

Safety device - PSR-SPP- 24DC/RSM4/4X1 - 2981541

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Two-channel speed and downtime monitor up to SIL 3 or Cat. 4, PL e according to EN ISO 13849, 4 N/O contacts, suitable for connecting incremental encoders and initiators, plug-in spring-cage connection terminal blocks, width: 45 mm

The figure shows a version with a screw connection

Product Features

- Easy configuration via software (PSR-RSM4)
- Up to SIL 3 according to IEC 61508
- Standard sensors can be connected



Key commercial data

package_quantity	1
GTIN	4017918996833

Technical data

Note:

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

Width	45 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

Input data

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.85 ... 1.1
Typical input current at U_N	100 mA
Voltage at input/start and feedback circuit	24 V DC
Typical response time	15 ms
Typical release time	12 ms

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Input data

Recovery time	1 s
Limit frequency	2 kHz (IN1, IN2)
Limit frequency	400 kHz (RJ45)

Output data

Contact type	4 enabling current paths
Contact material	AgNi10, + 5 µm Au
Maximum switching voltage	250 V AC/DC (when the gold layer is destroyed)
Maximum switching voltage	60 V AC/DC (With gold layer existing)
Minimum switching voltage	100 mV AC/DC
Limiting continuous current	5 A
Limiting continuous current	100 mA (alarm outputs)
Maximum inrush current	6 A
Inrush current, minimum	1 mA
Sq. Total current	$42.25 \text{ A}^2 (I_{TH}^2 = I_1^2 + I_2^2 + I_3^2 + I_4^2)$
Interrupting rating (ohmic load) max.	67 W (24 V DC, $\tau = 0 \text{ ms}$)
Interrupting rating (ohmic load) max.	36 W (48 V DC, $\tau = 0 \text{ ms}$)
Interrupting rating (ohmic load) max.	43 MW (110 V DC, $\tau = 0 \text{ ms}$)
Interrupting rating (ohmic load) max.	68 MW (220 V DC, $\tau = 0 \text{ ms}$)
Switching capacity min.	1 mW
Output fuse	6 A gL

General

Relay type	Electromechanically forcibly guided, dust-proof relay.
Mechanical service life	> 50 x 10 ⁶ cycles
Mounting position	Any
Assembly instructions	In rows with zero spacing
Category according to EN 13849-1	4
Category according to EN 13849-1	4
Stop category	0
Name	Air and creepage distances between the power circuits
Standards/regulations	EN 60664/VDE 0110
Rated surge voltage / insulation	4 kV / Basic isolation, (safe isolation, reinforced insulation and 6 kV between input circuit and enabling current paths.)
Rated insulation voltage	250 V
Pollution degree	2
Surge voltage category	III
Interfaces	Encoder

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

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Connection data

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	EC001449
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

