## Product data sheet <br> Characteristics

SR2E121BD
compact smart relay Zelio Logic - 12 I O-24 V DC - clock - no display

Product availability: Stock - Normally stocked in distribution facility



Main

| Range of product | Zelio Logic |
| :--- | :--- |
| Product or component <br> type | Compact smart relay |

Complementary

| Local display | Without |
| :---: | :---: |
| Number or control scheme lines | $0 . .500$ with FBD programming <br> 0... 240 with ladder programming |
| Cycle time | $6 . . .90 \mathrm{~ms}$ |
| Backup time | 10 yearsat $77{ }^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right)$ |
| Clock drift | $\begin{aligned} & 6 \mathrm{~s} / \text { monthat } 77^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right) \\ & 12 \mathrm{~min} / \text { yearat } 32 \ldots . . .131^{\circ} \mathrm{F}\left(0 \ldots 5{ }^{\circ} \mathrm{C}\right) \end{aligned}$ |
| Checks | Program memory on each power up |
| [Us] rated supply voltage | 24 V DC |
| Supply voltage limits | 19.2... 30 V |
| Supply current | 100 mA (without extension) |
| Power dissipation in W | 3 W without extension |
| Reverse polarity protection | With |
| Discrete input number | 8 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 kHzfor discrete input |
| Voltage state 1 guaranteed | >= 15 Vfor I1..IA and IH...IR discrete input circuit >= 15 Vfor IB...IG used as discrete input circuit |
| Voltage state 0 guaranteed | <= 5 Vfor I1...IA and IH...IR discrete input circuit <= 5 Vfor IB...IG used as discrete input circuit |
| Current state 1 guaranteed | $>=1.2 \mathrm{~mA}$ for IB...IG used as discrete input circuit $>=2.2 \mathrm{~mA}$ for I1...IA and IH...IR discrete input circuit |
| Current state 0 guaranteed | <= 0.5 mA for IB...IG used as discrete input circuit <= 0.75 mA for I1...IA and IH...IR discrete input circuit |
| Input compatibility | 3-wire proximity sensors PNP (discrete input) |
| Analogue input number | 4 |
| Analogue input type | Common mode |
| Analogue input range | $\begin{aligned} & 0 \ldots 10 \mathrm{~V} \\ & 0 \ldots . .24 \mathrm{~V} \end{aligned}$ |
| Maximum permissible voltage | 30 V (analogue input circuit) |
| Analogue input resolution | 8 bits |
| LSB value | 39 mV (analogue input circuit) |
| Conversion time | Smart relay cycle time analogue input circuit |


| Conversion error | $+/-5 \%$ at $77^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right)$ for analogue input circuit $+/-6.2$ \%at $131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)$ for analogue input circuit |
| :---: | :---: |
| Repeat accuracy | +/-2 \%at $131{ }^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)$ for analogue input circuit |
| Operating distance | 10 m between stations, with screened cable (sensor not isolated) analogue input circuit |
| Input impedance | 12 kOhm (IB...IG used as analogue input circuit) 12 kOhm (IB...IG used as discrete input circuit) 7.4 kOhm (I1...IA and IH...IR discrete input circuit) |
| Number of outputs | 4 relay output(s) |
| Output voltage limits | 24... 250 V AC (relay output) 5... 30 V DC (relay output) |
| Contacts type and composition | NO relay output |
| Output thermal current | 8 A for all 4 outputs (relay output) |
| Electrical durability | 500000 cycles AC-12at 230 V , 1.5 Afor relay output conforming to EN/IEC 60947-5-1 <br> 500000 cycles AC-15at 230 V , 0.9 Afor relay output conforming to EN/IEC 60947-5-1 <br> 500000 cycles DC-12at $24 \mathrm{~V}, 1.5$ Afor relay output conforming to EN/IEC 60947-5-1 <br> 500000 cycles DC-13at 24 V , 0.6 Afor relay output conforming to EN/IEC 60947-5-1 |
| Switching capacity in mA | >= 10 mAat 12 V (relay output) |
| Operating rate in Hz | 0.1 Hz (at le)for relay output 10 Hz (no load)for relay output |
| Mechanical durability | 10000000 cycles (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) relay output 5 ms (from state 1 to state 0) relay output |
| Connections - terminals | Screw terminals, clamping capacity: $1 \times 0.2 \ldots 1 \times 2.5 \mathrm{~mm}^{2}$ AWG $25 \ldots$...AWG 14 se-mi-solid <br> Screw terminals, clamping capacity: $1 \times 0.2 \ldots 1 \times 2.5 \mathrm{~mm}^{2}$ AWG 25 ...AWG 14 solid <br> Screw terminals, clamping capacity: $1 \times 0.25 \ldots 1 \times 2.5 \mathrm{~mm}^{2}$ AWG $24 \ldots$...AWG 14 flexible with cable end <br> Screw terminals, clamping capacity: $2 \times 0.2 \ldots 2 \times 1.5 \mathrm{~mm}^{2}$ AWG $24 \ldots$...AWG 16 solid <br> Screw terminals, clamping capacity: $2 \times 0.25 \ldots 2 \times 0.75 \mathrm{~mm}^{2}$ AWG $24 \ldots$...AWG 18 flexible with cable end |
| Tightening torque | $4.42 \mathrm{lbf.in}$ (0.5 N.m) |
| Overvoltage category | III conforming to EN/IEC 60664-1 |
| Product weight | $0.49 \mathrm{lb}(\mathrm{US})(0.22 \mathrm{~kg}$ ) |

