

Safety relays - PSR-SCP- 24UC/THC4/2X1/1X2 - 2963721

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Safety relay for two-hand control devices according to EN 574 type IIIC up to SIL 3 or Cat. 4, PL e according to EN ISO 13849, synchronous activation monitoring < 0.5 s, 2 N/O contacts, 1 N/C contact, safe isolation, plug-in screw terminal blocks, width: 22.5 mm

Product Features

- For two-hand control devices according to EN 574 Type IIIC
- Up to Cat. 4/PL e according to ISO 13849-1, SILCL 3 according to IEC 62061, SIL 3 according to IEC 61508
- Two-channel control
- Synchronous activation monitoring < 0.5 s
- Automatic activation
- Two enabling and one signaling current path



Key commercial data

| | |
|------------------|---------------|
| package_quantity | 1 |
| GTIN | 4017918818692 |

Technical data

Note:

| | |
|-------------------------|---|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---|

Dimensions

| | |
|--------|----------|
| Width | 22.5 mm |
| Height | 99 mm |
| Depth | 114.5 mm |

Ambient conditions

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|--|------------------|
| Ambient temperature (operation) | -20 °C ... 55 °C |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Max. permissible relative humidity (operation) | 75 % |
| Max. permissible humidity (storage/transport) | 75 % |

Input data

| | |
|---|--------------|
| Nominal input voltage U_N | 24 V AC/DC |
| Input voltage range in reference to U_N | 0.85 ... 1.1 |
| Typical input current at U_N | 125 mA AC |

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Technical data

Input data

| | |
|---|-----------------|
| Typical input current at U_N | 60 mA DC |
| Voltage at input/start and feedback circuit | approx. 24 V DC |
| Typical response time | 50 ms |
| Typical release time | 20 ms |
| Concurrence input 1/2 | < 0.5 s |
| Recovery time | 1 s |

Output data

| | |
|--|----------------------------------|
| Contact type | 2 enabling current paths |
| Contact type | 1 signaling current path |
| Contact material | AgSnO ₂ , + 0.2 μm Au |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 15 V AC/DC |
| Limiting continuous current | 6 A |
| Maximum inrush current | 6 A |
| Inrush current, minimum | 25 mA |
| Interrupting rating (ohmic load) max. | 144 W (24 V DC, τ = 0 ms) |
| Interrupting rating (ohmic load) max. | 288 W (48 V DC, τ = 0 ms) |
| Interrupting rating (ohmic load) max. | 110 W (110 V DC, τ = 0 ms) |
| Interrupting rating (ohmic load) max. | 88 W (220 V DC, τ = 0 ms) |
| Interrupting rating (ohmic load) max. | 1500 VA (250 V AC, τ = 0 ms) |
| Maximum interrupting rating (inductive load) | 42 W (24 V DC, τ = 40 ms) |
| Maximum interrupting rating (inductive load) | 42 W (48 V DC, τ = 40 ms) |
| Maximum interrupting rating (inductive load) | 42 W (110 V DC, τ = 40 ms) |
| Maximum interrupting rating (inductive load) | 42 W (220 V DC, τ = 40 ms) |
| Switching capacity min. | 0.4 W |
| Output fuse | 10 A gL/gG NEOZED (N/O contact) |
| Output fuse | 6 A gL/gG NEOZED (N/C contact) |

General

| | |
|----------------------------------|--|
| Relay type | Electromechanically forcibly guided, dust-proof relay. |
| Mechanical service life | Approx. 10 ⁷ cycles |
| Mounting position | Any |
| Category according to EN 13849-1 | 4 |
| Stop category | 0 |
| Name | Air and creepage distances between the power circuits |
| Standards/regulations | DIN EN 50178/VDE 0160 |
| Rated surge voltage / insulation | 6 kV / Safe isolation, increased insulation |
| Rated insulation voltage | 250 V |
| Pollution degree | 2 |
| Surge voltage category | III |

