Product datasheet

Specifications



power plug-in relay - HARMONY RPM - 4 C/O - 230 V AC - 15 A - with LED

RPM42P7

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	230 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	184...253 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	10000000 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 %

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

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
Mounting support	DIN rail
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	UL 508 IEC 61810-1 CSA C22.2 No 14
Product certifications	EAC CSA 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	4.7 cm
Package 1 Width	4 cm
Package 1 Length	2.8 cm
Package 1 Weight	76 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	3 cm
Package 2 Width	10.5 cm
Package 2 Length	22.5 cm
Package 2 Weight	769 g
Unit Type of Package 3	S02
Number of Units in Package 3	120
Package 3 Height	15 cm
Package 3 Width	30 cm

Package 3 Length	40 cm
Package 3 Weight	9.746 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

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	**57**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Packaging

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)**
REACh Regulation	**REACh Declaration**

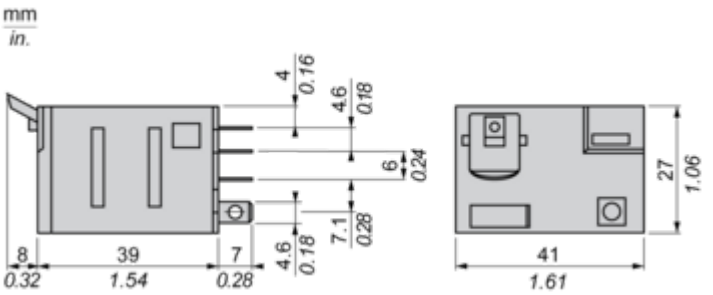
Use Again

Repack and remanufacture

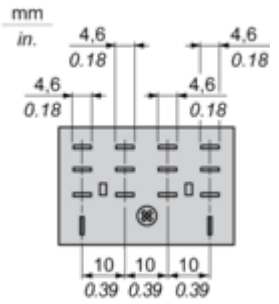
Circularity Profile	**No need of specific recycling operations**
Take-back	**No**

Dimensions Drawings

Dimensions

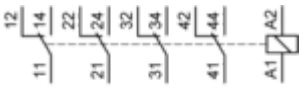


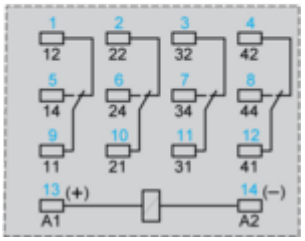
Pin Side View



Connections and Schema

Wiring Diagram



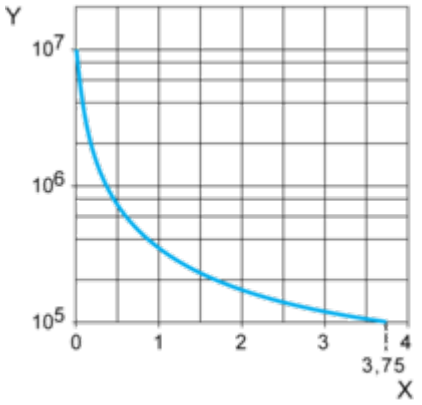


Symbols shown in blue correspond to Nema marking.

Performance Curves

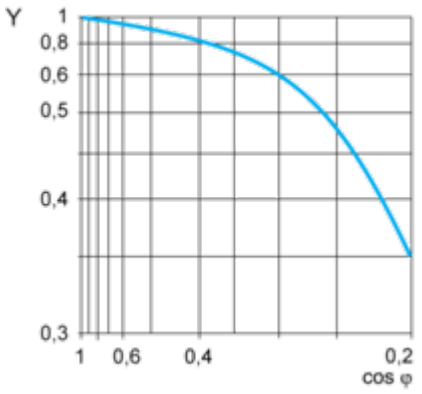
Electrical Durability of Contacts

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



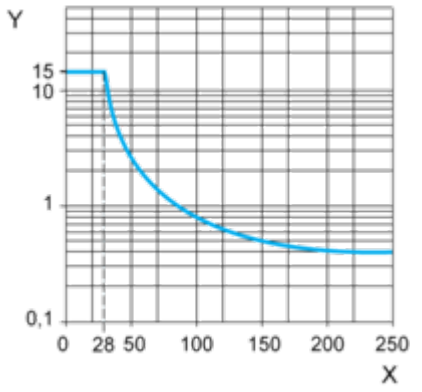
X Switching capacity (kVA)
Y Durability (Number of operating cycles)

