RLY3-OSSD100

ReLy

SAFETY RELAYS

SICK
Sensor Intelligence.

RLY3-OSSD100 | ReLy

SAFETY RELAYS

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)	✓

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

Electrical data

Operating data

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)
	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	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	1×10^7 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	1×10^7 switching cycles

Mechanical data

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

Ambient data

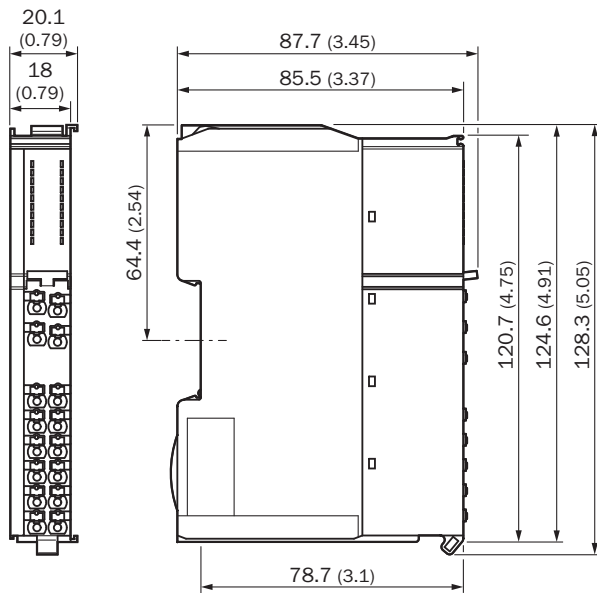|	
Enclosure rating	IP20 (IEC 60529)
Ambient operating temperature	–25 °C … +55 °C
Storage temperature	–25 °C … +70 °C
Air humidity	≤ 95 %, Non-condensing
Interference emission	According to IEC 61000-6-4
Interference resistance	According to IEC 61326-3-1 According to IEC 61000-6-2 According to IEC 60947-5-1

Classifications

eCl@ss 5.0	27371990
eCl@ss 5.1.4	27371990
eCl@ss 6.0	27371819
eCl@ss 6.2	27371819

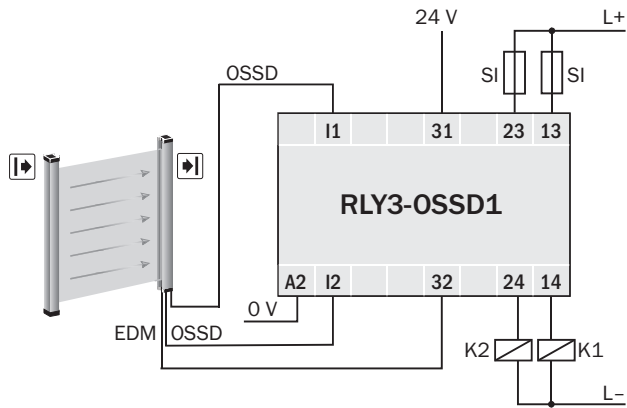| eCl@ss 7.0	27371819
eCl@ss 8.0	27371819
eCl@ss 8.1	27371819
eCl@ss 9.0	27371819
eCl@ss 10.0	27371819
eCl@ss 11.0	27371819
eCl@ss 12.0	27371819
ETIM 5.0	EC001449
ETIM 6.0	EC001449
ETIM 7.0	EC001449
ETIM 8.0	EC001449
UNSPSC 16.0901	41113704

Dimensional drawing (Dimensions in mm (inch))

EMSS1, HAND1, OSSD1, OSSD2, TIME1

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:

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