

The SW82 type of contactors 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 SW82 is suitable for switching Resistive, Capacitive and Inductive loads.

Application	Interrupted	Uninterrupted
Thermal Current Rating (I_{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 (I_{cn}) 5ms Time Constant: (in accordance with UL583*)		800A at 80V
Rated Fault Current Breaking Capacity (I_{cn}) Resistive Load: (in accordance with UL583*)		150A at 96V D.C.
Maximum Recommended Contact Voltages (U_e): (Both Poles in same circuit)		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:		
SW82		430 gms

Advised Connection Sizes for Maximum Continuous Current	
Copper busbar	65mm ² [0.1inch ²]
Cable	Rated suitable for Application

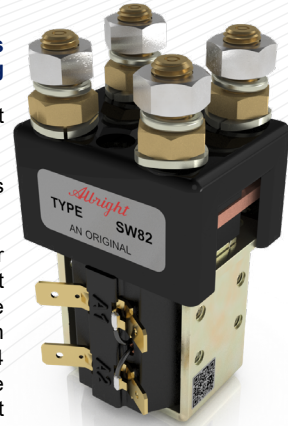
Key: ■ = Interrupted ■ = Uninterrupted

Note: Where applicable values shown are at 20° C

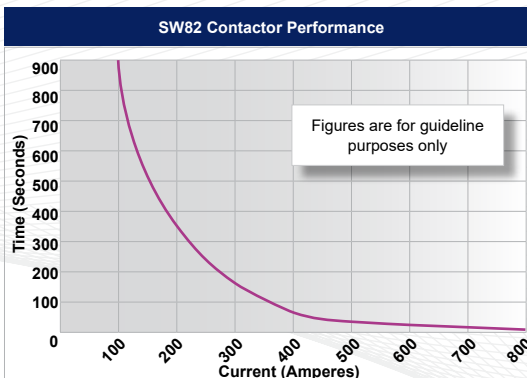
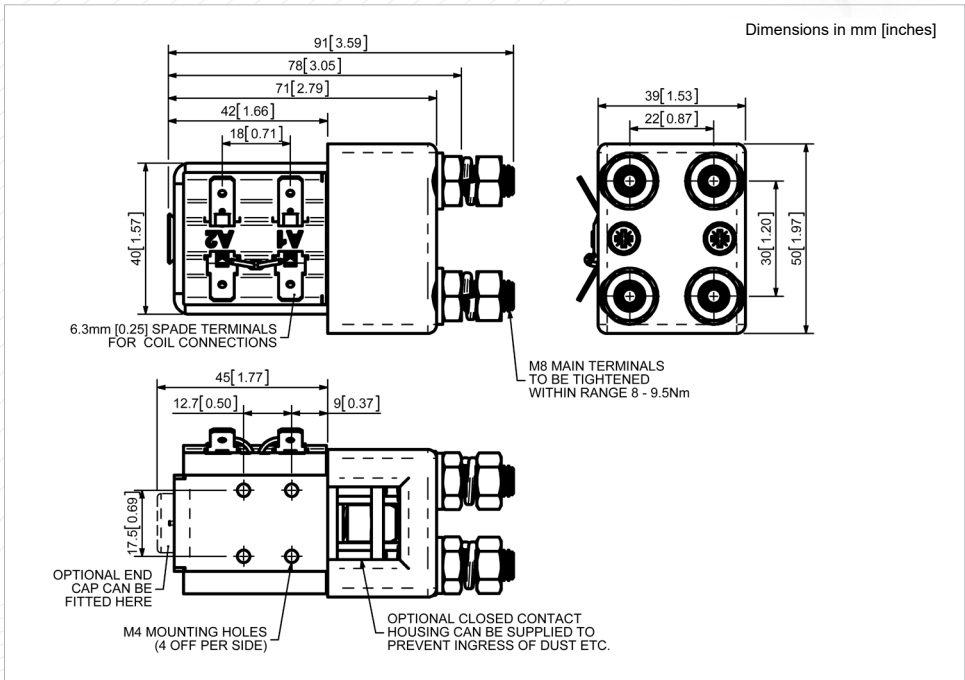
* Please check our web site for product UL status

- 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 SW82 features double pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The contactors are compact in size and are fully serviceable with a full range of spare parts available. The SW82 has M8 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 M8 contact studs should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this.



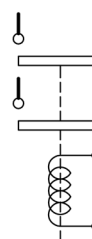
SW82



Contact Performance Key:

— Interrupted and Uninterrupted Current

Connection Diagram



SW82 Available Options

General	Suffix
Auxiliary Contacts	X
Auxiliary Contacts - V3	X
Magnetic Blowouts†	X
Magnetic Blowouts - High Powered†	X
Armature Cap	o
Mounting Brackets (See Stud Series Catalogue)	o
Magnetic Latching† (Not fail safe)	o M
Closed Contact Housing†	o
Environmentally Protected IP66 (see SW82P Catalogue sheet)	o P
EE Type (Steel Shroud)	X
Contacts	
Large Tips	o L
Textured Tips	o T
Silver Plating	X
Coil	
AC Rectifier Board (Fitted)	o
Coil Suppression†	o
Flying Leads	o F
Manual Override Operation	o
M4 Stud Terminals	X
M5 Terminal Board	o
Vacuum Impregnation	o

Key: Optional o Standard • Not Available X

† Connections become polarity sensitive

‡ Open Housing Available