

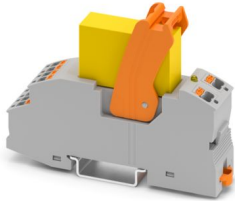
RIF-RPT-LDP-24DC/1X2/3X1/AU/FG - Relay module



1148703

<https://www.phoenixcontact.com/us/products/1148703>

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Relay module with Push-in connection, consisting of: relay base with status LED, freewheeling diode, and retaining bracket, safety relay with force-guided contacts in accordance with DIN EN 61810-3, contact switching type: 3 N/O contacts and 1 N/C contact, input voltage: 24 V DC

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1148703 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Sales key | C465 |
| Product key | DK652E |
| GTIN | 4063151142513 |
| Weight per piece (including packing) | 76.33 g |
| Weight per piece (excluding packing) | 69.15 g |
| Customs tariff number | 85364110 |
| Country of origin | CN |

RIF-RPT-LDP-24DC/1X2/3X1/AU/FG - Relay module



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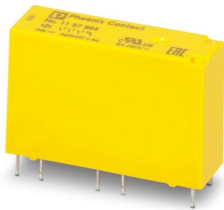
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Set consists of

REL-SR- 24DC/3X1AU/1X2AU/FG - Safety relays

1157954

<https://www.phoenixcontact.com/us/products/1157954>



Safety relay with force-guided contacts in accordance with DIN EN 61810-3 (type A), input voltage 24 V DC, with multi-layer gold contact, 3 N/O contacts and 1 N/C contacts

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Technical data

Product properties

| | |
|-------------------------|---|
| Product type | Relay Module |
| Product family | RIFLINE complete |
| Application | Forcibly guided contacts |
| Operating mode | 100% operating factor |
| Mechanical service life | approx. 10^7 cycles |
| B _{10d} (AC15) | 810000 Cycles (AC15, 250 V / 0.5 A, 1 NO) |
| | 170000 Cycles (250 V / 2 A; 1 NO) |
| B _{10d} (DC13) | 318000 Cycles (DC13, 24 V / 1 A, 1 NO) |
| | 208000 Cycles (DC13, 24 V / 2 A, 1 NO) |

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

| | |
|----------------------|---|
| Insulation | Basic insulation |
| | Safe isolation, reinforced insulation and 6 kV between coil and contact circuit and between contacts 11-12 and 13-14, 41-42 to 23-24, 33-34 |
| Overvoltage category | III |
| Pollution degree | 2 |

Data management status

| | |
|------------------------------|------------|
| Date of last data management | 17.03.2026 |
|------------------------------|------------|

Electrical properties

| | |
|---|--|
| Maximum power dissipation for nominal condition | 0.41 W |
| Test voltage (Winding/contact) | 4 kV _{rms} (50 Hz, 1 min., winding/contact) |
| Test voltage (open contact) | 1.5 kV _{rms} (50 Hz, 1 min., open contact) |
| Test voltage (between contacts: 7, 8 to 9, 10) | 2.5 kV _{rms} (50 Hz, 1 min., between contacts: 7, 8 to 9, 10) |
| Test voltage (between contacts: all others) | 4 kV _{rms} (50 Hz, 1 min., between contacts: all others) |

Air clearances and creepage distances between the power circuits

| | |
|--------------------------|-------------------------|
| Rated insulation voltage | 250 V AC (Input/output) |
| Rated surge voltage | 6 kV (Input/output) |

Short-circuit protection device

| | |
|-----------------------|--|
| Current | 10 A (RT28-32) |
| Voltage | 500 V (SCPD) |
| Short-circuit current | 1 kA (conditional short-circuit current) |

Input data

Coil side

| | |
|--|----------------------|
| Nominal operating voltage U _N | 24 V DC |
| Input voltage range in reference to U _N | See derating diagram |
| Drive and function | monostable |

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| | |
|-----------------------------------|--------------------|
| Drive (polarity) | polarized |
| Typical input current at U_N | 17 mA |
| Input power dissipation for U_N | 0.4 W |
| Typical response time | 10 ms |
| Typical release time | 15 ms |
| Coil voltage | 24 V DC |
| Protective circuit | Freewheeling diode |
| Status display | LED (yellow) |

