V2TF01 24-48V AC/DC

Manufacturer data sheet: V1.014

Monitoring relay- Motor temperature monitoring

Status: Available Data sheet created: 16.06.2025

Item Number: 2100102 - **Serie:** Veo - **EAN:** 9008662017818



- Monitoring relays VEO series
- Temperature monitoring (PTC)
- Short circuit detection
- Supply voltage 24-48 V ACDC
- 1 NO contact
- width 22,5 mm
- compact industrial design

Description

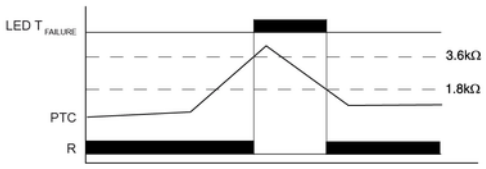
Compact and reliable measurement of voltage, current, cosine phi, temperature or levels.

General information

Short description	Motor temperature monitoring, 1 NO contact, 24-48V AC/DC
Item Number	2100102
EAN	9008662017818
Main category	Monitoring Relays
Series	Veo
Type	V2TF01 24-48V AC/DC
Design	Compact industrial design
Supply	24-48V AC/DC
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. 65 ms
	Shutter delay	-

Indicators

Supply/time lapse 1	Green LED U ON: Supply voltage applied
Error / monitoring function	Temperature monitoring LED TFailure (red) on Display overtemperature

Mechanical design

Housing material	PA 66, self-extinguishing plastic, class V-0
Housing - protection degree	IP40
Mounting	Profile rail TS 35 according to EN60715
Terminals/connections	Screw terminal
Terminals - protection degree	IP20
Mounting position	any
Stripping length	8 mm
Max. Tightening Torque	1 Nm

Supply circuit

Terminals/connections	A1-A2
Supply voltage d.c.	24 ... 48 V
Supply voltage tolerance d.c.	-15% ... +10%
Rated consumption d.c.	48 V d.c. typ. 0,409 W
Supply voltage a.c.	24 ... 48 V
Supply voltage tolerance a.c.	-15% ... +10%
Rated frequency [Hz]	50 / 60 Hz or d.c.
Tolerance of the Frequency	± 10%
Rated consumption a.c.	48 V a.c. typ. 0,431 W / 0,777 VA
Duty cycle	100 %
Backup power time	< 40 ms
Recovery time	100 ms

Output curcuit

Type	Relay
Contact 1	1 normally open contact
Terminals 1	13-14
Maximum switching voltage	400 V a.c.
Rated voltage	250 V (IEC 60947-5-1)
Rated current 1	AC-1 8 A / 250 V
Rated current 3	DC-12 8 A / 30 V
Rated current 2	AC-15 1,5 A / 240 V (B300)
Rated current 4	DC-13 0,27 A /250 V (Q300)
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
Rated surge voltage	1200/min ohne Last
Overvoltage category	III (IEC 60947-5-1)

Measuring circuit

Measurand	Temperature

Accuracy

Base accuracy	± 10 %
Temperature influence	< 0,05 % / °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	3,6 V
Reset	Autoreset
Sensor current	max. 0,25 mA

Ambient conditions and general specifications

Ambient temperature IEC	-25 ... +60°C
Storage temperature	-40 ... +70°C
Relative humidity	5 ... 95 %
Vibration resistance	EN 60947-1 2 ... 13,2 Hz: 1 mm; 13,2 ... 100 Hz: 7 m/s²
Shock resistance	EN 60947-1 150 m/s² 11 ms
Pollution degree	2, pollution level can be increased by installation in suitable enclosures (according to IEC 60947-5-1)
Installation altitude	Up to 2000 m above sea level

Logistics

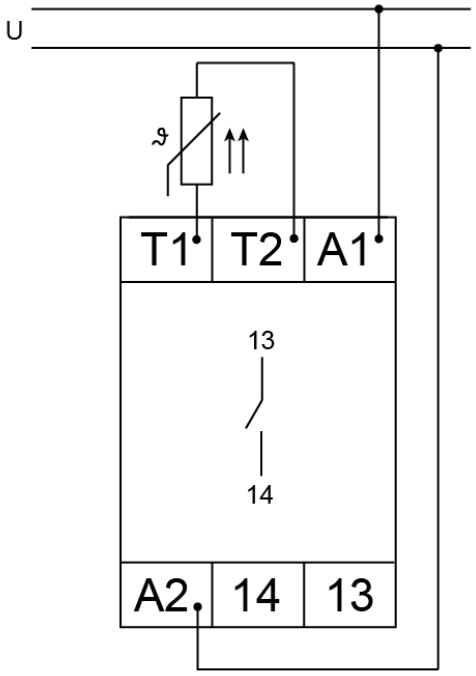
Minimum Quantity	1
Tariff Number	85364900
EAN	9008662017818
Country of Origin	AT
Product Weight (g)	83

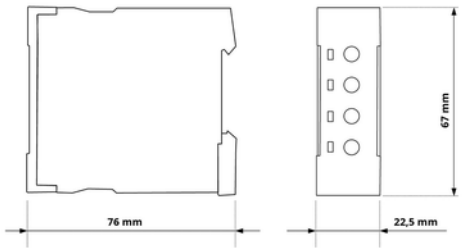
CAD Files

STEP_V2_en.STEP	Download file

Media & drawings







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