

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

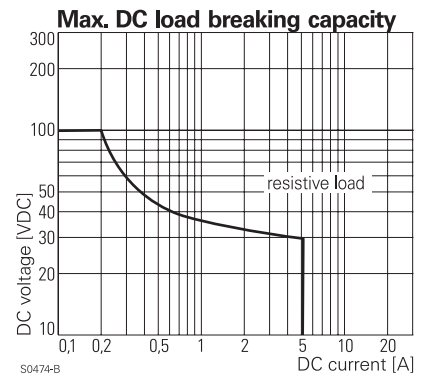
Coil data

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

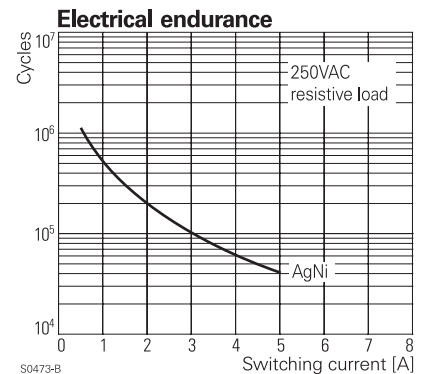
Coil versions, DC-coil

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

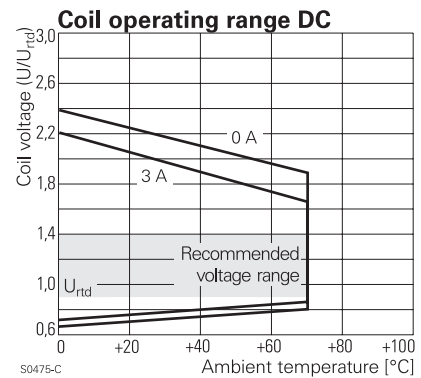
All figures are given for coil without preenergization, at ambient temperature +23°C
 Other coil voltages on request



S0474-B



S0473-B



S0475-C

Slimline PCB Relay PCN (Continued)

Insulation

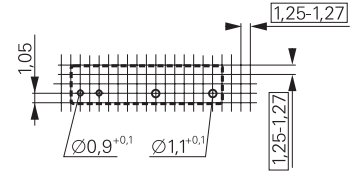
Dielectric strength coil-contact circuit	3000 V _{rms}
open contact circuit	750 V _{rms}
Clearance / creepage coil-contact circuit	≥ 3,5 / 3,5 mm
Material group of insulation parts	I
Tracking index of relay base	PTI 600
Insulation to IEC 61810-1	
Type of insulation coil-contact circuit	reinforced
open 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

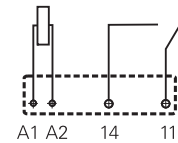
Mechanical endurance	20x10 ⁶ cycles
Material	RoHS - Directive 2002/95/EC compliant as per product date code 0424
Environment	
Ambient temperature range	-30...+70 °C
Vibration resistance (function) NO / NC contact	10 g
Shock resistance (function) NO / NC contact	10 g
Shock resistance (destruction)	100 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

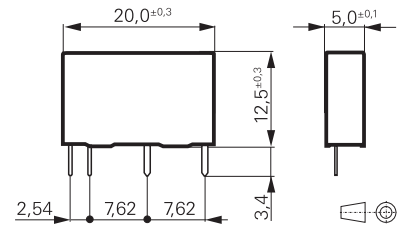


S0471-AA



S0471-AB

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