



Safety position switch, LS(4)...ZB, Safety position switches, 1 N/O, 1 NC, narrow, Snap-action contact - Yes, Screw terminal

Part no. LS4/S11-S/I/ZB/X
 Catalog No. 114291
 Alternate Catalog No. LS4-S11-S-I-ZB-X

Delivery program

| | | | |
|-----------------------|--|--|---|
| Basic function | | | Position switches Safety position switches |
| Part group reference | | | LS(4)...ZB |
| Product range | | | Safety position switches |
| Degree of Protection | | | IP65 |
| Snap-action contact | | | Yes |
| Description | | | With the actuator inserted, the N/O contact is open and the NC contact is closed. |
| Contacts | | | |
| N/O = Normally open | | | 1 N/O |
| N/C = Normally closed | | | 1 NC |
| Notes | | | = safety function, by positive opening to IEC/EN 60947-5-1 |
| Connection type | | | Screw terminal |

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 |
| Mounting position | | | As required |
| Degree of Protection | | | IP65 |
| Terminal capacities | | mm ² | |
| Solid | | mm ² | 1 x (0.75 - 2.5) 2 x (0.75 - 1.5) |
| Flexible with ferrule | | mm ² | 1 x (0.5 - 1.5) 2 x (0.5 - 1.5) |
| Terminal screw | | | PH1 |
| Repetition accuracy | | mm | 0.02 |

Contacts/switching capacity

| | | | |
|--|-----------|---------|----------|
| Rated impulse withstand voltage | U_{imp} | V AC | 6000 |
| Rated insulation voltage | U_i | V | 500 |
| Overvoltage category/pollution degree | | | III/3 |
| Rated operational current | I_e | A | |
| AC-15 | | | |
| 24 V | I_e | A | 6 |
| 220 V 230 V 240 V | I_e | A | 6 |
| 380 V 400 V 415 V | I_e | A | 4 |
| DC-13 | | | |
| 24 V | I_e | A | 3 |
| 110 V | I_e | A | 0.8 |
| 220 V | I_e | A | 0.3 |
| Supply frequency | | Hz | max. 400 |
| Short-circuit rating to IEC/EN 60947-5-1 | | | |
| max. fuse | | A gG/gL | 10 |

Mechanical variables

| | | | |
|--|--|---|---|
| Mechanical shock resistance (half-sinusoidal shock, 20 ms) | | | |
| Standard-action contact | | g | 5 |

| | | |
|---------------------|--------------|--------|
| Operating frequency | Operations/h | ≤ 1800 |
|---------------------|--------------|--------|

Design verification as per IEC/EN 61439

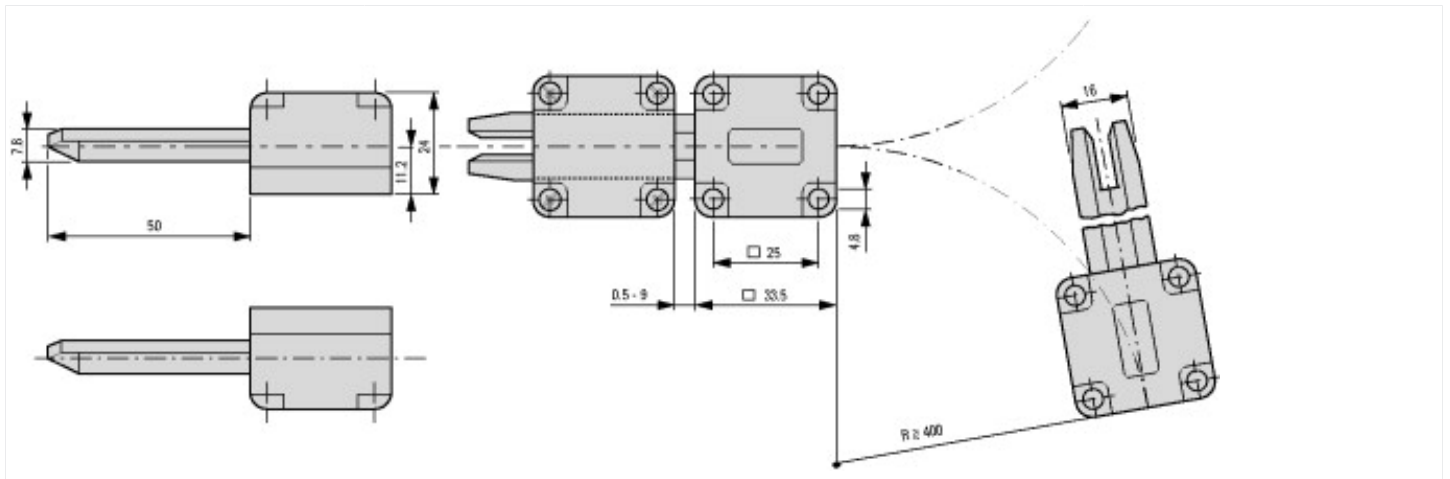
| Technical data for design verification | | | |
|--|------------|---|--|
| Rated operational current for specified heat dissipation | I_n | A | 6 |
| Heat dissipation per pole, current-dependent | P_{vid} | W | 0.1 |
| Equipment heat dissipation, current-dependent | P_{vid} | W | 0 |
| Static heat dissipation, non-current-dependent | P_{vs} | W | 0 |
| Heat dissipation capacity | P_{diss} | W | 0 |
| IEC/EN 61439 design verification | | | |
| 10.2 Strength of materials and parts | | | |
| 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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 | | | |
| | | | 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 properties | | | |
| 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 | | | |
| | | | 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

