

intelliTRACE™ HTLSC1D2

Series C1D2 Heat Trace Line Sensing Control Panel

- Approved for Class 1, Division 2
- Solid State Relay Output Rated 30 Amps 40°C
- Universal Inputs
- NEMA 4X Enclosure
- Ground Fault Alarm
- Programmable High/Low Temperature Alarms
- Programmable Current Alarm
- Optional RS-485

Applications

- Freeze Protection
- Fuel Gas Preheating and Superheating
- Fuel Oil Preheating
- Hydrocarbon and Chemical Product Piping
- Power Generation Plants



Description

The Chromalox HTLSC1D2 series panels are microprocessor based temperature control and monitoring units for heat tracing used in freeze protection and process temperature control applications.

This series of panels can be configured for ambient or line sensing control. The HTLSC1D2 series implement a scaleable design such that they can be configured with or without communications, ground fault monitoring or enclosure heater.

This unique format offers a design that can be tailored both by price and features to meet the most challenging demands in heat trace applications. For example: The HTLSC1D2 series can be networked together via RS-485 MODBUS and the Chromalox Windows based Chromasoft SpecView software package. The optional ground fault monitoring addresses the national electric code requirements and reduces the cost of installing costly ground-fault circuit breakers. In the event of sub-zero temperatures the optional enclosure heater is available. The Chromalox HTLSC1D2 series offers single and dual loop designs and are approved for Class 1 Division 2 Areas.

The HTLSC1D2 series have programmable inputs (thermocouple, RTD, mA, VDC), On/Off or PID control, Auto-tune function, High/Low temperature alarms, current alarm, and sensor failure indication. The heat tracing circuit is switched by a 30 amp solid state relay rated at 40°C ambient.

The Chromalox HTLSC1D2 series panel comes ready to install and includes control and power wiring terminal blocks for field connections.

Technical Specifications

Area of Use: Class 1 Division 2

Approvals: UL, cUL, CE

Supply Voltage: 120, 208, 240, 277, and 480 Vac.

Ambient Operating Temperature: 32 - 104°F (0 - 40°C), -32 - 104°F (-35.5 - 40°C) with Optional Enclosure Heater.

Protection: NEMA 4X Fiberglas®

Communications: RS-485 MODBUS

Temperature Sensor Input: J, K, T, E, B, R, S, N, L, PT100, mV, mA, V

Output: Solid State Relay rated 30 amps @ 40°C.

Current Alarm (Low): 0 - 50 Amps in .1 amp resolution.

Temperature Alarms: Field selectable Dev. High/Low, Dev. Band High/Low, Process Low /High, Latching, Non-Latching.

Control Modes: Field Selectable On/Off, PID, Auto-tune.

Ground Fault Alarm: Adjustable Trip Level 30 - 300mA; Adjustable Trip Delay 0 - 1 Sec.

HTLSC1D2

Series C1D2

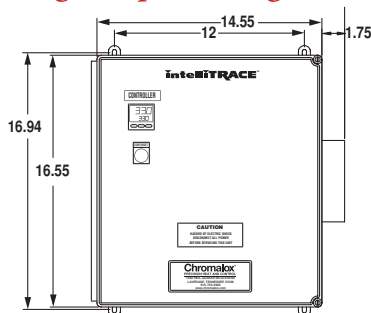
Heat Trace Line Sensing Control Panel *(cont'd.)*

Ordering Information

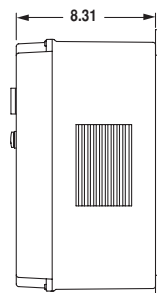
To Order — Complete the Model Number using the Matrix provided.

Note — Due to the nature of Division 1 hazardous location applications consultation with a factory representative is required.

Single Loop Mounting Dimensions

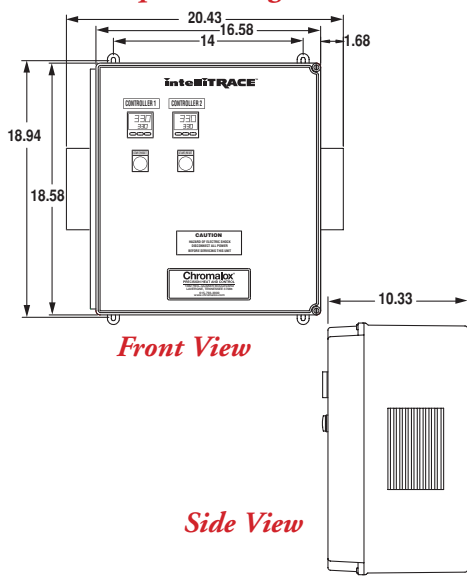


Front View



Side View

Dual Loop Mounting Dimensions



Front View

Side View

Single Loop

Model IntelliTRACE™ 10000 Series Line Sensing Heat Trace Panel

HTLSC1D2 Panel Configuration

cUL, UL and CE Listed Single Loop Line Sensing Temperature/Monitor Heat Trace Panel. Factory pre-wired for quick installation. Includes: Solid State Relay, Current Transformer, High-Low Temperature Alarms, Low Current Alarm, On/Off or PID Control, Universal Sensor Inputs, Dual Digital Displays, Terminal Blocks for Field Connections, Loop Enable/Disable, NEMA 4X rated Enclosure (16"H x 14"W x 8"D) for Indoor/Outdoor Applications. Options Include: Ground Fault Monitoring, Digital Communications and Enclosure Heater.

Code Single Loop of Heat Trace Control

1 30 Amp Rating

Code Voltage

0 120 Vac
1 208 Vac
2 240 Vac
3 277 Vac
4 480 Vac

Code Controller

0 ETR-9300-412690 Controller
1 ETR-9300-412691 Controller with Communications

Code Ground Fault Monitoring

0 None
1 Ground Fault Module (Includes Illuminated Reset switch)

Code Enclosure Heater

0 None
1 Thermostat Controlled Enclosure Heater

HTLSC1D2 1 0 0 1 0 Typical Model Number

Dual Loop

Model IntelliTRACE™ 20000 Series Line Sensing Heat Trace Panel

HTLSC1D2 Panel Configuration

cUL, UL and CE Listed Dual Loop Line Sensing Temperature/Monitor Heat Trace Panel. Factory pre-wired for quick installation. Includes: Solid State Relay, Current Transformer, High-Low Temperature Alarms, Low Current Alarm, On/Off or PID Control, Universal Sensor Inputs, Dual Digital Displays, Terminal Blocks for Field Connections, Loop Enable/Disable, NEMA 4X rated Enclosure (18"H x 16"W x 10"D) for Indoor/Outdoor Applications. Options Include: Ground Fault Monitoring, Digital Communications and Enclosure Heater.

Code Dual Loop of Heat Trace Control

2 30 Amp Rating

Code Voltage

0 120 Vac
1 208 Vac
2 240 Vac
3 277 Vac
4 480 Vac

Code Controller

0 ETR-9300-412690 Controller
1 ETR-9300-412691 Controller with Communications

Code Ground Fault Monitoring

0 None
1 Ground Fault Module (Includes Illuminated Reset switch)

Code Enclosure Heater

0 None
1 Thermostat Controlled Enclosure Heater

HTLSC1D2 2 0 0 1 0 Typical Model Number

SINGLE & DUAL LOOP
 CONTROL PANEL