

# Product data sheet

Specifications



plug-in relay, Harmony  
electromechanical relays, 15A, 4CO,  
with LED, lockable test button, 48V  
DC

RPM42ED

! To be discontinued

! To be discontinued on: Sep 30, 2025

## 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	4 C/O
status LED	With
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
[I <sub>th</sub> ] conventional enclosed thermal current	15 A at -40...55 °C

## Complementary

[U <sub>c</sub> ] control circuit voltage	48 V DC
Control type	Lockable test button
[I <sub>e</sub> ] 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	38.4...52.8 V DC
[U <sub>i</sub> ] 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	$\geq 0.1 U_c$ DC
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	$\leq 1200$ cycles/hour under load $\leq 18000$ 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 µs
Protection category	RT I
Operating position	Any position
Test levels	Level A group mounting
Device presentation	Complete product
Contacts material	AgNi
Shape of pin	Flat
Product weight	0.071 kg

## Environment

Pollution degree	3
Standards	CSA C22.2 No 14 IEC 61810-1 UL 508
Product certifications	CSA UL EAC
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	2.700 cm
Package 1 Width	4.000 cm
Package 1 Length	4.700 cm
Package 1 Weight	71.200 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3.100 cm
Package 2 Width	10.500 cm
Package 2 Length	22.600 cm
Package 2 Weight	759.000 g
Unit Type of Package 3	S01
Number of Units in Package 3	40
Package 3 Height	15.000 cm
Package 3 Width	15.000 cm
Package 3 Length	40.000 cm

---

Package 3 Weight 3.347 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	27
----------------------------------	----

## 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](http://www.P65Warnings.ca.gov)

## Use Again

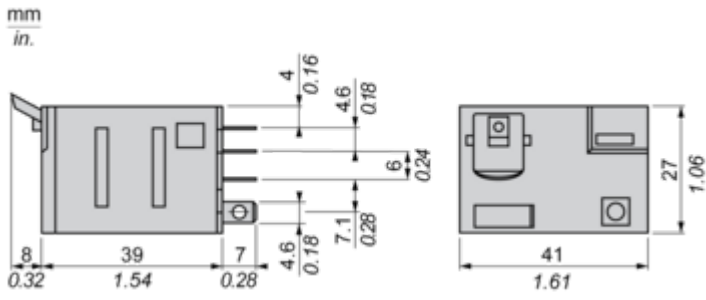
### Repack and remanufacture

End of life manual availability	No need of specific recycling operations
---------------------------------	--

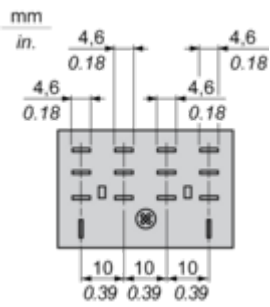
Dimensions Drawings

Dimensions

---



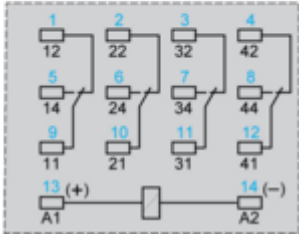
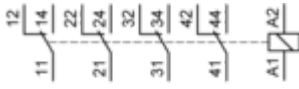
Pin Side View



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 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.

Technical Illustration

Dimensions

---

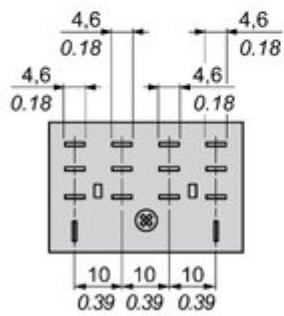
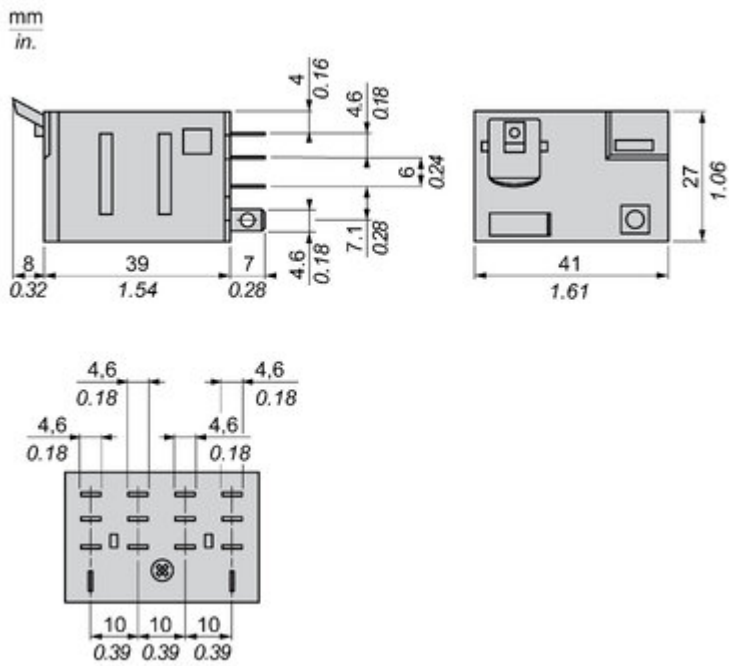


Image of product / Alternate images

Alternative

---

