# Product data sheet

Specifications


## universal plug in relay, Harmony Electromechanical Relays, 10A, 2CO, without LED, lockable test button, cylindrical, 24V AC

RUMC21B7

## 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** | 2 C/O |
| **status LED** | Without |
| **Control type** | Lockable test button |
| **[Uc] control circuit voltage** | 24 V AC 50/60 Hz |
| **[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 |
| **Average coil consumption in VA** | 3 at 60 Hz |
| **Operating time** | 20 ms at nominal voltage |
| **Rated operational voltage limits** | 19.2...26.4 V AC |
| **[Ui] rated insulation voltage** | 250 V conforming to IEC<br>300 V conforming to CSA<br>300 V conforming to UL |
| **Reset time** | 20 ms at nominal voltage |
| **Maximum switching voltage** | 250 V conforming to IEC |
| **Drop-out voltage threshold** | >= 0.15 Uc AC |
| **[Ie] rated operational current** | 10 A at 277 V AC conforming to UL<br>10 A at 30 V DC conforming to UL<br>10 A at 30 V DC conforming to CSA<br>5 A at 250 V AC (NC) conforming to IEC<br>5 A at 28 V DC (NC) conforming to IEC<br>10 A at 250 V AC (NO) conforming to IEC<br>10 A at 28 V DC (NO) conforming to IEC<br>10 A at 277 V AC conforming to CSA |
| **Average resistance** | 72 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<br><= 1200 cycles/hour under load |
| **Utilisation coefficient** | 20 % |
| **Compatibility code** | RUM |
| **Dielectric strength** | 1500 V AC between contacts with micro disconnection<br>2500 V AC between coil and contact with reinforced<br>2000 V AC between poles with basic |
| **Protection category** | RT I |
| **Pollution degree** | 3 |
| **Operating position** | Any position |
| **Device presentation** | Complete product |
| **Contacts material** | AgNi |
| **Shape of pin** | Cylindrical |
| **Net weight** | 0.086 kg |

## Environment

| | |
|---|---|
| **Ambient air temperature for operation** | -40…55 °C |
| **IP degree of protection** | IP40 |
| **Standards** | CSA C22.2 No 14<br>UL 508<br>IEC 61810-1 |
| **Product certifications** | CSA<br>EAC<br>UL |
| **Ambient air temperature for storage** | -40…85 °C |
| **Vibration resistance** | 3 gn, amplitude = +/- 1 mm (f = 10…150 Hz)5 cycles in operation<br>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<br>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** | 3.500 cm |
| **Package 1 Weight** | 85.000 g |
| **Unit Type of Package 2** | BB1 |
| **Number of Units in Package 2** | 10 |
| **Package 2 Height** | 3.900 cm |
| **Package 2 Width** | 14.500 cm |
| **Package 2 Length** | 19.800 cm |
| **Package 2 Weight** | 903.000 g |
| **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** | 5.920 kg |

## 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 | 30 |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | No |
| Packaging without single use plastic | No |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| 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 |

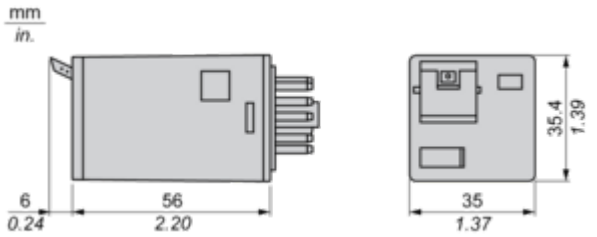
## Use Again

### Repack and remanufacture

| | |
|---|---|
| End of life manual availability | No need of specific recycling operations |
| Take-back | No |

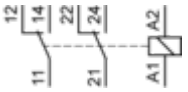
Dimensions Drawings

## Dimensions

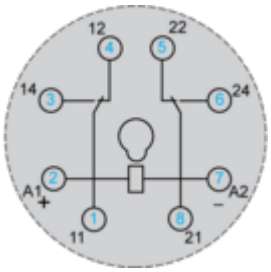


Connections and Schema

**Wiring Diagram**



## Wiring Diagram

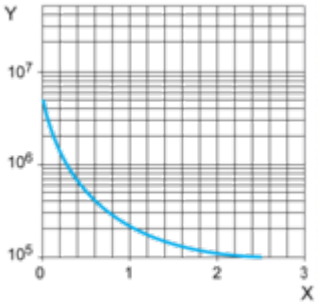



Symbols shown in blue correspond to Nema marking.

