



# RLY3-OSSD1

ReLy

SAFETY RELAYS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
RLY3-OSSD1	1085343

Other models and accessories → [www.sick.com/ReLy](http://www.sick.com/ReLy)

### Detailed technical data

#### Safety-related parameters

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

#### Interfaces

<b>Connection type</b>	Plug-in spring terminals
<b>Number of enable current (N/O) contacts</b>	2, relevant for safety
<b>Number of contactor monitoring (N/C) contacts</b>	1, not safety-relevant

#### Electrical data

##### Operating data

<b>Power consumption (input circuits)</b>	≤ 1.5 W
<b>Overtoltage category</b>	III
<b>Rated impulse withstand voltage U<sub>imp</sub></b>	6 kV (EN 60664-1)

##### Input circuits

<b>Input voltage</b>	HIGH	24 V DC (15 V DC ... 30 V DC)
	LOW	-3 V DC ... 5 V DC
<b>Input current</b>	≤ 2 x 50 mA	
<b>Test pulse width</b>	≤ 1 ms	

<b>Test frequency</b>	≤ 10 Hz
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Electrical output circuits

<b>Typical response time</b>	10 ms
<b>Contact material</b>	Silver alloy, gold flashed
<b>Enable current contacts</b>	
Switching voltage	10 V DC ... 250 V DC
Current-carrying capacity per OSSD	10 mA ... 6 A
<b>Contact monitoring contacts</b>	
Switching voltage	15 V DC ... 30 V DC
Current-carrying capacity per OSSD	3 mA ... 100 mA
<b>Total current</b>	≤ 12 A
<b>Mechanical life</b>	10 x 10 <sup>6</sup> switching operations

Mechanical data

<b>Dimensions (W x H x D)</b>	18 mm x 124.6 mm x 85.5 mm
<b>Weight</b>	130 g

Ambient data

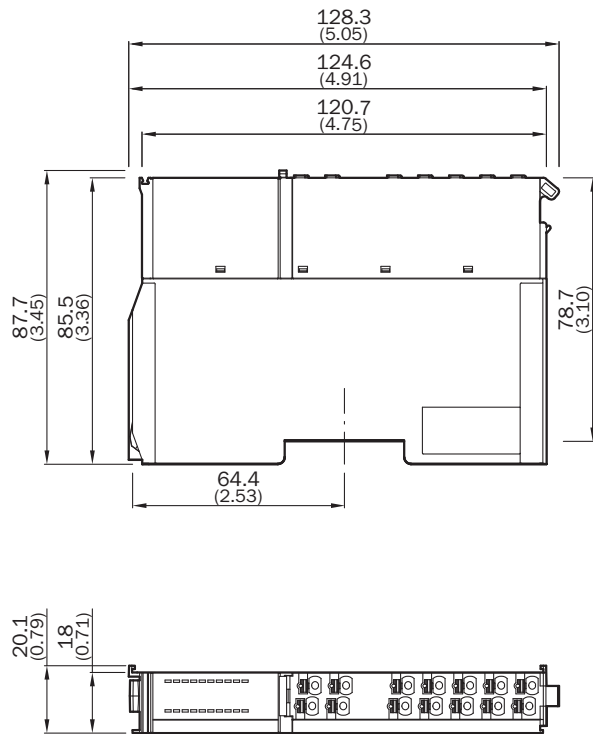
<b>Enclosure rating</b>	IP20 (EN 60529)
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Classifications

<b>ECl@ss 5.0</b>	27371990
<b>ECl@ss 5.1.4</b>	27371990
<b>ECl@ss 6.0</b>	27371819
<b>ECl@ss 6.2</b>	27371819
<b>ECl@ss 7.0</b>	27371819
<b>ECl@ss 8.0</b>	27371819
<b>ECl@ss 8.1</b>	27371819
<b>ECl@ss 9.0</b>	27371819
<b>ETIM 5.0</b>	EC001449
<b>ETIM 6.0</b>	EC001449
<b>UNSPSC 16.0901</b>	41113704

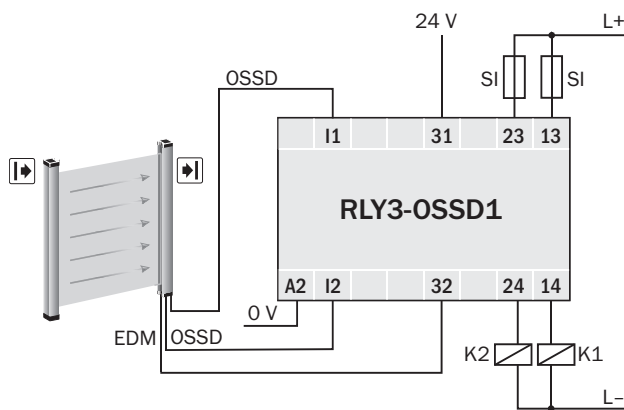
### Dimensional drawing (Dimensions in mm (inch))

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### Connection diagram

RLY3-OSSD1: at safety light curtain with 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.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)