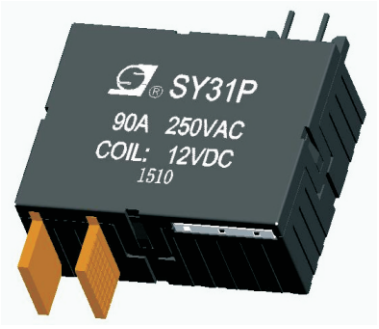
SANYOURELAYS
Relays for advanced technology

Magnetic Latching Relay

SY31P- Series



Features

- 90 A contact switching capability.
- Low coil power consumption and Pulse- driven.
- Dielectric Strength of 3KV between open contacts.
- Excellent anti-shock ability and high reliability.
- Both single and dual coil relay available.
- Environmental friendly product (RoHS Compliant)
- Conform to JB/T 12762-2015 standards, bear with short circuit current of 6000A(co-t-co)

Contact Capacity

Model	SY31P
Nominal switching capacity (res. load)	90A 250VAC
Max. switching current	90A
Max. switching voltage	250VAC
Max. switching power	22,500 VA

Characteristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	1mΩ Max.	
Operate time (at nominalvolt .)	20msec. Max.	
Release time (at nominalvolt .)	20msec. Max.	
Initial insulation resistance	1,000MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts： AC3,000V，50/60Hz 1min	
	Between coil and contact： AC4,000V，50/60Hz 1min	
Vibration resistance	Functional	10～55Hz at double amplitude of 1.5 mm
	Destructive	10～55Hz at double amplitude of 1.5 mm
Shock resistance	Functional	100 G Min.
	Destructive	10 G Min.
Endurance (operations)	Mechanical (at 1,800 ops./h)	100,000 cycles
	Electrical (at 120 ops./h)	10,000 cycles
Ambient temperature	-40℃～+70℃ (no condensation)	

CoilData (at 20℃)

Standard

Nominal voltage (VDC)	Singlecoil resistance ±10%(Ω)	Dualcoil resistance ±10%(Ω)		Operate voltage (Max.)	Release voltage (Max.)	Pulse duration (ms)	Nominal operating power
5	16.6	8.3	8.3	70% of nominal voltage	70% of nominal voltage	100 Min .	Single/Dual: 1.5W/3.0W
6	24	12	12				
9	54	27	27				
12	96	48	48				
24	384	192	192				
48	1,536	768	768				

Ordering Information

Nomenclature

SY31P	-90	-1	12	D	M	2	R	-XX

-XX : Special Parameter : Nil-Standard type,XX-Customized Requirement

R : Polarity : Nil-Positive polarity, R-Reverse polarity

2 : Coil Type:1-Single coil,2-Dual coils

M : Contact Form : M-Form A,B-FormB

D : Coil Power : D:Standard type -Single/Dual:1.5W/3.0W

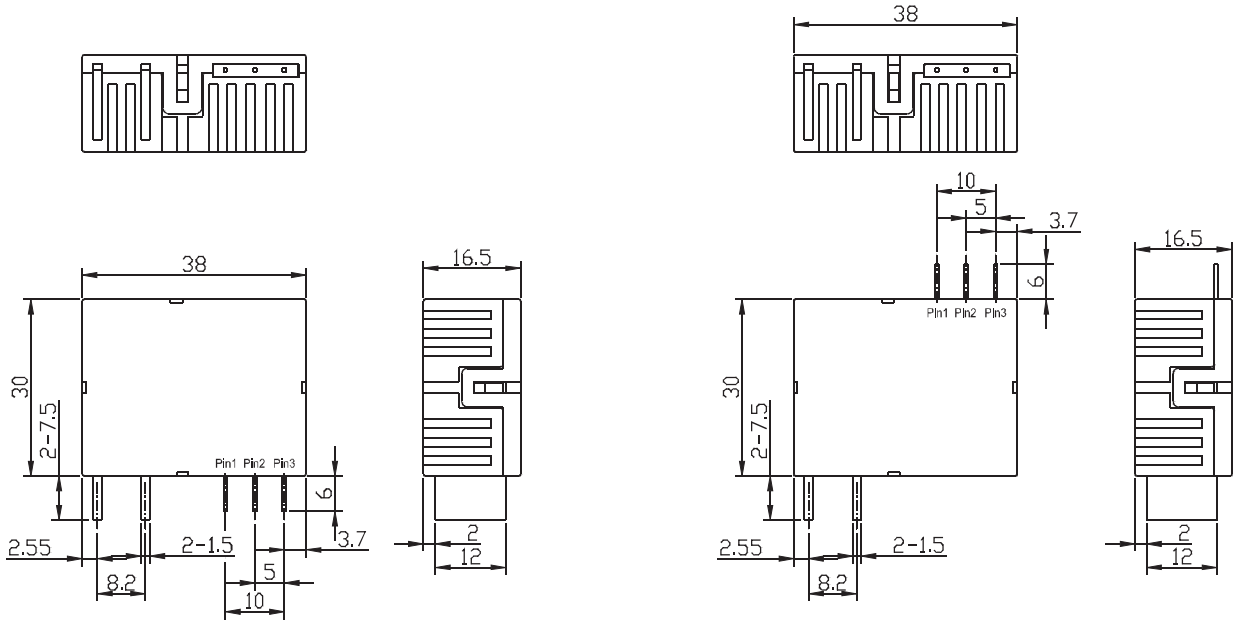
12 : Coil Voltage (VDC) : 05, 06, 09, 12, 24 , 48

