



# UE401-A0010

## UE401

SWITCHING AMPLIFIERS FOR SAFETY LIGHT-BEAM SENSORS

**SICK**  
Sensor Intelligence.

## Ordering information



Type	Part no.
UE401-A0010	6027343

Other models and accessories → [www.sick.com/UE401](http://www.sick.com/UE401)



## Detailed technical data

## Features

<b>Application</b>	Evaluation unit
<b>Description</b>	UE401 evaluation unit
<b>Response time</b>	≤ 30 ms
<b>Compatible sensor types</b>	L4000 Systems single-beam photoelectric safety switches
<b>Number of sensor pairs (sender and receiver)</b>	1 ... 8

## Safety-related parameters

<b>Type</b>	Type 4 (IEC 61496-1) <sup>1)</sup>
<b>Safety integrity level</b>	SIL 3 (IEC 61508) <sup>1)</sup>
<b>Category</b>	Category 4 (EN ISO 13849) <sup>1)</sup>
<b>Performance level</b>	PL e (EN ISO 13849) <sup>1)</sup>
<b>PFH<sub>D</sub> (mean probability of a dangerous failure per hour)</b>	$2.9 \times 10^{-10}$ (EN ISO 13849) <sup>1)</sup>
<b>T<sub>M</sub> (mission time)</b>	20 years (EN ISO 13849) <sup>1)</sup>
<b>Safe state in the event of a fault</b>	At least one OSSD is in the OFF state.

<sup>1)</sup> Only in conjunction with L40 sensors.

## Functions

<b>Restart interlock</b>	✓
<b>Restart interlock (delivery status)</b>	Activated
<b>External device monitoring (EDM)</b>	✓
<b>External device monitoring (delivery status)</b>	Activated

## Interfaces

<b>Connection type</b>	Plug-in screw-type terminals
Permitted cable length	≤ 100 m
Permitted cross-section	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

<b>Configuration method</b>	Hard wired
<b>Diagnostic display</b>	7-segment display
<b>Status display</b>	LEDs

## Electronics

<b>Protection class</b>	III (IEC 61140)
<b>Supply voltage <math>V_s</math></b>	24 V DC (19.2 V DC ... 28.8 V DC)
<b>Residual ripple</b>	$\leq 5 V_{pp}$
<b>Power consumption</b>	$\leq 3.6 \text{ W (DC)}$
<b>Switch-on time</b>	$\leq 2.5 \text{ s}$
<b>Output signal switching devices (OSSDs)</b>	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored <sup>1)</sup>
ON state, switching voltage HIGH	24 V DC (17.5 V DC ... 28.8 V DC)
OFF state, switching voltage LOW	$\leq 1.3 \text{ V DC}$
Current-carrying capacity per OSSD	$\leq 0.5 \text{ A}$

<sup>1)</sup> Applies to the voltage range between -30 V and +30 V.

## Mechanics

<b>Mounting</b>	Snap-on mounting on 35 mm mounting rail according to EN 60715
<b>Dimensions (W x H x D)</b>	22.6 mm x 99 mm x 113.5 mm
<b>Weight</b>	160 g

## Ambient data

<b>Enclosure rating</b>	IP20 (EN 60529)
<b>Ambient operating temperature</b>	-20 °C ... +55 °C
<b>Storage temperature</b>	-25 °C ... +75 °C
<b>Air humidity</b>	15 % ... 95 %, Non-condensing
<b>Vibration resistance</b>	5 g, 10 Hz ... 55 Hz (EN 60068-2-6)
<b>Shock resistance</b>	10 g, 16 ms (EN 60068-2-29)

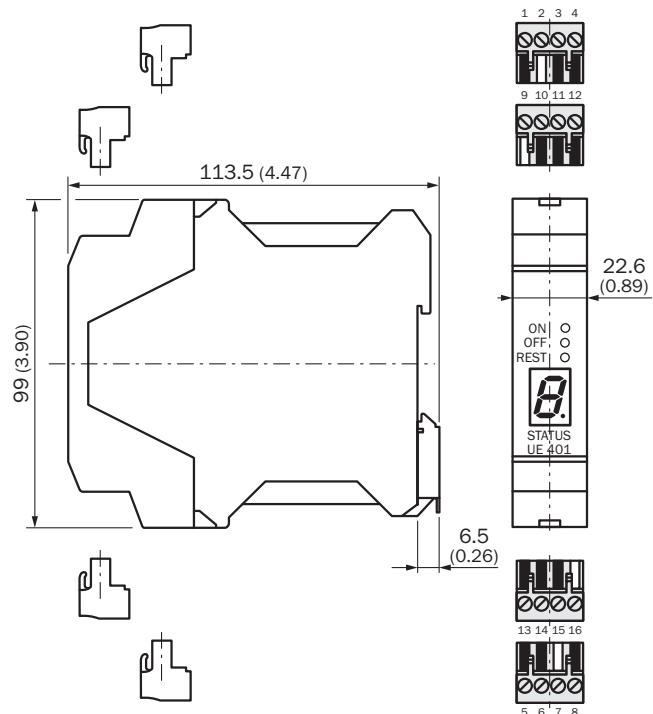
## Classifications

<b>ECLASS 5.0</b>	27272790
<b>ECLASS 5.1.4</b>	27272790
<b>ECLASS 6.0</b>	27272790
<b>ECLASS 6.2</b>	27272790
<b>ECLASS 7.0</b>	27272790
<b>ECLASS 8.0</b>	27272790
<b>ECLASS 8.1</b>	27272790
<b>ECLASS 9.0</b>	27272792
<b>ECLASS 10.0</b>	27272792
<b>ECLASS 11.0</b>	27272792
<b>ECLASS 12.0</b>	27272792
<b>ETIM 5.0</b>	EC011349
<b>ETIM 6.0</b>	EC011349

<b>ETIM 7.0</b>	EC011349
<b>ETIM 8.0</b>	EC011349
<b>UNSPSC 16.0901</b>	411113704

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

UE401



## 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)