

# Safety switch

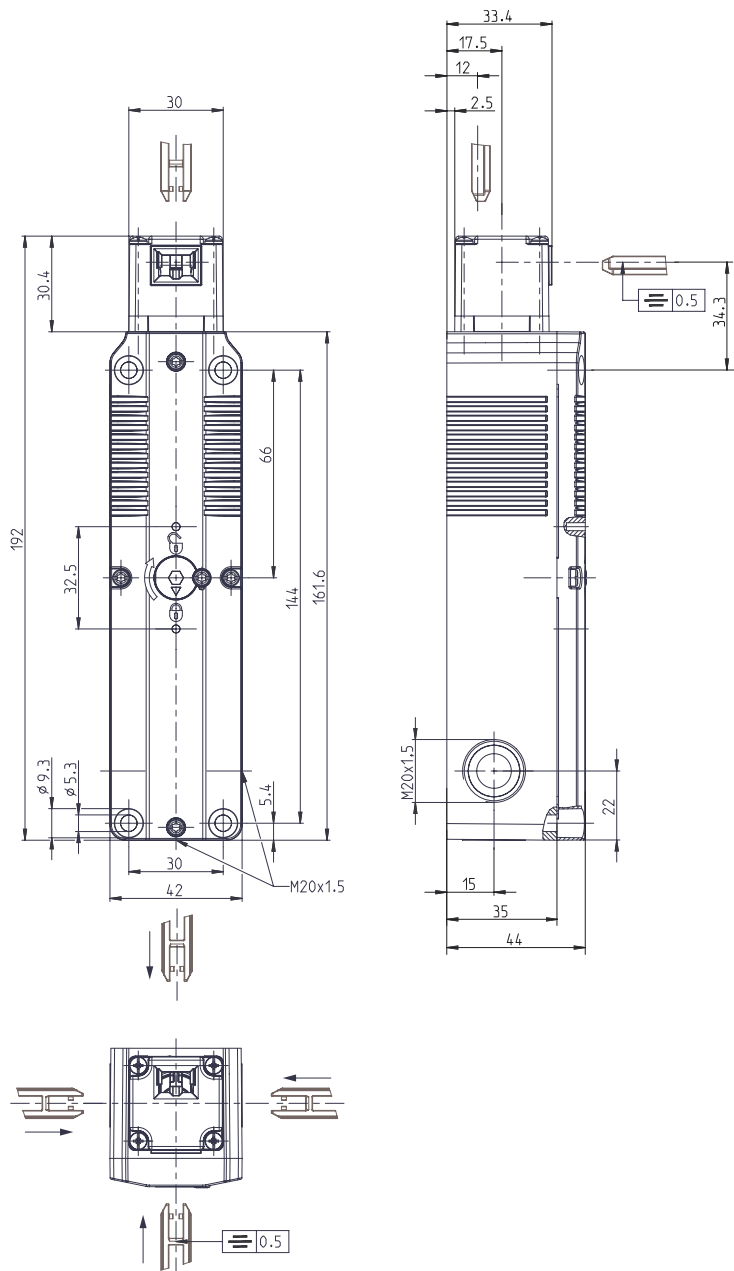
## Series SLC

Description **SLC-M-024-11/11-R4**

Article number **601820002**

| Position monitoring<br>(interlock D / guard lock L)  |  |
|--|--|
| <p>Actuator inserted<br/>Protective device interlocked and guard locked</p> <p>with current</p> <p>E1    E2<br/>13    14 D<br/>21    22 ⊕<br/>31    32 ⊕<br/>43    44 L</p>                    | <p>Actuator inserted<br/>Protective device interlocked and not guard locked</p> <p>without current</p> <p>E1    E2<br/>13    14 D<br/>21    22 ⊕<br/>31    32 ⊕<br/>43    44 L</p> |
| <p>Actuator withdraw<br/>Protective device not interlocked and not guard locked</p> <p>with or without current</p> <p>E1    E2<br/>13    14 D<br/>21    22 ⊕<br/>31    32 ⊕<br/>43    44 L</p> |  |

The actuator is not included in the scope of delivery. It can only be purchased in conjunction with the safety switch.



