

Product datasheet

Specifications



discrete I/O extension module - 14 I/O - 24 V DC - for Zelio Logic

Local distributor code: 389538316 SR3XT141BD

Main

Range of product Zelio Logic

Product or component type Discrete I/O extension module

Complementary

Number of control scheme lines 120 with ladder programming

Cycle time 6...90 ms

Backup time 10 years at 25 °C

Clock drift 12 min/year at 0...55 °C

Checks Program memory on each power up

[Us] rated supply voltage 24 V DC

Supply voltage limits 19.2...30 V

Reverse polarity protection With

Discrete input number 8 conforming to EN/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 I1...IA and IH...IR discrete input circuit
>= 15 V for IB...IG used as discrete input circuit

Voltage state 0 guaranteed
<= 5 V for I1...IA and IH...IR discrete input circuit
<= 5 V for IB...IG used as discrete input circuit

Current state 1 guaranteed
>= 1.2 mA (IB...IG used as discrete input circuit)
>= 2.2 mA (I1...IA and IH...IR discrete input circuit)

Current state 0 guaranteed
<= 0.5 mA (IB...IG used as discrete input circuit)
<= 0.75 mA (I1...IA and IH...IR discrete input circuit)

Input compatibility 3-wire proximity sensors PNP for discrete input

Input impedance 12 kOhm for IB...IG used as discrete input circuit
7.4 kOhm for 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 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 EN/IEC 60947-5-1 AC-12: 500000 cycles at 230 V, 1.5 A for relay output conforming to EN/IEC 60947-5-1 DC-13: 500000 cycles at 24 V, 0.6 A for relay output conforming to EN/IEC 60947-5-1 DC-12: 500000 cycles at 24 V, 1.5 A for relay output conforming to EN/IEC 60947-5-1
Switching capacity in mA	>= 10 mA at 12 V (relay output)
Operating rate in Hz	0.1 Hz (at I _e) for relay output 10 Hz (no load) for relay output
Mechanical durability	10000000 cycles for relay output
[Uiimp] 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 0.25...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	0.5 N.m
Overvoltage category	III conforming to EN/IEC 60664-1
Net weight	0.22 kg

Environment

Product certifications	C-Tick UL GL CSA GOST
Standards	EN/IEC 61000-4-11 EN/IEC 61000-4-6 level 3 EN/IEC 60068-2-27 Ea EN/IEC 60068-2-6 Fc EN/IEC 61000-4-3 EN/IEC 61000-4-4 level 3 EN/IEC 61000-4-5 EN/IEC 61000-4-12 EN/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 EN/IEC 61000-6-2 EMC directive conforming to EN/IEC 61000-6-3 EMC directive conforming to EN/IEC 61000-6-4 EMC directive conforming to EN/IEC 61131-2 zone B Low voltage directive conforming to EN/IEC 61131-2
Disturbance radiated/conducted	Class B conforming to EN 55022-11 group 1
Pollution degree	2 conforming to EN/IEC 61131-2
Ambient air temperature for operation	-20...40 °C in non-ventilated enclosure 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 Weight	200.0 g
Package 1 Height	6.8 cm

Package 1 width	10 cm
Package 1 Length	9 cm
Unit Type of Package 2	S03
Number of Units in Package 2	30
Package 2 Weight	6.515 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

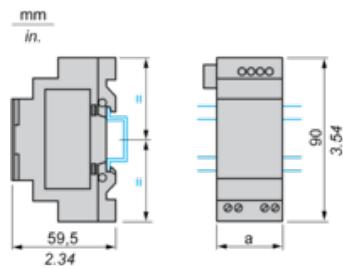
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product 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

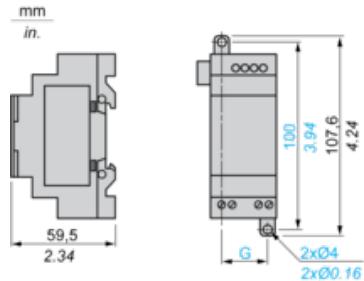
Warranty	18 months
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I/O Extension Modules

Mounting on 35 mm/1.38 in. DIN Rail



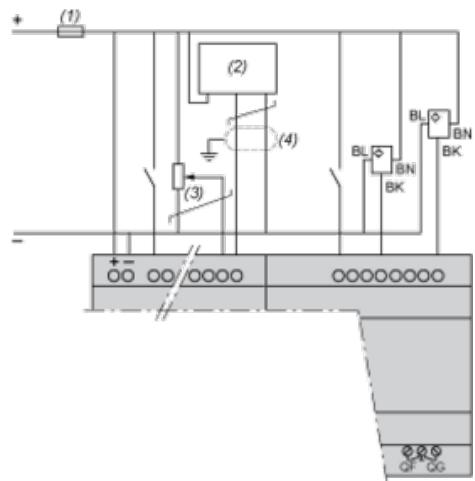
Screw Fixing (Retractable Lugs)



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 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 kΩ / 0.5 W (10 kΩ max.)

(4) Screened cables, maximum length 10 m / 32.80 feet.

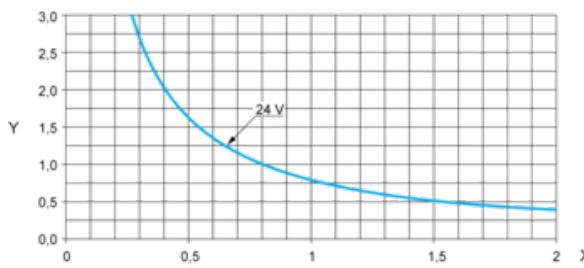
NOTE: QF and QG : 5 A for SR3XT141..

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)

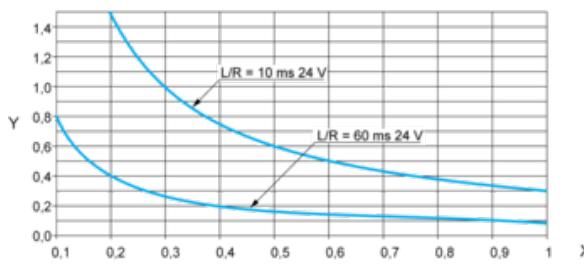


X: Current (A)

Y: Millions of operating cycles

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