

# Product datasheet

Specifications



## Analogue I/O extension module. Zelio Logic. 4 I/O. 24 V DC

SR3XT43BD

Price: 5,345.32 ZAR

### Main

|                           |                               |
|---------------------------|-------------------------------|
| Range Of Product          | Zelio Logic                   |
| Product Or Component Type | Analogue I/O extension module |

### Complementary

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Analogue Input Number           | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Analogue Input Type             | Common mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Analogue Input Range            | 0...10 V<br>0...20 mA<br>-25...125 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Temperature Probe Type          | Pt 100, 3-wire conforming to IEC 751                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Maximum Permissible Voltage     | 30 V for analogue input circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| [Imp] Maximum Permanent Current | 30 mA for analogue input circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Analogue Input Resolution       | 10 bits on the input range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Input Impedance                 | 18 kOhm, input range: 0...10 V for analogue input circuit<br>247 Ohm, input range: 0...20 mA for analogue input circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Analogue Output Number          | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Analogue Output Range           | 0...10 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Analogue Output Resolution      | 10 bits on the output range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Load Type                       | Resistive load for analogue output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Maximum Load Current            | 10 mA for analogue output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Short-Circuit Protection        | With analogue output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Lsb Value                       | 0.15 °C, - 25...125 °C for analogue input circuit<br>20 µA, 0...20 mA for analogue input circuit<br>9.8 mV, 0...10 V for analogue input circuit<br>9.8 mV, 0...10 V for analogue output                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Conversion Time                 | Smart relay cycle time for analogue input circuit<br>Smart relay cycle time for analogue output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Conversion Error                | +/- 1 % of the full scale value, input range: 0...10 V (25 °C) for analogue output<br>+/- 1 % of the full scale value, input range: 0...10 V (55 °C) for analogue output<br>+/- 1 %, input range: 0...10 V (25 °C) for analogue input circuit<br>+/- 1 %, input range: 0...10 V (55 °C) for analogue input circuit<br>+/- 1 %, input range: 0...20 mA (25 °C) for analogue input circuit<br>+/- 1 %, input range: 0...20 mA (55 °C) for analogue input circuit<br>+/- 1.5 °C, input range: - 25...125 °C (25 °C) for analogue input circuit<br>+/- 1.5 °C, input range: - 25...125 °C (55 °C) for analogue input circuit |
| Repeat Accuracy                 | < +/- 0.3 °C, input range: - 25...125 °C at 25 °C for analogue input circuit<br><= +/- 1 %, input range: 0...10 V at 25 °C for analogue input circuit<br><= +/- 1 %, input range: 0...10 V at 55 °C for analogue output<br><= +/- 1 %, input range: 0...20 mA at 25 °C for analogue input circuit                                                                                                                                                                                                                                                                                                                        |

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Distance          | 10 m with screened cable for analogue input circuit<br>10 m with screened cable for analogue output                                                                                                                                                                                                                                                                                                                                               |
| Reverse Polarity Protection | Analogue input circuit: with                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Connections - Terminals     | Screw terminals, 1 x 0.25...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 14) semi-solid<br>Screw terminals, 1 x 0.25...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 14) solid<br>Screw terminals, 2 x 0.25...2 x 1.5 mm <sup>2</sup> (AWG 23...AWG 16) solid<br>Screw terminals, 1 x 0.25...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 14) flexible with cable end<br>Screw terminals, 2 x 0.25...2 x 0.75 mm <sup>2</sup> (AWG 24...AWG 18) flexible with cable end |
| Tightening Torque           | 0.5 N.m                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Net Weight                  | 0.11 kg                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Environment

|                                       |                                                                                                                                                                                                                                          |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Certifications                | GOST<br>UL<br>C-Tick<br>CSA                                                                                                                                                                                                              |
| Standards                             | IEC 61000-4-12<br>IEC 61000-4-5<br>IEC 61000-4-3<br>IEC 61000-4-4 level 3<br>IEC 61000-4-6 level 3<br>IEC 61000-4-2 level 3<br>IEC 60068-2-6 Fc<br>IEC 61000-4-11<br>IEC 60068-2-27 Ea                                                   |
| Ip Degree Of Protection               | IP20 (terminal block) conforming to IEC 60529<br>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 IEC 55022-11 Group 1                                                                                                                                                                                               |
| Pollution Degree                      | 2 conforming to IEC 61131-2                                                                                                                                                                                                              |
| Ambient Air Temperature For Operation | -20...40 °C conforming to IEC 60068-2-1 and IEC 60068-2-2<br>-20...55 °C conforming to IEC 60068-2-1 and IEC 60068-2-2                                                                                                                   |
| Ambient Air Temperature For Storage   | -40...70 °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             | 6.000 cm  |
| Package 1 Width              | 6.500 cm  |
| Package 1 Length             | 11.000 cm |
| Package 1 Weight             | 105.000 g |
| Unit Type Of Package 2       | S03       |
| Number Of Units In Package 2 | 48        |
| Package 2 Height             | 30.000 cm |
| Package 2 Width              | 30.000 cm |

|                  |           |
|------------------|-----------|
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 5.516 kg  |

## Contractual warranty

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

Sustainability



**Green Premium™ label** is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> 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                   |     |

