



# NVF16

20.5×15.4×22.1

## Features

- General-purpose relay with small size.
- Small volume and light weight.
- Operation temperature can achieve 125°C.
- Contact rating: 35A and 40A versions are available.

## Ordering Information

**NVF16 A Z 35 DC12V R**

1 2 3 4 5 6

1 Part number: NVF16  
 2 Contact arrangement: A:1A;C:1C  
 3 Enclosure: S: Wash tight; Z: Flux proof  
 4 Contact rating:  
 12V:1A:35A,40A/14VDC; 1C:NO:35A/14VDC; NC:20A/14VDC  
 24V:1A:15A,20A/28VDC; 1C:NO:15A/28VDC; NC:10A/28VDC

5 Coil rated voltage(V): DC:12,24  
 6 Coil transient suppression: NIL:standard  
 R:with resistor  
 D:with diode

## Contact Data

Contact Arrangement	1A(SPSTNO) 1C(SPDT(B-M))		
Contact Material	AgSnO <sub>2</sub>		
Contact Rating	Coil rated voltage	1A	1C
	12V	35A/14VDC, 40A/14VDC	NO:35A/14VDC NC:20A/14VDC
	24V	15A/28VDC, 20A/28VDC	NO:15A/28VDC NC:10A/28VDC
Max. Switching Power	560W		
Max. Switching Voltage	30VDC Max. Switching Current:40A		
Voltage Drop(Intial)	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		

## Coil Parameter

Coil voltage VDC		Coil resistance Ω±10%		With Suppression Rsistive	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.	Without Rsistive	With Rsistive						
12	16	96	84	680	7.8	1.2	1.5	≤10	≤10
24	32	320	286	2700	15.6	2.4	1.8	≤10	≤10

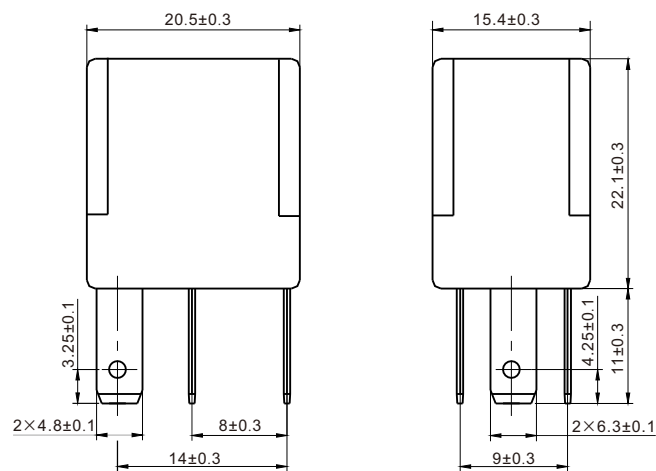
**Notes:** 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.  
 2.Pick-up and drop-out voltage are for test purposes only and are not to be used as design criteria.

## Characteristics

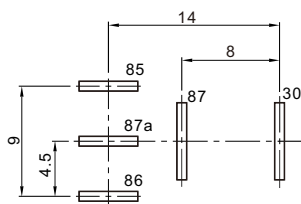
Insulation Resistance	100MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Open Contacts Between Contact and Coil	500VAC 1min 500VAC 1min	Item 4.9 of IEC 61810-7
Shock Resistance	Functional:98m/s <sup>2</sup> 11ms	Item 4.26 of IEC 61810-7
	Destructive:980m/s <sup>2</sup> 11ms	
Vibration Resistance	Functional:10Hz~55Hz Double amplitude 1.5mm	Item 4.28 of IEC 61810-7
	Destructive:10Hz~55Hz Double amplitude 1.5mm	
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.)	18g	Item 4.7 of IEC 61810-7

## Dimensions

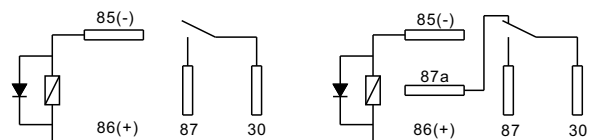
mm



Dimensions



Mounting (Bottom view)



1A

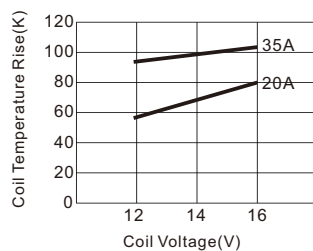
1C

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

Coil Temperature Rise (Contact Rating 12V)



Coil Temperature Rise (Contact Rating 24V)

