

# SCHRACK MINIATURE PCB RELAY REL

## GENERAL PURPOSE LOW POWER PCB RELAYS

### INTRODUCTION

TE Connectivity (TE)'s Miniature Power PCB Relays REL is general purpose relay designed for various types of loads (e.g., resistive, inductive) with low height. The relay is designed as 1 pole 5A with 1 form A (NO) contact and is in flux proof version. The relay is especially suited for applications white goods, consumer electronics, etc.

### FEATURES

- 1 pole 5 A, 1 form A (NO) contact
- Low height 12.0mm
- Especially suited for applications white goods, consumer electronics, etc.
- Plastic materials according to IEC 60335-1 (domestic appliances)

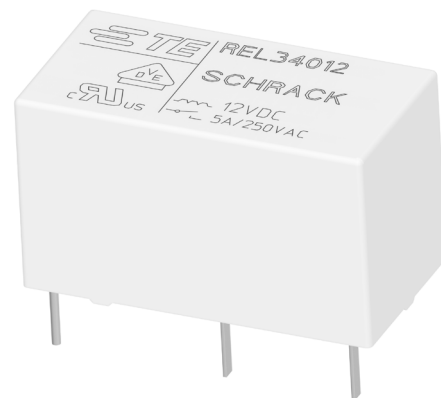
### APPLICATIONS

- PLC's
- Timers
- Temperature control
- I/O cards
- White goods

### APPROVALS

- VDE Cert. No. 40010579
- UL E214025

Technical data of approved types on request



# SCHRACK Miniature PCB Relay REL

General Purpose Relays | Low Power PCB Relays

## CONTACT DATA

|   |                  |
|---|------------------|
| Contact arrangement                                 | 1 form A (NO)    |
| Rated voltage                                       | 250VAC           |
| Max. switching voltage                              | 400VAC           |
| Rated current                                       | 5A               |
| Limiting making current,<br>max 4s, duty factor 10% | 15A              |
| Contact material                                    | AgNi 90/10       |
| Frequency of operation<br>with/without load         | 360/72000 ops./h |
| Operate/release time max.                           | 10/5ms           |
| Bounce time max.                                    | 4ms              |

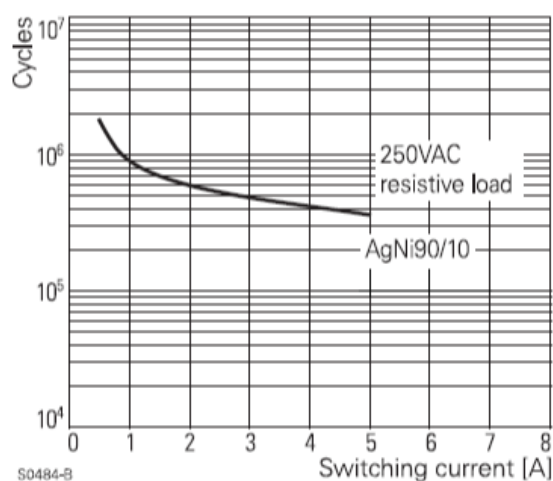
## CONTACT RATINGS

| Type                 | Contact | Load                            | Cycles              |
|----------------------|---------|---------------------------------|---------------------|
| IEC 61810            |         |                                 |                     |
| REL34                | A (NO)  | 5A, 250VAC, $\cos\phi=1$ , 85°C | 100x10 <sup>3</sup> |
| REL34                | A (NO)  | 3A, 400VAC, $\cos\phi=1$ , 85°C | 400x10 <sup>3</sup> |
| UL61810-1 (UL508)    |         |                                 |                     |
| REL34                | A (NO)  | 5A, 250VAC, resistive, 85°C     | 100x10 <sup>3</sup> |
| Mechanical endurance |         | >10x10 <sup>6</sup> operations  |                     |

## COIL DATA

|  |             |
|--|-------------|
| Coil voltage range                         | 5 to 48 VDC |
| Operative range, IEC 61810                 | 2           |
| Coil insulation system<br>according UL1446 | F           |

