## Product datasheet

### Characteristics

**SR2A101BD**  
compact smart relay Zelio Logic - 10 I O - 24 V DC - no clock - display

### Main

<table>
<thead>
<tr>
<th><strong>Range of product</strong></th>
<th>Zelio Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product or component type</strong></td>
<td>Compact smart relay</td>
</tr>
</tbody>
</table>

### Complementary

<table>
<thead>
<tr>
<th><strong>Local display</strong></th>
<th>With</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number or control scheme lines</strong></td>
<td>0…240 with ladder programming</td>
</tr>
<tr>
<td><strong>Cycle time</strong></td>
<td>6…90 ms</td>
</tr>
<tr>
<td><strong>Backup time</strong></td>
<td>10 years at 25 °C</td>
</tr>
</tbody>
</table>
| **Clock drift** | 12 min/year at 0…55 °C  
6 s/month at 25 °C |
| **Checks** | Program memory on each power up |
| **[Us] rated supply voltage** | 24 V DC |
| **Supply voltage limits** | 19.2…30 V |
| **Maximum supply current** | 100 mA (without extension) |
| **Power dissipation in W** | 3 W without extension |
| **Reverse polarity protection** | With |
| **Discrete input number** | 6 conforming to EN/IEC 61131-2 type 1 |
| **Discrete input type** | Resistive |
| **Discrete input voltage** | 24 V DC |
| **Discrete input current** | 4 mA |
| **Counting frequency** | 1 kHz for discrete input |
| **Voltage state 1 guaranteed** | >= 15 V for I1...IA and IH...IR discrete input circuit  
>= 15 V for IB...IG used as discrete input circuit |
| **Voltage state 0 guaranteed** | <= 5 V for I1...IA and IH...IR discrete input circuit  
<= 5 V for IB...IG used as discrete input circuit |
| **Current state 1 guaranteed** | >= 1.2 mA (IB...IG used as discrete input circuit)  
>= 2.2 mA (I1...IA and IH...IR discrete input circuit) |
| **Current state 0 guaranteed** | <= 0.5 mA (IB...IG used as discrete input circuit) |

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**Disclaimer:** 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.
**Input compatibility**

- \( \leq 0.75 \text{ mA} \) (I1...IA and IH...IR discrete input circuit)
- 3-wire proximity sensors PNP for discrete input

**Input impedance**

- 12 kOhm for IB...IG used as analogue input circuit
- 12 kOhm for IB...IG used as discrete input circuit
- 7.4 kOhm for I1...IA and IH...IR discrete input circuit

**Number of outputs**

- 4 relay

**Output voltage limits**

- 24...250 V AC (relay output)
- 5...30 V DC (relay output)

**Contacts type and composition**

- NO for relay output

**Output thermal current**

- 8 A for all 4 outputs for relay output

**Electrical durability**

- AC-12: 500000 cycles at 230 V, 1.5 A for relay output conforming to EN/IEC 60947-5-1
- AC-15: 500000 cycles at 230 V, 0.9 A for relay output conforming to EN/IEC 60947-5-1
- DC-12: 500000 cycles at 24 V, 1.5 A for relay output conforming to EN/IEC 60947-5-1
- DC-13: 500000 cycles at 24 V, 0.6 A for relay output conforming to EN/IEC 60947-5-1

**Switching capacity in mA**

- \( \geq 10 \text{ mA} \) at 12 V (relay output)

**Operating rate in Hz**

- 0.1 Hz (at Ie) for relay output
- 10 Hz (no load) for relay output

**Mechanical durability**

- 1000000 cycles for relay output

**[Uimp] rated impulse withstand voltage**

- EN/IEC 60947-1 and EN/IEC 60664-1 4 kV

**Clock**

- Without

**Response time**

- 10 ms (from state 0 to state 1) for relay output
- 5 ms (from state 1 to state 0) for relay output

