Eaton 026991

Catalog Number: 026991

Eaton Moeller® series T0 Changeoverswitches, T0, 20 A, service distribution board mounting, 1 contact unit(s), Contacts: 2, 45 °, maintained, With 0 (Off) position, HAND-0-AUTO, Design number 15431



General specifications

Product Name

Eaton Moeller® series T0 Changeover

switch

Product Height

55 mm

Product Weight

0.106 kg

Catalog Number

026991

Product Length/Depth

82 mm

Product Width

54 mm

Certifications

UL File No.: E36332

VDE 0660

CE

CSA

UL 60947-4-1

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

CSA-C22.2 No. 94

UL Category Control No.: NLRV

JL

IEC/EN 60947-3 CSA File No.: 012528

IEC/EN 60947

CSA Class No.: 3211-05

IEC/EN 60204

Catalog Notes

Rated Short-time Withstand Current

EAN

4015080269915



defaultTaxonomyAttributeLabel

Type

Changeover 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

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-00004895.pdf

DA-DC-00004927.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-changeover-switch-symbol-017.eps
eaton-general-rotary-switch-t0-step-switch-symbol-005.eps
eaton-rotary-switches-mounting-t0-changeover-switch-3d-drawing.eps

eCAD model

DA-CE-ETN.T0-1-15431_IVS

Installation instructions

IL03801006Z

Installation videos

Eaton's P Switch-disconnectors used in a factory

mCAD model

DA-CD-t0_1_ivs

 $\mathsf{DA}\text{-}\mathsf{CS}\text{-}\mathsf{t0}_\mathsf{1}_\mathsf{ivs}$

Wiring diagrams

eaton-rotary-switches-switch-t0-change over-switch-wiring-diagram.eps

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.

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 Reverser
Rated short-time withstand current (Icw) 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 III
Control circuit reliability 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
Degree of protection (front side) IP30

NEMA 2

Number of contacts

2

Suitable for

Branch circuits, suitable as motor disconnect, (UL/CSA)

Ground mounting

Distribution board installation

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

3 Number of contacts in series at DC-23A, 24 V 1 Number of contacts in series at DC-23A, 240 V Front shield size 48x48 mm Safe isolation 440 V AC, Between the contacts, According to EN 61140 Screw size M3.5, Terminal screw Inscription " HAND-0-AUTO " Shock resistance 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms Lifespan, mechanical 400,000 Operations Number of switch positions 3 Load rating 1.6 x I_e (with intermittent operation class 12, 40 % duty factor) 1.3 x I_e (with intermittent operation class 12, 60 % duty factor) 2 x I_e (with intermittent operation class 12, 25 % duty factor) Switching capacity (auxiliary contacts, general use) 10A, IU, (UL/CSA) Switching capacity (auxiliary contacts, pilot duty) P300 (UL/CSA) A600 (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)

Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)

100 A

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110 A
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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 $l/r=1\,$ 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 (le) 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 7.5 kW 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 7.5 kW

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) mm², ferrules to DIN 46228 1 x (0.75 - 2.5) mm², 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)

20 A, Class J, max. Fuse, SCCR (UL/CSA) 10 kA, 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) mm² 2 x (1 - 2.5) mm²

Tightening torque

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

Uninterrupted current

Rated uninterrupted current lu is specified for max. crosssection.

Design

15431



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