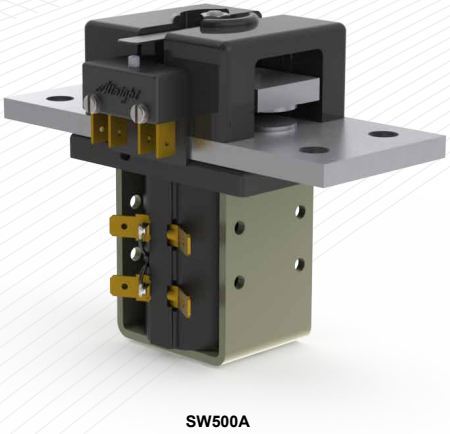
SW500 Single Pole Single Throw Normally Open
(Part of the Busbar Series)

The SW500 is designed for use in telecommunication and power distribution applications where an uninterrupted load is switched. These contactors are primarily for use with Direct Current loads but can also be used with Alternating Currents.

- Uninterrupted current - no or infrequent load switching requirements (maintains lower contact resistance).



SW500A

The SW500 features double breaking main contacts with silver alloy tips which are weld resistant, hard wearing and have excellent conductivity. Silver plating on the main contacts is standard for the SW500, however, optionally it can be excluded from the specification. This compact contactor can be busbar mounted vertically or horizontally, but if mounted vertically, the coil should be at the bottom. If the coil is required at the top, we can adjust the contactor to compensate for this. Optional extras include auxiliary switches, brackets, coil finishes and magnetic latching which allows the contactor to remain closed while consuming no coil power.

Application	Uninterrupted
Thermal Current Rating (I^{t}h)	500A
Intermittent Current Rating:	
30% Duty	915A
40% Duty	790A
50% Duty	705A
60% Duty	645A
70% Duty	600A
Rated Fault Current Breaking Capacity (I^{t}cn) Resistive Load: *(in accordance with UL508*)*	
SW500	750A at 60V D.C.
Maximum Recommended Contact Voltages (U_e):	
SW500	60V D.C.
Typical Voltage Drop per pole across New Contacts at 100A	<50mV
Mechanical M.T.B.F	>1 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 - 30% U_s
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	< 5ms
Operating Ambient Temperature	- 40˚C to + 60˚C
Guideline Contactor Weight:	
SW500	1030 gms
With Auxiliary	+ 20 gms

Auxiliary Details	
Auxiliary Thermal Current Rating	5A

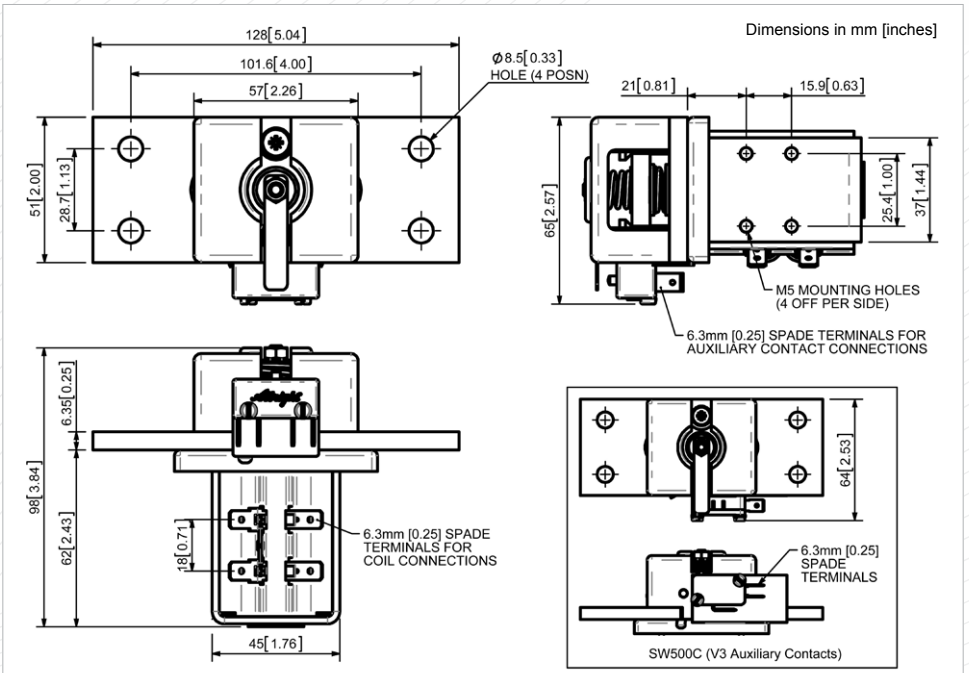
Auxiliary Contact Switching Capabilities (Resistive Load):	
SW500A	SW500C
5A at 24V D.C.	
2A at 48V D.C.	
0.5A at 240V D.C.	

Advised Connection Sizes for Maximum Continuous Current	
Copper busbar	322mm² [0.5inch²]
Cable	Rated suitable for Application

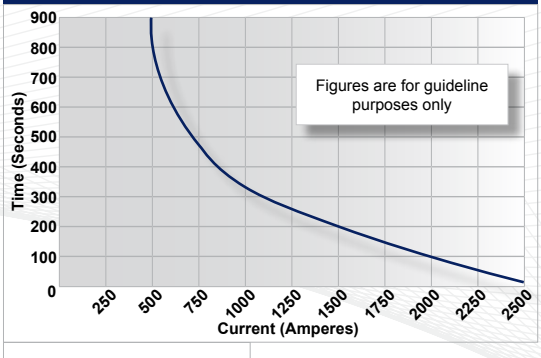
Key: ◢ = Uninterrupted

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

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



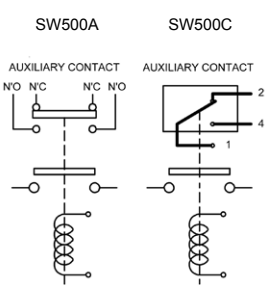
SW500 Contactor Performance



Contact Performance Key:

Uninterrupted Current

Connection Diagram



SW500 Available Options		
General		**Suffix**
Auxiliary Contacts	○	A
Auxiliary Contacts - V3	○	C
Magnetic Blowouts†	X	
Magnetic Blowouts - High Powered†	X	
Armature Cap	X	
Mounting Brackets (see Busbar Series Catalogue)	○	
Magnetic Latching† (Not fail safe)	○	M
Closed Contact Housing	X	
Environmentally Protected IP66	X	
EE Type (Steel Shroud)	X	
Contacts		
Large Tips	X	
Textured Tips	X	
Silver Plating *(fitted as standard)*	○	
Coil		
AC Rectifier Board (Fitted)	○	
Coil Suppression†	○	
Flying Leads	○	F
Manual Override Operation	○	
M4 Stud Terminals	X	
M5 Terminal Board	X	
Vacuum Impregnation	○	

Key: Optional ○ Standard ● Not Available X

† *Connections become polarity sensitive*

- **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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