

PSR-SPP- 24-230UC/ESAM4/3X1/1X2

Order No.: 2981127

The illustration shows the versions with screw connection



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2981127>

1 or 2-channel safety relay for emergency off and safety door circuits with manual or automatic activation, 3 N/O contacts, 1 N/C contact, Cat. 4 / EN 954-1 or SIL 3 / IEC 61508, pluggable spring-cage terminal blocks, 24 - 230 V AC/DC, width: 45 mm

Commercial data

EAN	4046356051651
Pack	1 Pcs.
Customs tariff	85364900
Weight/Piece	0.3404 KG
Catalog page information	Page 23 (IF-2007)

Product notes

WEEE/RoHS-compliant since:
05/02/2008



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Technical data

Input data

Input voltage range	24 V AC/DC ... 230 V AC/DC
Input voltage range in reference to U_N	0.85 ... 1.1

Typical input current at U_N	120 mA (for 24 V DC)
	15 mA (for 230 V AC)
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 (Single-channel)
Concurrence input 1/2	Infinite
Recovery time	1 s
Max. permissible overall conductor resistance	11 Ω (input voltage: $U_I = 8.4 \text{ V} + 0.02 \times \text{load} \times (\text{V}/\Omega)$)

Output data

Contact type	3 enabling current paths, 1 signaling current path
Contact material	AgSnO ₂
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	$50 \text{ A}^2 (I_{TH}^2 = I_1^2 + I_2^2 + I_3^2)$
Interrupting rating (ohmic load) max.	144 W (24 V DC, $\tau = 0 \text{ ms}$)
	288 W (48 V DC, $\tau = 0 \text{ ms}$)
	110 W (110 V DC, $\tau = 0 \text{ ms}$)
	88 W (220 V DC, $\tau = 0 \text{ ms}$)
	1500 VA (250 V AC, $\tau = 0 \text{ ms}$)
Maximum interrupting rating (inductive load)	42 W (24 V DC, $\tau = 40 \text{ ms}$)
	42 W (48 V DC, $\tau = 40 \text{ ms}$)
	42 W (110 V DC, $\tau = 40 \text{ ms}$)
	42 W (220 V DC, $\tau = 40 \text{ ms}$)
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 ⁷ 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	6 kV / Safe isolation, increased insulation
Rated insulation voltage	250 V
Pollution degree	2
Surge voltage category	III

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
Type of connection	Spring-cage conn.

Certificates / Approvals

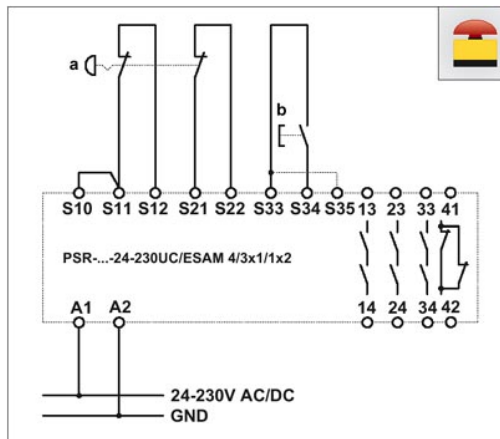
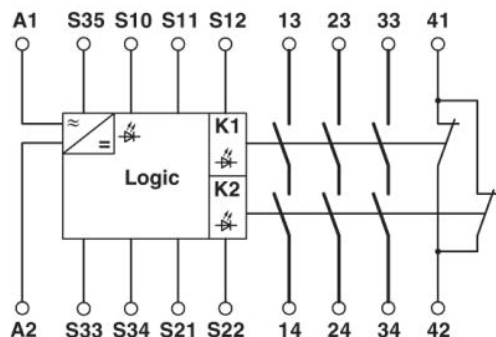


Certification

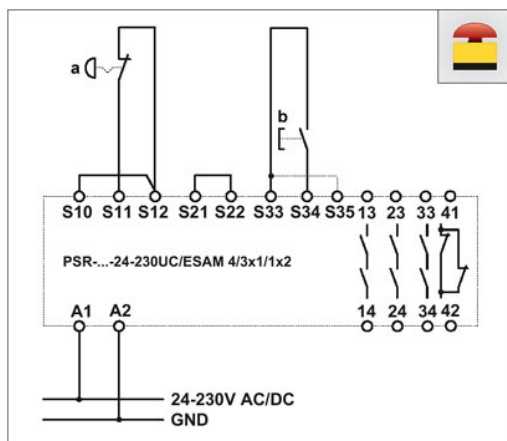
CUL Listed, GOST, TUEV-RH, UL Listed

Drawings

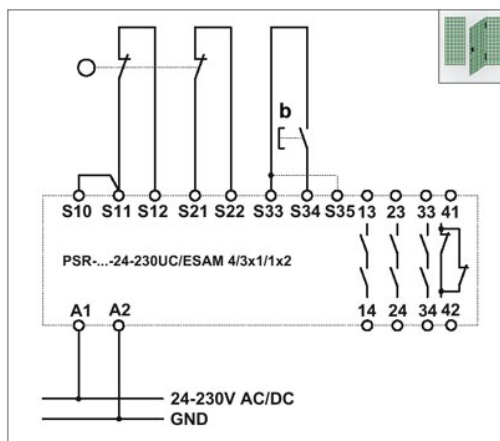
Circuit diagram



a = Emergency off, b= Reset. Two-channel emergency stop circuit with cross-circuiting detection and monitored reset button (bridge on S33/S35: Automatic activation, suitable up to safety category 4, SIL3).



a = Emergency off, b= Reset. Two-channel emergency stop circuit with monitored reset button (bridge on S33/S35: Automatic activation, suitable up to safety category 4, SIL3).



a = Emergency off, b= Reset. Two-channel protective door circuit with cross circuiting detection and monitored reset button (bridge on S33/S35: Automatic activation, suitable up to safety category 4, SIL3).