# Eaton 027076

### Catalog Number: 027076

Eaton Moeller® series T0 Step switches, T0, 20 A, service distribution board mounting, 1 contact unit(s), Contacts: 2, 45 °, maintained, With 0 (Off) position, 0-2, Design number 8240

#### General specifications



Eaton Moeller® series T0 Step switch

Product Length/Depth

82 mm

**Product Width** 

54 mm

Certifications

CSA

IEC/EN 60947-3 UL 60947-4-1

CSA Class No.: 3211-05

IEC/EN 60204 IEC/EN 60947

UL Category Control No.: NLRV

ш

CSA File No.: 012528 UL File No.: E36332 CSA-C22.2 No. 94

CE

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

**VDE 0660** 

Catalog Number

027076

**Product Height** 

55 mm

**Product Weight** 

0.106 kg

**Catalog Notes** 

Rated Short-time Withstand Current

(Icw) for a time of 1 second

EAN

4015080270768

Model Code

T0-1-8240/IVS





Photo is representative



#### defaultTaxonomyAttributeLabel

#### Type

Step switch

#### Actuator function

Maintained

With 0 (Off) position

#### 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

#### **Brochures**

Brochure - T Rotary Cam switch and P Switch-disconnector

#### Catalogues

P Switch-disconnectors and T Rotary cam switches catalogue CA042001EN

#### Declarations of conformity

DA-DC-00004927.pdf

DA-DC-00004895.pdf

#### **Drawings**

eaton-rotary-switches-mounting-t0-step-switch-dimensions-002.eps
eaton-rotary-switches-mounting-t0-step-switch-dimensions.eps
eaton-rotary-switches-front-plate-t0-step-switch-symbol-008.eps
eaton-rotary-switches-mounting-t0-changeover-switch-3d-drawing.eps
eaton-general-rotary-switch-t0-step-switch-symbol-005.eps

#### eCAD model

DA-CE-ETN.TO-1-8240\_IVS

#### Installation instructions

IL03801006Z

#### Installation videos

Eaton's P Switch-disconnectors used in a factory

#### mCAD model

DA-CD-t0\_1\_ivs

DA-CS-t0\_1\_ivs

#### Wiring diagrams

eaton-rotary-switches-switch-t0-step-switch-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.

#### Fitted with:

0 (off) position

Black thumb grip and front plate

#### Operating frequency

1200 Operations/h

#### Pollution degree

3

#### Climatic proofing

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

#### Rated impulse withstand voltage (Uimp)

6000 V AC

#### Rated uninterrupted current (Iu)

20 A

#### Static heat dissipation, non-current-dependent Pvs

0 W

#### Switching angle

45 °
Voltage per contact pair in series 60 V
Width in number of modular spacings 4
Product category Control switches
Number of poles Single-pole
Rated operational power at AC-3, 500 V, 50 Hz 5.5 kW
Device construction  Built-in device
Switch type Level switch
Rated short-time withstand current (lcw) 320 A, Contacts, 1 second
Actuator type Toggle
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
Assigned motor power at 115/120 V, 60 Hz, 1-phase 0.5 HP
Assigned motor power at 200/208 V, 60 Hz, 1-phase 1 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase 3 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase 1.5 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase 3 HP

