

# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://download.phoenixcontact.com>)



Single-channel or two-channel contact extension, 5 N/O contacts, 1 N/C contact, 1 confirmation current path, together with basic unit up to Cat. 4 PL e according to EN ISO 13849 safe isolation, plug-in terminal blocks, width: 35 mm

## Product Features

- Five enabling, one signaling, and one confirmation current path
- Up to Cat. 4/PL e according to ISO 13849-1, SILCL 3 according to IEC 62061, SIL 3 according to IEC 61508
- Single and two-channel control



## Key commercial data

package_quantity	1
GTIN	4017918591120

## Technical data

### Dimensions

Width	35 mm
Height	99 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 AC/DC
Input voltage range in reference to $U_N$	0.8 ... 1.1
Typical input current at $U_N$	47 mA (per channel)
Typical response time	20 ms
Typical release time	20 ms
Concurrence input 1/2	Infinite
Status display	Green LED

### Output data

Contact type	5 enabling current paths
Contact type	1 signaling current path

# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

## Technical data

### Output data

<b>Contact type</b>	1 confirmation current path
<b>Contact material</b>	AgSnO <sub>2</sub> , + 0.2 μm Au
<b>Minimum switching voltage</b>	15 V AC/DC
<b>Maximum switching voltage</b>	250 V AC/DC
<b>Limiting continuous current</b>	6 A (N/O contact)
<b>Limiting continuous current</b>	3 A (N/C contact 11/12)
<b>Inrush current, minimum</b>	25 mA
<b>Maximum inrush current</b>	6 A
<b>Maximum inrush current</b>	3 A (N/C contact 11/12)
<b>Sq. Total current</b>	$72 A^2 (I_{TH}^2 = I_1^2 + I_2^2 + \dots + I_5^2)$
<b>Interrupting rating (ohmic load) max.</b>	144 W (24 V DC, τ = 0 ms, N/C contact 11/12: 72 W)
<b>Interrupting rating (ohmic load) max.</b>	288 W (48 V DC, τ = 0 ms, N/C contact 11/12: 144 W)
<b>Interrupting rating (ohmic load) max.</b>	110 W (110 V DC, τ = 0 ms)
<b>Interrupting rating (ohmic load) max.</b>	88 W (220 V DC, τ = 0 ms)
<b>Interrupting rating (ohmic load) max.</b>	1500 VA (250 V AC, τ = 0 ms, N/C contact 11/12: 750 VA)
<b>Maximum interrupting rating (inductive load)</b>	42 W (24 V DC, τ = 40 ms)
<b>Maximum interrupting rating (inductive load)</b>	42 W (48 V DC, τ = 40 ms)
<b>Maximum interrupting rating (inductive load)</b>	42 W (110 V DC, τ = 40 ms)
<b>Maximum interrupting rating (inductive load)</b>	42 W (220 V DC, τ = 40 ms)
<b>Switching capacity min.</b>	0.4 W
<b>Output fuse</b>	6 A fast blow
<b>Output fuse</b>	C6 (24 V AC/DC) automatic device

### General

<b>Relay type</b>	Electromechanically forcibly guided, dust-proof relay.
<b>Mechanical service life</b>	Approx. 10 <sup>7</sup> cycles
<b>Mounting type</b>	DIN rail mounting
<b>Degree of protection</b>	IP20
<b>Min. degree of protection of inst. location</b>	IP54
<b>Mounting position</b>	any
<b>Category according to EN 13849-1</b>	4
<b>Stop category</b>	0
<b>Designation</b>	Air and creepage distances between the power circuits
<b>Standards/regulations</b>	DIN EN 50178/VDE 0160
<b>Rated surge voltage / insulation</b>	4 kV / Basic isolation, (safe isolation, reinforced insulation and 6 kV between input circuit and enabling current paths(43/44, 53/54, 63/64, 71/72) and between 43/44, 53/54, 63/64, 71/72 themselves.)
<b>Rated insulation voltage</b>	250 V
<b>Pollution degree</b>	2
<b>Surge voltage category</b>	III

### Connection data

# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

## Technical data

### Connection data

Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
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

