The SW185 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 SW185 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 SW185 features single pole, single throw, double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW185 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 M8 contact studs should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this.

Normally Closed contacts are not recommended to make and break load.

Please note Normally Closed contacts are not suited to make or break load.

**Auxiliary Details**
- **Auxiliary Thermal Current Rating**: 5A
- **Auxiliary Contact Switching Capabilities (Resistive Load):**
  - **SW185C**: 5A at 24V D.C.
  - **SW185A**: 2A at 48V D.C.
  - 0.5A at 240V D.C.

The SW185 has an 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 M8 contact studs should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this.

Guideline Contactor Weight:
- **SW185**: 655 gms
- **With Auxiliary**: +20 gms
- **With Blowouts**: +50 gms

**Contact Performance Key**
- **Interrupted and Uninterrupted Current**

**Auxiliary Connections**

<table>
<thead>
<tr>
<th>Application</th>
<th>Interrupted</th>
<th>Uninterrupted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal Current Rating (%)</td>
<td>150A</td>
<td></td>
</tr>
<tr>
<td>Intermittent Current Rating:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30% Duty</td>
<td>275A</td>
<td></td>
</tr>
<tr>
<td>40% Duty</td>
<td>235A</td>
<td></td>
</tr>
<tr>
<td>50% Duty</td>
<td>210A</td>
<td></td>
</tr>
<tr>
<td>60% Duty</td>
<td>195A</td>
<td></td>
</tr>
<tr>
<td>70% Duty</td>
<td>180A</td>
<td></td>
</tr>
</tbody>
</table>

Rated Fault Current Breaking Capacity (in accordance with UL583)
- **SW185**: 1000A at 48V 300A at 48V
- **SW185B**: 1000A at 96V 300A at 96V

Maximum Recommended Contact Voltages (Uc):
- **SW185**: 48V D.C.
- **SW185B**: 96V D.C.

Typical Voltage Drop per pole across New Contacts at 150A:
- Normally Open: 30mV
- Mechanical Durability: >5 x 10^5

Coil Voltage Available (Uc) (Rectifier board required for A.C.):
- From 6 to 240V 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:
- High Intermittent Rated Types (Max 25% Duty Cycle): 60% Uc
- Intermittently Rated Types (Max 70% Duty Cycle): 60% Uc
- Prolonged Operation (Max 60% Duty Cycle): 60% Uc
- Continuously Rated Types (100% Duty Cycle): 65% Uc

Drop-Out Voltage Range: 10 - 25% Uc

Typical Pull-In Time (N/O Contacts to Close): 30ms

Typical Drop-Out Time (N/O Contacts to Open):
- Without Suppression: 8ms
- With Diode Suppression: 60ms
- With Diode and Resistor (Subject to resistance value): 25ms
- Typical Contact Bounce Period: 3ms

Operating Ambient Temperature: -40°C to +60°C

Guideline Contactor Weight:
- **SW185**: 655 gms
- **With Auxiliary**: +20 gms
- **With Blowouts**: +50 gms

**Advised Connection Sizes for Maximum Continuous Current**
- Copper busbar: 130mm² [0.20inch²]
- 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

Please note Normally Closed contacts are not suited to make or break load.

**Auxiliary Available Options**

- **General**:
  - **Auxiliary Contacts**: A
  - **Auxiliary Contacts - V3**: C
  - **Magnetic Blownout**: B
  - **Magnetic Blownouts - High Powered**: B
  - **Armature Cap**: X
  - **Mounting Brackets**:
    - **(See Stud Contactor Series Catalogue)**
    - **Environmentally Protected IP65**: X
  - **EE Type (Steel Shroud)**: EE

**Contacts**
- **Large Tips**: L
- **Textured Tips**: T
- **Silver Plating**: X

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

**Key**: Optional [Standard] [Not Available] [Open Housing Available]

*Connections become polarity sensitive

† Open Housing Available