Specifications

# Eaton 050075



## Catalog Number: 050075

Eaton Moeller® series ZW7 Current transformer-operated overload relay, 420-630A, 1N/O+1N/C

### General specifications

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

**Catalog Number**
050075

**EAN**
4015080500759

**Product Length/Depth**
162.5 mm

**Product Height**
97 mm

**Product Width**
200.5 mm

**Product Weight**
0.64 kg

**Certifications**
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

Protection with heavy starting duty

Test/off button

Trip-free release

Reset pushbutton manual/auto

### 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

Product Range Catalog Switching and protecting motors

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

### Characteristic curve

eaton-tripping-devices-zw7-characteristic-curve-005.eps

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

### Declarations of conformity

DA-DC-00004857.pdf

DA-DC-00004847.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

DA-CE-ETN.ZW7-630

### Installation instructions

IL03407132Z

IL04210001Z

### mCAD model

DA-CS-zw7

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

### 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)

630 A

Static heat dissipation, non-current-dependent Pvs

0 W

Stripping length (control circuit cable)

8 mm

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

630 A

Adjustable current range - min

420 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

8.1 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

2.7 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

630 A

Overload release current setting - min

420 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

2, Terminal screw, Pozidriv screwdriver

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

Mounting position

As required

Mounting method

Separate positioning

Separate mounting

Degree of protection

IP00

Overvoltage category

III

### Safe isolation

440 V AC, 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

### 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)

B600 at opposite polarity, AC operated (UL/CSA)
R300, DC operated (UL/CSA)
B300 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




Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

© 2024 Eaton. All Rights Reserved.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.



Eaton.com/socialmedia