

# Product data sheet

## Characteristics

# SR2A101FU

compact smart relay Zelio Logic - 10 I O -  
100..240 V AC - no clock - display

Product availability: Stock - Normally stocked in distribution facility

Price\*: 258.00 USD



## Main

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

## Complementary

Local display	With
Number or control scheme lines	120 with ladder programming ≤ 200 with FBD programming
Cycle time	6...90 ms
Backup time	10 years at 77 °F (25 °C)
Clock drift	6 s/month at 77 °F (25 °C) 12 min/year at 32...131 °F (0...55 °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
Supply current	80 mA at 100 V (without extension) 30 mA at 240 V (without extension)
Power consumption in VA	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	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 for discrete input
Current state 0 guaranteed	< 0.5 mA for discrete input
Input impedance	350 kOhm (discrete input)
Number of outputs	4 relay output(s)
Output voltage limits	24...250 V AC 5...30 V DC (relay output)
Contacts type and composition	NO relay output
Output thermal current	8 A for all 4 outputs (relay output)

Electrical durability	500000 cycles DC-13at 24 V, 0.6 A for relay output conforming to EN/IEC 60947-5-1 500000 cycles DC-12at 24 V, 1.5 A for relay output conforming to EN/IEC 60947-5-1 500000 cycles AC-15at 230 V, 0.9 A for relay output conforming to EN/IEC 60947-5-1 500000 cycles AC-12at 230 V, 1.5 A 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	10 Hz (no load) for relay output 0.1 Hz (at I <sub>e</sub> ) for relay output
Mechanical durability	10000000 cycles (relay output)
[U <sub>imp</sub> ] rated impulse withstand voltage	4 kV conforming to EN/IEC 60947-1 and EN/IEC 60664-1
Clock	Without
Response time	5 ms (from state 1 to state 0) relay output 10 ms (from state 0 to state 1) relay output 50...255 ms with FBD programming (from state 1 to state 0) discrete input 50...255 ms with FBD programming (from state 0 to state 1) discrete input 50 ms with ladder programming (from state 1 to state 0) discrete input 50 ms with ladder programming (from state 0 to state 1) discrete input
Connections - terminals	Screw terminals, clamping capacity: 2 x 0.25...2 x 0.75 mm <sup>2</sup> AWG 24...AWG 18 flexible with cable end Screw terminals, clamping capacity: 2 x 0.2...2 x 1.5 mm <sup>2</sup> AWG 24...AWG 16 solid Screw terminals, clamping capacity: 1 x 0.25...1 x 2.5 mm <sup>2</sup> AWG 24...AWG 14 flexible with cable end Screw terminals, clamping capacity: 1 x 0.2...1 x 2.5 mm <sup>2</sup> AWG 25...AWG 14 solid Screw terminals, clamping capacity: 1 x 0.2...1 x 2.5 mm <sup>2</sup> AWG 25...AWG 14 semi-solid
Tightening torque	4.42 lbf.in (0.5 N.m)
Overvoltage category	III conforming to EN/IEC 60664-1
Product weight	0.55 lb(US) (0.25 kg)

## Environment

Immunity to microbreaks	<= 10 ms
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	IP40 (front panel) conforming to IEC 60529 IP20 (terminal block) conforming to IEC 60529
Environmental characteristic	Low voltage directive conforming to EN/IEC 61131-2 EMC directive conforming to EN/IEC 61131-2 zone B EMC directive conforming to EN/IEC 61000-6-4 EMC directive conforming to EN/IEC 61000-6-3 EMC directive conforming to EN/IEC 61000-6-2
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	-4...131 °F (-20...55 °C) conforming to IEC 60068-2-1 and IEC 60068-2-2 -4...104 °F (-20...40 °C) in non-ventilated enclosure conforming to IEC 60068-2-1 and IEC 60068-2-2
Ambient air temperature for storage	-40...158 °F (-40...70 °C)
Operating altitude	6561.68 ft (2000 m)
Altitude transport	<= 10000 ft (3048 m)
Relative humidity	95 % without condensation or dripping water

### Ordering and shipping details

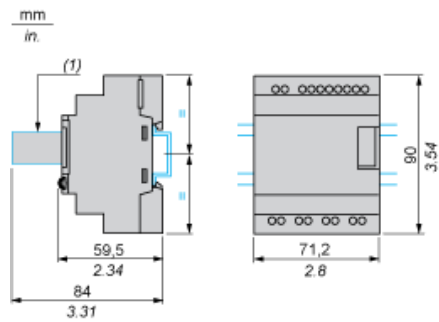
Category	22378 - SR2,3 ZELIO 2 RELAYS
Discount Schedule	I
GTIN	00785901422488
Nbr. of units in pkg.	1
Product availability	Stock - Normally stocked in distribution facility
Returnability	Y
Country of origin	FR

