

The SW63P is a miniature series single pole, free standing, compact contactor which is sealed to IP66. The SW63P is designed to fill the gap between 30 ampere relays and 100 ampere contactors. Devised for both interrupted and uninterrupted loads, the SW63P is suitable for switching Resistive, Capacitive and Inductive loads. Typical applications include switching small traction motors, hydraulic power packs and small electric winch motors.



SW63P

Application	Interrupted	Uninterrupted
Thermal Current Rating (I _{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 (I _{cn}) 5ms Time Constant: (in accordance with UL583*)		
SW63P	400A at 48V D.C.	
SW63BP	400A at 96V D.C.	
Rated Fault Current Breaking Capacity (I _{cn}) Resistive Load: (in accordance with UL508*)		
SW63P	120A at 60V D.C.	
SW63BP	120A at 96V D.C.	
Maximum Recommended Contact Voltages (U _e):		
SW63P	48V D.C. 60V D.C.	
SW63BP	96V D.C.	
Typical Voltage Drop per pole across New Contacts at 80A		40mV
Mechanical Durability		>3 x 10 ⁶ Cycles
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		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:		
SW63P		210 gms
With Blowouts		+ 8 gms
Advised Connection Sizes for Maximum Continuous Current		
Copper busbar		52mm ² [0.08inch ²]
Cable		Rated suitable for Application

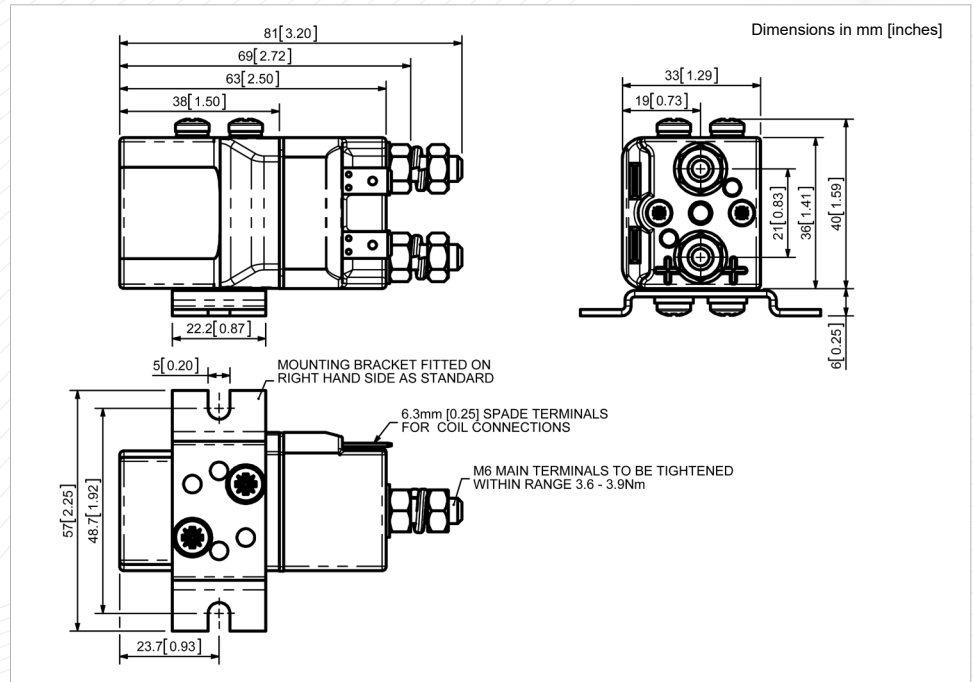
Key: ▾ = Interrupted ▴ = Uninterrupted

Note: Where applicable values shown are at 20° C

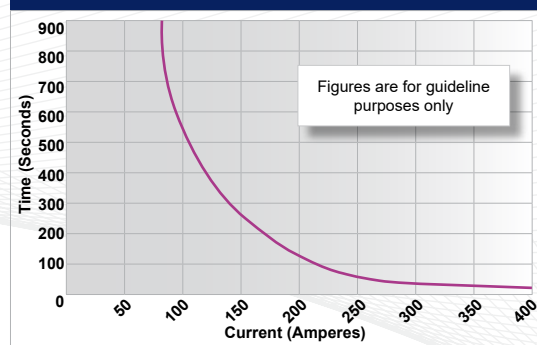
* Please check our web site for product UL status

- 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 SW63P features single pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SW63P incorporates an enclosed top cover and offers environmental protection to IP66. The SW63P has M6 stud main terminals and 6.3mm spade coil connections. It can be mounted via mounting brackets (supplied fitted). Mounting can be on the side or base of the contactor.



SW63P Contactor Performance



Contact Performance Key:

— Interrupted and Uninterrupted Current

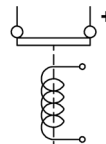
SW63P Available Options

SW63P Available Options		Suffix
General		
Auxiliary Contacts	X	
Auxiliary Contacts - V4	X	
Magnetic Blowouts†	●	B
Magnetic Blowouts - High Powered†	X	
Armature Cap	X	
Mounting Brackets (See Stud Contactor Series Catalogue)	●	
Magnetic Latching† (Not fail safe)	X	
Closed Contact Housing	●	
Environmentally Protected IP66	●	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: ○ Standard ● Not Available X

† Connections become polarity sensitive

Connection Diagram



- 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