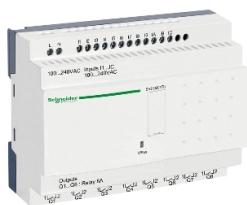


# Product data sheet

Specifications



compact smart relay, Zelio Logic  
SR2 SR3, 20 IO, 100 to 240V AC,  
no clock, no display

SR2D201FU

## Main

Range of product	Zelio Logic
Product or component type	Compact smart relay

## Complementary

Local display	Without
Number or control scheme lines	240 with ladder programming
Cycle time	6...90 ms
Backup time	10 years at 25 °C
Clock drift	12 min/year at 0...55 °C 6 s/month at 25 °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
Maximum supply current	100 mA at 100 V (without extension) 50 mA at 240 V (without extension)
Power consumption in VA	11 VA without extension
Isolation voltage	1780 V
Protection type	Against inversion of terminals (control instructions not executed)
Discrete input number	12
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 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)
Analogue input number	0
Input impedance	350 kOhm for discrete input
Number of outputs	8 relay
Output voltage limits	5...30 V DC (relay output) 24...250 V AC

<b>Contacts type and composition</b>	NO for relay output
<b>Output thermal current</b>	8 A for all 8 outputs for relay output
<b>Electrical durability</b>	AC-12: 500000 cycles at 230 V, 1.5 A for relay output conforming to IEC 60947-5-1 AC-15: 500000 cycles at 230 V, 0.9 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 DC-13: 500000 cycles at 24 V, 0.6 A for relay output conforming to 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 Ie) for relay output 10 Hz (no load) for relay output
<b>Mechanical durability</b>	10000000 cycles for relay output
<b>[Uiimp] rated impulse withstand voltage</b>	4 kV conforming to EN/IEC 60947-1 and EN/IEC 60664-1
<b>Clock</b>	Without
<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 0.2...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>	0.5 N.m
<b>Overvoltage category</b>	III conforming to IEC 60664-1
<b>Product weight</b>	0.35 kg

## Environment

<b>Immunity to microbreaks</b>	10 ms
<b>Product certifications</b>	UL GOST GL CSA C-Tick
<b>Standards</b>	IEC 61000-4-2 level 3 IEC 61000-4-12 IEC 61000-4-11 IEC 60068-2-6 Fc IEC 61000-4-5 IEC 60068-2-27 Ea IEC 61000-4-6 level 3 IEC 61000-4-3 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 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
<b>Disturbance radiated/conducted</b>	Class B conforming to EN 55022-11 group 1
<b>Pollution degree</b>	2 conforming to 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>	7.000 cm
<b>Package 1 Width</b>	10.400 cm
<b>Package 1 Length</b>	13.500 cm
<b>Package 1 Weight</b>	332.000 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	20
<b>Package 2 Height</b>	30.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	7.125 kg

## Contractual warranty

<b>Warranty</b>	18 months
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Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Total lifecycle Carbon footprint	515
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	91701a78-5972-4eb5-b11f-2737d556b9de
REACH Regulation	<a href="#">REACH Declaration</a>
California proposition 65	<b>WARNING:</b> 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="#">www.P65Warnings.ca.gov</a>
PVC free	Yes

## Use Again

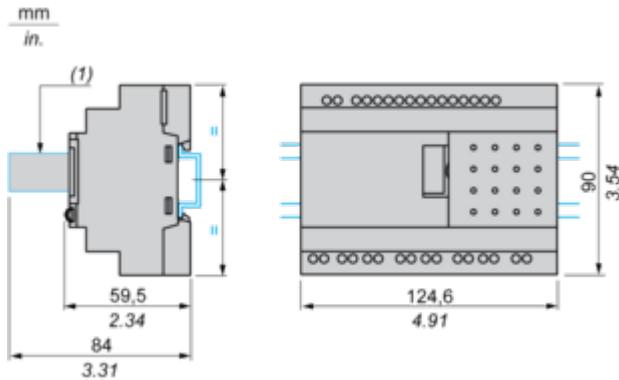
### Repack and remanufacture

End of life manual availability	<a href="#">End of Life Information</a>
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Dimensions Drawings