cUL Listed 

Functional Safety

cULus Listed 

accessories

Configuration and diagnostics

PSR-CONF-WIN1.0 - 2981554



Adapter cable

CABLE-15/8/250/RSM/AC120E - 2901030



CABLE-25/8/250/RSM/E-SIMO611D - 2901746



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accessories

CABLE-15/8/250/RSM/INDEL - 2902338



CABLE- 9/8/250/RSM/ELAU - 2902984



CABLE-15/8/100/RSM/BM - 2904108



CABLE-25/8/250/RSM/SIMO611D - 2981583



CABLE-25/8/250/RSM/ARADDEX - 2981596



CABLE-15/8/250/RSM/SIMO611D - 2981606



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accessories

CABLE-15/8/250/RSM/MHD/G - 2981619



CABLE-15/8/250/RSM/SIN800 - 2981622



CABLE-15/8/250/RSM/FM-NC - 2981635



CABLE-15/8/250/RSM/DKC - 2981648



CABLE-15/8/250/RSM/AMK - 2981651



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accessories

CABLE-15/8/250/RSM/SEW-X15 - 2981664



CABLE-15/8/250/RSM/PD - 2981758



CABLE- 9/8/250/RSM/LENZE - 2981826



CABLE-15/8/250/RSM/KINETIX - 2986698



CABLE-15/8/250/RSM/IHDUNI-SP - 2986973



CABLE-15/8/250/RSM/INDRADYN-2 - 2986986



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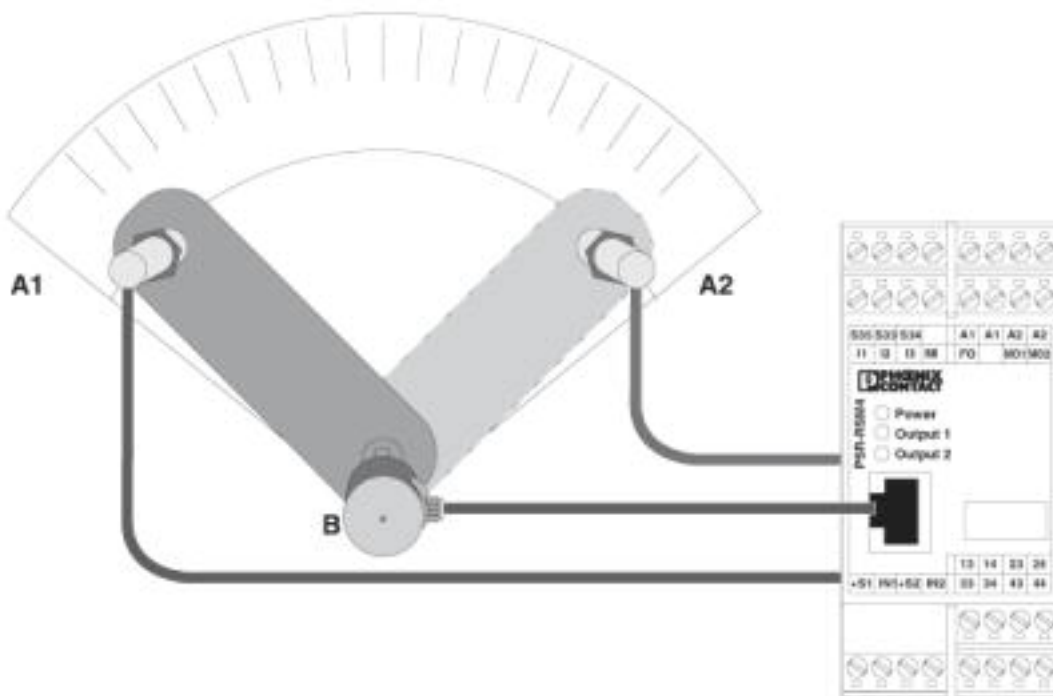
accessories

