# Product data sheet Characteristics

# SR3XT61BD

# discrete I/O extension module - 6 I O - 24 V DC - for Zelio Logic





#### Main

Wichin	
Range of product	Zelio Logic
Product or component type	Discrete I/O extension module

### Complementary

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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	4 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	2 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 2 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 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	0.125 kg	

#### Environment

Product certifications	GL O.T. I	
	C-Tick GOST	
	UL	
	CSA	
Standards	EN/IEC 61000-4-6 level 3	
Staridards	EN/IEC 61000-4-0 level 3 EN/IEC 61000-4-3	
	EN/IEC 61000-4-3	
	EN/IEC 61000-4-5	
	EN/IEC 61000-4-12	
	EN/IEC 61000-4-11	
	EN/IEC 60068-2-6 Fc	
	EN/IEC 61000-4-2 level 3	
	EN/IEC 60068-2-27 Ea	
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**

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	117 g
Package 1 Height	6 cm
Package 1 width	6.5 cm
Package 1 Length	11 cm
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Weight	6.209 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)	
Mercury free	Yes	
RoHS exemption information	₽¥Yes	
China RoHS Regulation	<sup>™</sup> 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	

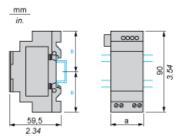
#### Contractual warranty

Warranty	18 months

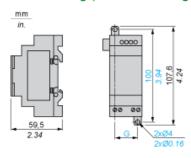
# SR3XT61BD

#### I/O Extension Modules

### Mounting on 35 mm/1.38 in. DIN Rail



### Screw Fixing (Retractable Lugs)

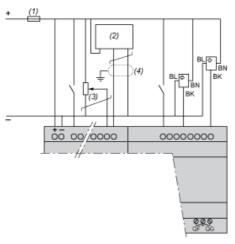


SR3	a (mm/in.)	G (mm/in.)
XT61••	35 / 1.38	25 / 0.98
XT101••	72 / 2.83	60 / 2.36
XT141••	72 / 2.83	60 / 2.36

## SR3XT61BD

#### 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:  $2.2 \text{ k}\Omega / 0.5 \text{ W}$  (10 k $\Omega$  max.)
- (4) Screened cables, maximum length 10 m / 32.80 feet.

NOTE: QF and QG: 5 A for SR3XT141.

# Product data sheet Performance Curves

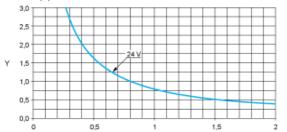
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#### Compact and Modular Smart Relays

#### **Electrical Durability of Relay Outputs**

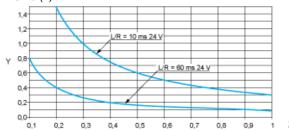
(in millions of operating cycles, conforming to IEC/EN 60947-5-1)

#### 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 ≤ 1 ms.

#### DC-13 (1)



- X: Current (A)
- Y: Millions of operating cycles
- (1) DC-13: switching electromagnets, L/R ≤ 2 x (Ue x le) in ms, Ue: rated operational voltage, le: 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).