# **Product datasheet**

Specifications





# Discrete I/O extension module, Zelio Logic, 14 I/O, 24 V AC

SR3XT141B

Price: 76,331.37 NGN

# Main

Range Of Produc	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 AC
Supply Voltage Limits	20.428.8 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	5763 Hz 4753 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 (discrete input)
Current State 0 Guaranteed	<= 0.5 mA (discrete input)
Input Impedance	4.6 kOhm for discrete input
Number Of Outputs	6 relay
Output Voltage Limits	530 V DC (relay output) 24250 V AC
Contacts Type And Composition	NO for relay output
Output Thermal Current	5 A for 2 outputs for relay output 8 A for 4 outputs for relay output
Electrical Durability	AC-15: 500000 cycles at 230 V, 0.9 A for relay output conforming to IEC 60947-5-1 AC-12: 500000 cycles at 230 V, 1.5 A for relay output conforming to IEC 60947-5-1 DC-13: 500000 cycles at 24 V, 0.6 A for relay output conforming to IEC 60947-5-1 DC-12: 500000 cycles at 24 V, 1.5 A for relay output conforming to IEC 60947-5-1
Switching Capacity In Ma	>= 10 mA at 12 V (relay output)

Mechanical Durability   10000000 cycles for relay output	Operating Rate In Hz	0.1 Hz (at le) for relay output 10 Hz (no load) for relay output	
Voltage   So 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 ms with ladder programming (from state 0 to state 1) for discrete input 50 ms with 180 programming (from state 0 to state 1) for discrete input 50 ms (from state 1 to state 0) for discrete input 50 ms (from state 1 to state 0) for discrete input 50 ms (from state 1 to state 0) for discrete input 50 ms (from state 1 to state 0) for discrete input 50 ms (from state 1 to state 0) for relay output 5 ms (from state 1 to state 0) for relay output 5 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for discrete input 7 ms (from state 1 to state 0) for discrete input 7 ms (from state 1 to state 0) for discrete input 7 ms (from state 1 to state 0) for relay output 6 ms (from from from state 1 to state 0) for discrete input 7 ms (from state 1 to state 0) for relay output 6 ms (from from state 1 to state 0) for relay output 6 ms (from from from state 1 to state 0) for discrete input 7 ms (from from state 1 to state 0) for relay output 6 ms (from from from from from from from from	Mechanical Durability	10000000 cycles for relay output	
So ms with ladder programming (from state 1 to state 0) for discrete input 50255 ms with FBD programming (from state 1 to state 0) for discrete input 10 ms (from state 1 to state 1) for discrete input 10 ms (from state 1 to state 0) for discrete input 10 ms (from state 1 to state 0) for relay output 5 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from state 1 to state 0) for relay output 6 ms (from stat	• •	4 kV conforming to EN/IEC 60947-1 and EN/IEC 60664-1	
Screw terminals, 2 x 0 2 S. z x 0 75 mm² (AWG 24. AWG 18) floxible with cable end Screw terminals, 1 x 0 Z 1 x 2 5 mm² (AWG 25. AWG 14) semi-solid Screw terminals, 1 x 0 Z 1 x 2 5 mm² (AWG 25. AWG 14) semi-solid Screw terminals, 1 x 0 Z 1 x 2 5 mm² (AWG 25. AWG 14) semi-solid Screw terminals, 2 x 0 Z 2 x 1.5 mm² (AWG 24. AWG 16) solid    Tightening Torque	Response Time	50 ms with ladder programming (from state 1 to state 0) for discrete input 50255 ms with FBD programming (from state 0 to state 1) for discrete input 50255 ms with FBD programming (from state 1 to state 0) for discrete input 10 ms (from state 0 to state 1) for relay output	
Net Weight 0.22 kg  Environment  Product Certifications C-Tick GL CSA UL GOST  Standards IEC 61000-4-5 IEC 61000-4-5 IEC 61000-4-1 IEC 61000-4-1 IEC 61000-4-1 IEC 61000-4-1 IEC 61000-4-1 IEC 61000-4-2 IEC 61000-6-3 IEC 61000-6	Connections - Terminals	Screw terminals, $2 \times 0.252 \times 0.75$ mm² (AWG 24AWG 18) flexible with cable end Screw terminals, $1 \times 0.21 \times 2.5$ mm² (AWG 25AWG 14) semi-solid Screw terminals, $1 \times 0.21 \times 2.5$ mm² (AWG 25AWG 14) solid	
Environment  Product Certifications  C-Tick GL CSA UL GOST  Standards  IEC 61000-4-5 IEC 61000-4-5 IEC 61000-4-5 IEC 61000-4-1 IEC 61000-4-3 IEC 61000-4-3 IEC 61000-4-1 IEC 61000-4-3 IEC 61000-4-3 IEC 61000-4-3 IEC 61000-4-3 IEC 61000-4-3 IEC 61000-4-3 IEC 61000-4-1 IEC 61000-4-3 IEC 61000-4-1 IEC 61000-4-1 IEC 61000-4-12 IEC 61000-4-12 IP20 (terminal block) conforming to IEC 60529 IP40 (front panel) conforming to IEC 60529 IP40 (front panel) conforming to IEC 61000-6-2 EMC directive conforming to IEC 61000-6-3 IEMC directive conforming to IEC 61000-6-3 IEMC directive conforming to IEC 61000-6-3 IEMC directive conforming to IEC 61100-6-3 IEC 61000-6-3 IEC	Tightening Torque	0.5 N.m	
