

Safety relays - PSR-SPP- 24UC/THC4/2X1/1X2 - 2963983

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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 spring-cage terminal blocks, width: 22.5 mm

The figure shows a version with a screw connection

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
- Two enabling and one signaling current path
- Automatic activation



Key commercial data

package_quantity	1
GTIN	4017918904807

Technical data

Note:

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

Width	22.5 mm
Height	112 mm
Depth	114.5 mm

Ambient conditions

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
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Input data

Input voltage range in reference to U_N	0.85 ... 1.1
Typical input current at U_N	125 mA AC
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

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Technical data

General

Surge voltage category	III
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Connection data

Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Stripping length	8 mm
Connection method	Spring-cage conn.

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

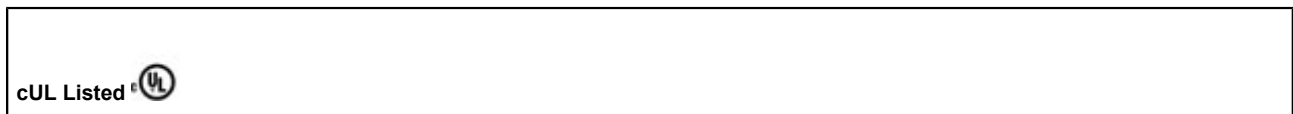
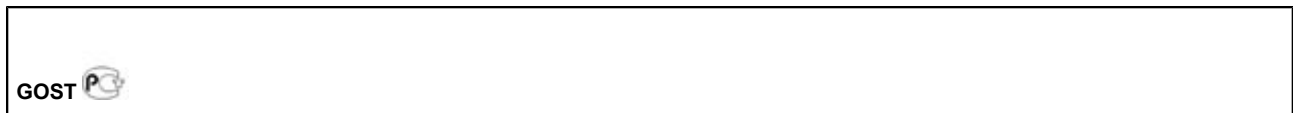
approvals

