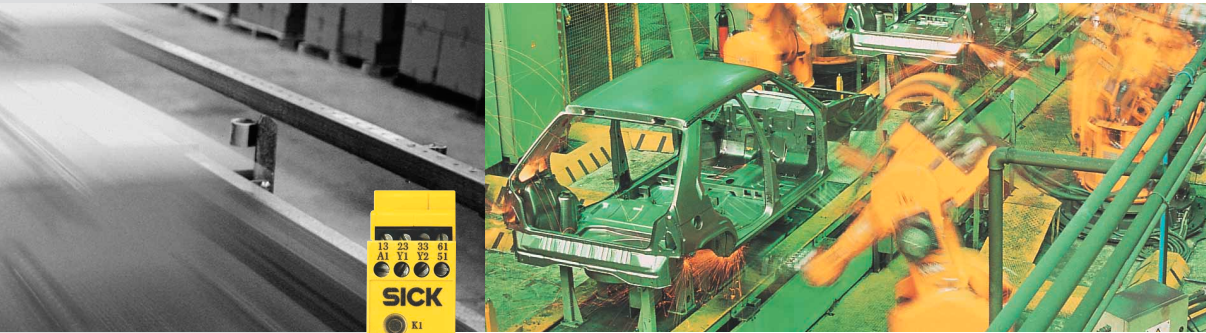


Safety relay for optoelectronic protective equipment

UE 10-3 OS



Safety class

Depending on the connected device

Output contacts

Safety		Auxiliary	
3		1	

Dimensions

96.5 x 22.5 x 114 mm

Applications

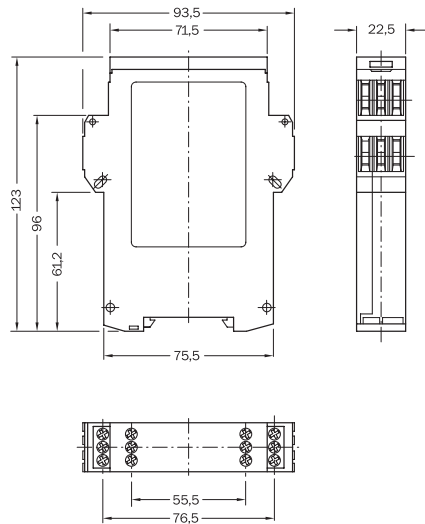
- Safety optoelectronic barriers (ESPE) with monitored static outputs (OSSD), like C 4000, MSL, LSI, S 3000, C/M 2000, C 4000, LE 20
- EDM and/or Reset functions integrated in the connected optoelectronic device

Features

- Safety Category is approved to the level of the connected optoelectronic device
- Stop Category 0 approved to EN 60 204-1
- 3 normally open contacts (NO), 1 normally closed contact (NC)
- 2 LED signal
- Suitable for applications with safety optoelectronic barriers with tested outputs



Dimensions



Functionality

If the semiconductor outputs of the installed safety device (e.g. C 4000, S 3000) are energized, then the safety output contacts will close.

When at least one of the semiconductor outputs of the safety device becomes de-energized, then the output contacts revert back to open circuit status.

If Restart Inhibit is needed, then this is achieved in the safety device, for example C 4000 or S 3000.

External device monitoring (EDM)

Safety Category 3 or 4 requires monitoring of contactors. This is provided by the connected protective device, for example in the C 4000 or S 3000. The normally closed contact (Y1 - Y2) in the UE 10-3 OS unit is, however, a part of this contactor monitoring system.

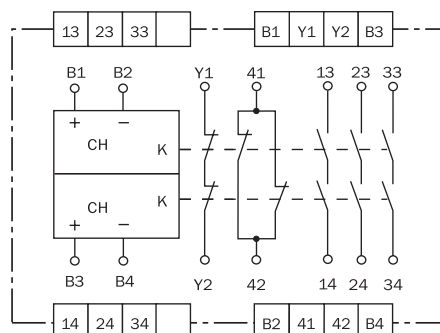
The UE 10-3 OS 2 unit has screw type terminals.

The UE 10-3 OS 3 unit has removable terminals.