### Safety-related characteristic data

Stop category	0
Designation	IEC 61508 - High demand
Safety Integrity Level (SIL)	3
SFF <sub>Single-channel</sub>	100 %
SFF <sub>Two-channel</sub>	99.8 %
Mean time to a hazardous failure (MTTF <sub>d</sub> )	1261219 Years
Probability of a hazardous failure per hour (PFH <sub>b</sub> )	9.04 x 10 <sup>-11</sup>
Diagnostic coverage (DC)	99 %
Proof test interval	240 Months
Note	The details apply assuming the following calculation basis: dop: 365.25 days (assumption)hop: 24 hours (assumption)tcycle: 3600 seconds (assumption)B10d for AC-15 6A: 230 000 (manufacturer's value)Data only applies if the safety function is demanded at least once a year. Only applies if signal contact is left in position!
Designation	IEC 61508 - Low demand
Safety Integrity Level (SIL)	3
SFF <sub>Single-channel</sub>	100 %
SFF <sub>Two-channel</sub>	89.77 %
Mean time to a hazardous failure (MTTF <sub>d</sub> )	32186 Years
Probability of a hazardous failure on demand (PFD <sub>AVG</sub> )	1,46 x 10 <sup>-4</sup>
Diagnostic coverage (DC)	0 %
Proof test interval	110 Months
Designation	EN ISO 13849
Performance level (PL)	e
Category	4
Diagnostic coverage (DC <sub>avg</sub> )	99 %
CCF	Passed
T <sub>10d</sub>	26 Years
Note	The details apply assuming the following calculation basis: dop: 365.25 days (assumption)hop: 24 hours (assumption)tcycle: 3600 seconds (assumption)B10d for AC-15 6A: 230 000 (manufacturer's value)Data only applies if the safety function is demanded at least once a year. Only applies if signal contact is left in position!

# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

## Technical data

### Safety-related characteristic data

<b>Designation</b>	EN 62061
<b>Safety Integrity Level Claim Limit (SIL CL)</b>	3
<b>PFH<sub>b</sub></b>	9.04 x 10 <sup>-11</sup>
<b>Note</b>	The details apply assuming the following calculation basis: dop: 365.25 days (assumption)hop: 24 hours (assumption)tcycle: 3600 seconds (assumption)B10d for AC-15 6A: 230 000 (manufacturer's value)Data only applies if the safety function is demanded at least once a year. Only applies if signal contact is left in position!

## classifications

### eCl@ss

<b>eCl@ss 4.0</b>	27371102
<b>eCl@ss 4.1</b>	27371102
<b>eCl@ss 5.0</b>	27371901
<b>eCl@ss 5.1</b>	27371901
<b>eCl@ss 6.0</b>	27371819
<b>eCl@ss 7.0</b>	27371819
<b>eCl@ss 8.0</b>	27371819

### ETIM

<b>ETIM 2.0</b>	EC000196
<b>ETIM 3.0</b>	EC001449
<b>ETIM 4.0</b>	EC001449
<b>ETIM 5.0</b>	EC001449


### UNSPSC

<b>UNSPSC 6.01</b>	30211901
<b>UNSPSC 7.0901</b>	39121501
<b>UNSPSC 11</b>	39121501
<b>UNSPSC 12.01</b>	39121501
<b>UNSPSC 13.2</b>	39121501

## approvals

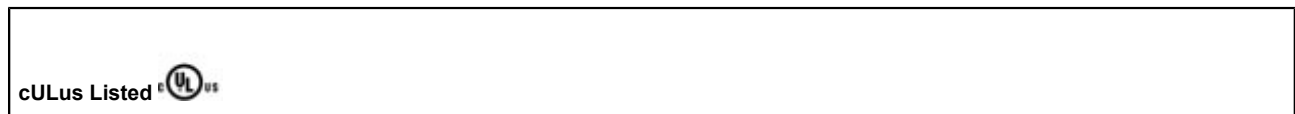
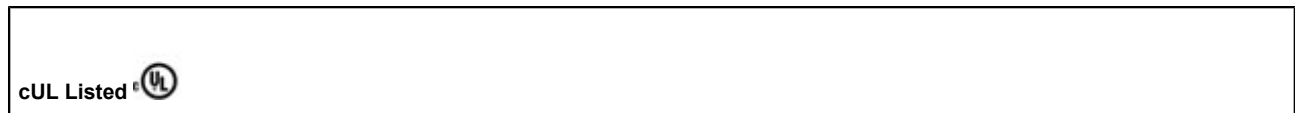
UL Listed / GOST / cUL Listed / cULus Listed / Functional Safety /

