

# Product data sheet

Specifications



## Power plug in relay, Harmony, 15A, 4CO, lockable test button, 12V DC

RPM41JD

! Discontinued on: 05 July 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	4 C/O
[Uc] control circuit voltage	12 V DC
[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

<b>Electrical durability</b>	100000 cycles for resistive load
<b>Average coil consumption</b>	1.6 W
<b>Drop-out voltage threshold</b>	>= 0.1 U <sub>c</sub> DC
<b>Operate time</b>	20 ms at nominal voltage
<b>Release time</b>	20 ms at nominal voltage
<b>Average coil resistance</b>	75.8 Ohm at 20 °C +/- 10 %
<b>Rated operational voltage limits</b>	9.6...13.2 V DC
<b>Protection category</b>	RT I
<b>Test levels</b>	Level A group mounting
<b>Operating position</b>	Any position
<b>Pollution degree</b>	3
<b>Safety reliability data</b>	B10d = 100000
<b>Product weight</b>	0.071 kg
<b>Device presentation</b>	Complete product

## Environment

<b>Dielectric strength</b>	1500 V AC between contacts with micro disconnection 2000 V AC between coil and contact with reinforced 2000 V AC between poles with basic
<b>Standards</b>	EN/IEC 61810-1 CSA C22.2 No 14 UL 508
<b>Product certifications</b>	EAC CSA UL
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Ambient air temperature for operation</b>	-40...55 °C
<b>Vibration resistance</b>	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
<b>Degree of protection (Housing only)</b>	IP40 conforming to EN/IEC 60529
<b>Shock resistance</b>	15 gn for in operation 30 gn for not operating

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	4.7 cm
<b>Package 1 Width</b>	4.0 cm
<b>Package 1 Length</b>	2.8 cm
<b>Package 1 Weight</b>	76.0 g

## Offer Sustainability

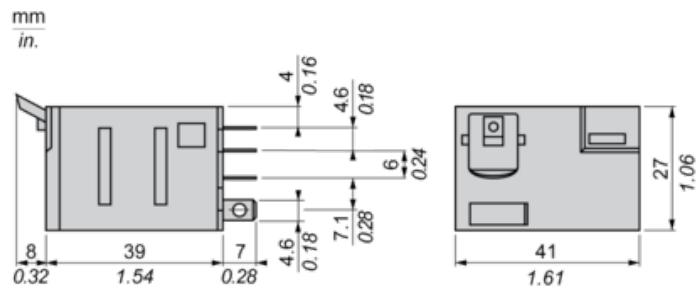
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>

<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

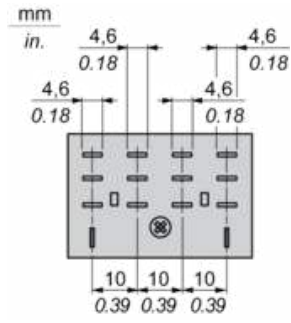
## Contractual warranty

<b>Warranty</b>	18 months
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**Dimensions**

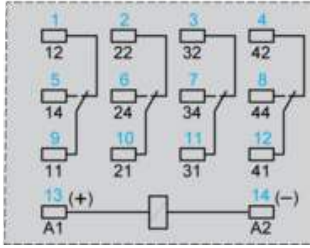
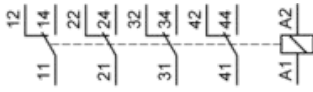


Pin Side View



## Wiring Diagram

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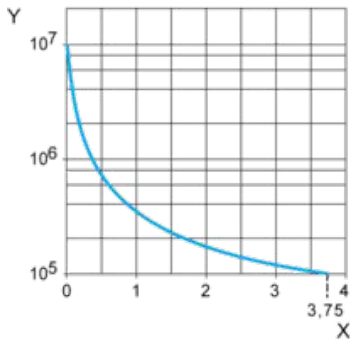
Symbols shown in blue correspond to Nema marking.

**Electrical Durability of Contacts**

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

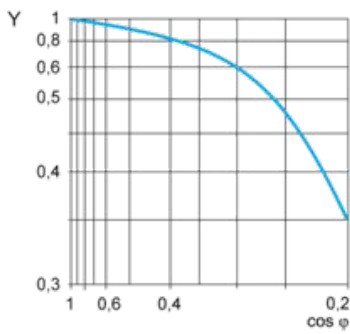
Resistive AC load



X Switching capacity (kVA)

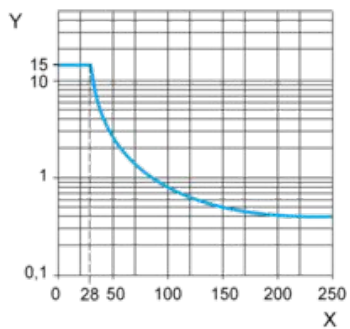
Y Durability (Number of operating cycles)

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.

**Recommended replacement(s)**