



# T4000-1RCA04

T4000 Multi

**NON-CONTACT SAFETY SWITCHES** 

**SICK**Sensor Intelligence.



## Ordering information

| Туре         | part no. |
|--------------|----------|
| T4000-1RCA04 | 6029947  |

Other models and accessories → www.sick.com/T4000\_Multi



#### Detailed technical data

#### **Features**

| System part | Evaluation unit |
|-------------|-----------------|
|             |                 |

### Safety-related parameters

| Category                                                                               | Category 4 (EN ISO 13849)                                                  |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Performance level                                                                      | PL e (EN ISO 13849)                                                        |
| $\mbox{PFH}_{\mbox{\scriptsize D}}$ (mean probability of a dangerous failure per hour) | 15 * 10 <sup>-9 1)</sup><br>9.6 x 10 <sup>-8 2)</sup>                      |
| $T_{\mathrm{M}}$ (mission time)                                                        | 20 years (EN ISO 13849) <sup>1)</sup> 2 years (EN ISO 13849) <sup>2)</sup> |
| Туре                                                                                   | Type 4 (EN ISO 14119)                                                      |
| Actuator coding level                                                                  | High coding level (EN ISO 14119)                                           |
| Classification in compliance with IEC/<br>EN 60947-5-3                                 | PDF-M                                                                      |

<sup>1)</sup> With < 23.000 switching cycles p.a.

#### **Functions**

| Safe series connection | None, only individual wiring (with diagnostics) |
|------------------------|-------------------------------------------------|
|                        |                                                 |

#### Interfaces

| Number of non-contact safety switches | 1 4      |
|---------------------------------------|----------|
| Display elements                      |          |
| Power indication                      | <b>√</b> |
| Out indication                        | <b>√</b> |
| Error indication                      | <b>√</b> |
| Status display                        | <b>√</b> |

<sup>2)</sup> With < 180.000 switching cycles p.a.

#### Electronics

| Protection class                                                | III (EN 50178)                                                                                                                |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Contamination rating                                            | 2                                                                                                                             |
| Classification according to cULus                               | Class 2                                                                                                                       |
| Note on supply voltage $U_S$                                    | Operation with UL-class 2 power supply only                                                                                   |
| External fuse                                                   | At supply voltage V <sub>s</sub> 0.4 A 8 A                                                                                    |
| Switching voltage                                               | 60 V DC / 30 V AC                                                                                                             |
| Usage category                                                  | AC-12/DC-12, AC-14/DC-13 (EN 60947-5-1)                                                                                       |
| Rated operating current (voltage)                               | 0.3 A (60 V AC) 50 Hz<br>6 A (30 V AC) 50 Hz<br>0.3 A (60 V DC)<br>6 A (30 V DC)<br>1.5 A (230 V AC) 50 Hz<br>1.2 A (24 V DC) |
| Rated insulation voltage U <sub>i</sub>                         | 250 V                                                                                                                         |
| Rated impulse with<br>stand voltage $\mathbf{U}_{\mathrm{imp}}$ | 4,000 V AC                                                                                                                    |
| Supply voltage $V_{\rm s}$                                      | 24 V DC (21 V DC 27 V DC)                                                                                                     |
| Short-circuit protection                                        | 6 A gG                                                                                                                        |
| Type of output                                                  | Relays                                                                                                                        |
| Switching voltage                                               | ≥1VDC                                                                                                                         |
| Response time                                                   | ≤ 450 ms                                                                                                                      |
| Switch-on time                                                  | 10 s <sup>1)</sup>                                                                                                            |
| Number of application diagnostic outputs                        | 4 semiconductor, p-switching                                                                                                  |
| Number of safe outputs (N/O)                                    | 2                                                                                                                             |

 $<sup>^{1)}</sup>$  When the operating voltage is switched on, the relay outputs are electrically isolated during the initialisation period, and the door alarm contact set to LOW .

#### Mechanics

| Design                 | Rectangular                           |
|------------------------|---------------------------------------|
| Dimensions (W x H x D) | 45 mm x 114 mm x 99 mm                |
| Weight                 | 250 g                                 |
| Housing material       | Plastic PA6.6                         |
| Mechanical life        | 10 x 10 <sup>6</sup> switching cycles |

#### Ambient data

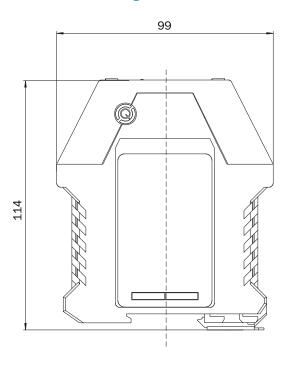
| Enclosure rating              | IP20        |
|-------------------------------|-------------|
| Ambient operating temperature | 0 °C +55 °C |
| Storage temperature           | 0 °C +70 °C |

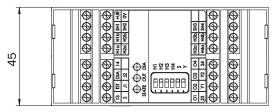
#### Classifications

| ECLASS 5.0   | 27272403 |
|--------------|----------|
| ECLASS 5.1.4 | 27272403 |
| ECLASS 6.0   | 27272403 |
| ECLASS 6.2   | 27272403 |
| ECLASS 7.0   | 27272403 |
| ECLASS 8.0   | 27272403 |

| ECLASS 8.1     | 27272403 |
|----------------|----------|
| ECLASS 9.0     | 27272403 |
| ECLASS 10.0    | 27272403 |
| ECLASS 11.0    | 27272403 |
| ECLASS 12.0    | 27274601 |
| ETIM 5.0       | EC001829 |
| ETIM 6.0       | EC001829 |
| ETIM 7.0       | EC001829 |
| ETIM 8.0       | EC001829 |
| UNSPSC 16.0901 | 39122205 |

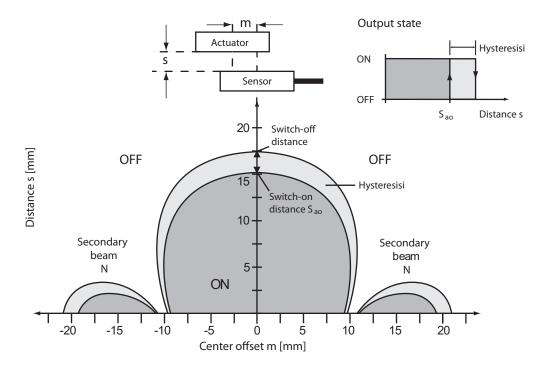
## Dimensional drawing





Dimensions in mm (inch)

#### Response range



## 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