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

Approval details

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approvals

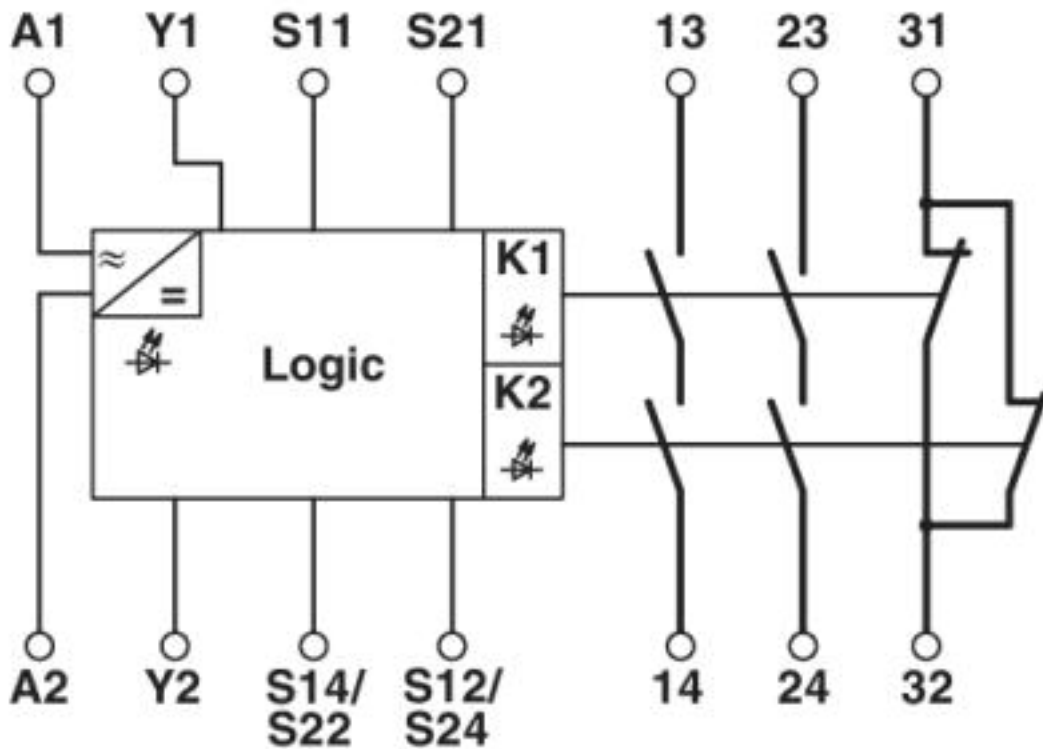


Functional Safety



