# REL-SR- 24DC/2X21/FG - Coupling relay

2908777

https://www.phoenixcontact.com/us/products/2908777

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Coupling relay with force-guided contacts in accordance with DIN EN 61810-3, contact switching type 2 changeover contacts. The requirements for type A in accordance with DIN EN 61810-3 are satisfied if the circuit is designed as 1 N/O contact / 1 N/C contact.

## Commercial data

| | |
|---|---|
| Item number | 2908777 |
| Packing unit | 20 pc |
| Minimum order quantity | 20 pc |
| Sales key | C460 |
| Product key | DK69D5 |
| GTIN | 4055626338651 |
| Weight per piece (including packing) | 19.45 g |
| Weight per piece (excluding packing) | 19.45 g |
| Customs tariff number | 85364900 |
| Country of origin | CZ |

## Technical data

### Product properties

| | |
|---|---|
| Product type | Single relay |
| Application | Forcibly guided contacts |
| Operating mode | 100% operating factor |
| Mechanical service life | approx. $10^7$ cycles |
| $B_{10d}$ (AC1) | 600000 Cycles (250 V / 6 A; 1 NO) |
| | 900000 Cycles (250 V / 3 A; 1 NO) |
| | 1800000 Cycles (250 V / 1,5 A; 1 NO) |
| $B_{10d}$ (AC15) | 180000 Cycles (250 V / 3 A; 1 NO) |
| | 560000 Cycles (250 V / 2 A; 1 NO) |
| | 4600000 Cycles (250 V / 0,75 A; 1 NO) |
| $B_{10d}$ (DC13) | 360000 Cycles (24 V / 3 A; 1 NO) |
| | 740000 Cycles (24 V / 1,5 A; 1 NO) |
| | 4200000 Cycles (24 V / 0,75 A; 1 NO) |

Insulation characteristics: Air clearances and creepage distances between the power circuits

| | |
|---|---|
| Insulation | Safe isolation, reinforced insulation |
| Overvoltage category | III |
| Pollution degree | 2 |

Data management status

| | |
|---|---|
| Date of last data management | 27.07.2026 |

### Electrical properties

| | |
|---|---|
| Maximum power dissipation for nominal condition | 0.7 W |

Air clearances and creepage distances between the power circuits

| | |
|---|---|
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 6 kV |

### Input data

Coil side

| | |
|---|---|
| Nominal input voltage $U_N$ | 24 V DC |
| Input voltage range in reference to $U_N$ | see diagram |
| Drive and function | monostable |
| Drive (polarity) | non-polarized |
| Typical input current at $U_N$ | 29 mA |
| Typical response time | 10 ms |
| Typical release time | 4 ms |

### Output data

Switching

| | |
|---|---|
| Contact switching type | 2 changeover contacts, forcibly actuated |
| Type of switch contact | Single contact |
| Contact material | AgNi |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 15 V |
| Limiting continuous current | 6 A |
| Maximum inrush current | 6 A |
| Min. switching current | 10 mA (5 V) |
| Interrupting rating (ohmic load) max. | 144 W (24 V DC) |
| | 288 W (48 V DC) |
| | 88 W (110 V DC) |
| | 110 W (220 V DC) |
| | 1500 VA (250 V AC) |
| Switching power min. | 0.24 W |
| Switching capacity | 2 A (24 V (DC13)) |
| | 3 A (230 V (AC15)) |
| Motor load according to UL 508 | 10 LRA / 0,5 FLA |

## Connection data

| | |
|---|---|
| Connection method | Plug / solder connection |

## Dimensions

Item dimensions

| | |
|---|---|
| Width | 12.6 mm |
| Height | 29 mm |
| Depth | 25.5 mm |

## Environmental and real-life conditions

Ambient conditions

| | |
|---|---|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -25 °C ... 70 °C |
| Ambient temperature (storage/transport) | -25 °C ... 70 °C |

