

EN 574, Type IIIC P2HZ X3



Two-hand relay in accordance with VDE 0113-1, 11/98, EN 60204-1, 12/97 and IEC 204-1, 11/98.

Features

- 22.5 mm width
- Conforms to type IIIC in accordance with EN 574 and category 4 in accordance with EN 954-1

Approvals

| | P2HZ X3 |
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| Technical Details | P2HZ X3 |
|---|---|
| Electrical Data | |
| Supply Voltage | 24 VDC |
| Tolerance | 85 ... 110 % |
| Power Consumption | Approx. 2.5 W |
| Residual Ripple DC | 10 % |
| Voltage and Current at the Input Circuits 1/2 | N/C: 24 VDC, 20 mA N/O: 24 VDC, 10 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/2.5 A; DC13: 24 V/1.5 A |
| Output Contacts | 2 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 De-energisation | N/O: approx. 20 ms, N/C: approx. 30 ms |
| Recovery Time | Min. 250 ms |
| Simultaneity channel 1/2 | < 0.5 s |
| Mechanical Data | |
| Maximum Cross Section of External Conductors | 2 x 1.5 mm ² or 1 x 2.5 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:
 - 2 safety contacts (N/O)
 - 1 auxiliary contact (N/C)
- Increase in the number of safety contacts available by connecting expander modules
- LEDs for power, channel 1 and channel 2.

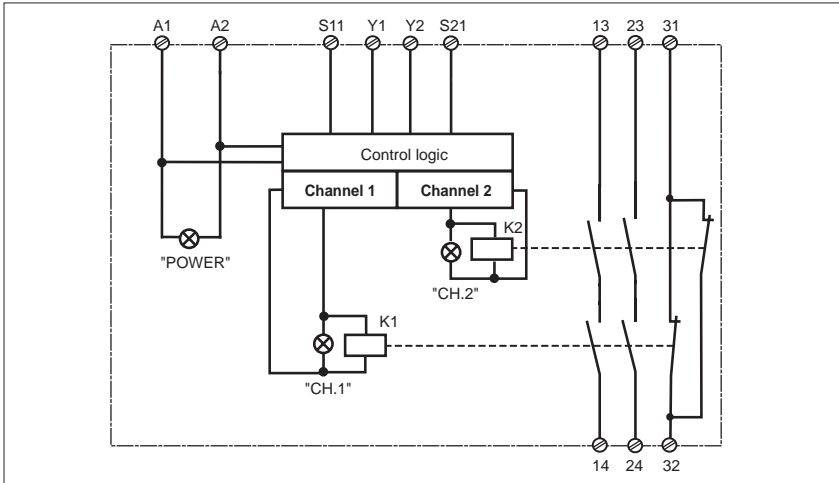
Function Description

The two-hand relay is a safety device to ensure that operators keep their hands away from the danger zone. The relay is suitable for use with mechanical and hydraulic presses, or in safety circuits.

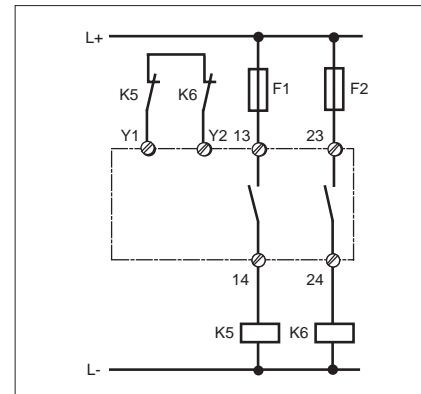
A cycle can only be initiated by pressing the two pushbuttons simultaneously (within 0.5 s). A cycle is interrupted by releasing one or both buttons to stop the output. The output signal can only be reinitiated after both inputs have been released and the pushbuttons are operated again.

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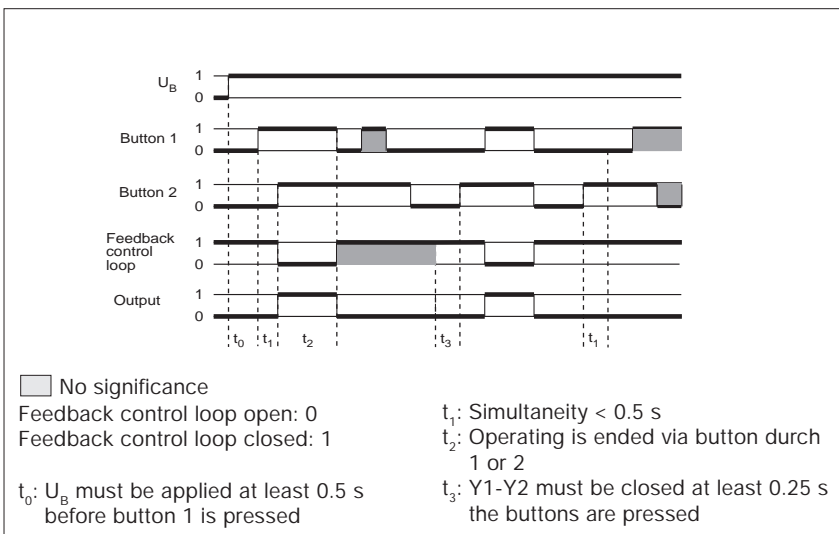
Internal Wiring Diagram



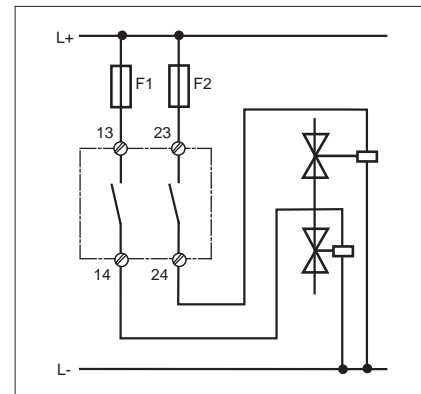
- Increase in safety contacts
The number of output contacts can be increased by using expander modules or relays/contactors with positive-guided contacts.



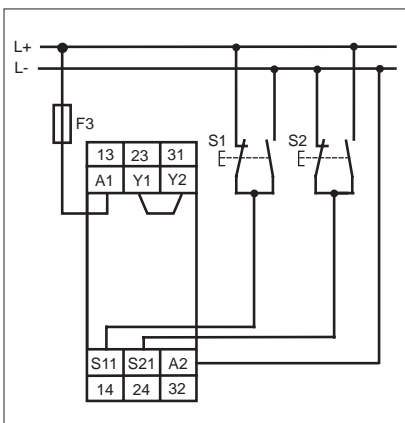
Function Diagram



- Driving a load



Connection Example



- Key

S1/S2: Two-hand pushbuttons

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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

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| 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

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| 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. |
|---------|----------------|-----------|
| P2HZ X3 | 24 V DC | 774 350 |