

Expander Module PNOZ po3.1p



Expander module for the PNOZpower modular safety system in accordance with EN 60204-1 (VDE 0113-1) and IEC 60204-1.

Features

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

Approvals

	PNOZ po3.1p
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Technical Details	PNOZ po3.1p
Electrical Data	
Supply Voltage	via PNOZpower Bus
Power Consumption	Approx. 4 W
Total Current	Max. 40 A
Utilisation category to EN 60947-4-1	AC1: 240 V/8 A/2000 VA DC1: 24 V/8 A/200 W
EN 60947-5-1 (DC13: 6 cycles/min.)	AC15: 230 V/5 A; DC13: 24 V/5 A
Output Contacts	8 safety contacts (N/O),
Contact fuse protection according to EN 60947-5-1	Blow-out fuse: 10 A quick or 6 A slow Safety cut-out: 24 V DC: 6 A, Characteristic B/C
Times	
Switch-on delay	Approx. 50 ms + Switch-on delay of the base unit
Delay-on De-energisation	Approx. 30 ms + Delay-on De-energisation of the base unit
Mechanical Data	
Cable cross section	
1 Core	flexible: 0.20 ... 2.5 mm ² , 24 - 12 AWG
2 cables with the same cross	flexible with crimp connectors without insulating sleeve: 0.25 ... 2,5 mm ² , 24 - 14 AWG flexible without crimp connectors or with TWIN crimp: 0.5 ... 1.5 mm ² , 24 - 14 AWG
Torque setting for connection terminals	0.5 Nm (screws)
Mounting Position	On a top hat rail installed horizontally
Protection Housing	IP30
Dimensions (H x W x D)	94 x 45 x 121 mm
Weight	340 g

Description

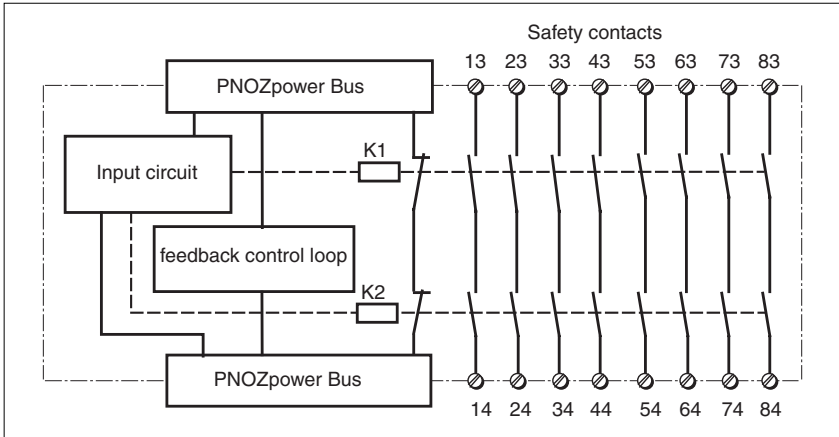
- 45 mm, P-01 housing, DIN-Rail mounting
- Relay outputs, positive-guided:
 - 8 safety contacts (N/O)
- Connection between base unit and expander module via PNOZpower Bus through connector plug on the backside of the unit.
- LEDs for channel 1/2, supply voltage and trouble

Function Description

PNOZ po3.1p supplies 8 safety contacts for the modular safety system PNOZpower. It can only be used in conjunction with a base unit PNOZpower.

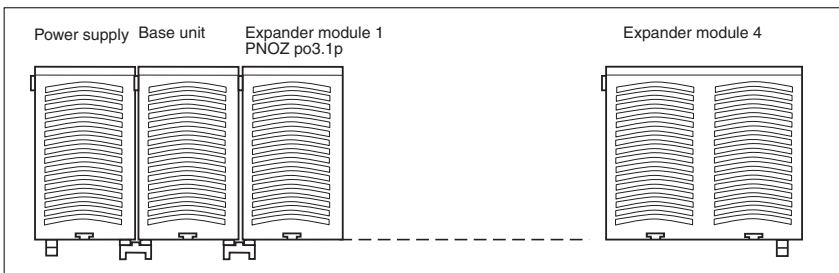
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Internal Wiring Diagram

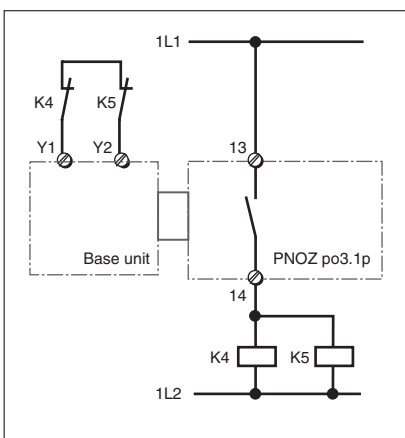


External Wiring

- 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 po3.1p

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 ₂
Continuous Duty	100 %

Environmental Data

EMC	EN 60947-5-1 EN 61000-6-2
Vibration to EN 60068-2-6	Frequency: 10 ... 55 Hz, Amplitude: 0.35 mm
Climatic Suitability	EN 60068-2-78
Airgap Creepage to EN 60947-1	
Pollution degree	2
Rated insulation voltage	250 V
Rated impulse withstand voltage	6,0 kV
Ambient Temperature	-10 ... +55 °C
Storage Temperature	-40 ... +85 °C

Mechanical Data

Torque Setting on Connection Terminals	0.5 Nm (screws)
Mounting Position	On a top hat rail installed horizontally
Housing Material	Front: ABS UL 94 V0 Housing: PPO UL 94 V0
Protection	Mounting: IP54 Housing: IP30 Terminal Range: IP20

The standards current on 2008-06 apply.

Order References

Type	Order No.
PNOZ po3.1p	773 630