# DEK-REL- 24/I/1 - Relay module

2940171

https://www.phoenixcontact.com/us/products/2940171

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Relay terminal block, with soldered-in miniature relays, contact (AgNi+Au): small to medium loads, 1 N/O contact, input voltage 24 V AC/DC, for assembly on NS 35/7.5, terminal width 6.2 mm

## Your advantages

- Reduced costs as N terminal block is no longer required
- Up to 73 % more space
- Wiring reduced to a minimum
- 2-layer contact with hard gold plating for universal applications from 1 mA to 5 A continuous current
- 2 kV<sub>rms</sub> electrical isolation between input and output
- Integrated input circuit

## Commercial data

| | |
|---|---|
| Item number | 2940171 |
| Packing unit | 10 pc |
| Minimum order quantity | 1 pc |
| Sales key | C460 |
| Product key | DK61A2 |
| GTIN | 4017918079895 |
| Weight per piece (including packing) | 23.31 g |
| Weight per piece (excluding packing) | 19 g |
| Customs tariff number | 85364190 |
| Country of origin | CN |

# Technical data

## Notes

| | |
|---|---|
| Note on application | Use of EB 80-DIK... bridges in the DEK terminal blocks: Absorption of humidity from the ambient air as well as an unfavorable tolerance between a larger number of DEK terminal blocks and the EB 80-DIK... bridge may cause (minor) expansion of the DEK housing. When the EB 80-DIK... bridges are used, therefore, it is recommended that these be disconnected after about 10 to 12 DEK terminal blocks and a wire bridge to the next DEK terminal block be inserted in their place. |

## Product properties

| | |
|---|---|
| Product type | Relay Module |
| Product family | DEK |
| Application | Output function |
| Operating mode | 100% operating factor |
| Mechanical service life | approx. 2x $10^7$ cycles |

### Insulation characteristics

| | |
|---|---|
| Insulation | Basic insulation |
| Overvoltage category | III |
| Pollution degree | 2 |

### Data management status

| | |
|---|---|
| Date of last data management | 01.04.2026 |

## Electrical properties

| | |
|---|---|
| Maximum power dissipation for nominal condition | 0.16 W |
| Test voltage (Winding/contact) | 2 kV AC (50 Hz, 1 min., winding/contact) |

## Input data

### Coil side

| | |
|---|---|
| Nominal input voltage $U_N$ | 24 V AC/DC |
| Input voltage range | 19.2 V AC/DC ... 26.4 V AC/DC (20 °C) |
| Drive and function | monostable |
| Drive (polarity) | polarized |
| Typical input current at $U_N$ | 6.5 mA |
| Typical response time | 5 ms |
| Typical release time | 15 ms |
| Protective circuit | Bridge rectifier; Bridge rectifier |
| Operating voltage display | Yellow LED |

## Output data

### Switching

| | |
|---|---|
| Contact switching type | 1 N/O contact |

| | |
|---|---|
| Type of switch contact | Double contact |
| Contact material | AgNi, hard gold-plated |
| Maximum switching voltage | 250 V AC |
| | 125 V DC |
| Minimum switching voltage | 0.1 V |
| Limiting continuous current | 3 A (5 A up to 35°C at 24 V DC) |
| Maximum inrush current | 5 A |
| Min. switching current | 1 mA |
| Interrupting rating (ohmic load) max. | 72 W (at 24 V DC) |
| | 60 W (at 48 V DC) |
| | 50 W (at 60 V DC) |
| | 50 W (at 110 V DC) |
| | 750 VA (for 250 V AC) |
| | 120 W (at 24 V DC - up to 35°) |

## Connection data

| | |
|---|---|
| Connection method | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M3 |
| Conductor cross-section rigid | 0.2 mm² ... 2.5 mm² |
| Conductor cross-section flexible | 0.2 mm² ... 2.5 mm² |
| Conductor cross-section AWG | 24 ... 14 |
| Tightening torque | 0.4 Nm ... 0.5 Nm |

## Dimensions

Item dimensions

| | |
|---|---|
| Width | 6.2 mm |
| Height | 80 mm |
| Depth | 56 mm |

## Material specifications

| | |
|---|---|
| Color | green (RAL 6021) |

## Environmental and real-life conditions

Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | -20 °C ... 50 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |

## Standards and regulations

| | |
|---|---|
| Standards/regulations | IEC 60947-5-1 |

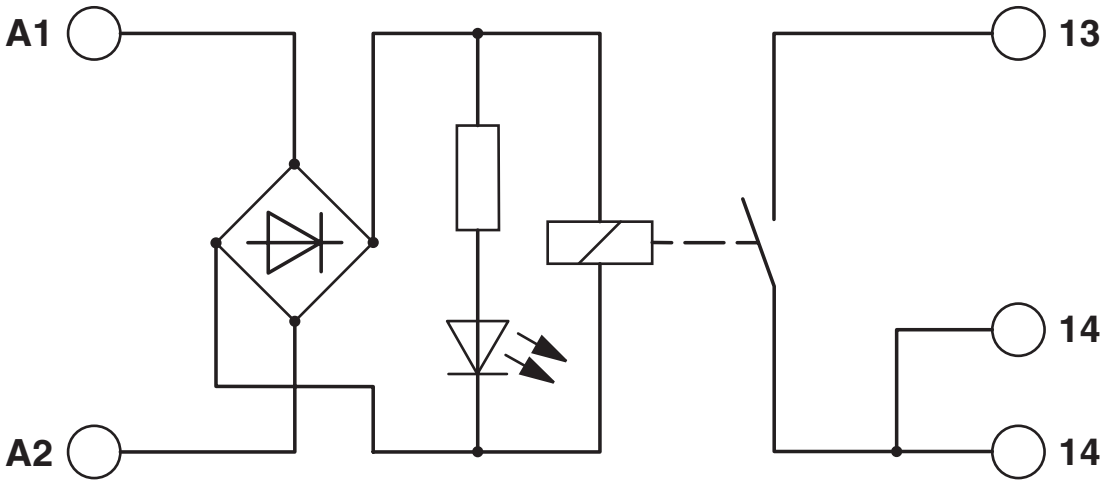
## Mounting

| | |
|---|---|
| Mounting type | DIN rail mounting |
| Assembly note | in rows with zero spacing |

| | |
|---|---|
| Mounting position | any |

## Drawings

Circuit diagram



## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2940171

**cUL Recognized**
Approval ID: E238705

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Approval ID: E238705

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-13.0 | 27371601 |
| ECLASS-15.0 | 27371601 |

### ETIM

| | |
|---|---|
| ETIM 10.0 | EC001437 |

### UNSPSC

| | |
|---|---|
| UNSPSC 21.0 | 39122300 |

## Environmental product compliance

EU RoHS

| | |
|---|---|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 7(a), 7(c)-I |

China RoHS

| | |
|---|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|---|---|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| SCIP | 9b235608-6f54-4508-85fb-8f2708416cbb |


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