

BTM-Series Battery Temperature/Thermal Runaway Monitor

Model # BTM-Series



BTM-Series Monitor & Sensor

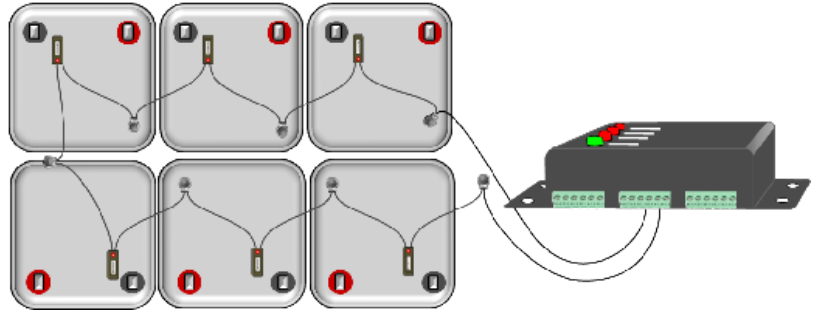
Product Overview

The BTM-Series is a dependable low-cost scalable solution to protecting your batteries against over-temperature and thermal runaway conditions. Individual sensors are quickly and securely attached to each battery jar 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. Several batteries in the vicinity of each other may be connected in series to the same monitor. In the event of one or more jars exceeding critical temperature, or a break in the sensor circuit, the monitor warning relay activates and the warning LED on the monitor is illuminated. Also at the same time an LED flashes on the sensor attached to the over-temperature battery jar, indicating the source of the fault. Should more than 6 jars exceed critical temperature, the system critical alarm relay activates warning of a serious situation in the battery as a whole.

Features

- Low cost monitor for thermal runaway detection
- Monitors individual unit temperatures for thermal runaway conditions
- Ensures compliance with US IFC608.3
- Simple fail-safe change-over relay alarm interfaces (2)
- Bright LEDs pinpoint individual over-temperature jars
- Fast one-wire acid and gas tight IDC connections
- Sensor circuit break detection
- Alarm on power supply failure (fail-safe)



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, 0.1A
Output Relays	(2) SPDT volt-free contact relays
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:	UL, CE

LED Indicators for:

- 1+ Jars critical temperature
- 4+ Jars critical temperature
- Power failure
- Sensor circuit break

Ordering Information

No.	Model #	Description
1	BTM-Series ⁽¹⁾	Battery Temperature Monitor includes (1) monitor and number of sensors per jars / cells

1) Model number varies per number of jars (Ex. BTM-60C for system with 60 jars)