

# Product datasheet

Specifications



## miniature plug-in relay - Zelio RXM2L - 4 C/O - 230 V AC - 3 A - with LED

RXM4LB2P7

### Main

|                               |                                  |
|-------------------------------|----------------------------------|
| Range of product              | Harmony Electromechanical Relays |
| Series name                   | Miniature                        |
| Product or component type     | Plug-in relay                    |
| Device short name             | RXM                              |
| Coil interference suppression | Without                          |
| Utilisation coefficient       | 20 %                             |
| Sale per indivisible quantity | 10                               |

### Complementary

|                                              |                                                                                |
|----------------------------------------------|--------------------------------------------------------------------------------|
| Contacts type and composition                | 4 C/O                                                                          |
| Contact operation                            | Standard                                                                       |
| [Uc] control circuit voltage                 | 230 V AC 50/60 Hz                                                              |
| [Ithe] conventional enclosed thermal current | 3 A at -40...55 °C                                                             |
| Status LED                                   | With                                                                           |
| Control type                                 | Without push-button                                                            |
| [Ui] rated insulation voltage                | 250 V conforming to IEC                                                        |
| [Uimp] rated impulse withstand voltage       | 2.5 kV during 1.2/50 µs conforming to IEC 61810-7                              |
| Contacts material                            | Silver alloy (Ag/Ni)                                                           |
| [Ie] rated operational current               | 3 A (AC-1/DC-1) NO conforming to IEC<br>1.5 A (AC-1/DC-1) NC conforming to IEC |
| Minimum switching current                    | 10 mA                                                                          |
| Maximum switching voltage                    | 250 V AC<br>28 V DC                                                            |
| Minimum switching voltage                    | 17 V                                                                           |
| Load current                                 | 3 A at 250 V AC<br>3 A at 28 V DC                                              |
| Maximum switching capacity                   | 750 VA AC<br>84 W DC                                                           |
| Minimum switching capacity                   | 170 mW                                                                         |
| Operating rate                               | <= 1200 cycles/hour under load<br><= 18000 cycles/hour no-load                 |

|                                  |                                                                                                                                                                  |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mechanical durability            | 10000000 cycles                                                                                                                                                  |
| Electrical durability            | 100000 cycles for resistive load                                                                                                                                 |
| Average coil consumption in VA   | 1.2 AC                                                                                                                                                           |
| Drop-out voltage threshold       | >= 0.15 Uc AC                                                                                                                                                    |
| Operating time                   | 20 ms between coil de-energisation and making of the Off-delay contact<br>20 ms between coil energisation and making of the On-delay contact                     |
| Average resistance               | 16500 Ohm at 23 °C +/- 15 %                                                                                                                                      |
| Rated operational voltage limits | 184...253 V AC                                                                                                                                                   |
| Protection category              | RT I                                                                                                                                                             |
| Test levels                      | Level A group mounting                                                                                                                                           |
| Operating position               | Any position                                                                                                                                                     |
| CAD overall width                | 21 mm                                                                                                                                                            |
| CAD overall height               | 27 mm                                                                                                                                                            |
| CAD overall depth                | 46 mm                                                                                                                                                            |
| Net weight                       | 0.032 kg                                                                                                                                                         |
| Dielectric strength              | 2000 V AC between coil and contact with basic insulation<br>2000 V AC between poles with basic insulation<br>1000 V AC between contacts with micro disconnection |
| Safety reliability data          | B10d = 100000                                                                                                                                                    |

## Environment

|                                       |                                                                                                                                                                                |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | CE<br>EN/IEC 61810-1 (iss. 2)                                                                                                                                                  |
| Ambient air temperature for storage   | -40...85 °C                                                                                                                                                                    |
| Ambient air temperature for operation | -40...55 °C                                                                                                                                                                    |
| Vibration resistance                  | 3 gn, amplitude = +/- 1 mm (f = 10...50 Hz)operating conforming to EN/IEC 60068-2-6<br>6 gn, amplitude = +/- 1 mm (f = 10...50 Hz)not operating conforming to EN/IEC 60068-2-6 |
| IP degree of protection               | IP40 conforming to EN/IEC 60529                                                                                                                                                |
| Pollution degree                      | 2                                                                                                                                                                              |
| Shock resistance                      | 30 gn for not operating conforming to EN/IEC 60068-2-27<br>10 gn for in operation conforming to EN/IEC 60068-2-27                                                              |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 2.096 cm |
| Package 1 Width              | 2.757 cm |
| Package 1 Length             | 4.581 cm |
| Package 1 Weight             | 34.0 g   |
| Unit Type of Package 2       | BB1      |
| Number of Units in Package 2 | 10       |
| Package 2 Height             | 3.1 cm   |
| Package 2 Width              | 11.2 cm  |
| Package 2 Length             | 13.6 cm  |
| Package 2 Weight             | 0.361 kg |
| Unit Type of Package 3       | S02      |

