# PRUCT with socket GUC11s-vo relays for railroad industry - interface 



RUCT + GUC11S-vo

- 35 mm rail mount acc. to EN 60715
- Compliance with standards: EN 45545-2 (category EL10, requirement R26 - flammability class V-0 acc. to EN 60695-11-10); EN 61373 category 1, class B (mechanical shock and vibration resistance); EN 50155; EN 60077-1; EN 61810-1
- Recognitions, certifications, directives: recognitions RUCT, RoHS,

C $\mathcal{E}$ EHLCIK
Contact data

| Number and type of contacts |  |
| :--- | :--- |
| Contact material |  |
| Rated / max. switching voltage | AC |
| Min. switching voltage | AC1 |
| Rated load | DC1 |
| Min. switching current |  |
| Max. inrush current |  |
| Rated current | AC1 |
| Max. breaking capacity |  |
| Min. breaking capacity |  |
| Contact resistance | AC1 |
| Max. operating frequency <br> - at rated load |  |

- no load

Coil data

| Rated voltage | DC |
| :---: | :---: |
| Must release voltage |  |
| Operating range of supply voltage |  |
| Must operate voltage |  |
| Rated power consumption | DC |
| Insulation according to EN 60664-1 |  |
| Insulation rated voltage |  |
| Rated surge voltage |  |
| Overvoltage category |  |
| Insulation pollution degree |  |
| Flammability class |  |
| Dielectric strength <br> - between coil and contacts <br> - contact clearance |  |
|  |  |
|  |  |
| - pole - pole |  |
| Contact - coil distance | - clearance |
|  | - creepage |
| Pole - pole distance | - clearance |
|  | - creepage |

General data
\(\left.$$
\begin{array}{|ll|}\hline \text { Operating / release time } & \begin{array}{c}\text { • typical values } \\
\text { • max. values }\end{array}
$$ <br>
\hline Electrical life \& <br>
• resistive AC1 \& <br>

• cos \varphi\end{array}\right]\)| Mechanical life (cycles) |  |
| :--- | :--- |
| Dimensions (L x W x H) |  |
| Weight | • storage |
| Ambient temperature |  |
| (non-condensation and/or icing) |  |
| Cover protection category |  |
| Environmental protection |  |
| Shock / vibration resistance |  |

$3 \mathrm{CO}, 3 \mathrm{NO}$
AgNi
230 V / 250 V
5 V
16 A / 250 V AC
16 A / 24 V DC (see Fig. 3)
5 mA
40 A
16 A
4000 VA
0,3 W
$\leq 100 \mathrm{~m} \Omega$

1200 cycles/hour
12000 cycles/hour

24, 110 V
$\geq 0,1 \mathrm{U}_{\mathrm{n}}$
$0,7 \ldots 1,25 U_{n}$ EN 50155 see Table 1
$\leq 0,7 \mathrm{U}_{\mathrm{n}}$
1,7 W reinforced version

250 V AC
4000 V $1,2 / 50 \mu \mathrm{~s}$
III
2
V-0 UL 94, EN 60695-11-10

2500 V AC type of insulation: basic
1500 V AC type of clearance: micro-disconnection
with contact gap $\geq 0,4 \mathrm{~mm}$
2500 V AC type of insulation: basic
$\geq 4 \mathrm{~mm}$
$\geq 5 \mathrm{~mm}$
$\geq 6,3 \mathrm{~mm}$
$\geq 8 \mathrm{~mm}$
$20 \mathrm{~ms} / 15 \mathrm{~ms}$
$25 \mathrm{~ms} / 20 \mathrm{~ms}$
$>10^{5}$
16 A, 250 V AC
see Fig. 2
$>10^{7}$
$84,5 \times 41,5 \times 77,3 \mathrm{~mm}$
162 g
$-40 \ldots+85^{\circ} \mathrm{C}$
$-40 \ldots+55^{\circ} \mathrm{C}$
IP 00 EN 60529
RTI EN 61810-7
category 1, class B EN 61373
(set: relay in socket with clip)

The data in bold type relate to the standard versions of the relays.
(1) For other voltages, please contact Relpol S.A.

Electrical life at AC resistive load. Switching frequency: 1200 cycles/hour


Max. DC breaking capacity A - resistive load DC1
$B$ - inductive load L/R = 40 ms


Relays for railroad industry - industrial


Electrical life reduction factor at AC inductive load


## Dimensions



## Connection diagrams

(screw terminals side view)


## Mounting

Relays PRUCT with socket GUC11S-V0 are designed for direct mounting on 35 mm rail mount acc. to EN 60715. Connections: max. cross section of the cables (stranded): $2 \times 2,5 \mathrm{~mm}^{2}$ ( $2 \times 14$ AWG), stripping length: 9 mm , max tightening moment for the terminal: $0,7 \mathrm{Nm}$.

Coil data - DC voltage version
Table 1

| Coil code | Rated voltage V DC © | Coil resistance at $20^{\circ} \mathrm{C}$ $\Omega$ | Acceptable resistance | Coil operating range V DC according to EN 50155 (2) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | min. | max. |
| W024 | 24 | 345 | $\pm 10 \%$ | 16,8 | 30,0 |
| W110 | 110 | 7300 | $\pm 10 \%$ | 77,0 | 137,5 |

The data in bold type relate to the standard versions of the relays. (1) For other voltages, please contact Relpol S.A. (2) Changes of voltage within the range $0,6 \ldots 1,4$ Un below $0,1 \mathrm{~s}$ and changes of voltage within the range $1,25 \ldots 1,4$ Un below 1 s are admissible and they do not distort operation of the relays.

## Ordering codes



Examples of ordering codes:
PRUCT-2013-26-W024-V0 interface relay PRUCT (railroad version) consists of: relay RUCT (three changeover contacts, contact material AgNi, reinforced coil voltage $24 \mathrm{~V} D C$ ), socket GUC11S-V0 (grey, screw terminals), spring wire clip MBA
PRUCT-2023-26-W110-V0
interface relay PRUCT (railroad version) consists of: relay RUCT (three normally open contacts, contact material AgNi, reinforced coil voltage 110 V DC), socket GUC11S-V0 (grey, screw terminals), spring wire clip MBA

## PRECAUTIONS:

1. Ensure that the parameters of the product described in its specification provide a safety margin for the appropriate operation of the device or system and never use the product in circumstances which exceed the parameters of the product. 2. Never touch any live parts of the device. 3. Ensure that the product has been connected correctly. An incorrect connection may cause malfunction, excessive heating or risk of fire. 4. In case of any risk of any serious material loss or death or injuries of humans or animals, the devices or systems shall be designed so to equip them with double safety system to guarantee their reliable operation.