Output data

Switching

| | |
|---|--|
| Contact switching type | 3 N/O contacts, 1 N/C contact |
| Type of switch contact | Single contact |
| Contact material | AgSnO, hard gold-plated |
| Maximum switching voltage | 250 V AC 300 V DC |
| Minimum switching voltage | 10 V (5 mA) |
| Limiting continuous current | 6 A |
| Maximum inrush current | 35 A (20 ms) |
| Min. switching current | 5 mA (10 V) |
| Interrupting rating (ohmic load) max. | 144 W (24 V DC) 100 W (48 V DC) 75 W (60 V DC) 55 W (110 V DC) 50 W (220 V DC) 1500 VA (250 V AC) |
| Force-guided contacts in accordance with EN 61810-3 | Type A |
| Utilization category CB Scheme (IEC 60947-5-1) | AC15, 2 A/240 V (N/O contact) DC13, 2 A/24 V (N/O contact) |

Connection data

| | |
|----------------------------------|---|
| Connection method | Push-in connection |
| Stripping length | 8 mm |
| Conductor cross-section rigid | 0.14 mm ² ... 1.5 mm ² |
| Conductor cross-section flexible | 0.14 mm ² ... 1.5 mm ² 0.14 mm ² ... 1.5 mm ² (Ferrule with plastic sleeve) 0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve, two conductors on double terminal block) |
| Conductor cross-section AWG | 26 ... 16 (solid) 26 ... 16 (flexible) |

Dimensions

Item dimensions

| | |
|-------|-------|
| Width | 21 mm |
|-------|-------|

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| | |
|--------|-------|
| Height | 96 mm |
| Depth | 67 mm |

Material specifications

| | |
|--|--------------|
| Flammability rating according to UL 94 | V2 (Housing) |
|--|--------------|

Environmental and real-life conditions

Ambient conditions

| | |
|--|------------------------------|
| Degree of protection (Relay base) | IP20 (Relay base) |
| Degree of protection (Relay) | RT II (Relay) |
| Degree of protection (Installation location) | IP54 (Installation location) |
| Ambient temperature (operation) | -40 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Altitude | ≤ 2000 m |

Approvals

UKCA

| | |
|-------------|----------------|
| Certificate | UKCA-compliant |
|-------------|----------------|

Standards and regulations

All specifications in accordance with the standard

| | |
|-----------------------|---------------|
| Standards/regulations | IEC 60947-5-1 |
| | IEC 61810-3 |

Air clearances and creepage distances between the power circuits

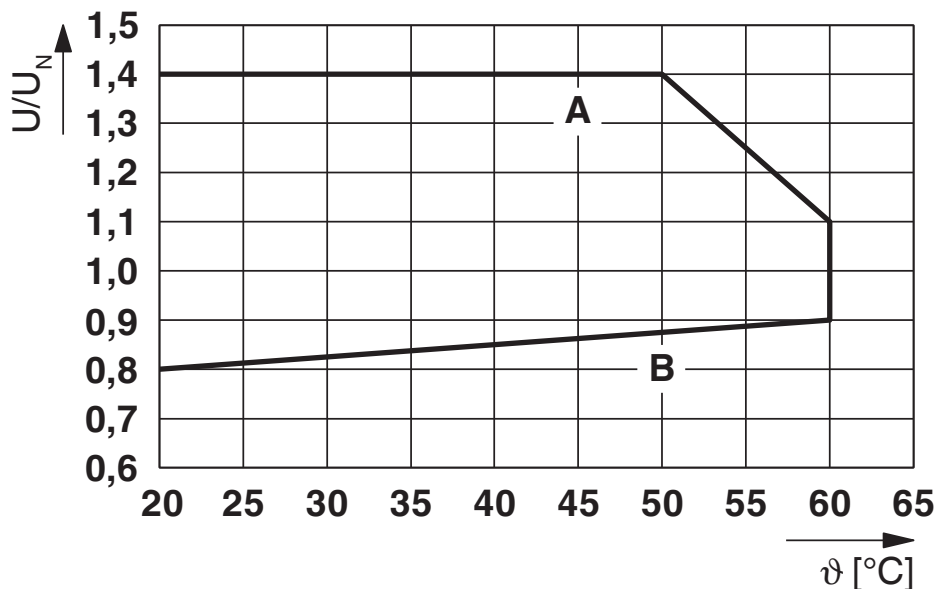
| | |
|-----------------------|------------|
| Standards/regulations | EN 61810-1 |
|-----------------------|------------|

