

PLC-RSC-230UC/21HC/EX - Relay Module



2909521

<https://www.phoenixcontact.com/in/products/2909521>

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, consisting of DIN-rail-mountable basic terminal block in 14 mm with screw connection and plug-in relay with 10 A power contact, 1 changeover contact, 230 V AC/220 V DC input voltage. Approved according to ATEX/IECEx (Zone 2) and Ex Zone Class I, Div. 2.

Commercial data

Item number	2909521
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CK6
Product key	CK621A
Catalog page	Page 387 (C-5-2019)
GTIN	4055626363493
Weight per piece (including packing)	78.6 g
Weight per piece (excluding packing)	70.63 g
Customs tariff number	85364900
Country of origin	DE

PLC-RSC-230UC/21HC/EX - Relay Module



2909521

<https://www.phoenixcontact.com/in/products/2909521>

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	High continuous currents potentially explosive areas
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles

Insulation characteristics

Insulation	Safe isolation, reinforced insulation
------------	---------------------------------------

Insulation characteristics: Standards/regulations

Insulation	Safe isolation, reinforced insulation
Overvoltage category	III
Pollution degree	3

Electrical properties

Maximum power dissipation for nominal condition	1.04 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

Standards/regulations

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 ... 264.5 V AC (20 °C) 171.6 V DC ... 264 V DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	4.5 mA
Typical response time	7 ms
Typical release time	10 ms
Protective circuit	Bridge rectifier; Bridge rectifier
Operating voltage display	Yellow LED

PLC-RSC-230UC/21HC/EX - Relay Module



2909521

<https://www.phoenixcontact.com/in/products/2909521>

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 (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Minimum switching voltage	12 V (10 mA)
Limiting continuous current	10 A 6 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.)
Maximum inrush current	30 A (300 ms)
Min. switching current	10 mA (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) 80 W (at 220 V DC) 2500 VA (for 250 V AC)
Interrupting rating (ohmic load) max. bridged	144 W (for 24 V DC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.) 1500 VA (for 250 V AC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)
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

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ² 0.2 mm ² ... 2.5 mm ² (Single ferrule) 2x 0.5 mm ² ... 1.5 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.6 Nm ... 0.8 Nm

Dimensions

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

PLC-RSC-230UC/21HC/EX - Relay Module



2909521

<https://www.phoenixcontact.com/in/products/2909521>

Height	80 mm
Depth	94 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	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)	-20 °C ... 60 °C (UL) -40 °C ... 55 °C (ATEX / IECEx)
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

CE

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

ATEX

Identification	⊕ II 3G Ex ec nC IIC T4 Gc
Certificate	IBExU16ATEXB015 X

IECEx

Identification	Ex ec nC IIC T4 Gc
Certificate	IECEx IBE 16.0029X

UKCA Ex (UKEX)

Identification	⊕ II 3 G Ex ec nC IIC T4 Gc
Certificate	PxCIF21UKEX2909514X

UL, USA

Identification	Class I, Zone 2, AEx nA nC IIC T6
----------------	-----------------------------------

UL, USA/Canada

Identification	Class I, Div. 2, Groups A, B, C, D
----------------	------------------------------------

UL, Canada

Identification	Class I, Zone 2, Ex nA nC IIC Gc T6 X
----------------	---------------------------------------

