

# Product datasheet

Specifications



## modular smart relay Zelio Logic - “discovery” pack - 10 I O - 24 V DC

Local distributor code:

389538167

SR3PACKBD

**EAN Code: 3389110549959**

### Main

|                           |                                    |
|---------------------------|------------------------------------|
| Range of product          | Zelio Logic                        |
| Product or component type | Modular discovery packs            |
| Discrete input number     | 6 conforming to IEC 61131-2 Type 1 |
| Number of outputs         | 4 relay                            |

### Complementary

|                                |                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Kit composition                | SR3B101BD<br>Cable PC SR2USB01 for connection to PC                                                                  |
| Input/output number            | 10                                                                                                                   |
| Local display                  | With                                                                                                                 |
| Number or control scheme lines | 120 with ladder programming<br>0...200 with FBD programming                                                          |
| Cycle time                     | 6...90 ms                                                                                                            |
| Backup time                    | 10 years at 25 °C                                                                                                    |
| Clock drift                    | 12 min/year at 0...55 °C<br>6 s/month at 25 °C                                                                       |
| Checks                         | Program memory on each power up                                                                                      |
| [Us] rated supply voltage      | 24 V                                                                                                                 |
| Supply voltage limits          | 19.2...30 V                                                                                                          |
| Maximum supply current         | 100 mA (with extensions)<br>100 mA (without extension)                                                               |
| Power dissipation in W         | 3 W without extension<br>8 W with extensions                                                                         |
| Reverse polarity protection    | With                                                                                                                 |
| 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<br>>= 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<br><= 5 V for IB...IG used as discrete input circuit<br><= 5 V |
| Current state 1 guaranteed     | >= 1.2 mA (IB...IG used as discrete input circuit)<br>>= 2.2 mA (I1...IA and IH...IR discrete input circuit)         |

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

|                                        |                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Current state 0 guaranteed             | <= 0.5 mA (IB...IG used as discrete input circuit)<br><= 0.75 mA (I1...IA and IH...IR discrete input circuit)                                                                                                                                                                                                                                                                      |
| Input compatibility                    | 3-wire proximity sensors PNP for discrete input                                                                                                                                                                                                                                                                                                                                    |
| Analogue input number                  | 4                                                                                                                                                                                                                                                                                                                                                                                  |
| Analogue input type                    | Common mode                                                                                                                                                                                                                                                                                                                                                                        |
| Analogue input range                   | 0...24 V<br>0...10 V                                                                                                                                                                                                                                                                                                                                                               |
| Temperature probe type                 | NTC 10k at 25 °C<br>NTC 1000k at 25 °C<br>KTY81 210/220/221/222/250<br>Pt 500                                                                                                                                                                                                                                                                                                      |
| Maximum permissible voltage            | 30 V for analogue input circuit                                                                                                                                                                                                                                                                                                                                                    |
| Analogue input resolution              | 8 bits                                                                                                                                                                                                                                                                                                                                                                             |
| LSB value                              | 39 mV for analogue input circuit                                                                                                                                                                                                                                                                                                                                                   |
| Conversion time                        | Smart relay cycle time for analogue input circuit                                                                                                                                                                                                                                                                                                                                  |
| Conversion error                       | +/- 5 % at 25 °C for analogue input circuit<br>+/- 6.2 % at 55 °C for analogue input circuit                                                                                                                                                                                                                                                                                       |
| Repeat accuracy                        | +/- 2 % at 55 °C for analogue input circuit                                                                                                                                                                                                                                                                                                                                        |
| Operating distance                     | 10 m between stations, with screened cable (sensor not isolated) for analogue input circuit                                                                                                                                                                                                                                                                                        |
| Input impedance                        | 12 kOhm for IB...IG used as analogue input circuit<br>12 kOhm for IB...IG used as discrete input circuit<br>7.4 kOhm for I1...IA and IH...IR discrete input circuit                                                                                                                                                                                                                |
| Output voltage limits                  | 24...250 V AC (relay output)<br>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 IEC 60947-5-1<br>AC-15: 500000 cycles at 230 V, 0.9 A for relay output conforming to IEC 60947-5-1<br>DC-12: 500000 cycles at 24 V, 1.5 A for relay output conforming to IEC 60947-5-1<br>DC-13: 500000 cycles at 24 V, 0.6 A for relay output conforming to IEC 60947-5-1                                     |
| Switching capacity in mA               | >= 10 mA at 12 V (relay output)                                                                                                                                                                                                                                                                                                                                                    |
| Operating rate in Hz                   | 0.1 Hz (at Ie) for relay output<br>10 Hz (no load) for relay output                                                                                                                                                                                                                                                                                                                |
| Mechanical durability                  | 10000000 cycles for relay output                                                                                                                                                                                                                                                                                                                                                   |
| [Uimp] rated impulse withstand voltage | 4 kV conforming to EN/IEC 60947-1 and EN/IEC 60664-1                                                                                                                                                                                                                                                                                                                               |
| Clock                                  | With                                                                                                                                                                                                                                                                                                                                                                               |
| Response time                          | 10 ms (from state 0 to state 1) for relay output<br>5 ms (from state 1 to state 0) for relay output                                                                                                                                                                                                                                                                                |
| Connections - terminals                | Screw terminals, 1 x 0.2...1 x 2.5 mm² (25 AWG...14 AWG) semi-solid<br>Screw terminals, 1 x 0.2...1 x 2.5 mm² (25 AWG...14 AWG) solid<br>Screw terminals, 1 x 0.25...1 x 2.5 mm² (24 AWG...14 AWG) flexible with cable end<br>Screw terminals, 2 x 0.2...2 x 1.5 mm² (24 AWG...16 AWG) solid<br>Screw terminals, 2 x 0.25...2 x 0.75 mm² (24 AWG...18 AWG) flexible with cable end |
| Tightening torque                      | 0.5 N.m                                                                                                                                                                                                                                                                                                                                                                            |
| Overvoltage category                   | III conforming to IEC 60664-1                                                                                                                                                                                                                                                                                                                                                      |
| Product weight                         | 0.7 kg                                                                                                                                                                                                                                                                                                                                                                             |

