



# Microprocessor Based Tank Heating Controller



The 2XTC Tank Heating Controller is the most complete and versatile tank heating controller in existence. Use this product to accurately control SPX and EGLX tank heating pads as well as WinterSafe Self-Regulating Heating Cable.

# **PRODUCT FEATURES**

- · Process temperature control with hi-limit protection
- 100-277 VAC, 50/60 HZ, 30A
- Use with up to 6 heaters
- Push-on heater connections for a quick installation
- · Simple operation and customizable preset
- High temperature, low temperature, and low current alarms
- Alarm contact for communication with customer systems (NO or NC, selectable)
- NEMA4X, IP66, polycarbonate enclosure
- 4-20mA retransmission output
- Includes two RTDs
- · cETLus approved for use in the USA and Canada







## **Description**

The HTD Heat Trace 2XTC Temperature Maintenance Heating System Controller is specifically designed for heating systems requiring process temperature control with high limit temperature protection. The most common tank heating applications using process and high limit control are non-metallic tanks, lined tanks or tanks with heat sensitive contents. This controller is designed for use with SPX heating pads, EGLX heating panels, heating cable and any other electric trace heater. The 2XTC controller is provided in a NEMA4X/IP66 polycarbonate enclosure for use indoors or outdoors

The 2XTC controller can be used on power supplies from 100 to 277 VAC for maximum versatility. The controller switches up to a 30A heating load using active arc suppression for maximum relay contact life.

The controller provides indication of process sensor temperature, over limit sensor temperature and heater current using a simple main setting menu. Indication is provided using high visibility LED number indication as well as LED lights showing set values and system status.

The 2XTC controller provides alarm and system status for use with remote monitoring such as DCS or SCADA systems. Alarms are provided for low temperature, high, temperature and low current alarm. These alarms are indicated by lights on the front of the controller and relay contacts for remote indication. Alarm relay contacts are selectable for close or open on alarm. In addition the controller offers current interval testing to periodically test for correct heating current. The current alarm can be set to off if not desired or test frequencies of 24, 168 or 720 hours. A 4-20 mA retransmission output is also provided for remote indication of the process temperature.

## **Technical Specifications**

#### General

Power Input: 100-277 VAC, 50/60HZ, 30 Amps maximum

Operating Temperature: -40°F to 113°F (-40 to 45°C)
Process Control: On/Off with adjustable hysteresis

Process Control Output: SPST NO Relay rated 30 Amps at 277 VAC with active arc suppression

#### **Setting Range**

Process Temperature: 0-200°F
High Limit Temperature: 0-250°F
Low Temperature Alarm: 0-200°F
High Temperature Alarm: 0-200°F

Low Current Alarm: OFF or 0.5 to 30 Amps

#### **Alarm and System Status**

Alarms: Low Temperature, High Temperature and Low Current

Alarm Indication: LEDs on the controller face

Alarm Outputs: SPST Relays rated 5 A at 277 VAC/5A at 30 VDC
Alarm Output Type: Relay contact Selectable open or close alarm

Retransmission Output: 4-20 mA indication of process temperature with selectable span

# **Sensor Input**

Sensor Type:  $1K\Omega$  Platinum RTD, 2 wire

Sensor  $\alpha$ : 0.00385

## **Approval**



UL 508

CSA 22.2 #14