



**Features**

- 100A contact switching capability.
- Low coil power consumption.
- Excellent anti-shock ability.
- Long service endurance.
- Single coil and dual coil relays available.

**Safety Approval**

CQC File No.: Pending

**Contact Capacity**

Model	SY32
Nominal switching capacity (res. load)	100A 250VAC 80A 250VAC 40A 250VAC
Max. switching current	100A
Max. switching voltage	250VAC
Max. switching power	25,000VA

**Charateristic Data**

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	2mΩ Max.	
Operate time (at nominal volt.)	30msec. Max.	
Release time (at nominal volt.)	30msec. Max.	
Initial insulation resistance	1,000MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts: AC1,100V, 50/60Hz 1Min.	
	Between coil and contact: AC5,000V, 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	10G Min.
	Destructive	100G Min.
Endurance (operations)	Mechanical (at 10,800 ops./h)	200,000
	Electrical (at 600 ops./h)	100A 250VAC: 1,000 80A 250VAC: 10,000 40A 250VAC: 30,000
Ambient temperature	-30°C ~ +70°C (no condensation)	
Unit weight	Approx. 155 g	

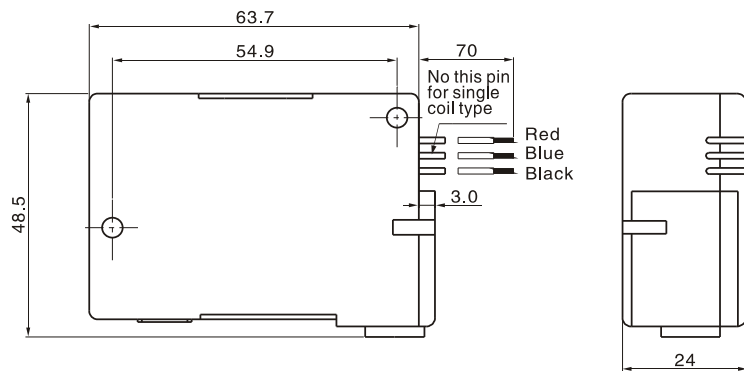
**Coil Data (at 20°C)**

Nominal voltage (VDC)	Nominal operating current ± 10% (mA)	Single coil resistance ± 10% (Ω)	Dual coil resistance ± 10% (Ω)		Set voltage (Max.)	Reset voltage (Min.)	Pulse duration (ms)	Nominal operating power
			Set	Reset				
5	595.2	8.4	4.2	4.20	80 % of nominal voltage	80 % of nominal voltage	100 Min.	Single/Dual: 2.88W /5.76W
6	480.0	12.5	6.25	6.25				
9	333.3	27	13.5	13.50				
12	240.0	50	25	25				
18	222.2	108	54	54				
24	120.0	200	100	100				
48	60.0	800	400	400				

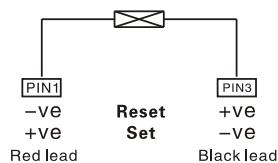
## Ordering Information

Nomenclature						
SY32	-1	12	D	M	1	-XX
Special Parameter: Nil-Standard type, Letter or number-Special requirement						
Coil Type: 1-Single coil, 2-Dual coils						
Contact Form: M-Form A						
Coil Power: Single/Dual: 2.88W/5.76W						
Coil Voltage (VDC): 05, 06, 09, 12, 18, 24, 48						
Number of Poles: 1-1 Pole						
Type Designation: SY32						

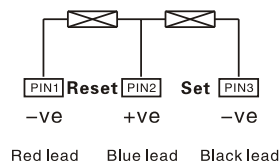
## Outline Dimensions, Wiring Diagram, Mounting Holes (unit: mm)



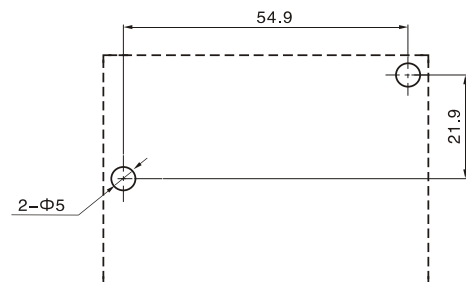
Unless otherwise specified:  
 If dimension < 1mm, tolerance:  $\pm 0.2\text{mm}$ ;  
 If dimension 1-5mm, tolerance:  $\pm 0.3\text{mm}$ ;  
 If dimension > 5mm, tolerance:  $\pm 0.4\text{mm}$ .  
 Note: 1. Extended terminal dimension is dimension before soldering.  
 2. Tolerance of mounting holes :  $\pm 0.1\text{mm}$ .



Wiring diagram  
(single coil)



Wiring diagram  
(dual coils)



Mounting Holes

## Typical Applications

- Industrial machinery
- Air conditioner and home appliances
- Electrical equipment