

- 1 pole 10 A, 1 CO or 1 NO contact
- Highly sensitive version, coil power 250 mW
- 5 kV / 10 mm coil-contact
- Reinforced insulation
- Ambient temperature 85°C at rated load
- RoHS compliant (Directive 2002/95/EC) as per product date code 0413

Applications

Domestic appliances, heating control



F0145-B

Approvals

VDE REG.-Nr. 6106, **UL** us E214025
 Technical data of approved types on request

Contact data

| | |
|--|-------------------------------|
| Contact configuration | 1 CO or 1 NO |
| Contact set | single contact |
| Type of interruption | micro disconnection |
| Rated current | 10 A |
| Rated voltage / max.switching voltage AC | 240/400 VAC |
| Maximum breaking capacity AC | 2500 VA |
| Limiting making capacity, max 4 s, duty factor 10% | 15 A |
| Contact material | AgNi 90/10 |
| Mechanical endurance | > 30 x 10 ⁶ cycles |
| Rated frequency of operation with / without load | 50 / 1200 min ⁻¹ |

Contact ratings

| Type | Load | Cycles |
|-------|---|----------------------|
| RT174 | 10 A, 250 VAC, CO contact, 85°C, EN61810-1 | 100x10 ³ |
| RT174 | 8 A, 250 VAC | 430x10 ³ |
| RT174 | 370 W, 230 VAC, compressor | >330x10 ³ |
| RT174 | 550 W, 250 VAC, incandescent lamps | 190x10 ³ |
| RT174 | 0.8/0.08 A, 230 VAC, cosφ=0.23, contactor 190/90 VA | >8.8x10 ⁶ |
| RT184 | Pilot duty B300, R150, UL508 | 6x10 ³ |
| RT174 | 3/4hp @ 240 VAC, 1/3hp @ 120 VAC, NO contact, UL508 | |
| RT174 | 1/2hp @ 240 VAC, 1/4hp @ 120 VAC, CO contact, UL508 | |

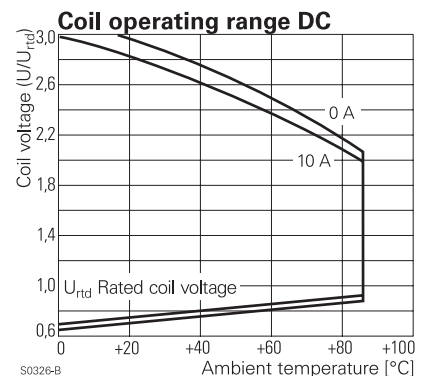
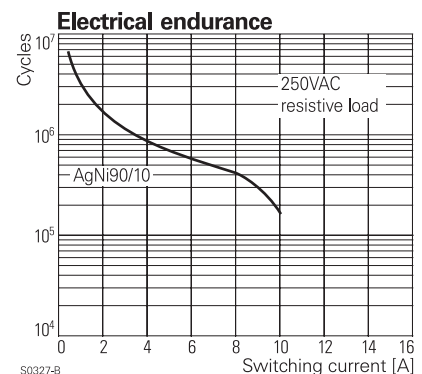
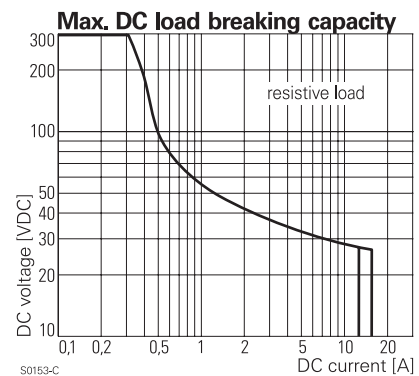
Coil data

| | |
|--|------------|
| Rated coil voltage range DC coil | 5...60 VDC |
| Coil power DC coil | typ 250 mW |
| Operative range | 2 |
| Coil Coil insulation system according UL1446 | class F |

Coil versions, DC-coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω | Rated coil power mW |
|------------|-------------------|---------------------|---------------------|-------------------|---------------------|
| 005 | 5 | 3.7 | 0.5 | 100±10% | 250 |
| 006 | 6 | 4.5 | 0.6 | 144±10% | 250 |
| 012 | 12 | 9.0 | 1.2 | 576±10% | 250 |
| 024 | 24 | 18.0 | 2.4 | 2304±10% | 250 |
| 048 | 48 | 36.0 | 4.8 | 9216±10% | 250 |
| 060 | 60 | 45.0 | 6.0 | 12857±12% | 280 |

