

## NVF4-1 & NVF4-2



NVF4-1      NVF4-2      NVF4-2b  
 26.5×26.5×24.5(+15.5)    35.5×35.5×45.5(+22.5)

### Features

- Small size and light weight.
- Heavy contact load (40A).
- Suitable for automobile and lamp accessories application.
- PC board mounting and QC mounting available.

### Ordering Information

**NVF4-1 C - Z 30 b DC12V 1.6 D**

1    2    3    4    5    6    7    8

1 Part number: NVF4-1 NVF4-2(Plastic Bracket) NVF4-2a(With Metal Bracket) NVF4-2b(Shrouded With Metal Bracket)	5 Terminals: b: PCB type; a1: QC type 1; a2:QC type 2 6 Coil rated voltage(V): DC:6,9,12,24,48 7 Coil power: 1.6:1.6W; 1.9:1.9W; 2.3:2.3W; 2.6:2.6W
2 Contact arrangement: A:1A; B:1B; C:1C; U:1U	8 Coil transient suppression: D: with diode R: with resistance NIL: standard
3 Enclosure: S: Wash tight ; Z: Dust protected	
4 Contact current: A Form: 20A,40A B Form: 20A,30A C Form: 15A,20A, 30A, 40A U Form: 2×20A	

### Contact Data

Contact Arrangement	1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M)) 1U(SPSTNOD)			
Contact Material	AgSnO <sub>2</sub>			
Contact Rating	1A	1B	1C	1U
	40A/14VDC 20A/24VDC	30A/14VDC 20A/24VDC	NO:40A/14VDC NC:30A,40A/14VDC 15A,20A/24VDC	2×20A/14VDC
Max. Switching Power	560W			
Max. Switching Voltage	75VDC		Max. Switching Current:40A	
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:** Limiting continuous current at 125°C:NC/NO:10A/15A.

### 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.										
006-1600	6	7.8	22.5	3.9	0.6	1.6	≤7	≤5				
009-1600	9	11.7	50.6	5.9	0.9							
012-1600	12	15.6	90	7.8	1.2							
024-1600	24	31.2	360	15.6	2.4							
048-1600	48	62.4	1440	31.2	4.8							
006-1900	6	7.8	19	3.9	0.6	1.9			≤7	≤5		
012-1900	12	15.6	75.8	7.8	1.2							
024-1900	24	31.2	303.2	15.6	2.4							
006-2300	6	7.8	15.6	3.9	0.6	2.3					≤7	≤5
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	≤7	≤5				
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.

# NVF4-1 & NVF4-2

## 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 750VAC 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.)	31g(NVF4-1);33g(NVF4-2);33g(NVF4-2a);45g(NVF4-2b)	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

