

## Safety device - PSR-SCP- 24DC/RSM4/4X1 - 2981538

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Two-channel speed and downtime monitor up to SIL 3 or Cat. 4, PL e according to EN ISO 13849, 4 N/O contacts, suitable for connecting incremental encoders and initiators, plug-in screw connection terminal blocks, width: 45 mm

### Product Features

- ✓ Easy configuration via software (PSR-RSM4)
- ✓ Up to SIL 3 according to IEC 61508
- ✓ Standard sensors can be connected



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	346.8 g
Custom tariff number	90328900
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

#### Dimensions

Width	45 mm
Height	99 mm
Depth	114.5 mm

#### Ambient conditions

Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C

## Safety device - PSR-SCP- 24DC/RSM4/4X1 - 2981538

### Technical data

#### Ambient conditions

Max. permissible relative humidity (operation)	75 % (on average, 85% infrequently, non-condensing)
Max. permissible humidity (storage/transport)	75 % (on average, 85% infrequently, non-condensing)
Maximum altitude	max. 2000 m (Above sea level)

#### 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 $U_N$	100 mA
Voltage at input/start and feedback circuit	approx. 24 V DC
Typical response time	15 ms
Typical release time	12 ms
Recovery time	1 s
Status display	Green LED
Limit frequency	2 kHz (IN1, IN2)
	400 kHz (RJ45)

#### Output data

Contact type	4 enabling current paths
Contact material	AgNi10, + 5 $\mu$ m Au
Minimum switching voltage	100 mV AC/DC
Maximum switching voltage	250 V AC/DC (when the gold layer is destroyed)
	60 V AC/DC (With gold layer existing)
Limiting continuous current	5 A
	100 mA (alarm outputs)
Inrush current, minimum	1 mA
Maximum inrush current	6 A
Sq. Total current	$42.25 \text{ A}^2 (I_{TH}^2 = I_1^2 + I_2^2 + I_3^2 + I_4^2)$
Interrupting rating (ohmic load) max.	67 W (24 V DC, $\tau = 0$ ms)
	36 W (48 V DC, $\tau = 0$ ms)
	43 MW (110 V DC, $\tau = 0$ ms)
	68 MW (220 V DC, $\tau = 0$ ms)
Switching capacity min.	1 mW
Output fuse	6 A gL

#### General

Relay type	Electromechanical relay with forcibly guided contacts in accordance with EN 50205
Mechanical service life	> 50 x 10 <sup>6</sup> cycles
Net weight	365 g

## Safety device - PSR-SCP- 24DC/RSM4/4X1 - 2981538

### Technical data

#### General

Mounting type	DIN rail mounting
Assembly instructions	In rows with zero spacing
Degree of protection	IP54
	IP20
Min. degree of protection of inst. location	IP54
Mounting position	any
Control	Two-channel
Parameters as per EN ISO 13849	4
Stop category	0
Parameters for IEC 61508	3
Interfaces	Encoder

#### Connection data

Connection method	Screw connection
pluggable	Yes
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	7 mm
Screw thread	M3

#### Standards and Regulations

Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	EN 60664/VDE 0110
Rated insulation voltage	250 V
Rated surge voltage/insulation	4 kV / Basic isolation, (safe isolation, reinforced insulation and 6 kV between input circuit and enabling current paths.)
Pollution degree	2
Overvoltage category	III
Safety Integrity Level Claim Limit (SIL CL)	3

#### Classifications

##### eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102

# Safety device - PSR-SCP- 24DC/RSM4/4X1 - 2981538

## Classifications

### eCl@ss

eCl@ss 5.0	27371901
eCl@ss 5.1	27371901
eCl@ss 6.0	27371819
eCl@ss 7.0	27371819
eCl@ss 8.0	27371811

### ETIM

ETIM 2.0	EC001449
ETIM 3.0	EC001449
ETIM 4.0	EC001449
ETIM 5.0	EC001448

### UNSPSC

UNSPSC 6.01	30211901
UNSPSC 7.0901	39121501
UNSPSC 11	39121501
UNSPSC 12.01	39121501
UNSPSC 13.2	39121501

## Approvals

### Approvals

---

#### Approvals

UL Listed / cUL Listed / Functional Safety / Functional Safety / UL Listed / cUL Listed / EAC / EAC / cULus Listed

