

# Datasheet

## SPST-NO PCB Mount Latching Relay, 24V dc For Use In Power Applications

RS Stock 476-628



### Features

- Maximum switching capability up to 50A
- Lamp load up to 5000W
- Capacitor load up to 200uF (Min. inrush current at 500A/10s)
- Creepage distance: 8mm
- Dielectric strength: more than 4000VAC (between coil and contacts)
- Wash tight and flux proofed types available
- Manual switch function available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (39.0 x 15.0 x 30.2)mm

### CONTACT DATA

Contact arrangement	1A, 1C
Contact resistance	50mΩ (at 1A 24VDC)
Contact material	AgSnO <sub>2</sub> , AgCdO
Contact rating	1A: 50A 250VAC, 1 x 10 <sup>5</sup> OPS(Resistive) 5000W 220VAC, 3 x 10 <sup>4</sup> OPS (Incandescent & fluorescent lamp) 1C: 40A 250VAC, 3 x 10 <sup>4</sup> OPS(Resistive)
Max. switching voltage	440VAC
Max. switching current	50A
Max. switching power	1A: 12500VA / 1C: 10000VA
Max. continuous current	50A
Mechanical endurance	1 x 10 <sup>6</sup> OPS
Electrical endurance	See rated load

### CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	4000VAC 1min
	Between open contacts	1500VAC 1min
Creepage distance (input to output)	1A: 8mm 1C: 6mm	
Pulse width of coil	50ms min. (Recommend: 100 to 200ms)	
Operate time (at nomi. volt.)	15ms max.	
Release time (at nomi. volt.)	15ms max.	
Max. operate frequency	1A: 20 cycles/min 1C: 10 cycles/min	
Shock resistance	Functional	98m/s <sup>2</sup>
	Destructive	980m/s <sup>2</sup>
Vibration resistance	10Hz to 55Hz 1.5mm DA	
Humidity	98% RH, 40°C	
Ambient temperature	-40°C to 70°C	
Storage temperature	-40°C to 100°C	
Termination	PCB	
Unit weight	Approx. 32g	
Construction	Wash tight, Flux proofed	

**SAFETY APPROVAL RATINGS**

UL&CUL (AgSnO <sub>2</sub> )	1 Form A	Resistive: 50A 277VAC Tungsten: 5000W 240VAC
	1 Form C	40A 277VAC

Notes: Only some typical ratings are listed above. If more details are required, please contact us.