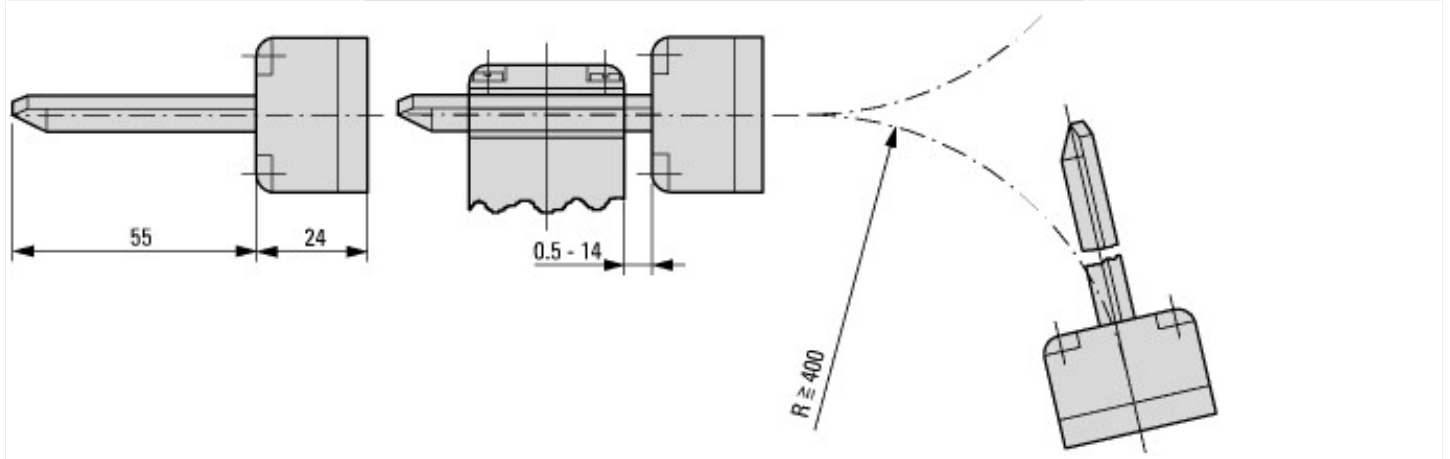
| Sensors (EG000026) / End switch (EC000030) | | | |
|--|--|----|--------------------|
| Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Position switch / Position switch (Type 1) (ecl@ss10.0.1-27-06-01 [AGZ382015]) | | | |
| Width sensor | | mm | 40 |
| Diameter sensor | | mm | 0 |
| Height of sensor | | mm | 125 |
| Length of sensor | | mm | 40 |
| Rated operation current I_e at AC-15, 24 V | | A | 10 |
| Rated operation current I_e at AC-15, 125 V | | A | 6 |
| Rated operation current I_e at AC-15, 230 V | | A | 6 |
| Rated operation current I_e at DC-13, 24 V | | A | 3 |
| Rated operation current I_e at DC-13, 125 V | | A | 0.8 |
| Rated operation current I_e at DC-13, 230 V | | A | 0.3 |
| Switching function | | | Slow-action switch |
| Switching function latching | | | No |
| Output electronic | | | No |
| Forced opening | | | Yes |

| | | |
|---|----|----------------------|
| Number of safety auxiliary contacts | | 0 |
| Number of contacts as normally closed contact | | 0 |
| Number of contacts as normally open contact | | 0 |
| 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 | | None |
| Alignment of the control element | | Other |
| Type of electric connection | | Cable entry metrical |
| 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 | °C | 25 - 70 |
| Degree of protection (IP) | | IP65 |
| Degree of protection (NEMA) | | 13 |

Dimensions



Switch must not be used as a mechanical stop



Actuator

Assets (links)

[Declaration of CE Conformity](#)

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