The SW400 has been designed by Albright for use in telecommunication and power distribution applications where the load is infrequently switched. These contactors are primarily for use with Direct Current loads, however they can also be used with Alternating Currents.

- **Uninterrupted current** - no or infrequent load switching requirements (maintains a lower contact resistance).

The SW400 has double breaking main contacts with silver alloy tips which are weld resistant, hard wearing and have excellent conductivity. This compact contactor can be busbar mounted vertically or horizontally, however if mounted vertically, the coil should be at the bottom. If the coil is required at the top, we can adjust the contactor to compensate for this. Optional extras for the SW400 include auxiliary switches, brackets, coil finishes and magnetic latching - allows the contactor to remain closed while consuming no coil power. Additionally, silver plating on the main contacts is specified as standard (option for no silver plating is also available).

### SW400 Contactor Performance

#### Figures are for guideline purposes only.

### SW400 Specifications

<table>
<thead>
<tr>
<th>Application</th>
<th>Uninterrupted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Current Rating (%U)</td>
<td>400A</td>
</tr>
<tr>
<td>Intermittent Current Rating:</td>
<td></td>
</tr>
<tr>
<td>30% Duty</td>
<td>730A</td>
</tr>
<tr>
<td>40% Duty</td>
<td>630A</td>
</tr>
<tr>
<td>50% Duty</td>
<td>565A</td>
</tr>
<tr>
<td>60% Duty</td>
<td>515A</td>
</tr>
<tr>
<td>70% Duty</td>
<td>480A</td>
</tr>
</tbody>
</table>

| Rated Fault Current Breaking Capacity (\%on) Resistive Load: | |
| (in accordance with UL508*) | |
| SW400 | 600A at 60V D.C. |

### Maximum Recommended Contact Voltages (U_\text{c})

- **SW400** 60V D.C.
- Typical Voltage Drop per pole across New Contacts at 450A: 50mV
- Mechanical Durability: > x 10^10 Cycles
- Coil Voltage Available (U_\text{c}) (Rectifier board required for A.C.): From 6 to 240V A.C., D.C.
- **Coil Power Dissipation:**
  - Highly Intermittent Rated Types: 40 - 50 Watts
  - Intermittently Rated Types: 30 - 40 Watts
  - Prolonged Rated Types: 15 - 30 Watts
  - Continuously Rated Types: 10 - 15 Watts

### Maximum Pull-In Voltage (Coil at 20°C) Guideline:

- Highly Intermittent Rated types (Max 25% Duty Cycle): 60% U_g
- Intermittently Rated types (Max 70% Duty Cycle): 60% U_g
- Prolonged Operation (Max 90% Duty Cycle): 60% U_g
- Continuously Rated Types (100% Duty Cycle): 66% U_g
- Drop-Out Voltage Range: 10 - 30% U_g
- **Typical Pull-In Time:** 15ms
- **Typical Drop-Out Time (N/O Contacts to Open):** Without Suppression: 6ms
- **With Diode Suppression:** 35ms
- **With Diode and Resistor (Subject to resistance value):** 20ms
- **Typical Contact Bounce Period:** < 5ms
- Operating Ambient Temperature: -40°C to +60°C

### Guideline Contactor Weight:

- SW400: 880 gms
- With Auxiliary: + 20 gms

### Auxiliary Details

- **Auxiliary Thermal Current Rating:** 5A
- **Auxiliary Contact Switching Capabilities (Resistive Load):**
  - SW400A: 5A at 24V D.C.
  - 2A at 48V D.C.
  - 1.3A at 72V D.C.

### Advised Connection Sizes for Maximum Continuous Current

- Copper busbar: 258mm²[0.39inch²]
- **Cable:** Rated suitable for Application

### Key:

- **=:** 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

### SW400 Available Options

<table>
<thead>
<tr>
<th>General</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auxiliary Contacts</td>
<td>A</td>
</tr>
<tr>
<td>Magnetic Blowouts</td>
<td>X</td>
</tr>
<tr>
<td>Magnetic Blowouts: High Powered</td>
<td>X</td>
</tr>
<tr>
<td>Armature Cap</td>
<td></td>
</tr>
<tr>
<td>Mounting Brackets (see Busbar Series Catalogue)</td>
<td></td>
</tr>
<tr>
<td>Magnetic Latching (Not fail safe)</td>
<td>M</td>
</tr>
<tr>
<td>Closed Contact Housing</td>
<td></td>
</tr>
<tr>
<td>Environmentally Protected IP66</td>
<td>X</td>
</tr>
<tr>
<td>EE Type (Steel Shroud)</td>
<td></td>
</tr>
</tbody>
</table>

### Connections

- **Large Tips:** X
- **Textured Tips:** T
- **Silver Plating (fitted as standard):** X

### Contacts

- **AC Rectifier Board (Fitted):**
- **Coil Suppression:**
- **Flying Leads:** F
- **Manual Override Operation:**
- **M4 Stud Terminals:** X
- **M5 Terminal Board:**
- **Vacuum Impregnation:**

### Key:

- **Optional:** O
- **Standard:** S
- **Not Available:** X

¹ Connections become polarity sensitive

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*E-mail: sales@albrightinternational.com or technical@albrightinternational.com*  
*Web Site: www.albrightinternational.com*