

# Product data sheet

Specifications



modular smart relay, Zelio Logic  
SR2 SR3, 10 IO, 100 to 240V AC,  
clock, display

SR3B101FU

**Product availability: Stock - Normally stocked in distribution facility**

**Price\*: 292.00 USD**

## Main

Range Of Product	Zelio Logic
Product Or Component Type	Modular smart relay

## Complementary

Local Display	With
Number Or Control Scheme Lines	0...500 FBD 0...240 ladder
Cycle Time	6...90 ms
Backup Time	10 years 77 °F (25 °C)
Clock Drift	12 min/year 32...131 °F (0...55 °C) 6 s/month 77 °F (25 °C)
Checks	Program memory on each power up
[Us] Rated Supply Voltage	100...240 V
Supply Voltage Limits	85...264 V
Supply Frequency	50/60 Hz
Maximum Supply Current	30 mA 240 V without extension) 40 mA 240 V with extensions) 80 mA 100 V with extensions) 80 mA 100 V without extension)
Power Consumption In Va	12 VA with extensions 7 VA without extension
Isolation Voltage	1780 V
Protection Type	Against inversion of terminals (control instructions not executed)
Discrete Input Number	6
Discrete Input Voltage	100...240 V AC
Discrete Input Current	0.6 mA
Discrete Input Frequency	57...63 Hz 47...53 Hz
Voltage State 1 Guaranteed	>= 79 V discrete input
Voltage State 0 Guaranteed	<= 40 V discrete input
Current State 1 Guaranteed	>= 0.17 mA discrete input)
Current State 0 Guaranteed	<= 0.5 mA discrete input)
Input Impedance	350 kOhm discrete input

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Number Of Outputs</b>	4 relay
<b>Output Voltage Limits</b>	5...30 V DC relay output) 24...250 V AC
<b>Contacts Type And Composition</b>	NO relay output
<b>Output Thermal Current</b>	8 A for all 4 outputs relay output
<b>Electrical Durability</b>	AC-12 500000 cycles 230 V, 1.5 A relay output IEC 60947-5-1 AC-15 500000 cycles 230 V, 0.9 A relay output IEC 60947-5-1 DC-12 500000 cycles 24 V, 1.5 A relay output IEC 60947-5-1 DC-13 500000 cycles 24 V, 0.6 A relay output IEC 60947-5-1
<b>Switching Capacity In Ma</b>	>= 10 mA 12 V relay output)
<b>Operating Rate In Hz</b>	0.1 Hz at Ie)relay output 10 Hz no load)relay output
<b>Mechanical Durability</b>	10000000 cycles relay output
<b>[Uimp] Rated Impulse Withstand Voltage</b>	4 kV EN/IEC 60947-1 and EN/IEC 60664-1
<b>Clock</b>	With
<b>Response Time</b>	50 ms ladder from state 0 to state 1)discrete input 50 ms ladder from state 1 to state 0)discrete input 50...255 ms FBD from state 0 to state 1)discrete input 50...255 ms FBD from state 1 to state 0)discrete input 10 ms from state 0 to state 1)relay output 5 ms from state 1 to state 0)relay output
<b>Connections - Terminals</b>	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, 1 x 0.25...1 x 2.5 mm <sup>2</sup> AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> AWG 24...AWG 16) solid Screw terminals, 2 x 0.25...2 x 0.75 mm <sup>2</sup> AWG 24...AWG 18) flexible with cable end
<b>Tightening Torque</b>	4.43 lbf.in (0.5 N.m)
<b>Overvoltage Category</b>	III IEC 60664-1
<b>Net Weight</b>	0.55 lb(US) (0.25 kg)

## Environment

<b>Immunity To Microbreaks</b>	10 ms
<b>Product Certifications</b>	GOST C-tick CSA UL GL
<b>Standards</b>	IEC 61000-4-12 IEC 61000-4-4 level 3 IEC 61000-4-6 level 3 IEC 61000-4-3 IEC 61000-4-2 level 3 IEC 61000-4-5 IEC 61000-4-11 IEC 60068-2-6 Fc IEC 60068-2-27 Ea
<b>Ip Degree Of Protection</b>	IP20 IEC 60529 terminal block) IP40 IEC 60529 front panel)
<b>Environmental Characteristic</b>	EMC directive IEC 61000-6-2 EMC directive IEC 61000-6-3 EMC directive IEC 61000-6-4 EMC directive IEC 61131-2 zone B Low voltage directive IEC 61131-2
<b>Disturbance Radiated/Conducted</b>	Class B EN 55022-11 group 1
<b>Pollution Degree</b>	2 IEC 61131-2

