

# Thermistor-Motor Protection Relay Series 8510



- > Screw fastening version
  - robust
  - vibration resistant
  - reliable
- > Corrosion resistant enclosure material
- > Easily accessible connection terminals enable
  - safe connection easy installation
- > Modular technology
  - clear arrangement in the Ex e enclosure
  - flexibly expandable for system modifications



08384E00

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**Normal operation:** If the supply voltage is applied to the terminals A1 / A2, the motor protection is released by means of a potential-free contact and can be actuated now.

Two synchronised contacts are installed in the device.

**Fault:** Due to heating of the resistors (PTC characteristic) within the stator windings, the Thermistor-motor protection relay is triggered as soon as the limit value has been reached.

**Return to normal operation:** Only after the resistor has cooled down, the Thermistor-motor protection relay can be reset to normal operation by means of the S1 button

	ATEX / IECEx					
Zone	0	1	2	20	21	22
For use in		x	x			

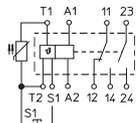
E9

WebCode 8510K

# Thermistor-Motor Protection Relay

## Series 8510

### Selection Table

Version	Schematic	Supply voltage	Order number	Weight kg
Thermistor motor protection relay	 <p>11220E00</p>	AC / DC: 24 ... 240 V	<b>8510/112-05-400-250</b>	1.250

### Explosion Protection

#### Global (IECEX)

Gas	IECEX BVS 07.0029U Ex de IIC Ex de I
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#### Europe (ATEX)

Gas	DMT 00 ATEX E 073 U ⊕ II 2 G Ex de IIC ⊕ I M2 Ex de I
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#### Certifications and certificates

Certificates	IECEX, ATEX, Belarus (operating authorisation)
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### Technical Data

#### Electrical data

Supply voltage	A1 / A2AC / DC: 24 ... 240 V
Rated operational frequency	15 ... 400 Hz
Tolerance for supply voltage	-15 ... +10 %
Duty cycle	100 %
Typical current/power consumption	24 V AC/DC; 33 mA / 0.55 VA
Remote reset	220 - 240 V AC; 11 mA / 1.6 VA
Voltage circuit (open-circuit, short-circuit monitoring)	S1 - T2 (Jumper) automatic reset
Max. no-load voltage	5.5 V
Control circuit	
Maximum switching voltage	250 V
Rated operational current	AC-12: 230 V 4 A AC-15: 230 V 3 A DC-12: 24 V 4 A DC-13: 24 V 2 A
Short-circuit protection	NC 10 A quick gG NO 10 A quick gG
Mechanical service life	30 million switching cycles
Electrical life	100,000 operating cycles

#### Ambient conditions

Ambient temperature	
Storage	-40 ... +85 °C
Operation at U <sub>c</sub>	-20 ... +40 °C

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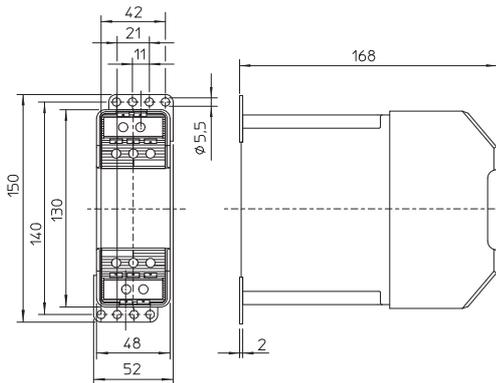
## Series 8510

### Technical Data

#### Mechanical data

Material	
Enclosure material	Epoxy resin
Terminal cover	Polyamide; IP20, finger-contact safety according to IEC/EN 60529
Conductor cross-section	
Auxiliary contacts	0.75 ... 1.5 mm <sup>2</sup> flexible 0.75 ... 2.5 mm <sup>2</sup> solid

#### Dimensional Drawings (All Dimensions in mm) - Subject to Alterations



07852E00

8510/112

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.