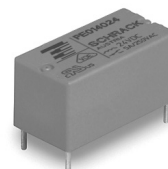


## Miniature PCB Relay PE

- 1 pole 5 A, 1 form C (CO) or 6A, 1 form A (NO) contact
- Cadmium-free contacts
- Sensitive coil 200mW
- Ambient temperature 85°C
- Low height 10.0mm
- Plastic materials according to IEC 60335-1 (domestic appliances)

### Typical applications

Industrial electronics, white goods, measurement and control



F0169-C



### Approvals

VDE Cert. No. 40011901, UL E214025

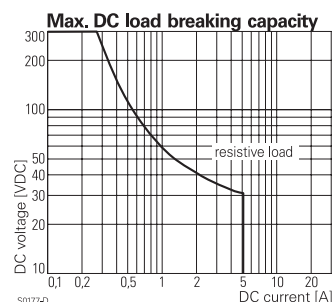
Technical data of approved types on request

### Contact Data

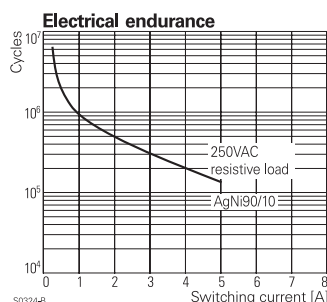
|                                             |                                            |
|---------------------------------------------|--------------------------------------------|
| Contact arrangement                         | 1 form C (CO) or 1 form A (NO)             |
| Rated voltage                               | 250VAC                                     |
| Max. switching voltage                      | 400VAC                                     |
| Rated current                               | 5A (CO - types)<br>6A (NO - types)         |
| Breaking capacity max.                      | 1250VA (CO - types)<br>1500VA (NO - types) |
| Contact material                            | AgNi 90/10, AgSnO <sub>2</sub>             |
| Frequency of operation<br>with/without load | 360/72000 ops/h                            |
| Operate/release time                        | typ. 8/8ms                                 |
| Bounce time, form A/form B                  | typ. 4/6ms                                 |

### Contact ratings

| Type             | Contact | Load                            | Cycles              |
|------------------|---------|---------------------------------|---------------------|
| <b>IEC 61810</b> |         |                                 |                     |
| PE013            | C (CO)  | 5A, 250VAC, $\cos\phi=1$ , 85°C | 30x10 <sup>3</sup>  |
| PE014/PE015      | C (CO)  | 5A, 250VAC, $\cos\phi=1$ , 85°C | 100x10 <sup>3</sup> |
| PE014            | A (NO)  | 5A, 30VDC, 0ms, 85°C            | 100x10 <sup>3</sup> |
| PE015            | A (NO)  | 1.5A, 30VDC, 900/h, 50% DF      | 100x10 <sup>3</sup> |
| PE034            | A (NO)  | 6A, 250VAC, $\cos\phi=1$ , 70°C | 50x10 <sup>3</sup>  |
| <b>UL 508</b>    |         |                                 |                     |
| PE013            | C (CO)  | 5A, 240VAC, resistive, 85°C     | 30x10 <sup>3</sup>  |
| PE014/PE015      | C (CO)  | 5A, 250VAC, resistive, 85°C     | 100x10 <sup>3</sup> |
| PE014            | A (NO)  | 5A, 30VDC, resistive, 85°C      | 100x10 <sup>3</sup> |
| PE034            | A (NO)  | 6A, 250VAC, resistive, 70°C     | 100x10 <sup>3</sup> |
| PE514            | C (CO)  | 5A, 250VAC, resistive, 85°C     | 10x10 <sup>3</sup>  |



S0171-D



S0324-B

Mechanical endurance, DC coil

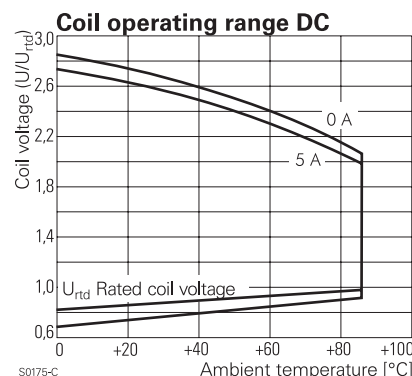
>15x10<sup>6</sup> operations.

