PLC-RSC-120UC/21/SO46 - Relay module

5603593

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PLC-INTERFACE for protection against interference currents or interference voltages on the control side. Consisting of PLC-BSC-120UC/21/SO46 basic terminal block with screw connection and plug-in miniature relay with power contact up to 6 A, 1 changeover contact, input voltage: 120 V AC

Your advantages

- Slim design
- Resistant to interference currents
- Efficient connection to system cabling using V8 adapter
- Safe isolation according to DIN EN 50178 between coil and contact
- RT III sealed relay
- Functional plug-in bridges

Commercial data

Item number	5603593
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C462
Product key	DK622M
GTIN	4046356686143
Weight per piece (including packing)	40.985 g
Weight per piece (excluding packing)	40.985 g
Customs tariff number	85364900
Country of origin	DE

Set consists of

PLC-BSC-120UC/21/SO46 - Relay base

2980319

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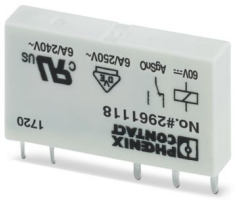


6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 120 V AC

REL-MR- 60DC/21 - Single relay

2961118

https://www.phoenixcontact.com/us/products/2961118



Plug-in miniature power relay, with power contact, 1 changeover contact, input voltage 60 V DC

Technical data

Notes

General	Separating plate PLC-ATP must 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....
General	The PLC-ATP divider plate should be installed for safe isolation between adjacent modules
General	The PLC-ATP divider plate is required at the start and end of every PLC terminal strip.
General	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.

Product properties

Product type	Relay Module
Product family	PLC-INTERFACE
Application	Filter to prevent interference
Operating mode	100% operating factor
Mechanical service life	2x 10^7 cycles

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

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

Data management status

Date of last data management	01.04.2026

Electrical properties

Maximum power dissipation for nominal condition	0.84 W
Test voltage (Winding/contact)	4 kV AC (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	120 V AC
	110 V DC
Input voltage range	93.6 V AC ... 168 V AC (20 °C)
	85.8 V DC ... 154 V DC (20 °C)
Nominal voltage (plugged-in electromechanical relay)	60 V DC
Mains frequency	50/60 Hz

Drive and function	monostable
Drive (polarity)	polarized
Typical input current at U_N	7 mA (50 Hz)
	8 mA (60 Hz)
Typical response time	7 ms
Typical release time	20 ms
Typical release voltage	50 V AC
Protective circuit	Bridge rectifier
	RC element
Status display	LED (yellow)

Output data

Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC (The divider 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	5 V (100 mA)
Limiting continuous current	6 A
Maximum inrush current	10 A (4 s)
Min. switching current	10 mA (12 V)
Interrupting rating (ohmic load) max.	140 W (24 V DC)
	20 W (48 V DC)
	18 W (60 V DC)
	23 W (110 V DC)
	40 W (220 V DC)
	1500 VA (250 V AC)
Switching power min.	0.12 W
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.14 mm² ... 2.5 mm²
	0.14 mm² ... 2.5 mm²

Conductor cross-section flexible	0.2 mm² ... 2.5 mm² (Single ferrule)
	2x 0.5 mm² ... 1.5 mm² (TWIN ferrule)
Conductor cross-section AWG	26 ... 14
Tightening torque	0.6 Nm ... 0.8 Nm

Dimensions

Item dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

Material specifications

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)
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

