

Power PCB Relay RPII/1

- 1 pole 8/12/16A, 1 form C (CO) or 1 form A (NO) contact
- 4kV/8mm coil-contact
- Pinning 3.5 or 5mm (8/12A) and 5mm (16A)
- RoHS compliant (Directive 2011/65/EC)

Typical applications
Power supplies, domestic appliances, heating control, installation

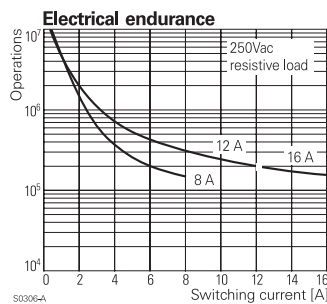
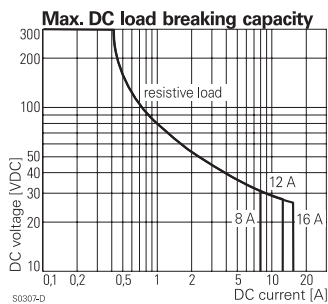


| Approvals | |
|---|--|
| VDE Cert. No. 40025448, UL E214025 | |
| Technical data of approved types on request | |

| Contact Data | 8A | 12A | 16A |
|---|--------------------------------|--------|--------|
| Contact arrangement | 1 form C (CO) or 1 form A (NO) | | |
| Rated voltage | 250VAC | | |
| Max. switching voltage | 400VAC | | |
| Rated current | 8A | 12A | 16A |
| Limiting making current | 16A | 20A | 25A |
| Breaking capacity max. | 2000VA | 3000VA | 4000VA |
| Contact material | AgNi0.15 | AgCdO | AgCdO |
| Frequency of operation, with/without load | 600/72000h ⁻¹ | | |
| Operate/release time typ. | 8/2ms | | |
| Bounce time typ., form A/form B | 2/4ms | | |

| Contact ratings | | | |
|-----------------|---------|-----------------------------|---------------------|
| Type | Contact | Load | Cycles |
| IEC61810 | | | |
| RP310 | A (NO) | 16A, 250VAC resistive, 35°C | 100x10 ³ |
| RP410/418 | A (NO) | 12A, 250VAC resistive, 35°C | 100x10 ³ |
| RP410/418 | C (CO) | 10A, 250VAC resistive, 70°C | 100x10 ³ |
| RP411/418 | A (NO) | 8A, 250VAC resistive, 35°C | 100x10 ³ |

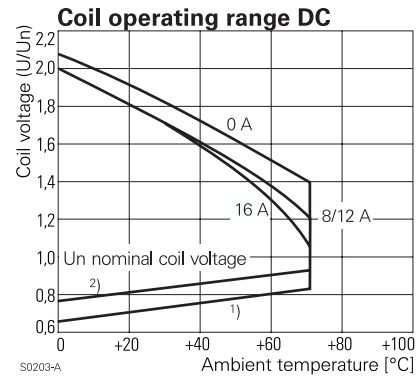
Mechanical endurance >30x10⁶ operations



| 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.



| Insulation Data | |
|------------------------------------|----------------------|
| Initial dielectric strength | |
| between open contacts | 1000V _{rms} |
| between contact and coil | 4000V _{rms} |
| Clearance/creepage | |
| between contact and coil | ≥8/8mm |
| Material group of insulation parts | IIIa |

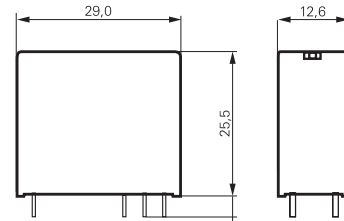
Power PCB Relay RPII/1 (Continued)

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 protection | RTII - flux proof, RTIII - wash tight |
| IEC 61810 | |
| Vibration resistance (functional), form A/form B, 30 to 300Hz | 10/2g |
| Shock resistance (destructive) | 100g |
| Terminal type | PCB-THT |
| Weight | 18g |
| Resistance to soldering heat THT, IEC 60068-2-20 | |
| flux proof version | 270°C/10s |
| wash tight version | 260°C/5s |
| Packaging/unit | tube/20 pcs., box/500 pcs. |

