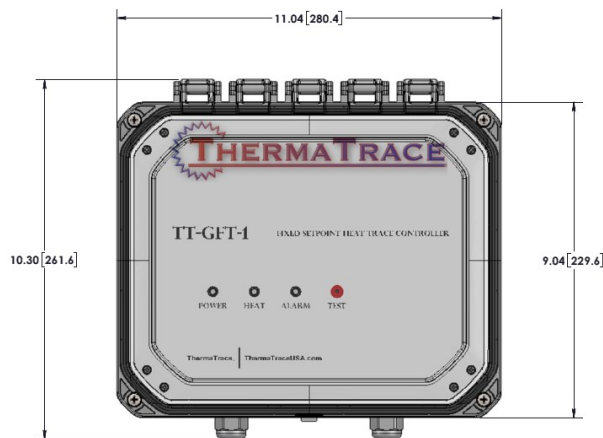


TT-GFT-1



Ground Fault Thermostat



The TT-GFT-1 Ground Fault Thermostat is a Fixed-Setpoint, Microprocessor-based Heat trace control thermostat. It is the most cost effective system for Heat Trace applications by providing Ground Fault Equipment Protection (GFEP).

Typical applications include freeze protection, and other temperature monitoring and control applications.

The TT-GFT-1 Ground Fault Thermostat operates from the heater's power source. A universal power supply allows the TT-GFT-1 to operate from 100 V ac to 277 V ac, and control a resistive load up to 30 A.

Temperature Setpoint and Alarms

The temperature setpoint is factory set at 40 °F (4.4 °C). Alarms include; Low Load Current, Ground Fault, Sensor Fault, Internal Fault, and Power Fail. These alarms are pre-set and are indicated on the front panel by a Common Alarm Indicating Light and defined by a series of blinking lights to indicate the specific alarm condition.

Sensor Inputs

The TT-GFT-1 is supplied with a 10K ohm thermistor temperature sensor with a 8 ft. jacketed cable. The included sensor has an operating range of -58 °F to 221 °F (-50 °C to 105 °C). The TT-GFT-1 can also be factory programmed to receive inputs from; 2-Wire, 3-Wire and 4-Wire RTD's.

Ground-Fault Equipment Protection

The TT-GFT-1 Ground Fault Thermostat includes integral GFEP. This eliminates the extra expenses associated with having to provide separate GFEP components in the circuit panel.

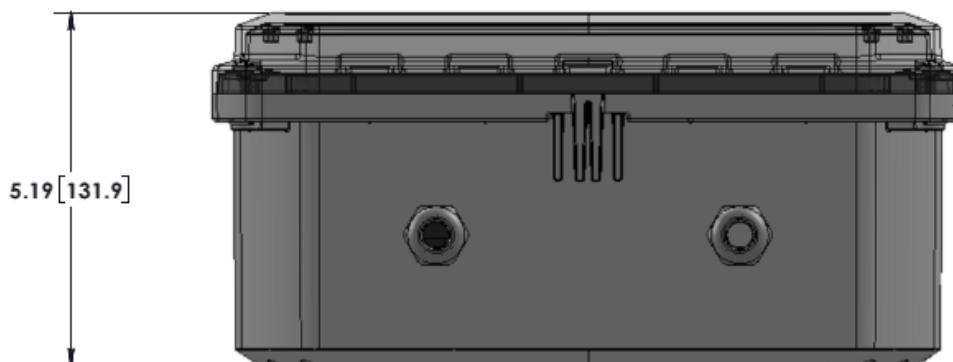
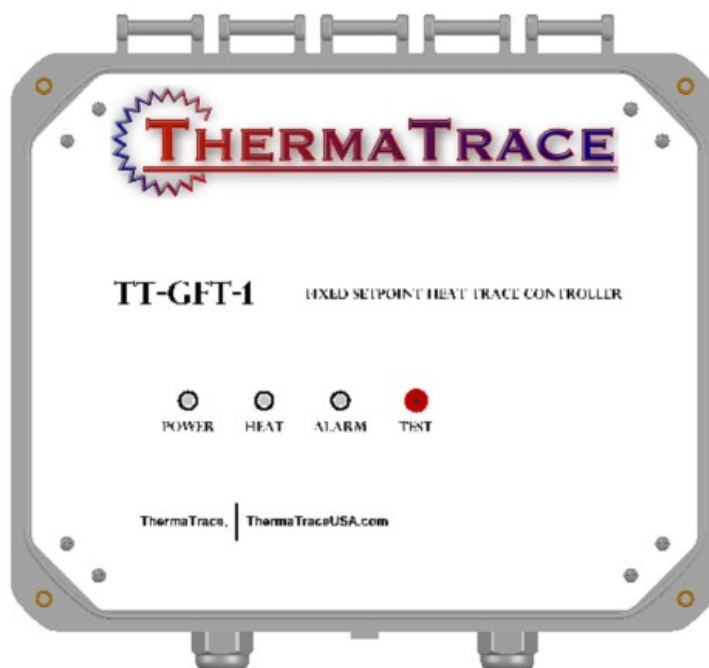
The TT-GFT-1 disconnects power immediately when ground fault current exceeds 30 mA.

