



### 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                 | 230 V AC                         |
| [Ithe] conventional enclosed thermal current | 16 A -40...104 °F (-40...40 °C)  |
| Status LED                                   | Without                          |
| Control Type                                 | Without push-button              |

### Complementary

|                                        |                                                                                                                                              |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Shape of pin                           | Flat                                                                                                                                         |
| Average coil resistance                | 38500 Ohm AC 20 °C +/- 15 %                                                                                                                  |
| [Ue] rated operational voltage         | 184...276 V AC 50 Hz<br>195.5...276 V AC 60 Hz                                                                                               |
| [Ui] rated insulation voltage          | 400 V EN/IEC 60947                                                                                                                           |
| [Uimp] rated impulse withstand voltage | 3.6 kV IEC 61000-4-5                                                                                                                         |
| Contacts material                      | Silver alloy (Ag/Ni)                                                                                                                         |
| [Ie] rated operational current         | 16 A AC-1/DC-1) NO IEC<br>8 A AC-1/DC-1) NC IEC                                                                                              |
| Minimum switching current              | 5 mA                                                                                                                                         |
| Maximum switching voltage              | 300 V DC<br>400 V AC                                                                                                                         |
| Minimum switching voltage              | 5 V                                                                                                                                          |
| Maximum switching capacity             | 4000 VA AC<br>448 W DC                                                                                                                       |
| Resistive rated load                   | 16 A 250 V AC<br>16 A 28 V DC                                                                                                                |
| Minimum switching capacity             | 300 mW 5 mA                                                                                                                                  |
| Operating rate                         | <= 600 cycles/hour under load<br><= 72000 cycles/hour no-load                                                                                |
| Mechanical durability                  | 30000000 cycles                                                                                                                              |
| Electrical durability                  | 100000 Cycles, 16 A at 250 V, AC-1 NO<br>100000 cycles, 8 A at 250 V, AC-1 NC                                                                |
| Operating time                         | 10 ms between coil de-energisation and making of the Off-delay contact<br>12 ms between coil energisation and making of the On-delay contact |
| Marking                                | CE                                                                                                                                           |
| Average coil consumption               | 0.75 VA AC 60 Hz                                                                                                                             |
| Drop-out voltage threshold             | >= 0.15 Uc AC                                                                                                                                |
| Safety reliability data                | B10d = 100000                                                                                                                                |
| Protection category                    | RT I                                                                                                                                         |
| Operating position                     | Any position                                                                                                                                 |
| 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>EN/IEC 61810-1<br>UL 508                                                 |
| Product Certifications                | CSA<br>UL<br>GOST                                                                           |
| Ambient Air Temperature for Storage   | -40...185 °F (-40...85 °C)                                                                  |
| Vibration resistance                  | +/- 1 mm 10...55 Hz)EN/IEC 60068-2-6                                                        |
| IP degree of protection               | IP40 conforming to EN/IEC 60529                                                             |
| Shock resistance                      | 10 gn 11 ms) not operating EN/IEC 60068-2-27<br>5 gn 11 ms) in operation EN/IEC 60068-2-27  |
| Ambient air temperature for operation | -40...158 °F (-40...70 °C) AC)<br>-40...185 °F (-40...85 °C) DC)                            |

## Ordering and shipping details

|                   |                             |
|-------------------|-----------------------------|
| Category          | 21127-ZELIO ICE CUBE RELAYS |
| Discount Schedule | CP2                         |
| GTIN              | 3389110255652               |
| Returnability     | No                          |
| Country of origin | FR                          |

## Packing Units

|                              |                      |
|------------------------------|----------------------|
| Unit Type of Package 1       | PCE                  |
| Number of Units in Package 1 | 1                    |
| Package 1 Height             | 3.15 in (8 cm)       |
| Package 1 Width              | 3.94 in (10 cm)      |
| Package 1 Length             | 13.39 in (34 cm)     |
| Package 1 Weight             | 2.47 oz (70 g)       |
| Unit Type of Package 2       | BB1                  |
| Number of Units in Package 2 | 20                   |
| Package 2 Height             | 2.95 in (7.5 cm)     |
| Package 2 Width              | 4.09 in (10.4 cm)    |
| Package 2 Length             | 13.39 in (34 cm)     |
| Package 2 Weight             | 3.09 lb(US) (1.4 kg) |
| Unit Type of Package 3       | S03                  |
| Number of Units in Package 3 | 140                  |
| Package 3 Height             | 11.81 in (30 cm)     |
| Package 3 Width              | 11.81 in (30 cm)     |
| Package 3 Length             | 15.75 in (40 cm)     |
| Package 3 Weight             | 22.05 lb(US) (10 kg) |

