

PSR-SPP- 24UC/ESL4/3X1/1X2/B

Order No.: 2981062




<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2981062>

Safety relay to emergency stop and safety door and light grid 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 230 V AC/DC



Commercial data

GTIN (EAN)	 4 017918 927196
sales group	G512
Pack	1 pcs.
Customs tariff	85364900
Catalog page information	Page 16 (IF-2011)

Product notes

WEEE/RoHS-compliant since:
08/08/2006



<http://www.download.phoenixcontact.com>
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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	150 mA AC
	70 mA DC
Voltage at input/start and feedback circuit	Approx. 24 V DC
Typical response time	25 ms (manual start)
	100 ms (automatic start)
Typical release time	10 ms
Concurrence input 1/2	Infinite
Recovery time	1 s

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	15 V AC/DC
Limiting continuous current	6 A
Maximum inrush current	6 A
Inrush current, minimum	25 mA
Sq. Total current	$72 \text{ A}^2 (I_{TH}^2 = I_1^2 + I_2^2 + I_3^2)$
Interrupting rating (ohmic load) max.	144 W (24 V DC, $\tau = 0 \text{ ms}$)
	288 W (48 V DC, $\tau = 0 \text{ ms}$)
	77 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)	48 W (24 V DC, $\tau = 40 \text{ ms}$)
	40 W (48 V DC, $\tau = 40 \text{ ms}$)
	35 W (110 V DC, $\tau = 40 \text{ ms}$)
	33 W (220 V DC, $\tau = 40 \text{ ms}$)
Switching capacity min.	0.4 W
Output fuse	10 A gL/gG NEOZED (N/O contact)

General data

Width	22.5 mm
Height	112 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. 10^7 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	4 kV / Basic isolation, (safe isolation, reinforced insulation and 6 kV between input circuit and enabling current paths.)
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
Connection method	Spring-cage conn.

Certificates / Approvals

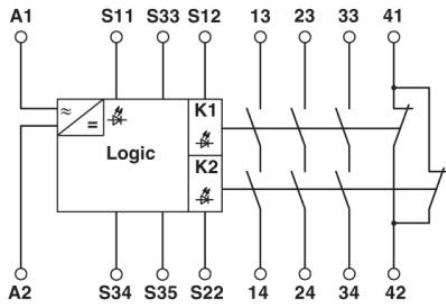


Certification

CUL Listed, GOST, TUEV-RH, UL Listed

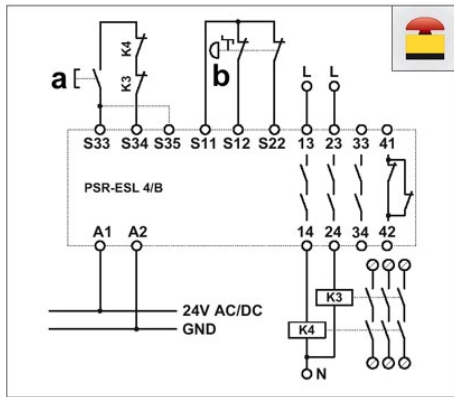
Diagrams/Drawings

Circuit diagram

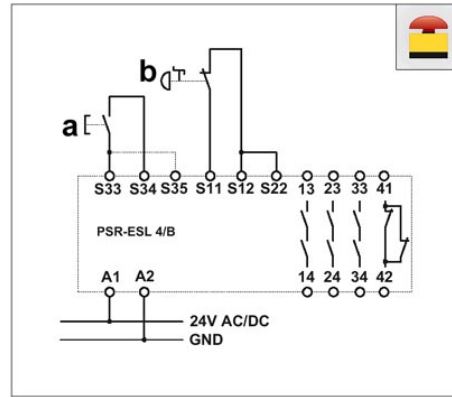


1 = logics

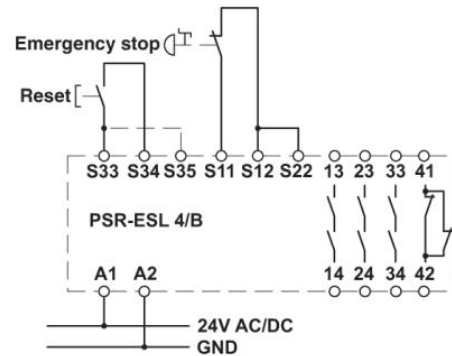
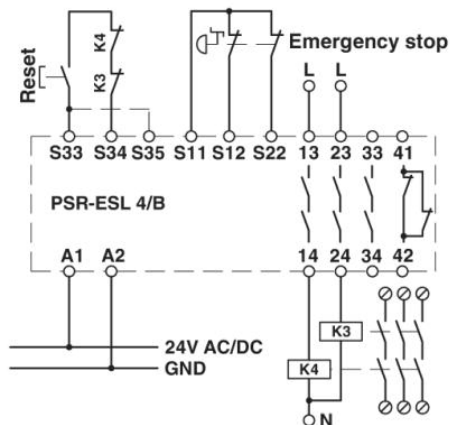
a = RESET
 b = light barrier
 Two-channel light barrier monitoring with cross-circuiting monitoring and manual activation (automatic activation: Bridge on S33/S35), suitable up to safety category 4.



a = RESET
 b = Emergency stop
 Two-channel emergency-stop circuit with manual activation and monitored contact expansion (automatic activation: Bridge on S33/S35), suitable up to safety category 3.



a = RESET
 b = Emergency stop
 One-channel emergency-stop circuit with manual activation (automatic activation: Bridge on S33/S35), suitable up to safety category 2.



Address

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