

# Product data sheet

Specifications



## Discrete I/O extension module, Zelio Logic, 10 I/O, 24 V AC

SR3XT101B

### 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 ms
Backup time	10 years at 25 °C
Clock drift	12 min/year at 0...55 °C
Checks	Program memory on each power up
[Us] rated supply voltage	24 V AC
Supply voltage limits	20.4...28.8 V
Supply frequency	50/60 Hz
Reverse polarity protection	With
Discrete input number	6
Discrete input voltage	24 V AC
Discrete input current	4.4 mA
Discrete input frequency	47...53 Hz 57...63 Hz
Voltage state 1 guaranteed	$\geq 14$ V for discrete input
Voltage state 0 guaranteed	$\leq 5$ V for discrete input
Current state 1 guaranteed	$\geq 2$ mA (discrete input)
Current state 0 guaranteed	$\leq 0.5$ mA (discrete input)
Input impedance	4.6 kOhm for discrete input
Number of outputs	4 relay
Output voltage limits	5...30 V DC (relay output) 24...250 V AC
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

<b>Switching capacity in mA</b>	>= 10 mA at 12 V (relay output)
<b>Operating rate in Hz</b>	0.1 Hz (at le) for relay output 10 Hz (no load) for relay output
<b>Mechanical durability</b>	10000000 cycles for relay output
<b>[Uimp] rated impulse withstand voltage</b>	4 kV conforming to EN/IEC 60947-1 and EN/IEC 60664-1
<b>Response time</b>	50 ms with ladder programming (from state 0 to state 1) for discrete input 50 ms with ladder programming (from state 1 to state 0) for discrete input 50...255 ms with FBD programming (from state 0 to state 1) for discrete input 50...255 ms with FBD programming (from state 1 to state 0) for discrete input 10 ms (from state 0 to state 1) for relay output 5 ms (from state 1 to state 0) for relay output
<b>Connections - terminals</b>	Screw terminals, 1 x 0.25...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.25...2 x 0.75 mm <sup>2</sup> (AWG 24...AWG 18) flexible with cable end Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> (AWG 25...AWG 14) semi-solid Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> (AWG 25...AWG 14) solid Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> (AWG 24...AWG 16) solid
<b>Tightening torque</b>	0.5 N.m
<b>Overvoltage category</b>	III conforming to EN/IEC 60664-1
<b>Net weight</b>	0.2 kg

## Environment

<b>Product certifications</b>	GOST GL C-Tick CSA UL
<b>Standards</b>	EN/IEC 61000-4-2 level 3 EN/IEC 61000-4-5 EN/IEC 61000-4-6 level 3 EN/IEC 60068-2-6 Fc EN/IEC 60068-2-27 Ea EN/IEC 61000-4-11 EN/IEC 61000-4-3 EN/IEC 61000-4-12 EN/IEC 61000-4-4 level 3
<b>IP degree of protection</b>	IP20 (terminal block) conforming to IEC 60529 IP40 (front panel) conforming to IEC 60529
<b>Environmental characteristic</b>	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
<b>Disturbance radiated/ conducted</b>	Class B conforming to EN 55022-11 group 1
<b>Pollution degree</b>	2 conforming to EN/IEC 61131-2
<b>Ambient air temperature for operation</b>	-20...40 °C in non-ventilated enclosure conforming to IEC 60068-2-1 and IEC 60068-2-2 -20...55 °C conforming to IEC 60068-2-1 and IEC 60068-2-2
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Operating altitude</b>	2000 m
<b>Maximum altitude transport</b>	3048 m
<b>Relative humidity</b>	95 % without condensation or dripping water

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	6.8 cm
<b>Package 1 Width</b>	9.0 cm
<b>Package 1 Length</b>	10.0 cm

Package 1 Weight	178.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	30
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.988 kg

## Offer Sustainability

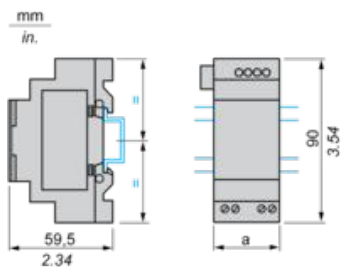
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	Yes
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

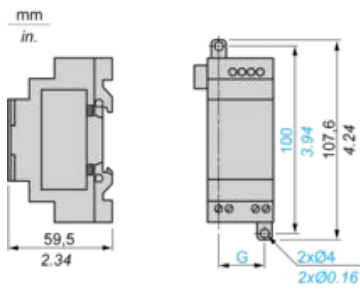
Warranty	18 months
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**I/O Extension Modules**

