

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

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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

### Why buy this product

- ✓ 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                                                                                                    |
| GTIN                                 | <br>4 017918 996826 |
| Weight per Piece (excluding packing) | 365.0 g                                                                                                 |
| Custom tariff number                 | 85371099                                                                                                |
| 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 |

#### Input data

|                             |         |
|-----------------------------|---------|
| Nominal input voltage $U_N$ | 24 V DC |
|-----------------------------|---------|

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## Technical data

### Input data

|                                             |                  |
|---------------------------------------------|------------------|
| 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              |
| Limit frequency                             | 2 kHz (IN1, IN2) |
|                                             | 400 kHz (RJ45)   |

### Output data

|                                       |                                                                    |
|---------------------------------------|--------------------------------------------------------------------|
| Contact type                          | 4 enabling current paths                                           |
| Contact material                      | AgNi10, + 5 $\mu$ m Au                                             |
| Maximum switching voltage             | 250 V AC/DC (when the gold layer is destroyed)                     |
|                                       | 60 V AC/DC (With gold layer existing)                              |
| Minimum switching voltage             | 100 mV AC/DC                                                       |
| Limiting continuous current           | 5 A                                                                |
|                                       | 100 mA (alarm outputs)                                             |
| Maximum inrush current                | 6 A                                                                |
| Inrush current, minimum               | 1 mA                                                               |
| 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                       | Electromechanically forcibly guided, dust-proof relay.                                                                     |
| Mechanical service life          | > 50 x 10 <sup>6</sup> cycles                                                                                              |
| Mounting position                | any                                                                                                                        |
| Assembly instructions            | In rows with zero spacing                                                                                                  |
| Category according to EN 13849-1 | 4                                                                                                                          |
|                                  | 4                                                                                                                          |
| Stop category                    | 0                                                                                                                          |
| Name                             | Air and creepage distances between the power circuits                                                                      |
| Standards/regulations            | EN 60664/VDE 0110                                                                                                          |
| 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                                                                                                                        |

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### Technical data

#### General

|            |         |
|------------|---------|
| Interfaces | Encoder |
|------------|---------|

#### Connection data

|                                        |                     |
|----------------------------------------|---------------------|
| 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 stranded min.  | 0.2 mm <sup>2</sup> |
| Conductor cross section stranded max.  | 2.5 mm <sup>2</sup> |
| 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    |

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27371102 |
| eCl@ss 4.1 | 27371102 |
| eCl@ss 5.0 | 27371901 |
| eCl@ss 5.1 | 27371901 |
| eCl@ss 6.0 | 27371819 |
| eCl@ss 7.0 | 27371819 |
| eCl@ss 8.0 | 27371819 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001449 |
| ETIM 3.0 | EC001449 |
| ETIM 4.0 | EC001449 |
| ETIM 5.0 | EC001449 |

#### UNSPSC

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

### Approvals

#### Approvals

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### Approvals

#### Approvals

UL Listed / GOST / cUL Listed / Functional Safety / UL Listed / GOST / cUL Listed / Functional Safety / cULus Listed

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#### Ex Approvals

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#### Approvals submitted

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#### Approval details

UL Listed 

GOST 

cUL Listed 

Functional Safety

UL Listed 

GOST 

cUL Listed 

Functional Safety

cULus Listed 

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### Accessories

#### Accessories

##### Adapter cable

Adapter cable - CABLE-25/8/250/RSM/E-SIMO611D - 2901746



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 25/8-pos., cable length: 2.5 m, for controller: Siemens, Heidenhain

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Adapter cable - CABLE-15/8/250/RSM/INDEL - 2902338



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: Indel

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Adapter cable - CABLE- 9/8/250/RSM/ELAU - 2902984



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 9/8-pos., cable length: 2.5 m, for controller: ELAU

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Adapter cable - CABLE-15/8/100/RSM/BM - 2904108



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 1 m, for controller: Baumüller

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Adapter cable - CABLE-25/8/250/RSM/SIMO611D - 2981583



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 25/8-pos., cable length: 2.5 m, for controller: Siemens, Heidenhain

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### Accessories

#### Adapter cable - CABLE-25/8/250/RSM/ARADEx - 2981596



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 25/8-pos., cable length: 2.5 m, for controller: Aradex

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#### Adapter cable - CABLE-15/8/250/RSM/SIMO611D - 2981606



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: Siemens, Heidenhain

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#### Adapter cable - CABLE-15/8/250/RSM/MHD/G - 2981619



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: Indramat

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#### Adapter cable - CABLE-15/8/250/RSM/SIN800 - 2981622



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: Siemens

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#### Adapter cable - CABLE-15/8/250/RSM/FM-NC - 2981635