Corrosive gas test

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

Standards and regulations

Standards/regulations

Standards/regulations	EN 50178
	EN 61810

Air clearances and creepage distances between the power circuits

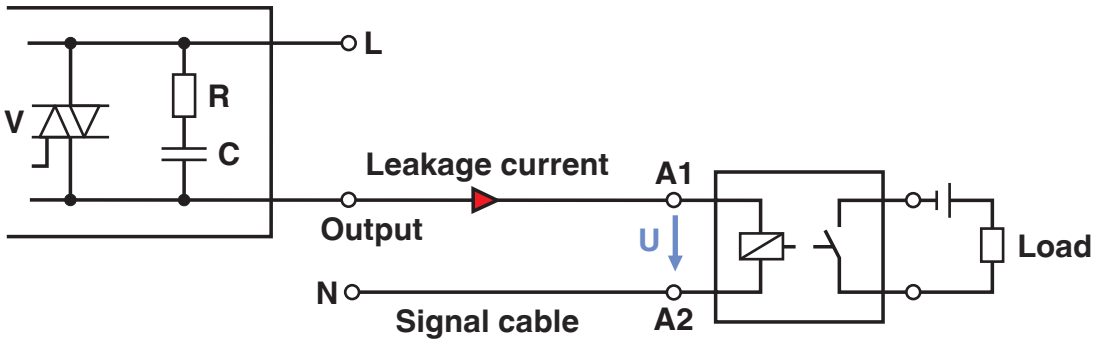