CABLE-20/8/250/RSM/FANUC - 2986999



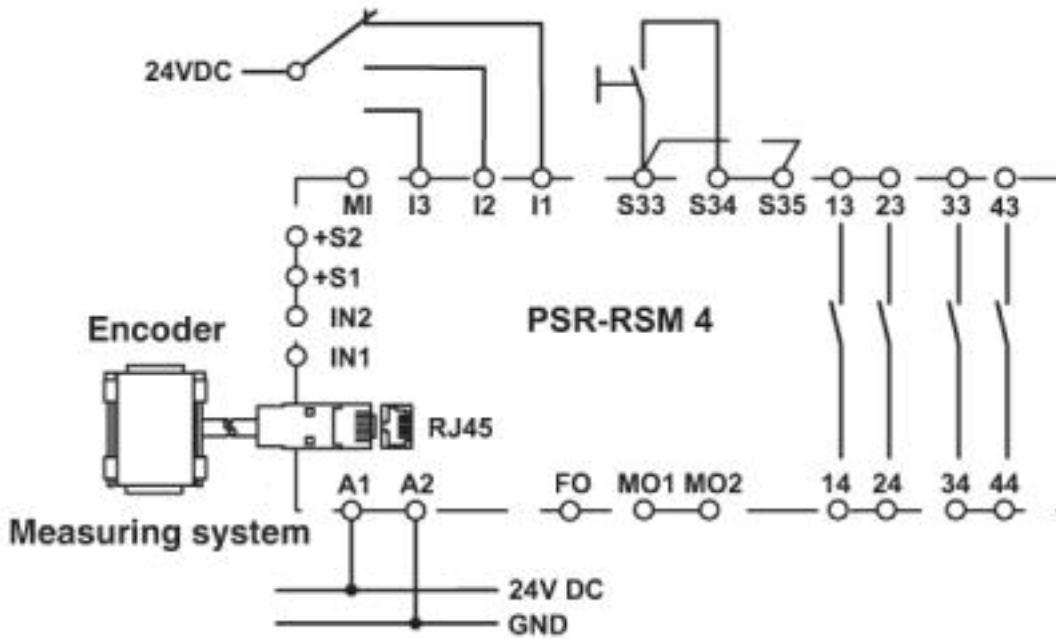
Drawings

Application drawing



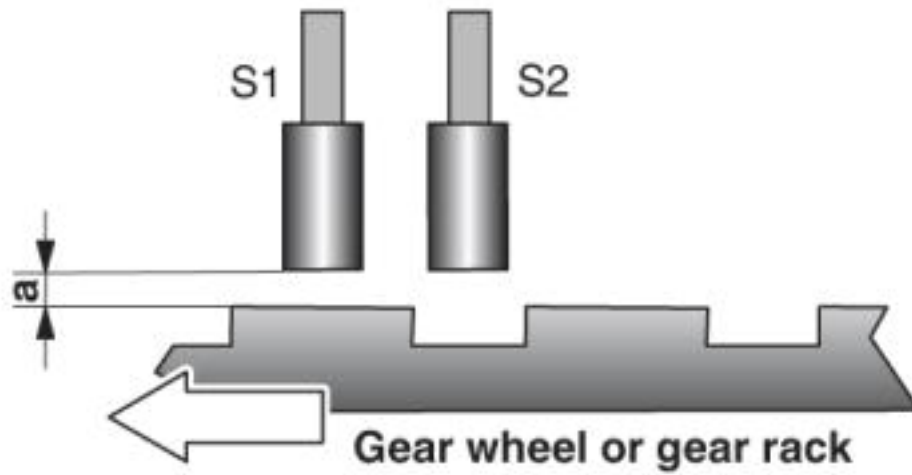
Safety device - PSR-SPP- 24DC/RSM4/4X1 - 2981541

