SCHRACK MINIATURE POWER PCB RELAY PB 105°C

GENERAL PURPOSE | LOW POWER PCB RELAYS

FEATURES

- 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
- Plastic materials according to IEC 60335-1 (domestic appliances)

APPLICATIONS

- White goods
- Domestic appliances

APPROVALS

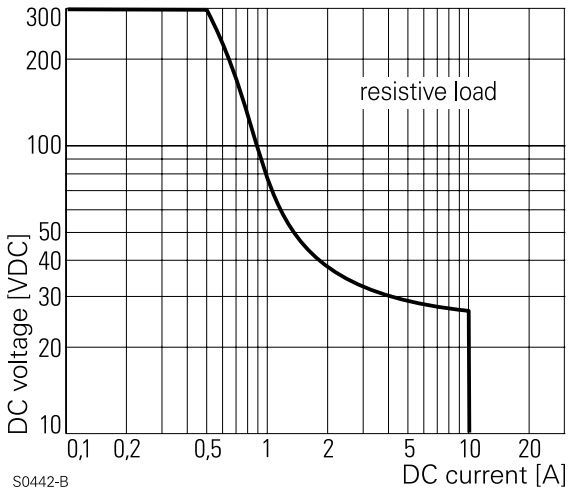
- VDE Cert. No. 40008364
- UL E214025

Technical data of approved types on request.

CONTACT DATA

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

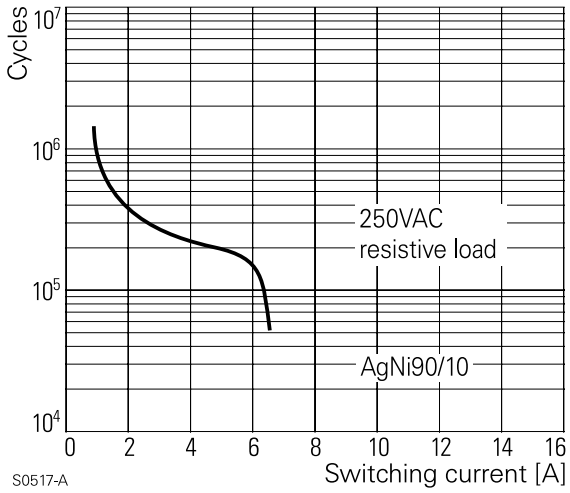
MAX. DC LOAD BREAKING CAPACITY



CONTACT RATINGS FOR SR4

Type	Contact	Load	Cycles
IEC 61810			
PBH14	C (CO)	6.5 A, 250 VAC, cosφ=1, 105 °C	10x10³
PBH34	A (NO)	6.5 A, 250 VAC, cosφ=1, 105 °C	100x10³
PBH14	A of C	6.5 A, 250 VAC, cosφ=1, 105 °C	100x10³
PBH34	A (NO)	2 A, 250 VAC, cosφ=0.55, 105 °C	250x10³
PBH14	A of C	2 A, 250 VAC, cosφ=0.55, 105 °C	250x10³
PBH34	A (NO)	6.5 A, 440 VAC, cosφ=1, 105 °C	50x10³
UL61810-1 (former UL 508)			
PBHx4	A (NO)	6 A, 415 VAC, cosφ=1, 105 °C	50x10³
Mechanical endurance, DC coil		2x10⁶ operations	

ELECTRICAL ENDURANCE



COIL DATA

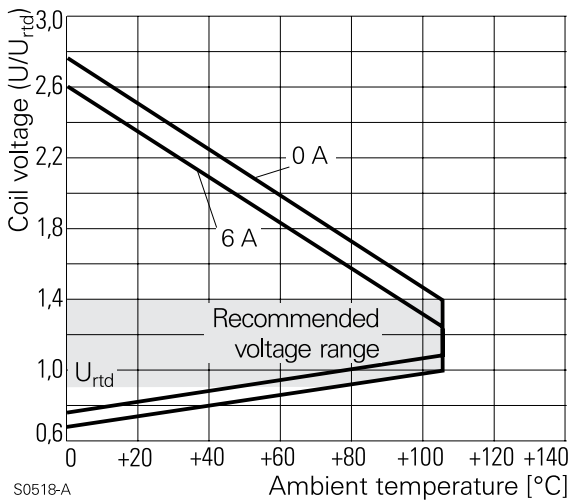
	PB6
Coil voltage range	5 to 36 VDC
Operative voltage range, % of rated coil voltage	90 to 100 %

COIL VERSIONS, DC-COIL

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω ±10%	Rated coil power 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.

