

# Zelio RXM

## Miniature relays

### Specification and selection guide



# Easiness and reliability

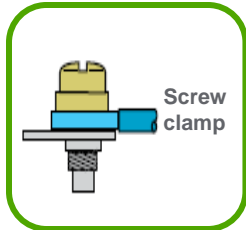
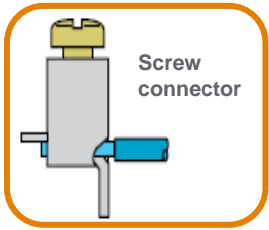
Zelio RXM industrial relay brings the right features for easy and improved control on both simple and complex automation system.

## Easy to select

- >Wide choice of numbers of contacts (2,3,4 C/O)
- >Wide control circuit voltage coverage
- >Standard or low level contacts (optional)
- >Wide range of socket types
- >Configurator available

## Convenient to use

- >One step lockable test button
- >Mechanical indicator for contact status
- >"Power On" LED for readiness

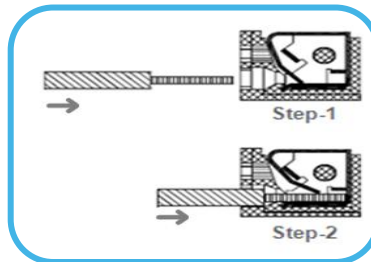


## Simple to install

- >Push n' stay spring clamp socket wiring without screw driver, up to 65% time saving
- >Sockets for both DIN-rail and panel mounting
- >Direct mounting with DIN-rail or flange adapter
- >Time-saving with bus jumper

## Designed to perform

- >Flexible add-in protection modules
- >Spring clamp socket 20KG wire pull-out force, that improves retention force on cables. No tool is required.



