



## Safety relays Main unit UE45-3S1

UE45-3S12D330



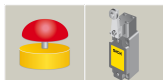
**Model Name** > [UE45-3S12D330](#)  
**Part No.** > [6024913](#)

#### At a glance

- Ideal for evaluating emergency stop pushbuttons and safety switches
- Cross circuit detection and sequence monitoring at the dual-channel input signal
- 2 N/O contacts for a direct integration into the machine
- 1 N/O time delayed up to 30 s for stop category 1 applications
- Manual or automatic reset
- Coded version for all plug-in positions

#### Your benefits

- Complete monitoring and analysis of sensors
- Time delay provides optimal protection of brake applications
- Adjustable time delay at the front of the device (up to 30 s) makes it easy for the user to change settings
- Tool-free exchange via coded pluggable terminals
- Combines the advantages of classic relays and easy circuitry



#### Applications

|                                                     |               |
|-----------------------------------------------------|---------------|
| Type of switching amplifier:                        | Main unit     |
| Emergency stop pushbuttons:                         | ✓             |
| Safety switches:                                    | ✓             |
| Safety Switch with mechanical lock:                 | -             |
| Two-hand control systems:                           | -             |
| Pressure sensitive mats:                            | -             |
| Opto-electronic protective devices:                 | -             |
| Opto-electronic protective devices without RES/EDM: | -             |
| Opto-electronic protective devices with RES/EDM:    | -             |
| System part:                                        | Safety relays |

#### Functions

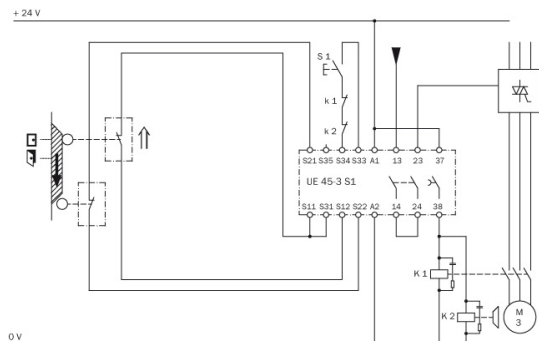
|                              |                               |
|------------------------------|-------------------------------|
| Input circuit:               | Single- or dual-channel       |
| Cross-circuit detection:     | ✓                             |
| Reset/restart:               | Manual/automatic/configurable |
| External device monitoring:  | ✓                             |
| Synchronous time monitoring: | ✓                             |

## Technical data

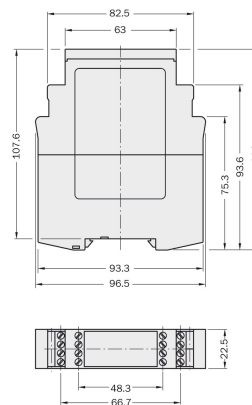
|                                            |                                                                                                                         |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Safety integrity level::                   | SILCL3 (IEC 62061) <sup>1) 2)</sup><br>SILCL2 (IEC 62061)                                                               |
| Category::                                 | Category 4 (EN ISO 13849) <sup>3) 4)</sup><br>category 3 (EN ISO 13849)                                                 |
| Performance level::                        | PL e (EN ISO 13849) <sup>5) 6)</sup><br>PL d (EN ISO 13849)                                                             |
| B10d parameter:                            | 4*1E 05 switching cycles (with maximum load)                                                                            |
| PfHd:                                      | 3.0 * 1E-08<br>2.0 * 1E-08                                                                                              |
| TM (mission time):                         | 20 a                                                                                                                    |
| Stop category:                             | 1, 0, EN 60204                                                                                                          |
| Width:                                     | 22.5 mm                                                                                                                 |
| Contact type:                              | Positively driven                                                                                                       |
| Number of enable current contacts:         | 2                                                                                                                       |
| Number of off-delayed N/O contacts:        | 1                                                                                                                       |
| Number of signalling current contacts:     | 0                                                                                                                       |
| Delay time:                                | 1.5 s ... 30 s                                                                                                          |
| Operating voltage DC:                      | 24 V DC                                                                                                                 |
| Maximum power consumption DC:              | 2.6 W                                                                                                                   |
| Type of output:                            | Relay contacts                                                                                                          |
| Rated operating current (voltage):         | 4 A (230 V AC) 3600 switching cycles/h<br>5 A (24 V DC) 360 switching cycles/h<br>3 A (24 V DC) 3600 switching cycles/h |
| Maximum switching current:                 | 6 A                                                                                                                     |
| Maximum total current:                     | 12 A                                                                                                                    |
| Mechanical life (relay contacts):          | 5*1E 06 switching cycles                                                                                                |
| Electrical life (relay contacts):          | 2* 1E 06 switching cycles, dependent upon loading, details see operating instructions                                   |
| Enclosure rating:                          | IP 20                                                                                                                   |
| Ambient operating temperature from ... to: | -25 °C ... 55 °C                                                                                                        |
| Connection type:                           | Screw-type terminals                                                                                                    |

1) 3) 5) For contacts 13/14, 23/24      2) 4) 6) For time contacts 37/38

## Connection diagram



## Dimensional drawing



**Australia**

Phone +61 3 9457 0600  
1800 334 802 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail sac@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Ceská Republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail kundenservice@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6801000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederlands**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail admin@sicksgp.com.sg

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886-2-2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 8865 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)