

High Voltage DC Contactor

CBVC7 SERIES DC CONTACTOR



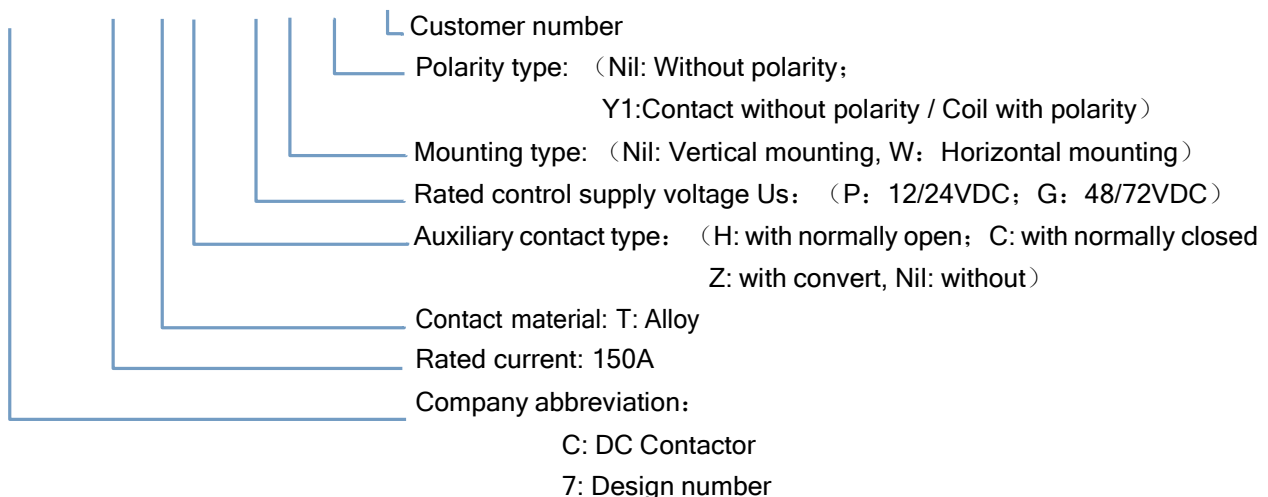
Part Number - CBVC7-150

● PRODUCT FEATURES

- **Safe** : Fully sealed with epoxy resin, contact and coil will not be oxidized, product performance is not affected by external environment, no arc outbursts, can be worked in explosive and harmful environment.
- **Reliable**: Adopt DC high voltage non-polarity design, the breaking capacity is higher and more reliable, convenient and reliable installation or wiring.
- **Good for environment**: All components meet the latest ROHS environmental requirements.
- **Application** : Ordinary, quick charging, auxiliary contactor. Can be used in EV, charging equipment, photovoltaic system, etc.
- **Approval**: UL, CE

● ORDERING

CBVC7-150 T H -P W Y1/XXX



● BASIC PARAMETER

Contact parameter	
Main Contact	
Rated operational current I_e	150A
Rated operational voltage U_e	12~1000VDC
Min. load	1A12VDC
Main contact type	1SH (SPST NO DM)
Nominal resistance of main circuit	0.2 m Ω (@150A)
Main contact mounting	M8 external thread
Connecting torque	10~12N·m
Max. switching current (more than one cycle)	1500A320VDC
Auxiliary contact	
Max. current	30VDC 2A; 125VAC 3A
Min. current	8VDC 100mA
Contact resistance	<0.15 Ω

Coil parameter		
Rated voltage U_s	12/24VDC	48/72VDC
Operating voltage range	8~36 VDC	32~95 VDC
Pick up voltage	7~8 VDC	28~32 VDC
Release voltage	5~6 VDC	18~22 VDC
Coil power	holding: 2W	holding: 1.5W
Inrush current	3A (0.1s) (@12V)	1.3A (0.1s)
Holding current	0.17A@12V; 0.085A@24V	0.03A@48V; 0.02A@72V
Pick up time (@ U_s)	\leq 45ms	\leq 45ms
Release time (@ U_s)	\leq 10ms	\leq 10ms
Bounce time (@ U_s)	\leq 5ms	\leq 5ms

Note: The above parameters are normal temperature rating, if other parameters needed, can customize.

