

Slimline PCB Relay PCN

- 1 pole 3 A, 1 form A (NO) contact
- Only 5mm wide
- 3A switching current, load range 1mA up to 5A
- Sensitive coil 120mW
- Allows high function-/packing density
- Cadmium-free contacts
- Z type with reinforced insulation
- RoHS compliant (Directive 2002/95/EC)
- Haz. Loc. Version available
- Typical applications

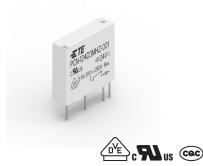
PLC, temperature control, I/O modules.

Approvals

VDE REG.-Nr.40001589, UL E82292, CQC 08001026045 Technical data of approved types on request.

Contact Data

1 from A (NO) 250VAC/30VDC 277VAC/125VDC 3A/5A 3A/5A 750VA (3A), 1250VA(5A)	
277VAC/125VDC 3A/5A 3A/5A 750VA (3A), 1250VA(5A)	
3A/5A 3A/5A 750VA (3A), 1250VA(5A)	
3A/5A 750VA (3A), 1250VA(5A)	
750VA (3A), 1250VA(5A)	
A siNE is a laborate at a)
Agini, gola plated	
bifurcated contact	
e) 5VDC,100mA	
30mΩ at 100mA, 6VDC	
10/300min-1	
100x10 ³ ops.	
30x10 ³ ops.	
	Cycles
	100x103
	100x103
	30x103
	70x10 ³
	100x103
	6x10 ³
	6x10 ³
	30x10 ³
>10x10 ⁶ operations	
	AgNi, gold plated bifurcated contact e) 5VDC,100mA 30mΩ at 100mA, 6VDC 10/300min ⁻¹ 100x10 ³ ops. 30x10 ³ ops.



Coil Data

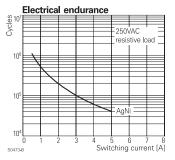
een Bata	
Coil voltage range	3 to 24VDC
Operative range, IEC 61810	1
Coil insulation system according UL	Class A
	Class F type available upon request

Standard D coil version (120mW), DC coil

Coil	Rated	Operate	Release	Coil	Rated coil		
code	voltage	voltage	voltage	resistance	power		
	VDC	VDC	VDC	Ω±10%	mW		
03	3	2.1	0.3	75	120		
04	4.5	3.15	0.45	169	120		
05	5	3.5	0.5	208	120		
06	6	4.2	0.6	300	120		
09	9	6.3	0.9	675	120		
12	12	8.4	1.2	1200	120		
18	18	12.6	1.8	2700	120		
23	23.5	16.45	2.35	4602	120		
24	24	16.8	2.4 4800		120		
Standar	d L coil versi	ion (100mW),	DC coil				
Coil	Rated	Operate	Release	Coil	Rated coil		
code	voltage	voltage	voltage	resistance	power		
	VDC	VDC	VDC	Ω±10%	mW		
03	3	2.1	0.3	90	100		
04	4.5	3.15	0.45	202	100		
05	5	3.5	0.5	250	100		
06	6	4.2	0.6	360	100		
09	9	6.3	0.9	810	100		
12	12	8.4	1.2	1440	100		
18	18	12.6	1.8	3240	100		
23	23.5	16.45	2.35	5522	100		
24	24	16.8	2.4	5760	100		

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

Max. DC load breaking capacity



Coil operating range DC (123,0 10,0 10,0 2,6 voltage 0 A Coil ЗA 18 1,4 Recommended voltage range Urtd 1,0 0,6E +100 0 +20+40+60+80Ambient temperature [°C] S0475-C

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Catalog product data, 'Definitions' section, application notes and all specifications are subject to change. 1



Slimline PCB Relay PCN (Continued)

Insulation Data	
Initial dielectric strength	
between open contacts	750V _{ms}
between contact and coil	3000V
Initial surge withstand voltage	
between contact and coil	4000V
Clearance/creepage	
between contact and coil	>3.5mm
Tracking index of relay base	PTI600

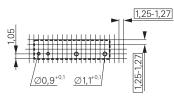
Other Data

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

www.te.com	1/customersupport/ronssupportcenter
Ambient temperature	-40 to 85°C
Category of environmental protection	
IEC 61810	RTIII - wash tight
Vibration resistance (functional)	10 to 55Hz, 1.5mm
Vibration resistance (destructive)	10 to 55Hz, 1.5mm
Shock resistance (functional)	
IEC 60068-2-27 (half sine)	min. 98m/s², 11ms
Shock resistance (destructive)	min. 980m/s², 6ms
Terminal type	PCB-THT
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/5s
Packaging/unit	box/2000 pcs.

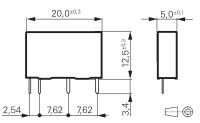
PCB layout / terminal assignment

Bottom view on solder pins





Dimensions



Product code structure	Typical product code	PCN	1	05	D	3	м	н	Z	,001
Type PCN Small Slim Power PCB Relay F	PCN									
Number of poles			1							
1 1pole										
Coil										
Coil code: please refer to coil versions	table (e.g. 05=5VDC)									
Coil version										
D standard 120mW L	high sensitivity 100mW									
Contact material										
3 AgNi										
Contact arrangement										
M 1 form A, 1 NO contact										
Enclosure										
H RTIII - wash tight									ļ	
Insulation										
Z Reinforced insulation (tracking resis	stance of relay base, case PTI	600)								
Version										
00000 3A model										
00100 5A model										
-EX1 according to IEC60079-15 = 20	010									

Product code	Contact	Coil voltage	Coil	Cont. material	Enclosure	Rating	Part number
PCN-105D3MHZ,000	1-pole	5VDC	120mW	AgNi	RTIII - wash tight	ЗA	3-1461491-0
PCN-106D3MHZ,000		6VDC					3-1461491-1
PCN-112D3MHZ,000		12VDC					3-1461491-3
PCN-124D3MHZ,000		24VDC					3-1461491-6
PCN-124D3MHZ,001						5A	3-1461491-8 All
PCN-112D3MZ-EX1,00400		12VDC					2071520-1

Note: This list represents the most common types and does not show all variants covered by this datasheet, other types on request.

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Mouser Electronics

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TE Connectivity: PCN-105D3MHZ,001B