

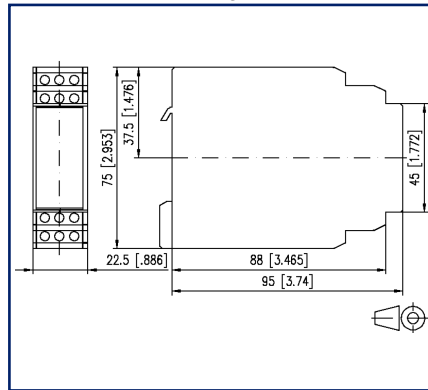
# Data sheet

## TMR-E12 without error memory, 230 V AC, 2 changeover contacts

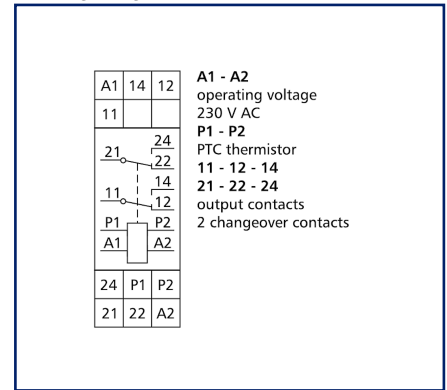
### Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

### Product specification

The thermistor relay is used as protection relay for motors against thermal overload (inadmissible heating). This heating might be caused by mechanical overload on the shaft or when operating the motor with inadmissible voltages. A PTC thermistor is used as sensor. It should be mounted to the part of the motor that heats most in case of overload (e.g. integrated in motor winding). The device can also be used for motors with integrated thermo switch.

- Variant:
- 230 V AC
- 2 changeover contacts (DPST)

## TMR-E12 without error memory, 230 V AC, 2 changeover contacts

P/N

1103150522

EAN 4250184121282

2023/06/20

Version: E

### Technical Data

Supply	
Operating voltage	230 V AC -10% ... +10%
Frequency range	50 ... 60 Hz
Inputs	
Thermistor voltage	12 V
Thermistor current	1 mA
Switch-on resistance	1.8 kOhm
Switch-off resistor	3.0 kOhm +/- 5 %
Outputs	
Contacts	2 changeover contacts
Contact material	AgSnO <sub>2</sub>
Switching voltage (max.)	250 V
Continuous Current	4 A
Pick-up delay	100 ms
Switching frequency	1200 switching cycles/h
Mechanical life	3x10 <sup>7</sup> switching cycles
Electrical life	1x10 <sup>5</sup> switching cycles
Indicator	green and red LED
Insulation coil - contact set	
Nominal voltage of the power supply system	230 / 400 V AC
Overvoltage category	III   II
Degree of pollution	2   2
Rated test voltage	4 kV   2.5 kV
Type of insulation	basic insulation   reinforced insulation
Housing	
Dimensions	
Dimension (W x H x D)	22.5 mm x 75 mm x 95 mm
Dimension (W x H x D)	0.886 in. x 2.953 in. x 3.74 in.
Weight	150 g
Mounting style	Standard rail TH35
Mounting position	any
Apposition	without distance
Connection type	Screw type terminal blocks