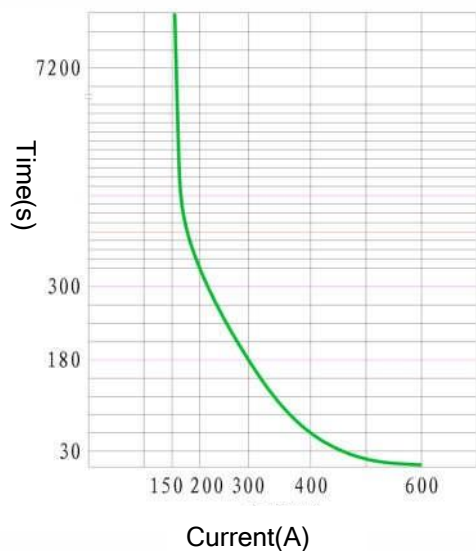
Life characteristics		
Mechanical Life		300,000 cycles
Resistivity load life (L/R \leq 1ms)		See next page
Capacitive load life (RC=1ms, only for connecting)	360A	50,000 cycles
<p>Note: For capacitive load life, when the contactor is used to control the main circuit of charge and discharge, the pre-charge circuit should be added. If there is no pre-charging path, a transient large current will be generated when the contactor closes, which may cause the contactor to stick.</p>		

Environmental characteristics		
Shock	Stability test	196m/s ² (20G)
	Strength test	490m/s ² (50G)
Resistance to vibration		10~2000Hz, 20G
Operating ambient temperature		-40°C~+85°C
Operating ambient humidity		5%~85% RH
IP Grade		IP67(inner space)
Altitude		≤4000m

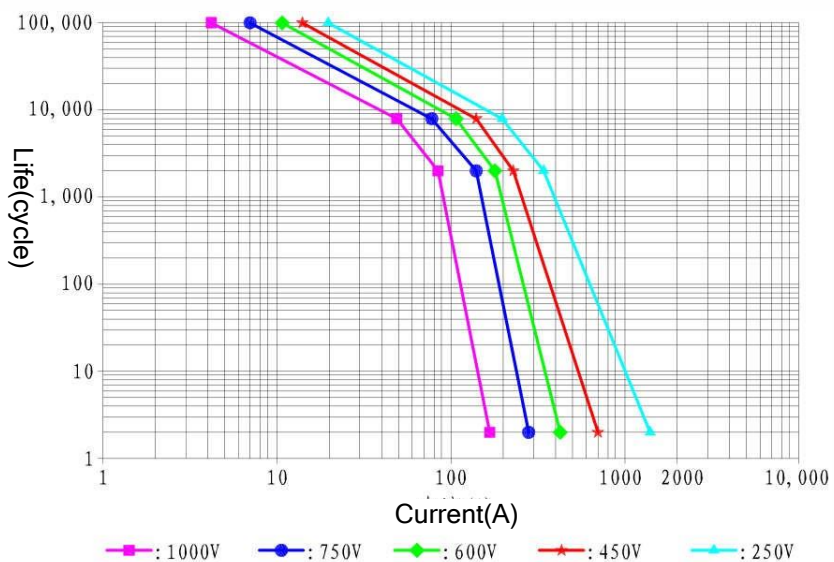
Electrical characteristics	
Dielectric withstand voltage	AC3000V
Insulation resistance	≥1000MΩ@1000VDC
Nominal insulation voltage Ui	1000V

Other	
Weight	425g, with auxiliary 430g
The cross sectional area of an external conductor	≥50mm ²
Case mounting hole torque	2.5~3.5 N·m

