Extract from the online catalog

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

Order No.: 2963996

The figure shows a version with a screw connection

http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=2963996

Safety relay for emergency stop and safety door monitoring up to SIL 3 or Cat. 4, PL e according to EN ISO 13849, single or two-channel operation, 8 enabling current paths, nominal input voltage of 24 V AC/DC, plug-in spring-cage terminal blocks

Product notes

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

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.

Commercial data

EAN	4 017918 904814
sales group	G504
Pack	1 Pcs.
Customs tariff	85371099
Gross weight in pieces	0.5353 KG
Net weight per piece	0.42134 KG
Catalog page information	Page 72 (C-8-2013)

Technical data

Dimensions

Width	45 mm
Height	112 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	0.85 ... 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
Status display	Green LED
Max. permissible overall conductor resistance	approx. 11 Ω (Input and start circuits at U_N)

Output data	
Contact type	8 enabling current paths
	1 signaling current path
Contact material	$AgSnO_2$, + 0.2 µm Au
Minimum switching voltage	15 V AC/DC
Maximum switching voltage	250 V AC/DC
Limiting continuous current	6 A
Inrush current, minimum	25 mA
Maximum inrush current	6 A
Sq. Total current	50 A^2 ($I_{TH}^2 = I_1^2 + I_2^2 + ... + I_8^2$)
Interrupting rating (ohmic load) max.	144 W (24 V DC, τ = 0 ms)
	288 W (48 V DC, τ = 0 ms)
	110 W (110 V DC, τ = 0 ms)
	88 W (220 V DC, τ = 0 ms)
	1500 VA (250 V AC, τ = 0 ms)

Maximum interrupting rating (inductive load)	42 W (24 V DC, τ = 40 ms)
	42 W (48 V DC, τ = 40 ms)
	42 W (110 V DC, τ = 40 ms)
	42 W (220 V DC, τ = 40 ms)
Switching capacity min.	0.4 W
Output fuse	6 A fast blow
	C6 (24 V AC/DC) automatic device

General

Relay type	Electromechanically forcibly guided, dust-proof relay.
Mechanical service life	Approx. 10^7 cycles
Mounting type	DIN rail mounting
Degree of protection	IP20
Min. degree of protection of inst. location	IP54
Mounting position	any
Category according to EN 13849-1	4
Stop category	0
Designation	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 **(63/64, 73/74, 83/84)** and between **63/64, 73/74, 83/84** between each other.)
Rated insulation voltage	250 V
Pollution degree	2
Surge voltage category	III

Connection data

Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	1.5 mm²
Conductor cross section stranded min.	0.2 mm²
Conductor cross section stranded max.	1.5 mm²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Stripping length	8 mm
Connection method	Spring-cage connection

Certificates / Approvals

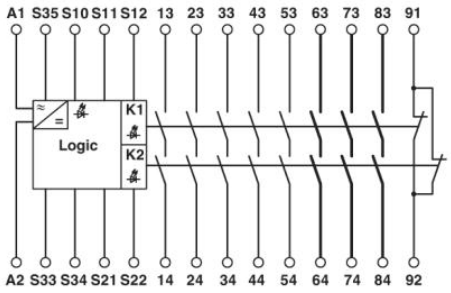
Certification	cULus Listed, GOST

Certifications applied for:

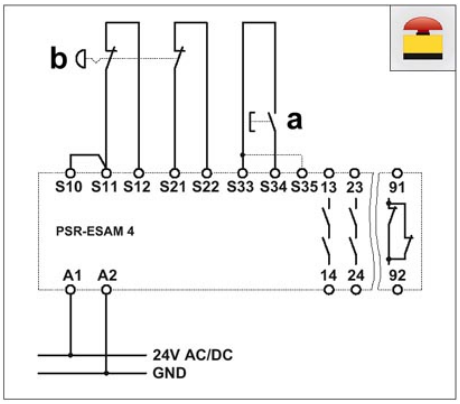
Certification Ex:

Drawings

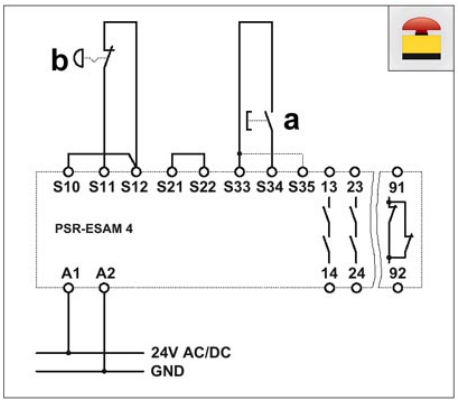
Circuit diagram



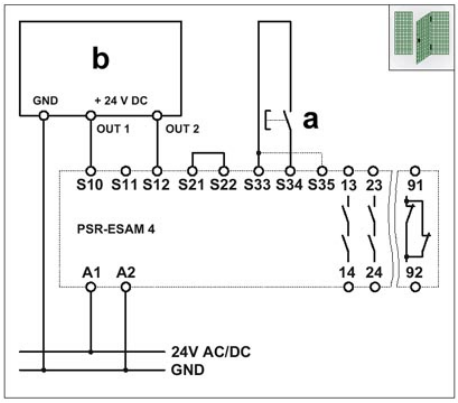
1 = logics



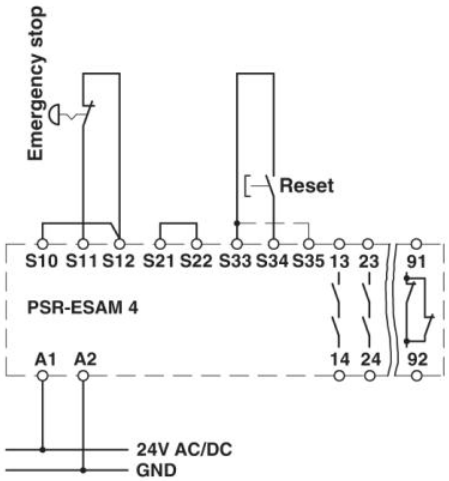
a = RESET
b = Emergency stop
Two-channel emergency stop circuit with cross-circuiting detection and monitored reset button, suitable up to safety category 4.

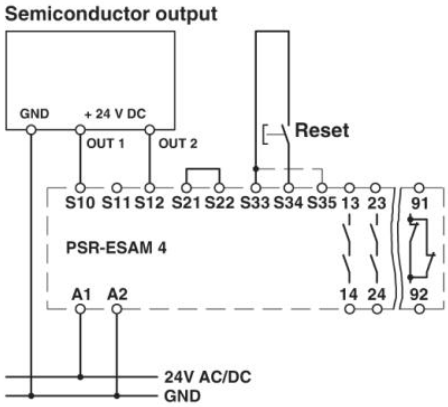


a = RESET
b = Emergency stop
Two-channel emergency stop circuit with monitored reset button (bridge on S33/ S35: Automatic activation), suitable up to safety category 2.



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.





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