**SERIES 1045 – SNAP-ACTION SWITCH**

**DUST AND WATER PROTECTION IP 67**

**ADVANTAGE**
- Wide rating range
- Compact, sealed switch unit
- High endurance
- High level of safety
- High level of tolerance in use
- Slider actuation without lever
- Approved for household appliances

**PRODUCT FEATURES**
- From low DC signal currents to ratings of 10 (3) A or 6 (6) A 250 V AC
- Cable assembly with dust and water protection (IP 67)
- More than 10 million switching cycles, tightness up to 1.5E6 cycles
- Versions with integrated mechanism for breaking contact weldings
- Long overtravel
- Start-up angle up to 35°
- IEC 60335 Chapter 30 approved

**EXAMPLES OF APPLICATION**
- Drives for beds, tables and roller shutters
- Servo drives
- Power tools
- Recreational equipment
- Vacuum cleaners
- Small household appliances
- Vending machines
- Medical devices
- HVAC technology
- Automotive applications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating in compliance with IEC/UL 61058-1</td>
<td>10 (3) A 250 V AC 10E3 or 6 (6) A 250 V AC 30E3 ENEC 10 (3) A 250 V AC 10E3 or 6 (6) A 250 V AC 30E3 UL</td>
</tr>
<tr>
<td>Switching function</td>
<td>Normally closed, normally open, changeover</td>
</tr>
<tr>
<td>Protection type</td>
<td>IP 40 and IP 67</td>
</tr>
<tr>
<td>Mechanical life</td>
<td>10E6, tightness up to 1.5E6 cycles</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>-40 °C … +100 °C</td>
</tr>
<tr>
<td>Creep resistance (Proof Tracking Index)</td>
<td>250 PTI</td>
</tr>
<tr>
<td>Terminal type</td>
<td>Quick-connect terminal 2.8 x 0.5, solder terminal, PCB terminal (straight), PCB terminal (lateral)</td>
</tr>
<tr>
<td>Terminal surface</td>
<td>Tin-plated, quick-connect terminal 2.8 x 0.5 uncoated</td>
</tr>
</tbody>
</table>
| Material | Housing, actuator: PA  
Terminals: Brass  
Additional actuator: Stainless spring steel / PA |
| Actuating force | 0.7 N … 3.2 N (depending on product) |
| Difference travel | max. 0.2 mm |
| Overtravel | min. 0.5 mm |
| Contact resistance | < 50 mOhm |
| Flammability | UL 94 V-0 |
### VARIANTS

<table>
<thead>
<tr>
<th>Basic type</th>
<th>Protection type</th>
<th>Actuating force</th>
<th>Terminal type</th>
<th>Ratings UL and ENEC</th>
<th>Switching functions</th>
<th>optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>1045</td>
<td>IP 67 actuator side</td>
<td>1.1 ...3.2 N</td>
<td>Solder terminal PCB terminal, straight PCB terminal, lateral Quick-connect terminal</td>
<td>A 250 V AC 100E3 (Au)</td>
<td>Normally closed contact</td>
<td>Mechanism to separate contact welding</td>
</tr>
<tr>
<td>1046</td>
<td>IP 40</td>
<td>0.7 ...2.8 N</td>
<td>PCB terminal, straight PCB terminal, lateral Quick-connect terminal</td>
<td>2 (1) A 250 V AC 100E3</td>
<td>Normally open contact</td>
<td>Lever</td>
</tr>
<tr>
<td>1048</td>
<td>IP 67</td>
<td>1.1 ...3.2 N</td>
<td>Wires UL Style 1569 0.5 / 0.75 mm², outlet on the left, on the right or at the bottom</td>
<td>10 (3) A 250 V AC 10E3</td>
<td>Change-over contact</td>
<td>Gold-plated contacts (Au)</td>
</tr>
</tbody>
</table>

### DRAWINGS

**Basic type 1045**

![Basic type 1045 Drawing](image)

**Basic type 1046**

![Basic type 1046 Drawing](image)

**Basic type 1048**

![Basic type 1048 Drawing](image)