



### Main

|                                              |                    |
|----------------------------------------------|--------------------|
| Commercial Status                            | Commercialised     |
| Range of product                             | Zelio Relay        |
| Series name                                  | Miniature          |
| Product or component type                    | Plug-in relay      |
| Device short name                            | RXM                |
| Contacts type and composition                | 4 C/O              |
| Control circuit voltage                      | 24 V AC, 50/60 Hz  |
| [Ithe] conventional enclosed thermal current | 3 A at -40...55 °C |
| Status LED                                   | Without            |
| Control type                                 | Pushbutton         |
| Utilisation coefficient                      | 20 %               |

### Complementary

|                                        |                                                                                                                                                                                                                                           |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shape of pin                           | Flat                                                                                                                                                                                                                                      |
| [Ui] rated insulation voltage          | 300 V conforming to UL<br>300 V conforming to CSA<br>250 V conforming to IEC                                                                                                                                                              |
| [Uimp] rated impulse withstand voltage | 2.5 kV for 1.2/50 µs                                                                                                                                                                                                                      |
| Contacts material                      | Gold plated bifurcated silver                                                                                                                                                                                                             |
| [Ie] rated operational current         | 3 A at 277 V AC conforming to UL<br>3 A at 28 V DC conforming to UL<br>1 A at 250 V AC (NC) conforming to IEC<br>1 A at 28 V DC (NC) conforming to IEC<br>2 A at 250 V AC (NO) conforming to IEC<br>2 A at 28 V DC (NO) conforming to IEC |
| Maximum switching voltage              | 250 V conforming to IEC                                                                                                                                                                                                                   |
| Resistive rated load                   | 3 A at 28 V DC<br>3 A at 250 V AC                                                                                                                                                                                                         |
| Maximum switching capacity             | 750 VA/84 W                                                                                                                                                                                                                               |
| Minimum switching capacity             | 15 mW at 3 mA, 5 V                                                                                                                                                                                                                        |
| Operating rate                         | <= 18000 cycles/hour no-load<br><= 1200 cycles/hour under load                                                                                                                                                                            |
| Mechanical durability                  | 10000000 cycles                                                                                                                                                                                                                           |
| Electrical durability                  | 100000 cycles for resistive load depending on mounting position and working environment                                                                                                                                                   |
| Average coil consumption in VA         | 1.2 at 60 Hz                                                                                                                                                                                                                              |
| Drop-out voltage threshold             | >= 0.15 Uc                                                                                                                                                                                                                                |
| Operate time                           | 20 ms                                                                                                                                                                                                                                     |
| Release time                           | 20 ms                                                                                                                                                                                                                                     |
| Average coil resistance                | 180 Ohm at 20 °C +/- 15 %                                                                                                                                                                                                                 |
| Rated operational voltage limits       | 19.2...26.4 V AC                                                                                                                                                                                                                          |
| Protection category                    | RT I                                                                                                                                                                                                                                      |
| Operating position                     | Any position                                                                                                                                                                                                                              |
| Product weight                         | 0.037 kg                                                                                                                                                                                                                                  |

## Environment

|                                       |                                                                                                                                                                                  |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dielectric strength                   | 2000 V AC between poles with basic insulation<br>2000 V AC between coil and contact with reinforced insulation<br>1300 V AC between contacts with micro disconnection insulation |
| Product certifications                | CE<br>CSA<br>GOST<br>RoHS<br>UL<br>REACH<br>Lloyd's                                                                                                                              |
| Standards                             | EN/IEC 61810-1<br>UL 508<br>CSA C22.2 No 14                                                                                                                                      |
| Ambient air temperature for storage   | -40...85 °C                                                                                                                                                                      |
| Ambient air temperature for operation | -40...55 °C                                                                                                                                                                      |
| Vibration resistance                  | 5 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles not operating)<br>3 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles in operation)                                  |
| IP degree of protection               | IP40 conforming to EN/IEC 60529                                                                                                                                                  |
| Shock resistance                      | 30 gn not operating<br>10 gn in operation                                                                                                                                        |
| Pollution degree                      | 2                                                                                                                                                                                |



Technical drawing of the 1000 Series 1/2" component. The drawing shows a side view and a top view. Dimensions are provided in both millimeters (mm) and inches (in.).

**Side View Dimensions:**

- Overall length: 7.7 mm (0.30 in.)
- Distance from front face to first hole: 40 mm (1.57 in.)
- Distance between first and second hole: 6 mm (0.23 in.)
- Distance from second hole to end: 6.3 mm (0.24 in.)
- Distance from end face to first hole: 6.3 mm (0.24 in.)
- Distance from end face to second hole: 16.3 mm (0.64 in.)
- Distance from end face to third hole: 24.3 mm (0.96 in.)

**Top View Dimensions:**

- Overall width: 27 mm (1.06 in.)
- Distance from left side to first hole: 21 mm (0.82 in.)
- Distance from left side to second hole: 21 mm (0.82 in.)
- Distance from left side to third hole: 21 mm (0.82 in.)

Technical drawing of a mechanical part with dimensions in mm and in. The drawing shows a cross-section of a part with a central rectangular feature. The dimensions are as follows:

- Top horizontal dimensions: 4.4 (0.17), 4.6 (0.18), 4.4 (0.17).
- Bottom horizontal dimensions: 2.5 (0.9), 4.4 (0.17), 2.5 (0.9).
- Bottom horizontal dimensions (total): 13.2 (0.51).

## Wiring Diagram



Symbols shown in blue correspond to Nema marking.

## Electrical Durability of Contacts

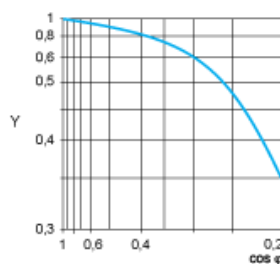
Durability (inductive load) = durability (resistive load) x reduction coefficient.

Resistive AC load



- X Switching capacity (kVA)  
Y Durability (Number of operating cycles)  
A RXM2AB...  
B RXM3AB...  
C RXM4AB...  
D RXM4GB...

Reduction coefficient for inductive AC load (depending on power factor  $\cos \phi$ )



- Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



- X Voltage DC  
Y Current DC  
A RXM2AB...  
B RXM3AB...  
C RXM4AB...  
D RXM4GB...

Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.