## Compliant to the most requested standards

Eco-Design with RoHS and REACH





Download the apps to configure your electronic and electromechanical relays

# Zelio RXM technical specifications

|   |         | Schneider   |             |                |                   |
|---|---------|---|-------------|----------------|-------------------|
|   |         | RXM2AB*   | RXM3AB*     | RXM4AB*        | RXM4GB*           |
| <b>GENERAL CHARACTERISTICS</b>          |         |   |             |                |                   |
| Standard                                |         | IEC 61810-1, UL 508, CSA C22-2 No14                                       |             |                |                   |
| Certification                           |         | CE, UL recognized, UL listed with socket, CSA, GOST, Lloyd's, ROHS, REACH |             |                |                   |
| Pollution Degree                        |         | 3   | 2           |                |                   |
| Overvoltage Category                    |         | III   |             |                |                   |
| Ambient temperature (Storage)           | °C      | -40 to 85   |             |                |                   |
| Ambient temperature (Operation)         | °C      | -40 to 55   |             |                |                   |
| Vibration resistance (in operation)     |         | 3 gn (10-150Hz / +/-1mm/5g/5cycles)                                       |             |                |                   |
| Vibration resistance (not operating)    |         | 5 gn (10-150Hz / +/-1mm/5g/5cycles)                                       |             |                |                   |
| Degree of protection                    |         | IP40  |             |                |                   |
| Shock resistance                        | gn      | 10gn (in operation)   |             |                |                   |
| Shock resistance                        |         | 30gn (not operation)  |             |                |                   |
| Protection category                     |         | RT I  |             |                |                   |
| Mounting Position                       |         | Any   |             |                |                   |
| <b>INSULATION CHARACTERISTICS</b>       |         |   |             |                |                   |
| Rated Insulation Voltage Ui (IEC 60947) | V       | 250(IEC), 300(UL, CSA)  |             |                |                   |
| Rated Impulse Withstand Voltage         | kV      | 4 (1.2/50us)  |             | 2.5 (1.2/50us) |                   |
| Dielectric_Between coil & contact       | VAC     | 2000 (reinforced)   |             |                |                   |
| Dielectric_Between poles                | VAC     | 2000 (basic)  |             |                |                   |
| Dielectric_Between contacts             | VAC     | 1300 (micro disconnection)  |             |                |                   |
| <b>CONTACT CHARACTERISTICS</b>          |         |   |             |                |                   |
| Contact material                        |         | Silver alloy  |             |                | AgAu - Bifurcated |
| Conventional thermal current <=55°C     | A       | 12  | 10          | 6              | 3                 |
| Rated operational current(IEC)_NO       | A       | 12  | 10          | 6              | 2                 |
| Rated operational current(IEC)_NC       | A       | 6   | 5           | 3              | 1                 |
| Rated operational current(UL)           | A       | 12  | 10          | 6              | 3                 |
| Switching Voltage(Maximum)              | V       | 250 VAC/VDC (IEC) / 300V (UL,CSA)   |             |                |                   |
| Nominal Load (resistive) AC             | A       | 12A /250VAC   | 10A /250VAC | 6A /250VAC     | 3A /250VAC        |
| Nominal Load (resistive) DC             | A       | 12A /28VDC  | 10A /28VDC  | 6A /28VDC      | 3A /28VDC         |
| Switching Capacity (Maximum) AC         | VA      | 3000  | 2500        | 1500           | 750               |
| Switching Capacity (Maximum) DC         | W       | 336   | 280         | 168            | 84                |
| Switching Capacity (Minimum)            | mW      | 170mW (10mA / 17V)  |             |                | 15mW (3mA / 5V)   |
| Maximum Operating Rate (No Load)        |         | 18000   |             |                |                   |
| Maximum Operating Rate (Under Load)     |         | 1200 Operating cycles/hour  |             |                |                   |
| Utilization coefficient                 |         | 0,2   |             |                |                   |
| Mechanical durability                   | Million | 10  |             |                |                   |
| Electrical durability (resistive)       | Million | 0,1   |             |                |                   |
| Electrical durability (inductive)       | Million | See curves below  |             |                |                   |
| <b>COIL CHARACTERISTICS</b>             |         |   |             |                |                   |
| Average Consumption (AC)                | VA      | 0,9   |             |                |                   |
| Average Consumption (DC)                | W       | 0,9   |             |                |                   |
| Drop out Voltage Threshold (AC)         |         | >=0.15Uc  |             |                |                   |
| Drop out Voltage Threshold (DC)         |         | >=0.10Uc  |             |                |                   |
| Operating Voltage limits                | V       | 0.8~1.1Uc   |             |                |                   |
| Coil Insulation                         |         | Class F   |             |                |                   |
| Operating time                          | mS      | 20 max  |             |                |                   |
| Release time                            | mS      | 20max (DC); 35max (AC)  |             |                |                   |
| Control Voltage                         | DC      | 12/24/48/60/110/125/220   |             |                |                   |
|   | AC      | 24/48/120/230/240   |             |                |                   |
| Coil resistance                         |         | refer to datasheet  |             |                |                   |

