



Safety relays  
Main unit UE45-3S1

UE45-3S12D33



**Model Name** > [UE45-3S12D33](#)  
**Part No.** > [6024911](#)



**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**

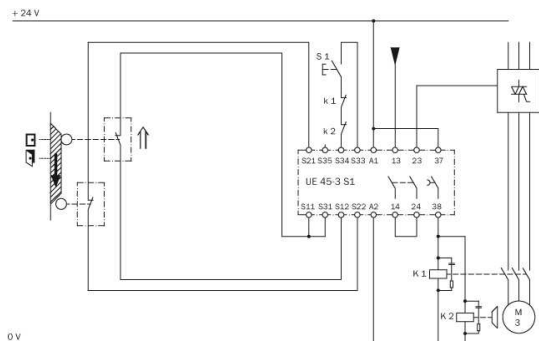
Input circuit::	Single- or dual-channel
Cross-circuit detection:	✓
Reset/restart:	Manual/automatic/configurable
External device monitoring:	✓
Synchronous time monitoring:	✓

## Technical data

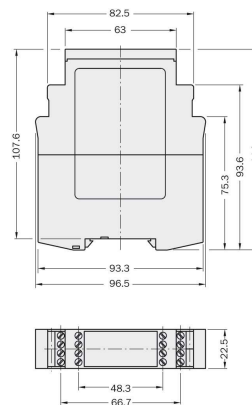
Safety integrity level::	SILCL3 (IEC 62061) <sup>1) 2)</sup> SILCL2 (IEC 62061)
Category::	Category 4 (EN ISO 13849) <sup>3) 4)</sup> category 3 (EN ISO 13849)
Performance level::	PL e (EN ISO 13849) <sup>5) 6)</sup> PL d (EN ISO 13849)
B10d parameter:	4*1E 05 switching cycles (with maximum load)
PFHd:	3.0 * 1E-08 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:	0.15 s ... 3 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 5 A (24 V DC) 360 switching cycles/h 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 33 48 02 – 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 marketing@sick.com.br

**Canada**

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

**Česká 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 info@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 +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

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

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

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

**Nederland**

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

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@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 sales.gsg@sick.com

**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 88 65 878  
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)