### Coil Data

|                            |             |
|----------------------------|-------------|
| Coil voltage range         | 5 to 48 VDC |
| Operative range, IEC 61810 | 2           |

### Coil versions, DC coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance $\Omega \pm 10\%$ | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-----------------------------------|---------------------|
| 3         | 3                 | 2.25                | 0.3                 | 45                                | 200                 |
| 5         | 5                 | 3.8                 | 0.5                 | 125                               | 200                 |
| 6         | 6                 | 4.5                 | 0.6                 | 172                               | 209                 |
| 9         | 9                 | 6.8                 | 0.9                 | 405                               | 200                 |
| 12        | 12                | 9.0                 | 1.2                 | 685                               | 210                 |
| 24        | 24                | 18.0                | 2.4                 | 2725                              | 211                 |
| 48        | 48                | 36.0                | 4.8                 | 10970                             | 210                 |



S0175-C

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

### Insulation Data

|                                    |                       |
|------------------------------------|-----------------------|
| Initial dielectric strength        |                       |
| between open contacts              | 1000V <sub>rms</sub>  |
| between contact and coil           | 4000V <sub>rms</sub>  |
| Initial insulation resistance      |                       |
| open contact circuit               | >10x10 <sup>9</sup> Ω |
| coil-contact circuit               | >10x10 <sup>9</sup> Ω |
| Clearance/creepage                 |                       |
| between contact and coil           | ≥3.2/4mm              |
| Material group of insulation parts | IIIa                  |

## Miniature PCB Relay PE (Continued)

Tracking index of relay base PTI250V

### 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](http://www.te.com/customersupport/rohssupportcenter)

Resistance to heat and fire according EN60335, par.30

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 >15/5g

Shock resistance (destructive) >100g

Shock resistance (functional/ 11ms), formA/form B >15/5g

Terminal type PCB-THT

Weight 5g

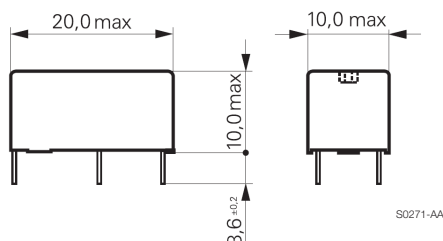
Resistance to soldering heat THT

IEC 60068-2-20 260°C/10s (flux proof version)

IEC 60068-2-20 260°C/5s (wash tight version)

Packaging/unit tube/25 pcs., box/500 pcs.

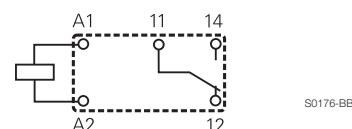
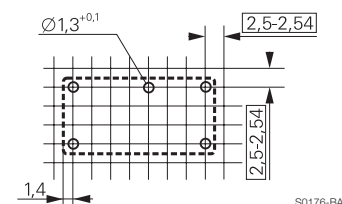
### Dimensions



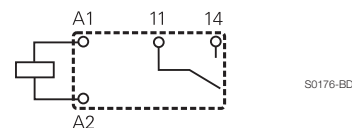
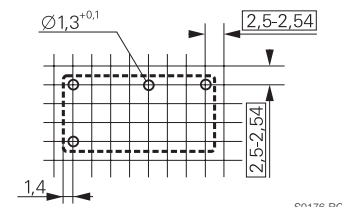
### PCB layout / terminal assignment

Bottom view on solder pins

1 form C (CO) version



1 form A (NO) version



### Product code structure

Typical product code **PE 0 1 4 012**

**Type**  
**PE** Miniature PCB Relay PE

**Version**  
**0** Flux proof **5** Wash tight

**Contact arrangement**  
**1** 1 form C (CO) contact **3** 1 form A (NO) contact

**Contact material**  
**4** AgNi 90/10 **3** AgSnO<sub>2</sub> **5** AgNi 90/10 gold plated

**Coil**  
Coil code: please refer to coil versions table

| Product code | Version    | Contacts     | Contact material      | Coil  | Part number |
|--------------|------------|--------------|-----------------------|-------|-------------|
| PE013012     | flux proof | 1 form C     | AgSnO <sub>2</sub>    | 12VDC | 7-1415539-4 |
| PE014005     |            | 1 CO contact | AgNi 90/10            | 5VDC  | 1393219-3   |
| PE014006     |            |              |                       | 6VDC  | 1393219-4   |
| PE014012     |            |              |                       | 12VDC | 1393219-6   |
| PE014024     |            |              |                       | 24VDC | 1-1393219-0 |
| PE014048     |            |              |                       | 48VDC | 1-1393219-3 |
| PE015012     |            |              | AgNi 90/10            | 12VDC | 1-1393219-4 |
| PE015024     |            |              | gold plated           | 24VDC | 1-1393219-5 |
| PE034005     |            | 1 form A     | AgNi 90/10            | 5VDC  | 4-1415535-6 |
| PE034006     |            | 1 NO contact |                       | 6VDC  | 4-1415535-7 |
| PE034012     |            |              |                       | 12VDC | 4-1415535-9 |
| PE034024     |            |              |                       | 24VDC | 5-1415535-1 |
| PE034048     |            |              |                       | 48VDC | 5-1415535-2 |
| PE514012     | wash tight | 1 form C     | AgNi90/10             | 12VDC | 2-1393219-0 |
| PE514024     |            | 1CO contact  |                       | 24VDC | 2-1393219-2 |
| PE515005     |            |              | AgNi90/10 gold plated | 5VDC  | 7-1415542-8 |