

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*)		
SW181	1000A at 48V §	
SW181B	1000A at 96V §	
Maximum Recommended Contact Voltages (U_g):		
SW181	48V D.C.	
SW181B	96V D.C.	
Typical Voltage Drop per pole across New Contacts at 100A:		
Normally Open	30mV	
Normally Closed	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 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% 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 - 20% 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	
Main Contact Change over time (milliseconds):		
Normally Closed to Normally Open	12ms	
Normally Open to Normally Closed	5ms	
Typical Contact Bounce Period	3ms	
Operating Ambient Temperature	-40°C to +60°C	
Guideline Contactor Weight:		
SW181	780 gms	
With Auxiliary	+ 20 gms	
With Blowouts	+ 50 gms	
Auxiliary Details		
Auxiliary Thermal Current Rating	5A	
Auxiliary Contact Switching Capabilities (Resistive Load):		
SW181A	SW181C	
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	130mm ² [0.20inch ²]	
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

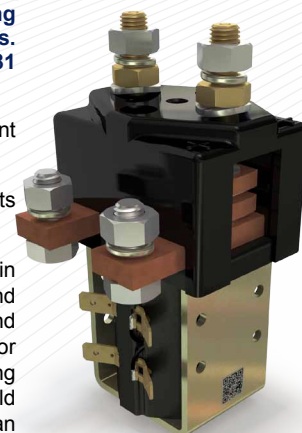
§ Normally Open contacts only - Normally Closed should be rated as per Interrupted Current, and are not designed to make and break load

- 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

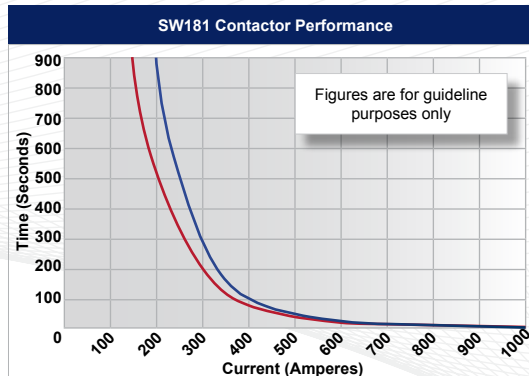
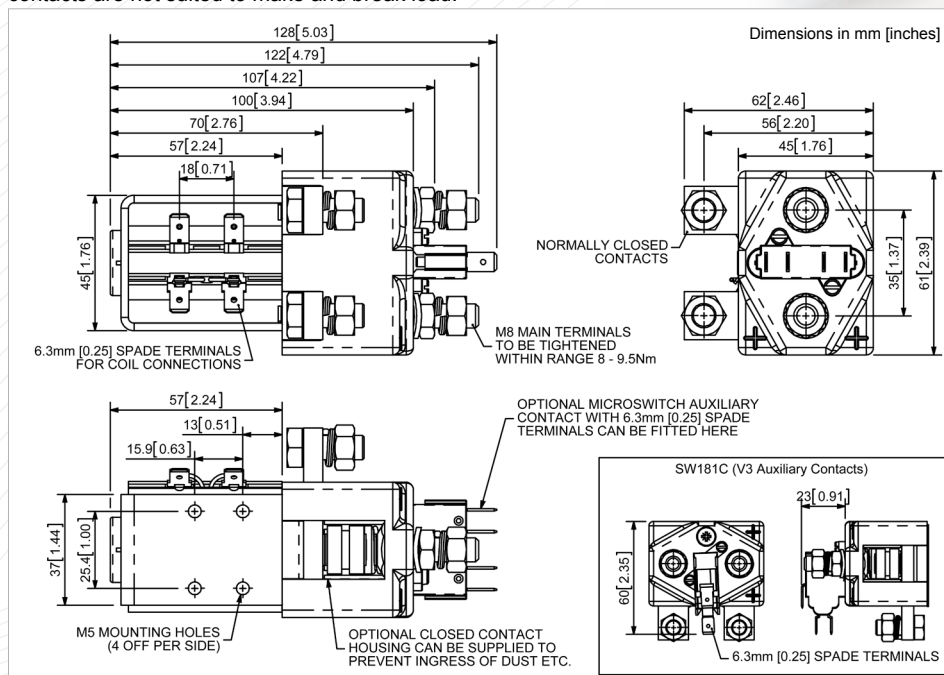
The SW181 has been designed for direct current loads, including motors as used on electric vehicles such as industrial trucks. Developed for both interrupted and uninterrupted[§] loads, the SW181 is suitable for switching Resistive, Capacitive and Inductive loads.

- 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 SW181 features single pole double throw, double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW181 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 M8 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.



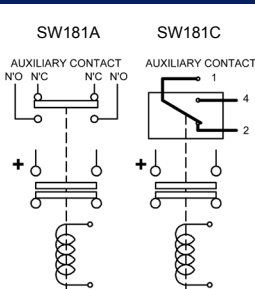
SW181



Contact Performance Key:

- Interrupted Current
- Uninterrupted Currents[§]

Connection Diagram



SW181 Available Options

General		Suffix
Auxiliary Contacts	<input type="radio"/>	A
Auxiliary Contacts - V3	<input type="radio"/>	C
Magnetic Blowouts†	<input type="radio"/>	B
Magnetic Blowouts - High Powered†	<input type="radio"/>	B
Armature Cap	<input checked="" type="radio"/>	
Mounting Brackets (See Stud Series Catalogue)	<input type="radio"/>	
Magnetic Latching† (Not fail safe)	<input type="radio"/>	M
Closed Contact Housing‡	<input type="radio"/>	
Environmentally Protected IP66	<input checked="" type="radio"/>	
EE Type (Steel Shroud)	<input type="radio"/>	
Contacts		
Large Tips	<input type="radio"/>	L
Textured Tips	<input type="radio"/>	T
Silver Plating	<input checked="" type="radio"/>	
Coil		
AC Rectifier Board (Fitted)	<input type="radio"/>	
Coil Suppression†	<input type="radio"/>	
Flying Leads	<input type="radio"/>	F
Manual Override Operation	<input type="radio"/>	
M4 Stud Terminals	<input checked="" type="radio"/>	
M5 Terminal Board	<input type="radio"/>	
Vacuum Impregnation	<input type="radio"/>	
Key: <input type="radio"/> Optional <input type="radio"/> Standard <input checked="" type="radio"/> Not Available X		
† Connections become polarity sensitive		
‡ Open Housing Available		