### Approval details


---

# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

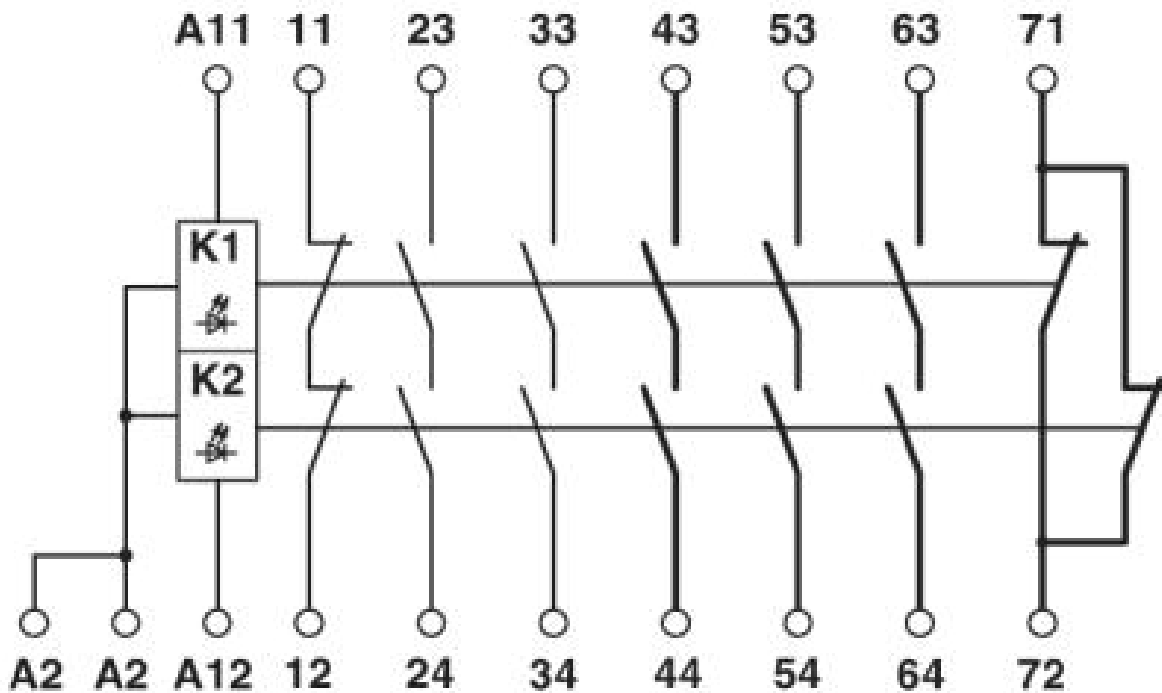
approvals



Functional Safety