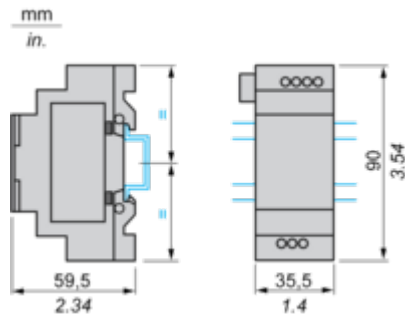
Certifications & Standards

|                          |                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Reach Regulation         | <a href="#">REACH Declaration</a>                                                                                           |
| Eu Rohs Directive        | Pro-active compliance (Product out of EU RoHS legal scope)                                                                  |
| China Rohs Regulation    | <a href="#">China RoHS declaration</a>                                                                                      |
| Environmental Disclosure | <a href="#">Product Environmental Profile</a>                                                                               |
| Weee                     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile      | <a href="#">End of Life Information</a>                                                                                     |

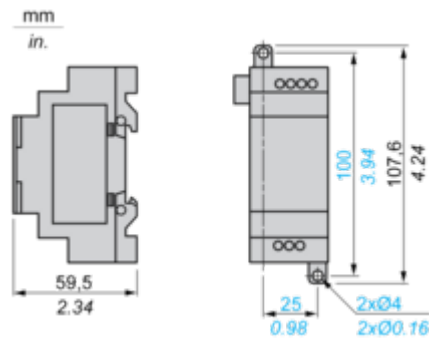
Dimensions Drawings

Analog I/O Extension Modules

Mounting on 35 mm/1.38 in. DIN Rail



Screw Fixing (Retractable Lugs)



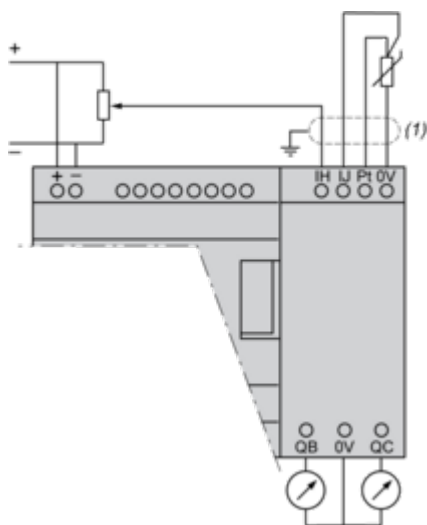
## Connections and Schema

### Connection of Smart Relays on DC Supply, with Analog I/O Extension Module

## Connection Alternatives

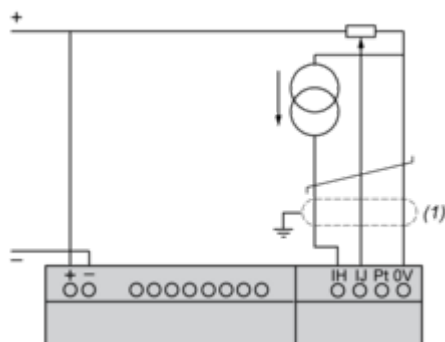
| 0 - 10 V | 0 - 20 mA | Pt100 |
|----------|-----------|-------|
| 2        | 0         | 0     |
| 1        | 1         | 0     |
| 0        | 2         | 0     |
| 1        | 0         | 1     |
| 0        | 1         | 1     |

### Application Example with 1 x 0 - 10 V Input and 1 x Pt100 Input



(1) Screened cables, maximum length 10 m/32.80 ft.

### Application Example with 1 x 0 - 20 mA Input and 1 x 0 - 10 V Input



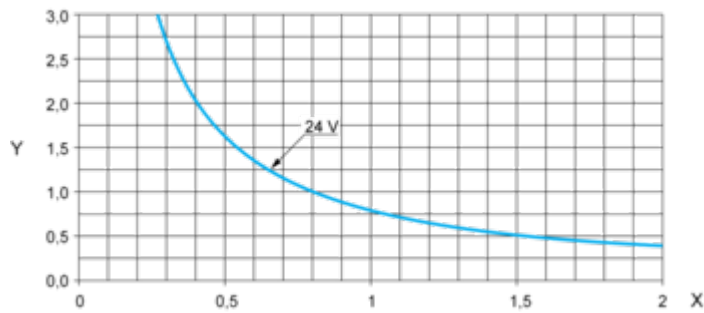
(1) Screened cables, maximum length 10 m/32.80 ft.

Performance Curves

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)

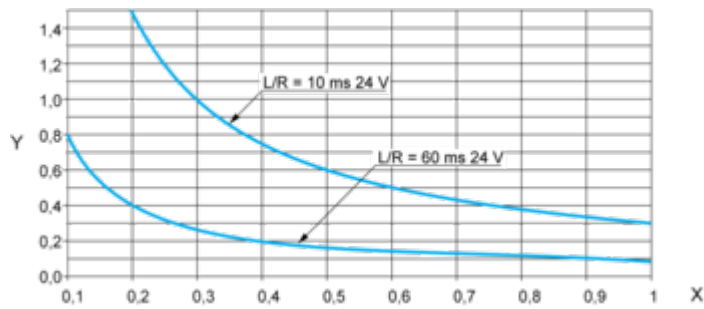


X: Current (A)

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).