Extract from the online catalog

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

Order No.: 2981114

http://eshop.phoenixcontact.co.uk/phoenix/treeViewClick.do?UID=2981114

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, 3 enabling current paths, nominal input voltage 24-230 V AC/DC

Product notes

WEEE/RoHS-compliant since: 31/05/2007

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 at http://www.download.phoenixcontact.com. The General Terms and Conditions of Use apply to Internet downloads.

Commercial data

EAN	4 046356 051644
Pack	1
Customs tariff	85364900
Country of Origin	DE
Catalog page information	Page 39 (IF-2011)

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 (at 24 V DC)
	20 mA (for 120 V AC)
	10 mA (for 230 V AC)
Voltage at input/start and feedback circuit	Approx. 24 V DC
Typical response time	50 ms (manual start)
	60 ms (automatic start)
Typical release time	20 ms (when controlled via S11/S12 and S21/S22)
	500 ms (when controlled via A1)
	50 ms (at 24 V DC)
	110 ms (for 120 V AC)
	280 ms (for 230 V AC)
Concurrence input 1/2	Infinite
Recovery time	1 s
Maximum switching frequency	0.5 Hz
Max. permissible overall conductor resistance	11 Ω (input voltage: U_I = 8.4 V + 0.02 x load x (V/Ω))

Output data

Contact type	3 enabling current paths, 1 signaling current path
Contact material	$AgSnO_2$, + 0.2 µm Au
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	10 V AC/DC
Limiting continuous current	6 A
Maximum inrush current	6 A
Inrush current, minimum	10 mA
Sq. Total current	50 A^2 ($I_{TH}^2 = I_1^2 + I_2^2 + ... + I_N^2$)
Interrupting rating (ohmic load) max.	192 W (24 V DC, τ = 0 ms)
	384 W (48 V DC, τ = 0 ms)
	80 W (110 V DC, τ = 0 ms)
	66 W (220 V DC, τ = 0 ms)
	2000 VA (250 V AC, τ = 0 ms)
Maximum interrupting rating (inductive load)	48 W (24 V DC, τ = 40 ms)
	48 W (48 V DC, τ = 40 ms)
	48 W (110 V DC, τ = 40 ms)
	48 W (220 V DC, τ = 40 ms)
Switching capacity min.	360 mW

Output fuse	6 A gL/gG NEOZED (enabling current paths)
	6 A gL/gG NEOZED (signaling current paths)

General data

Width	45 mm
Height	99 mm
Depth	114.5 mm
Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Relay type	Electromechanically forcibly guided, dust-proof relay.
Mechanical service life	Approx. 10^7 cycles
Mounting position	Any
Category according to EN 13849-1	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, reinforced insulation and 6 kV between input circuits and output contact current paths (13/14, 23/24, 33/34), as well as between output contact current paths (13/14, 23/24, 33/34).
Rated insulation voltage	250 V AC
Pollution degree	2
Surge voltage category	III

Connection data

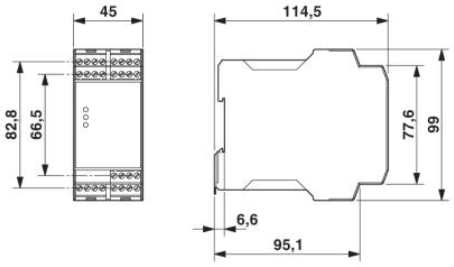
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section stranded min.	0.2 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Stripping length	7 mm
Screw thread	M3
Connection method	Screw connection

Certificates

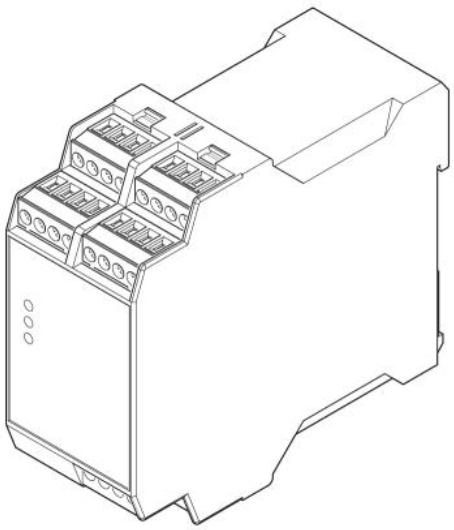
Certification	CUL Listed, GOST, TUEV-RH, UL Listed

Drawings

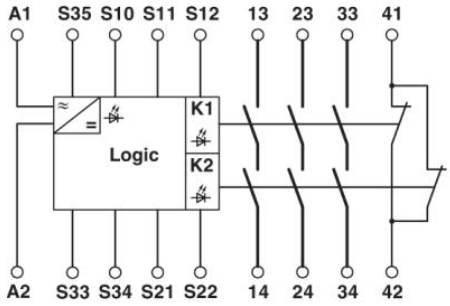
Dimensioned drawing

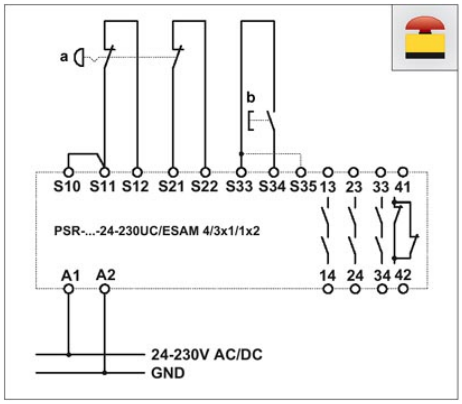


Product drawing

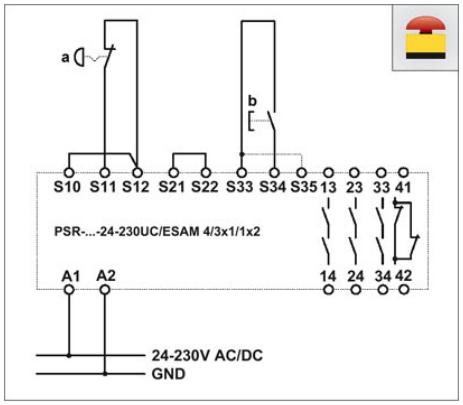


Circuit diagram





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.



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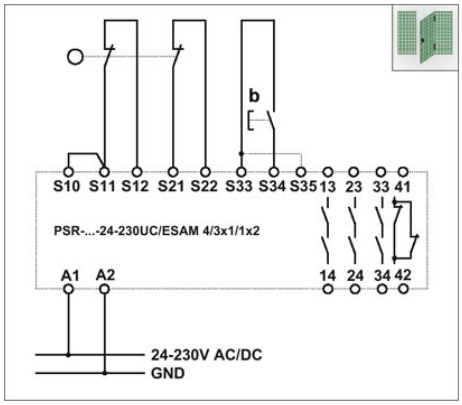

a = Emergency off, b= Reset. Two-channel protective door circuit with cross circuiting detection and monitored reset button (bridge on S33/S35: Automatic activation, suitable up to safety category 4, SIL3.

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