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: Siemens

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### Accessories

#### Adapter cable - CABLE-15/8/250/RSM/DKC - 2981648



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: Indramat

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#### Adapter cable - CABLE-15/8/250/RSM/AMK - 2981651



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: AMK

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#### Adapter cable - CABLE-15/8/250/RSM/SEW-X15 - 2981664



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: SEW

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#### Adapter cable - CABLE-15/8/250/RSM/PD - 2981758



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: Parker Drives

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#### Adapter cable - CABLE- 9/8/250/RSM/LENZE - 2981826



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 9/8-pos., cable length: 2.5 m, for controller: Lenze

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### Accessories

Adapter cable - CABLE-15/8/250/RSM/KINETIX - 2986698



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: Allen-Bradley (Kinetix)

Adapter cable - CABLE-15/8/250/RSM/IHDUNI-SP - 2986973



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), 15/8-pos., cable length: 2.5 m, for controller: Control Techniques, type: Unidrive SP

Adapter cable - CABLE-15/8/250/RSM/INDRADYN-2 - 2986986



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), cable length: 2.5 m, for controller: Bosch Rexroth Indramat, type: IndraDrive - IndraDyn

Adapter cable - CABLE-20/8/250/RSM/FANUC - 2986999



Cable adapter for PSR speed monitors (PSR-RSM4 and PSR-MOTIONSTOP), cable length: 2.5 m, for controller: FANUC CN

### Configuration and diagnostics

Software - PSR-CONF-WIN1.0 - 2981554



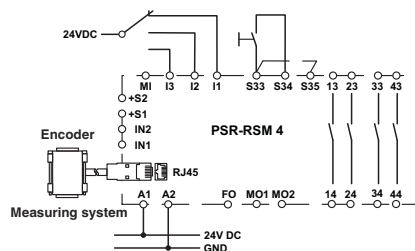
Configuration software for PSR-RSM4, with connecting cable

### Drawings

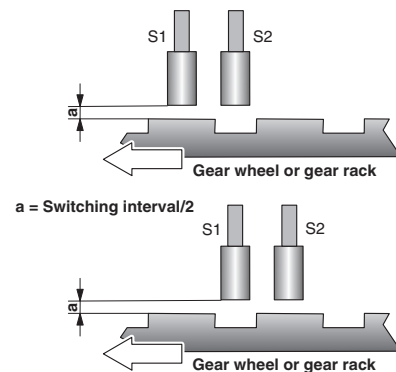


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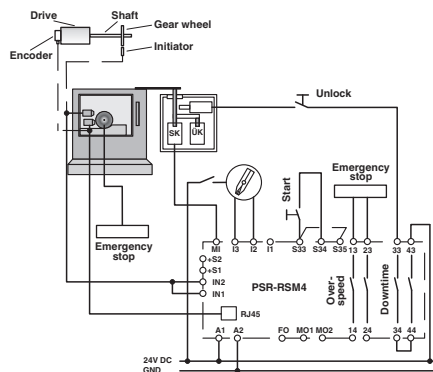
Diagram



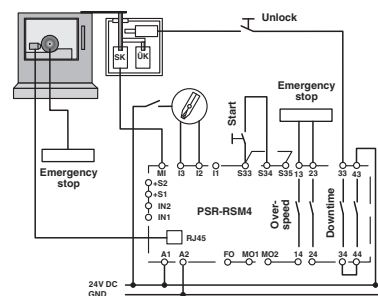
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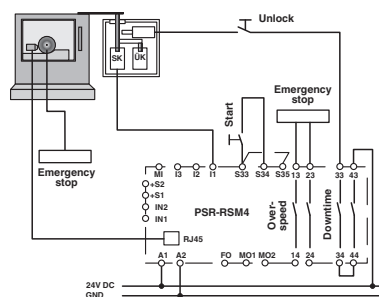
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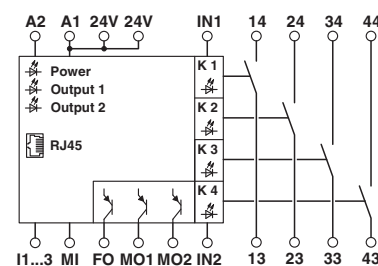
Diagram



Diagram

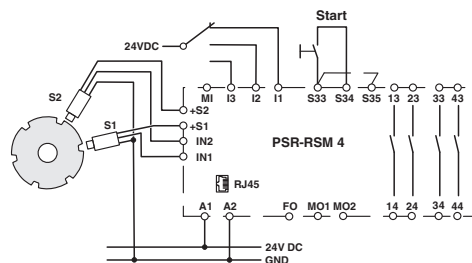


Circuit diagram



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Circuit diagram



Application drawing