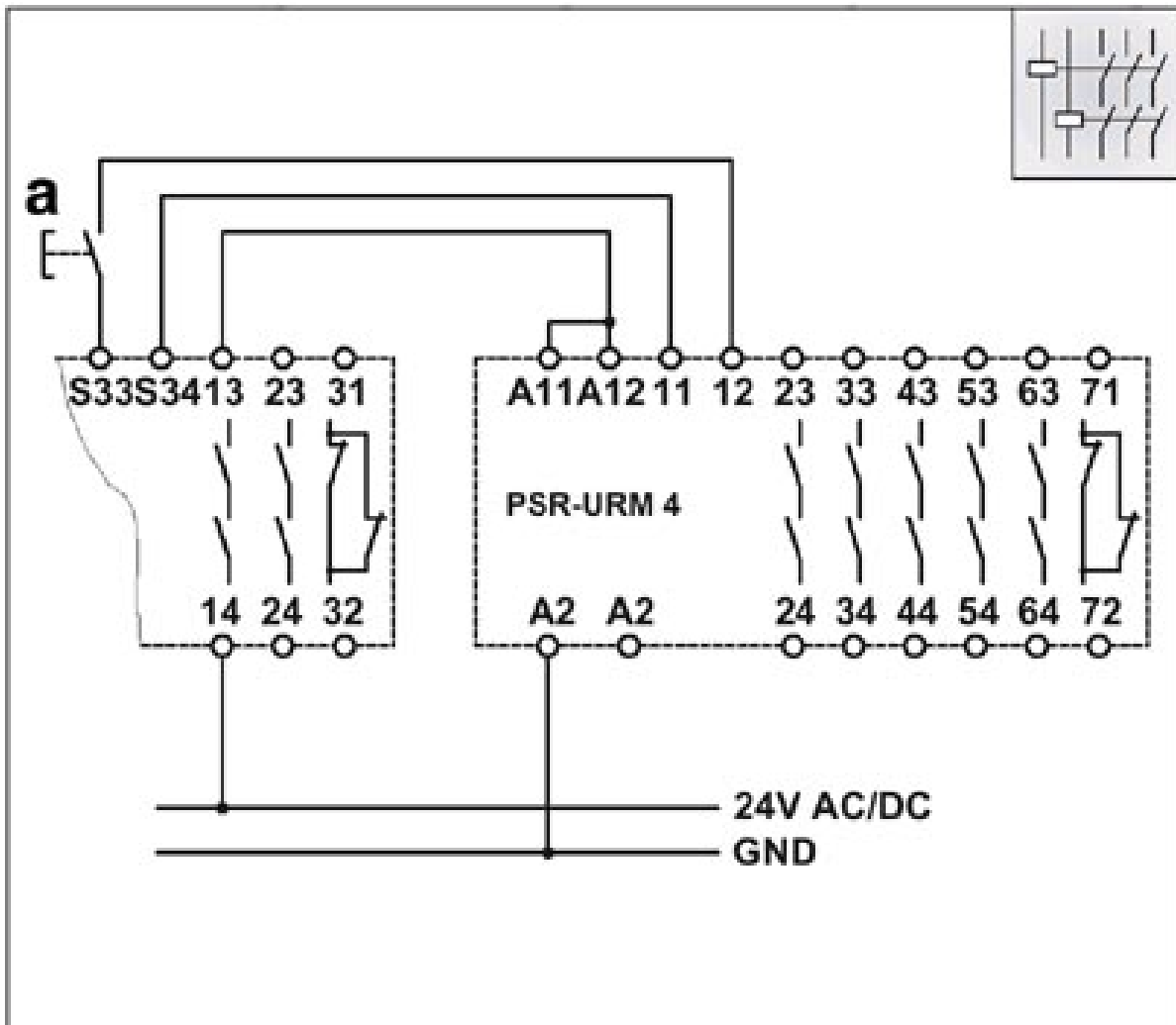
## Drawings

Circuit diagram



# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

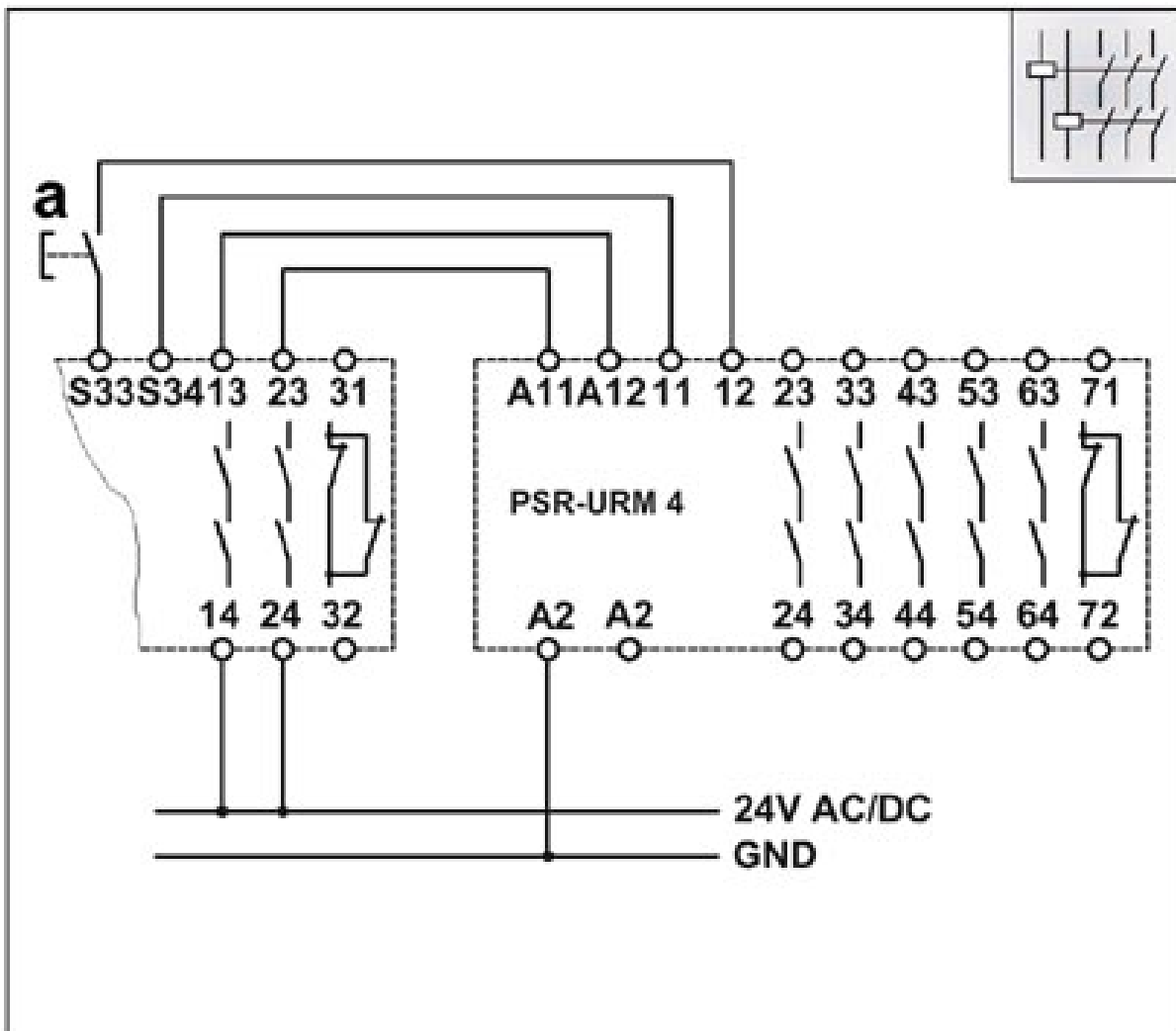
Circuit diagram



a = RESET One-channel connection with checkback path 11/12 integrated in the basic device, suitable up to safety category 4.

# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

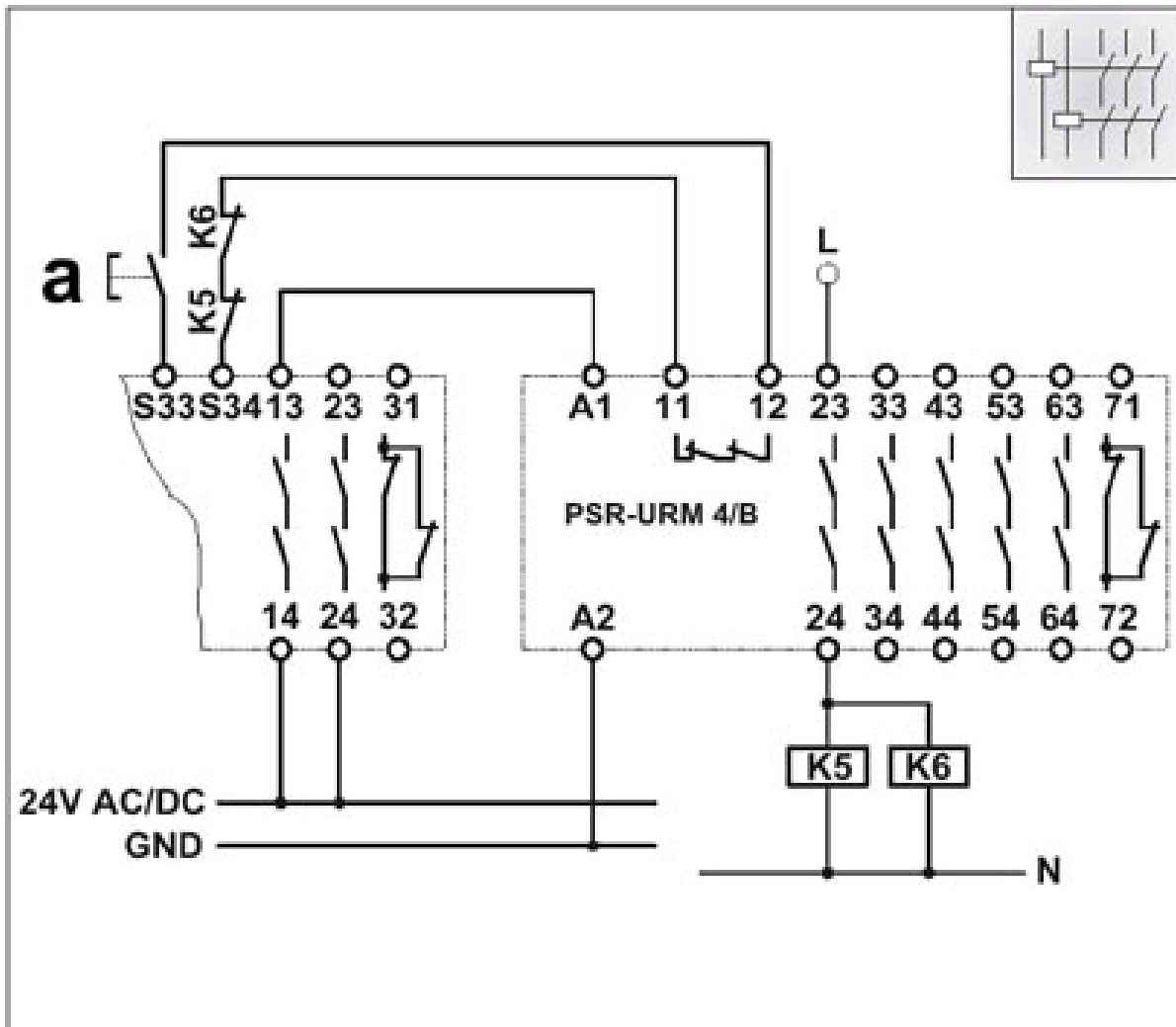
Circuit diagram



a = RESETtwo-channel connection with checkback path 11/12 integrated in the basic device, suitable up to safety category 4.

# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

Circuit diagram

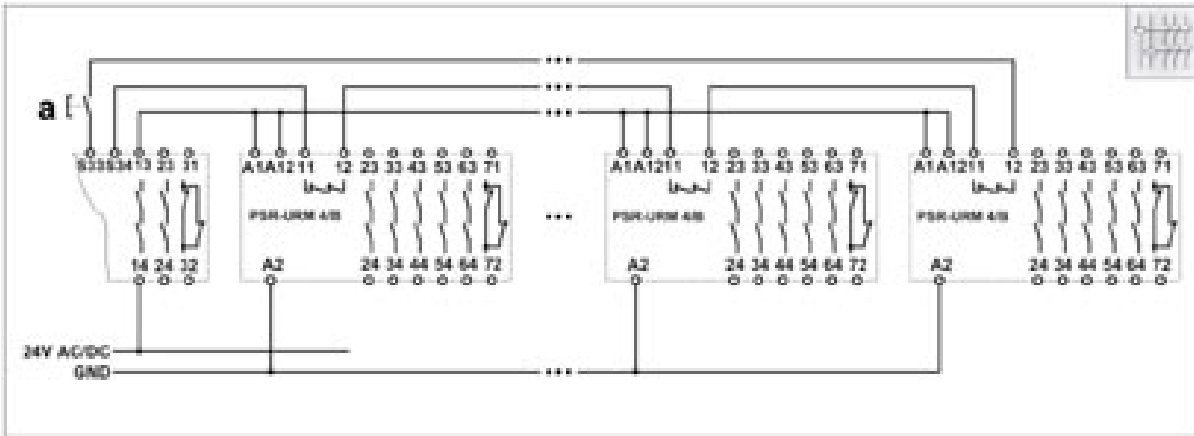


a = RESET One-channel connection with checkback path 11/12  
 integrated in the basic device, suitable up to safety category  
 2/4. Depends on the basic device. With externally monitored contacts.



