

# C4C-EV04530C10000

deTec

**SAFETY LIGHT CURTAINS** 





#### Ordering information

Туре	part no.
C4C-EV04530C10000	1223200

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

## Detailed technical data

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#### **Features**

Product version	deTec4 Core Vibes	
Application	Machines with strong shock or vibration loads	
System part	Receiver	
Resolution	30 mm	
Scanning range	6 m	
Protective field height	450 mm	
Response time	10 ms	
No blind zones	Yes	
Synchronization	Optical synchronization	
Items supplied	Receiver Test rod with diameter corresponding to the resolution of the safety light curtain Safety instruction Mounting instructions Operating instructions for download	

#### Safety-related parameters

Туре	Type 4 (IEC 61496-1)
Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (ISO 13849-1)
Performance level	PL e (ISO 13849-1)
$\ensuremath{PFH_D}$ (mean probability of a dangerous failure per hour)	3.7 x 10 <sup>.9</sup>
T <sub>M</sub> (mission time)	20 years (ISO 13849-1)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

#### **Functions**

Protective operation	✓
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#### Interfaces

System connection	Plug, M12, 5-pin
Length of cable	150 mm
Cable diameter	4.3 mm
Cable bend radius	
Stationary position	> 12 x cable diameter
Flexible use	> 15 x cable diameter
Display elements	LEDs

#### Electronics

Protection class	III (IEC 61140)
Supply voltage $V_{\rm S}$	24 V DC (19.2 V 28.8 V)
Ripple	≤ 10 %
Power consumption typical	1.73 W (DC)
Output signal switching devices (OSSDs)	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored <sup>1)</sup>
ON state, switching voltage HIGH	24 V DC (V <sub>S</sub> - 2.25 V DC V <sub>S</sub> )
OFF state, switching voltage LOW	≤ 2 V DC
Current-carrying capacity per OSSD	≤ 300 mA

 $<sup>^{1)}\,\</sup>mathrm{Applies}$  to the voltage range between –30 V and +30 V.

#### Mechanics

Dimensions	See dimensional drawing
Housing material	Aluminum extruded profile

#### Ambient data

Enclosure rating	IP65 (IEC 60529) IP67 (IEC 60529)
Ambient operating temperature	-30 °C +55 °C
Storage temperature	-30 °C +70 °C
Air humidity	15 % 95 %, Non-condensing
Vibration resistance	5 150 Hz, 3,5 mm / 1 g (EN 60068-2-6)
Shock resistance	15 g / 6 ms (EN 60068-2-27)
Class	3M4 (IEC TR 60721-4-3)

#### Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
ULus approval	✓
cUL approval	✓

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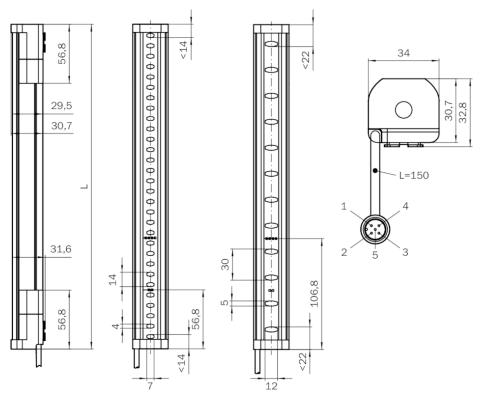
#### SAFETY LIGHT CURTAINS

Taiwan OSHA certificate	✓
Japan Press Safety certificate	✓
EC-Type-Examination approval	✓
China GB certificate	✓
China GB/T certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	<b>✓</b>

#### Classifications

ECLASS 5.0	27272704
ECLASS 5.1.4	27272704
ECLASS 6.0	27272704
ECLASS 6.2	27272704
ECLASS 7.0	27272704
ECLASS 8.0	27272704
ECLASS 8.1	27272704
ECLASS 9.0	27272704
ECLASS 10.0	27272704
ECLASS 11.0	27272704
ECLASS 12.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	46171620

#### Dimensional drawing



#### Dimensions in mm (inch)

Protective field height	L
300 (11.81)	313 (12.32)
450 (17.72)	463 (18.23)
600 (23.62)	613 (24.13)
750 (29.53)	763 (30.04)
900 (35.43)	913 (35.94)
1,050 (41.34)	1,063 (41.85)
1,200 (47.24)	1,213 (47.76)
1,350 (53.15)	1,362 (53.62)
1,500 (59.06)	1,512 (59.53)
1,650 (64.96)	1,662 (65.43)
1,800 (70.87)	1,812 (71.34)
1,950 (76.77)	1,962 (77.24)
2,100 (82.68)	2,112 (83.15)

#### Recommended accessories

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

	Brief description	Туре	part no.	
Safety relays				
	Applications: Evaluation unit     Compatible sensor types: Safety sensors with OSSDs     Connection type: Front connector with spring terminals     Restart interlock: yes     External device monitoring (EDM): Integrated     Outputs: 3 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe)     Housing width: 18 mm	RLY3-OSSD300	1099969	
	<ul> <li>Applications: Evaluation unit</li> <li>Compatible sensor types: Safety sensors with OSSDs</li> <li>Connection type: Front connector with spring terminals</li> <li>Restart interlock: yes</li> <li>External device monitoring (EDM): Integrated</li> <li>Outputs: 2 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe)</li> <li>Housing width: 18 mm</li> </ul>	RLY3-OSSD200	1085344	
connectors an	nd cables			
	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 5-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A15-020UB5XLEAX	2095617	
	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 5-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A15-050UB5XLEAX	2095618	
	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 5-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A15-100UB5XLEAX	2095619	
	<ul> <li>Connection type head A: Female connector, M12, 5-pin, A-coded</li> <li>Connection type head B: Female connector, M12, 5-pin, A-coded</li> <li>Connection type head C: Male connector, M12, 5-pin, A-coded</li> <li>Description: Unshielded</li> </ul>	DSC-1205T000025KM(	6030664	
66	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 5-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 5-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A15-020UB5M2A15	2096009	
66	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 5-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 5-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul>	YF2A15-050UB5M2A15	2096010	
F F.	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Male connector, M12, 5-pin, straight, A-coded Signal type: Sensor/actuator cable Cable: 10 m, 5-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A15-100UB5M2A15	2096011	

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	Brief description	Туре	part no.
Mounting syst	ems		
W.	<ul> <li>Description: QuickFix bracket for 2 devices (e.g. sender and receiver)</li> <li>Material: Plastic</li> <li>Details: Plastic</li> <li>Packing unit: 4 pieces</li> </ul>	BEF-3SHABPKU4	2098710

#### 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

