

# PLC-RSP-230UC/21-21AU/RWF - Relay module



2968001

<https://www.phoenixcontact.com/us/products/2968001>

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 spring-cage connection and plug-in miniature relay with multi-layer gold contact, range:  $0.75 \times U_N$  to  $1.15 \times U_N$ , nominal input frequency 16.7 Hz, 2 changeover contacts, input voltage 230 V AC

## Your advantages

- Vibration and shock resistance in accordance with EN 50155
- Safe isolation between coil and contact side
- Nominal input frequency of 16.7 Hz
- Screw- and Push-in connection

## Commercial data

Item number	2968001
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C461
Product key	DK622D
GTIN	4046356138666
Weight per piece (including packing)	65.47 g
Weight per piece (excluding packing)	65.47 g
Customs tariff number	85364900
Country of origin	DE

## Technical data

### Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	Railway applications
Operating mode	100% operating factor
Mechanical service life	approx. $3 \times 10^7$ cycles

Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	Basic insulation
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	1.1 W
Test voltage (Winding/contact)	6 kV (50 Hz, 1 min., winding/contact)

Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V AC
Rated surge voltage	6 kV

### Input data

Coil side

Nominal input voltage $U_N$	230 V AC
	220 V DC
Input voltage range	179.4 V AC/DC ... 264.5 V AC/DC
Input voltage range in reference to $U_N$	see diagram
Mains frequency	16.67 Hz
Drive and function	monostable
Typical input current at $U_N$	4.8 mA (with AC)
Typical response time	20 ms
Typical release time	60 ms
Coil voltage	110 V DC
Protective circuit	Bridge rectifier
Operating voltage display	Yellow LED

### Output data

Switching

Contact switching type	2 changeover contacts
Type of switch contact	Single contact

# PLC-RSP-230UC/21-21AU/RWF - Relay module



2968001

<https://www.phoenixcontact.com/us/products/2968001>

Contact material	AgNi + Au
Note	If the specified maximum values are exceeded, the gold plating is destroyed. The AgNi contact values are then valid for further operation; a reduction in length of service life is to be expected.
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Min. switching current	1 mA
Interrupting rating (ohmic load) max.	1.2 W (24 V DC)

Switching: when the gold layer is destroyed

Note	<b>the following values are applicable if a gold layer is destroyed</b>
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	5 V AC/DC
Limiting continuous current	6 A
Maximum inrush current	8 A
Min. switching current	10 mA
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	85 W (at 48 V DC)
	60 W (at 60 V DC)
	44 W (at 110 V DC)
	60 W (at 220 V DC)
	1500 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)
	2 A (at 24 V, AC15)
	2 A (at 120 V, AC15)
	2 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

# PLC-RSP-230UC/21-21AU/RWF - Relay module



2968001

<https://www.phoenixcontact.com/us/products/2968001>

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
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)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approvals

