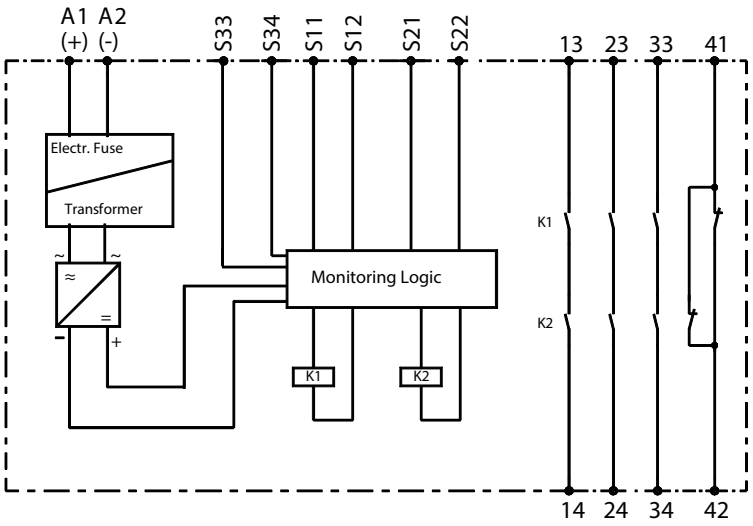
Safety Relay Combination
Series SCR

Description **SCR 4-W22-3.5-SD**	Article number **6075111010**

Assembly and function
(function circuit diagram)





13-14, 23-24, 33-34	safety circuits (normally open)
41-42	auxiliary circuits (normally close)
S33-S34	START button
S11-S12, S21-S22	EMERGENCY-STOP channel 1 and 2

Electrical Data		
Supply voltage	U_e	24 V AC/DC
Voltage range		0,90 ...1,1 U_B
Frequency		50 ... 60 Hz
Power consumption appr.		24V DC: 3 W, 24V AC: 5 VA

Conductor data	
conductor connection	2 x 1,5 mm² solid wire 2 x 1,0 mm² strand with wire end ferrule DIN VDE 46228
Max. conductor length (input circuit)	2 x 100m (single channel), 4 x 100m (dual channel)
Conductor cross-section	2 x 1,5 mm² / 4 x 1,5 mm²
Capacity	150 nF/km

Contact data	
Contact configuration	3 N.O. contacts / 1 N.C. contact
Contact type	Relay forcibly guided contacts
Contact material	$AgSnO_2$ flash gold or comparable material
Switching voltage	240 V AC, 24 V DC
Switching current	5 A
Summation current	13,8 A
Utilization category (DIN EN 60947-5-1)	AC 15 230 V / 5 A; DC 13 24 V / 5 A
Max. switching capacity	1200 VA (ohms load)
Mechanical life	10^7 operations
Electrical life	10^5 operations (DC 24V/2A)
Creapage and clearance distances (DIN VDE 0160)	at pollution grade 2, Voltage category 3 / 250 V
Contact protection	6,3 A fast acting or 4 A slow acting DIN VDE 0660 Teil 200
Short Circuit Withstand acc. IEC60947-5-1	6A
Short Circuit Protection Device (SCPD, Fuse links), size D01	gG acc. IEC IEC60269-1; IEC60269-3-1; VDE036-T301
Restarting readines time	0,5 s (minimum switch off time the inputs)
Delay on deenergisation K1	
One-channel	< 130 ms
Two channels	24 V DC: < 30 ms; AC: < 50 ms

Mechanical data	
Enclosure material	Polyamide PA 6.6
Dimensions (W x H x D) in mm	22,5 x 114,5 x 99
Mounting	Click-fastening for DIN-Rail

Environmental data	
Operating temperature range	-25 °C ... +55 °C (UL +40 °C)
Air humidity	Swap climate, 95 %, 0 ... +50 °C
Degree of protection, terminals	IP 20 DIN VDE 0470 part 1
Degree of protection, enclosure	IP 40 DIN VDE 0470 part 1
Shock resistance N.O./N.C. contacts	8g / 2g

EU Conformity	
	acc. to directive 2006/42/EG (Safety-of-Machinery-Directive)
	acc. to directive 2014/30/EU (EMC-Directive)

Approvals	
	TÜV type tested
	cUL us

Certifications	
Tested in accordance with	EN ISO 13849-1
Achieved level/category	Performance Level e , Kat.4
MTTFd [years]	154 “high”
DC	99 % “high”
CCF	achieved

Technical modifications and errors excepted.
The technical datasheet corresponds to the technical state as of 2019-01-31 and will not be removed in case of changes.

Notes
With monitoring of the START-button.