## Eaton 207123

## Catalog Number: 207123

Eaton Moeller ${ }^{\oplus}$ series T0 Changeoverswitches, T0, 20 A , surface mounting, 3 contact unit(s), Contacts: $6,60^{\circ}$, maintained, With 0 (Off) position, 1-0-2, Design number 8212

| General specifications |  |
| :--- | :--- |
| Product Name | Catalog Number |
| Eaton Moeller® series T0 Changeover | 207123 |
| switch | Model Code |
|  | T0-3-8212/11 |
|  | Product Length/Depth |
| EAN | 137 mm |
| 4015082071233 | Product Width |
| Product Height | 80 mm |
| 122 mm | Certifications |
| Product Weight | IEC/EN 60947 IEC/EN 60204 IEC/EN |
| .288 kg | $60947-3$ VDE 0660 |
|  | Model Code |
| Catalog Notes | T0-3-8212/11 |
| Rated Short-time Withstand Current |  |
| (Icw) for a time of 1 second |  |


| Features \& Functions | General |
| :---: | :---: |
| Enclosure material | Degree of protection |
| Plastic | IP65 |
| Features | Degree of protection (front side) |
| Complete device in housing | IP65 |
| Fitted with: | NEMA 12 |
| Black thumb grip and front plate | Lifespan, mechanical |
| 0 (off) position | 400,000 Operations |
| Inscription | Model |
| 1-0-2 | Reverser |
| Number of poles | Mounting method |
| 3 | Surface mounting |
|  | Number of contact units 3 |
|  | Operating frequency |
|  | 1200 Operations/h |
|  | Overvoltage category |
|  | III |
|  | Pollution degree |
|  | 3 |
|  | Product Category |
|  | Control switches |
|  | Rated impulse withstand voltage (Uimp) |
|  | 6000 V AC |
|  | Safe isolation |
|  | 440 V AC, Between the contacts, According to EN 61140 |
|  | Safety parameter (EN ISO 13849-1) |
|  | B10d values as per EN ISO 13849-1, table C. 1 |
|  | Shock resistance |
|  | 15 g , Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms |
|  | Suitable for |
|  | Ground mounting |
|  | Switching angle |
|  | $60^{\circ}$ |
|  | Type |
|  | Changeover switch |

Climatic environmental conditions

Ambient operating temperature - min $-25^{\circ} \mathrm{C}$

Ambient operating temperature - max $40^{\circ} \mathrm{C}$

Ambient operating temperature (enclosed) - min $-25^{\circ} \mathrm{C}$

Ambient operating temperature (enclosed) - max $40^{\circ} \mathrm{C}$

## Climatic proofing

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

## Terminal capacities

```
Terminal capacity (flexible with ferrule)
2 x (0.75-2.5) mm2, ferrules to DIN 46228
1\times(0.75-2.5) mm2, ferrules to DIN 46228
Terminal capacity (solid/stranded)
1\times(1-2.5) mm}\mp@subsup{}{}{2
2x(1-2.5) mm}\mp@subsup{}{}{2
Screw size
M3.5, Terminal screw
Tightening torque
1 Nm, Screw terminals
8.8 lb-in, Screw terminals
```


## Electrical rating

Rated breaking capacity at $220 / 230 \mathrm{~V}$ (cos phi to IEC 60947-3)
100 A

Rated breaking capacity at $400 / 415 \mathrm{~V}$ (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 operational current (le)
20 A at AC-3, 400 V star-delta
15.6 A at AC-3, 500 V star-delta
8.5 A at AC-3, 690 V star-delta

20 A at AC-3, 230 V star-delta
Rated operational current (le) at AC-3, 220 V, $230 \mathrm{~V}, 240 \mathrm{~V}$
11.5 A

Rated operational current (le) at AC-3, $380 \mathrm{~V}, 400 \mathrm{~V}, 415 \mathrm{~V}$
11.5 A

Rated operational current (le) at AC-3, 500 V
9 A
Rated operational current (le) at AC-3, $660 \mathrm{~V}, 690 \mathrm{~V}$
4.9 A

Rated operational current (le) at AC-21, 440 V

Rated operational current (le) at AC-23A, 230 V

### 13.3 A

Rated operational current (le) at AC-23A, $400 \mathrm{~V}, 415 \mathrm{~V}$
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 DC-1, load-break switches $\mathrm{I} / \mathrm{r}=1$ 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