Diagram

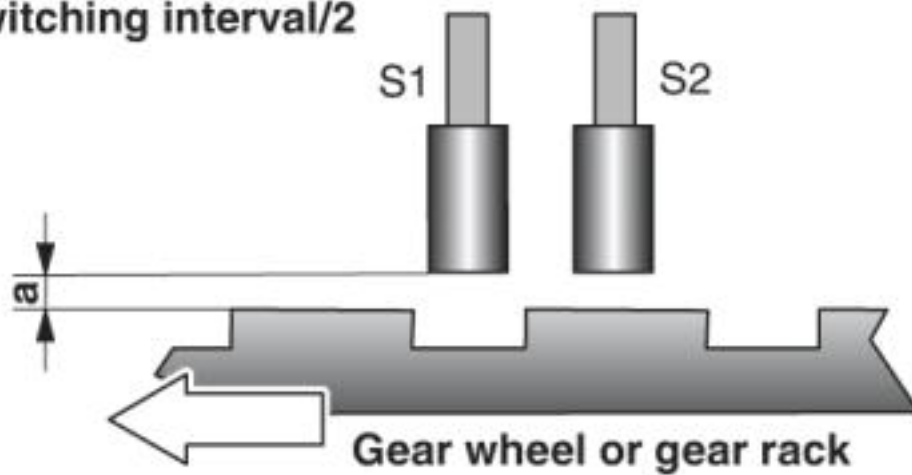


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Diagram

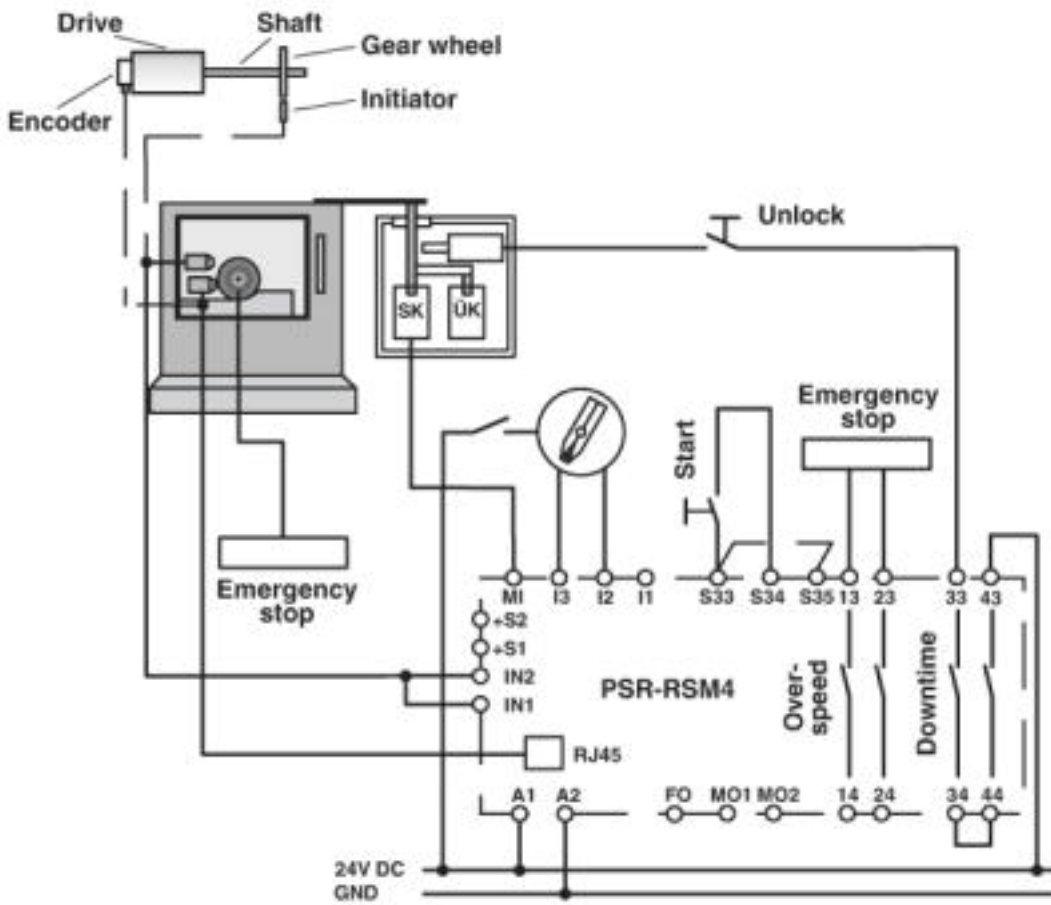


a = Switching interval/2



