



### Main

|  |                     |
|--|---------------------|
| Range of product                             | Harmony Relay       |
| Series name                                  | Interface relay     |
| Product or component type                    | Plug-in relay       |
| Device short name                            | RSB                 |
| Contacts type and composition                | 2 C/O               |
| Contact operation                            | Standard            |
| [Uc] control circuit voltage                 | 230 V AC            |
| [Ithe] conventional enclosed thermal current | 8 A at -40...40 °C  |
| Status LED                                   | Without             |
| Control type                                 | Without push-button |

### Complementary

|  |  |
|--|--|
| Shape of pin                           | Flat (PCB type)  |
| Average coil resistance                | 33000 Ohm network: AC at 20 °C +/- 10 %                                      |
| [Ue] rated operational voltage         | 184...345 V AC 50/60 Hz  |
| [Ui] rated insulation voltage          | 400 V conforming to EN/IEC 60947   |
| [Uimp] rated impulse withstand voltage | IEC 61000-4-5 3.6 kV   |
| Contacts material                      | Silver alloy (AgNi)  |
| [Ie] rated operational current         | 4 A (AC-1/DC-1) NC conforming to IEC<br>8 A (AC-1/DC-1) NO conforming to IEC |
| Minimum switching current              | 10 mA  |
| Maximum switching voltage              | 250 V DC conforming to IEC   |
| Minimum switching voltage              | 12 V   |
| Maximum switching capacity             | 2000 VA/224 W  |
| Resistive rated load                   | 8 A at 250 V AC<br>8 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                  | 5000000 cycles   |
| Electrical durability                  | 100000 Cycles, 8 A at 250 V, AC-1 NO<br>100000 cycles, 4 A at 250 V, AC-1 NC |
| Operating time                         | 20 ms operating<br>20 ms reset   |
| 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   |

## 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>UL 508<br>EN/IEC 61810-1  |
| Product certifications                | CSA<br>EAC<br>UL   |
| Ambient air temperature for storage   | -40...85 °C  |
| Vibration resistance                  | +/- 1 mm (f= 10...55 Hz) conforming to EN/IEC 60068-2-6  |
| IP degree of protection               | IP40 conforming to EN/IEC 60529  |
| Shock resistance                      | 10 gn (duration = 11 ms) for not operating conforming to EN/IEC 60068-2-27<br>5 gn (duration = 11 ms) for in operation conforming to EN/IEC 60068-2-27 |
| Ambient air temperature for operation | -40...70 °C (AC)   |

## Packing Units

|                  |          |
|------------------|----------|
| Package 1 Weight | 0.014 kg |
| Package 1 Height | 0.170 dm |
| Package 1 width  | 3.330 dm |
| Package 1 Length | 0.270 dm |

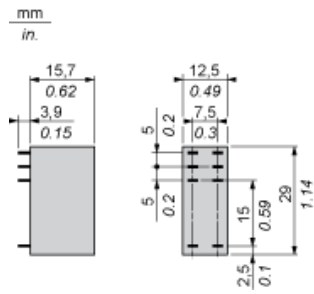
## Offer Sustainability

|                            |   |
|----------------------------|---|
| 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>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

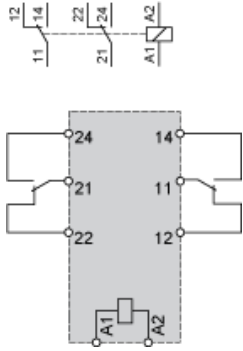
## Contractual warranty

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

Dimensions



## Wiring Diagram

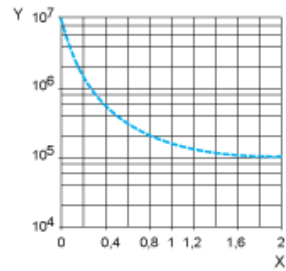


NOTE: For DC input, A1 have to be +, otherwise it would short circuit from protection module

Electrical Durability of Contacts

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

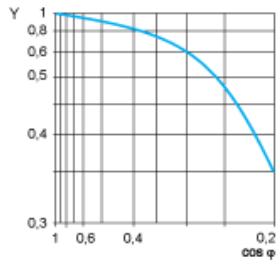
Resistive AC load



X Switching capacity (kVA)

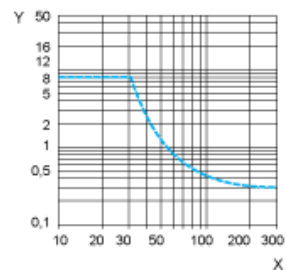
Y Durability (Number of operating cycles)

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.