

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 safety contacts + 1 N/C control contact, positive-guided.

Special Features

- The PNOZ 2 is designed for use in Emergency Stop control circuits with AC Operating Voltage at the Emergency Stop Button
- Approval:



A-ET 89108

TÜV Vienna



TÜV Rheinland



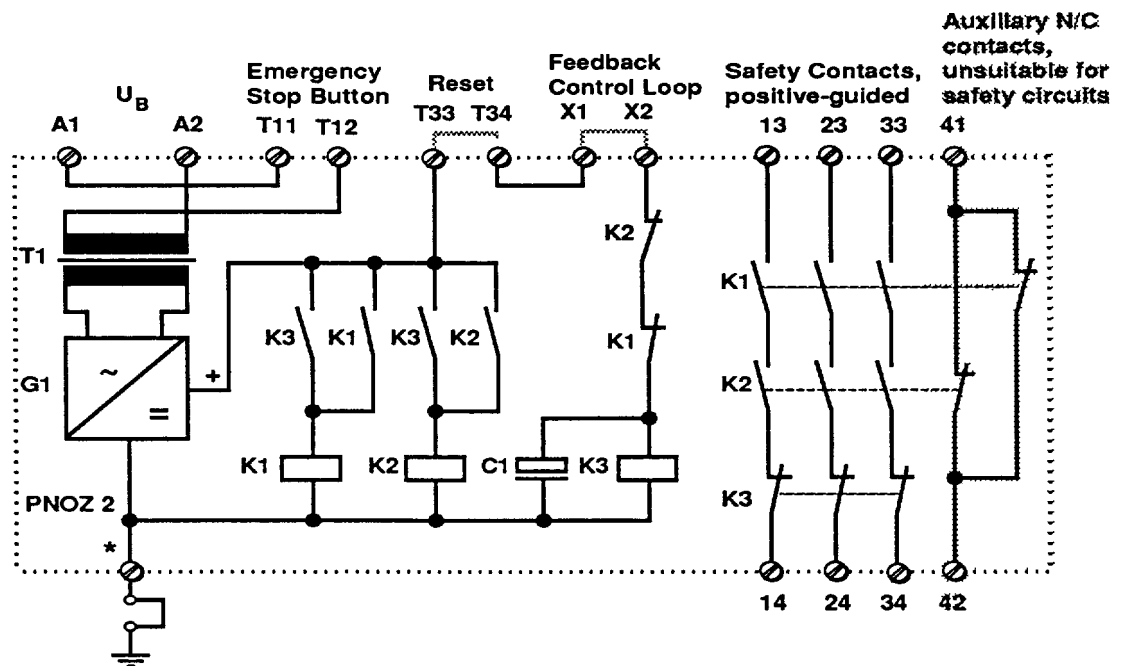
Sweden

Order Reference

PNOZ 2/110 V~

Operating Voltage
P-75 Range
Emergency Stop Unit

Internal Wiring Diagram
(Simplified Version)



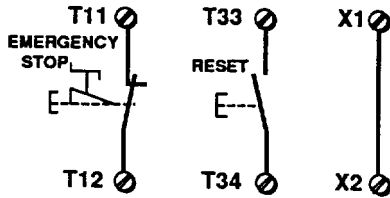
Technical Details, PNOZ 2 (for general technical details see appendix)	
Operating Voltage U _B	24, 42, 48, 100, 110, 115, 120, 127, 220, 240 V~
Voltage Tolerance U _B	80-110 % U _B
Frequency Range U _B	50-60 Hz
Power Consumption U _B	≤ 5 VA
Operating Temperature T _B	-10 to +55 °C
Airgap Creepage	DIN VDE 0110 Part 2, Para. 8, 4 kV/3
Voltage/Current T33, T34	24 V~/50 mA
Voltage/Current T11, T12	= U _B
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 Contacts: 10 A quick acting

* With AC operating voltage a removable connection between the unit and the system earth is required, in accordance with VDE 57 100 § 60 f

External Wiring

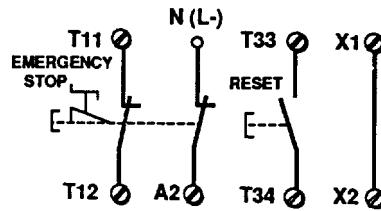
Example 1

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.



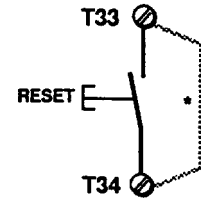
Example 2

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.

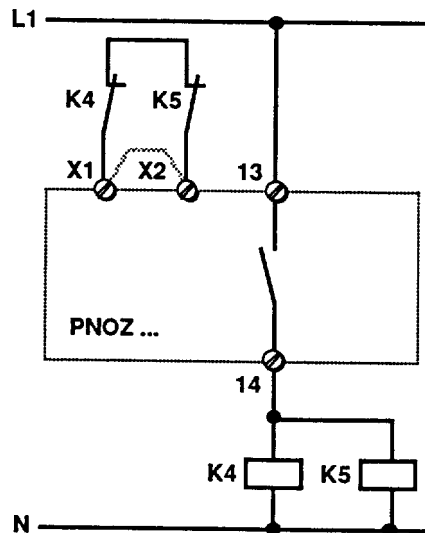


* Automatic Activation: Unit is active when terminals T33-T34 are bridged and operating voltage is applied.

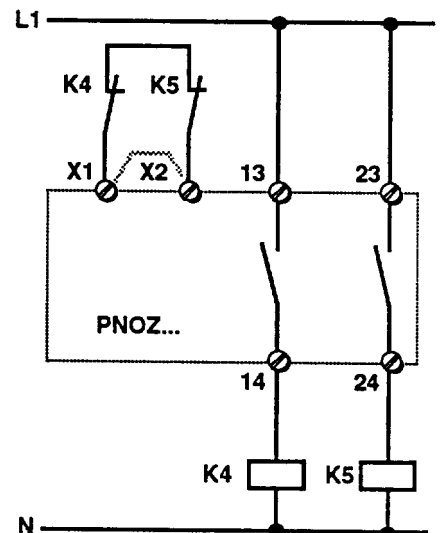
Feedback Control Loop (Terminals X1-X2)

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

