

# PLC-RSC-230AC/21HC/SO46/HI - Relay module



1079402

<https://www.phoenixcontact.com/us/products/1079402>

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 PLC-BSC.../21HC/SO46/HI basic terminal block with screw connection and plug-in miniature relay for high continuous current, 1 changeover contact, nominal input voltage of 230 V AC, with defined activation and deactivation thresholds

## Commercial data

Item number	1079402
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	DK623M
Catalog page	Page 393 (C-5-2019)
GTIN	4055626798936
Weight per piece (including packing)	75.87 g
Weight per piece (excluding packing)	63.06 g
Customs tariff number	85364900
Country of origin	DE

## Technical data

### Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	Filter to prevent interference
Operating mode	100% operating factor
Mechanical service life	3x 10 <sup>7</sup> cycles

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

Insulation	Basic insulation
	Safe isolation, reinforced insulation, and 6 kV between input circuit and output contact current paths
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	21.03.2025
------------------------------	------------

### Electrical properties

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

Air clearances and creepage distances between the power circuits

Rated surge voltage	4 kV
---------------------	------

### Input data

Coil side

Nominal input voltage $U_N$	230 V AC
Input voltage range	190 V AC ... 264 V AC (20 °C)
Nominal voltage (plugged-in electromechanical relay)	110 V DC
Switch-on threshold	190 V AC
Switch-off threshold	170 V AC
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at $U_N$	14 mA (50 Hz)
Input power dissipation for $U_N$	3 VA
Typical response time	10 ms
Typical release time	8 ms
Protective circuit	Bridge rectifier
Input circuit	RC element with threshold value switch
Operating voltage display	Yellow LED

### Output data

# PLC-RSC-230AC/21HC/SO46/HI - Relay module



1079402

<https://www.phoenixcontact.com/us/products/1079402>

## 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 <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> ... 1.5 mm <sup>2</sup> (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.45 Nm ... 0.55 Nm (Usually these terminal blocks must be supported during conductor connection (held by one hand, supported on the housing))

## Dimensions

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

# PLC-RSC-230AC/21HC/SO46/HI - Relay module



1079402

<https://www.phoenixcontact.com/us/products/1079402>

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 II (Relay)
Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Installation location)	≥ IP54 (Installation location)
Ambient temperature (operation)	-40 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

## 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

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

Standards/regulations	IEC 60947-5-1
-----------------------	---------------

# PLC-RSC-230AC/21HC/SO46/HI - Relay module



1079402

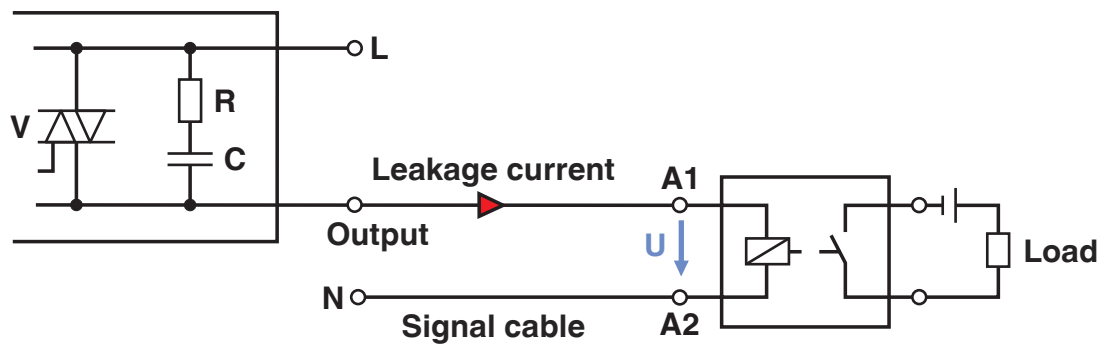
<https://www.phoenixcontact.com/us/products/1079402>

