

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



PLC relay, consisting of base terminal block PLC-BSC.../21 with screw connection and pluggable miniature relay with power contact, for assembly on DIN rail NS 35/7.5, 2 PDT, input voltage 120 V AC / 110 V DC

#### Your advantages

- ☑ RT III sealed relay
- ☑ Safe isolation according to DIN EN 50178 between coil and contact
- Integrated input circuit and interference suppression circuit



## **Key Commercial Data**

Packing unit	10 pc
GTIN	4 017918 156398
GTIN	4017918156398
Sales Key	08

#### Technical data

#### Note

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

#### **Dimensions**

Width	14 mm
Height	80 mm
Depth	94 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C 60 °C
Ambient temperature (storage/transport)	-40 °C 85 °C



## Technical data

## Ambient conditions

Degree of protection	RT III (Relay)
	IP20 (Relay base)

## Coil side

Nominal input voltage U <sub>N</sub>	120 V AC
	110 V DC
Typical input current at U <sub>N</sub>	$4.5 \text{ mA} (at U_N = 120 \text{ V AC})$
	$4.2 \text{ mA (at U}_{N} = 110 \text{ V DC)}$
Typical response time	7 ms
Typical release time	10 ms
Protective circuit	Bridge rectifier Bridge rectifier
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.54 W

#### Contact side

Contact type	2 PDT
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 orFBST 500)
Minimum switching voltage	5 V AC/DC (at 10 mA)
Min. switching current	10 mA (At 5 V)
Maximum inrush current	15 A (300 ms)
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	85 W (at 48 V DC)
	60 W (at 60 V DC)
	44 W (at 110 V DC)
	60 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	0.2 A (at 250 V, DC13)
	3 A (at 250 V, AC15)

## Connection data

Connection name	Coil side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3



## Technical data

## Connection data

Conductor cross section solid	0.14 mm² 2.5 mm²
Conductor cross section flexible	0.14 mm² 2.5 mm²
	0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup> (Single ferrule)
	2x 0.5 mm² 1.5 mm² (TWIN ferrule)
Conductor cross section AWG	26 14

#### Connection data 2

Connection name	Contact side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.14 mm² 2.5 mm²
Conductor cross section flexible	0.14 mm² 2.5 mm²
	0.2 mm² 2.5 mm² (Single ferrule)
	2x 0.5 mm² 1.5 mm² (TWIN ferrule)
Conductor cross section AWG	26 14

#### General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RT III (Relay)
	IP20 (Relay base)
Mechanical service life	3x 10 <sup>7</sup> cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

## Standards and Regulations

Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
Rated surge voltage	6 kV
Insulation	Safe isolation: Control side / contact side
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V0

## **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50

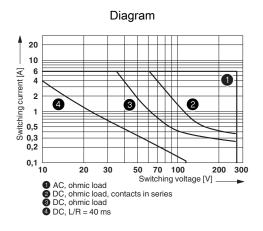


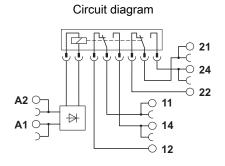
## Technical data

## **Environmental Product Compliance**

For details about hazardous substances go to tab "Downloads",
Category "Manufacturer's declaration"

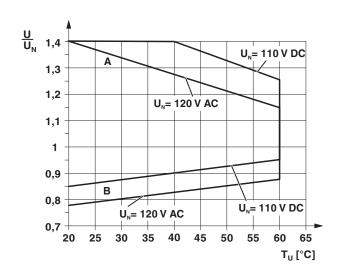
## **Drawings**





#### Interrupting rating

#### 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)



## Articles in set

Relay base - PLC-BSC-120UC/21-21 - 2967031



14 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 PDTs, input voltage 120 V AC/DC

Single relay - REL-MR-110DC/21-21 - 2961202



Plug-in miniature power relay, with power contact, 2 PDTs, input voltage 110 V DC

Approvals			
Approvals			
Approvals			
PRS / UL Listed / UL Recogn	ized / cUL Recognize	ed / cUL Listed / EAC / RC FRT / DNV GL / cULus Recognized / cULus Liste	d
Ex Approvals			
Approval details			
PRS	and the second	http://www.prs.pl/	TE/2109/880590/16
UL Listed	UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140



**UL** Recognized



http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

FILE E 238705

cUL Recognized



http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

FILE E 238705



## Approvals

cUL Listed	C UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
EAC	ERC		RU C- DE.A*30.B.01082
RC FRT	СЖТ		B.00094
DNV GL	TW DO	https://approvalfinder.dnvgl.com/	TAE0000196-02
cULus Recognized	c <b>FL</b> us		
cULus Listed	C. UL US		

Phoenix Contact 2019 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany

Tel. +49 5235 300 Fax +49 5235 3 41200

http://www.phoenixcontact.com