

BSBC7 Series DC Contactor Specification

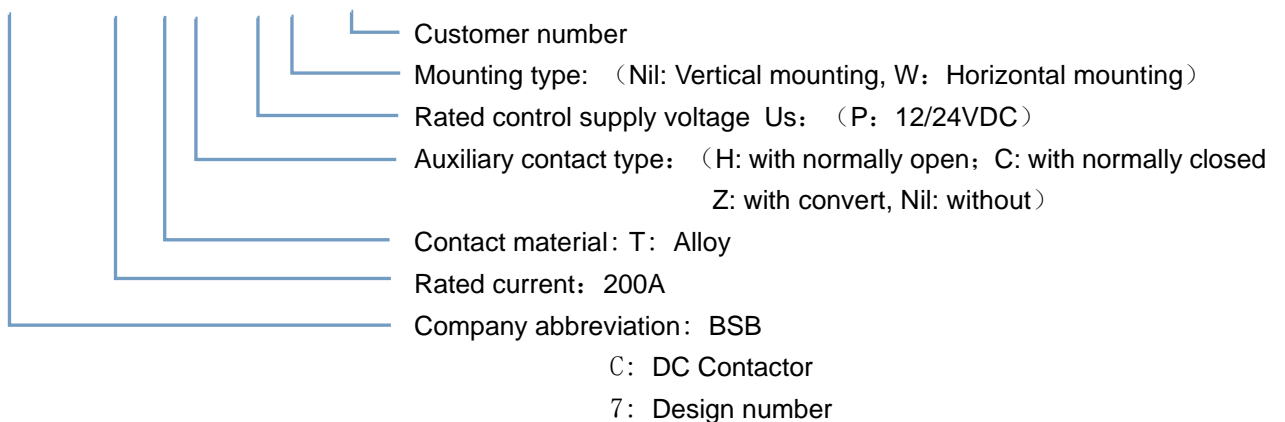
Customer	General Specification
Product Name	DC Contactor
Part Number	BSBC7-200T-P BSBC7-200TH-P BSBC7-200TC-P BSBC7-200TZ-P BSBC7-200T-PW BSBC7-200TH-PW BSBC7-200TC-PW BSBC7-200TZ-PW
Date	2020/04/01
Validity	2 Year
Version	2020V1.0

Feature

- 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, TUV

Ordering

BSBC7-200 T H -P W /XXX



Basic Parameter

Contact parameter			Coil parameter	
Main contact	Rated operational current Ie	200A	Rated voltage Us	12/24VDC
	Rated operational voltage Ue	12~1000VDC	Operating voltage range	8~36 VDC
	Min. load	1A12VDC	Pick up voltage	7~8 VDC
	Main contact type	1SH (SPST NO DM)	Release voltage	5~6 VDC
	Nominal resistance of main circuit	0.2 mΩ (@200A)	Coil power	holding: 2W
	Main contact mounting	M8 external thread	Inrush current	3A (0.1s) (@12V)
	Connecting torque	10~12N·m	Holding current	0.17A@12V; 0.085A@24V
	Max. switching current (more than one cycle)	2000A320VDC	Pick up time (@Us)	≤45ms
Auxiliary contact	Max. current	30VDC 2A; 125VAC 3A	Release time (@Us)	≤10ms
	Min. current	8VDC 100mA	Bounce time (@Us)	≤5ms
	Contact resistance	<0.15Ω		

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

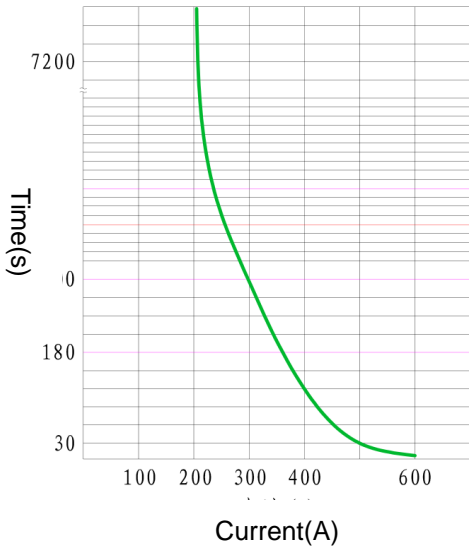
Life characteristics		
Mechanical Life	300,000 cycles	
Resistivity load life (L/R≤1ms)	See next page	
Capacitive load life (RC=1ms , only for connecting)	480A	50,000 cycles
Note: For capacitive load life, when the contactor is used to control the main circuit of charge and discharge, the pre-charge circuit 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.		

