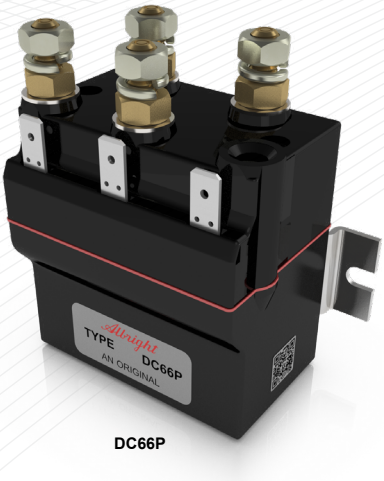
DC66P Monoblock, Single Pole Double Throw for Motor Reversing - IP67
(Part of the SW60 Series)

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 IP67 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.



DC66P

Application	Interrupted	Uninterrupted
Thermal Current Rating (I_{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 (I_{cn}) 5ms Time Constant: *(in accordance with UL583*)*		
DC66P	500A at 60V D.C.	
Rated Fault Current Breaking Capacity (I_{cn}) Resistive Load: *(in accordance with UL508*)*		
DC66P	120A at 48V D.C.	
Maximum Recommended Contact Voltages (U_e):		
DC66P	48V D.C.	
Typical Voltage Drop per pole across New Contacts at 80A	<40mV	
Mechanical Durability	>3 x 10^6 Cycles	
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_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	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	
Advised Connection Sizes for Maximum Continuous Current		
Copper busbar	52 mm² [0.08 inch²]	
Cable	Rated suitable for Application	

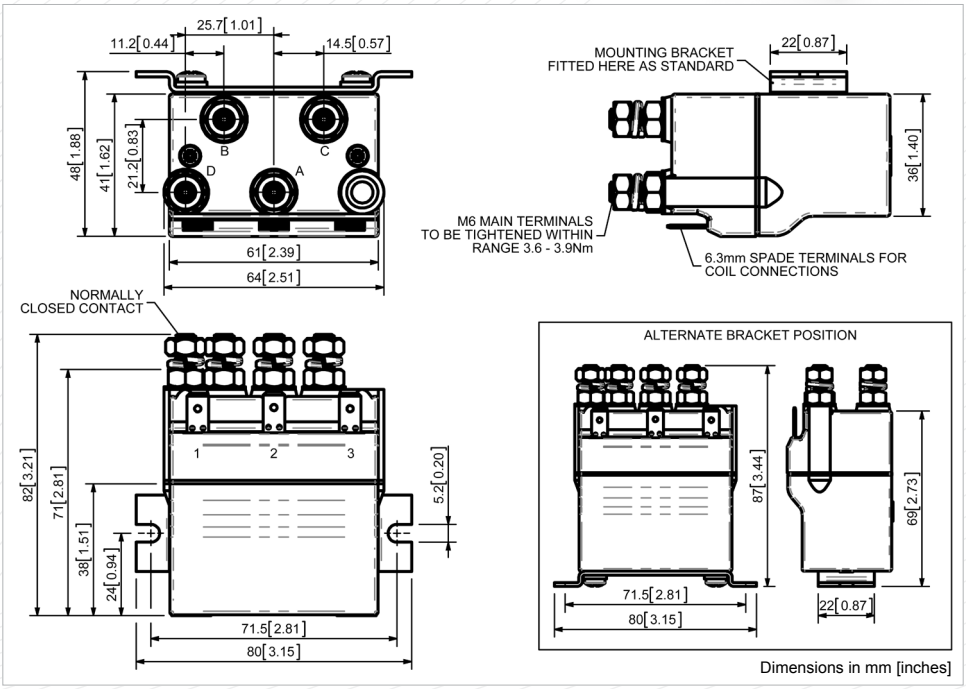
Key: = *Interrupted* = *Uninterrupted*

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

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

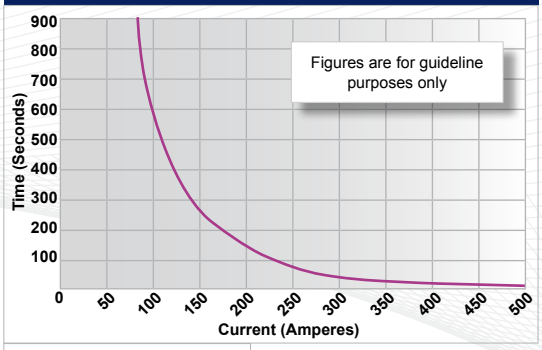
- Interrupted current - opening and closing on load with frequent switching (results in increased contact resistance).
- Uninterrupted current - no or infrequent load switching requirements (maintains a lower contact resistance).

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.



Dimensions in mm [inches]

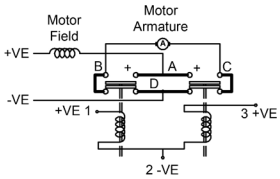
DC66P Contactor Performance



Contact Performance Key:

Interrupted and Uninterrupted Current

Connection Diagram



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 IP67	●	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*

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

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