| Application | Interrupted | Uninterrupted |
|---|---|---|
| Thermal Current Rating ($I^t$h) | 100A | 125A |
| Intermittent Current Rating: | | |
| 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 ($I^t$cn) 5ms Time Constant: *(in accordance with UL583*)* | | |
| SW80 | 800A at 48V | |
| SW80B | 800A at 80V | |
| Rated Fault Current Breaking Capacity ($I^t$cn) Resistive Load: *(in accordance with UL508*)* | | |
| SW80 | 190A at 60V D.C. | |
| SW80B | 190A at 96V D.C. | |
| Maximum Recommended Contact Voltages ($U_e$): | | |
| SW80 | 48V D.C. | 60V D.C. |
| SW80B | 96V D.C. | |
| Typical Voltage Drop per pole across New Contacts at 100A | 40mV | |
| Mechanical M.T.B.F | >5 x $10^6$ | |
| Coil Voltage Available ($U_s$) *(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% $U_s$ | |
| Intermittently Rated types (Max 70% Duty Cycle) | 60% $U_s$ | |
| Prolonged Operation (Max 90% Duty Cycle) | 60% $U_s$ | |
| Continuously Rated Types (100% Duty Cycle) | 66% $U_s$ | |
| Drop-Out Voltage Range | 10 - 25% $U_s$ | |
| 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 Contactor Weight: | | |
| SW80 | 350 gms | |
| With Auxiliary | + 20 gms | |
| With Blowouts | + 50 gms | |
| | | |
| Auxiliary Thermal Current Rating | 5A | |

| Auxiliary Contact Switching Capabilities (Resistive Load): | |
|---|---|
| SW80C | SW80A |
| 5A at 24V D.C. | |
| 2A at 48V D.C. | |
| 0.5A at 240V D.C. | |

| Advised Connection Sizes for Maximum Continuous Current | |
|---|---|
| Copper busbar | 80mm² [0.124inch²] |
| Cable | Rated suitable for Application |

**Key:** = *Interrupted* = *Uninterrupted*

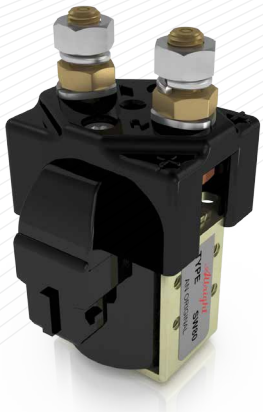
***Note:*** *Where applicable values shown are at 20˚C*

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

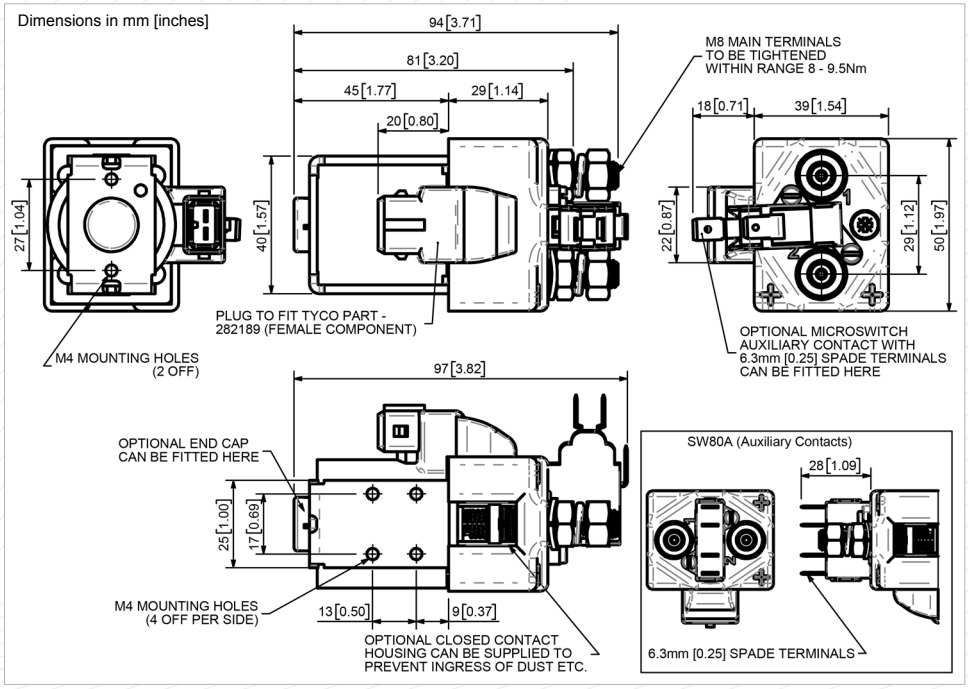
**The SW80 with Junior Power Timer (JPT) Connector has been designed for direct current loads, including motors as used on electric vehicles such as industrial trucks, and telecom and power distribution applications. Developed for both interrupted and uninterrupted loads, the SW80 is suitable for switching 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).

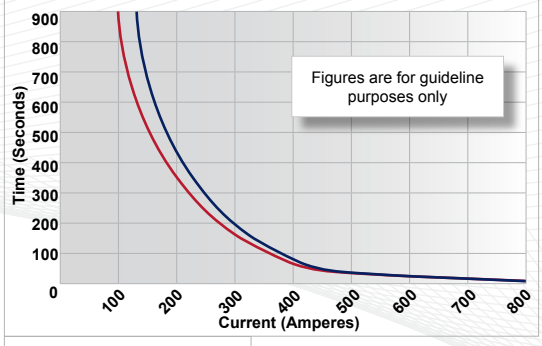
The SW80 features single pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW80 has M8 stud main terminals and 6.3mm spade coil connections. Mounting is via M4 tapped holes or mounting brackets, either supplied fitted, 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.



**SW80 with JPT Connector**



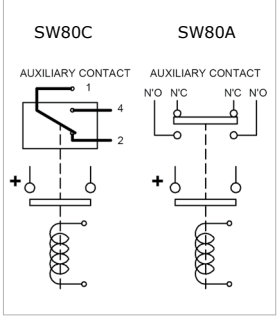

**SW80 Contactor Performance**




**Contact Performance Key:**

- Interrupted Current
- Uninterrupted Current

**Connection Diagram**




| SW80 Available Options | | |
|---|---|---|
| **General** | | **Suffix** |
| Auxiliary Contacts | ○ | A |
| Auxiliary Contacts - V3 | ○ | C |
| Magnetic Blowouts† | ○ | B |
| Magnetic Blowouts - High Powered† | ○ | B |
| Armature Cap | ○ | |
| Mounting Brackets (See Stud Series Catalogue) | ○ | |
| Magnetic Latching† (Not fail safe) | ○ | M |
| Closed Contact Housing‡ | ○ | |
| Environmentally Protected IP66 | 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 | X | |
| Junior Power Timer Connector | ● | |
| Manual Override Operation | ○ | |
| M4 Stud Terminals | X | |
| M5 Terminal Board | X | |
| Vacuum Impregnation | X | |

**Key:** Optional ○ Standard ● Not Available X

† *Connections become polarity sensitive*

‡ *Open Housing Available*

- **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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