The SW80P is sealed to IP66 and has been designed for direct current loads in more arduous environments. Applications include winches and motors as used on electric vehicles such as industrial trucks. Developed for both interrupted and uninterrupted loads, the SW80P 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 SW80P features single pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW80P features an enclosed top cover and offers environmental protection to IP66. The SW80P has M8 stud main terminals and 6.3mm spade coil connections. Mounted using supplied brackets, mounting can be horizontal or vertical, when vertical the M8 contact stud should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this.

**Application**

- **Thermal Current Rating (amps)**
  - 100A/125A

- **Intermittent Current Rating**
  - 100A/125A

- **30% Duty**
  - 185A
  - 230A

- **40% Duty**
  - 160A
  - 200A

- **50% Duty**
  - 140A
  - 175A

- **60% Duty**
  - 130A
  - 160A

- **70% Duty**
  - 120A
  - 150A

- **Rated Fault Current Breaking Capacity (amps) 5ms Time Constant:**
  - (In accordance with UL508)
  - No Blowouts: 600A at 48V D.C.
  - Blowouts: 600A at 96V D.C.

- **Rated Current Breaking Capacity (amps) Resistive Load:**
  - (In accordance with UL508)
  - No Blowouts: 190A at 60V D.C.
  - Blowouts: 190A at 96V D.C.

Max Recommended Contact Voltages (Uc):
- **No Blowouts**: 48V D.C., 60V D.C.
- **Blowouts**: 96V D.C.

Typical Voltage Drop per pole across New Contacts at 100A: 40mV

Mechanical Durability: >5 x 10^8 Cycles

Coil Voltage Available (Uc): (Rectifier board required for A.C.)
- From 6 to 240V D.C.

Coil Power Dissipation:
- Highly Intermittent Rated Types: 20 - 30 Watts
- Intermittently Rated types: 15 - 20 Watts
- Prolonged Rated Types: 13 - 15 Watts
- Continuously Rated Types: 7 - 13 Watts

Maximum Pull-In Voltage (Coil at 20°C) Guideline:
- Highly Intermittent Rated types (Max 25% Duty Cycle): 60% Uc
- Intermittently Rated types (Max 70% Duty Cycle): 60% Uc
- Prolonged Operation (Max 90% Duty Cycle): 60% Uc
- Continuously Rated Types (100% Duty Cycle): 66% Uc

Drop-Out Voltage Range: 10 - 25% Uc

Typical Pull-In Time: 20ms

Typical Drop-Out Time (N/O Contacts to Open): Without Suppression: 5ms
With Diode Suppression: 50ms
With Diode and Resistor (Subject to resistance value): 8 - 20ms
Typical Contact Bounce Period: 3ms
Operating Ambient Temperature: -40°C to +60°C

Guideline Contact Weight:
- SW80P: 390 gms
- With Blowouts: +50 gms

- **Advised Connection Sizes for Maximum Continuous Current**
  - Copper busbar: 80mm² (0.124inch²)
  - Cable: Rated suitable for application

- **Key**:
  - Interrupted
  - Uninterrupted

- **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**

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* Connections become polarity sensitive

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<table>
<thead>
<tr>
<th>SW80P Contact Performance</th>
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<tbody>
<tr>
<td><strong>Time (msec)</strong></td>
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<tr>
<td><strong>Current (Ampere)</strong></td>
</tr>
<tr>
<td><strong>SW80P Contact Performance</strong></td>
</tr>
<tr>
<td><strong>Interrupted Current</strong></td>
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<tr>
<td><strong>Uninterrupted Current</strong></td>
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<table>
<thead>
<tr>
<th>SW80P Available Options</th>
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</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
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<tr>
<td><strong>Auxiliary Contacts</strong> X</td>
</tr>
<tr>
<td><strong>Auxiliary Contacts - V3</strong> X</td>
</tr>
<tr>
<td><strong>Magnetic Blowouts†</strong> ○ B</td>
</tr>
<tr>
<td><strong>Magnetic Blowouts - High Powered†</strong> X</td>
</tr>
<tr>
<td><strong>Armature Cap</strong> X</td>
</tr>
<tr>
<td><strong>Mounting Brackets</strong> (See Stud Range Catalogue) ●</td>
</tr>
<tr>
<td><strong>Magnetic Latching† (Not fail safe)</strong> ○ M</td>
</tr>
<tr>
<td><strong>Closed Contact Housing</strong> ●</td>
</tr>
<tr>
<td><strong>Environmentally Protected IP66</strong> ● P</td>
</tr>
<tr>
<td><strong>EE Type (Steel Shroud)</strong> X</td>
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</tbody>
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<tbody>
<tr>
<td><strong>Contacts</strong></td>
</tr>
<tr>
<td><strong>Large Tips</strong> ○ L</td>
</tr>
<tr>
<td><strong>Textured Tips</strong> ○ T</td>
</tr>
<tr>
<td><strong>Silver Plating</strong> X</td>
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<tbody>
<tr>
<td><strong>Coil</strong></td>
</tr>
<tr>
<td><strong>AC Rectifier Board (Fitted)</strong> X</td>
</tr>
<tr>
<td><strong>Coil Suppression</strong> ○</td>
</tr>
<tr>
<td><strong>Flying Leads</strong> X</td>
</tr>
<tr>
<td><strong>Manual Override Operation</strong> X</td>
</tr>
<tr>
<td><strong>M4 Stud Terminals</strong> ○</td>
</tr>
<tr>
<td><strong>M8 Terminal Board</strong> X</td>
</tr>
<tr>
<td><strong>Vacuum Impregnation</strong> ○</td>
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</tbody>
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<tbody>
<tr>
<td><strong>Key</strong></td>
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<tr>
<td><strong>Optional</strong> ○ Standard ● Not Available X</td>
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</tbody>
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