Connection data

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Technical data

Connection data

| | |
|--|---------------------|
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section stranded min. | 0.2 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 24 |
| Conductor cross section AWG/kcmil max | 12 |
| Stripping length | 7 mm |
| Screw thread | M3 |
| Connection method | Screw connection |

classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27371102 |
| eCl@ss 4.1 | 27371102 |
| eCl@ss 5.0 | 27371901 |
| eCl@ss 5.1 | 27371901 |
| eCl@ss 6.0 | 27371819 |
| eCl@ss 7.0 | 27371819 |
| eCl@ss 8.0 | 27371819 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000196 |
| ETIM 3.0 | EC001449 |
| ETIM 4.0 | EC001449 |
| ETIM 5.0 | EC001449 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211901 |
| UNSPSC 7.0901 | 39121501 |
| UNSPSC 11 | 39121501 |
| UNSPSC 12.01 | 39121501 |
| UNSPSC 13.2 | 39121501 |

approvals

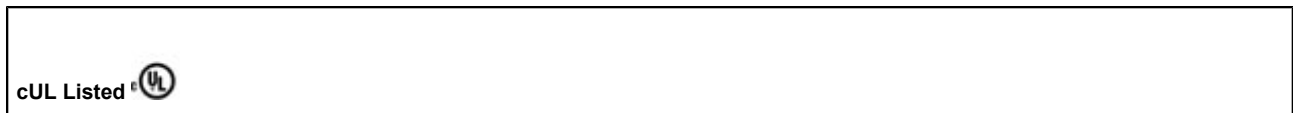
UL Listed / GOST / cUL Listed / Functional Safety / cULus Listed /

Approval details

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|  |
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approvals

