# SR3XT141BD <br> discrete I/O extension module - 14 I O-24 V DC for Zelio Logic 

Product availability : Stock - Normally stocked in distribution facility



Main

| Range of product | Zelio Logic |
| :---: | :---: |
| Product or component type | Discrete I/O extension module |
| Complementary |  |
| Number or control scheme lines | 120 with ladder programming |
| Cycle time | $6 . . .90 \mathrm{~ms}$ |
| Backup time | 10 yearsat $77{ }^{\circ} \mathrm{F}\left(25^{\circ} \mathrm{C}\right)$ |
| Clock drift | $12 \mathrm{~min} / \mathrm{ye}$ arat $32 . . .131^{\circ} \mathrm{F}\left(0 . .55^{\circ} \mathrm{C}\right)$ |
| Checks | Program memory on each power up |
| [Us] rated supply voltage | 24 V DC |
| Supply voltage limits | 19.2... 30 V |
| Reverse polarity protection | With |
| Discrete input number | 8 conforming to EN/IEC 61131-2 type 1 |
| Discrete input type | Resistive |
| Discrete input voltage | 24 V DC |
| Discrete input current | 4 mA |
| Counting frequency | 1 kHzfor discrete input |
| Voltage state 1 guaranteed | >= 15 Vfor I1...IA and IH...IR discrete input circuit <br> $>=15$ Vfor IB...IG used as discrete input circuit |
| Voltage state 0 guaranteed | <= 5 Vfor I1...IA and IH...IR discrete input circuit <= 5 Vfor IB...IG used as discrete input circuit |
| Current state 1 guaranteed | >= 1.2 mA for IB...IG used as discrete input circuit $>=2.2 \mathrm{~mA}$ for I1...IA and IH...IR discrete input circuit |
| Current state 0 guaranteed | <= 0.5 mA for IB...IG used as discrete input circuit <= 0.75 mA for I1...IA and IH...IR discrete input circuit |
| Input compatibility | 3-wire proximity sensors PNP (discrete input) |
| Input impedance | 12 kOhm (IB...IG used as discrete input circuit) |

7.4 kOhm (I1...IA and IH...IR discrete input circuit)

| Number of outputs | 6 relay output(s) |
| :---: | :---: |
| Output voltage limits | 24... 250 V AC (relay output) 5... 30 V DC (relay output) |
| Contacts type and composition | NO relay output |
| Output thermal current | 5 A for 2 outputs (relay output) 8 A for 4 outputs (relay output) |
| Electrical durability | 500000 cyclesat $230 \mathrm{~V}, 0.9 \mathrm{~A}$ (AC-15)for relay output conforming to EN/IEC 60947-5-1 500000 cyclesat 230 V , 1.5 A (AC-12)for relay output conforming to EN/IEC 60947-5-1 500000 cyclesat $24 \mathrm{~V}, 0.6 \mathrm{~A}$ (DC-13)for relay output conforming to EN/IEC 60947-5-1 500000 cyclesat 24 V , 1.5 A (DC-12)for relay output conforming to EN/IEC 60947-5-1 |
| Switching capacity in mA | >= 10 mAat 12 V (relay output) |
| Operating rate in Hz | 0.1 Hz (at le)for relay output 10 Hz (no load)for relay output |
| Mechanical durability | 10000000 cycles (relay output) |
| [Uimp] rated impulse withstand voltage | 4 kV conforming to EN/IEC 60947-1 and EN/IEC 60664-1 |
| Response time | 10 ms (from state 0 to state 1) relay output 5 ms (from state 1 to state 0) relay output |
| Connections - terminals | Screw terminals, flexible cable with cable end $1 \times 0.25 \ldots 1 \times 2.5 \mathrm{~mm}^{2} /$ AWG $24 \ldots$...AWG 14 AWG Screw terminals, flexible cable with cable end $2 \times 0.25 \ldots 2 \times 0.75 \mathrm{~mm}^{2} /$ AWG $24 \ldots$...AWG 18 AWG Screw terminals, semi-solid cable $1 \times 0.2 \ldots 1 \times 2.5 \mathrm{~mm}^{2} /$ AWG 25 ...AWG 14 AWG Screw terminals, solid cable $1 \times 0.2 \ldots 1 \times 2.5 \mathrm{~mm}^{2} /$ AWG $25 \ldots$...AWG 14 AWG Screw terminals, solid cable $2 \times 0.2 \ldots 2 \times 1.5 \mathrm{~mm}^{2} /$ AWG 24...AWG 16 AWG |
| Tightening torque | 4.42 lbf.in (0.5 N.m) |
| Overvoltage category | III conforming to EN/IEC 60664-1 |
| Product weight | 0.49 lb (US) (0.22 kg) |

