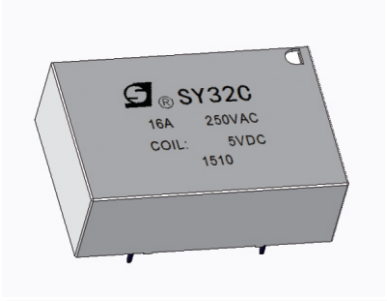
SANYOURELAYS
Relays for advanced technology

# Magnetic Latching Relay

## SY32C-Series




## Features

- 16A contact switching capacity.
- Sealed relay avaliable.
- Max input current capability : 350A/2ms.
- Dielectric Strength of 4 KV between coil and contacts.
- Pluse-driven and both single and dual coil relays available.
  Environmental friendly product (RoHS Compliant).
- Appearance dimension: 30.0mmx20.0mmx10.2 mm.

## Contact Capacity

| | |
|---|---|
| Model | SY32C |
| Nominal switching capacity (res .load) | 16A 277 VAC |
| Max. switching current | 16A |
| Max . switching voltage | 277 VAC |
| Max . switching power | 4,432VA |
| contact form | 2A、2B、1A+1B |

## Characteristic Data

| | | |
|---|---|---|
| Contact material | Silver alloy | |
| Initial contact resistance (at 6VDC 1A) | 20mΩ Max . | |
| Operate time (at nominal volt.) | 15 msec . Max . | |
| Release time (at nominal volt.) | 15 msec . Max . | |
| Initial insulation resistance | 1,000 MΩ Min.( DC 500 DC) | |
| Initial dielectric strength | Between open contacts: AC 1,000 V , 50/60 Hz 1min | |
| | Between coil and contact: AC 4,000 V , 50/60 Hz 1min | |
| Vibration resistance | Destructive | 10～55 Hz at double amplitude of 1.5 mm |
| | Functional | 10～55 Hz at double amplitude of 1.5 mm |
| Shock resistance | Destructive | 100 G Min. |
| | Functional | 10 G Min. |
| Endurance (operations) | Mechanical (at 3,600 ops./h) | 1000,000 cycles |
| | Electrical (at 360 ops./h) | 50,000 cycles |
| Ambient temperature | -40℃ ～+85 ℃(no condensation ) | |

## Coil Data (at 20℃)

| Nominal voltage (VDC) | Single coil resistance 10%(Ω) | Dual coil resistance 10%(Ω) | | Operate voltage (Max.) | Release voltage (Max.) | Pulse duration (ms) | Standard Nominal operating power |
|---|---|---|---|---|---|---|---|
| 3 | 9 | 4.5 | 4.5 | 80% of nominal voltage | 80% of nominal voltage | 50Min. | Single/Dual: 1W/2W |
| 5 | 25 | 12.5 | 12.5 | | | | |
| 6 | 36 | 18 | 18 | | | | |
| 9 | 81 | 40.5 | 40.5 | | | | |
| 12 | 144 | 72 | 72 | | | | |
| 24 | 576 | 288 | 288 | | | | |
| 48 | 2,304 | 1,152 | 1,152 | | | | |

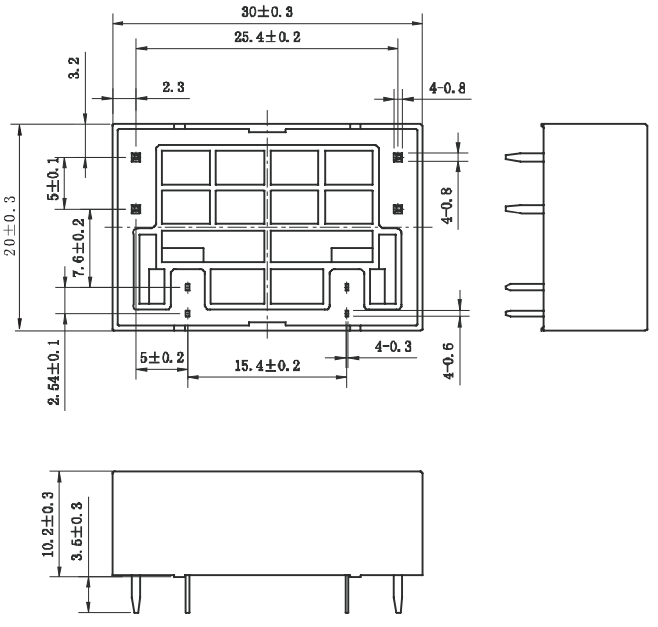
## Ordering Information

| Nomenclature | | | | | | | |
|---|---|---|---|---|---|---|---|
| SY32C | -1 | 05 | D | M | 2 | R | -XX |