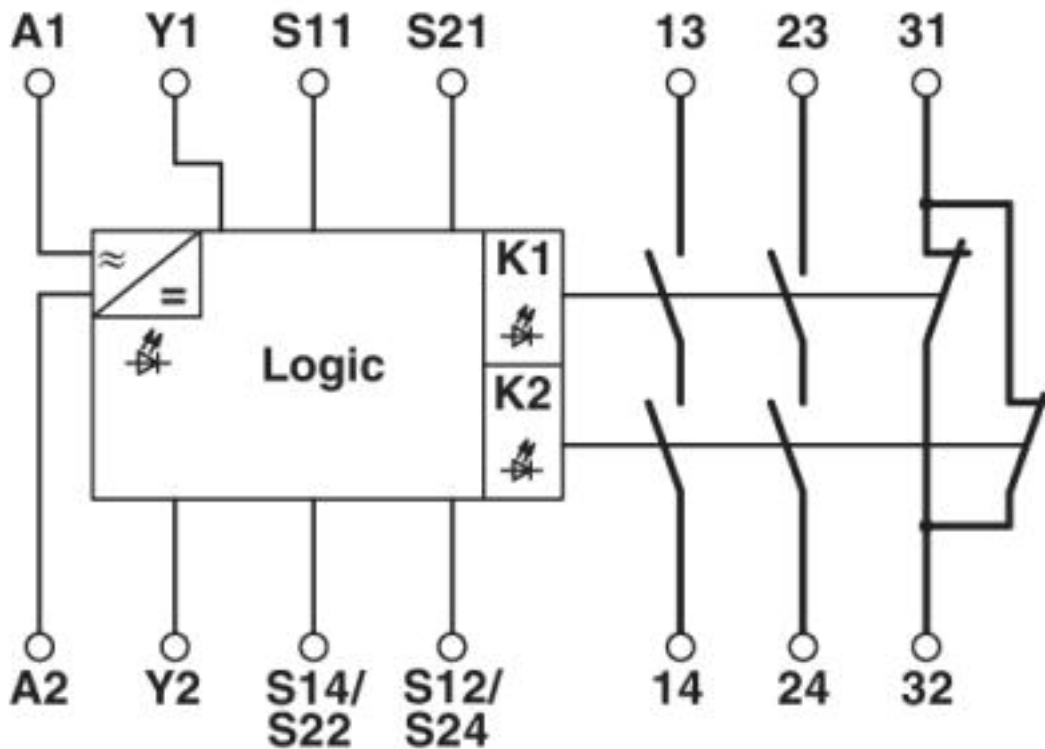


Functional Safety



Drawings

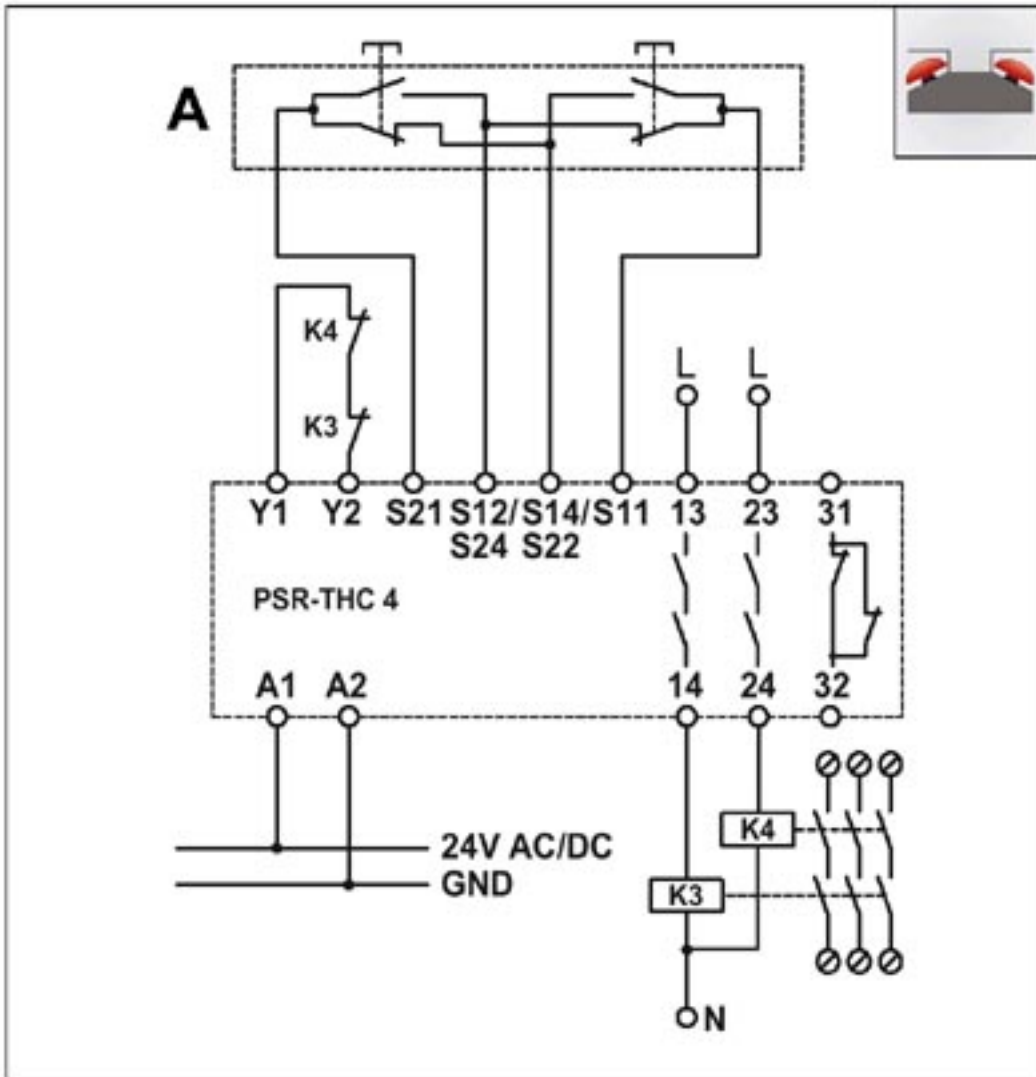
Circuit diagram



1 = logics

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