

# PLC-RPT- 72UC/21/RW - Relay module



2900319

<https://www.phoenixcontact.com/us/products/2900319>

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 documentation. Our general terms of use for downloads are valid.



PLC-INTERFACE for railway applications, consisting of basic terminal block with Push-in connection and plug-in miniature relay with power contact, range:  $0.7 \times U_N$  to  $1.25 \times U_N$ , temperature class TX:  $-40^\circ\text{C}$  to  $+70^\circ\text{C}$ , 1 changeover contact, input voltage 72 V DC

## Your advantages

- Optimum relay operation thanks to wide-range electronics
- Safe isolation between coil and contact side
- Certified in accordance with EN 50155
- Vibration and shock resistance in accordance with EN 50155
- Temperature range:  $-40^\circ\text{C}$  ...  $+70^\circ\text{C}$  (short-term  $85^\circ\text{C}$ )
- Input voltage range of 0.7 to  $1.25 \times U_N$  ( $1.4 \times U_N$  briefly)

## Commercial data

Item number	2900319
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to order (non-returnable)
Sales key	C461
Product key	DK62AL
GTIN	4046356507417
Weight per piece (including packing)	33.37 g
Weight per piece (excluding packing)	33.37 g
Customs tariff number	85364900
Country of origin	DE

## Technical data

### Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	Railway applications
Environment	Attached to the vehicle body
Operating mode	100% operating factor
Mechanical service life	approx. $2 \times 10^7$ cycles

### Insulation characteristics

Overvoltage category	III
Pollution degree	2

### Data management status

Date of last data management	01.04.2026
------------------------------	------------

### Electrical properties

Maximum power dissipation for nominal condition	0.22 W
Test voltage (Winding/contact)	4 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact)
Rated insulation voltage	250 V AC
Rated surge voltage	6 kV

### Input data

#### Coil side

Nominal input voltage $U_N$	72 V DC
Input voltage range	50.4 V DC ... 90 V DC
Nominal voltage (plugged-in electromechanical relay)	48 V DC
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at $U_N$	3 mA
Typical response time	4 ms
Typical release time	4 ms
Protective circuit	Surge protection; Freewheeling diode
	RCZ filter
	Wide-range electronics
Operating voltage display	Yellow LED

### Output data

#### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO

# PLC-RPT- 72UC/21/RW - Relay module



2900319

<https://www.phoenixcontact.com/us/products/2900319>

Maximum switching voltage	250 V AC/DC (Separating plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules.)
Minimum switching voltage	5 V (100 mA)
Limiting continuous current	6 A
Maximum inrush current	10 A (4 s)
Min. switching current	10 mA (12 V)
Short-circuit current	200 A (conditional short-circuit current)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Output fuse	4 A gL/gG NEOZED
Switching capacity	1 A (24 V (DC13))
	0.2 A (110 V (DC13))
	0.1 A (220 V (DC13))
	3 A (24 V (AC15))
	3 A (120 V (AC15))
	3 A (230 V (AC 15))

## Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)
	2x 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> (TWIN ferrule)
Conductor cross-section AWG	26 ... 14

## Dimensions

### Item dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94 (Housing)	V0 (Housing)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (Relay)	RT III (Relay)
------------------------------	----------------

2900319

<https://www.phoenixcontact.com/us/products/2900319>

Degree of protection (Relay base)	IP20 (Relay base)
Ambient temperature (operation)	-40 °C ... 70 °C (Temperature class TX)
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approvals

### CE

Certificate	CE-compliant
-------------	--------------

### UKCA

Certificate	UKCA-compliant
-------------	----------------

### Shipbuilding approval

Certificate	TAE0000196
-------------	------------

### Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

### Shipbuilding data

Temperature	D
Humidity	A
Vibration	B/C
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

## EMC data

Electromagnetic compatibility	Conformance with EMC directive
Low Voltage Directive	Conformance with Low Voltage Directive