## Approvals

Corrosive gas test

| | |
|---|---|
| Identification | ISA-S71.04. G3 Harsh Group |
| | EN 60068-2-60 |

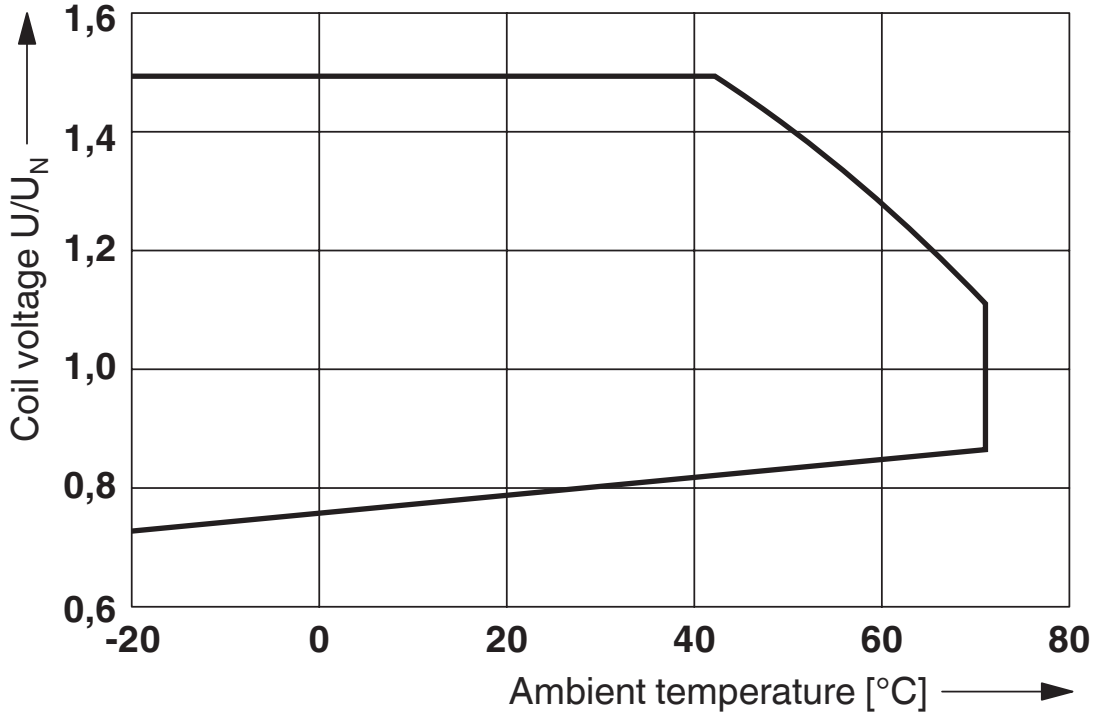
## Standards and regulations

Air clearances and creepage distances between the power circuits

| | |
|---|---|
| Standards/regulations | DIN EN 50178 |
| | DIN EN 61810-3 |
| | IEC 60664-1 |

