



Main

Range of Product	Zelio Logic
Product or Component Type	Discrete I/O extension module

Complementary

Number of control scheme lines	120 ladder
Cycle time	6...90 ms
Backup time	10 years 77 °F (25 °C)
Clock drift	12 min/year 32...131 °F (0...55 °C)
Checks	Program memory on each power up
[Us] rated supply voltage	12 V DC
Supply voltage limits	10.4...14.4 V
Reverse polarity protection	With
Discrete input number	8 IEC 61131-2 Type 1
Discrete input type	Resistive
Discrete input voltage	12 V DC
Discrete input current	4 mA
Counting frequency	1 kHz discrete input
Voltage state 1 guaranteed	>= 7 V IB...IG used as discrete input circuit >= 5.6 V I1...IA and IH...IR discrete input circuit
Voltage state 0 guaranteed	<= 3 V IB...IG used as discrete input circuit <= 2.4 V I1...IA and IH...IR discrete input circuit
Current state 1 guaranteed	>= 2 mA I1...IA and IH...IR discrete input circuit) >= 0.5 mA IB...IG used as discrete input circuit)
Current state 0 guaranteed	<= 0.2 mA IB...IG used as discrete input circuit) <= 0.9 mA I1...IA and IH...IR discrete input circuit)
Input compatibility	3-wire proximity sensors PNP discrete input
Input impedance	14 kOhm IB...IG used as discrete input circuit 2.7 kOhm I1...IA and IH...IR discrete input circuit
Number of Outputs	6 relay
Output voltage limits	24...250 V AC relay output) 5...30 V DC relay output)
Contacts type and composition	NO relay output
Output thermal current	5 A for 2 outputs relay output 8 A for 4 outputs relay output
Electrical durability	AC-15 500000 cycles 230 V, 0.9 A relay output IEC 60947-5-1 AC-12 500000 cycles 230 V, 1.5 A relay output IEC 60947-5-1 DC-13 500000 cycles 24 V, 0.6 A relay output IEC 60947-5-1 DC-12 500000 cycles 24 V, 1.5 A relay output IEC 60947-5-1
Switching capacity in mA	>= 10 mA 12 V relay output)
Operating rate in Hz	0.1 Hz at Ie)relay output 10 Hz no load)relay output

Mechanical durability	10000000 cycles relay output
[Uimp] rated impulse withstand voltage	4 kV EN/IEC 60947-1 and EN/IEC 60664-1
Response time	10 ms from state 0 to state 1)relay output 5 ms from state 1 to state 0)relay output
Connections - terminals	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 Screw terminals, 1 x 0.2...1 x 2.5 mm ² AWG 25...AWG 14) semi-solid Screw terminals, 1 x 0.2...1 x 2.5 mm ² AWG 25...AWG 14) solid Screw terminals, 2 x 0.2...2 x 1.5 mm ² AWG 24...AWG 16) solid
Tightening torque	4.43 lbf.in (0.5 N.m)
Overvoltage category	III IEC 60664-1
Net Weight	0.49 lb(US) (0.22 kg)

Environment

Product Certifications	GL[RETURN]UL[RETURN]GOST[RETURN]C-tick[RETURN]CSA
Standards	IEC 61000-4-6 level 3 IEC 61000-4-3 IEC 61000-4-2 level 3 IEC 61000-4-4 level 3 IEC 60068-2-27 Ea IEC 61000-4-12 IEC 60068-2-6 Fc IEC 61000-4-11 IEC 61000-4-5
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 EN 55022-11 group 1
Pollution degree	2 IEC 61131-2
Ambient air temperature for operation	-4...104 °F (-20...40 °C) in non-ventilated enclosure 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	3389119203951
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.68 in (6.8 cm)
Package 1 Width	3.54 in (9.0 cm)
Package 1 Length	3.94 in (10.0 cm)
Package 1 Weight	6.95 oz (197.0 g)
Unit Type of Package 2	S03
Number of Units in Package 2	30
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	14.48 lb(US) (6.568 kg)

Offer Sustainability

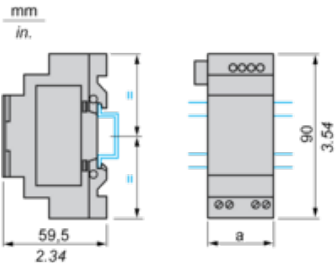
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
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

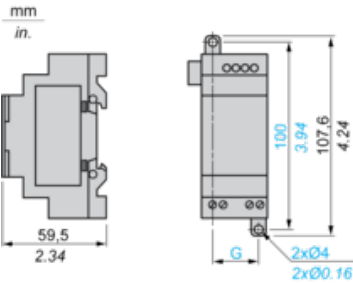
Warranty	18 months
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I/O Extension Modules

Mounting on 35 mm/1.38 in. DIN Rail



Screw Fixing (Retractable Lugs)



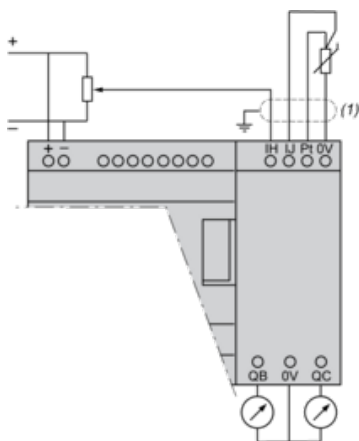
SR3	a (mm/in.)	G (mm/in.)
XT61••	35 / 1.38	25 / 0.98
XT101••	72 / 2.83	60 / 2.36
XT141••	72 / 2.83	60 / 2.36

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

Connection Alternatives

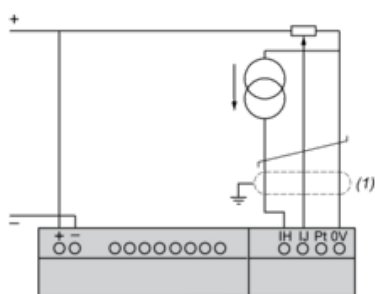
0 - 10 V	0 - 20 mA	Pt100
2	0	0
1	1	0
0	2	0
1	0	1
0	1	1

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



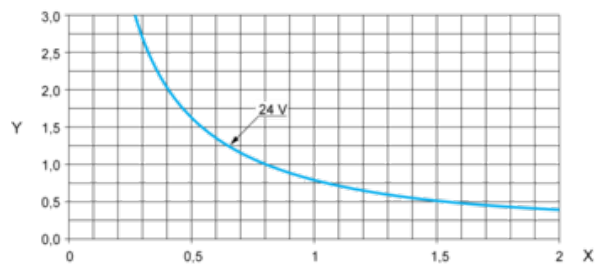
(1) Screened cables, maximum length 10 m/32.80 ft.

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)

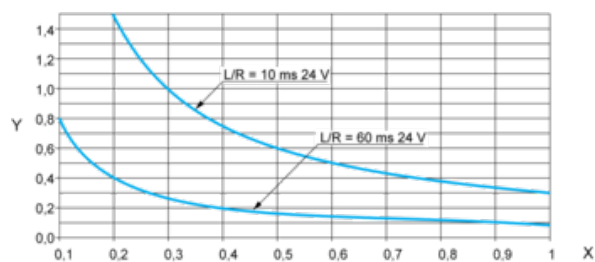


X: Current (A)

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).