

# Relay Module - PLC-RPT- 24DC/21HC - 2900291

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

The figure shows a version with a screw connection

## Product Features

- 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
- Max. continuous current of 10 A
- Functional plug-in bridges



## Key commercial data

<b>package_quantity</b>	10
<b>GTIN</b>	4046356509268

## Technical data

Note:

<b>Utilization restriction</b>	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

<b>Width</b>	14 mm
<b>Height</b>	80 mm
<b>Depth</b>	94 mm

### Ambient conditions

<b>Ambient temperature (operation)</b>	-40 °C ... 60 °C
<b>Ambient temperature (storage/transport)</b>	-40 °C ... 85 °C

### Coil side

<b>Nominal input voltage <math>U_N</math></b>	24 V DC
<b>Nominal input current at <math>U_{IN}</math></b>	18 mA
<b>Typical response time</b>	8 ms

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## Technical data

### Coil side

<b>Typical release time</b>	10 ms
<b>Operating voltage display</b>	Yellow LED
<b>Protective circuit</b>	Protection against polarity reversal Polarity protection diode
<b>Protective circuit</b>	Free-wheeling diode Damping diode

### Contact side

<b>Contact type</b>	1 PDT
<b>Contact material</b>	AgNi
<b>Maximum switching voltage</b>	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...)
<b>Minimum switching voltage</b>	12 V DC (at 10 mA)
<b>Maximum inrush current</b>	30 A (300 ms)
<b>Min. switching current</b>	10 mA (at 12 V)
<b>Limiting continuous current</b>	10 A
<b>Limiting continuous current</b>	6 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.)
<b>Interrupting rating (ohmic load) max.</b>	240 W (at 24 V DC)
<b>Interrupting rating (ohmic load) max.</b>	58 W (at 48 V DC)
<b>Interrupting rating (ohmic load) max.</b>	48 W (at 60 V DC)
<b>Interrupting rating (ohmic load) max.</b>	50 W (at 110 V DC)
<b>Interrupting rating (ohmic load) max.</b>	80 W (at 220 V DC)
<b>Interrupting rating (ohmic load) max.</b>	2500 VA (for 250 V AC)
<b>Interrupting rating (ohmic load) max. bridged</b>	144 W (for 24 V DC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)
<b>Interrupting rating (ohmic load) max. bridged</b>	1500 VA (for 250 V AC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.)

### General

<b>Operating mode</b>	100% operating factor
<b>Mechanical service life</b>	3 x 10 <sup>7</sup> cycles
<b>Inflammability class according to UL 94</b>	V0
<b>Name</b>	Standards/regulations
<b>Standards/regulations</b>	IEC 60664
<b>Standards/regulations</b>	EN 50178
<b>Standards/regulations</b>	IEC 62103
<b>Rated surge voltage / insulation</b>	6 kV / Safe isolation, increased insulation
<b>Pollution degree</b>	2
<b>Surge voltage category</b>	III
<b>Mounting position</b>	Any
<b>Assembly instructions</b>	In rows with zero spacing

### Connection data

<b>Connection method</b>	Push-in connection
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## Technical data

### Connection data

Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.14 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
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 4.0	EC000196
ETIM 5.0	EC000196

### UNSPSC


UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39121515

## approvals

GL / UL Listed / cUL Listed / UL Recognized / cUL Recognized / cULus Recognized / cULus Listed /

### Approval details


GL
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# Relay Module - PLC-RPT- 24DC/21HC - 2900291

approvals

cUL Listed 

UL Recognized 

cUL Recognized 

cULus Recognized  US

cULus Listed  US

accessories

**Mounting rail**

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



NS 35/ 7,5 PERF 2000MM - 0801733



## Relay Module - PLC-RPT- 24DC/21HC - 2900291

### accessories

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



NS 35/15 UNPERF 2000MM - 1201714



NS 35/15 CU UNPERF 2000MM - 1201895



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



NS 35/15 AL UNPERF 2000MM - 1201756



NS 35/15 PERF 2000MM - 1201730



# Relay Module - PLC-RPT- 24DC/21HC - 2900291

## accessories

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NS 35/ 7,5 UNPERF 2000MM - 0801681



## Terminal marking

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ZB10/WH-100:UNBEDRUCKT - 5060883



ZB 10:UNBEDRUCKT - 1053001



## Labeled terminal marker

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ZB10,LGS:FORTL.ZAHLEN - 1053014



