

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



2980351

<https://www.phoenixcontact.com/us/products/2980351>

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.



6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with spring-cage 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

Your advantages

- Resistant to interference currents
- High relay release voltage

Commercial data

Item number	2980351
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C461
Product key	DK6221
GTIN	4017918895761
Weight per piece (including packing)	28.8 g
Weight per piece (excluding packing)	26.96 g
Customs tariff number	85366990
Country of origin	DE

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---

Product properties

Product type	Relay socket
Product family	PLC-INTERFACE
Application	Filter to prevent interference
Operating mode	100% operating factor
Compatible components	Miniature relay, REL-MR-60DC/21AU, REL-MR-60DC/21; miniature optocoupler, OPT-60DC/48DC/100, OPT-60DC/24DC/2, OPT-60DC/230AC/1

Electrical properties

Protective circuit	Bridge rectifier; Bridge rectifier
	RCZ filter; RCZ filter

Input data

Nominal input voltage U_N	120 V AC
	120 V AC

Relay assembly

Nominal input voltage U_N	120 V AC
Input voltage range in reference to U_N	0.8 ... 1.4
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
Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier; Bridge rectifier
	Filter; Filter

Optocoupler assembly

Nominal input voltage U_N	120 V AC
Input voltage range in reference to U_N	0.85 ... 1.1
Typical input current at U_N	7 mA (50 Hz)
	8 mA (60 Hz)
Switching threshold "0" signal in reference to U_N	≤ 0.4
Typical response time	6 ms
Typical release time	10 ms
Operating voltage display	Yellow LED

Protective circuit	Bridge rectifier; Bridge rectifier
	Filter; Filter

Output data

Compatible components	Miniature relay, REL-MR-60DC/21AU, REL-MR-60DC/21; miniature optocoupler, OPT-60DC/48DC/100, OPT-60DC/24DC/2, OPT-60DC/230AC/1
Maximum switching voltage	48 V DC
Minimum switching voltage	3 V DC
Limiting continuous current	100 mA
Voltage drop at max. limiting continuous current	< 1 V DC
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection
	Surge protection
Maximum switching voltage	30 V DC
Minimum switching voltage	3 V DC
Limiting continuous current	3 A
Voltage drop at max. limiting continuous current	< 200 mV
Maximum inrush current	15 A (10 ms)
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection
	Surge protection
Maximum switching voltage	253 V AC (Partition plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal points in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...)
Minimum switching voltage	24 V AC
Limiting continuous current	0.75 A
Voltage drop at max. limiting continuous current	< 1 V AC
Maximum inrush current	30 A (10 ms)
Output circuit	2-conductor, floating
Protective circuit	RCV circuit
Leakage current	< 1 mA
Phase angle cos phi min	0.5
Max. load value	4.5 A ² s

Connection data

Input side

Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross-section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.14 mm ² ... 2.5 mm ²
Conductor cross-section AWG	26 ... 14

Output side

Connection method	Spring-cage connection
-------------------	------------------------

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



2980351

<https://www.phoenixcontact.com/us/products/2980351>

Stripping length	8 mm
Conductor cross-section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.14 mm ² ... 2.5 mm ²
Conductor cross-section AWG	26 ... 14

Signaling

Status display	LED
----------------	-----

Dimensions

Width	6.2 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

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

Mounting

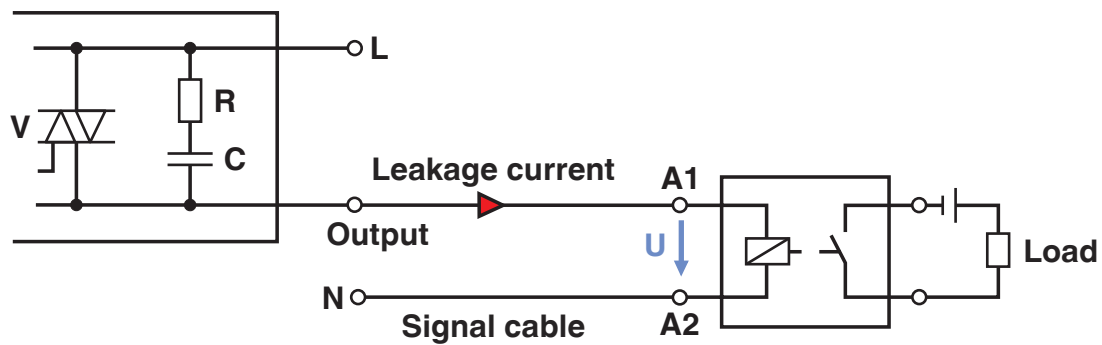
Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

