



NVF4-3 29×29×26.5  
 NVF4-4 29×29×26.5(+16)

# NVF4-3&NVF4-4

Features
<ul style="list-style-type: none"> <li>Miniature.</li> <li>Contact load capacity up to 80A.</li> <li>Suitable for automobile.</li> <li>Terminal types as inserting.</li> </ul>

Ordering Information
<p><b>NVF4-3</b>   <u>C</u>   <u>Z</u>   <u>30</u>   <u>b</u>   <u>DC12V</u>   <u>C</u>   <u>D</u></p> <p>1 Part number: NVF4-3, NVF4-4 (Insulation Bracket), NVF4-4a (Metal Bracket)                  2 Contact arrangement: A:1A, B:1B, C:1C, U:1U                  3 Enclosure: S: Sealed type, Z: Dust cover                  4 Contact Current: A Form:60A,80A; B Form:40A,70A; C Form :60A,80A; U Form:2×25A                  5 Terminals: b: PCB type, a: plug in type                  6 Coil rated Voltage(V): DC:6,12,24                  7 Contact material: C:AgCdO, N:AgNi, NIL: Ag·SnO<sub>2</sub>                  8 Coil transient suppression: D: with diode.; 2D:with two diodes.; R: with resistance.; DR: with diode and resistance; NIL: standard</p>

Contact Data	1A (SPSTNO)	1B (SPSTNC)	1C (SPDT(B-M))	1U (SPSTNODM)
Contact Arrangement	1A (SPSTNO) 1B (SPSTNC) 1C (SPDT(B-M)) 1U (SPSTNODM)			
Contact Material	Ag·SnO <sub>2</sub> , AgNi			
Contact Rating (resistive)	1A	1B	1C	1U
	60A,80A/14VDC	40A,70A/14VDC	NO:60A,80A/14VDC NC:40A,70A/14VDC	2×25A/14VDC
Max. Switching Power	980W		Max. Switching Current:80A	
Max. Switching Voltage	75VDC		Item 3.12 of IEC255-7	
Contact Resistance or Voltage drop	≤30mΩ		Item 3.30 of IEC255-7	
Operator life	Electrical	10 <sup>5</sup>	Item 3.31 of IEC255-7	
	Mechanical	10 <sup>7</sup>		

Dash numbers	Coil voltage VDC		Coil resistance Ω±10%	Pickup voltage VDC(max) (65%of rated voltage )	release voltage VDC(min) (10% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
006-1800	6	7.8	20	3.9	0.6	1.8	≤7	≤5
012-1800	12	15.6	80	7.8	1.2			
024-1800	24	31.2	320	15.6	2.4			

**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>	100M $\Omega$ min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength <sup>1)</sup>		
Between contacts	50Hz 500V	Item 6 of IEC255-5
Between contact and coil	50Hz 500V	Item 6 of IEC255-5
Shock resistance	147m/s <sup>2</sup> 11ms	IEC68-2-27 Test Ea
Vibration resistance	10~40Hz double amplitude 1.5mm	IEC68-2-6 Test Fc
Terminals strength	8N 4N(PC type)	IEC68-2-20 Test Ta method 1
Solderability	235 $\times$ 2 $\times$ 3 3 $\times$ 0.5s	
Ambient Temperature	-40~85 $\times$	IEC68-2-3 Test Ca
Relative Humidity	85% (at 40 $\times$ )	
Mass	46g(NVF4-3);48g(NVF4-4)	

Note: 1). When testing, coil terminals shall be connect ,If coil transient suppression is installed in relay .

**Qualification inspection:**

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

Dimensions (Unit: mm)

40A~60A NVF4-3 type      70A~80A NVF4-4 type

70A~80A PCB 式

Note: Footprint as shown above is also available.

Dimensions

40A~60A PCB type      70A~80A PCBtype

Mounting (Bottom views)      Wiring diagram (Bottom views)

mm	inch
0.3	0.012
0.8	0.031
1.4	0.055
1.5	0.059
1.93	0.076
2.16	0.085
2.5	0.098
2.6	0.102
3.0	0.118
3.2	0.126
3.8	0.150
4.6	0.181
5.5	0.217
6.3	0.248
7.3	0.287
8	0.315
8.4	0.331
9.5	0.374
9.8	0.386
11.5	0.453
12	0.472
15.2	0.598
16.8	0.661
17	0.669
17.9	0.705
19	0.748
22	0.866
26.5	1.043
29	1.142

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

**Reference Data**