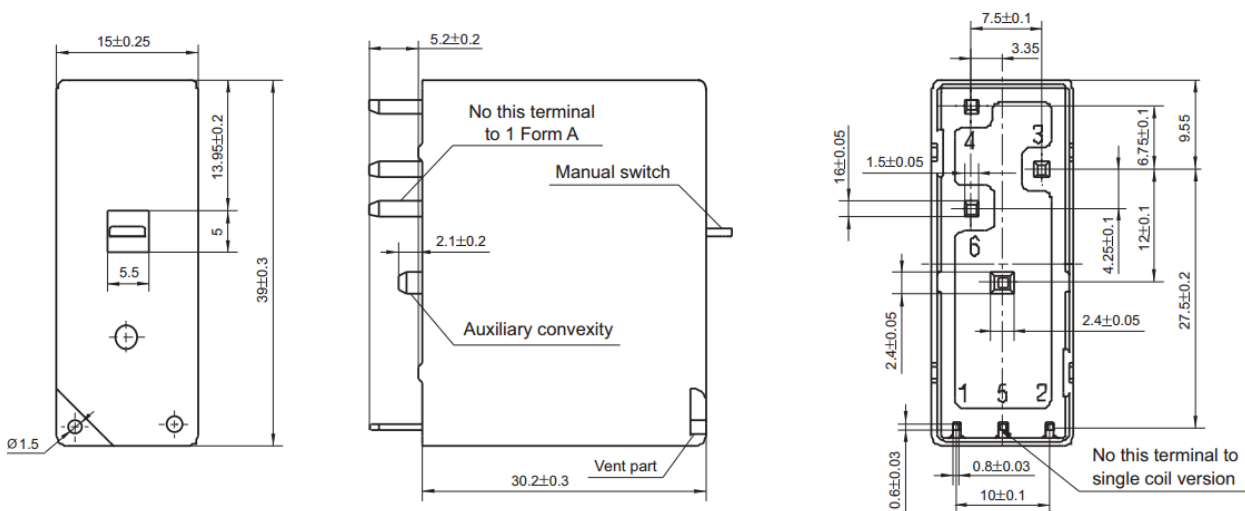
**COIL**

Coil power	Single Coil: 1.5W; Double Coil: 3.0W
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**COIL DATA** at 23°C

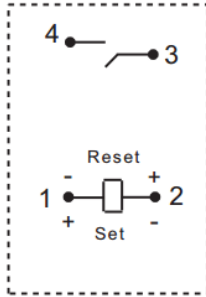
Nominal Voltage VDC	Set/Reset Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance x (1±10%) Ω	
6	4.8	7.8	Single Coil	24
12	9.6	15.6		96
24	19.2	31.2		384
48	38.4	62.4		1536
6	4.8	7.8	Double Coil	2 x 12
12	9.6	15.6		2 x 48
24	19.2	31.2		2 x 192
48	38.4	62.4		2 x 768

**Dimensions: (mm)**

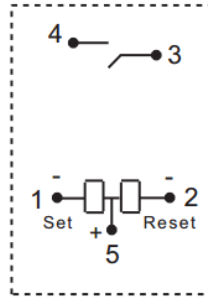


Standard polarity (Reset condition)

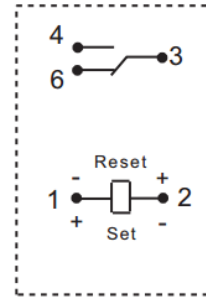
Single coil, 1 Form A



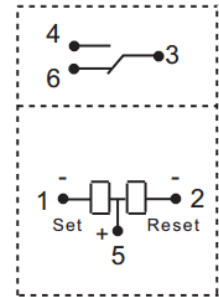
Double coil, 1 Form A



Single coil, 1 Form C

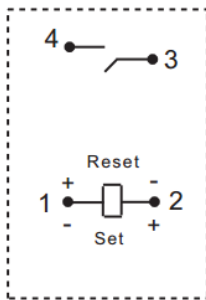


Double coil, 1 Form C

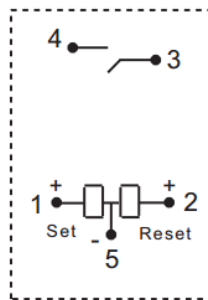


Reverse polarity (Reset condition)

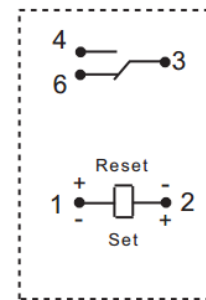
Single coil, 1 Form A



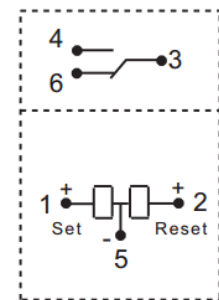
Double coil, 1 Form A



Single coil, 1 Form C



Double coil, 1 Form C



**Notice**

1. Relay is on the "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "reset" status, therefore, when application ( connecting the power supply), please reset the relay to "set" or "reset" status on request.
2. In order to maintain "set" or "reset" status, energized voltage to coil should reach the rated voltage, impulse width should be 5 times more than "set" or "reset" time. Do not energize voltage to "set" coil and "reset" coil simultaneously. And also long energized time (more than 1 min) should be avoided.
3. In order to avoid changing operate voltage, products should not be kept in strong magnetic field during transportation, storage and application.