## Environment

|                         |      |
|-------------------------|------|
| Immunity to microbreaks | 1 ms |
|-------------------------|------|

|                                       |                                                                                                                                                                                                                                          |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product certifications                | GL<br>UL<br>CSA<br>GOST<br>C-Tick                                                                                                                                                                                                        |
| Standards                             | IEC 60068-2-27 Ea<br>IEC 60068-2-6 Fc<br>IEC 61000-4-3<br>IEC 61000-4-6 level 3<br>IEC 61000-4-11<br>IEC 61000-4-5<br>IEC 61000-4-2 level 3<br>IEC 61000-4-12<br>IEC 61000-4-4 level 3                                                   |
| IP degree of protection               | IP20 (terminal block) conforming to IEC 60529<br>IP40 (front panel) conforming to IEC 60529                                                                                                                                              |
| Environmental characteristic          | EMC directive conforming to IEC 61000-6-2<br>EMC directive conforming to IEC 61000-6-3<br>EMC directive conforming to IEC 61000-6-4<br>EMC directive conforming to IEC 61131-2 zone B<br>Low voltage directive conforming to IEC 61131-2 |
| Disturbance radiated/conducted        | Class B conforming to EN 55022-11 group 1                                                                                                                                                                                                |
| Pollution degree                      | 2 conforming to 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<br>-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

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 6.300 cm  |
| Package 1 Width              | 15.500 cm |
| Package 1 Length             | 23.500 cm |
| Package 1 Weight             | 394.000 g |
| Unit Type of Package 2       | S03       |
| Number of Units in Package 2 | 10        |
| Package 2 Height             | 30.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 4.422 kg  |

## Logistical informations

|                   |    |
|-------------------|----|
| Country of origin | FR |
|-------------------|----|

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## 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

|                                                        |                                               |
|--------------------------------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint                       | 148 kg CO2 eq.                                |
| Carbon footprint of the manufacturing phase [A1 to A3] | 48 kg CO2 eq.                                 |
| Carbon footprint of the distribution phase [A4]        | 0.8 kg CO2 eq.                                |
| Carbon footprint of the installation phase [A5]        | 0.1 kg CO2 eq.                                |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 98 kg CO2 eq.                                 |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 1 kg CO2 eq.                                  |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |

## Use Better



### Materials and Substances

|                                        |                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                    |
| Packaging without single use plastic   | Yes                                                                                    |
| SCIP Number                            | Eee2fc35-1620-4b70-b1d5-206e9240044e                                                   |
| EU RoHS Directive                      | <a href="#">Compliant By Exemption</a>                                                 |
| REACH Regulation                       | <a href="#">Reference contains Substances of Very High Concern above the threshold</a> |
| PVC free                               | Yes                                                                                    |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again



### Repack and remanufacture

|                                 |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in %   | 0                                                                                                                                                                                                               |
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                       | No                                                                                                                                                                                                              |
| WEEE Label                      |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |