

Features:

- Rated 250A contact switching capacity.
- Can withstand short-circuit current of 5000A.
- It can be adjusted to abnormal operating conditions and switched to 10-times over-current.

Typical Application

- 12V battery pack start stop

Contacts Data

Contact arrangement	Power Contact:1 Form A	
Rated load current	250A	
Contact resistance	≤0.3mΩ (@10A)	
Max. Switching voltage	14VDC	
Electrica endurance ⁽¹⁾	Load current	Switching times
	10A	≥150K
	60A	≥100K
Breaking current	250A	≥10K
	1200A	≥20
Load current capacity ⁽²⁾	2000A	≥6
	Load current	Time
	200A	40000sec
	250A	18000sec
	400A	370sec
	600A	150sec
	1000A	12sec
	2000A	1sec
4000A	0.15sec	
5000A	0.1sec	

NOTES:

(1) The electrical endurance test temperature is 65°C, whilst break-make ratio 0.6s:5.4s unless marked otherwise

(2) Maximum continuous current, ambient temperature is 85°C, wire cross-sectional area 50mm²

Coil Data (at 23°C)

Rated voltage (VDC)	Rated current ±10% (A)	Coil resistance ±10% (A)	Pick-up voltage (VDC)	Pulse (ms)	Rated power (W)
12	3	2×4	4-24v	100~300	36
24	1.5	2×16	8-36v	100~300	36

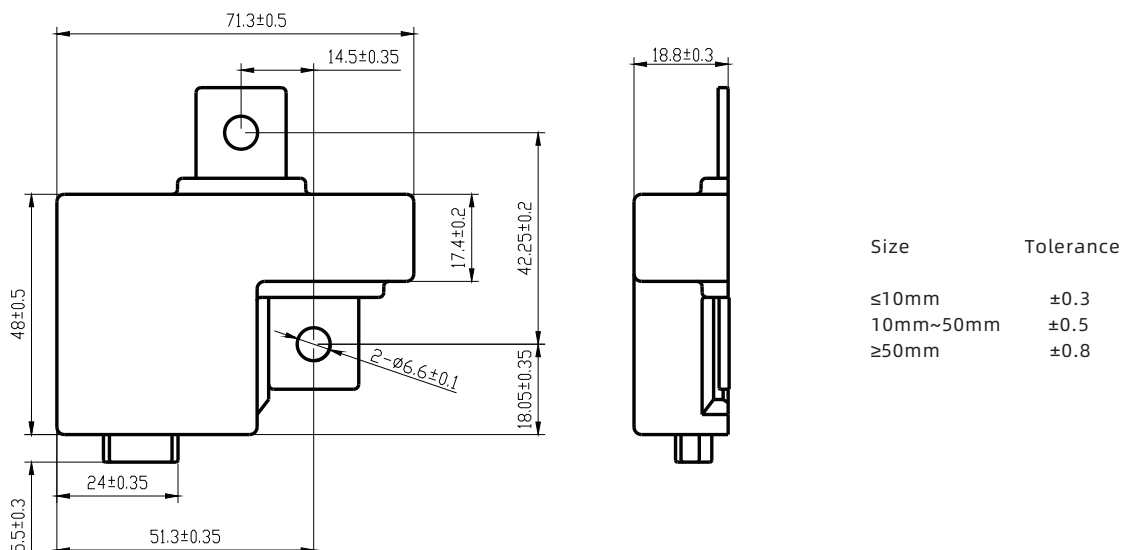
Parameters Date

Mechanical life	5×10 ⁵ times	
Insulation resistance	100MΩ(500VDC)	
Operate time	≤15ms	
Reset time	≤10ms	
Dielectric strength	Between open contacts	1000VAC 1min. 10mA
	Between contact and coil	1000VAC 1min. 10mA
Shock resistance	Functional	100GMin
	Destructive	50GMin
Protection level	IP64	
Ambient temperature	-40°C~105°C	
Ambient humidity	5%~95% RH	
Noise	60dB (50cm)	
Weight	110g±10g	