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

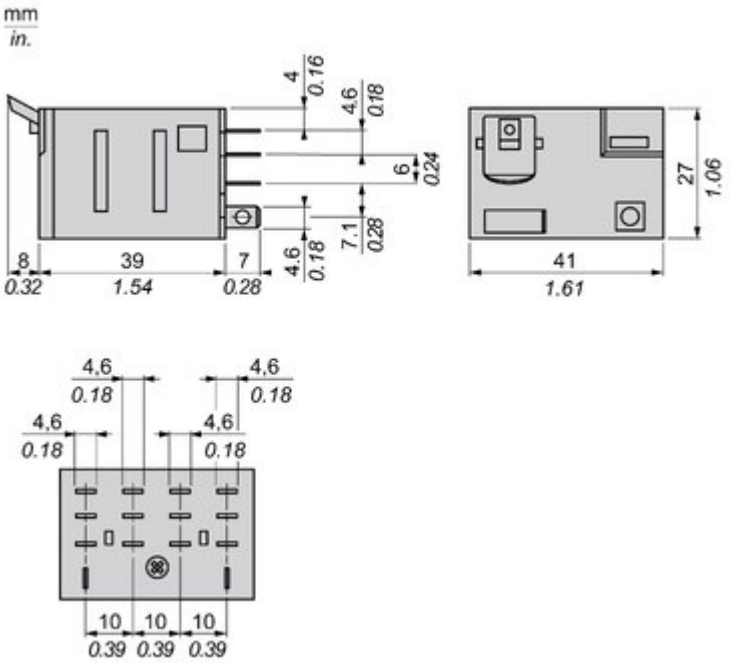


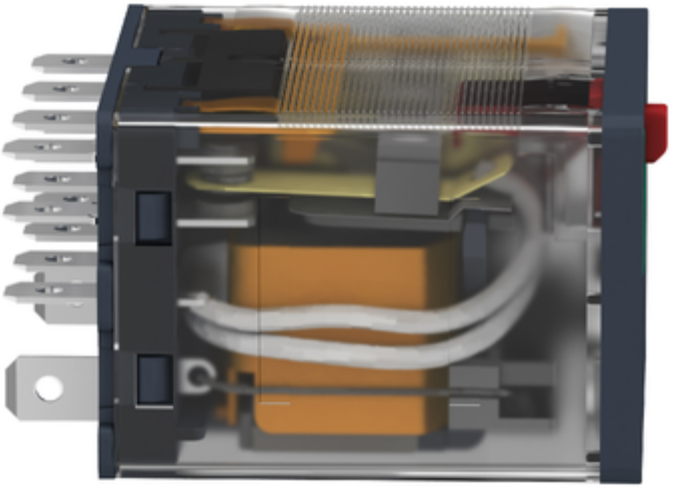
Image of product / Alternate images

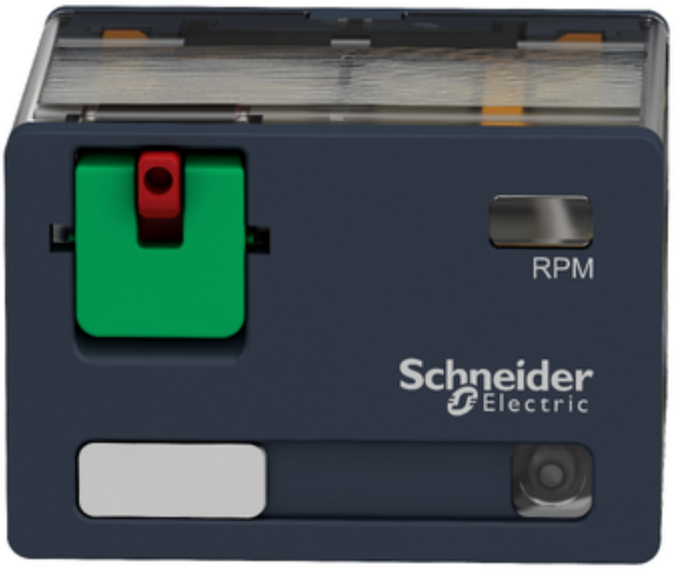
Alternative










RPM
Schneider
Electric