Shipbuilding approval

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

Corrosive gas test

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

DNV GL data

PLC-RSC-230UC/21HC/EX - Relay Module



2909521

<https://www.phoenixcontact.com/in/products/2909521>

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

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

Standards and regulations

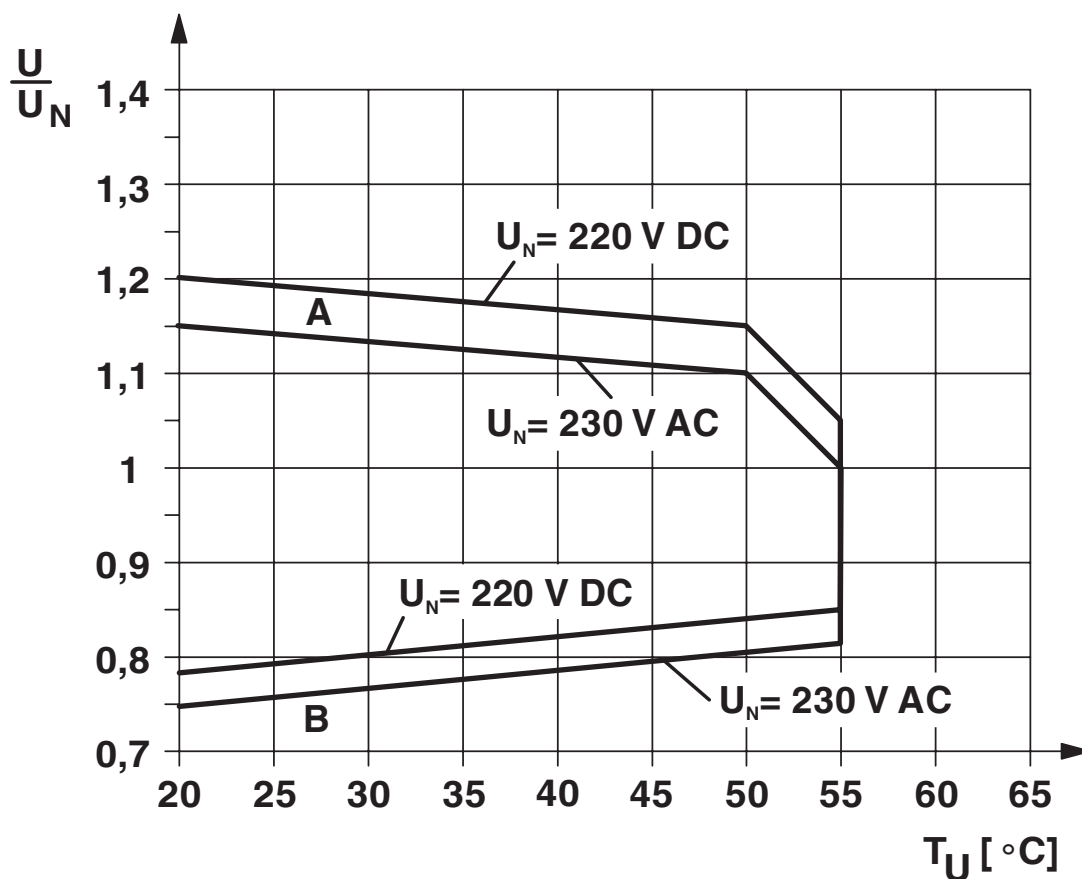
Standards/regulations	
Standards/regulations	IEC 60947-5-1
	EN 60079-0
	EN 60079-7
	EN 60079-15

Mounting

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

Drawings

Diagram

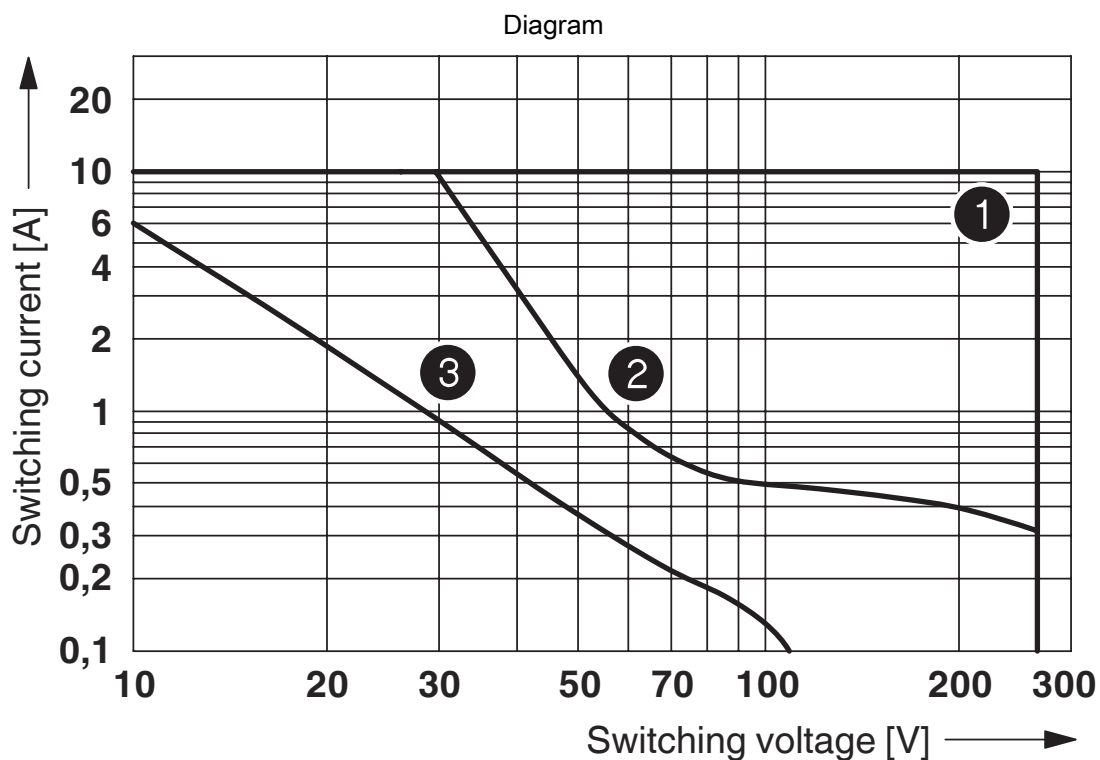
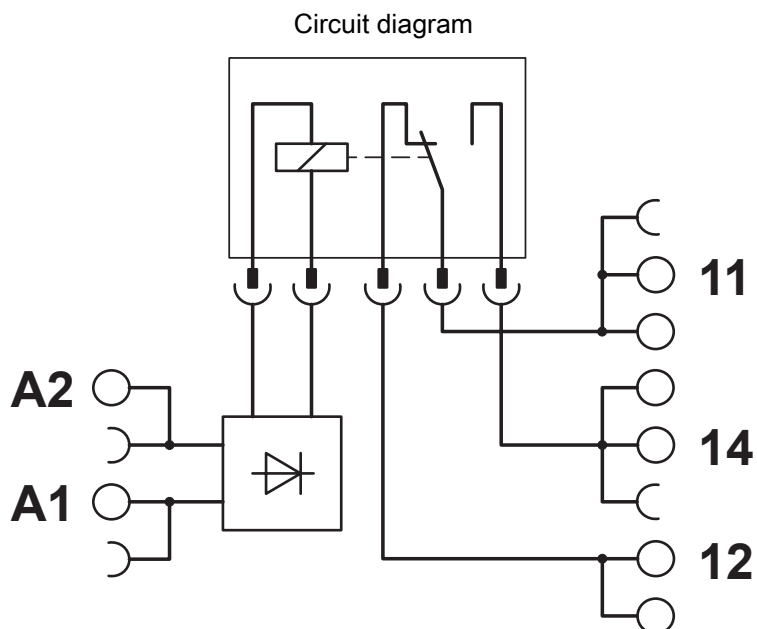


