

## Expander Module PNOZ po4p





Expander module for the PNOZpower modular safety system in accordance with EN 60204-1 (VDE 0113-1), 11/98 and IEC 60204-1, 10/97.

### Features

- 4 safety contacts
- Dual channel connection capability with detection of shorts across the inputs when using the base unit.

### Approvals

	PNOZ po4p
	●
	Pending

Technical Details	PNOZ po4p
<b>Electrical Data</b>	
Supply Voltage	via PNOZpower Bus
Power Consumption	Approx. 2 W
Switching Capabiltiy in accordance with EN 60947-4-1, 02/01	AC1: 240 V/4 A/960 VA DC1: 24 V/4 A/96 W
EN 60947-5-1, 11/97 (DC13: 6 cycles/min.)	AC15: 230 V/4 A; DC13: 24 V/3 A
Output Contacts	4 safety contacts (N/O)
Contact fuse protection according to EN 60947-5-1, 08/00	Blow-out fuse: 6 A quick or 4 A slow Safety cut-out: 24 V AC/DC: 4 A; Characteristic B/C
<b>Times</b>	
Switch-on delay	Approx. 100 ms + Switch-on delay of the base unit
Delay-on De-energisation	Approx. 50 ms + Delay-on De-energisation of the base unit
<b>Mechanical Data</b>	
Cable cross section	
1 Core	flexible: 0.25 ... 2.5 mm <sup>2</sup>
2 cables with the same cross	flexible with crimp connectors without insulating sleeve: 0.25 ... 1 mm <sup>2</sup> flexible without crimp connectors or with TWIN crimp: 0.25 ... 1.5 mm <sup>2</sup>
Torque setting for connection terminals	0.5 Nm (screws)
Mounting Position	On a top hat rail installed horizontally.
Protection Housing	IP 30
Dimensions (H x W x D)	94 x 22,5 x 135 mm
Weight	220 g

### Description

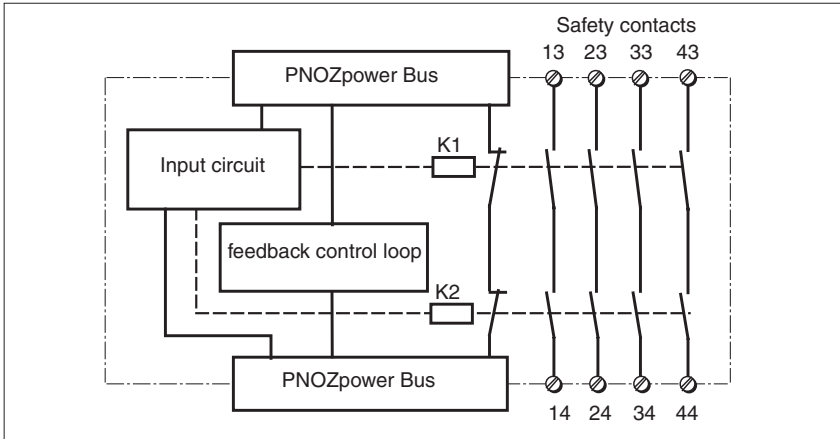
- 22,5 mm, P-01 housing, DIN-Rail mounting
- Relay outputs, positive-guided:
  - 4 safety contacts (N/O)
- Connection between base unit and expander module via PNOZpower Bus through connector plug on the backside of the unit.
- LEDs for channel 1/2, supply voltage and trouble

### Function Description

PNOZ po4p supplies 4 safety contacts for the modular safety system PNOZpower. It can only be used in conjunction with a base unit PNOZpower.

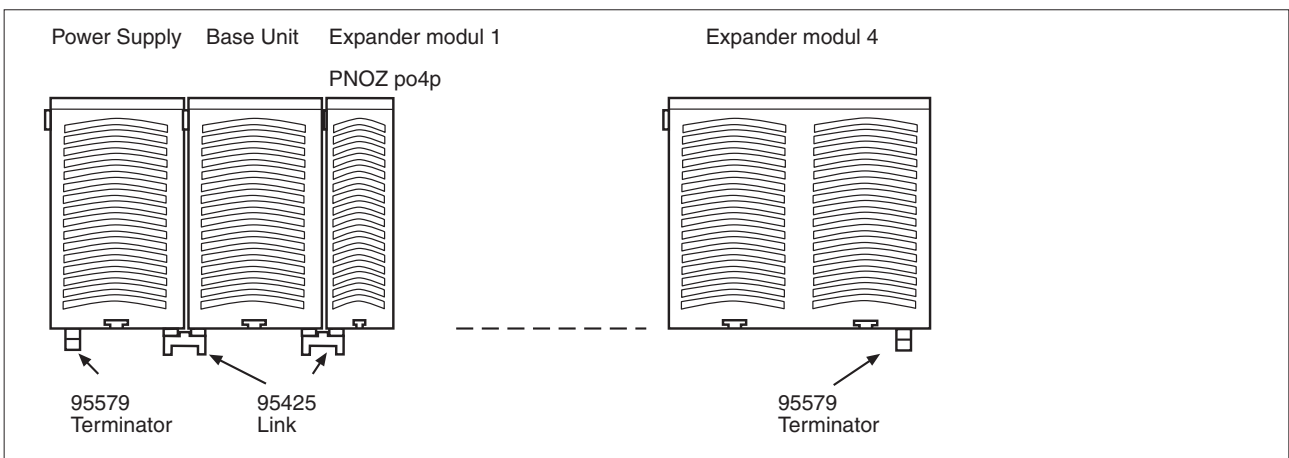
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### Internal Wiring Diagram

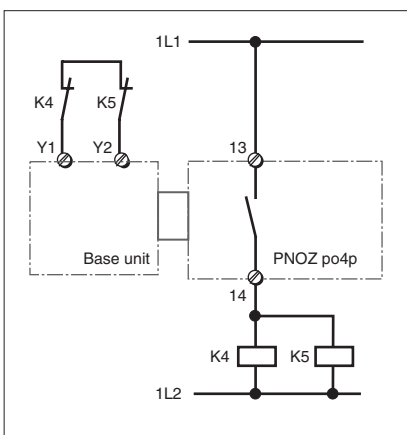


### External Wiring

- PNOZpower Bus: Base unit connected with 4 expansion modules and power supply (optional) via connector plugs.



- Output contacts for switching higher currents



## Expander Module

### PNOZ po4p

#### General Technical Data

Unless stated otherwise in the technical details for the specific unit

#### Electrical Data

Frequency Range AC	50 ... 60 Hz
Residual Ripple DC	160 %
Contact Material	AgSnO <sub>2</sub>
Continuous Duty	100 %

#### Environmental Data

EMC	EN 61000-4-6, 04/97 EN 61000-6-2, 04/99
Vibration in accordance with EN 60068-2-6, 01/00	Frequency: 10 ... 55 Hz, Amplitude: 0.35 mm
Climatic Suitability	DIN IEC 60068-2-3, 12/86
Airgap Creepage	DIN VDE 0110 part 1, 04/97
Ambient Temperature	-10 ... +55 °C
Storage Temperature	-40 ... +85 °C

#### Mechanical Data

Torque Setting on Connection Terminals	0.6 Nm (screws)
Mounting Position	Any
Housing Material	Front: ABS UL 94 V0 Housing: PPO UL 94 V0
Protection	Mounting: IP 54 Housing: IP 40 Terminal Range: IP 20

The units were tested in accordance with the relevant standards current at the time of development.

#### Order References

Type	Order No.
PNOZ po4p	773 635