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Worldwide English



LS-S11/LB - Position switch, Roller lever, Complete unit, 1 N/O, 1 NC, Screw terminal, Yellow , Insulated material, -25 - +70 °C, Large



106786 LS-S11/LB

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106786 LS-S11/LB

Position switch, Roller lever, Complete unit, 1 N/O, 1 NC, Screw terminal, Yellow , Insulated material, -25 - +70 °C, Large

Alternate Catalog No.

LS-S11-LB

EL-Nummer (Norway)

4315204

Position switch, Basic function: Position switches, Safety position switches, Part group reference: LS(M)-..., Product range: Roller lever, Degree of Protection: IP66, IP67, Features: Complete unit, Ambient temperature: -25 - +70 °C, Description: Large, Contacts N/O = Normally open: 1 N/O, Contacts NC = Normally closed: 1 NC, Notes: = safety function, by positive opening to IEC/EN 60947-5-1, Positive opening (ZW): yes, Colour Enclosure covers: Yellow , Housing: Insulated material, Connection type: Screw terminal, Standards: IEC/EN 60947

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Delivery program

Basic function

Position switches

Safety position switches

Part group reference

LS(M)-...

Product range

Roller lever

Degree of Protection

IP66, IP67

Features

Complete unit

Ambient temperature

-25 - +70 °C

Description

Large

Contacts

N/O = Normally open

1 N/O

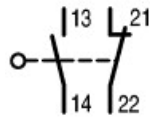
NC = Normally closed

1 NC

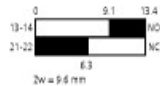
Notes

□ = safety function, by positive opening to IEC/EN 60947-5-1

Contact sequence



Contact travel ■ = Contact closed □ = Contact open



Positive opening (ZW)

yes

Colour

Enclosure covers

Yellow

Enclosure covers



Housing

Insulated material

Connection type

Screw terminal

Notes

The operating head can be rotated at 90° intervals to adapt to the specified approach direction.

Technical data

General

Standards

IEC/EN 60947

Climatic proofing

Damp heat, constant, to IEC 60068-2-78; damp heat, cyclical, to IEC 60068-2-30

Ambient temperature

-25 - +70 °C

Mounting position

As required

Degree of Protection

IP66, IP67

Terminal capacitiesSolid

1 x (0.5 - 2.5) mm²

Terminal capacitiesFlexible with ferrule

1 x (0.5 - 1.5) mm²

Repetition accuracy

0.15 mm

Contacts/switching capacity

Rated impulse withstand voltage [U_{imp}]

4000 V AC

Rated insulation voltage [U_i]

400 V

Overvoltage category/pollution degree

III/3

Rated operational current [I_e]AC-1524 V [I_e]

6 A

Rated operational current [I_e]AC-15220 V 230 V 240 V [I_e]

6 A

Rated operational current [I_e]AC-15380 V 400 V 415 V [I_e]

4 A

Rated operational current [I_e]DC-13 24 V [I_e]

3 A

Rated operational current [I_e]DC-13 110 V [I_e]

0.6 A

Rated operational current [I_e]DC-13 220 V [I_e]

0.3 A

Control circuit reliabilityat 24 V DC/5 mA [H_f]

< 10⁻⁷, < 1 fault in 10⁷ operations Fault probability

Control circuit reliabilityat 5 V DC/1 mA [H_f]

< 5 x 10⁻⁶, < 1 failure at 5 x 10⁶ operations Fault probability

Supply frequency

max. 400 Hz

Short-circuit rating to IEC/EN 60947-5-1max. fuse

6 A gG/gL

Rated conditional short-circuit current

1 kA

Mechanical variables
 Lifespan, mechanical [Operations]
 8×10^6
 Mechanical shock resistance (half-sinusoidal shock, 20 ms)Standard-action contact
 25 g
 Operating frequency [Operations/h]
 □ 6000
 Actuation
 MechanicalActuating force at beginning/end of stroke
 1.0/8.0 N
 MechanicalActuating torque of rotary drives
 0.2 Nm
 MechanicalMax. operating speed with DIN cam
 1 m/s
 Mechanical**Notes**
 for angle of actuation $\alpha = 30^\circ/45^\circ$

Design verification as per IEC/EN 61439

Technical data for design verification
 Rated operational current for specified heat dissipation [I_r]
 6 A
 Heat dissipation per pole, current-dependent [P_{id}]
 0.17 W
 Equipment heat dissipation, current-dependent [P_{id}]
 0 W
 Static heat dissipation, non-current-dependent [P_{vs}]
 0 W
 Heat dissipation capacity [P_{diss}]
 0 W
 Operating ambient temperature min.
 -25 °C
 Operating ambient temperature max.
 +70 °C
 IEC/EN 61439 design verification
 10.2 Strength of materials and parts10.2.2 Corrosion resistance
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.1 Verification of thermal stability of enclosures
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heat
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.4 Resistance to ultra-violet (UV) radiation
 Meets the product standard's requirements.
 10.2 Strength of materials and parts10.2.5 Lifting
 Does not apply, since the entire switchgear needs to be evaluated.
 10.2 Strength of materials and parts10.2.6 Mechanical impact
 Does not apply, since the entire switchgear needs to be evaluated.
 10.2 Strength of materials and parts10.2.7 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 Insulation properties10.9.2 Power-frequency electric strength
 Is the panel builder's responsibility.
 10.9 Insulation properties10.9.3 Impulse withstand voltage
 Is the panel builder's responsibility.
 10.9 Insulation properties10.9.4 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

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.

