Product datasheet

Specifications



universal plug-in relay - Harmony RUM - 3 C/O - 24 V DC - 10 A

Local distributor code:

401162217 RUMC31BD

EAN Code: 3606480626821

Main

Range of product	Harmony Electromechanical Relays
Series name	RUM series
Product or component type	Plug-in relay
Relay type	Universal relay
Contacts type and composition	3 C/O
status LED	Without
Control type	Lockable test button
[Uc] control circuit voltage	24 V DC
[Ithe] conventional enclosed thermal current	10 A at -40…55 °C

Complementary

[Uimp] rated impulse withstand voltage	4 kV (1.2/50 µs)
Minimum switching capacity	170 mW at 10 mA, 17 V
Electrical durability	100000 cycles for resistive load
Operating time	20 ms at nominal voltage
Rated operational voltage limits	19.2...26.4 V DC
[Ui] rated insulation voltage	250 V conforming to IEC 300 V conforming to CSA 300 V conforming to UL
Reset time	20 ms at nominal voltage
Maximum switching voltage	250 V conforming to IEC
Drop-out voltage threshold	>= 0.1 Uc DC
[Ie] 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
Average resistance	470 Ohm at 20 °C +/- 15 %
Maximum switching capacity	2500 VA/280 W
Mechanical durability	5000000 cycles
Safety reliability data	B10d = 100000
Operating rate	<= 18000 cycles/hour no-load <= 1200 cycles/hour under load

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Utilisation coefficient	20 %
Compatibility code	RUM
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
Protection category	RT I
Pollution degree	2
Operating position	Any position
Test levels	Level A group mounting
Device presentation	Complete product
Contacts material	AgNi
Shape of pin	Cylindrical
Net weight	0.086 kg
Average coil consumption	1.4 W
Load current	10 A at 250 V AC 10 A at 28 V DC

Environment

Ambient air temperature for operation	-40…55 °C
IP degree of protection	IP40
Standards	IEC 61810-1 CSA C22.2 No 14 UL 508
Product certifications	EAC UL CSA
Ambient air temperature for storage	-40…85 °C
Vibration resistance	3 gn, amplitude = +/- 1 mm (f = 10…150 Hz)5 cycles in operation 4 gn, amplitude = +/- 1 mm (f = 10…150 Hz)5 cycles not operating
Shock resistance	10 gn (duration = 11 ms) for in operation conforming to IEC 60068-2-27 10 gn (duration = 11 ms) for not operating conforming to IEC 60068-2-27

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.500 cm
Package 1 Width	6.900 cm
Package 1 Length	3.600 cm
Package 1 Weight	97.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	4.000 cm
Package 2 Width	14.600 cm
Package 2 Length	20.000 cm
Package 2 Weight	1.029 kg

Unit Type of Package 3	S02
Number of Units in Package 3	60
Package 3 Height	15.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	6.682 kg

Logistical informations

Country of origin	CN

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**21 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**4 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**16 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.2 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Compliant**
REACh Regulation	**Free of Substances of Very High Concern above the threshold**

Use Longer

Lifetime extension

Repair	**No**

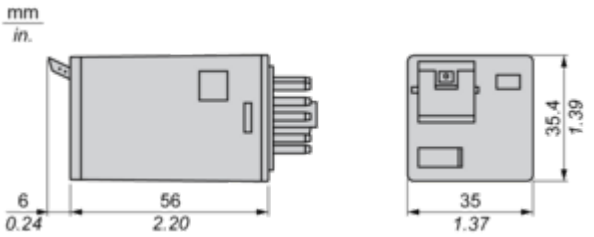
Use Again

Repack and remanufacture

Recyclability potential, in %	**58**
End of life manual availability	**No need of specific recycling operations**
Take-back	**No**

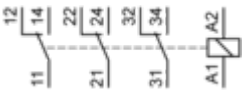
Dimensions Drawings

Dimensions

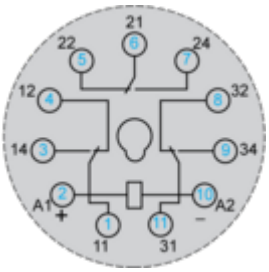


Connections and Schema

Wiring Diagram



Wiring Diagram

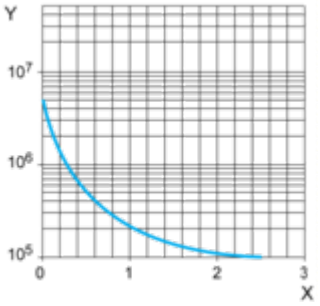


Symbols shown in blue correspond to Nema marking.

Performance Curves

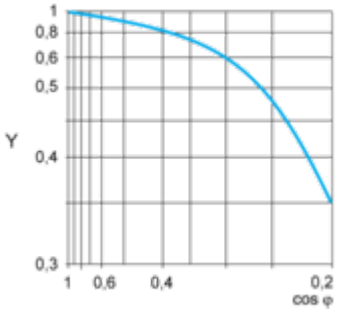
Electrical Durability of Contacts

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



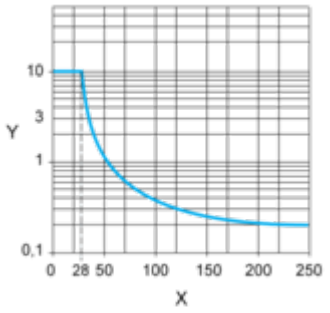
X Switching capacity (kVA)
Y Durability (Number of operating cycles)

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.

Image of product in real life situation

