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

Application	Interrupted	Uninterrupted
Thermal Current Rating (I^th)	150A	
Intermittent Current Rating:		
30% Duty	275A	
40% Duty	235A	
50% Duty	210A	
60% Duty	195A	
70% Duty	180A	
Rated Fault Current Breaking Capacity (I^tcn) 5ms Time Constant: *(in accordance with UL583*)*		
DC182	1000A at 48V	
DC182B	1000A at 96V	
Maximum Recommended Contact Voltages (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)	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	30ms	
Typical Drop-Out Time (N/O Contacts to Open):		
Without Suppression	8ms	
With Diode Suppression	60ms	
With Diode and Resistor *(Subject to resistance value)*	25ms	
Typical Main Contact Changeover Time (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 Details		
Auxiliary Thermal Current Rating	5A	
Auxiliary Contact Switching Capabilities (Resistive Load):		
	5A at 24V D.C.	
	2A at 48V D.C.	
	0.5A at 240V D.C.	
Connection Conductor Sizes for Maximum Continuous Current Should be Rated Suitable for Application		

Key: = *Interrupted* = *Uninterrupted*

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

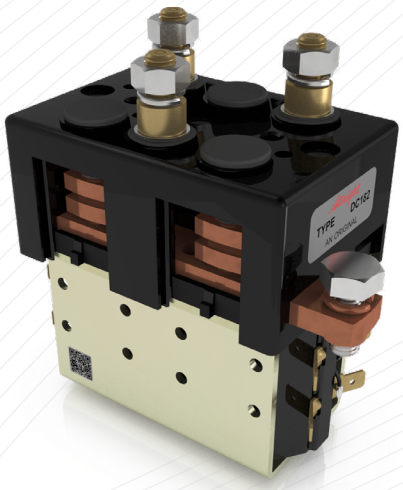
** Please check our web site for product UL status*

- **Performance data provided should be used as a guide only. Some de-rating/variation from figures may be necessary according to application.**
- **Thermal current ratings stated are dependant upon size of conductor used**
- **For further technical advice email: technical@albrightinternational.com**
- **Albright reserve the right to change data without prior notice**

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).

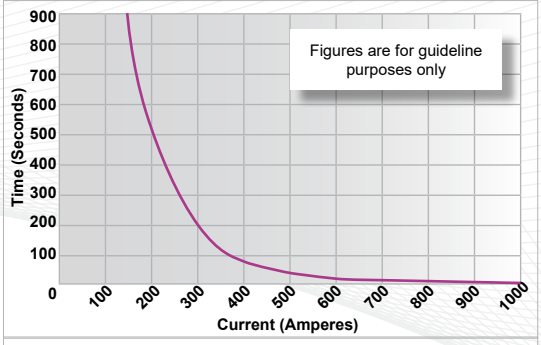
DC182 (with integral bracket)



DC182 (with optional tapped holes)

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.

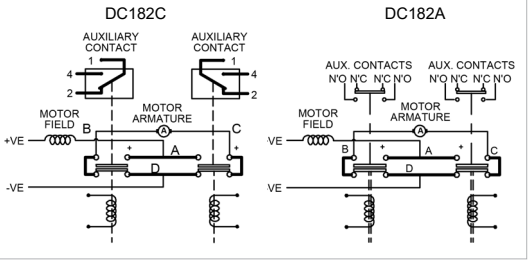
DC182 Contactor Performance



Contact Performance Key:

Interrupted and Uninterrupted Current

Connection Diagram



DC182 Available Options

General		Suffix
Auxiliary Contacts	○	A
Auxiliary Contacts - V3	○	C
Magnetic Blowouts†	○	B
Magnetic Blowouts - High Powered†	X	
Armature Cap	●	
Mounting Brackets (See overleaf)	●	
Magnetic Latching† (Not fail safe)	○	M
Dust Shields‡	○	
Environmentally Protected IP66	X	
EE Type (Steel Shroud)	○	EE
Contacts		
Large Tips	○	L
Textured Tips	○	T
Silver Plating	X	
Coil		
AC Rectifier Board (Fitted)	○	
Coil Suppression†	○	
Flying Leads	○	F
Manual Override Operation	X	
M4 Stud Terminals	X	
M5 Terminal Board	○	
Vacuum Impregnation	○	

Key: Optional ○ Standard ● Not Available X

† *Connections become polarity sensitive*

‡ *Open Housing Available*

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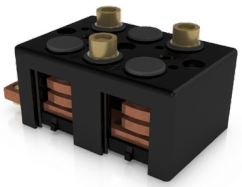
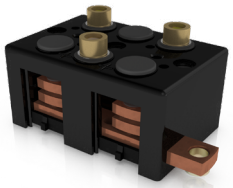
Top Cover Configurations

