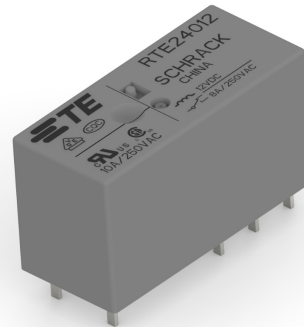


Power PCB Relay RT2 DC and AC (for Asia/Pacific markets)

- 2 pole 8A, 2 form C (CO) or 2 form A (NO) contacts
- Sensitive coil 400mW
- 5kV/10mm coil-contact, reinforced insulation
- Ambient temperature 85°C
- WG version: product in accordance to IEC60335-1



Typical applications

Boiler control, timers, garage door control, POS automation, interface modules.



Approvals

VDE Cert. No. 40007571, UL E214025, cCSAus 1142018, CQC 20002275223, CQC 08001027262
Technical data of approved types on request.

Contact Data

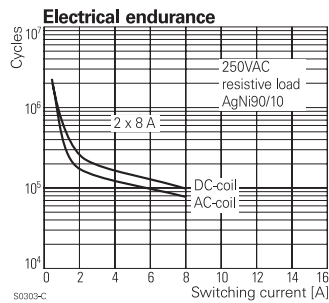
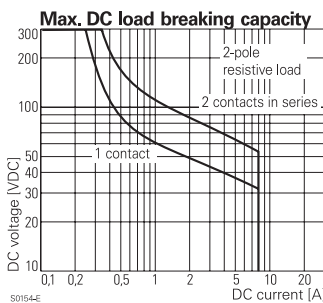
| | |
|---|--------------------------------|
| Contact arrangement | 2 form C (CO) or 2 form A (NO) |
| Rated voltage | 250VAC |
| Max. switching voltage | 400VAC |
| Rated current | 8A, UL: 10A |
| Limiting continuous current | 8A, UL: 10A |
| Limiting making current, max. 4s, duty factor 10% | 15A |
| Breaking capacity max. | 2000VA |
| Contact material | AgNi 90/10 |
| Frequency of operation, with/without load | 360/72000h ⁻¹ |
| Operate/release time max., DC coil | 8/6ms |
| Bounce time max., DC coil, form A/form B | 4/10ms |

Contact ratings

| Type | Contact | Load | Cycles |
|--------------------|-------------|---------------------------------|---------------------|
| IEC 61810 | | | |
| RT424 DC coil | C (CO) | 8A, 250VAC, cosφ=1, 85°C | 10x10 ³ |
| RT444 AC coil | A (NO) | 8A, 250VAC, cosφ=1, 70°C | 50x10 ³ |
| RT424 AC coil | C (CO) | 8A, 250VAC, cosφ=1, 70°C | 30x10 ³ |
| UL 508 | | | |
| RT424 DC coil | A/B (NO/NC) | 10A, 250VAC, gen. purpose, 85°C | 20x10 ³ |
| RT424 DC coil | A/B (NO/NC) | 1/2hp, 240VAC, 85°C | 1x10 ³ |
| RT424 DC coil | A/B (NO/NC) | Pilot duty, B300, R300, 85°C | 6x10 ³ |
| EN60947-5-1 | | | |
| RTE24 DC coil | A/B (NO/NC) | AC15, 250VAC, 3A | 6.050 |
| RTE24 DC coil | A/B (NO/NC) | DC13, 24VDC, 2A | 6.050 |
| RTE24 DC coil | A/B (NO/NC) | DC13, 250VDC, 0.2A | 6.050 |
| EN60730-1 | | | |
| RT424 DC coil | A/B (NO/NC) | 6(2)A, 250VAC, 85°C | 100x10 ³ |

Mechanical endurance

>30x10⁶ operations



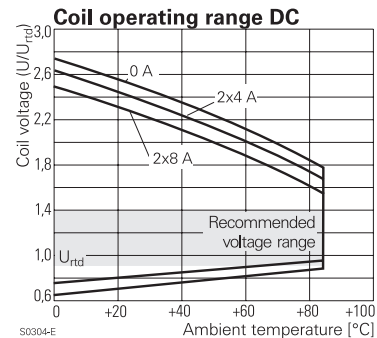
Coil Data

| | |
|-------------------------------------|-------------|
| Coil voltage range | 5 to 110VDC |
| Operative range, IEC 61810 | 2 |
| Coil insulation system according UL | class F |

Coil versions, DC coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-----------------------|---------------------|
| 005 | 5 | 3.5 | 0.5 | 62 | 403 |
| 006 | 6 | 4.2 | 0.6 | 90 | 400 |
| 009 | 9 | 6.3 | 0.9 | 200 | 400 |
| 012 | 12 | 8.4 | 1.2 | 360 | 400 |
| 024 | 24 | 16.8 | 2.4 | 1440 | 400 |
| 048 | 48 | 33.6 | 4.8 | 5520 | 417 |
| 060 | 60 | 42.0 | 6.0 | 8570 ¹⁾ | 420 |
| 110 | 110 | 77.0 | 11.0 | 28800 ¹⁾ | 420 |

1) Coil resistance ±12%. All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.