**Connections - terminals**

- Screw terminals, 1 x 0.2...1 x 2.5 mm² (AWG 25...AWG 14) semi-solid
- Screw terminals, 1 x 0.2...1 x 2.5 mm² (AWG 25...AWG 14) solid
- Screw terminals, 1 x 0.25...1 x 2.5 mm² (AWG 24...AWG 14) flexible with cable end
- Screw terminals, 2 x 0.2...2 x 1.5 mm² (AWG 24...AWG 16) solid
- Screw terminals, 2 x 0.25...2 x 0.75 mm² (AWG 24...AWG 18) flexible with cable end

**Tightening torque**

- 0.5 N.m

**Overvoltage category**

- III conforming to EN/IEC 60664-1

**Net weight**

- 0.25 kg

**Environment**

**Immunity to microbreaks**

- 1 ms

**Product certifications**

- CSA
- UL
- C-Tick
- GL
- GOST

**Standards**

- EN/IEC 61000-4-4 level 3
- EN/IEC 60068-2-27 Ea
- EN/IEC 61000-4-3
- EN/IEC 61000-4-11
- EN/IEC 61000-4-12
- EN/IEC 60668-2-6 Fc
- EN/IEC 61000-4-6 level 3
- EN/IEC 61000-4-5
- EN/IEC 61000-4-2 level 3

**IP degree of protection**

- IP20 (terminal block) conforming to IEC 60529
- IP40 (front panel) conforming to IEC 60529

**Environmental characteristic**

- EMC directive conforming to EN/IEC 61000-6-2
- EMC directive conforming to EN/IEC 61000-6-3
- EMC directive conforming to EN/IEC 61000-6-4
- EMC directive conforming to EN/IEC 61131-2 zone B
- Low voltage directive conforming to EN/IEC 61131-2

**Disturbance radiated/conducted**

- Class B conforming to EN 55022-11 group 1

**Pollution degree**

- 2 conforming to EN/IEC 61131-2

**Ambient air temperature for operation**

- -20...+40 °C in non-ventilated enclosure conforming to IEC 60068-2-1 and IEC 60068-2-2
- -20...+55 °C conforming to IEC 60068-2-1 and IEC 60068-2-2

**Ambient air temperature for storage**

- -40...+70 °C

**Operating altitude**

- 2000 m

**Maximum altitude transport**

- 3048 m

**Relative humidity**

- 95 % without condensation or dripping water
### Packing Units

<table>
<thead>
<tr>
<th>Packing Units</th>
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<tbody>
<tr>
<td>Package 1 Weight</td>
<td>0.236 kg</td>
</tr>
<tr>
<td>Package 1 Height</td>
<td>0.700 dm</td>
</tr>
<tr>
<td>Package 1 Width</td>
<td>1.000 dm</td>
</tr>
<tr>
<td>Package 1 Length</td>
<td>0.900 dm</td>
</tr>
</tbody>
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### Offer Sustainability

<table>
<thead>
<tr>
<th>Offer Sustainability</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Sustainable offer status</td>
<td>Green Premium product</td>
</tr>
<tr>
<td>REACH Regulation</td>
<td>REACH Declaration</td>
</tr>
<tr>
<td>EU RoHS Directive</td>
<td>Pro-active compliance (Product out of EU RoHS legal scope)</td>
</tr>
<tr>
<td>EU RoHS Declaration</td>
<td>EU RoHS Declaration</td>
</tr>
<tr>
<td>Mercury free</td>
<td>Yes</td>
</tr>
<tr>
<td>RoHS exemption information</td>
<td>Yes</td>
</tr>
<tr>
<td>China RoHS Regulation</td>
<td>China RoHS declaration</td>
</tr>
<tr>
<td>Environmental Disclosure</td>
<td>Product Environmental Profile</td>
</tr>
<tr>
<td>Circularity Profile</td>
<td>End of Life Information</td>
</tr>
<tr>
<td>WEEE</td>
<td>The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins</td>
</tr>
<tr>
<td>PVC free</td>
<td>Yes</td>
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### Contractual warranty

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<thead>
<tr>
<th>Contractual warranty</th>
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<tbody>
<tr>
<td>Warranty</td>
<td>18 months</td>
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