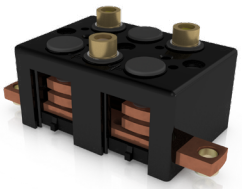
Normally Closed Contact



Standard

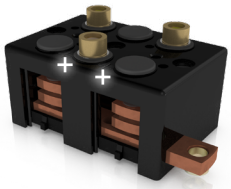


Alternative

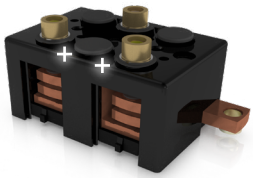


Double Ended

Polarity Orientation



+ Forward

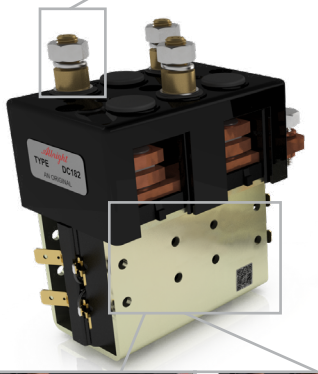


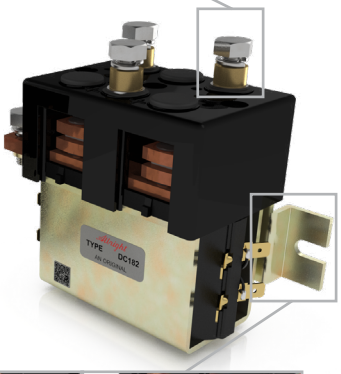
+ Reversed

Main Terminal Options and Mounting Options

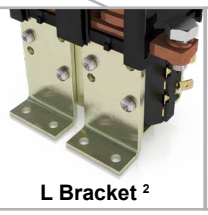
Stud Male Post

Female Post [1]

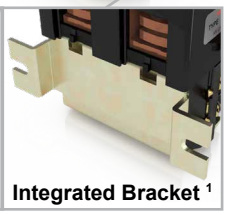




M5 Tapped Holes

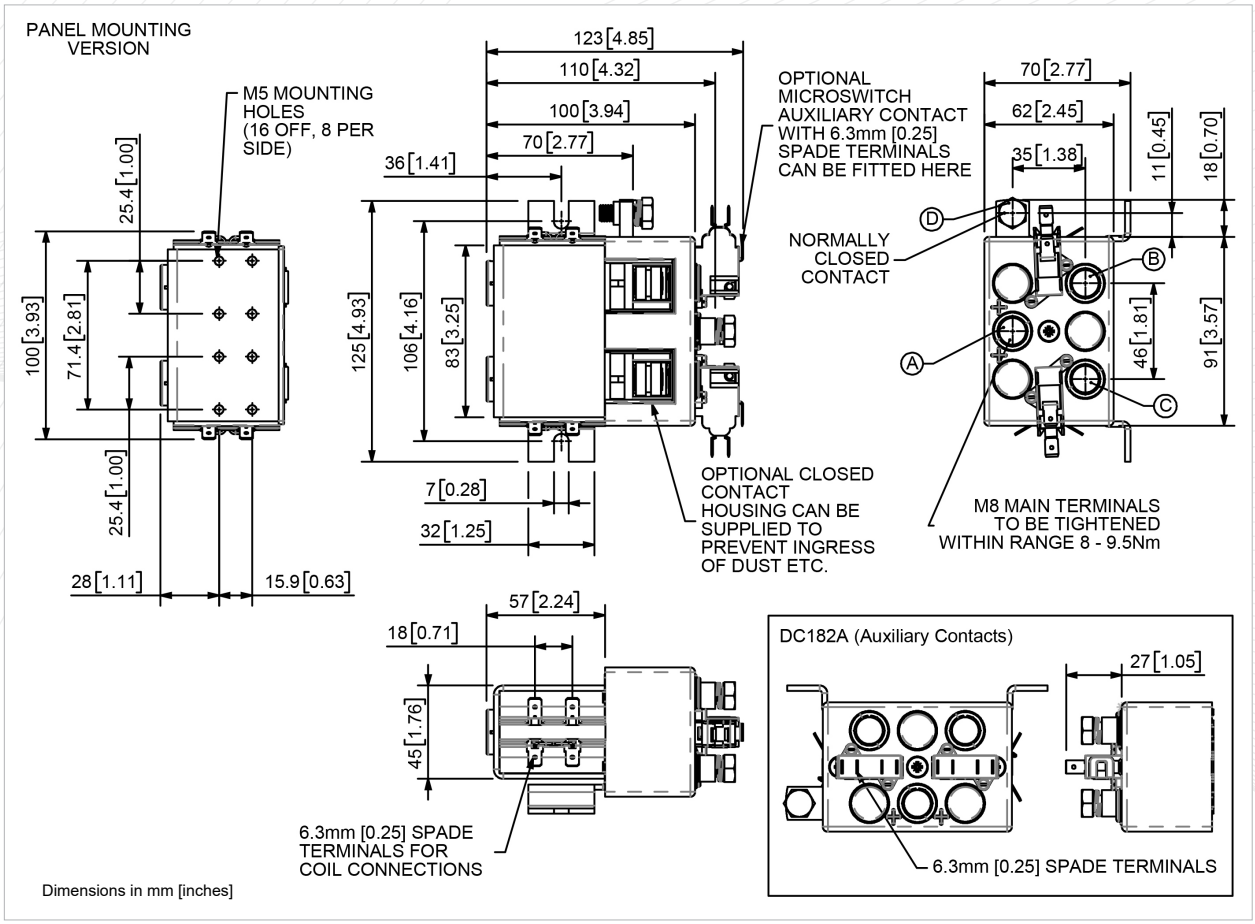


L Bracket [2]



Integrated Bracket [1]

[1] Fitted as Standard [2] See Stud Range Catalogue for Details



Dimensions in mm [inches]

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