

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


Order No.: 2963912



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2963912>

Safety relay to emergency stop and safety door monitoring up to SIL 3 or Cat. 4, PL e according to EN ISO 13849, one- or two-channel operation, automatically or manually supervised activation, 8 enabling current paths, nominal input voltage 230 V AC/DC



Commercial data	
GTIN (EAN)	 4 017918 899707
Note	Made-to-order
sales group	G504
Pack	1 pcs.
Customs tariff	85364900
Catalog page information	Page 13 (IF-2011)

#### Product notes

WEEE/RoHS-compliant since:  
03/24/2006



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Technical data	
<b>Input data</b>	
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 (man. start)
	250 ms (Auto-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
	C6 (24 V AC/DC) automatic device

#### General data

Width	45 mm
Height	99 mm
Depth	114.5 mm

Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relay type	Electromechanically forcibly guided, dust-proof relay.
Mechanical service life	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, reinforced insulation and 6 kV between input circuit and enabling current paths <b>(63/64, 73/74, 83/84)</b> and between <b>63/64, 73/74, 83/84</b> between each other.)
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.	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

#### Certificates / Approvals

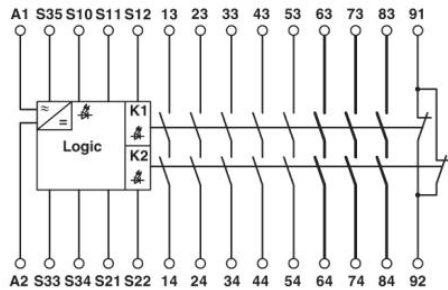


Certification BG, CUL Listed, GOST, UL Listed

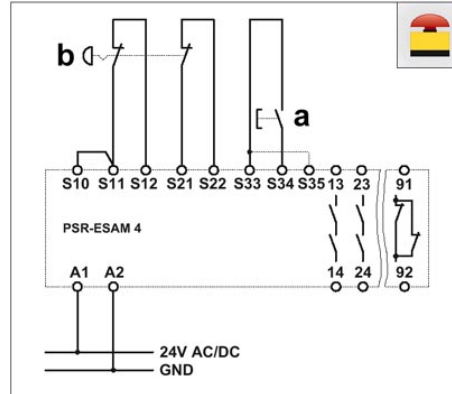
Certifications applied for: TUEV-RH

**Diagrams/Drawings**

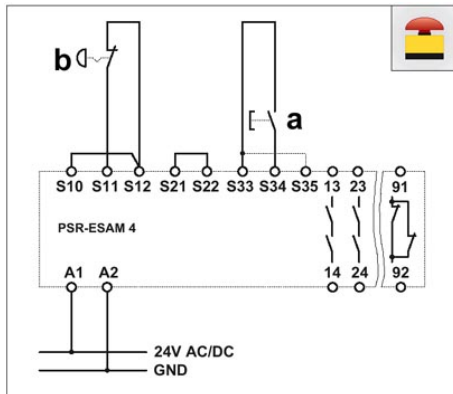
Circuit diagram



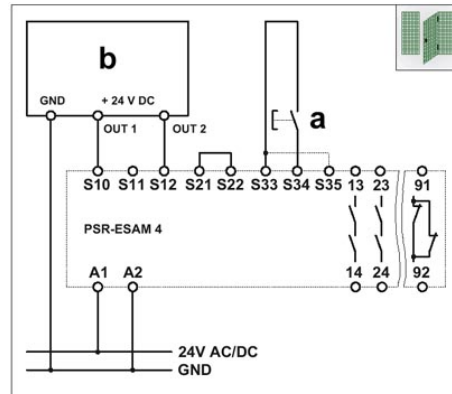
1 = logics



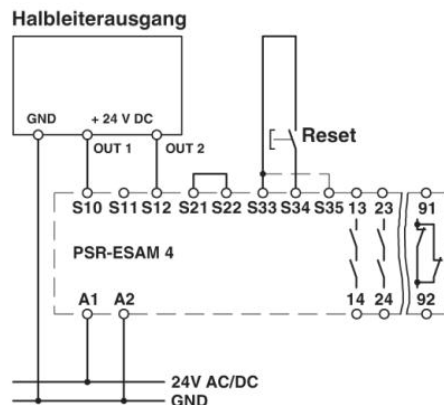
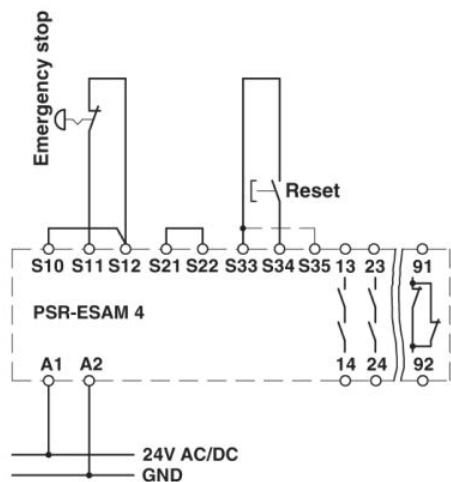
a = RESET  
 b = Emergency stop  
 Two-channel emergency stop circuit with cross-circuiting detection and monitored reset button, suitable up to safety category 4.



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.



**Address**

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