## DATASHEET - LS-11S/RL-M12A

Position switch, Rotary lever, Complete device, 1 N/O, 1 NC, Snap-action contact - Yes, Cage Clamp, Yellow, Insulated material, $-25-+70^{\circ} \mathrm{C}$, with M12 connector, EN 50047 Form A
$E \pm T \cdot N$
Powering Business Worldwide"

## Part no. LS-11S/RL-M12A 178142

| General specifications |  |
| :---: | :---: |
| Product name | Eaton Moeller® series LS Position switch |
| Part no. | LS-11S/RL-M12A |
| EAN | 4015081734658 |
| Product Length/Depth | 33.5 millimetre |
| Product height | 125 millimetre |
| Product width | 31 millimetre |
| Product weight | 0.074 kilogram |
| Certifications | IEC/EN 60947 |
| Product Tradename | LS |
| Product Type | Position switch |
| Product Sub Type | None |
| Catalog Notes | 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 A |
| Enclosure color | Yellow Cover |
| Enclosure material | Insulated material |
| Features | Positive opening Snap-action contact |
| General information |  |
| Accessories | M12 connector included. |
| Connection type | Cage Clamp |
| Degree of protection | IP66 |
| Lifespan, mechanical | 8,000,000 Operations |
| Operating frequency | 6000 Operations/h |
| Overvoltage category | III |
| Pollution degree | 3 |
| Product category | Rotary lever |
| Rated impulse withstand voltage (Uimp) | 2500 V AC |
| Repetition accuracy | 0.15 mm (Contacts/switching capacity) |
| Type | Position switch Safety position switch |
| Ambient conditions, mechanical |  |
| Mounting position | As required |
| Shock resistance | 25 g , Standard-action contact, Mechanical, Half-sinusoidal shock 20 ms |
| 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 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) | 250 V |


| Rated operational current (le) | 6 A at $\mathrm{AC}-15,24 \mathrm{~V}$ <br> 3 A at 24 V <br> 1 A at $\mathrm{AC}-15,220 \mathrm{~V} 230 \mathrm{~V} 240 \mathrm{~V}$ <br> 0.3 A at 220 V <br> 4 A at $\mathrm{AC}-15,115 \mathrm{~V}$ <br> 4 A at $\mathrm{AC}-15,380 \mathrm{~V} 400 \mathrm{~V} 415 \mathrm{~V}$ <br> 0.8 A at 110 V |
| :---: | :---: |
| Short-circuit protection rating | Max. 4 A gG/gL, Fuse, Contacts |
| Supply frequency | Max. 400 Hz , Contacts |
| Actuator |  |
| Actuating torque of rotary drives | 0.2 N.m |
| Actuator type | Rotary lever |
| Operating speed | Max. $1.5 \mathrm{~m} / \mathrm{s}$ (with DIN cam, mechanical actuation) |
| Contacts |  |
| Control circuit reliability | 1 failure per 10,000,000 switching operations (Statistically determined, at $24 \mathrm{~V} \mathrm{DC/5}$ $\mathrm{mA})$ <br> 1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 $\mathrm{mA})$ |
| Number of contacts (normally closed contacts) | 1 |
| Number of contacts (normally open contacts) | 1 |
| Design verification |  |
| Equipment heat dissipation, current-dependent Pvid | OW |
| Heat dissipation capacity Pdiss | 0 W |
| 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 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 9.0

Sensors (EG000026) / Drive head for position switches/hinge switches (EC001483)
Electric engineering, automation, process control engineering / Sensor technology, safety-related sensor technology / Mechanical switch (sensor technology) / Drive head for position switches (ecl@ss13-27-27-06-04 [BAA083017])

Type of control element
Rotary lever

