# Safety relays - REL-SR- 24DC/2X21/FG - 2908777

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Safety relay with force-guided contacts in accordance with DIN EN 61810-3, contact 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.

## Key Commercial Data

| | |
|---|---|
| Packing unit | 20 pc |
| Minimum order quantity | 20 pc |
| GTIN | 4 055626 338651 |
| GTIN | 4055626338651 |

## Technical data

### Dimensions

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

### Ambient conditions

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

### Coil side

| | |
|---|---|
| Nominal input voltage $U_N$ | 24 V DC |
| Input voltage range in reference to $U_N$ | see diagram |
| Typical input current at $U_N$ | 29 mA |
| Typical response time | 10 ms |
| Typical release time | 4 ms |
| Voltage type for actuation | DC |
| Power dissipation for nominal condition | 0.7 W |

### Contact side

| | |
|---|---|
| Contact type | 2 changeover contacts |
| Type of switch contact | Single contact |
| Contact material | AgNi |

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## Technical data

### Contact side

| | |
|---|---|
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 15 V |
| Min. switching current | 10 mA |
| Maximum inrush current | 6 A |
| Limiting continuous current | 6 A |
| Interrupting rating (ohmic load) max. | 144 W (24 V DC) |
| | 288 W (at 48 V DC) |
| | 88 W (at 110 V DC) |
| | 110 W (at 220 V DC) |
| | 1500 VA (for 250 V AC) |
| Switching capacity min. | 0.24 W |
| Switching capacity | 2 A (at 24 V, DC13) |
| | 3 A (at 230 V, AC15) |
| Motor load according to UL 508 | 10 LRA / 0,5 FLA |

### General

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

### Connection data

| | |
|---|---|
| Connection method | Solder connection |

### Standards and Regulations

| | |
|---|---|
| Designation | Air clearances and creepage distances between the power circuits |
| Standards/regulations | DIN EN 50178 |
| | DIN EN 61810-3 |
| | IEC 60664-1 |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 6 kV |
| Insulation | Safe isolation, reinforced insulation |
| Pollution degree | 2 |
| Overvoltage category | III |

### Environmental Product Compliance

# Safety relays - REL-SR- 24DC/2X21/FG - 2908777

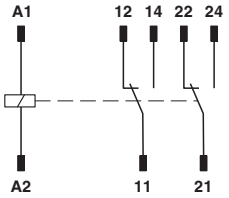
## Technical data

### Environmental Product Compliance

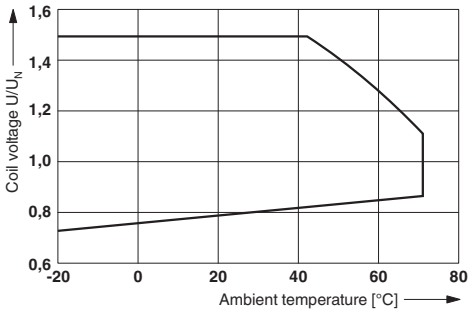
| | |
|---|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

## Drawings

Circuit diagram

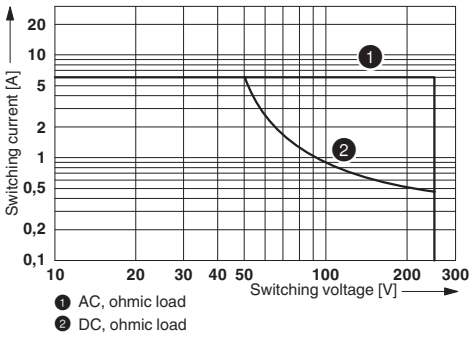



Diagram




Operating voltage range

Diagram




Interrupting rating

## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 10.0.1 | 27371601 |
| eCl@ss 11.0 | 27371601 |
| eCl@ss 5.0 | 27371600 |
| eCl@ss 5.1 | 27371600 |
| eCl@ss 6.0 | 27371600 |
| eCl@ss 7.0 | 27371601 |
| eCl@ss 9.0 | 27371601 |

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## Classifications

### ETIM

| | |
|---|---|
| ETIM 2.0 | EC001437 |
| ETIM 3.0 | EC001437 |
| ETIM 4.0 | EC001437 |
| ETIM 6.0 | EC001437 |
| ETIM 7.0 | EC001437 |

### UNSPSC

| | |
|---|---|
| UNSPSC 6.01 | 30211901 |
| UNSPSC 7.0901 | 39121501 |
| UNSPSC 11 | 39121501 |
| UNSPSC 12.01 | 39121501 |
| UNSPSC 13.2 | 39122334 |
| UNSPSC 18.0 | 39122334 |
| UNSPSC 19.0 | 39122334 |
| UNSPSC 20.0 | 39122334 |
| UNSPSC 21.0 | 39122334 |

## Approvals

### Approvals

Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

Ex Approvals

### Approval details

| | | | |
|---|---|---|---|
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 228652 |
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 228652 |
| EAC | | | TR_TS_D_00573_c |

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## Approvals

| | | |
|---|---|---|
| EAC | | RU*C-DE.*08.B.00010 |

| | |
|---|---|
| cULus Recognized | |

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