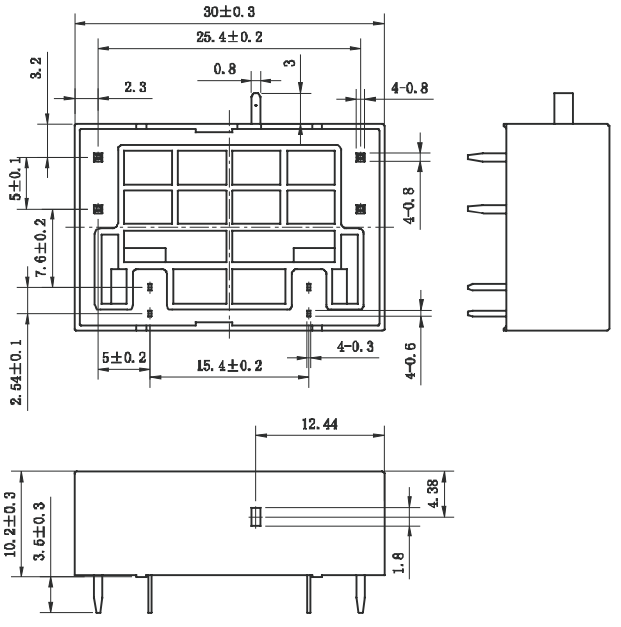
Special Parameter : Nil-Standard type,XX-Customized Requirement
Polarity : R-Reverse polarity, Nil-Positive polarity
Coil Type:1-Single coil,2-Dual coils
Contact Form : M-2Form A,B-2Form B,C-FromA+FormB
Coil Power : Standard type -Single/Dual:1.0W/2.0W
Coil Voltage (VDC) : 03 , 05 , 06 , 09 , 12, 24 , 48
Number of Poles : 1-1 Pole,2-2Pole
Type Designation: SY32C

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

SY 32C-0

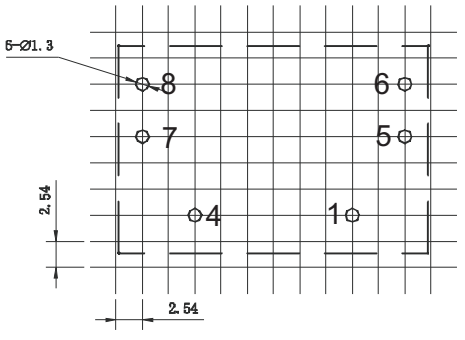



SY 32C-1

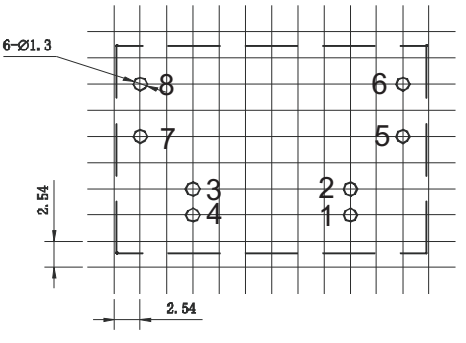



## P.C.B.Board.Layout (Bottom.view)

Single coil




Dual coils




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

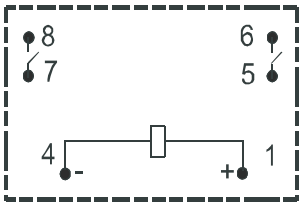
## Typical Applications

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

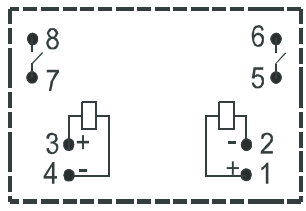
## Wiring Diagram (Bottom view)