| <b>Electrical data</b>                  |   |
|---|---|
| Protection class                        | II, totally insulated   |
| <b>Contact elements</b>                 |   |
| Rated insulation voltage                | $U_i$ 250 V   |
| Rated impulse withstand voltage         | $U_{imp}$ 2,5 kV  |
| Rated operational voltage               | $U_e$ 240 V AC / 24 V AC/DC   |
| Conv. thermal current                   | $I_{the}$ 5 A   |
| Utilization category acc. to IEC        | AC-15, $U_e / I_e$ 240 V / 1,5 A<br>DC-13, $U_e / I_e$ 24 V / 1,5 A; 250 V / 0,11 A |
| Utilization category acc. to UL / CSA   | B300 R300<br>general use 240 V / 1,5 A<br>general use M12 connector 24 V / 1,5 A    |
| Direct opening action                   | ⊕ according to IEC/EN 60947-5-1, Annex K  |
| Short-circuit protective device         | 4 A gG  |
| Rated conditional short-circuit current | 400 A   |
| <b>Electro magnet</b>                   |   |
| Duty cycle                              | 100 % ED (at E1; E2)  |
| Temperature class                       | F (155 °C)  |
| Permanent power consumption             | 6,7 VA (W)  |
| Switch operations permanent             | 600 / h   |
| Operating voltage                       | 24 V AC / DC (+10 % / -15 %)  |

| <b>Mechanical data</b>   |   |
|--------------------------|---|
| Enclosure                | Thermoplastic, glass fibre reinforced (UL 94-V0)                    |
| Cover                    | Thermoplastic, glass fibre reinforced (UL 94-V0)                    |
| Actuating head           | Thermoplastic, glass fibre reinforced / Zn-GD                       |
| Actuator                 | Separate actuator   |
| Minimum actuating radius | $R_{min}$ see separate actuators data sheet                         |
| Velocity for actuating   | $V_{max}$ 0,5 m/s   |
| Extraction force         | ≤ 10 N  |
| Interlocking principle   | Magnetic force  |
| Unlocking                | Spring force  |
| Hold on force            | $F_{Zh}$ 1500 N (EN ISO 14119)                                      |
| Ambient air temperature  | -25 °C ... +55 °C   |
| Contact type             | Interlock (D): 1 NC, 1 NO<br>Guard lock (L): 1 NC, 1 NO             |
| Switching principle      | 4 slow make and break contact elements                              |
| Mechanical life          | 1 x 10 <sup>6</sup> switching cycles                                |
| Assembly                 | 4 x M5  |
| Connection               | Screw connection  |
| Conductor cross-sections | 0,34 ... 1,5 mm <sup>2</sup> flexible                               |
| Cable entrance           | 3 x M20 x 1,5   |
| Weight                   | ≈ 0,484 kg  |
| Installation position    | operator definable  |
| Protection type          | IP67 acc. to IEC/EN 60529 ; (UL 50 E / CSA C22.2) Type 6 indoor use |

| <b>ID for safety engineering</b> |                            |
|----------------------------------|----------------------------|
| B10d                             | 2 x 10 <sup>6</sup> cycles |

| <b>Standards</b> |   |
|------------------|---|
|                  | DIN EN 60947-5-1                        |
|                  | UL 508 18th Edition, CSA-C22.2 No.14-18 |
|                  | GS-ET-19 (DGUV)                         |
|                  | DIN EN ISO 14119                        |
|                  | DIN EN ISO 13849-1                      |

| <b>EU Conformity</b> |  |
|----------------------|--|
|                      | acc. to directive 2006/42/EC (Safety-of-Machinery-Directive) |

| <b>Approvals</b> |  |
|------------------|--|
|                  | DGUV (in preparation)                          |
|                  | cCSA <sub>US</sub> B300 (same polarity) / R300 |
|                  | CCC  |

| <b>Notes</b>  |  |
|---|--|
| The degree of protection (IP code) specified applies solely to a property closed cover and the use of an equivalent cable gland with adequate cable.<br>The switch may not be used as a mechanical stop.<br>In the event of a power failure, the guard does not remains locked. |  |