Safety relays - S² series

- Evaluation device for two-hand actuators (according to DIN EN 574 Typ IIIC)
- Two-channel control with 1NO and 1NC contact per channel
- Cross monitoring
- Monitoring of simultaneous activation
- 2 enabling current paths
- 1 signaling current path
- For applications up to safety category 4
- Stop category 0
- Width 22.5mm
- Industrial design

Technical data

1. Functions

Evaluation device for two-hand actuators.

2. Indicators

Green LED U ON: Green LED K1 ON/OFF: Green LED K2 ON/OFF: indication of supply voltage safety channel 1 and 2 activated indication of simultaneous activation

3. Mechanical design

Self-extinguishing plastic housing, IP rating IP40 Mounted on DIN-Rail TS 35 according to EN 50022 Mounting position: any Shockproof terminal connection according to VBG 4, IP rating IP20 Tightening torque: 0.5 to 0.6Nm Terminal capacity:

2 x 0.14 to 0.75mm² without multicore cable end

- 1 x 0.14 to 2.5mm² without multicore cable end
- 2 x 0.25 to 0.5mm² flexible with multicore cable ends
- 1 x 0.25 to 2.5mm² flexible with multicore cable ends

4. Input circuit Supp

Supply voltage:	
24V AC/DC	terminals A1-A2
	(other voltages on request)
Tolerance:	
24V AC/DC	-15% to +10%
Rated frequency:	50 to 60Hz
Rated consumption:	

Rate 24V AC/DC 3.2VA (2.6W) Duration of operation: 100% Residual ripple bei DC: 2.4Vss

5. Output circuit

2 forced normally open contacts (enabling current paths) 1 forced normally closed contact (signaling current path) 240V AC /300V DC Rated voltage: Rated current of enabling paths: max. 6A Rated current of signaling contacts: max. 6A gG 6A (MCB 6 B or C) Fusing: Total current of all paths: max. 12A Mechanical life: 10 x 10⁶ operations Switching capacity (according to IEC 947-5-1): max. 6/min (AC-15: 4A/230V AC) max. 60/min (AC-15: 3A/230V AC) max. 6/min (DC-13: 4A/24V DC) max. 60/min (DC-13: 2.5A/24V DC) Insulation voltage: 300V (according to IEC 664-1) 4kV, overvoltage category III Surge voltage: (according to IEC 664-1) Release time t_R K1, K2: 40ms

6. Safety circuit

Function:

and 1NC safety contact according to DIN EN 574 IIIC Rated voltage: 24V DC Rated current: 40mA 100mA Peak current: Short circuit protection: PTC-resistor terminals Y11-Y12-Y14 Channel 1 (CH1): Channel 2 (CH2): Simultaneous time (CH1 vor CH2): Simultaneous time (CH2 vor CH1): Cross monitoring (CH1, CH2): Yes Galvanic separation to power supply: No

7. Ambient conditions

Ambient temperature:

Storage temperature: Transport temperature: Relative Humidity:

terminals Y21-Y22-Y24 max. 500ms max. 500ms -25 to +55°C (according to IEC 68-1) -25 to +70°C -25 to +70°C max. 83% (bei 23°C),

max. 93% (bei 40°C)

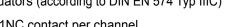
3 outside, 2 inside (according to IEC 664-1)

according to DIN 50016

connection of actuators with 1 No

Pollution degree:

Release 200712





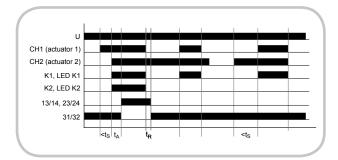
Subject to alterations and errors

S2Z021

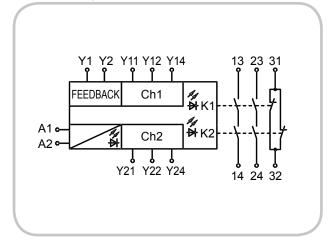
Functions

Evaluation devive for two-hand actuators

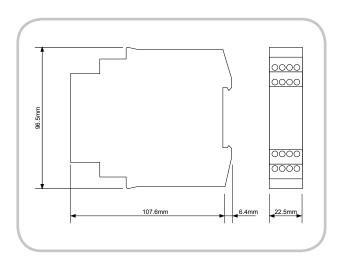
After the supply voltage is applied to terminals A1-A2 (green LED U illuminated) and with closed feedback circuit (terminals Y1-Y2 bridged), the enabling current paths are closed by activating simultaneously the actuators S1 and S2. Both momentary contact switches have to be activated within the simultaneously time of 0.5s for the output contacts to be enabled. If only one of the two hand switches is released, the device is immediately de-excited and the enabling current paths open. The relay can be restarted only after both actuators have returned to their initial position and the feedback circuit is closed again.



Internal circuitry



Dimensions



www.tele-power-net.com

Connections

