

Product data sheet

Characteristics

SR2B201BD

compact smart relay Zelio Logic - 20 I O - 24 V DC - clock - display



Main

Range of product	Zelio Logic
Product or component type	Compact smart relay
[Us] rated supply voltage	24 V DC
Discrete input number	12 EN/IEC 61131-2 type 1
Analogue input number	6
Number of outputs	8 relay
Local display	With
Clock	With

Complementary

Supply current	100 mA without extension
Discrete input current	4 mA
Number of control scheme lines	120 ladder ≤ 200 FBD
Cycle time	6...90 ms
Backup time	10 years 25 °C
Clock drift	6 s/month 25 °C 12 min/year 0...55 °C
Checks	Program memory on each power up
Supply voltage limits	19.2...30 V
Power dissipation in W	6 W without extension
Reverse polarity protection	With
Discrete input type	Resistive
Discrete input voltage	24 V DC
Counting frequency	1 kHz discrete input
Voltage state 1 guaranteed	≥ 15 V IB...IG used as discrete input circuit ≥ 15 V I1...IA and IH...IR discrete input circuit
Voltage state 0 guaranteed	≤ 5 V IB...IG used as discrete input circuit ≤ 5 V I1...IA and IH...IR 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 IB...IG used as discrete input circuit < 0.75 mA I1...IA and IH...IR discrete input circuit
Input compatibility	3-wire proximity sensors PNP discrete input
Analogue input type	Common mode
Analogue input range	0...10 V 0...24 V
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 % 25 °C analogue input circuit +/- 6.2 % 55 °C analogue input circuit
Repeat accuracy	+/- 2 % 55 °C analogue input circuit
Operating distance	10 m between stations, with screened cable (sensor not isolated) analogue input circuit

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Input impedance	7.4 kOhm I1...IA and IH...IR discrete input circuit 12 kOhm IB...IG used as analogue input circuit 12 kOhm IB...IG used as discrete input circuit
Output voltage limits	5...30 V DC relay output 24...250 V AC relay output
Contacts type and composition	NO relay output
Output thermal current	8 A for all 8 outputs relay output
Electrical durability	500000 cycles DC-12 24 V 1.5 A relay output EN/IEC 60947-5-1 500000 cycles DC-13 24 V 0.6 A relay output EN/IEC 60947-5-1 500000 cycles AC-12 230 V 1.5 A relay output EN/IEC 60947-5-1 500000 cycles AC-15 230 V 0.9 A relay output EN/IEC 60947-5-1
Switching capacity in mA	≥ 10 mA 12 V relay output
Operating rate in Hz	0.1 Hz at Ie relay output 10 Hz no load relay output
Mechanical durability	10000000 cycles relay output
[Uimp] rated impulse withstand voltage	4 kV EN/IEC 60947-1 and EN/IEC 60664-1
Response time	5 ms from state 1 to state 0 relay output 10 ms from state 0 to state 1 relay output
Connections - terminals	Screw terminals 1 x 0.25...1 x 2.5 mm ² 24...14 flexible with cable end Screw terminals 2 x 0.2...2 x 1.5 mm ² 24...16 solid Screw terminals 1 x 0.2...1 x 2.5 mm ² 25...14 solid Screw terminals 1 x 0.2...1 x 2.5 mm ² 25...14 semi-solid Screw terminals 2 x 0.25...2 x 0.75 mm ² 24...18 flexible with cable end
Tightening torque	0.5 N.m
Overvoltage category	III EN/IEC 60664-1
Product weight	0.38 kg

Environment

Immunity to microbreaks	≤ 10 ms
Product certifications	C-Tick CSA GL GOST UL
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
IP degree of protection	IP20 terminal block IEC 60529 IP40 front panel IEC 60529
Environmental characteristic	EMC directive EN/IEC 61131-2 zone B EMC directive EN/IEC 61000-6-2 EMC directive EN/IEC 61000-6-3 EMC directive EN/IEC 61000-6-4 Low voltage directive EN/IEC 61131-2
Disturbance radiated/conducted	Class B EN 55022-11 group 1
Pollution degree	2 EN/IEC 61131-2
Ambient air temperature for operation	-20...40 °C in non-ventilated enclosure IEC 60068-2-1 and IEC 60068-2-2 -20...55 °C IEC 60068-2-1 and IEC 60068-2-2
Ambient air temperature for storage	-40...70 °C
Operating altitude	2000 m
Altitude transport	≤ 3048 m
Relative humidity	95 % without condensation or dripping water
RoHS EUR conformity date	0622
RoHS EUR status	Compliant