

Miniature Power PCB Relay PB

- 1pole 10A, 1 form C (CO) or 1 form A (NO)
- Environmentally-friendly cadmium-free contacts
- Class F coil system standard
- Compact and simple design gives high process security
- Product in accordance to IEC 60335-1



Typical applications
White goods, small home appliances, heating temperature controllers.



Approvals

VDE Cert. No. 40008364, UL E214025

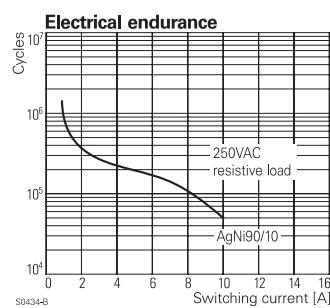
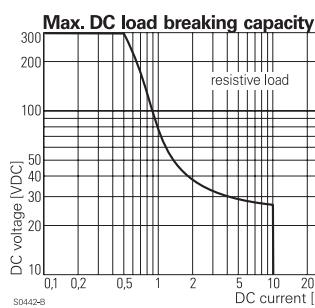
Technical data of approved types on request.

Contact Data

Contact arrangement	1 form C (CO) or 1 form A (NO)		
Rated voltage	250VAC		
Max. switching voltage	400VAC		
Rated current	10A		
Limiting making current, max 4 s, duty factor 10%	15A		
Breaking capacity max.	2500VA		
Contact material	AgNi 90/10, AgSnO ₂		
Frequency of operation, with/without load	360/36000h ⁻¹		
Operate/release time max.	10/20ms		
Bounce time max., form A/form B	10/15ms		

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
PB114; PB113	A/B (NO/NC)	10A/3A, 250VAC, cosφ=1, 85°C	30x10 ³
PB114	A of C	10A, 250VAC, cosφ=1, 85°C	30x10 ³
PB134; PB133	A (NO)	10A, 250VAC, cosφ=1, 85°C	20x10 ³
PB134	A (NO)	6.5A, 440VAC, cosφ=1, 85°C	50x10 ³
PB634	A (NO)	8.5A, 250VAC, cosφ=1, 85°C	100x10 ³
PB634	A (NO)	10A, 250VAC, cosφ=1, 85°C	60x10 ³
UL 508			
PB1x4	A (NO)	10A, 250VAC, cosφ=1, 85°C	20x10 ³
Mechanical endurance, DC coil			
		5x10 ⁶ operations	



Coil Data		PB1	PB5	PB6
Coil voltage range		5 to 48 VDC	5 to 24 VDC	5 to 24 VDC
Operative range, IEC 61810		2	2	2

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
Coil versions, DC-coil, 360mW					
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

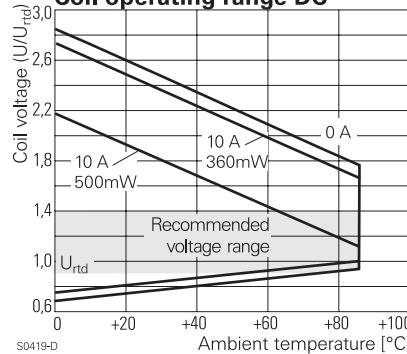
Coil versions, DC-coil, 500mW

005	5	3.75	0.5	48	521
006	6	4.5	0.6	69	522
012	12	9	1.2	274	526
024	24	18	2.4	1097	525

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

Other coil voltages on request.

Coil operating range DC



Insulation Data

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

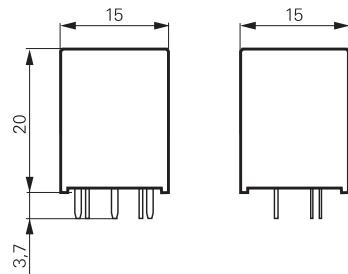
Miniature Power PCB Relay PB (Continued)

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

Resistance to heat and fire version PB1, PB5	according EN60335, par.30
Ambient temperature, DC coil	-40 to +85°C
Category of environmental protection IEC 61810	RTII - flux proof
Vibration resistance (functional), form A/form B, 30 to 400Hz PB1, PB6	>10/4g
PB5	>10/6 g
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.

Dimensions



Product code structure

Typical product code **PB** **1** **1** **4** **012**

Type	PB Miniature Power PCB Relay PB				
Version	1 Standard version 5 500 mW version 6 High performance version (form A version only)				
Contact arrangement	1 1 form C contact (1 CO) 3 1 form A contact (1 NO)				
Contact material	3 AgSnO ₃ 4 AgNi 90/10				
Coil	Coil code: please refer to coil versions table				

Product code	Version	Contacts	Contact material	Coil	Part number
PB114005	Standard class F	1 form C	AgNi 90/10	5VDC	6-1415029-1
PB114006		1 CO contact		6VDC	7-1415029-1
PB114012				12VDC	8-1415029-1
PB114024				24VDC	9-1415029-1
PB134005		1 form A		5VDC	1415030-1
PB134006		1 NO contact		6VDC	1-1415030-1
PB134012				12VDC	2-1415030-1
PB134024				24VDC	3-1415030-1
PB514012	500 mW version	1 form C		12VDC	2-1415538-5
PB514024		1 CO contact		24VDC	5-1415535-6
PB634005	High performance version	1 form A		5VDC	3-1415541-8
PB634006		1 NO contact		6VDC	3-1415541-9
PB634012				12VDC	4-1415541-1
PB634024				24VDC	4-1415541-2

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