Environment  Product Certifications  C-Tick GL CSA UL GOST  Standards  IEC 61000-4-5 IEC 61000-4-5 IEC 61000-4-6 level 3 IEC 61000-4-1 IEC 61000-4-1 IEC 61000-4-1 IEC 61000-4-1 IEC 61000-4-1 IEC 61000-4-2 IEC 61000-4-1 IEC 61000-4-2 IEC 61000-4-2 IEC 61000-4-1 IEC 60068-2-6 Fc IEC 61000-4-12 IEC 61000-6-2 IEMC directive conforming to IEC 61000-6-2 IEMC directive conforming to IEC 61000-6-3 IEMC directive conforming to IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC 61131-2 IEC 61131-2 IEC 61131-2 IEC 61000-6-3 IEC 61131-2 IEC	Overvoltage Category	III conforming to IEC 60664-1	
Product Certifications  C-Tick GL CSA UL GOST  Standards  IEC 61000-4-5 IEC 61000-4-5 IEC 61000-4-6 level 3 IEC 61000-4-11 IEC 61000-4-11 IEC 61000-4-11 IEC 61000-4-12 Ip Degree Of Protection Ip 20 (terminal block) conforming to IEC 60529 IP40 (front panel) conforming to IEC 61000-6-2 EMC directive conforming to IEC 61000-6-3 EMC directive conforming to IEC 61000-6-3 EMC directive conforming to IEC 61131-2 Disturbance Radiated/Conducted Class B conforming to IEC 61131-2  Disturbance Radiated/Conducted Class B conforming to 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 -2055 °C conforming to IEC 60068-2-1 and IEC 60068-2-2 Ambient Air Temperature For Storage 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	Net Weight	0.22 kg	
Standards    EC 61000-4-5     EC 61000-4-4     EC 61000-4-4     EC 61000-4-5     EC 61000-4-6     EC 61000-4-1     EC 61000-4-1     EC 61000-4-1     EC 61000-4-1     EC 61000-4-1     EC 61000-4-2     EC 61000-4-1     EC 61000-4-2     EC 61000-4-2     EC 61000-4-2     EC 61000-4-2     EC 61000-4-2     EV 0     IP 20 (terminal block) conforming to IEC 60529     IP 40 (front panel) conforming to IEC 60529     IP 40 (front panel) conforming to IEC 600629     Environmental Characteristic     EMC directive conforming to IEC 61000-6-2     EMC directive conforming to IEC 61000-6-3     EMC directive conforming to IEC 61000-6-3     EMC directive conforming to IEC 61131-2     EMC dire	Environment		
IEC 61000-4-4 level 3 IEC 61000-4-6 level 3 IEC 60068-2-27 Ea IEC 61000-4-3 level 3 IEC 61000-4-31 IEC 61000-4-31 IEC 61000-4-2 level 3 IEC 61000-4-2 level 3 IEC 61000-4-2 level 3 IEC 60068-2-6 Fc IEC 61000-4-12  Ip Degree Of Protection IP20 (terminal block) conforming to IEC 60529 IP40 (front panel) conforming to IEC 60529 IP40 (front panel) conforming to IEC 61000-6-2 EMC directive conforming to IEC 61000-6-3 EMC directive conforming to IEC 61000-6-4 EMC directive conforming to IEC 61131-2 zone B Low voltage directive conforming to IEC 61131-2  Disturbance Radiated/Conducted Class B conforming to IEC 61131-2  Disturbance Radiated/Conducted Class B conforming to 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 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	Product Certifications	GL CSA UL	
Environmental Characteristic  EMC directive conforming to IEC 61000-6-2 EMC directive conforming to IEC 61000-6-3 EMC directive conforming to IEC 61000-6-4 EMC directive conforming to IEC 61131-2 zone B Low voltage directive conforming to IEC 61131-2  Disturbance Radiated/Conducted  Class B conforming to EN 55022-11 group 1  Pollution Degree  2 conforming to 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 June 1000 m  Maximum Altitude  2000 m  Maximum Altitude Transport  3048 m  Relative Humidity  95 % without condensation or dripping water  Packing Units  Unit Type Of Package 1  PCE	Standards	IEC 61000-4-4 level 3 IEC 61000-4-6 level 3 IEC 60068-2-27 Ea IEC 61000-4-11 IEC 61000-4-3 IEC 61000-4-2 level 3 IEC 60068-2-6 Fc	
EMC directive conforming to IEC 61000-6-3 EMC directive conforming to IEC 61000-6-4 EMC directive conforming to IEC 61131-2 zone B Low voltage directive conforming to IEC 61131-2  Disturbance Radiated/Conducted  Class B conforming to EN 55022-11 group 1  Pollution Degree  2 conforming to 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  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	lp Degree Of Protection	· · · · · · · · · · · · · · · · · · ·	
Pollution Degree 2 conforming to 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	Environmental Characteristic	EMC directive conforming to IEC 61000-6-3 EMC directive conforming to IEC 61000-6-4 EMC directive conforming to IEC 61131-2 zone B	
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  Packing Units  Unit Type Of Package 1  PCE	Disturbance Radiated/Conducted	Class B conforming to EN 55022-11 group 1	
Operation  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	Pollution Degree	2 conforming to IEC 61131-2	
Storage 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		60068-2-2	
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		-4070 °C	
Packing Units Unit Type Of Package 1  95 % without condensation or dripping water  PCE		2000 m	
Packing Units Unit Type Of Package 1 PCE	Maximum Altitude Transport	3048 m	
Unit Type Of Package 1 PCE	Relative Humidity	95 % without condensation or dripping water	
Unit Type Of Package 1 PCE	Packing Units		
Number Of Units In Package 1 1		PCE	
	Number Of Units In Package 1	1	
Package 1 Height 6.8 cm	Package 1 Height	6.8 cm	

