Product data sheet

Specifications



Discrete I/O extension module, Zelio Logic, 10 I/O, 100...240 V AC

SR3XT101FU

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	100...240 V AC
Supply voltage limits	85…264 V
Supply frequency	50/60 Hz
Reverse polarity protection	With
Discrete input number	6
Discrete input voltage	100...240 V AC
Discrete input current	0.6 mA
Discrete input frequency	47...53 Hz 57...63 Hz
Voltage state 1 guaranteed	>= 79 V for discrete input
Voltage state 0 guaranteed	<= 40 V for discrete input
Current state 1 guaranteed	>= 0.17 mA (discrete input)
Current state 0 guaranteed	<= 0.5 mA (discrete input)
Input impedance	350 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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Switching capacity in mA	>= 10 mA at 12 V (relay output)
Operating rate in Hz	0.1 Hz (at Ie) 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	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
Connections - terminals	Screw terminals, 1 x 0.25...1 x 2.5 mm² (AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.25...2 x 0.75 mm² (AWG 24...AWG 18) flexible with cable end Screw terminals, 1 x 0.2...1 x 2.5 mm² (AWG 25...AWG 14) semi-solid Screw terminals, 1 x 0.2...1 x 2.5 mm² (AWG 25...AWG 14) solid Screw terminals, 2 x 0.2...2 x 1.5 mm² (AWG 24...AWG 16) solid
Tightening torque	0.5 N.m
Overvoltage category	III conforming to EN/IEC 60664-1
Net weight	0.2 kg

Environment

Product certifications	GOST UL CSA C-Tick GL
Standards	EN/IEC 60068-2-27 Ea EN/IEC 61000-4-12 EN/IEC 61000-4-3 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 61000-4-11 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	-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
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 Weight	185.0 g
Package 1 Height	6.8 cm
Package 1 width	9.0 cm

Package 1 Length	10.0 cm
Unit Type of Package 2	S03
Number of Units in Package 2	30
Package 2 Weight	5.973 kg
Package 2 Height	30.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm

Offer Sustainability

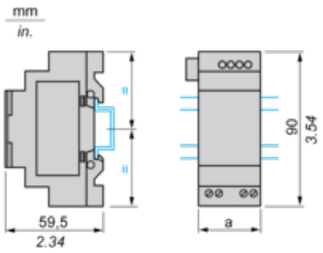
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product 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
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 www.P65Warnings.ca.gov

Contractual warranty

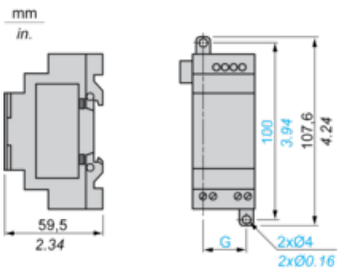
Warranty	18 months

I/O Extension Modules

Mounting on 35 mm/1.38 in. DIN Rail



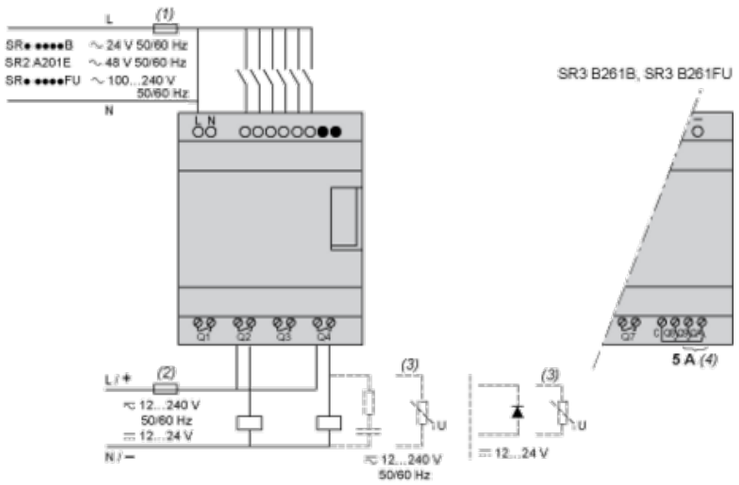
Screw Fixing (Retractable Lugs)



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.

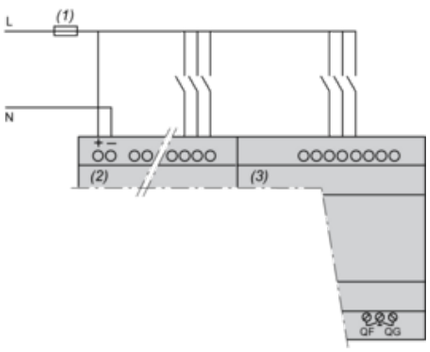
(2) Fuse or circuit-breaker.

(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.

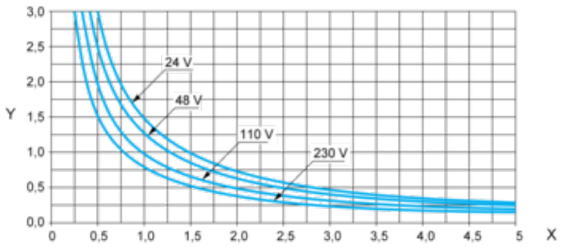
NOTE: QF and QG: 5 A for SR3XT141••

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)

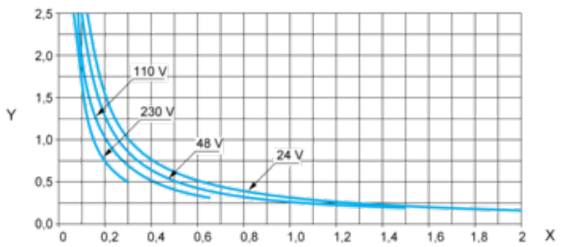


X: Current (A)

Y: Millions of operating cycles

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

AC-14 (1)

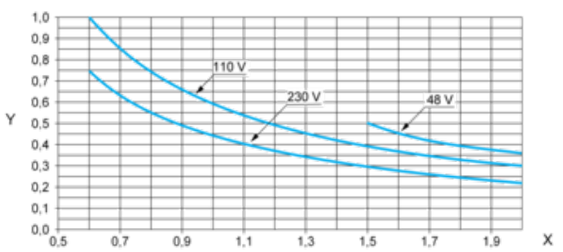


X: Current (A)

Y: Millions of operating cycles

(1) AC-14: switching small electromagnetic loads ≤ 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 ≥ 72 VA, make: cos = 0.7, break: cos = 0.4.