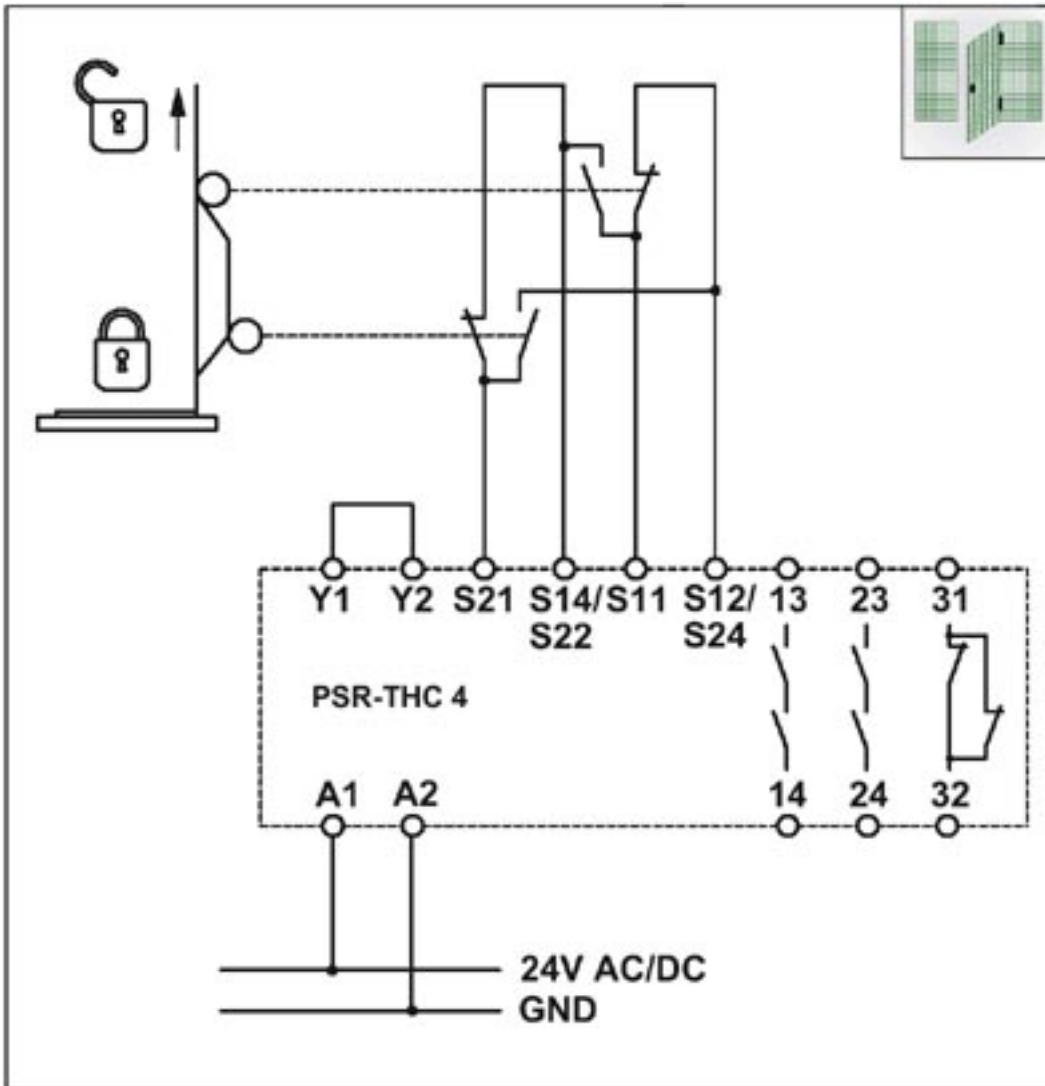
Circuit diagram



Monitoring of controlling, disabling protective devices in acc. with EN 1088 with equality monitoring < 0.5 s, suitable up to safety category 4.

