

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

Order No.: 2963912



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2963912>

1 or 2-channel safety relay for emergency off and safety door circuits, 8 N/O contacts, 1 N/C contact, undelayed, optionally with start button monitoring or automatic start for category 4 / EN 954-1, optionally with or without cross-circuit monitoring



Commercial data

| | |
|--------------------------|-------------------|
| EAN | 4017918899707 |
| Pack | 1 Pcs. |
| Customs tariff | 85364900 |
| Weight/Piece | 0.4936 KG |
| Catalog page information | Page 22 (IF-2007) |

Product notes

WEEE/RoHS-compliant since:
10/31/2006



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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 | 210 mA AC |
| | 120 mA DC |
| Voltage at input/start and feedback circuit | Approx. 24 V DC |
| Typical response time | 60 ms (manual start) |
| | 250 ms (automatic start) |
| Typical release time | 20 ms |
| Concurrence input 1/2 | Infinite |
| Recovery time | 1 s |
| 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 μ m 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 | 50 A ² ($I_{TH}^2 = I_1^2 + I_2^2 + \dots + I_8^2$) |
| Interrupting rating (ohmic load) max. | 144 W (24 V DC, $\tau = 0$ ms) |
| | 288 W (48 V DC, $\tau = 0$ ms) |
| | 110 W (110 V DC, $\tau = 0$ ms) |
| | 88 W (220 V DC, $\tau = 0$ ms) |
| | 1500 VA (250 V AC, $\tau = 0$ ms) |
| Maximum interrupting rating (inductive load) | 42 W (24 V DC, $\tau = 40$ ms) |
| | 42 W (48 V DC, $\tau = 40$ ms) |
| | 42 W (110 V DC, $\tau = 40$ ms) |
| | 42 W (220 V DC, $\tau = 40$ ms) |
| Switching capacity min. | 0.4 W |
| Output fuse | 6 A fast blow |
| | 4 A circuit-breaker C |

General data

| | |
|--------|----------|
| Length | 99 mm |
| Width | 45 mm |
| Height | 114.5 mm |

| | |
|---|---|
| Ambient temperature (operation) | -20 °C ... 55 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |
| Service life mechanical | 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 insulation (safe isolation, increased insulation and 6 kV between input circuit and output contact current paths (63/64, 73/74, 83/84) and between the output contact current paths (63/64, 73/74, 83/84) themselves.) |
| 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. | 2.5 mm ² |
| Conductor cross section stranded min. | 0.2 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 24 |
| Conductor cross section AWG/kcmil max | 12 |
| Stripping length | 7 mm |
| Screw thread | M3 |
| Type of connection | Screw connection |

Certificates / Approvals

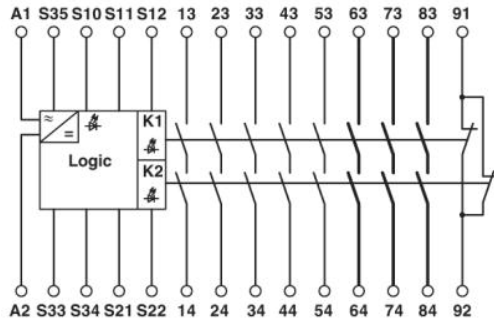


Certification BG, CUL Listed, GOST, UL Listed

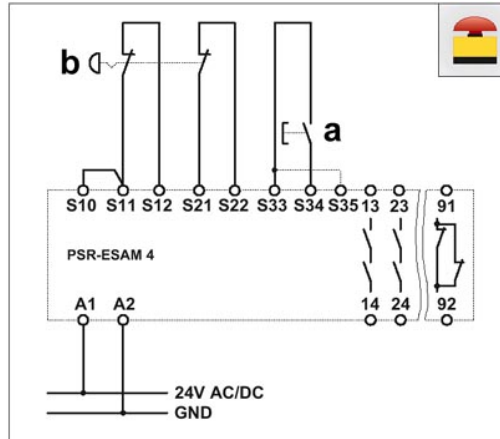
Certifications applied for: BG

Drawings

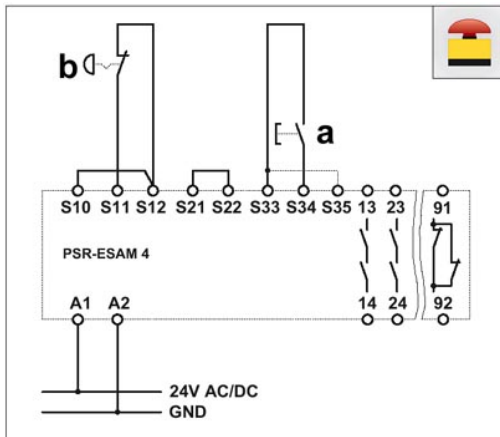
Circuit diagram



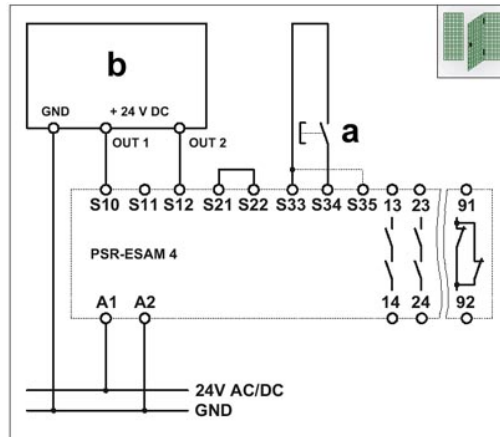
1 = logics



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.