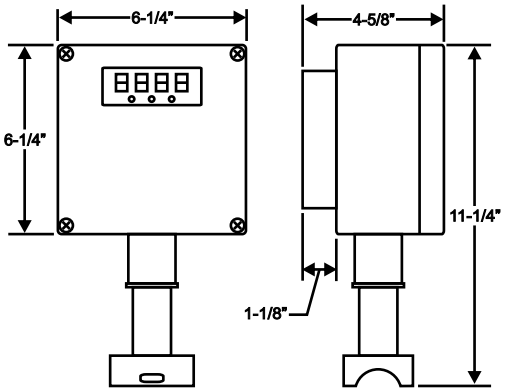
DTS-HAZ
Heat Trace Digital Thermostat



- 30 Amp Solid State Relay (SSR) Output
- On/Off Control With Programmable Deadband As Low As 2°F
- Soft Start Feature Eliminates SR Cable In-Rush
- LED Indication for:
  - Setpoint Temperature
  - Process Temperature
  - High Temperature Alarm
  - Low Temperature Alarm
  - RTD Failure
- Programmable High & Low Temperature Alarms
- Common Alarm Contact for Remote Indication of Alarm Status
- NEMA 4X Enclosure
- Integral Pipe Stand
- 100 Ohm Platinum RTD - Included
- Enclosure Serves as Heating Cable, Power & Sensor Connection
- Works with SR, CWM and MI Cable
- 100 to 277 VAC Operation

Description:

The DTS-HAZ digital thermostat is a microprocessor based temperature control and power connection kit. It is used for freeze protection or process temperature maintenance of pipes or tanks protected by heat tracing products. This thermostat can be used with Constant Wattage, Mineral Insulated or Self-Regulating heating cables in Ordinary area or Class 1, Division 2 hazardous area locations.

This unit is designed to provide local temperature control and monitoring for heat traced pipes or tanks across a variety of industries and applications and will switch 30 amperes of current.

The DTS-HAZ provides easy programming of the temperature set point, high and low temperature alarms, the deadband, the temperature units, the soft start function and the alarm state through the front panel push buttons. LED lights are provided for indication of power to the unit, heater power on (load) and alarm status. A Fail Safe alarm contact is included for wiring to your building management system to indicate alarm status. This contact may be set to open on all alarm conditions including loss of power, high or low temperature alarm and RTD failure. The loss of power indication qualifies this unit to be used to sense temperature and control heat trace when used in fire protection systems. The minimum operating ambient temperature is -40 °F (-40 °C). This unit has programmable high and low temperature alarm set points from -80 °F (-62 °C) to 1150 °F (621 °C).

The DTS-HAZ employs a Soft Start feature that uses a proprietary software algorithm which eliminates the inherent self-regulating in-rush current, resulting in longer circuit lengths and less nuisance tripping at cold temperatures. For added flexibility, the user may disable the soft start feature for non-heat trace applications. The alarm contact may be either normally open or normally closed.

A 100 Ohm platinum RTD is provided with a 3 foot (1 m) lead resulting in flexible mounting options for the user.

DTS-HAZ

Applications:

- **Freeze Protection of Piping**
- **Process Temperature Maintenance**
- **Tank Freeze Protection**
- **Tank Process Temperature Maintenance**

Environments:

- **Ordinary Areas**
- **Hazardous Areas, Class I, Div 2, Groups A, B, C, D**

Sensor:

- **100 Ohm Platinum RTD**
- **Probe Length = 4”**
- **Probe Diameter = 1/4"**
- **Leadwire Length = 3 ft***
  ***The maximum allowable length of the RTD wire is 50 ft in order to remain UL/cUL compliant.**
- **Maximum Temperature = 500 °F***
  ***Sensor is replaceable for higher temperatures.**

Mounting:

- **Standard mounting is directly to a pipe or vessel.**
- **Optional wall mounting is available using P/N MP-2.**

Features:

- User Selectable Soft-Start Program
- Small Enclosure. The 6.25 inch by 6.25 inch enclosure houses the temperature control and monitoring unit along with terminals for connecting instrument power, heating cable and RTD.
- 100 Ohm platinum RTD which can be pipe mounted or can be used to sense ambient air temperature.
- Pipe stand-off mount for direct pipe mounting.
- Integral wiring. The wiring of the heating cable, AC power line and the RTD sensor are all accomplished within the enclosure. This feature reduces both labor and material costs by eliminating the need for an additional heat trace power connection kit as well as the time for the additional wiring.

Specifications:

Operating Voltage	100 to 277 VAC, 50/60 Hz, Single Phase
Operating Temperature	
- Hazardous Areas	-40 °F to 104 °F (-40 °C to 40 °C)
- Ordinary Areas	-40 °F to 140 °F (-40 °C to 60 °C)
Sensor Input	100 Ohm platinum RTD
Heater Output	30 amp solid state relay
Alarms	High temp to 1150 °F (621 °C) Low temp to -80 °F (-62 °C) RTD Failure Red LED alarm status indicator on front panel
Common Alarm Contact Rating	12-277 VAC, 2 Amps RMS
Common Alarm Contact State	Normal operation: Closed In Alarm Condition or Power Off: Open
Deadband	1 °F (or C) to 100 °F (or C), programmable
Set Point	-80 °F to 1100 °F programmable (-62 °C to 593 °C)
Units of Temperature	°F or °C, selectable
Control Mode	On/Off control
Soft Start	User selectable integral soft start, patent pending software algorithm, which eliminates nuisance breaker tripping associated with self-regulating cable in-rush