

## Feature :

- 200 amps rated load
- Ceramic brazing technology is used to prevent arcing leakage, fire and explosion.
- No polarity requirement for load wiring and coil
- RoHS compliant

## Contact Data

Item	Specification
Contact arrangement	1 Form A
Rated current	200A
Contact resistance	≤0.5mΩ (at 200A)
Min. Switching load	6VDC 1A
Max. Switching voltage	1000VDC
Max. Breaking current	1500A, (600VDC, 1 time)
Max. Short Circuit Current	No smoke, no fire at 5000A(5ms)
Electrical endurance <sup>(1)</sup>	Switch: 500VDC, 200A 800 cycles
	Resistive load Switch: 800VDC, 200A 100 cycles
	Capacitive load 7.5×10 <sup>4</sup> cycles 50VDC, inrush current 180A

## Parameters

Item	Specification
Mechanical endurance	2×10 <sup>5</sup> cycle
Insulation resistance	1000MΩ(1000VDC)
Dielectric strength	Between open contacts 3000VAC 1min 1mA
	Between contact and coil 4000VAC 1min 1mA
Operation time (at rated coil voltage)	≤30ms
Release time (at rated coil voltage)	≤10ms
Shock resistance	Functional Closed State: 490m/s <sup>2</sup> (50G) Disconnected state: 98m/s <sup>2</sup> (10G)
	Destructive 490m/s <sup>2</sup> (50G)
Vibration resistance	10Hz~500Hz 49m/s <sup>2</sup> (5G)
Ambient temperature	-40°C~+85°C
Ambient humidity	5%~85% RH
Weight	260g
External dimension	76 x 66.3 x 36 mm

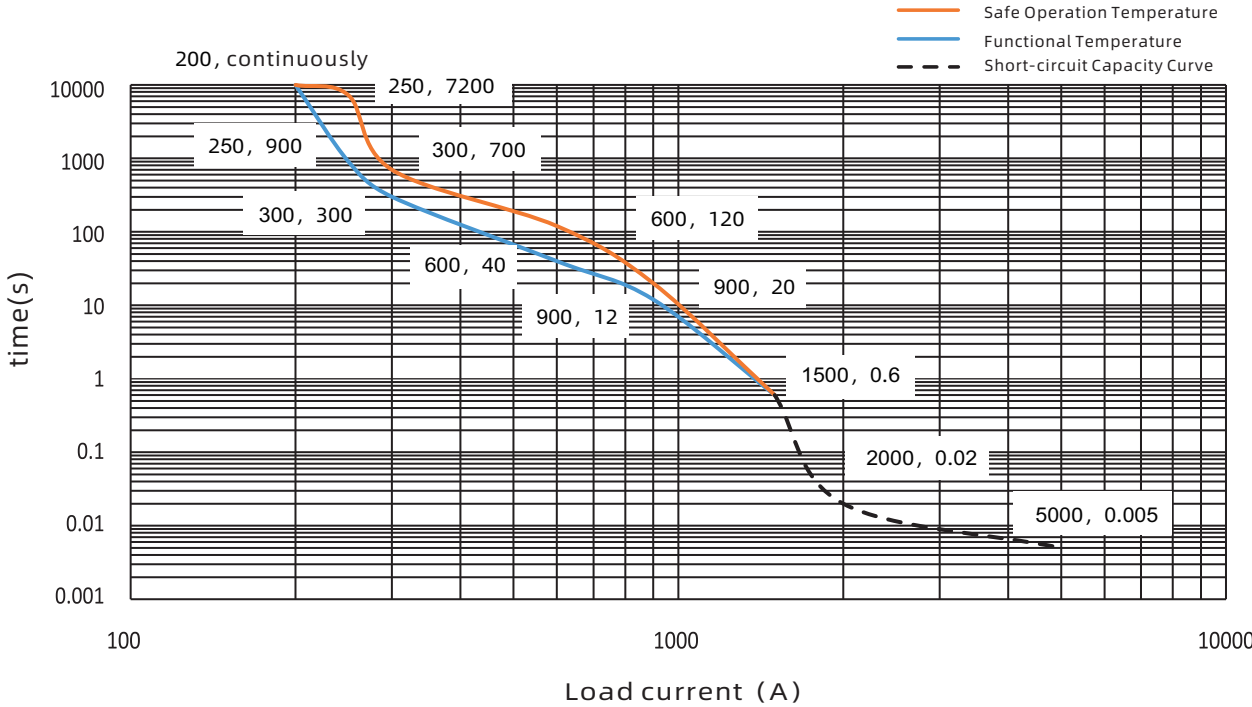
Coil Data

Rated voltage (VDC)	Operation voltage (VDC)	Max. voltage (VDC)	Pick-up voltage (VDC)	Drop-out voltage (VDC)	Coil resistance (±10%)(Ω)	Operating power (W)
12	12	16	≤9	≥1.0	26.2	5.5
24	24	32	≤18	≥2.0	104.7	5.5
12	12	16	≤9	≥1.0	18	8
24	24	32	≤18	≥2.0	72	8

NOTES:  
 (1) Unless specified otherwise, ambient temperature:23°C, on:off /0.6s: 5.4s.  
 (2) If other types of rated coil voltage is needed, please contact us.

