

# Relay Module - PLC-RPT- 24DC/21 - 2900299

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://download.phoenixcontact.com)



PLC-INTERFACE, consisting of PLC-BPT.../21 basic terminal block with Push-in technology and plug-in miniature relay with power contact, for mounting on NS 35/7,5 DIN rails, 1 PDT, input voltage: 24 V DC

### **Product Features**

- ✓ Narrow design
- ☑ RT III sealed relay
- ☑ Safe isolation according to DIN EN 50178 between coil and contact
- Functional plug-in bridges





# Key commercial data

Packing unit	11
Weight per Piece (excluding packing)	36.0 GRM
Custom tariff number	85364190
Country of origin	Germany

# Technical data

#### Note:

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

#### **Dimensions**

Width	6.2 mm
Height	80 mm
Depth	94 mm

#### Ambient conditions



# Relay Module - PLC-RPT- 24DC/21 - 2900299

# Technical data

## Ambient conditions

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

# Coil side

Nominal input voltage U <sub>N</sub>	24 V DC
Nominal input current at U <sub>IN</sub>	9 mA
Typical response time	5 ms
Typical release time	8 ms
Operating voltage display	Yes
Protective circuit	Protection against polarity reversal Polarity protection diode
	Free-wheeling diode Damping diode

# Contact side

Contact type	1 PDT
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)
Maximum inrush current	(on request)
Min. switching current	10 mA (at 12 V)
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)

### General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	2 x 10 <sup>7</sup> cycles
Inflammability class according to UL 94	V0
Name	Standards/regulations
Standards/regulations	IEC 60664
	IEC 60664 A
	DIN VDE 0110
	DIN EN 50178/DIN VDE 0160 (in relevant parts)

17.10.2013 Page 2 / 11



# Relay Module - PLC-RPT- 24DC/21 - 2900299

# Technical data

### General

	DIN EN 50178/VDE 0160
	IEC 60255/DIN VDE 0435 (in relevant parts)
Pollution degree	3
Surge voltage category	III
Mounting position	Any
Assembly instructions	In rows with zero spacing

### Connection data

Connection method	Push-in connection
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.14 mm²
Conductor cross section stranded max.	2.5 mm²
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	14
Stripping length	8 mm

# Classifications

# eCl@ss

eCl@ss 4.0	27371001
eCl@ss 4.1	27371001
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371001

# **ETIM**

ETIM 3.0	EC000196
ETIM 4.0	EC000196
ETIM 5.0	EC000196

### **UNSPSC**

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515

UL Listed 🕦



# Relay Module - PLC-RPT- 24DC/21 - 2900299

Classifications		
UNSPSC		
UNSPSC 13.2	39121515	_
Approvals		
Approvals		
Approvals		
UL Recognized / UL Listed / cUL Recognized / cUL Listed	/ GL / UL Listed / cUL Listed / cULus Recognized / cULus Listed	
Ex Approvals		
Approvals submitted		
Approval details		
UL Recognized <b>\$1</b>		
UL Listed (I)		
cUL Recognized • 51		
cUL Listed (19)		
GL		



# Relay Module - PLC-RPT- 24DC/21 - 2900299

# Approvals



cULus Recognized • Sus

cULus Listed • Wus

#### Accessories

Accessories

Assembly

DIN rail - NS 35/7,5 V2A UNPERF 2000MM - 0801377



DIN rail, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

DIN rail perforated - NS 35/7,5 PERF 2000MM - 0801733



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

DIN rail - NS 35/7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m



# Relay Module - PLC-RPT- 24DC/21 - 2900299

## Accessories

DIN rail - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

DIN rail - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

DIN rail - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm



# Relay Module - PLC-RPT- 24DC/21 - 2900299

## Accessories

DIN rail - NS 35/7,5 UNPERF 2000MM - 0801681



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

### Separating plate - PLC-ATP BK - 2966841



Separating plate, 2 mm thick, required at the start and end of a PLC terminal strip. Furthermore, it is used for: visual separation of groups, safe isolation of different voltages of neighboring PLC relays in acc. with DIN VDE 0106-101, isolation