## Environment

| Product certifications | C-Tick UL <br> GL CSA GOST |
| :---: | :---: |
| Standards | EN/IEC 61000-4-5 <br> EN/IEC 61000-4-12 <br> EN/IEC 60068-2-27 Ea <br> EN/IEC 61000-4-6 level 3 <br> EN/IEC 61000-4-2 level 3 <br> EN/IEC 61000-4-11 <br> EN/IEC 61000-4-3 <br> EN/IEC 60068-2-6 Fc <br> EN/IEC 61000-4-4 level 3 |
| IP degree of protection | IP20 (terminal block) conforming to IEC 60529 IP40 (front panel) conforming to IEC 60529 |
| Environmental characteristic | EMC directive conforming to EN/IEC 61000-6-2 EMC directive conforming to EN/IEC 61000-6-3 EMC directive conforming to EN/IEC 61000-6-4 EMC directive conforming to EN/IEC 61131-2 zone B Low voltage directive conforming to EN/IEC 61131-2 |
| Disturbance radiated/conducted | Class B conforming to EN 55022-11 group 1 |
| Pollution degree | 2 conforming to EN/IEC 61131-2 |
| Ambient air temperature for operation | $-4 \ldots 104^{\circ} \mathrm{F}\left(-20 \ldots 40^{\circ} \mathrm{C}\right)$ in non-ventilated enclosure conforming to IEC 60068-2-1 and IEC 60068-2-2 $-4 \ldots 131^{\circ} \mathrm{F}\left(-20 \ldots 55^{\circ} \mathrm{C}\right)$ conforming to IEC 60068-2-1 and IEC 60068-2-2 |
| Ambient air temperature for storage | $-40 . .158{ }^{\circ} \mathrm{F}\left(-40 \ldots 70^{\circ} \mathrm{C}\right)$ |
| Operating altitude | $6561.68 \mathrm{ft}(2000 \mathrm{~m})$ |
| Altitude transport | <= $10000 \mathrm{ft}(3048 \mathrm{~m})$ |
| Relative humidity | 95 \% without condensation or dripping water |

## Ordering and shipping details



| GTIN | 00785901422518 |
| :--- | :--- |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 0.44 |
| Returnability | Y |
| Country of origin | FR |

Contractual warranty
Warranty period 18 months

## Dimensions Drawings

I/O Extension Modules
Mounting on $35 \mathrm{~mm} / 1.38$ in. DIN Rail


Screw Fixing (Retractable Lugs)


| SR3 | a (mm/in.) | G (mm/in.) |
| :--- | :--- | :--- |
| XT61•• | $35 / 1.38$ | $25 / 0.98$ |
| XT101•• | $72 / 2.83$ | $60 / 2.36$ |
| XT141•• | $72 / 2.83$ | $60 / 2.36$ |


(1) 1 A quick-blow fuse or circuit-breaker.
(2) Ca : Analog sensor / Ta: Analog transmitter.
(3) Recommended values: $2.2 \mathrm{k} \Omega / 0.5 \mathrm{~W}$ ( $10 \mathrm{k} \Omega$ max.)
(4) Screened cables, maximum length $10 \mathrm{~m} / 32.80$ feet.

NOTE: QF and QG : 5 A for SR3XT141••

## Performance Curves

Compact and Modular Smart Relays
Electrical Durability of Relay Outputs
(in millions of operating cycles, conforming to IEC/EN 60947-5-1)
DC-12 (1)


X: Current (A)
Y: Millions of operating cycles
(1) DC-12: control of resistive loads and of solid state loads isolated by opto-coupler, L/R $\leq 1 \mathrm{~ms}$.

DC-13 (1)


X: Current (A)
Y: Millions of operating cycles
(1) $\mathrm{DC}-13$ : switching electromagnets, $\mathrm{L} / \mathrm{R} \leq 2 \times$ (Ue $\times \mathrm{le}$ ) in ms , Ue: rated operational voltage, le: rated operational current (with a protection diode on the load,

