V2TF01-E 230V AC

Manufacturer data sheet: V1.014

Monitoring relay- Motor temperature monitoring

Status: Available Data sheet created: 23.04.2025

Item Number: 2100101 - **Serie:** 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

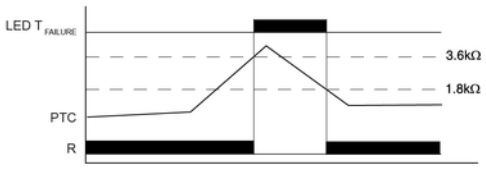
Temperature monitoring of the motor winding

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 (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, the output relay R drops out. The output relay R picks up again when the PTC summation resistance has fallen below 1.6 k 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)

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Output curcuit

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/s² (EN 60947-1)
Shock resistance	150 m/s² 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

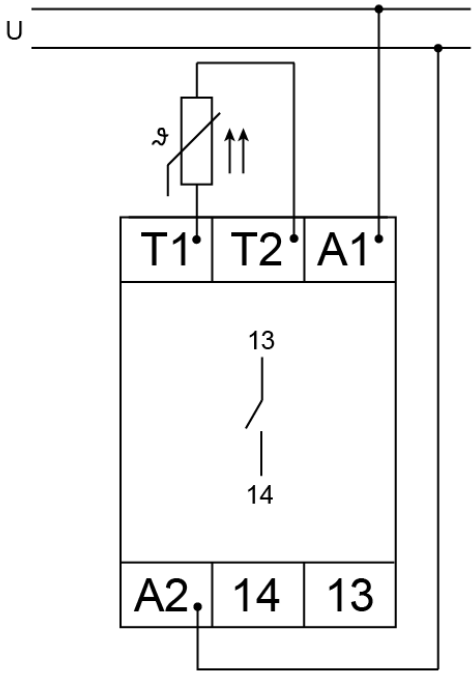
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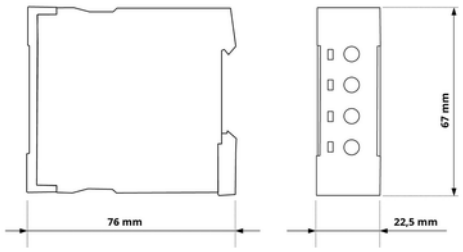
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