Automatic GFEP Circuit Self-Test

To ensure continued safe operation, the TT-GFT-1 performs a self-test of the GFEP circuit when power is first applied, along with a load ground fault test, and this test repeats every 24 hours while power is applied if the load has not been energized.

Bluetooth Connectivity

Bluetooth capability will allow the TT-GFT-1 to connect to our app (downloadable from Google Play Store), enabling the user to monitor Circuit Status, check for Alarms and change operational commands.



Specifications

Certifications	ETL Tested to UL 60730–1, UL 1053, Listed CSA E60730–1:13
Environmental	
Area of use	Nonhazardous locations
Operating temperature	-40 °F to 122 °F (-40 °C to 50 °C)
Enclosure	
Dimensions	11.04" W x 9.04" H x 5.19" D 280.4 X 229.6 X 131.9 mm
Ingress protection	NEMA 1, 2, 3, 3R, 3RX, 3S, 3SX, 3X, 4, 4X, 5, 12 & 13
Cover	IP65, IP66 Hinged cover with Stainless Steel Hardware, Impact Resistant Polycarbonate
Cable entries	Two liquid-tight cable glands installed for sensor and alarm leads, cable diameter 0.08" to 0.24" (2 mm to 6 mm) One 1.046" hole to accommodate a 3/4" conduit fitting for power wiring connection
Weight	
Mounting	Wall mount with flanges
Wiring Connector Ratings	
Power	Barrier Strip Terminals for Line, Neutral, and Ground; use 10 AWG wires rated for at least 194 °F (90 °C)
Sensors	Terminal Block, rising cage clamp, 12–28 AWG leads
Alarm relay	Terminal Block, rising cage clamp, 12–28 AWG leads
Parameter Settings	
Temperature setpoints	40 °F (4.44 °C), Custom Setpoint can be Factory Programmed
Low-current alarm threshold	0.1 A
Low-current alarm delay	5 s
Ground Fault Trip Current	30 mA
Self-test interval	24 h

User Interfaces

Pushbutton	Test / Reset
Indicators	
Status indicator	Power to the unit (Green blinking) Call for heat (Yellow solid) Sensor fault (4 Short Pulse, 1 Long Pulse) Ground fault (2 Short Pulse, 1 Long Pulse) Low load current (3 Short Pulse)
Summary alarm relay re- porting	Low load current High ground fault current Sensor fault Internal fault
Control Ratings	
Temperature accuracy	+/- 2 °F (1 °C)
Temperature Sensors	
Temperature input	(Included) Thermistor, 10k ohms at 25 °C, range -58 °F to 221 °F (-50 °C to 105 °C), 8ft Lead
GFEP	
Threshold	30 mA
Automatic self-test range	Verifies GFEP functionality every 24 hr. and when the load is turned on
Power	
Supply voltage	100 – 277 V ac 50/60 Hz
Controller power consumption	5 W maximum, 2 W idle
Load rating	30 A, 100 – 277 V ac resistive