

# Relay Module - PLC-RPT- 24UC/21AU/RW - 2900321

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6.2 mm PLC complete relay module with push-in connection for railway applications, 24 V DC nominal input voltage, range:  $0.7 \times U_N$  to  $1.25 \times U_N$ , temperature class TX:  $-40^\circ\text{C}$  to  $+70^\circ\text{C}$ . Corresponds to EN 50155, EN 50178, EN 61373, EN 50121, and IEC 62103.

The illustration shows the version PLC-RSP-24UC/21/RW

## Product Features

- Optimum relay operation thanks to wide-range electronics
- Certified according to EN 50155
- Vibration and shock resistance according to EN 50155
- Safe isolation according to DIN EN 50178 between coil and contact
- Spring-cage and Push-in connection technology
- Temperature range from  $-40^\circ\text{C}$  to  $+70^\circ\text{C}$  ( $+85^\circ\text{C}$  briefly)
- Input voltage range of  $0.7$  to  $1.25 \times U_N$  ( $1.4 \times U_N$  briefly)



## Key commercial data

package_quantity	10
GTIN	4046356510042

## Technical data

Note:

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

Width	6.2 mm
Height	80 mm
Depth	94 mm

### Ambient conditions

Ambient temperature (operation)	$-40^\circ\text{C}$ ... $70^\circ\text{C}$ (Temperature class TX)
Ambient temperature (storage/transport)	$-40^\circ\text{C}$ ... $85^\circ\text{C}$

### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	$0.7$ ... $1.25$

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## Technical data

### Coil side

Nominal input current at $U_{IN}$	9 mA
Typical response time	4 ms
Typical release time	4 ms
Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier Bridge rectifier
Protective circuit	Free-wheeling diode Damping diode
Protective circuit	Surge protection
Protective circuit	RCZ filter
Protective circuit	Wide-range electronics

### Contact side

Contact type	1 PDT
Contact material	AgSnO, hard gold-plated
Maximum switching voltage	30 V AC
Maximum switching voltage	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Maximum inrush current	50 mA
Min. switching current	1 mA (at 24 V)
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	1 A (24 V (DC13))
Switching capacity in acc. with DIN VDE 0660/IEC 60947	0.2 A (110 V (DC13))
Switching capacity in acc. with DIN VDE 0660/IEC 60947	0.1 A (220 V (DC13))
Switching capacity in acc. with DIN VDE 0660/IEC 60947	3 A (24 V (AC15))
Switching capacity in acc. with DIN VDE 0660/IEC 60947	3 A (120 V (AC15))
Switching capacity in acc. with DIN VDE 0660/IEC 60947	3 A (230 V (AC 15))
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC (Separating plate PLC-ATP must be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules.)
Minimum switching voltage	12 V AC/DC
Limiting continuous current	6 A
Min. switching current	10 mA
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
Interrupting rating (ohmic load) max.	20 W (at 48 V DC)
Interrupting rating (ohmic load) max.	18 W (at 60 V DC)
Interrupting rating (ohmic load) max.	23 W (at 110 V DC)
Interrupting rating (ohmic load) max.	40 W (at 220 V DC)
Interrupting rating (ohmic load) max.	1500 VA (for 250 V AC)

### General

Test voltage relay winding/relay contact	4 kV <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor

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## Technical data

### General

Degree of protection	RT III (relay)
Degree of protection	IP20 (basic terminal block)
Mechanical service life	Approx. $2 \times 10^7$ cycles
Inflammability class according to UL 94	V0
Standards/regulations	EN 50155 (VDE 0115 part 200)
Standards/regulations	EN 50178
Standards/regulations	IEC 62103
Standards/regulations	EN 61373
Standards/regulations	EN 50121
Rated surge voltage / insulation	6 kV
Rated insulation voltage	250 V AC
Pollution degree	2
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 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
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# Relay Module - PLC-RPT- 24UC/21AU/RW - 2900321