Standards/regulations	DIN EN 50178

Mounting

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

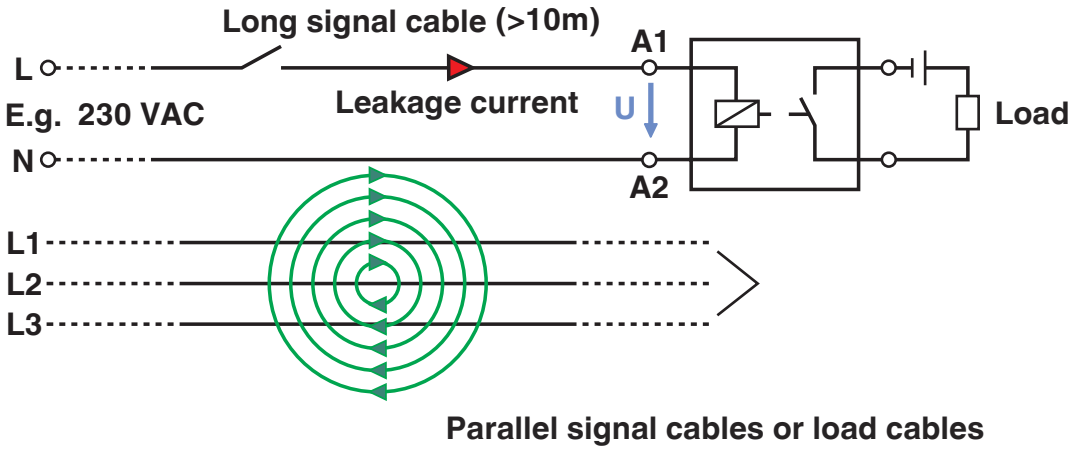
Drawings

Application drawing



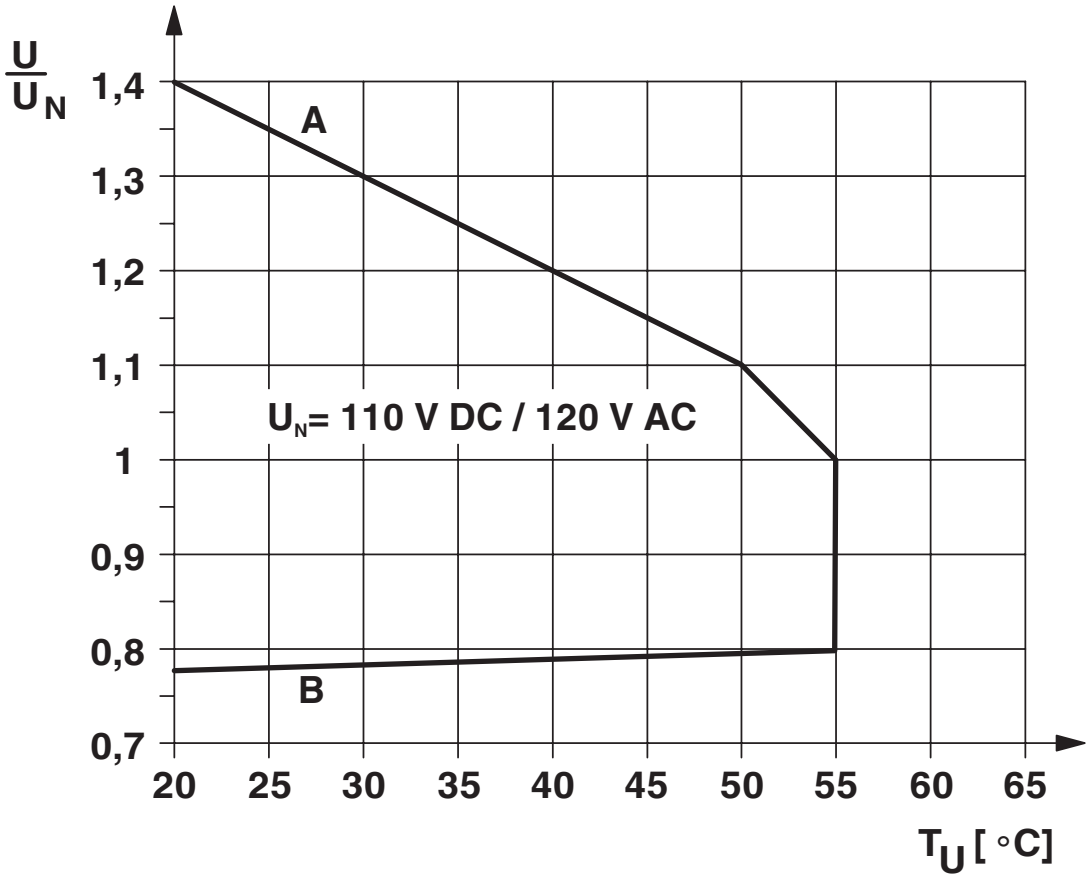
Occurrence of interference signals
Scenario 1: controller - AC output card