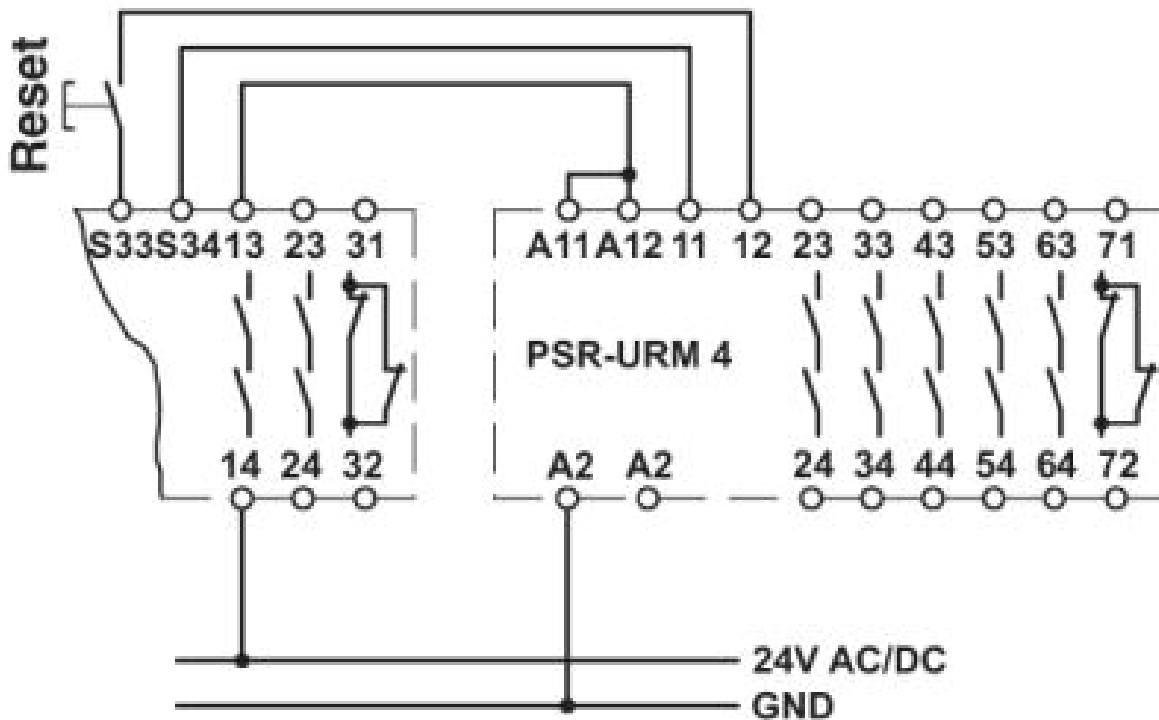
# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

Circuit diagram



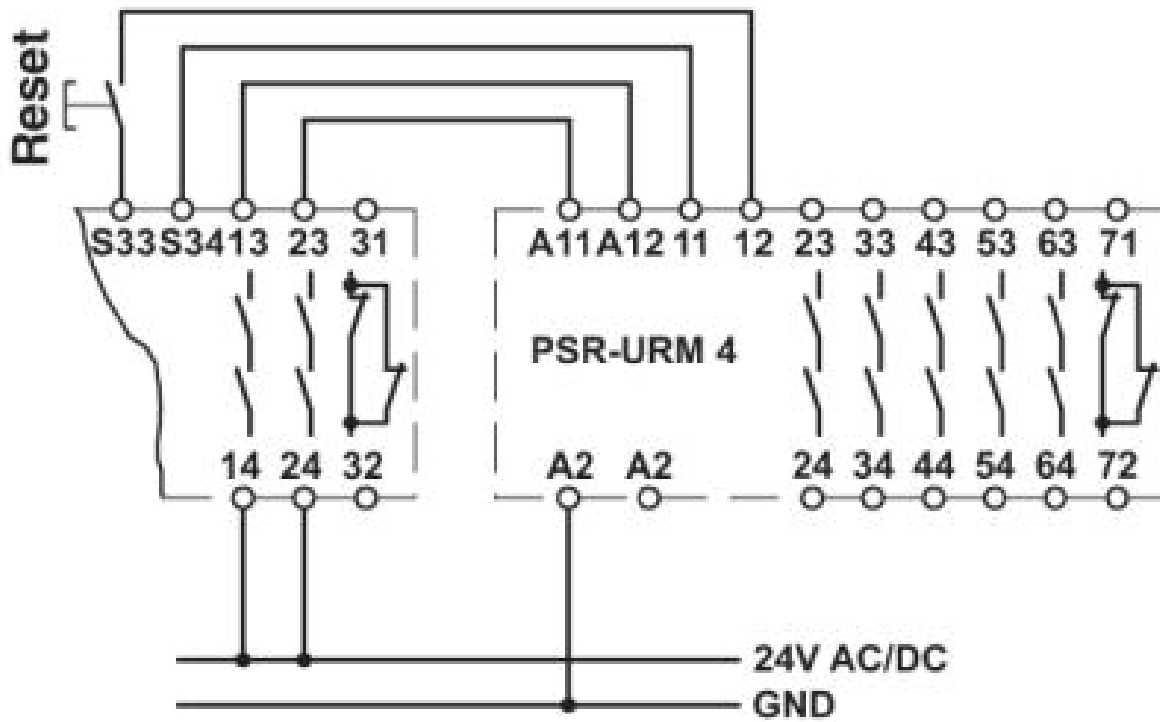
a = RESET one-channel connection with checkback path 11/12 integrated in the basic device, suitable up to safety category 2/4. Depends on the basic device. Connection of several extension modules.

