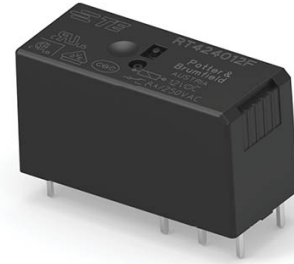


Power PCB Relay RT2

- 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

Typical applications

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



Approvals

VDE Cert. No. 40007571, UL E214025, cCSAus 1142018
CQC 18002197247 (monostable), CQC 20002275223 (China production),
CQC 08001027262 (China production)

Technical data of approved types on request

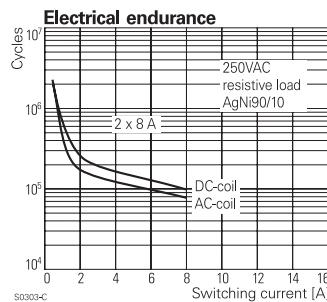
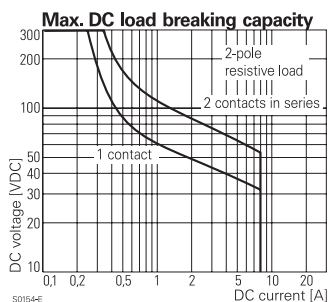
Contact Data

| | |
|---|--------------------------------|
| 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 61810-1 (former 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



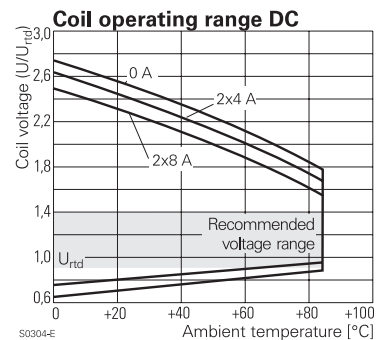
Coil Data

| | |
|-------------------------------------|-------------|
| 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 |
|-----------|-------------------|---------------------|---------------------|-----------------------|------------|
| 005 | 5 | 3.5 | 0.5 | 62 | power |
| 006 | 6 | 4.2 | 0.6 | 90 | mW |
| 009 | 9 | 6.3 | 0.9 | 200 | 403 |
| 012 | 12 | 8.4 | 1.2 | 360 | 400 |
| 024 | 24 | 16.8 | 2.4 | 1440 | 400 |
| 048 | 48 | 33.6 | 4.8 | 5520 | 400 |

All figures are given for coil without pre-energization, at ambient temperature +23°C
Other coil voltages on request. 417



Insulation Data

| | |
|------------------------------------|----------------------|
| Initial dielectric strength | |
| between open contacts | 1000V _{rms} |
| between contact and coil | 5000V _{rms} |
| between adjacent contacts | 2500V _{rms} |
| 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 (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

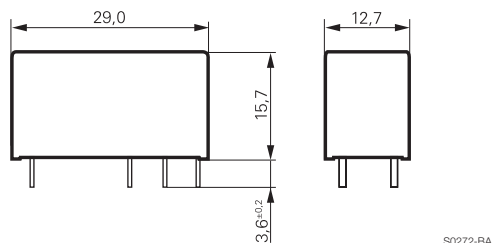
| | |
|--|---------------------------------------|
| Ambient temperature | -40 to 85°C |
| Category of environmental protection | IEC 61810 |
| | RTII - flux proof, RTIII - wash tight |
| Vibration resistance (functional), form A/form B contact, 30 to 300Hz | 20g/5g |
| Shock resistance (destructive) | 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](#)

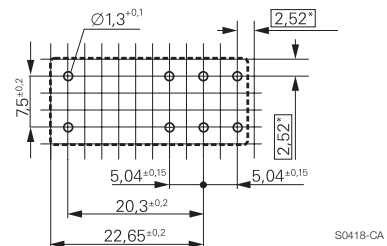
NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

Dimensions



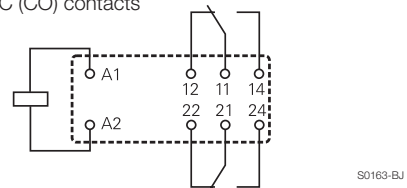
PCB layout / terminal assignment

Bottom view on solder pins

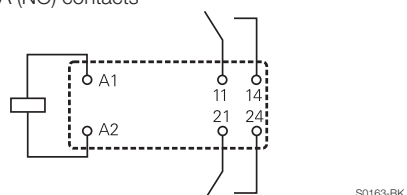


*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

2 form C (CO) contacts



2 form A (NO) contacts



Power PCB Relay RT2 (Continued)

| Product code structure | | Typical product code | | | | |
|------------------------|--|----------------------|---|---|---|-------|
| Type | RT Power PCB Relay RT2 | RT | 4 | 2 | 4 | 024 F |
| Version | | | | | | |
| 4 | 8A, pinning 5mm, flux proof | | | | | |
| E | 8A, pinning 5mm, wash tight | | | | | |
| Contact arrangement | | | | | | |
| 2 | 2 form C (CO) contacts | | | | | |
| 4 | 2 form A (NO) contacts | | | | | |
| Contact material | | | | | | |
| 4 | AgNi 90/10 | | | | | |
| Coil | | | | | | |
| | Coil code: please refer to coil versions table | | | | | |
| Version | | | | | | |
| F | Standard version | | | | | |

| Product code | Version | Contacts | Contact material | Coil | Part number |
|--------------|--------------|------------------------|------------------|-------|-------------|
| RT424005F | 8A, | 2 form C (CO) contacts | AgNi 90/10 | 5VDC | 1-1419108-6 |
| RT424012F | pinning 5mm, | | | 12VDC | 2-1393237-8 |
| RT424024F | flux proof | | | 24VDC | 1-1419108-7 |
| RT444012F | | 2 form A (NO) contacts | | 12VDC | 1-1419108-9 |
| RT444024F | | | | 24VDC | 2-1419108-0 |
| RTE24005F | 8A, | 2 form C (CO) contacts | | 5VDC | 4-1419108-0 |
| RTE24006F | pinning 5mm, | | | 6VDC | 6-1393227-5 |
| RTE24009F | wash tight | | | 9VDC | 3-1393237-0 |
| RTE24012F | | | | 12VDC | 3-1393237-1 |
| RTE24024F | | | | 24VDC | 3-1393237-3 |
| RTE24048F | | | | 48VDC | 3-1393237-4 |
| RTE44012F | | 2 form A (NO) contacts | | 12VDC | 4-1419108-2 |
| RTE44024F | | | | 24VDC | 3-1393237-5 |

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[3-1393237-0](#) [RTE24009F](#)