Application drawing



Occurrence of interference signals
Scenario 2: long signal cables

Diagram



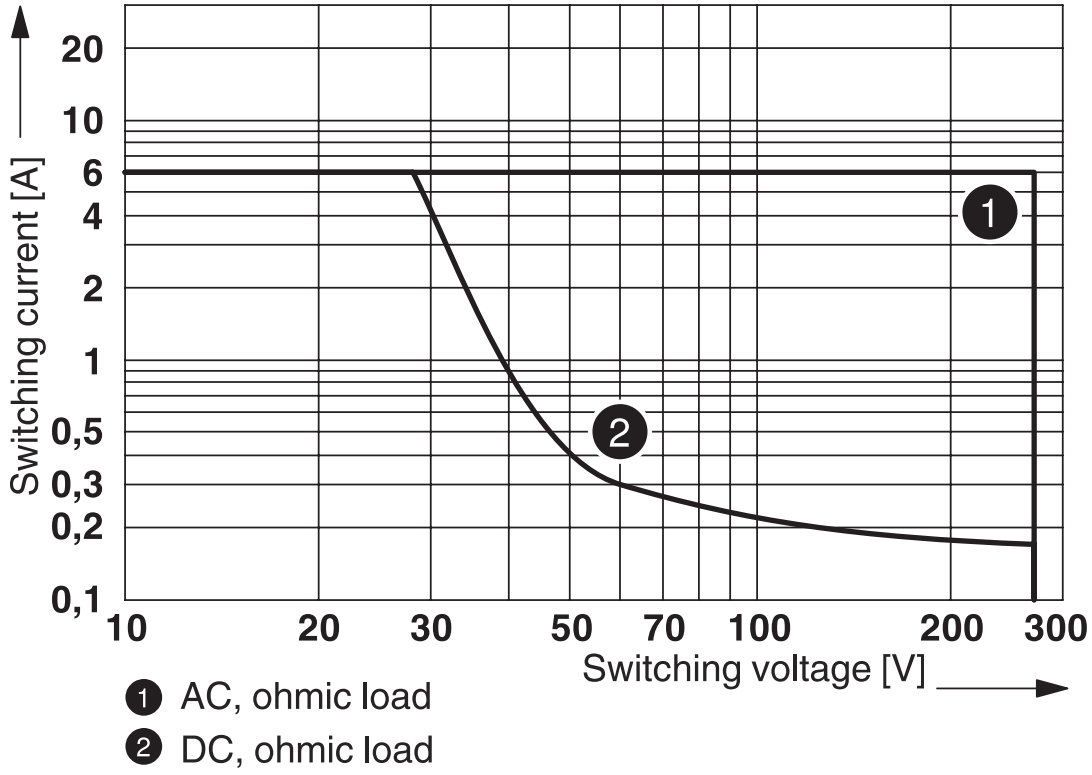
Curve A

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

Curve B

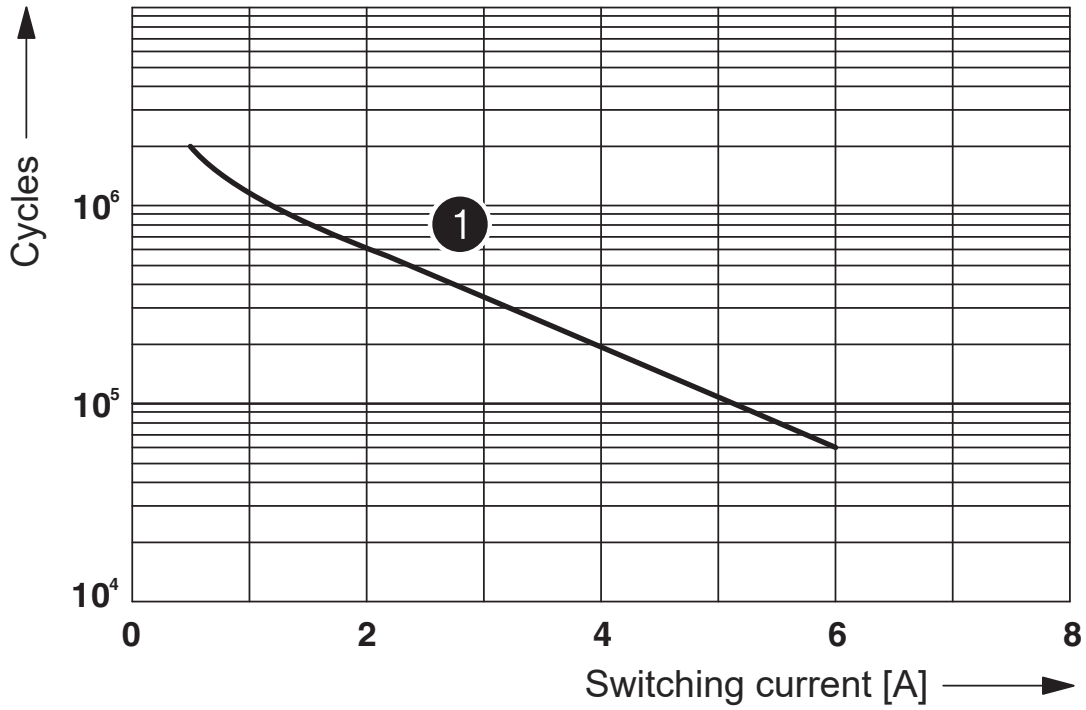
Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)

