

Features:

- 150A switching capacity
- Low power consumption
- Strong anti-shock capability
- Contact spacing 1.5mm
- Withstand voltage between contacts and coil: 3 KV
- DC load non-polarized connection
- Environmentally friendly products(Accord RoHS)
- Certified by TUV to IEC 61810 Standard
- Dimensions: 39.2 mm×28.5mm×22 mm

Typical Application:

- Smart meter
- Remote electrical control
- Power composite switch
- Electrical equipment
- PV Energy Storage
- Charging pile

Approvals

CQC: 26002501258 TUV: R50707684 UL: E179745-1-48

Contact Data

Product category	SY508 (AC)	SY508 (DC)
Contact form	main contact:1Form A or 1 Form B Auxiliary contact:consistent with the main contacts	
Rated load	Main contact: Making 50A,Loading 150A, Breaking 50A,277VAC Auxiliary contact: 1A 6VDC	Main contact:Making 50A,Loading 150A, Breaking 50A,80VDC Auxiliary contact: 1A 6VDC
Max.switching voltage	Main contact: 277VAC Auxiliary contact:6V DC	Main contact: 80VDC Auxiliary contact: 6V DC
Max.switching current	Main contact: 50A; Auxiliary contact: 1A	
Max.switching power	41550VA	12000W
Contact Material	Silver alloy	
Contact resistance	≤1 mΩ	
Max.Operate/Release time	30ms/30ms	
Electrical Endurance	1x10 ⁴ cycles (Making 50A 277VAC, Carry Current 150A 277VAC, Breaking 50A 277VAC) 1x10 ⁴ cycles (Making 150A 277VAC, Carry Current 150A 277VAC, Disconnect 50A 277V AC) Resistive load	1x10 ⁴ cycles(Making 50A 80 VDC, Carry Current 150A 80VDC, Breaking 50A 80VDC) Resistive load
Mechanical Endurance	1x10 ⁵ cycles	

Insulation Data

Insulation Resistance	≥1,000MΩ (500VDC)	
Dielectric Strength	Contact-Contact	AC2,000V; 50/60Hz 1min
	Contact-Coil	AC3,000V; 50/60Hz 1min
	Auxiliary Contact-Contact	AC3,000V; 50/60Hz 1min
	Auxiliary Contact-Coil	AC3,000V; 50/60Hz 1min



Coil Data

Coil voltage range		12VDC to 24VDC		
Coil insulation system according UL		Class F		
Coil type, standard type				
Rated	Operate/Releas	Coil resistance	Rated power	Pulse
Voltage	Voltage	Single/Dual	Single/Dual	Duration
VDC	VDC	Ω (±10%)	W	ms
12	≤8.4	15	9.6	≥150
24	≤16.8	60	9.6	≥150

All figures are given for coil without pre-energization, at ambient temperature 20°C.

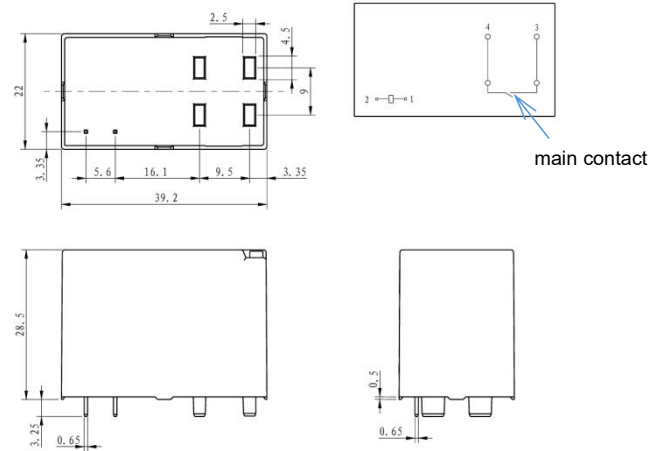
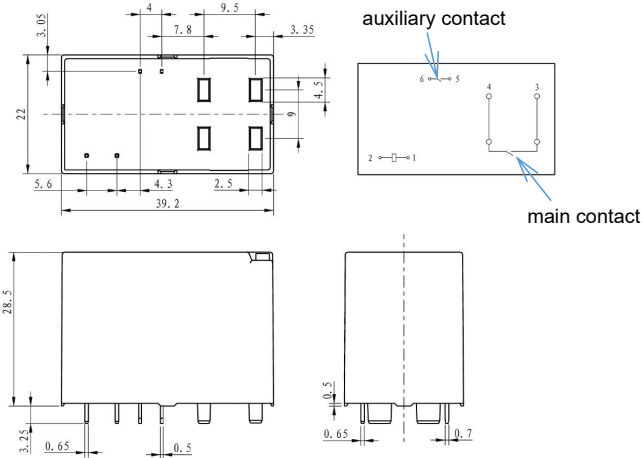
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACHHS		
Ambient Temperature	-40°C to +85°C	
Ambient Humidity	5% ~ 85% RH	
Vibration resistance	10 ~ 55Hz, 1.5mm DA	
Shock resistance	Durability	50g
	Malfunction	5g
Packaging type	Sealed	

Outline Dimensions (Unit: mm)

SY508-150SH1XXDM1

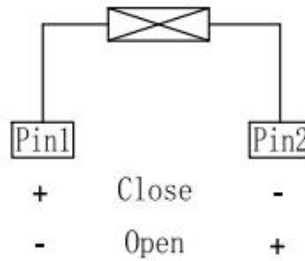
SY508-150SH1XXDM1



Note: Some product dimensional tolerance is not specified. When < 1mm, the tolerance is $\pm 0.2\text{mm}$; when between 1~5mm, the tolerance is $\pm 0.3\text{mm}$; when > 5mm, the tolerance is $\pm 0.4\text{mm}$.

Wiring Diagrams

Positive coil type



Model naming rules

SY508 -XXX SH 1 12 D M 1 R X XX

Special parameters:

None - standard type,

XX - customer required type

Current type:None- DC, R-AC

Drive polarity: None- Positive coil type, R- indicates reverse polarity

Coil type: 1- means single coil

Contact type:

M - indicates (normally open type)

B - indicates (normally closed type)

Coil Power Consumption: D - Standard Type

Coil Specifications (VDC): 12, 24

Auxiliary Contact: 1- Has auxiliary contact 2- None auxiliary contact

Packaging type:

S- Flux protection

SH-Sealed

Rated current: 150A

Type: SY508

Customized special suffix is available after being evaluated by Sanyou.

Examples of Ordering Codes

SY508-150S212DM1RA

Relay SY508, Rated current 150 A AC, Flux protection S, None auxiliary contact 2, Coil Specifications 12 VDC, Standard Type D, 1 Form A, single coil, indicates reverse polarity R

Cautions

1. The original position of latching relay is "open" when shipping. It is possible that during transit or installation, the relay may change its state to be "close" position, it is recommended to set the relay in to state needed via apply voltage to the coil.
2. In order to let relay operate normally, the voltage which apply to the coil should reach to the rated voltage, no energize the coil for longer than minute.
3. Keep away from corrosive gas and other condition which may damage the relay.
4. When wave soldering relays, the preheating temperature should be controlled at $120^{\circ}\text{C} \pm 5^{\circ}\text{C}$ within 30 seconds, and the soldering temperature at $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ within 8 seconds.

Disclaimer

This product specification is for reference only and may change without prior notice. Customers should select the appropriate product model according to the performance parameter requirements of their specific application areas. The customer will bear the responsibility and loss caused by improper selection. For more technical support, please contact Sanyou Corporation Limited.