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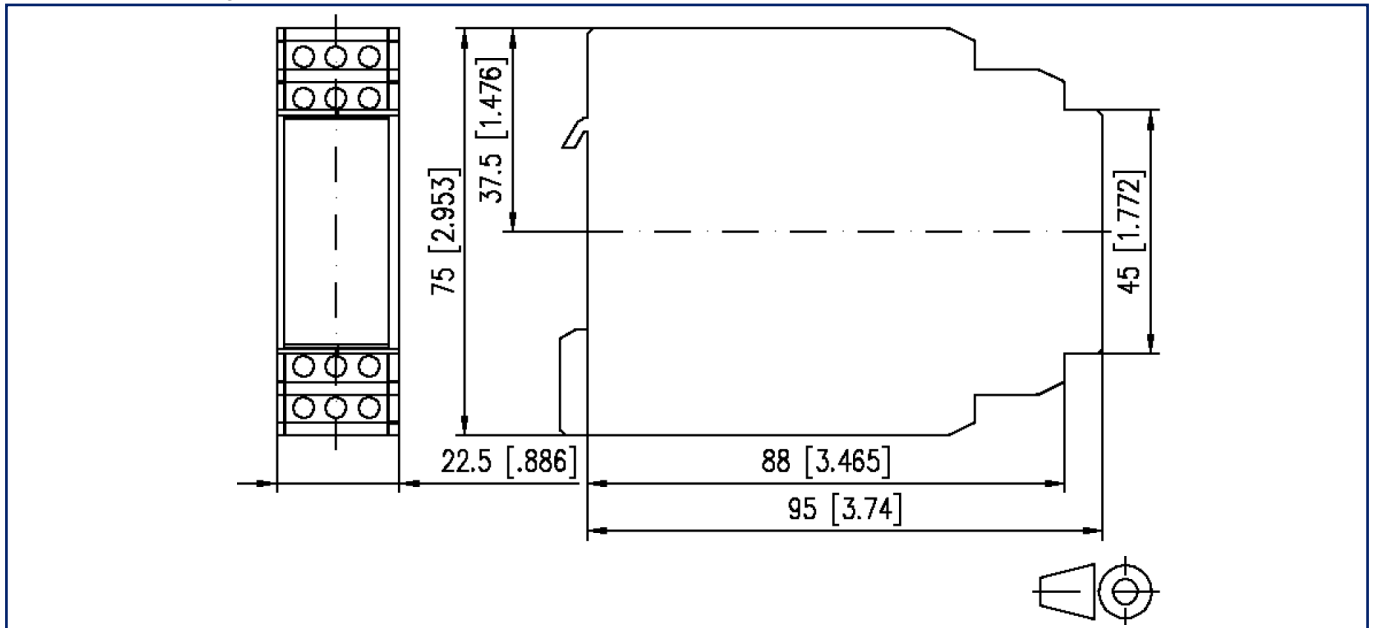
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### Technical Data

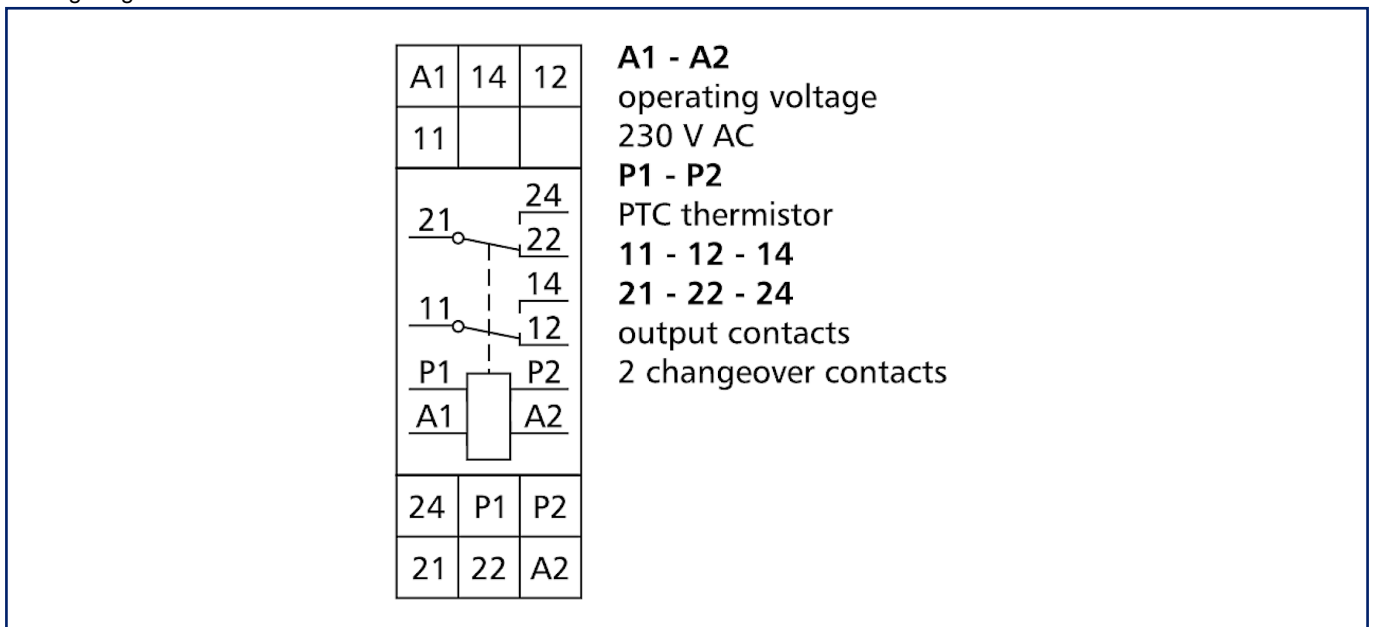
Terminal blocks	
Wire cross section solid	0.2 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / AWG 22-12
Wire cross section multi	0.25 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / AWG 22-12
Wire cross section with wire ferrule	0.25 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / AWG 22-12
Screw torque (max.)	0.5 Nm
Stripping length (min.)	8 mm
Material	
Material - Housing	Polyamid 6.6 V0
Color	gray
Material - Terminal block	Polyamid 6.6 V0
Material - Covers	Polyamid 6.6 V0
Protection category according to IEC 60529	
Protection category - housing (acc. to IEC 60529)	IP40
Protection category - terminal blocks (acc. to IEC 60529)	IP20
Temperature range	
Operating	
Temperature - Operating °C	0 °C - 55 °C
Temperature - Operating °F	32 °F - 131 °F
Storage	
Temperature - Storage °C	-20 °C - 70 °C
Temperature - Storage °F	-4 °F - 158 °F
Classifications	
ETIM 7.0	EC001446
ETIM 8.0	EC001446
ETIM 9.0	EC001446