### Contractual warranty

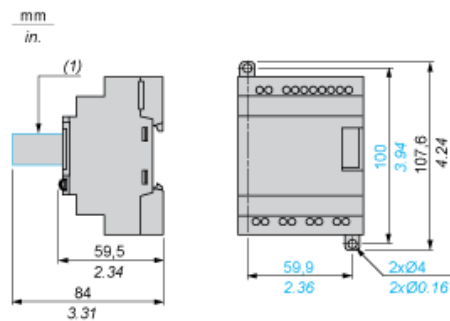
Warranty period	18 months
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## Compact and Modular Smart Relays

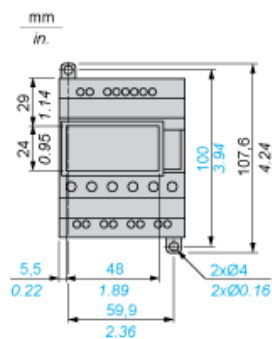
### Mounting on 35 mm/1.38 in. DIN Rail



### Screw Fixing (Retractable Lugs)

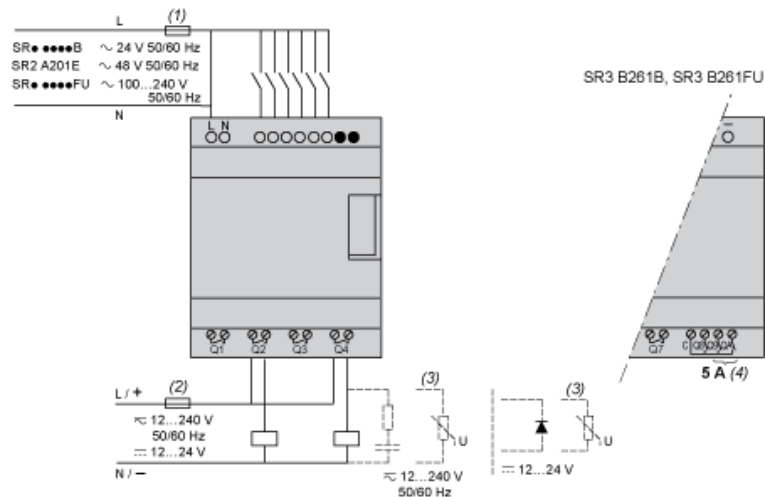


### Position of Display



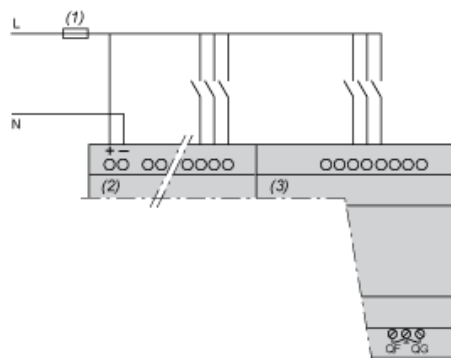
## Connection of Smart Relays on AC Supply

### SR...1B, SR...1FU



### With Discrete I/O Extension Module

SR3B...B + SR3XT...B, SR3B...FU + SR3XT...FU

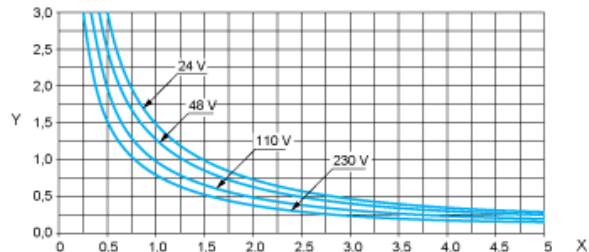


## Compact and Modular Smart Relays

### Electrical Durability of Relay Outputs

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

#### AC-12 (1)

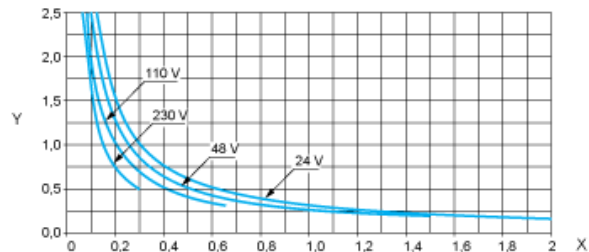


X: Current (A)

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)

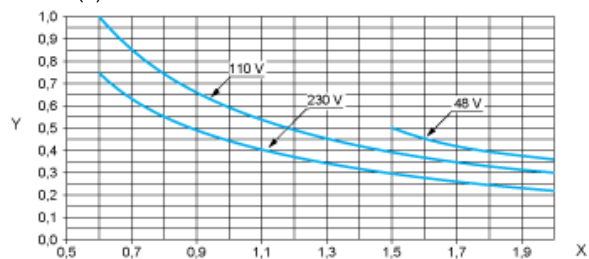


X: Current (A)

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:  $\cos = 0.4$ .