Assigned motor power at 460/480 V, 60 Hz, 3-phase 7.5 HP Assigned motor power at 575/600 V, 60 Hz, 3-phase 7.5 HP Equipment heat dissipation, current-dependent Pvid 0 W Mounting position As required Mounting method Service distribution board mounting Rated conditional short-circuit current (Iq) 6 kA Degree of protection IP30 Overvoltage category Ш Control circuit reliability 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) Degree of protection (front side) IP65 NEMA 12 Number of contacts 2 Suitable for Distribution board installation Ground mounting Branch circuits, suitable as motor disconnect, (UL/CSA) Heat dissipation capacity Pdiss 0 W Heat dissipation per pole, current-dependent Pvid 0.6 W Number of contact units 1 Number of contacts in series at DC-21A, 240 V Number of contacts in series at DC-23A, 120 V

```
Number of contacts in series at DC-23A, 24 V
Number of contacts in series at DC-23A, 240 V
5
Front shield size
48x48 mm
Safe isolation
440 V AC, Between the contacts, According to EN 61140
Screw size
M3.5, Terminal screw
Inscription
0-2
Number of steps
2 (45°)
Shock resistance
15 g, Mechanical, According to IEC/EN 60068-2-27, Half-
sinusoidal shock 20 ms
Lifespan, mechanical
400,000 Operations
Number of switch positions
3
Load rating
1.6 \times I_e (with intermittent operation class 12, 40 % duty
1.3 x I<sub>e</sub> (with intermittent operation class 12, 60 % duty
factor)
2 x I<sub>e</sub> (with intermittent operation class 12, 25 % duty factor)
Switching capacity (auxiliary contacts, general use)
10A, IU, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)
A600 (UL/CSA)
P300 (UL/CSA)
Number of contacts in series at DC-23A, 48 V
Number of contacts in series at DC-23A, 60 V
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)
100 A
```

```
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)
110 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)
80 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)
60 A
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)
130 A
Rated operating voltage (Ue) at AC - max
690 V
Rated operational current (le) at AC-21, 440 V
20 A
Rated operational current (le) at AC-23A, 230 V
13.3 A
Rated operational current (le) at AC-23A, 400 V, 415 V
13.3 A
Rated operational current (le) at AC-23A, 500 V
13.3 A
Rated operational current (le) at AC-23A, 690 V
7.6 A
Rated operational current (le) at AC-3, 220 V, 230 V, 240 V
11.5 A
Rated operational current (le) at AC-3, 380 V, 400 V, 415 V
11.5 A
Rated operational current (le) at AC-3, 500 V
9 A
Rated operational current (le) at AC-3, 660 V, 690 V
4.9 A
Rated operational current (le) at DC-1, load-break switches I/r = 1
ms
10 A
Rated operational current (le) at DC-13, control switches L/R =
50 ms
10 A
Rated operational current (le) at DC-21, 240 V
1 A
Switching capacity (main contacts, general use)
16 A, Rated uninterrupted current max. (UL/CSA)
```

Safety parameter (EN ISO 13849-1) B10d values as per EN ISO 13849-1, table C.1 Rated operational current (le) at DC-23A, 120 V 5 A Rated operational current (le) at DC-23A, 24 V 10 A Rated operational current (le) at DC-23A, 240 V 5 A Rated operational current (le) at DC-23A, 48 V 10 A Rated operational current (Ie) at DC-23A, 60 V 10 A Rated operational current (le) star-delta at AC-3, 230 V 20 A Rated operational current (le) star-delta at AC-3, 400 V 20 A Rated operational current (le) star-delta at AC-3, 500 V 15.6 A Rated operational current (le) star-delta at AC-3, 690 V 8.5 A Rated operational current for specified heat dissipation (In) 20 A Rated operational power at AC-23A, 220/230 V, 50 Hz 3 kW Rated operational power at AC-23A, 400 V, 50 Hz 5.5 kW Rated operational power at AC-23A, 500 V, 50 Hz Rated operational power at AC-23A, 690 V, 50 Hz 5.5 kW Rated operational power at AC-3, 415 V, 50 Hz 5.5 kW Rated operational power at AC-3, 690 V, 50 Hz 4 kW

Rated operational power star-delta at 380/400 V, 50 Hz

5.5 kW

Rated operational power star-delta at 220/230 V, 50 Hz

#### Rated operational power star-delta at 500 V, 50 Hz

7.5 kW

#### Rated operational power star-delta at 690 V, 50 Hz

5.5 kW

#### Terminal capacity (flexible with ferrule)

2 x (0.75 - 2.5) mm<sup>2</sup>, ferrules to DIN 46228 1 x (0.75 - 2.5) mm<sup>2</sup>, ferrules to DIN 46228

#### Short-circuit current rating (basic rating)

50A, max. Fuse, SCCR (UL/CSA) 5 kA, SCCR (UL/CSA)

#### Short-circuit current rating (high fault)

10 kA, SCCR (UL/CSA)
20 A, Class J, max. Fuse, SCCR (UL/CSA)

#### Short-circuit protection rating

20 A gG/gL, Fuse, Contacts

#### Terminal capacity (solid/flexible with ferrule AWG)

18 - 14

#### Terminal capacity (solid/stranded)

1 x (1 - 2.5) mm<sup>2</sup> 2 x (1 - 2.5) mm<sup>2</sup>

#### Tightening torque

1 Nm, Screw terminals8.8 lb-in, Screw terminals

#### Uninterrupted current

Rated uninterrupted current lu is specified for max. crosssection.

#### Design

8240



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