

NVF4-1 & NVF4-2



NVF4-1 NVF4-2 NVF4-2b
 $26.5 \times 26.5 \times 24.5(+15.5)$ $35.5 \times 35.5 \times 45.5(+22.5)$

Features

- Small size and light weight.
- Heavy contact load (40A).
- Suitable for automobile and lamp accessories application.
- PC board mounting and direct insert 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: plug in type 1; a2: plug in type 2 6 Coil rated voltage(V): DC:6,12,24,48 7 Coil power: 1.6:1.6W; 1.9:1.9W; 2.3:2.3W; 2.6:2.6W 8 Coil transient suppression: D: with diode R: with resistance NIL: standard
2 Contact arrangement: A:1A1; A2:1A2; B:1B; C:1C; C2:1C2	
3 Enclosure: S: Wash tight; Z: Dust protected	
4 Contact current: A Form:20A,40A; B Form: 20A,30A; C Form or C2 Form:15A,20A, 30A, 40A; A2 Form: 2×20A	

Contact Data

Contact Arrangement		1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M))			
Contact Material		AgSnO ₂			
Contact Rating (Resistive)		1A1	1B	1C or C2	1A2
		40A/14VDC 20A/24VDC	30A/14VDC 20A/24VDC	NO:40A/14VDC NC:30A,40A/14VDC 15A、20A/24VDC	2×20A/14VDC
Max. Switching Power		630W			
Max. Switching Voltage		75VDC			
Voltage Drop(Initial)		Typ. 50mV (at 10A)		Max. Switching Current:40A	
Operation Life	Electrical	1×10 ⁵		Item 4.12 of IEC 61810-7	
	Mechanical	1×10 ⁷		Item 4.31 of IEC 61810-7	

NOTE: 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		
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		
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			

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.



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Characteristics

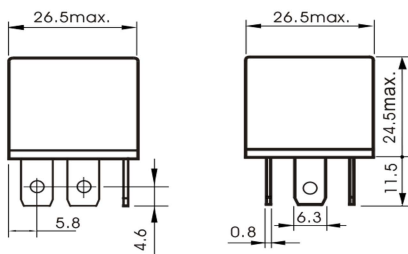
Insulation Resistance ¹⁾	100M Ω min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength ¹⁾ Between Contacts Between Contact and Coil	50Hz 500V 50Hz 750V	Item 4.9 of IEC 61810-7 Item 4.9 of IEC 61810-7
Shock Resistance	147m/s ² 11ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~40Hz Double amplitude 1.5mm	Item 4.28 of IEC 61810-7
Terminals Strength	8N 4N (PC Type)	Item 4.24 of IEC 61810-7
Ambient Temperature	-40°C~125°C	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Mass	31g(NVF4-1);33g(NVF4-2);33g(NVF4-2a);45g(NVF4-2b)	Item 4.7 of IEC 61810-7

