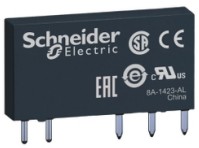
# Product datasheet

Specifications



## Slim interface plug in relay, Harmony Electromechanical Relays, 6A, 1CO, standard, 24V DC

RSL1AB4BD

## Main

| | |
|---|---|
| **Range of product** | Harmony Electromechanical Relays |
| **Series name** | Slim interface relay |
| **Product or component type** | Plug-in relay |
| **Device short name** | RSL |
| **Contacts type and composition** | 1 C/O |
| **Contact operation** | Standard |
| **[Uc] control circuit voltage** | 24 V DC |
| **[Ithe] conventional enclosed thermal current** | 6 A at -40…55 °C |
| **status LED** | Without |
| **control type** | Without push-button |

## Complementary

| | |
|---|---|
| **Shape of pin** | Flat (PCB type) |
| **Average resistance** | 3390 Ohm at 23 °C +/- 15 % |
| **Rated operational voltage limits** | 18...33.6 V DC |
| **[Ui] rated insulation voltage** | 250 V conforming to IEC<br>277 V conforming to cUL |
| **[Uimp] rated impulse withstand voltage** | 6 kV conforming to IEC |
| **Contacts material** | Silver alloy (AgSnO2) |
| **[Ie] rated operational current** | 6 A (AC-1/DC-1) conforming to IEC/UL |
| **minimum switching current** | 100 mA |
| **Maximum switching voltage** | 277 V |
| **Minimum switching voltage** | 12 V |
| **Maximum switching capacity** | 1500 VA<br>150 W |
| **Minimum switching capacity** | 120 mW |
| **Operating rate** | <= 360 cycles/hour under load<br><= 18000 cycles/hour no-load |
| **Mechanical durability** | 10000000 cycles |
| **Electrical durability** | 60000 cycles, 6 A at 250 V, AC-1 C/O |
| **Operating time** | 5 ms reset<br>12 ms |
| **Protection category** | RT III |

| | |
|---|---|
| **Test levels** | Level A group mounting |
| **Operating position** | Any position |
| **Width** | 5 mm |
| **Height** | 28 mm |
| **Depth** | 18.5 mm |
| **Terminals description ISO n°1** | (11-12-14)OC<br>(A1-A2)CO |
| **Net weight** | 0.0054 kg |
| **Load current** | 6 A at 250 V AC 0.5 mm mounting distance |
| **Average coil consumption** | 0.17 W |
| **Drop-out voltage threshold** | >= 0.05 Uc |
| **Safety reliability data** | B10d = 60000 |
| **Mounting support** | Socket or PCB |
| **Device presentation** | Complete product |

## Environment

| | |
|---|---|
| **Dielectric strength** | 1000 V AC between contacts<br>4000 V AC between coil and contact |
| **Standards** | CSA C22.2 No 14<br>IEC 61810-1<br>UL 508 |
| **Product certifications** | CSA<br>UL<br>EAC |
| **Ambient air temperature for storage** | -40…70 °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** | 5 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…55 °C |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 0.500 cm |
| **Package 1 Width** | 1.500 cm |
| **Package 1 Length** | 2.800 cm |
| **Package 1 Weight** | 5.000 g |
| **Unit Type of Package 2** | BB1 |
| **Number of Units in Package 2** | 10 |
| **Package 2 Height** | 0.700 cm |
| **Package 2 Width** | 2.400 cm |
| **Package 2 Length** | 30.500 cm |
| **Package 2 Weight** | 71.000 g |

| | |
|---|---|
| **Unit Type of Package 3** | S01 |
| **Number of Units in Package 3** | 500 |
| **Package 3 Height** | 15.000 cm |
| **Package 3 Width** | 15.000 cm |
| **Package 3 Length** | 40.000 cm |
| **Package 3 Weight** | 3.913 kg |

## Contractual warranty

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

## 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

| | |
|---|---|
| Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) | 3 |
| Environmental Disclosure | Product Environmental Profile |

## Use Better

### Materials and Substances

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

## Use Again

### Repack and remanufacture

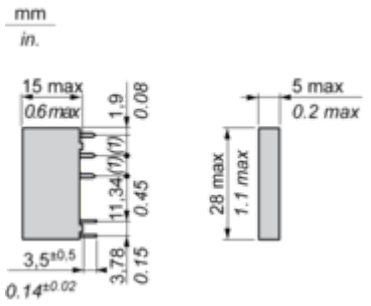
| | |
|---|---|
| Circularity Profile | End of Life Information |

| | |
|---|---|
| WEEE |  **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins** |
| Take-back | **No** |

