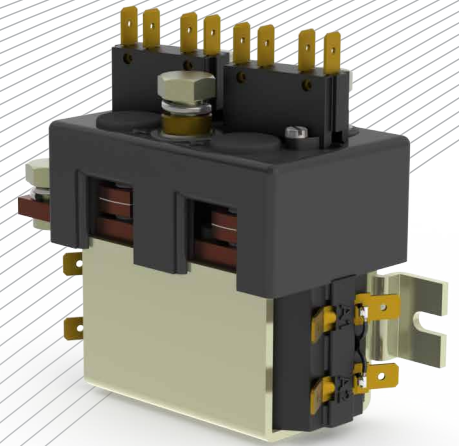


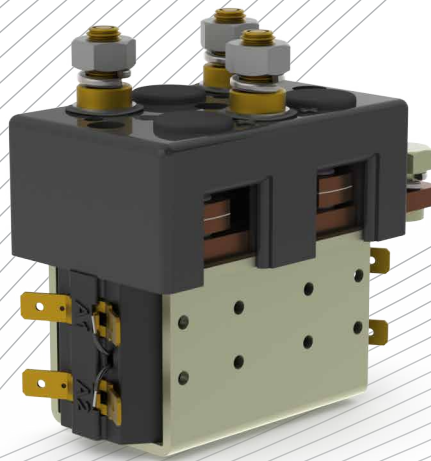
Application	Interrupted	Uninterrupted
Thermal Current Rating ( <sup>1</sup> th)		100A
Intermittent Current Rating:		
30% Duty		185A
40% Duty		160A
50% Duty		140A
60% Duty		130A
70% Duty		120A
Rated Fault Current Breaking Capacity ( <sup>1</sup> cn) 5ms Time Constant: (in accordance with UL583*)		
DC88		800A at 48V
DC88B		600A at 80V
Maximum Recommended Contact Voltages (U <sub>e</sub> ):		
DC88		48V D.C.
DC88B		96V D.C.
Typical Voltage Drop per pole across New Contacts at 100A:		
Normally Open		40mV
Normally Closed		50mV
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		20 - 30 Watts
Intermittently Rated types		15 - 20 Watts
Prolonged Rated Types		13 - 15 Watts
Continuously Rated Types		7 - 13 Watts
Maximum Pull-In Voltage (Coil at 20° C) Guideline:		
Highly Intermittent Rated types (Max 25% Duty Cycle)		60% U <sub>s</sub>
Intermittently Rated types (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		20ms
Typical Drop-Out Time (N/O Contacts to Open):		
Without Suppression		5ms
With Diode Suppression		50ms
With Diode and Resistor (Subject to resistance value)		8 - 20ms
Typical Main Contact Changeover Time (milliseconds):		
Normally Closed to Normally Open		7ms
Normally Open to Normally Closed		4ms
Typical Contact Bounce Period		3ms
Operating Ambient Temperature		- 40°C to + 60°C
Guideline Contactor Weight:		
DC88		990 gms
Per Auxiliary		+ 20 gms
With Blowouts		+ 50 gms
<b>Auxiliary Details</b>		
Auxiliary Thermal Current Rating		5A
<b>Auxiliary Contact Switching Capabilities (Resistive Load):</b>		
		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		
<b>Key:</b> <span style="color: red;">▶</span> = Interrupted <span style="color: blue;">▶</span> = Uninterrupted		
<b>Note:</b> Where applicable values shown are at 20° C		
* Please check our web site for product UL status		

The DC88 motor reversing type of contactor has been designed for direct current loads, particularly motors as used on electric vehicles such as industrial trucks. The DC88 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 DC88 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).