## classifications

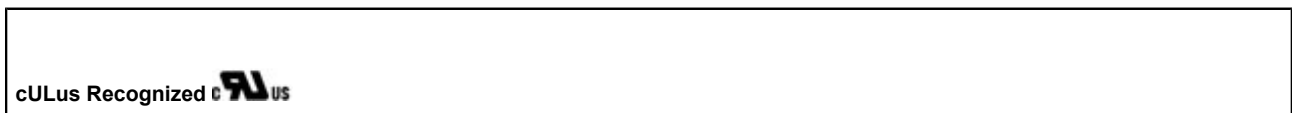
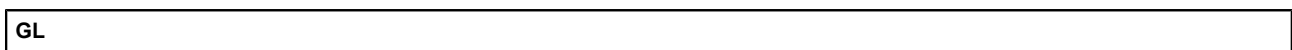
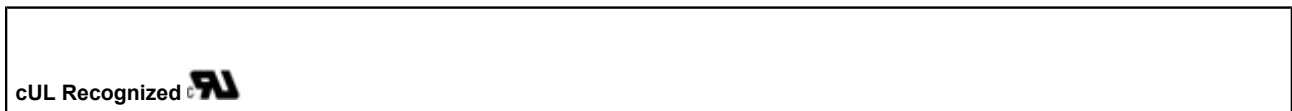
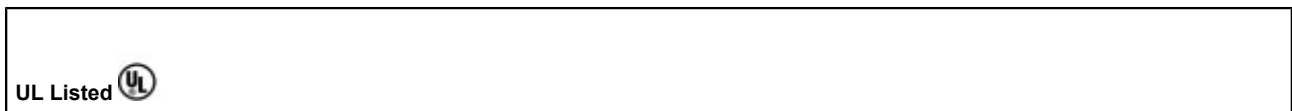
### UNSPSC

UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39121515

## approvals

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

### Approval details



## accessories

### Mounting rail

## Relay Module - PLC-RPT- 24UC/21AU/RW - 2900321

### accessories

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



NS 35/ 7,5 PERF 2000MM - 0801733



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



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## accessories

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NS 35/15 AL UNPERF 2000MM - 1201756



NS 35/15 PERF 2000MM - 1201730



NS 35/ 7,5 UNPERF 2000MM - 0801681



## Power module

PLC-ESK GY - 2966508



## Partition plate

PLC-ATP BK - 2966841



## Screwdriver tools

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# Relay Module - PLC-RPT- 24UC/21AU/RW - 2900321

## accessories

SZF 1-0,6X3,5 - 1204517



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## Terminal marking

ZB 6:UNBEDRUCKT - 1051003



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ZB 6/WH-100:UNBEDRUCKT - 5060935



