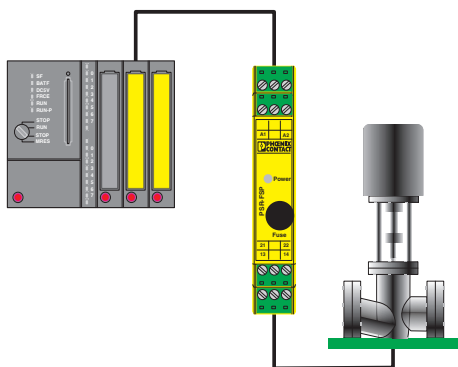


Safe coupling relays

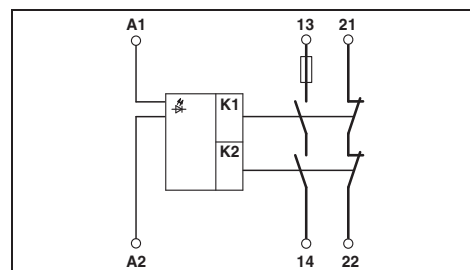
- Couples digital output signals from failsafe controllers to I/O devices (valves, etc.) for electrical isolation and power adaptation
- 1 enabling current path
- 17.5 mm narrow housing
- Long service life thanks to filtering of controller test pulses
- With installed and replaceable fuse in the enabling current path
- Forcibly guided contacts according to EN 50205
- Simple proof test as per IEC 61508 due to integrated signaling contact
- Up to SIL 3 according to IEC 61508



Example of electrical isolation of a safety PLC output from the field.



Safe coupling relay  
SIL 3 according to IEC 61508



<b>Notes:</b>
Can be used for system cabling with the termination carrier. For further information, see page 96
Additional products for SIL applications can be found on page 71
1) EMC: Class A product, see page 553

Technical data

<b>Input data</b>	
Nominal input voltage $U_N$	24 V DC
Permissible range (with reference to $U_N$ )	0.85 ... 1.1
Typ. current consumption (with reference to $U_N$ )	55 mA
Typ. response time (K1, K2) at $U_N$	50 ms
Typ. release time (K1, K2) at $U_N$	50 ms
Recovery time	1 s
<b>Output data</b>	
Contact type	1 undelayed enabling current path 1 undelayed confirmation current path AgCuNi, + 0.2 µm Au
Contact material	250 V AC/DC / 15 V AC/DC
Max. / min. switching voltage	5 A (N/O contact, pay attention to the derating), 100 mA (N/C contact)
Limiting continuous current	5 A / 5 mA
Max. / min. inrush current	75 mW
Min. switching power	5 A (24 V (DC13)) ; 5 A (230 V (AC15))
Switching capacity (3600/h cycles)	5 A T fuse
Short-circuit protection of the output circuits	
<b>General data</b>	
Ambient temperature range	-20 °C ... 55 °C
Air and creepage distances between the circuits	DIN EN 50178
Rated surge voltage / insulation	6 kV / safe isolation, increased insulation
Screw connection solid/stranded/AWG	0.2 - 2.5 mm <sup>2</sup> / 0.2 - 2.5 mm <sup>2</sup> / 24 - 12
Spring-cage connection solid/stranded/AWG	0.2 - 1.5 mm <sup>2</sup> / 0.2 - 1.5 mm <sup>2</sup> / 24 - 16
Dimensions	17.5 mm / 99 mm / 114.5 mm
W / H / D	17.5 mm / 112 mm / 114.5 mm
	Screw version
	Spring-cage version

24 V DC
0.85 ... 1.1
55 mA
50 ms
50 ms
1 s
1 undelayed enabling current path 1 undelayed confirmation current path AgCuNi, + 0.2 µm Au
250 V AC/DC / 15 V AC/DC
5 A (N/O contact, pay attention to the derating), 100 mA (N/C contact)
5 A / 5 mA
75 mW
5 A (24 V (DC13)) ; 5 A (230 V (AC15))
5 A T fuse

Ordering data

<b>Description</b>
<b>Emergency stop coupling relay</b> for failsafe controllers in process engineering, with secured enabling current path
With screw connection
With spring-cage connection

Type	Order No.	Pcs. / Pkt.
PSR-SCP- 24DC/FSP/1X1/1X2 <sup>1</sup> )	2981978	1
PSR-SPP- 24DC/FSP/1X1/1X2 <sup>1</sup> )	2981981	1