



29 x 29 x 26.5 (+16)

RoHS compliant

NF105

Features

- Small size
- ISO based Terminal layout
- Contact load capacity upto 80A
- Plug-in or PCB terminals
- 24VDC version with contact gap >0.8mm
- Wide operating temperature range: -40°C to +125°C

Ordering Information

<u>NF105</u>	<u>001</u>	<u>E</u>	<u>12</u>	<u>1</u>	<u>S</u>	<u>P</u>	<u>R</u>	<u>XXXX</u>
1	2	3	4	5	6	7	8	9
1. Type:	NF105			6. Protection:	Nil = Dust cover S = Sealed			
2. Contact configuration:	100 = 1NO (1 form A) 001 = 1CO (1 form C)			7. Terminal type:	Nil = Plug-in P = PCB			
3. Contact material:	E = Ag alloy			8. Coil transient suppression	Nil = Standard D = Diode R = Resistor			
4. Coil voltage:	12 = 12VDC 24 = 24VDC			9. Special code:	XXXX = Letters and / or number for special design			
5. Cover version:	Nil = Standard 1 = Insulation bracket 2 = Metal bracket							

Contact Data

Contact Arrangement	1A SPST		1C SPDT (B-M)	
Contact Material	AgSnO			
Contact Current	80A, 14VDC		NO:80A, 14VDC; NC: 70A, 14VDC;	
Max. Switching Power	1120W			
Max. Switching Voltage	75VDC		Max. Switching Current:80A	
Contact Resistance or Voltage drop	< 30mOhm		Item 4.12 of IEC 61810-7	
Operation life	Electrical	10 ⁵		Item 4.30 of IEC 61810-7
	Mechanical	10 ⁷		Item 4.31 of IEC 61810-7

Note: Special high performance 24V version with contact gap >0.8mm;
Limiting continuous current at 125°C: NO/NC 15A/10A;

Coil Parameter

Model	Coil voltage VDC		Coil resistance $\Omega \pm 10\%$	Pickup voltage VDC(max)	Release voltage VDC(min) (8.3% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
Standard	12	16	80	7.8	1.2	1.8	<10	<5
	24	31	320	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.

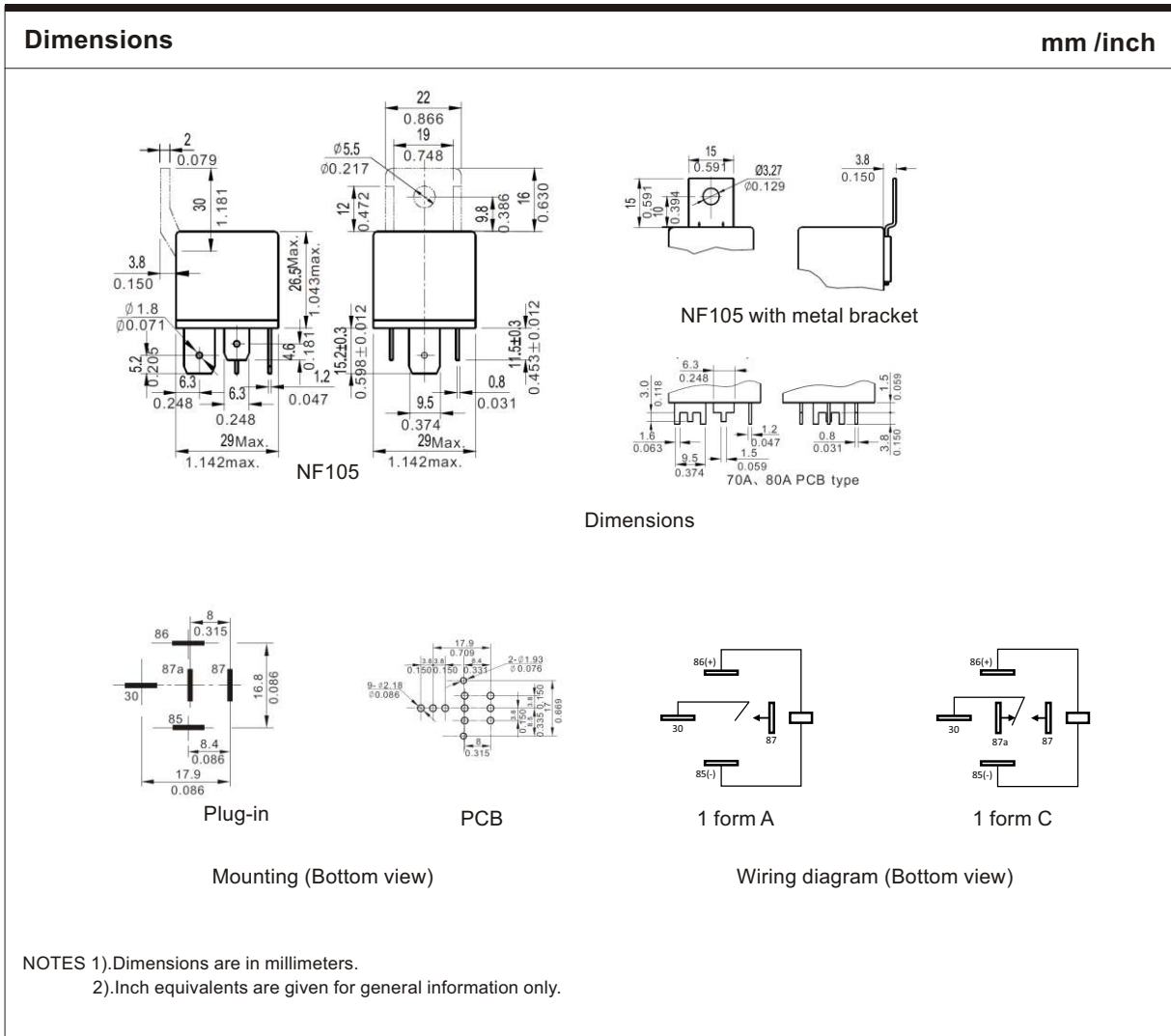
Operation condition

Insulation Resistance	100M Ω min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength		
Between contacts	50Hz 500V	Item 6 of IEC 60255-5
Between contact and coil	50Hz 1000V	Item 6 of IEC 60255-5
Shock resistance	147m/s ² 11ms	IEC 68-2-27 Test Ea
Vibration resistance	10Hz~40Hz double amplitude 1.5mm	IEC 68-2-6 Test Fc

Operation condition (continued)

Terminals strength	8N (4N PCB terminal)	IEC 68-2-21 Test Ua1
Solderability	235°C ± 2°C 3s ± 0.5s	IEC 68-2-20 Test Ta method 1
Ambient Temperature	-40°C ~ 125°C	
Relative Humidity	85% (at 40°C)	IEC 68-2-3 Test Ca
Mass	46g (standard cover) / 48g (with bracket)	
Packaging	20pcs / box; 100pcs / box; 400pcs / carton;	

Note: 1. When testing, coil terminal should be connected, if coil transient suppression is installed in relay.



Disclaimer

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of NF Forward GmbH & NF Forward USA Inc. are reserved.