The SU80P is an up-rated version of the SW80P designed for Interrupted and Uninterrupted applications. It is sealed to IP66 and has been designed for direct current loads in more arduous environments. It is suitable for switching Resistive, Capacitive and Inductive loads. Typical applications include, but are not limited to, electric motors, hydraulic power packs, winches and speed controllers.

### Application

<table>
<thead>
<tr>
<th>Application</th>
<th>Interrupted</th>
<th>Uninterrupted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Current Rating (9%)</td>
<td>150A</td>
<td>200A</td>
</tr>
</tbody>
</table>

### Intermittent Rating:

<table>
<thead>
<tr>
<th>Duty (%)</th>
<th>Interrupted</th>
<th>Uninterrupted</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>275A</td>
<td>365A</td>
</tr>
<tr>
<td>40%</td>
<td>235A</td>
<td>315A</td>
</tr>
<tr>
<td>50%</td>
<td>210A</td>
<td>280A</td>
</tr>
<tr>
<td>60%</td>
<td>190A</td>
<td>260A</td>
</tr>
<tr>
<td>70%</td>
<td>180A</td>
<td>240A</td>
</tr>
</tbody>
</table>

### Rated Fault Current Breaking Capacity (in accordance with UL583)

- Blowouts: 800A at 80V D.C.
- No Blowouts: 800A at 48V D.C.

### Typical Voltage Drop per pole across New Contacts at 150A

40mV

### Mechanical Durability

- >3 x 10⁶ Cycles

### Coil Voltage Available (Uc)

- Blowouts: 96V D.C.
- No Blowouts: 48V D.C., 60V D.C.

### Typical Voltage Drop per pole across New Contacts at 150A

40mV

### Mechanical Durability

- >3 x 10⁶ Cycles

### Coil Voltage Available (Uc)

- Blowouts: 96V D.C.
- No Blowouts: 48V D.C., 60V 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 80% 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

- 0°C to +60°C

### Guideline Contactor Weight:

- SU80P: 350 gms
- With Blowouts: + 50 gms

### Advised Connection Sizes for Maximum Continuous Current

<table>
<thead>
<tr>
<th>Connection</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper busbar</td>
<td>97mm² [0.15inch²]</td>
</tr>
<tr>
<td>Cable</td>
<td>72mm² [0.20inch²]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key: = Interrupted = Uninterrupted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Where applicable values shown are at 20°C</td>
</tr>
</tbody>
</table>

* 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**

The SU80P features single pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SU80P features an enclosed top cover and offers environmental protection to IP66. It has M8 stud main terminals and 6.3mm spade coil connections. Mounting can be vertical or horizontal, when vertical the M8 contact studs should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this.

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**SU80P Single Pole Single Throw Normally Open - IP66**

(Part of the SU Series)

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**SU80P Contactor Performance**

- **Figures are for guideline purposes only**

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**SU80P Available Options**

<table>
<thead>
<tr>
<th>General</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auxiliary Contacts</td>
<td>X</td>
</tr>
<tr>
<td>Auxiliary Contacts - V3</td>
<td>X</td>
</tr>
<tr>
<td>Magnetic Blowouts&lt;sup&gt;4&lt;/sup&gt;</td>
<td>○ B</td>
</tr>
<tr>
<td>Magnetic Blowouts - High Powered&lt;sup&gt;3&lt;/sup&gt;</td>
<td>X</td>
</tr>
<tr>
<td>Armature Cap</td>
<td>X</td>
</tr>
<tr>
<td>Mounting Brackets</td>
<td>(see Stud Range Catalogue)</td>
</tr>
<tr>
<td>Magnetic Latching&lt;sup&gt;2&lt;/sup&gt; (Not fail safe)</td>
<td>○ M</td>
</tr>
<tr>
<td>Closed Contact Housing</td>
<td>●</td>
</tr>
<tr>
<td>Environmentally Protected IP66</td>
<td>● P</td>
</tr>
</tbody>
</table>

**EE Type (Steel Shroud)**

X

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**Contacts**

| Large Tips | ○ L |
| Textured Tips | ○ T |
| Silver Plating | X |

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**Coil**

| Large Tips | ○ L |
| Textured Tips | ○ T |
| Silver Plating | X |

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**Connection Diagrams**

- **Connection Diagrams**
- **SU80P**

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**SU80P**

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**Dimensions in mm [Inches]**

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**Figures are for guideline purposes only**

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**Contact Performance Key:**

- **Interrupted Current**
- **Uninterrupted Current**

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**SU80P**