Drawings

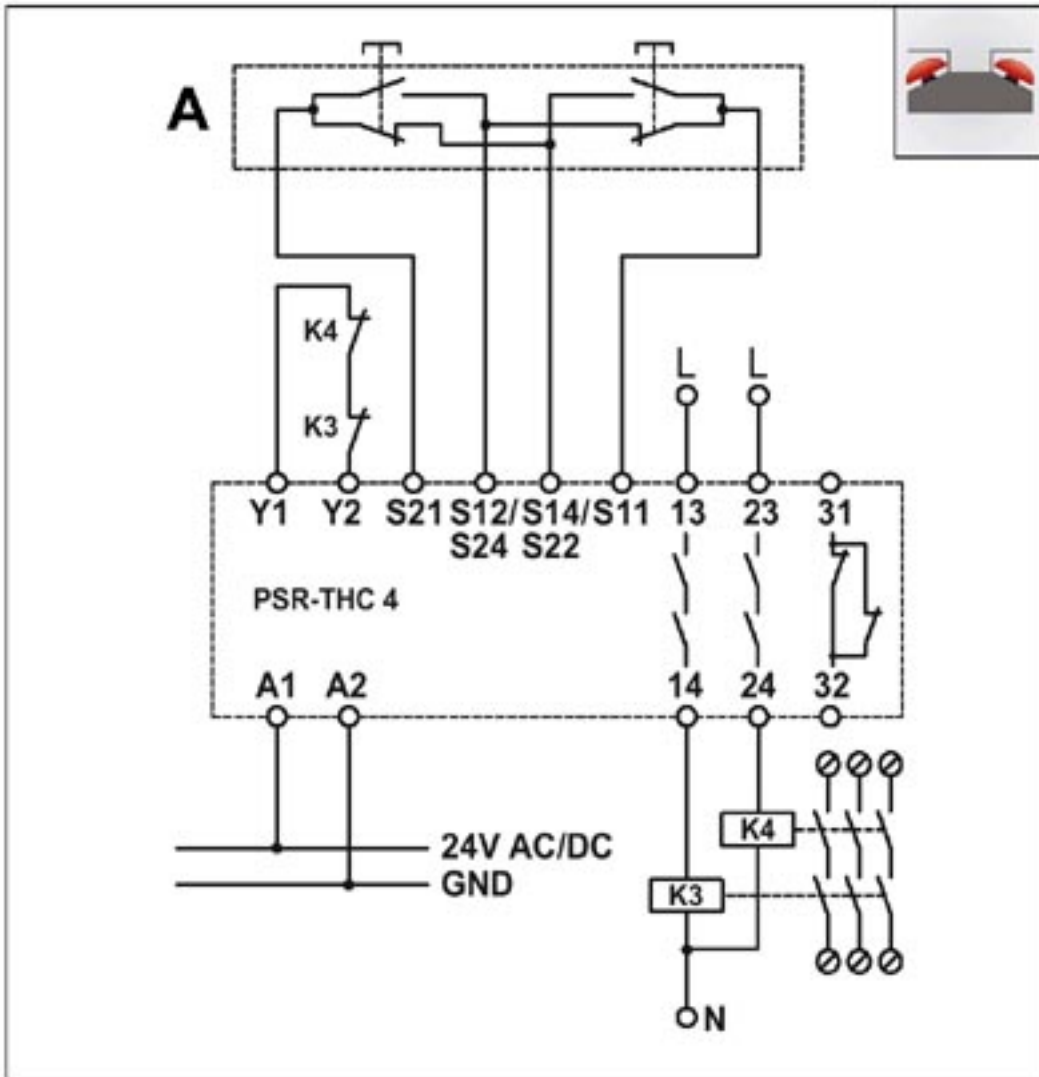
Circuit diagram



1 = logics

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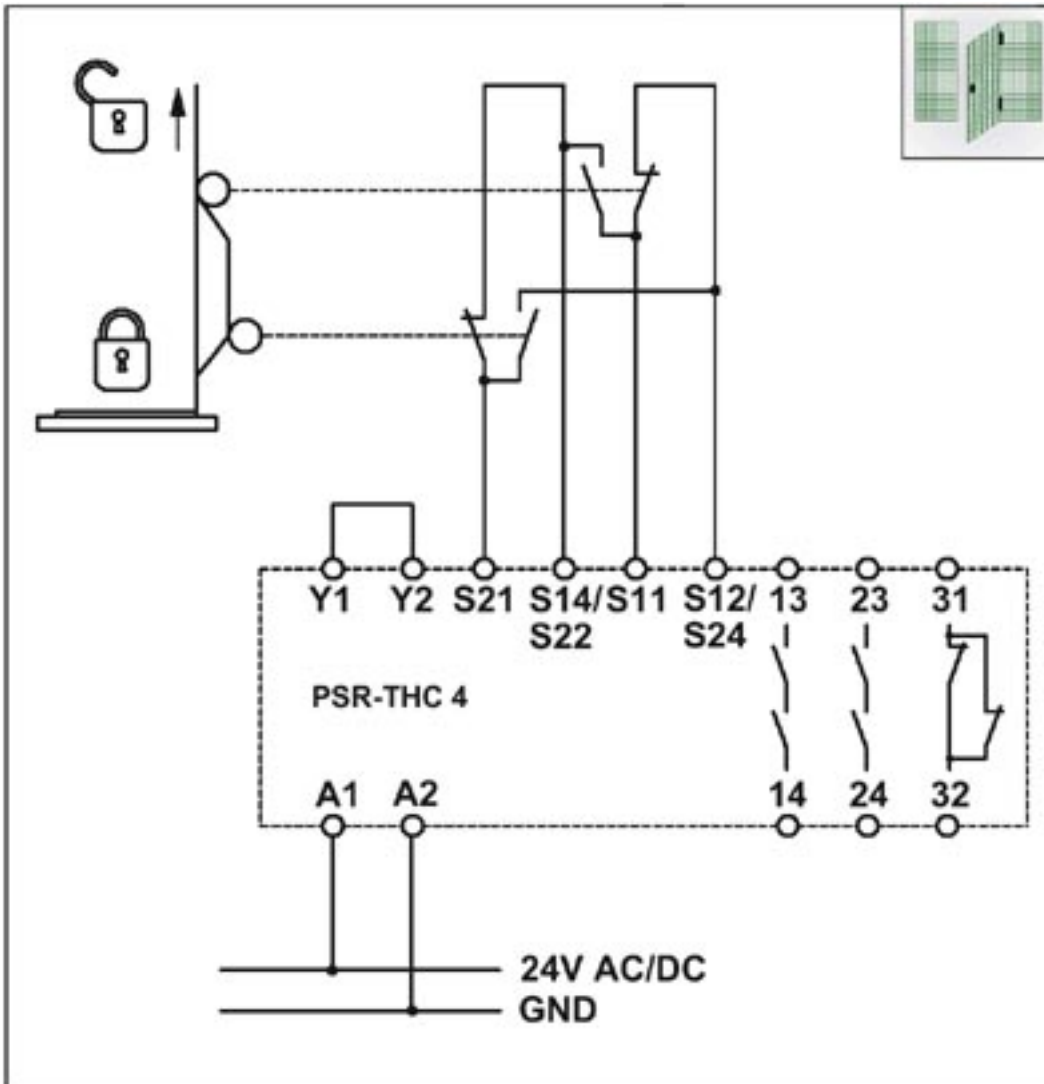
Circuit diagram



