Specifications

Eaton 116703



Catalog Number: 116703

Eaton Moeller® series LS Position switch, Rounded plunger, Basic device, expandable, 2 NC, Screw terminal, Yellow, Insulated material, -25 - +70 °C, EN 50047 Form B

General specifications

Product Name
Eaton Moeller® series LS Position switch

Catalog Number
116703

EAN
4015081164486

Product Length/Depth
33.5 mm

Product Height
76.5 mm

Product Width
31 mm

Product Weight
0.051 kg

Compliances
CE Marked

Certifications
EN 60947-5
UL 508
CSA Std. C22.2 No. 14-05
IEC 60947-5
UL File No.: E29184
CSA File No.: 012528
CSA-C22.2 No. 14
CSA
CSA Class No.: 3211-03
IEC/EN 60947
UL Category Control No.: NKCR
CE
IEC/EN 60947-5
UL

Catalog Notes
Contacts with safety function, by positive opening to IEC/EN 60947-5-1

Powering Business Worldwide

Product specifications

Type

Position switch

Safety position switch

Features

Expandable

Forced opening

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.

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-00004133.pdf

DA-DC-00004160.pdf

Drawings

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

eaton-position-switches-plunger-ls-dimensions-002.eps

eaton-operating-button-symbol-008.eps

eaton-position-switches-plunger-ls-3d-drawing.eps

eCAD model

ETN.116703.edz

Installation instructions

IL053001ZU

mCAD model

DA-CD-ls

DA-CS-ls

Sales notes

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

Wiring diagrams

eaton-position-switches-contact-ls-wiring-diagram-003.eps

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.

Electric connection type

Cable entry metrical

Enclosure material finishing

Other

Operating frequency

6000 Operations/h

Pollution degree

3

Actuator alignment

Roller cam straight

Climatic proofing

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

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

Enclosure material

Insulated material

Plastic

Enclosure type

Cuboid

Rated operational current (Ie) at DC-13, 110 V

0.6 A

Rated operational current (Ie) at DC-13, 125 V

0.8 A

Rated operational current (Ie) at DC-13, 220 V, 230 V

0.3 A

Rated operational current (Ie) at DC-13, 24 V

3 A

Rated operational current for specified heat dissipation (In)

6 A

Sensor height

61 mm

Sensor length

33.5 mm

Static heat dissipation, non-current-dependent Pvs

0 W

Width sensor

31 mm

Product category

Rounded plunger

Action

2021118113756-Mechanical Limit Switches.xlsm-Data

Rated impulse withstand voltage (Uimp)

4000 V AC

Enclosure color

Yellow Cover

Actuating force at beginning/end of stroke

1.0 N/8.0 N

Explosion safety category for dust

None

Explosion safety category for gas

None

Actuator type

Plunger

Actuating torque of rotary drives

0.2 Nm

Ambient operating temperature - max

70 °C

Ambient operating temperature - min

-25 °C

Diameter sensor

0 mm

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 (change-over contacts)

0

Number of contacts (normally closed contacts)

2

Number of contacts (normally open contacts)

0

Number of safety auxiliary contacts

2

Rated insulation voltage (Ui)

400 V

Rated operational current (Ie) at AC-15, 125 V

6 A

Rated operational current (Ie) at AC-15, 220 V, 230 V, 240 V

6 A

Rated operational current (Ie) at AC-15, 24 V

6 A

Rated operational current (Ie) at AC-15, 380 V, 400 V, 415 V

4 A

Design

EN 50047 Form B

Mounting position

As required

Rated conditional short-circuit current (Iq)

1 kA

Overvoltage category

III

Control circuit reliability

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

Connection type

Screw terminal

Temperature resistance

100 °C, Contact temperature of roller head

Degree of protection

IP66/IP67
NEMA Other

Interface type

None

Switch function type

Slow-action switch

Lifespan

8,000,000 mechanical 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

Suitable for

Safety functions

Operating speed

Max. 1/0.5 m/s (with DIN cam, mechanical actuation)
For angle of actuation α = 0°/30°

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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