

PLC-RSC-230UC/21HC/SO46 - Relay module



1125943

<https://www.phoenixcontact.com/us/products/1125943>

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PLC-INTERFACE for protection against interference currents/voltages on the control side. Consisting of PLC-BSC-230UC/21HC/SO46 basic terminal block with screw connection and plug-in miniature relay with power contact up to 10 A, 1 changeover contact, 230 V AC input voltage

Commercial data

Item number	1125943
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C461
Product key	DK623M
GTIN	4063151052973
Weight per piece (including packing)	78.61 g
Weight per piece (excluding packing)	56.43 g
Customs tariff number	85364900
Country of origin	DE

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Technical data

Notes

Notes on operation	The PLC-ATP partition plate must be installed for voltages greater than 250 V (L1, L2, L3) between identical terminal blocks on adjacent modules.
Notes on operation	The PLC-ATP separating plate should be installed for safe isolation between adjacent modules
Notes on operation	The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact.
Assembly note	The PLC-ATP separating plate is required at the start and end of every PLC terminal strip.

Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	Filter to prevent interference
Operating mode	100% operating factor
Mechanical service life	approx. 3×10^7 cycles

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

Insulation	Basic insulation
Oversupply category	III
Pollution degree	3

Data management status

Date of last data management	12.09.2025
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Electrical properties

Maximum power dissipation for nominal condition	2.3 W
Test voltage (Winding/contact)	4 kV _{rms} (50 Hz, 1 min., winding/contact)

Air clearances and creepage distances between the power circuits

Rated insulation voltage	250 V AC
Rated surge voltage	4 kV (Safe isolation, reinforced insulation, and 6 kV between input circuit and output contact current paths)

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 ... 253 V DC (20 °C)
Nominal voltage (plugged-in electromechanical relay)	110 V DC
Mains frequency	50/60 Hz

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Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	8.5 mA (50 Hz) 10 mA (60 Hz)
Typical response time	7 ms
Typical release time	10 ms
Typical release voltage	60 V AC
Protective circuit	RC element Bridge rectifier
Status display	LED (yellow)

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
Minimum switching voltage	12 V (10 mA)
Limiting continuous current	6 A 10 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.) 30 A (300 ms, N/O contact)
Maximum inrush current	10 mA (12 V)
Min. switching current	144 W (24 V DC) 240 W (24 V DC, value is valid for connections 12. If connections 12 are bridged, the normal value applies.) 58 W (48 V DC) 48 W (60 V DC) 50 W (110 V DC) 80 W (220 V DC) 1500 VA (250 V AC) 2500 W (250 V AC, value is valid for connections 12. If connections 12 are bridged, the normal value applies.)
Interrupting rating (ohmic load) max.	2 A (DC13, 24 V) 0.2 A (DC13, 250 V) 6 A (AC15, 24 V) 6 A (AC15, 250 V)
Switching capacity	

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 0.14 mm ² ... 2.5 mm ²

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Conductor cross-section flexible	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
Height	80 mm
Depth	94 mm

Material specifications

Color	gray (RAL 7042)
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Environmental and real-life conditions

Ambient conditions

Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Relay)	RT II (Relay)
Degree of protection (Installation location)	IP54 (Installation location)
Ambient temperature (operation)	-40 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

Approvals

CE

Certificate	CE-compliant
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UKCA

Certificate	UKCA-compliant
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Shipbuilding approval

Certificate	TAE0000196
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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
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Low Voltage Directive

