

Product data sheet

Specifications



power plug in relay, Harmony Electromechanical Relays, 15A, 4CO, with LED, with lockable test button, 24V AC

RPM42B7

Main

| | |
|--|----------------------------------|
| Range of product | Harmony Electromechanical Relays |
| Series name | RPM series |
| Product or component type | Plug-in relay |
| Contacts type and composition | 4 C/O |
| Relay type | Power relay |
| status LED | With |
| [Uc] control circuit voltage | 24 V AC 50/60 Hz |
| Minimum switching capacity | 170 mW at 10 mA, 17 V |
| Release time | 20 ms at nominal voltage |
| Ambient air temperature for operation | -40...55 °C |
| [Ithe] conventional enclosed thermal current | 15 A at -40...55 °C |

Complementary

| | |
|-------------------------------------|---|
| Control type | Lockable test button |
| [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 |
| Degree of protection (Housing only) | IP40 conforming to IEC 60529 |
| Rated operational voltage limits | 19.2...26.4 V AC |
| [Ui] rated insulation voltage | 250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL |
| Maximum switching voltage | 250 V conforming to IEC |
| Drop-out voltage threshold | >= 0.15 Uc AC |
| Maximum switching capacity | 3750 VA 420 W |
| Mechanical durability | 1000000 cycles |
| Electrical durability | 100000 cycles for resistive load |
| Safety reliability data | B10d = 100000 |
| Operating rate | <= 1200 cycles/hour under load <= 18000 cycles/hour no-load |
| Utilisation coefficient | 20 % |

| | |
|---|---|
| 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 |
| [Uimp] rated impulse withstand voltage | 4 kV during 1.2/50 μ s |
| Protection category | RT I |
| Mounting support | Plug-in |
| Operating position | Any position |
| Test levels | Level A group mounting |
| Device presentation | Complete product |
| Contacts material | AgNi |
| Shape of pin | Flat (faston type) |
| Net weight | 0.071 kg |

Environment

| | |
|--|---|
| Average coil consumption in VA | 2.5 at 60 Hz |
| Pollution degree | 3 |
| Standards | IEC 61810-1 CSA C22.2 No 14 UL 508 |
| Product certifications | CSA EAC UL |
| Ambient air temperature for storage | -40...85 °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 |
| 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 | 2.500 cm |
| Package 1 Width | 4.000 cm |
| Package 1 Length | 4.500 cm |
| Package 1 Weight | 71.000 g |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 10 |
| Package 2 Height | 3.000 cm |
| Package 2 Width | 10.000 cm |
| Package 2 Length | 22.500 cm |
| Package 2 Weight | 757.000 g |
| Unit Type of Package 3 | S02 |
| Number of Units in Package 3 | 120 |
| Package 3 Height | 15.000 cm |
| Package 3 Width | 30.000 cm |

Package 3 Length 40.000 cm

Package 3 Weight 9.328 kg

Contractual warranty

Warranty 18 months



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

Total lifecycle Carbon footprint 34

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

California proposition 65

WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Use Again

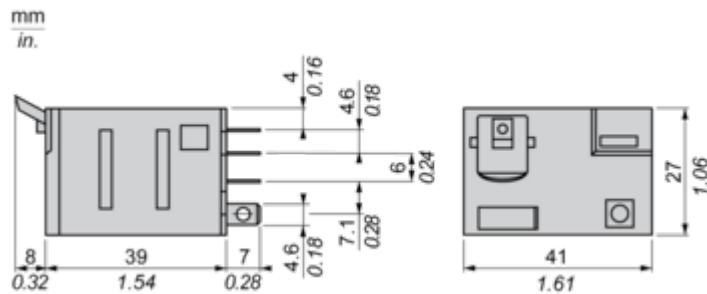
Repack and remanufacture

End of life manual availability No need of specific recycling operations

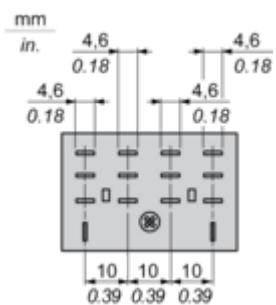
Take-back No

Dimensions Drawings

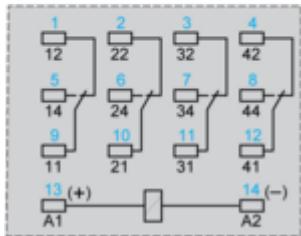
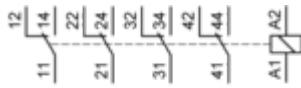
Dimensions



Pin Side View



Connections and Schema

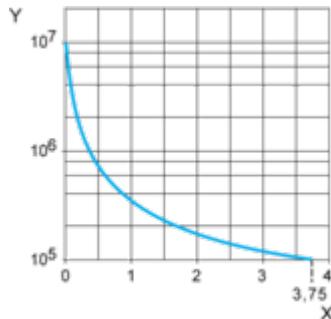
Wiring Diagram

Symbols shown in blue correspond to Nema marking.

Performance Curves

Electrical Durability of Contacts

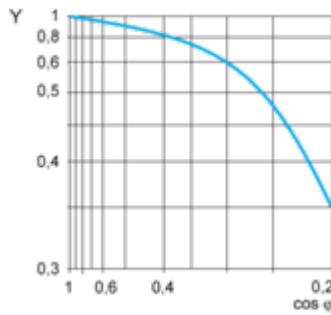
Durability (inductive load) = durability (resistive load) x reduction coefficient.
Resistive AC load



X Switching capacity (kVA)

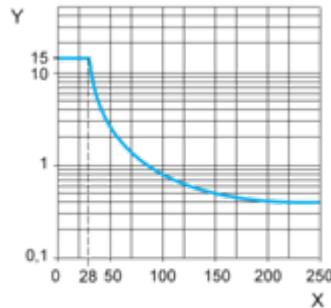
Y Durability (Number of operating cycles)

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



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC

Y Current DC

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

Technical Illustration

Dimensions

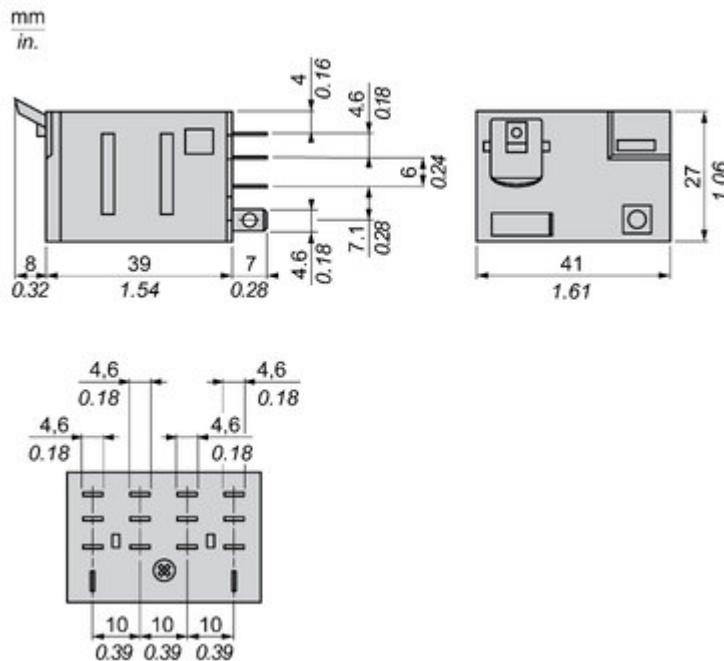


Image of product / Alternate images

Alternative