Diagram



Interrupting rating

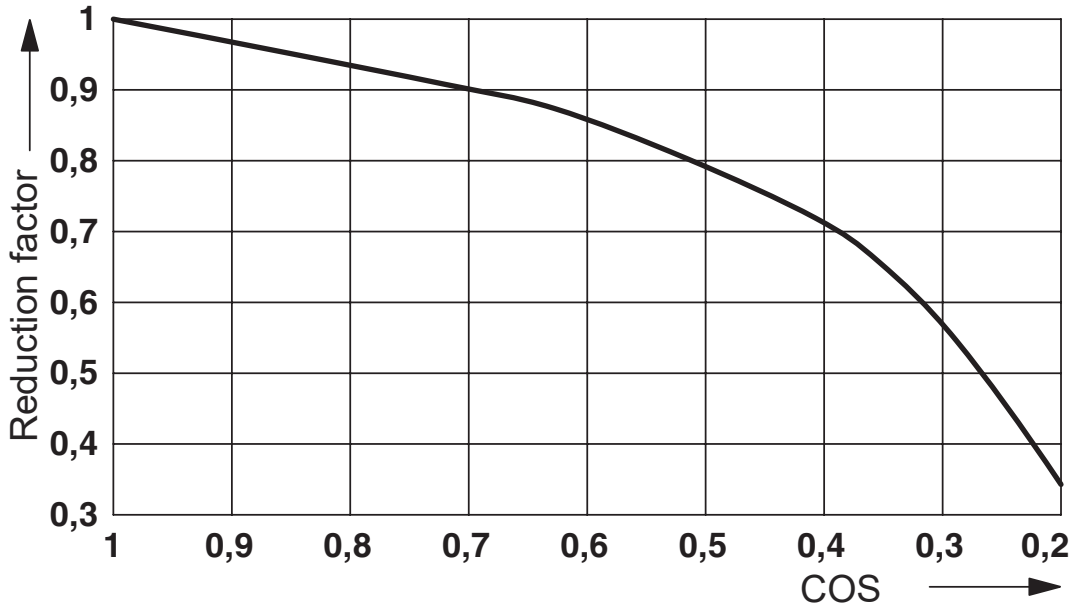
Diagram



1 250 V AC, ohmic load

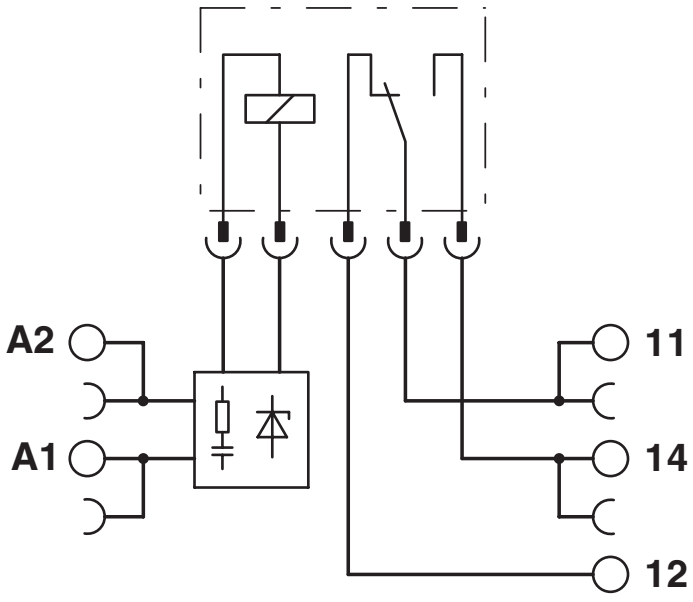
Electrical service life

Diagram



Service life reduction factor

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/5603593

cULus Listed
Approval ID: E140324

cULus Listed
Approval ID: E140324

cULus Listed
Approval ID: E140324

DNV
Approval ID: TAE0000196

Classifications

ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

ETIM

ETIM 10.0	EC001437

UNSPSC

UNSPSC 21.0	39122300

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)
	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7)
SCIP	2bbd43a8-5f51-45db-bea1-c9ee8a76fa51

EF3.1 Climate Change

CO2e kg	0.604 kg CO2e

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