## Standards and regulations

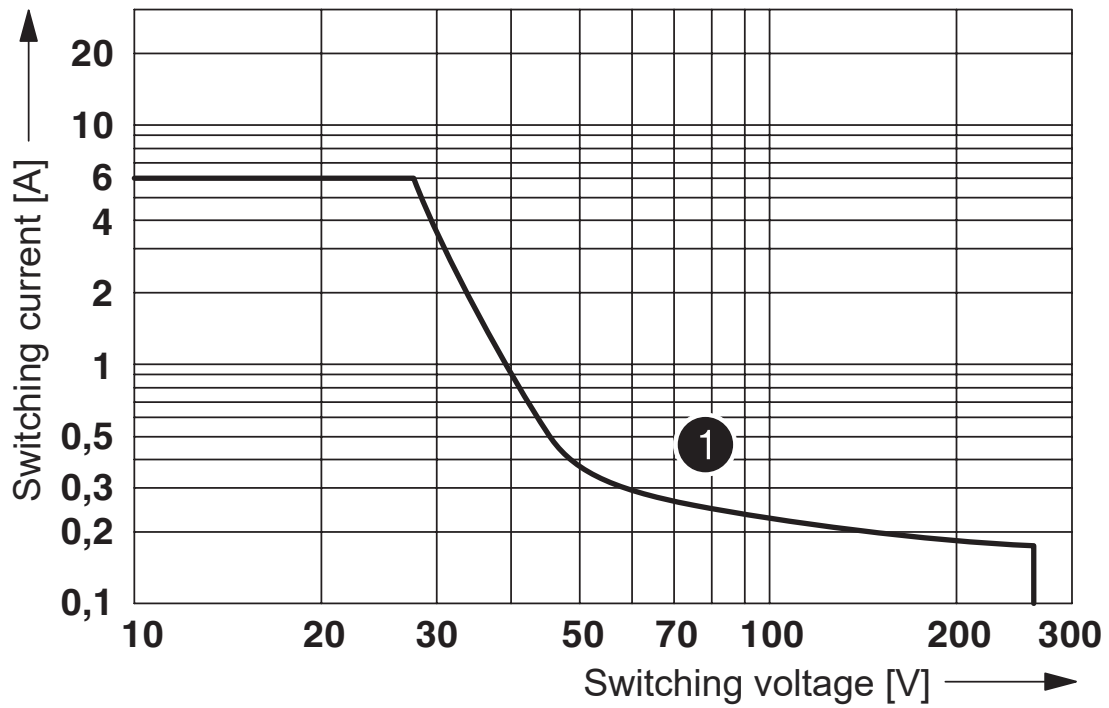
Standards/regulations	IEC 60947-5-1
	EN 50155 (VDE 0115 part 200)
	EN 61373
	EN 50121

## Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

Diagram



① ohmic load

DC interrupting rating

Diagram



① 250 V AC, ohmic load

Electrical service life

Diagram



Permissible humidity for operation and storage.

The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures  $\leq 0^\circ\text{C}$  must be prevented

Area B: Condensation at ambient temperatures  $> 0^\circ\text{C}$  must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature  $\leq 25^\circ\text{C}$ .

Circuit diagram



2900319

<https://www.phoenixcontact.com/us/products/2900319>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2900319>



**EAC**

Approval ID: RU\*C-DE.\*08.B.00010



**cULus Listed**

Approval ID: E140324



**cUL Recognized**

Approval ID: E238705



**UL Recognized**

Approval ID: E238705



**UL Listed**

Approval ID: FILE E 172140



**cUL Listed**

Approval ID: FILE E 172140



**cULus Listed**

Approval ID: E140324



**cULus Listed**

Approval ID: E140324

**DNV**

Approval ID: TAE0000196

2900319

<https://www.phoenixcontact.com/us/products/2900319>

## Classifications

### ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

### ETIM

ETIM 10.0	EC001437
-----------	----------

### UNSPSC

UNSPSC 21.0	39122300
-------------	----------

2900319

<https://www.phoenixcontact.com/us/products/2900319>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	ad81a586-7d0b-4b17-a59b-9d6a61f53720

### EF3.1 Climate Change

CO2e kg	2.5 kg CO2e
---------	-------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)