## Partition plate

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PLC-ATP BK - 2966841



# Relay Module - PLC-RPT- 24DC/21HC - 2900291

accessories

## Power module

PLC-ESK GY - 2966508



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## Screwdriver tools

SZF 1-0,6X3,5 - 1204517



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## Bridge

FBST 500-PLC RD - 2966786



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FBST 500-PLC BU - 2966692



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FBST 500-PLC GY - 2966838



## Relay Module - PLC-RPT- 24DC/21HC - 2900291

### accessories

FBST 6-PLC RD - 2966236



FBST 6-PLC BU - 2966812



FBST 6-PLC GY - 2966825



FBST 8-PLC GY - 2967688



FBST 14-PLC BK - 2967691

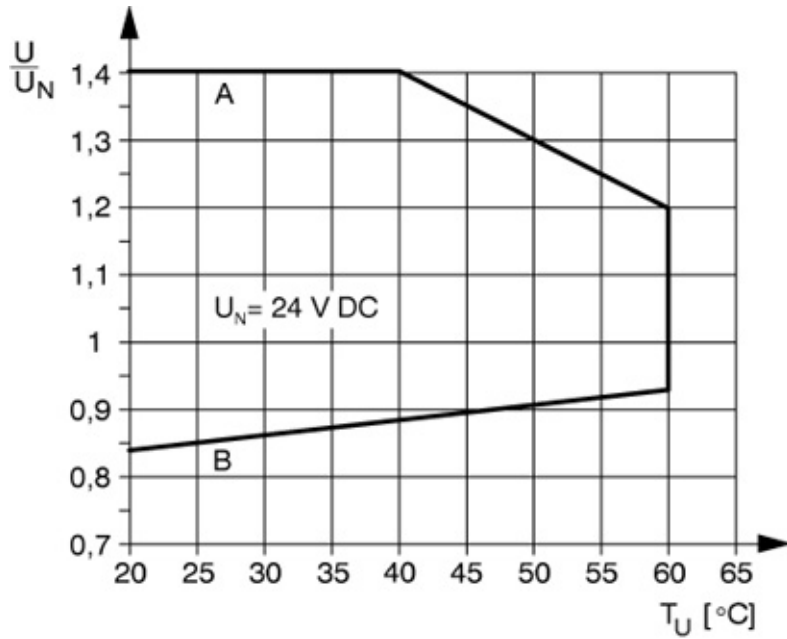


### Drawings



# Relay Module - PLC-RPT- 24DC/21HC - 2900291

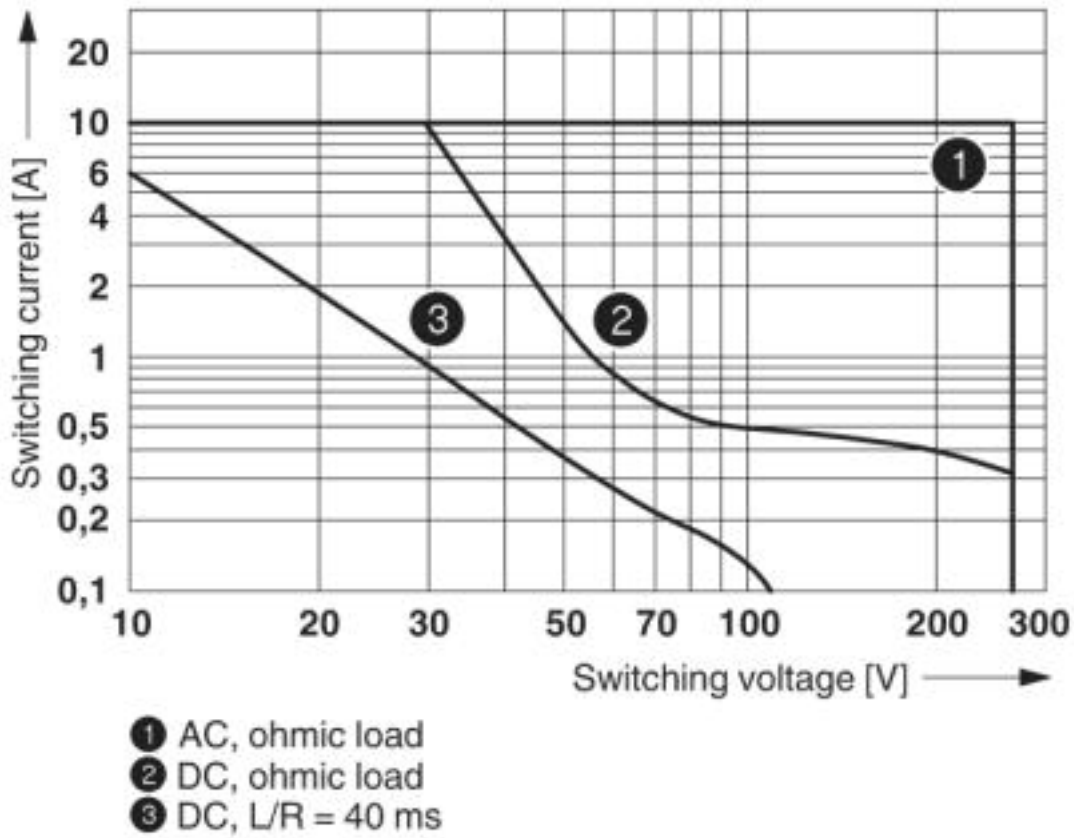
Diagram



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

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Diagram



Interrupting rating

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Circuit diagram

