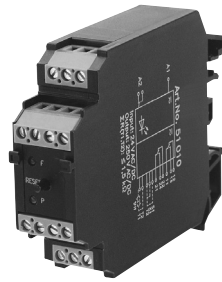


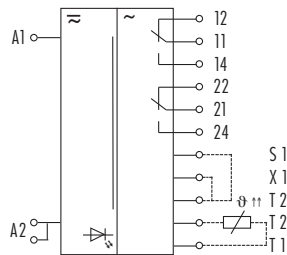
## MCVO Motor protection relay

### RM

motor protection relay  
for monitoring motors  
with an integrated temperature sensor



#### Circuit diagram



#### Ordering data

Art.-No.

Input voltage  
24 V DC

1 relays; 2 C/O contacts

51010

#### Input

Input voltage/ current

24 V DC  $\pm$  10 %/100 mA

Status indicator

green LED

#### Output

Max. switched voltage

250 V AC/DC

Max. contact current

8 A

Min. load current

10 mA

Max. power rating

2000 VA

Contact material

Ag Cd O

De-energize/energize delay

< 80 ms/25 ms

#### Temperature monitoring data

Total cold resistance (between T1 and T2)

$\leq$  1.5 kOhm

Operate (relay de-energize)

2.5...3.6 kOhm

Reset (relay energize)

1.5...2.3 kOhm

Fault indicator

red LED

Reset

with push button or remote reset

Sensor wire short-circuit protection

$\leq$  20 Ohm

#### General data

Mech./elect. life

2 x 10<sup>7</sup>/load dependent

Max. switching frequency

10 Hz

Test isolation voltage

3.75 kV AC

Temperature range

-20...+60 °C

Mounting method

DIN-rail mounting to EN 60715

Dimension

H x W x D

75 x 22.5 x 102 mm

#### Function description

The relay protects and monitors motors temperature sensor to DIN 44081. Temperature resistors will be serial switched and galvanically isolated connected to terminals T1 and T2. Minimal changes of temperature will trip the relay. A red LED shows the fault optically. A bridge link X1/T2 enables fault latching. Via bridge S1/T2, remote resetting can be realised.

#### Notes

Accessories in chapter 3.13