

## Miniature PCB Relay PE

- 1 pole 5 A, 1 form C (CO) or 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)



F0169-C

Typical applications  
Industrial electronics, white goods, measurement and control



### Approvals

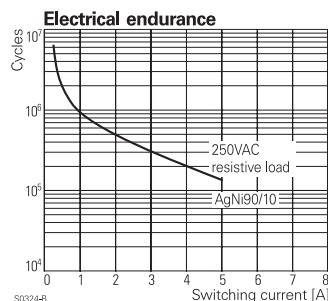
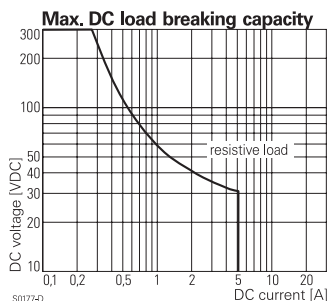
VDE Cert. No. 40011901, UL E214025  
Technical data of approved types on request

### Contact Data

Contact arrangement	1 form C (CO) or 1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	5A
Breaking capacity max.	1250VA
Contact material	AgNi 90/10, AgSnO <sub>2</sub>
Frequency of operation 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/PE015	A (NO)	5A, 30VDC, 0ms, 85°C	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, 240VAC, 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>
Mechanical endurance, DC coil			>15x10 <sup>6</sup> operations.



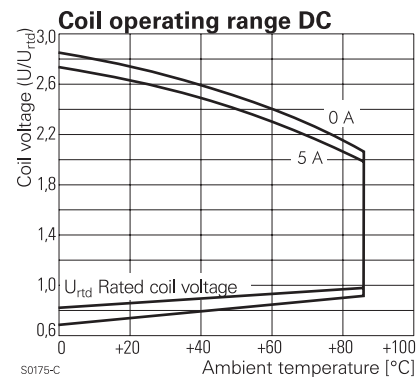
### Coil Data

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

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	
Tracking index of relay base	
PTI250V	

## Miniature PCB Relay PE (Continued)

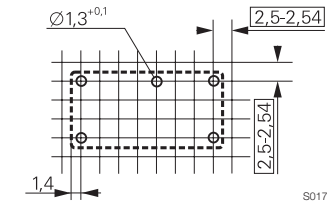
### Other Data

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 (RTIII - wash tight on request)
Vibration resistance (functional), form A/form B	>15/5g
Shock resistance (destructive)	>100g
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	250°C/5s (wash tight version)
Packaging/unit	tube/25 pcs., box/500 pcs.

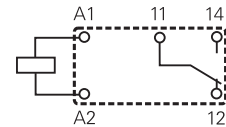
### PCB layout / terminal assignment

Bottom view on solder pins

1 form C (CO) version

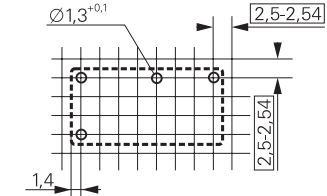


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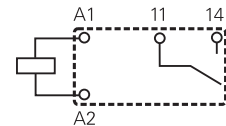


S0176-BB

1 form A (NO) version

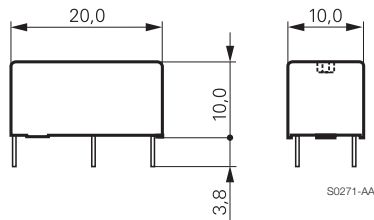


S0176-BC



S0176-BD

### Dimensions



S0271-AA

### Product code structure

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

<b>Type</b>			
PE Miniature PCB Relay PE			
<b>Version</b>			
0	Flux proof	5	Wash tight
<b>Contact arrangement</b>			
1	1 form C (CO) contact	3	1 form A (NO) contact
<b>Contact material</b>			
4	AgNi 90/10	3	AgSnO <sub>2</sub>
		5	AgNi 90/10 gold plated
<b>Coil</b>			
Coil code: please refer to coil versions table			

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