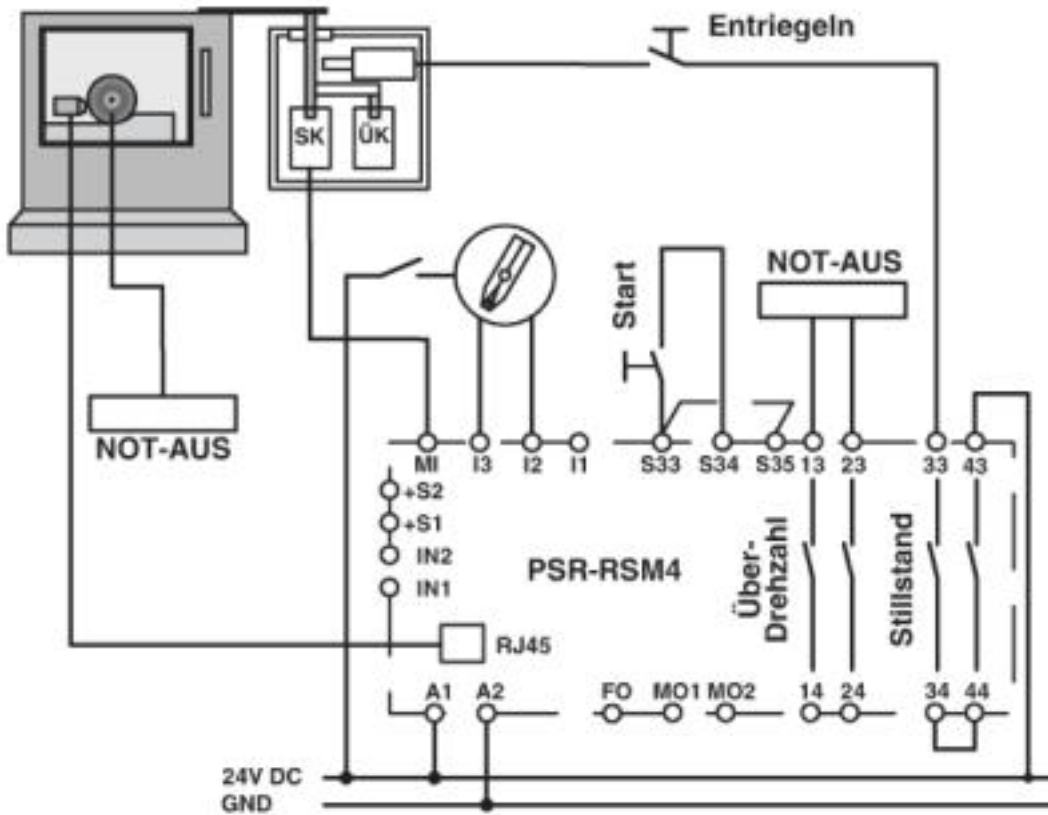
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Diagram



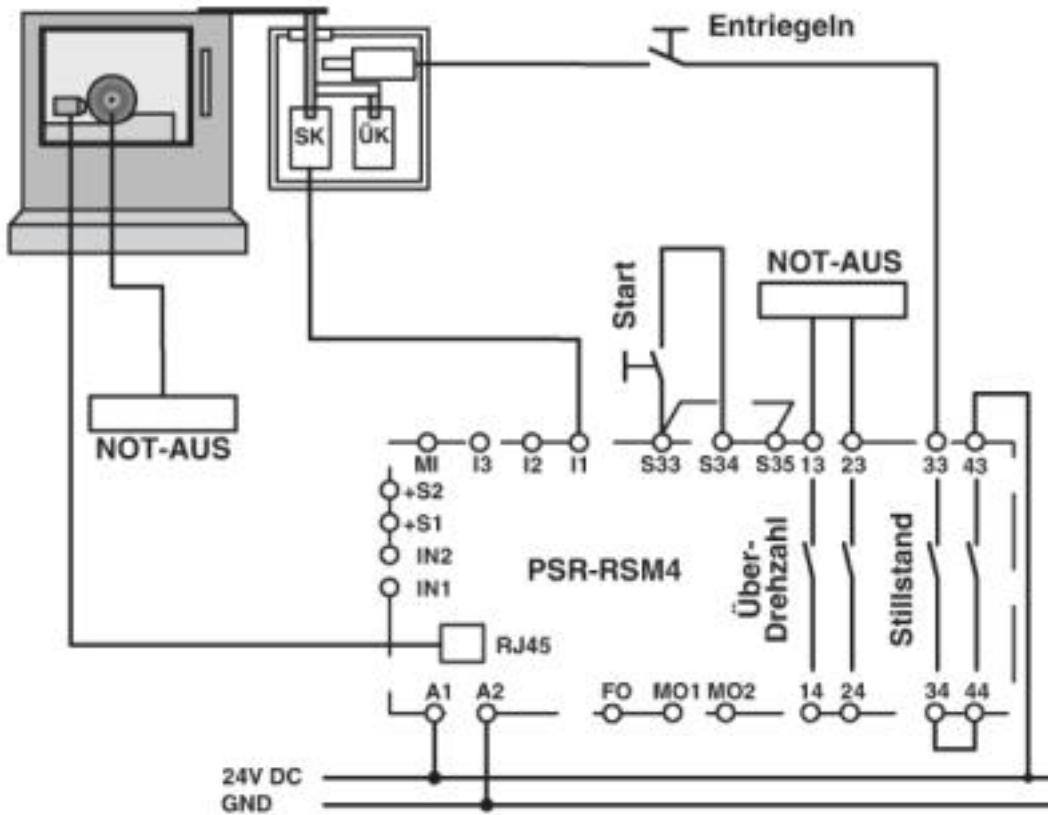
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Diagram



