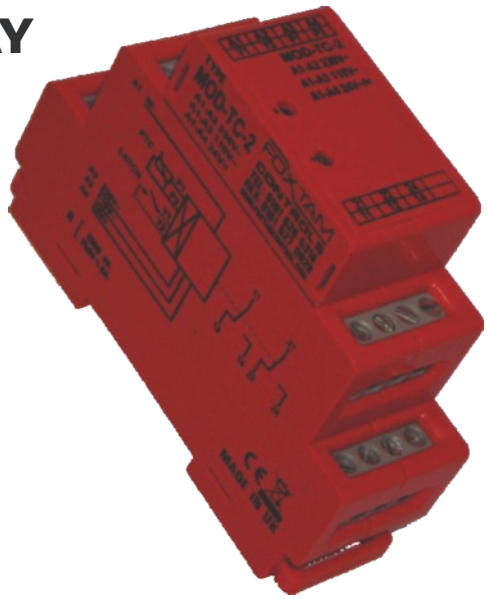
THERMISTOR MONITORING RELAY

TYPE: MOD-TC-2 (dpco)



FEATURES

- Din rail mounted
- Modern modular design
- Width 27mm (1.5 modules)
- DPCO output
- Tri voltage 24VACDC, 110VAC, 230VAC
- Selectable manual or auto reset
- Tri LED status indication
- CE marked

DESCRIPTION & MODE OF OPERATION

An attractive modern designed thermistor relay in a din rail mounted modular style housing of 1.5 modules width (27mm). The units are supply voltage selectable via the connection of different terminals. On the connection of the supply voltage the two LED's illuminate green and the output relay will energise. Should the PTC sensor embedded within the motor windings resistance rise above 3.3 KOhms due to a rise in motor temperature the output relay will de-energise and one of the LED's will illuminate orange. Once tripped the motor temperature would have to cool sufficiently for the resistance to drop below 1.8 KOhms to allow the output relay to re-energise again. The fixed tripping and reset values are industry recognised acceptable values.

Should the input resistance short circuit or go low below 30 Ohms this will be regarded as a fault and will be indicated by one green and one red LED, the output relay will be de-energised. Likewise, should the sensor go open circuit this will be infinity resistance and therefore high which will be indicated by one green and one orange LED, the output relay will be de-energised.

Via terminals Y1 & Y2 a volt free link can be placed thus causing the unit to have a latched function. Once tripped and the input resistance has fallen back below 1.8 KOhms the unit will need to be reset. This can be done by opening the link between Y1 & Y2 manual reset, resetting can also be achieved by removing the supply voltage. Leaving Y1 & Y2 open will result in auto resetting.

All terminal details and information along with the CE mark is clearly marked on the sides of the housing.

SPECIFICATIONS

Supply & Measuring

Supply voltage:	A1 to A2 (230VAC) A1 to A3 (110VAC) A1 to A4 (24VAC) A1 to A4+ (24VDC)
Max power consumption:	11VA
Insulation:	2.5KV 50Hz impulse
Sensor voltage:	Max 2.5VDC (open circuit 12VDC)
Trip level:	3.3 KOhms
Reset level:	1.8 KOhms
Min cold sensor:	30 Ohms

Accuracy

Repeat accuracy:	<0.5%
Temperature dependance:	<0.1% per 1'C

LED indication

2 green LED's:	Healthy & relay energised
1 green & 1 red LED:	Short circuited thermistor or low resistance <30 Ohms, relay de-energised
1 green & 1 orange LED:	Open circuit thermistor or high resistance >3.3 KOhms, relay de-energised

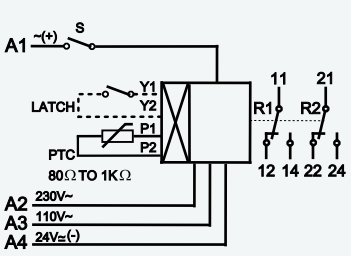
Relay output

Output contacts:	DPCO 8Amps/250V AC1
Mechanical life:	30 Million ops
Electrical life:	200K ops at max rated load

General

Operating temperature:	-20°C to +40°C
Storage temperature:	-20°C to +60°C
Max cable size:	4mm
CE marked	Yes
In accordance with:	EN61000-6-1: 2007 EN61000-6-3: 2007 EN61010-1: 2002
Housing material	Thermo plastic ABS (DIN7728), auto extinguishable according to UL94V0

CONNECTIONS



A1	A2	A3	A4
Y1	Y2	P1	P2

MOD-TC2
A1-A2 230V~
A1-A2 110V~
A1-A4 24V⎓

U

R

21	22	24	
11	12	14