

Miniature Power PCB Relay PB

1pole 10 A



Features

- 1 C/O or 1 N/O contact
- Environmentally-friendly cadmium-free contacts
- Creepage/clearance to VDE 0435 and VDE 0700
- Class F coil available
- Compact and simple design gives high process security

Applications

White goods, small home appliances, heating temperature controllers

F0224-A



Technical data of approvals on request

Contact data

Configuration	1 C/O contact or 1 N/O contact
Type of contact	single contact
Rated current	C/O version: N/O 10 A; N/C 3 A N/O version: 10 A
Continuous thermal load	10 A
Maximum switching voltage	250 Vac / 100 Vdc
Maximum breaking capacity AC	2500 VA
Make current (max. 4 s at duty cycle 10%)	15 A
Contact material	AgNi 90/10

Contact ratings

Type	Load	Operations
N/O contact	10 A, 85 °C	25x10 ³
N/O contact	6 A, 85 °C	100x10 ³
C/O contact	10 A / 3 A, 85 °C	25x10 ³
C/O contact	10 A / 10 A, 85 °C	1x10 ³

Coil data

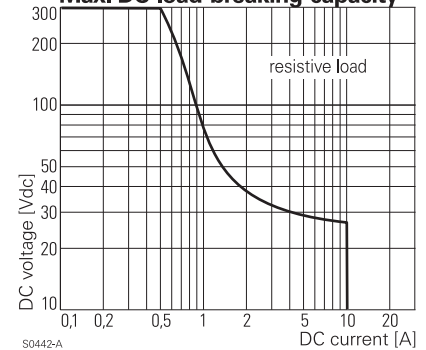
Nominal voltage	5, 6, 12, 24 Vdc
Nominal coil power	360 mW
Operate power	200 mW
Operate category	2 / c
Operate voltage max.	75 % U _{nom}
Non-release voltage	50 % U _{nom}
Release voltage min.	10 % U _{nom}

Coil versions, DC-coil

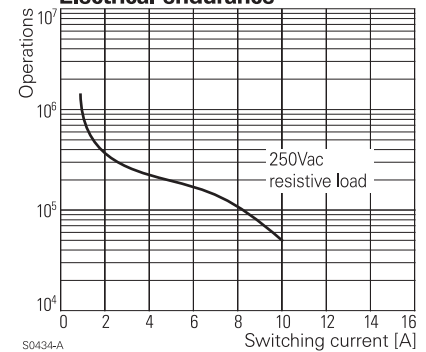
Coil code	Nominal voltage Vdc	Pull-in voltage Vdc	Release voltage Vdc	Coil resistance Ω	Coil current mA
006	6	4.5	0.6	100±5%	60.0
012	12	9	1.2	400±5%	30.0
024	24	18	2.4	1600±5%	15.0

All figures are given for coil without preenergization, at ambient temperature +20°C
Other coil voltages on request

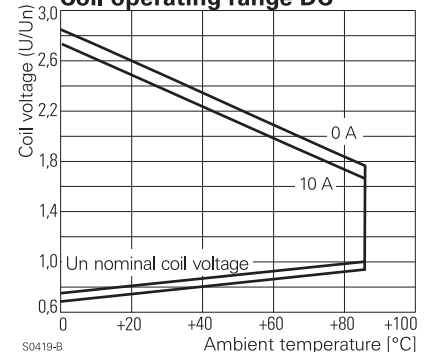
Max. DC load breaking capacity



Electrical endurance



Coil operating range DC



Miniature Power PCB Relay PB

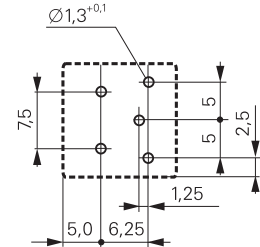
1pole 10 A

Insulation		
Dielectric strength	coil-contacts	2500 V _{rms}
	open contact circuit	1000 V _{rms}
Surge voltage resistance	coil-contacts	4000 V _{rms}
Clearance / creepage		3 / 4 mm
Insulation to IEC 60664		
	Voltage rating	250 V
	Pollution degree	3
	Overtoltage category	III
Insulation to VDE 0110b (2/79)		
	Insulation category / reference voltage	C / 250
Insulation resistance		100x10 ⁶
Tracking resistance of relay base	PB1...CTI 250	
	PB3...CTI 300	

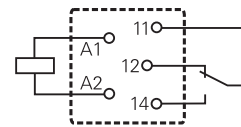
Other data	
Flammability class according to UL 94	V-0
Coil insulation system according to UL 1446	Class F
Ambient temperature	-40...+85 °C (105 °C)
Mechanical life	> 5x10 ⁶ operations
Max. switching rate at rated- / minimum load	60 min ⁻¹ / 600 min ⁻¹
Operate- / release time	< 20 ms
Bounce time	< 15 ms
Vibration resistance 30...400 Hz	>4 g
Shock resistance (destruction)	>30 g
Category of protection (IEC 61810)	RT II - flux proof
Relay weight	5.4 g
Soldering temperature / time, IEC 68-2-20	max. 260 °C / 5s
Packaging unit	35 / 1050 pcs.

PCB layout / terminal assignment

View on solder pins
Dimensions in mm



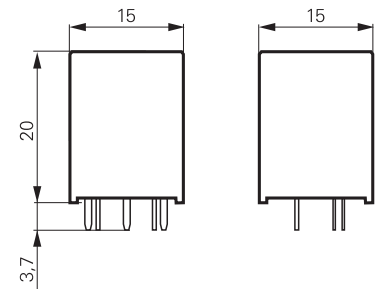
S0407-AA



S0407-AB

Dimensions

Dimensions in mm



S0406-A

Product key

Type

Version

- 1** standard version, CTI 250
- 3** high CTI version, CTI 300

Contacts

- 1** 1 C/O contact
- 3** 1 N/O contact

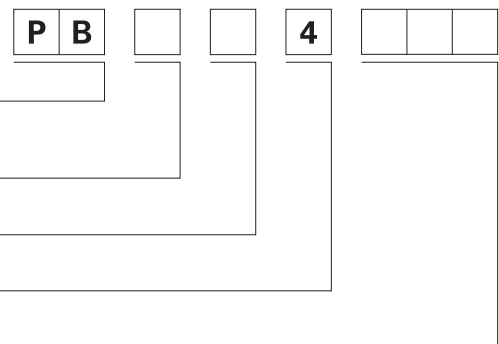
Contact material

- 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	
PB114005	standard CTI 250	1 C/O contact	AgNi 90/10	5 Vdc	6-1415029-1	
PB114006				6 Vdc	7-1415029-1	
PB114012				12 Vdc	8-1415029-1	
PB114024				24 Vdc	9-1415029-1	
PB134005	high CTI version CTI 300	1 N/O contact	AgNi 90/10	5 Vdc	0-1415030-1	
PB134006				6 Vdc	1-1415030-1	
PB134012				12 Vdc	2-1415030-1	
PB134024				24 Vdc	3-1415030-1	
PB314005		1 C/O contact		1 C/O contact	5 Vdc	4-1415030-1
PB314006					6 Vdc	5-1415030-1
PB314012					12 Vdc	6-1415030-1
PB314024					24 Vdc	7-1415030-1
PB334005		1 N/O contact	AgNi 90/10	5 Vdc	8-1415030-1	
PB334006				6 Vdc	9-1415030-1	
PB334012				12 Vdc	0-1415031-1	
PB334024				24 Vdc	1-1415031-1	