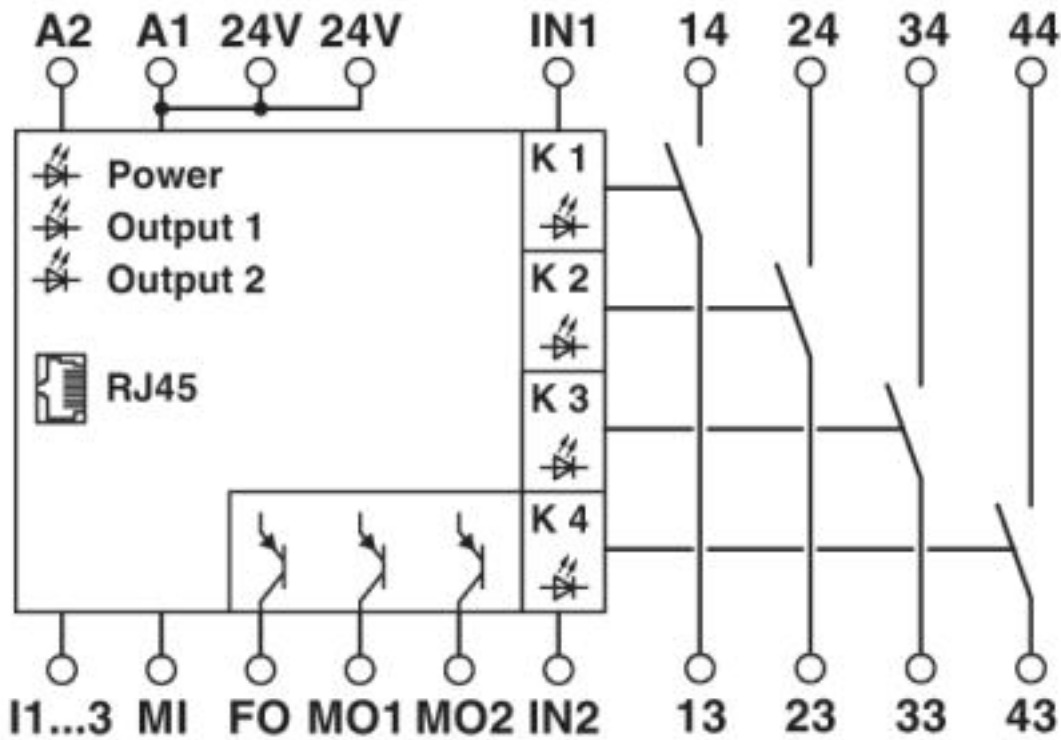
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Diagram



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Circuit diagram



Circuit diagram

