

Application	Interrupted	Uninterrupted
Thermal Current Rating (¹ th)	▲	100A
Intermittent Current Rating:	▲	
30% Duty	▲	185A
40% Duty	▲	160A
50% Duty	▲	140A
60% Duty	▲	130A
70% Duty	▲	120A
Rated Fault Current Breaking Capacity (¹ cn) 5ms Time Constant: (in accordance with UL583*)	▲	
SW85	▲	800A at 48V
SW85B	▲	800A at 80V
Rated Fault Current Breaking Capacity (¹ cn) Resistive Load: (in accordance with UL508*)	▲	
SW85	▲	150A at 48V D.C.
SW85B	▲	150A at 96V D.C.
Maximum Recommended Contact Voltages (U _c):	▲	
SW85	▲	48V D.C.
SW85B	▲	96V D.C.
Typical Voltage Drop per pole across New Contacts at 100A	▲	50mV
Mechanical Durability	▲	>5 x 10 ⁶ Cycles
Coil Voltage Available (U _c) (Rectifier board required for A.C.)	▲	From 6 to 240V D.C.
Coil Power Dissipation:	▲	
Highly Intermittent Rated Types	▲	20 - 30 Watts
Intermittently Rated types	▲	15 - 20 Watts
Prolonged Rated Types	▲	13 - 15 Watts
Continuously Rated Types	▲	7 - 13 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	▲	20ms
Typical Drop-Out Time (N/O Contacts to Open):	▲	
Without Suppression	▲	5ms
With Diode Suppression	▲	50ms
With Diode and Resistor (Subject to resistance value)	▲	8 - 20ms
Typical Contact Bounce Period	▲	3ms
Operating Ambient Temperature	▲	- 40°C to + 60°C
Guideline Contactor Weight:	▲	
SW85	▲	360 gms
With Auxiliary	▲	+ 20 gms
With Blowouts	▲	+ 50 gms
Auxiliary Details		
Auxiliary Thermal Current Rating	▲	5A
Auxiliary Contact Switching Capabilities (Resistive Load):		
SW85A	▲	SW85C
▲	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	▲	65mm ² [0.1inch 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		
Please note Normally Closed contacts are not suited to make and break load.		

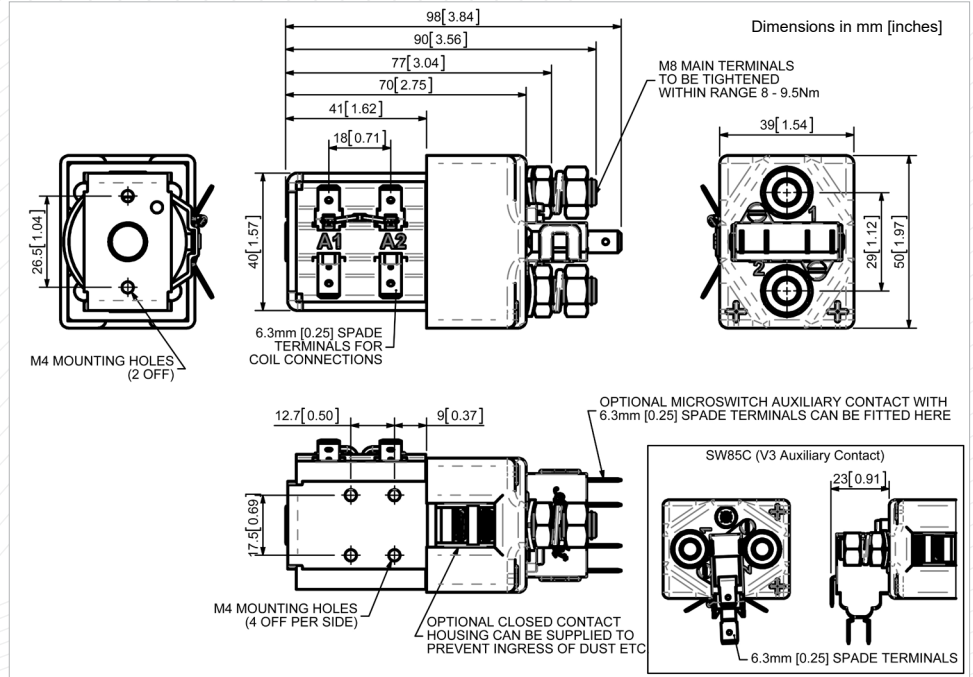
The SW85 has been designed for direct current loads, particularly motors as used on electric vehicles such as industrial trucks. Developed for both interrupted and uninterrupted loads, the SW85 is suitable for switching Resistive, Capacitive and Inductive loads.

- **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).

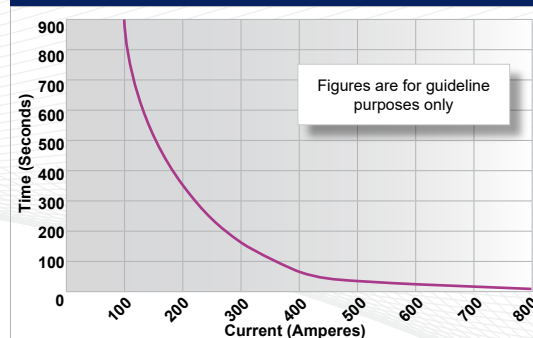
The SW85 features single pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW85 has M8 stud main terminals and 6.3mm spade coil connections. Mounting is via M4 tapped holes or mounting brackets, either supplied fitted, or as separate items. Mounting can be horizontal or vertical, when vertical the M8 contact studs should point downwards. If the requirement is for upwards orientation we can adjust the contactor to compensate for this. Please note Normally Closed contacts are not suited to make and break load.



SW85



SW85 Contactor Performance



Contact Performance Key:

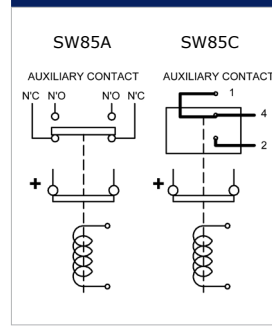


SW85 Available Options

General		Suffix
Auxiliary Contacts	○	A
Auxiliary Contacts - V3	○	C
Magnetic Blowouts†	○	B
Magnetic Blowouts - High Powered†	○	B
Armature Cap	X	
Mounting Brackets (See Stud Series Catalogue)	○	
Magnetic Latching† (Not fail safe)	○	M
Closed Contact Housing†	○	
Environmentally Protected IP66 (see SW85P Catalogue sheet)	○	P
EE Type (Steel Shroud)	○	EE
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

Connection Diagram



- 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