Delayed
PZE 5V

Expander module in accordance with VDE 0113-1, 11/98, EN 60204-1, 12/97, and IEC 204-1, 11/98 to increase the number of safety contacts available.

Features

- Delay-on de-energisation can be set via the rotary switch
- Delay-on de-energisation is effective after power failure

Approvals

	PZE 5V
BG-PRÜFZERT	●
UL LISTED	●
c UL LISTED	●

Technical Details	PZE 5V
Electrical Data	
Supply Voltage	AC: 24, 42, 110, 120, 230, 240 V DC: 24 V
Tolerance	85 ... 110 %
Power Consumption	Approx. 3.5 W/5 VA
Residual Ripple DC	20 %
Total Current	max. 40 A
Switching Capabilty in accordance with EN 60947-4-1, 10/91	 AC1: 240 V/8 A/2000 VA 400 V/5 A/2000 VA DC1: 24 V/8 A/200 W
EN 60947-5-1, 10/91 (DC13: 6 cycles/min.)	AC15: 230 V/5 A; DC13: 24 V/7A
Output Contacts	4 safety contacts (N/O), 1 auxiliary contact (N/C)
Contact Fuse Protection (EN 60947-5-1, 10/91)	 10 A quick or 6 A slow
Times	
Delay-on Energisation Time range 0.5 ... 3 s Time Range 2 ... 8 s	 AC: 0.2/0.4/0.8/1.2 s DC: 0.08/0.15/0.3/0.45 s AC: 1/2/3/4 s DC: 0.33/0.66/1/1.3 s
Delay-on De-energisation Time range 0.5 ... 3 s Time range 2 ... 8 s	 0.5/1/2/3 s 2/4/6/8 s
Recovery Time	Delay-on de-energisation + delay-on energisation
Mechanical Data	
Torque Setting on Connection Terminals	1.2 Nm (screws)
Maximum Cross Section of External conductors	2 x 2.5 mm^2 Single-core or multi-core with crimp connectors
Dimensions (H x W x D)	87 x 135 x 110 mm
Weight Range 0.5 ... 3 s Range 2 ... 8 s	 AC: 670 g, DC: 570 g AC: 720 g, DC: 620 g

Description

- 135 mm, P-75 housing, DIN-Rail mounting
- Positive-guided relay outputs:
  - 4 safety contacts (N/O)
  - 1 auxiliary contact (N/C)
- Connection for feedback control loop
- Delay-on energisation and delay-on de-energisation can be programmed
- Single or dual-channel operation
- 2 versions available with different time ranges.

Function Description

PZE 5V is used to increase the number of safety contacts available and the timed delay switching of an E-STOP command for

- E-STOP relays
- Safety gate monitors
- Two-hand relays

All base units must have a feedback control loop.

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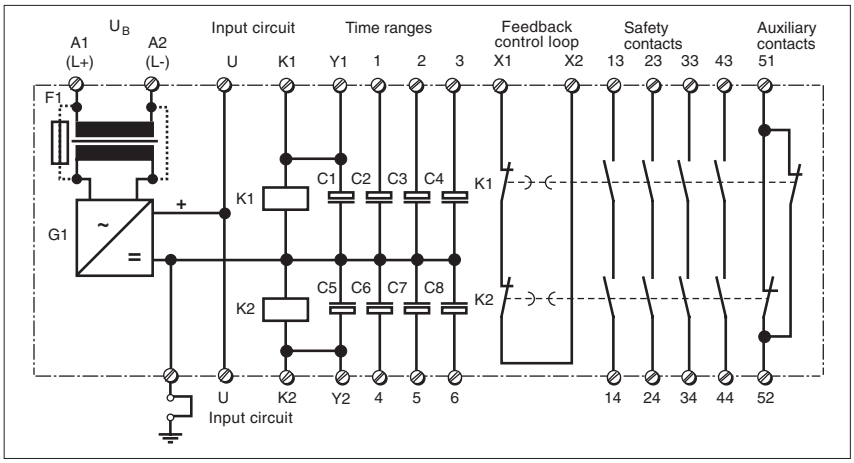
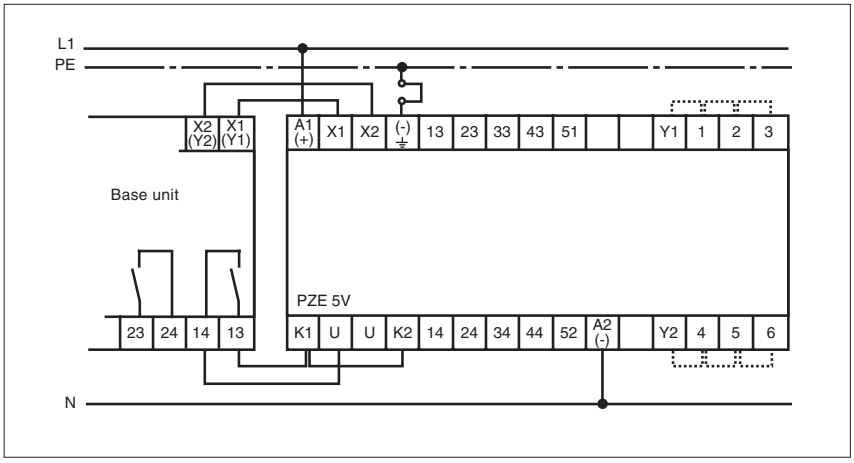
Internal Wiring Diagram

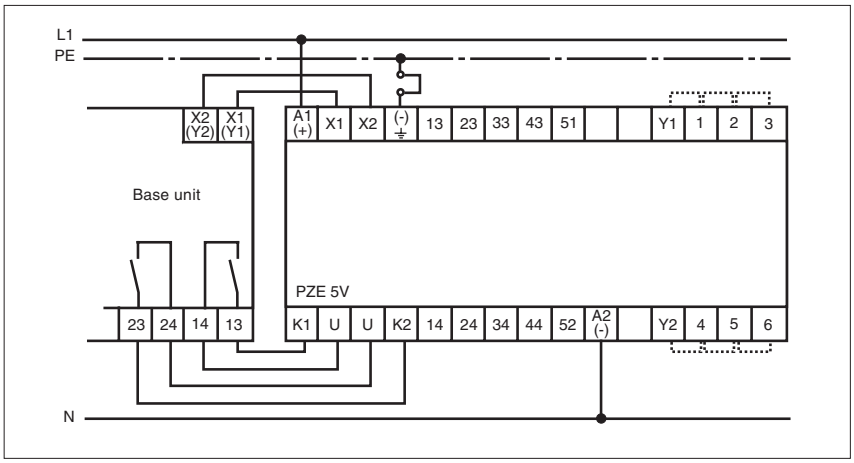


External Wiring

● Example 1
Single-channel operation



● Example 2
Dual-channel operation



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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	t	U_B	Order No.
PZE 5V	3 s	24 V DC	474 965
PZE 5V	3 s	24 V AC	474 950
PZE 5V	3 s	42 V AC	474 951
PZE 5V	3 s	110 V AC	474 954
PZE 5V	3 s	120 V AC	474 956
PZE 5V	3 s	230 V AC	474 958
PZE 5V	3 s	240 V AC	474 959
PZE 5V	8 s	24 V DC	474 985
PZE 5V	8 s	24 V AC	474 970
PZE 5V	8 s	42 V AC	474 971
PZE 5V	8 s	110 V AC	474 974
PZE 5V	8 s	230 V AC	474 978
PZE 5V	8 s	240 V AC	474 979