Conformance with Low Voltage Directive

Standards and regulations

Air clearances and creepage distances between the power circuits

Standards/regulations

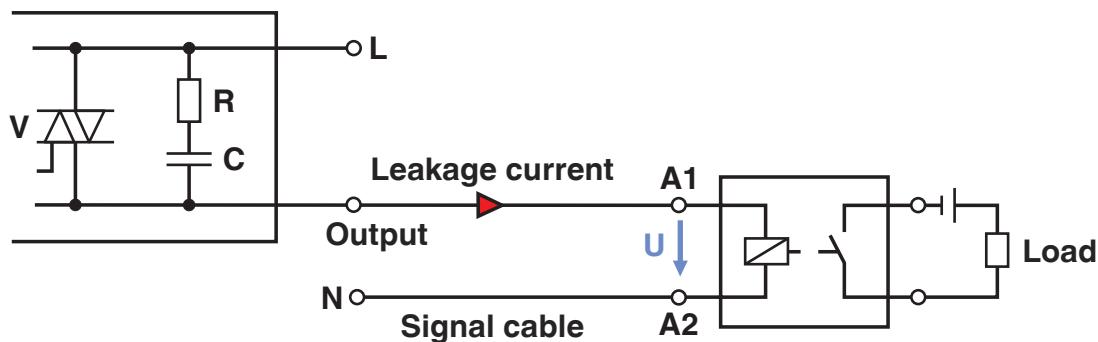
IEC 60947-5-1

Mounting

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

Drawings

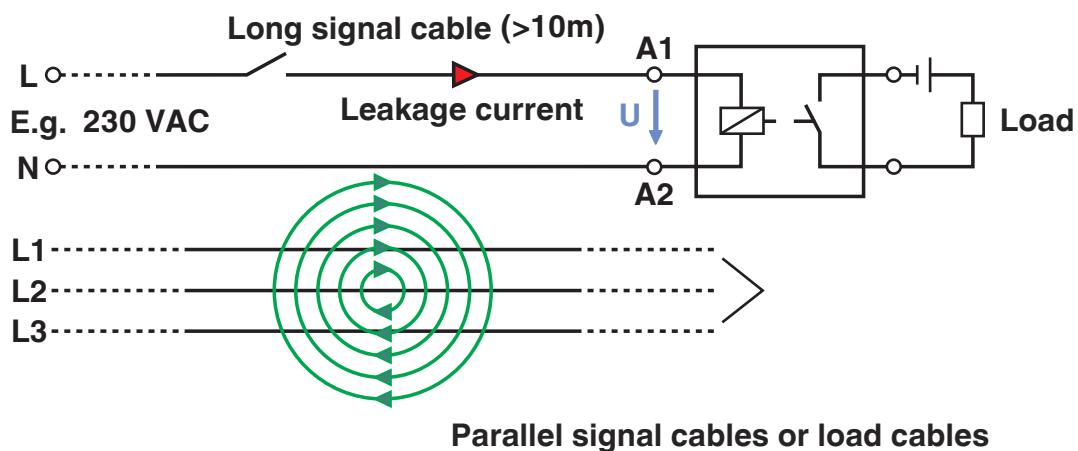
Application drawing



Occurrence of interference signals

