

## Description

- 90 mm P-75 Housing, DIN-Rail Mounting.
- Feedback control loop for monitoring external contactors which:
  - Multiply the number of contacts
  - Strengthen contacts.
- Connections:
  - Emergency Stop Button or
  - Safety Switch to incorporate into the safety circuit.
- 2 LEDs
- Channels 1 and 2 status indicator.
- Relay output:
  - 3 N/O + 1 N/C, positive-guided.

## Special Features

- When the emergency stop unit is wired for 2 channels, faults in the pushbutton are also identified
- 24 V= at the emergency stop buttons
- Approval:



A-ET 89108

TÜV Vienna

## Order Reference

PNOZ 1/110 V~

Operating Voltage  
P-75 Range  
Emergency Stop Unit

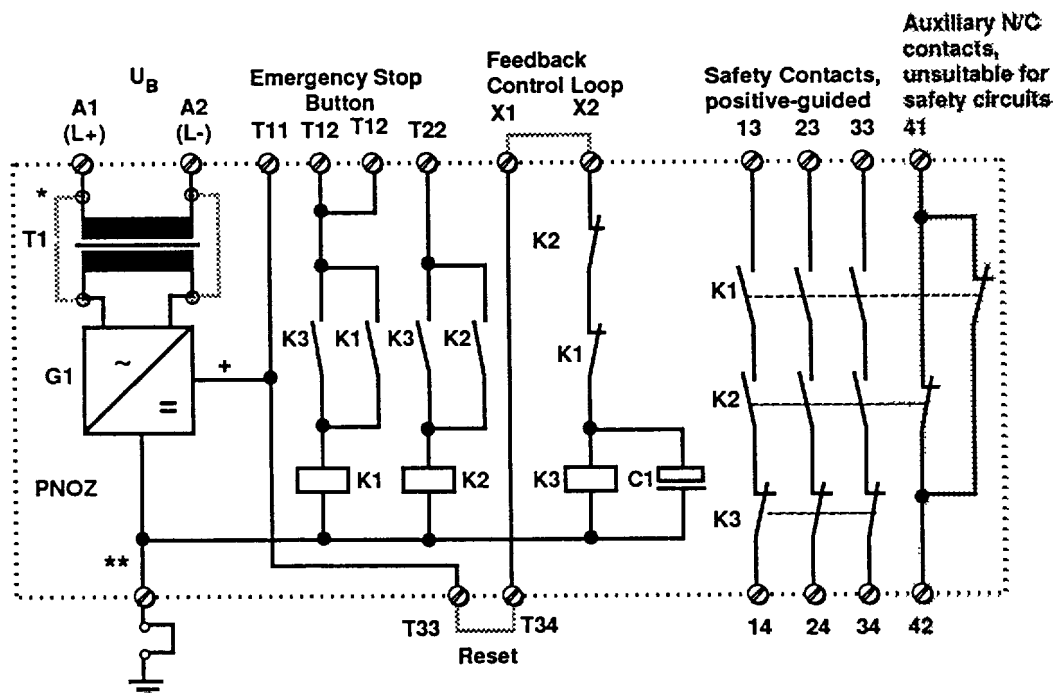


TÜV Rheinland



Sweden

## Internal Wiring Diagram (Simplified Version)



### Technical Details, PNOZ (for general technical details see appendix)

|                                       |                                                                     |
|---------------------------------------|---------------------------------------------------------------------|
| Operating Voltage $U_B$               | 24, 42, 48, 100, 110, 115, 120, 127, 220, 240 V~; 24 V=             |
| Voltage Tolerance $U_B$               | 80-110 % $U_B$ ~; 80-120 % $U_B$ =                                  |
| Frequency Range $U_B$ V~              | 50-60 Hz                                                            |
| Residual Ripple $U_B$ V=              | 160 %                                                               |
| Power Consumption $U_B$               | ≤ 5 VA                                                              |
| Operating Temperature                 | -10 to +55 °C                                                       |
| Airgap Creepage                       | DIN VDE 0110 Part 2 Para. 8, 4 kV/3                                 |
| Voltage/Current at T11, T22, T33, T34 | 24 V= / 50 mA                                                       |
| Relay Contacts                        | 3 N/O + 1 N/C Ag Cd O                                               |
| Switching Capability                  | 24 V= / 250 V~ / 0.1-8 A / 2000 VA                                  |
| Fuse Protection (VDE 0660 T2)         | $U_B$ : 1 A quick acting/slow acting<br>Contacts: 10 A quick acting |