<b>Ambient Air Temperature For Operation</b>	-4...104 °F (-20...40 °C) in non-ventilated enclosure IEC 60068-2-1 and IEC 60068-2-2 -4...131 °F (-20...55 °C) IEC 60068-2-1 and IEC 60068-2-2
<b>Ambient Air Temperature For Storage</b>	-40...158 °F (-40...70 °C)
<b>Operating Altitude</b>	6561.68 ft (2000 m)
<b>Maximum Altitude Transport</b>	10000.00 ft (3048 m)
<b>Relative Humidity</b>	95 % without condensation or dripping water

## Ordering and shipping details

<b>Category</b>	US1000I22378
<b>Discount Schedule</b>	000I
<b>Gtin</b>	3389110549911
<b>Returnability</b>	Yes
<b>Country Of Origin</b>	FR

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
<b>Number Of Units In Package 1</b>	1
<b>Package 1 Height</b>	2.68 in (6.8 cm)
<b>Package 1 Width</b>	3.94 in (10 cm)
<b>Package 1 Length</b>	3.54 in (9 cm)
<b>Package 1 Weight</b>	8.54 oz (242 g)
<b>Unit Type Of Package 2</b>	S03
<b>Number Of Units In Package 2</b>	30
<b>Package 2 Height</b>	11.81 in (30 cm)
<b>Package 2 Width</b>	11.81 in (30 cm)
<b>Package 2 Length</b>	15.75 in (40 cm)
<b>Package 2 Weight</b>	17.06 lb(US) (7.738 kg)

## Contractual warranty

<b>Warranty</b>	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class 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.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

Mercury Free

Rohs Exemption Information Yes

Pvc Free

## Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu 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.

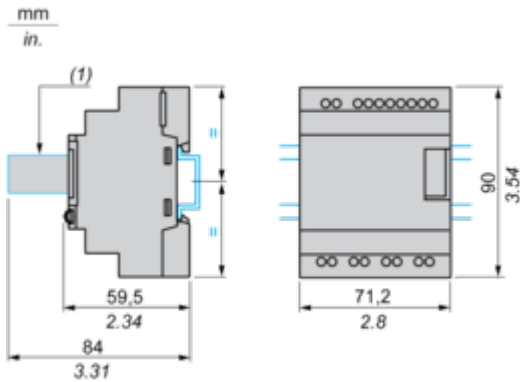
Circularity Profile [End of Life Information](#)

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](http://www.P65Warnings.ca.gov)

Dimensions Drawings

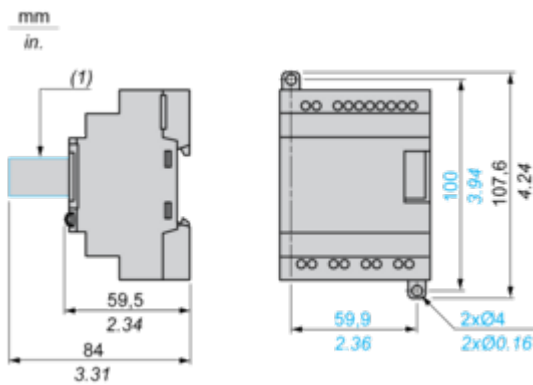
Compact and Modular Smart Relays

Mounting on 35 mm/1.38 in. DIN Rail



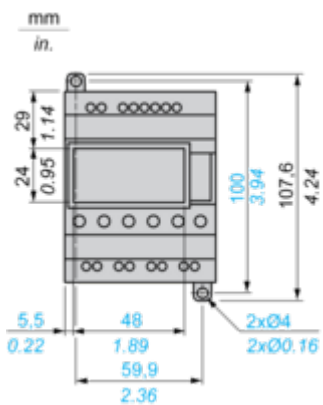
(1) With SR2USB01 or SR2BTC01

Screw Fixing (Retractable Lugs)