---

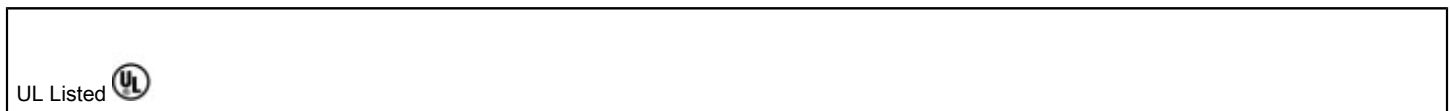
#### Ex Approvals

---

#### Approvals submitted

---

#### Approval details



# Safety device - PSR-SCP- 24DC/RSM4/4X1 - 2981538

## Approvals

cUL Listed

Functional Safety

Functional Safety

UL Listed

cUL Listed

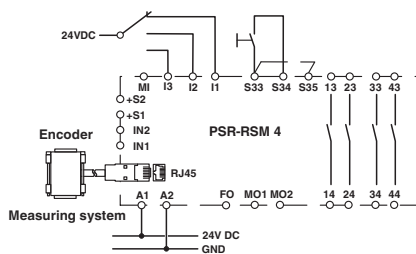
EAC

EAC

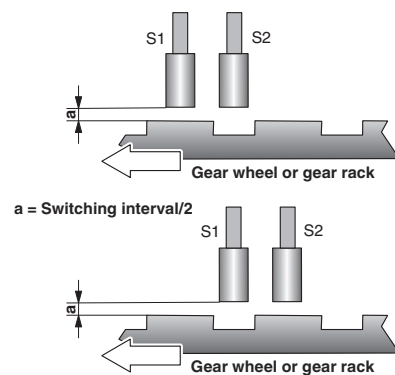
cULus Listed

## Drawings

Diagram

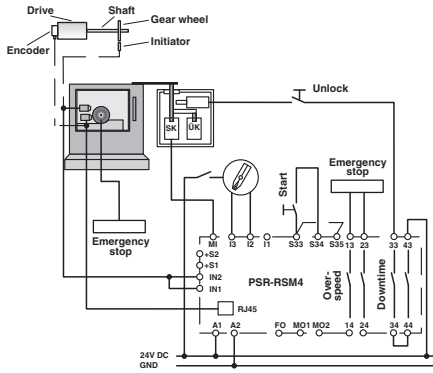


Diagram

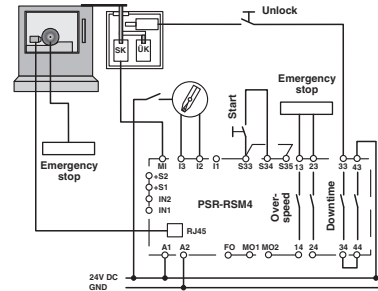


# Safety device - PSR-SCP- 24DC/RSM4/4X1 - 2981538

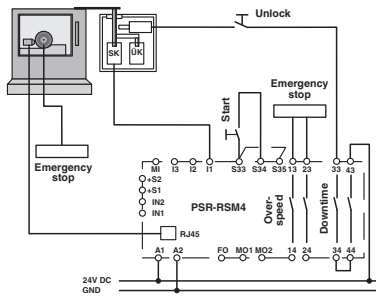
Diagram



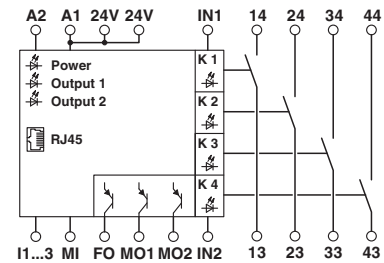
Diagram



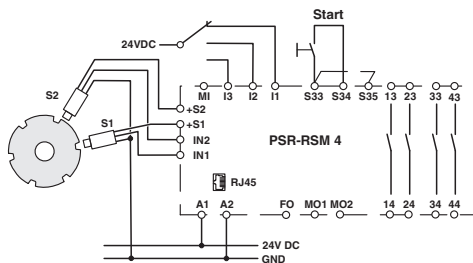
Diagram



Circuit diagram

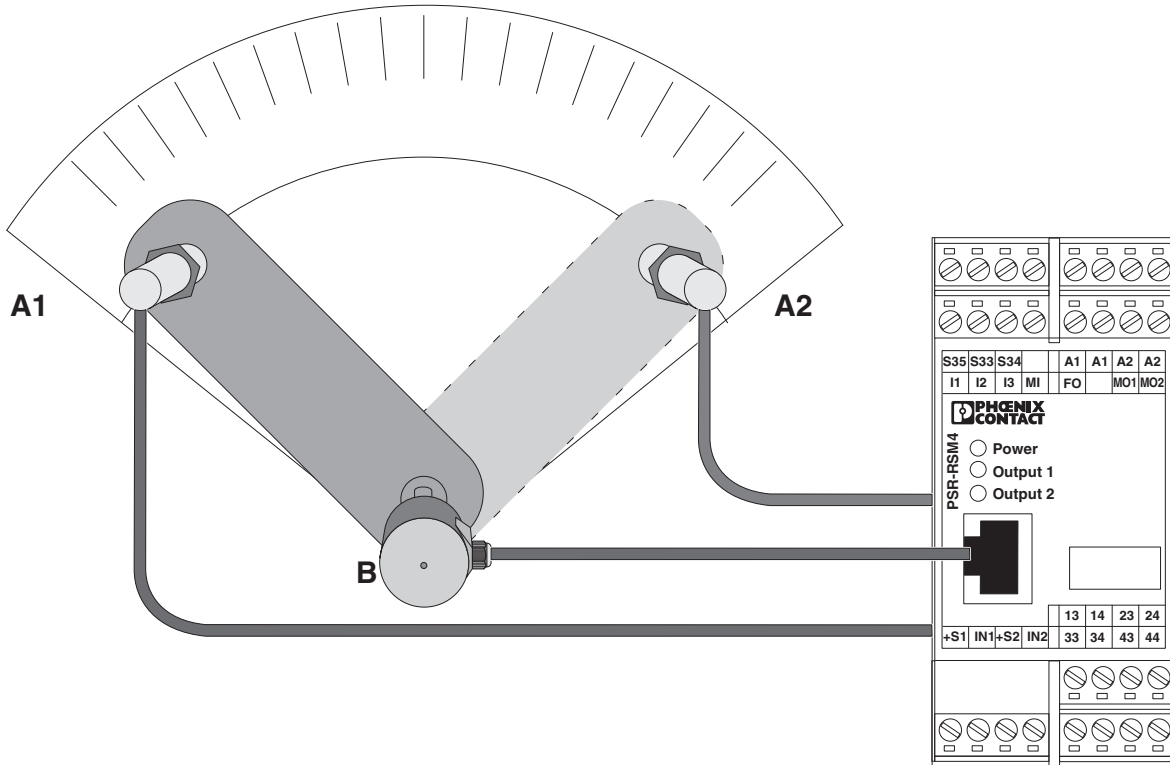


Circuit diagram



# Safety device - PSR-SCP- 24DC/RSM4/4X1 - 2981538

Application drawing





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.