# Zelio RXM selection guide

## Relays

| Function    |           | Miniature Relay (RXM) |             |            |                                | Timing relay (REXL)  |   |
|-------------|-----------|-----------------------|-------------|------------|--------------------------------|--|---|
|             |           | Standard              |             |            | Low level (bifurcated contact) | Delay on fuction - 0.1s to 100h  |   |
|             |           | 2 C/O - 12A           | 3 C/O - 10A | 4 C/O - 6A | 4 C/O - 3A                     |  |   |
| Output      |           |                       |             |            |                                | 2 relay outputs -5A  | 4 relay outputs -5A   |
| Without LED | 12 VDC    | RXM2AB1JD             | RXM3AB1JD   | RXM4AB1JD  | RXM4GB1JD                      |  |  |
|             | 24 VDC    | RXM2AB1BD             | RXM3AB1BD   | RXM4AB1BD  | RXM4GB1BD                      |  |   |
|             | 48 VDC    | RXM2AB1ED             | RXM3AB1ED   | RXM4AB1ED  | RXM4GB1ED                      |  |   |
|             | 110 VDC   | RXM2AB1FD             | RXM3AB1FD   | RXM4AB1FD  | RXM4GB1FD                      |  |   |
|             | 220 VDC   | -                     | -           | RXM4AB1MD  | -                              |  |   |
|             | 24 VAC    | RXM2AB1B7             | RXM3AB1B7   | RXM4AB1B7  | RXM4GB1B7                      |  |   |
|             | 48 VAC    | RXM2AB1E7             | RXM3AB1E7   | RXM4AB1E7  | RXM4GB1E7                      |  |   |
|             | 120 VAC   | RXM2AB1F7             | RXM3AB1F7   | RXM4AB1F7  | RXM4GB1F7                      |  |   |
|             | 230 VAC   | RXM2AB1P7             | RXM3AB1P7   | RXM4AB1P7  | RXM4GB1P7                      |  |   |
|             | 240 VAC   | -                     | -           | RXM4AB1U7  | -                              |  |   |
| With LED    | 12 VDC    | RXM2AB2JD             | RXM3AB2JD   | RXM4AB2JD  | RXM4GB2JD                      | REXL2TMJD  | REXL4TMJD   |
|             | 24 VDC    | RXM2AB2BD             | RXM3AB2BD   | RXM4AB2BD  | RXM4GB2BD                      | REXL2TMBD  | REXL4TMBD   |
|             | 48 VDC    | RXM2AB2ED             | RXM3AB2ED   | RXM4AB2ED  | RXM4GB2ED                      | -  | -   |
|             | 60 VDC    | -                     | -           | -          | RXM4GB2ND                      | -  | -   |
|             | 110 VDC   | RXM2AB2FD             | RXM3AB2FD   | RXM4AB2FD  | RXM4GB2FD                      | -  | -   |
|             | 125 VDC   | -                     | -           | RXM4AB2GD  | RXM4GB2GD                      | -  | -   |
|             | 220 VDC   | -                     | -           | -          | RXM4GB2MD                      | -  | -   |
|             | 24 VAC    | RXM2AB2B7             | RXM3AB2B7   | RXM4AB2B7  | RXM4GB2B7                      | REXL2TMB7  | REXL4TMB7   |
|             | 48 VAC    | RXM2AB2E7             | RXM3AB2E7   | RXM4AB2E7  | RXM4GB2E7                      | -  | -   |
|             | 120 VAC   | RXM2AB2F7             | RXM3AB2F7   | RXM4AB2F7  | RXM4GB2F7                      | REXL2TMF7  | REXL4TMF7   |
| 230 VAC     | RXM2AB2P7 | RXM3AB2P7             | RXM4AB2P7   | RXM4GB2P7  | REXL2TMP7                      | REXL4TMP7  |   |
| 240 VAC     | -         | -                     | -           | RXM4GB2U7  | -                              | -  |   |

Control V

\*REXL timing relay is from "Zelio Time Relay" family, for detail please refer to Zelio Time catalog

## Sockets

| For relays                              | Contact terminal arrangement | Connection                | Reference  |
|---|------------------------------|---------------------------|------------|
| RXM2*, Timing relay REXL2*              | Separate                     | Screw connector           | RXZE2S108M |
| RXM3*                                   | Separate                     | Screw connector           | RXZE2S111M |
| RXM4*, Timing relay REXL4*              | Separate                     | Screw connector           | RXZE2S114M |
| RXM2*,RXM4*, Timing relay REXL2*,REXL4* | Separate                     | Push n' Stay Spring clamp | RXZE2S114S |
| RXM2*,RXM4*, Timing relay REXL2*,REXL4* | Mixed                        | Screw clamp               | RXZE2M114  |
| RXM2*,RXM4*, Timing relay REXL2*,REXL4* | Mixed                        | Screw connector           | RXZE2M114M |

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## Protection modules

| Function   | Control voltage | Reference |
|------------|-----------------|-----------|
| Diode      | 6...250VDC      | RXM040W   |
| RC circuit | 24...60VAC      | RXM041BN7 |
|            | 110...240VAC    | RXM041FU7 |
| Varistor   | 6...24V AC/DC   | RXM021RB  |
|            | 24...60 AC/DC   | RXM021BN  |
|            | 110...240 AC/DC | RXM021FP  |



## Accessories

| Function  | Reference |
|---|-----------|
| Metal maintaining clamp                                   | RXZ400    |
| Plastic maintaining clamp                                 | RXZR335   |
| Bus jumper 2-pole (Ith:5A), for socket RXZE2S1**M         | RXZS2     |
| Mounting adapter for Din-rails                            | RXZE2DA   |
| Mounting adapter with fixing lugs for panel               | RXZE2FA   |
| Clip-in legends for all RXM relays (sheet of 108 legends) | RXZL520   |
| Clip-in legends for all RXM sockets except RXZE2M14       | RXZL420   |

