# Product data sheet
## Characteristics

# SR2B121FU
compact smart relay, Zelio Logic SR2 SR3, 12 IO, 100 to 240V AC, clock, display



## Main

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|---|---|
| Range of product | Zelio Logic |
| Product or component type | Compact smart relay |

## Complementary

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| Local display | With |
| Number or control scheme lines | 0…240 with ladder programming<br>0…500 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 | 100...240 V AC |
| Supply voltage limits | 85…264 V |
| Supply frequency | 50/60 Hz |
| Maximum supply current | 30 MA at 240 V (without extension)<br>80 MA at 100 V (without extension) |
| Power consumption in VA | 7 VA without extension |
| Isolation voltage | 1780 V |
| Protection type | Against inversion of terminals (control instructions not executed) |
| Discrete input number | 8 |
| Discrete input voltage | 100...240 V AC |
| Discrete input current | 0.6 MA |
| Discrete input frequency | 47...53 Hz<br>57...63 Hz |
| Voltage state 1 guaranteed | >= 79 V for discrete input |
| Voltage state 0 guaranteed | <= 40 V for discrete input |
| Current state 1 guaranteed | >= 0.17 mA (discrete input) |
| Current state 0 guaranteed | <= 0.5 mA (discrete input) |
| Analogue input number | 0 |
| Input impedance | 350 kOhm for discrete input |
| Number of outputs | 4 relay |
| Output voltage limits | 5...30 V DC (relay output)<br>24...250 V AC |
| Contacts type and composition | NO for relay output |
| Output thermal current | 8 A for all 4 outputs for relay output |

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| 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 | 50 ms with ladder programming (from state 0 to state 1) for discrete input<br>50 ms with ladder programming (from state 1 to state 0) for discrete input<br>50...255 ms with FBD programming (from state 0 to state 1) for discrete input<br>50...255 ms with FBD programming (from state 1 to state 0) for discrete input<br>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 |
| Net weight | 0.25 Kg |

## Environment

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|---|---|
| Immunity to microbreaks | 10 Ms |
| Product certifications | GL[RETURN]GOST[RETURN]UL[RETURN]CSA[RETURN]C-Tick |
| Standards | IEC 61000-4-4 level 3<br>IEC 60068-2-27 Ea<br>IEC 61000-4-5<br>IEC 61000-4-11<br>IEC 61000-4-12<br>IEC 61000-4-3<br>IEC 60068-2-6 Fc<br>IEC 61000-4-2 level 3<br>IEC 61000-4-6 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

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|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 6.800 Cm |
| Package 1 Width | 9.000 Cm |
| Package 1 Length | 10.000 Cm |
| Package 1 Weight | 246.000 G |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 30 |
| Package 2 Height | 30.000 Cm |
| Package 2 Width | 30.000 Cm |

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|---|---|
| Package 2 Length | 40.000 Cm |
| Package 2 Weight | 7.885 Kg |

## Offer Sustainability

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| Recyclability potential, in % | 0 |
| Total lifecycle Carbon footprint | 195 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 30.136633378004667 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 30 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.48838938016889794 |
| Carbon footprint of the distribution phase [A4] | 0.5 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.046230056623997685 |
| Carbon footprint of the installation phase [A5] | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 164.00340084141706 |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 164 kg CO2 eq. |
| Mercury free | Yes |
| Sustainable packaging | Yes |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.6160677672492774 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.6 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |
| Total lifecycle Carbon footprint | 195 |
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| SCIP Number | Eee2fc35-1620-4b70-b1d5-206e9240044e |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant By Exemption |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, w |
| PVC free | Yes |
| End of life manual availability | End Of Life Information |
| Take-back | No |
| WEEE Label | The product must be disposed on European Union markets following specific waste collection a |

## Contractual warranty

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| Warranty (in months) | 18 |

Product Life Status : Commercialised