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**

F0224CB

Applications

White goods, domestic appliances

Approvals

VDE REG.-Nr. 121560, cULus 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 voltage / max. switching voltage AC	250 / 400 VAC
Rated current	6 A
Limiting continuous current	6.5 A
Maximum breaking capacity AC	1500 VA
Limiting making capacity, max 4 s, duty factor 10%	10 A
Contact material	AgNi 90/10
Rated frequency of operation with / without load	6/600 min^{-1}
Operate- / release time	max 10 / 20 ms
Bounce time NO / NC contact	max 10 / 15 ms

Contact ratings

Type	Contact	Load	Ambient temp. [°C]	Cycles
IEC 61810				
PBH14	CO	6.5 A, 250 VAC, cosφ=1	105°C	10x10^3
PBH34	NO	6.5 A, 250 VAC, cosφ=1	105°C	100x10^3
PBH14	NO of CO	6.5 A, 250 VAC, cosφ=1	105°C	100x10^3
PBH34	NO	2 A, 250 VAC, cosφ=0.55	105°C	250x10^3
PBH14	NO of CO	2 A, 250 VAC, cosφ=0.55	105°C	250x10^3
PBH34	NO	6.5 A, 440 VAC, cosφ=1	105°C	50x10^3
UL 508				
PBHx4	NO	6 A, 415 VAC, cosφ=1	105°C	50x10^3

Coil data

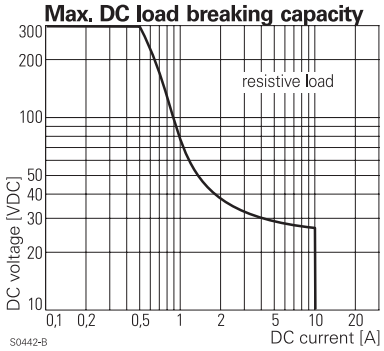
Rated coil voltage range DC coil	5...36 VDC
Operative voltage range, % of rated coil voltage	90...100%

Coil versions, DC-coil

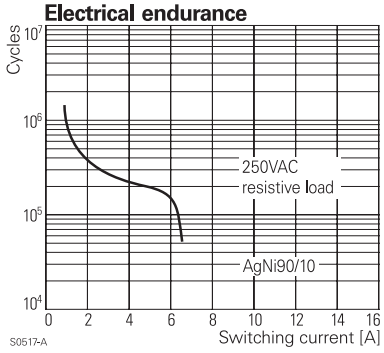
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
005	5	3.75	0.5	70±10%	357
006	6	4.5	0.6	100±10%	360
009	9	6.75	0.9	225±10%	360
012	12	9.0	1.2	400±10%	360
018	18	13.5	1.8	900±10%	360
022	22	16.5	2.2	1344±10%	360
024	24	18.0	2.4	1600±10%	360
048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

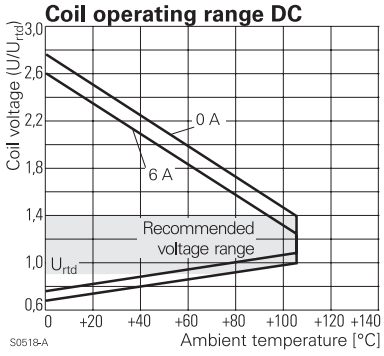
Max. DC load breaking capacity



Electrical endurance



Coil operating range DC



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www.tycoelectronics.com
www.schrackrelays.com

Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and processing information only to be used together with the 'Definitions' section in the catalogue or at schrackrelays.com in the 'Schrack' section.

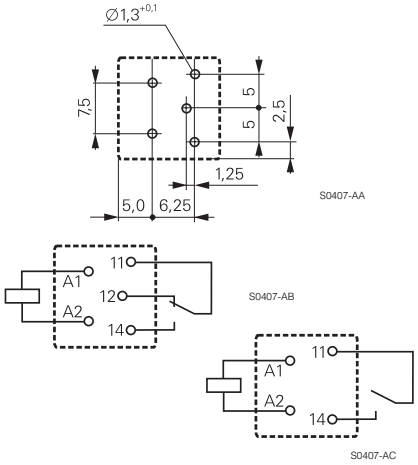
Specifications subject to change.

Miniature Power PCB Relay PBH 105°C (Continued)

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		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

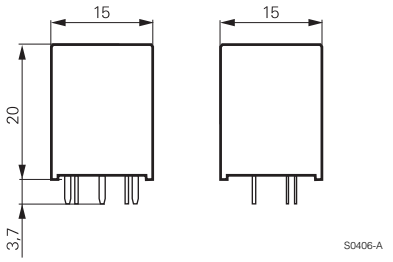
Other data	
Mechanical endurance	2x10^6 cycles
Material	
RoHS - Directive 2002/95/EC	compliant as per product date code 0346
Resistance to heat and fire	according EN60335, par.30
Environment	
Ambient temperature range	-20...105°C
Vibration resistance (function) NO / NC contact	>10 / 4g, 30...400Hz
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof
Processing	
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



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Miniature Power PCB Relay PBH 105°C (Continued)

Product key Typical product key: **PB H 1 4 012**

Type
PB Miniature Power PCB Relay PB 105°C

Version
H High temperature version

Contact configuration
1 1 CO contact (1 form C)
3 1 NO contact (1 form A)

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			6 VDC	8-1415356-1
PBH14009	version			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	1415356-1

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