Pressurization Control System

| | |
|---|---|
| 0 | None |
| 1 | Type Z for Class I Division II Hazardous Location |

HTLS 12 2 3 1 1 Typical Model Number

HTLS Series Line Sensing Heat Trace Panel

Ordering Information

MODEL HTLS 24000 Series Line Sensing Heat Trace Panel Order Table

HTLS cUL Listed Twenty-Four Loop Line Sensing Temperature/Monitor Heat Trace Panel.

Floor-Mount Nema 4 Steel Enclosure 60"H x 60"W x 12"D. Includes Complete Prewired Controller, Two-Pole Contactors, Current Transformer to Measure Operating Currents, High/Low Temperature Alarms, On/off Control, RTD Sensor Input, Color Touchscreen Programming, GFI Indication or Shutdown, Common Alarm Output, Hand/Off/Auto Selection, Loop Enable/Disable and Auto-Cycle Feature.

CODE Twenty-Four Independent Loops of Heat Trace Control

24

CODE Voltage

- 0 120 Vac (Includes Single-Pole Circuit Breakers) 208Y/120 Vac Three-Phase Four-Wire
- 1 240 Vac (Includes Double-Pole Circuit Breakers) 240 Vac Three-Phase Three-Wire Delta
- 2 277 Vac (Includes Single-Pole Circuit Breakers) 480Y/277 Vac Three-Phase Four-Wire

CODE Circuit Breaker Rating Selection

- 1 15 amp Thermal Magnetic Circuit Breakers
- 2 20 amp Thermal Magnetic Circuit breakers
- 3 30 amp Thermal Magnetic Circuit Breakers

CODE Cabinet Heater

- 0 None
- 1 Thermostat Controlled Enclosure Heater

CODE Pressurization Control System

- 0 None
- 1 Type Z for Class I Division II Hazardous Location

HTLS 24 2 3 1 1 Typical Model Number

HTLS Series Line Sensing Heat Trace Panel

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October 2000