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 (le) at DC-23A, 60 V 10 A

Rated operational power at AC-3, $380 / 400 \mathrm{~V}, 50 \mathrm{~Hz}$ 4 kW

Rated operational power at AC-3, $415 \mathrm{~V}, 50 \mathrm{~Hz}$ 5.5 kW

Rated operational power at AC-3, $690 \mathrm{~V}, 50 \mathrm{~Hz}$ 4 kW

Rated operational power at AC-23A, 220/230 V, 50 Hz 3 kW

Rated operational power at AC-23A, $400 \mathrm{~V}, 50 \mathrm{~Hz}$

## 5.5 kW

Rated operational power at AC-23A, $500 \mathrm{~V}, 50 \mathrm{~Hz}$ 7.5 kW

Short-circuit rating

Rated conditional short-circuit current (Iq)
6 kA
Rated short-time withstand current (Icw)
320 A, Contacts, 1 second
Short-circuit protection rating
20 A gG/gL, Fuse, Contacts

## Switching capacity

Load rating
$2 \times I_{\text {e }}$ (with intermittent operation class $12,25 \%$ duty factor) $1.6 \times \mathrm{I}_{\mathrm{e}}$ (with intermittent operation class $12,40 \%$ duty factor)
$1.3 \times I_{\mathrm{e}}$ (with intermittent operation class $12,60 \%$ duty factor)

Number of contacts in series at DC-21A, 240 V 1

Number of contacts in series at DC-23A, 24 V 1

Number of contacts in series at DC-23A, 48 V 2

Number of contacts in series at DC-23A, 60 V 3

Number of contacts in series at DC-23A, 120 V 3

Number of contacts in series at DC-23A, 240 V 5

Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3) 130 A

Voltage per contact pair in series 60 V

## Contacts

Control circuit reliability
1 failure per 100,000 switching operations statistically determined, at $24 \mathrm{~V} D, 10 \mathrm{~mA}$ )

Rated operational power at AC-23A, $690 \mathrm{~V}, 50 \mathrm{~Hz}$

## 5.5 kW

Rated operational power star-delta at $220 / 230 \mathrm{~V}, 50 \mathrm{~Hz}$ 5.5 kW

Rated operational power star-delta at $380 / 400 \mathrm{~V}, 50 \mathrm{~Hz}$ 7.5 kW

Rated operational power star-delta at $500 \mathrm{~V}, 50 \mathrm{~Hz}$
7.5 kW

Rated operational power star-delta at $690 \mathrm{~V}, 50 \mathrm{~Hz}$ 5.5 kW

Rated operational voltage (Ue) at AC - max

## 690 V

Rated uninterrupted current (Iu)
20 A

Uninterrupted current
Rated uninterrupted current lu is specified for max. crosssection.

Number of auxiliary contacts (change-over contacts)
0

Number of auxiliary contacts (normally closed contacts)
0

Number of auxiliary contacts (normally open contacts)
0

Number of contacts
6

## Actuator

Actuator function
Maintained
With 0 (Off) position
Actuator type
Short thumb-grip

## Design verification

Equipment heat dissipation, current-dependent Pvid
0 W

Heat dissipation capacity Pdiss
0 W

Heat dissipation per pole, current-dependent Pvid . 6 W

Rated operational current for specified heat dissipation (In)
20 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

UV resistance only in connection with protective shield.

### 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

## Resources

Brochures
Brochure - T Rotary Cam switch and P Switch-disconnector
Catalogues
Pl-40 Switch-disconnectors
P Switch-disconnectors and T Rotary cam switches catalogue CA042001EN

Compliance information
UKCA TO rotary cam switches and accessories
CE TO rotary cam switches and accessories
Drawings
eaton-rotary-switches-t0-changeover-switch-dimensions-002.eps 115X161
eaton-rotary-switches-dimensions-t0-step-switch-dimensions.eps
115X113
eaton-rotary-switches-front-plate-t0-changeover-switch-symbol-009.eps 115K003
eaton-rotary-switches-surface-mounting-t0-changeover-switch-3ddrawing.eps
eaton-general-totally-insulated-t0-main-switch-symbol.eps
1150DRW-3
eaton-general-rotary-switch-t0-step-switch-symbol.eps
$000 Z 078$
$000 Z 083$
eCAD model
DA-CE-ETN.TO-3-8212_I1
Installation instructions
Cam switch: Surface mounting enclosure (IL03801007Z)
mCAD model
DA-CS-bauform4
DA-CD-bauform4
Wiring diagrams
115S291-2
eaton-rotary-switches-changeover-switch-t0-changeover-switch-wiring-
diagram-003.eps

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.
Eaton Corporation plc

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