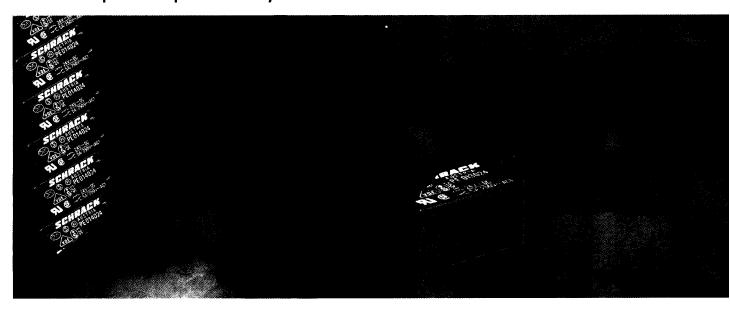
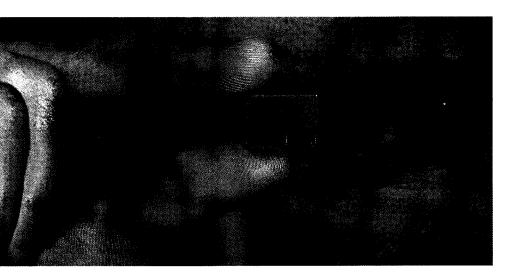


# PE - the power print relay



# PE...it's Small



#### **THE Power Print Relay.**

The PE power print relay is not only low in height, but also takes up the minimum of space on a printed circuit board.

The PE has a powerful 5A changeover contact and a sensitive 200mW monostable coil.

Cadmium free contacts and beryllium free contact springs ensure that the PE is environmentally friendly.

Despite its size, the PE is not a compromise. It delivers the power and performance you need for applications requiring total reliability, all the way up to 85°C.



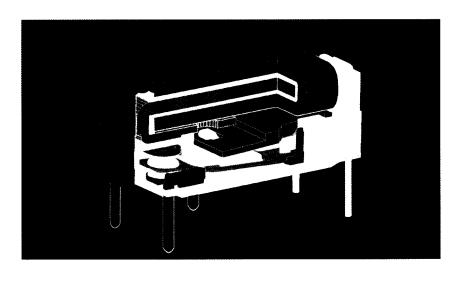
The trend towards smaller power print relays with higher switching capacity has previously been addressed by creating flatter components which, although giving reduced height, occupy more board space, or have a reduced base area with the penalty of increased height.

The PE is different.
With a small base area of only 10mm x 20mm, it's height has been limited to 10.0mm.

This means that with the PE, your pcb layout is no longer dictated by the relay.

#### Powerful...

Don't be fooled by its size. It may look as though it is only capable of switching low currents, but in fact, it will switch 5A at mains voltage 100,000 times and has an inrush capability of 20A as specified in AC14.



# **PE PCB Relay**

1pole 5A



- 1 C/O contact 5 A
- Sensitive coil 200 mW
- Low height 10.0 mm
- 4 kV dielectric test voltage coil-contact
- Ambient temperature 85°C
- Insulation according to IEC 255
- Flux-tignt, suitable for flow soldering
- Cadmium-free contact material
- Beryllium-free contact spring

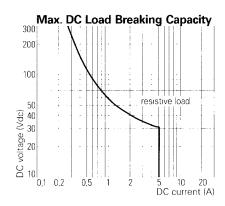
Applications: industrial electronics, white goods, etc.



**Contact data** 

Configuration Type of contact Rated current Rated voltage / max. breaking voltage Rated breaking capacity

1C/O single contact 5 A 250 Vac / 440 Vac 1250 VA AgNi 90/10



Contact endurance

Contact material

Туре Load PE014 5A, 250 Vac, C/O contact Operations 100.000

Standard VDE 0435

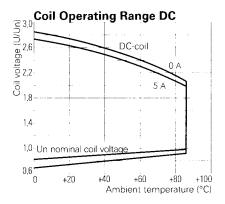
### Coil data

Nominal voltage 5...48 Vdc typ. 0,20 W Nominal coil power Coil operating range and pull-in category to VDE 0435 2b

