# Product data sheet

Specifications





Harmony, Universal plug-in relay, 10 A, 3 CO, with lockable test button, flat (faston) terminals, 24 V AC

RUMF31B7



! Discontinued on: Oct 9, 2023

Product availability: Non-Stock - Not normally stocked in distribution facility

#### Main

Range of Product	Harmony Electromechanical Relays	
Series name	Universal	
Product or Component Type	Plug-in relay	
Device short name	RUM	
Contacts type and composition	3 C/O	
[Uc] control circuit voltage	24 V AC 50/60 Hz	
[Ithe] conventional enclosed thermal current	10 A -40.0000000000131.0000000000 °F (-4055 °C)	
Status LED	Without	
Control Type	Lockable test button	
Utilisation coefficient	20 %	

### 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	10 A at 277 V AC conforming to UL
	10 A at 30 V DC conforming to UL
	10 A at 277 V AC (same polarity) conforming to CSA
	10 A at 30 V DC conforming to CSA
	5 A at 250 V AC (NC) conforming to IEC
	5 A at 28 V DC (NC) conforming to IEC
	10 A at 250 V AC (NO) conforming to IEC
	10 A at 28 V DC (NO) conforming to IEC
Maximum switching voltage	250 V IEC
Resistive rated load	10 A 250 V AC
	10 A 28 V DC
Maximum switching capacity	2500 VA/280 W
Minimum switching capacity	170 mW 10 mA, 17 V
Operating rate	<= 18000 cycles/hour no-load
	<= 1200 cycles/hour under load
Mechanical durability	5000000 cycles

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Electrical durability	100000 cycles resistive	
Average coil consumption in VA	3 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	72 Ohm 20 °C +/- 15 %	
Rated operational voltage limits	19.226.4 V AC	
Protection category	RTI	
Test levels	Level A group mounting	
Safety reliability data	B10d = 100000	
Operating position	Any position	
Net Weight	0.190 lb(US) (0.086 kg)	
device presentation	Complete product	

## **Environment**

Dielectric strength	1500 V AC between contacts with micro disconnection 2500 V AC between coil and contact with reinforced
	2000 V AC between contact with remoted
	2000 V AC Detween poles with basic
Product Certifications	EAC
	UL
	CSA
Standards	CSA C22.2 No 14
	UL 508
	EN/IEC 61810-1
Ambient Air Temperature for Storage	-40.000000000185.0000000000 °F (-4085 °C)
Ambient air temperature for operation	-40.0000000000131.0000000000 °F (-4055 °C)
Vibration resistance	3 gn +/- 1 mm 10150 Hz)5 cycles in operation
	4 gn +/- 1 mm 10150 Hz)5 cycles not operating
IP degree of protection	IP40
Shock resistance	10 gn 11 ms) in operation EN/IEC 60068-2-27
	10 gn 11 ms) not operating EN/IEC 60068-2-27
Pollution degree	3

# Ordering and shipping details

Category	US10CP221127
Discount Schedule	0CP2
GTIN	3606480627361
Returnability	No
Country of origin	CN

# **Packing Units**

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	1.5 in (3.7 cm)	
Package 1 Width	1.5 in (3.8 cm)	

Package 1 Length	2.8 in (7.2 cm)	
Package 1 Weight	3.2 oz (92.0 g)	
Unit Type of Package 2	BB1	
Number of Units in Package 2	10	
Package 2 Height	1.5 in (3.8 cm)	
Package 2 Width	5.2 in (13.2 cm)	
Package 2 Length	7.9 in (20.0 cm)	
Package 2 Weight	31.6 oz (896.0 g)	
Unit Type of Package 3	S02	
Number of Units in Package 3	60	
Package 3 Height	5.9 in (15.0 cm)	
Package 3 Width	11.8 in (30.0 cm)	
Package 3 Length	15.7 in (40.0 cm)	
Package 3 Weight	13.166 lb(US) (5.972 kg)	

## 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**

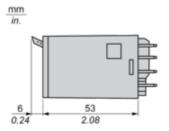
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
California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

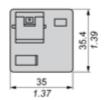
## **Product data sheet**

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## **Dimensions Drawings**

### **Dimensions**





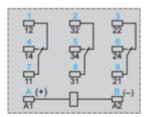
## **Product data sheet**

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Connections and Schema

Wiring Diagram

### Wiring Diagram



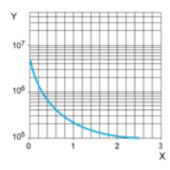
Symbols shown in blue correspond to Nema marking.

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#### Performance Curves

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

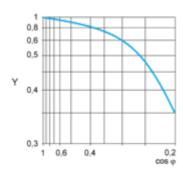
Durability (inductive load) = durability (resistive load) x reduction coefficient. Resistive AC load



X Switching capacity (kVA)

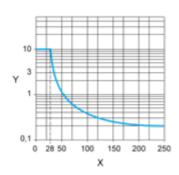
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor  $\cos \varphi$ )



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.