149 Main St. - Stanhope, New Jersey 07874 - Phone 800-523-9194 - Fax 973-448-1674

# THERMISTOR TRIP



# **SELECTION GUIDE**

M200-TTA Automatic reset M200-TTM Manual reset

# TYPICAL APPLICATIONS

The M200 thermistor trip accepts positive temperature coefficient thermistor inputs. Typically used to monitor temperature in motor windings.

When the thermistor is below its predetermined temperature the resistance is low and the M200-TTA / TTM relay is energised. A green LED indicates the safe condition. When the temperature exceeds the predetermined temperature, the resistance of the thermistor rapidly increases, this increase in temperature is detected by M200-TTA/TTM and the relay is de-energised.

The M200-TTM is manually reset. Once the relay has deenergised it will stay de-energised regardless of the temperature being monitored. The relay can only be reset via the reset push button on the front of the unit. The M200-TTA automatically resets once the temperature has dropped below the trip point

A yellow LED is provided to indicate the condition of the power supply.

# TECHNICAL SPECIFICATION

**INPUT** 

Positive temperature

coefficient thermistors <1500 Ohms max at nominal

temperature. Sensors can be

connected in series but 1500 ohm

must not be exceeded.

Trip point 2500-3500 Ohms

Reset point 1500-2300 Ohms

Total resistance of

sensor loop 1500 Ohms max at nominal

temperature

Differential Fixed 5%

Repeatability Better than 5% of range

RESET

M200-TTA Automatic

M200-TTM Manual via push switch on front

of product

**AUXILIARY** 

*AC Voltage* 115/230/400V

 $\pm 25\% / 45-65Hz / 2VA$ 

*DC Voltage*  $24 \text{ volt } (\pm 20\% / \text{non isolated})$ 

<3 watt

WEIGHT & CASE SIZE Approx. 0.3kg 55mm case

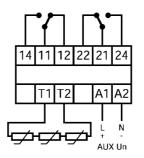
### **ORDERING INFORMATION**

Product Code Aux Freq Options M200-TTA 230V 50Hz

# **OPTIONS**

1. AC auxiliary in the range 57.7 to 480 volts 2. Calibration at temperature other than 23 C

#### CONNECTION DIAGRAMS



M200TTA M200TTM

# **GENERAL SPECIFICATIONS**

#### **ENVIRONMENTAL**

## RELAY OUTPUT

Working temperature Functional temperature Storage temperature Temperature Coefficient Relative humidity Class of climate

**INSULATION** 

HF interference test

Protection class

Test voltage

Impulse test

0 to +60 deg C -25 to + 70 deg C-40 to +85 deg C

0.03% per deg C (3OOppm/ $^{0}$ C) 95% non condensing HSE complying with DIN 40040

-3 complying with VDE/VDJ

4kV RMS 50Hz 1min between

EMC 5kV transient complying

II complying with IEC 348

Input / Case /Auxiliary

with IEC 255-4

3540

Relay type dual pole change over Material Silver / Cadmium Contact resistance 200mOhm max Typically <50m Ohm

250V 5A non resistive 1200VA Rating AC Rating DC 125V 1A resistive 120 watts Electrical lije  $1 \times 10^6$  at above load

 $5 \times 10^6$ Mechanical life

Operating time approx. 7ms (20ms max)

Dielectric strength Between coil and contacts

> 5kV RMS 1min Between open contacts 1kV RMS Imin Between adjacent contacts

1kV RMS imin

with IEC 801 / EN55020 Insulation resistance EHF 2.5kv 1MHz complying Operating temperature Approval

1000M Ohm at 500V DC -30 to + 75 deg CUL and CSA recognised

# APPLIED STANDARDS

IEC 144/BS 5420/VDE/ General

VDI 0435/ IEC 947/

EN60947

Safety BS EN 61010

DIN 57411 / VDE 0411

ANSI C37

Surge withstand IEC 801 / EN 55020

ANSI C37-90a

RFI degree N complies with Radio screening

VDEO87S

EMCEmissions EN50081-2

Immunity EN50082-1

# **ENCLOSURE**

Snap on to DIN rail 35 x7.5 mm Fixing

complies with DIN-EN 50022

BS 5584

Mounting Any position

Enclosure Code Case IP 50/ terminals IP 30

Complies with IEC 529 BS 5490 DIN 40050

Complying with UL 94 VO Material

### **APPROVALS**

U.L. Approval File No E157034

# CASE DIMENSIONS

All Dimensions in mm

