

THERMISTOR PROTECTION TRIP RELAY

PROTECTOR TRIP RELAY

KEY FEATURES

- LED fault indication
- Adjustable nominal voltages, trip points, time delay and differentials
- Compact DIN-rail enclosure
- Power on LED (Green)
- Designed to avoid nuisance tripping

TE Connectivity's (TE) Crompton Instruments Thermistor protector trip relay monitors the temperature of a motor using the PTC sensor (Positive Temperature Coefficient Resistor) or thermostat (TK) switch built into the motor winding. Relay contacts can be used to disconnect the supply to the motor should it overheat. LEDs indicate mains on and fault status.

The Thermistor protector trip relay operates by de-energizing a relay and illuminating a red LED when the thermistor detects a critical temperature condition. When the motor overheats and the PTC resistance goes above the 3.3k ohms, the relays de-energize. The contacts remain de-energized until the PTC resistance falls to 1.8k ohms. The selectable memory switch allows the option of latching the relay and the red LED will stay illuminated until the reset button is pressed or triggered via the external reset switch. Any number of thermistors may be connected in a series providing the resistance is at a normal working temperature or less than 1500 ohms.

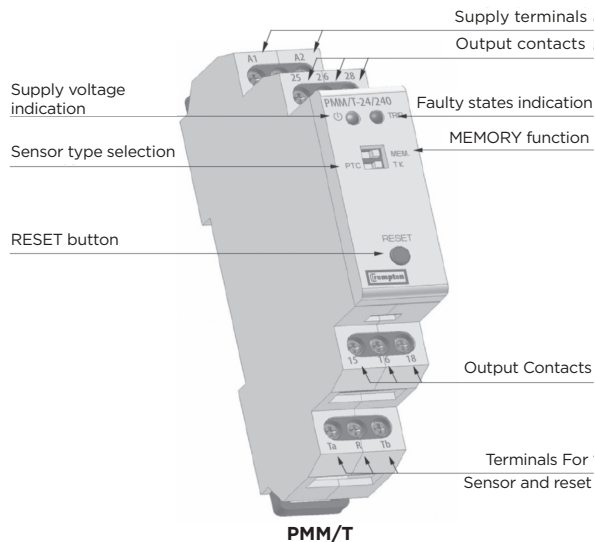
Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

Thermistor Protection Trip Relay

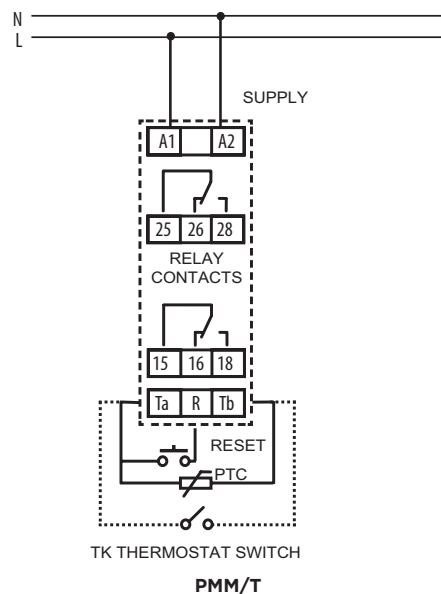


SPECIFICATION	
Technical parameters	PMM/T-24/240
Thermistor type	PTC, TK
System type	Monitoring temperature of motor winding
Supply terminals	A1, A2
Input/thermistor terminals	Ta, Tb
Supply voltage	AC/DC 24-240V (AC 45-65Hz)
Supply voltage burden (max)	2VA max
Supply voltage tolerance	-15/10%
PTC sensor ranges	
Cold	50 Ω - 1.5 kΩ
Lower limit	1.8 kΩ
Upper limit	3.3 kΩ
Sensor failure indication	Red LED flashes
Repetition accuracy (mech)	<5%
Switching error	35%
Temperature dependence	<0.1%/°C
Output relay-contact	2 x change over (AgNi) plated
Output relay-contact terminals	15, 16, 18 & 25, 26, 28
Load capability of relay contact AC	250 V / 8A, max .2 kVA
Load capability of relay contact DC	24V 8A 500mW min
Mechanical life	3x10 ⁶ by rated load
Electrical life (AC1)	7 x 10 ⁶
ANSI no.	49
Operating temperature	-20 + 55°C
Storage temperature	-30 + 70°C
Electric strength (supplying -contact relay)	4 kV / 1min.
Overvoltage category	III.
Pollution degree	2
Enclosure integrity	IP40 from the front panel/IP20 terminals
Enclosure style	DIN-rail, 1 module
Case material	Flame retardant polycarbonate
Connecting conductors profile (mm ²)	max .2 x 1.5 mm ² / 1 x 2.5 mm ²
Dimensions	H 90 x W 17.6 x D 64 mm
Weight	83 g approx
Standards	EN 60255-6, EN 60255-27, EN61000-6-2, EN6100-6-4

PROTECTOR OVERVIEW



CONNECTION



FOR MORE INFORMATION: TE Technical Support Centers

- USA/Canada: +1 800-327-6996
- Brazil: +55 11-2103-6023
- Mexico: +52 55-1106-0800
- South America: +57 1-319-8962
- Benelux: +32 16-508-695
- France: +33 (0) 38-058-3210
- Germany/Switzerland: +49 (0) 89-608-9903
- Italy: +39 335-834-3453
- Middle East/Africa: +971 4-211-7020
- Russia: +7 495-790-790-2-200
- Spain/Portugal: +34 912-681-885
- UK: +44 08708-707-500
- China: +86 400-820-6015

te.com/energy

©2020 TE Connectivity. All Rights Reserved. EPP-3451-DDS-05/20

TE Connectivity, TE connectivity (logo), EVERY CONNECTION COUNTS, AMP, AMPACT, Axicom, Bowthorpe EMP, Crompton Instruments, Raychem, SIMEL, UTILUX are trademarks. Other logos, product and Company names mentioned herein may be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this brochure are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.