



### Main

|  |                                  |
|--|----------------------------------|
| Range of product                             | Harmony Electromechanical Relays |
| Series name                                  | Interface relay                  |
| Product or component type                    | Plug-in relay                    |
| Device short name                            | RSB                              |
| Contacts type and composition                | 1 C/O                            |
| Contact operation                            | Standard                         |
| [Uc] control circuit voltage                 | 24 V AC 50/60 Hz                 |
| [Ithe] conventional enclosed thermal current | 12 A at -40...40 °C              |
| Status LED                                   | Without                          |
| Control type                                 | Without push-button              |

### Complementary

|  |   |
|--|---|
| Shape of pin                           | Flat (PCB type)   |
| Average coil resistance                | 368 Ohm network: AC at 20 °C +/- 10 %   |
| [Ue] rated operational voltage         | 19.2...36 V AC 50/60 Hz   |
| [Ui] rated insulation voltage          | 400 V conforming to IEC 60947   |
| [Uimp] rated impulse withstand voltage | 3.6 kV conforming to IEC 61000-4-5  |
| Contacts material                      | Silver alloy (AgNi)   |
| [Ie] rated operational current         | 12 A (AC-1/DC-1) NO conforming to IEC<br>6 A (AC-1/DC-1) NC conforming to IEC |
| Minimum switching current              | 10 mA   |
| Maximum switching voltage              | 300 V DC conforming to IEC  |
| Minimum switching voltage              | 12 V  |
| Maximum switching capacity             | 3000 VA/336 W   |
| Resistive rated load                   | 12 A at 250 V AC<br>12 A at 28 V DC   |
| Minimum switching capacity             | 120 mW at 10 mA, 12 V   |
| Operating rate                         | <= 600 cycles/hour under load<br><= 18000 cycles/hour no-load                 |
| Mechanical durability                  | 10000000 cycles   |
| Electrical durability                  | 100000 Cycles, 12 A at 250 V, AC-1 NO<br>100000 cycles, 6 A at 250 V, AC-1 NC |
| Operating time                         | 20 ms operating<br>20 ms reset  |
| Marking                                | CE  |
| Average coil consumption               | 0.75 VA AC  |
| Drop-out voltage threshold             | >= 0.15 U <sub>c</sub> AC   |
| Safety reliability data                | B10d = 100000   |
| Protection category                    | RT I  |
| Test levels                            | Level A group mounting  |
| Operating position                     | Any position  |
| Net weight                             | 0.014 kg  |
| Sale per indivisible quantity          | 10  |
| Device presentation                    | Complete product  |

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.

## Environment

|                                       |  |
|---------------------------------------|--|
| Dielectric strength                   | 1000 V AC between contacts<br>2500 V AC between poles<br>5000 V AC between coil and contact  |
| Standards                             | CSA C22.2 No 14<br>IEC 61810-1<br>UL 508   |
| Product certifications                | EAC[RETURN]UL[RETURN]CSA   |
| Ambient air temperature for storage   | -40...85 °C  |
| Vibration resistance                  | +/- 1 mm (f= 10...55 Hz) conforming to IEC 60068-2-6   |
| IP degree of protection               | IP40 conforming to IEC 60529   |
| Shock resistance                      | 10 gn (duration = 11 ms) for not operating conforming to IEC 60068-2-27<br>5 gn (duration = 11 ms) for in operation conforming to IEC 60068-2-27 |
| Ambient air temperature for operation | -40...70 °C (AC)   |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 2.1 cm  |
| Package 1 Width              | 2.5 cm  |
| Package 1 Length             | 31.1 cm |
| Package 1 Weight             | 13.0 g  |
| Unit Type of Package 2       | BB1     |
| Number of Units in Package 2 | 10      |
| Package 2 Height             | 2.1 cm  |
| Package 2 Width              | 2.5 cm  |
| Package 2 Length             | 31.1 cm |
| Package 2 Weight             | 158.0 g |
| Unit Type of Package 3       | S01     |
| Number of Units in Package 3 | 350     |
| Package 3 Height             | 15.0 cm |
| Package 3 Width              | 15.0 cm |
| Package 3 Length             | 40.0 cm |
| Package 3 Weight             | 5.74 kg |

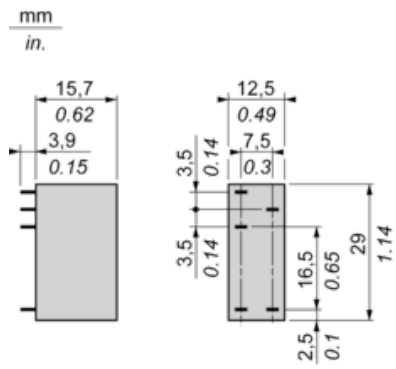
## Offer Sustainability

|                            |  |
|----------------------------|--|
| Sustainable offer status   | Green Premium product  |
| REACH Regulation           | <a href="#">REACH Declaration</a>  |
| 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  |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>   |
| RoHS exemption information | <a href="#">Yes</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>  |
| Circularity Profile        | No need of specific recycling operations   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins  |
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

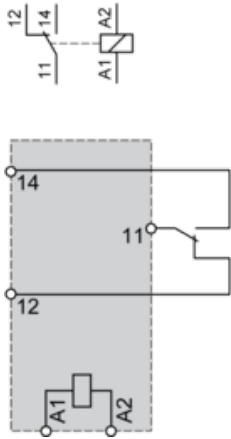
## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions



## Wiring Diagram

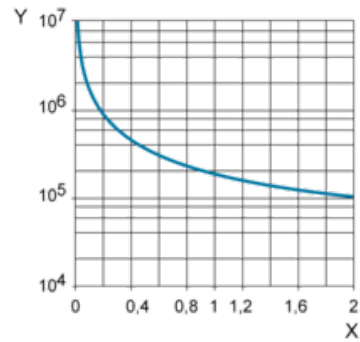


NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

Electrical Durability of Contacts

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

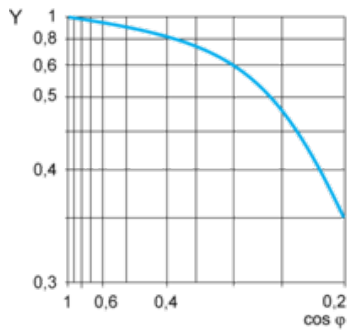
Resistive AC load



X Switching capacity (kVA)

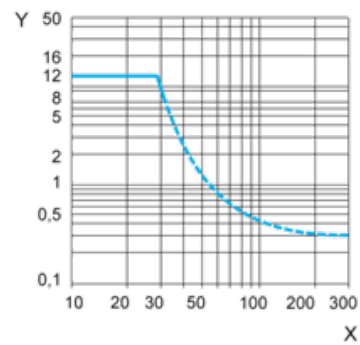
Y Durability (Number of operating cycles)

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.