2980351

<https://www.phoenixcontact.com/us/products/2980351>

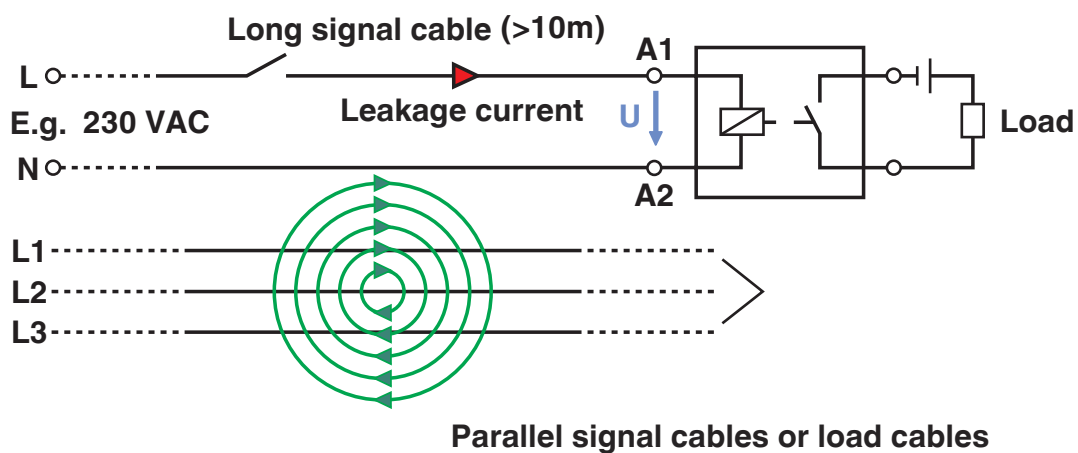
Drawings

Application drawing



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

Application drawing

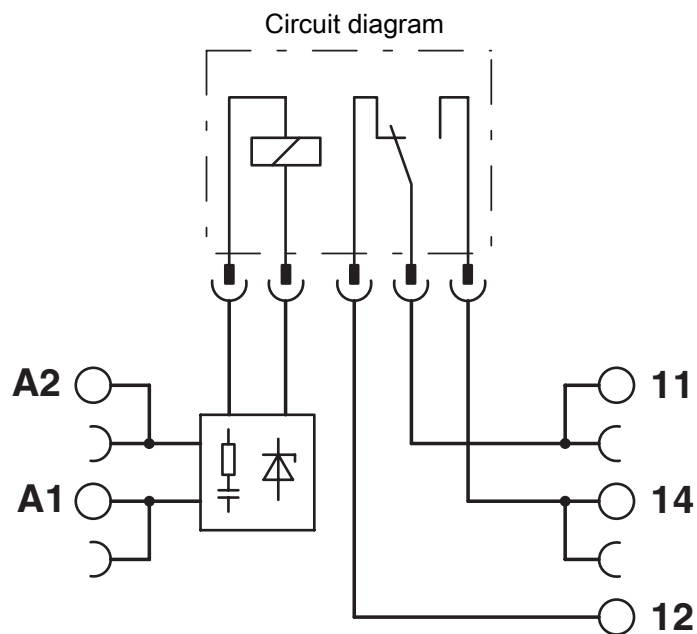


Occurrence of interference signals
Scenario 2: long signal cables

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

2980351

<https://www.phoenixcontact.com/us/products/2980351>



Circuit diagram



DC output

Circuit diagram



AC output

2980351

<https://www.phoenixcontact.com/us/products/2980351>

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