-1 : Number of Poles : 1-1 Pole

-90 : Switching Capacity: 90:90A

SY31P : Type Designation : SY31P

Outline Dimensions, Wiring Diagram, Mounting Holes (unit : mm)

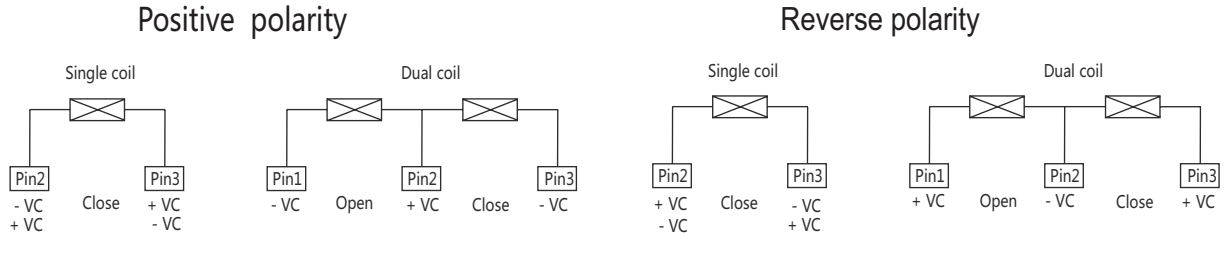


Unless other wise specified:
If dimension ＜1mm, tolerance : ±0.2mm;
If dimension 1~5mm, tolerance : ±0.3mm;
If dimension ＞5mm, tolerance : ±0.4mm.
Note : 1. Extended terminal dimension is dimension before soldering.
2. Tolerance of mounting holes : ±0.5mm.

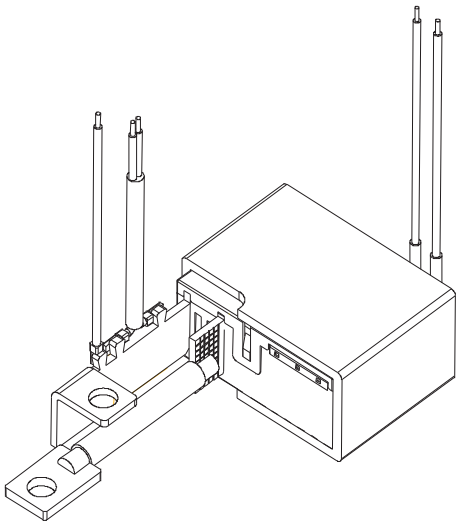
Typical Applications

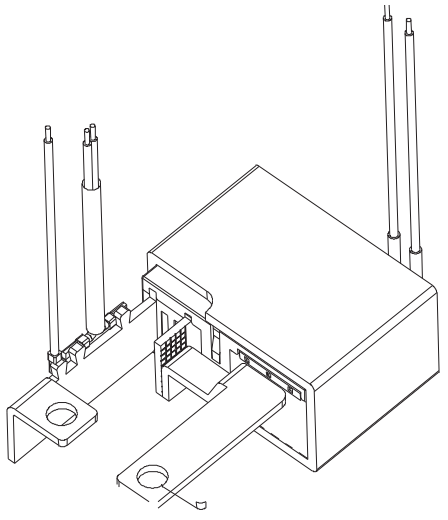
● Intelligent electric meter ● Electric remote control ● Composite power switch ● Electrical device

Wiring diagram



Typical drawing





Note:

Typical drawings are just for reference, customized terminals with metering components are acceptable.
Please contact us for any special requirements.

Announcements：

1 The magnetic latching relay is to be supplied with contacts close(Operate) or contacts open(Release), but the contact status may got changed due to unexpected shock or vibration during delivering or mounting. You can reset the contact status according to your requirement.

2 In order to make sure the contacts are completely closed or opened, energized voltage to Operate or Release coil should be the nominal operate/release voltage, impulse width should be 5 times more than specified operate/release time in the specification but less than 1 minute. Do not apply power to Operate and Release coils at the same time.

Disclaimer:

This data sheet is just for customers' reference.The newest specification you can get from the website of sanyou relays. We could not evaluate all the performances and parameters for all possible applications, so the user should choose the suitable relay for their own application or require us to provide necessary help. If there is any query, please contact Sanyou for the technical service, however, it is the user's responsibility to determine which relay should be used.

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