# SR3XT141BD

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



## 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 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 state1 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 for IBIG used as discrete input circuit >= 2.2 mA for I1IA and IHIR discrete input circuit
Current state 0 guaranteed	< 0.5 mA for IBIG used as discrete input circuit < 0.75 mA for I1IA and IHIR discrete input circuit
Input compatibility	3-wire proximity sensors PNP (discrete input)
Input impedance	12 kOhm (IBIG used as discrete input circuit) 7.4 kOhm (I1IA and IHIR discrete input circuit)
Number of outputs	6 relay output(s)
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 (relay output) 8 A for 4 outputs (relay output)
Electrical durability	500000 cycles at 230 V, 0.9 A (AC-15) for relay output conforming to EN/IEC 60947-5-
	500000 cycles at 230 V, 1.5 A (AC-12) for relay output conforming to EN/IEC 60947-5-1
	500000 cycles at 24 V, 0.6 A (DC-13) for relay output conforming to EN/IEC 60947-5-1 500000 cycles at 24 V, 1.5 A (DC-12) 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 le) for relay output 10 Hz (no load) for relay output
Mechanical durability	10000000 cycles (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, flexible cable with cable end 1 x 0.251 x 2.5 mm² / AWG 24AWG 14 AWG Screw terminals, flexible cable with cable end 2 x 0.252 x 0.75 mm² / AWG 24AWG 18 AWG Screw terminals, semi-solid cable 1 x 0.21 x 2.5 mm² / AWG 25AWG 14 AWG Screw terminals, solid cable 1 x 0.21 x 2.5 mm² / AWG 25AWG 14 AWG Screw terminals, solid cable 2 x 0.22 x 1.5 mm² / AWG 24AWG 16 AWG
Tightening torque	0.5 N.m
Overvoltage category	III conforming to EN/IEC 60664-1
Product weight	0.22 kg
Environment	
Product certifications	CSA C-Tick GL GOST UL
Standards	EN/IEC 60068-2-27 Ea EN/IEC 60068-2-6 Fc EN/IEC 61000-4-11 EN/IEC 61000-4-12 EN/IEC 61000-4-2 level 3 EN/IEC 61000-4-3 EN/IEC 61000-4-4 level 3 EN/IEC 61000-4-5 EN/IEC 61000-4-6 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	-2040 °C in non-ventilated enclosure conforming to IEC 60068-2-1 and IEC 60068-

-40...70 °C

<= 3048 m

2000 m

-20...55 °C conforming to IEC 60068-2-1 and IEC 60068-2-2

95 % without condensation or dripping water

Connection of Smart Relays on DC Supply, with Discrete I/O Extension Modules

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

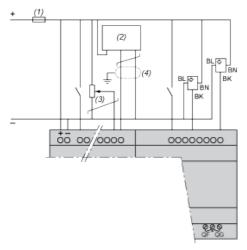
Ambient air temperature for storage

Operating altitude

Altitude transport

Relative humidity





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

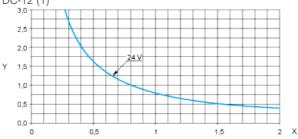
QF and QG: 5 A for SR3XT141.

### **Compact and Modular Smart Relays**

#### **Electrical Durability of Relay Outputs**

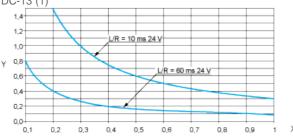
(in millions of operating cycles, conforming to IEC/EN 60947-5-1)

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 ≤ 2 x (Ue x le) in ms, Ue: rated operational voltage, le: 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).