

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_{cn}) 5ms Time Constant: (in accordance with UL583*)		
DC182		1000A at 48V
DC182B		1000A at 96V
Maximum Recommended Contact Voltages (U_0):		
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_c) (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

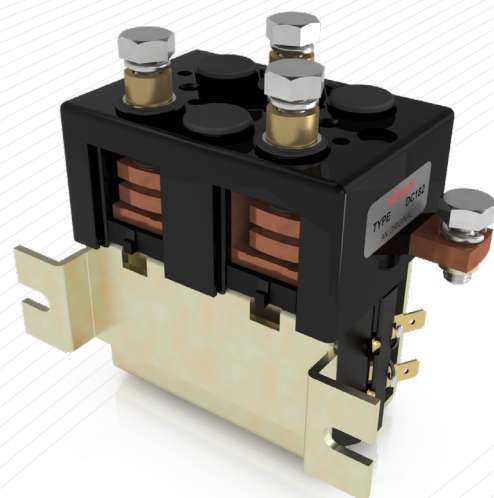
Note: Where applicable values shown are at 20° C

* Please check our web site for product UL status

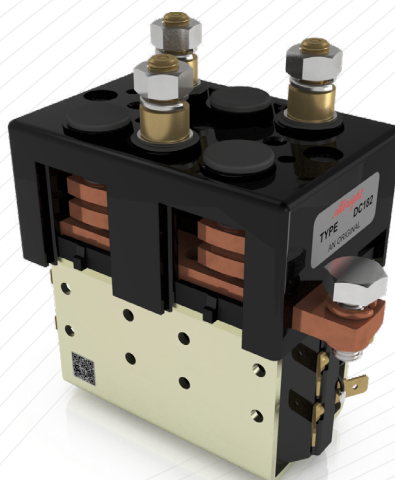
- Performance data provided should be used as a guide only. Some de-rating/variation from figures may be necessary according to application.
- Thermal current ratings stated are dependant upon size of conductor used
- For further technical advice email: technical@albrightinternational.com
- Albright 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).

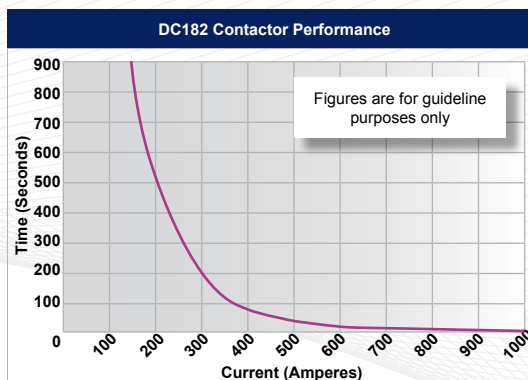


DC182 (with integral bracket)



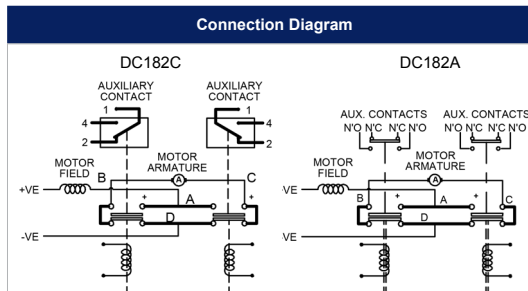
DC182 (with optional tapped holes)

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.



Contact Performance Key:

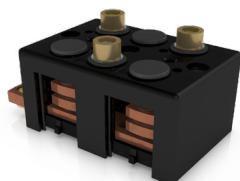
— Interrupted and Uninterrupted Current



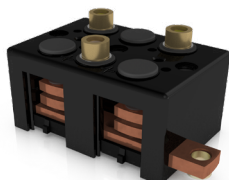
DC182 Available Options		
General		Suffix
Auxiliary Contacts	○	A
Auxiliary Contacts - V3	○	C
Magnetic Blowouts†	○	B
Magnetic Blowouts - High Powered†	X	
Armature Cap	●	
Mounting Brackets (See overleaf)	●	
Magnetic Latching† (Not fail safe)	○	M
Dust Shields†	○	
Environmentally Protected IP66	X	
EE Type (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		

