

BTM-Series Battery Temperature/Thermal Runaway Monitor



BTM-Series Monitor & Sensor

Product Overview

The BTM-Series is a dependable low-cost scalable solution for protecting your batteries against over-temperature and thermal runaway conditions. Meet IFC and NFPA code compliance (see Product Features). Individual sensors are quickly and securely attached to each battery and connected in series from the main unit. Each thermal sensor is sealed to IP68 (water, gas and dust proof) and the provided special gel-filled connectors are also sealed against acid ingress, dust, and gases.

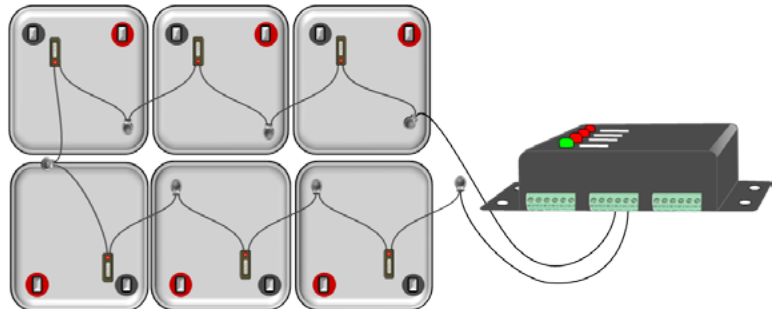
The alarm relays are 'fail-safe', meaning the user will always get an indication of supply failure. In the event of one or more sensors detecting critical temperature, or a break in the sensor circuit, the monitor warning relay activates and the warning LED on the monitor is illuminated. Simultaneously an LED flashes on the sensor attached to the over-temperature battery, indicating the source of the fault. Should more than 4 cells exceed critical temperature, the system critical alarm relay activates warning of a serious situation at the battery as a whole.

Product Features

- Monitor individual unit temperatures for thermal runaway conditions
- Simple fail-safe change-over relay alarm interfaces
- Bright LEDs pinpoint individual over-temperature cells
- No special tools required for installation
- Sensor circuit break detection
- Alarm on power supply failure (fail-safe)

Code Compliance

- IFC 2015 - 608.3 - Thermal Runaway
- NFPA 1 - Article 53.3.2 - Thermal Runaway



Typical Connection of Sensors from Main Monitor

Technical Specifications

Alarm Range:	Activation at 35 °C (95 °F), ± 3 °C (5 °F)
Reinstatement Temp:	2 °C (3.5 °F) below activation temperature
Input Voltage:	DC 12V 2-pin connectors or 12V AC/DC wall adapter
Output Relays	(2) SPDT volt-free contact relays Output relay contact ratings: 7A at 240 VAC, 10A at 120 VAC
Dimensions: (L x W x D)	Monitor: 84 x 40 x 77 mm (3.3 x 1.6 x 3 in.) Sensor: 38 x 20 x 10 mm (1.5 x 0.8 x 0.4 in.) Cables: 300 mm (11.8 in.)
Compliance:	IFC 2015 - 608.3, NFPA 1 - Article 53.3.2

Kit Includes

- BTM Monitor
- BTM Sensors
- Installation Cable and Materials
- 12V AC Wall Adapter
- Support Literature

Ordering Information

No.	Model #	Description
1	BTM-Series ⁽¹⁾	Battery Temperature Monitor for up to

¹⁾ Model number varies per number of cells (e.g. BTM-60C for system with 60 cells)