



Safety relays
Main unit UE48-20S

UE48-20S2D2



Model Name > [UE48-2OS2D2](#)
Part No. > [6024915](#)



At a glance

- Ideal for the evaluation of emergency stop pushbuttons, safety switches, safety light curtains, safety laser scanners and pressure-sensitive safety mats
- Cross circuit detection and sequence monitoring at the dual-channel input signal
- 2 safety outputs, 1 application diagnostic output
- Manual or automatic reset
- Coded version for all plug-in positions

Your benefits

- One module for all common applications simplifies machine integration
- Complete monitoring and analysis of sensors
- The sequence monitoring function takes over the evaluation of non-contact safety switches
- Fast diagnostics via the status information reduces downtime
- Fast 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

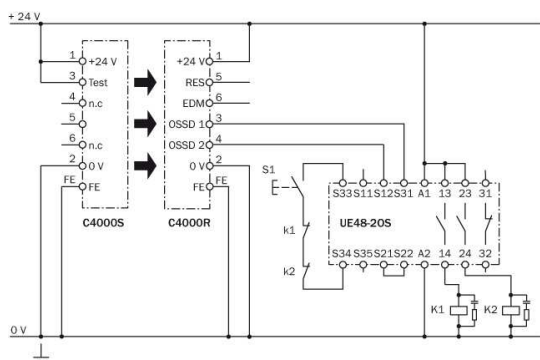
Functions

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

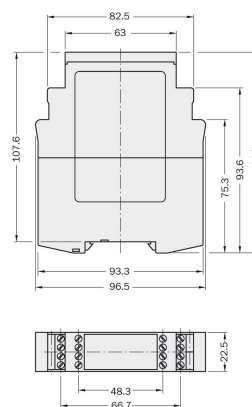
Technical data

Safety integrity level:	SIL3 (IEC 61508), SILCL3 (IEC 62061)
Category:	category 4 (EN ISO 13849)
Performance level:	PL e (EN ISO 13849)
B10d parameter:	1.26 * 1E 06 switching cycles (AC-15, 230 V, I = 1.5 A) 5.9*1E 06 switching cycles (AC-15, 230 V, I = 0.75 A) 4.35*1E 05 switching cycles (DC-13, 24 V, I = 2.5 A) 1*1E 07 switching cycles (DC-13, 24 V, I = 0.63 A)
PFHd:	3.0 * 1E-08
TM (mission time):	20 a
Stop category:	0, EN 60204
Width:	22.5 mm
Contact type:	Positively driven
Number of enable current contacts:	2
Number of signalling current contacts:	1
Operating voltage AC:	24 V AC
Operating voltage DC:	24 V DC
Maximum power consumption AC:	4.6 VA
Maximum power consumption DC:	2.1 W
Type of output:	Relay contacts
Rated operating current (voltage):	4 A (230 V AC) 360 switching cycles/h 3 A (230 V AC) 3600 switching cycles/h 4 A (24 V DC) 360 switching cycles/h 2.5 A (24 V DC) 3600 switching cycles/h
Maximum switching current:	6 A
Maximum total current:	12 A
Mechanical life (relay contacts):	1*1E 07 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 screw-type terminals

Connection diagram



Dimensional drawing



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