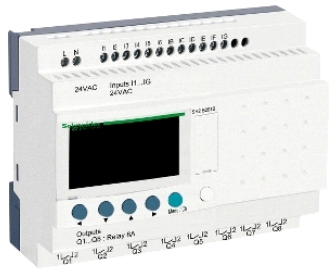
Product datasheet
Characteristics

SR2B201B



Main

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

Complementary

Local display	With
Number or control scheme lines	0...500 with FBD programming 0...240 with ladder programming
Cycle time	6...90 ms
Backup time	10 yearsat 77 °F (25 °C)
Clock drift	6 s/monthat 77 °F (25 °C) 12 min/yearat 32...131 °F (0...55 °C)
Checks	Program memory on each power up
[Us] rated supply voltage	24 V
Supply voltage limits	20.4...28.8 V
Supply frequency	50/60 Hz
Supply current	233 mA (without extension)
Power consumption in VA	6 VA without extension
Isolation voltage	1780 V
Protection type	Against inversion of terminals (control instructions not executed)
Discrete input number	12
Discrete input voltage	24 V AC
Discrete input current	4.4 mA
Discrete input frequency	47...53 Hz 57...63 Hz
Voltage state 1 guaranteed	>= 14 Vfor discrete input
Voltage state 0 guaranteed	<= 5 V for discrete input
Current state 1 guaranteed	>= 2 mA for discrete input
Current state 0 guaranteed	<= 0.5 mA for discrete input
Input impedance	4.6 kOhm (discrete input)
Number of outputs	8 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 8 outputs (relay output)
Electrical durability	500000 cycles AC-12at 230 V, 1.5 Afor relay output conforming to EN/IEC 60947-5-1 500000 cycles AC-15at 230 V, 0.9 Afor relay output conforming to EN/IEC 60947-5-1 500000 cycles DC-12at 24 V, 1.5 Afor relay output conforming to EN/IEC 60947-5-1 500000 cycles DC-13at 24 V, 0.6 Afor relay output conforming to EN/IEC 60947-5-1
Switching capacity in mA	>= 10 mAat 12 V (relay output)
Operating rate in Hz	0.1 Hz (at Ie)for relay output 10 Hz (no load)for relay output
Mechanical durability	10000000 cycles (relay output)
[Uimp] rated impulse withstand voltage	4 kV conforming to EN/IEC 60947-1 and EN/IEC 60664-1
Clock	With

Response time	10 ms (from state 0 to state 1) relay output 5 ms (from state 1 to state 0) relay output 50 ms with ladder programming (from state 0 to state 1) discrete input 50 ms with ladder programming (from state 1 to state 0) discrete input 50...255 ms with FBD programming (from state 0 to state 1) discrete input 50...255 ms with FBD programming (from state 1 to state 0) discrete input
Connections - terminals	Screw terminals, clamping capacity: 1 x 0.2...1 x 2.5 mm² AWG 25...AWG 14 semi-solid Screw terminals, clamping capacity: 1 x 0.2...1 x 2.5 mm² AWG 25...AWG 14 solid Screw terminals, clamping capacity: 1 x 0.25...1 x 2.5 mm² AWG 24...AWG 14 flexible with cable end Screw terminals, clamping capacity: 2 x 0.2...2 x 1.5 mm² AWG 24...AWG 16 solid Screw terminals, clamping capacity: 2 x 0.25...2 x 0.75 mm² AWG 24...AWG 18 flexible with cable end
Tightening torque	4.42 lbf.in (0.5 N.m)
Overvoltage category	III conforming to EN/IEC 60664-1
Product weight	0.84 lb(US) (0.38 kg)

Environment

immunity to microbreaks	<= 10 ms repeated 20 times
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	IP20 (terminal block) conforming to IEC 60529 IP40 (front panel) conforming to IEC 60529
environmental characteristic	EMC directive conforming to EN/IEC 61000-6-2 EMC directive conforming to EN/IEC 61000-6-3 EMC directive conforming to EN/IEC 61000-6-4 EMC directive conforming to EN/IEC 61131-2 zone B Low voltage directive conforming to EN/IEC 61131-2
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...104 °F (-20...40 °C) in non-ventilated enclosure conforming to IEC 60068-2-1 and IEC 60068-2-2 -4...131 °F (-20...55 °C) 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

Offer Sustainability

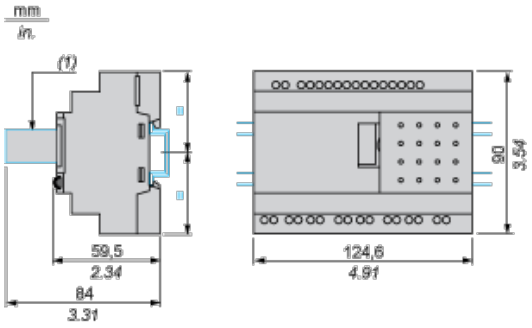
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information go to www.p65warnings.ca.gov	For more information go to www.p65warnings.ca.gov

