| Part no. | LS-11S |
| :--- | :--- |
| EL Number | $\mathbf{2 6 6 1 0 5}$ |
| 4356032 |  |
| (Norway) |  |

## General specifications

| Product name | Eaton Moeller® series LS Position switch |
| :---: | :---: |
| Part no. | LS-11S |
| EAN | 4015082661052 |
| Product Length/Depth | 33.5 millimetre |
| Product height | 76.5 millimetre |
| Product width | 31 millimetre |
| Product weight | 0.053 kilogram |
| Certifications | IEC/EN 60947 <br> UL 508 <br> CSA <br> CE <br> UL File No.: E29184 <br> UL Category Control No.: NKCR <br> IEC/EN 60947-5 <br> UL <br> CSA File No.: 012528 <br> CSA Class No.: 3211-03 <br> CSA-C22.2 No. 14 |
| Product Tradename | LS |
| Product Type | Position switch |
| Product Sub Type | None |
| Catalog Notes | Accessories for the Cage-Clamp terminals from Wago:power comb, gray, Wago Article No. 264-402 <br> Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany <br> Contacts with safety function, by positive opening to IEC/EN 60947-5-1 |
| Features \& Functions |  |
| Design | EN 50047 Form B |
| Electric connection type | Cable entry metrical |
| Enclosure color | Yellow Cover |
| Enclosure material | Insulated material Plastic |
| Features | Expandable <br> Positive opening <br> Forced opening <br> Snap-action contact |
| Switch function type | Quick-break switch |
| General information |  |
| Connection type | Cage Clamp |
| Degree of protection | IP66/P67 NEMA Other |
| Lifespan | 8,000,000 mechanical Operations |
| Operating frequency | 6000 Operations/h |
| Overvoltage category | III |
| Pollution degree | 3 |
| Product category | Rounded plunger |
| Rated impulse withstand voltage (Uimp) | 4000 V AC |
| Repetition accuracy | 0.15 mm (Contacts/switching capacity) |
| Suitable for | Safety functions |
| Type | Safety position switch |
| Ambient conditions, mechanical |  |
| Mounting position | As required |
| Shock resistance | 25 g , Standard-action contact, Mechanical, Half-sinusoidal shock 20 ms |


| Temperature resistance | $100^{\circ} \mathrm{C}$, Contact temperature of roller head |
| :---: | :---: |
| Climatic environmental conditions |  |
| Ambient operating temperature - min | $-25^{\circ} \mathrm{C}$ |
| Ambient operating temperature - max | $70^{\circ} \mathrm{C}$ |
| Climatic proofing | Damp heat, cyclic, to IEC 60068-2-30 <br> Damp heat, constant, to IEC 60068-2-78 |
| Terminal capacities |  |
| Terminal capacity (flexible with ferrule) | $1 \times(0.5-1.5) \mathrm{mm}^{2}$ |
| Terminal capacity (solid) | $1 \times(0.5-2.5) \mathrm{mm}^{2}$ |
| Electrical rating |  |
| Rated conditional short-circuit current (Iq) | 1 kA |
| Rated insulation voltage (Ui) | 400 V |
| Rated operational current (le) at AC-15, $220 \mathrm{~V}, 230 \mathrm{~V}, 240 \mathrm{~V}$ | 6 A |
| Rated operational current (le) at AC-15, 24 V | 6 A |
| Rated operational current (le) at AC-15, $380 \mathrm{~V}, 400 \mathrm{~V}, 415 \mathrm{~V}$ | 4A |
| Rated operational current (le) at $\mathrm{DC}-13,110 \mathrm{~V}$ | 0.6 A |
| Rated operational current (le) at DC-13, 125 V | 0.8 A |
| Rated operational current (le) at DC-13, $220 \mathrm{~V}, 230 \mathrm{~V}$ | 0.3 A |
| Rated operational current (le) at $\mathrm{DC}-13,24 \mathrm{~V}$ | 3 A |
| Short-circuit protection rating | Max. $6 \mathrm{AgG} / \mathrm{gL}$, Fuse, Contacts |
| Supply frequency | Max. 400 Hz , Contacts |
| Actuator |  |
| Actuating force at beginning/end of stroke | $1.0 \mathrm{~N} / 8.0 \mathrm{~N}$ |
| Actuating torque of rotary drives | $0.2 \mathrm{~N} \cdot \mathrm{~m}$ |
| Actuator type | Plunger |
| Operating speed | Max. $1 / 0.5 \mathrm{~m} / \mathrm{s}$ (with DIN cam, mechanical actuation) For angle of actuation $a=0^{\circ} / 30^{\circ}$ |
| Contacts |  |
| Control circuit reliability | 1 failure per 5,000,000 switching operations (statistically determined, at $5 \mathrm{VDC} / 1$ mA) <br> 1 failure per $10,000,000$ switching operations (Statistically determined, at 24 V DC/5 mA) |
| Number of contacts (change-over contacts) | 0 |
| Number of contacts (normally closed contacts) | 1 |
| Number of contacts (normally open contacts) | 1 |
| Safety |  |
| Explosion safety category for gas | None |
| Explosion safety category for dust | None |
| Design verification |  |
| Equipment heat dissipation, current-dependent Pvid | OW |
| Heat dissipation capacity Pdiss | OW |
| Heat dissipation per pole, current-dependent Pvid | 0.17 W |
| Rated operational current for specified heat dissipation (In) | 6 A |
| Static heat dissipation, non-current-dependent Pvs | OW |
| 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 | 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. |
| 10.10 Temperature rise | The panel builder is responsible for the temperature rise calculation. Eaton will <br> 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 <br> observed. |
| 10.12 Electromagnetic compatibility | Is the panel builder's responsibility. The specifications for the switchgear must be <br> observed. |
| 10.13 Mechanical function | The device meets the requirements, provided the information in the instruction <br> leaflet (IL) is observed. |

## Technical data ETIM 8.0

Sensors (EG000026) / End switch (EC000030)
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Safety-related position switch / Safety position switch (Type 1) (ecl@ss10.0.1-27-27-26-01 [AKE640013])

| Width sensor | mm | 31 |
| :---: | :---: | :---: |
| Diameter sensor | mm | 0 |
| Height of sensor | mm | 61 |
| Length of sensor | mm | 33.5 |
| Rated operation current le at AC-15, 24 V | A | 6 |
| Rated operation current le at AC-15, 125 V | A | 6 |
| Rated operation current le at AC-15, 230 V | A | 6 |
| Rated operation current le at DC-13, 24 V | A | 3 |
| Rated operation current le at DC-13, 125 V | A | 0.8 |
| Rated operation current le at DC-13, 230 V | A | 0.3 |

## Switching function

Switching function latching
Output electronic
Forced opening
Number of safety auxiliary contacts
Number of contacts as normally closed contact
Number of contacts as normally open contact
Number of contacts as change-over contact
Type of interface
Type of interface for safety communication
Construction type housing
Material housing
Coating housing
Type of control element
Alignment of the control element
Type of electric connection
With status indication
Suitable for safety functions
Explosion safety category for gas
Explosion safety category for dust
Ambient temperature during operating
Degree of protection (IP)
Degree of protection (NEMA)
s the panel builder's responsibility. s the panel builder's responsibility. s the panel builder's responsibility. provide heat dissipation data for the devices.

Is the panel builder's responsibility. The specifications for the switchgear must be Is the panel builder's responsibility. The specifications for the switchgear must be The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