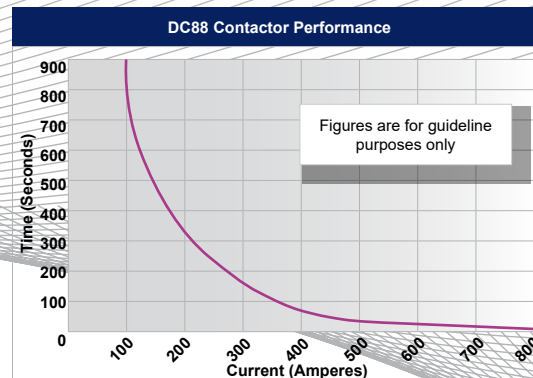


DC88A (with integral bracket)



DC88 (with optional tapped holes)

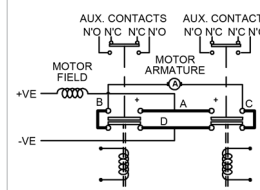
The main contact circuit, designed for motor reversing, has a built in failsafe, so that if both coils are energised simultaneously the contact arrangement is open circuit. The DC88 has double breaking main contacts with silver alloy contact tips, which are weld resistant, hard wearing and have excellent conductivity. The DC88 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

Connection Diagram

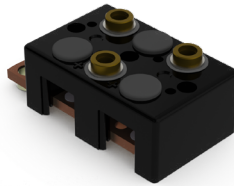


DC88 Available Options

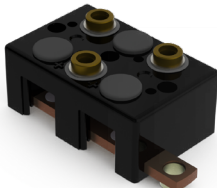
General	Suffix
Auxiliary Contacts	○ A
Auxiliary Contacts - V3	X
Magnetic Blowouts†	○ B
Magnetic Blowouts - High Powered†	○ B
Armature Cap	○
Mounting Brackets (For options see overleaf)	○
Magnetic Latching† (Not fail safe)	○ M
Closed Contact Housing†	○
Environmentally Protected IP66 (see DC88-1000P Catalogue sheet)	○ P
EE Type (Steel Shroud)	○
<b>Contacts</b>	
Large Tips	○ L
Textured Tips	○ T
Silver Plating	X
<b>Coil</b>	
AC Rectifier Board (Fitted)	○
Coil Suppression†	○
Flying Leads	○ F
Manual Override Operation	○
M4 Stud Terminals	X
M5 Terminal Board	○
Vacuum Impregnation	○
<b>Key:</b> Optional ○ Standard ● Not Available X	
† Connections become polarity sensitive	
‡ Open Housing Available	

## Top Cover Configurations

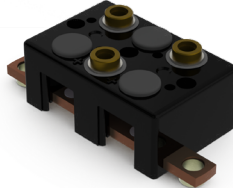
### Normally Closed Contact



Standard

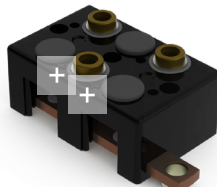


Alternative

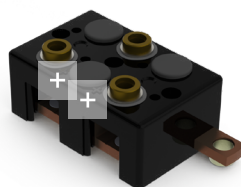


Double Ended

### Polarity Orientation



+ Forward



+ Reversed

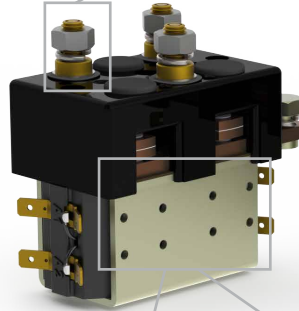
## Main Terminal Options and Mounting Options



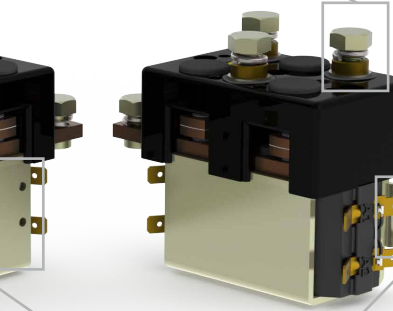
Stud Male Post



Female Post <sup>1</sup>



M4 Tapped Holes



Integrated Bracket <sup>1</sup>

<sup>1</sup> Fitted as Standard <sup>2</sup> See Stud Range Catalogue for Details