(1) With SR2USB01 or SR2BTC01

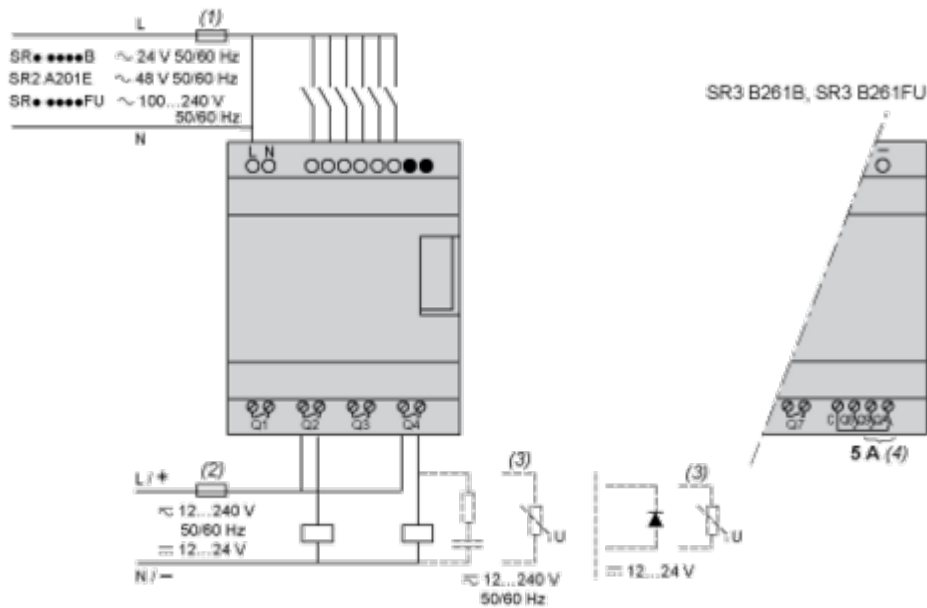
Position of Display



Connections and Schema

Connection of Smart Relays on AC Supply

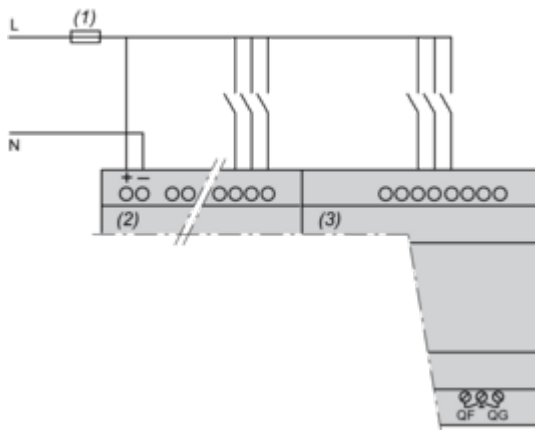
SR••••1B, SR••••1FU



- (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.

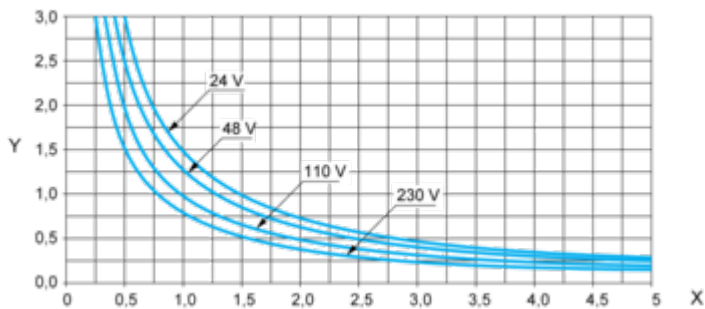
**NOTE:** QF and QG: 5 A for SR3XT141••

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)

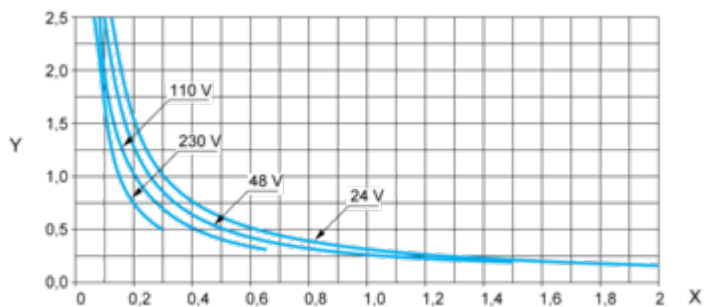


X: Current (A)

Y: Millions of operating cycles

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

AC-14 (1)

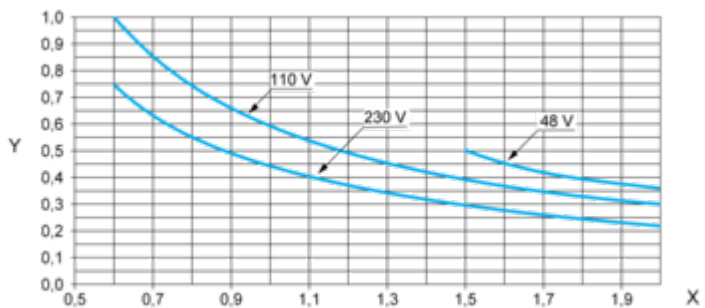


X: Current (A)

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:  $\cos = 0.4$ .