Contractual warranty

Warranty period	18 months

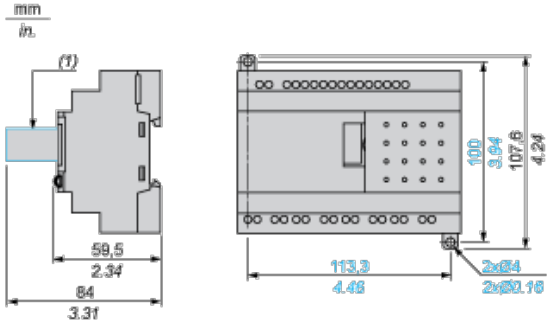
Compact and Modular Smart Relays

Mounting on 35 mm/1.38 in. DIN Rail



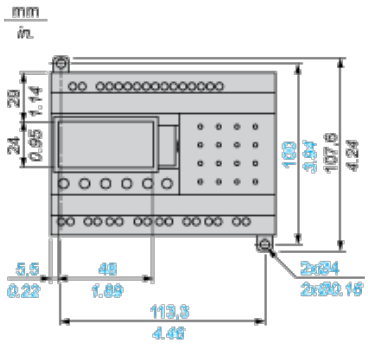
(1) With SR2USB01 or SR2BTC01

Screw Fixing (Retractable Lugs)



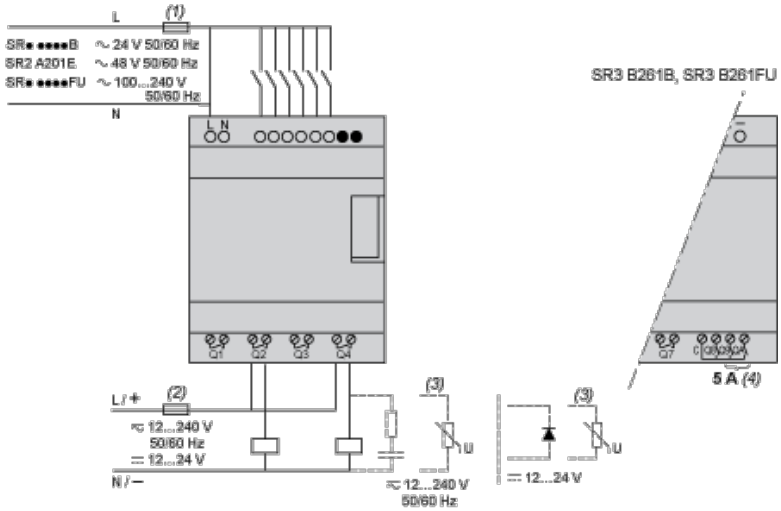
(1) With SR2USB01 or SR2BTC01

Position of Display



Connection of Smart Relays on AC Supply

SR••••1B, SR••••1FU



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

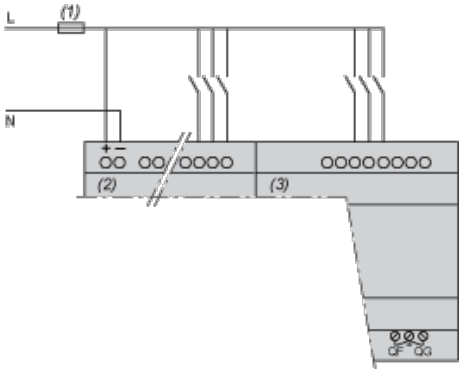
(2) Fuse or circuit-breaker.

(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.

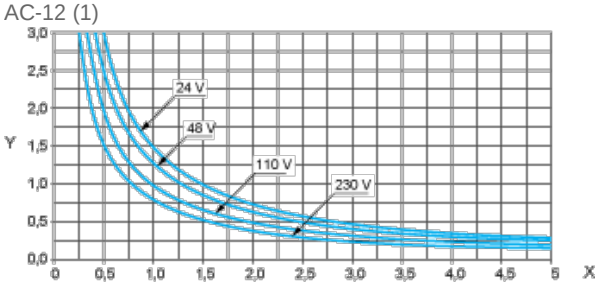
NOTE: QF and QG: 5 A for SR3XT141••

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)

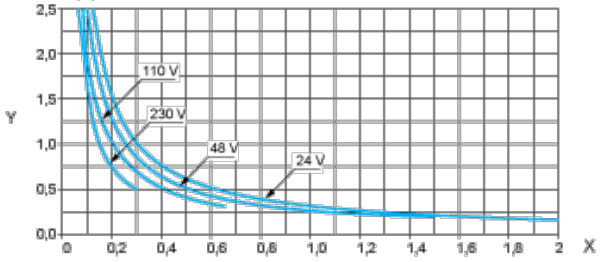


X: Current (A)

Y: Millions of operating cycles

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

AC-14 (1)

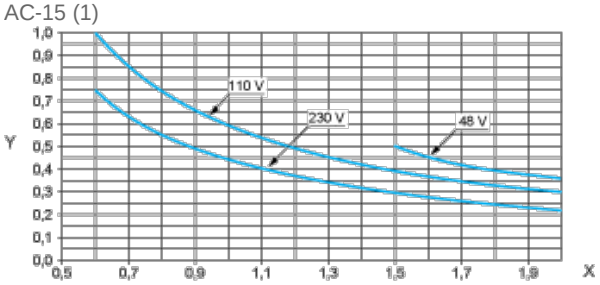


X: Current (A)

Y: Millions of operating cycles

(1) AC-14: switching small electromagnetic loads ≤ 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.