

150/200A

SU80P Single Pole Single Throw Normally Open - IP66 (Part of the SU Series)

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.

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| Application | Interrupted | Uninterrupted | |
|---|---|--------------------------|--|
| Thermal Current Rating ([/] 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 Capac (in accordance with UL583*) | city (^I cn) 5ms Tir | ne Constant: | |
| Blowouts | 800A at 80V D.C. | | |
| No Blowouts | 800A at 48V D.C. | | |
| Rated Fault Current Breaking Capac (in accordance with UL508*) | city ([/] cn) Resistiv | ve Load: | |
| Blowouts | 300A at 96V D.C. | | |
| No Blowouts | 300A at 48V D.C. | | |
| Maximum Recommended Contact V | /oltages (U _e): | | |
| Blowouts | 96V | D.C. | |
| No Blowouts | 48V D.C. | 60V D.C. | |
| Typical Voltage Drop per pole across New Contacts at 150A | 40mV | | |
| Mechanical Durability | >3 x 10 |) ⁶ Cycles | |
| Coil Voltage Available (U _S) | 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 | 3 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 | 20ms | | |
| Typical Drop-Out Time (N/O Contac | ts 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: | | | |
| SU80P | 350 gms | | |
| With Blowouts | + 50 gms | | |
| With Blowouts | ximum Continu | ous Current | |
| Advised Connection Sizes for Ma | | 129mm ² | |
| | 97mm ² [0.15inch ²] | [0.20inch ²] | |
| Advised Connection Sizes for Ma | [0.15inch ²] | | |
| Advised Connection Sizes for Ma Copper busbar Cable | [0.15inch ²] | [0.20inch ²] | |
| Advised Connection Sizes for Ma Copper busbar Cable | [0.15inch ²] Rated suitable | [0.20inch ²] | |

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

MOUNTING BRACKET FITTED ON RIGHT HAND SIDE AS STANDARD 58[2.28] 28.3[1.11] 53[2.09] 29[1.13] 0 44.3[1.74] C 57 [2.25] 48[1.90] (0 (0 C 27 [1.07] 5.2[0.20] M8 MAIN TERMINALS TO BE TIGHTENED WITHIN RANGE 8 - 9.5Nm 6.3mm [0.25] SPADE TERMINALS FOR COIL CONNECTIONS 0 94 [3.71] 81[3.20] 74[2.91] (1 22[0.87] 42[1.66] ſ

Dimensions in mm [inches]

| | 66% U _s | SU80P Contactor Performance | | SU80P Available Options | | |
|--|---------------------------|-----------------------------|---|---|-----|--|
| | 10 - 25% U _s | | | General | | |
| | 20ms | | | Auxiliary Contacts | х | |
| Contonto to (| Figures are for guideline | | Figures are for guideline purposes only | Auxiliary Contacts - V3 | х | |
| | | 700 [©] 000 | parposes sing | Magnetic Blowouts [†] | о В | |
| | 5ms | 8 600 9 500 | | Magnetic Blowouts - High Powered [†] | х | |
| | 50ms | | | Armature Cap | х | |
|) | 8 - 20ms | € 400 ≝ 300 | | Mounting Brackets (see Stud Range Catalogue) | • | |
| iod | 3ms | 200 | | Magnetic Latching [†] (Not fail safe) | • M | |
| ature | - 40°C to + 60°C | 100 | | Closed Contact Housing | • | |
| : | | | | Environmentally Protected IP66 | • P | |
| , | | 0 100 500 300 mo | 00, 00, 00, 00, 00, 00, 00 | EE Type (Steel Shroud) | Х | |
| | 350 gms | Curr | rent (Amperes) | Contacts | | |
| | + 50 gms | Contact Performance Key: | | Large Tips | 0 L | |
| s for Maximum Continuous Current 97mm ² [0.15inch ²] Rated suitable for Application | | Connection Diagrams | Textured Tips | 0 T | | |
| | | | Silver Plating Coil | х | | |
| | | | AC Rectifier Board (Fitted) | Х | | |
| I = Uninterrupted | | + | Coil Suppression [†] | 0 | | |
| | | | Flying Leads | х | | |
| | | L L | Manual Override Operation | х | | |
| e for product UL status | | | M4 Stud Terminals | х | | |
| a provided should be used as a guide only. Some de-rating or gures may be necessary according to application. ratings stated are dependant upon the size of conductor being used nical advice email: technical@albrightinternational.com the right to change data without prior notice | | Ч . | M5 Terminal Board | Х | | |
| | | | Vacuum Impregnation | 0 | | |
| | | | Key: Optional O Standard • No | ot Available X | | |
| | | | [†] Connections become polarity sensitiv | | | |

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