



# UE23-2MF2D3

## UE23-2MF

SAFETY RELAYS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
UE23-2MF2D3	6026146

Other models and accessories → [www.sick.com/UE23-2MF](http://www.sick.com/UE23-2MF)

### Detailed technical data

#### Safety-related parameters

<b>Safety integrity level</b>	SILCL2 (EN 62061)
<b>Category</b>	Category 3 (EN ISO 13849)
<b>Performance level</b>	PL d (EN ISO 13849)
<b>B<sub>10d</sub> parameter</b>	5.45 x 10 <sup>4</sup> switching cycles (AC-15, 230 V, I = 3 A) 1.26 x 10 <sup>6</sup> switching cycles (AC-15, 230 V, I = 1.5 A) 5.9 x 10 <sup>6</sup> switching cycles (AC-15, 230 V, I = 0.75 A) 4.35 x 10 <sup>5</sup> switching cycles (DC-13, 24 V, I = 2.5 A) 1 x 10 <sup>7</sup> switching cycles (DC-13, 24 V, I = 0.63 A)
<b>PFH<sub>D</sub> (mean probability of a dangerous failure per hour)</b>	3.0 x 10 <sup>-6</sup> (EN ISO 13849)
<b>T<sub>M</sub> (mission time)</b>	20 years (EN ISO 13849)
<b>Stop category</b>	0 (EN 60204-1)

#### Interfaces

<b>Connection type</b>	Fixed screw terminals
<b>Number of enabling current paths (N/O)</b>	2, relevant for safety

#### Electrical data

##### Operating data

<b>Protection class</b>	II, safe isolation (EN 50178)
<b>Supply voltage V<sub>S</sub></b>	A1, A2 24 V DC (19.2 V DC ... 30 V DC)
<b>Residual ripple</b>	(≤ 2.4 V <sub>pp</sub> ) <sup>1)</sup>
<b>Power consumption</b>	(≤ 1 W)
<b>Overtoltage category</b>	III

<sup>1)</sup> In DC operation, within the limits of V<sub>S</sub>.

<b>Rated insulation voltage <math>U_i</math></b>	300 V AC
<b>Rated impulse withstand voltage <math>U_{imp}</math></b>	6 kV
<b>Test voltage</b>	3.5 kV (50 Hz) (EN 60439-1)

<sup>1)</sup> In DC operation, within the limits of  $V_S$ .

Control voltage: Y1-Y2-Y3

<b>Control voltage</b>	$U_V - 2 \text{ V DC} \dots U_V$
<b>Control current</b>	$\leq 20 \text{ mA}$
<b>Short-circuit current</b>	$\leq 250 \text{ mA}$
<b>Short-circuit protection</b>	PTC resistor
<b>Reset time</b>	
Manual	$\leq 70 \text{ ms}$
Automatic	$\leq 600 \text{ ms}$

Output current paths: 13/14, 23/24, 31/32

<b>Response time</b>	$(\leq 80 \text{ ms})^1$
<b>Number of enabling current paths (N/O)</b>	2, relevant for safety
<b>Number of signaling current paths (N/C)</b>	1, not safety-relevant
<b>Contact type</b>	Positively driven
<b>Contact material</b>	Silver alloy, gold flashed
<b>Switching voltage</b>	
Enabling current path	10 V ... 230 V AC 10 V ... 300 V DC
Signaling current path	10 V AC ... 230 V AC 10 V DC ... 300 V DC
<b>Current-carrying capacity per OSSD</b>	
Enabling current path	10 mA ... 6 A
Signaling current path	10 mA ... 6 A
Total current	$\leq 12 \text{ A}$
<b>Usage category</b>	AC-15/DC-13 (EN 60947-5-1)
<b>Rated operating current (voltage)</b>	4 A (230 V AC) 360 switching cycles/h 3 A (230 V AC) 3600 switching cycles/h 4 A (24 V DC) 360 switching cycles/h 2.5 A (24 V DC) 3600 switching cycles/h
<b>Switching frequency</b>	$\leq 3600/\text{h}$
<b>Mechanical life (relay contacts)</b>	$1 \times 10^7$ switching cycles
<b>Electrical life (relay contacts)</b>	$2 \times 10^6$ switching cycles

<sup>1)</sup> K1/K2.