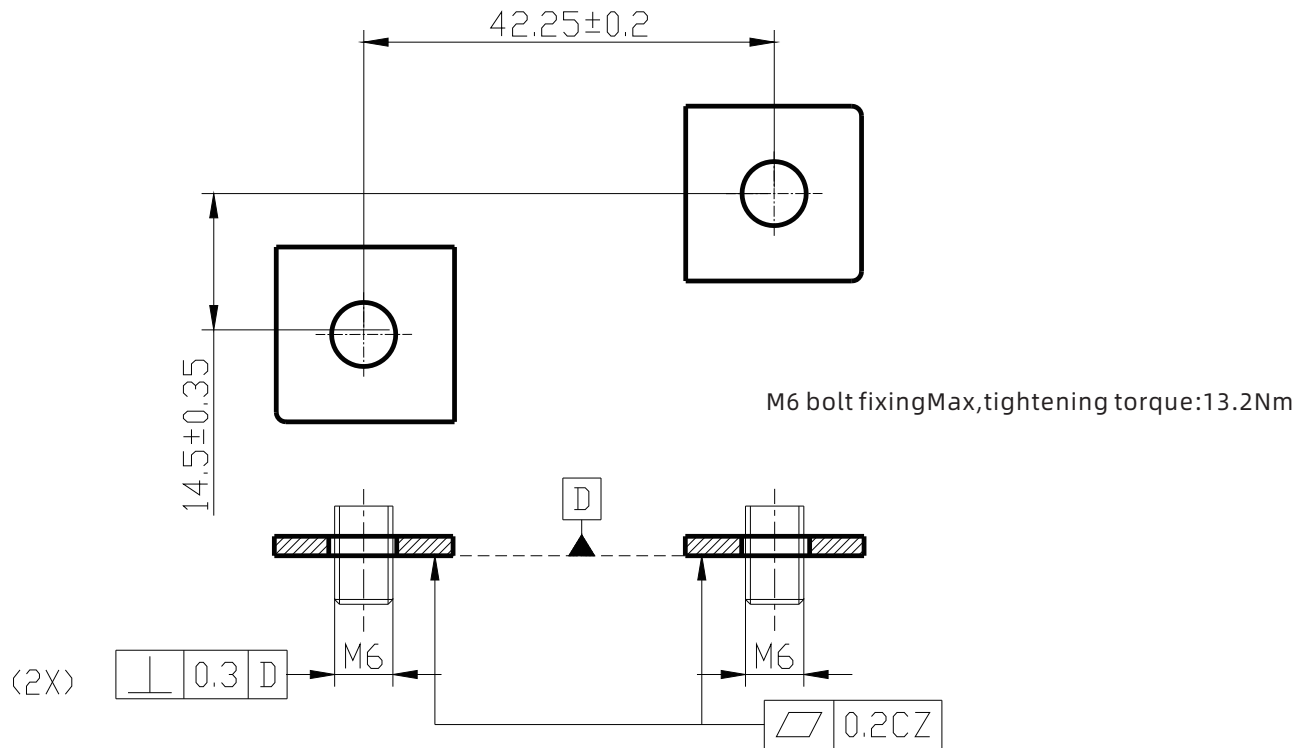
Ordering Information

SY200	-S	-1	24	D	M	
						Contact form: M-SPST
						Coil Power: D-36W
						Coil Voltage(VDV) : 12/24VDC
						Number of contact groups: 1-1 group
						Packaging form: s-plastic encapsulated
						Type Designation:SY200

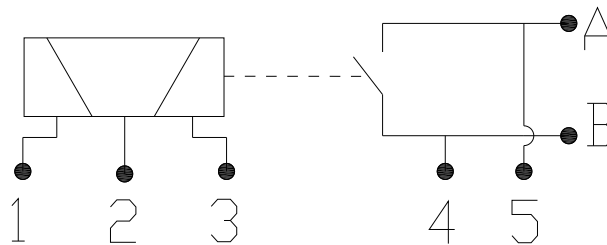
Outline Dimensions



Mounting dimensions (单位:mm)



Schematic diagram of low voltage apparatus



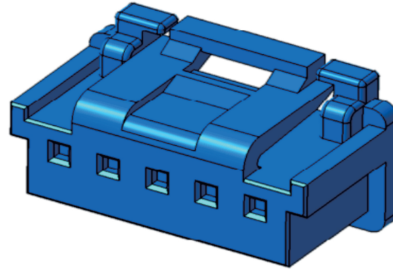
Definition of low voltage interface

Pin	Function
1	Reset coil(-)
2	Common end of action and reset coil (+)
3	Reset coil(-)
4	Signal output of load pin A
5	Signal output of load pin B
A	Load pin A
B	Load pin B

