



## 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                | 2 C/O                            |
| [Uc] control circuit voltage                 | 230 V AC                         |
| [Ithe] conventional enclosed thermal current | 10 A at -40...55 °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<br>300 V conforming to CSA<br>300 V conforming to UL                                                                                                                                                                                                                                             |
| [Uimp] rated impulse withstand voltage | 4 kV (1.2/50 µs)                                                                                                                                                                                                                                                                                                         |
| Contacts material                      | AgNi                                                                                                                                                                                                                                                                                                                     |
| [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 |
| Maximum switching voltage              | 250 V conforming to IEC                                                                                                                                                                                                                                                                                                  |
| Resistive rated load                   | 10 A at 250 V AC<br>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<br><= 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       | 184...253 V AC                                                                                                                                                                                                                                                                                                           |
| Protection category                    | RT I                                                                                                                                                                                                                                                                                                                     |
| Test levels                            | Level A group mounting                                                                                                                                                                                                                                                                                                   |
| Safety reliability data                | B10d = 100000                                                                                                                                                                                                                                                                                                            |
| Operating position                     | Any position                                                                                                                                                                                                                                                                                                             |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                     |                  |
|---------------------|------------------|
| Net weight          | 0.086 kg         |
| Device presentation | Complete product |

## Environment

|                                       |                                                                                                                                                         |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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         |
| Product certifications                | CSA<br>UL<br>EAC                                                                                                                                        |
| Standards                             | EN/IEC 61810-1<br>UL 508<br>CSA C22.2 No 14                                                                                                             |
| Ambient air temperature for storage   | -40...85 °C                                                                                                                                             |
| Ambient air temperature for operation | -40...55 °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                 |
| IP degree of protection               | IP40                                                                                                                                                    |
| Shock resistance                      | 10 gn (duration = 11 ms) for in operation conforming to EN/IEC 60068-2-27<br>10 gn (duration = 11 ms) for not operating conforming to EN/IEC 60068-2-27 |
| Pollution degree                      | 3                                                                                                                                                       |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 87 g     |
| Package 1 Height             | 3.6 cm   |
| Package 1 width              | 3.5 cm   |
| Package 1 Length             | 6.9 cm   |
| Unit Type of Package 2       | BB1      |
| Number of Units in Package 2 | 10       |
| Package 2 Weight             | 938 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             | 6.304 kg |
| Package 3 Height             | 15 cm    |
| Package 3 width              | 30 cm    |
| Package 3 Length             | 40 cm    |

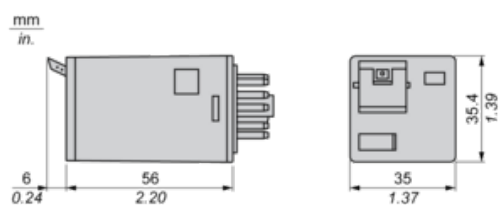
## Offer Sustainability

|                            |                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                |
| REACH free of SVHC         | Yes                                                                                                                                                                                  |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes                                                                                                                                                                                  |
| Mercury free               | Yes                                                                                                                                                                                  |
| RoHS exemption information |  <a href="#">Yes</a>                                                                              |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>                                                           |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a>                                                    |

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Dimensions

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## Wiring Diagram

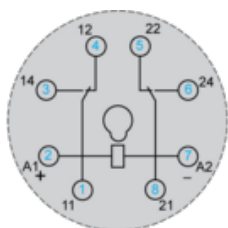
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## Wiring Diagram

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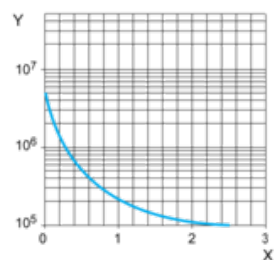


Symbols shown in blue correspond to Nema marking.

## Electrical Durability of Contacts

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

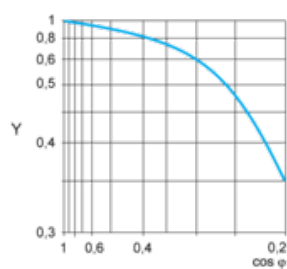
Resistive AC load



X Switching capacity (kVA)

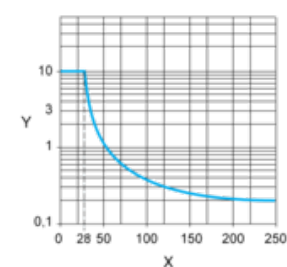
Y Durability (Number of operating cycles)

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.