discrete IO extension module, Zelio Logic SR2 SR3, 14 IO, 24V DC





Main

Range of product	Zelio Logic
Product or component type	Discrete I/O extension module

Complementary

Number or control scheme lines	120 with ladder programming	
Cycle time	690 ms	
Backup time	10 years at 25 °C	
Clock drift	12 min/year at 055 °C	
Checks	Program memory on each power up	
[Us] rated supply voltage	24 V DC	
Supply voltage limits	19.230 V	
Reverse polarity protection	With	
Discrete input number	8 conforming to IEC 61131-2 Type 1	
Discrete input type	Resistive	
Discrete input voltage	24 V DC	
Discrete input current	4 mA	
Counting frequency	1 kHz for discrete input	
Voltage state 1 guaranteed	>= 15 V for I1IA and IHIR discrete input circuit >= 15 V for IBIG used as discrete input circuit	
Voltage state 0 guaranteed	<= 5 V for I1IA and IHIR discrete input circuit <= 5 V for IBIG used as discrete input circuit	
Current state 1 guaranteed	>= 1.2 mA (IBIG used as discrete input circuit) >= 2.2 mA (I1IA and IHIR discrete input circuit)	
Current state 0 guaranteed	<= 0.5 mA (IBIG used as discrete input circuit) <= 0.75 mA (I1IA and IHIR discrete input circuit)	
Input compatibility	3-wire proximity sensors PNP for discrete input	
Input impedance	12 kOhm for IBIG used as discrete input circuit 7.4 kOhm for I1IA and IHIR discrete input circuit	
Number of outputs	6 relay	
Output voltage limits	24250 V AC (relay output) 530 V DC (relay output)	
Contacts type and composition	NO for relay output	
Output thermal current	5 A for 2 outputs for relay output 8 A for 4 outputs for relay output	
Electrical durability	AC-15: 500000 cycles at 230 V, 0.9 A for relay output conforming to IEC 60947-5-1 AC-12: 500000 cycles at 230 V, 1.5 A for relay output conforming to IEC 60947-5-1 DC-13: 500000 cycles at 24 V, 0.6 A for relay output conforming to IEC 60947-5-1 DC-12: 500000 cycles at 24 V, 1.5 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	
Response time	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 x 0.251 x 2.5 mm² (AWG 24AWG 14) flexible with cable end Screw terminals, 2 x 0.252 x 0.75 mm² (AWG 24AWG 18) flexible with cable end Screw terminals, 1 x 0.21 x 2.5 mm² (AWG 25AWG 14) semi-solid Screw terminals, 1 x 0.21 x 2.5 mm² (AWG 25AWG 14) solid Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) solid	
Tightening torque	0.5 N.m	
Overvoltage category III conforming to IEC 60664-1		
Net weight	0.22 kg	

Environment

Product certifications	C-Tick[RETURN]UL[RETURN]GL[RETURN]CSA[RETURN]GOST
Standards	IEC 61000-4-11 IEC 61000-4-6 level 3 IEC 60068-2-27 Ea IEC 60068-2-6 Fc IEC 61000-4-3 IEC 61000-4-4 level 3 IEC 61000-4-5 IEC 61000-4-12 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 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 EN 55022-11 group 1
Pollution degree	2 conforming to IEC 61131-2
Ambient air temperature for operation	-2040 °C in non-ventilated enclosure conforming to IEC 60068-2-1 and IEC 60068-2-2 -2055 °C conforming to IEC 60068-2-1 and IEC 60068-2-2
Ambient air temperature for storage	-4070 °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	6.800 cm
Package 1 Width	9.000 cm
Package 1 Length	10.000 cm
Package 1 Weight	200.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	30
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	6.470 kg

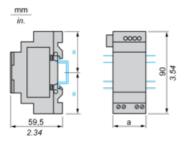
Offer Sustainability

Sustainable offer status	Green Premium product	
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	

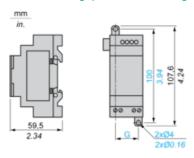
Warranty	18 months	

I/O Extension Modules

Mounting on 35 mm/1.38 in. DIN Rail



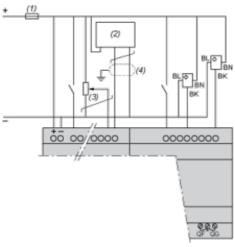
Screw Fixing (Retractable Lugs)



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 Discrete I/O Extension Modules

SR3B•••JD + SR3XT•••JD, SR3B•••BD + SR3XT•••BD



- (1) 1 A quick-blow fuse or circuit-breaker.
- (2) Ca: Analog sensor / Ta: Analog transmitter.
- (3) Recommended values: 2.2 k Ω / 0.5 W (10 k Ω max.)
- (4) Screened cables, maximum length 10 m / 32.80 feet.

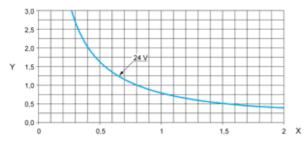
NOTE: QF and QG: 5 A for SR3XT141..

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)

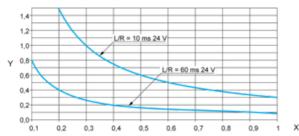


X: Current (A)

Y: Millions of operating cycles

(1) DC-12: control of resistive loads and of solid state loads isolated by opto-coupler, $L/R \le 1$ ms.

DC-13 (1)



X: Current (A)

Y: Millions of operating cycles

(1) DC-13: switching electromagnets, $L/R \le 2 \times (Ue \times Ie)$ 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).