# Product data sheet





# plug-in relay, Harmony electromechanical relays, 15A, 4CO, lockable test button, 24V DC

RPM41BD

### 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	24 V DC	
[Ithe] Conventional Enclosed Thermal Current	15 A -40131 °F (-4055 °C)	
Status Led	Without	
Control Type	Lockable test button	
Utilisation Coefficient	20 %	

### **Complementary**

Complementary	
Shape Of Pin	Flat
[Ui] Rated Insulation Voltage	250 V IEC
	300 V CSA
	300 V UL
[Uimp] Rated Impulse Withstand Voltage	4 kV 1.2/50 μs
Contacts Material	AgNi
[le] Rated Operational Current	15 A 277 V AC) UL
	15 A 28 V DC) UL
	15 A 250 V AC) NO IEC
	15 A 28 V DC) NO IEC
	7.5 A 250 V AC) NC IEC
	7.5 A 28 V DC) NC IEC
Maximum Switching Voltage	250 V IEC
Resistive Load Current	15 A 250 V AC
	15 A 28 V DC
Maximum Switching Capacity	3750 VA
	420 W
Minimum Switching Capacity	170 mW 10 mA, 17 V
Operating Rate	<= 1200 cycles/hour under load
	<= 18000 cycles/hour no-load
Mechanical Durability	10000000 cycles
Electrical Durability	100000 cycles resistive
Average Coil Consumption	1.6 W
Drop-Out Voltage Threshold	>= 0.1 Uc DC

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Operate Time	20 ms at nominal voltage	
Release Time	20 ms at nominal voltage	
Average Coil Resistance	303 Ohm 68 °F (20 °C) +/- 10 %	
Rated Operational Voltage Limits	19.226.4 V DC	
Protection Category	RTI	
Test Levels	Level A group mounting	
Operating Position	Any position	
Pollution Degree	3	
Safety Reliability Data	B10d = 100000	
Net Weight	0.16 lb(US) (0.071 kg)	
Device Presentation	Complete product	

## **Environment**

Dielectric Strength	1500 V AC between contacts micro disconnection 2000 V AC between coil and contact reinforced 2000 V AC between poles basic
Standards	IEC 61810-1 CSA C22.2 No 14 UL 508
Product Certifications	EAC CSA UL
Ambient Air Temperature For Storage	-40185 °F (-4085 °C)
Ambient Air Temperature For Operation	-40131 °F (-4055 °C)
Vibration Resistance	3 gn +/- 1 mm 10150 Hz)5 cycles in operation 5 gn +/- 1 mm 10150 Hz)5 cycles not operating
Degree Of Protection (Housing Only)	IP40 conforming to IEC 60529
Shock Resistance	15 gnin operation 30 gnnot operating

# **Packing Units**

Unit Type Of Package 1	PCE	
Number Of Units In Package 1	1	
Package 1 Height	1.85 in (4.7 cm)	
Package 1 Width	1.57 in (4 cm)	
Package 1 Length	1.10 in (2.8 cm)	
Package 1 Weight	2.61 oz (74 g)	
Unit Type Of Package 2	BB1	
Number Of Units In Package 2	10	
Package 2 Height	1.18 in (3 cm)	
Package 2 Width	4.13 in (10.5 cm)	
Package 2 Length	8.86 in (22.5 cm)	
Package 2 Weight	26.42 oz (749 g)	
Unit Type Of Package 3	S02	
Number Of Units In Package 3	120	

Package 3 Height	5.91 in (15 cm)
Package 3 Width	11.81 in (30 cm)
Package 3 Length	15.75 in (40 cm)
Package 3 Weight	20.95 lb(US) (9.503 kg)

## **Contractual warranty**

Warranty 18 months

# Sustainability Green Premium

**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

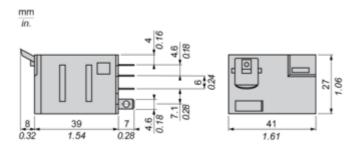
#### **Certifications & Standards**

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
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	No need of specific recycling operations

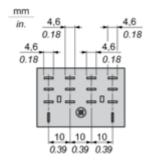
Jun 7, 2024

#### **Dimensions Drawings**

#### **Dimensions**



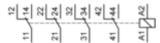
#### Pin Side View

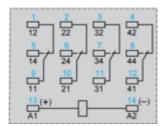


#### RPM41BD

Connections and Schema

### Wiring Diagram





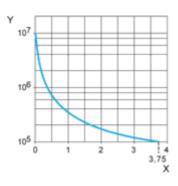
Symbols shown in blue correspond to Nema marking.

### RPM41BD

#### Performance Curves

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

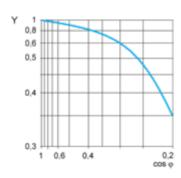
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

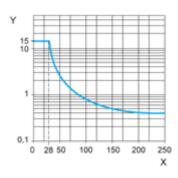
Y Durability (Number of operating cycles)

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.