

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# RLY3-OSSD2

ReLy

**SAFETY RELAYS** 





### Ordering information

Туре	Part no.
RLY3-OSSD2	1085344

Other models and accessories → www.sick.com/ReLy

Illustration may differ



#### Detailed technical data

#### Safety-related parameters

Safety integrity level	SIL3 (IEC 61508) SILCL3 (IEC 62061)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
B <sub>10d</sub> parameter	$3 \times 10^5$ switching operations (AC-15, 230 V, I = 1 A), $9 \times 10^4$ switching operations (AC-15, 230 V, I = 5 A), $2 \times 10^5$ switching operations (DC-13, 24 V, I = 1 A), $6 \times 10^4$ switching operations (DC-13, 24 V, I = 5 A)
$\ensuremath{PFH_D}$ (mean probability of a dangerous failure per hour)	1,0 x 10 <sup>-9</sup> (EN ISO 13849)
T <sub>M</sub> (mission time)	20 years (EN ISO 13849)

#### **Functions**

Sensor monitoring	Discrepancy monitoring Sequence monitoring
Reset	Automatic Manual

#### Interfaces

Connection type	Plug-in spring terminals
Number of enable current (N/0) contacts	2, relevant for safety

#### Electrical data

#### Operating data

Voltage supply	PELV or SELV
Supply voltage $V_{\rm S}$	24 V DC (16.8 V DC 30 V DC)
Residual ripple	≤ 2.4 V <sub>pp</sub> <sup>1)</sup>
Power consumption (input circuits)	≤ 1.3 W
Overvoltage category	III

 $<sup>^{1)}</sup>$  In DC operation, within the limits of  $\mbox{V}_{\mbox{\scriptsize S}}.$ 

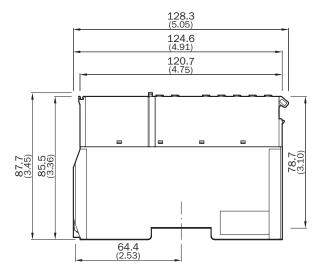
Rated impulse withstand voltage U <sub>imp</sub>	6 kV (EN 60664-1)
$^{1)}$ In DC operation, within the limits of V <sub>S</sub> .	
Input circuits	
Input voltage	
HIGH	24 V DC (11 V DC 30 V DC)
LOW	-3 V DC 5 V DC
Input current	4 mA 6 mA
Test pulse width	≤1 ms
Test frequency	≤ 10 Hz
Control outputs	
Type of output	PNP semiconductor, short-circuit protected
Test period	40 ms
Output circuits	
Type of output	PNP semiconductors, short-circuit protected
Output current	≤ 120 mA
Electrical output circuits	
Typical response time	10 ms
Contact material	Silver alloy, gold flashed
Enable current contacts	
Switching voltage	10 V DC 250 V DC
Current-carrying capacity per OSSD	10 mA 6 A
Total current	≤ 12 A
Mechanical life	10 x 10 <sup>6</sup> switching operations
Mechanical data	
Dimensions (W x H x D)	18 mm x 124.6 mm x 85.5 mm
Weight	130 g
Ambient data	
Enclosure rating	IP20 (EN 60529)
Classifications	
ECI@ss 5.0	27371990
ECI@ss 5.1.4	27371990
ECI@ss 6.0	27371819
ECI@ss 6.2	27371819
ECI@ss 7.0	27371819
ECI@ss 8.0	27371819
ECI@ss 8.1	27371819
ECI@ss 9.0	27371819
ETIM 5.0	EC001449
ETIM 6.0	EC001449

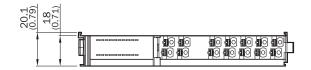
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#### Dimensional drawing (Dimensions in mm (inch))

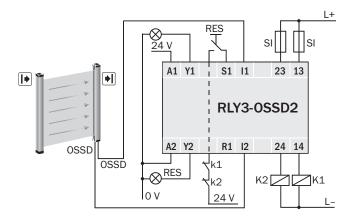
ReLy



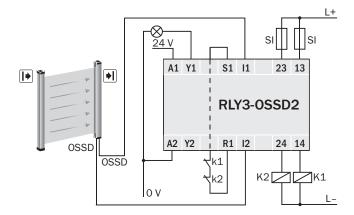


#### Connection diagram

RLY3-OSSD2 at safety light curtain with manual reset and external device monitoring



RLY3-OSSD2 at safety light curtain with automated reset and external device monitoring



## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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