



28,5 x 12,5 x 10,1 RoHS compliant

# S7

c us E352915 40021923

Features	Application Examples
<ul style="list-style-type: none"> <li>● 1 pole 10A, 1 form C (1CO) or 1 form A (1NO)</li> <li>● Low profile with 12.5 height</li> <li>● 5kV / 8mm dielectric strength (between coil and contact)</li> <li>● UL insulation system: Class F</li> <li>● Accordance with IEC60335-1 Ed.5 (optional)</li> <li>● UL / CUL approved</li> </ul>	<ul style="list-style-type: none"> <li>● Heating control</li> <li>● Air conditioner, refrigerator</li> <li>● Temperature control</li> <li>● Domestic appliances</li> </ul>

Ordering Information					
<u>S7</u>	<u>001</u>	<u>A</u>	<u>24</u>	<u>W</u>	<u>XXXX</u>
1	2	3	4	5	6
1. Type:	S7		4. Coil voltage:		5 = 5VDC; 6 = 6VDC; 9 = 9VDC; 12 = 12VDC; 24 = 24VDC; 48 = 48VDC;
2. Contact configuration:	100 = 1NO (1 form A) 001 = 1CO (1 form C)		5. Protection <sub>1</sub> :		Nil = Flux tight W = Plastic sealed
3. Contact material:	A = AgNi E = AgSnO C = AgNi + Au		6. Special:		XXXX = Special letters or numbers, e.g. 0335 stands for products in accordance to IEC60335-1 (GWT)

**Note 1):** If (immersed) water cleaning is required after the relay is assembled on PCB, please contact us for suggestion about suitable parts.

### Contact Data

Contact Arrangement	1 form C (1CO) or 1 form A (1NO)
Contact Material	AgNi or AgSnO
Contact Rating	10A, 250VAC
Max. Switching Voltage	440VAC / 125VDC
Max. Switching Current	10A
Min. Switching Capacity	100mA/6VDC; AgNi + Au: 50mA/6VDC (Initial)
Contact Resistance	≤ 100mΩ (by voltage drop 6VDC/1A)
Electrical endurance	10 <sup>5</sup>
Mechanical endurance	10 <sup>7</sup>

### Coil Rating (at 23°C)

Rated Coil Voltage [VDC]	Coil Resistance R[Ω] ± 10%	Pull-in Voltage [VDC]	Drop-out Voltage [VDC]	Coil Power [mW]	Max. Applied Voltage [VDC]
5	113	Max.70% of nominal voltage (Initial)	Min.10% of nominal voltage (Initial)	220	Max.100% of nominal voltage (Initial)
6	164				
9	360				
12	620			230	
18	1295			250	
24	2350				

### Specification

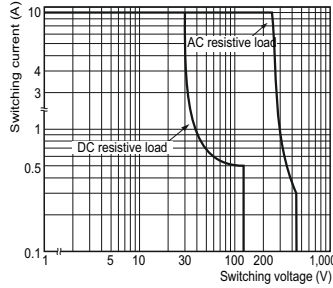
Initial Dielectric Strength	between open contacts 1000Vrms, 50/60Hz for 1 min
	between contact and coil 5000Vrms, 50/60Hz for 1 min
Environmental Protection	RTII (Flux tight) / RTIII (Sealed)
Operate Time / Release Time	Max. 10ms / Max. 5ms
Vibration Resistance (Malfunction) 10 to 55 to 10 Hz	NO: 1,65mm double amplitude
	NC: 0,8mm double amplitude (Coil de-energized)

## Specification (continued)

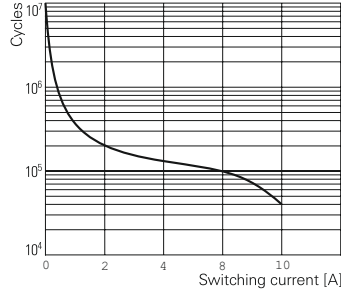
Shock Resistance (Malfunction)	Energized 98,1m/s <sup>2</sup> , De-energized 98,1m/s <sup>2</sup>
Ambient Operating Temperature	-40 to +85°C (without icing or condensation)
Weight	8g

## Engineering Data

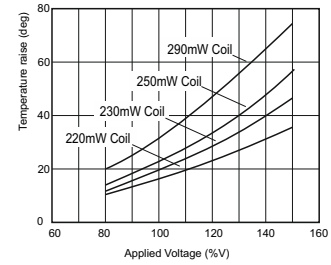
### Max. switching capacity



### Electrical Endurance (Pending)



### Coil Temperature Rise (Pending)



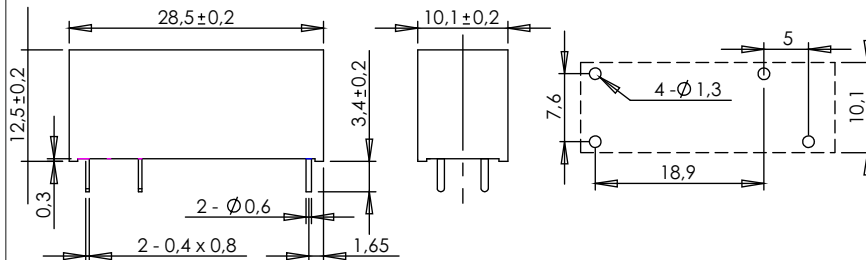
## Safety approvals

Approvals	UL File No. E352915	VDE File No. 40021923
S7	10A / 30VDC; 10A / 250VAC;	1CO : 8A / 250VAC 1NO : 10A / 250VAC

## Dimensions

mm

### S7 100A... / S7 100E... / S7 100C...

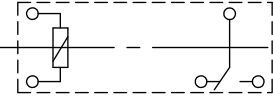
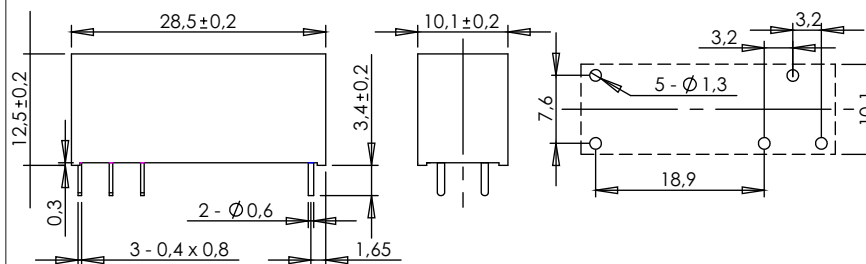


PCB Mounting Holes  
(Bottom View)  
Tolerance: ±0,3mm

Wiring Diagram



### S7 001A... / S7 001E... / S7 001C..



### 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.