

PNOZplus - Expander Unit PNOZ XE1




Input module for the PNOZplus modular safety system in accordance with VDE 0113-1, 11/98, EN 60204-1, 12/97, EN 422, 06/95, EN 201, 06/85 and IEC 204-1, 11/98.

Features

- 2 input circuits per unit
- Triple-channel operation
- LED status indicators

Approvals

	PNOZ XE1
	●

Technical Details	PNOZ XE1
Electrical Data	
Supply Voltage	24 VDC sourced from PNOZ XM1
Tolerance	85 ... 120 %
Power Consumption	Approx. 2 W
Voltage and Current at the Input Circuit, Reset and Feedback Control Loop	24 VDC/8 mA
Input Circuits	2
Environmental Data	
Ambient Temperature	0 ... +60 °C
Storage Temperature	-25 ... +70 °C
Mechanical Data	
Maximum Cross Section of External Conductors	1.5 mm ² Single-core or multi-core with crimp connectors
Dimensions (H x W x D)	94 x 27 x 122 mm
Weight	120 g

Description

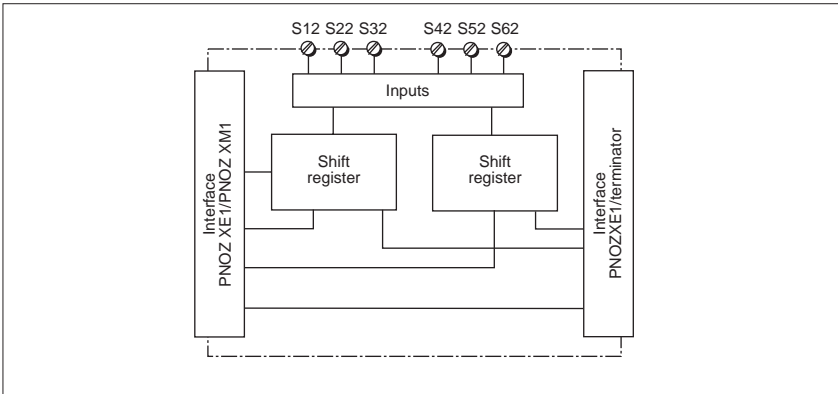
- 22.5 mm, S-95 housing, DIN-Rail mounting
- 2 input circuits for
 - E-STOP button
 - safety gates with up to 3 limit switches
 - light curtains with relay outputs
- Connection to PNOZ XM1 and between PNOZ XE1 via bus connectors on the rear of the unit
- Last module identified via the terminator
- LEDs for status of the input circuits, error status and power.

Operating Modes

- Single-channel operation at the input circuits
- Dual-channel operation at the input circuits
- Triple-channel operation at the input circuits

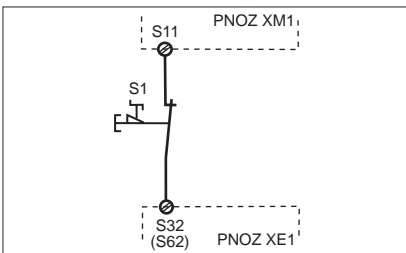
PNOZplus - Expander Unit PNOZ XE1

Internal Wiring Diagram

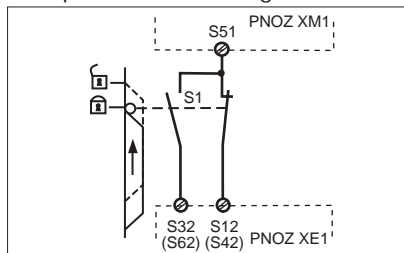


External Wiring

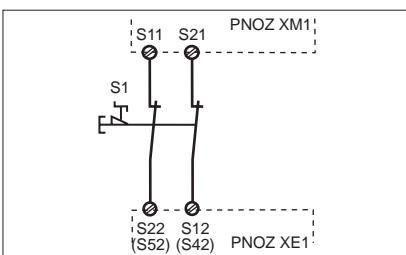
● Example 1
Single-channel E-STOP wiring.



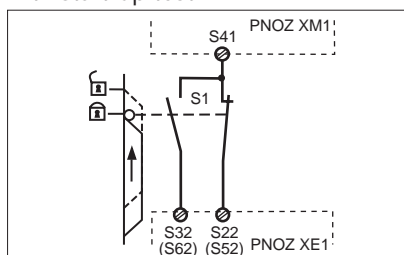
● Example 4
Single-channel safety gate control with position monitoring.



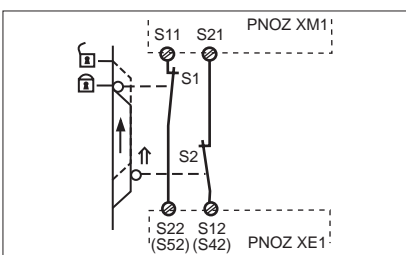
● Example 2
Dual-channel E-STOP wiring.



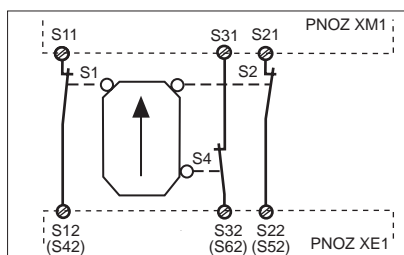
● Example 5
Single-channel safety gate control with start-up test.



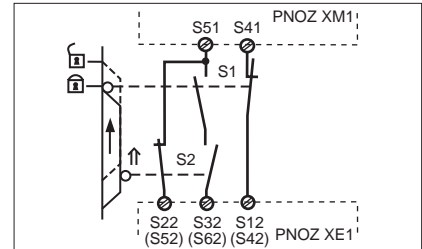
● Example 3
Dual-channel safety gate control.



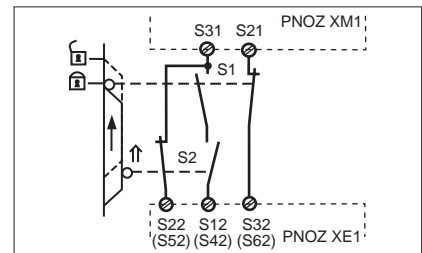
● Example 6
Safety gate with 3 limit switches.



● Example 7
Dual-channel safety gate control with position monitoring.



● Example 8
Dual-channel safety gate control with start-up test.



- Key

S1/2/4: E-STOP or safety gate switch

S3: Reset button

↑ Switch operated

🔓 Gate open

🔒 Gate closed

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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 50081-1, 01/92, EN 50082-2, 03/95
Vibration in accordance with EN 60068-2-6, 04/95	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	Thermoplast Noryl SE 100
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	U _B	Order No.
PNOZ XE1	24 V DC	774 620