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℃~+85℃
Operating ambient humidity		5%~85% RH
IP Grade		IP67(inner space)
Altitude		≤4000m

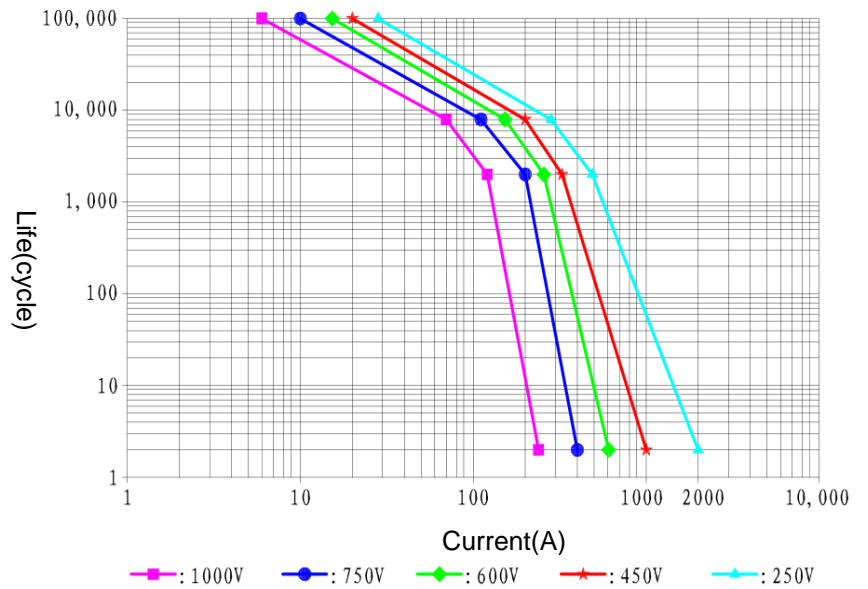
Electrical characteristics	
Dielectric withstand voltage	AC 3000V
Insulation resistance	≥1000MΩ@1000VDC
Nominal insulation voltage Ui	1000V

Other	
Weight	425g, with auxiliary 430g
The cross sectional area of an external conductor	≥65mm ²
Case mounting hole torque	2.5~3.5 N·m

