



SY200-S-112DM S23451-020 Havac 12VAC 250A AVAC 12VAC 250A 1 2 3 4 5

Start Stop Relay

SY200

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	
	Load current	Switching times
Electrica endurance ⁽¹⁾	10A	≥150K
	60A	≥100K
	250A	≥10K
Breaking current ⁽²⁾	1200A	≥20
	2000A	≥6
	Load current	Time
	200A	40000sec
	250A	18000sec
Load current capacity ⁽³⁾	400A	370sec
	600A	150sec
	1000A	12sec
	2000A	1sec
	4000A	0.15sec
	5000A	0.1sec

NOTES:

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

(2) The high current power on time is 50ms, and the interruption test interval is 10min

(3) 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)	Incentive time (ms)	Rated power (W)
12	3	2×4	4-24v	100±50	36
24	1.5	2×16	8-36v	100±50	36
48	0.75	2×64	36-64v	100±50	36

NOTES:

(1) Do not energize the coil for a long time (>10 seconds) to avoid permanent damage caused by excessive coil power and heating

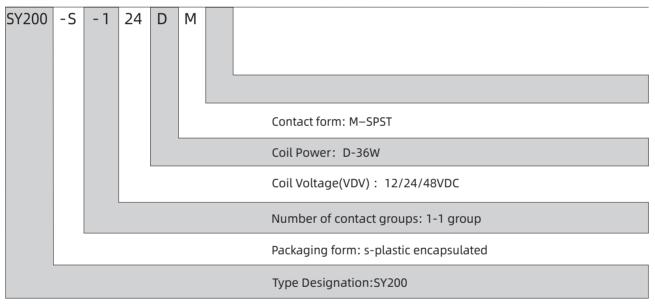
(2) Do not apply voltage to both the coil action and the return coil at the same time

(3) The interval between action and return motivation should be greater than 5 seconds

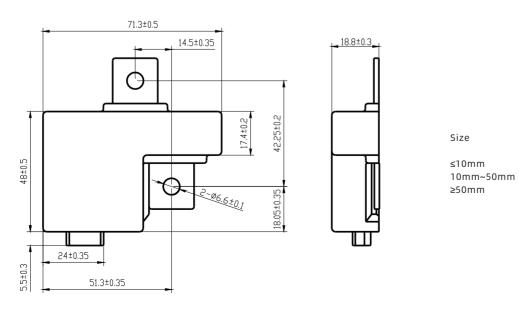
Parameters Date

Mechanical life	5×10 ^s 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



Outline Dimensions



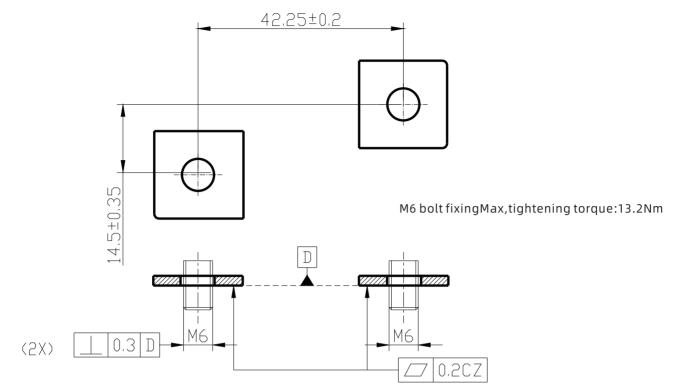
Tolerance

±0.3

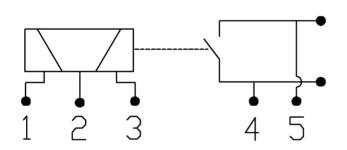
±0.5

±0.8

Mounting dimensions (单位:mm)



Schematic diagram of low voltage apparatus



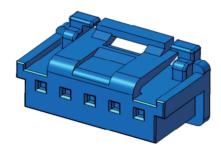
触点状态 Contact position	\square	Γ
线圈 3pin 激励	2 / 3	1 / 2
Coil 3pin excitation	(+) (-)	(-) (+)
线圈 2pin 激励	1 / 3	1 / 3
Coil 2pin excitation	(+) (-)	(-) (+)

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
А	Load pin A
В	Load pin B

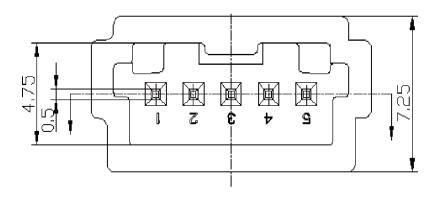
Low voltage communication interface

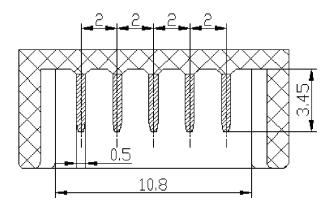
Connector model: Molex 502351-0501 Crimping terminal model: Molex 560085-0101



Low voltage communication interface (plug)

Relay terminal plug size





Low voltage communication interface (socket)

NOTES

1. The magnetic holding relay is in the working state when it leaves the factory, but due to factors such as impact and stress during transportation or relay installation, the contacts may change state. When in use, they can be restored to the required state according to demand;

2.To ensure the operation or reset of the magnetic holding relay , the excitation voltage applied to the coil should reach the required rated voltage. Do not simultaneously move he coil and reset

3. The output pins of the load terminals of magnetic holding relays without soft copper brush wires cannot be soldered, cannot be pulled arbitrarily, and cannot be rigidly fixed at the same time;

4. The relay should not be used in environments with corrosive gases or other harsh environmental factors.other harsh environmental factors.

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.