The SU280 has been designed for direct current loads, particularly motors as used on electronic vehicles such as industrial trucks, airport tractors and such like.

- **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 contactors have double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. They are easy to install, with M5 tapped holes in the switch frame together with a range of mounting brackets. Mounting can be vertical or horizontal, when vertical the M10 contact studs should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this.

### Application Interrupted Uninterrupted

<table>
<thead>
<tr>
<th>Thermal Current Rating (Iₚ)</th>
<th>250A</th>
<th>350A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermittent Current Rating:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30% Duty</td>
<td>450A</td>
<td>640A</td>
</tr>
<tr>
<td>40% Duty</td>
<td>395A</td>
<td>555A</td>
</tr>
<tr>
<td>50% Duty</td>
<td>355A</td>
<td>495A</td>
</tr>
<tr>
<td>60% Duty</td>
<td>325A</td>
<td>450A</td>
</tr>
<tr>
<td>70% Duty</td>
<td>300A</td>
<td>420A</td>
</tr>
</tbody>
</table>

Rated Fault Current Breaking Capacity (Iₚ) 5ms Time Constant:

- SU280: 1500A at 48V D.C.
- SU280B: 1500A at 80V D.C.

Rated Fault Current Breaking Capacity (Iₚ) Resistive Load:

- SU280: 525A at 60V D.C.
- SU280B: 525A at 96V D.C.

Maximum Recommended Contact Voltages (Uₕ):

- SU280: 80V D.C.
- SU280B: 80V D.C.

Typical Voltage Drop per pole across New Contacts at 250A:
40mV

Mechanical Durability: >3 x 10⁶ Cycles

Coil Voltage Available (Us) (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% Uₕ
- Intermittently Rated types (Max 70% Duty Cycle): 60% Uₕ
- Prolonged Operation (Max 50% Duty Cycle): 60% Uₕ
- Continuously Rated Types (100% Duty Cycle): 66% Uₕ
- Drop-Out Voltage Range: 10 - 25% Uₕ
- Typical Pull-In Time: 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 Contact Weight:

- SU280: 755 gms
- With Auxiliary: +20 gms
- With Biowounds: +50 gms

**Auxiliary Details**

- Auxiliary Thermal Current Rating: 5A

**Auxiliary Contact Switching Capabilities (Resistive Load):**

- **SU280C**
  - 5A at 240V D.C.
- **SU280A**
  - 2A at 48V D.C.
  - 0.5A at 240V D.C.

**Advised Connection Sizes for Maximum Continuous Current**

- Copper busbar: 220mm² (0.353 inch²)
- Cable: Rated suitable for Application

**Key:**
- F: Interrupted
- U: Uninterrupted

**Note:** Where applicable values shown are at 20°C

**Please check our web site for product UL status**

**SU280 Contact Performance**

**Contact Performance Key:**

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

**SU280 Available Options**

**General**

- **Suffix**
  - Auxiliary Contacts: A
  - Magnetic Blowouts²: B
  - Magnetic Blowouts - High Powered²: B
  - Armature Cap: C
  - Mounting Brackets: D
  - Magnetic Latching³ (Not fail safe): M
  - Closed Contact Housing: N
  - Environmentally Protected IP66 (see SU280P Catalogue Sheet): P
  - EE Type (Steel Shroud): EE

**Contacts**

- Large Tips: X
- Textured Tips: T
- Silver Plating: X

**Coil**

- AC Rectifier Board (Fitted): ○
- Coil Suppression³: ○
- Flying Leads: ○
- Junior Power Timer Connector: ○
- Manual Override Switch: ○
- MS Stud Terminals: X
- MS Terminal Board: X
- Vacuum Impregnation: ○

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

* Connections become polarity sensitive

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