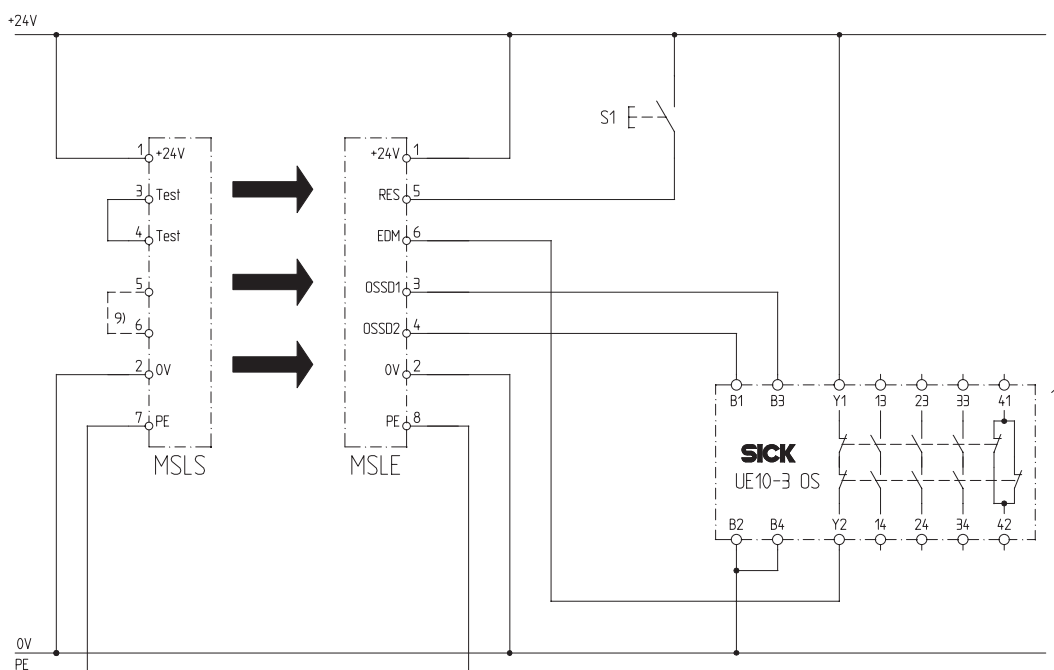
Technical specifications

General data description	min.	typ.	max.
Supply voltage to B1 - B2, B3 - B4			
Electrical output circuit > 25 V AC/60 V DC	PELV		
Electrical output circuit < 25 V AC/60 V DC	PELV or SELV		
Inputs B1...B4			
Activation time			40 ms
Switch-on voltage	15 V	24 V	30 V
Switch-on current			500 mA
Output circuits (13 - 14, 23 - 24, 33 - 34, 41 - 42, Y1 - Y2)			
Response time (K1/K2)			20 ms
Relay contacts			
	3 normally open contacts (NO), safety relevant		
	1 normally closed contact (NC), not safety relevant		
	1 normally closed contact (NC), contactor monitoring		
Contact type	positively guided		
Contact material	Silver alloy; gold-plated		
Load capacity of contacts			
Switching voltage	10 V AC/DC		230 V AC/30 V DC
Switching current	10 mA		6 A
Total current across all contacts			12 A
Application category to EN 60 947-5-1	AC-15 Ue 230 V AC, I _e 4 A (360 c/h) AC-15 Ue 230 V AC, I _e 3 A (3600 c/h) DC-13 Ue 24 V DC, I _e 4 A (360 c/h) DC-13 Ue 24 V DC, I _e 2.5 A (3600 c/h)		
Permitted switching frequency			3600 c/h
Mechanical service life (switching cycles)	1 x 10 ⁷		
Electrical service life (dependent on the load)	2 x 10 ⁶		
Operating data			
Surge voltage rating (V _{imp})			4 kV
Excess voltage category			III
Contamination rating of the unit (EN 50 178)			
External			3
Internal			2
Voltage rating			300 V AC
Test voltage V _{eff} (50 Hz) EN 60 439-1			2 kV
Protection type			
Housing	IP 40		
Terminals	IP 20		
Radio interference	DIN EN 61 000-6-4		
Interference emission according to	DIN EN 61 000-6-2		
Ambient operating temperature	-25°C		+55°C
Storage temperature	-25°C		+75°C
Cross sections of electrical conductors			
single strand wire (2x, identical cross section)	0.14 mm ²		0.75 mm ²
single strand wire (1x)	0.14 mm ²		2.5 mm ²
fine stranded wire with terminal crimps (2x, identical cross section)	0.25 mm ²		0.5 mm ²
fine stranded wire with terminal crimps (1x)	0.25 mm ²		2.5 mm ²
Weight	0.2 kg		

Internal circuitry



Connection drawing



Selection table

Model	Output	OS	Connection (terminal type)		Without actual supply voltage	Part number
			Screw	Removable		
UE 10-	3	OS	2		D0	6 024 917
UE 10-	3	OS		3	D0	6 024 918

We recommend contacting Customer Service for product selection

Safety Relays