The SW84 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 SW84 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 SW84 features single pole double throw, double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW84 has M8 stud main terminals and 6.3mm spade coil connections. It can be mounted via M4 tapped holes or mounting brackets – either supplied fitted, or as separate items. Mounting can be horizontal or vertical, when vertical the M6 contact studs should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this. Please note Normally Closed contacts are not suited to make and break load.

### Application Interrupted Uninterrupted
Thermal Current Rating (%) 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 (On) 5ms Time Constant:** (in accordance with UL583)
  - SW84 800A at 48V
  - SW84B 600A at 80V

- **Maximum Recommended Contact Voltages (Uc):**
  - SW84 48V D.C.
  - SW84B 96V D.C.

- **Typical Voltage Drop per pole across New Contacts at 100A:**
  - Normally Open 40mV
  - Normally Closed 50mV

- **Mechanical Durability:** >5 x 10^6 Cycles

- **Coil Voltage Available (Uc):** (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):**
  - Highly Intermittent Rated Types (Max 25% Duty Cycle) 80% 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 (N/O Contacts to Close):** 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

- **Main Contact Change over time (milliseconds):**
  - Normally Closed to Normally Open 7ms
  - Normally Open to Normally Closed 4ms

- **Typical Contact Bounce Period:** 3ms

- **Operating Ambient Temperature:** -40˚C to + 60˚C

- **Guide Line Contactor Weight:**
  - SW84A 430gms
  - SW84C 20gms
  - With Blows 50gms

- **Dimensions in mm [inches]:**
  - 6.3mm [0.25] SPADE TERMINALS CAN BE FITTED HERE

### Contactor Performance

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

- **Contact Performance Figures:**
  - Time (Seconds)
  - Current (Amperes)

### Connection Diagram

- **Auxiliary Contact Switching Capabilities (Resistive Load):**
  - SW84A
  - SW84C

- **SW84A Available Options**
  - General
  - Auxiliary Contacts
  - Magnetic Blowouts
  - Armature Cap
  - Mounting Brackets
  - Magnetic Latching
  - Closed Contact Housing
  - Environmentally Protected IP66

- **SW84C (3x Auxiliary Contacts)**

- **SW84 Single Pole Double Throw** (Part of the SW80 Series)

- **Auxiliary Details**
  - Auxiliary Thermal Current Rating: 5A

- **Auxiliary Contact Switching Capabilities:**
  - Copper busbar
  - Cable

- **Advised Connection Sizes for Maximum Continuous Current:**
  - SW84A 5A at 24V D.C.
  - SW84C 2A at 48V D.C.
  - 0.5A at 240V D.C.

- **Key:**
  - ‡ Interrupted
  - ■ Uninterrupted

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

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

- **▼ Normally Open contacts only - Normally Closed should be rated at their Interrupted Current, and are not designed to make and break load**

- **▼ Some de-rating or variation from figures may be necessary according to application.**

- **▼ Thermal current ratings stated are dependent upon the size of conductor being used.**

- **▼ For further technical email: technical@albrightinternational.com**

- **▼ Albright reserve the right to change data without prior notice**

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