

SR3XT141B

discrete I/O extension module - 14 I O - 24 V AC -
for Zelio Logic



Main

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

Complementary

Number of 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	8
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	≥ 14 V for discrete input
Voltage state 0 guaranteed	≤ 5 V for discrete input
Current state 1 guaranteed	≥ 2 mA for discrete input
Current state 0 guaranteed	≤ 0.5 mA for discrete input
Input impedance	4.6 kOhm (discrete input)
Number of outputs	6 relay output(s)
Output voltage limits	24...250 V AC 5...30 V DC (relay output)
Contacts type and composition	NO for relay output
Output thermal current	5 A for 2 outputs (relay output) 8 A for 4 outputs (relay output)
Electrical durability	500000 cycles at 230 V, 0.9 A (AC-15) for relay output conforming to EN/IEC 60947-5-1 500000 cycles at 230 V, 1.5 A (AC-12) for relay output conforming to EN/IEC 60947-5-1 500000 cycles at 24 V, 0.6 A (DC-13) for relay output conforming to EN/IEC 60947-5-1 500000 cycles at 24 V, 1.5 A (DC-12) 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 Ie) 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) for relay output 5 ms (from state 1 to state 0) for relay output 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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

	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
Connections - terminals	Screw terminals, flexible cable with cable end 1 x 0.25...1 x 2.5 mm ² / AWG 24...AWG 14 AWG Screw terminals, flexible cable with cable end 2 x 0.25...2 x 0.75 mm ² / AWG 24...AWG 18 AWG Screw terminals, semi-solid cable 1 x 0.2...1 x 2.5 mm ² / AWG 25...AWG 14 AWG Screw terminals, solid cable 1 x 0.2...1 x 2.5 mm ² / AWG 25...AWG 14 AWG Screw terminals, solid cable 2 x 0.2...2 x 1.5 mm ² / AWG 24...AWG 16 AWG
Tightening torque	0.5 N.m
Overvoltage category	III conforming to EN/IEC 60664-1
Product weight	0.22 kg

Environment

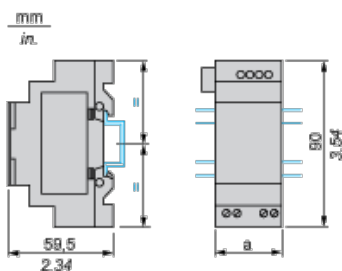
product certifications	CSA C-Tick GL GOST UL
standards	EN/IEC 60068-2-27 Ea EN/IEC 60068-2-6 Fc EN/IEC 61000-4-11 EN/IEC 61000-4-12 EN/IEC 61000-4-2 level 3 EN/IEC 61000-4-3 EN/IEC 61000-4-4 level 3 EN/IEC 61000-4-5 EN/IEC 61000-4-6 level 3
IP degree of protection	IP20 (terminal block) conforming to 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
altitude transport	<= 3048 m
relative humidity	95 % without condensation or dripping water

Contractual warranty

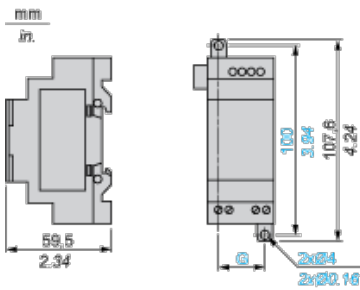
Warranty period	18 months
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I/O Extension Modules

Mounting on 35 mm/1.38 in. DIN Rail



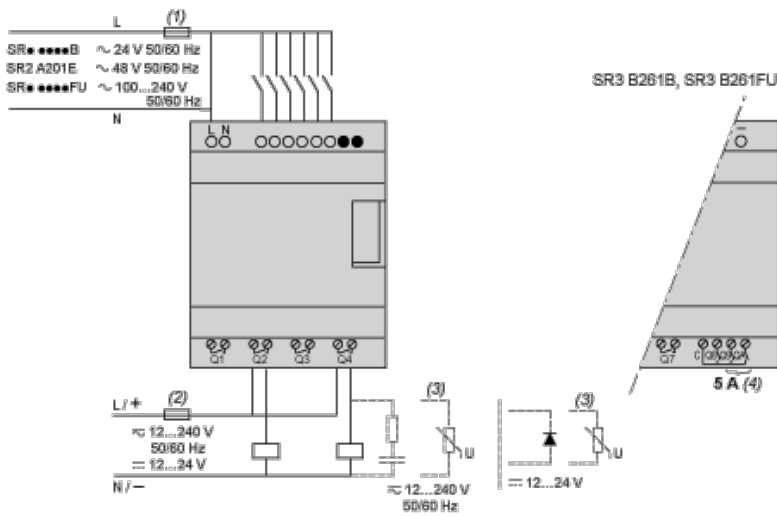
Screw Fixing (Retractable Lugs)



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

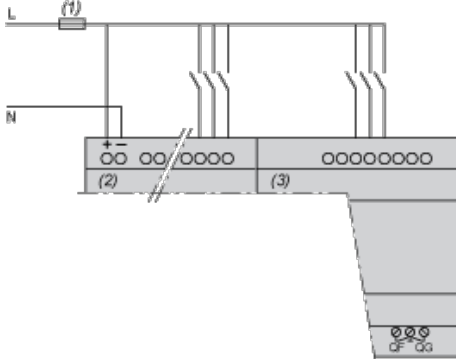
SR••••1B, SR••••1FU



- (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.

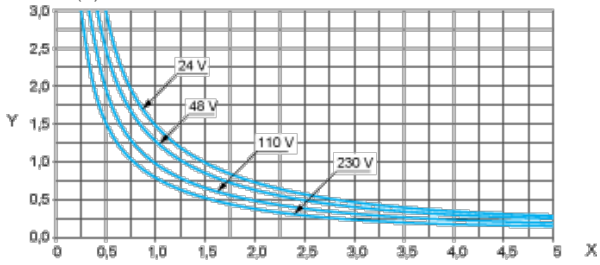
NOTE: QF and QG: 5 A for SR3XT141••

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)

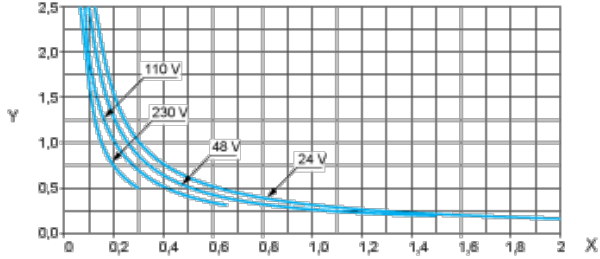


X: Current (A)

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)

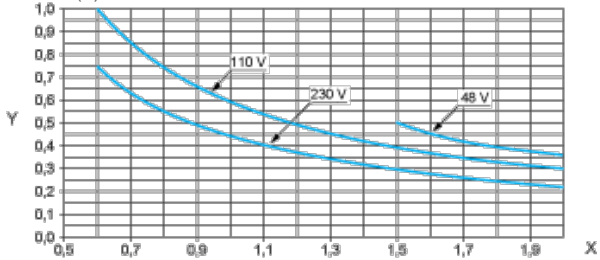


X: Current (A)

Y: Millions of operating cycles

(1) AC-14: switching small electromagnetic loads ≤ 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: $\cos = 0.4$.