

plug-in relay, Harmony electromechanical relays, 15A, 4CO, with LED, lockable test button, 230V AC

RPM42P7

## 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	230 V AC 50/60 Hz
[Ithe] Conventional Enclosed Thermal Current	15 A at -4055 °C
Status Led	With
Control Type	Lockable test button
Utilisation Coefficient	20 %

## **Complementary**

Complementary	
Shape Of Pin	Flat
[Ui] Rated Insulation Voltage	250 V conforming to IEC 300 V conforming to CSA
	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
[le] 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	2.5 at 60 Hz
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	7350 Ohm at 20 °C +/- 15 %	
Rated Operational Voltage Limits	184253 V AC	
Protection Category	RTI	
Test Levels	Level A group mounting	
Operating Position	Any position	
Pollution Degree	3	
Safety Reliability Data	B10d = 100000	
Net Weight	0.071 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 IEC 61810-1 CSA C22.2 No 14
Product Certifications	EAC CSA UL
Ambient Air Temperature For Storage	-4085 °C
Ambient Air Temperature For Operation	-4055 °C
Vibration Resistance	3 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles in operation 5 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles not operating
Degree Of Protection (Housing Only)	IP40 conforming to 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	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 ka	

# **Contractual warranty**

Warranty 18 months

## Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

# Well-being performance



Reach Free Of Svhc



Rohs Exemption Information

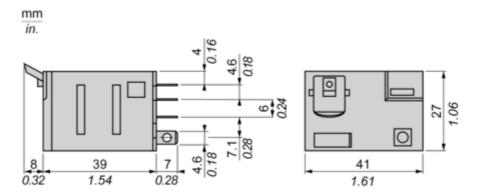
Yes

#### **Certifications & Standards**

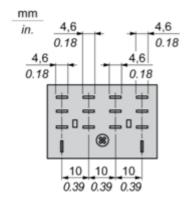
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
California 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

#### **Dimensions Drawings**

#### **Dimensions**



Pin Side View

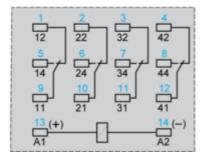


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Connections and Schema

## Wiring Diagram





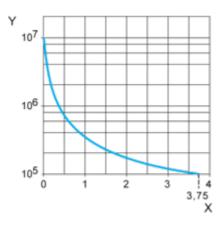
Symbols shown in blue correspond to Nema marking.

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#### Performance Curves

#### **Electrical Durability of Contacts**

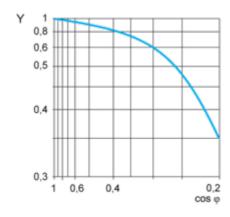
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

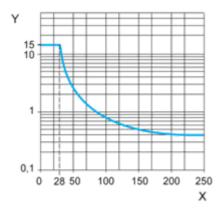
Y Durability (Number of operating cycles)

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.