



## Main

Range of Product	Zelio Logic
Product or Component Type	Compact smart relay

## Complementary

Local display	With
Number of control scheme lines	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	24 V DC
Supply voltage limits	19.2...30 V
Maximum supply current	100 mA without extension)
Power dissipation in W	3 W without extension
Reverse polarity protection	With
Discrete input number	6 IEC 61131-2 Type 1
Discrete input type	Resistive
Discrete input voltage	24 V DC
Discrete input current	4 mA
Counting frequency	1 kHz discrete input
Voltage state 1 guaranteed	>= 15 V I1...IA and IH...IR discrete input circuit >= 15 V IB...IG used as discrete input circuit
Voltage state 0 guaranteed	<= 5 V I1...IA and IH...IR discrete input circuit <= 5 V IB...IG used as discrete input circuit
Current state 1 guaranteed	>= 1.2 mA IB...IG used as discrete input circuit) >= 2.2 mA I1...IA and IH...IR discrete input circuit)
Current state 0 guaranteed	<= 0.5 mA IB...IG used as discrete input circuit) <= 0.75 mA I1...IA and IH...IR discrete input circuit)
Input compatibility	3-wire proximity sensors PNP discrete input
Analogue input number	0
Input impedance	12 kOhm IB...IG used as analogue input circuit 12 kOhm IB...IG used as discrete input circuit 7.4 kOhm I1...IA and IH...IR discrete input circuit
Number of Outputs	4 relay
Output voltage limits	24...250 V AC relay output) 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	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
Switching capacity in mA	>= 10 mA 12 V relay output)
Operating rate in Hz	0.1 Hz at Ie)relay output 10 Hz no load)relay output
Mechanical durability	10000000 cycles relay output
[Uimp] rated impulse withstand voltage	4 kV EN/IEC 60947-1 and EN/IEC 60664-1
Clock	Without
Response time	10 ms from state 0 to state 1)relay output 5 ms from state 1 to state 0)relay output
Connections - terminals	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
Tightening torque	4.43 lbf.in (0.5 N.m)
Overvoltage category	III IEC 60664-1
Net Weight	0.55 lb(US) (0.25 kg)

## Environment

Immunity to microbreaks	1 ms
Product Certifications	CSA[RETURN]UL[RETURN]C-tick[RETURN]GL[RETURN]GOST
Standards	IEC 61000-4-4 level 3 IEC 60068-2-27 Ea IEC 61000-4-3 IEC 61000-4-11 IEC 61000-4-12 IEC 60068-2-6 Fc IEC 61000-4-6 level 3 IEC 61000-4-5 IEC 61000-4-2 level 3
IP degree of protection	IP20 IEC 60529 terminal block) IP40 IEC 60529 front panel)
Environmental characteristic	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
Disturbance radiated/conducted	Class B EN 55022-11 group 1
Pollution degree	2 IEC 61131-2
Ambient air temperature for operation	-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
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Operating altitude	6561.68 ft (2000 m)
Maximum altitude transport	10000.00 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	3389110547535
Returnability	Yes
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.76 in (7 cm)
Package 1 Width	3.94 in (10 cm)
Package 1 Length	3.54 in (9 cm)
Package 1 Weight	8.18 oz (232 g)
Unit Type of Package 2	S03
Number of Units in Package 2	30
Package 2 Height	11.81 in (30 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	16.42 lb(US) (7.45 kg)

## Offer Sustainability

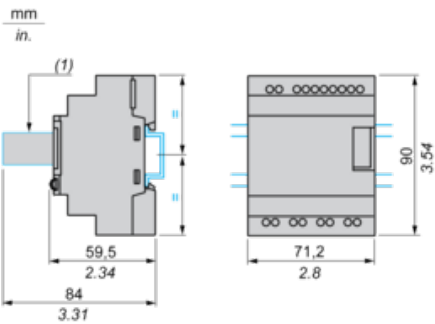
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

