

Thermistor Trip Relay

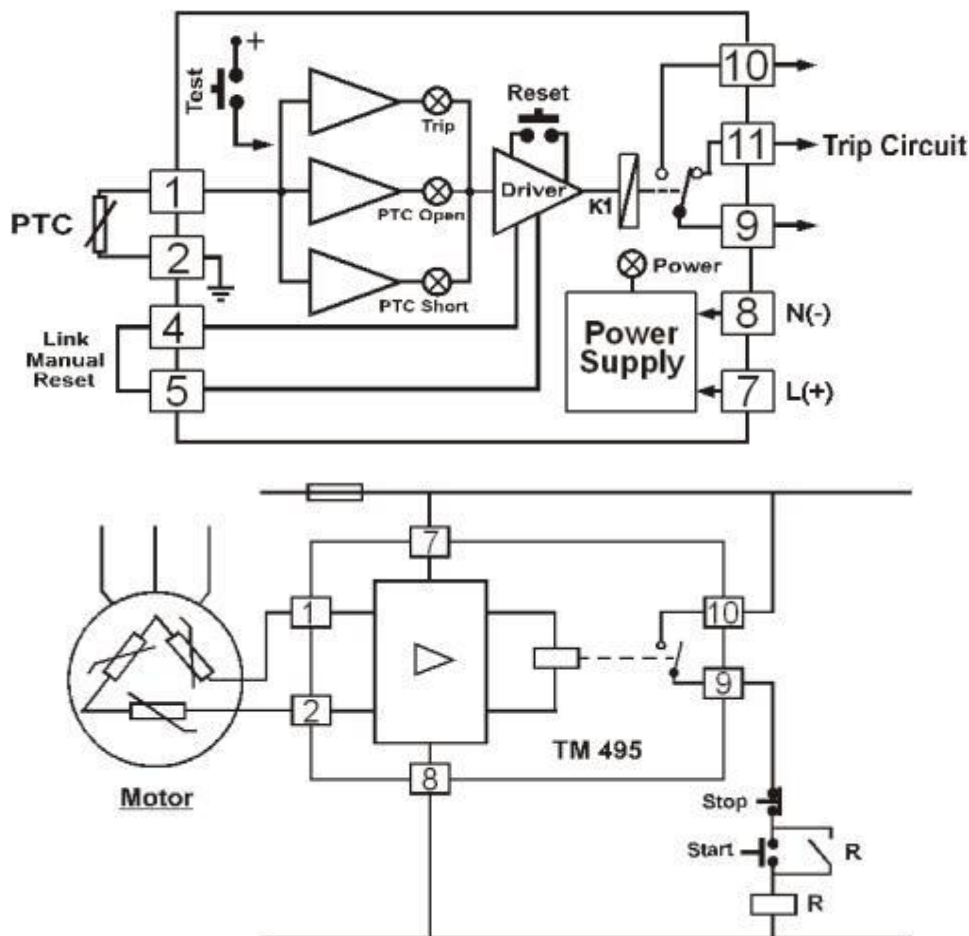
TM495



- Prevents Damage To Motors Or Transformers Caused By High Temperatures
- PTC Thermistor Sensor
- Sensor Fail Detection

Thermistor Trip Relay TM495 This device protects electrical equipment- such as motors and transformers- from damage caused by high temperatures (over-temperature conditions) by operating in conjunction with a PTC thermistor sensor. PTC sensors exhibit low resistance when the temperature is below the nominal operating temperature; however, when the temperature exceeds this threshold, the resistance increases sharply. Since PTC sensors are available in various types based on their nominal operating temperatures, the specific sensor selected determines the temperature at which the relay activates. The TM495 operates as follows:

When the PTC temperature is below the Nominal Operating Temperature (NOT), Relay K1 turns ON; however, when the temperature exceeds the NOT, the relay turns OFF. When the temperature subsequently drops below the NOT, the relay turns ON if the TM495 is in Auto Reset mode; conversely, if it is in Manual Reset mode, the Reset button must be pressed to turn the relay ON. Additionally, the relay will turn OFF if the PTC sensor experiences a short circuit or an open circuit.



Specifications

Thermistor Input

Number of channel: 1 Channel

Input type: PTC Thermistor

Input range: Trip $3200 \Omega \pm 5 \%$,
Reset $2100 \Omega \pm 5 \%$

Mode: Manual or Automatic Reset

Sensor Detection:

Short Circuit $< 50 \Omega$

Open Circuit $> 680 \text{ k}\Omega$

Relay Output

Number of channel: 1 Channels

Relay Type: N.O., N.C.

Contact Rating: 3 A @ 250 VAC

Ordering Information: Specify Power Supply

Example TM495/220VAC

Package Checklist

1. TM495

Power Requirements

Power Supply: 110, 220 VAC

Environmental Limits

Operating Temperature: 0 to 55 °C

Operating Humidity: 5 to 95% RH

Storage Temperature: 0 to 70 °C

Physical Characteristics

Dimension: W50 × H70 × D130 mm.

Mounting: Wall or DIN Rail

Connection: Plug - in 11 pins socket

Warranty

Warranty Period: 5 Year