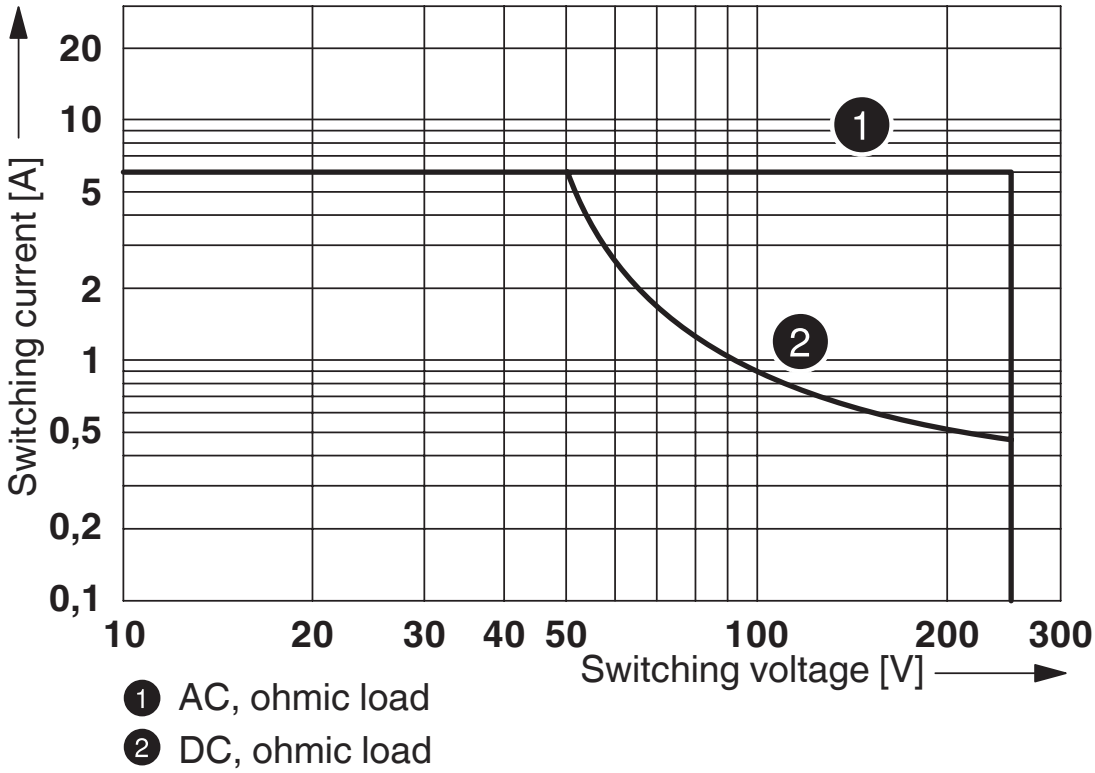
## Drawings

Diagram



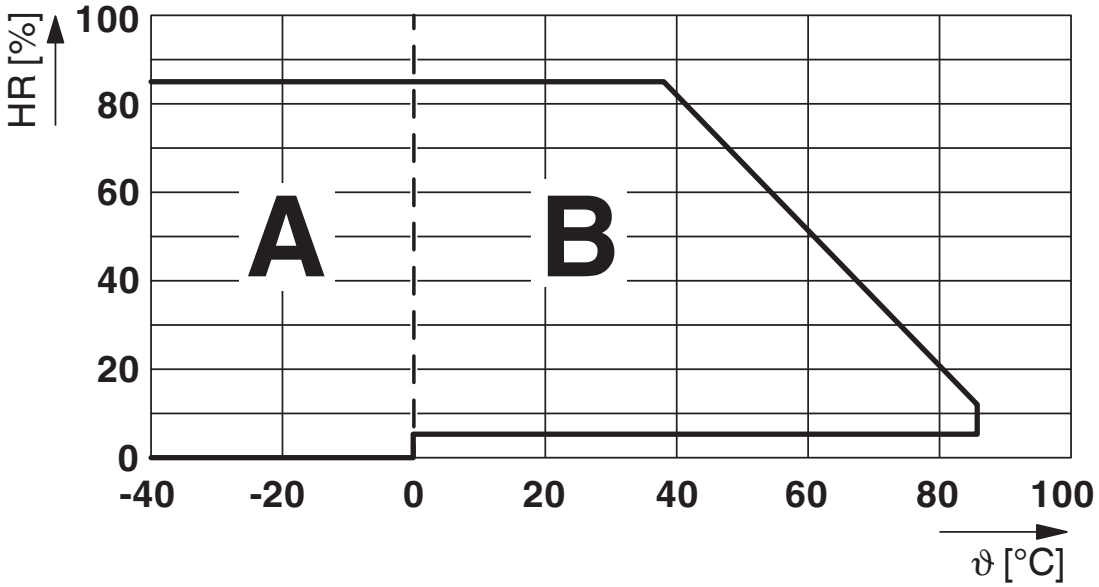

Operating voltage range

Diagram




Interrupting rating

Diagram

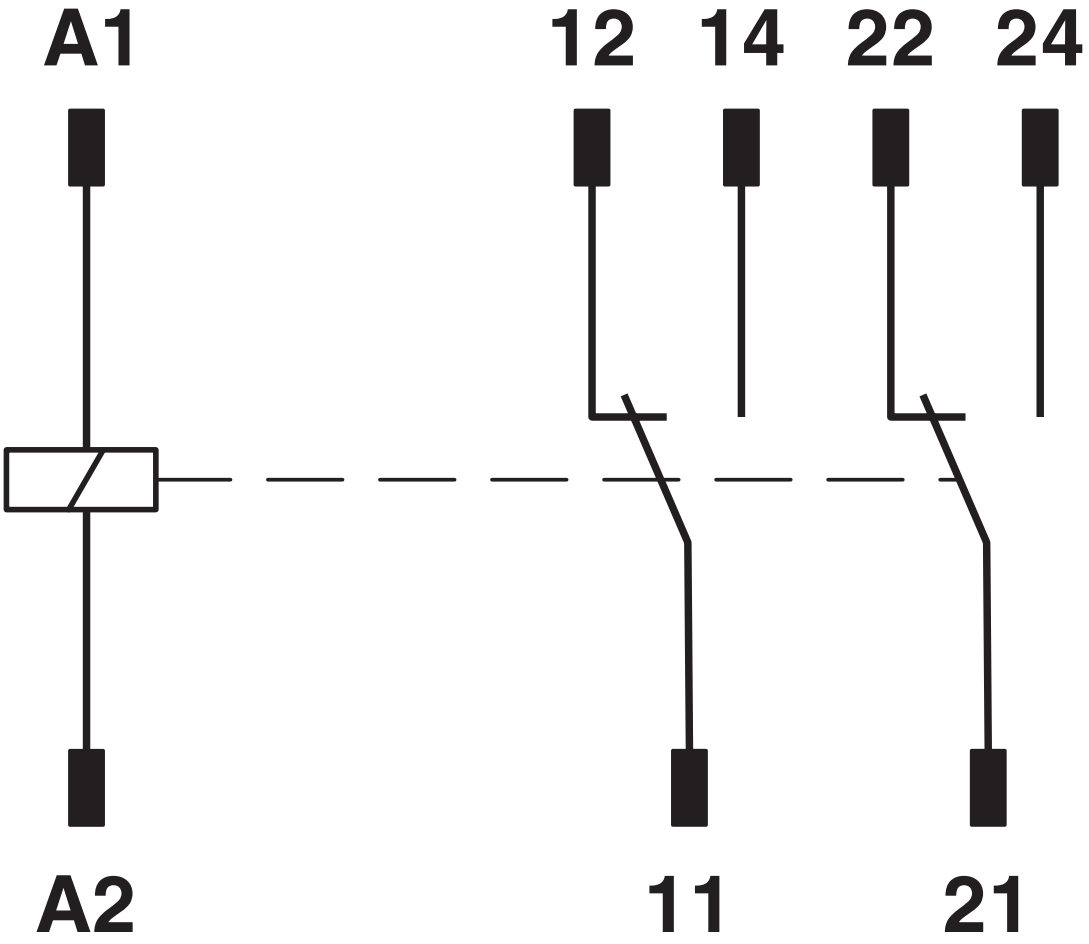



Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°C must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature ≤ 25°C.

Circuit diagram



## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2908777

**cUL Recognized**
Approval ID: FILE E 228652

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## 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, No exemptions |

China RoHS

| | |
|---|---|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|---|---|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |

EF3.1 Climate Change

| | |
|---|---|
| CO2e kg | 0.523 kg CO2e |


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