

## Relay Module - PLC-RPT- 48DC/21-21 - 2900333

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PLC-INTERFACE, consisting of PLC-BPT.../21-21 basic terminal block with push-in connection and plug-in miniature relay with power contact, for mounting on NS 35/7,5 DIN rail, 2 PDTs, input voltage 48 V DC

### Your advantages

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



### Key Commercial Data

Packing unit	10 pc
GTIN	 4 046356 509916
GTIN	4046356509916

### Technical data

#### Note

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

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## Technical data

### Coil side

Nominal input voltage $U_N$	48 V DC
Typical input current at $U_N$	20 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Reverse polarity protection Polarity protection diode
	Free-wheeling diode Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.96 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... or ...FBST 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 input side

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>
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> ( )
	2x 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> ( )
Conductor cross section AWG	26 ... 14

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## Technical data

### Connection data output side

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> ()
	2x 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> ()
Conductor cross section AWG	26 ... 14

### General

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
Net weight (SAP)	58.5 g

### 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 of input/output
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V0

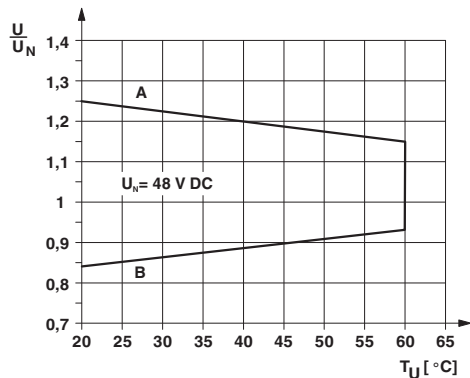
### Environmental Product Compliance

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

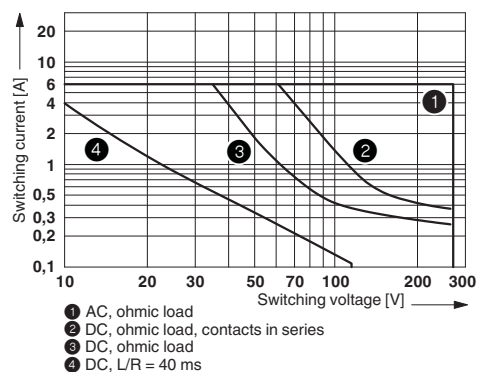
## Drawings

# Relay Module - PLC-RPT- 48DC/21-21 - 2900333

Diagram



Diagram

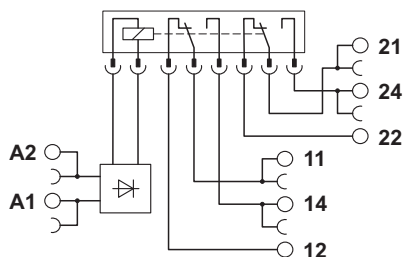


Interrupting rating

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- 48DC/21-21 - 2900285



14 mm PLC basic terminal block with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 PDTs, input voltage 48 V DC

Single relay - REL-MR- 24DC/21-21 - 2961192



Plug-in miniature power relay, with power contact, 2 PDTs, input voltage 24 V DC

# Relay Module - PLC-RPT- 48DC/21-21 - 2900333

## Approvals

### Approvals

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#### Approvals

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

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#### Ex Approvals

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### Approval details

DNV GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE0000196-01
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- 48DC/21-21 - 2900333

### Approvals

cULus Listed



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