

The SU80P is an up-rated version of the SW80P designed for Interrupted and Uninterrupted applications. It is sealed to IP66 and has been designed for direct current loads in more arduous environments. It is suitable for switching Resistive, Capacitive and Inductive loads. Typical applications include, but are not limited to, electric motors, hydraulic power packs, winches and speed controllers.

Application	Interrupted	Uninterrupted
Thermal Current Rating ( $I_{th}$ )	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 ( $I_{cn}$ ) 5ms Time Constant:  
(in accordance with UL583\*)

SU80P	800A at 48V D.C.
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Rated Fault Current Breaking Capacity ( $I_{cn}$ ) Resistive Load:  
(in accordance with UL508\*)

SU80P	300A at 60V D.C.
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Maximum Recommended Contact Voltages ( $U_e$ ):

SU80P	48V D.C.	60V D.C.
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Typical Voltage Drop per pole across New Contacts at 150A

<40mV

Mechanical M.T.B.F

>3 x 10<sup>6</sup>

Coil Voltage Available ( $U_s$ )

From 6 to 240V D.C.

Coil Power Dissipation:

Highly Intermittent Rated Types	20 - 30 Watts
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Intermittently Rated types	15 - 20 Watts
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Prolonged Rated Types	13 - 15 Watts
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Continuously Rated Types	7 - 13 Watts
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Maximum Pull-In Voltage (Coil at 20° C) Guideline:

Highly Intermittent Rated types (Max 25% Duty Cycle)	60% $U_s$
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Intermittently Rated types (Max 70% Duty Cycle)	60% $U_s$
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Prolonged Operation (Max 90% Duty Cycle)	60% $U_s$
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Continuously Rated Types (100% Duty Cycle)	66% $U_s$
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Drop-Out Voltage Range	10 - 25% $U_s$
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Typical Pull-In Time	20ms
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Typical Drop-Out Time (N/O Contacts to Open):

Without Suppression	5ms
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With Diode Suppression	50ms
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With Diode and Resistor (Subject to resistance value)	8 - 20ms
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Typical Contact Bounce Period	3ms
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Operating Ambient Temperature	- 40°C to + 60°C
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Guideline Contactor Weight:

SU80P	350 gms
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#### Advised Connection Sizes for Maximum Continuous Current

Copper busbar	97mm <sup>2</sup>	129mm <sup>2</sup>
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Cable	Rated suitable for Application	
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**Key:** ■ = Interrupted ■ = Uninterrupted

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

\* Please check our web site for product UL status

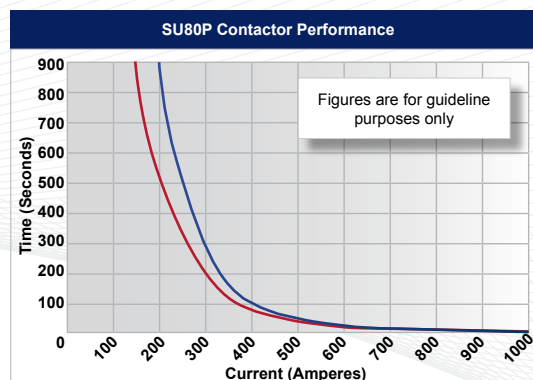
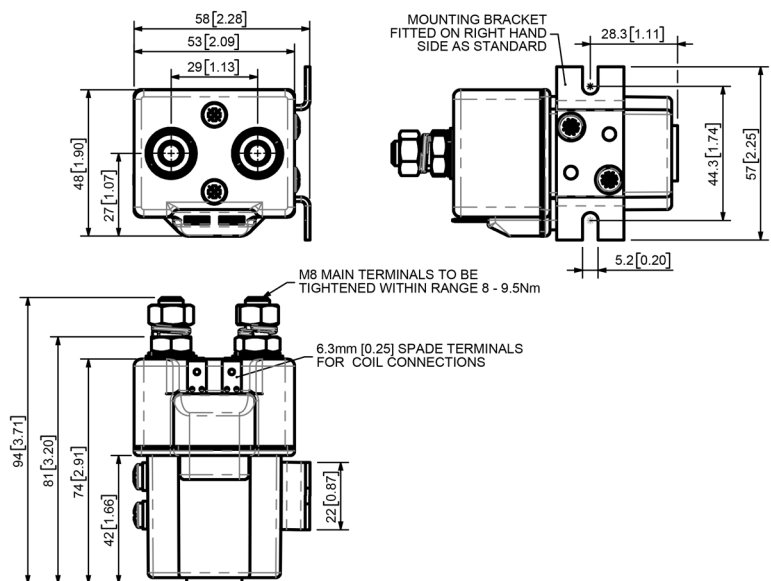
• **Interrupted** current - opening and closing on load with frequent switching (results in increased contact resistance).

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

The SU80P features single pole double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The SU80P features an enclosed top cover and offers environmental protection to IP66. It has M8 stud main terminals and 6.3mm spade coil connections. Mounting can be vertical or horizontal, when vertical the M8 contact studs should point upwards. If the requirement is for downwards orientation we can adjust the contactor to compensate for this.



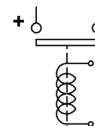
SU80P



#### Contact Performance Key:

— Interrupted Current  
— Uninterrupted Current

#### Connection Diagrams



#### SU80P 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 Range Catalogue)	•
Magnetic Latching† (Not fail safe)	○ M
Closed Contact Housing	•
Environmentally Protected IP66	• P
EE Type (Steel Shroud)	X

#### Contacts

Large Tips	○ L
Textured Tips	○ T
Silver Plating	X

#### Coil

AC Rectifier Board (Fitted)	X
Coil Suppression†	○
Flying Leads	X
Manual Override Operation	X
M4 Stud Terminals	X
M5 Terminal Board	X
Vacuum Impregnation	○

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

† Connections become polarity sensitive