



RLY3-OSSD100

ReLy

SAFETY RELAYS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	part no.
RLY3-OSSD100	1085343

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

Detailed technical data

Features

Applications	Output expansion module for OSSDs
Compatible sensor types	Safety sensors with OSSDs

Safety-related parameters

Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (ISO 13849-1)
Performance level	PL e (ISO 13849-1)
PFH_D (mean probability of a dangerous failure per hour)	1.0×10^{-9}
T_M (mission time)	20 years (ISO 13849-1)
Stop category	0 (IEC 60204-1)

Functions

Path for external device monitoring (EDM)	✓
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Interfaces

Connection type	Front connector with spring terminals
Inputs	2 safety inputs
Outputs	2 enabling current paths (safe) 1 feedback current path (for use as external device monitoring, not safe)
Display elements	LEDs

Electronics

Voltage supply	Passive (no active voltage supply)
Power consumption (input circuits)	≤ 1.5 W (DC)
Safety inputs	

Number	2
Input voltage HIGH	24 V DC (15 V ... 30 V)
Input voltage LOW	0 V DC (-3 V ... 5 V)
Input current	≤ 50 mA
Test pulse width	≤ 1 ms
Test pulse rate	≤ 10 Hz
Enabling current paths	
Response time (opening of enabling current paths)	12 ms
Number	2
Type of output	N/O contacts, positively guided
Contact material	Silver alloy, gold flashed
Switching voltage	10 V AC ... 230 V AC
	10 V DC ... 230 V DC
Switching current	10 mA ... 6 A
Total current	12 A
Mechanical life	1 x 10 ⁷ switching cycles
Overvoltage category	III (EN 60664-1)
Rated impulse withstand voltage U _{imp}	6 kV (EN 60664-1)
Check-back current paths	
Number	1
Type of output	N/C contact, positively guided
Contact material	Silver alloy, gold flashed
Switching voltage	15 V AC ... 30 V AC
	15 V DC ... 30 V DC
Switching current	3 mA ... 100 mA
Mechanical life	1 x 10 ⁷ switching cycles

Mechanics

Dimensions (W x H x D)	18 mm x 124.6 mm x 85.5 mm
Weight	130 g

Ambient data

Enclosure rating	IP20 (IEC 60529)
Ambient operating temperature	-25 °C ... +55 °C
Storage temperature	-25 °C ... +70 °C
Air humidity	≤ 95 %, Non-condensing
Interference emission	According to IEC 61000-6-4
Interference resistance	According to IEC 61326-3-1 According to IEC 61000-6-2 According to IEC 60947-5-1

Certificates

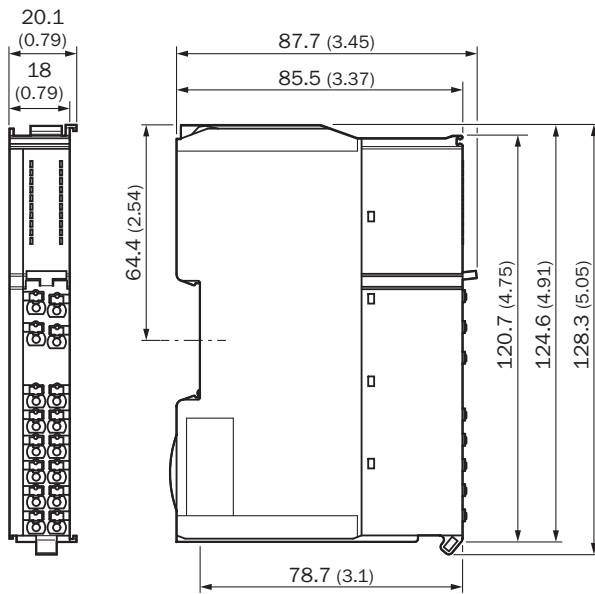
EU declaration of conformity	✓
UK declaration of conformity	✓

ACMA declaration of conformity	✓
China RoHS	✓
CCC certificate	✓
UK-Type-Examination approval	✓
cULus certificate	✓
EAC certificate / DoC	✓
cTUVus certificate	✓
S Mark certificate	✓
EC-Type-Examination approval	✓
EC-Type-Examination approval (Machinery Directive)	✓
EC-Type-Examination approval (Machinery Regulation)	✓
Third party certificate	✓

Classifications

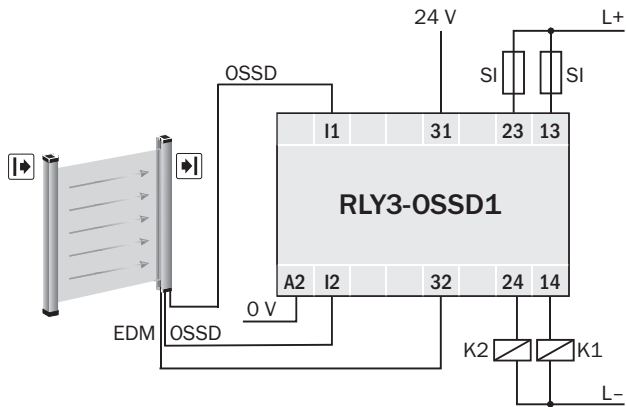
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ECLASS 5.1.4	27371990
ECLASS 6.0	27371819
ECLASS 6.2	27371819
ECLASS 7.0	27371819
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ECLASS 8.1	27371819
ECLASS 9.0	27371819
ECLASS 10.0	27371819
ECLASS 11.0	27371819
ECLASS 12.0	27371819
ETIM 5.0	EC001449
ETIM 6.0	EC001449
ETIM 7.0	EC001449
ETIM 8.0	EC001449
UNSPSC 16.0901	41113704

Dimensional drawing EMSS1, HAND1, OSSD1, OSSD2, TIME1



Dimensions in mm (inch)

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