Product specifications

Eaton 014432

Catalog Number: 014432

Eaton Moeller® series ZE Overload relay, Ir= 1 - 1.6 A, 1 N/O, 1 N/C, Direct mounting

General specifications

Product Name
Eaton Moeller® series ZE Thermal overload relay

Catalog Number
014432

Model Code
ZE-1,6

EAN
4015080144328

Product Length/Depth
52 mm

Product Height
65 mm

Product Width
45 mm

Product Weight
0.075 kg

Certifications
CSA-C22.2 No. 14
UL
IEC/EN 60947-4-1
UL Category Control No.: NKCR
CSA Class No.: 3211-03
IEC/EN 60947
UL 508
CSA
CSA File No.: 012528
CE
IEC/EN 60947-5-1
UL File No.: E29184
VDE 0660

Product specifications

Rated operational current for specified heat dissipation (In)

1.6 A

Terminal capacity (flexible with ferrule)

2 x (0.5 - 1.5) mm², Main cables

1 x (0.5 - 1.5) mm², Control circuit cables

1 x (0.5 - 1.5) mm², Main cables

10.11 Short-circuit rating

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

Stripping length (control circuit cable)

8 mm

Ambient operating temperature (enclosed) - min

-25 °C

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.12 Electromagnetic compatibility

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

Mounting method

Direct mounting

Direct attachment

10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

Stripping length (main cable)

8 mm

Ambient operating temperature (enclosed) - max

40 °C

Reset function

Automatic

Push-button

Short-circuit current rating (basic rating)

5 kA, SCCR (UL/CSA)

6 A, max. Fuse, SCCR (UL/CSA)

15 A, max. CB, CB for max. 480 V, SCCR (UL/CSA)

10.8 Connections for external conductors

Is the panel builder's responsibility.

Resources

Catalogs

Product Range Catalog Switching and protecting motors

Certification reports

DA-DC-00004328.pdf

Characteristic curve

eaton-tripping-ze-overload-relay-characteristic-curve-006.eps

eaton-tripping-ze-overload-relay-characteristic-curve.eps

Declarations of conformity

DA-DC-00004858.pdf

DA-DC-00004839.pdf

Drawings

eaton-tripping-devices-ze-overload-relay-dimensions.eps

eaton-tripping-devices-overload-relay-ze-overload-relay-dimensions.eps

eCAD model

ETN.ZE-1,6

Installation instructions

IL03407007Z

Manuals and user guides

eaton-motor-protective-relay-ze-overload-monitoring-exe-manual-mn03407003z-de-de-en-us.pdf

mCAD model

DA-CD-ze

DA-CS-ze

Wiring diagrams

eaton-tripping-devices-overload-relay-zb-overload-relay-wiring-diagram.eps

eaton-general-release-zeb-overload-relay-wiring-diagram.eps

Screw size

M3.5, Terminal screw

Adjustable current range - min

1 A

Protection

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

Ambient operating temperature - max

50 °C

Climatic proofing

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

Features

Phase-failure sensitivity (according to IEC/EN 60947, VDE 0660 Part 102)
Reset pushbutton manual/auto
Trip-free release
Test/off button

Static heat dissipation, non-current-dependent Pvs

0 W

Rated operational current (Ie) at AC-15, 500 V

0.5 A

Electrical connection type of main circuit

Screw connection

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

Ambient operating temperature - min

-25 °C

10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

Safe isolation

250 V AC, Between auxiliary contacts, According to EN 61140
300 V AC, Between auxiliary contacts and main contacts, According to EN 61140
300 V AC, Between main circuits, According to EN 61140

Rated operational current (Ie) at AC-15, 220 V, 230 V, 240 V

1.5 A

Class

CLASS 10 A

10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

Number of contacts (normally closed contacts)

1

10.3 Degree of protection of assemblies

Does not apply, since the entire switchgear needs to be evaluated.

Rated operational current (Ie) at AC-15, 380 V, 400 V, 415 V

0.7 A

Heat dissipation per pole, current-dependent Pvid

1.7 W

Switching capacity (auxiliary contacts, general use)

0.6 A, 600V AC, (UL/CSA)
1.5 A, 240V AC, (UL/CSA)

Product category

ZE overload relays for mini contactor relays

Overload release current setting - min

1 A

Rated operational current (Ie) at DC-13, 60 V

0.75 A

Equipment heat dissipation, current-dependent Pvid

5.1 W

Heat dissipation capacity Pdiss

0 W

Suitable for

Branch circuits, (UL/CSA)

Temperature compensation

≤ 0.25 %/K, residual error for T > 40°
Continuous

Terminal capacity (solid)

1 x (0.75 - 2.5) mm², Main cables

1 x (0.75 - 2.5) mm², Control circuit cables

2 x (0.75 - 2.5) mm², Control circuit cables

Number of auxiliary contacts (normally closed contacts)

1

10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects

Meets the product standard's requirements.

Rated operational current (Ie) at DC-13, 220 V, 230 V

0.2 A

Conventional thermal current ith of auxiliary contacts (1-pole, open)

6 A

Overload release current setting - max

1.6 A

Terminal capacity (solid/stranded AWG)

18 - 14, Main cables

2 x (18 - 12), Control circuit cables

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

Degree of protection

IP20

Overvoltage category

III

Number of auxiliary contacts (change-over contacts)

0

Pollution degree

3

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

Rated impulse withstand voltage (Uimp)

4000 V (auxiliary and control circuits)

6000 V AC

10.10 Temperature rise

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

Adjustable current range - max

1.6 A

Screwdriver size

2, Terminal screw, Pozidriv screwdriver

0.8 x 5.5 mm, Terminal screw, Standard screwdriver

Rated operational current (Ie) at AC-15, 120 V

1.5 A

10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2.7 Inscriptions

Meets the product standard's requirements.

Number of contacts (normally open contacts)

1

Short-circuit protection rating

6 A gG/gL, Fuse, Type “2” coordination

20 A gG/gL, Fuse, Type “1” coordination

Max. 4 A gG/gL, Fuse, Auxiliary contacts

Number of auxiliary contacts (normally open contacts)

1

Rated operational current (Ie) at DC-13, 110 V

0.4 A

Rated operational voltage (Ue) - max

690 V

Shock resistance

10 g, Mechanical, Sinusoidal, Shock duration 10 ms

Rated operational current (Ie) at DC-13, 24 V

0.9 A

Switching capacity (auxiliary contacts, pilot duty)

D300, AC operated (UL/CSA)

R300, DC operated (UL/CSA)

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Dublin 4, Ireland
Eaton.com

Eaton.com/socialmedia