Package 1 Width	9.0 cm
Package 1 Length	10.0 cm
Package 1 Weight	201.0 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	6.506 kg

# **Contractual warranty**

Warranty 18 months



**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

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Transparency RoHS/REACh

# Well-being performance

Mercury Free	
Rohs Exemption Information	Yes
Pvc Free	

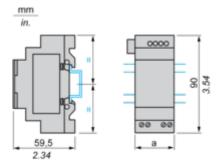
### **Certifications & Standards**

Reach Regulation	REACh Declaration	
u Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)		
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
Circularity Profile	End of Life Information	

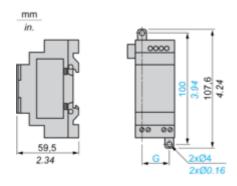
## **Dimensions Drawings**

## I/O Extension Modules

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



### Screw Fixing (Retractable Lugs)

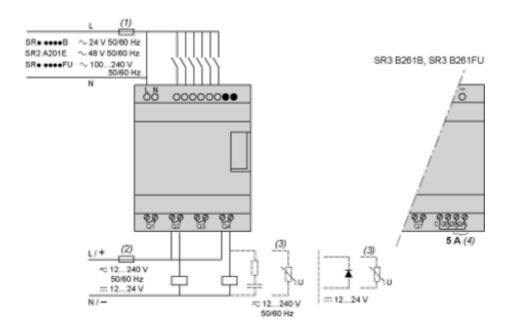


SR3	a (mm/in.)	G (mm/in.)
XT61••	35 / 1.38	25 / 0.98
XT101••	72 / 2.83	60 / 2.36
XT141••	72 / 2.83	60 / 2.36

#### Connections and Schema

#### **Connection of Smart Relays on AC Supply**

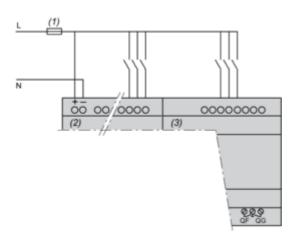
#### SR --- 1B, SR --- 1FU



- (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.

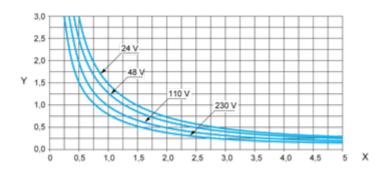
NOTE: QF and QG: 5 A for SR3XT141..

#### Performance Curves

#### **Compact and Modular Smart Relays**

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

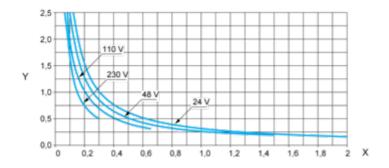
(in millions of operating cycles, conforming to IEC/EN 60947-5-1) AC-12 (1)



X: Current (A)

Y: Millions of operating cycles

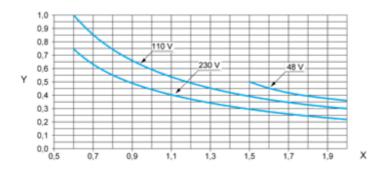
(1) AC-12: switching resistive loads and opto-coupler isolated solid-state loads, cos ≥ 0.9. AC-14 (1)



X: Current (A)

Y: Millions of operating cycles

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