

The DC66P is a compact contactor following the established design of our mono block contactors, configured specifically for motor reversing. Suitable for Direct Current loads and compatible with modern electronic control systems, the DC66P is sealed to IP66 and is ideal for use in applications such as battery powered winches, vehicle mounted cranes and small electric vehicles. Devised for both interrupted and uninterrupted loads, the DC66P is suitable for switching Resistive, Capacitive and Inductive loads.

Application	Interrupted	Uninterrupted
Thermal Current Rating ( <sup>1</sup> th)		80A
Intermittent Current Rating:		
30% Duty		145A
40% Duty		125A
50% Duty		115A
60% Duty		105A
70% Duty		95A
Rated Fault Current Breaking Capacity ( <sup>1</sup> cn) 5ms Time Constant: (in accordance with UL583*)		
DC66P		500A at 60V D.C.
Rated Fault Current Breaking Capacity ( <sup>1</sup> cn) Resistive Load: (in accordance with UL508*)		
DC66P		120A at 48V D.C.
Maximum Recommended Contact Voltages (U <sub>e</sub> ):		
DC66P		48V D.C.
Typical Voltage Drop per pole across New Contacts at 80A		<40mV
Mechanical M.T.B.F		>3 x 10 <sup>6</sup>
Coil Voltage Available (Us)		From 6 to 130V D.C.
Coil Power Dissipation:		
Highly Intermittent Rated Types		14 - 21 Watts
Intermittently Rated types		10 - 14 Watts
Prolonged Rated Types		7 - 10 Watts
Continuously Rated Types		5 - 7 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		15ms
Typical Drop-Out Time (N/O Contacts to Open):		
Without Suppression		6ms
With Diode Suppression		35ms
With Diode and Resistor (Subject to resistance value)		8 - 20ms
Typical Main Contact Changeover Time (milliseconds):		
Normally Closed to Normally Open		6ms
Normally Open to Normally Closed		6ms
Typical Contact Bounce Period		3ms
Operating Ambient Temperature		- 40°C to + 60°C
Guideline Contactor Weight:		
DC66P		460 gms
<b>Advised Connection Sizes for Maximum Continuous Current</b>		
Copper busbar		52 mm <sup>2</sup> [0.08 inch <sup>2</sup> ]
Cable		Rated suitable for Application

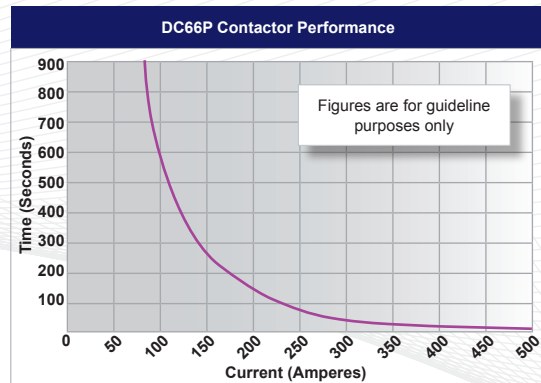
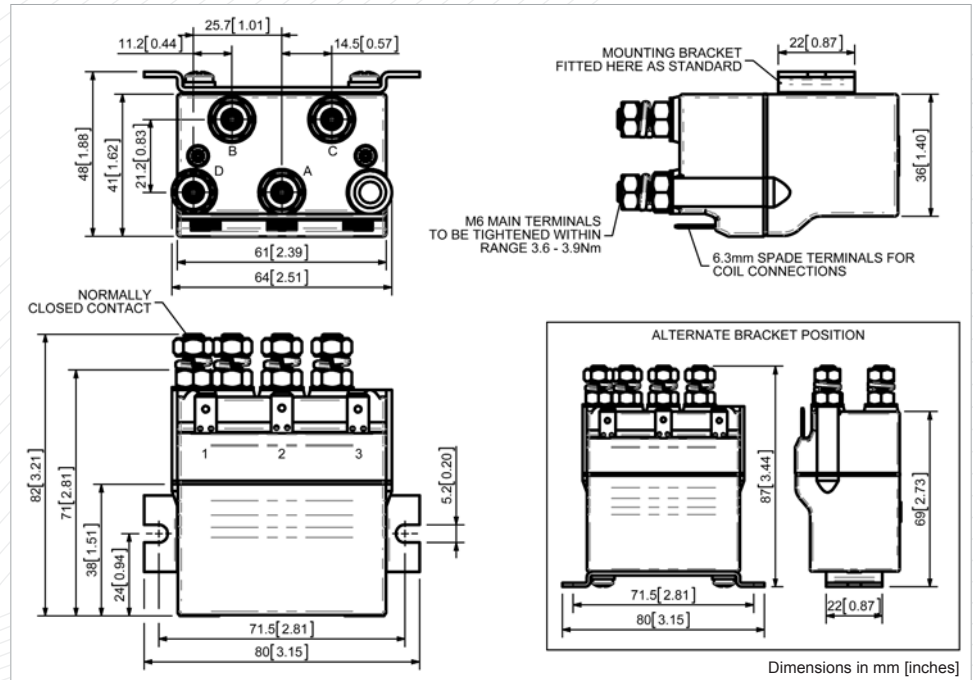
**Key:** ▾ = Interrupted ▾ = Uninterrupted  
**Note:** Where applicable values shown are at 20°C  
 \* Please check our web site for product UL status

- **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).

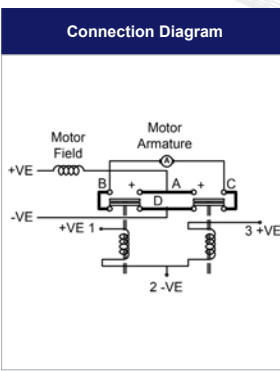
The main contact circuit has a built in fail safe, so that if both coils are energised simultaneously the contact arrangement is open circuit. The DC66P has double breaking main contacts with silver alloy tips, which are weld resistant, hard wearing and have excellent conductivity. The DC66P has M6 main stud terminals and coil connections are by means of 6.3mm spades.



DC66P



**Contact Performance Key:**  
 — Interrupted and Uninterrupted Current



DC66P Available Options		
General	Suffix	
Auxiliary Contacts	X	
Auxiliary Contacts - V3	X	
Magnetic Blowouts†	X	
Magnetic Blowouts - High Powered†	X	
Armature Cap	X	
Mounting Brackets	●	
Magnetic Latching† (Not fail safe)	X	
Closed Contact Housing	●	
Environmentally Protected IP66	●	P
EE Type (Steel Shroud)	X	
Contacts		
Large Tips	X	
Textured Tips	X	
Silver Plating	X	
Coil		
AC Rectifier Board (Fitted)	X	
Coil Suppression†	○	
Flying Leads	X	
Manual Override Operation	X	
M4 Stud Terminals	○	
M5 Terminal Board	X	
Vacuum Impregnation	X	

**Key:** Optional ○ Standard ● Not Available X  
 † Connections become polarity sensitive