## ELECTRICAL ENDURANCE



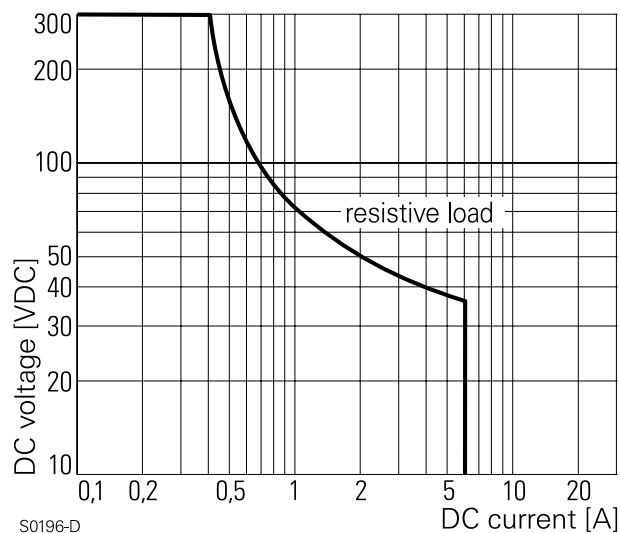
## COIL VERSIONS, DC COIL

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance $\Omega \pm 10\%^{(1)}$ | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|---|---------------------|
| 005       | 5                 | 3.75                | 0.5                 | 70                                      | 357                 |
| 006       | 6                 | 4.5                 | 0.6                 | 100                                     | 360                 |
| 012       | 12                | 9.0                 | 1.2                 | 400                                     | 360                 |
| 024       | 24                | 18.0                | 2.4                 | 1600                                    | 360                 |
| 036       | 36                | 27.0                | 3.6                 | 3600 <sup>1)</sup>                      | 360                 |
| 048       | 48                | 36.0                | 4.8                 | 6400 <sup>1)</sup>                      | 360                 |

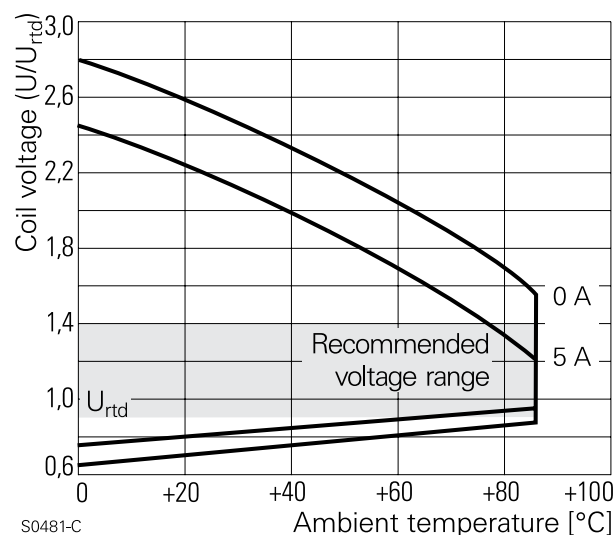
1) Coil resistance  $\pm 15\%$ .

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

## MAX. DC LOAD BREAKING CAPACITY



## COIL OPERATING RANGE DC



# SCHRACK Miniature PCB Relay REL

General Purpose Relays | Low Power PCB Relays

## INSULATION DATA

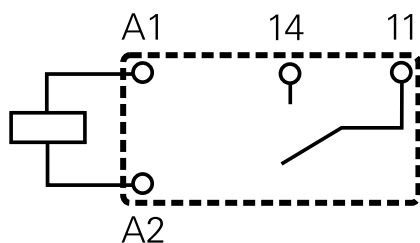
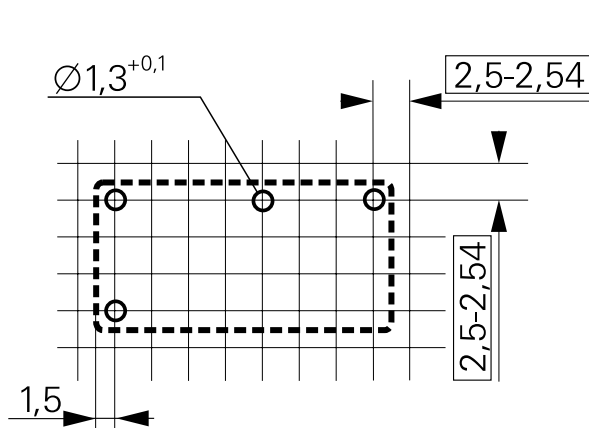
|                                    |                       |
|------------------------------------|-----------------------|
| Initial dielectric strength        |                       |
| Between open contacts              | 1000V <sub>rms</sub>  |
| Between contact and coil           | 3000V <sub>rms</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           | ≥4/4mm                |
| Material group of insulation parts | IIIa                  |