Reference date

Tolerance curve



NOTE:  
 (1)The upper limit of safety temperature is 180°C , and the upper limit of functional temperature is 150°C;  
 (2)If the product needs to work for a long time, it is recommended that the product temperature should not exceed 150°C. If the safety temperature exceeds 180°C, the relay may be ignited.  
 (3)Ambient temperature is 85°C, wire cross sectional area ≥60mm<sup>2</sup>; (Test conditions for this curve)  
 (4)Relay load current ovre 1500A is short circuit resistance performance. The relay can guarantee no fire or explosion within this curve.When the current is greater than 2000A, the relay contact may be repulsed by a large current.

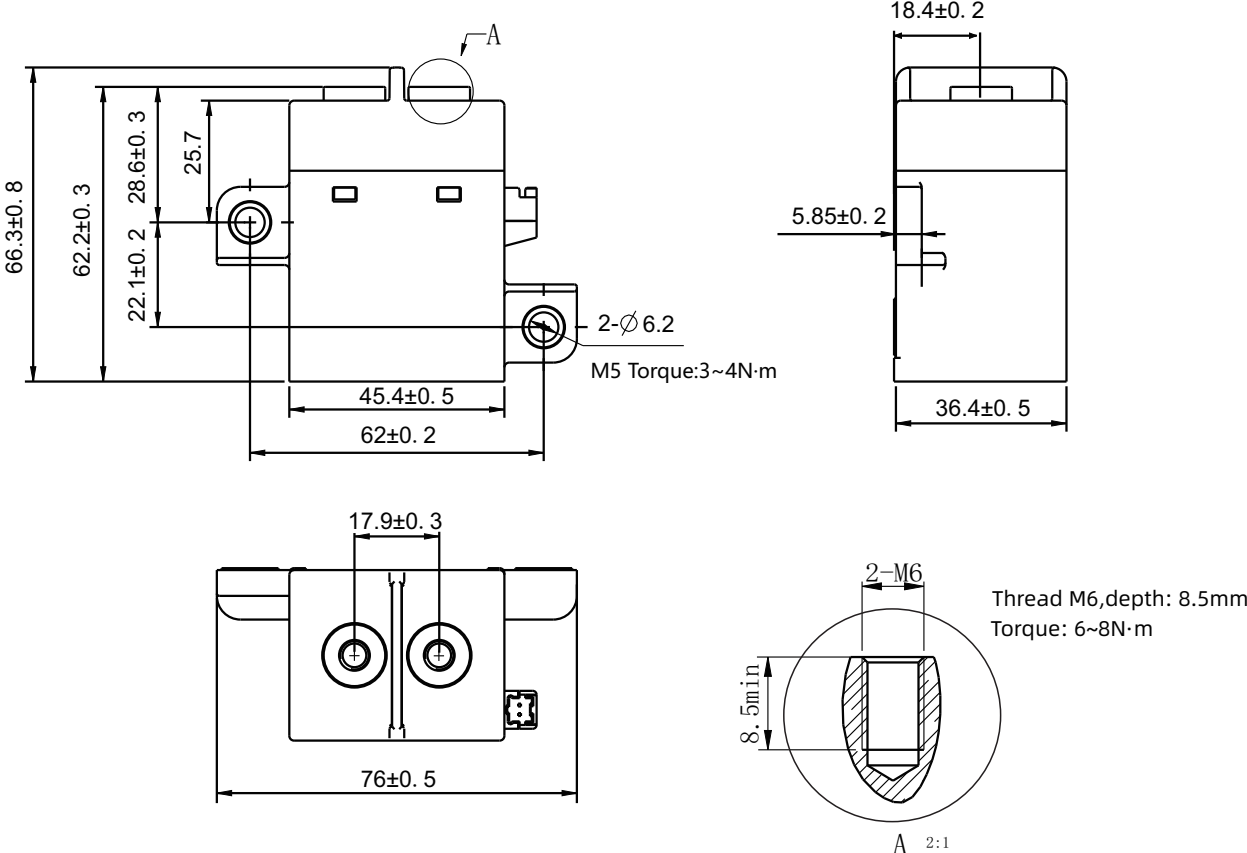
Ordering Information

Nomenclature

SEL200D-	H	□	M	□	2	
						Customer special code Nil: No customer special requirement  Numbers or Letters: Customer special requirement  Z :Coil power 8W
						Load connection type 2: internal thread
						Coil voltage 12: 12VDC 24: 24VDC
						Contact arrangement M: 1 Form A
						Voltage rating 500: 500VDC 800: 800VDC
						Installation H: Horizontally
						Series Code 200D: 200A
						Type designation SEL

