

## NVF4-3 & NVF4-4



NVF4-3  
29×29×26.5

NVF4-4  
29×29×26.5(+16)

### Features

- Small size.
- Contact load capacity up to 100A.
- Suitable for automobile.
- PC board mounting and QC mounting available.
- 24V versions with contact gap >0.8mm.

### Ordering Information

**NVF4-3 C - Z 50 b DC12V 1.8 D**

1 2 3 4 5 6 7 8

1 Part number: NVF4-3, NVF4-4 (Plastic Bracket),  
NVF4-4a (Metal Bracket)  
2 Contact arrangement: A:1A; B:1B; C:1C; U:1U  
3 Enclosure: S: Wash tight; Z: Flux proof  
4 Contact current: A Form:25A,40A,50A,70A,80A,100A  
B Form:25A,40A,60A  
C Form:25A,40A,50A,60A,80A  
U Form:2×15A, 2×25A

5 Terminals: b: PCB type; a: QC type  
6 Coil rated voltage(V): DC:6, 12, 24  
7 Coil power: 1.8:1.8W; 2.3:2.3W; 2.6:2.6W  
8 Coil transient suppression: D: with diode  
2D: with two diodes  
R: with resistance  
DR: with diode and resistance  
NIL: standard

### Contact Data

Contact Arrangement	1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M)) 1U(SPSTNODM)			
Contact Material	AgSnO <sub>2</sub>			
Contact Rating	1A	1B	1C	1U
	50A,70A,80A, 100A/14VDC 25A,40A/24VDC	40A,60A/14VDC 25A,40A/24VDC	NO:50A, 80A/14VDC 25A, 40A/24VDC NC:40A,60A/14VDC 25A, 40A/24VDC	2×25A/14VDC 2×15A/24VDC
Max. Switching Power	1400W			
Max. Switching Voltage	75VDC Max. Switching Current:100A			
Voltage Drop(Initial)	Typ.: 50mV(at 10A)		Item 4.12 of IEC 61810-7	
Electrical Endurance	1×10 <sup>5</sup>		Item 4.30 of IEC 61810-7	
Mechanical Endurance	1×10 <sup>7</sup>		Item 4.31 of IEC 61810-7	

**Notes:** Special high performance 24V version with contact gap >0.8mm; Limiting continuous current at 125°C: NC/NO: 10A/15A, 1U:2×11A.

### Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance Ω ± 10%	Pick-up voltage VDC(max) (65% of rated voltage)	Drop-out voltage VDC(min) (10% of rated voltage)	Coil power W	Operate time ms	Release time ms
	Rated	Max.						
006-1800	6	7.8	20	3.9	0.6	1.8	≤10	≤5
012-1800	12	15.6	80	7.8	1.2			
024-1800	24	31.2	320	15.6	2.4			
006-2300	6	7.8	15.6	3.9	0.6	2.3		
012-2300	12	15.6	62.6	7.8	1.2			
024-2300	24	31.2	250.4	15.6	2.4			
006-2600	6	7.8	13.8	3.9	0.6	2.6		
012-2600	12	15.6	55.4	7.8	1.2			
024-2600	24	31.2	221.5	15.6	2.4			

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

# NVF4-3 & NVF4-4

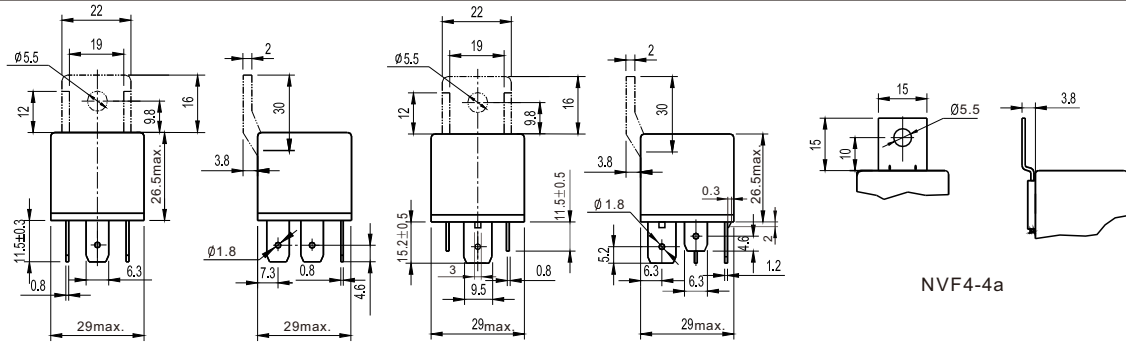
## Characteristics

Insulation Resistance <sup>1)</sup>	100MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength <sup>1)</sup> Between Contacts Between Contact and Coil	500VAC 1min 500VAC 1min	Item 4.9 of IEC 61810-7
Shock Resistance	147m/s <sup>2</sup> 11ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~40Hz Double amplitude 1.5mm	Item 4.28 of IEC 61810-7
Terminals Strength	Terminal retention(pull & push): ≥100N Terminal resistance to bending(front & side): ≥10N	Item 4.24 of IEC 61810-7
Ambient Temperature	-40℃~125℃	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Weight (Approx.)	46g(NVF4-3);48g(NVF4-4)	Item 4.7 of IEC 61810-7

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

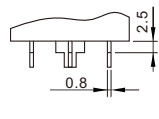
## Dimensions

mm

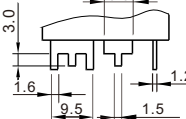


NVF4-3&NVF4-4(40A、50A)

NVF4-3&NVF4-4(70A、80A、100A)

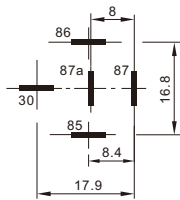


40A、50A PCB type

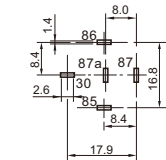


70A、80A、100A PCB type

Notes: Terminals as shown above are also available.

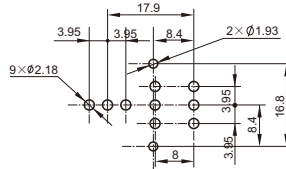


QC type



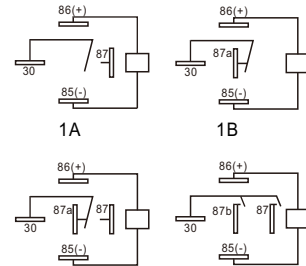
40A、50A PCB type

### Dimensions



70A、80A、100A PCBtype

Mounting (Bottom view)



Wiring diagram (Bottom view)

Remark: In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm ;  
outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

## Reference Data

