

# **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

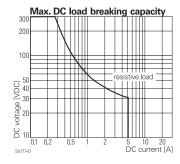
VDE Cert. No. 40011901, UL E214025

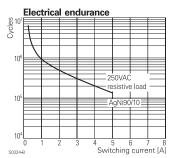
Technical data of approved types on request

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** 

	<b>3</b> ~		
Type	Contact	Load	Cycles
IEC 61810			
PE013	C (CO)	5A, 250VAC, cosφ=1, 85°C	$30x10^3$
PE014/PE015	C (CO)	5A, 250VAC, cosφ=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, cosφ=1, 70°C	50x10 <sup>3</sup>
UL 508			
PE013	C (CO)	5A, 240VAC, resistive, 85°C	$30x10^3$
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.			

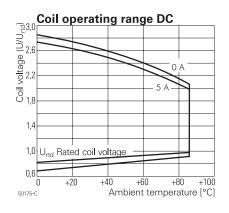




Coil Data	
Coil voltage range	5 to 48 VDC
Operative range, IEC 61810	2

Coil vers	sions, DC co	il			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	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	$1000V_{rms}$	
between contact and coil	$4000V_{rms}$	
Initial insulation resistance		
open contact circuit	$>10 \times 10^{9} \Omega$	
coil-contact circuit	$>10 \times 10^{9} \Omega$	
Clearance/creepage		
between contact and coil	≥3.2/4mm	
Material group of insulation parts	Illa	
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 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 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)

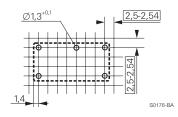
 IEC 60068-2-20
 250°C/5s (wash tight version)

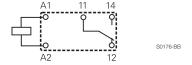
 Packaging/unit
 tube/25 pcs., box/500 pcs.

### PCB layout / terminal assignment

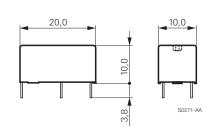
Bottom view on solder pins

### 1 form C (CO) version

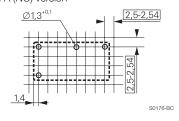


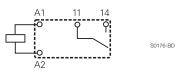


### **Dimensions**



### 1 form A (NO) version





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
PE014005	flux proof	1 form C	AgNi 90/10	5VDC	1393219-3
PE014006			1 CO contact	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

# **Mouser Electronics**

**Authorized Distributor** 

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TE Connectivity:
PE014024 1-1393219-0