Slimline PCB Relay PCN

- **1 pole 3 A, 1 NO contact**
- **Only 5 mm wide**
- **3 A switching current; 5 A version available**
- **Load range 1 mA up to 3 A**
- **Sensitive coil 120 mW**
- **Allows high function- / packing density**
- **Cadmium-free contacts**
- **Z type with reinforced insulation**



F0258-B

Applications

Centralized and decentralized heating control, extremely narrow interface elements, interface technology, timers, PLC's, I/O modules, I/O-ports

Approvals

VDE REG.-Nr. 6166; cULus E82292
Technical data of approved types on request

Contact data

Contact configuration	1NO
Contact set	bifurcated contact
Type of interruption	micro disconnection
Rated voltage / max. switching voltage AC	250/277 VAC
Rated current	3 A
Limiting continuous current	3 A
Maximum breaking capacity AC	750 VA
Limiting making capacity, max 4 s, duty factor 10%	5 A
Contact material	AgNi90/10
Minimum contact load	5V / 1mA
Rated frequency of operation with / without load	10 / 600 min^{-1}
Operate- / release time	max. 8/3 ms
Bounce time NO / NC contact	max. 2/2 ms

Contact ratings

Type	Contact	Load	Ambient temp. [°C]	Cycles
IEC 61810				
PCN-1..D3MHZ	NO	3 A, 250 VAC, cosφ=1	70°C	$100x10^3$
PCN-1..D3MHZ-001	NO	5 A, 250 VAC, cosφ=1	85°C	$30x10^3$
UL 508				
PCN-1..D3MHZ	NO	3 A, 250 VAC, resistive	25°C	$100x10^3$
PCN-1..D3MHZ	NO	Pilot duty, B300	25°C	$6x10^3$
PCN-1..D3MHZ	NO	Pilot duty, R300	25°C	$6x10^3$
PCN-1..D3MHZ	NO	9 A LRA, 1,5A FLA, 240 VAC	45°C	$30x10^3$

Coil data

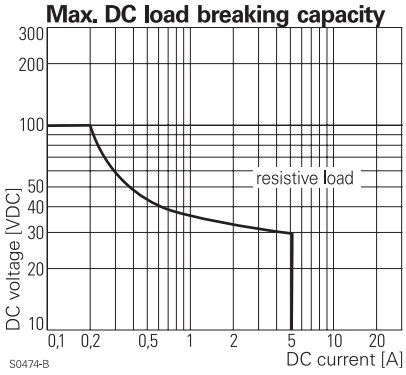
Rated coil voltage range DC coil	5...24 VDC
Operative range to IEC 61810	1

Coil versions, DC-coil

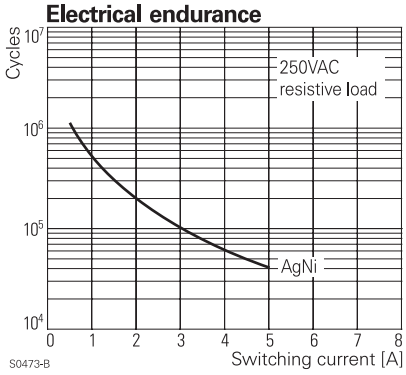
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
005	5	3.5	0.5	208±10%	120
006	6	4.2	0.6	300±10%	120
009	9	6.3	0.9	675±10%	120
012	12	8.4	1.2	1200±10%	120
024	24	16.8	2.4	4800±10%	120

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

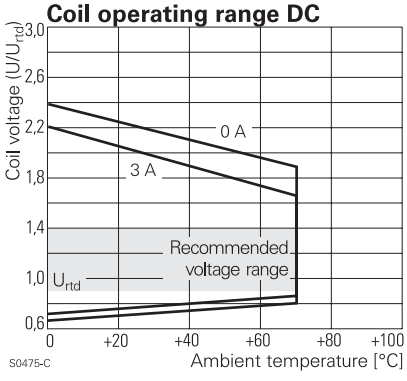
Max. DC load breaking capacity



Electrical endurance



Coil operating range DC



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www.tycoelectronics.com
www.schrackrelays.com

Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and processing information only to be used together with the 'Definitions' section in the catalogue or at schrackrelays.com in the 'Schrack' section.

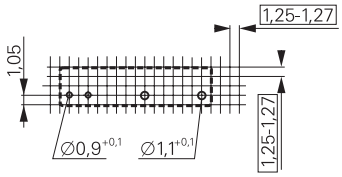
Specifications subject to change.

Slimline PCB Relay PCN (Continued)

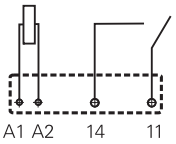
Insulation	
Dielectric strength coil-contact circuit	3000 V_{rms}
open contact circuit	750 V_{rms}
Clearance / creepage coil-contact circuit	≥ 3,5 / 3,5 mm
Material group of insulation parts	I
Tracking index of relay base	PTI 600
Insulation to IEC 61810-1	
Type of insulation coil-contact circuit	reinforced
open contact circuit	micro disconnection
Rated insulation voltage	320 V
Pollution degree	2
Rated voltage system	277 V
Overvoltage category as basic insulation	III
Overvoltage category as reinforced insulation	II

Other data	
Mechanical endurance	20x10^6 cycles
Material	
RoHS - Directive 2002/95/EC	compliant as per product date code 0424
Environment	
Ambient temperature range	-30...+70 °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	RTIII - wash tight
Processing	
Mounting	pcb
Mounting position	any
Minimum mounting distance	≥ 0 mm
Resistance to soldering heat wash tight version	260°C / 5 s
Relay weight	3 g
Packaging unit	25 / 2000 pcs

PCB layout / terminal assignment
Bottom view on solder pins



S0471-AA



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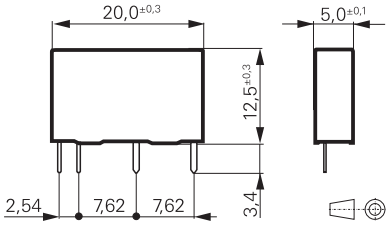
Dimensions



S0472-B

Product key Typical product key **PCN -1 06 D 3 M H Z**

Type
PCN Slim PCB Relay PCN

Number of contacts
1 1 pole

Coil
Coil code: please refer to coil versions table

Coil version
D standard 120 mW

Contact material
3 AgNi

Contact configuration
M 1 NO contact (1 form A)

Version
H wash tight

Insulation
Z tracking resistance of relay base PTI 600

Version
Blank 3 A version **001** 5 A version

Other types on request

Product key	Contacts	Coil	Coil	Contacts	Version	Part number
PCN-105D3MHZ	1-pole	5 VDC	standard	1 NO contact	wash tight	3-1461491-0
PCN-106D3MHZ		6 VDC	120 mW	AgNi	high insulation	3-1461491-1
PCN-112D3MHZ		12 VDC				3-1461491-3
PCN-124D3MHZ		24 VDC				3-1461491-6

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