# **FORWARD RELAYS**



**VDE** 40008356

**NPA** 

20.3×5.4×12.6

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## Features

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- Small size, light weight.
- Low coil power consumption 0.12W.
- PC board mounting, SIL terminal
- . Suitable for household electrical appliances, automation system, electronic equipment, instrument, meter,
- telecommunication facilities and remote control facilities.

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### **Ordering Information** NPA A S 5 DC12V 2 3 4

1 Part number: NPA;NPA2 2 Contact arrangement:A:1A 3 Enclosure: S:Sealed type NIL:Dust cover

4 Contact current: 3:3A; 5:5A 5 Coil rated voltage (V): DC:5,6,9,12,18,24

#### **Contact Data**

Contact Arrangement		angement	1A (SPSTNO)			
Contact Material		erial	Silver Alloy (Gold clad)			
	Contact Rating (resistive)		3A,5A/30VDC,250VAC;			
	Max. Switch	ing Power	150W 1250VAC	min. Load:0.1mA/0.1VDC (reference value)		
	Max. Switch	ing Voltage	110VDC 250VAC	Max.Switching Current:5A		
	Contact Res	istance & Voltage drop	$\leq$ 50m $\Omega$ (at 10mA/6V)	Item 4.12 of IEC 61810-7		
	Operational	Electrical	$1 \times 10^{5} 5 \times 10^{4} (5A)$	Item 4.30 of IEC 61810-7		
	life	Mechanical	2 × 10 <sup>7</sup>	Item 4.31 of IEC 61810-7		

CAUTION:

Relays previously tested or used above 10mA resistive at 6VDC maximum or peak AC open circuit are not recommended for subsequent use in low level applications

#### **Coil Parameter**

Dash	Coil voltage VDC		Rated	Coil	Pickup voltage	Release voltage	Coil power	Operate	Release
numbers	Rated	Max.	current mA	resistance $\Omega \pm 10\%$	VDC (max) (70%of rated voltage)	VDC (min) (5% of rated voltage)	consumption W	Time ms	Time ms
NPA-005 NPA-006 NPA-009 NPA-012 NPA-018	5 6 9 12 18	6 7.2 10.8 14.4 21.6	24 20 13.3 10 6.7	208 300 675 1200 2700	3.5 4.2 6.3 8.4 12.6	0.25 0.3 0.45 0.6 0.9	0.12	<10	≪5
NPA-024	24	28.8	5	3200	16.8	1.2	0.18	<10	<5

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 1000MΩ min (at 500VDC) Dielectric Strength Between contacts 50Hz 1000V 50Hz 2000V Surge voltage: Between contact and coil Functional:147m/s<sup>2</sup> 11ms Shock resistance Survival:980m/s<sup>2</sup> 6ms 10Hz~55Hz Functional double Vibration resistance Survival:double amplitude 3.5n Terminals strength 5N 235°C ± 2°C 3s ± 0.5s Solderability Ambient Temperature -40°C~85°C Relative Humidity 5%~85% (at 40°C) Mass 3g

#### Safety approvals

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Safety approval	U L & CUR	VDE
Load	3A.5A/250VAC,30VDC.	3A.5A/250VAC,30VDC





	Item 7 of IEC 60255-5
:4kV	Item 6 of IEC 60255-5 Item 6 and 8 of IEC 60255-5
	IEC 68-2-27 TestEa
e amplitude 2.5mm mm	IEC 68-2-6 Test Fc
	IEC 68-2-21 Test Ua1
	IEC 68-2-20 Test Ta method 1
	IEC 68-2-3 Test Ca