Low voltage communication interface

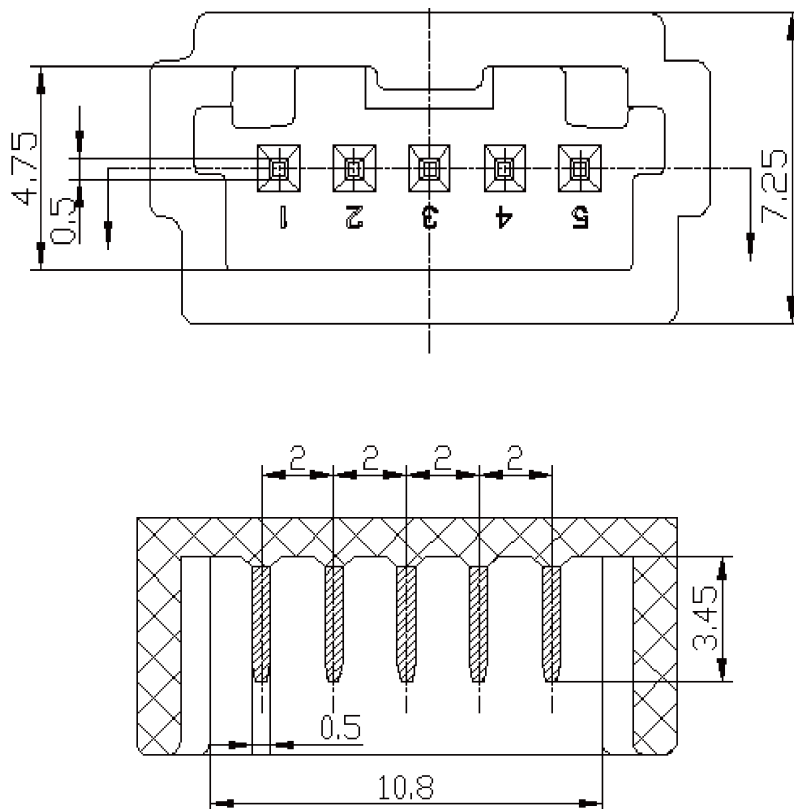
Connector model: Molex 502351-0501

Crimping terminal model: Molex 560085-0101



Low voltage communication interface (plug)

Relay terminal plug size



Low voltage communication interface (socket)

NOTES

Mounting Attention

1. When installing the relay, always use washers to prevent the screws from loosening.
2. Tighten each screw within the rated range given in the outline dimensions. Exceeding the maximum torque may result in breakage.
3. Avoid mounting the relay in strong magnetic fields (near a transformer or magnet) or close to an object that radiates heat.

Electrical Life Attention

1. This relay is a DC high-voltage switch. In its final breakdown mode, it may lose the ability to provide the proper cut-off. Therefore, do not exceed the indicated switching capacity and life.
2. Please treat the relay as a product with limited life and replace it when necessary.
3. Be careful that foreign matter and oils and fats kind, don't stick to the main terminal parts because it is likely to cause terminal parts to give off unusual heat. Also, please use the following specifications of conductor.

10A	Min. 2mm ² nominal cross-sectional area
20A	Min. 3mm ² nominal cross-sectional area
40A	Min. 10mm ² nominal cross-sectional area
60A	Min. 15mm ² nominal cross-sectional area
100A	Min. 35mm ² nominal cross-sectional area
150A	Min. 45mm ² nominal cross-sectional area
200A	Min. 60mm ² nominal cross-sectional area
250A	Min. 80mm ² nominal cross-sectional area
300A	Min. 100mm ² nominal cross-sectional area
350A	Min. 120mm ² nominal cross-sectional area

Coil Attention

1. Please note that when using a diode, the switching speed may decrease and cause a reduction in cut-off performance, 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 reliable. Don't exceed maximum coil voltage.
3. The 250A and 300A types have built-in dedicated drive circuit, please drive the coil with a quick startup (Built-in one-shot pulse generator circuit).
4. After the ON signal enters the 250A and 300A types, automatic coil current switching occurs after approximately 0.1 seconds. Do not repeatedly turn it OFF within that 0.1 seconds interval, as doing so may damage the relay.

Statement:

This product specification is for reference only, subject to change without prior notice. We could not evaluate all test conditions for every possible application, thus customers should be in a right position to choose suitable products for their own application. If in doubt, please contact Sanyou for more technical support. However, it's the customer's responsibility to determine which product should be used.