



NVF4-3

29×29×26.5

NVF4-4

29×29×26.5(+16)

## NVF4-3 &amp; NVF4-4

**Features**

- Miniature.
- Contact load capacity up to 80A.
- Suitable for automobile.
- Terminal types as inserting.

**Contact Data**

Contact Arrangement 1A, 1B, 1C, 1U  
 Contact Material Ag-SnO<sub>2</sub>, AgNi

Contact Rating (resistive)	1A	1B	1C	1U
	50A,80A/14VDC	40A,60A/14VDC	NO:50A,80A/14VDC NC:40A,60A /14VDC	2 × 25A/14VDC

Max. Switching Power 980W  
 Max. Switching Voltage 75VDC  
 Contact Resistance or Voltage drop ≤30mΩ  
 Operation | Electrical 10<sup>5</sup>  
 life | Mechanical 10<sup>7</sup>

Max. Switching Current:80A  
 Item 3.12 of IEC255-7  
 Item 3.30 of IEC255-7  
 Item 3.31 of IEC255-7

**Coil Parameter**

Coil voltage VDC		Coil resistance Ω±10%	Pickup voltage VDC(max) (of rated voltage)		release voltage VDC(min) (10% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
Rated	Max.		65%	70%				
6	7.8	20	3.9	4.2	0.6	1.8	≤7	≤5
12	15.6	80	7.8	8.4	1.2			
24	31.2	320	15.6	16.8	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> 100MΩ 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 method 1  
 Vibration resistance 10~40Hz double amplitude 1.5mm IEC68-2-6 Test Fc  
 Terminals strength 8N 4N(PC type) IEC68-2-21 Test Ua2  
 Solderability 230°C ±2°C 10 ±0.5s IEC68-2-20 Test Ta method 1  
 Ambient Temperature -40~85°C  
 Relative Humidity 85% (at 40°C) IEC68-2-3Test Ca  
 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.

Ordering Information	
<b>NVF4-3</b>	<b>C Z 30 b DC12V D</b>
Coil transient suppression :D:with diod.;2D:with two diods.; R:with resis.;DR:with diod. and resis;Nil:standard	
Coil rated DC Voltage:6V, 12V, 24V	
b:PCB type PC, a:plug in type	
Contact Current: A From:50A,80A;B From:40A,60A;C From:50A,80A; U From:2×25A/14VDC	
Z:Dust Cover, S:Sealed type	
Contact Arrangement : A:1A, B:1B, C:1C, U:1U	
Part number:NVF4-3,NVF4-4(Insulation Bracket), NVF4-4a(Metal Bracket)	

Dimensions (Unit: mm)		mm	inch
	40A, 50A	0.3	0.012
	60A, 80A	0.8	0.031
	60A, 80A PCB 式	1.4	0.055
		1.93	0.076
	40A, 50A PCB type	2.16	0.085
		2.5	0.098
	60A, 80A PCB type	2.6	0.102
		3.2	0.126
	40A, 50A PCB type	3.8	0.150
	60A, 80A PCB type	4.6	0.181
	1A	5.5	0.127
	1B	6.3	0.248
	1C	7.3	0.287
	1U	8	0.315
	1A	8.4	0.331
	1B	9.5	0.374
	1C	9.8	0.386
	1U	11.5	0.453
	1A	12	0.472
	1B	15.2	0.598
	1C	16.8	0.661
	1U	17	0.669
	1A	17.9	0.705
	1B	19	0.748
	1C	22	0.866
	1U	26.5	1.043
	1A	29	1.142
	1B		

Reference Data		
<p>Coil Temp Rise Contact Carrying Current 40A</p>	<p>Coil Temp Rise Ambient Temp 20°C</p>	<p>Max Value For Switching Capacity</p>