

# PLC-RSP-110UC/21HC/RW - Relay module



2987095

<https://www.phoenixcontact.com/us/products/2987095>

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.



The figure shows the 24 V design

PLC-INTERFACE for railway applications and high continuous currents, consisting of basic terminal block with spring-cage connection and plug-in miniature relay, 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 110 V DC

## Your advantages

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

## Commercial data

Item number	2987095
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DK622A
GTIN	4046356154130
Weight per piece (including packing)	68.22 g
Weight per piece (excluding packing)	68.22 g
Customs tariff number	85364900
Country of origin	DE

# PLC-RSP-110UC/21HC/RW - Relay module



2987095

<https://www.phoenixcontact.com/us/products/2987095>

## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---

### 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. $3 \times 10^7$ cycles

#### Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

#### Data management status

Date of last data management	12.09.2025
------------------------------	------------

### Electrical properties

Maximum power dissipation for nominal condition	0.5 W
Test voltage (Winding/contact)	5 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 $U_N$	110 V DC
Input voltage range	77 V DC ... 137.5 V DC
Input voltage range in reference to $U_N$	0.7 ... 1.25
Drive and function	monostable
Typical input current at $U_N$	4.5 mA
Typical response time	5 ms
Typical release time	11 ms
Coil voltage	60 V DC
Protective circuit	Bridge rectifier; Bridge rectifier
	Freewheeling diode; Freewheeling diode
	Surge protection
	RCZ filter
	Wide-range electronics

# PLC-RSP-110UC/21HC/RW - Relay module



2987095

<https://www.phoenixcontact.com/us/products/2987095>

Operating voltage display	Yellow LED
---------------------------	------------

## Output data

### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgNi
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	12 V (at 10 mA)
Limiting continuous current	10 A (With inserted bridge 2967691)
Maximum inrush current	30 A (300 ms)
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC) 58 W (at 48 V DC) 48 W (at 60 V DC) 50 W (at 110 V DC) 75 W (at 220 V DC) 2500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13) 0.2 A (at 110 V, DC13) 0.2 A (at 250 V, DC13) 6 A (at 24 V, AC15) 6 A (at 120 V, AC15) 6 A (at 250 V, AC15)

## Connection data

### Coil side

Connection method	Spring-cage connection
Stripping length	8 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>
Conductor cross-section AWG	26 ... 14

### Contact side

Connection method	Spring-cage connection
Stripping length	8 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>
Conductor cross-section AWG	26 ... 14

## Dimensions

Width	14 mm
-------	-------

# PLC-RSP-110UC/21HC/RW - Relay module



2987095

<https://www.phoenixcontact.com/us/products/2987095>

Height	80 mm
Depth	94 mm

## Material specifications

Color	green (RAL 6021)
Flammability rating according to UL 94 (Housing)	V0 (Housing)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (Relay)	RT III (Relay)
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

## Standards and regulations

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

## Mounting

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

Drawings

Diagram

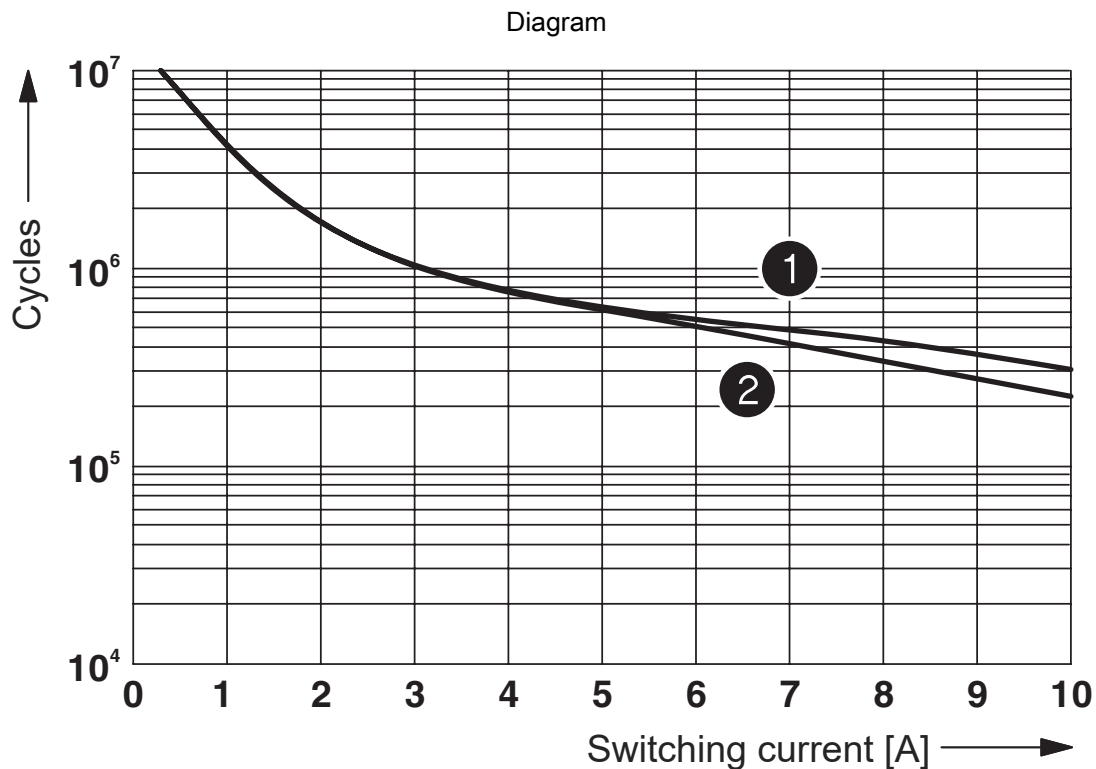


- ① AC, ohmic load
- ② DC, ohmic load
- ③ DC, L/R = 40 ms

Interrupting rating

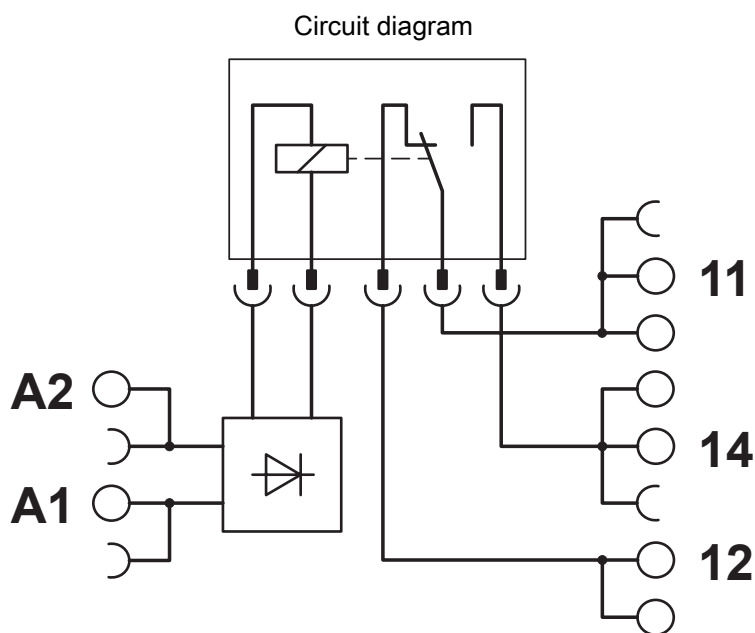
2987095

<https://www.phoenixcontact.com/us/products/2987095>



- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

Electrical service life



# PLC-RSP-110UC/21HC/RW - Relay module



2987095

<https://www.phoenixcontact.com/us/products/2987095>

## Environmental product compliance

### 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.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

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)