# Product data sheet Characteristics

# SR3XT141BD

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

Complementary		
Number or control scheme lines	120 ladder	
Cycle time	690 ms	
Backup time	10 years 77 °F (25 °C)	
Clock drift	12 min/year 32131 °F (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 IEC 61131-2 Type 1	
Discrete input type	Resistive	
Discrete input voltage	24 V DC	
Discrete input current	4 mA	
Counting frequency	1 kHz discrete input	
Voltage state 1 guaranteed	>= 15 V I1IA and IHIR discrete input circuit >= 15 V IBIG used as discrete input circuit	
Voltage state 0 guaranteed	<= 5 V I1IA and IHIR discrete input circuit <= 5 V 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 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 voltage limits	24250 V AC relay output) 530 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 le)relay output 10 Hz no load)relay output	



Mechanical durability	1000000 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 0.251 x 2.5 mm <sup>2</sup> AWG 24AWG 14) flexible with cable end Screw terminals, 2 x 0.252 x 0.75 mm <sup>2</sup> AWG 24AWG 18) flexible with cable end Screw terminals, 1 x 0.21 x 2.5 mm <sup>2</sup> AWG 25AWG 14) semi-solid Screw terminals, 1 x 0.21 x 2.5 mm <sup>2</sup> AWG 25AWG 14) solid Screw terminals, 2 x 0.21 x 2.5 mm <sup>2</sup> AWG 25AWG 14) solid Screw terminals, 2 x 0.22 x 1.5 mm <sup>2</sup> AWG 24AWG 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	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 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	-4104 °F (-2040 °C) in non-ventilated enclosure IEC 60068-2-1 and IEC	
	60068-2-2	
	-4131 °F (-2055 °C) IEC 60068-2-1 and IEC 60068-2-2	
Ambient Air Temperature for Storage	-40158 °F (-4070 °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	1
GTIN	3389110550115
Returnability	Yes
Country of origin	FR

## Packing Units

PCE	
1	
2.68 in (6.8 cm)	
3.94 in (10.0 cm)	
3.54 in (9.0 cm)	
7.05 oz (200.0 g)	
S03	
30	
11.81 in (30.0 cm)	
11.81 in (30.0 cm)	
	1   2.68 in (6.8 cm)   3.94 in (10.0 cm)   3.54 in (9.0 cm)   7.05 oz (200.0 g)   \$03   30   11.81 in (30.0 cm)

Package 2 Length	15.75 in (40.0 cm)	
Package 2 Weight	14.36 lb(US) (6.515 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

# SR3XT141BD

## 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

# SR3XT141BD

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

# \* (1) (2)(4) 00 00/0000 00000000 ବୃଛୁଡ

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 $\Omega$  / 0.5 W (10 k $\Omega$  max.)

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

NOTE: QF and QG : 5 A for SR3XT141 ••

# SR3XT141BD

#### 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.



X: Current (A)

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

х

Y: Millions of operating cycles