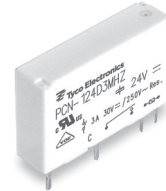


Slimline PCB Relay PCN

- 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)



Typical applications
PLC, temperature control, I/O modules.



Approvals

VDE REG.-Nr.6166, UL E82292, CQC 08001026045
Technical data of approved types on request.

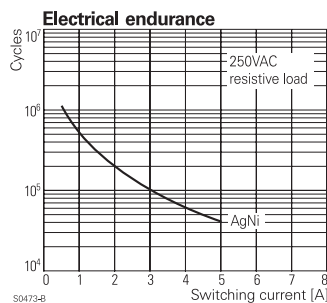
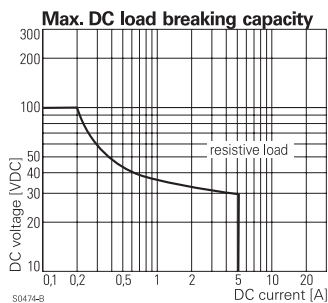
Contact Data

| | |
|-------------------------------------------|--------------------------|
| Contact arrangement | 1 from A (NO) |
| Rated voltage | 250VAC/30VDC |
| Max. switching voltage | 277VAC/125VDC |
| Rated current | 3A/5A |
| Limiting continuous current | 3A/5A |
| Breaking capacity max. | 750VA (3A), 1250VA(5A) |
| Contact material | AgNi, gold plated |
| Contact style | bifurcated contact |
| Min. recommended contact load (reference) | 5VDC, 1mA |
| Initial contact resistance | 30mΩ at 100mA, 6VDC |
| Frequency of operation, with/without load | 10/300min ⁻¹ |
| Electrical endurance | |
| 3A, 250VAC, resistive, +70°C | 100x10 ³ ops. |
| 5A, 250VAC, resistive, +85°C | 30x10 ³ ops. |

Contact ratings

| Load | Cycles |
|---------------------------------|---------------------|
| IEC 61810 | |
| 3A, 250VAC, cosφ=1, +70°C | 100x10 ³ |
| 3A/30VDC, L/R=0ms, +70°C | 100x10 ³ |
| 5A, 250VAC, cosφ=1, +85°C | 30x10 ³ |
| 5A 30VDC, L/R=0ms, +85°C | 70x10 ³ |
| UL 508 | |
| 3A, 250VAC, resistive, +25°C | 100x10 ³ |
| Pilot duty, B300, +25°C | 6x10 ³ |
| Pilot duty, R300, +25°C | 6x10 ³ |
| 9A LRA, 1.5A FLA, 240VAC, +45°C | 30x10 ³ |

Mechanical endurance, DC coil >10x10⁶ operations



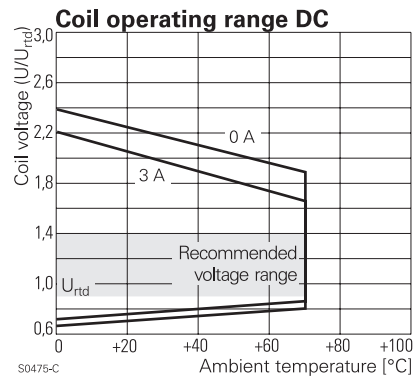
Coil Data

| | |
|-------------------------------------|-----------------------------------------------------|
| Coil voltage range | 3 to 24VDC |
| Operative range, IEC 61810 | 1 |
| Coil insulation system according UL | Class155(F), Class F type available upon request |

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 | 2.1 | 0.3 | 75 | 120 |
| 05 | 5 | 3.5 | 0.5 | 208 | 120 |
| 06 | 6 | 4.2 | 0.6 | 300 | 120 |
| 09 | 9 | 6.3 | 0.9 | 375 | 120 |
| 12 | 12 | 8.4 | 1.2 | 1200 | 120 |
| 24 | 24 | 16.8 | 2.4 | 4800 | 120 |

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 | 3000V _{rms} |
| Initial surge withstand voltage | |
| between contact and coil | 4000V |
| Clearance/creepage | |
| between open contacts | >3.5mm |
| between contact and coil | >3.5mm |
| Tracking index of relay base | PTI600 |

Slimline PCB Relay PCN (Continued)

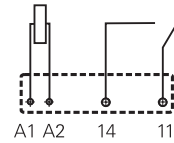
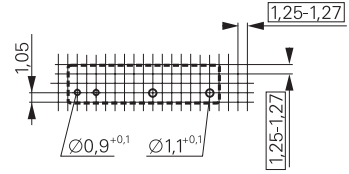
Other Data

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

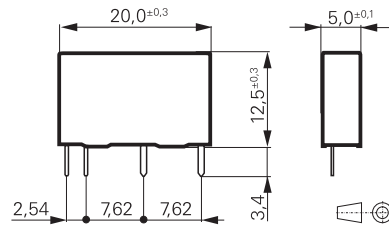
| | |
|--------------------------------------|--------------------------------|
| Ambient temperature | -30 to 85°C |
| Category of environmental protection | RTIII - wash tight |
| IEC 61810 | |
| Vibration resistance (functional) | 10 to 55Hz, 1.5mm |
| Vibration resistance (destructive) | 10 to 55Hz, 1.5mm |
| Shock resistance (functional) | |
| IEC 60068-2-27 (half sine) | min. 98m/s ² , 11ms |
| Shock resistance (destructive) | min. 980m/s ² , 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 | M | H | Z | ,001 |
| Type | PCN Small Slim Power PCB Relay PCN | | | | | | | | | |
| Number of poles | 1 1pole | | | | | | | | | |
| Coil | Coil code: please refer to coil versions table (e.g. 05=5VDC) | | | | | | | | | |
| Coil version | D standard 120mW | | | | | | | | | |
| Contact material | 3 AgNi | | | | | | | | | |
| Contact arrangement | M 1 form A, 1 NO contact | | | | | | | | | |
| Enclosure | H RTIII - wash tight | | | | | | | | | |
| Insulation | Z Reinforced insulation (tracking resistance of relay base, case PTI 600) | | | | | | | | | |
| Version | 00000 3A model 00100 5A model | | | | | | | | | |

| Product code | Contact | Coil voltage | Coil | Cont. material | Enclosure | Rating | Part number |
|------------------|---------|--------------|-------|----------------|--------------------|--------|-------------|
| PCN-105D3MHZ,000 | 1-pole | 5VDC | 120mW | AgNi | RTIII - wash tight | 3A | 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 |