

# Type PZE7

Contact Block with positive-guided relays for providing additional contacts in safety-oriented controls, in accordance with DIN/VDE 0113

## General

Various DIN and VDE Regulations prescribe standards for safety switches:

- Two-hand switches
  - ZH1/456, ZH1/457
  - DIN 24 980;
- Electrical equipment on industrial machinery
  - DIN VDE 0113 1/02/86
  - BS 2771
  - IEC 204-1

Units which comply with these regulations are equipped with varying numbers of relay contacts and differ in contact load on the output circuit. In practice, however, situations do occur when more contacts are required.

The **PZE7** has been designed to meet these requirements. It is driven by the contacts on the unit to which it is connected and provides 1 N/C and 6 N/O contacts on output.

The contact block must be wired in accordance with the connection diagram, as the unit on its own does not fulfill any special safety requirements.

### \* Electronic Fuse

PZE units with AC operating voltage have a shortcircuit proof transformer (approved to DIN VDE 0551) and the internal bridges are removed. In the event of an external earth fault, the supply voltage fails and the output contacts open.

PZE units with DC operating voltage have internal bridges but no transformer. In the event of an input earth fault, the integrated electronic fuse

## Description

The **PZE7** is a contact block for increasing the number of contacts available in safety-oriented control units.

The **PZE7** is used in conjunction with:

- Emergency stop units
- Safety gate monitors
- Two-hand relays.
- 90 mm P-75 Housing, DIN-Rail Mounting
- 1 or 2 channel control
- Connection for feedback control loop
- Relay output:
  - 6 N/O safety contacts + 1 N/C control contact, positive-guided.

## Order Reference

PZE7/110 V~

Operating Voltage

Number of Contacts

P-75 Range  
Contact Block

Approvals:

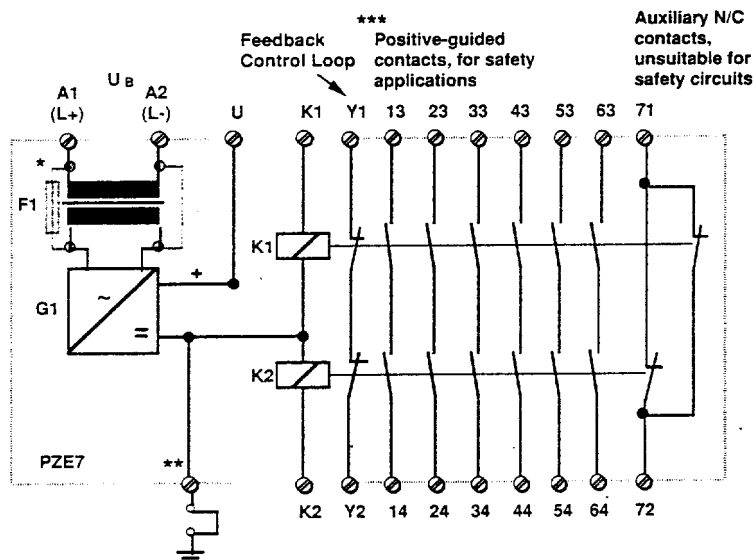


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## PZE7 Internal Wiring Diagram (Simplified Version)



causes a safety oriented opening of the output contacts and protects the unit from damage. The safety release comes into effect with fault currents  $\geq 1.2$  A. Once the cause of the

disturbance is removed, the unit is ready for operation after 1s (keeping to the rated voltage) and takes up the original starting position dependent on the input conditions.

## Technical Details,\* PZE7 (for general technical details see appendix)

Operating Voltage $U_B$	24, 42, 48, 100, 110, 115, 120, 127, 230, 240 V~; 24 V=
Voltage Tolerance	80...110 % $U_B$ ~; 80...120 % $U_B$ =
Power Consumption $U_B$	6 VA/4 W
Operating Temperature $T_B$	-10°C to +55°C
Airgap Creepage	4 kV/2; DIN VDE 0110 C Part 2 Par. 8
Delay-on De-Energisation $t_d$	$\approx 30$ ms
Relay Contacts	6 N/O+1 N/C, positive-guided Ag Cd O + 10 $\mu$ Au
Switching Capability	24 VDC/250 VAC/0.1 - 8 A 400 VAC/0.1 - 5 A/2000 VA $\Sigma$ -current max. 48 A
Contact Fuse Protection (VDE 0660 Pt. 2)	10 A quick/6 A slow acting

\*\*In accordance with VDE 57 100 § 60f, with AC operating voltage a detachable connection is required between unit and system earth. With DC operating voltage this connection is not necessary.

\*\*\*To prevent a welding together of the output contacts, a fuse (max. 6 A slow/ 10 A fast acting) must be connected externally.