

## Product datasheet

### Characteristics

## RPM42JD

power plug-in relay - Zelio RPM - 4 C/O - 12 V DC - 15 A - with LED



### Main

Range of product	Zelio Relay
Series name	Power
Product or component type	Plug-in relay
Device short name	RPM
Contacts type and composition	4 C/O
[Uc] control circuit voltage	12 V DC
[Ithe] conventional enclosed thermal current	15 A at -40...55 °C
Status LED	With
Control type	Lockable test button
Utilisation coefficient	20 %

### Complementary

Shape of pin	Flat
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to UL 300 V conforming to CSA
[Uimp] rated impulse withstand voltage	4 kV for 1.2/50 µs
Contacts material	AgNi
[Ie] rated operational current	15 A at 277 V AC conforming to UL 7.5 A at 28 V DC (NC) conforming to IEC 15 A at 250 V AC (NO) conforming to IEC 7.5 A at 250 V AC (NC) conforming to IEC 15 A at 28 V DC (NO) conforming to IEC 15 A at 28 V DC conforming to UL
Maximum switching voltage	250 V conforming to IEC
Load current	15 A at 250 V AC 15 A at 28 V DC
Maximum switching capacity	3750 VA 420 W
Minimum switching capacity	170 mW at 10 mA, 17 V
Operating rate	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load
Mechanical durability	10000000 cycles
Electrical durability	100000 cycles for resistive load
Average coil consumption	1.6 W
Drop-out voltage threshold	>= 0.1 Uc DC
Operating time	20 ms at nominal voltage
Reset time	20 ms at nominal voltage
Average resistance	75.8 Ohm +/- 10 % at 20 °C
Rated operational voltage limits	9.6...13.2 V DC
Protection category	RT I
Operating position	Any position
Safety reliability data	B10d = 100000
Product weight	0.071 kg
Device presentation	Complete product

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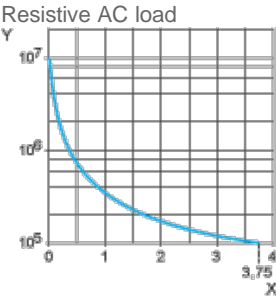
Environment	
dielectric strength	2000 V AC between coil and contact with reinforced insulation 2000 V AC between poles with basic insulation 1500 V AC between contacts with micro disconnection insulation
standards	EN/IEC 61810-1 UL 508 CSA C22.2 No 14
product certifications	CSA RoHS UL REACH EAC
ambient air temperature for storage	-40...85 °C
ambient air temperature for operation	-40...55 °C
vibration resistance	3 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles in operation) 5 gn (f = 10...150 Hz), amplitude +/- 1 mm (on 5 cycles not operating)
IP degree of protection	IP40 conforming to EN/IEC 60529
shock resistance	30 gn not operating 15 gn in operation
pollution degree	3

Warranty period	18 months
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Technical drawings of the Pin Side View. The drawing includes a side view and a top view. The side view shows a rectangular component with a central slot and two side slots. Dimensions are given in mm and in. The top view shows the component's footprint with dimensions 41 mm (1.61 in) by 27 mm (1.06 in).

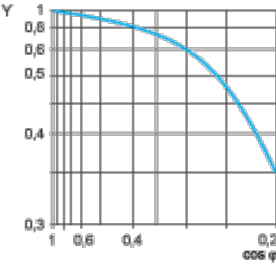
## Electrical Durability of Contacts

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



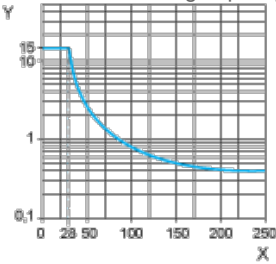
X Switching capacity (kVA)  
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor cos φ)



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC  
Y Current DC

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