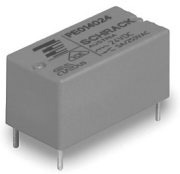
Miniature PCB Relay PE

- **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)**



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

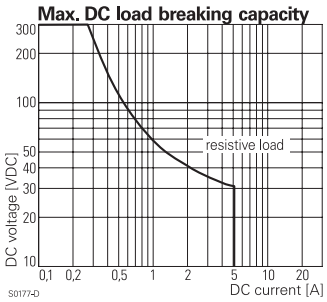
Contact Data

Contact arrangement	1 form C (CO) or 1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	5A (CO - types) 6A (NO - types)
Breaking capacity max.	1250VA (CO - types) 1500VA (NO - types)
Contact material	AgNi 90/10, $AgSnO_2$
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

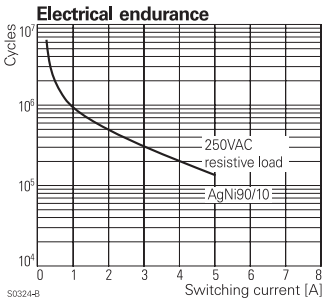
Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
PE013	C (CO)	5A, 250VAC, cosφ=1, 85°C	$30x10^3$
PE014/PE015	C (CO)	5A, 250VAC, cosφ=1, 85°C	$100x10^3$
PE014	A (NO)	5A, 30VDC, 0ms, 85°C	$100x10^3$
PE015	A (NO)	1,5A, 30VDC, 900/h, 50% DF	$100x10^3$
PE034	A (NO)	6A, 250VAC, cosφ=1, 70°C	$50x10^3$
UL 508			
PE013	C (CO)	5A, 240VAC, resistive, 85°C	$30x10^3$
PE014/PE015	C (CO)	5A, 250VAC, resistive, 85°C	$100x10^3$
PE014	A (NO)	5A, 30VDC, resistive, 85°C	$100x10^3$
PE034	A (NO)	6A, 250VAC, resistive, 70°C	$100x10^3$
PE514	C (CO)	5A, 250VAC, resistive, 85°C	$10x10^3$

Max. DC load breaking capacity



Electrical endurance



Mechanical endurance, DC coil	>$15x10^6$ operations.

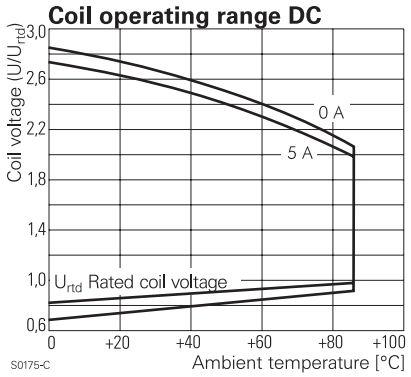
Coil Data

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 Ω±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

Coil operating range DC



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	$>10x10^9\Omega$
coil-contact circuit	$>10x10^9\Omega$
Clearance/creepage	
between contact and coil	≥3.2/4mm
Material group of insulation parts	IIIa

01-2017, Rev. 0117
www.te.com

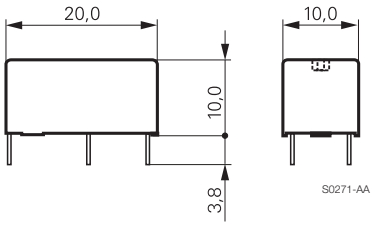
Miniature PCB Relay PE (Continued)

Tracking index of relay base	PTI250V

Other Data

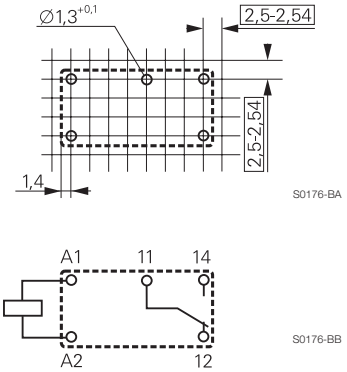
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Resistance to heat and fire	according EN60335, par.30
Ambient temperature	-40 to 85°C
Category of environmental protection, IEC 61810	RTII - 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

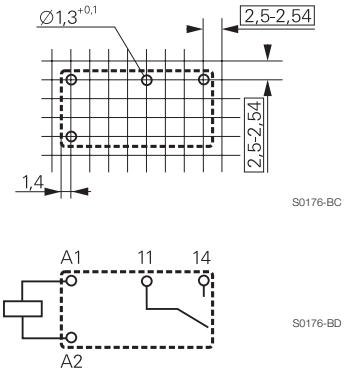


PCB layout / terminal assignment
Bottom view on solder pins

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** $AgSnO_2$ **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	$AgSnO_2$	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