



# UE10-2FG3D0

UE10-2FG

SAFETY RELAYS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

| Type        | Part no. |
|-------------|----------|
| UE10-2FG3D0 | 1043916  |

Other models and accessories → [www.sick.com/UE10-2FG](http://www.sick.com/UE10-2FG)

### Detailed technical data

#### Safety-related parameters

|   |  |
|---|--|
| <b>Safety integrity level</b>   | SIL3 (IEC 61508) <sup>1)</sup><br>SILCL3 (EN 62061) <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>B<sub>10d</sub> parameter</b>  | 1 x 10 <sup>5</sup> switching cycles (AC-15, 230 V, I = 2 A)<br>2.5 x 10 <sup>5</sup> switching cycles (AC-15, 230 V, I = 1 A)<br>5.4 x 10 <sup>5</sup> switching cycles (DC-13, 24 V, I = 0.5 A)<br>1 x 10 <sup>7</sup> switching cycles (DC-13, 24 V, I ≤ 2 A) |
| <b>PFH<sub>D</sub> (mean probability of a dangerous failure per hour)</b> | 7.0 x 10 <sup>-10</sup> (EN ISO 13849)   |
| <b>T<sub>M</sub> (mission time)</b>                                       | 20 years (EN ISO 13849)  |

<sup>1)</sup> If the feedback current path Y1 - Y2 (external device monitoring) is monitored using an appropriate main unit.

#### Electrical data

##### Operating data

|  |  |
|--|--|
| <b>Voltage supply</b>                                  | B1/A2, B2/A2                           |
| Output circuit > 25 V AC / 60 V DC                     | PELV                                   |
| Output circuit ≤ 25 V AC / 60 V DC                     | PELV or SELV                           |
| <b>Residual ripple</b>                                 | (≤ 2.4 V <sub>pp</sub> ) <sup>1)</sup> |
| <b>Power consumption</b>                               | (≤ 2 W (DC))                           |
| <b>Overvoltage category</b>                            | II                                     |
| <b>Rated insulation voltage U<sub>i</sub></b>          | 300 V AC                               |
| <b>Rated impulse withstand voltage U<sub>imp</sub></b> | 4 kV                                   |
| <b>Test voltage</b>                                    | 1.2 kV (50 Hz) (EN 60439-1)            |

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

Input circuits: B1, B2

|                         |                                   |
|-------------------------|-----------------------------------|
| <b>Input voltage</b>    | 24 V DC (16.8 V DC ... 27.6 V DC) |
| <b>Input current</b>    | ≤ 50 mA                           |
| <b>Reset time</b>       | ≤ 30 ms                           |
| <b>Test pulse width</b> | ≤ 1 ms                            |

Output current paths: 13/14, 23/24, Y1/Y2

|   |                                      |
|---|--------------------------------------|
| <b>Response time</b>                                      | (≤ 10 ms)                            |
| <b>Number of enabling current paths (N/O)</b>             | 2, relevant for safety               |
| <b>Number of feedback current paths (normally closed)</b> | 1, external device monitoring (EDM)  |
| <b>Contact type</b>                                       | Positively driven                    |
| <b>Contact material</b>                                   | Silver alloy, gold flashed           |
| <b>Switching voltage</b>                                  |                                      |
| Enabling current path                                     | 10 V AC/DC ... 250 V AC/DC           |
| Feedback current path                                     | 0.1 V AC/DC ... 60 V AC/DC           |
| <b>Current-carrying capacity per OSSD</b>                 |                                      |
| Enabling current path                                     | 10 mA ... 6 A                        |
| Feedback current path                                     | 1 mA ... 300 mA                      |
| Switching capacity  | ≤ 1,500 VA (AC)<br>≤ 200 W (DC)      |
| <b>Usage category</b>                                     | AC-15/DC-13 (EN 60947-5-1)           |
| <b>Rated operating current (voltage)</b>                  | 3 A (230 V AC)<br>4 A (24 V DC)      |
| <b>Mechanical life (relay contacts)</b>                   | 1 x 10 <sup>7</sup> switching cycles |
| <b>Electrical life (relay contacts)</b>                   | 1 x 10 <sup>5</sup> switching cycles |

Mechanical data

|                               |                              |
|-------------------------------|------------------------------|
| <b>Dimensions (W x H x D)</b> | 17.8 mm x 105.5 mm x 70.8 mm |
| <b>Contamination rating</b>   | 3 (EN 50178)                 |
| <b>Weight</b>                 | + 91 g                       |

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>eCl@ss 12.0</b>  | 27371819 |
| <b>ETIM 5.0</b>     | EC001449 |

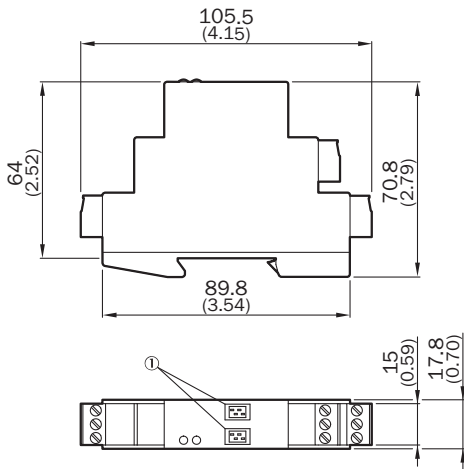
# UE10-2FG3D0 | UE10-2FG

## SAFETY RELAYS

|                       |          |
|-----------------------|----------|
| <b>ETIM 6.0</b>       | EC001449 |
| <b>ETIM 7.0</b>       | EC001449 |
| <b>ETIM 8.0</b>       | EC001449 |
| <b>UNSPSC 16.0901</b> | 41113704 |

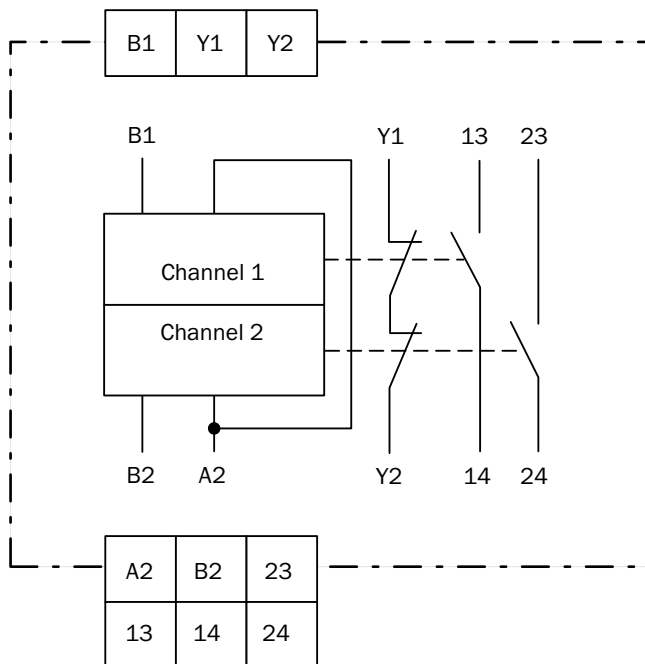
### Dimensional drawing (Dimensions in mm (inch))

UE10-2FG3, UE12-2FG3



① Only valid for UE12-2FG3

### 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)