Dimensions Drawings

## Dimensions

### Relay with Flat Pins (PCB Type)



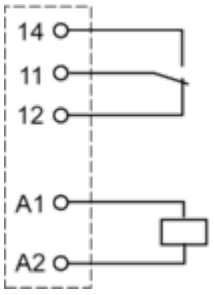

**(1):** 5.04 mm / 0.19 in.

Connections and Schema

## Wiring Diagram

### Relay with Flat Pins (PCB Type)

1 C/O contact

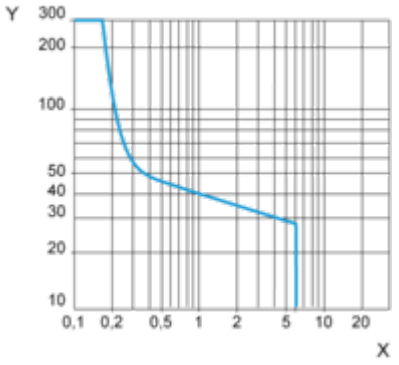


## Performance Curves

### Curves for Resistive Load

#### Maximum Switching Capacity on DC Load

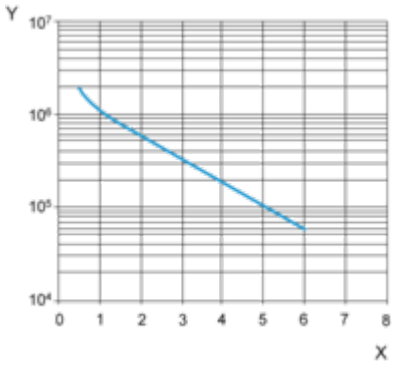
Resistive load




**X** DC Current
**Y** DC Voltage

#### Electrical Durability

Only tested at 6A/250VAC, projection for the rest
250 Vac Resistive load




**X** Switching current (A)
**Y** Cycles
**Note :** These are typical curves, actual durability depends on load, environment, duty cycle, etc.

Technical Illustration

**Dimensions**

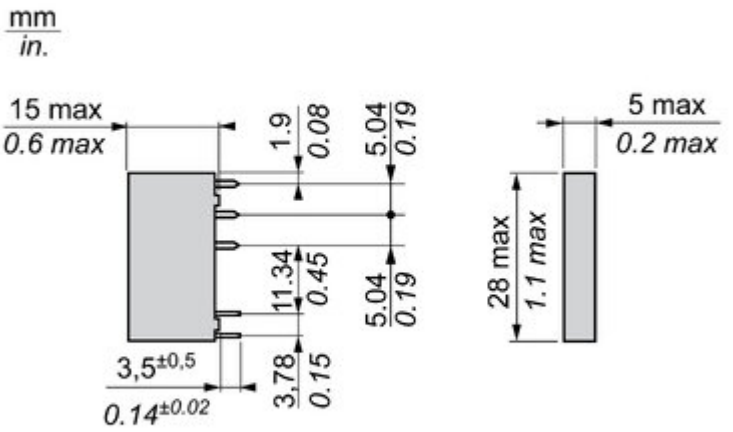


Image of product / Alternate images

**Alternative**

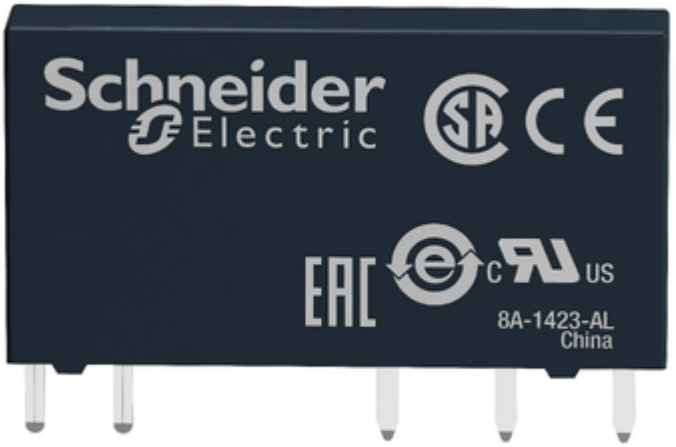


Image of product in real life situation