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## Labeled terminal marker

ZB 6,LGS:FORTL.ZAHLEN - 1051016



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## Bridge

FBST 500-PLC RD - 2966786



## Relay Module - PLC-RPT- 24UC/21AU/RW - 2900321

### accessories

FBST 500-PLC BU - 2966692



FBST 500-PLC GY - 2966838



FBST 6-PLC RD - 2966236



FBST 6-PLC BU - 2966812



FBST 6-PLC GY - 2966825



FBST 8-PLC GY - 2967688



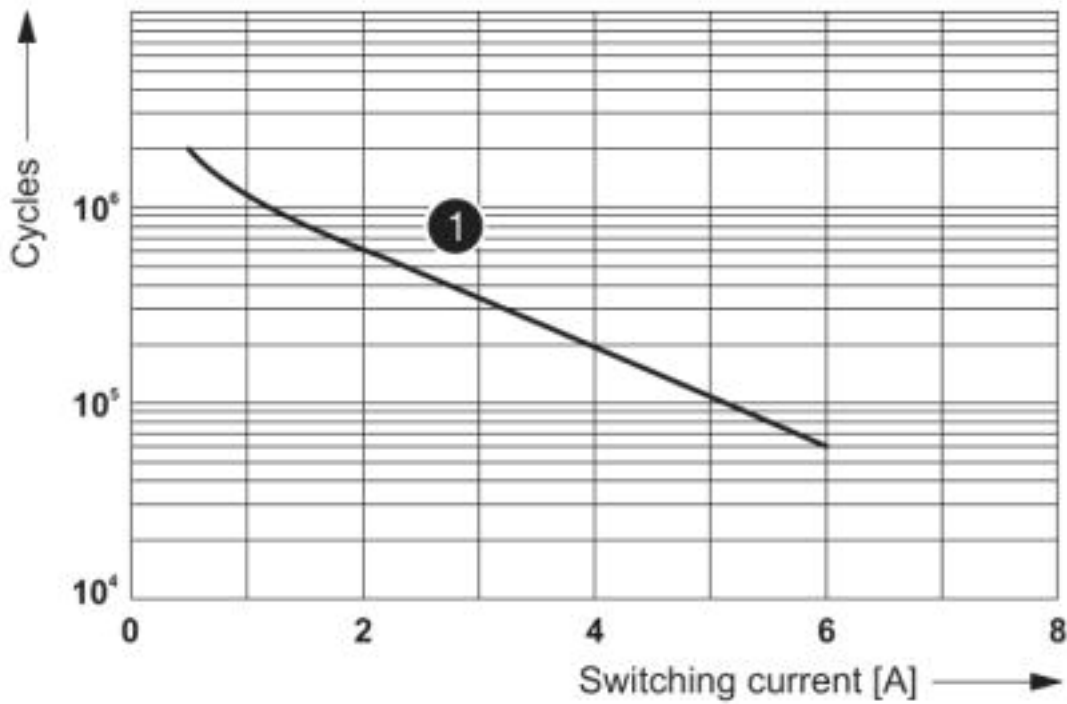


# Relay Module - PLC-RPT- 24UC/21AU/RW - 2900321

accessories

## Drawings

Diagram

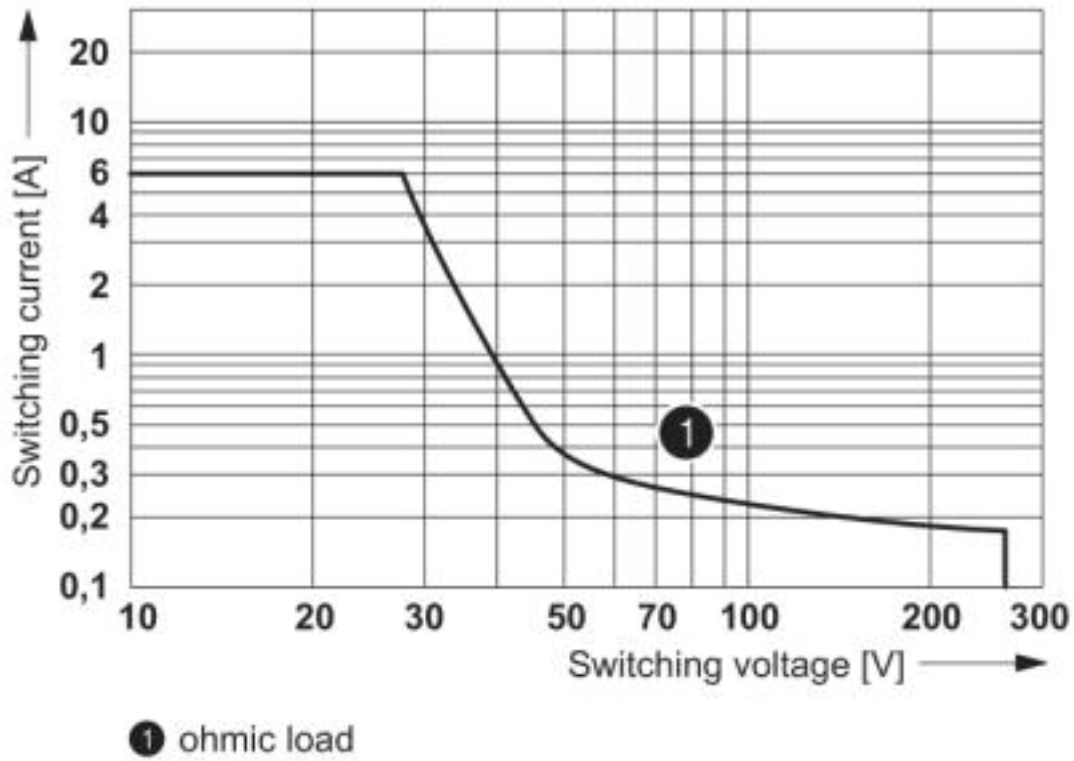


① 250 V AC, ohmic load

Electrical service life

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Diagram



DC interrupting rating

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Circuit diagram

