



Safety relays
Main unit UE45-3S1

UE45-3S13D33



Model Name > [UE45-3S13D33](#)
Part No. > [6024912](#)



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

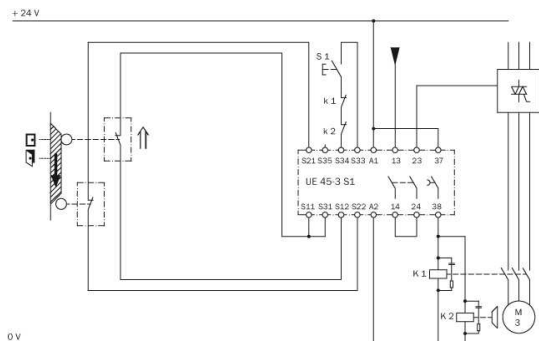
Input circuit::	Single- or dual-channel
Cross-circuit detection:	✓
Reset/restart:	Manual/automatic/configurable
External device monitoring:	✓
Synchronous time monitoring:	✓

Technical data

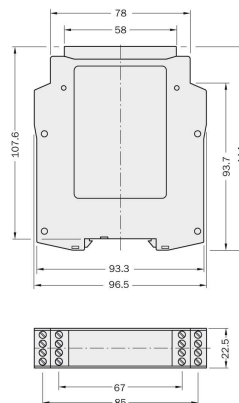
Safety integrity level::	SILCL3 (IEC 62061) ^{1) 2)} SILCL2 (IEC 62061)
Category::	Category 4 (EN ISO 13849) ^{3) 4)} category 3 (EN ISO 13849)
Performance level::	PL e (EN ISO 13849) ^{5) 6)} PL d (EN ISO 13849)
B10d parameter:	4*1E 05 switching cycles (with maximum load)
PFHd:	3.0 * 1E-08 2.0 * 1E-08
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:	Plug-in terminals

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

Connection diagram



Dimensional drawing



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