All figures are given for coil without preenergization, at ambient temperature +23°C
 Other coil voltages on request

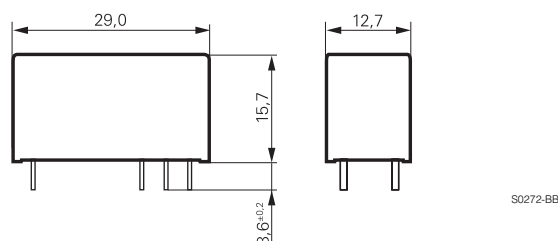


| Insulation | |
|---|-----------------------|
| Dielectric strength coil-contact circuit | 5000 V _{rms} |
| open contact circuit | 1000 V _{rms} |
| Clearance / creepage coil-contact circuit | > 10 / 10 mm |
| Material group of insulation parts | ≥ IIIa |
| Tracking index of relay base | PTI 250 V |
| Insulation to IEC 60664-1 | |
| Type of insulation coil-contact circuit | reinforced |
| open contact circuit | functional |
| Rated insulation voltage | 250 V |
| Pollution degree | 3 |
| Rated voltage system | 240/400 V |
| Overvoltage category | III |

| Other data | |
|---|---|
| RoHS - Directive 2002/95/EC | compliant as per product date code 0413 |
| Flammability class according to UL94 | V-0 |
| Ambient temperature range | -40...+85°C |
| Operate- / release time | typ 7 / 3 ms |
| Bounce time NO / NC contact | typ 2 / 4 ms |
| Vibration resistance (function) NO / NC contact | 20 / 5 g, 30 ... 500 Hz |
| Shock resistance (destruction) | 100 g |
| Category of protection | RTII - flux proof, RTIII - wash tight |
| Mounting | pcb or on socket |
| Mounting distance | 0 mm |
| Resistance to soldering heat flux-proof version | 270°C / 10 s |
| wash-tight version | 260°C / 5 s |
| Relay weight | 14 g |
| Packaging unit | 20 / 500 pcs |

| Accessories | |
|---------------------------|----------------------------|
| For details see datasheet | Accessories Power Relay RT |

Dimensions



Product key

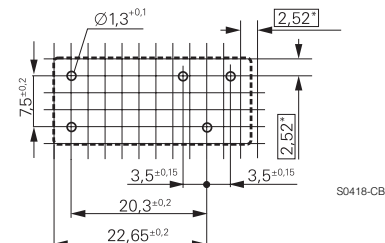
| | | | | |
|-----------------------|--|---|--|--|
| Type | | | | |
| Version | 1 10 A, pinning 3.5 mm, flux proof | B 10 A, pinning 3.5 mm, wash tight | | |
| Contact configuration | 7 1 CO contact | 8 1 NO contact | | |
| Contact material | 4 AgNi 90/10 | | | |
| Coil | Coil code: please refer to coil versions table | | | |

Preferred types in bold print

| Product key | Version | Contacts | Contact material | Coil | Part number |
|-------------|----------------|--------------|------------------|--------|-------------|
| RT174005 | 10 A | 1 CO contact | AgNi 90/10 | 5 VDC | 3-1393239-6 |
| RT174006 | pinning 3.5 mm | | | 6 VDC | 3-1393239-7 |
| RT174012 | flux proof | | | 12 VDC | 3-1393239-8 |
| RT174024 | | | | 24 VDC | 3-1393239-9 |
| RTB74012 | 10 A, 3.5mm | | | 12 VDC | 4-1393238-4 |
| RTB74024 | wash tight | | | 24 VDC | 4-1393238-6 |

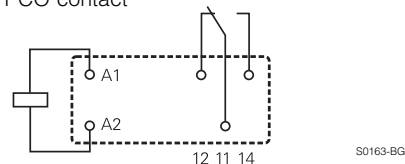
PCB layout / terminal assignment
Bottom view on solder pins

10 A, pinning 3.5 mm



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

1 CO contact



1 NO contact