### Illustrations

Dimensional drawing

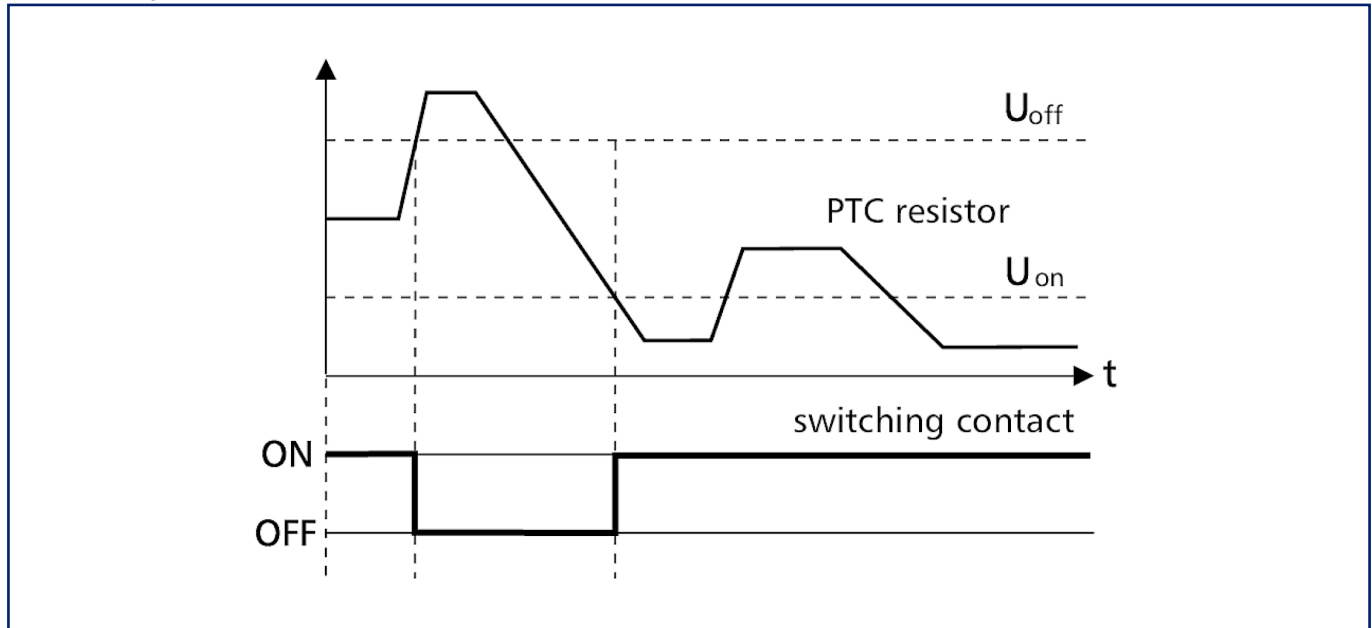


Wiring diagram



**Illustrations**

Function diagram



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