| Main |  | - |
| :---: | :---: | :---: |
| Range of product | Zelio Relay |  |
| Series name | Power | ¢ |
| Product or component type | Plug-in relay |  |
| Device short name | RPM |  |
| Contacts type and composition | $1 \mathrm{C} / \mathrm{O}$ | $\stackrel{4}{4}$ |
| [Uc] control circuit voltage | 48 V DC |  |
| [Ithe] conventional enclosed thermal current | 15 A at $-40 \ldots 55^{\circ} \mathrm{C}$ | - |
| Status LED | Without | 年 |
| Control type | Lockable test button |  |
| Utilisation coefficient | 20 \% | , |
| Complementary |  | 흠 |
| Shape of pin | Flat | - |
| [Ui] rated insulation voltage | 250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL | - |
| [Uimp] rated impulse withstand voltage | 4 kV during 1.2/50 $\mu \mathrm{s}$ | \% |
| Contacts material | AgNi |  |
| [le] rated operational current | 15 A at $277 \mathrm{~V}(\mathrm{AC})$ conforming to UL 15 A at 28 V (DC) conforming to UL 15 A at 250 V (AC) NO conforming to IEC 15 A at 28 V (DC) NO conforming to IEC 7.5 A at $250 \mathrm{~V}(\mathrm{AC}) \mathrm{NC}$ conforming to IEC 7.5 A at 28 V (DC) NC conforming to IEC | ¢ |
| Maximum switching voltage | 250 V conforming to IEC |  |
| Resistive load current | $\begin{aligned} & 15 \mathrm{~A} \text { at } 250 \mathrm{~V} \mathrm{AC} \\ & 15 \mathrm{~A} \text { at } 28 \mathrm{VDC} \end{aligned}$ | d |
| Maximum switching capacity | $\begin{aligned} & 3750 \mathrm{VA} \\ & 420 \mathrm{~W} \end{aligned}$ | + |


| Minimum switching capacity | 170 mW at $10 \mathrm{~mA}, 17 \mathrm{~V}$ |
| :--- | :--- |
| 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 | 1.1 W |
| Drop-out voltage threshold | $>=0.1 \mathrm{Uc}$ DC |
| Operate time | 20 ms at nominal voltage |
| Release time | 20 ms at nominal voltage |
| Average coil resistance | 1800 Ohm at $20^{\circ} \mathrm{C}+/-10 \%$ |
| Rated operational voltage limits | $38.4 \ldots . .52 .8 \mathrm{~V}$ DC |
| Protection category | RT I |
| Test levels | Level A group mounting |
| Operating position | Any position |
| Pollution degree | 3 |
| Safety reliability data | B10d $=100000$ |
| Net weight | 0.026 kg |
| Device presentation | Complete product |

Environment
\(\left.\begin{array}{ll}\hline Dielectric strength \& 1500 \mathrm{~V} AC between contacts with micro disconnection \\

\& 2000 \mathrm{~V} AC between coil and contact with reinforced\end{array}\right]\)|  | UL 508 |
| :--- | :--- |
|  | EN/IEC 61810-1 |
|  | CSA C22.2 No 14 |
| Product certifications | EAC |
|  | REACH |
|  | CSA |
|  | UL |
|  | RoHS |
| Ambient air temperature for storage | $-40 \ldots 85^{\circ} \mathrm{C}$ |
| Ambient air temperature for operation | $-40 \ldots 55^{\circ} \mathrm{C}$ |
| Vibration resistance | 3 gn, amplitude $=+/-1 \mathrm{~mm}(\mathrm{f}=10 \ldots 150 \mathrm{~Hz}) 5$ cycles in operation |
|  | 5 gn, amplitude $=+/-1 \mathrm{~mm}(\mathrm{f}=10 \ldots 150 \mathrm{~Hz}) 5$ cycles not operating |
| Degree of protection (Housing only) | $\mathrm{IP40}$ conforming to EN/IEC 60529 |
| Shock resistance | 15 gn for in operation |
|  | 30 gn for not operating |

## Packing Units

| Package 1 Weight | 0.026 kg |
| :--- | :--- |
| Package 1 Height | 0.190 dm |
| Package 1 width | 0.280 dm |
| Package 1 Length | 0.470 dm |

Offer Sustainability

| Sustainable offer status | Green Premium product |
| :--- | :--- |
| REACh free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) <br>  <br> EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |



Pin Side View
$\frac{\mathrm{mm}}{\mathrm{in} .}$

$\frac{2.6}{0.1} \cdot \ldots \frac{2.6}{0.1}$


Symbols shown in blue correspond to Nema marking.

## Performance Curves

Electrical Durability of Contacts

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

$X$
Switching capacity (kVA)
$\mathrm{Y} \quad$ Durability (Number of operating cycles)

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


Y Reduction coefficient (A)

## Maximum switching capacity on resistive DC load


$\begin{array}{ll}\mathrm{X} & \text { Voltage DC } \\ \mathrm{Y} & \text { Current DC }\end{array}$
Note : These are typical curves, actual durability depends on load, environment, duty cycle, etc.

