

Application	Interrupted	Uninterrupted
Thermal Current Rating (¹ th)		80A
Intermittent Current Rating:		
30% Duty		145A
40% Duty		125A
50% Duty		115A
60% Duty		105A
70% Duty		95A
Rated Fault Current Breaking Capacity (¹ cn) 5ms Time Constant: (in accordance with UL583*)		
SW688		400A at 48V
Rated Fault Current Breaking Capacity (¹ cn) Resistive Load: (in accordance with UL508*)		
SW688		
Maximum Recommended Contact Voltages (U _e):		
SW688		96V D.C.
Typical Voltage Drop per pole across New Contacts at 100A		<40mV
Mechanical M.T.B.F		>3 x 10 ⁶
Coil Voltage Available (U _s) (Rectifier board required for A.C.)		From 6 to 130V D.C.
Coil Power Dissipation:		
Highly Intermittent Rated Types		14 - 21 Watts
Intermittently Rated types		10 - 14 Watts
Prolonged Rated Types		7 - 10 Watts
Continuously Rated Types		5 - 7 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)		15ms
Typical Drop-Out Time (N/O Contacts to Open) [§] :		
Without Suppression		6ms
With Diode Suppression		35ms
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:		
SW688		460 gms

Advised Connection Sizes for Maximum Continuous Current	
Copper busbar	52mm ² [0.081inch 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

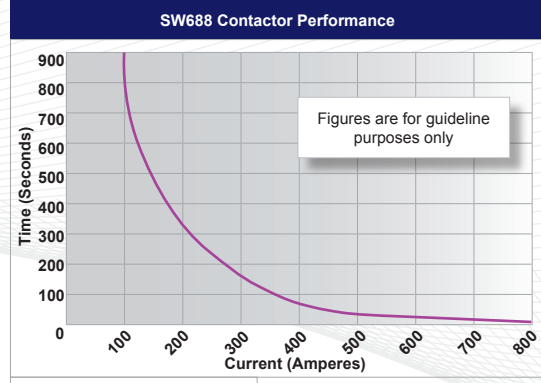
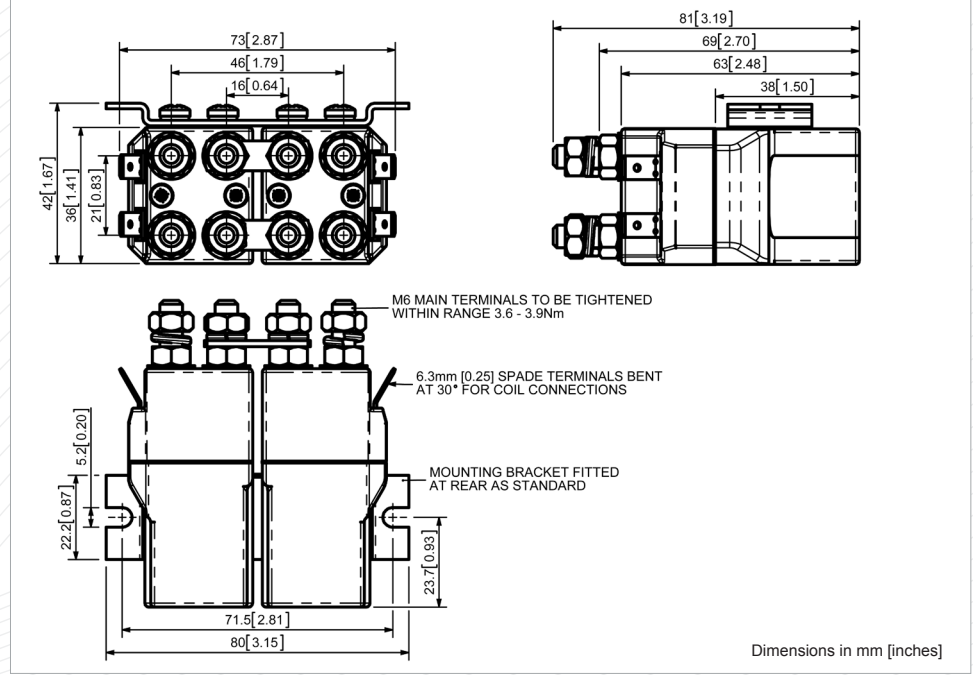
[§] The SW688 has fast drop out times and relatively slow pull-in times. Motor direction changes can be undertaken without risk of all contacts being closed at the same time. Note, some coil suppression such as diodes substantially increase drop out times and care must be taken to ensure suitable suppression is used (e.g. diode and resistor in series).

- 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

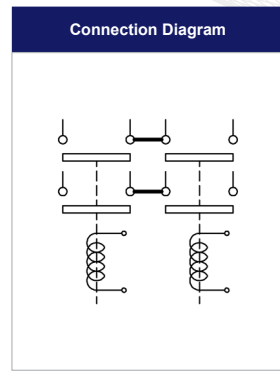
The SW688 is a miniature series double pole, free standing, compact contactor. It is designed for Motor Reversing applications with direct current loads, particularly motors as used on small traction motors, hydraulic power packs and small electric winch motors. Developed for both interrupted and uninterrupted loads, the SW688 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 SW688 features double pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW688 has M6 stud main terminals and 6.3mm spade coil connections. Mounted using supplied brackets, mounting can be horizontal or vertical, when vertical the M6 contact studs should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this.



Contact Performance Key:
— Interrupted and Uninterrupted Current



SW688 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 Contactor Range Catalogue)	●	
Magnetic Latching† (Not fail safe)	○	M
Closed Contact Housing	●	
Environmentally Protected IP66 (see SW688P Catalogue sheet)	○	P
EE Type (Steel Shroud)	X	
Contacts		
Large Tips	X	
Textured Tips	X	
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	X	
Key: Optional ○ Standard ● Not Available X		
† Connections become polarity sensitive		