

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, 1 PDT, input voltage 120 V AC / 110 V DC

#### Your advantages

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



### **Key Commercial Data**

Packing unit	10 pc
GTIN	4 017918 130718
GTIN	4017918130718
Sales Key	08

#### Technical data

#### Note

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

#### **Dimensions**

Width	6.2 mm
Height	80 mm
Depth	94 mm

### Ambient conditions



# Technical data

### Ambient conditions

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

### Coil side

Nominal input voltage U <sub>N</sub>	120 V AC
	110 V DC
Typical input current at U <sub>N</sub>	$3.5 \text{ mA} (at U_N = 120 \text{ V AC})$
	3 mA (at U <sub>N</sub> = 110 V DC)
Typical response time	6 ms
Typical release time	15 ms
Protective circuit	Bridge rectifier Bridge rectifier
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.42 W

#### Contact side

Contact type	1 PDT
Type of switch contact	Single contact
Contact material	AgSnO
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 (at 100 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	10 A (4 s)
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
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 1

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



# Technical data

### Connection data 1

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 ()
	2x 0.5 mm <sup>2</sup> 1.5 mm <sup>2</sup> ()
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 ()
	2x 0.5 mm <sup>2</sup> 1.5 mm <sup>2</sup> ()
Conductor cross section AWG	26 14

#### General

Note	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
Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay base)
Mechanical service life	2x 10 <sup>7</sup> cycles
Mounting position	any
Assembly instructions	In rows with zero spacing
Net weight (SAP)	33.16 g

# Standards and Regulations

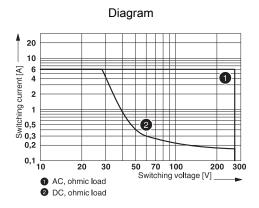
Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
Degree of pollution	3
Overvoltage category	III
Flammability rating according to UL 94	V0

### **Environmental Product Compliance**

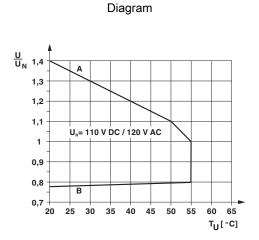
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"



## **Drawings**



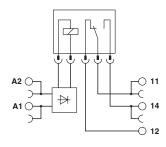
#### Interrupting rating



Curve A
Maximum permissible continuous voltage U<sub>max</sub> with limiting continuous current on the contact side (see relevant technical data)
Curve B

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

#### Circuit diagram



## Articles in set

Relay base - PLC-BSC-120UC/21 - 2966032



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 120 V AC/DC



# Articles in set

Single relay - REL-MR- 60DC/21 - 2961118



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

Approvals			
Approvals			
Approvals			
PRS / GL / UL Listed / UL Reco	ognized / cUL Reco	ngnized / cUL Listed / EAC / RC FRT / cULus Recognized / cULus Listed	
Ex Approvals			
Approval details			
PRS		http://www.prs.pl/	TE/2109/880590/16
GL	(GL)	http://exchange.dnv.com/tari/	46016-03 HH
UL Listed	UL LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
UL Recognized	<i>7</i> .1	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
cUL Recognized	<b>.71</b>	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705



# Approvals

Attp://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 172140

EAC EHE

RU CDE.A\*30.B.01082

CULus Recognized

CULus Listed

CULus Listed

CULus Listed

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