## Product data sheet Characteristics

# RUMC31P7

Harmony, Universal plug-in relay, 10 A, 3 CO, with lockable test button, 230 V AC





#### 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	230 V AC 50/60 Hz	
[Ithe] conventional enclosed thermal current	10 A at -4055 °C	
Status LED	Without	
Control type	Lockable test button	
Utilisation coefficient	20 %	

### Complementary

Complementary		
Shape of pin	Cylindrical	
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to 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 conforming to IEC	
Load current	10 A at 250 V AC 10 A at 28 V DC	
Maximum switching capacity	2500 VA/280 W	
Minimum switching capacity	170 mW at 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 at 60 Hz	
Drop-out voltage threshold	>= 0.15 Uc AC	
Operating time	20 ms at nominal voltage	
Reset time	20 Ms at nominal voltage	

Average resistance	6800 Ohm at 20 °C +/- 15 %	
Rated operational voltage limits	184253 V AC	
Protection category	RT I	
Test levels	Level A group mounting	
Safety reliability data	B10d = 100000	
Operating position	Any position	
Net weight	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 poles with basic
Product certifications	EAC CSA UL
Standards	CSA C22.2 No 14 EN/IEC 61810-1 UL 508
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 4 gn, amplitude = +/- 1 mm (f = 10150 Hz)5 cycles not operating
IP degree of protection	IP40
Shock resistance	10 gn (duration = 11 ms) for in operation conforming to EN/IEC 60068-2-27 10 gn (duration = 11 ms) for not operating conforming to EN/IEC 60068-2-27
Pollution degree	2

### **Packing Units**

I acking chits	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	92 G
Package 1 Height	69 Mm
Package 1 width	35 Mm
Package 1 Length	36 Mm
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Weight	974 G
Package 2 Height	4 Cm
Package 2 width	14.6 Cm
Package 2 Length	20 Cm
Unit Type of Package 3	S02
Number of Units in Package 3	60
Package 3 Weight	6.536 Kg
Package 3 Height	15 Cm
Package 3 width	30 Cm
Package 3 Length	40 Cm

### Offer Sustainability

Sustainable offer status	Green Premium product
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EV EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	€Yes



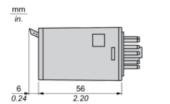
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile



# Product data sheet Dimensions Drawings

# RUMC31P7

### **Dimensions**





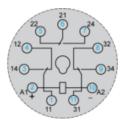
# Product data sheet Connections and Schema

# RUMC31P7

### Wiring Diagram



### Wiring Diagram

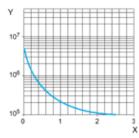


Symbols shown in blue correspond to Nema marking.

### **Electrical Durability of Contacts**

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

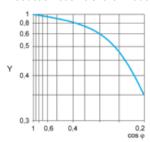
Resistive AC load



X Switching capacity (kVA)

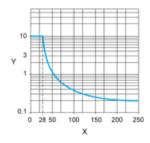
Y Durability (Number of operating cycles)

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.

Product Life Status: Commercialised