Product datasheet

Specifications

Zelio Logic, 4 Analog I/O Extension, for 24V DC SR

SR3XT43BD

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 0...20 mA -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 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 20 µA, 0...20 mA for analogue input circuit 9.8 mV, 0...10 V for analogue input circuit 9.8 mV, 0...10 V for analogue output
Conversion Time	Smart relay cycle time for analogue input circuit 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 +/- 1 % of the full scale value, input range: 0...10 V (55 °C) for analogue output +/- 1 %, input range: 0...10 V (25 °C) for analogue input circuit +/- 1 %, input range: 0...10 V (55 °C) for analogue input circuit +/- 1 %, input range: 0...20 mA (25 °C) for analogue input circuit +/- 1 %, input range: 0...20 mA (55 °C) for analogue input circuit +/- 1.5 °C, input range: - 25...125 °C (25 °C) for analogue input circuit +/- 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 <= +/- 1 %, input range: 0...10 V at 25 °C for analogue input circuit <= +/- 1 %, input range: 0...10 V at 55 °C for analogue output <= +/- 1 %, input range: 0...20 mA at 25 °C for analogue input circuit

Operating Distance	10 m with screened cable for analogue input circuit 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 mm² (AWG 24...AWG 14) semi-solid Screw terminals, 1 x 0.25...1 x 2.5 mm² (AWG 24...AWG 14) solid Screw terminals, 2 x 0.25...2 x 1.5 mm² (AWG 23...AWG 16) solid Screw terminals, 1 x 0.25...1 x 2.5 mm² (AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.25...2 x 0.75 mm² (AWG 24...AWG 18) flexible with cable end
Tightening Torque	0.5 N.m
Net Weight	0.11 kg

Environment

Product Certifications	GOST UL C-Tick CSA
Standards	IEC 61000-4-12 IEC 61000-4-5 IEC 61000-4-3 IEC 61000-4-4 level 3 IEC 61000-4-6 level 3 IEC 61000-4-2 level 3 IEC 60068-2-6 Fc IEC 61000-4-11 IEC 60068-2-27 Ea
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 EMC directive conforming to IEC 61000-6-3 EMC directive conforming to IEC 61000-6-4 EMC directive conforming to IEC 61131-2 zone B 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 -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^{TM} 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_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	

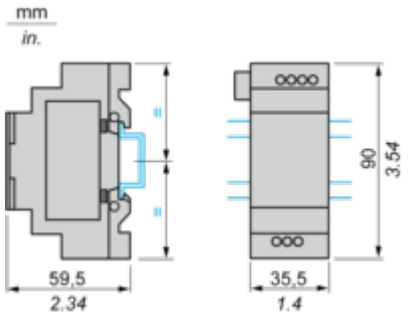
Certifications & Standards

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 collection and never end up in rubbish bins
Circularity Profile	End of Life Information

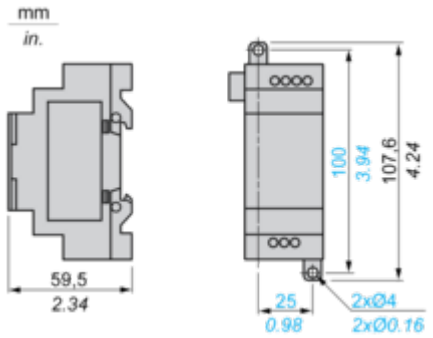
Dimensions Drawings

Analog I/O Extension Modules

Mounting on 35 mm/1.38 in. DIN Rail



Screw Fixing (Retractable Lugs)



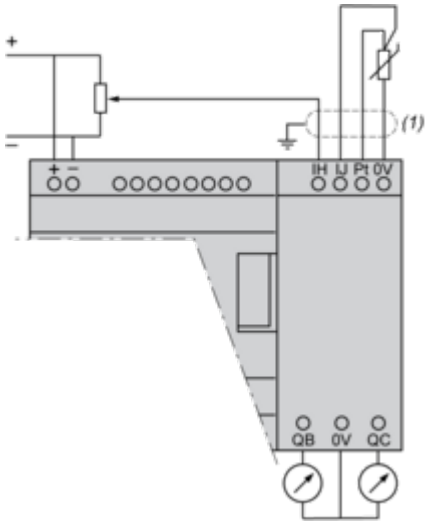
Connections and Schema

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

Connection Alternatives

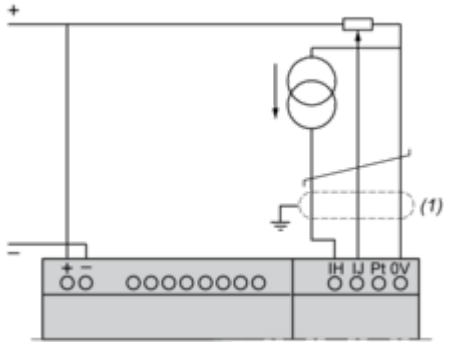
0 - 10 V	0 - 20 mA	Pt100
2	0	0
1	1	0
0	2	0
1	0	1
0	1	1

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



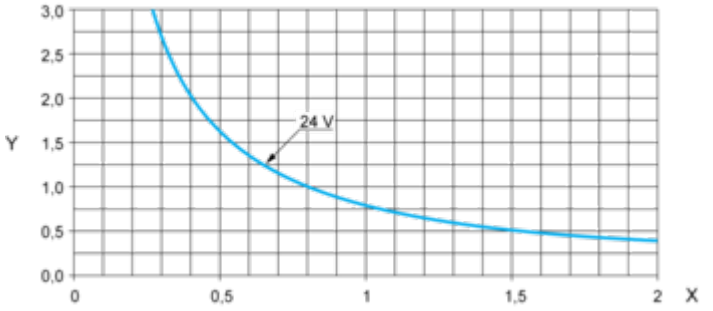
(1) Screened cables, maximum length 10 m/32.80 ft.

Performance Curves

Compact and Modular Smart Relays

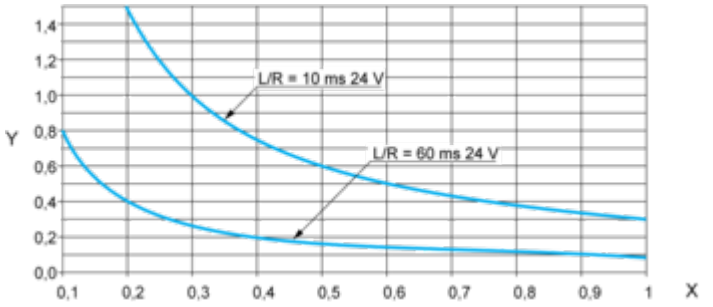
Electrical Durability of Relay Outputs

(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 ≤ 1 ms.

DC-13 (1)



X: Current (A)
Y: Millions of operating cycles
(1) DC-13: switching electromagnets, L/R ≤ 2 x (Ue x Ie) in ms, Ue: rated operational voltage, Ie: 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).