Circuit diagram



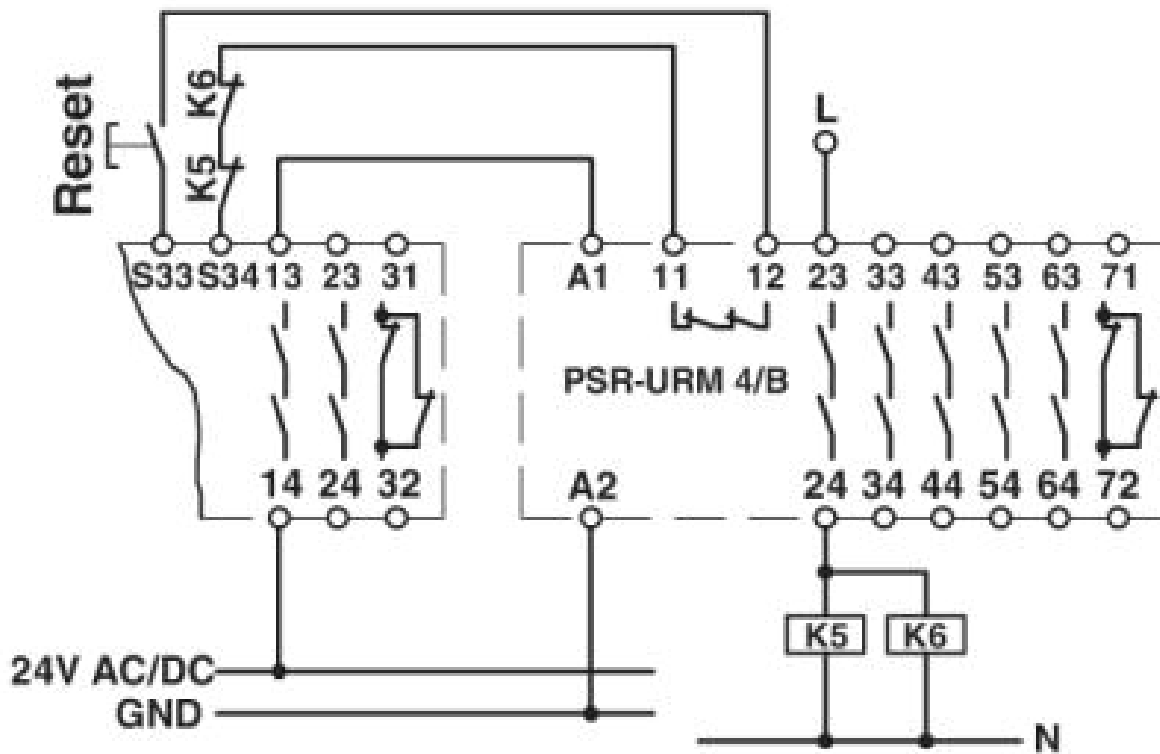
# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

Circuit diagram



# Extension module - PSR-SCP- 24UC/URM4/5X1/2X2 - 2963734

Circuit diagram



© Phoenix Contact 2014 - all rights reserved  
<http://www.phoenixcontact.com>