

Miniature PCB Relay PCJ

- 1 pole 3A/5A, 1 form A (NO) contact
- Sensitive coil 200mW
- Ambient temperature 85°C or 105°C
- RoHS compliant (Directive 2002/95/EC)
- WG version : Product in accordance to IEC60335-1



F0276-C

Typical applications
Home appliances



Approvals

VDE 40009151, UL E58304, CSA LR48471-211, CQC 03001008593
Technical data of approved types on request

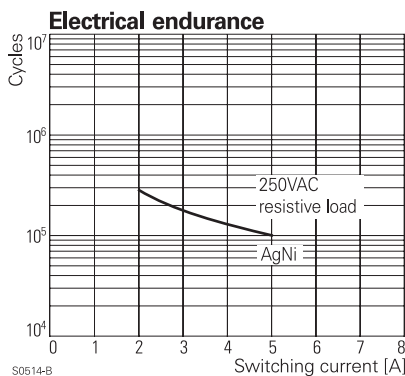
Contact Data

Contact arrangement	1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	30VDC, 250VAC
Rated current	3A/5A
Switching power	1,250VA, 150W
Contact material	AgNi
Min. recommended contact load	100mA, 5VDC
Initial contact resistance	100mΩ at 1A, 6VDC
Frequency of operation, with/without load	360/18000h ⁻¹
Operate/release time max.	10/4ms
Electrical endurance	
3A version: 250VAC, resistive,	100x10 ³ ops.
5A version: 250VAC, resistive,	100x10 ³ ops.

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
PCJ	form A (NO)	5A, 250VAC, cosφ=1, 85°C	100x10 ³
PCJ	form A (NO)	2A, 250VAC, cosφ=0.6, 85°C	100x10 ³
PCJ	form A (NO)	3A, 250VAC, cosφ=1, 105°C	100x10 ³
UL 508			
PCJ	form A (NO)	5A, 250VAC, general use, 85°C	6x10 ³
PCJ	form A (NO)	3A, 250VAC, cosφ=1, 85°C	100x10 ³
PCJ	form A (NO)	5A, 250VAC, cosφ=1, 85°C	100x10 ³
PCJ	form A (NO)	3A, 250VAC, cosφ=1, 105°C	100x10 ³

Mechanical endurance >10x10⁶ operations



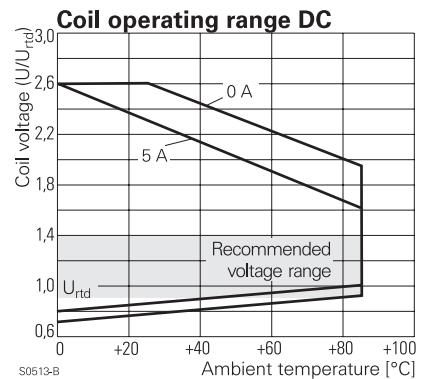
Coil Data

Coil voltage range	3 to 24VDC
Coil insulation system according UL	
Standard version:	class 105 (A)
WG version:	class 155 (F)

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
03	3	2.25	0.15	45	200
05	4	3.75	0.25	125	200
06	6	4.50	0.3	180	200
09	9	6.75	0.45	405	200
12	12	9.00	0.6	720	200
18	18	13.50	0.9	1620	200
24	24	18.00	1.2	2880	200

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



Insulation Data

Initial dielectric strength	
between open contacts	750V _{rms}
between contact and coil	4000V _{rms}
Initial surge withstand voltage	
between contact and coil	10000V _{rms}
Initial insulation resistance	1000MΩ
Clearance/creepage	
between contact and coil	≥ 7.5/8mm

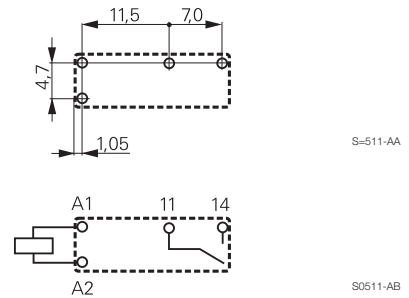
Miniature PCB Relay PCJ (Continued)

Other Data

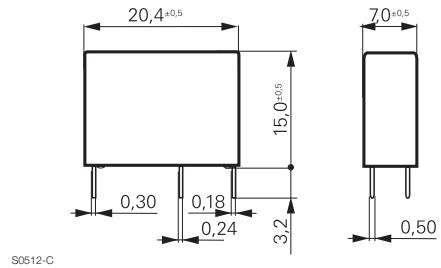
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Ambient temperature	-40 to 85°C (105°C), no icing or condensation
Category of environmental protection IEC 61810	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional)	10 to 50Hz, 1.5mm double amplitude
Shock resistance (functional) IEC 60068-2-27 (half sine)	98m/s ² , 11ms
Terminal type	PCB-THT
Weight	4g
Resistance to soldering heat THT IEC 60068-2-20	260°C/5s
Packaging/unit	box/1000 pcs.

PCB layout / terminal assignment

Bottom view on solder pins



Dimensions



Product code structure

Typical product code **PCJ 1 12 D 3 M H WG 301**

Type	PCJ Miniature PCB Relay PCJ
Version	1 Single contact
Coil	12 Coil code: please refer to coil versions table
Coil power	D Standard 200mW
Contact material	3 AgNi
Contact arrangement	M 1 form A (NO) contact
Sealing	Blank Flux proof H Wash tight
Special type	Blank Standard version WG For domestic appliances (IEC 60335-1)
Suffix	301 3A version 303 5A version 00000 Standard type

Miniature PCB Relay PCJ (Continued)

Product code	Version	Contact	Cont. material	Coil version	Coil	Sealing	Part number				
PCJ-103D3M,301	3A	1 form A (NO)	AgNi	200mW	3VDC	Flux proof	1721081-1				
PCJ-105D3M,301					5VDC		1721081-2				
PCJ-106D3M,301					6VDC		1721081-3				
PCJ-109D3M,301					9VDC		1721081-4				
PCJ-112D3M,301					12VDC		1721081-5				
PCJ-124D3M,301					24VDC		1721081-7				
PCJ-103D3MH,301					3VDC		Wash tight	1721081-8			
PCJ-105D3MH,301					5VDC	1721081-9					
PCJ-106D3MH,301					6VDC	1-1721081-0					
PCJ-109D3MH,301					9VDC	1-1721081-1					
PCJ-112D3MH,301					12VDC	1-1721081-2					
PCJ-124D3MH,301					24VDC	1-1721081-4					
PCJ-103D3M-WG					5A					3VDC	Flux proof
PCJ-105D3M-WG							5VDC			1721547-2	
PCJ-106D3M-WG	6VDC	1721547-3									
PCJ-109D3M-WG	9VDC	1721547-4									
PCJ-112D3M-WG	12VDC	1721547-5									
PCJ-124D3M-WG	24VDC	1721547-7									
PCJ-103D3MH-WG	3VDC	Wash tight	1721547-8								
PCJ-105D3MH-WG	5VDC		1721547-9								
PCJ-106D3MH-WG	6VDC		1-1721547-0								
PCJ-109D3MH-WG	9VDC		1-1721547-1								
PCJ-112D3MH-WG	12VDC		1-1721547-2								
PCJ-118D3MH-WG	18VDC		1-1721547-3								
PCJ-124D3MH-WG	24VDC		1-1721547-4								