



### Main

|                           |                                       |
|---------------------------|---------------------------------------|
| Range of product          | Zelio Logic                           |
| Product or component type | Compact discovery packs               |
| Discrete input number     | 8 conforming to EN/IEC 61131-2 type 1 |
| Number of outputs         | 4 relay                               |

### Complementary

|                                |                                                                                                               |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|
| Kit composition                | SR2B121BD<br>Cable PC SR2USB01 for connection to PC<br>Zelio Soft 2 programming software CD-ROM               |
| Input/output number            | 12                                                                                                            |
| Local display                  | With                                                                                                          |
| Number of 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 (without extension)                                                                                    |
| Power dissipation in W         | 3 W without extension                                                                                         |
| 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    |
| 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)  |
| 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...10 V<br>0...24 V                                                                                          |
| 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 EN/IEC 60947-5-1<br>AC-15: 500000 cycles at 230 V, 0.9 A for relay output conforming to EN/IEC 60947-5-1<br>DC-12: 500000 cycles at 24 V, 1.5 A for relay output conforming to EN/IEC 60947-5-1<br>DC-13: 500000 cycles at 24 V, 0.6 A for relay output conforming to EN/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 mm <sup>2</sup> (AWG 25...AWG 14) semi-solid<br>Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> (AWG 25...AWG 14) solid<br>Screw terminals, 1 x 0.25...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 14) flexible with cable end<br>Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> (AWG 24...AWG 16) solid<br>Screw terminals, 2 x 0.25...2 x 0.75 mm <sup>2</sup> (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                             | 0.7 kg                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Environment

|                                |                                                                                                                                                                                                                                                         |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immunity to microbreaks        | 1 ms                                                                                                                                                                                                                                                    |
| Product certifications         | CSA<br>C-Tick<br>UL<br>GOST<br>GL                                                                                                                                                                                                                       |
| Standards                      | EN/IEC 61000-4-4 level 3<br>EN/IEC 61000-4-12<br>EN/IEC 61000-4-5<br>EN/IEC 60068-2-6 Fc<br>EN/IEC 61000-4-2 level 3<br>EN/IEC 61000-4-6 level 3<br>EN/IEC 61000-4-3<br>EN/IEC 61000-4-11<br>EN/IEC 60068-2-27 Ea                                       |
| 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 EN/IEC 61000-6-2<br>EMC directive conforming to EN/IEC 61000-6-3<br>EMC directive conforming to EN/IEC 61000-6-4<br>EMC directive conforming to EN/IEC 61131-2 zone B<br>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<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

|                  |          |
|------------------|----------|
| Package 1 Weight | 0.558 kg |
| Package 1 Height | 0.650 dm |
| Package 1 width  | 1.550 dm |
| Package 1 Length | 2.350 dm |

### Offer Sustainability

|                            |                                                                                                                                                                                    |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                              |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| 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>                                                    |
| Circularity Profile        |  <a href="#">End Of Life Information</a>                                                         |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins                                                        |
| PVC free                   | Yes                                                                                                                                                                                |

### Contractual warranty

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