The SW180 has been designed for direct current loads, including motors as used on electric vehicles such as industrial trucks. Developed for both interrupted and uninterruptible loads, the SW180 is suitable for switching Resistive, Capacitive and Inductive loads.

- **Interrupted current** - opening and closing on load with frequent switching (results in increased contact resistance).
- **Uninterrupted current** - no or infrequent load switching requirements (maintains a lower contact resistance).

The SW180 features single pole single throw, double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW180 has M8 stud main terminals and 6.3mm spade coil connections. It can be mounted via M5 tapped holes or mounting brackets – either supplied fitted, or as separate items. Mounting can be horizontal or vertical, when vertical the M6 contact studs should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this.

### Contact Performance Key:
- **Interrupted Current**
- **Uninterrupted Current**

### Connection Diagram
- **SW180C**
- **SW180A**

### Connection Options
- **AUXILIARY CONTACT**
- **AUXILIARY CONTACT**

### Application Interrupted Uninterrupted

<table>
<thead>
<tr>
<th>Thermal Current Rating (U)</th>
<th>150A</th>
<th>200A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermittent Current Rating:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30% Duty</td>
<td>275A</td>
<td>365A</td>
</tr>
<tr>
<td>40% Duty</td>
<td>235A</td>
<td>315A</td>
</tr>
<tr>
<td>50% Duty</td>
<td>210A</td>
<td>285A</td>
</tr>
<tr>
<td>60% Duty</td>
<td>195A</td>
<td>260A</td>
</tr>
<tr>
<td>70% Duty</td>
<td>180A</td>
<td>240A</td>
</tr>
</tbody>
</table>

### Maximum Recommended Contact Voltages (U):
- **SW180A** 48V D.C.
- **SW180B** 96V D.C.

### Typical Voltage Drop per pole across New Contacts at 150A:
- **Uninterrupted**
- **Interrupted**

- **Coil Power Dissipation**:
  - Highly Interimint Rated Types: 40 - 50 Watts
  - Intermittently Rated types: 30 - 40 Watts
  - Continuously Rated Types: 10 - 15 Watts

- **Maximum Pull-In Voltage (Coil at 20°C):**
  - Highly Interimint Rated types (Max 25% Duty Cycle): 60% U
  - Intermittently Rated types (Max 70% Duty Cycle): 60% U
  - Continuously Rated Types (100% Duty Cycle): 66% U
  - Drop-Out Voltage Range: 10 - 25% U

### Typical Pull-In Time (N/O Contacts to Close):
- Without Suppression: 8ms
- With Diode Suppression: 60ms
- With Diode and Resistor (Subject to resistance value): 25ms

### Auxiliary Details
- **Auxiliary Thermal Current Rating**: 5A
- **Auxiliary Contact Switching Capabilities (Resistive Load):**
  - **SW180C**: 2A at 48V D.C.
  - **SW180A**: 2A at 48V D.C.

### Advised Connection Sizes for Maximum Continuous Current
- Copper busbar: 130mm² [0.20inch²]
- Cable: Rated suitable for application

### Key:
- Interrupted = I
- Uninterrupted = U

### Note:
- Where applicable values shown are at 20°C
- Please check our web site for product UL status
- Performance data provided should be used as a guide only. Some de-rating or variation from figures may be necessary according to application.
- Thermal current ratings stated are dependant upon the size of conductor being used.
- For further technical advice email: technical@albrightinternational.com
- Albright reserve the right to change data without prior notice.