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



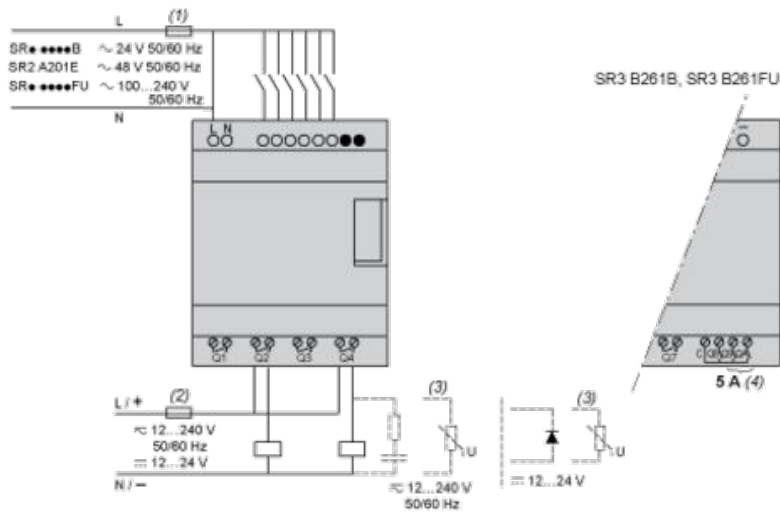
**Screw Fixing (Retractable Lugs)**



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

**Connection of Smart Relays on AC Supply**

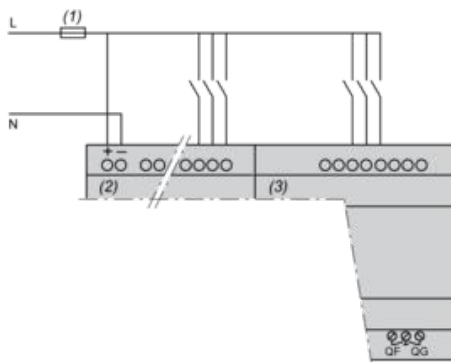
**SR••••1B, SR••••1FU**



- (1) 1 A quick-blow fuse or circuit-breaker.
- (2) Fuse or circuit-breaker.
- (3) Inductive load.
- (4) Q9 and QA: 5 A (max. current in terminal C: 10 A).

**With Discrete I/O Extension Module**

SR3B•••B + SR3XT•••B, SR3B•••FU + SR3XT•••FU



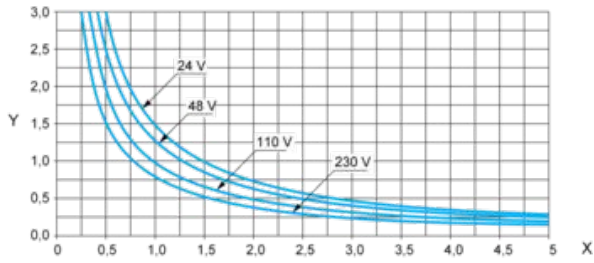
- (1) 1 A quick-blow fuse or circuit-breaker.
- NOTE:** QF and QG: 5 A for SR3XT141••

**Compact and Modular Smart Relays**

**Electrical Durability of Relay Outputs**

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

AC-12 (1)

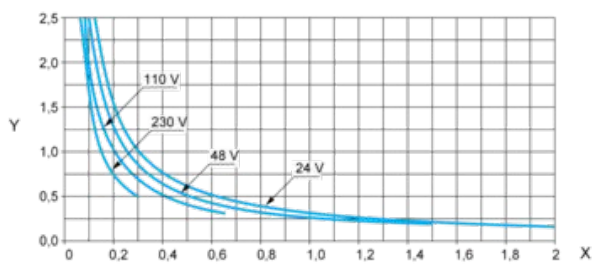


X: Current (A)

Y: Millions of operating cycles

(1) AC-12: switching resistive loads and opto-coupler isolated solid-state loads,  $\cos \geq 0.9$ .

AC-14 (1)

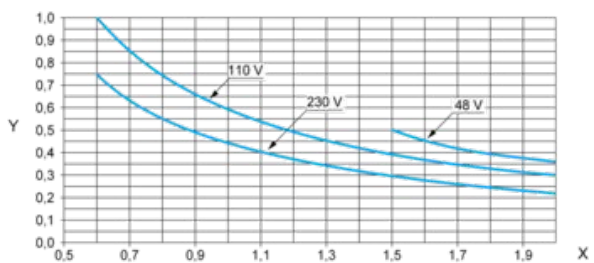


X: Current (A)

Y: Millions of operating cycles

(1) AC-14: switching small electromagnetic loads  $\leq 72$  VA, make:  $\cos = 0.3$ , break:  $\cos = 0.3$ .

AC-15 (1)



X: Current (A)

Y: Millions of operating cycles

(1) AC-15: switching electromagnetic loads  $\geq 72$  VA, make:  $\cos = 0.7$ , break:  $\cos = 0.4$ .

**Recommended replacement(s)**