

Application	Interrupted	Uninterrupted
Thermal Current Rating ( <sup>1</sup> th)	150A	200A
Intermittent Current Rating:		
30% Duty	275A	365A
40% Duty	235A	315A
50% Duty	210A	280A
60% Duty	190A	260A
70% Duty	180A	240A
Rated Fault Current Breaking Capacity ( <sup>1</sup> cn) 5ms Time Constant:		
SU80	800A at 48V D.C.	
SU80B	800A at 80V D.C.	
Rated Fault Current Breaking Capacity ( <sup>1</sup> cn) Resistive Load*:		
SU80	300A at 60V D.C.	
SU80B	300A at 96V D.C.	
Maximum Recommended Contact Voltages (U <sub>e</sub> ):		
SU80	48V D.C.	60V D.C.
SU80B		96V D.C.
Typical Voltage Drop per pole across New Contacts at 100A	< 40mV	
Mechanical M.T.B.F	>3 x 10 <sup>6</sup>	
Coil Voltage Available (Us) (Rectifier board required for A.C.)	From 6 to 240V A.C./D.C.	
Coil Power Dissipation:		
Very Intermittently 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:		
Very Intermittently 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%	
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:		
SU80	350 gms	
With Auxiliary	+ 20 gms	
With Blowouts	+ 50 gms	

Auxiliary Details		
Auxiliary Thermal Current Rating	5A	
Auxiliary Contact Switching Capacities (Resistive Load):		
SU80A	SU80C	
	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	97mm <sup>2</sup> [0.15inch <sup>2</sup> ]	129mm <sup>2</sup> [0.20inch <sup>2</sup> ]
Cable	Rated suitable for Application	

**Key:** ■ = Interrupted ■ = Uninterrupted

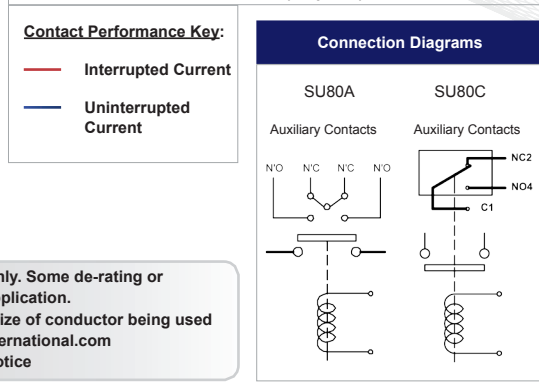
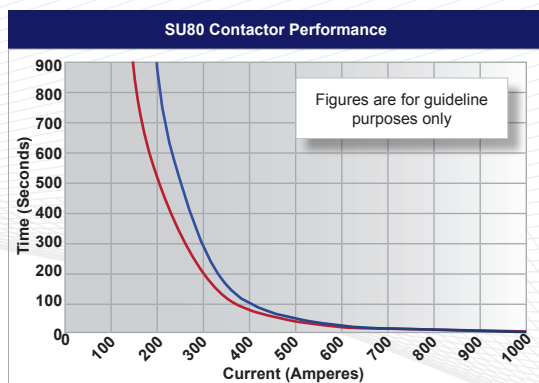
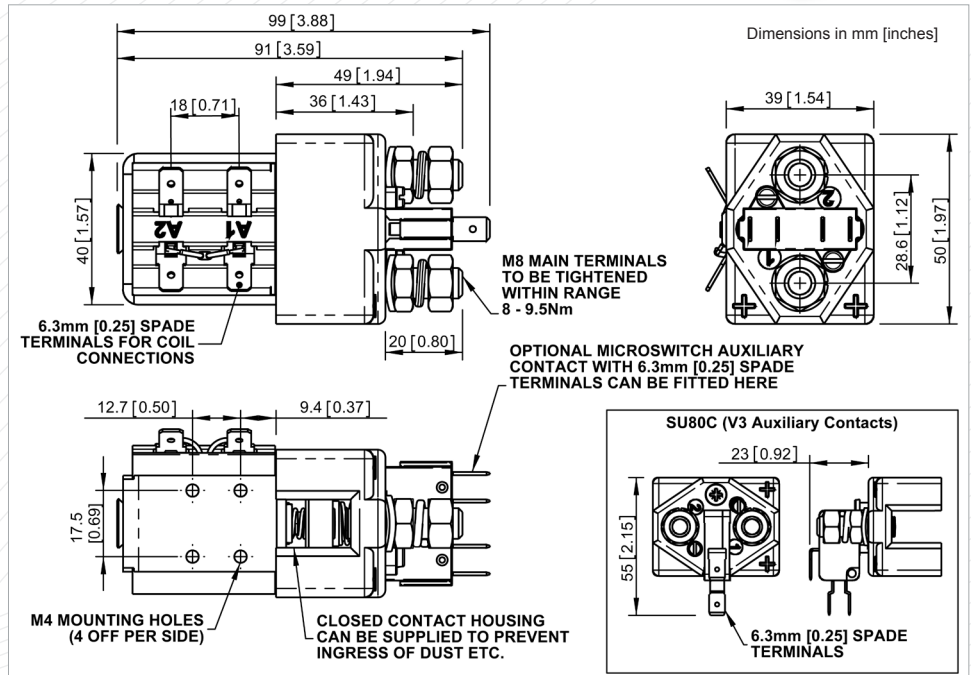
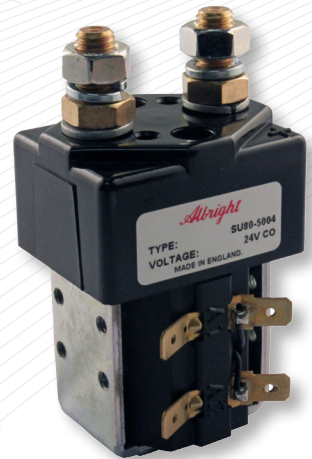
**Note:** Where applicable values shown are at 20° C

\* In accordance with UL508

The SU80 is an up-rated version of the SW80 Contactor designed for Interrupted and Uninterrupted loads. It is suitable for switching Resistive, Capacitive and Inductive loads. Typical applications include, but are not limited to, electric motors, hydraulic power packs, winches, speed controllers, UPS and Power Distribution Systems.

- 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 SU80 features single pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. Economical in price they compare favourably with sealed automotive style solenoid switches which cannot be serviced or inspected for contact wear. Mounting can be vertical or horizontal, when vertical the M8 contact studs should point upwards.



SU80 Available Options		
General		
Auxiliary Contacts (SU80A)		○
Auxiliary Contacts - V3 (SU80C)		○
Magnetic Blowouts*		○
Magnetic Blowouts - High Powered*		○
Armature Cap		○
Mounting Brackets (see SU Series Catalogue)		○
Magnetic Latching (Not fail safe)*		○
Closed Contact Housing		○
Environmentally Protected IP66		○
EE Type (Steel Shroud)		○
Contacts		
Large Tips		○
Textured Tips		○
Silver Plating		X
Coil		
AC Rectifier Board (Fitted)		○
Coil Suppression*		○
Flying Leads		○
Manual Override Operation		○
M4 Stud Terminals		X
M5 Terminal Board		○
Vacuum Impregnation		○

**Key:** Optional ○ Standard ● Not Available X

\* Connections become polarity sensitive