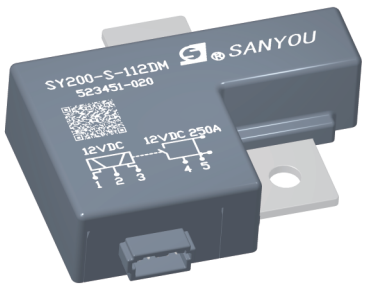
Features:

- Capable of withstanding short-circuit current of 5000A
- Non-position-sensitive - can be installed anywhereand is easy to install
- Meet the requirements for responding to abnormal working conditions and be capable of switching to 10-times overcurrent.
- There are loads of 12V and 24V, and models with auxiliary switches are optional.
- Can be used in 12V and 24V battery pack start-stop systems
- This product is a latching relay. After power failure, the coil does not need to be continuously energized, making it more energy-efficient.



Contact Data

Contact arrangement	Standard form： 1 Form A Auxiliary switch type： 1 Form A， 1FormB (The main contact is closed and the auxiliary contact is open)
Contact material	AgSnO2
Contact Resistance	Main contact： ≤0.30mΩ （@ 10A） Auxiliary contact：≤200mΩ （@ 1A）
Rated load current	Main contact： 250A Auxiliary contact： 1A
Max. Contact Voltage	14VDC (Load 12V specification) 28VDC (Load 24V specification)
Operate Time （at nominal volt.）	≤15ms
Reset time （at nominal volt.）	≤10ms
Electrical endurance (Load 12V specification) (resistive load) (1)	60A,14VDC， 1.0×10^5 ops
	100A,14VDC， 5.0×10^4 ops
	250A,14VDC， 1.0×10^4 ops
Electrical endurance (Load 24V specification) (resistive load)	200A,28VDC， 1.0×10^4 ops
Breaking Current (2)	1200A,12VDC， 20 ops
	2000A,12VDC， 6 ops
Load current capacity (3)	200A， 40000s
	250A， 18000s
	400A,370s
	600A,150s
	1000A,12s
	2000A,1s
	4000A,150ms
	5000A,100ms

Note:

(1) Electrical life test: @65℃,(on:off) 0.6s:5.4s, copper bar cross-section 35mm²

(2) Ultimate breaking test: @ 65℃, (on:off) 0.02s:5.4s, copper bar cross-section 35mm²

(3) Anti-short-circuit capability test: @ 85℃, copper bar cross-section 35mm²

Coil Data

Nominal Voltage VDC	Max. Operate Voltage VDC	Min. Reset Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance (1±10%)	Coil Power W	Coil excitation time
12	6	6	24	4	36	100±50ms
24	12	12	36	16		
48	24	24	60	64		

Note:

(1) Do not supply power to the coil excitation for a long time (> 10 seconds) to avoid permanent damage caused by excessive power and overheating of the coil

(2) Do not apply voltage to both the operating and returning coils simultaneously. The interval between operating and returning excitation should be more than 5 seconds

Insulation Data

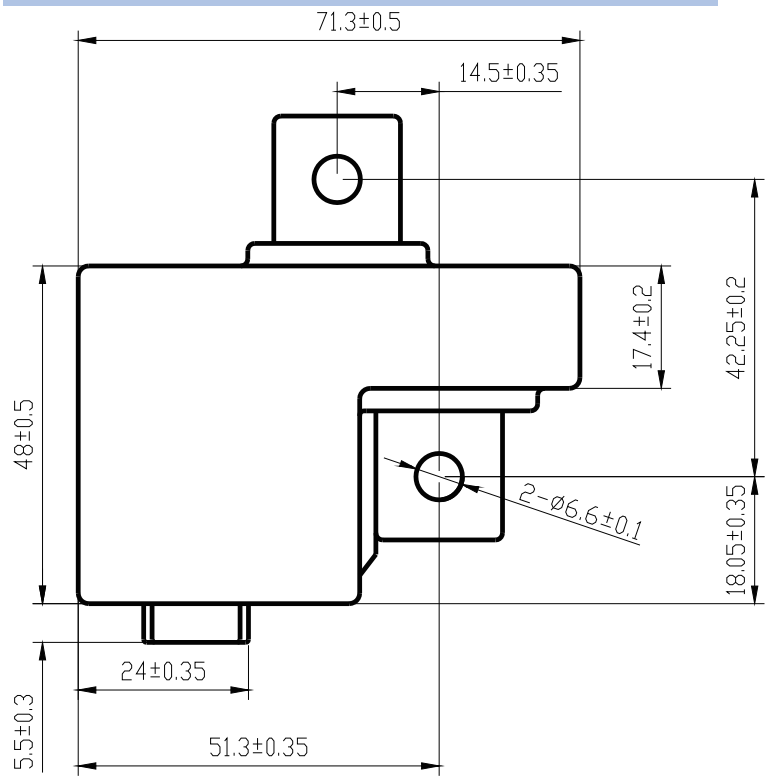
Insulation resistance	100MΩ (500VDC)
Initial dielectric strength (Leakage current ≤ 1mA)	
Between open contacts	1000VAC,50/60Hz ,1min
Between contact and coil	1000VAC,50/60Hz ,1min
Between the main contact and the auxiliary contact	1000VAC,50/60Hz ,1min
Between the coil and the auxiliary contact	1000VAC,50/60Hz ,1min