Mounting

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

Drawings

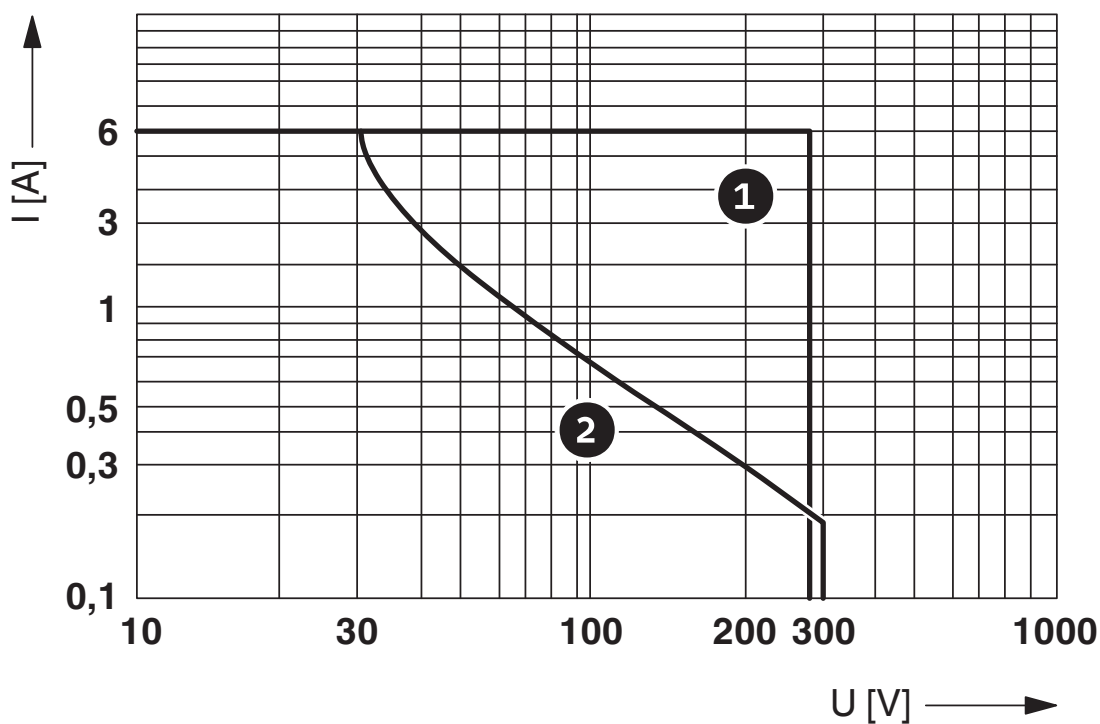
Diagram



Curve A: maximum continuous voltage at limiting continuous current

Curve B: minimum pick-up voltage for pre-excitation with U_N and limiting continuous current

