



# NV231

23.8×12.9×9.9

## Features

- Small size, light weight (8g)。
- Withstands high temperature, operational under 85°C ambient temperature.
- Heavy contact load switching current up to 30A.

## Ordering Information

<b>NV231</b>	<b>2C</b>	<b>Z</b>	<b>S</b>	<b>DC12V</b>	<b>0.57</b>
1	2	3	4	5	6
1 Part number: NV231			4 Mounting: NIL: Standard; S: SMT		
2 Contact arrangement: 2A:2A; 2C:2C			5 Coil rated Voltage(V): DC:10,12		
3 Enclosure: S: Sealed type; Z: Dust cover			6 Coil power consumption: 0.55:0.55W; 0.57:0.57W		

## Contact Data

Contact Arrangement	2A (DPSTNO)、2C (DPDT(B-M))
Contact Material	Ag·SnO <sub>2</sub> Ag·Ni
Contact Rating	Resistive: 2A:20A/14VDC 2C:NO:20A/14VDC; NC:15A/14VDC
Max. Switching Power	Inductive:1.0mH On 18A(NO)13A(NC)/14VDC Off:8A/14VDC 280W
Max. Switching Voltage	24VDC
Contact Resistance or Voltage drop	≤30mV (at 10A) Max. Switching Current:30A
Operation life	Electrical 10 <sup>5</sup> Item 3.12 of IEC255-7 Mechanical 10 <sup>7</sup> Item 3.30 of IEC255-7 Item 3.31 of IEC255-7

## Coil Parameter

Dash Numbers	Coil voltage VDC		Coil resistance Ω±10%	Pickup voltage VDC(max) (57%of rated voltage )	release voltage VDC(min) (12.5% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
010-550	10	12	2×181	5.7	1.25	2×0.55	<3	<1.5
012-570	12	14.4	2×254	6.9	1.5	2×0.57	<3	<1.5

- CAUTION:** 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.  
 2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

**Operation condition**

Insulation Resistance	1000M $\Omega$ min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between contacts	50Hz 500V	Item 6 of IEC255-5
Between contact and coil	50Hz 500V	Item 6 of IEC255-5
Shock resistance	300m/s <sup>2</sup> 6ms	IEC68-2-27 Test Ea
Vibration resistance	10~500Hz double amplitude 1.27mm 60m/s <sup>2</sup>	IEC68-2-6 Test Fc
Terminals strength	10N	IEC68-2-21 Test Ua1
Solderability	235 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C 3 $\pm$ 0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~85 $^{\circ}$ C	
Relative Humidity	85% (at 20 $^{\circ}$ C)	IEC68-2-3Test Ca
Mass	8g	

**Qualification inspection:**

Perform the qualification test as specified in the table IV of IEC255-19-1 and minimum sample size 24.

**Dimensions (Unit: mm)**

<p>Dimensions</p>	<p>Mounting (Bottom views)</p>	<table border="0"> <thead> <tr> <th>mm</th> <th>inch</th> </tr> </thead> <tbody> <tr><td>0.3</td><td>0.012</td></tr> <tr><td>0.4</td><td>0.016</td></tr> <tr><td>0.5</td><td>0.020</td></tr> <tr><td>0.6</td><td>0.024</td></tr> <tr><td>0.7</td><td>0.027</td></tr> <tr><td>0.8</td><td>0.031</td></tr> <tr><td>1.0</td><td>0.039</td></tr> <tr><td>1.1</td><td>0.043</td></tr> <tr><td>1.3</td><td>0.051</td></tr> <tr><td>1.5</td><td>0.059</td></tr> <tr><td>1.56</td><td>0.061</td></tr> <tr><td>1.8</td><td>0.071</td></tr> <tr><td>2.2</td><td>0.087</td></tr> <tr><td>2.8</td><td>0.110</td></tr> <tr><td>3.0</td><td>0.118</td></tr> <tr><td>3.06</td><td>0.120</td></tr> <tr><td>3.2</td><td>0.126</td></tr> <tr><td>3.36</td><td>0.132</td></tr> <tr><td>6.01</td><td>0.237</td></tr> <tr><td>7.0</td><td>0.275</td></tr> <tr><td>7.2</td><td>0.283</td></tr> <tr><td>7.5</td><td>0.295</td></tr> <tr><td>8</td><td>0.315</td></tr> <tr><td>8.5</td><td>0.335</td></tr> <tr><td>9.5</td><td>0.374</td></tr> <tr><td>9.9</td><td>0.390</td></tr> <tr><td>11.3</td><td>0.445</td></tr> <tr><td>12.9</td><td>0.508</td></tr> <tr><td>23.6</td><td>0.929</td></tr> <tr><td>23.8</td><td>0.937</td></tr> </tbody> </table>	mm	inch	0.3	0.012	0.4	0.016	0.5	0.020	0.6	0.024	0.7	0.027	0.8	0.031	1.0	0.039	1.1	0.043	1.3	0.051	1.5	0.059	1.56	0.061	1.8	0.071	2.2	0.087	2.8	0.110	3.0	0.118	3.06	0.120	3.2	0.126	3.36	0.132	6.01	0.237	7.0	0.275	7.2	0.283	7.5	0.295	8	0.315	8.5	0.335	9.5	0.374	9.9	0.390	11.3	0.445	12.9	0.508	23.6	0.929	23.8	0.937
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NOTES 1).Dimensions are in millimeter.  
 2).Inch equivalents are given for general information only.