

## NV23K&NV23KW



NV23K NV23KW  
12×12.9×9.9

### Features

- Small size, lightweight (4g) .
- Withstands high temperature, operating under 105°C ambient temperature.
- Heavy contact load switching current up to 30A.
- Suitable for automobile and lamp accessories application.

### Ordering Information

**NV23K** C Z 0.57 DC12V 30  
1 2 3 4 5 6

1 Part number: NV23K,NV23KW(Wide pin)  
2 Contact arrangement: A:1A; C:1C  
3 Enclosure: S: Wash tight  
Z: Flux proof

4 Coil power: 0.55:0.55W;  
0.57:0.57W  
5 Coil rated voltage(V): DC:5,10,12,24  
6 Contact current: 30:30A; 20:20A

### Contact Data

Contact Arrangement	1A(SPSTNO) 1C(SPDT(B-M))	
Contact Material	AgSnO <sub>2</sub>	
Contact Rating(Resistive)	NO:30A/14VDC; NC:25A/14VDC NO:20A/14VDC; NC:15A/14VDC	
Max. Switching Power	420W	
Max. Switching Voltage	24VDC	Max. Switching Current:30A
Max. carrying current	NO:40A for 2 minutes,30A for 1 hour(12VDC at 20°C); 35A for 2 minutes,25A for 1hour(12VDC at 85°C)	
Voltage Drop(Initial)	Typ. 30mV (at 10A)	Item 4.12 of IEC 61810-7
Operation Life	Electrical	1×10 <sup>5</sup> Item 4.30 of IEC 61810-7
	Mechanical	1×10 <sup>7</sup> Item 4.31 of IEC 61810-7

**CAUTION:** 1.For the intermediate current, it only applies to the room temperature.

### Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance Ω ±10%	Pick-up voltage VDC(max) (58% of rated voltage)	Drop-out voltage VDC(min) (12.5% of rated voltage)	Coil power W	Operate time ms	Release time ms
	Rated	Max.						
005-550	5	6	45.5	3.5 <sup>1)</sup>	0.625	0.55	≤4	≤1.5
010-550	10	12	181	5.8	1.25	0.55		
012-570	12	14.4	254	7	1.5	0.57		
024-570	24	28.8	1010	13.9	3	0.57		

**CAUTION:** 1). Pickup voltage VDC(max.) 70% of rated voltage .

2).The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.

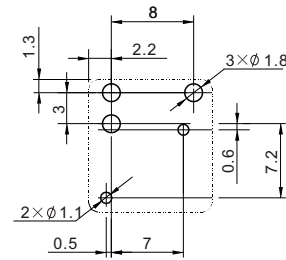
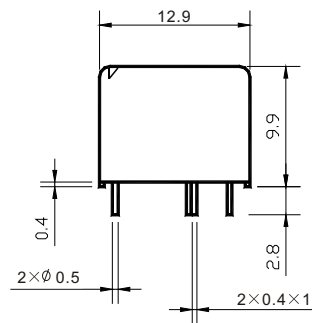
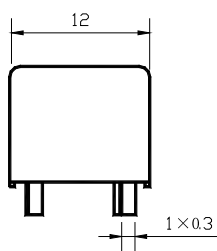
3).Pickup and release voltage are for test purposes only and are not to be used as design criteria.

## Characteristics

Insulation Resistance	1000M $\Omega$ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Contacts Between Contact and Coil	50Hz 500V 50Hz 500V	Item 4.9 of IEC 61810-7 Item 4.9 of IEC 61810-7
Shock Resistance	294m/s <sup>2</sup> 6ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~500Hz Double amplitude 1.27mm 60m/s <sup>2</sup>	Item 4.28 of IEC 61810-7
Terminals Strength	10N	Item 4.24 of IEC 61810-7
Ambient Temperature	-40 $^{\circ}$ C~105 $^{\circ}$ C	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Mass	4g	Item 4.7 of IEC 61810-7

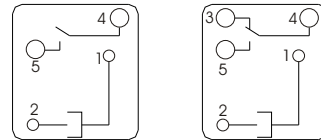
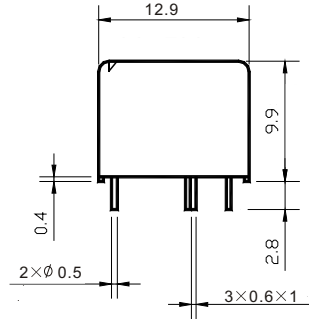
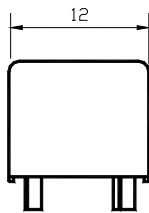
## Dimensions

mm



Mounting (Bottom view)

NV23K



1A

1C

Wiring diagram  
(Bottom view)

NV23KW

### Dimensions

**CAUTION:** In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.