

PSR-SPP- 24DC/ESP4/2X1/1X2

Order No.: 2981017




<http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=2981017>

Safety relay for SIL 3 high and low demand applications, also approved according to EN 50156, Germanischer Lloyd and EN ISO 13849, emergency stop and safety door monitoring, single-channel, 2 enabling current paths, 1 alarm contact, plug-in terminal blocks, width: 22.5 mm



Commercial data

EAN	 4 017918 911072
Pack	1 Pcs.
Customs tariff	85364900
Product key	106501
Catalog page information	Page 39 (IF-2011)

Product notes

WEEE/RoHS-compliant since:
08/28/2006



<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.

Technical data

Input data

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.85 ... 1.1

Typical input current at U_N	50 mA DC
Typical inrush current	< 1 A
Voltage at input/start and feedback circuit	24 V DC
Typical response time	60 ms (Automatic/manual start)
Typical release time	20 ms
Recovery time	Approx. 1 s

Output data

Contact type	2 enabling current paths 1 signaling current path (type B according to EN 50205)
Contact material	AgSnO ₂ , gold-flashed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	10 V
Limiting continuous current	6 A (N/O contact/N/C contact, high demand) 4 A (N/O contact/N/C contact, low demand)
Maximum inrush current	6 A
Inrush current, minimum	10 mA
Sq. Total current	$72 \text{ A}^2 (I_{TH}^2 = I_1^2 + I_2^2)$
Interrupting rating (ohmic load) max.	144 W (24 V DC, $\tau = 0 \text{ ms}$) 200 W (48 V DC, $\tau = 0 \text{ ms}$) 77 W (110 V DC, $\tau = 0 \text{ ms}$) 70 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, $\tau = 40 \text{ ms}$) 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.	0.2 W
Output fuse	6 A gL/gG NEOZED (High demand) 4 A gL/gG NEOZED (Low demand)

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	On horizontal and vertical DIN rail
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, increased insulation
Rated insulation voltage	250 V
Pollution degree	2
Surge voltage category	III
Housing material	Polyamide PA non-reinforced

Connection data

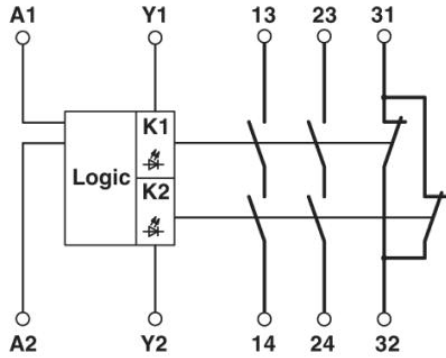
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Stripping length	8 mm
Connection method	Spring-cage conn.

Certificates / Approvals

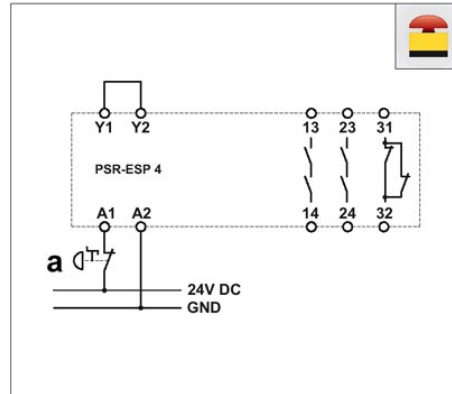
Certification CUL Listed, GL, GOST, TUEV-RH, UL Listed

Drawings

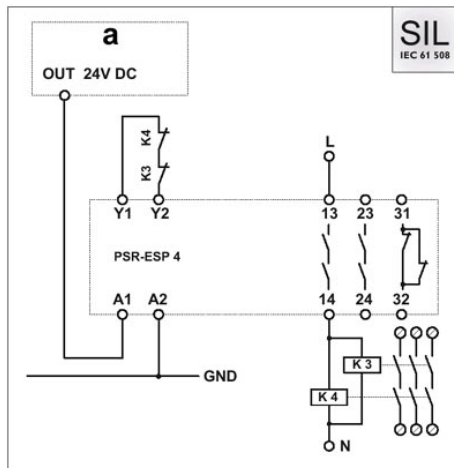
Circuit diagram



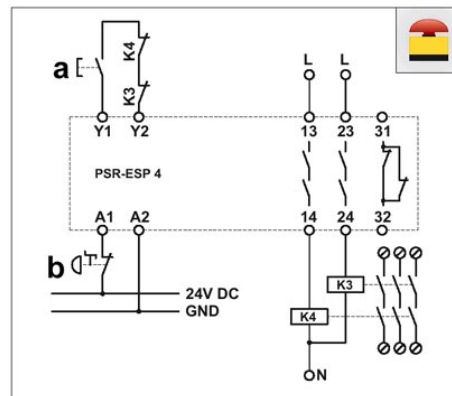
1 = logics



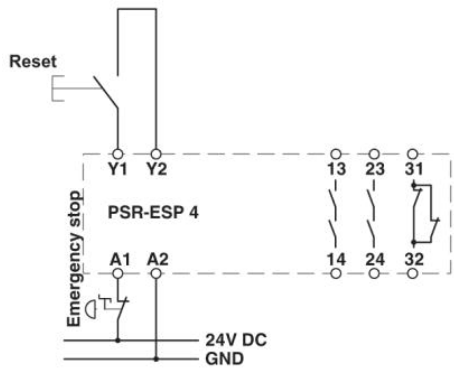
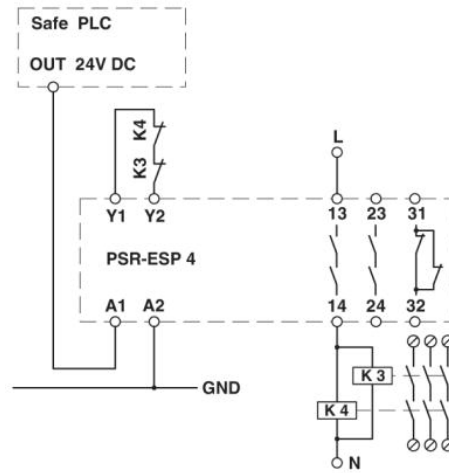
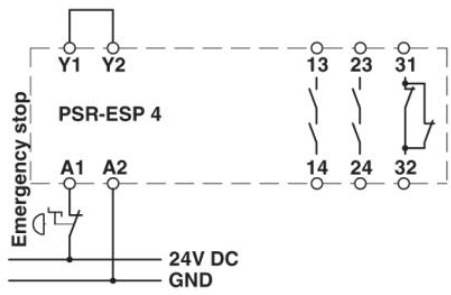
One-channel emergency stop circuit with automatic activation, suitable up to safety category 2.



One-channel evaluation of a safety controller with automatic activation, suitable up to SIL 3.



One-channel emergency stop circuit with manual activation and monitored contact expansion, suitable up to safety category 2.



Connection data incl. use groups





Address

Nanjing Phoenix Contact Co. Ltd.
No. 36 Phoenix Road - Jiangning Development Zone /
P.O. Box 236 Jiangning Nanjing
CN-211100 Nanjing, China
Phone +86/25-5212-1888
Fax +86/25-5212-1999 or 1555
<http://www.phoenixcontact.com.cn>



© 2012 Phoenix Contact
Technical modifications reserved;