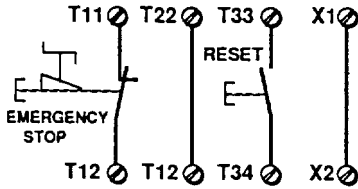
\* With DC operating voltage bridges are present in place of transformers. With AC operating voltage a transformer is used (bridges do not apply).

\*\*With AC operating voltage a removable connection between the unit and the system earth is required, in accordance with VDE 57 100 § 60 f. With DC operating voltage this connection does not apply.

## External Wiring

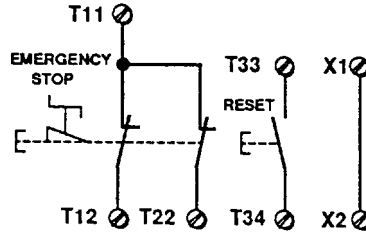
### Example 1

If the emergency stop is wired through 1 channel it meets the requirements of VDE 0113, but does not have safe operation redundancy in the emergency stop circuit. Earth faults in the emergency stop circuit are detected.



### Example 2

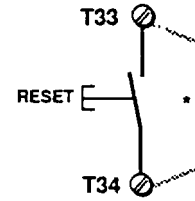
If the emergency stop is wired through 2 channels it will also monitor any faults in the emergency stop contacts. Earth faults in the emergency stop circuit are detected, but shorts across the emergency stop pushbutton will not be detected.



### Example 3

#### Reset-Function

Conditional Activation: Unit only becomes active once a switch is closed at terminals T33-T34. It is impossible, therefore, for the emergency stop Unit to activate automatically when voltage is re-applied after a cut in power.



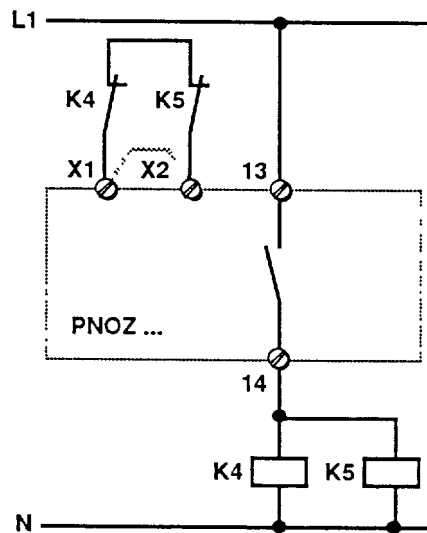
\* Automatic Activation: Unit is active when terminals T33-T34 are bridged and operating voltage is applied.

### Feedback Control Loop (Terminals X1-X2)

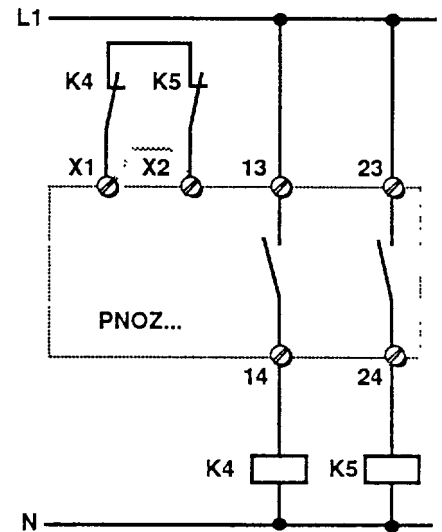
If required, the output contacts on the PNOZ can be strengthened (>8A) or multiplied by using external relays with positive-guided contacts. The function of the external relays may be monitored by connecting N/C contacts in series to terminals X1-X2, which are factory-equipped with a bridge.

The use of 1 or 2 channel drive depends on the level of safety required for your control unit.

### Example 4 1 Channel Drive



### Example 5 2 Channel Drive



## Connection Diagram

