# Product data sheet Characteristics

# RUMC31P7

# Universal plug-in relay, 10 A, 3 CO, 230 V AC





#### Main

Range of product	Harmony Relay
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	230 V AC
[Ithe] conventional enclosed thermal current	10 A -40131 °F (-4055 °C)
Status LED	Without
Control type	Lockable test button
Utilisation coefficient	20 %

### Complementary

Shape of pin	Cylindrical
[Ui] rated insulation voltage	250 V conforming to 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 277 V AC UL 10 A 30 V DC UL 10 A 277 V AC same polarity)CSA 10 A 30 V DC CSA 5 A 250 V AC NC)IEC 5 A 28 V DC NC)IEC 10 A 250 V AC NO)IEC 10 A 250 V AC NO)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
Electrical durability	100000 cycles for resistive load
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	6800 Ohm 20 °C +/- 15 %
Rated operational voltage limits	184253 V AC
Protection category	RTI
Test levels	Level A group mounting
Safety reliability data	B10d = 100000
Operating position	Any position
Net Weight	0.19 lb(US) (0.086 kg)
Device presentation	Complete product

### Environment

Dielectric strength	1500 V AC between contacts micro disconnection 2500 V AC between coil and contact reinforced 2000 V AC between poles basic	
Product certifications	RoHS EAC CSA UL	
Standards	CSA C22.2 No 14 EN/IEC 61810-1 UL 508	
Ambient air temperature for storage	-40185 °F (-4085 °C)	
Ambient air temperature for operation	-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	2	

### Ordering and shipping details

are arribbing access	
Category	21127 - ZELIO ICE CUBE RELAYS
Discount Schedule	CP2
GTIN	00785901504184
Nbr. of units in pkg.	10
Package weight(Lbs)	0.2 lb(US) (0.09 kg)
Returnability	No
Country of origin	CN

### Packing Units

r acking office	
Unit Type of Package 1	PCE
Package 1 Height	2.72 in (6.9 cm)
Package 1 width	1.38 in (3.5 cm)
Package 1 Length	1.42 in (3.6 cm)
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Weight	34.36 oz (974 g)
Package 2 Height	1.57 in (4 cm)
Package 2 width	5.75 in (14.6 cm)
Package 2 Length	7.87 in (20 cm)
Unit Type of Package 3	S02
Number of Units in Package 3	60
Package 3 Weight	14.41 lb(US) (6.536 kg)
Package 3 Height	5.91 in (15 cm)
Package 3 width	11.81 in (30 cm)
Package 3 Length	15.75 in (40 cm)

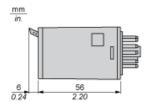
### Offer Sustainability

Sustainable offer status	Green Premium product
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
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile

# Product data sheet Dimensions Drawings

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### **Dimensions**





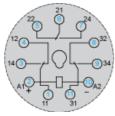
# Product data sheet Connections and Schema

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### Wiring Diagram



# Wiring Diagram



Symbols shown in blue correspond to Nema marking.

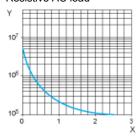
# Product data sheet Performance Curves

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### **Electrical Durability of Contacts**

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

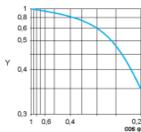
Resistive AC load



X Switching capacity (kVA)

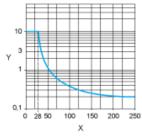
Y Durability (Number of operating cycles)

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



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.