

Monitoring relay- Motor temperature monitoring

Status: **Available** Data sheet created: **23.04.2025**

Item Number: 2100101 - Series: Veo - EAN: 9008662011762



- ✓ Monitoring relays VEO series
- ✓ temperature monitoring (PTC)
- ✓ Short circuit detection
- ✓ supply voltage 230 V AC
- ✓ 1 NO contact
- ✓ width 22,5 mm
- ✓ compact industrial design

Description

Temperature monitoring of the motor winding

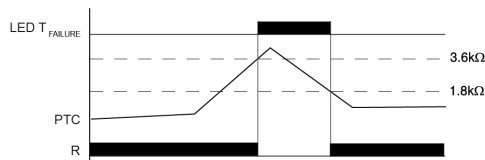
General information

Short description	Motor temperature monitoring, 1 NO contact, 230V AC
Item Number	2100101
EAN	9008662011762
Main category	Monitoring Relays
Series	Veo
Type	V2TF01-E 230V AC
Design	Compact industrial design
Dimensions	22.5 x 67 x 76 mm

Functions and measurands

Amount of functions

1



Temperature monitoring (Temp)

If the PTC summation resistance is less than 3.6 k Ω (normal temperature of the motor) when the supply voltage is applied, the output relay R is energized. If the total resistance rises above 3.6 k Ω , the output relay R drops out. The output relay R picks up again when the PTC summation resistance has fallen below 1.6 k Ω again.

Time ranges

Number Of Areas

1

Setting range

Time ranges

Switch-on delay

fix ca. 50 ms

Shutter delay

-

Indicators

Supply/time lapse 1

Green LED U ON: Supply voltage applied

Error / monitoring function

Red LED TFailure ON: indication overtemperatur

Mechanical design

Housing material

PA 66, self-extinguishing plastic, class V-0

Housing - protection degree

IP40

Terminals/connections

Screw terminal

Terminals - protection degree

IP20

Mounting position

any

Stripping length

8 mm

Max. Tightening Torque

1 Nm

Terminal capacity

- flexible with wire end ferrule 0.5 ... 2.5 mm² (20 AWG ... 13 AWG)
- flexible without ferrule 0.5 ... 4 mm² (20 AWG ... 12 AWG)
- rigid 0.5 ... 4 mm² (20 AWG ... 12 AWG).

Supply circuit

Terminals/connections

A1-A2

Supply voltage a.c.

230 V

Supply voltage tolerance a.c.

-15 / +15 %

Stand-by consumption a.c.

1,1 W / 1,6 VA

Rated frequency [Hz]

50 / 60 Hz

Tolerance of the Frequency

48 ... 63 Hz

Duty cycle

100%

Backup power time

< 8 ms

Recovery time

> 9 ms

Overvoltage category

III (IEC 60947-5-1)

Rated impulse withstand voltage

300 V (IEC 60947-1)



Output circuit

Type	Relay
Contact 1	1 normally open contact
Terminals 1	13-14
Maximum switching voltage	400 V a.c.
Minimum Switch Voltage/Current	12 V / 10 mA
Rated voltage	250 V (IEC 60947-5-1)
Contacts material	AgNi
Fuse Protection	8 A quick
Mechanical life	30 x 10 ⁶ Switching cycles
Electrical life	100 x 10 ³ Switching cycles (AC-1)
Switching frequency	1200/min without load
Switching frequency 2	6/min with load
Overvoltage category	III (IEC 60947-5-1)

Measuring circuit

Measurand	Temperature
-----------	-------------

Accuracy

Base accuracy	± 10 %
Temperature influence	< 0,04 % / °C

Measuring circuit - temperature

Measuring input	T1-T2
Initial resistance	≤ 1,5 kΩ
Response value (relay in off-position)	≥ 3,6 kΩ
Release value (relay in on-position)	≤ 1,6 kΩ
Disconnection (short circuit thermistor)	yes, response value ≤ 20 Ω
Maximum open loop voltage	max. 4 V
Reset	Autoreset
Sensor current	max. 0,5 mA

Ambient conditions and general specifications

Ambient temperature IEC	-25 ... +60°C
Storage temperature	-40 ... +70°C
Relative humidity	5 ... 95 %
Vibration resistance	2 ... 13,2 Hz: 1 mm; 13,2 ... 100 Hz: 7 m/s ² (EN 60947-1)
Shock resistance	150 m/s ² 11 ms (EN 60947-1)
Pollution degree	2, pollution level can be increased by installation in suitable enclosures (according to IEC 60664-1)
Installation altitude	Up to 2000 m above sea level



Logistics

Minimum Quantity	1
Tariff Number	85364900
EAN	9008662011762
Country of Origin	AT
Product Weight (g)	98
Ampel-Status	Grün
ERP-Gesamtbestand	139

Available declarations / conformities

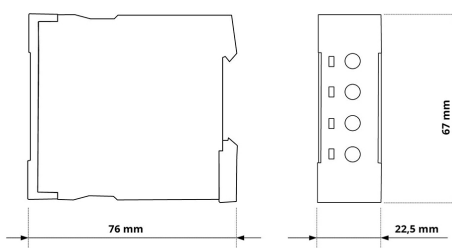
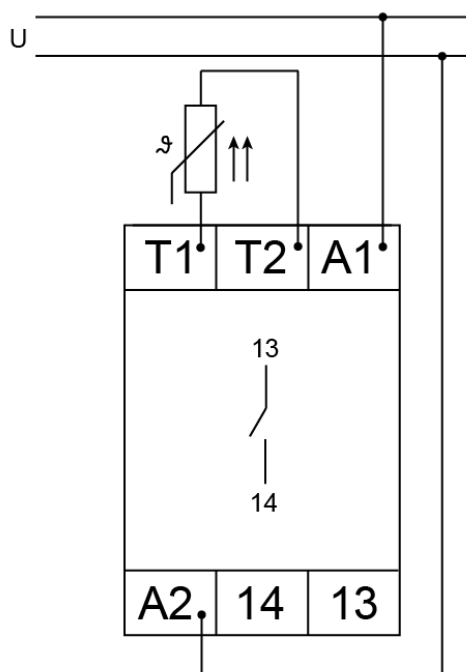
CE	✓
----	---

CAD Files

STEP_V2_en.STEP	Download file
-----------------	-------------------------------



Media & drawings



Tele Haase Steuergeräte Ges.m.b.H

Vorarlberger Allee 38

1230 Vienna

Austria

CALL US



+43 / 1 / 614 74 - 0

ONLINE SUPPORT



support@tele-haase.at

Changes and errors excepted