Short overload capacity curve



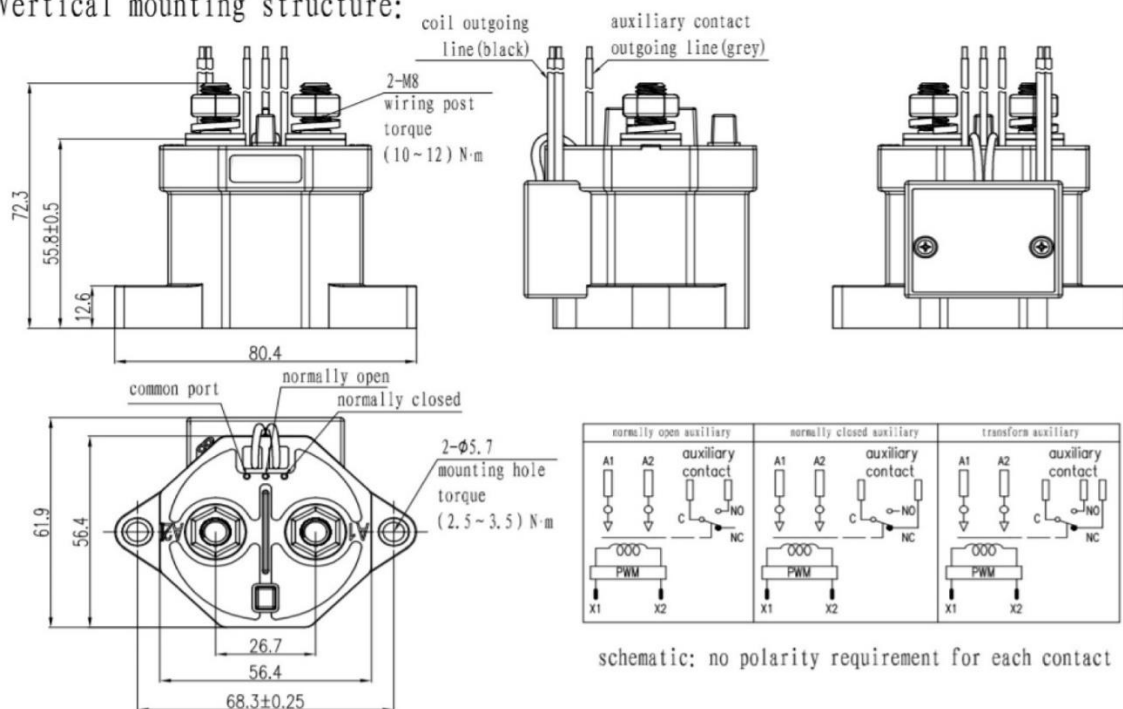
Cut-off life curve of resistive load



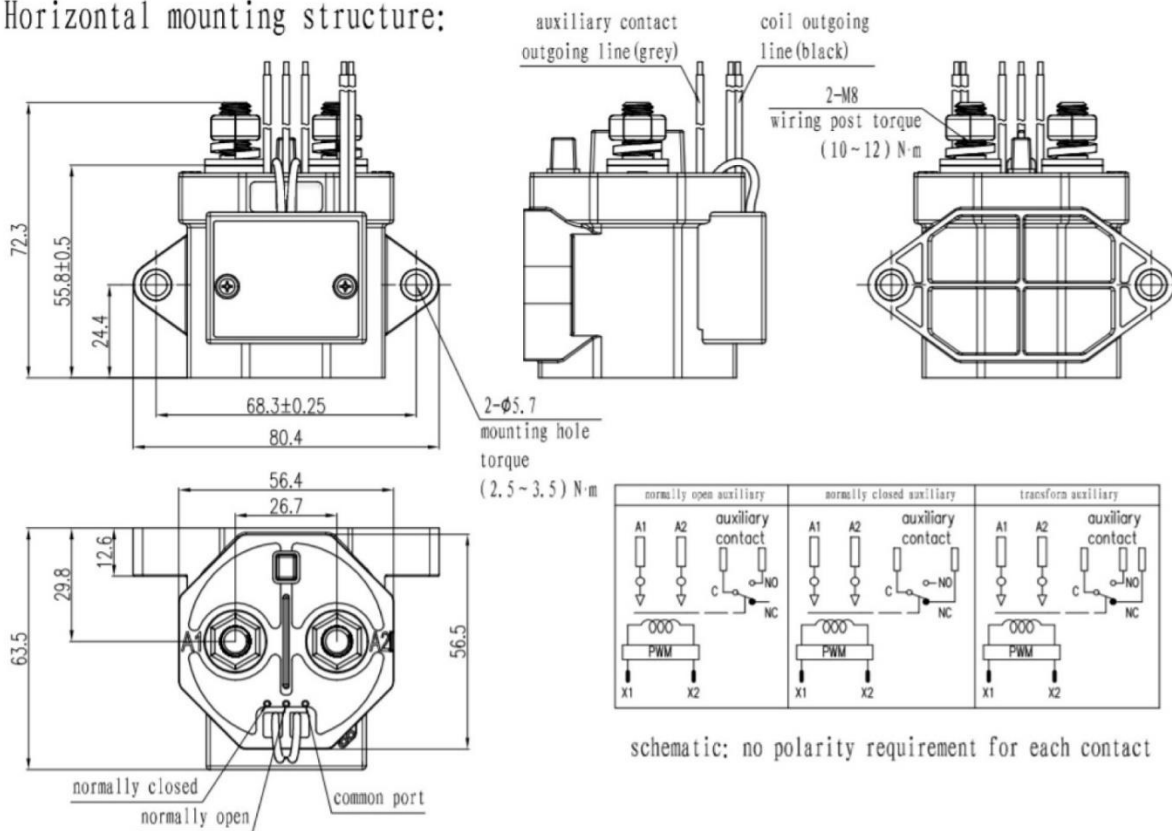
Note: Except for special note, the ambient temperature of electrical durability test is 23°C, and the on-break ratio is: 1s: 9s

● OUTLINE AND WIRING SCHEMATIC DIAGRAM

Vertical mounting structure:



Horizontal mounting structure:



Note: Control coil wire length 300±20mm
 Product without tolerance, when ≤10mm, tolerance ±0.3mm
 When dimension between 10~50 mm, tolerance ±0.5mm
 When dimension ≥50mm, tolerance ±0.8mm

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Mailing Address: Component Basics, 1539, 35-Viking Lane, Toronto, M9B 0A2, ON, Canada.

Email: info@componentbasics.com