

Miniature Power PCB Relay PBH 105°C

- 1pole 6 A, 1 CO or 1 NO contact
- Environmentally-friendly cadmium-free contacts
- Class F coil system standard
- For ambient temperatures up to 105°C
- Product in accordance to IEC60335-1
- RoHS compliant (Directive 2002/95/EC) as per product date code 0346



F0224BB

Applications

White goods, domestic appliances

Approvals

VDE REG.-Nr. 121560, c RU us E214025
 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	6 A
Rated voltage / max.switching voltage AC	250/400 VAC
Maximum breaking capacity AC	1500 VA
Limiting making capacity, max 4 s, duty factor 10%	10 A
Contact material	AgNi 90/10
Mechanical endurance	2x10 ⁶ cycles
Rated frequency of operation with / without load	6/600 min ⁻¹

Contact ratings

Type	Load	Cycles
PBH14	6.5 A, 250 VAC, 105°C, resistive, 50Hz, EN61810-1	10x10 ³
PBH14	(NO tested) 2 A, 250 VAC, 105°C, cosφ=0.55, 50Hz, EN61810-1	250x10 ³
PBH14	(NO tested) 6.5 A, 250 VAC, 105°C, resistive, 50Hz, EN61810-1	100x10 ³
PBH34	2 A, 250 VAC, 105°C, cosφ=0.55, 50Hz, EN61810-1	250x10 ³
PBH34	6.5 A, 250 VAC, 105°C, resistive, 50Hz, EN61810-1	100x10 ³

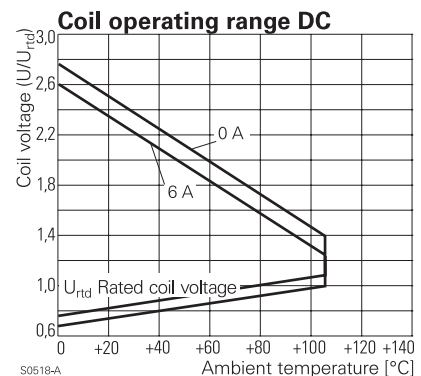
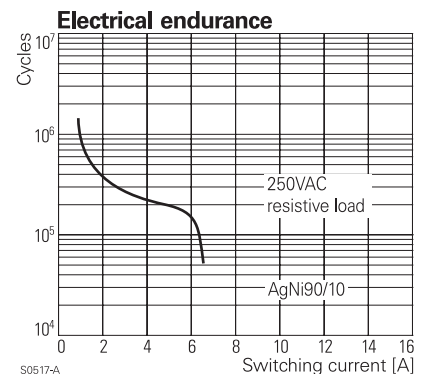
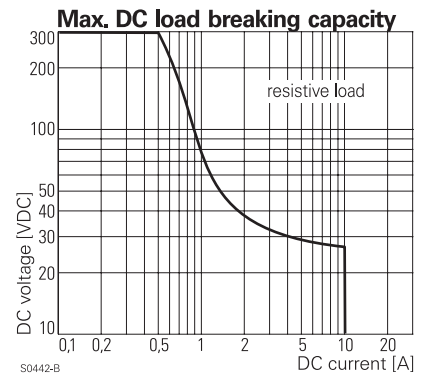
Coil data

Rated coil voltage range DC coil	5...36 VDC
Coil power DC coil	typ. 360 mW
Operative voltage range, % of rated coil voltage	90...100%

Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
005	5	3.75	0.5	70±10%	357
006	6	4.5	0.6	100±10%	360
009	9	6.75	0.9	225±10%	360
012	12	9.0	1.2	400±10%	360
018	18	13.5	1.8	900±10%	360
022	22	16.5	2.2	1344±10%	360
024	24	18.0	2.4	1600±10%	360
048	48	36	4.8	6400±10%	360

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



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Insulation

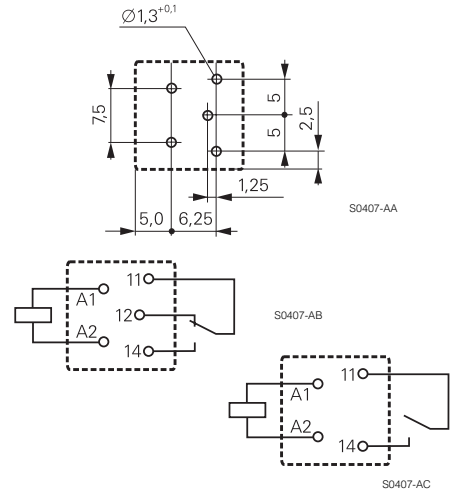
Dielectric strength coil-contact circuit	2500 V _{rms}
open contact circuit	1000 V _{rms}
Clearance / creepage coil-contact circuit CO version	≥ 3/4 mm
NO version	≥ 4/5 mm
Material group of insulation parts	IIIa
Tracking index of relay base	CTI 250
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	basic
open contact circuit	functional
Rated insulation voltage	250 V
Pollution degree	3
Rated voltage system	230/400 V
Overvoltage category	III

Other data

RoHS - Directive 2002/95/EC	compliant as per product date code 0346
Flammability class according to UL94	V-0
GWFI to IEC 60335-1	≥ 850°C
GWIT to IEC 60335-1	≥ 775°C
Ambient temperature range	-20...105°C
Operate- / release time	< 20 ms
Bounce time NO / NC contact	< 15 ms
Vibration resistance (function) NO / NC contact	> 10/4g, 30...400Hz
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof
Mounting	pcb
Resistance to soldering heat	270°C / 10 s
Relay weight	5.4 g
Packaging unit	35/1050 pcs

PCB layout / terminal assignment

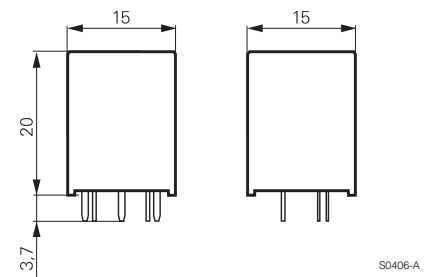
Bottom view on solder pins



1) Layout note:

No openings (e.g. holes, slots, cutouts, unused pins, open through connexions, etc.) allowed under the relay base. The relay base must be fully covered by the pcb, recommended minimum distance between the relay and the edge of the printed circuit board is 5 mm. For more information, please contact our application support.

Dimensions



Miniature Power PCB Relay PBH 105°C (Continued)

Product key

Type	P B	H		4			
Version	H High temperature version						
Contact configuration	1 1 CO contact		3 1 NO contact				
Contact material	4 AgNi 90/10						
Coil	Coil code: please refer to coil versions table						
Other types on request							

Product key	Version	Contacts	Contact material	Coil	Part number
PBH14005	high	1 CO contact	AgNi 90/10	5 VDC	9-1415356-1
PBH14006	temperature version			6 VDC	8-1415356-1
PBH14009				9 VDC	7-1415356-1
PBH14012				12 VDC	6-1415356-1
PBH14018				18 VDC	6-1415357-1
PBH14022				22 VDC	7-1415357-1
PBH14024				24 VDC	6-1415355-1
PBH14036				36 VDC	9-1415355-1
PBH34005		1 NO contact		5 VDC	5-1415356-1
PBH34006				6 VDC	4-1415356-1
PBH34009				9 VDC	3-1415356-1
PBH34012				12 VDC	2-1415356-1
PBH34018				18 VDC	8-1415357-1
PBH34022				22 VDC	9-1415357-1
PBH34024				24 VDC	1-1415356-1
PBH34036				36 VDC	0-1415356-1