Coil versions

| Coil code | Nominal | Pull-in | Release | Maximum     | Coil            | Coil    |
|-----------|---------|---------|---------|-------------|-----------------|---------|
|           | voltage | voltage | voltage | voltage     | resistance      | current |
|           | Vdc     | Vdc     | Vdc     | Vdc         | Ohm             | mΑ      |
| 005       | 5       | 3,8     | 0,5     | 13,2        | 125±10%         | 40,0    |
| 006       | 6       | 4,5     | 0,6     | 15,9        | 172±10%         | 34,9    |
| 012       | 12      | 9,0     | 1,2     | 31,8        | 685±10%         | 17,5    |
| 024       | 24      | 18,0    | 2,4     | 63,6        | $2725 \pm 10\%$ | 8,8     |
| 048       | 48      | 36,0    | 4,8     | 127,2       | 10970±10%       | 4,4     |
| 4.11.61   |         | , .     |         | 2000 (0005) |                 |         |

All figures for cold coil (amb. temperature +20°C / 68°F), dense mounting



# **PE PCB Relay**

Overvoltage category
Tracking resistance relay base

1pole 5A

# InsulationDielectric test voltagecoil-contacts<br/>open contact $4000 \, \text{Vac}$ Clearance / creepagecoil-contact $\geq 3,2 \, \text{mm / 4 mm}$ Insulation to IEC664 / VDE0110 (1/89)<br/>Voltage rating<br/>Pollution degree $\geq 3,2 \, \text{mm / 4 mm}$

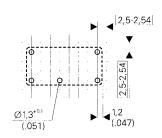
Ш

CTI 250

Ε

0

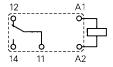
#### **PCB layout / Connections**



#### Other data

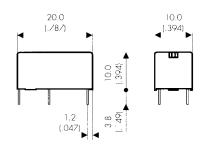
| Flammability class (UL)                  | V-0                     |  |
|--|-------------------------|--|
| Ambient temperature                      | -40+85°C                |  |
| Mechanical life                          | $> 30 \times 10^6$ ops. |  |
| Maximum switching rate                   |                         |  |
| at rated load / minimum load             | 360 / 72.000 ops/h      |  |
| Pull-in / release / bounce time N/O      | typ. 5/2/1 ms           |  |
| Vibration resistance (30500Hz) N/O / N/C | > 10/5 g                |  |
| Shock resistance                         | > 100 g                 |  |
| Protection category                      | IP 40                   |  |
| Relay weight                             | 5 g                     |  |
| Packaging unit                           | 20/500 pcs.             |  |
|  |                         |  |

View on solder pins All dimensions in mm (inch)



#### **Dimensions**

All dimensions in mm (inch)



## Ordering key

Type

Version

• Flux-tight

Contacts

1 1 C/O

Contact material

**4** AgNi 90/10

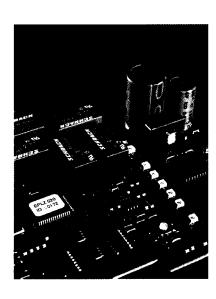
Coil

Coil code: Please refer to coil versions table

#### Sensitive...

Reduced power consumpation is an essential part of today's circuit design.

The PE, with its sensitive 200mW coil, may be driven conventionally or directly from logic.



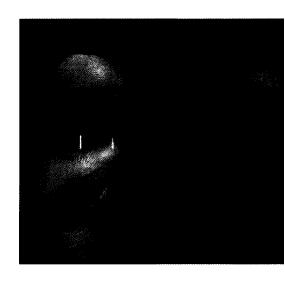
#### ...and environmentally friendly

For us, care for the environment is not just a marketing tool, but a company philosophy.

Constant consideration for the environment has led us to invest in new ways of achieving the product quality and performance required by our customers with detriment to the environment.

This philosophy has been maintained in the design of the PE through the use of cadmium free contact material and contact springs which do not contain beryllium.

The relays are supplied in cardboard bar packaging which is completely recyclable.



#### Powerful products...

Complementing our range of modern power print relays, the PE joins the RE, SNR, RY/MSR and RT ranges to provide a solution for modern power switching applications.

Whether you need to switch up to 16A, need a maximum component width of 5mm, require only 85mW pull-in power of 10mm creepage and clearance distances, we have a product to suit your design.

#### At 85°C...

There has been no compromise with the specification of the PE, it's switching capability remaining unaltered even at increasingly higher ambient temperatures demanded by today's applications.



The PE is manufactured in Austria to ISO9001 and ISO14001 standards and is sold and supported throughout the world by Siemens, Siemens Electromechanical Components, OEG and Schrack.

# Printed on environmentally friendly paper مرحم

# Sales partner in your area

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