Product data sheet
Characteristics

SR2B121B
compact smart relay, Zelio Logic SR2 SR3, 12 IO, 24V AC, clock, display



Main

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

Complementary

Local display	With
Number or control scheme lines	0…240 with ladder programming 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 6 s/month at 25 °C
Checks	Program memory on each power up
[Us] rated supply voltage	24 V AC
Supply voltage limits	20.4…28.8 V
Supply frequency	50/60 Hz
Maximum supply current	145 MA (without extension)
Power consumption in VA	4 VA without extension
Isolation voltage	1780 V
Protection type	Against inversion of terminals (control instructions not executed)
Discrete input number	8
Discrete input voltage	24 V AC
Discrete input current	4.4 MA
Discrete input frequency	57...63 Hz 47...53 Hz
Voltage state 1 guaranteed	>= 14 V for discrete input
Voltage state 0 guaranteed	<= 5 V for discrete input
Current state 1 guaranteed	>= 2 mA (discrete input)
Current state 0 guaranteed	<= 0.5 mA (discrete input)
Analogue input number	0
Input impedance	4.6 kOhm for discrete input
Number of outputs	4 relay
Output voltage limits	5...30 V DC (relay output) 24...250 V AC
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 AC-15: 500000 cycles at 230 V, 0.9 A for relay output conforming to IEC 60947-5-1 DC-12: 500000 cycles at 24 V, 1.5 A for relay output conforming to IEC 60947-5-1 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 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 50 ms with ladder programming (from state 1 to state 0) for discrete input 50...255 ms with FBD programming (from state 0 to state 1) for discrete input 50...255 ms with FBD programming (from state 1 to state 0) for discrete input 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 (25 AWG...14 AWG) semi-solid Screw terminals, 1 x 0.2...1 x 2.5 mm² (25 AWG...14 AWG) solid Screw terminals, 1 x 0.25...1 x 2.5 mm² (24 AWG...14 AWG) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² (24 AWG...16 AWG) solid 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

Immunity to microbreaks	10 Ms repeated 20 times
Product certifications	C-Tick[RETURN]CSA[RETURN]GL[RETURN]UL[RETURN]GOST
Standards	IEC 61000-4-3 IEC 61000-4-4 level 3 IEC 61000-4-11 IEC 60068-2-27 Ea IEC 61000-4-5 IEC 61000-4-6 level 3 IEC 61000-4-2 level 3 IEC 60068-2-6 Fc IEC 61000-4-12
IP degree of protection	IP20 (terminal block) conforming to IEC 60529 IP40 (front panel) conforming to IEC 60529
Environmental characteristic	EMC directive conforming to IEC 61000-6-2 EMC directive conforming to IEC 61000-6-3 EMC directive conforming to IEC 61000-6-4 EMC directive conforming to IEC 61131-2 zone B 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 -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	6.600 Cm
Package 1 Width	9.100 Cm
Package 1 Length	10.000 Cm
Package 1 Weight	243.000 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
Package 2 Length	40.000 Cm
Package 2 Weight	7.763 Kg

Offer Sustainability

Recyclability potential, in %	0
Total lifecycle Carbon footprint	122 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	29.76911345876071
Carbon footprint of the manufacturing phase [A1 to A3]	30 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.4824334121180578
Carbon footprint of the distribution phase [A4]	0.5 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.045666275445656254
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	91.11300046745393
Carbon footprint of the use phase [B2, B3, B4, B6]	91 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.6085547456974569
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	122
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, wh
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

Warranty (in months)	18

Product Life Status : Commercialised