Scenario 1: controller - AC output card

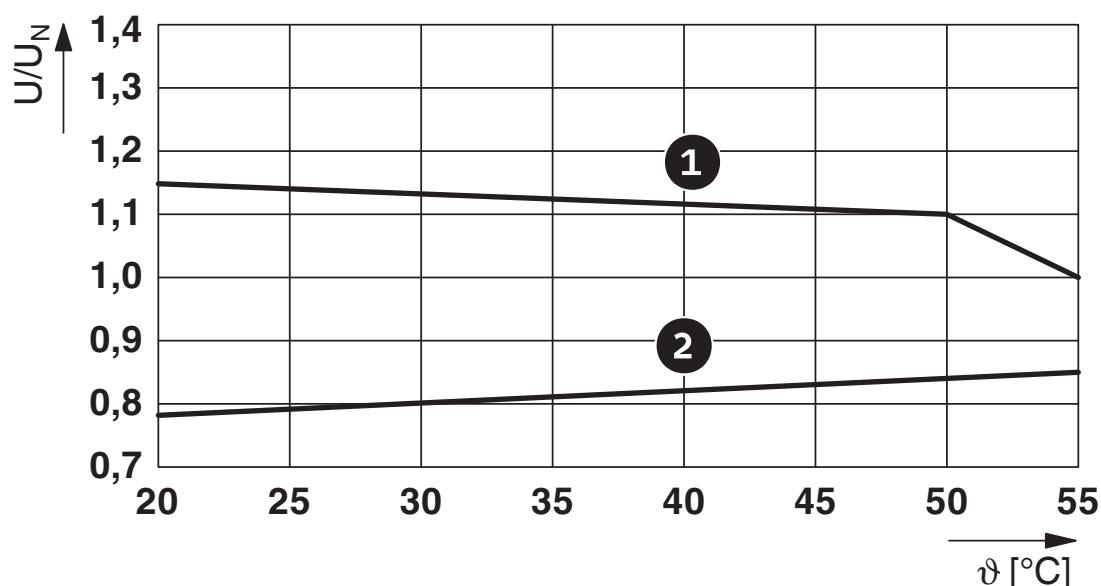
Application drawing



Occurrence of interference signals

Scenario 2: long signal cables

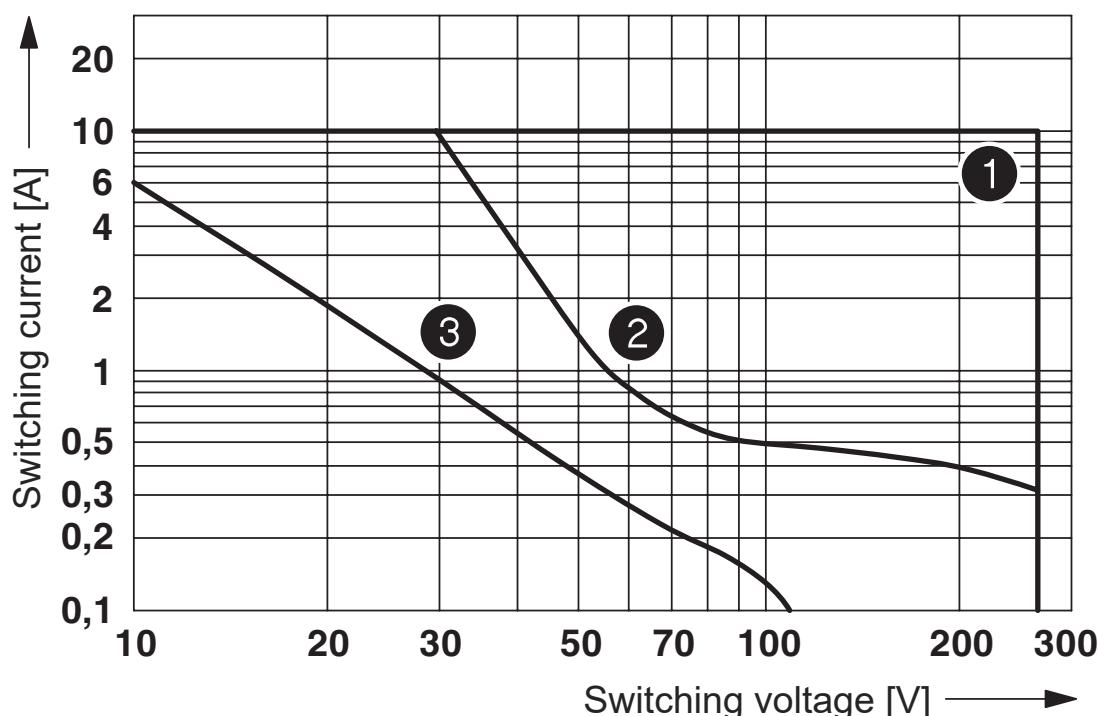
Diagram



① maximum continuous voltage U_{\max} at $I_K=10$ A

② minimum pick-up voltage U_{an} with pre-energization with U_N at limiting continuous current $I_K=10$ A

