

F0150-B

Power PCB Relay RPII/2

2 pole 8 A, 2 form C (CO) or 2 form A (NO) contacts

■ 4 kv/8 mm coil contact



Applications Domestic appliances, UPS

Approvals

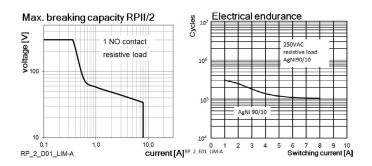
VDE Cert. No. 40025448, UL E214025 Technical data of approved types on request

Contact Data

| Contact configuration | 2 form C (CO) or |
|--|-----------------------------|
| | 2 form A (NO) |
| Rated voltage / max.switching voltage AC | 250 VAC |
| Max. switching voltage | 400 VAC |
| Rated current | 8 A (UL: 10A) |
| Limiting making capacity, max 4 s, duty factor 10% | 14 A |
| Breaking capacity max. | 2000 VA |
| Contact material | AgNi 90/10 |
| | AgNi0.15 gold flashed |
| Frequency of operation with load | 600 h ⁻¹ |
| Frequency of operation without load DC-/REM-coil | 36000/18000 h ⁻¹ |
| Operate/release time typ. | 9/3 ms |
| Bounce time typ., form A/form B | 2/3 ms |
| | |

Contact ratings

| Contact rating | 3 | | |
|-----------------------|-----------|--------------------------------|---------------------|
| Туре | Contact | Load | Cycles |
| IEC61810 | | | |
| RP421 | A (NO) | 8A, 250 VAC, resistive, 35°C | 100x10 ³ |
| RP424 DC-coil | A (NO) | 8A, 250 VAC, resistive, 35°C | 100x10 ³ |
| RP424 DC-coil | C (CO) | 5A, 250 VAC, resistive, 70°C | 20x10 ³ |
| RP424 DC-coil | A (NO) | 8A, 250 VAC, resistive, 70°C | 30x10 ³ |
| RP424 REM | A (NO) | 8A, 250 VAC, resistive, 35°C | 50x10 ³ |
| UL61810-1 (for | merly UL5 | i08) | |
| RP421 | C (CO) | 8A, 250 VAC, gen. purp, 40°C | 6x10 ³ |
| RP424 | A (NO) | 10A, 250 VAC, gen. purp, 65°C | 30x10 ³ |
| RP424 | C (CO) | 8A, 250 VAC, gen. purp, 70°C | 6x10 ³ |
| Mechanical en | durance | | |
| DC-coil version: | | >20x10 ⁶ operations | |
| REM/bistable version: | | >1x10 ⁶ operations | |



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Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.



| Coil voltage range | 5 to 110VDC |
|----------------------------|-------------|
| Operative range, IEC 61810 | 2 |
| | |

Coil versions, DC coil

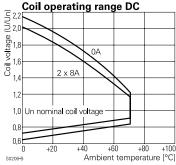
Coil Data

| | 50113, 00 00 | | | | |
|------|--------------|---------|---------|------------------------|------------|
| Coil | Rated | Operate | Release | Coil | Rated coil |
| code | voltage | voltage | voltage | resistance | power |
| | VDC | VDC | VDC | $\Omega \pm 10\%^{1)}$ | mW |
| 005 | 5 | 3.5 | 0.5 | 54 | 500 |
| 006 | 6 | 4.2 | 0.6 | 68 | 500 |
| 012 | 12 | 8.4 | 1.2 | 270 | 500 |
| 024 | 24 | 16.8 | 2.4 | 1100 ¹⁾ | 500 |
| 048 | 48 | 33.6 | 4.8 | 4400 ¹⁾ | 500 |
| 060 | 60 | 42.0 | 6.0 | 6540 ¹⁾ | 500 |
| 110 | 110 | 77.0 | 11.0 | 23100 ¹⁾ | 500 |

1) Coil resistance ±15%.

All figures are given for coil without pre-energization, at ambient temperature +20°C. Other coil voltages on request.





Coil versions, REM I (1 coil bistable/remanence)

| Coil | Rated | Resistance | Magnetisa | Magnetisation range | | isation range | | | | |
|------|---------|------------|-----------|---------------------|-----------|---------------|--|--|--|--|
| code | voltage | Ω±15% | MIN./ Vdc | MAX./Vdc | MIN./ Vdc | MAX./Vdc | | | | |
| | VDC | | | | | | | | | |
| A12 | 12 | 115 | 9 | 18 | 3 | 4.8 | | | | |
| A24 | 24 | 460 | 18 | 36 | 6 | 9.6 | | | | |
| A48 | 48 | 1748 | 36 | 72 | 12 | 19.2 | | | | |

Coil versions, REM II (2 coil bistable/remanence)

| 00111 | | | | | | | | | |
|--------------------------------|-----|------------|------------|-----------|-----------|--------------|--|--|--|
| Coil Rated Resistance | | Resistance | Magnetisat | ion range | Demagneti | sation range | | | |
| code voltage $\Omega \pm 15\%$ | | | MIN./ Vdc | MAX./Vdc | MIN./ Vdc | MAX./Vdc | | | |
| | VDC | | | | | | | | |
| F05 | 5 | 20 | 3.7 | 7.5 | 3.7 | 6 | | | |
| F12 | 12 | 105 | 9 | 18 | 9 | 14.4 | | | |
| F24 | 24 | 460 | 18 | 36 | 18 | 28.8 | | | |
| | | | | | | | | | |

All figures are given for coil without pre-energization, at ambient temperature +20°C. Other coil voltages on request.

Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change. 1



S0163-BK

Power PCB Relay RPII/2 (Continued)

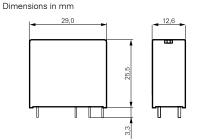
| Insulation | |
|------------------------------------|----------------------|
| Initial dielectric strength | |
| coil-contact circuit | 4000V _{rms} |
| open contact circuit | 1000V _{rms} |
| adjacent contact circuits | 2500Vrms |
| Clearance/creepage | |
| coil-contact circuit | ≥8/8mm |
| Material group of insulation parts | Illa |

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

| Ambient temperature | -40 to +70°C |
|--------------------------------------|---------------------------------------|
| Category of environmental | |
| IEC 61810 | RTII - flux proof, RTIII - wash tight |
| Vibration resistance (functional), | |
| form A/form B, 30 to 150Hz | 11/1.5g |
| Shock resistance (destructive) | 100g |
| Terminal type | PCB-THT |
| Resistance to soldering heat THT, IE | C 60068-2-20 |
| flux-proof version | 270°C / 10s |
| wash-tight version | 260°C / 5s |
| Relay weight | 18g |
| Packaging unit | tube/20 pcs., box/500 pcs. |
| | |

Dimensions

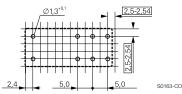


monostable and REM I (REM II version has 3 coil terminals)

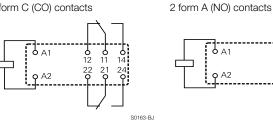
S0273-AB

PCB layout / terminal assignment

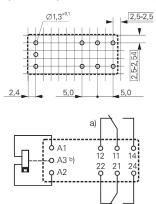
Bottom view on solder pins Dimensions in mm



2 form C (CO) contacts



2 form C (CO) contacts (REM II version/ 2 coils)



a) Indicated contact position during or after coil energization with reset voltage.

b) For 2 coil version only

A2-A3 is set coil

A1-A3 is reset coil A1&A2 always same polarity, A3 opposite polarity.

Current direction not important.

| Prod | uct code structure | | | Typical product code | RP | 4 | 2 | 4 | 024 |
|-------------|---|---------|-----------------------------------|----------------------|----|---|---|---|-----|
| Туре | | | | | | | | | |
| RP | Power PCB Relay RPII/2 | | | | | | | | |
| Versio 4 | on 8A, flux proof | 8 | 8A, wash tight | | | - | | | |
| Conta 2 | act arrangement 2 form C (2 CO) | 4 | 2 form A (2 NO) | | | | _ | | |
| Conta 1 | act material AgNi0.15 gold flashed | 0 | Discontinued: AgCdO ²⁾ | 4 AgNi 90/10 | | | | | |
| Coil | Coil code: please refer to coil version | ons tal | ble | | | | | | |

2) AgCdO contacts are discontinued and replaced with AgNi contacts (see PCN E-18-003947)

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Power PCB Relay RPII/2 (Continued)

| Product Code | Version | Contacts | Cont. Material | Coil Version | Coil | Part Number |
|--------------|------------|------------------------|----------------|--------------|--------|-------------|
| RP421012 | Flux proof | 2 form C (CO) contacts | AgNi0.15 | monostable | 12VDC | 6-1393234-7 |
| RP421024 | | | | | 24VDC | 6-1393234-8 |
| RP421110 | | | | | 110VDC | 7-1393234-1 |
| RP821012 | Wash tight | | AgNi0.15 | | 12VDC | 1393845-4 |
| RP821024 | | | | | 24VDC | 1393845-5 |
| RP424005 | Flux proof | | AgNi 90/10 | | 5VDC | 6-1415546-2 |
| RP424006 | | | | | 6VDC | 6-1415546-3 |
| RP424012 | | | | | 12VDC | 6-1415546-4 |
| RP424024 | | | | | 24VDC | 6-1415546-5 |
| RP424048 | | | | | 48VDC | 6-1415546-6 |
| RP424060 | | | | | 60VDC | 6-1415546-7 |
| RP424110 | | | | | 110VDC | 6-1415546-8 |
| RP424A12 | | | | REM I | 12VDC | 6-1415546-9 |
| RP424A24 | | | | | 24VDC | 7-1415546-0 |
| RP424A48 | | | | | 48VDC | 7-1415546-1 |
| RP424F12 | | | | REM II | 12VDC | 7-1415546-2 |
| RP424F24 | | | | | 24VDC | 7-1415546-3 |
| RP444012 | | 2 form A (NO) contacts | | monostable | 12VDC | 7-1415546-4 |
| RP444024 | | | | | 24VDC | 7-1415546-5 |
| RP824006 | Wash tight | 2 form C (CO) contacts | | | 6VDC | 7-1415546-6 |
| RP824012 | | | | | 12VDC | 7-1415546-7 |
| RP824024 | | | | | 24VDC | 7-1415546-8 |
| RP824048 | | | | | 48VDC | 7-1415546-9 |
| RP824060 | | | | | 60VDC | 8-1415546-0 |
| RP844024 | | 2 form A (NO) contacts | | | 24VDC | 6-1415546-1 |

Note. This list represents the most common types and does not show all variants covered by this datasheet. Other types on request.

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RP424012