Interlocking solenoid safety switches with plastic body

SLK

Safelock family
Plastic body
Protection class IP 67
Power to lock or unlock

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**Product advantages**
- **Safety** built into the system through two independent safety circuits, flexible contact assembly with max. 4 NC
- **Universal** integration into system due to multiple voltage supply 24 V DC and 24/110/230 V AC (Standard: 24 V AC/DC)
- **Flexible** integration due to rotatable actuating head (4 x 90°) and horizontal or vertical operation
- **Compact** design with slim dimensions with total length of 170 mm
- **Innovative** installation due to cage-clamp connection technology.
- **Function** according to GS ET 19, EN 60 204-1 and EN 60 947-5-1.

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**Innovative installation**

The electrical connection of the SLK is safe and reliable. A terminal block with cage-clamp terminal connectors is used. The terminal compartment is separate from all working parts ensuring that the connections are safely made. A terminal block with conventional screw-type connections is available as an option.

The terminal compartment is designed according to protection class IP 67.

The LED indicator showing the actual status is optional.

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**Flexible application**

The SLK can be operated both horizontally and vertically. The necessary pre-setting is carried out before mounting by simply adjusting the actuating head. This flexible method of mounting is supported by the ability to position the actuating head in 4 x 90° increments.

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**Safe application**

The actuator made from stainless steel guarantees reliable operation. The coding prevents manipulation and bypassing in the “simplest possible way”. The optional radius actuator allows smaller safety doors to be monitored. It can be installed horizontally or vertically, and is also made from stainless steel.

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**Safety in demanding environmental conditions**

The use of an innovative electromechanical system (Bernstein patent) consisting of a solenoid actuator, electro-magnetic retention system and electronic controller, results in a very low power consumption. This allows reliable continuous operation even in high ambient temperatures.

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**Universal integration in system**

In the multiple voltage version, the SLK can be connected to all control voltages from 24 V DC as well as from 24/110/230 V AC. The standard SLK is equipped for a control voltage of 24 V DC/AC.
Mounting

- The safety switch is mounted using a minimum of two M5 screws in the mounting holes.
- The separate actuator is to be suitably secured to prevent unintentional loosening (one-way and break-off screws, rivets).
- The user sets the actuating head to either horizontal or vertical operation before installation.
- This is achieved by changing the alignment of the actuating head and the upper and lower parts are then secured together using a security screw.
- The four operating directions are selected by pulling forward the clasp and turning the actuating head.

Warning

- The safety switch must not be used as a mechanical end stop.
- The interlock of the safety device is maintained on power failure only with the types SLK-FVTU... (spring-locking).
- To operate the auxiliary release, first loosen the screw and turn the actuating lever.
- To maintain the safety level, the safety switch may only be used in conjunction with the corresponding actuator.

Product designation system for SLK safety switches

<table>
<thead>
<tr>
<th>Switch</th>
<th>Locking principle</th>
<th>Actuating device</th>
<th>Operating voltage</th>
<th>Two-digit contact code:</th>
<th>Release function</th>
<th>Additional function</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLK</td>
<td>F Spring force</td>
<td>VTU</td>
<td>24DC-24-230MC</td>
<td>0 = free 5 = 1NC/1NO 1 = 1NC 6 = 1NC/2NO 2 = 2NC 7 = 2NC/1NO 3 = 1NO 8 = 3NC 4 = 2NO 9 = 4NC</td>
<td>AR Auxiliary release</td>
<td>R = Radius actuator</td>
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<tr>
<td></td>
<td>M Magnet force</td>
<td></td>
<td></td>
<td></td>
<td>ER Emergency release</td>
<td>S = Plug-in connector</td>
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</tbody>
</table>

Example: SLK FVTU24UC-55-ARR = type F, 24 V AC/DC, 1 NC / 1 NO on the interlock, 1 NC / 1 NO on the safety equipment, auxiliary release, radial actuator
## Table of standard products

### SLK

<table>
<thead>
<tr>
<th>Part number</th>
<th>Designation</th>
<th>Locking</th>
<th>Connection assembly</th>
<th>Control voltage</th>
<th>Add. functions</th>
<th>Actuator</th>
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</thead>
<tbody>
<tr>
<td>601.8119.001</td>
<td>SLK-FVTU24UC-95-AR</td>
<td>Spring force</td>
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<td>24 V AC/DC</td>
<td>AR</td>
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<tr>
<td>601.8119.009</td>
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</table>

According to the part designation systematic, customer specific versions (i.e. different contacts) are possible (see page 76)

### Electrical characteristics

**Switching devices**

- Rated isolated voltage Ui: 250 V
- Application category: AC 15 230 V/2,5 A
- Thermal current Ith: 2,5 A
- Short-circuit protection: 4 A slow blow fuse

**Electronic magnets**

- Duration of current: 100% ED
- Temperature class: B (130 °C)
- Pulse power: 56 VA (0.2 s)
- Holding power: 1.1 VA (constant)
- Switching frequency: 600 / h max.

**Mechanical characteristics**

- Enclosure: PA 6 GV (UL94-V0)
- Lid: PA 6 GV (UL94-V0)
- Actuating device: PA 6 GV / ZN-GD
- Separate actuator: St/PA
- Ambient temperature: –25 °C/+70 °C
- –13 °F/+158 °F
- Switching function: 2 NC; 2 NO (Standard)
- Switching principal: 4 push-button devices
- Mechanical life: 1 million cycles at 600 cycles/h
- Actuating radius: R = 400 mm min.
- Approach speed: V = 0.5 m/s max.
- Mounting: 4 x M5 screws
- Connection cross section: 1.5 mm² flex. max.
- Connection type: cage clamp
- Cable entries: 3x M 20 x 1.5
- Weight: approx. 0.3 kg
- Protection class: IP 67
- Mounting position: variable
- Locking: Power to lock or unlock
- Locking force: 2 000 N max., acc. GSET-19
- Isolated: 2 000 N max., acc. GSET-19