#### **Bridges**

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, Length: 500 mm, Color: red

## Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, Length: 500 mm, Color: blue

### Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, Length: 500 mm, Color: gray



# Relay Module - PLC-RPT- 24DC/21 - 2900299

## Accessories

Single plug-in bridge - FBST 6-PLC RD - 2966236



Single plug-in bridge, Length: 6 mm, Number of positions: 2, Color: red

Single plug-in bridge - FBST 6-PLC BU - 2966812



Single plug-in bridge, Length: 6 mm, Number of positions: 2, Color: blue

Single plug-in bridge - FBST 6-PLC GY - 2966825



Single plug-in bridge, Length: 6 mm, Number of positions: 2, Color: gray

Single plug-in bridge - FBST 8-PLC GY - 2967688



Single plug-in bridge, Length: 8 mm, Number of positions: 2, Color: gray

#### Marking

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm



# Relay Module - PLC-RPT- 24DC/21 - 2900299

#### Accessories

Zack marker strip - ZB 6,LGS:FORTL.ZAHLEN - 1051016



Zack marker strip, Strip, white, labeled, Can be labeled with: Plotter, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, For terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Zack marker strip - ZB 6/WH-100:UNBEDRUCKT - 5060935



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

### Plug/Adapter

System connection - PLC-V8/FLK14/OUT - 2295554



V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Supplementary Products"). 14-pos. flat-ribbon cable connection for the PLC system cabling, control logic: Plus switching

System connection - PLC-V8/FLK14/OUT/M - 2304102



V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Supplementary Products"). 14-pos. flat-ribbon cable connection for the PLC system cabling, control logic: Minus switching

System connection - PLC-V8/D15S/OUT - 2296058



V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Additional Products"). 15-pin D-SUB male connector, control logic: Positive switching



# Relay Module - PLC-RPT- 24DC/21 - 2900299

# Accessories

System connection - PLC-V8/D15B/OUT - 2296061



V8-OUTPUT adapter for eight 6.2 mm PLC interfaces (1 PDT, etc./see "Additional Products"). 15-pin D-SUB female connector, control logic: Positive switching

#### Power terminal block

Power terminal block - PLC-ESK GY - 2966508



Power terminal block, for the input of up to four potentials, for mounting on NS 35/7.5

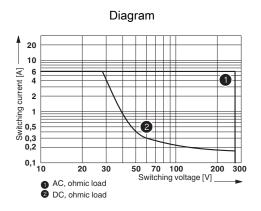
#### Tools

Screwdriver - SZF 1-0,6X3,5 - 1204517

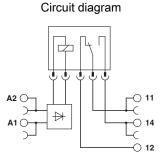


Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

# **Drawings**

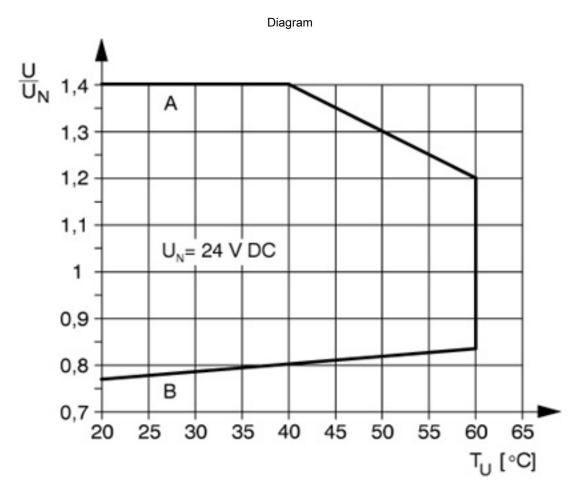


Interrupting rating





# Relay Module - PLC-RPT- 24DC/21 - 2900299



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)

© Phoenix Contact 2013 - all rights reserved http://www.phoenixcontact.com