



Main

Range of product	Zelio Logic
Product or component type	Modular smart relay
[Us] rated supply voltage	24 V DC
Discrete input number	16 EN/IEC 61131-2 type 1
Analogue input number	6
Number of outputs	10 relay

Complementary

Local display	With
Supply current	190 mA without extension 300 mA with extensions
Discrete input type	Resistive
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 10 W with extensions
Reverse polarity protection	With
Discrete input voltage	24 V DC
Counting frequency	1 kHz discrete input
Voltage state 1 guaranteed	≥ 15 V I1...IA and IH...IR discrete input circuit ≥ 15 V IB...IG used as 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	< 0.5 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
Input impedance	7.4 kOhm I1...IA and IH...IR discrete input circuit 12 kOhm IB...IG used as discrete input circuit 12 kOhm IB...IG used as analogue 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	5 A for 2 outputs relay output 8 A for 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
Clock	With
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 0.25...2 x 0.75 mm ² 24...18 flexible with cable end Screw terminals 1 x 0.2...1 x 2.5 mm ² 25...14 semi-solid Screw terminals 1 x 0.2...1 x 2.5 mm ² 25...14 solid Screw terminals 2 x 0.2...2 x 1.5 mm ² 24...16 solid
Tightening torque	0.5 N.m
Overvoltage category	III EN/IEC 60664-1
Product weight	0.4 kg

Environment

Immunity to microbreaks	≤ 1 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