Diagram



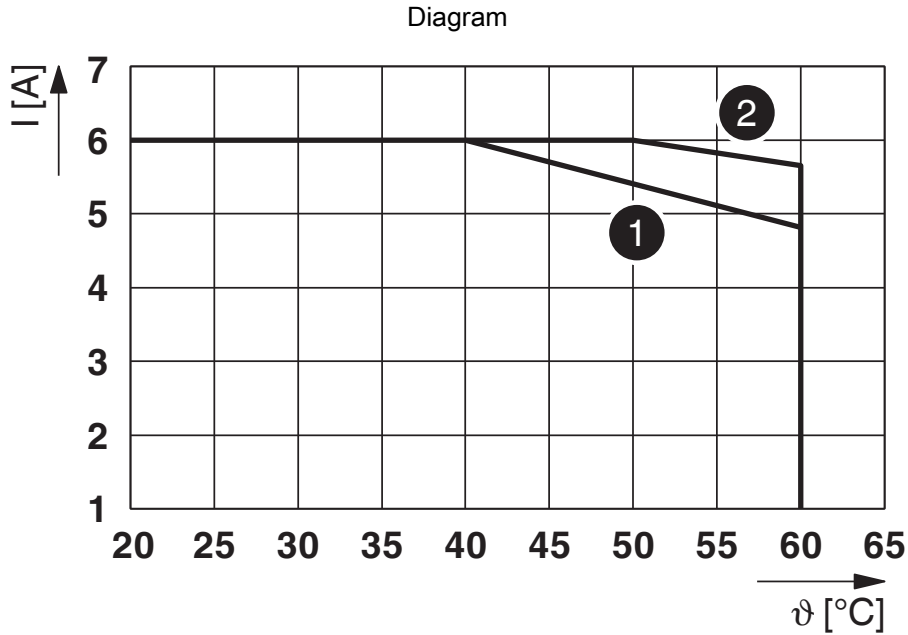
Interrupting rating

Curve 1: AC, ohmic load

Curve 2: DC, ohmic load

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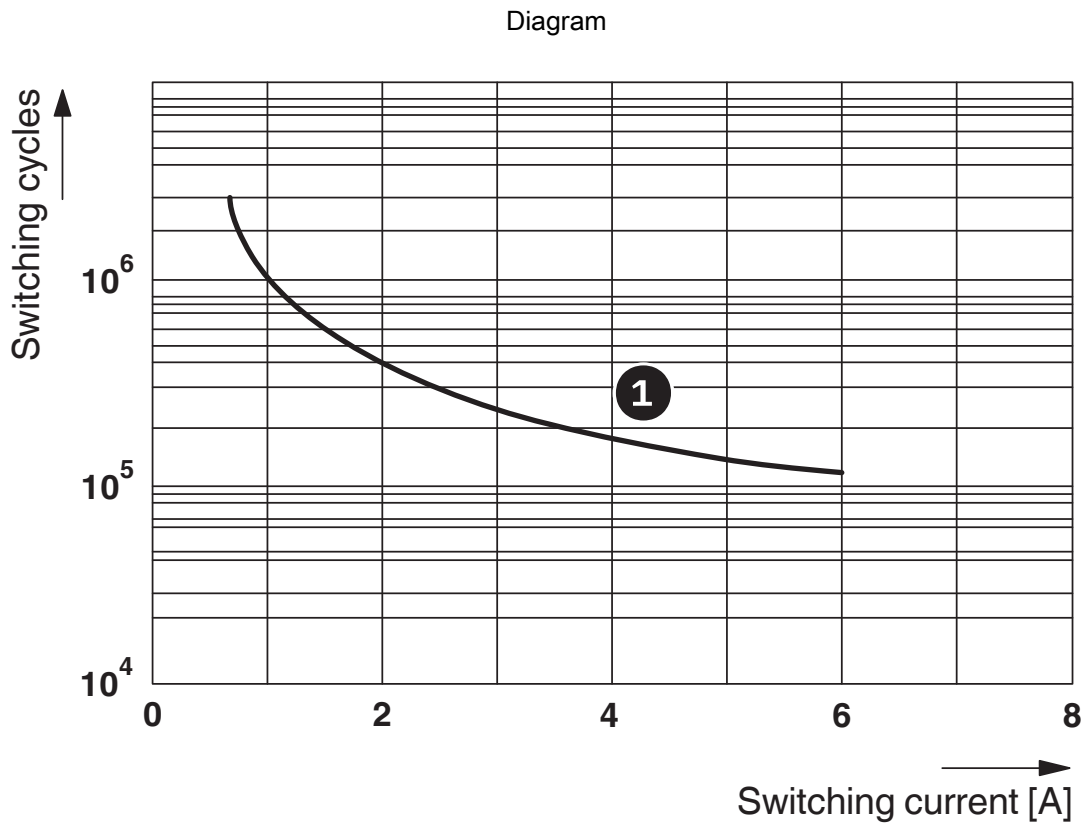
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Contact derating

