Product data sheet
Characteristics

SR2B201BD
compact smart relay, Zelio Logic SR2 SR3, 20 IO, 24V DC, clock, display, 8 relay outputs



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 DC
Supply voltage limits	19.2…30 V
Maximum supply current	100 MA (without extension)
Power dissipation in W	6 W without extension
Reverse polarity protection	With
Discrete input number	12 conforming to IEC 61131-2 Type 1
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 >= 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 <= 5 V for IB...IG used as discrete input circuit
Current state 1 guaranteed	>= 1.2 mA (IB...IG used as discrete input circuit) >= 2.2 mA (I1...IA and IH...IR discrete input circuit)
Current state 0 guaranteed	<= 0.75 mA (I1...IA and IH...IR discrete input circuit) <= 0.75 mA (IB...IG used as discrete input circuit)
Input compatibility	3-wire proximity sensors PNP for discrete input
Analogue input number	6
Analogue input type	Common mode
Analogue input range	0...24 V 0...10 V
Temperature probe type	NTC 10k at 25 °C NTC 1000k at 25 °C KTY81 210/220/221/222/250 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 +/- 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 12 kOhm for IB...IG used as discrete input circuit 7.4 kOhm for I1...IA and IH...IR discrete input circuit
Number of outputs	8 relay
Output voltage limits	24...250 V AC (relay output) 5...30 V DC (relay output)
Contacts type and composition	NO for relay output
Output thermal current	8 A for all 8 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	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	0.38 Kg

Environment

Immunity to microbreaks	10 Ms
Product certifications	GOST[RETURN]UL[RETURN]CSA[RETURN]C-Tick[RETURN]GL
Standards	IEC 61000-4-2 level 3 IEC 61000-4-5 IEC 60068-2-27 Ea IEC 61000-4-12 IEC 61000-4-3 IEC 60068-2-6 Fc IEC 61000-4-6 level 3 IEC 61000-4-4 level 3 IEC 61000-4-11
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	6.500 Cm
Package 1 Width	10.200 Cm
Package 1 Length	13.200 Cm
Package 1 Weight	362.000 G
Unit Type of Package 2	S03
Number of Units in Package 2	20
Package 2 Height	30 Cm
Package 2 Width	30 Cm
Package 2 Length	40 Cm
Package 2 Weight	7.726 Kg

Offer Sustainability

Recyclability potential, in %	0
Total lifecycle Carbon footprint	241 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	44.469910228519076
Carbon footprint of the manufacturing phase [A1 to A3]	44 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.7206721341516665
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.06821752257931366
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	195.24214385882985
Carbon footprint of the use phase [B2, B3, B4, B6]	195 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.9090756077702751
Carbon footprint of the end-of-life phase [C1 to C4]	0.9 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	241
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

Warranty (in months)	18

Product Life Status : Commercialised