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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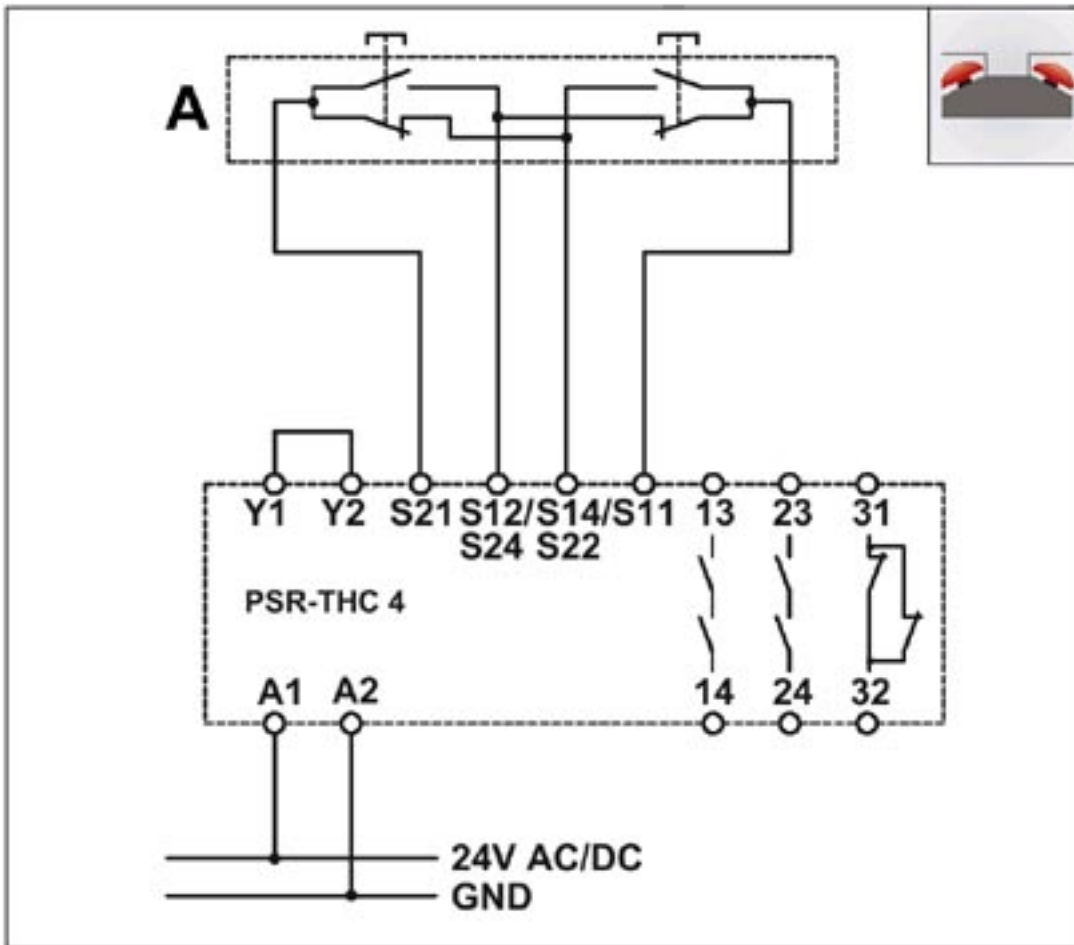
Circuit diagram



