Albright International

250A/400A

SW201 Single Pole Double Throw
(Part of the SW200 Series)

Application	Interrupted	Uninterrupted
Thermal Current Rating (I^th)	250A	400A §
Intermittent Current Rating:		
30% Duty	450A	730A §
40% Duty	390A	630A §
50% Duty	360A	565A §
60% Duty	320A	515A §
70% Duty	300A	480A §
Rated Fault Current Breaking Capacity (I^tcn) 5ms Time Constant: *(in accordance with UL583*)*		
SW201	1500A at 96V §	
SW201N	1500A at 48V §	
Maximum Recommended Contact Voltages (U_e):		
SW201	96V D.C.	
SW201N	48V D.C.	
Typical Voltage Drop per pole across New Contacts at 100A:		
Normally Open	40mV	
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	60 - 80 Watts	
Intermittently Rated types	30 - 60 Watts	
Prolonged Rated Types	21 - 30 Watts	
Continuously Rated Types	13 - 21 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):	40ms	
Typical Drop-Out Time (N/O Contacts to Open):		
Without Suppression	10ms	
With Diode Suppression	100ms	
With Diode and Resistor *(Subject to resistance value)*	30ms	
Main Contact Change over time (milliseconds):		
Normally Closed to Normally Open	14ms	
Normally Open to Normally Closed	8ms	
Typical Contact Bounce Period	3ms	
Operating Ambient Temperature	- 40˚C to + 60˚C	
Guideline Contactor Weight:		
SW201	1600 gms	
With Auxiliary	+ 20 gms	
Without Blowouts	- 50 gms	

Auxiliary Details	
Auxiliary Thermal Current Rating	5A

Auxiliary Contact Switching Capabilities (Resistive Load):	
SW201A	SW201C
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	260mm² [0.40inch²]
Cable	Rated suitable for Application

Key: = *Interrupted* = *Uninterrupted*

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

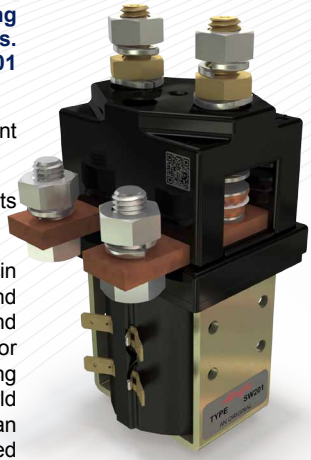
** Please check our web site for product UL status*

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

The SW201 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 SW201 is suitable for switching Resistive, Capacitive and Inductive loads.

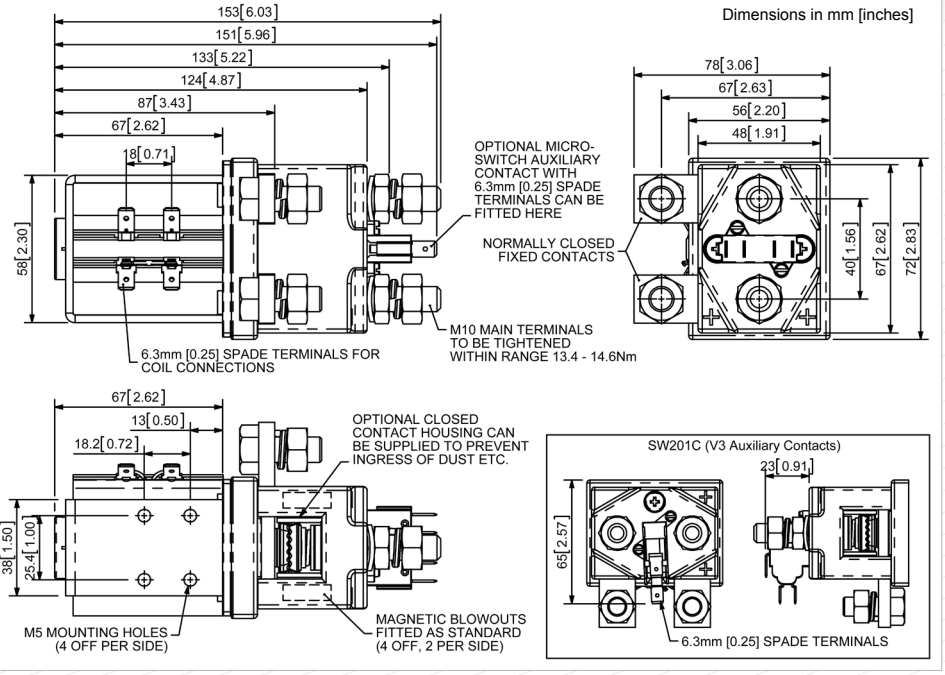
- Interrupted current - opening and closing on load with frequent switching (results in increased contact resistance).
- Uninterrupted current - no or infrequent load switching requirements (maintains a lower contact resistance).

The SW201 features single pole double throw, double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW201 has M10 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 M10 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.

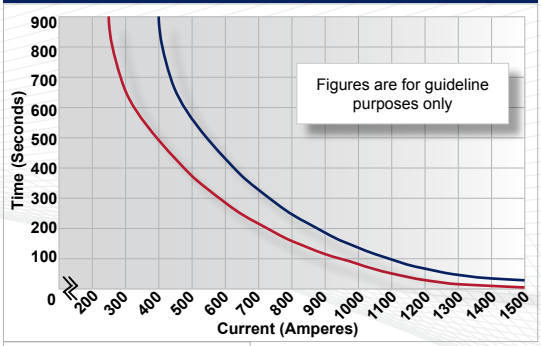


SW201

Dimensions in mm [inches]



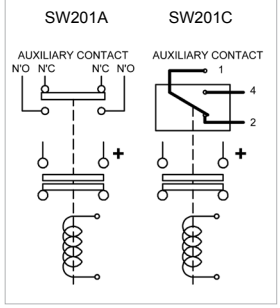
SW201 Contactor Performance



Contact Performance Key:

- Interrupted Current
- Uninterrupted Current§

Connection Diagram



SW201 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)	○	
Contacts		
Large Tips	X	
Textured Tips	○	T
Silver Plating	X	
Coil		
AC Rectifier Board (Fitted)	○	
Coil Suppression†	○	
Flying Leads	○	F
Manual Override Operation	○	
M4 Stud Terminals	X	
M5 Terminal Board	○	
Vacuum Impregnation	○	

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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