Diagram



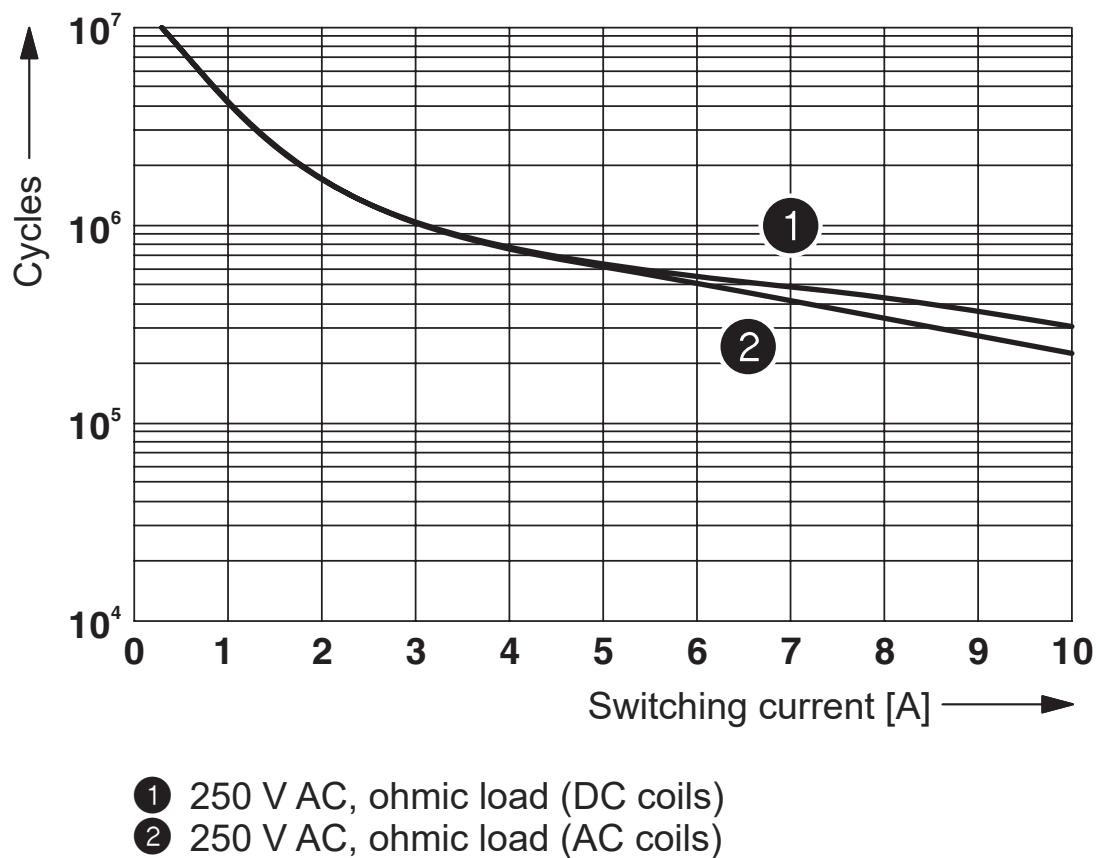
① AC, ohmic load

② DC, ohmic load

③ DC, $L/R = 40$ ms

Interrupting rating

Diagram

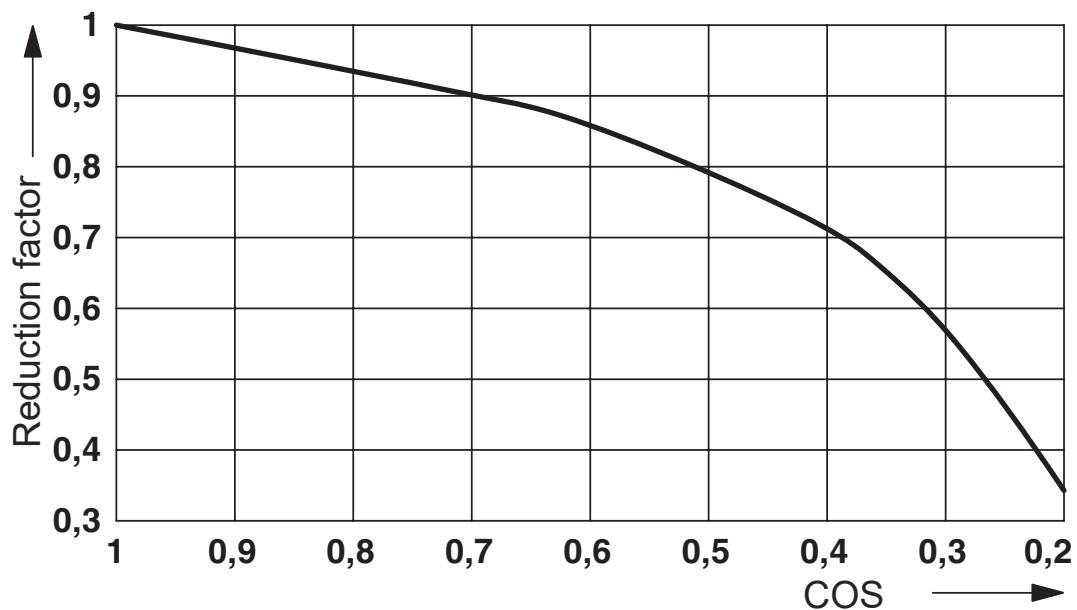


Electrical service life

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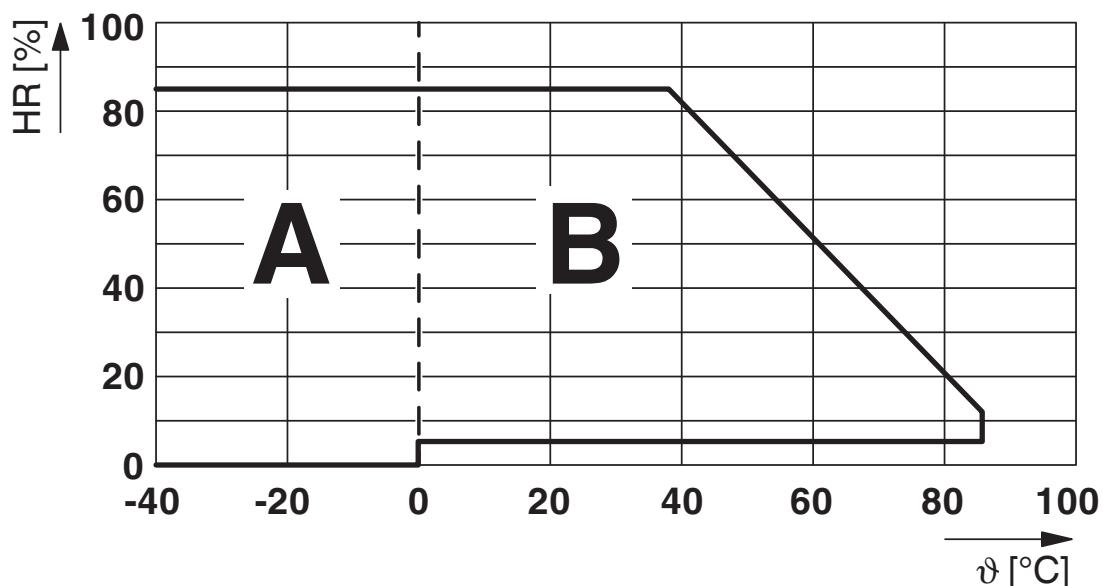
<https://www.phoenixcontact.com/us/products/1125943>

Diagram



Service life reduction factor

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

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Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1125943>



EAC

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



DNV GL

Approval ID: TAE0000196



EAC

Approval ID: RU D-DE.B*00573/18



cULus Listed

Approval ID: E140324

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Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

ETIM 9.0	EC001437
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UNSPSC

UNSPSC 21.0	39122300
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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.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
SCIP	7c0b2dee-6d86-40cd-9177-4e3af25e9daf

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