

Eaton 278454

Catalog Number: 278454

Eaton Moeller® series ZB Overload relay, ZB32, Ir= 24 - 32 A, 1 N/O, 1 N/C, Direct mounting, IP20

General specifications



Fotografia este reprezentativa

Product Name

Eaton Moeller® series ZB Thermal overload relay

Catalog Number

278454

EAN

4015082784546

UPC

782116358816

Product Length/Depth

96 mm

Product Height

67 mm

Product Width

45 mm

Product Weight

0.141 kg

Certifications

CSA Class No.: 3211-03

UL

IEC/EN 60947-4-1

UL 60947-4-1

UL Category Control No.: NKGR

CSA

CSA File No.: 012528

CE

IEC/EN 60947

UL File No.: E29184

CSA-C22.2 No. 60947-4-1-14

VDE 0660

Model Code

ZB32-32

Features & Functions

Features

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

General

Ambient operating temperature - min

-25 °C

Ambient operating temperature - max

55 °C

Ambient operating temperature (enclosed) - min

-25 °C

Ambient operating temperature (enclosed) - max

40 °C

Class

CLASS 10 A

Climatic proofing

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

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

Degree of protection

IP20

Frame size

ZB32

Mounting method

Direct attachment

Direct mounting

Overload release current setting - min

24 A

Overload release current setting - max

32 A

Overvoltage category

III

Pollution degree

3

Product category

Accessories

Overload relay ZB up to 150

A

Protection

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

Rated impulse withstand voltage (Uimp)

4000 V (auxiliary and control circuits)

6000 V AC

Shock resistance

10 g, Mechanical, Sinusoidal, Shock duration 10 ms

Suitable for

Branch circuits, (UL/CSA)

Temperature compensation

Continuous

$\leq 0.25\%/K$, residual error for $T > 40^\circ$

Terminal capacities

Terminal capacity (flexible with ferrule)

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

1 x (1 - 4) mm², Main cables

2 x (1 - 4) mm², Main cables

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

Terminal capacity (solid)

2 x (0.75 - 4) mm², Control circuit cables

1 x (0.75 - 4) mm², Control circuit cables

1 x (1 - 6) mm², Main cables

2 x (1 - 6) mm², Main cables

Terminal capacity (solid/stranded AWG)

2 x (18 - 14), Control circuit cables

18 - 8, Main cables

Stripping length (main cable)

10 mm

Stripping length (control circuit cable)

8 mm

Screw size

M3.5, Terminal screw, Control circuit cables

M4, Terminal screw

Screwdriver size

1 x 6 mm, Terminal screw, Standard screwdriver

2, Terminal screw, Pozidriv screwdriver

Tightening torque

1.8 Nm, Screw terminals, Main cables

1.2 Nm, Screw terminals, Control circuit cables

Electrical rating

Conventional thermal current I_{th} of auxiliary contacts (1-pole, open)

6 A

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

1.5 A

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

1.5 A

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

0.9 A

Short-circuit rating

Short-circuit current rating (high fault at 600 V)

100 kA, Fuse, SCCR (UL/CSA)

60 A, Class J, max. Fuse, SCCR (UL/CSA)

Short-circuit protection rating

125 A gG/gL, Fuse, Type "1" coordination

63 A gG/gL, Fuse, Type "2" coordination

Max. 6 A gG/gL, fuse, Without welding, Auxiliary and control circuits

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

0.4 A

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

0.2 A

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

0.9 A

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

0.75 A

Rated operational voltage (Ue) - max

690 V

Safe isolation

440 V, Between auxiliary contacts and main contacts, According to EN 61140

240 V AC, Between auxiliary contacts, According to EN 61140

440 V AC, Between main circuits, According to EN 61140

Switching capacity (auxiliary contacts, pilot duty)

B300 at opposite polarity, AC operated (UL/CSA)

R300, DC operated (UL/CSA)

B600 at opposite polarity, AC operated (UL/CSA)

Voltage rating - max

600 VAC

Contacts

Number of auxiliary contacts (change-over contacts)

0

Number of auxiliary contacts (normally closed contacts)

1

Number of auxiliary contacts (normally open contacts)

1

Number of contacts (normally closed contacts)

1

Number of contacts (normally open contacts)

1

Design verification

Equipment heat dissipation, current-dependent Pvid

6 W

Heat dissipation capacity Pdis

0 W

Heat dissipation per pole, current-dependent Pvid

2 W

Rated operational current for specified heat dissipation (In)

32 A

Static heat dissipation, non-current-dependent Pvs

0 W

10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

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.

10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2.5 Lifting

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

10.2.6 Mechanical impact

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

10.2.7 Inscriptions

Meets the product standard's requirements.

10.3 Degree of protection of assemblies

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

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.5 Protection against electric shock

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

10.6 Incorporation of switching devices and components

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

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

10.8 Connections for external conductors

Is the panel builder's responsibility.

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

10.10 Temperature rise

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

10.11 Short-circuit rating

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

10.12 Electromagnetic compatibility

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

10.13 Mechanical function

Resurse

Characteristic curve

[eaton-tripping-devices-zb-overload-relay-characteristic-curve-004.eps](#)

Instrucțiuni de instalare

[IL03407015Z](#)

[IL03407195Z](#)

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



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