Specifications

Eaton 156509

Catalog Number: 156509

Eaton Moeller® series LS Position switch, Rotary lever, Complete device, 2 NC, Cage Clamp, Yellow, Insulated material, -40 - +70 °C, EN 50047 Form A



General specifications

Product Name
Eaton Moeller® series LS Position switch

Catalog Number
156509

EAN
4015081531202

Product Length/Depth
33.5 mm

Product Height
110 mm

Product Width
31 mm

Product Weight
0.066 kg

Certifications
UL
UL Category Control No.: NKCR
CSA-C22.2 No. 14
UL File No.: E29184
CE
CSA
UL 508
IEC/EN 60947-5
IEC/EN 60947
CSA Class No.: 3211-03
CSA File No.: 012528

Catalog Notes

Contacts with safety function, by positive opening to IEC/EN 60947-5-1
Contains a silicone seal to

Product specifications

Features

The operating head can be rotated 90° to enable adaptation to the specified approach direction

Positive opening

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.

10.3 Degree of protection of assemblies

Resources

Catalogs

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

eaton-pushbuttons-signal-towers-sensors-assortment-overview-catalog-ca047003en-en-us.pdf

Declarations of conformity

DA-DC-00004160.pdf

DA-DC-00004133.pdf

Drawings

eaton-position-switches-plunger-ls-dimensions-004.eps

eaton-position-switches-rotary-handle-ls-dimensions.eps

eaton-operating-button-symbol-008.eps

eCAD model

ETN.156509.edz

Installation instructions

IL053001ZU

mCAD model

DA-CD-ls_rl

DA-CS-ls_rl

Sales notes

eaton-safety-switches-rs-titan-flyer-fl053001en-en-us.pdf

Wiring diagrams

eaton-position-switches-contact-ls-wiring-diagram.eps

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.

Operating frequency

6000 Operations/h

Pollution degree

3

Climatic proofing

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

Enclosure material

Insulated material

Rated impulse withstand voltage (Uimp)

4000 V AC

Enclosure color

Yellow Cover

Actuator type

Rotary lever

Actuating torque of rotary drives

0.2 Nm

Ambient operating temperature - max

70 °C

Ambient operating temperature - min

-40 °C

Equipment heat dissipation, current-dependent Pvid

0 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

0.17 W

Number of contacts (normally closed contacts)

2

Rated insulation voltage (Ui)

400 V

Rated operational current for specified heat dissipation (In)

6 A

Static heat dissipation, non-current-dependent Pvs

0 W

Accessories

Accessories for the Cage-Clamp terminals from Wago: Power comb, gray, Wago Article No. 264-402

Product category

Rotary lever

Actuating force at beginning/end of stroke

1.0 N/8.0 N

Design

EN 50047 Form A

Mounting position

As required

Overvoltage category

III

Control circuit reliability

1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC/5 mA)
1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 mA)

Connection type

Cage Clamp

Degree of protection

IP66

NEMA 4X (indoor use only)

NEMA 13

IP67

NEMA 3R

NEMA 12

Lifespan, mechanical

8,000,000 Operations

Repetition accuracy

0.15 mm (Contacts/switching capacity)

Shock resistance

25 g, Standard-action contact, Mechanical, Half-sinusoidal shock

20 ms

Supply frequency

Max. 400 Hz, Contacts

Operating speed

Max. 1.5 m/s (with DIN cam, mechanical actuation)

Rated operational current (Ie)

4 A at AC-15, 380 V 400 V 415 V

0.6 A at 110 V

3 A at 24 V

6 A at AC-15, 220 V 230 V 240 V

6 A at AC-15, 24 V

0.3 A at 220 V

Short-circuit protection rating

Max. 6 A gG/gL, Fuse, Contacts

Terminal capacity (flexible with ferrule)

1 x (0.5 - 1.5) mm²

Terminal capacity (solid)

1 x (0.5 - 2.5) mm²



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