Package: 36/box

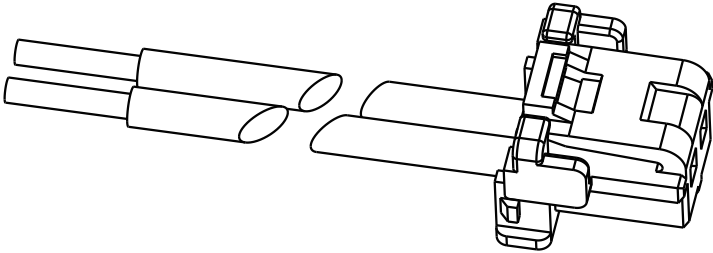
Outline Dimensions



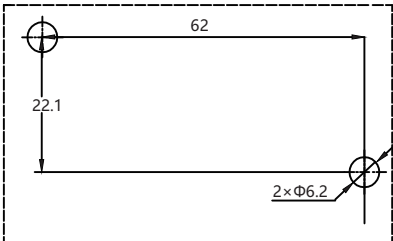
Size	tolerance
Less than 10mm:	$\pm 0.3$
10 to 50mm:	$\pm 0.5$
More than 50mm:	$\pm 0.8$

Coil Connection Type

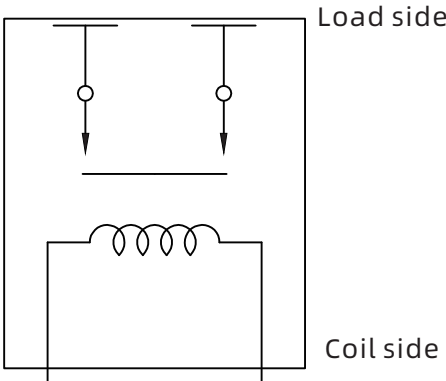
Connectors: MOLEX 505151-0200(Customer self configuration)



Installation Size Chart



Schematic Diagram



Note: No polarity on load side and coil side

**NOTES:****● Mounting Precautions**

1. By principle, please do not use it when the relay drops on the ground.
2. It's forbidden to use the product at the temperature beyond  $-40\text{ }^{\circ}\text{C} \sim 85\text{ }^{\circ}\text{C}$  for a long time as the relay contacts are sealed and filled with gas and when the contact temperature changes, the gas will break the ceramic sealed chamber.
3. When installing the relay, always use washers to prevent the screws from loosening.
4. Tighten each screw with given torque as suggested. Exceeding the maximum torque may result in screw loose, breakage, etc. When using screws, please make sure the washers are strong enough to prevent the case from deformation.
5. Avoid mounting the relay near strong magnetic fields or a heat generator.

**● Precautions for connection of the load terminals**

1. Please avoid excessive load applied to the product. If the product exceeds the rated range, the performance of the product cannot be guaranteed.
2. Please treat the relay as a product with limited life and replace it when necessary.
3. Be careful that foreign particles or oil attach on the terminals, which will lead to abnormal heating on terminals. And below connectors or conductors with sizes are suggested.

10A	Min. $2\text{mm}^2$ nominal cross-sectional area
20A	Min. $3\text{mm}^2$ nominal cross-sectional area
40A	Min. $10\text{mm}^2$ nominal cross-sectional area
60A	Min. $15\text{mm}^2$ nominal cross-sectional area
100A	Min. $35\text{mm}^2$ nominal cross-sectional area
150A	Min. $45\text{mm}^2$ nominal cross-sectional area
200A	Min. $60\text{mm}^2$ nominal cross-sectional area
250A	Min. $80\text{mm}^2$ nominal cross-sectional area
300A	Min. $100\text{mm}^2$ nominal cross-sectional area
400A	Min. $200\text{mm}^2$ nominal cross-sectional area

**● Precautions for connection of the coil**

1. Please note that when using a diode, the release time will increase and the switching capacity may decrease. We recommend installing a surge protector varistor.
2. The pick-up voltage and drop-out voltage will change with ambient temperature, please use rated voltage to make sure the relay operate reliably. Don't exceed maximum coil voltage.
3. Please do not continuously apply maximum voltage on the coil.
4. The product with PWM, recommend using increase rapidly (phase step power supply mode) to drive the coil.
5. The product with PWM, after 0.1s the coil current automatic switch, please do not repeat switch the coil voltage at  $< 0.1\text{ s}$ , otherwise the Product performance can be not guarantee.

**Disclaimer:**

1. This datasheet is for customer's reference only. Sanyou had tried its best to ensure the information accuracy but impossible to be avoided all the incorrects. The product specification and parameter might be change due to the product improvement. All of specification are subject to change without notice, please refer to the specification and samples.

2. We could not evaluate all the performance and parameters for every possible application. Thus the users should be in a right position to choose the suitable product for their own application. If there is any query, please contact Sanyou for technical service. However it is the users' responsibility to determine which product should be used only.

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