|                              |           |
|------------------------------|-----------|
| Number of Units in Package 3 | 270       |
| Package 3 Height             | 15.0 cm   |
| Package 3 Width              | 30.0 cm   |
| Package 3 Length             | 40.0 cm   |
| Package 3 Weight             | 10.301 kg |

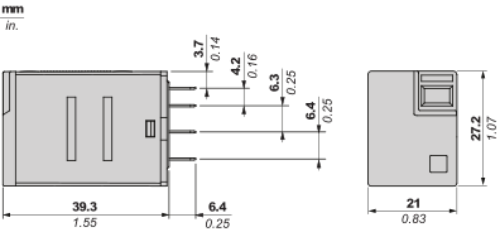
Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| REACH free of SVHC         | Yes                                                                                                                         |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                           |
| Toxic heavy metal free     | Yes                                                                                                                         |
| Mercury free               | Yes                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>                                                                                      |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                               |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

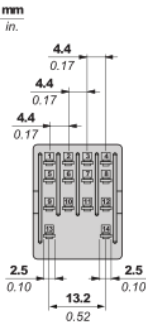
Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

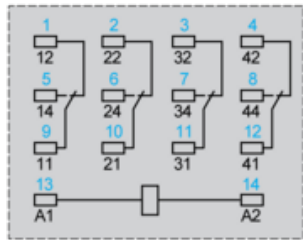
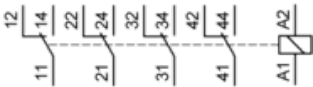
Dimensions



Pin Side View



Wiring Diagram

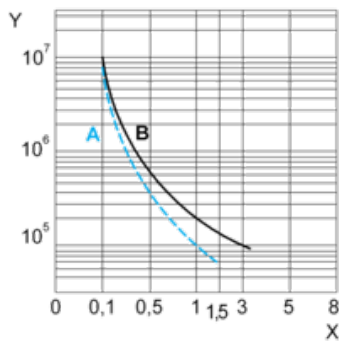


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

For 4 Poles Relay

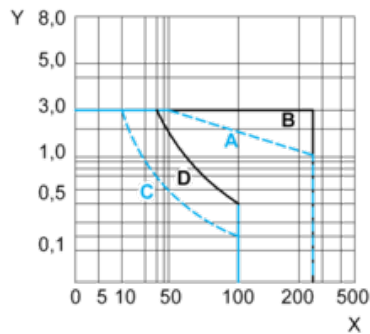


- X : Contact current (A)
- Y : Durability (Number of operating cycles)
- A : Inductive load
- B : Resistive load

**Note :** These are typical curves, actual durability depends on load, environment, duty cycle, etc.  
For inductive load, to increase relay life cycles, please add a proper load protection circuit (eg: RC protection/Varistor/free Wheeling diode -DC load only- )

Maximum Switching Capacity

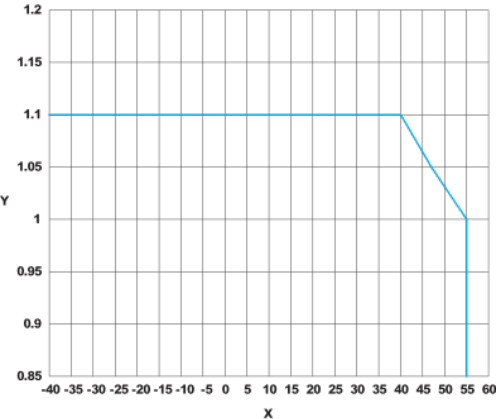
For 4 Poles Relay



- X : Contact voltage (v)
- Y : Contact current (A)
- A : Inductive AC load
- B : Resistive AC load
- C : Inductive DC load
- D : Resistive DC load

**Note :** These are typical curves, actual durability depends on load, environment, duty cycle, etc.  
For inductive load, to increase relay life cycles, please add a proper load protection circuit (eg: RC protection/Varistor/free Wheeling diode -DC load only- )

AC Coil Voltage and Operating Temperature under continuous duty



X : Operating temperature (°C)  
Y : AC coil voltage (UC)

Recommended replacement(s)