

discrete I/O extension module - 10 I O - 24 V DC - for Zelio Logic

Local distributor code: 389538219 SR3XT101BD

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 | 690 ms |
| Backup time | 10 years at 25 °C |
| Clock drift | 12 min/year at 055 °C |
| Checks | Program memory on each power up |
| [Us] rated supply voltage | 24 V DC |
| Supply voltage limits | 19.230 V |
| Reverse polarity protection | With |
| Discrete input number | 6 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 kHz for discrete input |
| Voltage state 1 guaranteed | >= 15 V for I1IA and IHIR discrete input circuit >= 15 V for IBIG used as discrete input circuit |
| Voltage state 0 guaranteed | <= 5 V for I1IA and IHIR discrete input circuit <= 5 V for IBIG used as discrete input circuit |
| Current state 1 guaranteed | >= 1.2 mA (IBIG used as discrete input circuit) >= 2.2 mA (I1IA and IHIR discrete input circuit) |
| Current state 0 guaranteed | <= 0.5 mA (IBIG used as discrete input circuit) <= 0.75 mA (I1IA and IHIR discrete input circuit) |
| Input compatibility | 3-wire proximity sensors PNP for discrete input |
| Input impedance | 12 kOhm for IBIG used as discrete input circuit 7.4 kOhm for I1IA and IHIR discrete input circuit |
| Number of outputs | 4 relay |
| Output voltage limits | 24250 V AC (relay output) 530 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-15: 500000 cycles at 230 V, 0.9 A for relay output conforming to EN/IEC 60947-5-1 AC-12: 500000 cycles at 230 V, 1.5 A for relay output conforming to EN/IEC 60947-5-1 DC-13: 500000 cycles at 24 V, 0.6 A for relay output conforming to EN/IEC 60947-5-1 DC-12: 500000 cycles at 24 V, 1.5 A for relay output conforming to EN/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 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 | |
| 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 0.251 x 2.5 mm² (AWG 24AWG 14) flexible with cable end Screw terminals, 2 x 0.252 x 0.75 mm² (AWG 24AWG 18) flexible with cable end Screw terminals, 1 x 0.21 x 2.5 mm² (AWG 25AWG 14) semi-solid Screw terminals, 1 x 0.21 x 2.5 mm² (AWG 25AWG 14) solid Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) solid | |
| Tightening torque | 0.5 N.m | |
| Overvoltage category | III conforming to EN/IEC 60664-1 | |
| Net weight | 0.2 kg | |
| | | |
| Environment Braduat contifications | GL | |
| Product certifications | C-Tick UL GOST CSA | |
| Standards | EN/IEC 61000-4-4 level 3 EN/IEC 61000-4-2 level 3 EN/IEC 61000-4-3 EN/IEC 61000-4-12 EN/IEC 61000-4-11 EN/IEC 60068-2-6 Fc EN/IEC 60068-2-27 Ea EN/IEC 61000-4-6 level 3 EN/IEC 61000-4-5 | |
| 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 | -2040 °C in non-ventilated enclosure conforming to IEC 60068-2-1 and IEC 60068-2-2 -2055 °C conforming to IEC 60068-2-1 and IEC 60068-2-2 | |
| Ambient air temperature for storage | -4070 °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 Weight | 184.0 g | |
| 0 0 | | |

| Package 1 width | 9 cm |
|------------------------------|----------|
| Package 1 Length | 10 cm |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 30 |
| Package 2 Weight | 5.964 kg |
| Package 2 Height | 30 cm |
| Package 2 width | 30 cm |
| Package 2 Length | 40 cm |

Offer Sustainability

| Sustainable offer status | Green Premium product | |
|----------------------------|---|--|
| REACh Regulation | REACh Declaration | |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration | |
| Mercury free | Yes | |
| RoHS exemption information | Yes | |
| China RoHS Regulation | China RoHS declaration | |
| Environmental Disclosure | Product Environmental Profile | |
| Circularity Profile | End of Life Information | |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins | |
| PVC free | Yes | |

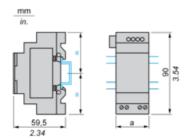
Contractual warranty

| <u> </u> | |
|----------|-----------|
| Warranty | 18 months |

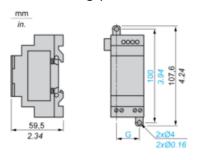
Dimensions Drawings

I/O Extension Modules

Mounting on 35 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 |

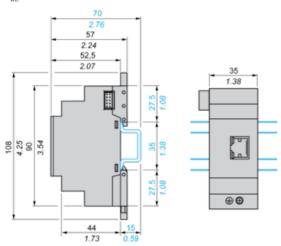
SR3XT101BD

Dimensions Drawings

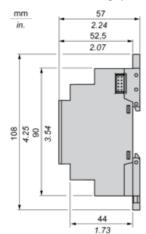
Communication Modules

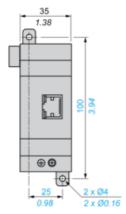
Rail Mounting





Screw Mounting (Retractable Lugs)





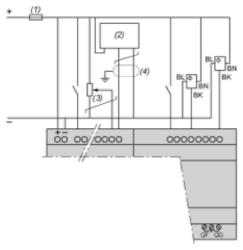
Product datasheet

SR3XT101BD

Connections and Schema

Connection of Smart Relays on DC Supply, with Discrete I/O Extension Modules

SR3B•••JD + SR3XT•••JD, SR3B•••BD + SR3XT•••BD



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

NOTE: QF and QG: 5 A for SR3XT141.

Product datasheet

SR3XT101BD

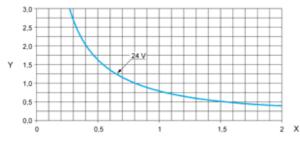
Performance Curves

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)

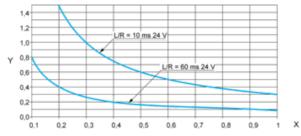


X: Current (A)

Y: Millions of operating cycles

(1) DC-12: control of resistive loads and of solid state loads isolated by opto-coupler, $L/R \le 1$ ms.

DC-13 (1)



X: Current (A)

Y: Millions of operating cycles

(1) DC-13: switching electromagnets, $L/R \le 2 \times (Ue \times Ie)$ in ms, Ue: rated operational voltage, Ie: rated operational current (with a protection diode on the load, DC-12 curves must be used with a coefficient of 0.9 applied to the number in millions of operating cycles).