### CE

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

## EMC data

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

## Standards and regulations

### Air clearances and creepage distances between the power circuits

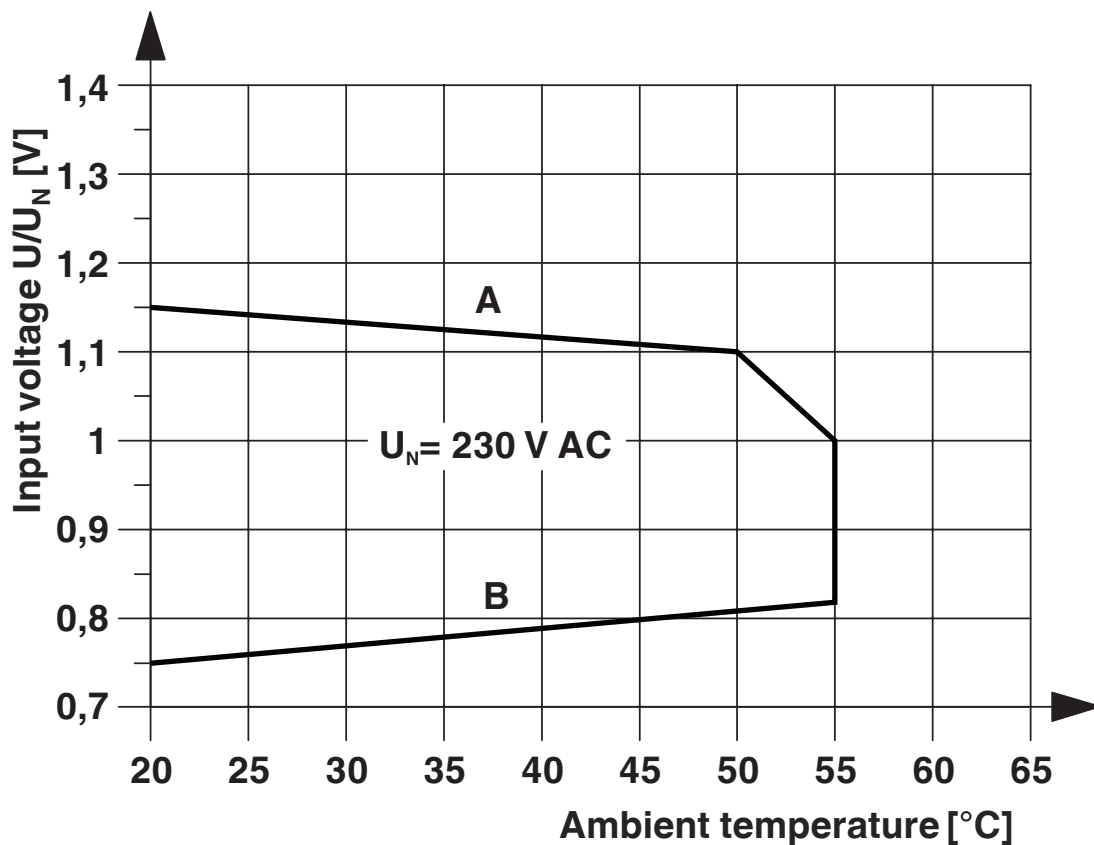
Standards/regulations	IEC 60664
	IEC 60947-5-1

## Mounting

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

Drawings

Diagram



**Curve A:**  
 Maximum continuous operating voltage  
 at limiting continuous current = 6 A

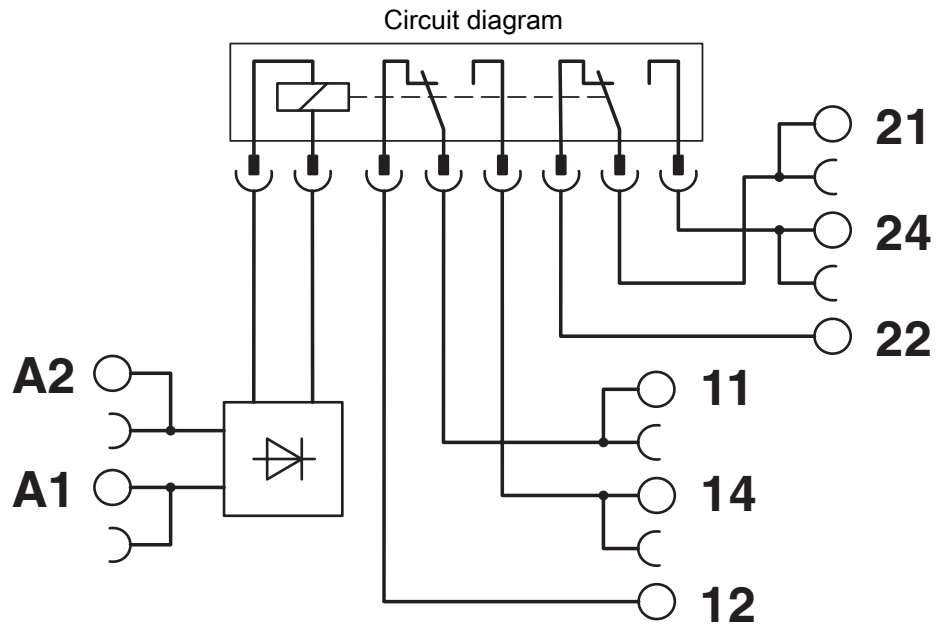
**Curve B:**  
 Minimum relay operating voltage at initial  
 trigger with  $U_N$  and limiting continuous current = 6 A

# PLC-RSP-230UC/21-21AU/RWF - Relay module



2968001

<https://www.phoenixcontact.com/us/products/2968001>



2968001

<https://www.phoenixcontact.com/us/products/2968001>

## 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)