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
[Ithe] conventional enclosed thermal current	10 A at -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 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
Resistive rated load	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
Operate time	20 ms at nominal voltage
Release time	20 ms at nominal voltage
Average coil resistance	6800 Ohm at 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	0.086 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

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	92 g
Package 1 Height	6.9 cm
Package 1 width	3.5 cm
Package 1 Length	3.6 cm
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

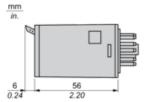
Offer Sustainability

Green Premium product
REACh Declaration
Yes
Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Yes
Yes
€Yes
China RoHS Declaration
Product Environmental Profile

Product data sheet Dimensions Drawings

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Dimensions





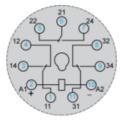
Product data sheet Connections and Schema

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Wiring Diagram



Wiring Diagram

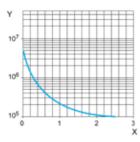


Symbols shown in blue correspond to Nema marking.

Electrical Durability of Contacts

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

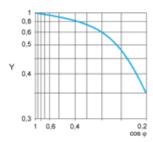
Resistive AC load



X Switching capacity (kVA)

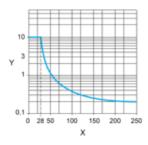
Y Durability (Number of operating cycles)

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.