COIL OPERATING RANGE DC



Other coil voltages on request.

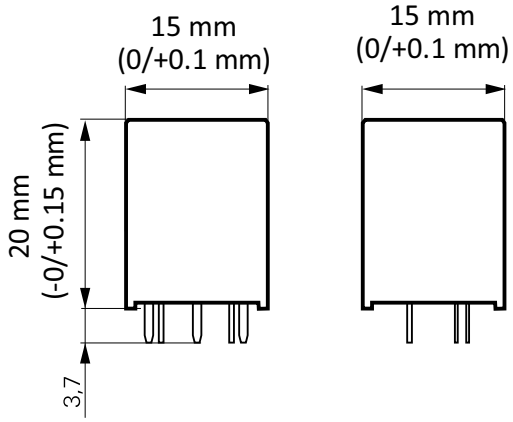
INSULATION DATA

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

OTHER DATA

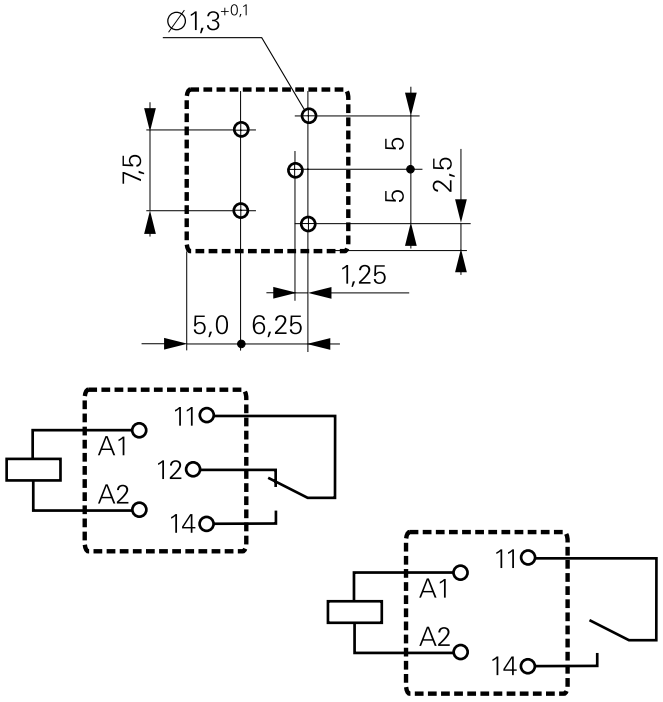
Material compliance	EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter
Resistance to heat and fire version PB1, PB5	according EN60335, par.30
Ambient temperature, DC coil	-20 to +105°C
Category of environmental protection	
IEC 61810	RTII - flux proof
Vibration resistance (functional),	
form A/form B, 30 to 400 Hz	> 10/4 g
Shock resistance (destructive)	> 100 g
Terminal type	PCB-THT
Weight	5.4 g
Resistance to soldering heat THT	
IEC 60068-2-20	270 °C/ 10 s
Packaging/unit	tube/35 pcs., box/1050 pcs.

DIMENSIONS (Unit: mm)



PCB LAYOUT[2)]/ TERMINAL ASSIGNMENT

Bottom view on solder pins



2) Layout note:

No openings (e.g. holes, slots, cutouts, unused pins, open through connections, 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.

ORDERING INFORMATION

Type

PB	Miniature Power PCB Relay PB 105°C

Version

H	High temperature version

Contact arrangement

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

Coil

Coil code: please refer to coil versions table

Contact material

4	AgNi 90/10

Other types on request.

PRODUCT INFORMATION

Product code	Version	Contact configuration	Contact material	Coil	Part Number
PBH14005	High temperature version	1 form C 1 CO contact	AgNi 90/10	5 VDC	9-1415356-1
PBH14006				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 form A 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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