



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 IEC 751
Maximum permissible voltage	30 V analogue input circuit
[Imp] maximum permanent current	30 mA analogue input circuit
Analogue input resolution	10 bits on the input range
Input impedance	18 kOhm 0...10 V analogue input circuit 247 Ohm 0...20 mA 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 analogue output
Maximum load current	10 mA analogue output
Short-circuit protection	With analogue output
LSB value	0.15 °C, - 25...125 °C analogue input circuit 20 µA, 0...20 mA analogue input circuit 9.8 mV, 0...10 V analogue input circuit 9.8 mV, 0...10 V analogue output
Conversion time	Smart relay cycle time analogue input circuit Smart relay cycle time analogue output
Conversion error	+/- 1 % of the full scale value 0...10 V 77 °F (25 °C) analogue output +/- 1 % of the full scale value 0...10 V 131 °F (55 °C) analogue output +/- 1 % 0...10 V 77 °F (25 °C) analogue input circuit +/- 1 % 0...10 V 131 °F (55 °C) analogue input circuit +/- 1 % 0...20 mA 77 °F (25 °C) analogue input circuit +/- 1 % 0...20 mA 131 °F (55 °C) analogue input circuit +/- 1.5 °C - 25...125 °C 77 °F (25 °C) analogue input circuit +/- 1.5 °C - 25...125 °C 131 °F (55 °C) analogue input circuit
Repeat accuracy	< +/- 0.3 °C - 25...125 °C 77 °F (25 °C) analogue input circuit <= +/- 1 % 0...10 V 77 °F (25 °C) analogue input circuit <= +/- 1 % 0...10 V 131 °F (55 °C) analogue output <= +/- 1 % 0...20 mA 77 °F (25 °C) analogue input circuit
Operating distance	10 m with screened cable analogue input circuit 10 m with screened cable analogue output
Reverse polarity protection	Analogue input circuit with

Connections - terminals	Screw terminals, 1 x 0.25...1 x 2.5 mm ² AWG 24...AWG 14) semi-solid Screw terminals, 1 x 0.25...1 x 2.5 mm ² AWG 24...AWG 14) solid Screw terminals, 2 x 0.25...2 x 1.5 mm ² AWG 23...AWG 16) solid Screw terminals, 1 x 0.25...1 x 2.5 mm ² AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.25...2 x 0.75 mm ² AWG 24...AWG 18) flexible with cable end
Tightening torque	4.43 lbf.in (0.5 N.m)
Net Weight	0.24 lb(US) (0.11 kg)

Environment

Product Certifications	GOST[RETURN]UL[RETURN]C-tick[RETURN]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 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 IEC 55022-11 Group 1
Pollution degree	2 IEC 61131-2
Ambient air temperature for operation	-4...104 °F (-20...40 °C) 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	3389119203968
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.40 in (6.1 cm)
Package 1 Width	2.56 in (6.5 cm)
Package 1 Length	4.33 in (11.0 cm)
Package 1 Weight	3.70 oz (105.0 g)
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Height	11.81 in (30.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	12.13 lb(US) (5.503 kg)

Offer Sustainability

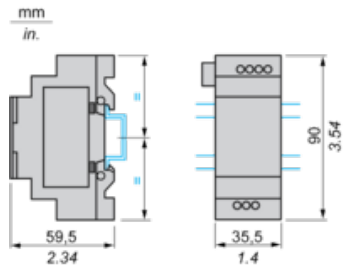
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
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

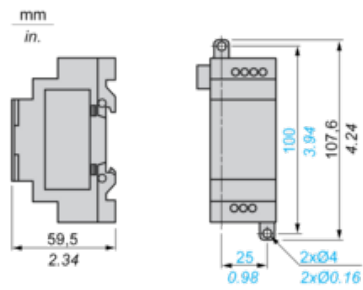
Warranty	18 months
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Analog I/O Extension Modules

Mounting on 35 mm/1.38 in. DIN Rail



Screw Fixing (Retractable Lugs)

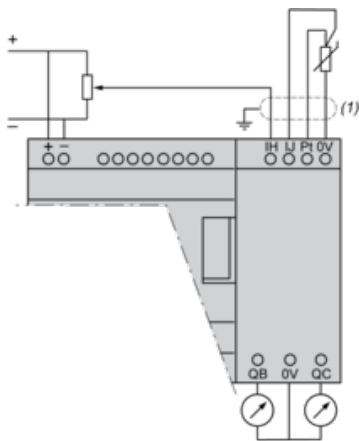


Connection of Smart Relays on DC Supply, with Analog I/O Extension Module

Connection Alternatives

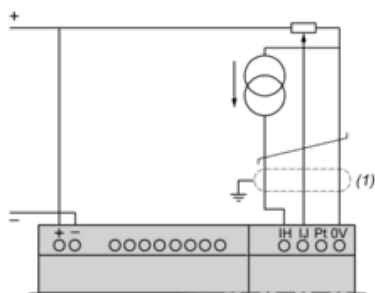
0 - 10 V	0 - 20 mA	Pt100
2	0	0
1	1	0
0	2	0
1	0	1
0	1	1

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



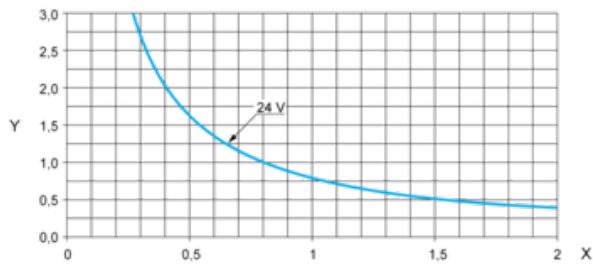
(1) Screened cables, maximum length 10 m/32.80 ft.

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)

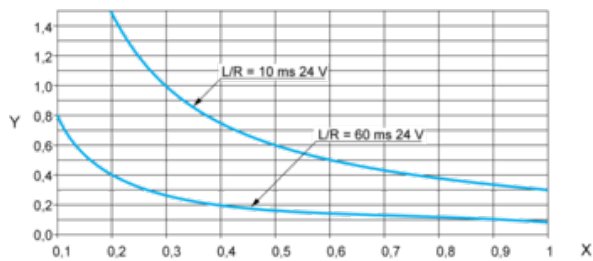


X: Current (A)

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).