## Mounting

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

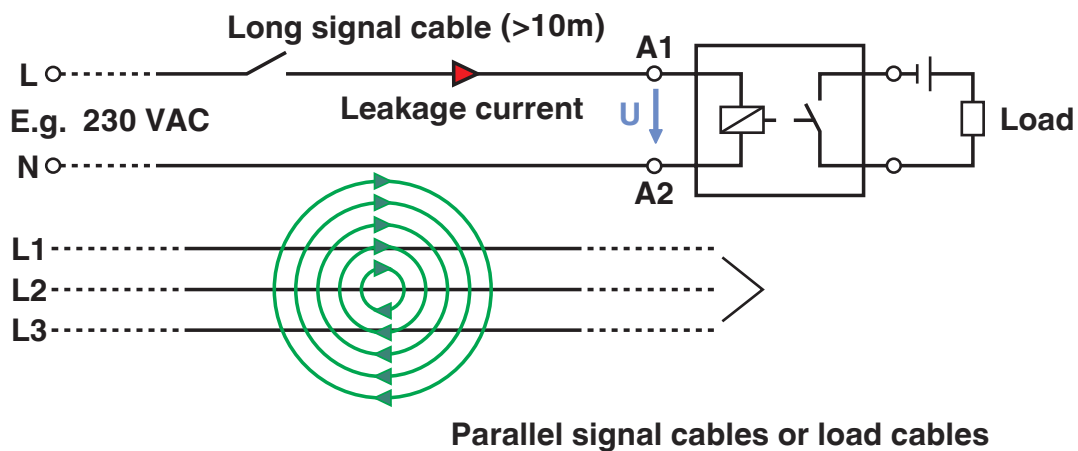
## Drawings

Application drawing

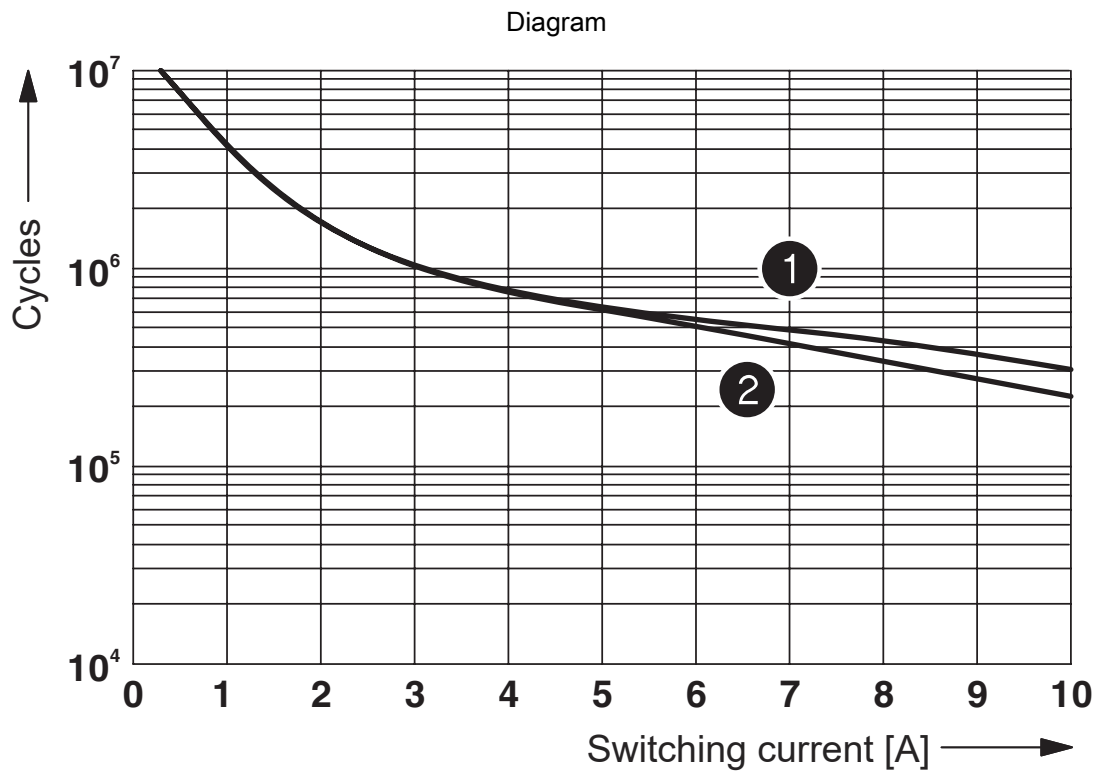


Occurrence of interference signals  
Scenario 1: controller - AC output card

Application drawing

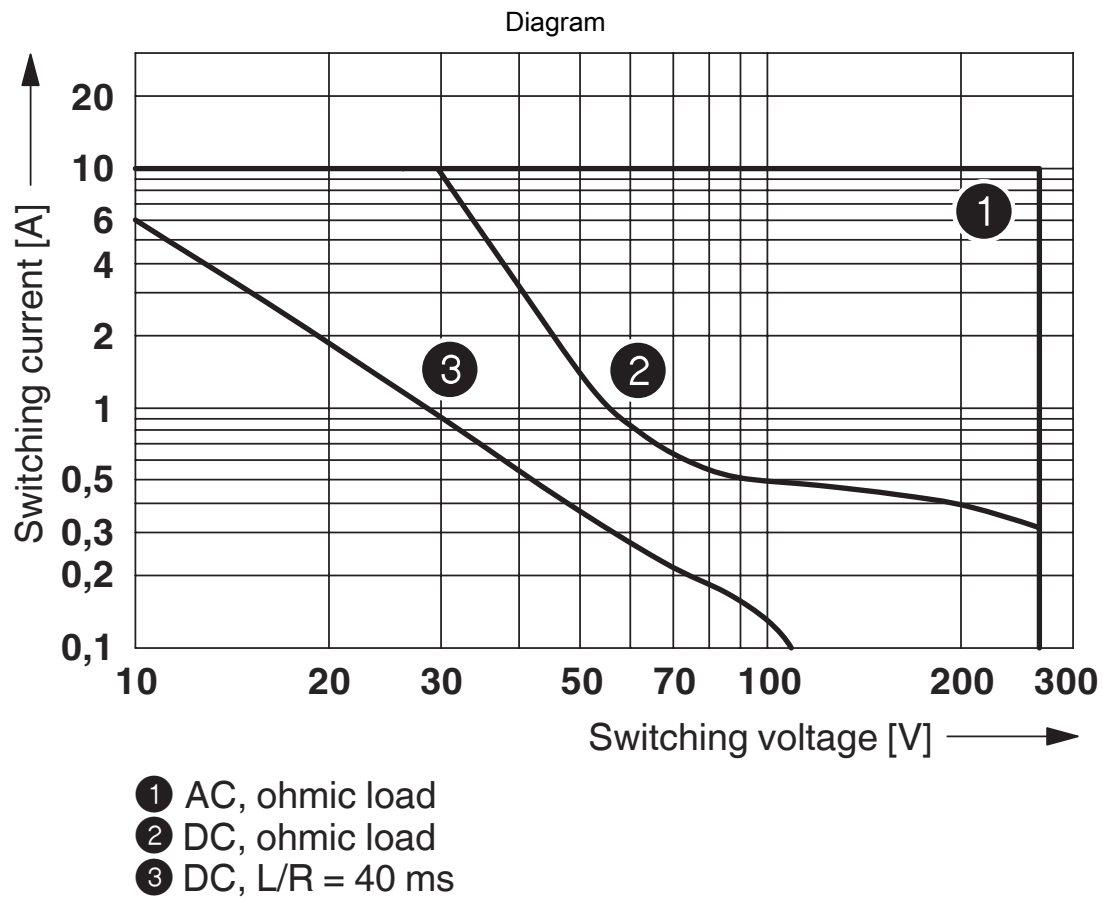


Occurrence of interference signals  
Scenario 2: long signal cables



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

Electrical service life



Interrupting rating

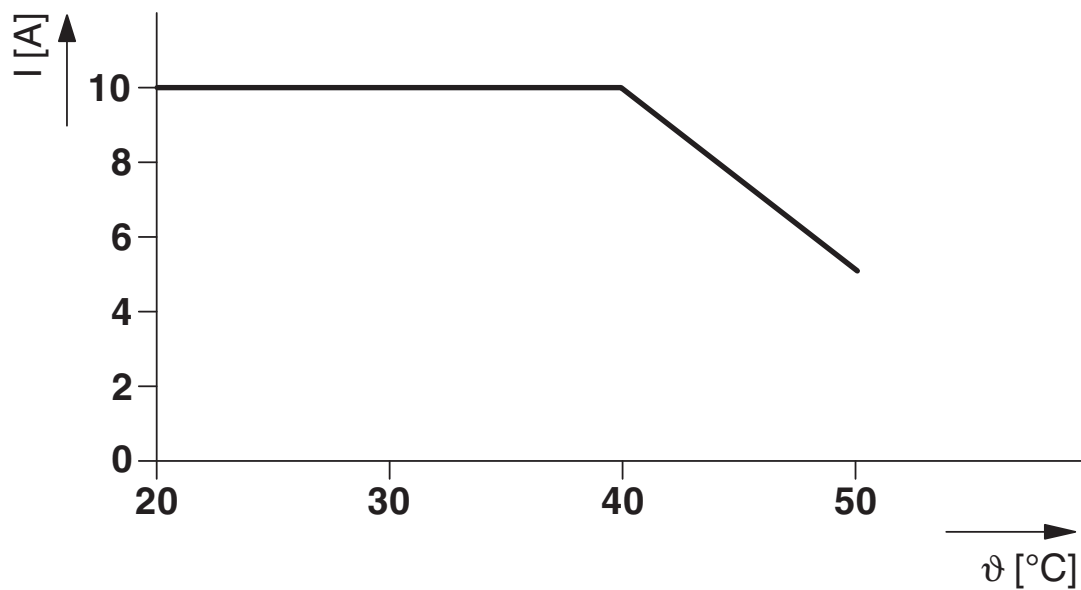


Diagram



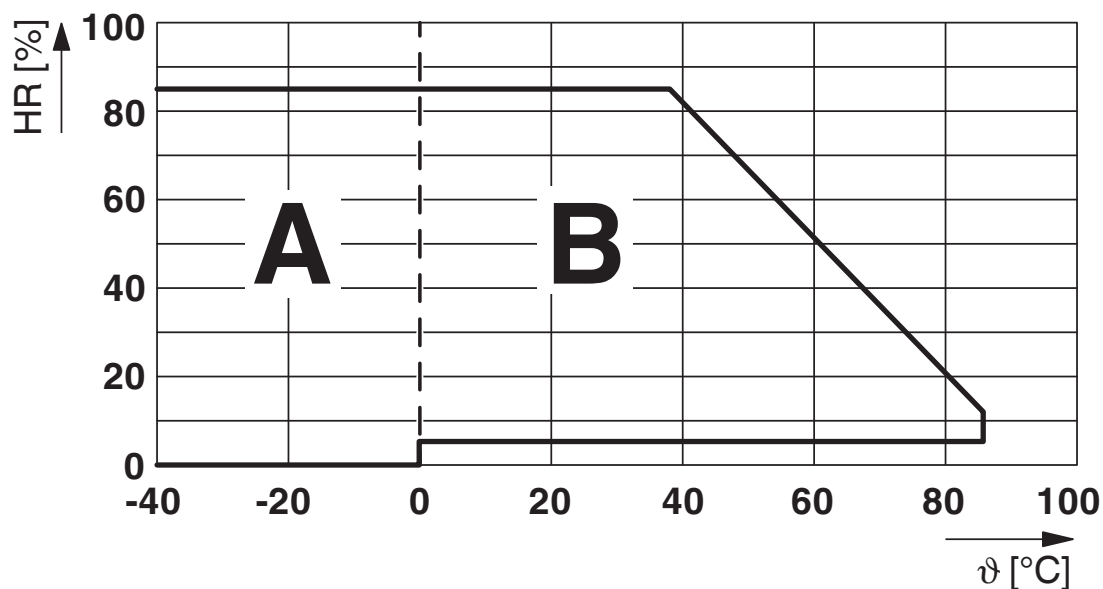
Service life reduction factor