Dimensions

Dimensions in mm



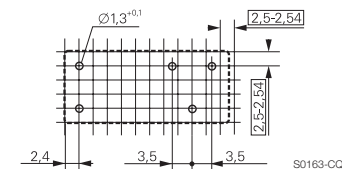
S0273-AA

PCB layout / terminal assignment

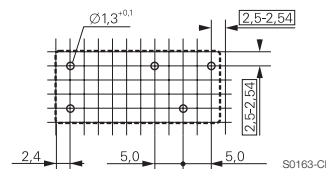
8/12A, pinning 3.5 mm

8/12A, pinning 5 mm

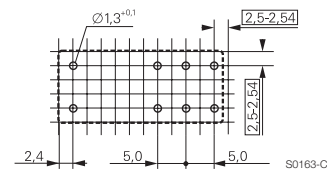
16A, pinning 5 mm



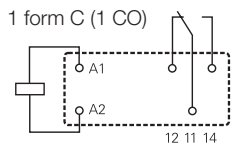
S0163-CQ



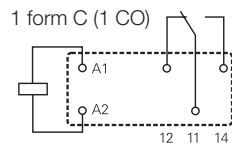
S0163-CP



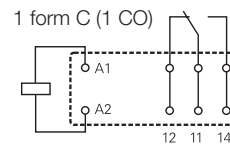
S0163-CO



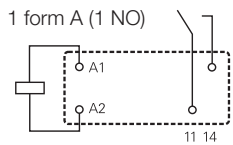
S0163-BG



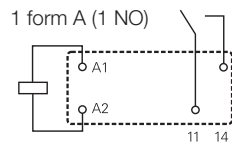
S0163-BC



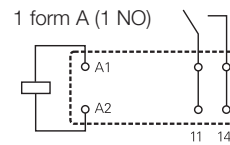
S0163-BE



S0163-BH



S0163-BD



S0163-BF

Product code structure

Typical product code **RP 3 1 0 024**

Type

RP Power PCB Relay RPII/1

Version

- | | |
|----------------------------|----------------------------|
| 3 16A, flux proof | 7 16A, wash tight |
| 4 8/12A, flux proof | 8 8/12A, wash tight |

Contact arrangement

- | | |
|----------------------------------|----------------------------------|
| 1 1 form C contact (1 CO) | 3 1 form A contact (1 NO) |
|----------------------------------|----------------------------------|

Contact material and pinning

- | | |
|--------------------------------------|-------------------------------------|
| 1 AgNi0.15, 8A, pinning 5mm | 0 AgCdO, 12/16A, pinning 5mm |
| 2 AgNi0.15, 8A, pinning 3.5mm | 8 AgCdO, 12A, pinning 3.5mm |

Coil

Coil code: please refer to coil versions table

Power PCB Relay RPII/1 (Continued)

| Product code | Version | Contact arrangement | Contact material | Pinning | Coil | Part number |
|--------------|-----------------|-----------------------|------------------|-----------|-------|-------------|
| RP310012 | 16A, flux proof | 1 form C (CO) contact | AgCdO | 5mm 16A | 12VDC | 2-1393230-9 |
| RP310024 | | | | | 24VDC | 3-1393230-2 |
| RP310048 | | | | | 48VDC | 3-1393230-3 |
| RP330012 | | 1 form A (NO) contact | | | 12VDC | 4-1393230-7 |
| RP330024 | | | | | 24VDC | 4-1393230-9 |
| RP330048 | | | | | 48VDC | 5-1393230-1 |
| RP410024 | 12A, flux proof | 1 form C (CO) contact | | 5mm 8/12A | 24VDC | 8-1393230-2 |
| RP411024 | 8A, flux proof | | AgNi0.15 | | | 9-1393230-5 |
| RP412024 | | | | 3.5mm | | 1-1393231-2 |
| RP418012 | 12A, flux proof | | AgCdO | | 12VDC | 2-1393231-5 |
| RP418024 | | | | | 24VDC | 2-1393231-8 |
| RP438012 | | 1 form A (NO) contact | | | 12VDC | 5-1393231-0 |
| RP710012 | 16A, wash tight | 1 form C (CO) contact | | 5mm 16A | | 7-1393231-2 |
| RP710024 | | | | | 24VDC | 7-1393231-5 |
| RP730012 | | 1 form A (NO) contact | | | 12VDC | 8-1393231-2 |
| RP818012 | 12A, wash tight | | | 3.5mm | | 1-1393232-7 |

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