Environment

| Immunity to microbreaks | $<=1 \mathrm{~ms}$ |
| :--- | :--- |
| Product certifications | CSA |
|  | C-Tick |
|  | GL |
|  | GOST |
| Standards | EN/IEC 60068-2-27 Ea |
|  | EN/IEC 60068-2-6 Fc |
|  | EN/IEC 61000-4-11 |
|  | EN/IEC 61000-4-12 |
|  | EN/IEC 61000-4-2 level 3 |
|  | EN/IEC 61000-4-3 |
|  | EN/IEC 61000-4-4 level 3 |
|  | EN/IEC 61000-4-5 |
|  | EN/IEC 61000-4-6 level 3 |
| 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 |  |
| Disturbance radiated/conducted | Low voltage directive conforming to EN/IEC 61131-2 |
| Pollution degree | Class B conforming to EN 55022-11 group 1 |


| Ambient air temperature for operation | $-4 \ldots 104{ }^{\circ} \mathrm{F}\left(-20 \ldots 40^{\circ} \mathrm{C}\right)$ in non-ventilated enclosure conforming to IEC 60068-2-1 and IEC 60068-2-2 <br> $-4 \ldots 131^{\circ} \mathrm{F}\left(-20 \ldots 55^{\circ} \mathrm{C}\right)$ conforming to IEC 60068-2-1 and IEC 60068-2-2 |
| :---: | :---: |
| Ambient air temperature for storage | $-40 \ldots 158{ }^{\circ} \mathrm{F}\left(-40 \ldots 70^{\circ} \mathrm{C}\right)$ |
| Operating altitude | 6561.68 ft (2000 m) |
| Altitude transport | <= $10000 \mathrm{ft}(3048 \mathrm{~m})$ |
| Relative humidity | $95 \%$ without condensation or dripping water |

Ordering and shipping details

| Category | $22378-$ SR2,3 ZELIO 2 RELAYS |
| :--- | :--- |
| Discount Schedule | I |
| GTIN | 00785901422709 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 0.46000000000000002 |
| Returnability | Y |
| Country of origin | FR |

Offer Sustainability
California proposition 65
WARNING: This product can expose you to chemicals including:

| ---- - Substance 1 | Lead and lead compounds, which is known to the State of California to cause can- <br> cer and birth defects or other reproductive harm. |
| :--- | :--- |
| ----- - More information | For more information go to www.p65warnings.ca.gov |

Contractual warranty
Warranty period 18 months

Mounting on $35 \mathrm{~mm} / 1.38 \mathrm{in}$. DIN Rail

$$
\frac{\mathrm{mm}}{\mathrm{in}}
$$


(1) With SR2USB01 or SR2BTC01

## Screw Fixing (Retractable Lugs)

$$
\frac{\mathrm{mm}}{\mathrm{in} .}
$$


(1) With SR2USB01 or SR2BTC01

Position of Display


Compact and Modular Smart Relays
Connection of Smart Relays on DC Supply

(1) 1 A quick-blow fuse or circuit-breaker.
(2) Fuse or circuit-breaker.
(3) Inductive load.
(4) Q9 and QA: 5 A (max. current in terminal C: 10 A ).

Discrete Input Used for 3-Wire Sensors

(1) 1 A quick-blow fuse or circuit-breaker.

Electrical Durability of Relay Outputs
(in millions of operating cycles, conforming to IEC/EN 60947-5-1)
DC-12 (1)


X: Current (A)
Y: Millions of operating cycles
(1) DC-12: control of resistive loads and of solid state loads isolated by opto-coupler, $\mathrm{L} / \mathrm{R} \leq 1 \mathrm{~ms}$.

DC-13 (1)


X: Current (A)
Y: Millions of operating cycles
(1) DC-13: switching electromagnets, L/R $\leq 2 \times(\mathrm{Ue} \times \mathrm{le})$ in ms , Ue: rated operational voltage, le: rated operational current (with a protection diode on the load, DC-12 curves must be used with a coefficient of 0.9 applied to the number in millions of operating cycles).

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Industrial Relays category:
Click to view products by Schneider manufacturer:

Other Similar products are found below :
6-1617801-8 6-1618107-9 7-1618273-3 EV250-4A-02 EV250-6A-01 FCA-125-CX8 FCA-325-159 FCA-410-138 8000-S3121 8-1618273-6 8-1618393-1 GCA63A220VAC60HZ GCA63A277VAC60HZ GCA63A600VAC60HZ 1-1672275-3 1-1833005-4 H-16/S1 A711Z H-8C H-8/S11 H-8/S68 ACC530U20 ACC730U30 RF303ZM4-12 DH18DA 1423675-8 AR4-15F13-C01 AR7-41F11 AVR907 15732A200 B07B032AC1-0329 B329 B490A 1618279-1 BHR124Y 1810DDB-SX N417 P30C42A12D1-120 2-1617748-6 2-1618375-1 2-1618396-6 2-1618398-1 JMAPD-5XL JMGACD-5M JMGSC-5LW JMGSCD-5L PBO-18A1218 PBO-40A3040 K8DSPH1200480VAC KA-3C-12A