Mechanical data

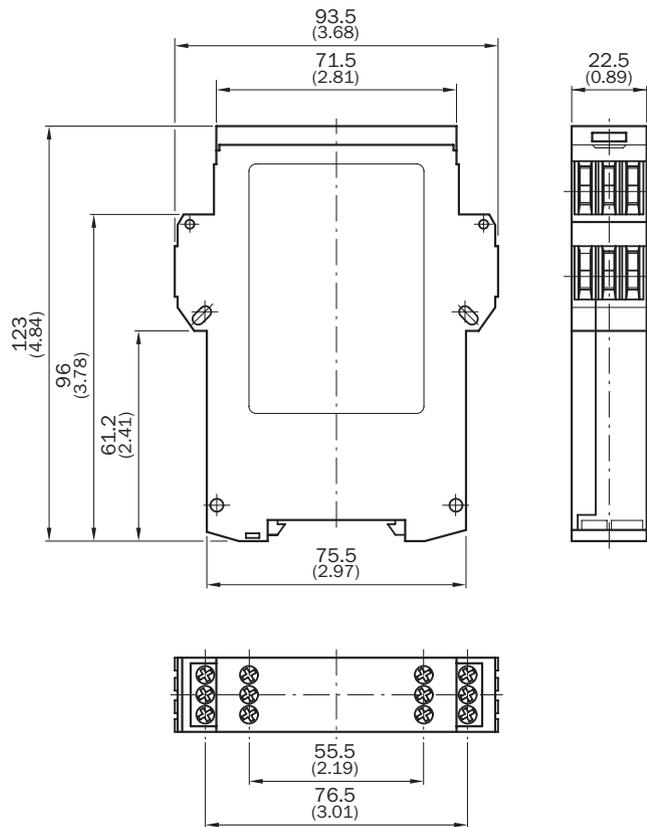
<b>Dimensions (W x H x D)</b>	22.5 mm x 123 mm x 93.5 mm
<b>Weight</b>	0.27 kg

Classifications

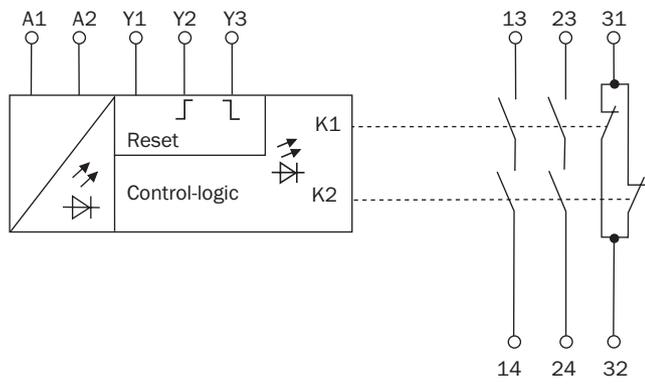
<b>ECl@ss 5.0</b>	27371990
<b>ECl@ss 5.1.4</b>	27371990

<b>ECl@ss 6.0</b>	27371819
<b>ECl@ss 6.2</b>	27371819
<b>ECl@ss 7.0</b>	27371819
<b>ECl@ss 8.0</b>	27371819
<b>ECl@ss 8.1</b>	27371819
<b>ECl@ss 9.0</b>	27371819
<b>ECl@ss 10.0</b>	27371819
<b>ECl@ss 11.0</b>	27371819
<b>ETIM 5.0</b>	EC001449
<b>ETIM 6.0</b>	EC001449
<b>ETIM 7.0</b>	EC001449
<b>UNSPSC 16.0901</b>	41113704

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



Connection diagram



## 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)