

# PSR-SPP- 24UC/ESAM4/8X1/1X2

Order No.: 2963996



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2963996>

1 or 2-channel safety relay for emergency off and safety door circuits, 8 N/O contacts, 1 N/C contact, undelayed, optionally with start button monitoring or automatic start for category 4 / EN 954-1, optionally with or without cross-circuit monitoring

## Commercial data

EAN	4017918904814
Pack	1 Pcs.
Customs tariff	85364900
Weight/Piece	0.4901 KG
Catalog page information	Page 22 (IF-2007)

## Product notes

WEEE/RoHS-compliant since:  
11/15/2006



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

## Technical data

### 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 $U_N$	210 mA AC
	120 mA DC
Voltage at input/start and feedback circuit	Approx. 24 V DC
Typical response time	60 ms (manual start)
	250 ms (automatic start)
Typical release time	20 ms
Concurrence input 1/2	Infinite
Recovery time	1 s
Max. permissible overall conductor resistance	Approx. 11 $\Omega$ (Input and start circuits at $U_N$ )

#### Output data

Contact type	8 enabling current paths, 1 signaling current path
Contact material	AgSnO <sub>2</sub> , + 0.2 $\mu$ m 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
Sq. Total current	50 A <sup>2</sup> ( $I_{TH}^2 = I_1^2 + I_2^2 + \dots + I_8^2$ )
Interrupting rating (ohmic load) max.	144 W (24 V DC, $\tau = 0$ ms)
	288 W (48 V DC, $\tau = 0$ ms)
	110 W (110 V DC, $\tau = 0$ ms)
	88 W (220 V DC, $\tau = 0$ ms)
	1500 VA (250 V AC, $\tau = 0$ ms)
Maximum interrupting rating (inductive load)	42 W (24 V DC, $\tau = 40$ ms)
	42 W (48 V DC, $\tau = 40$ ms)
	42 W (110 V DC, $\tau = 40$ ms)
	42 W (220 V DC, $\tau = 40$ ms)
Switching capacity min.	0.4 W
Output fuse	6 A fast blow
	4 A circuit-breaker C

#### General data

Length	112 mm
Width	45 mm
Height	114.5 mm

Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Service life mechanical	Approx. 10 <sup>7</sup> cycles
Mounting position	Any
Category in acc. with EN 954-1	4
Stop category	0
Name	Air and creepage distances between the power circuits
Standards/regulations	DIN EN 50178/VDE 0160
Rated surge voltage / insulation	4 kV / basic insulation (safe isolation, increased insulation and 6 kV between input circuit and output contact current paths <b>(63/64, 73/74, 83/84)</b> and between the output contact current paths <b>(63/64, 73/74, 83/84)</b> themselves.)
Rated insulation voltage	250 V
Pollution degree	2
Surge voltage category	III

#### Connection data

Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	1.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Stripping length	8 mm
Type of connection	Spring-cage conn.

#### Certificates / Approvals

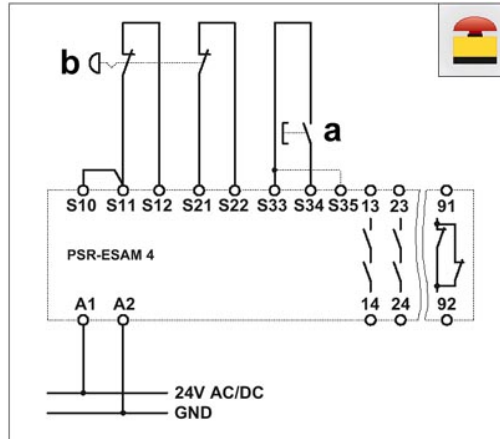
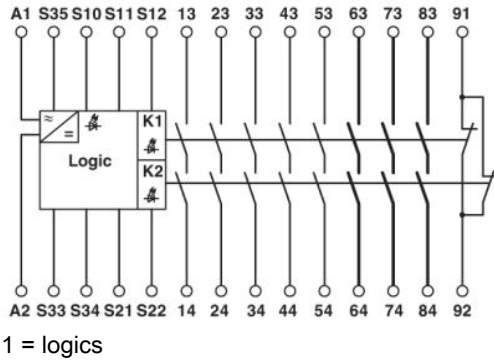


Certification BG, CUL Listed, GOST, UL Listed

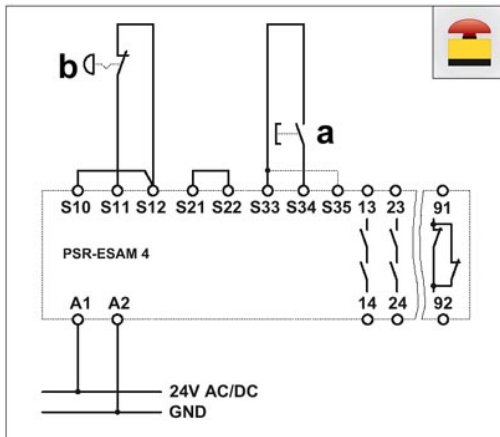
Certifications applied for: BG

**Drawings**

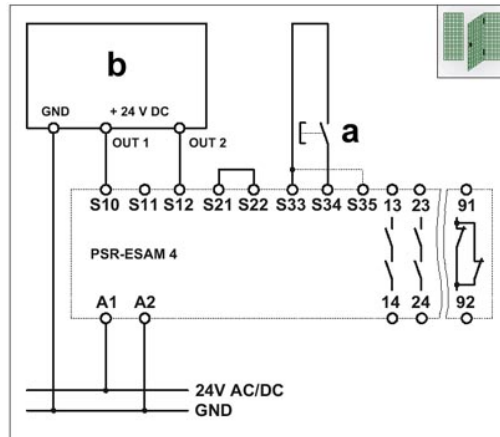
Circuit diagram



a = RESET  
 b = Emergency stop  
 Two-channel emergency stop circuit with cross-circuiting detection and monitored reset button, suitable up to safety category 4.



a = RESET  
 b = Emergency stop  
 Two-channel emergency stop circuit with monitored reset button (bridge on S33/S35: Automatic activation), suitable up to safety category 2.



a = RESET  
 b = semiconductor input  
 Two-channel limit switch monitoring with semiconductor output and monitored reset button (automatic activation: Bridge S33/S35), suitable up to safety category 4 depending on the limit switch.