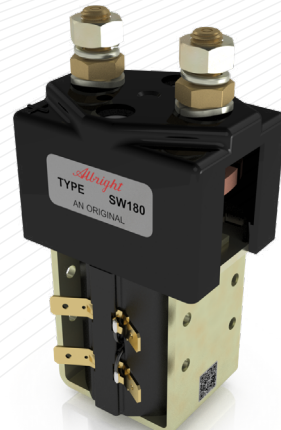


Application	Interrupted	Uninterrupted
Thermal Current Rating ( $I_{th}$ )	150A	200A
Intermittent Current Rating:		
30% Duty	275A	365A
40% Duty	235A	315A
50% Duty	210A	285A
60% Duty	195A	260A
70% Duty	180A	240A
Rated Fault Current Breaking Capacity ( $I_{cn}$ ) 5ms Time Constant: (in accordance with UL583*)		
SW180	1000A at 48V	
SW180B	1000A at 96V	
Maximum Recommended Contact Voltages ( $U_0$ ):		
SW180	48V D.C.	
SW180B	96V D.C.	
Typical Voltage Drop per pole across New Contacts at 150A:		
Normally Open	30mV	
Mechanical Durability	>5 x 10 <sup>6</sup>	
Coil Voltage Available ( $U_s$ ) (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:		
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 (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:		
SW180	640 gms	
With Auxiliary	+ 20 gms	
With Blowouts	+ 50 gms	
<b>Auxiliary Details</b>		
Auxiliary Thermal Current Rating	5A	
<b>Auxiliary Contact Switching Capabilities (Resistive Load):</b>		
SW180C	SW180A	
5A at 24V D.C.		
2A at 48V D.C.		
0.5A at 240V D.C.		
<b>Advised Connection Sizes for Maximum Continuous Current</b>		
Copper busbar	130mm <sup>2</sup> [0.20inch <sup>2</sup> ]	
Cable	Rated suitable for Application	
<b>Key:</b> <span style="color: red;">▶</span> = Interrupted <span style="color: blue;">▶</span> = Uninterrupted		
<b>Note:</b> Where applicable values shown are at 20° C		
* Please check our web site for product UL status		

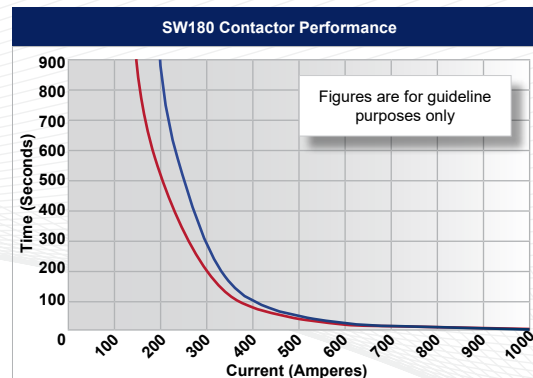
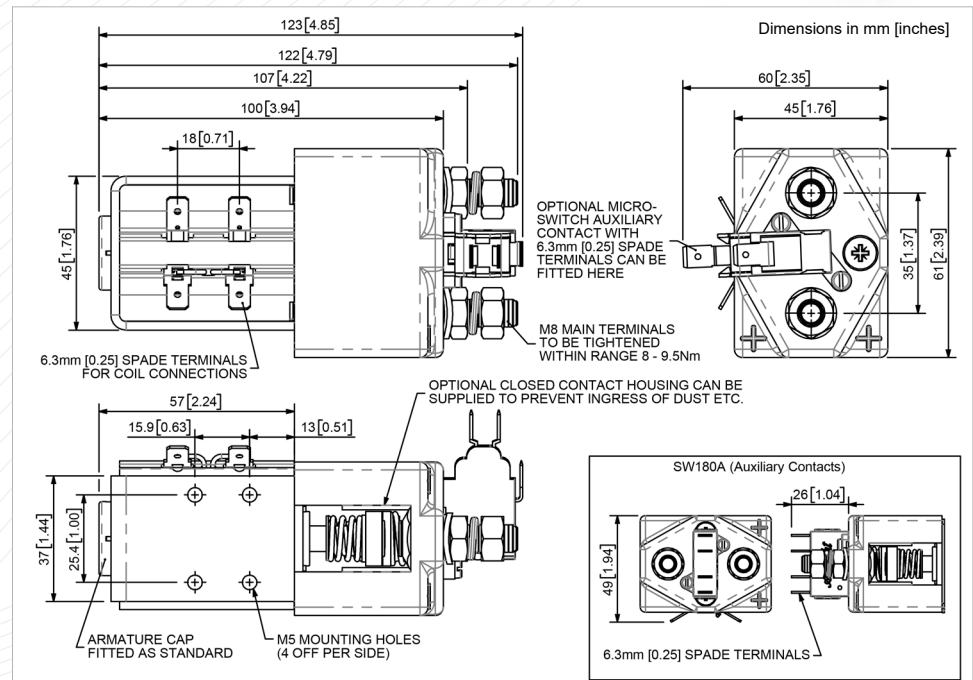
The SW180 has been designed for direct current loads, including motors as used on electric vehicles such as industrial trucks. Developed for both interrupted and uninterrupted loads, the SW180 is suitable for switching Resistive, Capacitive and Inductive loads.

- 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 SW180 features single pole single throw, double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW180 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.



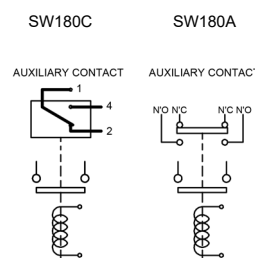
SW180



#### Contact Performance Key:

- Interrupted Current
- Uninterrupted Current

#### Connection Diagram



#### SW180 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 Contactor Series Catalogue)	○	
Magnetic Latching† (Not fail safe)	○	M
Closed Contact Housing†	○	
Environmentally Protected IP66	X	
EE Type (Steel Shroud)	○	EE
<b>Contacts</b>		
Large Tips	○	L
Textured Tips	○	T
Silver Plating	X	
<b>Coil</b>		
AC Rectifier Board (Fitted)	○	
Coil Suppression†	○	
Flying Leads	○	F
Manual Override Operation	○	
M4 Stud Terminals	X	
M5 Terminal Board	○	
Vacuum Impregnation	○	
<b>Key:</b> Optional ○ Standard ● Not Available X		
† Connections become polarity sensitive		
‡ Open Housing Available		