Overleaf DC182 Drawing & Options

Application	Interrupted Uninterrup
Fhermal Current Rating ( <sup>I</sup> 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 ( <sup>7</sup> cn) 5ms Time Constant:
DC182	1000A at 48V
DC182B	1000A at 96V
Maximum Recommended Contact Vo	oltages (U <sub>e</sub> ):
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 <sup>6</sup> Cycles
Coil Voltage Available (U <sub>S</sub> ) (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 <sub>S</sub>
(Max 70% Duty Cycle)	60% U <sub>S</sub>
Prolonged Operation (Max 90% Duty Cycle)	60% U <sub>s</sub>
Continuously Rated Types (100% Duty Cycle)	66% U <sub>s</sub>
Drop-Out Voltage Range	10 - 25% U <sub>s</sub>
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

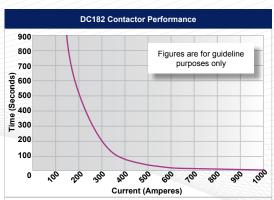
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The DC182 motor reversing type of contactor has been designed for direct current loads, particularly motors as used on electric vehicles such as industrial trucks. The DC182 is a monoblock construction, resulting in a compact design which is compatible 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).

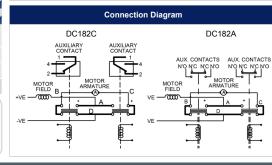


DC182 (with optional tapped holes)



## 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 <sup>†</sup>	0	В	
Magnetic Blowouts - High Powered <sup>†</sup>	Х		
Armature Cap	•		
Mounting Brackets (See overleaf)	•		
Magnetic Latching <sup>†</sup> (Not fail safe)	0	М	
Dust Shields <sup>‡</sup>	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 <sup>†</sup>	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	
<sup>†</sup> Connections become polarity sensitive	;		
<sup>‡</sup> Open Housing Available			

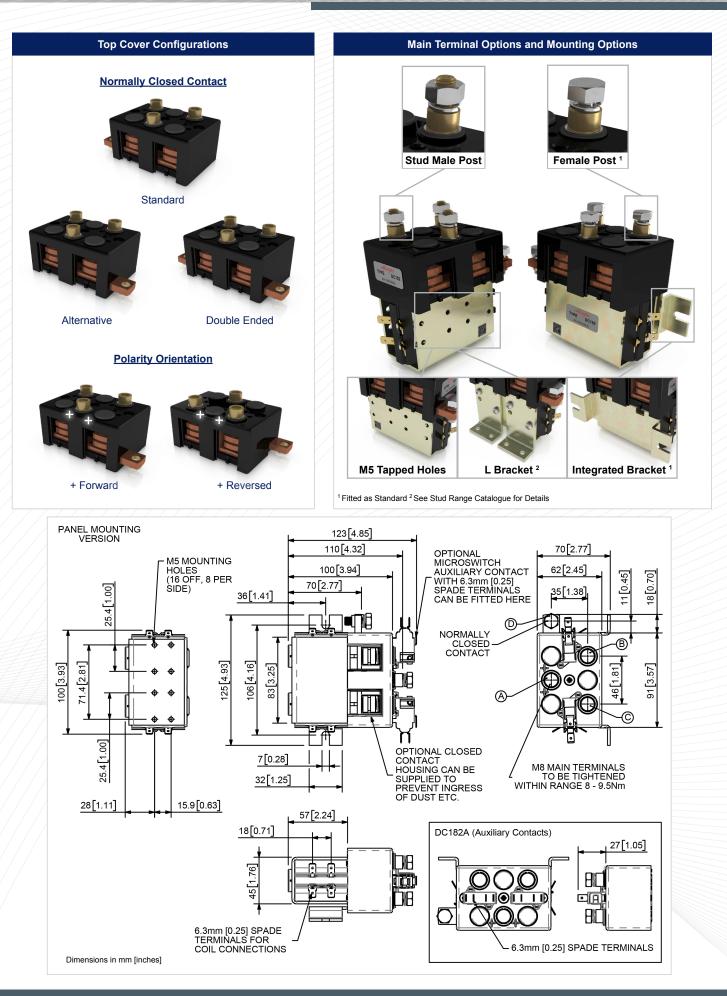
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DC182 Monoblock Single Pole Double Throw for Motor Reversing (Part of the SW180 Series)

Overleaf DC182 Specification



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