

- ▶ Industrial design
- ▶ Width 22.5mm
- ▶ Single channel activation
- ▶ 3 N/O safety contacts and 1 N/C control contact
- ▶ Stop-category 0 (according to EN 60204-1)
- ▶ Safety-category 3 (according to EN 954-1)



Technical data

1. Functions

Basic unit for emergency stop and safety gates applications

2. Indicators

Green LED (SUPPLY) ON: indication supply voltage
 Green LED (K1, K2) ON/OFF: indication of relay output

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 (PZ1 required), IP rating IP20
 Initial 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 with/without multicore cable end
 1 x 0.25 to 2.5mm² flexible with multicore cable end

4. Input circuit

Supply voltage: 24V AC/DC terminals A1-A2
 Tolerance: -15% to +10%
 Rated frequency: 50 to 60Hz
 Rated consumption: 24V DC 1.3W
 24V AC 2.4VA (1.4W)
 Duration of operation: 100%
 Residual ripple for DC: 1.4Vss

5. Output circuit

3 forced normally open safety contacts and 1 forced normally closed control contact
 Switching capacity: 1380VA (6A / 230V AC/DC)
 Rated current: max. 6A
 Total current all contacts: max. 12A
 Fusing: 6A fast acting
 Mechanical life: 10 x 10⁶ operations
 Switching frequency:
 3600/h at I_e 6A / U_e 230V AC (AC-15)
 3600/h at I_e 3A / U_e 24V DC resp.
 360/h at I_e 6A / U_e 24V DC (DC-13)
 Insulation voltage: 300V AC (according to IEC 664-1)
 Surge voltage: 4kV, overvoltage category III (according to IEC 664-1)

6. Control circuit

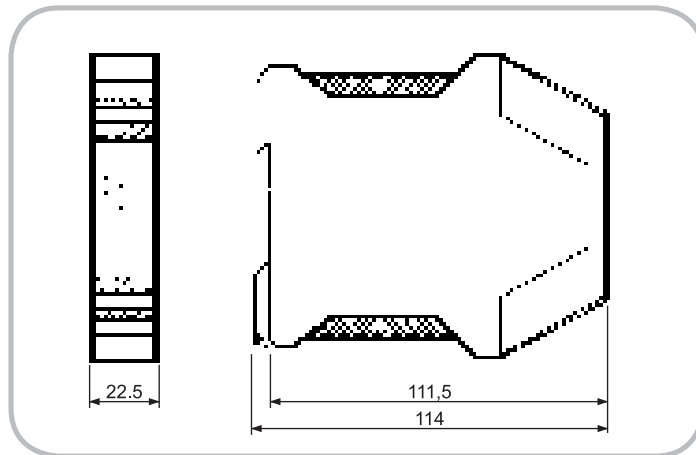
(only for supplying the control inputs)

Line resistance Y1-Y2: ≤70Ω
 Control contact Y1:
 Galvanically separated: No (A1-A2-Y1)
 Rated output voltage: 24V DC
 Rated current: 40mA
 Short circuit current I_k: max. 1.4A
 Fusing: PTC-Resistor
 Response time: 2s
 Reset time: 3s
 Control contact Y2:
 Rated current: 40mA
 Response time t_A: K1, K2 50ms
 Recovery time t_R: K1, K2 40ms
 Activation time t_M: Y2 min. 50ms
 Reset time t_W: ≤50ms

7. Ambient conditions

Ambient temperature: -25 to +55°C (according to IEC 68-1)
 Storage temperature: -25 to +70°C
 Transport temperature: -25 to +70°C
 Relative humidity: 83% (at 23°C), 93% (at 40°C) (according to DIN 50016)
 Pollution degree: 3 outside, 2 inside (according to IEC 664-1)

Dimensions



Functions

Basic unit for emergency stop and safety gates applications

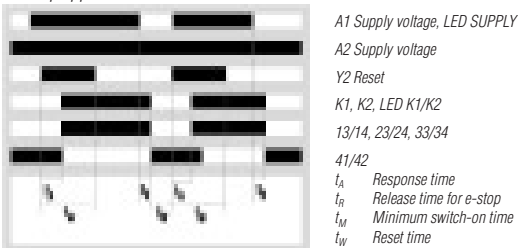
When supply voltage is applied to terminal A1 and A2 through the not-actuated E-stop switch or protective gate contact, the lockout preventing closing is effective. The actuating of the RESET key connected to terminals Y1/Y2 activates the control logic. This triggers the relays K1 and K2. The latter become self locking through their own contacts after the response time t_A . At the same time, the relay contacts of K1 and K2 deactivate the control logic.

After this switch-on phase, the three enabling current paths, which are intended for the output, are closed (terminal connections 13/14, 23/24, 33/34) and the control contact is opened (terminal connections 41/42). Two LEDs provide a display, and these LEDs are associated with the safety channels K1/K2 and the supply voltage.

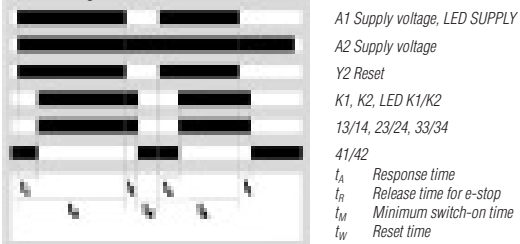
If the E-stop switch or the position switch is opened, the current leads for K1 and K2 relays are interrupted. The enabling current paths at the output are opened and the control contact is closed.

According to the particular application it is possible to have an automatic start shunting terminals Y1/Y2.

E-stop application



Protective gate



Connections

