

Slim 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
- RoHS compliant (Directive 2002/95/EC) as per product date code 0424



F0258-A

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; c **RU** us E82292
 Technical data of approved types on request

Contact data

Contact configuration	1NO
Contact set	bifurcated contact
Type of interruption	micro disconnection
Rated current	3 A
Rated voltage / max.switching voltage AC	250/277 VAC
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
Mechanical endurance	20x10 ⁶ cycles
Rated frequency of operation with / without load	10 / 1200 min ⁻¹

Contact ratings

Type	Load	Cycles
PCN-1..D3M.(-,H).(-,Z)	3 A, 250 VAC resistive, 70°C, 20 cycles/min, EN61810-1	1x10 ⁵
PCN-1..D3M.(-,H).(-,Z)	3 A, 30 VDC, resistive, 70°C, 20 cycles/min, EN61810-1	1x10 ⁵
PCN-1..D3M.(-,H).(-,Z)	Pilot Duty B300 240 VAC, UL508	6x10 ³
PCN-1..D3M.(-,H).(-,Z)	Pilot Duty B300 120 VAC, UL508	6x10 ³
PCN-1..D3M.(-,H).(-,Z)	001 5A, 250 VAC res. 85°C, 10 cycles/min, EN61810-1	3x10 ⁴

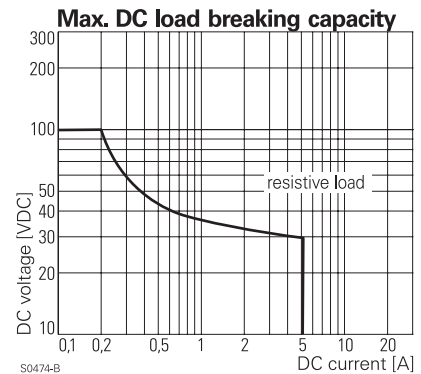
Coil data

Rated coil voltage range DC coil	DC5...24 VDC
Coil power DC coil	typ 120 mW
Operative range	1

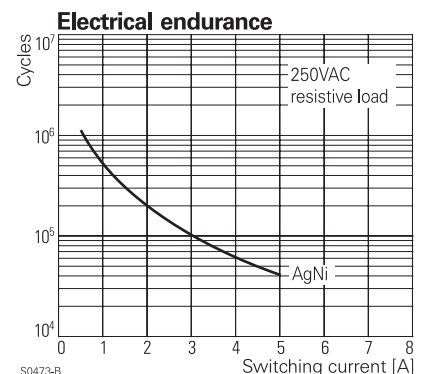
Coil versions, DC-coil

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

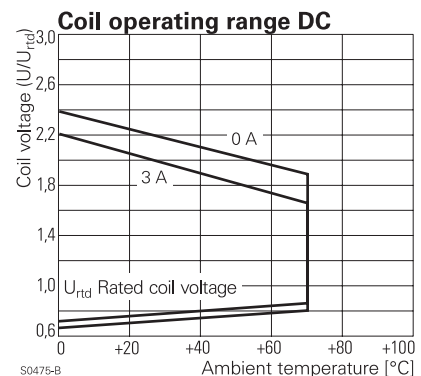
All figures are given for coil without preenergization, at ambient temperature +23°C
 Other coil voltages on request



S0474-B



S0473-B



S0475-B

Slim PCB Relay PCN (Continued)

Insulation

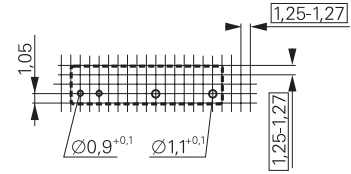
Dielectric strength coil-contact circuit	3000 V _{rms}
open contact circuit	750 V _{rms}
Clearance / creepage coil-contact circuit	≥ 3,5 / 3,5 mm
Material group of insulation parts	I
Tracking index of relay base	PTI 600
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	reinforced
open contact circuit	functional
Rated insulation voltage	277 V
Pollution degree	2
Rated voltage system	277 V
Overvoltage category as basic insulation	III
Overvoltage category as reinforced insulation	II

Other data

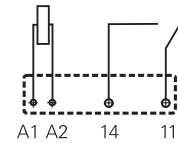
RoHS - Directive 2002/95/EC	compliant as per product date code 0424
Flammability class according to UL94	V-0
Ambient temperature range	-30...+70 °C
Operate- / release time	typ. 5/2 ms
Bounce time NO / NC contact	< 1ms
Vibration resistance (function) NO / NC contact	10 g
Shock resistance (function) NO / NC contact	10 g
Shock resistance (destruction)	100 g
Category of protection	RTIII - wash tight
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

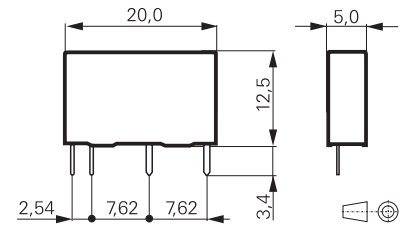


S0471-AA



S0471-AB

Dimensions



S0472-A

Product key

Type	P C N	1		D	3	M	H	Z	
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								
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