

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
- Twin contacts available



Applications
Domestic appliances, UPS



F0150-B

Approvals

VDE Cert. No. 40025448, UL E214024
Technical data of approved types on request

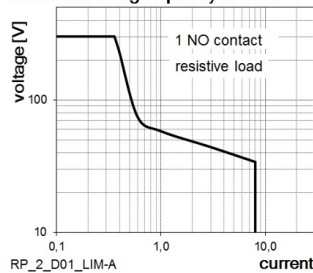
Contact Data

| | |
|--|-------------------------------------|
| 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 / without load | 600 / 36000 h ⁻¹ |
| Operate/release time typ. | 9/3 ms |
| Bounce time typ., form A/form B | 2/3 ms |

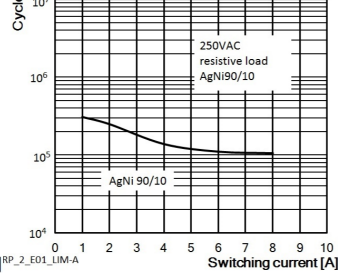
Contact ratings

| Type | 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 |
| UL508 | | | |
| RP420 | C (CO) | 10A, 250 VAC, gen. purp, 70°C | 6x10 ³ |
| 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 |
| RP424 | A (NO) | 1/2 HP, 240 VAC, 70°C | 6x10 ³ |

Max. breaking capacity RPII/2



Electrical endurance



Coil Data

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

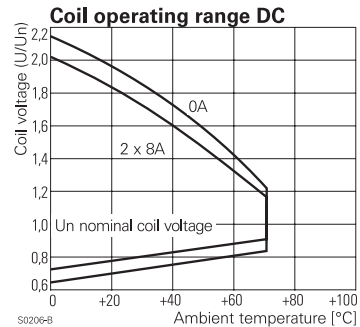
Coil versions, DC coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% ¹⁾ | Rated power 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/remance)

| Coil code | Rated voltage VDC | Resistance Ω±15% | Magnetisation range MIN./Vdc MAX./Vdc | Demagnetisation range MIN./Vdc MAX./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/remance)

| Coil code | Rated voltage VDC | Resistance Ω±15% | Magnetisation range MIN./Vdc MAX./Vdc | Demagnetisation range MIN./Vdc MAX./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.

Power PCB Relay RPII/2 (Continued)

Insulation

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

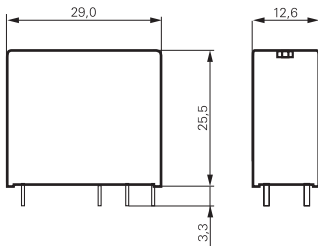
Other Data

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

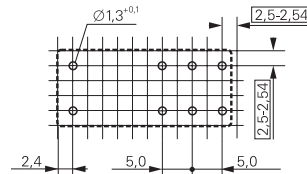
Dimensions in mm



S0273-AB

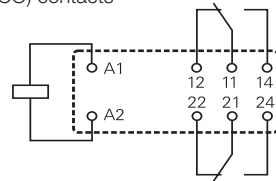
PCB layout / terminal assignment

Bottom view on solder pins
Dimensions in mm



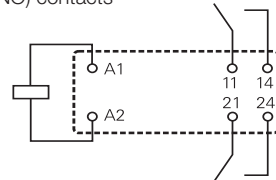
S0163-CO

2 form C (CO) contacts



S0163-BJ

2 form A (NO) contacts



S0163-BK

Product code structure

Typical product code

RP 4 2 4 024

Type

RP Power PCB Relay RPII/2

Version

4 8A, flux proof **8** 8A, wash tight

Contact arrangement

2 2 form C (2 CO) **4** 2 form A (2 NO)

Contact material

1 AgNi0.15 gold flashed **0** AgCdO² **4** AgNi 90/10

Coil

Coil code: please refer to coil versions table

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

Power PCB Relay RPII/2 (Continued)

| Product Code | Version | Contacts | Cont. Material | Coil Version | Coil | Part Number |
|--------------|------------|------------------------|----------------|--------------|-------------|-------------|
| RP420006 | Flux proof | 2 form C (CO) contacts | AgCdO | monostable | 6VDC | 4-1393234-8 |
| RP420012 | | | | | 12VDC | 5-1393234-0 |
| RP420024 | | | | | 24VDC | 5-1393234-1 |
| RP420048 | | | | | 48VDC | 5-1393234-2 |
| RP421012 | | | AgNi0.15 | | 12VDC | 6-1393234-7 |
| RP421024 | | | | 24VDC | 6-1393234-8 | |
| RP421110 | | | | | 110VDC | 7-1393234-1 |
| RP820012 | Wash tight | | AgCdO | | 12VDC | 9-1393234-0 |
| RP820024 | | | | | 24VDC | 9-1393234-2 |
| RP821012 | | | 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.