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

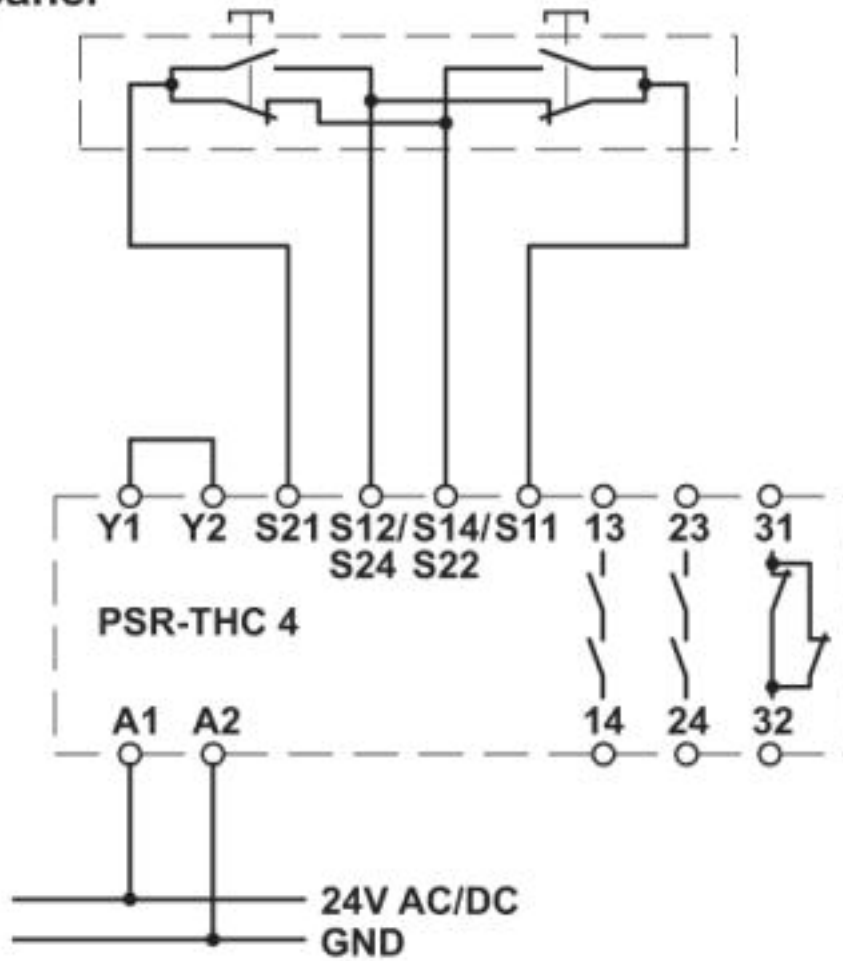


A = two-hand control panel
Two-hand control systems with equality monitoring < 0.5 s, Corresponds to EN 574 type IIIC, suitable up to safety category 4.

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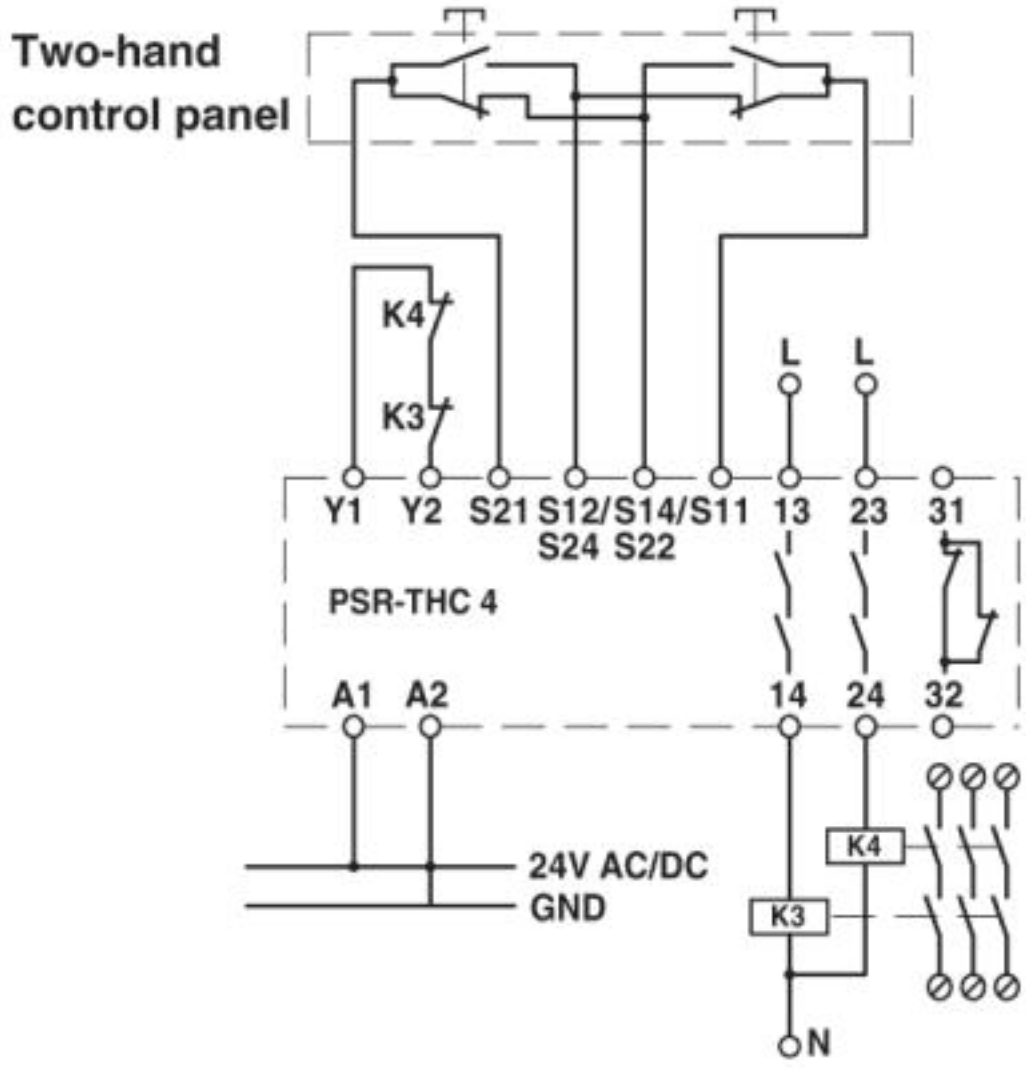
Circuit diagram

Two-hand control panel



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Circuit diagram



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Circuit diagram