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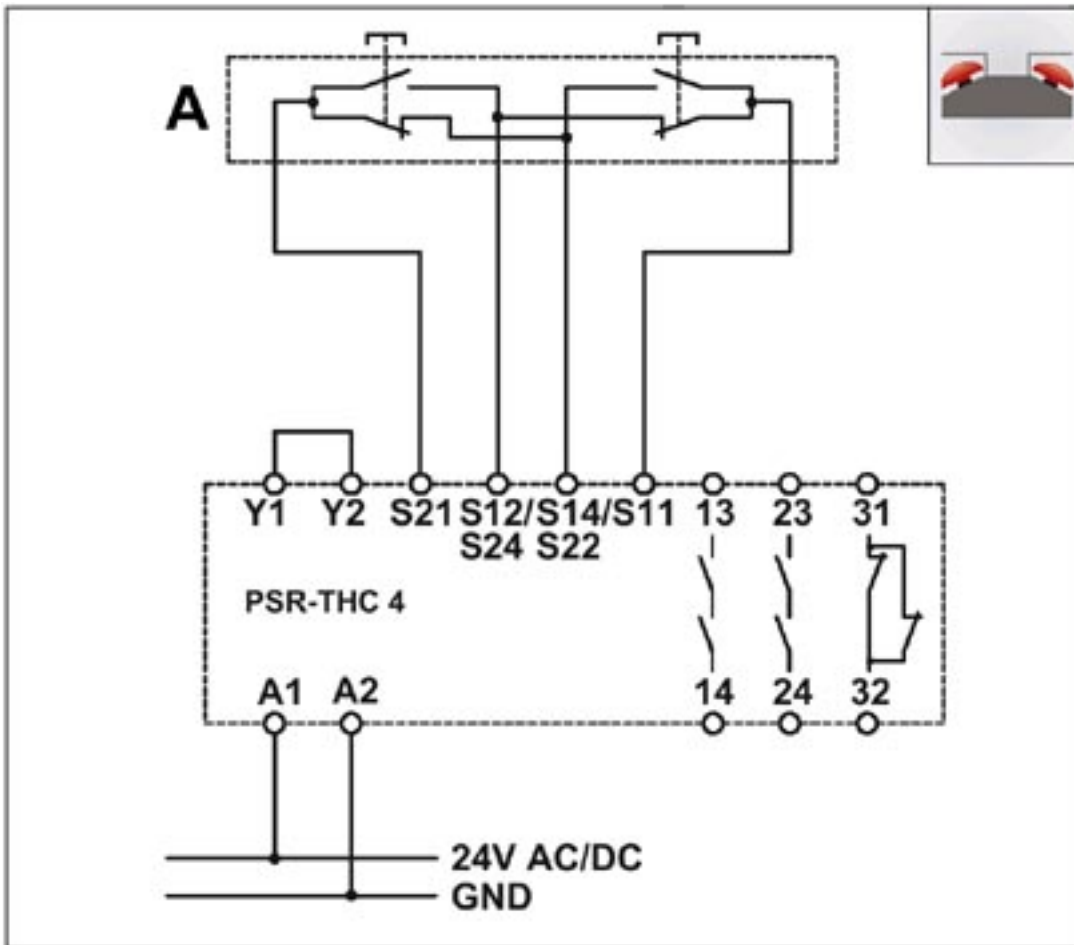
Circuit diagram



A = two-hand control panel|Two-hand control systems with equality monitoring < 0.5 s and monitored contact expansion, corresponds to EN 574 type IIC, suitable up to safety category 4.

