

Pipe Freeze Protection Controller | PT-ECONOMY

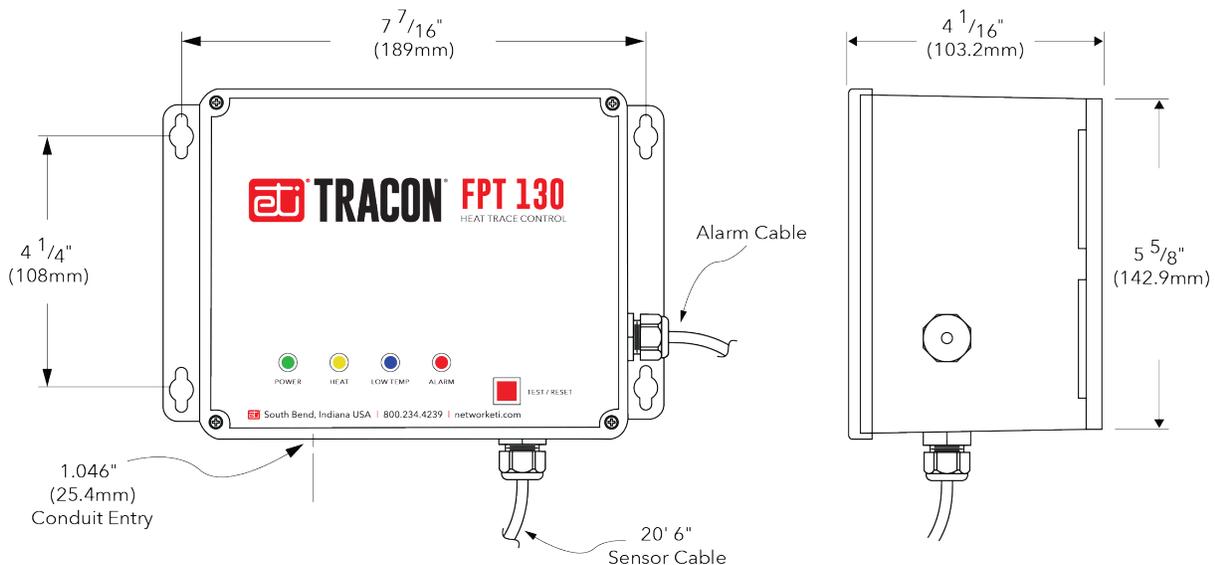
The PT-ECONOMY Heat-Trace Control is a single-point microprocessor-based heat-trace control thermostat. It is ideal for applications which require Ground-Fault Equipment Protection (GFEP). Ideal uses include freeze protection, and other temperature monitoring and control applications.

The PT-ECONOMY Heat-Trace Control operates from the heater's power source. A universal power supply allows the PT-ECONOMY to operate from 100 V ac to 277 V ac, and control a resistive load up to 30 A.



Features

- Adjustable temperature set point of 30 °F, 38 °F, 45 °F, or 50 °F (-1.1 °C, 3.3 °C, 7.2 °C, or 10 °C) for various freeze protection applications
- Can use an NEC Class 2 temperature sensor with up to 2,000 ft. cable for enhanced installation options
- Thermistor temperature sensor with 20 ft. cable included for applications of -40 °F to 230 °F (-40 °C to 110 °C)
- Ground-Fault Equipment Protection with manual and automatic test function
- Alarms for excess ground fault current, low load current, and temperature
- Alarms indicated with panel LED lights and relay contact for remote signaling
- A Fault Mode setting which can be set to energize or de-energize the heaters during a sensor fault
- Fire Protection Mode maintains heater operation for use in critical fire protection systems
- Durable weather-resistant NEMA 4X IP66 enclosure permits indoor or outdoor installation



Specifications

Certifications	UL 60730–1, UL 1053, CSA E60730–1:13
Environmental	
Area Of Use	Nonhazardous Locations
Operating Temperature Range	–40 °F to 131 °F (–40 °C to 55 °C)
Enclosure	
Dimensions	8 1/8" (W) x 5 1/2" (H) x 4 3/8" (D) 207 mm (W) x 140 mm (H) x 112 mm (D)
Ingress Protection	NEMA 4X, IP66
Cover Attachment	Polycarbonate cover, plastic screws
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
Material	Polycarbonate
Weight	2.7 lb. (1.22 kg)
Mounting	Wall mount with flanges
Wiring Terminal 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
User Interfaces	
Pushbuttons	UP, DOWN, ENTER, TEST / RESET BACK
DIP Switches	RTD wiring configuration, Panel lockout
Parameter Settings	
Temperature Setpoints	30 °F, 38 °F, 45 °F, or 50 °F (–1.1 °C, 3.3 °C, 7.2 °C, or 10 °C)
Low–Temperature Alarm Threshold	32 °F (0 °C) for 38 °F, 45 °F, or 50 °F (3.3 °C, 7.2 °C, or 10 °C) setpoints 28 °F (–2.2 °C) for 30 °F (–1.1 °C) setpoint
Low–Current Alarm Threshold	0.1 A
Low–Current Alarm Delay	5 s
Ground Fault Limit Current	30 mA
Self–Test Interval	24 h
Indicators	
Status Indicator	Power to the unit (Green solid) Calibration error (Green blinking) Call for heat (Yellow solid) Low current alarm (Yellow blinking) Stuck relay (Yellow blinking fast) Low temperature (Blue solid) Sensor fault (Blue blinking) Ground fault (Red solid) GFEP circuit failure (Red blinking)
Summary Alarm Relay Reporting	Low load current High ground fault current Sensor fault Internal fault
Control Ratings	
Temperature Accuracy	+/- 2 °F (1 °C)
Temperature Sensors	
Temperature Inputs	(Included) Thermistor, 100k ohms at 25 °C, range –40 °F to 230 °F (–40 °C to 110 °C), 20ft Lead (25076)
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

