Overleaf DC182 Drawing & Options

| Application | Interrupted Uninterrup |
|---|---|
| Fhermal Current Rating (^I th) | 150A |
| ntermittent Current Rating: | |
| 30% Duty | 275A |
| 40% Duty | 235A |
| 50% Duty | 210A |
| 60% Duty | 195A |
| 70% Duty | 180A |
| Rated Fault Current Breaking Capac (in accordance with UL583*) | ity (⁷ cn) 5ms Time Constant: |
| DC182 | 1000A at 48V |
| DC182B | 1000A at 96V |
| Maximum Recommended Contact Vo | oltages (U _e): |
| DC182 | 48V D.C. |
| DC182B | 96V D.C. |
| Typical Voltage Drop per pole across | New Contacts at 150A: |
| Normally Open | 30mV |
| Normally Closed | 40mV |
| Mechanical Durability | >5 x 10 ⁶ Cycles |
| Coil Voltage Available (U _S) (Rectifier board required for A.C.) | From 6 to 240V D.C. |
| Coil Power Dissipation: | |
| Highly Intermittent 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: |
| Highly Intermittent Rated types Max 25% Duty Cycle) Intermittently Rated types | 60% U _S |
| (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 | 30ms |
| Typical Drop-Out Time (N/O Contacts | s to Open): |
| Without Suppression | 8ms |
| With Diode Suppression | 60ms |
| With Diode and Resistor (Subject to resistance value) | 25ms |
| Typical Main Contact Changeover Ti | me (milliseconds): |
| Normally Closed to Normally Open | 12ms |
| Normally Open to Normally Closed | 5ms |
| Typical Contact Bounce Period | 3ms |
| Operating Ambient Temperature | - 40°C to + 60°C |
| Guideline Contactor Weight: | |
| DC182 | 1660 gms |
| Per Auxiliary | + 40 gms |
| With Blowouts | + 75 gms |
| Auxiliary D | |
| Auxiliary Thermal Current Rating | 5A |
| Auxiliary Contact Switching Capal | bilities (Resistive Load): |
| | 5A at 24V D.C. |
| | 2A at 48V D.C. |
| | 0.5A at 240V D.C. |
| Connection Conductor Sizes for Max | |
| Should be Rated Suitable for Applica | |
| Should be Rated Suitable for Applica Key: F = Interrupted a = Uninte Note: Where applicable values show | |

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rating/variation from figures may be necessary according to application Ther al current ratings stated are dependant upon size of conductor

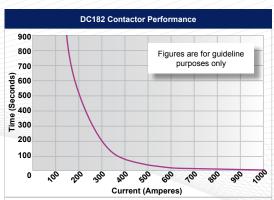
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The DC182 motor reversing type of contactor has been designed for direct current loads, particularly motors as used on electric vehicles such as industrial trucks. The DC182 is a monoblock construction, resulting in a compact design which is compatible with modern electronic control systems. Developed for both interrupted and uninterrupted loads, the DC182 is suitable for switching Resistive, Capacitive and Inductive 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).

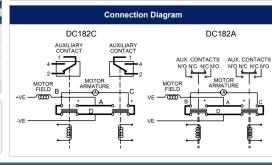


DC182 (with optional tapped holes)



Contact Performance Key:

Interrupted and Uninterrupted Current



| E. | |
|----|-----|
| | A A |

DC182 (with integral bracket)

The main contact circuit, designed for motor reversing, has a built in failsafe, so that if both coils are energised simultaneously the contact arrangement is open circuit. The DC182 has double breaking main contacts with silver alloy contact tips, which are weld resistant, hard wearing and have excellent conductivity. The DC182 M8 main stud terminals can be configured in a variety of ways in order to suit the application. Coil connections are by means of 6.3mm spades and mounting is via the supplied bracket and can be horizontal or vertical, 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.

| DC182 Available Options | | | |
|--|------------|--------|--|
| General | | Suffix | |
| Auxiliary Contacts | 0 | А | |
| Auxiliary Contacts - V3 | 0 | С | |
| Magnetic Blowouts [†] | 0 | В | |
| Magnetic Blowouts - High Powered [†] | Х | | |
| Armature Cap | • | | |
| Mounting Brackets (See overleaf) | • | | |
| Magnetic Latching [†] (Not fail safe) | 0 | М | |
| Dust Shields [‡] | 0 | | |
| Environmentally Protected IP66 | Х | | |
| EE Type (Steel Shroud) | 0 | EE | |
| Contacts | | | |
| Large Tips | 0 | L | |
| Textured Tips | 0 | Т | |
| Silver Plating | х | | |
| Coil | | | |
| AC Rectifier Board (Fitted) | 0 | | |
| Coil Suppression [†] | 0 | | |
| Flying Leads | 0 | F | |
| Manual Override Operation | Х | | |
| M4 Stud Terminals | х | | |
| M5 Terminal Board | 0 | | |
| Vacuum Impregnation | 0 | | |
| Key: Optional O Standard • N | lot Availa | ble X | |
| [†] Connections become polarity sensitive | ; | | |
| [‡] Open Housing Available | | | |

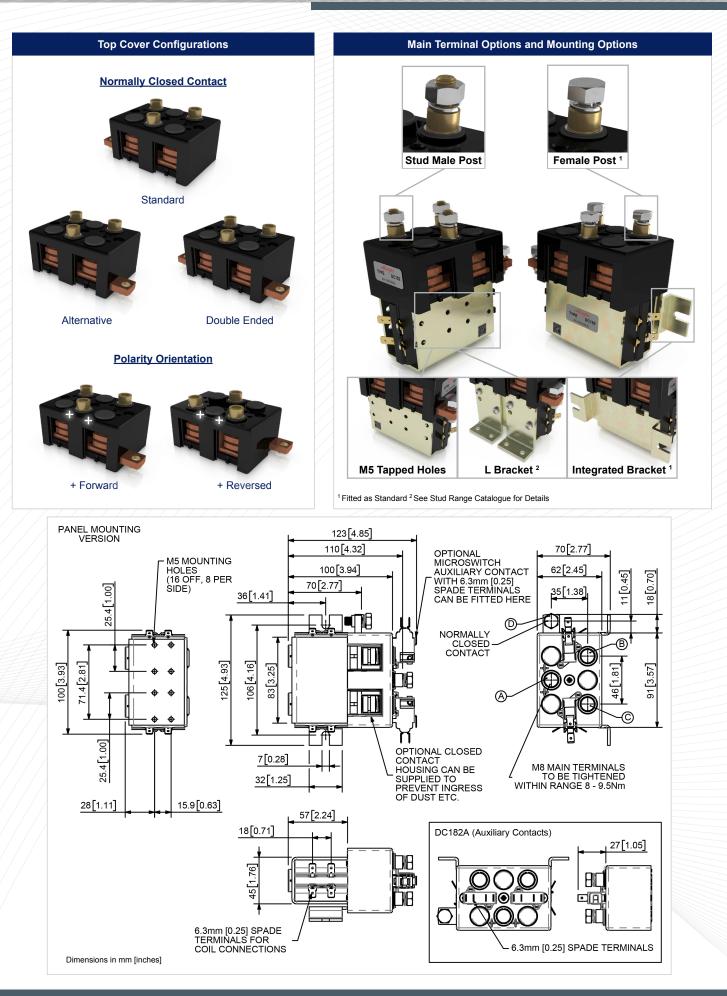
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DC182 Monoblock Single Pole Double Throw for Motor Reversing (Part of the SW180 Series)

Overleaf DC182 Specification



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