

Sensors

**Control and Communication**

Electronic monitoring relays

Safety Relays

PNOZ X

PNOZsigma

PNOZelog

PNOZmulti

PNOZpower

Configurable control systems

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**PNOZsigma - Base units**

Safe monitoring of E-STOP, safety gate, light grid and two-hand control


**PNOZ s4 48-240VACDC 3 n/o 1 n/c**  
**Order numbers: 750134**

- Type: **PNOZ s4**
- Application options: **Safety gate monitor , Instantaneous E-STOP monitoring , Light barrier mon. Cat.4 , Light barrier mon. Cat.2 w/o tp , Light barrier mon. Cat.2 w/ tp , Limit switch**
- Category in accordance with: **EN 954-1 , EN ISO 13849-1**
- SIL value: --
- Standards: **VDE 0113-1 , EN 954-1 , EN 62061 , EN 60204-1**
- Approvals: **UL/cUL , GOST Russia , CCC , BG**
- Operating modes: **Dual-channel , Without detection of shorts across contacts , Monitored manual reset , Manual start , Single-channel , Automatic start , Self test , Detection of shorts across contacts , Start-up testing**
- Selectable times: --
- Number of instantaneous safety contacts: **3**
- Number of delayed safety contacts: --
- Number of auxiliary contacts: **1**
- Number of delayed auxiliary contacts: --
- Number of semiconductor outputs: **1**
- Stop category: **0**
- Supply voltage [V]: --
- Supply voltage range: **48 - 240 V**
- Supply voltage type: **AC/DC**
- Max. current at DC1: **6,0 A**
- Power consumption AC: --
- Power consumption DC: --
- Height dimension: **96,0 mm**
- Width dimension: **22,5 mm**
- Depth dimension: **120,0 mm**
- Height dimension (inches): **3.78"**
- Width dimension (inches): **0.89"**
- Depth dimension (inches): **4.72"**
- Gross weight: **250 g**
- Net weight: **210 g**

## Up to PL e of EN ISO 13849-1 PNOZ s4



Safety relay for monitoring E-STOP pushbuttons, safety gates and light barriers.

### Approvals

PNOZ s4	
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### Unit features

- ▶ Positive-guided relay outputs:
  - 3 safety contacts (N/O), instantaneous
  - 1 auxiliary contact (N/C), instantaneous
- ▶ 1 semiconductor output
- ▶ Connection options for:
  - E-STOP pushbutton
  - Safety gate limit switch
  - Reset button
  - Light barriers
  - PSEN
- ▶ A connector can be used to connect 1 PNOZsigma contact expander module
- ▶ Operating modes can be set via rotary switch
- ▶ LED indicator for:
  - Supply voltage
  - Input status, channel 1
  - Input status, channel 2
  - Switch status, safety contacts
  - Reset circuit
  - Error
- ▶ Plug-in connection terminals (either spring-loaded terminal or screw terminal)

### Unit description

The safety relay meets the requirements of EN 60947-5-1, EN 60204-1 and VDE 0113-1 and may be used in applications with

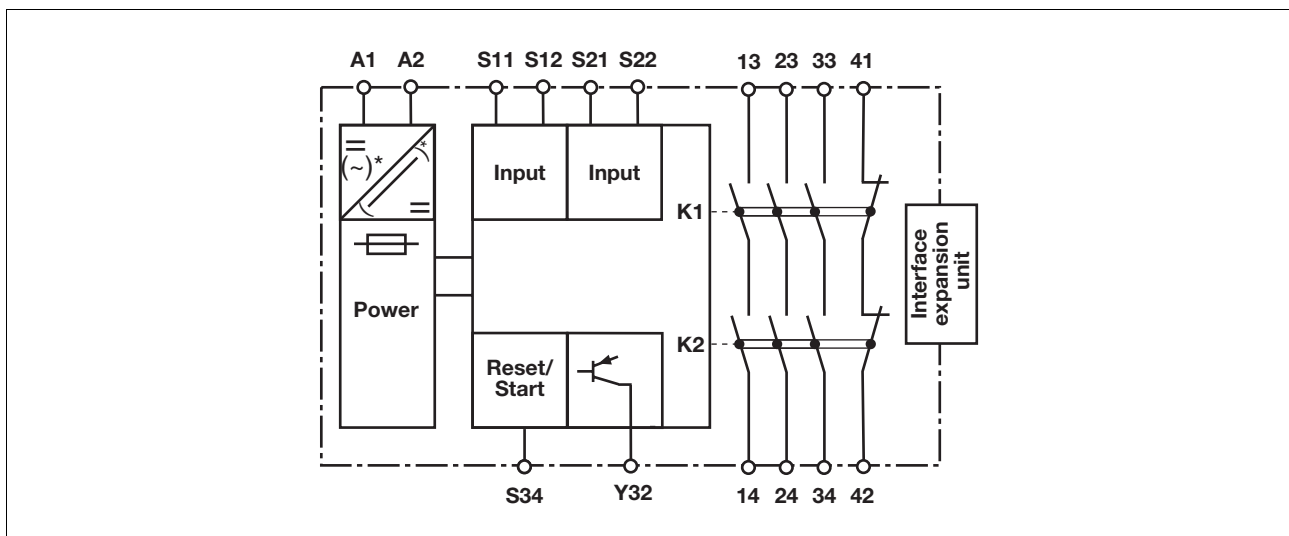
- ▶ E-STOP pushbuttons
- ▶ Safety gates
- ▶ Light barriers

### Safety features

The relay meets the following safety requirements:

- ▶ The circuit is redundant with built-in self-monitoring.
- ▶ The safety function remains effective in the case of a component failure.
- ▶ The correct opening and closing of the safety function relays is tested automatically in each on-off cycle.
- ▶ The unit has an electronic fuse.

### Block diagram



\* only when  $U_B = 48 - 240 \text{ VAC/DC}$