Technical data ETIM 7.0

Sensors (EG000026) / End switch (EC000030)

Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Position switch / Position switch (Type 1) (ecl@ss10.0.1-27-27-06-01 [AGZ382015])

Width sensor

31 mm

Diameter sensor

0 mm

Height of sensor

61 mm

Length of sensor

33.5 mm

Rated operation current I_e at AC-15, 24 V

6 A

Rated operation current I_e at AC-15, 125 V

6 A

Rated operation current I_e at AC-15, 230 V

6 A

Rated operation current I_e at DC-13, 24 V

3 A

Rated operation current I_e at DC-13, 125 V

0.8 A

Rated operation current I_e at DC-13, 230 V

0.3 A

Switching function

Slow-action switch

Switching function latching

No

Output electronic

No

Forced opening

Yes

Number of safety auxiliary contacts

1

Number of contacts as normally closed contact

1

Number of contacts as normally open contact

1

Number of contacts as change-over contact

0

Type of interface

None

Type of interface for safety communication

None

Construction type housing

Cuboid

Material housing

Plastic

Coating housing

Other

Type of control element

Roller lever

Alignment of the control element

Other

Type of electric connection

Other

With status indication

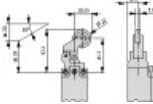
No
Suitable for safety functions
Yes
Explosion safety category for gas
None
Explosion safety category for dust
None
Ambient temperature during operating
25 - 70 °C
Degree of protection (IP)
IP67
Degree of protection (NEMA)
4X

Approvals

Product Standards
IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14; CE marking
UL File No.
E29184
UL Category Control No.
NKCOR
CSA File No.
12528
CSA Class No.
3211-03
North America Certification
UL listed, CSA certified
Degree of Protection
IEC: IP66, 67, UL/CSA Type 3R, 4X (indoor use only), 12, 13

Dimensions

- Tightening torque of cover screws: $0.8 \text{ Nm} \pm 0.2 \text{ Nm}$
 - only with LS (insulated version)
 - Fixing screws 2 x M4 □ 30
- $M_A = 1.5 \text{ Nm}$



CAD data

- Product-specific CAD data
(Web)
- 3D Preview
(Web)

DWG files

- [DA-CD-Is_lb](#)
File
(Web)

edz files

- [DA-CE-ETN.LS-S11_LB](#)
File
(Web)

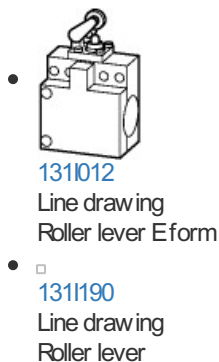
Step files

- [DA-CS-Is_lb](#)
File
(Web)

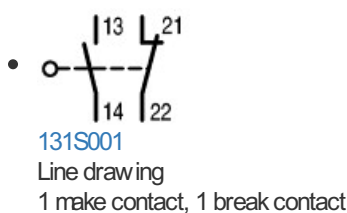
Product photo



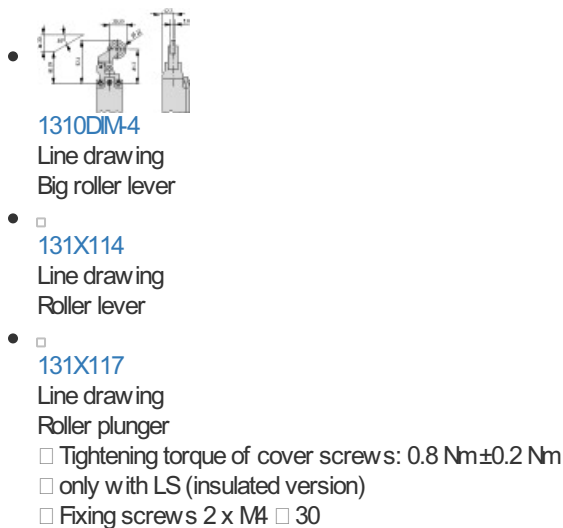
3D drawing



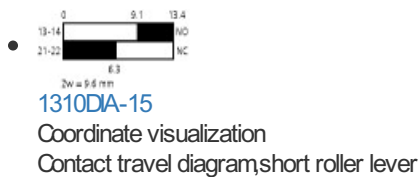
Wiring diagram



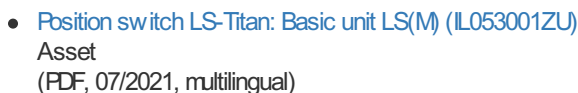
Dimensions single product




Contact travel diagram



Instruction Leaflet



Symbol

-  [116C064](#)
Graphic
Button plate, yellow

Declaration of Conformity

EU

- [Limit switch LS-Titan \(DA-DC-00003472\)](#)
Asset
(PDF)

UK

- [Limit switch LS-Titan \(DA-DC-00003963\)](#)
Asset
(PDF)

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