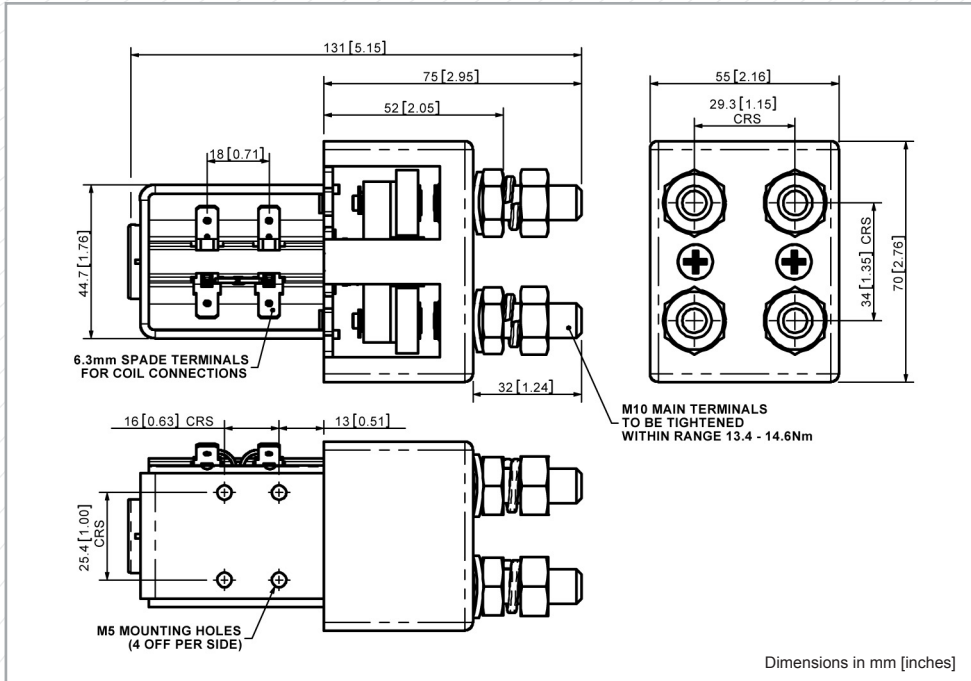




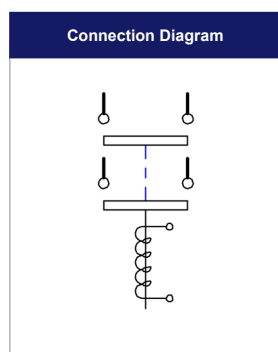
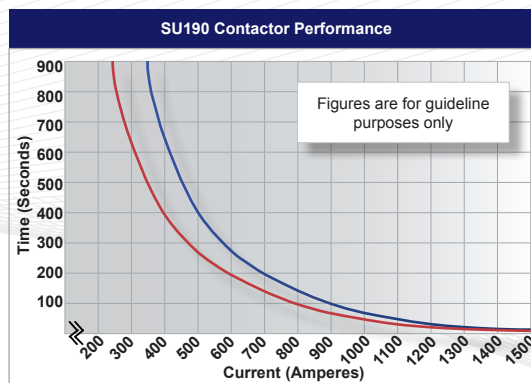
The SU190 is an updated variant of the SW190 Series of contactor that has been designed to switch heavy duty DC loads and is suitable for switching Resistive, Capacitive and Inductive loads. Typical applications include electric motors, hydraulic power packs, winches, speed controllers and Power Distribution Systems. The contacts are double breaking and are capable of switching AC 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 contactors feature double pole, double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SU190 is easy to install, with M5 tapped holes in the switch frame or a variety of optional brackets available. Electrical connections follow industry standards, with M10 main terminal studs and an option for either 6.3mm standard spade terminals or flying leads on the coil assembly.



SU190 Available Options	
General	
Auxiliary Contacts	X
Auxiliary Contacts - V3	X
Magnetic Blowouts	X
Magnetic Blowouts - High Powered	o
Armature Cap	●
Mounting Brackets (see SW180 Series Catalogue)	o
Magnetic Latching (Not fail safe)*	o
Closed Contact Housing	X
Environmentally Protected IP66	X
EE Type (Steel Shroud)	o
Contacts	
Large Tips	X
Textured Tips	o
Silver Plating	X
Coil	
AC Rectifier Board (Fitted)	o
Coil Suppression*	o
Flying Leads	o
Manual Override Operation	X
M4 Stud Terminals	X
M5 Terminal Board	o
Vacuum Impregnation	o
Key: Optional o Standard ● Not Available X	
* Connections become polarity sensitive	



Contact Performance Key:

- Interrupted Current
- Uninterrupted Current

Application	Interrupted	Uninterrupted
Thermal Current Rating (I_{th})	250A	350A
Intermittent Current Rating:		
30% Duty	450A	635A
40% Duty	390A	550A
50% Duty	360A	495A
60% Duty	320A	450A
70% Duty	300A	415A
Rated Fault Current Breaking Capacity (I_{cn}) 5ms Time Constant:		
SU190	1500A at 48V D.C.	
SU190B	1500A at 96V D.C.	
Maximum Recommended Contact Voltages (U_{ϕ}):		
SU190	96V D.C.	
SU190B	120V D.C.	
Typical Voltage Drop per pole across New Contacts at 100A	40mV	
Mechanical M.T.B.F	$>3 \times 10^6$	
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	40 - 50 Watts	
Intermittently Rated types	30 - 40 Watts	
Prolonged Rated Types	15 - 30 Watts	
Continuously Rated Types	10 - 15 Watts	
Maximum Pull-In Voltage (Coil at 20° C) Guideline:		
Very Intermittently 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%	
Typical Pull-In Time	30ms	
Typical Drop-Out Time (N/O Contacts to Open):		
Without Suppression	8ms	
With Diode Suppression	60ms	
With Diode and Resistor	25ms	
Typical Contact Bounce Period	3ms	
Operating Ambient Temperature	- 40° C to + 60° C	
Guideline Contactor Weight:		
SU190	760 gms	
With Blowouts	+ 50 gms	
- Where applicable values shown are at 20° C		
Recommended Connection Sizes for Maximum Continuous Current		
Copper busbar	161mm ² [0.25inch ²]	225mm ² [0.35inch ²]
Cable	Rated suitable for Application	

• Performance data provided should be used as a guide only. Some de-rating or variation from figures may be necessary according to application.

• The thermal current ratings stated are dependant upon the size of conductor being used for the required duty.

• For further technical advice email: technical@albrightinternational.com

• Albright reserve the right to change data without prior notice