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Circuit diagram

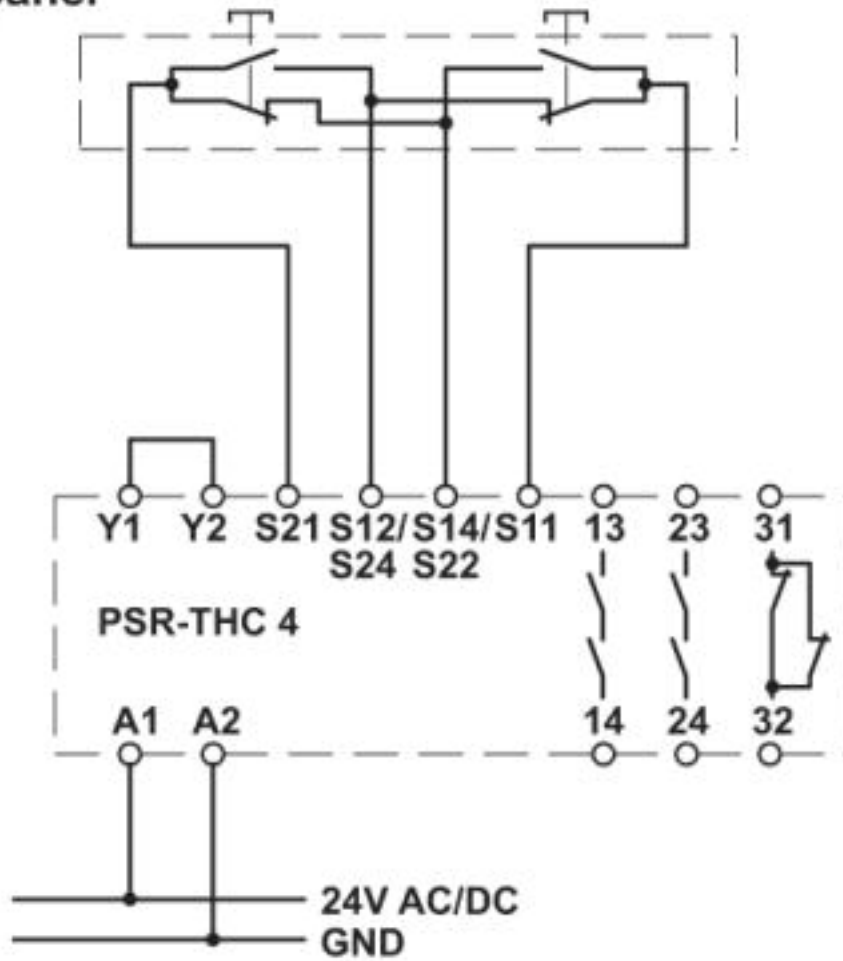


A = two-hand control panel
Two-hand control systems with equality monitoring < 0.5 s, Corresponds to EN 574 type IIIC, suitable up to safety category 4.

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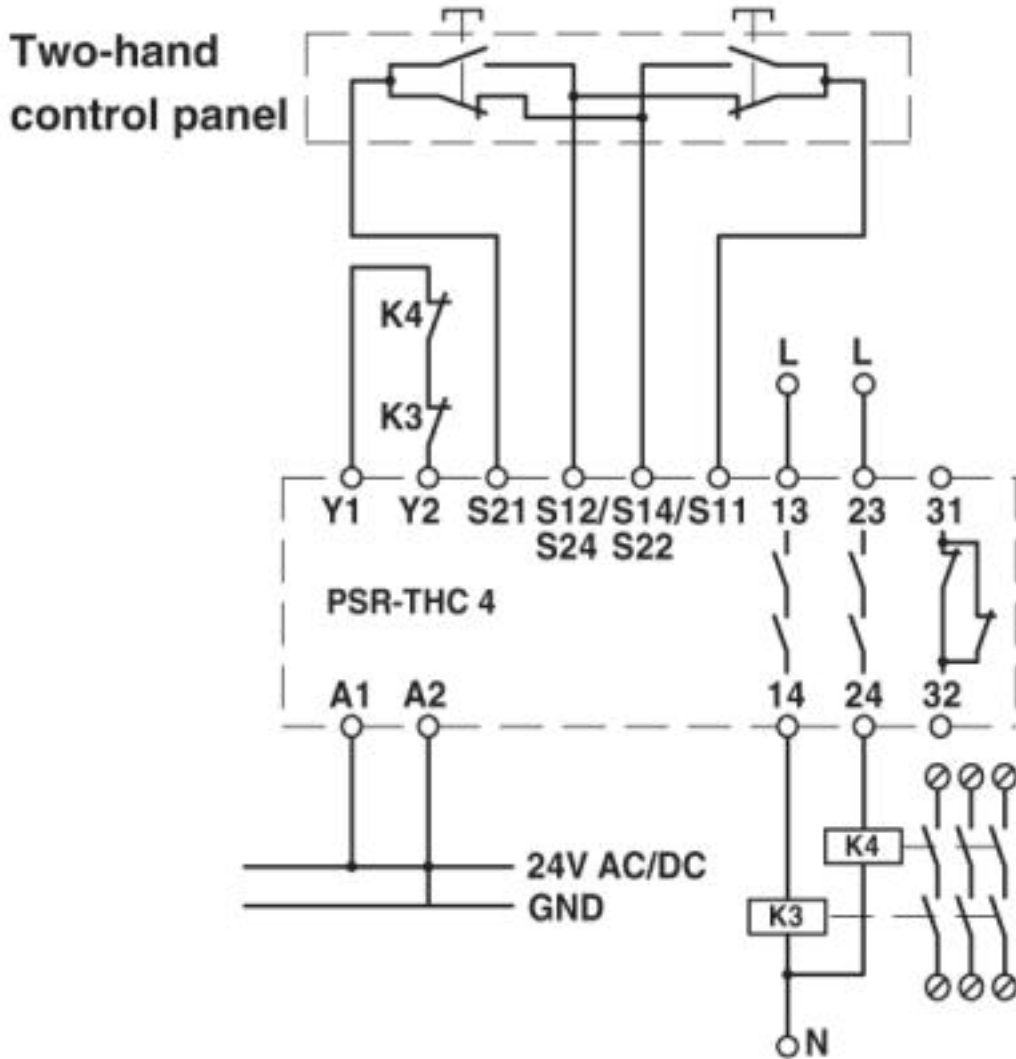
Circuit diagram

Two-hand control panel



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Circuit diagram



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Circuit diagram