Short overload capacity curve



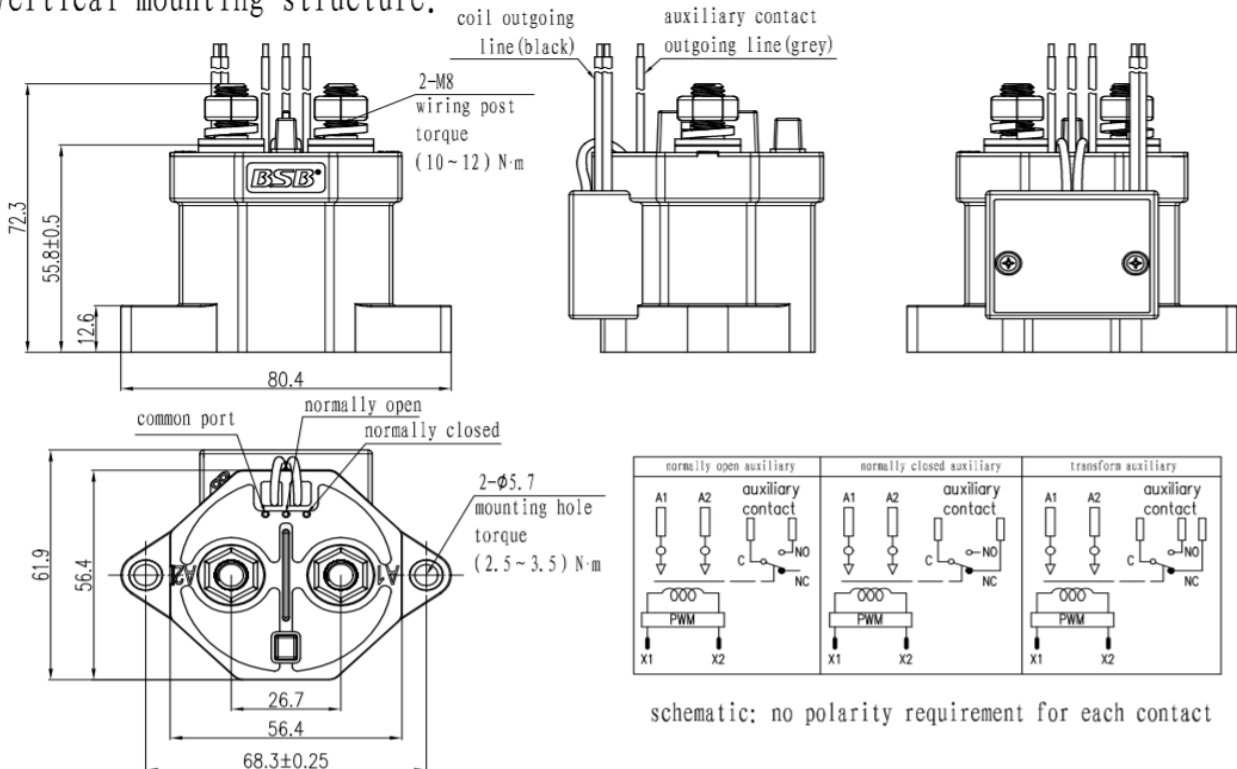
Cut-off life curve of resistive load



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

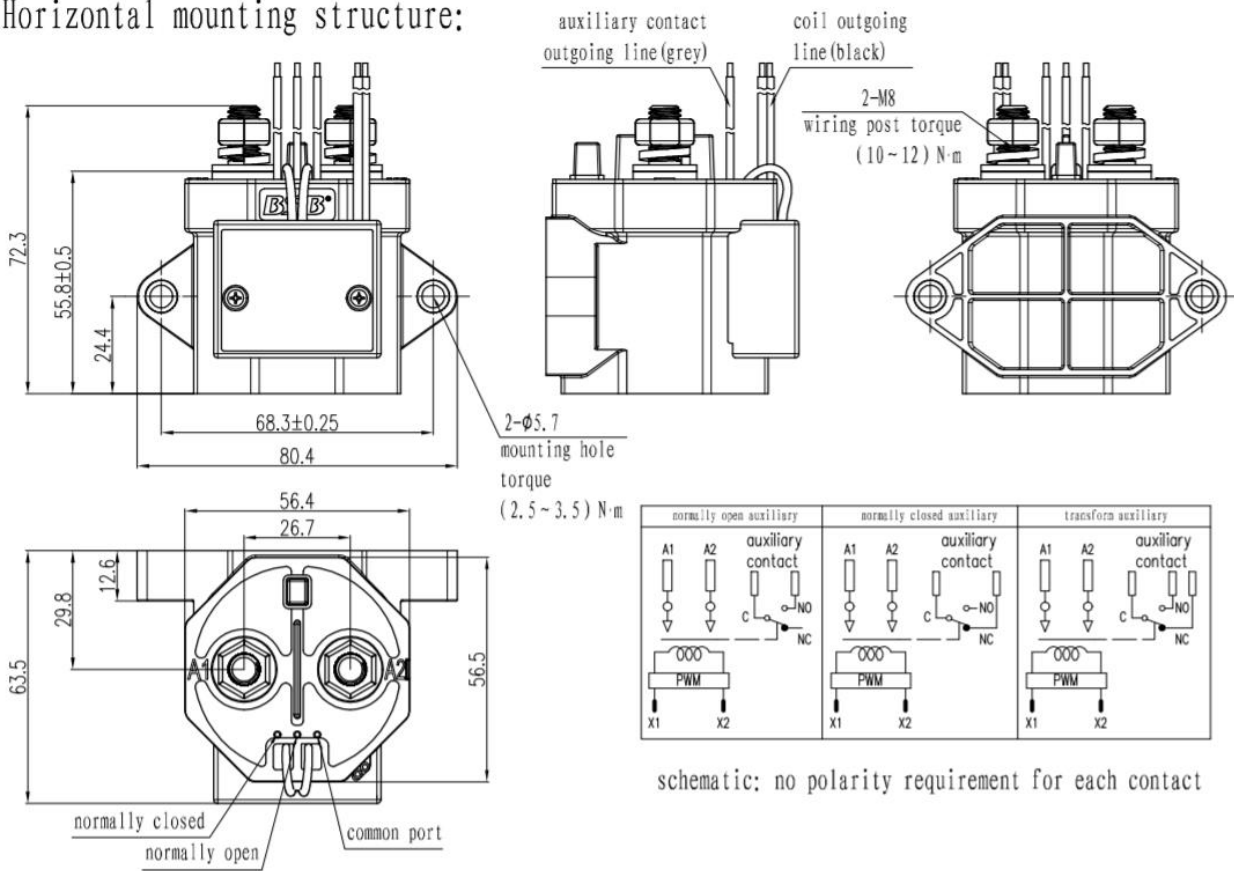
Outline and wiring schematic diagram

Vertical mounting structure:



schematic: no polarity requirement for each contact

Horizontal mounting structure:



Note: Control coil wire length 300 ± 20 mm

Product without tolerance, when ≤ 10 mm, tolerance ± 0.3 mm

When dimension between 10~50 mm, tolerance ± 0.5 mm

When dimension ≥ 50 mm, tolerance ± 0.8 mm