

# UE403-A0930

UE403

**SWITCHING AMPLIFIERS FOR SAFETY LIGHT-BEAM SENSORS** 





# Ordering information

Туре	Part no.
UE403-A0930	1026287

Other models and accessories → www.sick.com/UE403

Illustration may differ



#### Detailed technical data

# Safety-related parameters

Туре	Type 4 (IEC 61496-1)
Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
$\ensuremath{PFH_D}$ (mean probability of a dangerous failure per hour)	1.0 x 10 <sup>-8</sup> (EN ISO 13849) <sup>1)</sup>
T <sub>M</sub> (mission time)	20 years (EN ISO 13849) <sup>1)</sup>

 $<sup>^{1)}</sup>$  Only in conjunction with M4000 Advanced, M4000 Advanced A/P and M4000 Advanced Curtain.

#### **Functions**

Concurrence monitoring	✓
Monitoring of total muting time	<b>✓</b>
Sensor gap monitoring	✓
Belt stop	✓
Muting with override	✓
Exit monitoring	1
End of muting by ESPE	1

# Interfaces

Connection type	Female connector M12, 5-pin
Permitted cable length	≤ 10 m
Diagnostic display	LEDs

# Electrical data

Protection class	III (IEC 61140)

<sup>&</sup>lt;sup>1)</sup> Via connected ESPE.

<sup>&</sup>lt;sup>2)</sup> Total of all supply currents from the connections RES/OVR, A1, A2, B1 and B2 (pin 1 in each case): max. 1000 mA.

 $<sup>^{</sup>m 3)}$  At max. 5 W power consumption.

Supply voltage $V_S$	24 V DC (19.2 V DC 28.8 V DC) $^{1)}$
Power consumption	≤ 2 A
Inputs: override, reset, ${\bf C1}$ , belt stop, muting sensors	
ON state, switching voltage HIGH	24 V DC (11 V DC 30 V DC)
OFF state, switching voltage LOW	0 V DC (-30 V DC 5 V DC)
Input current HIGH	6 mA 15 mA
Input current LOW	-0.5 mA 1.5 mA
Outputs: voltage supply for reset, override, C1	
Supply voltage	24 V DC (15 V DC 28.8 V DC)
Output current	$\leq$ 400 mA $^{2)}$
Outputs: muting sensors	
Supply voltage	24 V DC (15 V DC 28.8 V DC)
Output current	$\leq$ 500 mA $^{2)}$
Muting lamp	
Output current HIGH (monitored)	20 mA 400 mA <sup>3)</sup>
Output current HIGH (not monitored)	0 mA 400 mA <sup>3)</sup>

<sup>&</sup>lt;sup>1)</sup> Via connected ESPE.

# Mechanical data

Mounting	Flexible mounting on the M4000 Advanced or directly in the system
Dimensions (W x H x D)	76.5 mm x 225.2 mm x 40 mm
Housing material	Aluminum die cast, powder coated
Material, connector strip	Polyamide
Weight	+ 600 g

# Ambient data

Enclosure rating	IP65 (IEC 60529)
Ambient operating temperature	-30 °C +55 °C
Storage temperature	-30 °C +70 °C
Air humidity	15 % 95 %, Non-condensing
Vibration resistance	10 Hz 55 Hz (EN 60068-2-6)
Shock resistance	10 g, 16 ms (IEC 60068-2-29)

# 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

<sup>&</sup>lt;sup>2)</sup> Total of all supply currents from the connections RES/OVR, A1, A2, B1 and B2 (pin 1 in each case): max. 1000 mA.

 $<sup>^{</sup>m 3)}$  At max. 5 W power consumption.

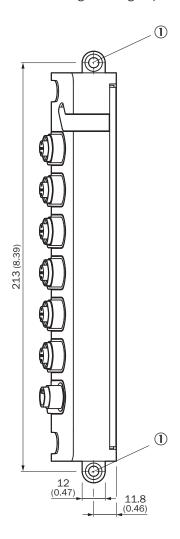
# UE403-A0930 | UE403

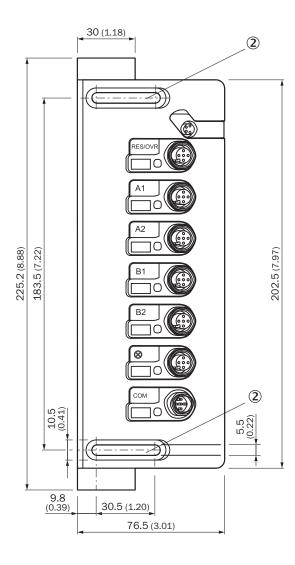
# SWITCHING AMPLIFIERS FOR SAFETY LIGHT-BEAM SENSORS

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

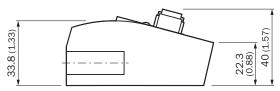
# Dimensional drawing (Dimensions in mm (inch))

UE403 muting switching amplifier





Note: The fixing holes ① and slots ② are suitable for cheese head screws M5 x 30 as per DIN EN ISO 4762.



# SICK AT A GLANCE

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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.

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