Insulation Data

| | |
|------------------------------------|--------------------|
| Insulation resistance | 1000MΩ (at 500VDC) |
| Initial dielectric strength | |
| between open contacts | 1000Vrms |
| between contact and coil | 5000Vrms |
| between adjacent contacts | 2500Vrms |
| Clearance/creepage | |
| between contact and coil | ≥ 10/10mm |
| between adjacent contacts | ≥ 3/4mm |
| Material group of insulation parts | IIIa |
| Tracking index of relay base | PTI 250V |

Power PCB Relay RT2 DC and AC (for Asia/Pacific markets) (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

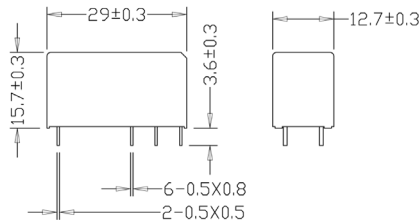
| | |
|--|---------------------------------------|
| Resistance to heat and fire | |
| WG version | according EN60335, par30 |
| Ambient temperature -40 to 85°C | |
| Category of environmental protection | |
| IEC 61810 | RTII - flux proof, RTIII - wash tight |
| Vibration resistance (functional) | |
| form A/form B contact, 30 to 300Hz | 20g/5g |
| Shock resistance (destructive) | |
| | 100g |
| Terminal type PCB-THT, plug-in | |
| Weight 13g | |
| Resistance to soldering heat THT, IEC 60068-2-20 | |
| RTII | 270°C/10s |
| RTIII | 260°C/5s |
| Packaging/unit tube/20pcs., box/500pcs. | |

Accessories

For details see datasheet [Accessories Industrial Power Relay RT](#)

NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

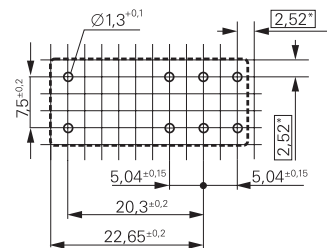
Outline Dimensions



Note:
In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm;

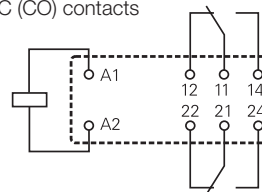
PCB layout / terminal assignment

Bottom view on solder pins

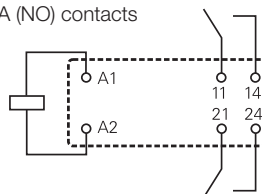


*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

2 form C (CO) contacts



2 form A (NO) contacts



Power PCB Relay RT2 DC and AC (for Asia/Pacific markets) (Continued)

| | | | | | |
|-------------------------------|--|----------------------|---|---|-------|
| Product code structure | | Typical product code | | | |
| Type | RT Power PCB Relay RT2 | RT | 4 | 2 | 4 024 |
| Version | 4 8A, pinning 5mm, flux proof E 8A, pinning 5mm, wash tight (not for Reflow version) | | | | |
| Contact arrangement | 2 2 form C (CO) contacts 4 2 form A (NO) contacts | | | | |
| Contact material | 3 AgSnO 4 AgNi 90/10 5 AgNi 90/10 gold plated | | | | |
| Coil | Coil code: please refer to coil versions table | | | | |
| Version | Blank Standard version WG Product in accordance with IEC 60335-1 (domestic appliances) R Reflow solderable | | | | |

| Product code | Version | Contact | Contact Material | Coil | Version | Part number |
|--------------|---------------|---------------|------------------|--------|-----------------------|-------------|
| RT424005 | 8A, | 2 form C (CO) | AgNi 90/10 | 5VDC | standard | 1-1649329-0 |
| RT424006 | pinning 5 mm, | contacts | | 6VDC | | 1-1649329-1 |
| RT424009 | flux proof | | | 9VDC | | 1-1649329-2 |
| RT424012 | | | | 12VDC | | 1-1649329-3 |
| RT424012WG | | | | 12VDC | IEC 60335-1 compliant | 8-1833003-5 |
| RT424024 | | | | 24VDC | standard | 1-1649329-5 |
| RT424048 | | | | 48VDC | | 1-1649329-6 |
| RT424060 | | | | 60VDC | | 1-1649329-7 |
| RT424110 | | | | 110VDC | | 1-1649329-8 |
| RT425005 | | | AgNi 90/10 | 5VDC | | 4-1649329-6 |
| RT425012 | | | gold plated | 12VDC | | 4-1649329-9 |
| RT425024 | | | | 24VDC | | 5-1649329-1 |
| RT444012 | | 2 form A (NO) | AgNi 90/10 | 12VDC | | 3-1649329-1 |
| RT444024 | | contacts | | 24VDC | | 3-1649329-3 |
| RTE24005 | 8A, | 2 form C (CO) | | 5VDC | | 1649329-1 |
| RTE24006 | pinning 5 mm, | contacts | | 6VDC | | 1649329-2 |
| RTE24012 | wash tight | | | 12VDC | | 1649329-4 |
| RTE24024 | | | | 24VDC | | 1649329-6 |
| RTE24048 | | | | 48VDC | | 1649329-7 |
| RTE24060 | | | | 60VDC | | 1649329-8 |
| RTE24110 | | | | 110VDC | | 1649329-9 |
| RTE25005 | | | AgNi 90/10 | 5VDC | | 3-1649329-7 |
| RTE25012 | | | gold plated | 12VDC | | 4-1649329-0 |
| RTE25024 | | | | 24VDC | | 4-1649329-2 |
| RTE44009 | | 2 form A (NO) | AgNi 90/10 | 9VDC | | 2-1649329-1 |
| RTE44012 | | contacts | | 12VDC | | 2-1649329-2 |
| RTE44024 | | | | 24VDC | | 2-1649329-4 |
| RTE44048 | | | | 48VDC | | 2-1649329-5 |