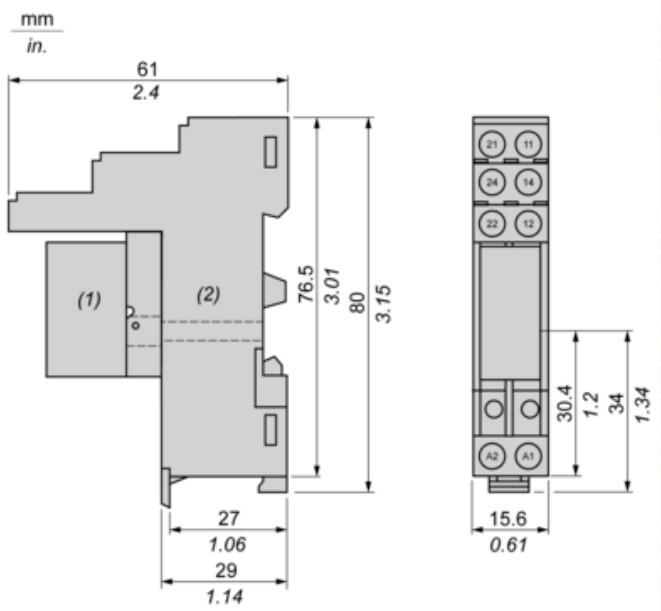
## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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> |
| 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 |  Yes                                                                                                                                                                                                                                                                                |

|                             |                                                                                                                                |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 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.   |
| <b>Contractual warranty</b> |                                                                                                                                |
| Warranty                    | 18 months                                                                                                                      |

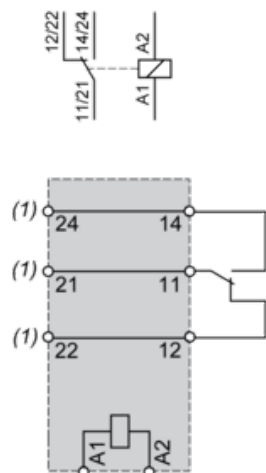
Dimensions

Relay Complete with Socket



- (1) Relays  
(2) Socket

## Wiring Diagram



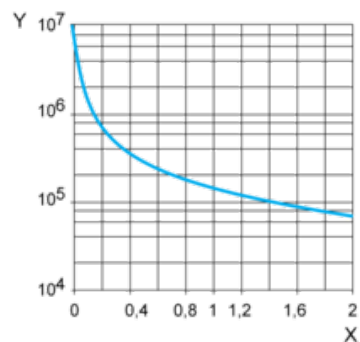
(1) Terminals 11 and 21, 14 and 24, 12 and 22 must be linked for this references

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.

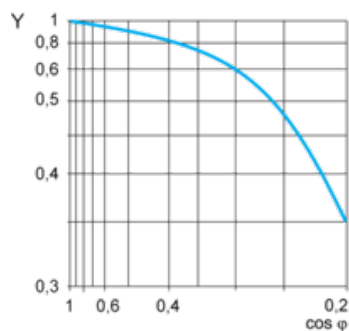
Resistive AC load



X Switching capacity (kVA)

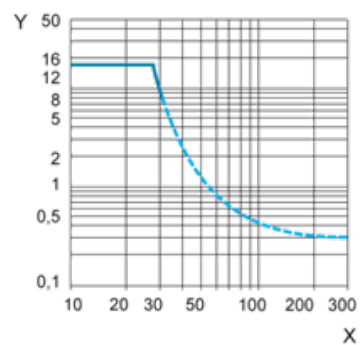
Y Durability (Number of operating cycles)

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.