

The SW140 has been specifically designed to be installed within the confines of a Power Distribution System 1U rack. This compact busbar mounted contactor follows the recognised design of the SW150 series of contactors and is devised for uninterrupted loads. They are primarily for use with direct current loads but can be used for alternating current loads.

- Uninterrupted current - no or infrequent load switching requirements (maintains a lower contact resistance).

Application	Uninterrupted
Thermal Current Rating ( <sup>t</sup> h)	140A
Intermittent Current Rating:	
30% Duty	255A
40% Duty	220A
50% Duty	200A
60% Duty	180A
70% Duty	165A
Rated Fault Current Breaking Capacity ( <sup>cn</sup> ) Resistive Load: (in accordance with UL508*)	
SW140	210A at 60V D.C.
Maximum Recommended Contact Voltages (U <sub>e</sub> ):	
SW140	60V D.C.
Typical Voltage Drop per pole across New Contacts at 100A	< 40mV
Mechanical M.T.B.F	>1 x 10 <sup>6</sup>
Coil Voltage Available (U <sub>s</sub> )	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	15ms
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	< 5ms
Operating Ambient Temperature	- 40° C to + 60° C
Guideline Contactor Weight:	
SW140	440 gms
With Auxiliary	+ 20 gms

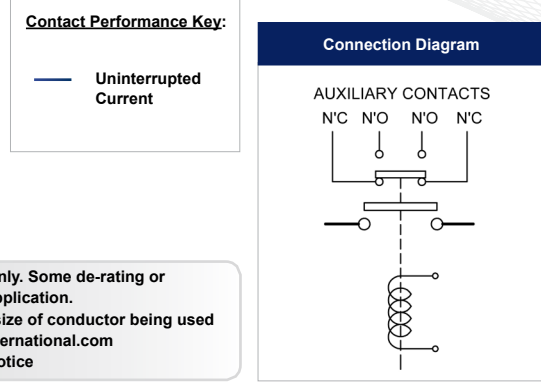
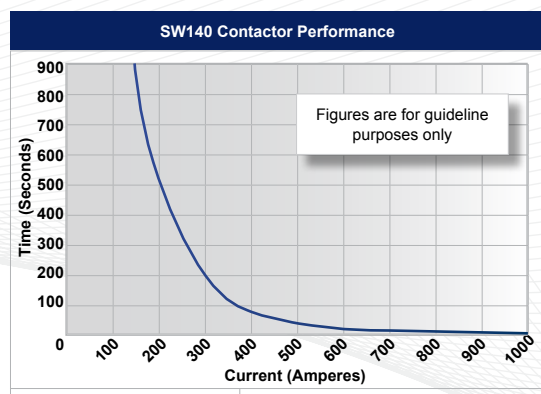
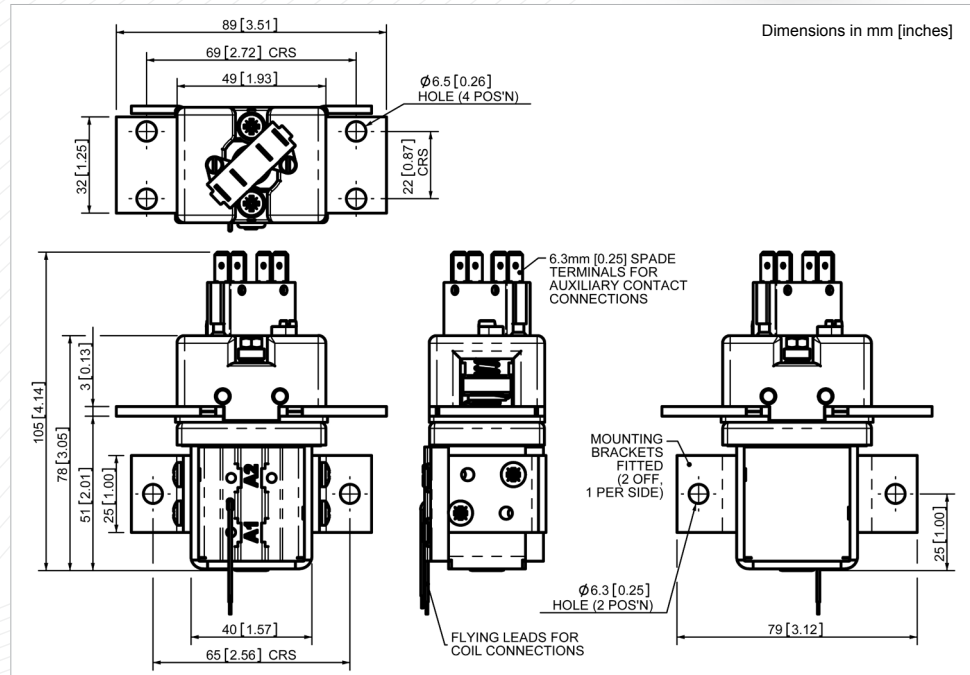
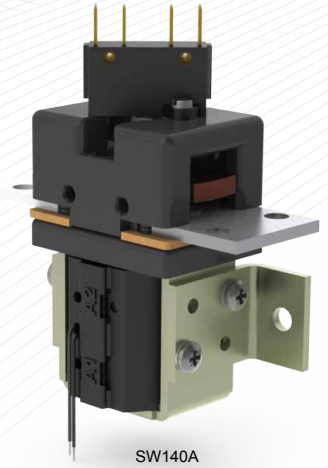
Auxiliary Details	
Auxiliary Thermal Current Rating	5A
Auxiliary contact switching capacities (Resistive Load):	
	5A at 24V D.C.
	2A at 48V D.C.
	0.5A at 240V D.C.

Advised Connection Sizes for Maximum Continuous Current	
Copper busbar	90mm <sup>2</sup> [0.14inch <sup>2</sup> ]
Cable	Rated suitable for Application

**Key:** ▲ = 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](mailto:technical@albrightinternational.com)
- Albright reserve the right to change data without prior notice

The SW140 features single pole double breaking main contacts with silver alloy tips which are weld resistant, hard wearing and have excellent conductivity. Silver plating on the main contacts is standard for the SW140, however optionally it can be excluded from the specification. Mounting can either be horizontal or vertical, but if mounted vertically, the coil should be at the bottom. If the coil is required at the top, we can adjust the contactor to compensate for this. The SW140 is easy to install, with "L" Shape Mounting bracket kits fitted as a standard option, or alternatively the M4 tapped holes in the switch frame can be used. To suit the limitations of space of a 1U rack, the coil connections are supplied as flying leads.



SW140 Available Options		
General		Suffix
Auxiliary Contacts	○	A
Auxiliary Contacts - V3	X	
Magnetic Blowouts	X	
Magnetic Blowouts - High Powered†	X	
Armature Cap	X	
Mounting Brackets (fitted as standard)	○	
Magnetic Latching† (Not fail safe)	○	M
Closed Contact Housing	X	
Environmentally Protected IP66	X	
EE Type (Steel Shroud)	X	
Contacts		
Large Tips	X	
Textured Tips	X	
Silver Plating (fitted as standard)	○	
Coil		
AC Rectifier Board (Fitted)	X	
Coil Suppression†	○	
Flying Leads	●	F
Manual Override Operation	○	
M4 Stud Terminals	X	
M5 Terminal Board	X	
Vacuum Impregnation	○	

**Key:** Optional ○ Standard ● Not Available X  
 † Connections become polarity sensitive