Curve A

Maximum permissible continuous voltage $U_{\max}$ with limiting continuous current on the contact side (see relevant technical data)

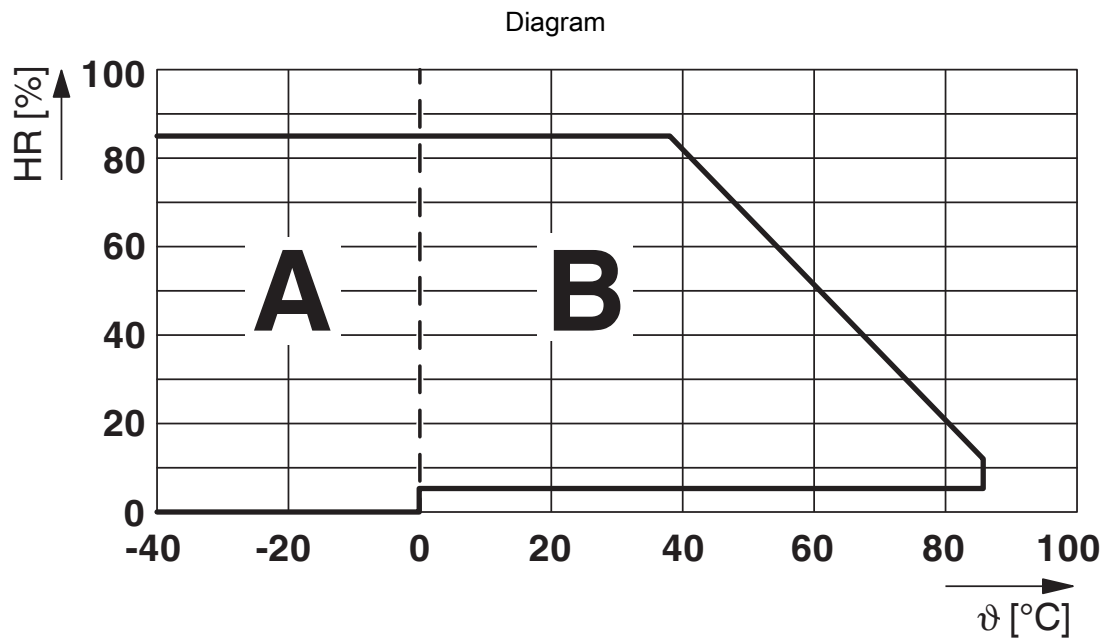
Curve B

Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)



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

Interrupting rating



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 $\leq 25^\circ\text{C}$.

PLC-RSC-230UC/21HC/EX - Relay Module



2909521

<https://www.phoenixcontact.com/in/products/2909521>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/2909521>



DNV GL

Approval ID: TAE0000196



CCC

Approval ID: 2021122304114118



cULus Listed

Approval ID: E140324



IECEx

Approval ID: IECEx IBE 16.0029X



ATEX

Approval ID: 16ATEXB015X



EAC Ex

Approval ID: RU C-DE.AB72.B.02328



cUL Listed

Approval ID: FILE E 199827



UL Listed

Approval ID: FILE E 199827



cULus Listed

Approval ID: E199827

cULus Listed

PLC-RSC-230UC/21HC/EX - Relay Module



2909521

<https://www.phoenixcontact.com/in/products/2909521>

Classifications

ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

ETIM

ETIM 9.0	EC001437
----------	----------

UNSPSC

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

PLC-RSC-230UC/21HC/EX - Relay Module



2909521
<https://www.phoenixcontact.com/in/products/2909521>

Environmental product compliance

REACH SVHC	Lead 7439-92-1
	Hexahydromethylphthalic anhydride
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.
A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420
info@phoenixcontact.co.in