

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

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PLC-INTERFACE for railway applications, consisting of basic terminal block with push-in connection and plug-in miniature relay with multi-layer gold contact, range:  $0.7 \times U_N$  to  $1.25 \times U_N$ , temperature class TX:  $-40^\circ\text{C}$  to  $+70^\circ\text{C}$ , 1 PDT, input voltage 24 V DC

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

Packing unit	1 pc
Weight per Piece (excluding packing)	33.74 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
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#### Dimensions

Width	6.2 mm
Height	80 mm

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## Technical data

### Dimensions

Depth	94 mm
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### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C (Temperature class TX)
Ambient temperature (storage/transport)	-40 °C ... 85 °C

### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	0.7 ... 1.25
Typical input current at $U_N$	9 mA
Typical response time	4 ms
Typical release time	4 ms
Operating voltage display	Yellow LED
Protective circuit	Bridge rectifier Bridge rectifier
	Free-wheeling diode Damping diode
	Surge protection
	RCZ filter
	Wide-range electronics

### Contact side

Contact type	1 PDT
Contact material	AgSnO, hard gold-plated
Maximum switching voltage	30 V AC
	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))
	0.2 A (110 V (DC13))
	0.1 A (220 V (DC13))
	3 A (24 V (AC15))
	3 A (120 V (AC15))
	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.)

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## Technical data

### Contact side

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)
	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)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

### General

Test voltage relay winding/relay contact	4 kV <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RT III (Relay)
	IP20 (Relay socket)
Mechanical service life	Approx. $2 \times 10^7$ cycles
Inflammability class according to UL 94	V0
Standards/regulations	EN 50155 (VDE 0115 part 200)
	EN 50178
	IEC 62103
	EN 61373
	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
Stripping length	8 mm

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## Technical data

### Connection data

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 solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil max	14
Conductor cross section AWG/kcmil min.	26

## 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

### Approvals

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#### Approvals

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

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#### Ex Approvals

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

## Approvals

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Approvals submitted

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### Approval details



UL Listed 



cUL Listed 

UL Recognized 

cUL Recognized 

GL

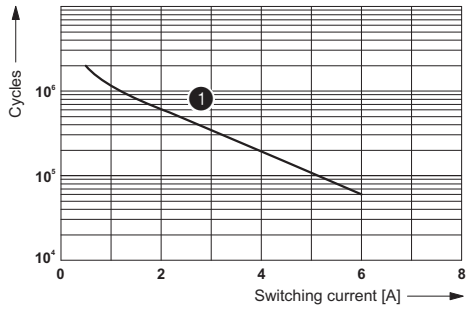
cULus Recognized  

cULus Listed  

## Drawings

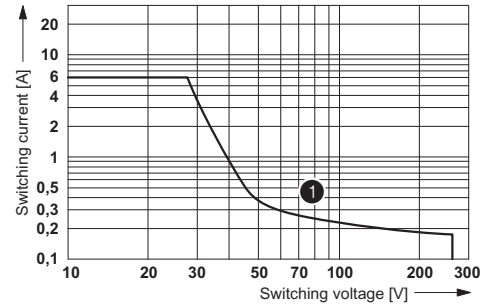
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Diagram



1 250 V AC, ohmic load

Diagram



1 ohmic load

Electrical service life

DC interrupting rating

Circuit diagram

