



Emergency stop and safety gate monitoring relays

Printing 11.03.2016

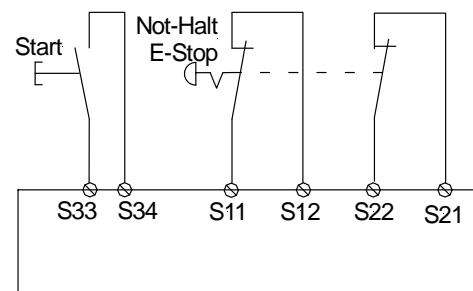
→ DEVICE	SAFE 4 / SAFE 4.1
→ APPLICATIONS	Emergency stop and safety gate monitoring relay
→ APPROVALS	CE, TÜV, UL, C-UL
→ CONTACTS	3 normally open safety, 1 normally auxiliary closed
→ SPECIAL CHARACTERISTICS	LED indicators for status and supply diagnostic Opposite polarity between channels
→ LED	With (SAFE 4) and without (SAFE 4.1) start control
→ OPERATING VOLTAGE	Power, channel 1 and channel 2 24 V AC / DC (electronic fuse) 110, 230 V AC (with galvanic disconnection / transformer)
→ POWER CONSUMPTION	24 V AC: ca. 5 VA, 24 V DC: 3 W, 110 / 230 V AC: 3,7 VA
→ START UP DELAY / FALLBACK TIME	<50 ms / <30 ms (24 V AC <50 ms) ready after time delay <0,5 s
→ CONTACT CAPACITY max.	5 A, 240 V AC, 24 V AC / DC, AC15 230 V / 5 A, DC13 24 V / 5 A
→ CONTACT CAPACITY min. at 24 V DC (*)	6 mA
→ SIMULTANEITY	
→ ENVIRONMENTAL TEMPERATURE	-25°C to + 55°C
→ SWITCHING CAPACITY	1200 VA (resistive load)
→ CONTACT SECURITY	6,3 A quick acting or 4 A time lag

→ **OPERATING MODE**
(*) We offer all devices who have a CONTACT CAPACITY of min. 100 mA at 24 V DC with hard gold-plated contacts. In this way the CONTACT CAPACITY of min. 100 mA is only 4 mA. Please ask our sales team!

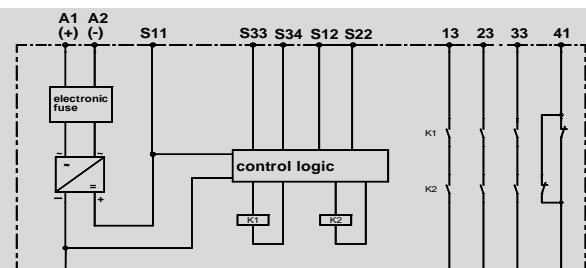
A supply voltage must be applied to terminals A1 and A2. The power LED illuminates and 24 V DC is available at terminal S11. Terminals S12 and S22 must be connected according to the application example selected to meet the application requirements. To start the unit terminals S33 and S34 must be bridged with a normally open contact. The unit works if you close this contact. At this time the contacts 13-14, 23-24 and 33-34 are closed. The LEDs channel 1 and channel 2 illuminate. In series to this start button an external contactor can be controlled.

For version with detachable clamps (screw - or cage clamps) ... please ask our sales team!

→ **CONNECTION DIAGRAM**



→ **FUNCTION CIRCUIT DIAGRAM**



→ Certifications according to Safety relevant substance data
Depending on wiring (only max. achievable values are given)

EN ISO 13849-1: PLe, Cat. 4
MTTFd: 154 years / high, DC: 99% / high,
CCF: achieved