Contactors

C310 Series
Cam-operated switching elements for 500 A
Catalogue C310.en
Cam-operated switching elements for 500 A

Schaltbau Series S310 cam-operated switching elements are complementary to the well proven S306 and S307 ones. As with these series, versions are available with permanent magnetic blowout and without. They are suitable for materials handling and rail vehicles, crane controls, bulk goods unloaders, and emergency power supplies.

<table>
<thead>
<tr>
<th>Series</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>S310</td>
<td>S310 A</td>
</tr>
</tbody>
</table>

**Ordering code**

**Series**
- S310: Cam-operated switching element

**Version**
- A: Ith = 500 A, without blowout
- C: Ith = 500 A, with blowout

**Arc chamber:** Arc chambers the cam-operated switching elements can be fitted with must be ordered separately.

LK-S310: Arc chamber for cam-operated switching element S310

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**Specifications**

- **Conv. thermal current Ith:** 500 A *
- **Temporary duty:**
  - 1 minute: 1,300 A *
  - 5 minute: 800 A *
- **Permissible inrush current:** 2,500 A
- **Nominal voltage Un:** 300 V DC / 750 V AC
- **Mechanical endurance:** 2 million operating cycles min.
- **Insulation:** EN60947-1, at pollution degree 3
  - With single mounting and normal contact gap 400 V
- **Dimensions (L x D x H):** 62 x 65 x 120 mm
- **Weight:** 0.7 kg
- **Permissible total temperature:** 160 °C

* with wire gauge 2 x 70 mm² (AWG 3/0)

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**Maximum breaking capacity**

<table>
<thead>
<tr>
<th>Switching voltage / V</th>
<th>DC Maximum breaking capacity with arc chamber and blow-out magnets</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1,500 A</td>
</tr>
<tr>
<td>200</td>
<td>1,250 A</td>
</tr>
<tr>
<td>400</td>
<td>1,000 A</td>
</tr>
<tr>
<td>600</td>
<td>750 A</td>
</tr>
<tr>
<td>800</td>
<td>500 A</td>
</tr>
</tbody>
</table>

**Temperature rise**

<table>
<thead>
<tr>
<th>Time / minutes</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
</tr>
</thead>
</table>
| 0°C            |   |   |    |    |    |    |    | 160°C

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**Circuit and dimension diagram, mounting instructions**

**Circuit diagram:**

**Dimension diagram:**

**Mounting instructions:**

- Observe the right polarity when connecting the cables to a cam-operated switching element with magnetic blowout. Make sure that the positive wire is connected to the terminal marked “+”.
- Cam-operated switching elements can be mounted by means of single terminal bolts. Refer to catalogue B100.en – Single Terminal Bolts, EKS127 Series.
- Cam-operated switching elements are often needed as spare parts for Schaltbau cam contactors. So if you need a spare part please also specify the contactor when you order the switching element.