

Miniature PCB Relay PE

- 1 pole 5 A, 1 CO or 1 NO contact
- Cadmium-free contacts
- Sensitive coil 200 mW
- Ambient temperature 85°C
- Low height 10.0 mm
- Plastic materials according to IEC60335-1 (domestic appliances)



F0169-C

Applications

Industrial electronics, white goods, measurement and control

Approvals

VDE REG.-Nr. 6656, **CE** 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 voltage / max. switching voltage AC	250 / 400 VAC
Rated current	5 A
Maximum breaking capacity AC	1250 VA
Contact material	AgNi90/10 / AgSnO ₂
Rated frequency of operation with / without load	6 / 1200 min ⁻¹
Operate- / release time	typ. 8 / 8 ms
Bounce time NO / NC contact	typ. 4 / 6 ms

Contact ratings

Type	Contact	Load	Ambient temp. [°C]	Cycles
IEC 61810				
PE013	CO	5 A, 250 VAC, cosφ=1	85°C	30x10 ³
PE014	CO	5 A, 250 VAC, cosφ=1	85°C	100x10 ³
PE014	NO	5 A, 30 VDC, 0 ms	85°C	100x10 ³
PE034	NO	6 A, 250 VAC, cosφ=1	70°C	50x10 ³
UL 508				
PE013	CO	5 A, 240 VAC, resistive	85°C	30x10 ³
PE014	NO	5 A, 240 VAC, resistive	85°C	100x10 ³
PE014	NO	5 A, 30 VDC, resistive	85°C	100x10 ³
PE034	NO	6 A, 250 VAC, resistive	70°C	100x10 ³

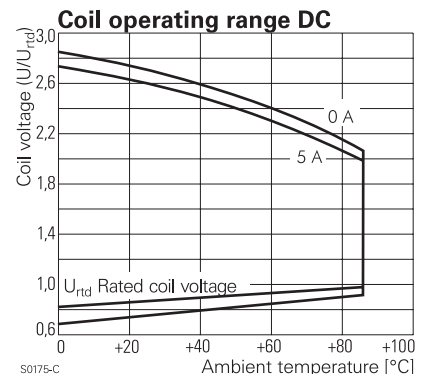
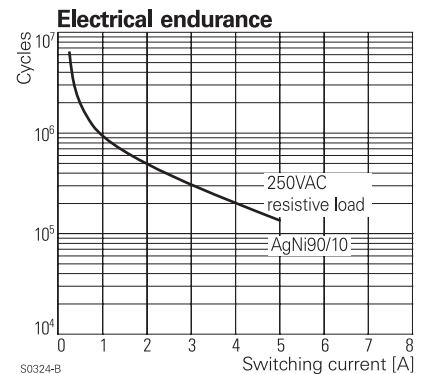
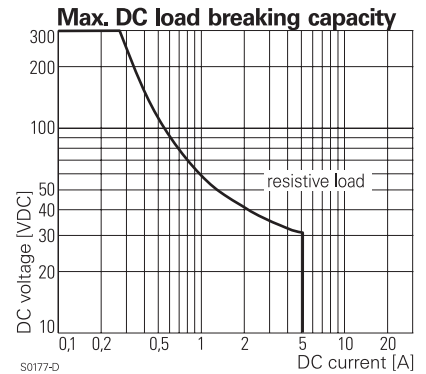
Coil data

Rated coil voltage range DC coil	5...48 VDC
Operative range to IEC 61810	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
009	9	6.75	0.9	405 ± 10%	200
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)

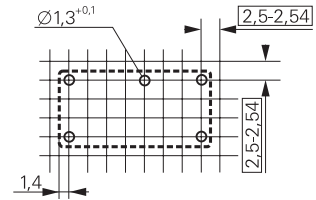
Insulation		
Insulation resistance coil-contact circuit	> 10 ⁴ MOhms	
open contact circuit	> 10 ⁴ MOhms	
Dielectric strength coil-contact circuit	4000 V _{rms}	
open contact circuit	1000 V _{rms}	
Clearance / creepage coil-contact circuit	≥ 3,2 / 4 mm	
Material group of insulation parts	IIIa	
Tracking index of relay base	PTI 250	
Insulation to IEC 61810-1		
Type of insulation coil-contact circuit	basic	
open contact circuit	micro disconnection	
Rated insulation voltage	250 V	
Pollution degree	3	2
Rated voltage system	240 V	230 / 400 V
Overvoltage category	III	

Other data		
Mechanical endurance	15x10 ⁶ cycles	
Material		
RoHS - Directive 2002/95/EC	compliant as per product date code 0352	
Resistance to heat and fire	according EN60335, par.30	
Environment		
Ambient temperature range	-40...85°C	
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)	
Processing		
Resistance to soldering heat flux-proof version	270°C / 10 s	
Relay weight	5 g	
Packaging unit	25/500 pcs	

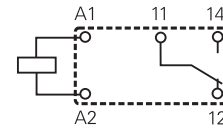
PCB layout / terminal assignment

Bottom view on solder pins

CO version

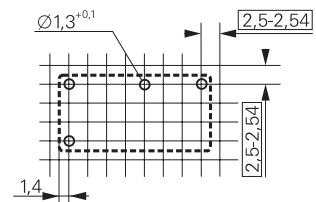


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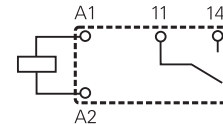


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NO version

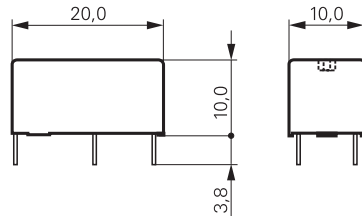


S0176-BC



S0176-BD

Dimensions



S0271-AA

Product key

Typical product key

PE 0 1 4 012

Type	PE Miniature PCB Relay PE				
Version	0 flux proof				
Contact configuration	1 1 CO contact (1 form C)	3	1 NO contact (1 form A)		
Contact material	4 AgNi 90/10	3	AgSnO ₂		
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	1393219-3
PE014006				6 VDC	1393219-4
PE014012				12 VDC	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