

Application	Interrupted	Uninterrupted
Thermal Current Rating (I _{th})	✓	150A
Intermittent Current Rating:		
30% Duty	✓	275A
40% Duty	✓	235A
50% Duty	✓	210A
60% Duty	✓	195A
70% Duty	✓	180A
Rated Fault Current Breaking Capacity (I _{cn}) 5ms Time Constant: (in accordance with UL583*)		
SW189	1000A at 48V	300A at 60V
SW189B	1000A at 96V	300A at 96V
Maximum Recommended Contact Voltages (U _e):		
SW189	48V D.C.	
SW189B	96V D.C.	
Typical Voltage Drop per pole across New Contacts at 150A:		
Normally Open	✓	30mV
Mechanical Durability	✓	>5 x 10 ⁶
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:		
SW189	✓	1380 gms
With Auxiliary	✓	+ 40 gms
With Blowouts	✓	+ 100 gms

Auxiliary Details	
Auxiliary Thermal Current Rating	5A
Auxiliary Contact Switching Capabilities (Resistive Load):	
SW189C	SW189A
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

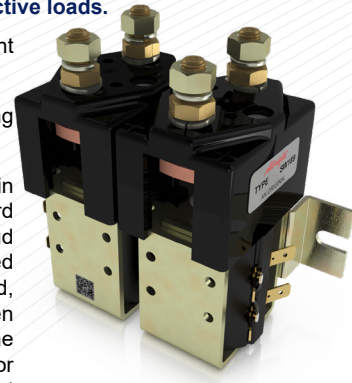
Key: ▶ = Interrupted ▶ = Uninterrupted
 Note: Where applicable values shown are at 20° C
 * Please check our web site for product UL status

- 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

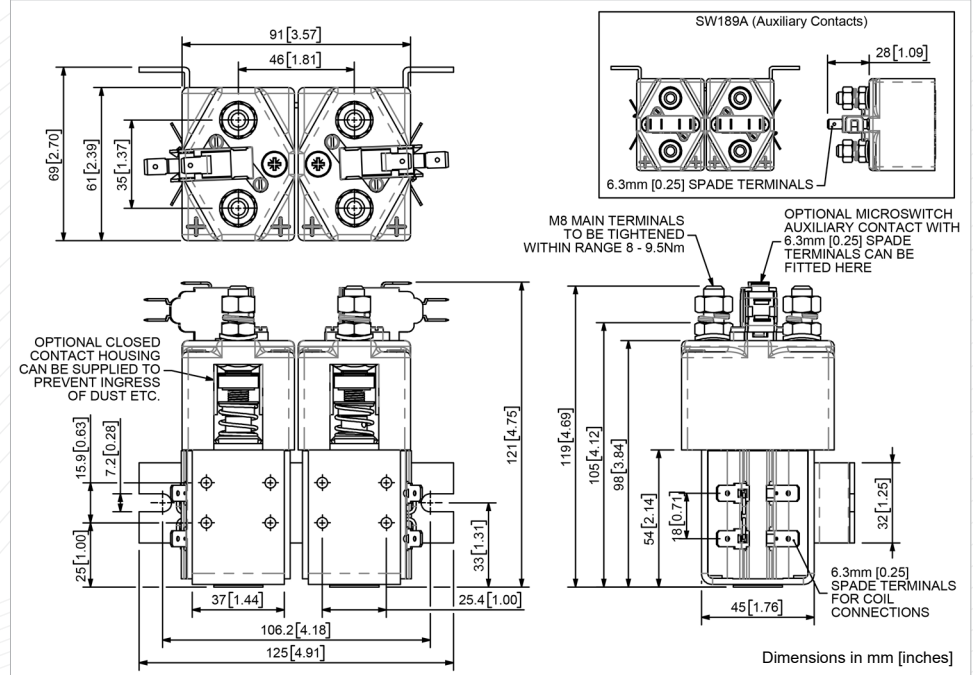
The SW189 has been designed for direct current loads, including motors as used on electric vehicles such as industrial trucks. Developed for both interrupted and uninterrupted loads, the SW189 is suitable for switching Resistive, Capacitive and Inductive loads.

- **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).

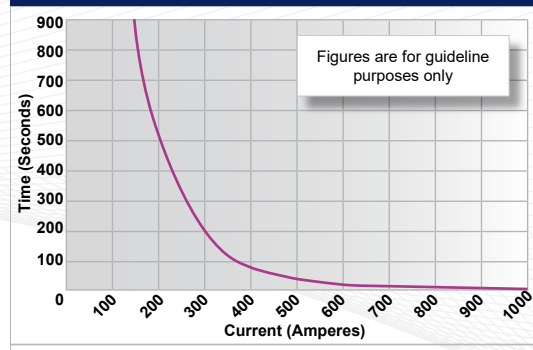
The SW189 features single pole, single throw, double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW189 has M8 stud main terminals and 6.3mm spade coil connections. It can be mounted via M5 tapped holes or mounting brackets – 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. Note Normally Closed contacts are not recommended to make and break load.



SW189

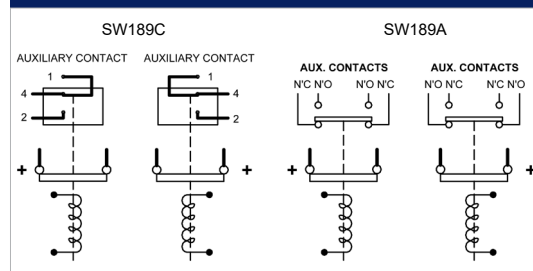


SW189 Contactor Performance



Contact Performance Key: — Interrupted & Uninterrupted Current

Connection Diagram



SW189 Available Options

General		Suffix
Auxiliary Contacts	○	A
Auxiliary Contacts - V3	○	C
Magnetic Blowouts†	○	B
Magnetic Blowouts - High Powered†	○	B
Armature Cap	X	
Mounting Brackets (See Stud Contactor Series Catalogue)	●	
Magnetic Latching† (Not fail safe)	X	
Closed Contact Housing‡	○	
Environmentally Protected IP66	X	
EE Type (Steel Shroud)	X	
Contacts		
Large Tips	○	L
Textured Tips	○	T
Silver Plating	X	
Coil		
AC Rectifier Board (Fitted)	○	
Coil Suppression†	○	
Flying Leads	○	F
Manual Override Operation	X	
M4 Stud Terminals	X	
M5 Terminal Board	○	
Vacuum Impregnation	○	

Key: Optional ○ Standard ● Not Available X
 † Connections become polarity sensitive
 ‡ Open Housing Available