Other Data

Material compliance	EU RoHS/ELV, China RoHS, REACH
Temperature rise	< 70K， @250A， 85℃ (copper bar cross-section 35mm²)
Shock resistance	Functional 50G Destructive 100G
Vibration resistance	According to LV124-M04, the acceleration is 30.8m/s²
Mechanical endurance	Main contact： 5×10^5 ops Auxiliary contact： 1×10^5 ops
Ambient temperature	-40℃ to +85℃
Humidity	5% to 85%RH
Terminal Configuration	Terminal :M6 through hole coil :connector
Weight	110g±5g
Protection Degree	IP64

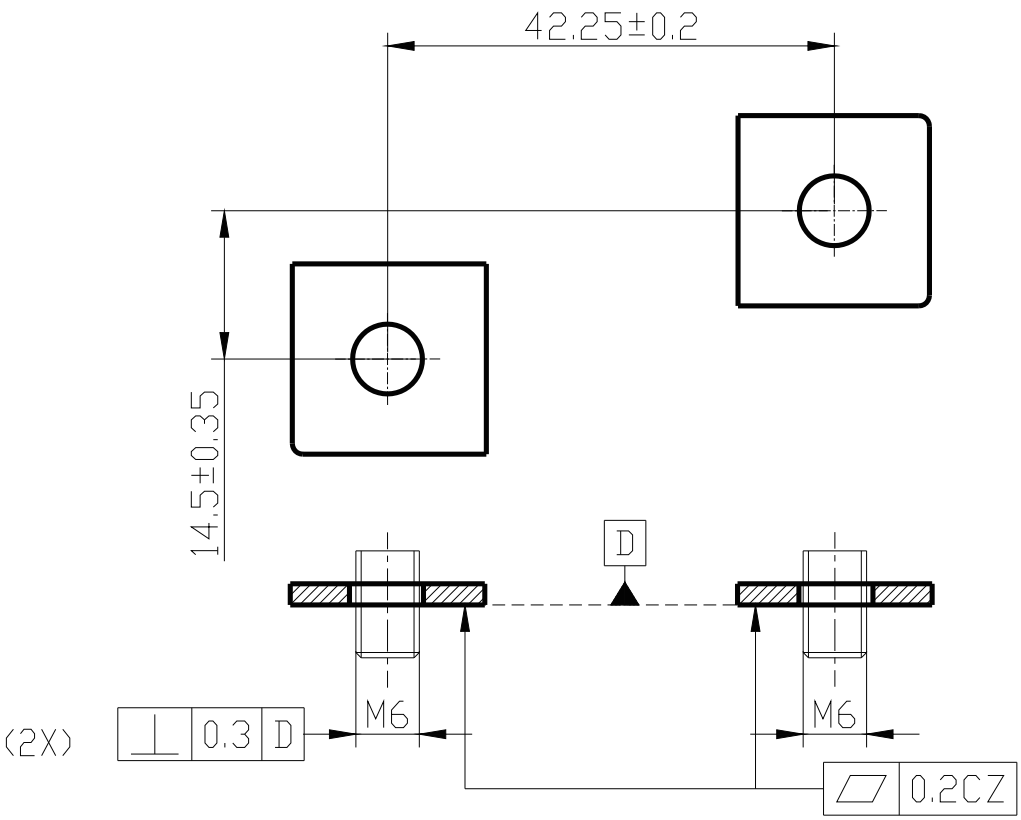
Note: The above values are initial values

Dimensions



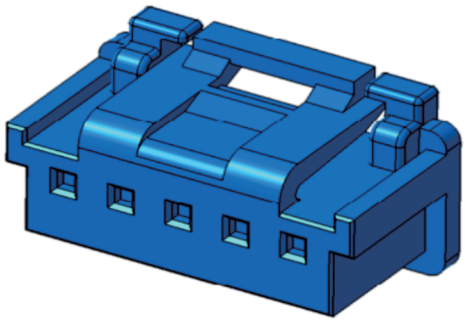
Unless otherwise specified:
If dimension ≤10mm, tolerance: ±0.3mm.
If dimension 10~50mm, tolerance: ±0.5mm.
If dimension >50mm, tolerance: ±0.8mm.

