

The SW85P 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 SW85P 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).



SW85P

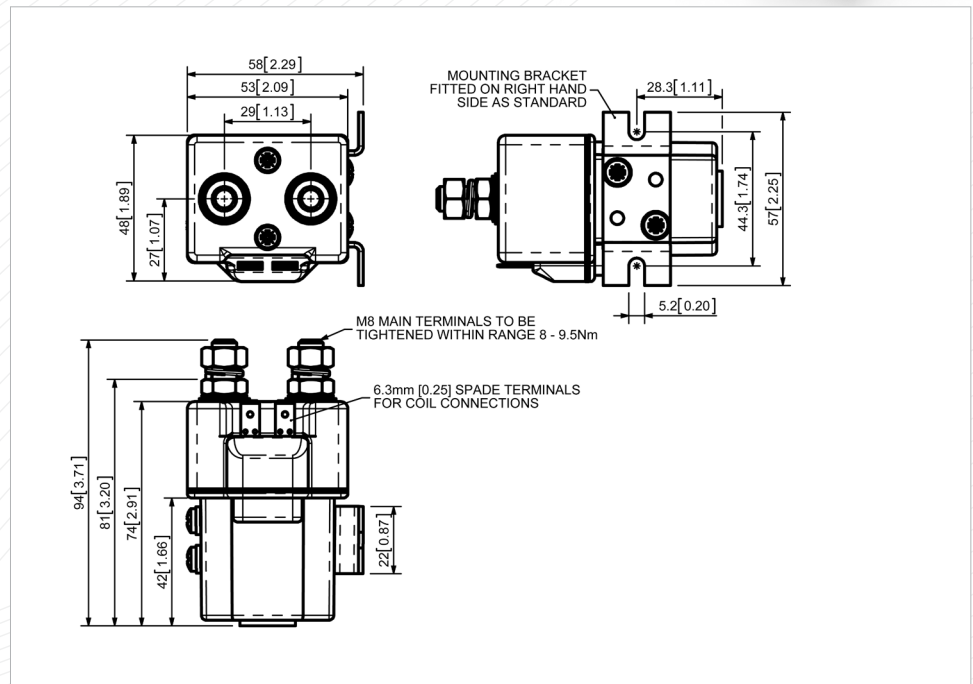
Application	Interrupted	Uninterrupted
Thermal Current Rating ( <sup>t</sup> th)		100A
Intermittent Current Rating:		
30% Duty		185A
40% Duty		160A
50% Duty		140A
60% Duty		130A
70% Duty		120A
Rated Fault Current Breaking Capacity ( <sup>t</sup> cn) 5ms Time Constant: (in accordance with UL583*)		
SW85P		800A at 48V
Rated Fault Current Breaking Capacity ( <sup>t</sup> cn) Resistive Load: (in accordance with UL508*)		
SW85P		150A at 48V D.C.
Maximum Recommended Contact Voltages (U <sub>e</sub> ):		
SW85P		48V D.C.
Typical Voltage Drop per pole across New Contacts at 100A		50mV
Mechanical Durability		>5 x 10 <sup>6</sup> Cycles
Coil Voltage Available (U <sub>s</sub> ) (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 <sub>s</sub>
Intermittently Rated types (Max 70% Duty Cycle)		60% U <sub>s</sub>
Prolonged Operation (Max 90% Duty Cycle)		60% U <sub>s</sub>
Continuously Rated Types (100% Duty Cycle)		66% U <sub>s</sub>
Drop-Out Voltage Range		10 - 25% U <sub>s</sub>
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:		
SW85P		395 gms
<b>Advised Connection Sizes for Maximum Continuous Current</b>		
Copper busbar		80mm <sup>2</sup> [0.124inch <sup>2</sup> ]
Cable		Rated suitable for Application

Key: ▾ = Interrupted ▴ = Uninterrupted

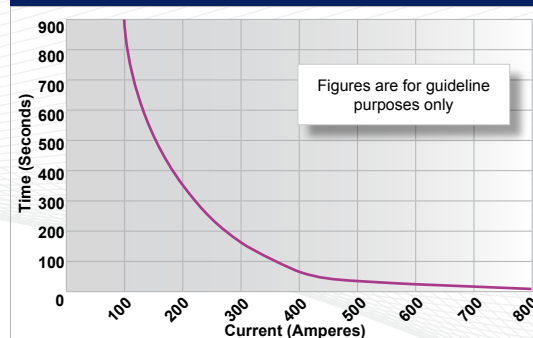
Note: Where applicable values shown are at 20° C

\* Please check our web site for product UL status

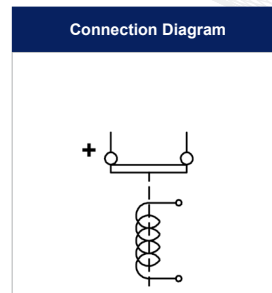
The SW85P features single pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW85P features an enclosed top cover and offers environmental protection to IP66. The SW85P has M8 stud main terminals and 6.3mm spade coil connections. Mounted using supplied brackets, 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 designed to make and break load.



SW85P Contactor Performance



Contact Performance Key:  
— Interrupted and Uninterrupted Current



SW85P Available Options

General		Suffix
Auxiliary Contacts	X	
Auxiliary Contacts - V3	X	
Magnetic Blowouts†	X	
Magnetic Blowouts - High Powered†	X	
Armature Cap	X	
Mounting Brackets (See Stud Range Catalogue)	●	
Magnetic Latching† (Not fail safe)	X	
Closed Contact Housing	●	
Environmentally Protected IP66	●	P
EE Type (Steel Shroud)	X	
Contacts		
Large Tips	○	L
Textured Tips	○	T
Silver Plating	X	
Coil		
AC Rectifier Board (Fitted)	X	
Coil Suppression†	○	
Flying Leads	X	
Manual Override Operation	X	
M4 Stud Terminals	○	
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](mailto:technical@albrightinternational.com)
- Albright reserve the right to change data without prior notice