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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: [info@chipsmall.com](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Relay Module - PLC-RPT- 24UC/21-21/RW - 2900346

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PLC-INTERFACE for railway applications, consisting of basic terminal block with push-in connection and plug-in miniature relay with power contact, range:  $0.7 \times U_N$  to  $1.25 \times U_N$ , temperature class TX:  $-40^\circ\text{C}$  to  $+70^\circ\text{C}$ , 2 PDTs, input voltage 24 V DC

The figure shows a version with a screw connection

### Product Features

- ✓ Optimum relay operation thanks to wide-range electronics
- ✓ Certified according to EN 50155
- ✓ Safe isolation according to DIN EN 50178 between coil and contact
- ✓ Vibration and shock resistance according to EN 50155
- ✓ 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) | 99.99 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  | 14 mm |
| Height | 80 mm |

# Relay Module - PLC-RPT- 24UC/21-21/RW - 2900346

## Technical data

### Dimensions

|       |       |
|-------|-------|
| Depth | 94 mm |
|-------|-------|

### 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 $U_N$            | 20 mA                             |
| Typical response time                     | 5 ms                              |
| Typical release time                      | 11 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   | 2 PDT   |
| Contact material                                       | AgNi  |
| 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                              | 5 V (at 10 mA)  |
| Maximum inrush current                                 | 15 A (300 ms)   |
| Min. switching current                                 | 10 mA (At 5 V)  |
| 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 in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 24 V, DC13)   |
|  | 0.2 A (at 250 V, DC13)  |
|  | 3 A (at 24 V, AC15)   |
|  | 3 A (at 120 V, AC15)  |

# Relay Module - PLC-RPT- 24UC/21-21/RW - 2900346

## Technical data

### Contact side

|  |                      |
|--|----------------------|
|  | 3 A (at 250 V, AC15) |
|--|----------------------|

### General

|  |                                       |
|--|---------------------------------------|
| Test voltage relay winding/relay contact | 5 kV <sub>rms</sub> (50 Hz, 1 min.)   |
| Test voltage PDT/PDT                     | 2.5 kV <sub>rms</sub> (50 Hz, 1 min.) |
| Operating mode                           | 100% operating factor                 |
| Degree of protection                     | Relay socket                          |
|  | RT III (Relay)                        |
| Mechanical service life                  | Approx. $3 \times 10^7$ 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 / Basic isolation                |
| 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                 |
| 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 |

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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| 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

#### Approvals

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

#### Ex Approvals

#### Approvals submitted

#### Approval details


|    |
|----|
| GL |
|----|


|   |
|---|
| UL Listed  |
|---|


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Approvals

cUL Listed 

UL Recognized 

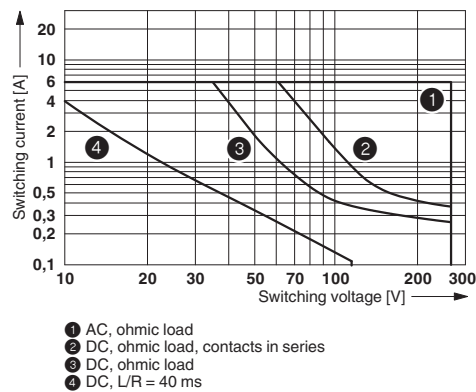
cUL Recognized 

cULus Recognized 

cULus Listed 

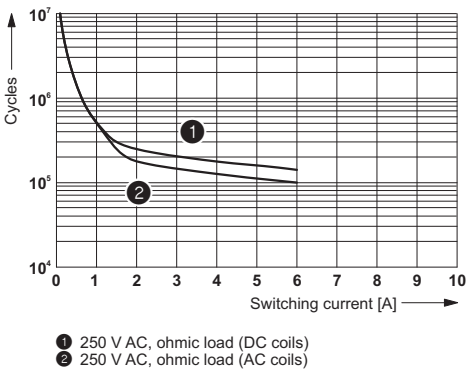
Drawings

Diagram



Interrupting rating

Diagram



Electrical service life

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Circuit diagram

