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



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

| Product name                                 | Eaton Moeller® series LS Position switch  |
|--|---|
|  |   |
| Part no.                                     | LS-11S/RL-M12A  |
| EAN Product Length/Depth                     | 4015081734658<br>33.5 millimetre  |
| • •  |   |
| Product height                               | 125 millimetre  |
| Product width                                | 31 millimetre   |
| Product weight                               | 0.074 kilogram  |
| Certifications                               | IEC/EN 60947  |
| Product Tradename                            | LS Positive switch  |
| Product Type                                 | Position switch   |
| Product Sub Type                             | None  |
| Catalog Notes                                | Cage-Clamp is a registered trademark of Wago Kontakttechnik, 32432 Minden, Germany 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)   |
| Туре   | 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 °C  |
| Ambient operating temperature - max          | 70 °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 x (0.5 - 1.5) mm <sup>2</sup>   |
| Terminal capacity (solid)                    | 1 x (0.5 - 2.5) mm <sup>2</sup>   |
| Electrical rating                            |   |
| Rated conditional short-circuit current (Iq) | 1 kA  |
| Rated insulation voltage (Ui)                | 250 V   |

| Rated operational current (le)   | 6 A at AC-15, 24 V<br>3 A at 24 V<br>1 A at AC-15, 220 V 230 V 240 V<br>0.3 A at 220 V<br>4 A at AC-15, 115 V<br>4 A at AC-15, 380 V 400 V 415 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 m/s (with DIN cam, mechanical actuation)  |
| Contacts   |  |
| Control circuit reliability  | 1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC/5  |
|  | mA) 1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 mA)  |
| Number of contacts (normally closed contacts)                                    | 1  |
| Number of contacts (normally open contacts)                                      | 1  |
| Design verification  |  |
| Equipment heat dissipation, current-dependent Pvid                               | 0 W  |
| 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                               | 0 W  |
| 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