

Product datasheet

Specifications



power plug-in relay - Zelio RPM - 3 C/O - 24 V AC - 15 A

RPM31B7

⚠ Discontinued on: 30 Jun 2023

⚠ Discontinued

Main

Range Of Product	Harmony Electromechanical Relays
Series Name	Power
Product Or Component Type	Plug-in relay
Device Short Name	RPM
Contacts Type And Composition	3 C/O
[Uc] Control Circuit Voltage	24 V AC 50/60 Hz
[Ithe] Conventional Enclosed Thermal Current	15 A at -40...55 °C
Status Led	Without
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 CSA 300 V conforming to UL
[Uimp] Rated Impulse Withstand Voltage	4 kV during 1.2/50 µs
Contacts Material	AgNi
[Ie] Rated Operational Current	15 A at 277 V (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 V (AC) 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	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	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
Mechanical Durability	10000000 cycles
Electrical Durability	100000 cycles for resistive load
Average Coil Consumption In Va	1.7 at 60 Hz

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Drop-Out Voltage Threshold	>= 0.15 Uc AC
Operate Time	20 ms at nominal voltage
Release Time	20 ms at nominal voltage
Average Coil Resistance	110 Ohm at 20 °C +/- 15 %
Rated Operational Voltage Limits	19.2...26.4 V AC
Protection Category	RT I
Test Levels	Level A group mounting
Operating Position	Any position
Pollution Degree	3
Safety Reliability Data	B10d = 100000
Net Weight	0.054 kg
Device Presentation	Complete product

Environment

Dielectric Strength	1500 V AC between contacts with micro disconnection 2000 V AC between coil and contact with reinforced 2000 V AC between poles with basic
Standards	UL 508 EN/IEC 61810-1 CSA C22.2 No 14
Product Certifications	UL CSA EAC
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...150 Hz)5 cycles in operation 5 gn, amplitude = +/- 1 mm (f = 10...150 Hz)5 cycles not operating
Degree Of Protection (Housing Only)	IP40 conforming to EN/IEC 60529
Shock Resistance	15 gn for in operation 30 gn for not operating

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3 cm
Package 1 Width	3.3 cm
Package 1 Length	5 cm
Package 1 Weight	58 g
Unit Type Of Package 2	BB1
Number Of Units In Package 2	10
Package 2 Height	3.1 cm
Package 2 Width	10.4 cm
Package 2 Length	17.5 cm
Package 2 Weight	582 g
Unit Type Of Package 3	S01

Number Of Units In Package 3	80
Package 3 Height	15 cm
Package 3 Width	15 cm
Package 3 Length	40 cm
Package 3 Weight	4.881 kg

Contractual warranty

Warranty	12 months
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Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

[Learn more >](#)



Transparency

Well-being performance

 Reach Free Of Svhc

Reach Regulation

[REACH Declaration](#)

Eu Rohs Directive

Pro-active compliance (Product out of EU RoHS legal scope)

[EU RoHS Declaration](#)

China Rohs Regulation

[China RoHS declaration](#)

Environmental Disclosure

[Product Environmental Profile](#)

Weee

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile

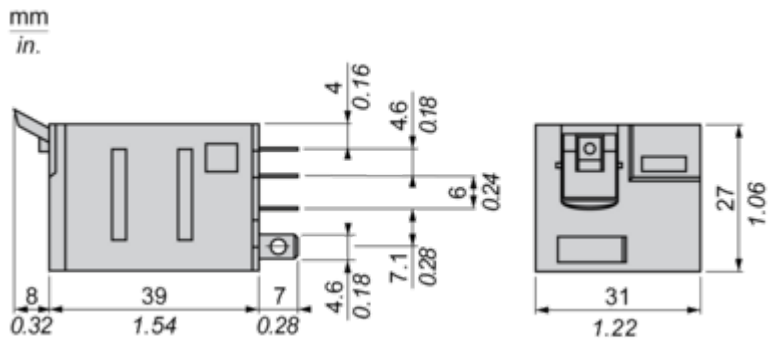
No need of specific recycling operations

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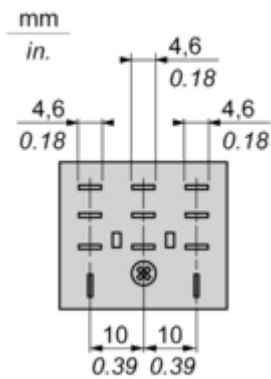
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Dimensions Drawings

Dimensions

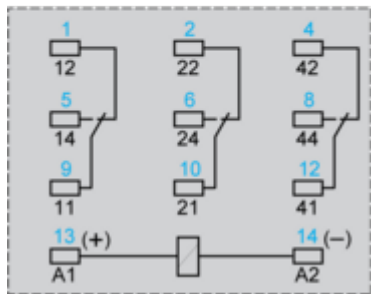
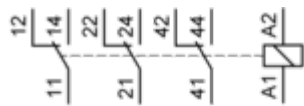


Pin Side View



Connections and Schema

Wiring Diagram



Symbols shown in blue correspond to Nema marking.

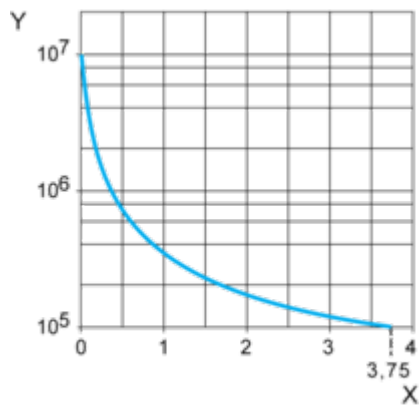
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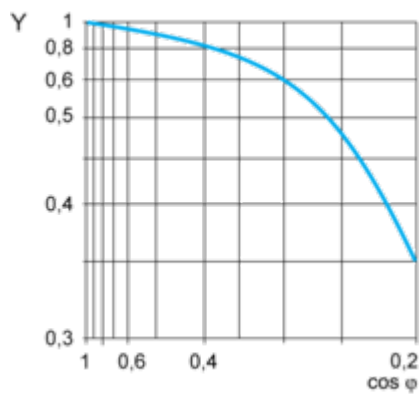
Performance Curves

Electrical Durability of Contacts

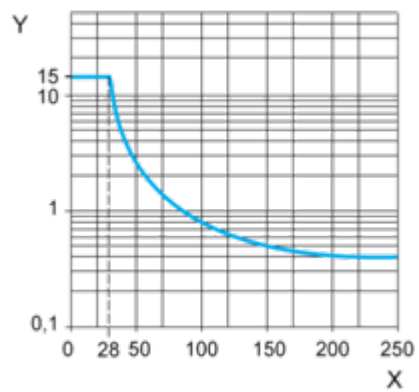
Durability (inductive load) = durability (resistive load) x reduction coefficient.
Resistive AC load



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