

**Miniature PCB Relay PE**

- 1 pole 5 A, 1 CO or 1 NO contact
- Cadmium-free contacts
- Sensitive coil 200 mW
- 4 kV coil-contact
- Ambient temperature 85°C
- Low height 10.0 mm
- Plastic materials according to IEC60335-1 (domestic appliances)
- RoHS compliant (Directive 2002/95/EC) as per product date code 0352

**Applications**

Industrial electronics, white goods, measurement and control



FD169-B

**Approvals**

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

**Contact data**

Contact configuration	1 CO or 1 NO contact
Contact set	single contact
Type of interruption	micro disconnection
Rated current	5 A
Rated voltage / max.switching voltage AC	240/400 VAC
Maximum breaking capacity AC	1250 VA
Contact material	AgNi90/10
Mechanical endurance	15x10 <sup>6</sup> cycles
Rated frequency of operation with / without load	6/1200 min <sup>-1</sup>

**Contact ratings**

Type	Load	Cycles
PE014	5 A, 250 VAC, resistive, 85°C, 6 cycles/min, 50% df, EN61810-1	1x10 <sup>5</sup>
PE014	5 A, 30 VDC, resistive, on NO-contact, 85°C, 6 cycles/min, 50% duty factor, EN61810-1,	1x10 <sup>5</sup>
PE014	5 A, 240 VAC resistive load, on NO or NC contact, UL508	1x10 <sup>5</sup>
PE034	5 A, 250 VAC, resistive, 85°C, 6 cycles/min, 50% df, EN61810-1	1x10 <sup>5</sup>
PE034	5 A, 30 VDC, resistive, 85°C, 6 cycles/min, 50% duty factor, EN61810-1,	1x10 <sup>5</sup>
PE034	5 A, 240 VAC resistive load, UL508	1x10 <sup>5</sup>

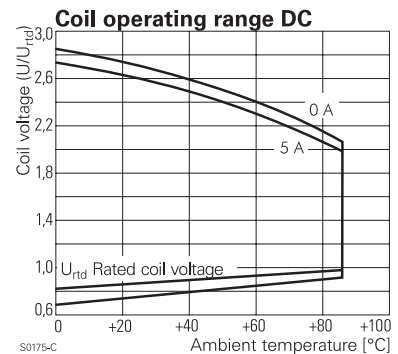
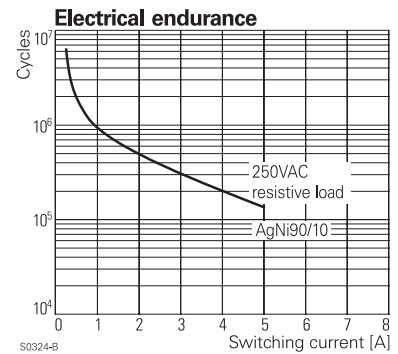
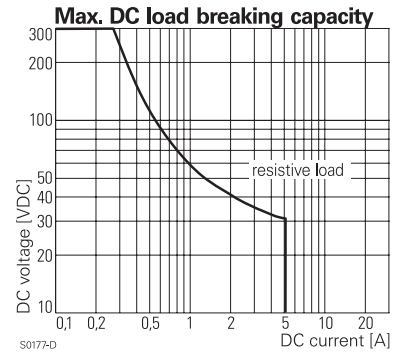
**Coil data**

Rated coil voltage range DC coil	5...48 VDC
Coil power DC coil	typ. 200 mW
Operative range	2

**Coil versions, DC-coil**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
003	3	2.25	0.3	45±10%	200
005	5	3.8	0.5	125±10%	200
006	6	4.5	0.6	172±10%	209
012	12	9.0	1.2	685±10%	210
024	24	18.0	2.4	2725±10%	211
048	48	36.0	4.8	10970±10%	210

All figures are given for coil without preenergization, at ambient temperature +23°C  
Other coil voltages on request



**Miniature PCB Relay PE (Continued)**

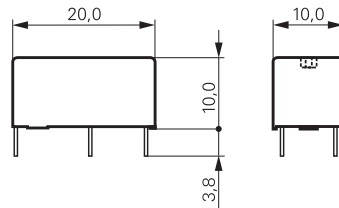
**Insulation**

Dielectric strength coil-contact circuit	4000 V <sub>rms</sub>	
open contact circuit	1000 V <sub>rms</sub>	
Clearance / creepage coil-contact circuit	≥ 3,2 / 4 mm	
Material group of insulation parts	IIIa	
Tracking index of relay base	PTI 250	
Insulation to IEC 60664-1		
Type of insulation coil-contact circuit	basic	
open contact circuit	functional	
Rated insulation voltage	250 V	
Pollution degree	3	2
Rated voltage system	230 V	400 V
Overvoltage category	III	

**Other data**

RoHS - Directive 2002/95/EC	compliant as per product date code 0352	
Flammability class according to UL94	V-0	
Ambient temperature range	-40...85°C	
Operate- / release time	typ. 5/2 ms	
Bounce time NO / NC contact	typ. 1/5 ms	
Vibration resistance (function) NO / NC contact	> 15/5 g	
Shock resistance (destruction)	> 100 g	
Category of protection	RTII - flux proof (RTIII - wash tight on request)	
Resistance to soldering heat flux-proof version	270°C / 10 s	
Relay weight	5 g	
Packaging unit	25/500 pcs	

**Dimensions**

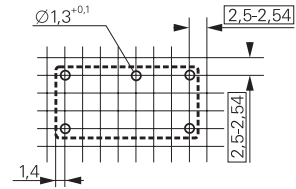


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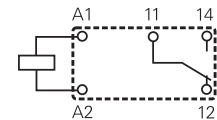
**PCB layout / terminal assignment**

Bottom view on solder pins

CO version

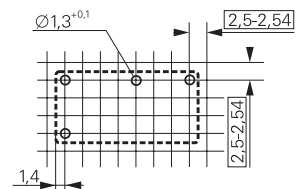


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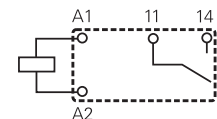


S0176-BB

NO version



S0176-BC



S0176-BD

**Product key**

Type

Version

**0** flux proof

Contact configuration

**1** 1 CO contact

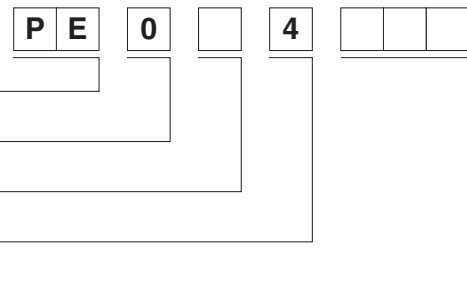
**3** NO contact

Contact material

**4** AgNi 90/10

Coil

Coil code: please refer to coil versions table



Product key	Version	Contacts	Contact material	Coil	Part number
PE014005	flux proof	1 CO contact	AgNi 90/10	5 VDC	0-1393219-3
PE014006				6 VDC	0-1393219-4
PE014012				12 VDC	0-1393219-6
PE014024				24 VDC	1-1393219-0
PE014048		1 NO contact		48 VDC	1-1393219-3
PE034005				5 VDC	4-1415535-6
PE034006				6 VDC	4-1415535-7
PE034012				12 VDC	4-1415535-9
PE034024				24 VDC	5-1415535-1
PE034048				48 VDC	5-1415535-2