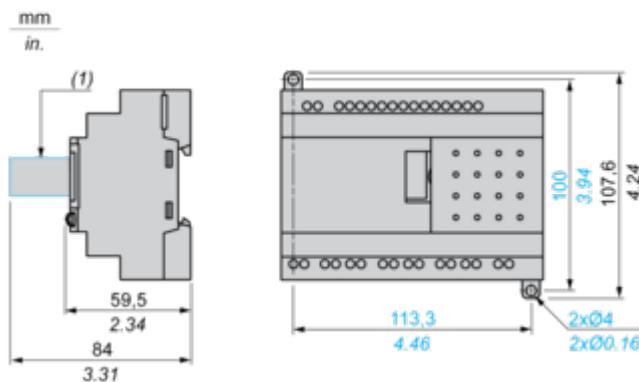
Compact and Modular Smart Relays

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



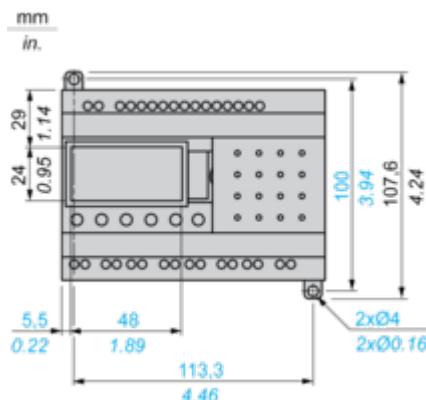
(1) With SR2USB01 or SR2BTC01

## Screw Fixing (Retractable Lugs)



(1) With SR2USB01 or SR2BTC01

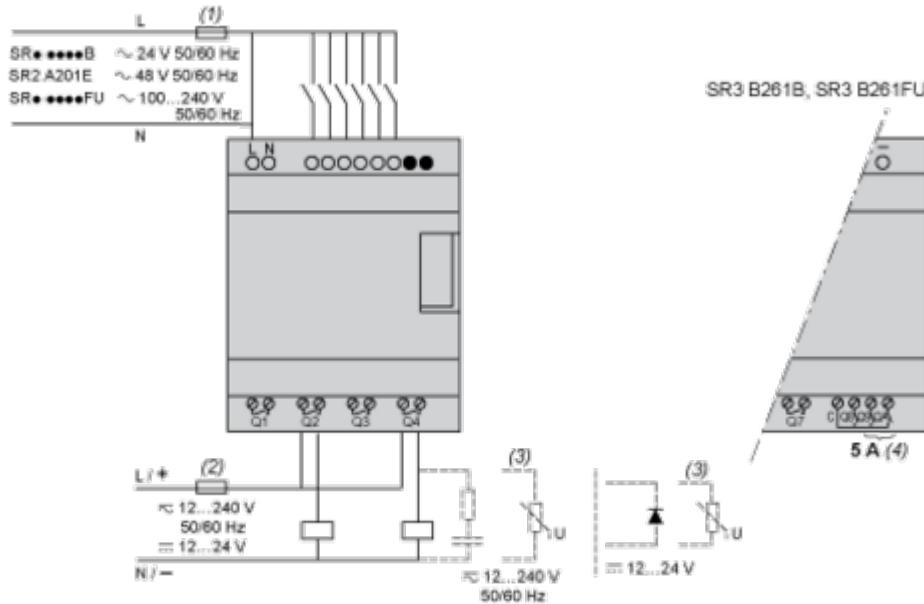
## Position of Display



## Connections and Schema

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

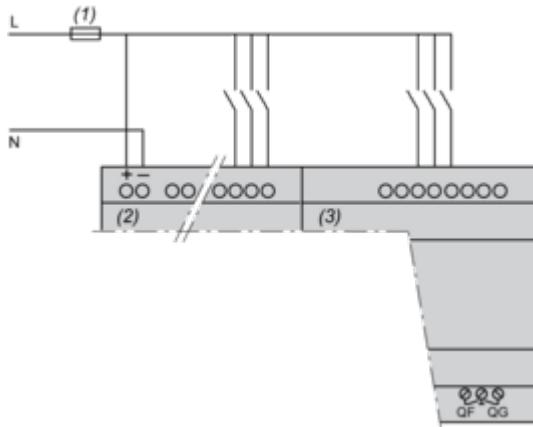
SR•••1B, SR•••1FU



- (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



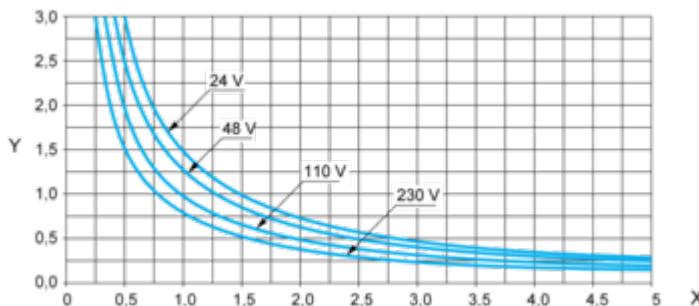
(1) 1 A quick-blow fuse or circuit-breaker.

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

## Performance Curves

Compact and Modular Smart Relays**Electrical Durability of Relay Outputs**

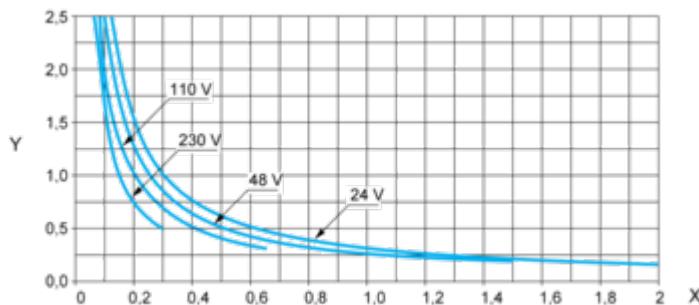
(in millions of operating cycles, conforming to IEC/EN 60947-5-1)  
AC-12 (1)



X: Current (A)

Y: Millions of operating cycles

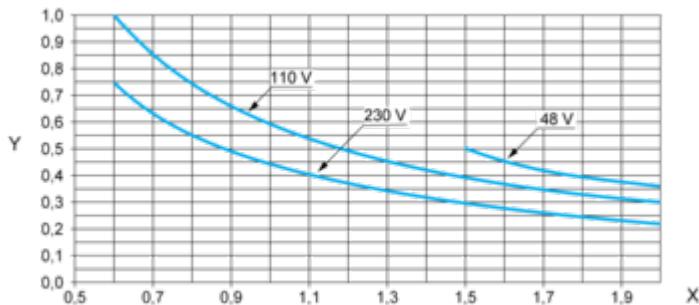
(1) AC-12: switching resistive loads and opto-coupler isolated solid-state loads,  $\cos \geq 0.9$ .  
AC-14 (1)



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:  $\cos = 0.4$ .

Image of product / Alternate images

Alternative

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