## Contractual warranty

Warranty	18 months
----------	-----------

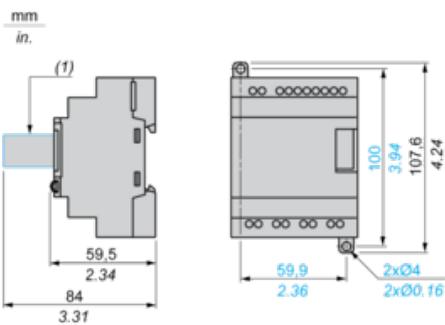
Compact and Modular Smart Relays

Mounting on 35 mm/1.38 in. DIN Rail



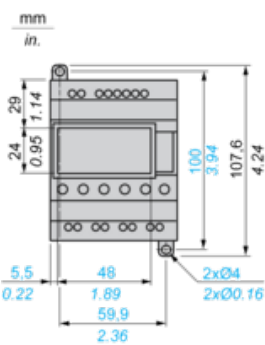
(1) With SR2USB01 or SR2BTC01

Screw Fixing (Retractable Lugs)



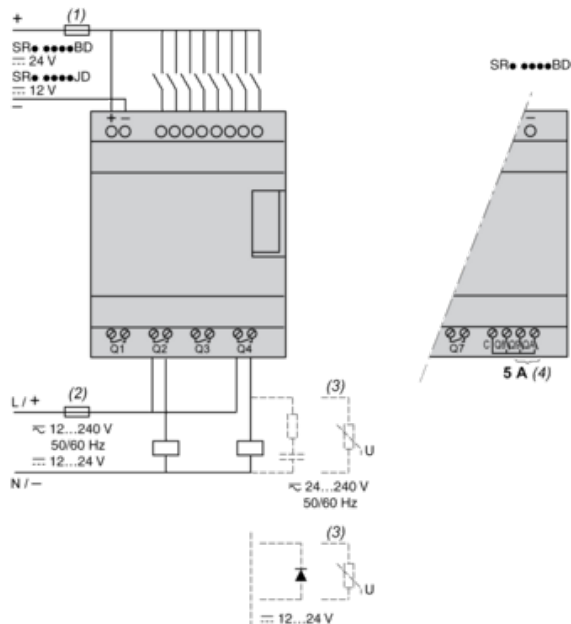
(1) With SR2USB01 or SR2BTC01

Position of Display



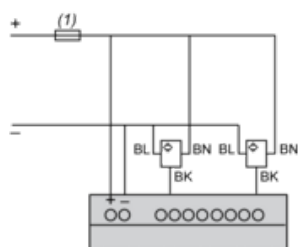
## Compact and Modular Smart Relays

### Connection of Smart Relays on DC Supply



- (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).

### Discrete Input Used for 3-Wire Sensors



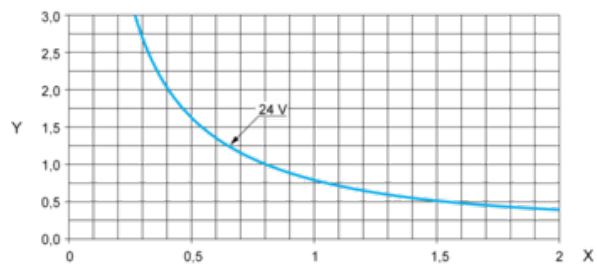
- (1) 1 A quick-blow fuse or circuit-breaker.

## Compact and Modular Smart Relays

### Electrical Durability of Relay Outputs

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

#### DC-12 (1)

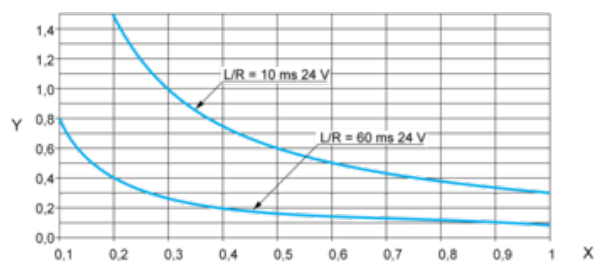


X: Current (A)

Y: Millions of operating cycles

(1) DC-12: control of resistive loads and of solid state loads isolated by opto-coupler,  $L/R \leq 1$  ms.

#### DC-13 (1)



X: Current (A)

Y: Millions of operating cycles

(1) DC-13: switching electromagnets,  $L/R \leq 2 \times (U_e \times I_e)$  in ms,  $U_e$ : rated operational voltage,  $I_e$ : rated operational current (with a protection diode on the load, DC-12 curves must be used with a coefficient of 0.9 applied to the number in millions of operating cycles).