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

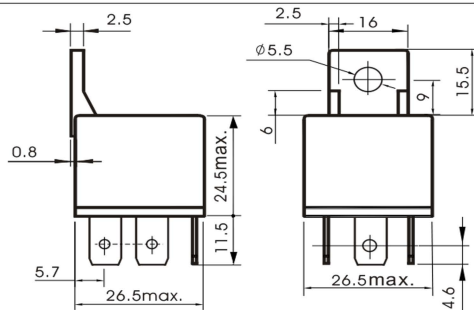
Dimensions

mm

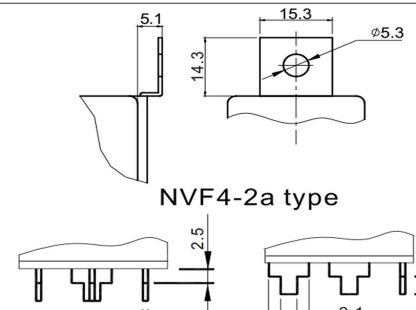
Dust cover



NVF4-1 type

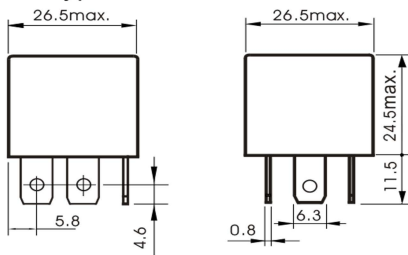


NVF4-2 type

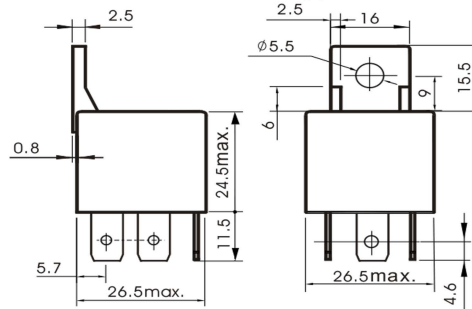


NVF4-2a type

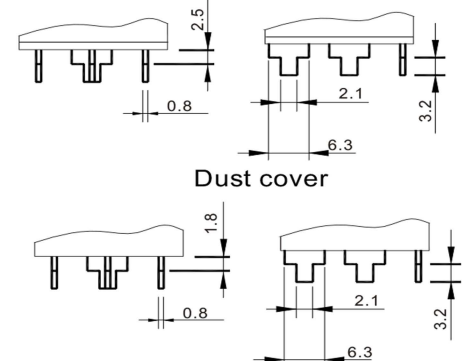
Sealed type



NVF4-1 type



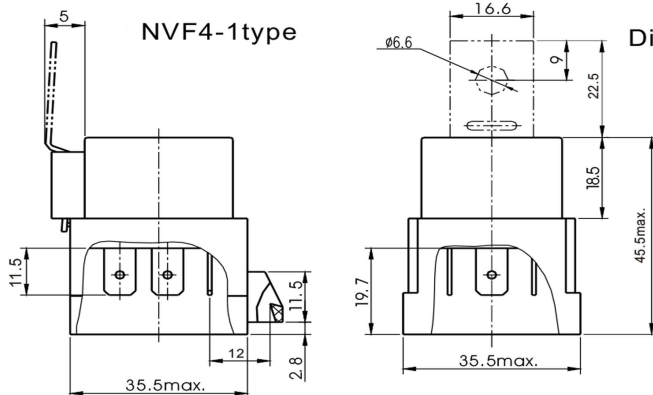
NVF4-2 type
Dimensions



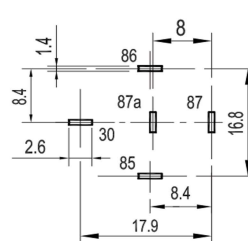
Dust cover

Sealed type

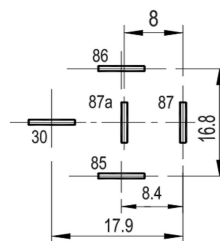
Note: Terminals as shown above are also available.



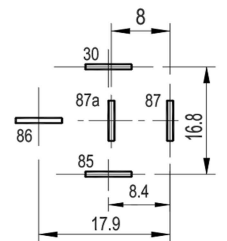
NVF4-2b type



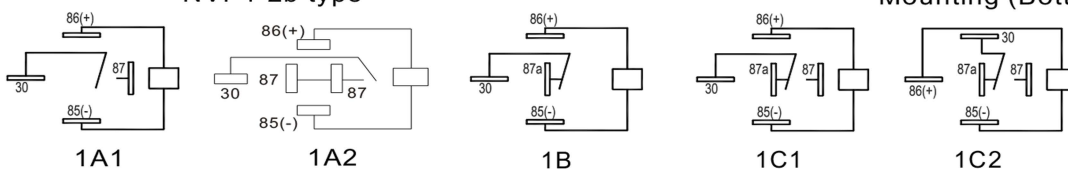
PCB type



Plug in type 1



Plug in type (1C2)



Wiring diagram (Bottom view)

CAUTION: In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.

Reference Data

