## Product data sheet

Specifications
compact smart relay, Zelio Logic


SR2 SR3, 20 IO, 100 to 240V AC, no clock, display

SR2A201FU

Main

| Range Of Product | Zelio Logic |
| :--- | :--- |
| Product Or Component Type | Compact smart relay |

Complementary

| Local Display | With |
| :---: | :---: |
| Number Or Control Scheme Lines | 0... 240 with ladder programming |
| Cycle Time | $6 . . .90 \mathrm{~ms}$ |
| Backup Time | 10 years at $25^{\circ} \mathrm{C}$ |
| Clock Drift | $12 \mathrm{~min} / \text { year at } 0 \ldots 55^{\circ} \mathrm{C}$ $6 \mathrm{~s} / \text { month at } 25^{\circ} \mathrm{C}$ |
| Checks | Program memory on each power up |
| [Us] Rated Supply Voltage | 100... 240 V AC |
| Supply Voltage Limits | 85... 264 V |
| Supply Frequency | $50 / 60 \mathrm{~Hz}$ |
| 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 | $\begin{aligned} & 47 \ldots 53 \mathrm{~Hz} \\ & 57 \ldots 63 \mathrm{~Hz} \end{aligned}$ |
| 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 | $<=0.5 \mathrm{~mA}$ (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 |


| Contacts Type And Composition | NO for relay output |
| :---: | :---: |
| Output Thermal Current | 8 A for all 8 outputs for relay output |
| Electrical Durability | AC-12: 500000 cycles at $230 \mathrm{~V}, 1.5 \mathrm{~A}$ for relay output conforming to IEC 60947-5-1 AC-15: 500000 cycles at $230 \mathrm{~V}, 0.9 \mathrm{~A}$ for relay output conforming to IEC 60947-5-1 DC-12: 500000 cycles at $24 \mathrm{~V}, 1.5 \mathrm{~A}$ for relay output conforming to IEC 60947-5-1 DC-13: 500000 cycles at $24 \mathrm{~V}, 0.6 \mathrm{~A}$ for relay output conforming to IEC 60947-5-1 |
| Switching Capacity In Ma | >= 10 mA at 12 V (relay output) |
| Operating Rate In Hz | 0.1 Hz (at le) for relay output 10 Hz (no load) for relay output |
| Mechanical Durability | 10000000 cycles for relay output |
| [Uimp] Rated Impulse Withstand Voltage | 4 kV conforming to EN/IEC 60947-1 and EN/IEC 60664-1 |
| Clock | Without |
| Response Time | 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 |
| Connections - Terminals | Screw terminals, $1 \times 0.2 \ldots 1 \times 2.5 \mathrm{~mm}^{2}$ (AWG 25...AWG 14) semi-solid <br> Screw terminals, $1 \times 0.2 . . .1 \times 2.5 \mathrm{~mm}^{2}$ (AWG 25 ...AWG 14) solid <br> Screw terminals, $1 \times 0.25 \ldots 1 \times 2.5 \mathrm{~mm}^{2}$ (AWG $24 \ldots$...AWG 14) flexible with cable end <br> Screw terminals, $2 \times 0.2 \ldots 2 \times 1.5 \mathrm{~mm}^{2}$ (AWG $24 \ldots$ AWG 16) solid <br> Screw terminals, $2 \times 0.25 \ldots 2 \times 0.75 \mathrm{~mm}^{2}$ (AWG $24 \ldots$...AWG 18) flexible with cable end |
| Tightening Torque | 0.5 N.m |
| Overvoltage Category | III conforming to IEC 60664-1 |
| Net Weight | 0.38 kg |
| Environment |  |
| Immunity To Microbreaks | 10 ms |
| Product Certifications | GL <br> C-Tick <br> CSA <br> UL <br> GOST |
| Standards | IEC 61000-4-12 <br> IEC 60068-2-6 Fc <br> IEC 61000-4-5 <br> IEC 60068-2-27 Ea <br> IEC 61000-4-6 level 3 <br> IEC 61000-4-3 <br> IEC 61000-4-4 level 3 <br> IEC 61000-4-11 <br> IEC 61000-4-2 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 IEC 61000-6-2 <br> EMC directive conforming to IEC 61000-6-3 <br> EMC directive conforming to IEC 61000-6-4 <br> EMC directive conforming to IEC 61131-2 zone B <br> Low voltage directive conforming to IEC 61131-2 |
| Disturbance Radiated/Conducted | Class B conforming to EN 55022-11 group 1 |
| Pollution Degree | 2 conforming to IEC 61131-2 |
| Ambient Air Temperature For Operation | $-20 \ldots 40^{\circ} \mathrm{C}$ in non-ventilated enclosure conforming to IEC $60068-2-1$ and IEC 60068-2-2 <br> $-20 \ldots 55^{\circ} \mathrm{C}$ conforming to IEC 60068-2-1 and IEC 60068-2-2 |
| Ambient Air Temperature For Storage | $-40 \ldots .70^{\circ} \mathrm{C}$ |


| Operating Altitude | 2000 m |
| :--- | :--- |
| Maximum Altitude Transport | 3048 m |
| Relative Humidity | $95 \%$ without condensation or dripping water |

## Packing Units

| Unit Type Of Package 1 | PCE |
| :--- | :--- |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 6.604 cm |
| Package 1 Width | 10.16 cm |
| Package 1 Length | 13.208 cm |
| Package 1 Weight | 362.878 g |
| Unit Type Of Package 2 | 503 |
| Number Of Units In Package 2 | 20 |
| Package 2 Height | 30 cm |
| Package 2 Width | 30 cm |
| Package 2 Length | 40 cm |
| Package 2 Weight | 7.841 kg |

Contractual warranty
Warranty
18 months

## Sustainability Flirenum

Green Premium ${ }^{\text {TM }}$ label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low- $\mathrm{CO}_{2}$ 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 <br> collection and never end up in rubbish bins |
| :--- | :--- |
| Circularity Profile |  |

Dimensions Drawings

Compact and Modular Smart Relays

Mounting on $35 \mathrm{~mm} / 1.38 \mathrm{in}$. 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 $\cdots$ B + SR3XT $\cdots$ B, SR3B $\cdots F U+S R 3 X T \cdots F U$

(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 $\leq 72 \mathrm{VA}$, 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 $\geq 72 \mathrm{VA}$, make: $\cos =0.7$, break: $\cos =0.4$.

