Specifications

Eaton 052448

Catalog Number: 052448

Eaton Moeller® series ZW7 Current transformer-operated overload relay, 190-290A, 1N/O+1N/C



General specifications

Product Name
Eaton Moeller® series ZW7 Current transformer-operated overload relay

Catalog Number
052448

EAN
4015080524489

Product Length/Depth
162.5 mm

Product Height
97 mm

Product Width
200.5 mm

Product Weight
0.622 kg

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

Catalog Notes
Rated operational current: Switch-on and switch-off conditions based on DC-13, time constant as specified.

Powering Business Worldwide

Product specifications

Features

Test/off button

Reset pushbutton manual/auto

Protection with heavy starting duty

Trip-free release

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

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

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.

Resources

Catalogs

eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf

Product Range Catalog Switching and protecting motors

Characteristic curve

eaton-tripping-devices-zw7-characteristic-curve-002.eps

eaton-tripping-devices-tripping-characteristic-zw7-characteristic-curve.eps

Declarations of conformity

DA-DC-00004847.pdf

DA-DC-00004857.pdf

Drawings

eaton-tripping-devices-current-zw7-dimensions.eps

eaton-tripping-devices-current-zw7-dimensions-002.eps

eaton-tripping-devices-current-zw7-3d-drawing.eps

eCAD model

ETN.ZW7-290

Installation instructions

IL03407129Z2017_08

IL04210001Z

mCAD model

DA-CD-zw7

DA-CS-zw7

Wiring diagrams

eaton-tripping-devices-circuit-zw7-wiring-diagram.eps

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.

Pollution degree

3

Class

Other

Opening diameter

27 mm

Climatic proofing

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

Rated impulse withstand voltage (Uimp)

8000 V AC
4000 V (auxiliary and control circuits)

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

1.5 A

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

0.9 A

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 current for specified heat dissipation (In)

290 A

Static heat dissipation, non-current-dependent Pvs

0 W

Stripping length (control circuit cable)

8 mm

Voltage rating - max

600 VAC

Product category

ZW7 current transformer-operated overload relays

Protection

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

Adjustable current range - max

290 A

Adjustable current range - min

190 A

Ambient operating temperature - max

50 °C

Ambient operating temperature - min

-25 °C

Ambient operating temperature (enclosed) - max

40 °C

Ambient operating temperature (enclosed) - min

25 °C

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

6 A

Equipment heat dissipation, current-dependent Pvid

7.2 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

2.4 W

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

Overload release current setting - max

290 A

Overload release current setting - min

190 A

Rated operational voltage (Ue) - max

690 V

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

1.5 A

Electrical connection type of main circuit

Screw connection

Reset function

Automatic

Push-button

Screwdriver size

1 x 6 mm, Terminal screw, Control circuit cables, Standard screwdriver

2, Terminal screw, Pozidriv screwdriver

Mounting position

As required

Mounting method

Separate positioning

Separate mounting

Degree of protection

IP00

Overvoltage category

III

Safe isolation

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

Screw size

M3.5, Terminal screw

Shock resistance

10 g, Mechanical, Sinusoidal, Shock duration 10 ms

Short-circuit protection

With overload relay in conjunction with a transformer as required for the contactor, Max. Fuse, Main conducting paths

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)

Short-circuit protection rating

Max. 6 A gG/gL, Fuse, Auxiliary contacts

Suitable for

Branch circuits, (UL/CSA)

Temperature compensation

Continuous

Terminal capacity (flexible with ferrule)

2 x (0.75 - 2.5) mm²
1 x (0.75 - 2.5) mm²

Terminal capacity (solid)

2 x (0.75 - 4) mm²
1 x (0.75 - 4) mm²

Terminal capacity (solid/stranded AWG)

2 x (18 - 14)

Tightening torque

1.2 Nm, Screw terminals, Control circuit cables

Rated frequency - min

50 Hz

Rated frequency - max

60 Hz



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