

## Relay Module - PLC-RPT- 24UC/21HC - 2900293

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-INTERFACE for high continuous currents, consisting of PLC-BPT.../21 HC basic terminal block with push-in connection and plug-in miniature relay, for mounting on DIN rail NS 35/7,5, limiting continuous current up to 10 A, 1 PDT, input voltage 24 V AC/DC

### Your advantages

- ✓ Efficient connection to system cabling using V8 adapter
- ✓ All common input voltages of 12 V DC to 230 V AC
- ✓ Long electrical service life thanks to 16 A relay
- ✓ Safe isolation according to DIN EN 50178 between coil and contact
- ✓ Functional plug-in bridges
- ✓ Max. continuous current of 10 A



### Key Commercial Data

Packing unit	10 pc
GTIN	 4 046356 509879
GTIN	4046356509879

### 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

# Relay Module - PLC-RPT- 24UC/21HC - 2900293

## Technical data

### Coil side

Nominal input voltage $U_N$	24 V AC/DC
Typical input current at $U_N$	17.5 mA
Typical response time	8 ms
Typical release time	10 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	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... or ...FBST 500...)
Minimum switching voltage	12 V DC (at 10 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	30 A (300 ms)
Limiting continuous current	10 A
	6 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	2500 VA (for 250 V AC)
Interrupting rating (ohmic load) max. bridged	144 W (for 24 V DC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)
	1500 VA (for 250 V AC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	6 A (at 24 V, AC15)
	6 A (at 120 V, AC15)
	6 A (at 250 V, AC15)

### Connection data

Connection name	Coil side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

# Relay Module - PLC-RPT- 24UC/21HC - 2900293

## Technical data

### Connection data

Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)
	2x 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> (TWIN ferrule)
Conductor cross section AWG	26 ... 14

### Connection data 2

Connection name	Contact side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)
	2x 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> (TWIN ferrule)
Conductor cross section AWG	26 ... 14

### General

Operating mode	100% operating factor
Degree of protection	RT II (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, reinforced insulation
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V0

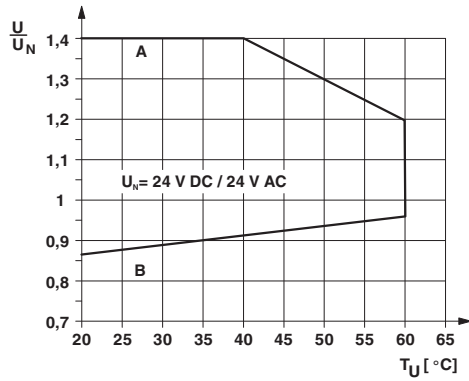
### Environmental Product Compliance

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

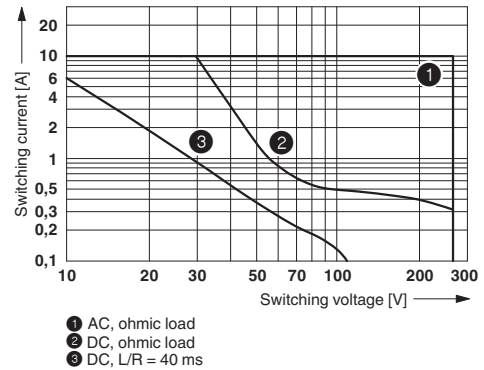
## Drawings

# Relay Module - PLC-RPT- 24UC/21HC - 2900293

Diagram



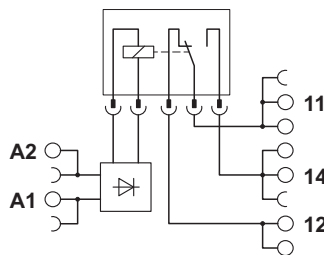
Diagram



Interrupting rating

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)

Circuit diagram



## Articles in set

Relay base - PLC-BPT- 24UC/21HC - 2900255



14 mm PLC basic terminal block for high continuous currents with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V AC/DC

Single relay - REL-MR- 24DC/21HC - 2961312



Plug-in miniature power relay, with power contact for high continuous currents, 1 PDT, input voltage 24 V DC

# Relay Module - PLC-RPT- 24UC/21HC - 2900293

## Approvals

### Approvals

---

#### Approvals

DNV GL / UL Listed / UL Recognized / cUL Recognized / cUL Listed / EAC / RC FRT / cULus Recognized / cULus Listed

---

#### Ex Approvals

---

### Approval details

DNV GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE0000196-02
UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
EAC			RU C- DE.A*30.B.01082
RC FRT			B.00094
cULus Recognized			

## Relay Module - PLC-RPT- 24UC/21HC - 2900293

### Approvals

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>