Wiring diagram



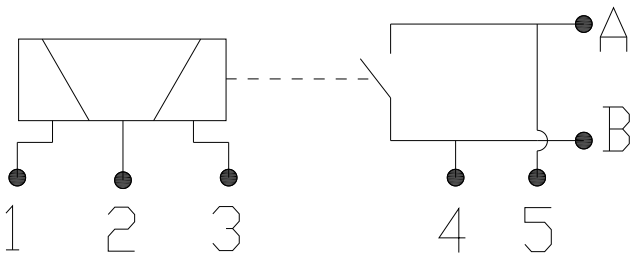
Connector specification

Client pairing connector model recommendation (Sanyou relays do not specify pairing plug connectors)
Connect Type: Molex 502351-0501
Crimping terminal Type: Molex 560085-0101

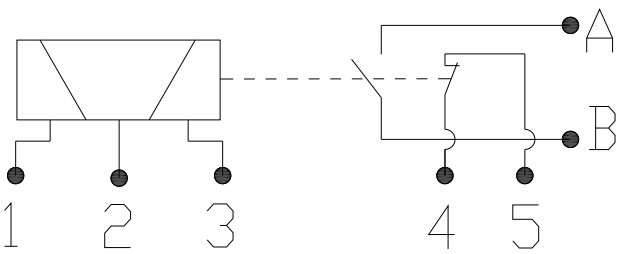


Wiring diagram

Standard model



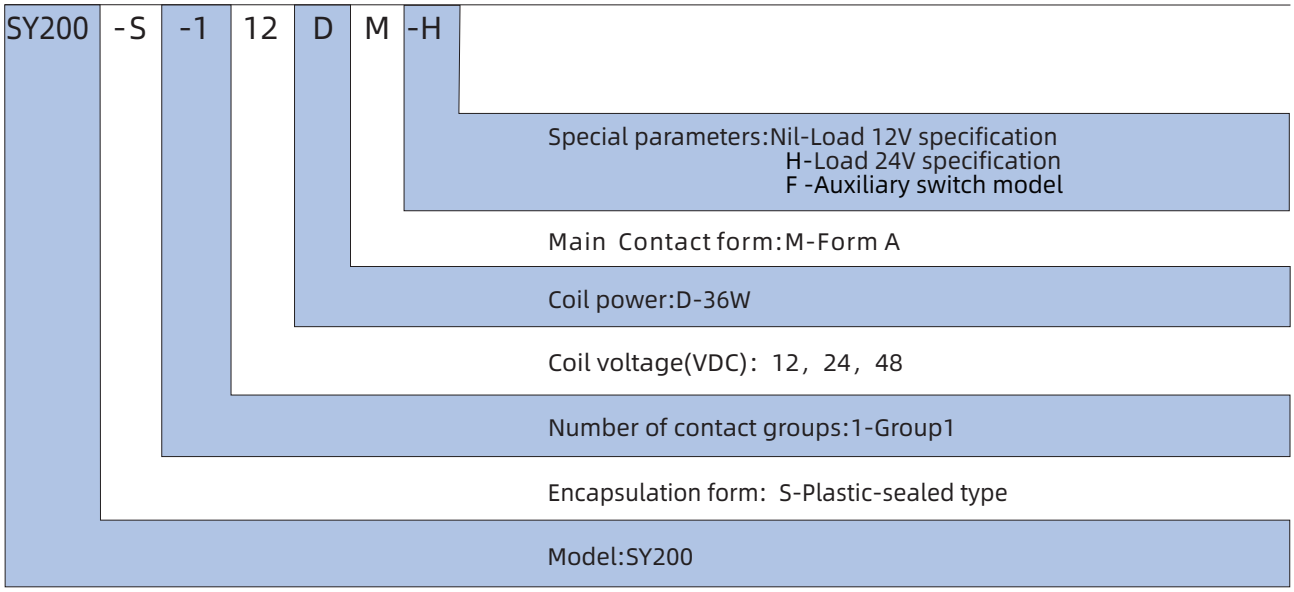
Auxiliary switch model



Pin	Function
1	Reset coil (-)
2	The common terminal of the action and reset coils (+)
3	Action coil (-)
4	The signal output of load pin A
5	The signal output of load pin B
A	Load pin A/ auxiliary switch pin A
B	Load pin B/ Auxiliary switch pin B

触点状态 Contact position		
线圈 3pin 激励 Coil 3pin excitation	2 / 3 (+) (-)	1 / 2 (-) (+)
线圈 2pin 激励 Coil 2pin excitation	1 / 3 (+) (-)	1 / 3 (-) (+)

订货标记



Note
(1) The customer's special requirements need to be formulated together with Sanyou.
(2) The magnetic latching relay is in an operating state when it leaves the factory. However, due to factors such as impact and stress during transportation or installation of the relay, the contacts may change their state. When in use, they can be restored to the required state as needed.

Disclaimer

This product specification is for reference only, subject to change without prior notice.It is not possible for Sanyou to evaluate all the performance parameter requirements of relays in each specific application field, so customers should choose the suitable product according to the specific application conditions. If you have any questions, please contact us for more technical support, but the customer should be responsible for product selection.