269470
EMT6-K

DELIVERY PROGRAM

Product range
EMT6 thermistor overload relay for machine protection

Function
Without manual reset
Mains and fault LED display
Trip with short-circuit in the sensor cable
Test button

Rated operational current [I_e]

AC-15
240 V [I_e]
3 A

AC--14
300 V [I_e]
3 A

AC--14
400 V [I_e]
3 A

AC--14
Value applies starting with release 001.

conventional thermal current [I_{th}]
6 A

Rated control voltage [U_s]
24 - 240 V 50 - 400 Hz
24 - 240 V DC V

Notes

BVS 14 ATEX F003 X

II(2)G [Ex e] [Ex d] [Ex px]

II(2)D [Ex t] [Ex p]

Observe manual MN03407006Z-DE/EN.

Can be snap fitted on a top-hat rail to IEC/EN 60715.

TECHNICAL DATA

General

Standards
IEC/EN 60947, VDE 0660, EN 55011

Climatic proofing
Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclic, to IEC 60068-2-30

Ambient temperature
Open
-25 - +60 °C

Ambient temperature
Enclosed
- 25 - 45 °C

Ambient temperature

Storage
- 45 - 85 °C

Mounting position
As required

Weight
0.15 kg

Mechanical shock resistance half-sinusoidal shock
10 ms to IEC 60068-2-27
10 g

Degree of Protection
IP20

Protection against direct contact when actuated from front (EN 50274)
Finger and back-of-hand proof

Safe isolation to EN 61140
between the contacts
250 V AC

Safe isolation to EN 61140
between contacts and power supply
250 V AC

Auxiliary and control circuits

Rated impulse withstand voltage [U_{imp}]
4000 V AC

Rated impulse withstand voltage [U_{imp}]
6000 V AC

Value applies starting with release 001.

Overvoltage category/pollution degree
III/3

Terminal capacities Auxiliary and control circuits
Solid
1 x (0.5 - 2.5)
2 x (0.5 - 1.5) mm^2

Terminal capacities Auxiliary and control circuits
Flexible with ferrule
1 x (0.5 - 2.5)
2 x (0.5 - 1.5) mm^2

Terminal capacities Auxiliary and control circuits
Solid or stranded
20 - 14 AWG

Terminal screw
M3.5

Tightening torque
1.2 Nm

Tools
Pozidriv screwdriver
2 Size

Tools
Standard screwdriver
1 x 6 mm

Auxiliary power circuit

Rated insulation voltage [U_i]
300 V

Rated insulation voltage [U_i]
400 V

Value applies starting with release 001.

Rated operational current [I_e]
AC--14
Make contact
300 V [I_e]
3 A

Rated operational current [I_e]
AC--14
Make contact
380 V 400 V 415 V [I_e]
3 A

Rated operational current [I_e]
AC--14
Make contact
Value applies starting with release 001.

Rated operational current [I_e]
AC--14
Break contact
300 V [I_e]
3 A

Rated operational current [I_e]
AC--14
Break contact
380 V 400 V 415 V [I_e]
3 A

Rated operational current [I_e]
AC--14
Break contact
Value applies starting with release 001.

Rated operational current [I_e]
AC-15
Make contact
220 V 230 V 240 V [I_e]
3 A

Rated operational current [I_e]
AC-15
Make contact
300 V [I_e]
1 A

Rated operational current [I_e]
AC-15
Make contact
380 V 400 V 415 V [I_e]
1 A

Rated operational current [I_e]
AC-15
Make contact
Value applies starting with release 001.

Rated operational current [I_e]
AC-15
Break contact
220 V 230 V 240 V [I_e]
3 A

Rated operational current [I_e]
AC-15
Break contact
300 V [I_e]
1 A

Rated operational current [I_e]
AC-15
Break contact
380 V 400 V 415 V [I_e]
1 A

Rated operational current [I_e]
AC-15
Break contact
Value applies starting with release 001.

Max. short-circuit protective device
Fuse [gG/gL]
6 A

Control circuit

Rated insulation voltage [U_i]
240 V

Rated operational voltage [U_e]
240 V

Pick-up and drop-out values
0.85 - 1.1 x U_e

Power consumption
AC
3.5 VA

Power consumption
DC
2 W

Trip at approx.
3600 Ω

Recovery at approx.
1600 Ω

Sensor circuit

Sensor circuit parameters at U_S and +20 °C:
max. Cable length to sensor 250m (not insulated)
Total cold resistance $\sum R_K$ □ 1500 Ω
- R_{T1-T2} (T1, T2 shorted): I_{T1-T2} = 1.9 mA
- R_{T1-T2} (4 kΩ): U_{T1-T2} = max. 3 V DC, I_{T1-T2} = max. 0.8 mA
- R_{T1-T2} (T1, T2 open): U_{T1-T2} = 5.1 V DC typ. (5.5 V DC max.)

Electromagnetic compatibility (EMC)

Electrostatic discharge (ESD)
applied standard
IEC/EN 61000-4-2

Electrostatic discharge (ESD)
Air discharge
8 kV

Electrostatic discharge (ESD)
Contact discharge
6 kV

Electromagnetic fields (RFI)
applied standard
IEC/EN 61000-4-3

Electromagnetic fields (RFI)
80 - 1000 MHz: 10
1.4 - 2 GHz: 3
2.0 - 2.7 GHz: 1 V/m

Radio interference suppression
EN 55011
Class B

Burst
Supply cables: 2
Signal cables: 1
according to IEC/EN 61000-4-4 kV

power pulses (Surge)
2 kV (symmetrical)
4 kV (asymmetrical)
according to IEC/EN 61000-4-5

Immunity to line-conducted interference to (IEC/EN 61000-4-6)
10 V

DESIGN VERIFICATION AS PER IEC/EN 61439

Rated operational current for specified heat dissipation [I_n]
0 A

Heat dissipation per pole, current-dependent [P_{vid}]
0 W

Equipment heat dissipation, current-dependent [P_{vid}]
0 W

Static heat dissipation, non-current-dependent [P_{vs}]
0.8 W

Heat dissipation capacity [P_{diss}]
0 W

Operating ambient temperature min.
-25 °C

Operating ambient temperature max.
+60 °C

TECHNICAL DATA ETIM 7.0

Relays (EG000019) / Temperature monitoring relay (EC001446)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Temperature monitoring equipment (ecl@ss10.0.1-27-37-18-10 [AKF104014])

Type of electric connection
Screw connection

Rated control supply voltage Us at AC 50HZ
24 - 240 V

Rated control supply voltage Us at AC 60HZ
24 - 240 V

Rated control supply voltage Us at DC
24 - 240 V

Voltage type for actuating
AC/DC

With detachable clamps
No

Number of measuring circuits
1

Error registration possible
No

External reset possible
No

Number of contacts as normally closed contact
1

Number of contacts as normally open contact
1

Number of contacts as change-over contact
0

Temperature measuring range
0 - 0 °C

Resistance measuring range
750 - 12000 Ohm

Width
23 mm

Height
84 mm

Depth
104 mm

APPROVALS

Product Standards
UL 508; CSA-C22.2 No. 14; IEC/EN 60947-8; CE marking

UL File No.
E29184

UL Category Control No.
NKCR

CSA File No.
12528

CSA Class No.
3211-03

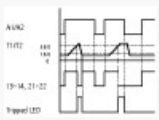
North America Certification
UL listed, CSA certified

Specially designed for North America
No

Max. Voltage Rating
600 V AC

Degree of Protection
IEC: IP20, UL/CSA Type: -

CHARACTERISTICS



DIMENSIONS

Applies to release 001 and higher