

Miniature PCB Relay PCJ

- 1 pole 3 / 5 A, 1 NO contact
- Sensitive coil 200 mW
- 8 mm creepage / clearance
- Version for 105°C
- WG version: Product in accordance to IEC60335-1

Applications

Domestic appliances



F0276-C

Approvals

VDE REG.-Nr. 122301 ÜG  E58304
 Technical data of approved types on request

Contact data

Contact configuration	1 NO	
Contact set	single contact	
Type of interruption	micro disconnection	
Rated voltage / max. switching voltage AC	250 / 400 VAC	
Rated current	3 A	5 A (WG version)
Limiting continuous current	5 A	5 A
Maximum breaking capacity AC	750 VA	1250 VA
Contact material	AgNi	
Rated frequency of operation with / without load	30 / 300 min ⁻¹	
Operate- / release time	max 10 / 4 ms	
Bounce time NO	max 5 ms	

Contact ratings

Type	Contact	Load	Ambient temp. [°C]	Cycles
IEC 61810				
PCJ-1..D3M	NO	5 A, 250 VAC, cosφ=1	85°C	100x10 ³
PCJ-1..D3M	NO	2 A, 250 VAC, cosφ=0.6	85°C	100x10 ³
PCJ-1..D3M	NO	3 A, 250 VAC, cosφ=1	105°C	100x10 ³
UL 508				
PCJ-1..D3M	NO	5 A, 250 VAC, general use	85°C	6x10 ³
PCJ-1..D3M	NO	3 A, 250 VAC, cosφ=1	85°C	100x10 ³
PCJ-1..D3M	NO	3 A, 250 VAC, cosφ=1	105°C	100x10 ³

Coil data

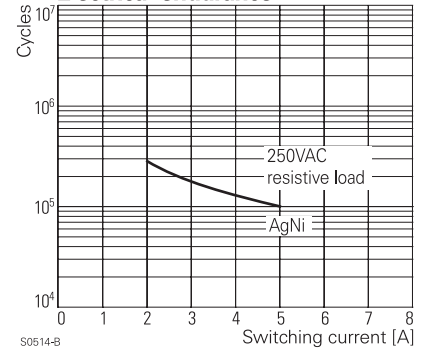
Rated coil voltage range DC coil	3...24 VDC	
Operative range to IEC 61810	2	
Coil insulation system according UL1446	A	F

Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
03	3	2.25	0.15	45±10%	200
05	5	3.75	0.25	125±10%	200
06	6	4.5	0.3	180±10%	200
09	9	6.75	0.45	405±10%	200
12	12	9	0.6	720±10%	200
24	24	18	1.2	2880±10%	200

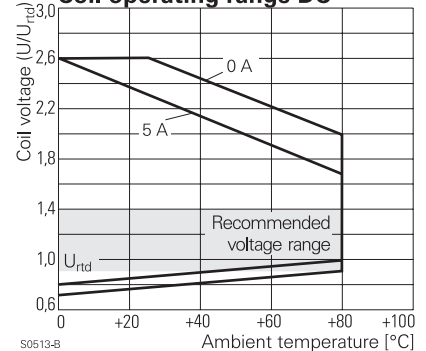
All figures are given for coil without preenergization, at ambient temperature +23°C
 Other coil voltages on request

Electrical endurance



S0514-B

Coil operating range DC



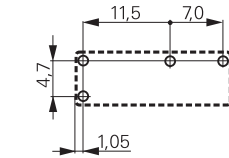
S0513-B

Miniature PCB Relay PCJ (Continued)

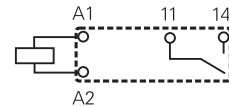
Insulation	
Dielectric strength coil-contact circuit	4000 V _{rms}
open contact circuit	750 V _{rms}
Clearance / creepage coil-contact circuit	≥ 8 / 8 mm
Material group of insulation parts	≥ IIIa
Tracking index of relay base, standard version	PTI 175
WG-version	PTI 250
Insulation to IEC 61810-1	
Type of insulation coil-contact circuit	reinforced
open contact circuit	micro disconnection
Rated insulation voltage	250 V
Pollution degree	3
Rated voltage system	230 / 400 V
Overtoltage category	III

PCB layout / terminal assignment

Bottom view on solder pins



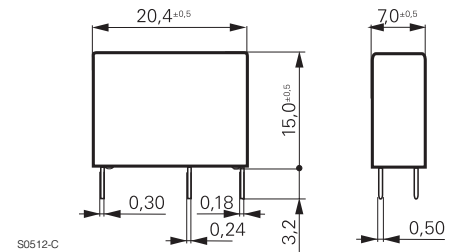
S=511-AA



S0511-AB

Other data	
Mechanical endurance	10x10 ⁶ cycles
Material	RoHS - Directive 2002/95/EC compliant as per product date code 0424
Resistance to heat and fire, WG-version	according EN60335, par.30
Environment	
Ambient temperature range	-40...+90°C (105°C)
Vibration resistance (function) NO / NC contact	>10 g
Shock resistance (function) NO / NC contact	>10 g
Shock resistance (destruction)	>100 g
Category of protection	RTII - flux proof / RTIII - wash tight
Processing	
Resistance to soldering heat flux-proof version	270°C / 10 s
wash-tight version	260°C / 5 s
Relay weight	4 g
Packaging unit	100 pcs

Dimensions



Product key	Typical product key								
Type	PCJ	Miniature PCB Relay PCJ	PCJ	-1	12	D	3	M	-WG
Version	1	single contact							
Coil	Coil code: please refer to coil versions table								
Coil power	D	standard 200 mW							
Contact material	3	AgNi							
Contact configuration	M	1 NO contact (1 form A)							
Enclosure	Blank	flux proof							
	H	wash tight							
Version	Blank	standard version, 3 A, class A							
	WG	Product in accordance with IEC 60335-1 (domestic appliances), 5 A version only, flux proof, class F							

Other types on request

Product key	Version	Contacts	Contact material	Coil	Part number
PCJ-105D3M	flux proof	1 NO contact	AgNi	5 VDC	1721081-2
PCJ-109D3M		3 A	Class A	9 VDC	1721081-4
PCJ-112D3M				12 VDC	1721081-5
PCJ-124D3M				24 VDC	1721081-7
PCJ-105D3MH	wash tight			5 VDC	1721081-9
PCJ-109D3MH				9 VDC	1-1721081-1
PCJ-112D3MH				12 VDC	1-1721081-2
PCJ-124D3MH				24 VDC	1-1721081-4
PCJ-105D3M-WG	flux proof	1 NO contact	AgNi	5 VDC	1721547-2
PCJ-109D3M-WG		5 A	Class F	9 VDC	1721547-4
PCJ-112D3M-WG			WG version	12 VDC	1721547-5
PCJ-124D3M-WG				24 VDC	1721547-7