## OTHER DATA

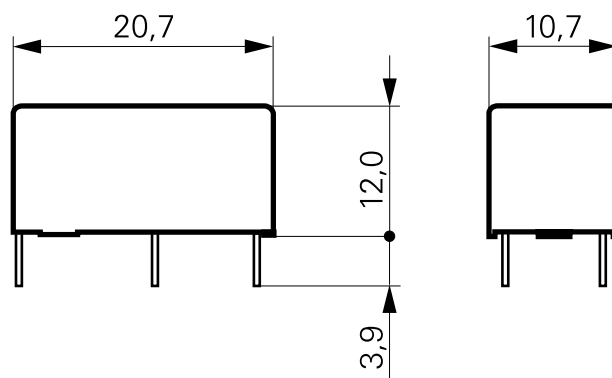
|                                      |  |
|--------------------------------------|--|
| Material compliance                  | EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at <a href="http://www.te.com/customersupport/rohssupportcenter">www.te.com/customersupport/rohssupportcenter</a> |
| Resistance to heat and fire          | according EN60335, par.30  |
| Ambient temperature                  | -40 to +85°C   |
| Category of environmental protection |  |
| IEC 61810                            | RTII - flux proof  |
| Shock resistance (destructive)       | 100 g  |
| Terminal type                        | PCB-THT  |
| Weight                               | 5 g  |
| Resistance to soldering heat THT     |  |
| IEC 60068-2-20                       | 270°C/10s  |
| Packaging/unit                       | tube/25 pcs., box/500 pcs.   |

## PCB LAYOUT / TERMINAL ASSIGNMENT

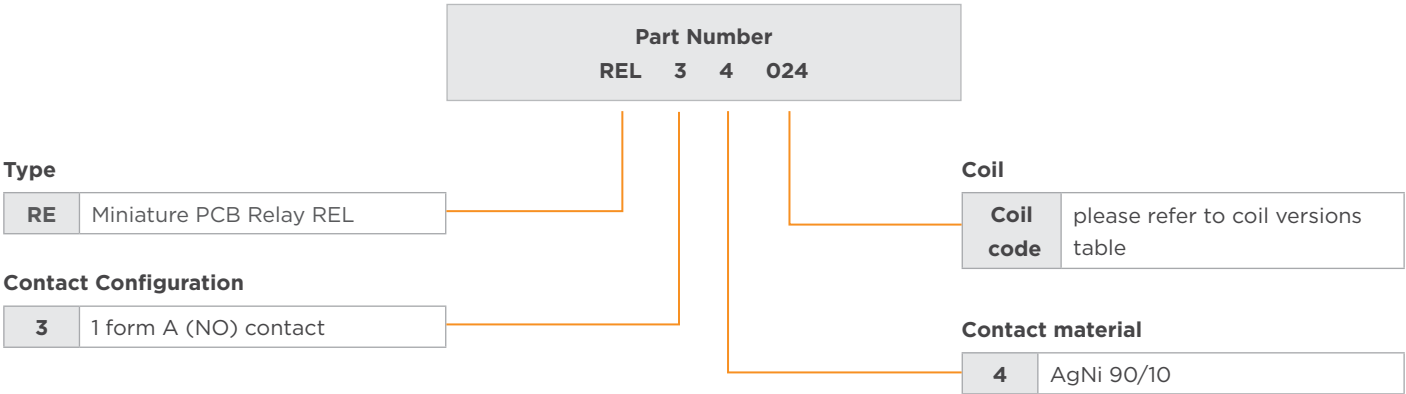
Bottom view on solder pins



## DIMENSIONS (UNIT: mm)



PRODUCT CODE STRUCTURE



PRODUCT INFORMATION

| Product code | Version    | Contacts                 | Contact material | Coil  | TE Part Number |
|--------------|------------|--------------------------|------------------|-------|----------------|
| REL34006     | flux proof | 1 form A<br>1 NO contact | AgNi90/10        | 6VDC  | 3-1415535-5    |
| REL34012     |            |                          |                  | 12VDC | 3-1415535-6    |
| REL34024     |            |                          |                  | 24VDC | 3-1415535-7    |
| REL34048     |            |                          |                  | 48VDC | 3-1415535-8    |

te.com

©2024 TE Connectivity Plc. family of companies. All Rights Reserved.

TE Connectivity, SCHRACK, TE connectivity (logo) and Every Connection Counts are trademarks owned or licensed by the TE Connectivity Plc. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this document, owned or licensed by the TE Connectivity family of companies. TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any changes to the information contained herein without prior notice. TE Connectivity assumes only those obligations set forth in the terms and conditions for this product and shall in no event be liable for any incidental, indirect, or consequential damages arising out of the sale, resale, use, or misapplication of the product. TE expressly disclaims any implied warranties with respect to the information contained herein, including, but not limited to, implied warranties of merchantability or fitness for a particular purpose. Dimensions, specifications and/or information contained herein are for reference purposes only and are subject to change without notice. Consult TE for the latest dimensions, specifications and/or information. Users of TE Connectivity products must make their own assessment as to whether the respective product is suitable for the respective desired application.

04/25 ED