Top Cover Configurations

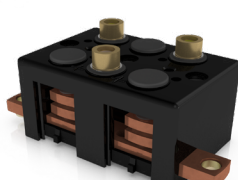
Normally Closed Contact



Standard

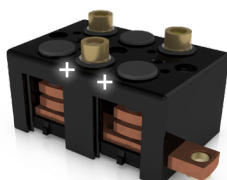


Alternative

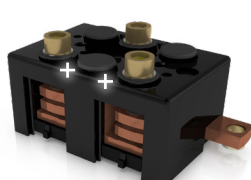


Double Ended

Polarity Orientation



+ Forward



+ Reversed

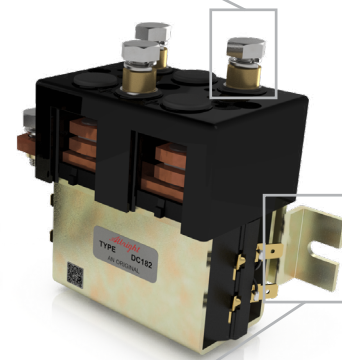
Main Terminal Options and Mounting Options



Stud Male Post

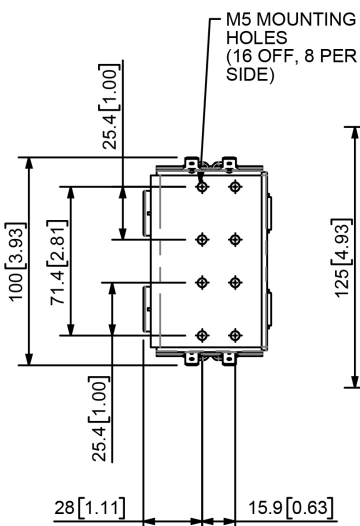

Female Post ¹


M5 Tapped Holes

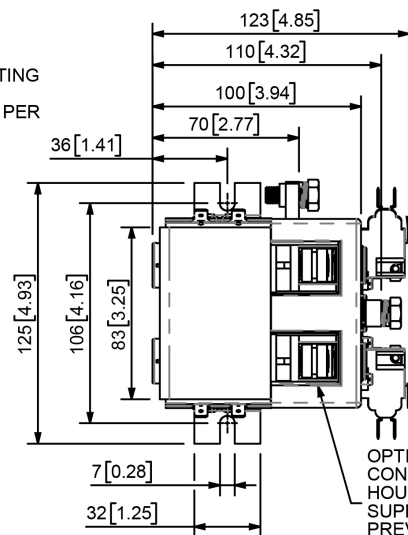

L Bracket ²

Integrated Bracket ¹
¹ Fitted as Standard ² See Stud Range Catalogue for Details

PANEL MOUNTING VERSION



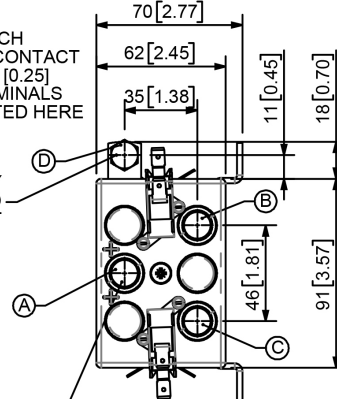
Dimensions in mm [inches]



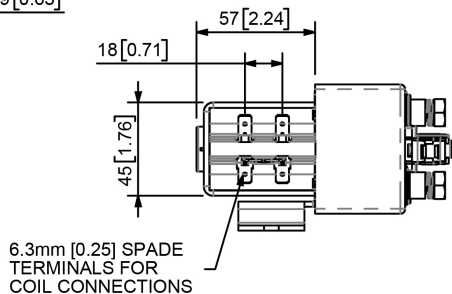
OPTIONAL MICROSWITCH AUXILIARY CONTACT WITH 6.3mm [0.25] SPADE TERMINALS CAN BE FITTED HERE

NORMALLY CLOSED CONTACT

OPTIONAL CLOSED CONTACT HOUSING CAN BE SUPPLIED TO PREVENT INGRESS OF DUST ETC.



M8 MAIN TERMINALS TO BE TIGHTENED WITHIN RANGE 8 - 9.5Nm



6.3mm [0.25] SPADE TERMINALS FOR COIL CONNECTIONS

DC182A (Auxiliary Contacts)