Diagram



Derating curve

Diagram



Permissible humidity for operation and storage.

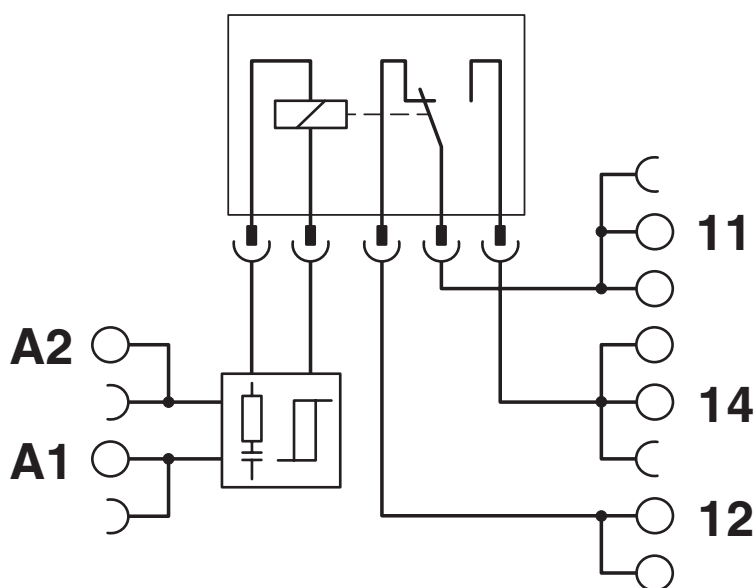
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented

Area B: Condensation at ambient temperatures > 0°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 ≤ 25°C.

Circuit diagram




# PLC-RSC-230AC/21HC/SO46/HI - Relay module



1079402

<https://www.phoenixcontact.com/us/products/1079402>

## Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1079402>



**EAC**

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



**DNV GL**

Approval ID: TAE0000196



**cULus Listed**

Approval ID: E140324

# PLC-RSC-230AC/21HC/SO46/HI - Relay module



1079402

<https://www.phoenixcontact.com/us/products/1079402>

## Classifications

### ECLASS

ECLASS-13.0	27371601
-------------	----------

### ETIM

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

### UNSPSC

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

# PLC-RSC-230AC/21HC/SO46/HI - Relay module



1079402

<https://www.phoenixcontact.com/us/products/1079402>

## 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	b51159e2-b7f5-470d-9b88-2dab842f4ad5

Phoenix Contact 2025 © - 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)