

Category 2, EN 954-1 PNOZ X1



Emergency stop relay and safety gate monitor in accordance with VDE 0113, 11/98, EN 60204-1, 12/97 and IEC 204-1, 11/98.

Features

- Single-channel operation
- Supply voltage: 24 VAC/DC
- 3 N/O and 1 N/C
- 22.5 mm width

Approvals

	PNOZ X1
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Technical Details	PNOZ X1
Electrical Data	
Supply Voltage	AC: 24 V DC: 24 V
Tolerance	85 ... 110 %
Power Consumption	Approx. 2 W/2 VA
Voltage and Current at the Input and Reset Circuits and Feedback Control Loop	24 VDC, 20 mA
Switching Capability in accordance with EN 60947-4-1, 10/91	AC1: 240 V/5 A/1200 VA DC1: 24 V/4 A/100 W
EN 60947-5-1, 10/91 (DC13: 6 cycles/min.)	AC15: 230 V/5 A; DC13: 24 V/4A
Output Contacts	3 safety contacts (N/O), 1 auxiliary contact (N/C)
Contact Fuse Protection EN 60947-5-1, 10/91	6 A quick or 4 A slow
Times	
Delay-on Energisation	Max. 150 ms
Delay-on De-energisation	Max. 100 ms
Recovery Time	Max. 100 ms
Max. Supply Interruption before De-energisation	Approx. 10 ms
Mechanical Data	
Maximum Cross Section of External Conductors	2 x 1.5 mm ² Single-core or multi-core with crimp connectors
Dimensions (H x W x D)	87 x 22.5 x 122 mm
Weight	220 g

Description

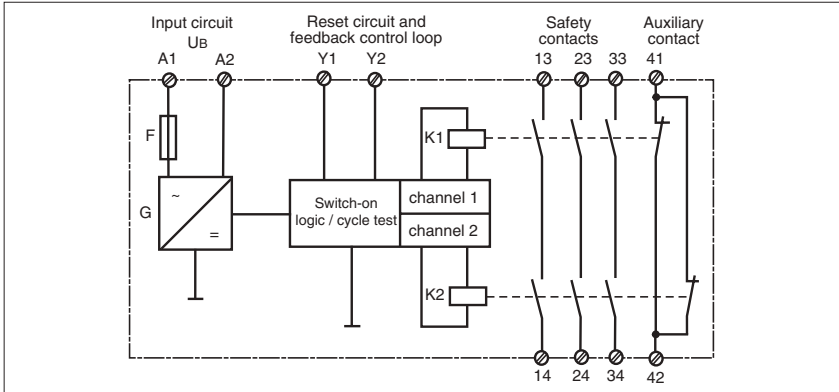
- 22.5 mm, S-95 housing, DIN-Rail mounting
- Positive-guided relay outputs:
 - 3 safety contacts (N/O)
 - 1 auxiliary contact (N/C)
- Connections for
 - E-STOP button
 - reset button
- LEDs for power, channel 1 and channel 2
- Increase in the number of safety contacts available by connecting expander modules.

Operating Modes

- Single-channel operation
- Automatic reset
- Manual reset

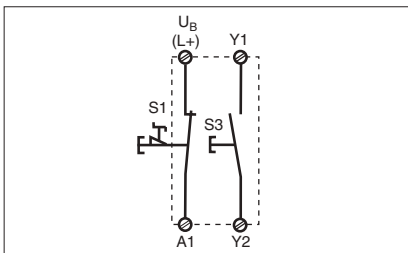
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Internal Wiring Diagram

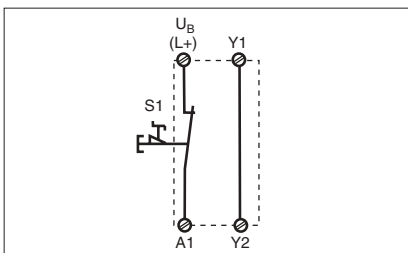


External Wiring

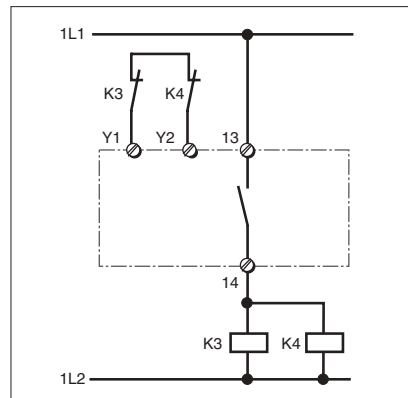
● Example 1
Single-channel E-STOP wiring with manual reset.



● Example 2
Single-channel E-STOP wiring with automatic reset.



● Increase in safety contacts
The number of output contacts can be increased by using expander modules or relays/contactors with positive-guided contacts.



– Key

S1: E-STOP button
S3: Reset button

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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 X1	24 V AC/DC	774 300