



NVF4-3&NVF4-4

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 rating: A Form:25:25A; 40:40A; 50:50A,
70:70A; 80:80A; 100:100A
B Form:25:25A; 40:40A; 60:60A
C Form:25:25A; 40:40A; 60:60A; 80:80A
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 resistor
DR:with diode and resistor
NIL:standard

Contact Data

Contact Arrangement	1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M)) 1U(SPSTNODM)			
Contact Material	AgSnO ₂			
Contact Rating	1A	1 B	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			
Voltage Drop(Initial)	Typ.: 50mV(at 10A)		Max. Switching Current:100A	
Electrical Endurance	1×10 ⁵		Item 4.12 of IEC 61810-7	
Mechanical Endurance	1×10 ⁷		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

Coil voltage VDC		Coil resistance $\Omega \pm 10\%$	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.						
6	7.8	20	3.9	0.6	1.8	≤ 10	≤ 5
12	15.6	80	7.8	1.2			
24	31.2	320	15.6	2.4			
6	7.8	15.6	3.9	0.6	2.3		
12	15.6	62.6	7.8	1.2			
24	31.2	250.4	15.6	2.4			
6	7.8	13.8	3.9	0.6	2.6		
12	15.6	55.4	7.8	1.2			
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.

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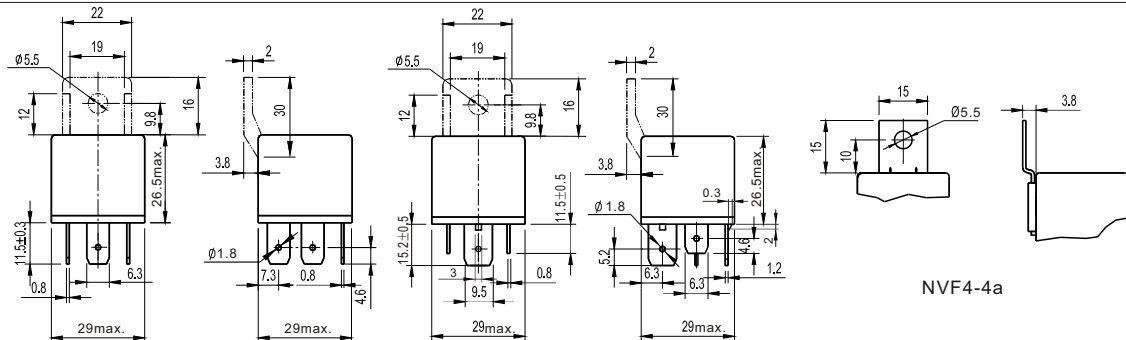
Characteristics

Insulation Resistance ¹⁾	100MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength ¹⁾ Between Open Contacts Between Contact and Coil	500VAC 1min 500VAC 1min	Item 4.9 of IEC 61810-7
Shock Resistance	147m/s ² 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 .

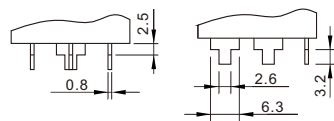
Dimensions

mm

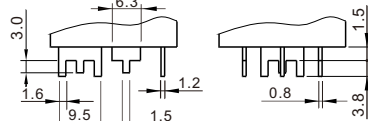


NVF4-3&NVF4-4(40A、50A)

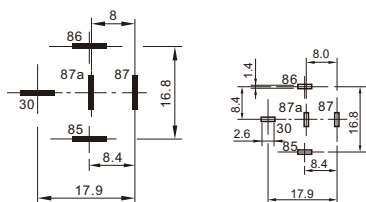
NVF4-3&NVF4-4(70A、80A、100A)



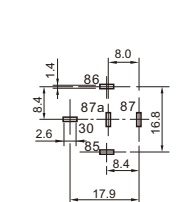
40A、50A PCB type terminals



70A、80A、100A PCB type terminals

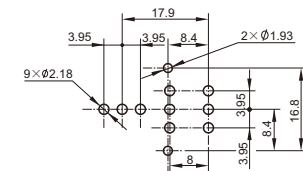


QC type



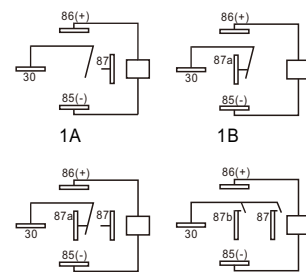
40A、50A PCB type

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

