



20.3×15.3×22.5

# NVF

Patent No.: 200520013465.7

Features
<ul style="list-style-type: none"> <li>Switching capacity up to 25A.</li> <li>PC board mounting and insert mounting available.</li> <li>Suitable for automation system and automobile auxiliary etc.</li> </ul>

Ordering Information	
<b>NVF</b> <u>A</u> <u>Z</u> <u>20</u> <u>DC12V</u> <u>b</u> <u>D</u> 1 2 3 4 5 6 7	5 Coil rated voltage(V): DC:12,24 6 Terminals: b: PCB type; a: plug in type 7 Coil transient suppression: D: with diode; R: with resistance; NIL: standard
1 Part number: NVF 2 Contact arrangement: A:1A ; B:1B 3 Enclosure: S: Sealed type; Z: Dust cover; 4 Contact current: 15:15A/14VDC; 20:20A/14VDC 25:25A/14VDC	

Contact Data	
Contact Arrangement	1A (SPSTNO) , 1B (SPSTNC)
Contact Material	AgSnO <sub>2</sub> , AgNi
Contact Rating (resistive)	1A: 25A/14VDC,20A/14VDC; 1B: 20A/14VDC,15A/14VDC
Max. Switching Power	420W
Max. Switching Voltage	75VDC
Max. Switching Current	30A
Contact Resistance or Voltage drop	≤20mV(at 10A)(B:40mV) Item 4.12 of IEC 61810-7
Operation life	Electrical: 5×10 <sup>5</sup> , 2×10 <sup>6</sup> (B) Item 4.30 of IEC 61810-7 Mechanical: 10 <sup>7</sup> Item 4.31 of IEC 61810-7

Coil Parameter								
Dash numbers	Coil voltage VDC		Coil resistance Ω ±10%	Pickup voltage VDC(max) (60% of rated voltage)	Release voltage VDC(min) (11% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
012-1160	12	18	124	7.2	1.3	1.16	≤10	≤7
024-1160	24	35	489	14.4	2.8			

**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 <sup>1)</sup>	100MΩ min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength <sup>1)</sup>		
Between contacts	50Hz 500V	Item 6 of IEC 60255-5
Between contact and coil	50Hz 1000V	Item 6 of IEC 60255-5
Shock resistance	100m/s <sup>2</sup> 11ms	IEC68-2-27 Test Ea
Vibration resistance	10~40Hz double amplitude 1.27mm	IEC68-2-6 Test Fc
Terminals strength	100N	IEC68-2-21 Test Ua2
Solderability	235°C ±2°C 3±0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~125°C	
Relative Humidity	85% (at 40°C)	IEC68-2-3 Test Ca
Mass	14g	

Note: 1). ,When testing, coil terminals should be connected, if coil transient suppression is installed in relay.

### Dimensions

mm /inch

Note: Terminals as shown above are also available.

### Mounting (Bottom view)

Plug in type      PCB type

### Wiring diagram (Bottom view)

1A      1B

NOTES 1).Dimensions are in millimeters.  
 2).Inch equivalents are given for general information only.

