## Extract from the online catalog

## PSR-SCP- 24-230UC/ESAM4/3X1/1X2

Order No.: 2981114

http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2981114

1 or 2-channel safety relay for emergency off and safety door circuits with manual or automatic activation, 3 N/O contacts, $1 \mathrm{~N} / \mathrm{C}$ contact, Cat. 4 / EN 954-1 or SIL 3 / IEC 61508, pluggable screw terminal blocks, 24-230 V AC/DC, width: 45 mm

$\qquad$

| Commercial data |  |
| :--- | :--- |
| EAN | 4046356051644 |
| Pack | 1 Pcs. |
| Customs tariff | 85364900 |
| Weight/Piece | 0.3444 KG |
| Catalog page information | Page 23 (IF-2007) |


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

| Input voltage range | $24 \mathrm{~V} \mathrm{AC} / D C \ldots 230 \mathrm{~V} \mathrm{AC} / D C$ |
| :--- | :--- |
| Input voltage range in reference to $U_{N}$ | $0.85 \ldots 1.1$ |


| Typical input current at $U_{N}$ | 120 mA (for 24 V DC ) |
| :--- | :--- |
|  | 15 mA (for 230 V AC ) |
| 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 (Single-channel) |
| Concurrence input $1 / 2$ | Infinite |
| Recovery time | 1 s |
| Max. permissible overall conductor resistance | $11 \Omega$ (input voltage: $\mathrm{U}_{1}=8.4 \mathrm{~V}+0.02 \times \operatorname{load} \times(\mathrm{V} / \Omega)$ ) |

## Output data

| Contact type | 3 enabling current paths, 1 signaling current path |
| :---: | :---: |
| Contact material | $\mathrm{AgSnO}_{2}$ |
| 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 | $50 \mathrm{~A}^{2}\left(I_{\text {TH }}{ }^{2}=I_{1}{ }^{2}+I_{2}{ }^{2}+I_{3}{ }^{2}\right)$ |
| Interrupting rating (ohmic load) max. | $144 \mathrm{~W}(24 \mathrm{~V} \mathrm{DC}, \mathrm{t}=0 \mathrm{~ms})$ |
|  | 288 W (48 V DC, $\mathrm{t}=0 \mathrm{~ms}$ ) |
|  | $110 \mathrm{~W}(110 \mathrm{~V}$ DC, $\mathrm{t}=0 \mathrm{~ms})$ |
|  | 88 W (220 V DC, $\mathrm{t}=0 \mathrm{~ms}$ ) |
|  | $1500 \mathrm{VA}(250 \mathrm{~V} \mathrm{AC} \mathrm{t}=,0 \mathrm{~ms}$ ) |
| Maximum interrupting rating (inductive load) | 42 W (24 V DC, $\mathrm{T}=40 \mathrm{~ms}$ ) |
|  | 42 W (48 V DC, $\mathrm{t}=40 \mathrm{~ms}$ ) |
|  | 42 W (110 V DC, $\mathrm{T}=40 \mathrm{~ms}$ ) |
|  | $42 \mathrm{~W}(220 \mathrm{~V}$ DC, $\mathrm{t}=40 \mathrm{~ms})$ |
| 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) | $-20^{\circ} \mathrm{C} \ldots 55^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Ambient temperature (storage/transport) | $-20^{\circ} \mathrm{C} \ldots 70^{\circ} \mathrm{C}$ |
| 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 | $6 \mathrm{kV} /$ Safe isolation, increased insulation |
| Rated insulation voltage | 250 V |
| Pollution degree | 2 |
| Surge voltage category | III |

## Connection data

| Conductor cross section solid min. | $0.2 \mathrm{~mm}^{2}$ |
| :--- | :--- |
| Conductor cross section solid max. | $2.5 \mathrm{~mm}^{2}$ |
| Conductor cross section stranded min. | $0.2 \mathrm{~mm}^{2}$ |
| Conductor cross section stranded max. | $2.5 \mathrm{~mm}^{2}$ |
| Conductor cross section AWG/kcmil min. | 24 |
| Conductor cross section AWG/kcmil max | 12 |
| Stripping length | 7 mm |
| Screw thread | M 3 |
| Type of connection | Screw connection |

## Certificates / Approvals

## -(1L) us (bl)

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

## Drawings

Circuit diagram

$\mathrm{a}=$ Emergency off, b= Reset. Two-channel emergency stop circuit with monitored reset button (bridge on S33/S35: Automatic activation, suitable up to safety category 4 , SIL3.

$\mathrm{a}=$ Emergency off, b= Reset. Two-channel emergency stop circuit with cross-circuiting detection and monitored reset button (bridge on S33/S35: Automatic activation, suitable up to safety category 4, SIL3.

$\mathrm{a}=$ Emergency off, b= Reset. Two-channel protective door circuit with cross circuiting detection and monitored reset button (bridge on S33/S35: Automatic activation, suitable up to safety category 4, SIL3.