(1) Aligned without clearance, nominal input voltage $1.1 \times U_N$

(2) Clearance ≥ 50 mm, nominal input voltage $1.0 \times U_N$



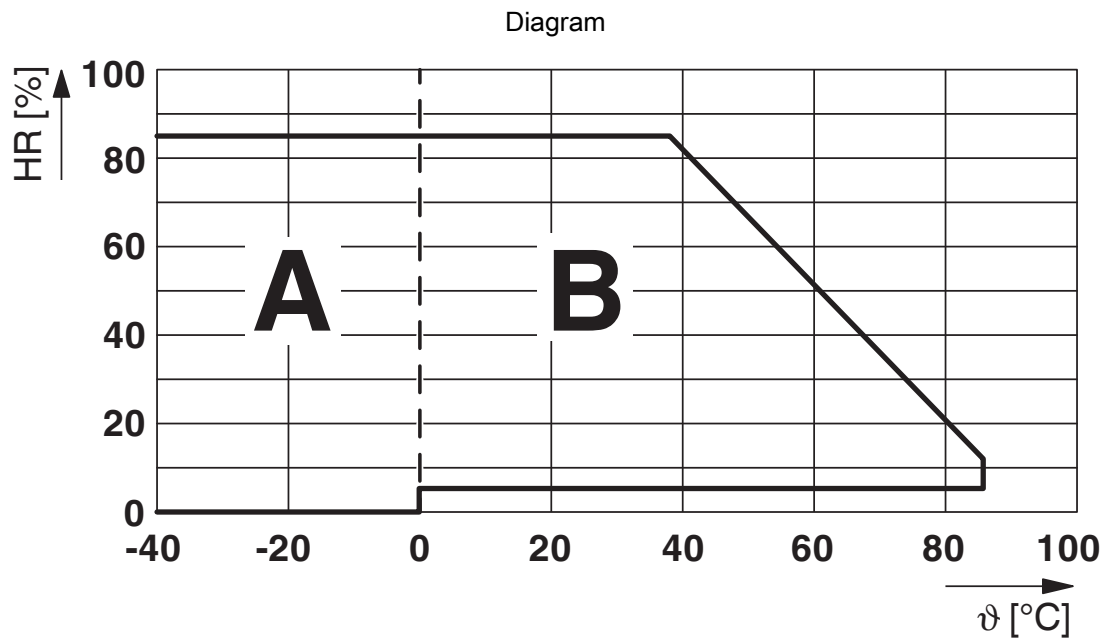
① 250 V AC, Ohmic load

Electrical service life

Diagram



Service life reduction factor with various cos phi



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 $\leq 0^\circ\text{C}$ must be prevented

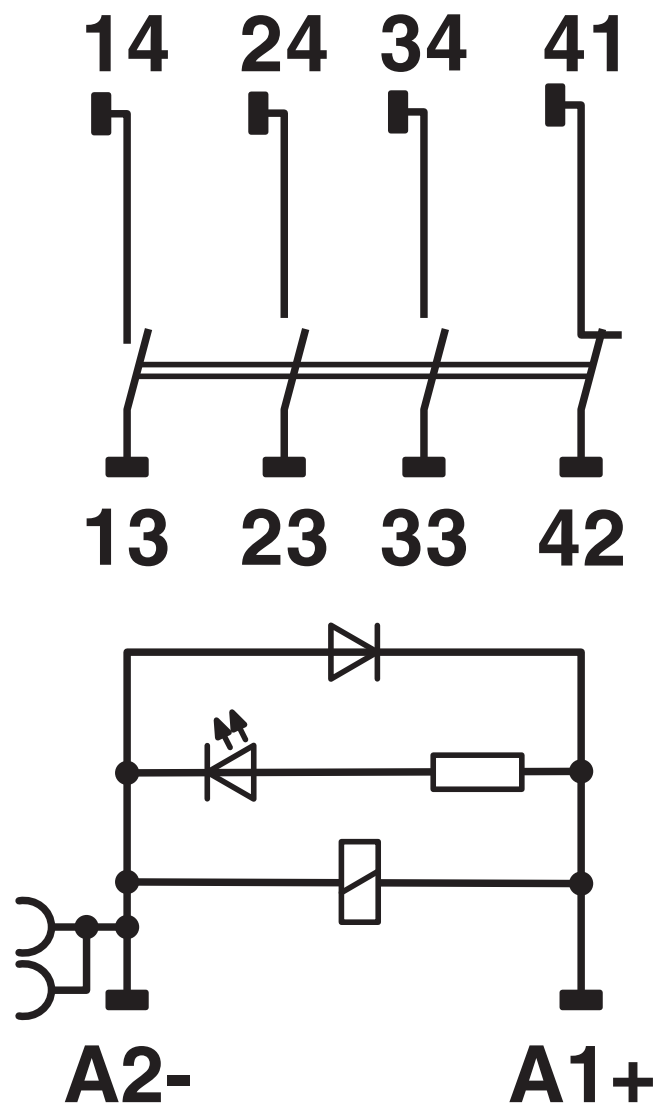
Area B: Condensation at ambient temperatures $> 0^\circ\text{C}$ must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature $\leq 25^\circ\text{C}$.

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Circuit diagram



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<https://www.phoenixcontact.com/us/products/1148703>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1148703>



EAC

Approval ID: RU*C-DE.*08.B.00010



UL Listed

Approval ID: FILE E 172140



cUL Listed

Approval ID: FILE E 172140

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Classifications

ECLASS

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

ETIM

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

UNSPSC

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

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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 | b4dd0375-a05a-427a-8312-a7330483c926 |

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