



## Main

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

## Complementary

|                                |   |
|--------------------------------|---|
| Local display                  | With  |
| Number of control scheme lines | 0...240 with ladder programming<br>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<br>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         | 3 W without extension   |
| Reverse polarity protection    | With  |
| Discrete input number          | 8 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     | $\geq 15$ V for I1...IA and IH...IR discrete input circuit<br>$\geq 15$ V for IB...IG used as discrete input circuit  |
| Voltage state 0 guaranteed     | $\leq 5$ V for I1...IA and IH...IR discrete input circuit<br>$\leq 5$ V for IB...IG used as discrete input circuit    |
| Current state 1 guaranteed     | $\geq 1.2$ mA (IB...IG used as discrete input circuit)<br>$\geq 2.2$ mA (I1...IA and IH...IR discrete input circuit)  |
| Current state 0 guaranteed     | $\leq 0.5$ mA (IB...IG used as discrete input circuit)<br>$\leq 0.75$ mA (I1...IA and IH...IR discrete input circuit) |
| Input compatibility            | 3-wire proximity sensors PNP for discrete input   |
| Analogue input number          | 4   |
| Analogue input type            | Common mode   |
| Analogue input range           | 0...10 V<br>0...24 V  |
| Temperature probe type         | NTC 10k at 25 °C<br>NTC 1000k at 25 °C<br>KTY81 210/220/221/222/250<br>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<br>+/- 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<br>12 kOhm for IB...IG used as discrete input circuit<br>7.4 kOhm for I1...IA and IH...IR discrete input circuit  |
| Number of outputs                      | 4 relay  |
| Output voltage limits                  | 24...250 V AC (relay output)<br>5...30 V DC (relay output)   |
| 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<br>AC-15: 500000 cycles at 230 V, 0.9 A for relay output conforming to IEC 60947-5-1<br>DC-12: 500000 cycles at 24 V, 1.5 A for relay output conforming to IEC 60947-5-1<br>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 le) for relay output<br>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<br>5 ms (from state 1 to state 0) for relay output  |
| Connections - terminals                | Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> (AWG 25...AWG 14) semi-solid<br>Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> (AWG 25...AWG 14) solid<br>Screw terminals, 1 x 0.25...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 14) flexible with cable end<br>Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> (AWG 24...AWG 16) solid<br>Screw terminals, 2 x 0.25...2 x 0.75 mm <sup>2</sup> (AWG 24...AWG 18) 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               | 1 ms   |
| Product certifications                | GL[RETURN]CSA[RETURN]UL[RETURN]GOST[RETURN]C-Tick  |
| Standards                             | IEC 61000-4-12<br>IEC 61000-4-4 level 3<br>IEC 61000-4-5<br>IEC 61000-4-11<br>IEC 61000-4-2 level 3<br>IEC 60068-2-6 Fc<br>IEC 61000-4-6 level 3<br>IEC 60068-2-27 Ea<br>IEC 61000-4-3   |
| IP degree of protection               | IP20 (terminal block) conforming to IEC 60529<br>IP40 (front panel) conforming to IEC 60529  |
| Environmental characteristic          | EMC directive conforming to IEC 61000-6-2<br>EMC directive conforming to IEC 61000-6-3<br>EMC directive conforming to IEC 61000-6-4<br>EMC directive conforming to IEC 61131-2 zone B<br>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<br>-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              | 9.000 cm  |
| Package 1 Length             | 10.000 cm |
| Package 1 Weight             | 239.000 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             | 7.660 kg  |

## Offer Sustainability

|                            |  |
|----------------------------|--|
| Sustainable offer status   | Green Premium product  |
| REACH Regulation           | <a href="#">REACH Declaration</a>  |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)   |
| Mercury free               | Yes  |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>   |
| RoHS exemption information | <a href="#">Yes</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>  |
| Circularity Profile        | <a href="#">End Of Life Information</a>  |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins  |
| PVC free                   | Yes  |
| California proposition 65  | "WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> " |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|