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 REG.-Nr. 6656, UL E214025 (version with 1 form A (NO) in process)
Technical data of approved types on request

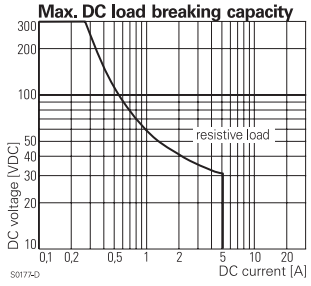
Contact Data

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, $AgSnO_2$
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

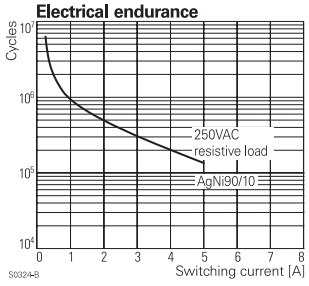
Contact ratings

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/PE015	A (NO)	5A, 30VDC, 0ms, 85°C	$100x10^3$
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, 240VAC, resistive, 85°C	$100x10^3$
PE014	A (NO)	5A, 30VDC, resistive, 85°C	$100x10^3$
PE034	A (NO)	6A, 250VAC, resistive, 70°C	$100x10^3$
Mechanical endurance, DC coil		>15x106 operations.	

Max. DC load breaking capacity



Electrical endurance



Coil Data

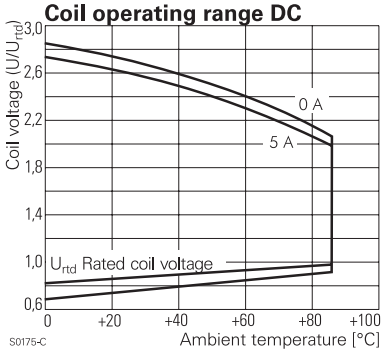
Coil voltage range	5 to 48 VDC
Operative range, IEC 61810	2

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

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

Coil operating range DC



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
Tracking index of relay base	PTI250V

04-2011, Rev. 0411
www.te.com

Miniature PCB Relay PE (Continued)

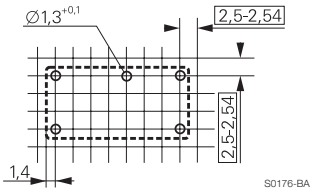
Other Data

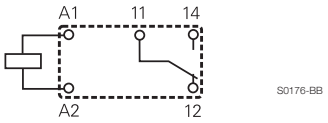
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Resistance to heat and fire	according EN60335, par.30
Ambient temperature	-40 to 85°C
Category of environmental protection, IEC 61810	RTII - 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	270°C/10s (flux proof version)
Packaging/unit	tube/25 pcs., box/500 pcs.

PCB layout / terminal assignment

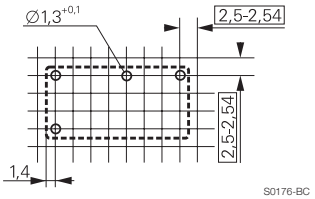
Bottom view on solder pins

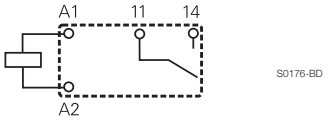
1 form C (CO) version



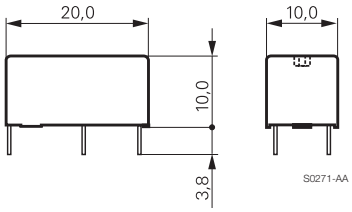


1 form A (NO) version





Dimensions



Product code structure

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

Type
PE Miniature PCB Relay PE

Version
0 Flux proof

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
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