## Performance Curves

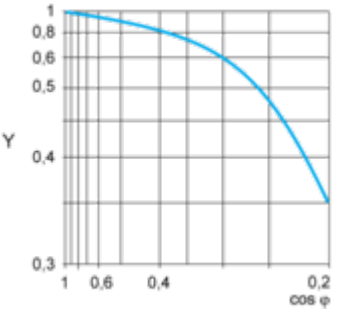
### Electrical Durability of Contacts

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



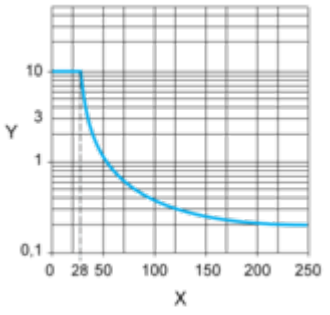

**X** Switching capacity (kVA)
**Y** Durability (Number of operating cycles)

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.

Technical Illustration

**Dimensions**

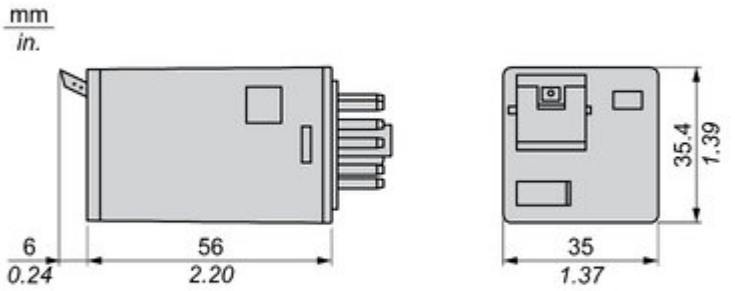
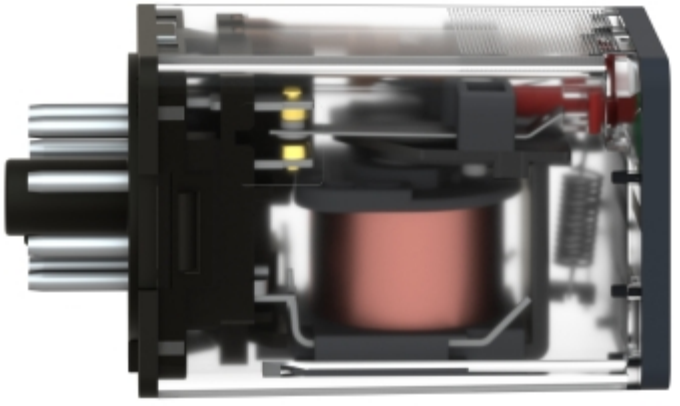


Image of product / Alternate images

**Alternative**


RUM
Schneider Electric



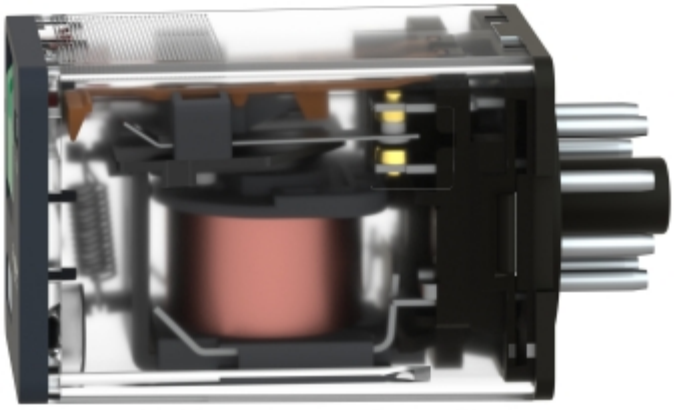


Image of product in real life situation