### Positive polority

single coil

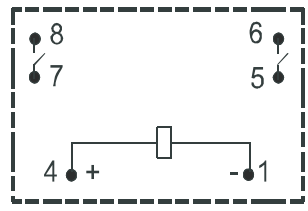



dual coils

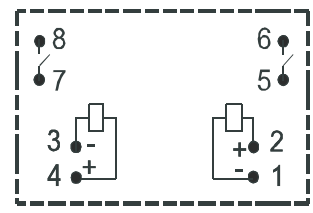



### Reverse polority

single coil



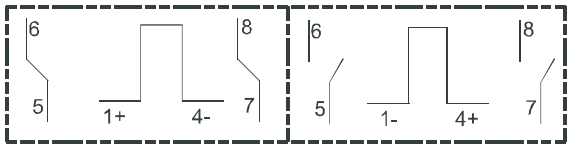

dual coils




## Positive polority

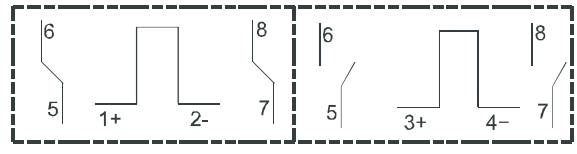
2A

single coil




set reset

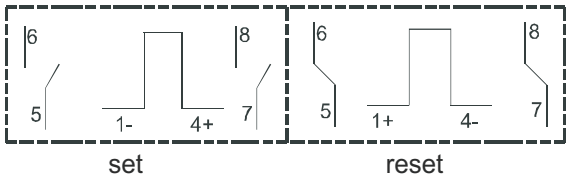
dual coils




set reset

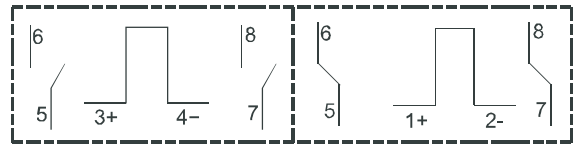
2B

single coil




set reset

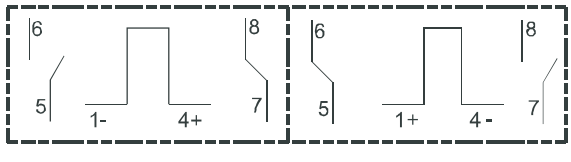
dual coils




set reset

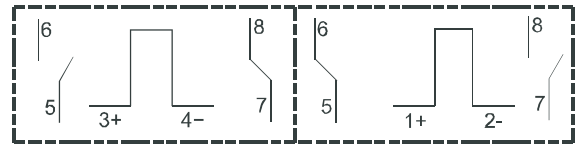
1A+1B

single coil



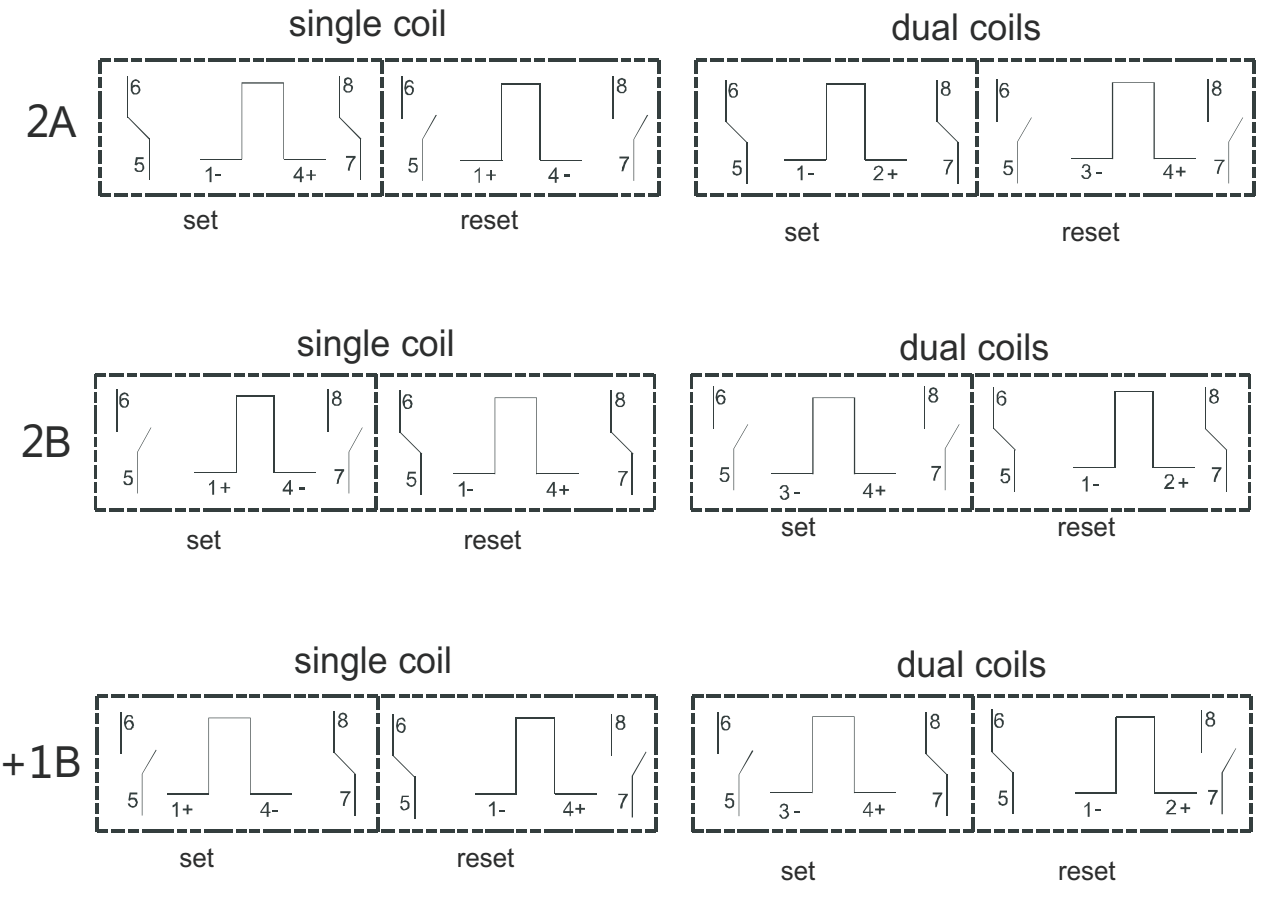

set reset

dual coils




set reset

# Reverse polority




## 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 datasheet 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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