

# Miniature Power PCB Relay PBH 105°C

- 1pole 6 A, 1 form C (CO) or 1 form A (NO) contact
- Environmentally-friendly cadmium-free contacts
- Class F coil system standard
- For ambient temperatures up to 105°C
- Product in accordance to IEC 60335-1



Typical applications White goods, domestic appliances.



## Approvals

VDE Cert. No. 40008364, UL E214025 Technical data of approved types on request.

# Contact Data

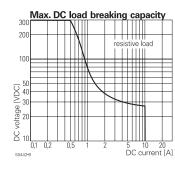
Contact Data	
Contact arrangement	1 form C (CO) or 1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	6A
Limiting continuous current	6.5 A
Limiting making current, max 4 s, duty	factor 10% 10A
Breaking capacity max.	1500VA
Contact material	AgNi 90/10
Frequency of operation, with/without lo	ad 360/36000h <sup>-1</sup>
Operate/release time max.	10/20ms
Bounce time max., form A/form B	10/15ms

### Contact ratings

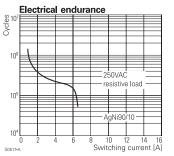
Contact	aunys		
Туре	Contact	Load	Cycles
IEC 6181	0		
PBH14	C (CO)	6.5A, 250VAC, cosφ=1, 105°C	10x10 <sup>3</sup>
PBH34	A (NO)	6.5A, 250VAC, cosφ=1, 105°C	100x10 <sup>3</sup>
PBH14	A of C	6.5A, 250VAC, cosφ=1, 105°C	100x10 <sup>3</sup>
PBH34	A (NO)	2A, 250VAC, cosφ=0.55, 105°C	250x103
PBH14	A of C	2A, 250VAC, cosφ=0.55, 105°C	250x103
PBH34	A (NO)	6.5A, 440VAC, cosφ=1, 105°C	50x10 <sup>3</sup>
UL 508			
PBHx4	A (NO)	6A. 415VAC. cosφ=1. 105°C	50x10 <sup>3</sup>

Mechanical endurance, DC coil









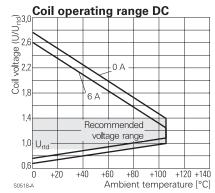
## **Coil Data**

Coil voltage range	5 to 36 VDC
Operative voltage range, % of rated coil voltage	90 to 100 %

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Coll vers	sions, DC co				
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	mW
005	5	3.75	0.5	70	357
006	6	4.50	0.6	100	360
009	9	6.75	0.9	225	360
012	12	9.00	1.2	400	360
018	18	13.50	1.8	900	360
022	22	16.50	2.2	1344	360
024	24	18.00	2.4	1600	360
048	48	36.00	4.8	6400	360

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



### **Insulation Data**

mound on Bata	
Initial dielectric strength	
between open contacts	1000V_ms
between contact and coil	2500V
Clearance/creepage	1110
between contact and coil	
form C (CO) version	≥3/4mm
form A (NO)	≥4/5mm
Material group of insulation parts	Illa
Tracking index of relay base	PTI250

Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Catalog and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

Catalog product data, 'Definitions' section, application notes and all specifications are subject to change.

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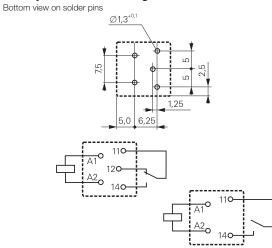


# Miniature Power PCB Relay PBH 105°C (Continued)

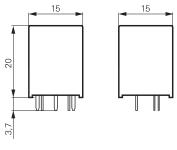
## **Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content					
refer to the Product Compliance Support Center a					
www.te.com	n/customersupport/rohssupportcenter				
Resistance to heat and fire	according EN60335, par.30				
Ambient temperature, DC coil	-20 to +105°C				
Category of environmental protection					
IEC 61810	RTII - flux proof				
Vibration resistance (functional)					
form A/form B, 30 to 400Hz	>10/4g				
Shock resistance (destructive)	>100g				
Terminal type	PCB-THT				
Weight	5.4g				
Resistance to soldering heat THT					
IEC 60068-2-20	270°C/10s				
Packaging/unit	tube/35 pcs., box/1050 pcs.				

# PCB layout<sup>1)</sup> / terminal assignment



## Dimensions



#### <sup>1)</sup> 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.

Prod	uct code structure	Typical product c	ode	PB	н	1	4	012
Туре								
	PB Miniature Power PCB Relay PB 105°C							
Versio	on							
	H High temperature version							
Conta	act configuration							
	<b>1</b> 1 form C contact (1 CO) <b>3</b> 1 for	m A contact (1 NO)						
Conta	act material							
	4 AgNi 90/10							
Coil								
	Coil code: please refer to coil versions table							

Other types on request.

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

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TE Connectivity: 2-1415356-1