# Printed-circuit board connector - PTCM 0,5/ 6-PI-2,5 WH - 1015246

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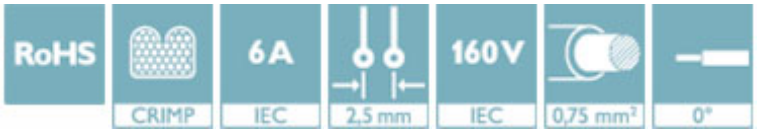
The figure shows a 5-position version

PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.75 mm², number of positions: 6, pitch: 2.5 mm, connection method: Crimp connection, color: white, contact surface: Tin

## Your advantages

- White design: Stable color when welding and during use
- High current carrying capacity of 6 A in very compact dimensions
- Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections
- Cost-effective connection of crimped conductors in large quantities
- Tools for manual and automatic crimping available as an option




## Key Commercial Data

| | |
|---|---|
| Packing unit | 100 pc |
| GTIN | 4 055626 495552 |
| GTIN | 4055626495552 |

## Technical data

### Item properties

| | |
|---|---|
| Brief article description | Printed-circuit board connector |
| Plug-in system | COMBICON COMPACT PTSM |
| Type of contact | Male connector |
| Range of articles | PTCM 0,5/..-PI |
| Pitch | 2.5 mm |
| Number of positions | 6 |
| Connection method | Crimp connection |
| Number of levels | 1 |
| Number of connections | 6 |
| Number of potentials | 6 |

# Printed-circuit board connector - PTCM 0,5/ 6-PI-2,5 WH - 1015246

## Technical data

### Electrical parameters

| | |
|---|---|
| Nominal current | 6 A |
| Nom. voltage | 160 V |
| Rated voltage | 160 V |
| Rated voltage (III/2) | 160 V |
| Rated voltage (II/2) | 320 V |
| Rated surge voltage (III/3) | 2.5 kV |
| Rated surge voltage (III/2) | 2.5 kV |
| Rated surge voltage (II/2) | 2.5 kV |

### Connection capacity

| | |
|---|---|
| Connection method | Crimp connection |
| Conductor cross section flexible | 0.14 mm² ... 0.75 mm² (Maximum external diameter of the insulation 1.9 mm) |
| Conductor cross section AWG / kcmil | 26 ... 18 (Maximum external diameter of the insulation 1.9 mm) |
| Stripping length | 4.1 mm ... 4.5 mm |

### Material data - housing

| | |
|---|---|
| Insulating material | PA |
| Insulating material group | I |
| CTI according to IEC 60112 | 600 |
| Flammability rating according to UL 94 | V0 |
| Glow wire flammability index GWFI according to EN 60695-2-12 | 850 |
| Glow wire ignition temperature GWIT according to EN 60695-2-13 | 775 |
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C |

### Dimensions for the product

| | |
|---|---|
| Length [ l ] | 18.3 mm |
| Width [ w ] | 16.7 mm |
| Height [ h ] | 5 mm |
| Pitch | 2.5 mm |
| Height (without solder pin) | 5 mm |

### Packaging information

| | |
|---|---|
| Type of packaging | packed in cardboard |
| Pieces per package | 100 |
| Denomination packing units | Pcs. |

### Ambient conditions

| | |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 100 °C (dependent on the derating curve) |

### Termination and connection method

### Mechanical tests according to standard

# Printed-circuit board connector - PTCM 0,5/ 6-PI-2,5 WH - 1015246

## Technical data

### Mechanical tests according to standard

| | |
|---|---|
| Test specification | IEC 61984 |
| Visual examination | Test passed IEC 60512-1-1:2002-02 |
| Dimensional test | Test passed IEC 60512-1-2:2002-02 |
| Resistance of marking | Test passed IEC 60068-2-70:1995-12 |
| Result | Test passed |
| Specification | IEC 60512-13-2:2006-02 |
| No. of cycles | 25 |
| Insertion strength per pos. approx. | 3 N |
| Withdraw strength per pos. approx. | 2 N |
| Polarization and coding | Test passed IEC 60512-13-5:2006-02 |
| Result | Test passed |
| Specification | IEC 60512-15-1:2008-05 |
| Test force per pos. | 20 N |

### Air clearances and creepage distances

| | |
|---|---|
| Clearances and creepage distances | IEC 60664-1:2007-04 |
| Specification | IEC 60664-1:2007-04 |
| Minimum clearance - inhomogeneous field (III/3) | 1.5 mm |
| Minimum clearance - inhomogeneous field (III/2) | 1.5 mm |
| Minimum clearance - inhomogeneous field (II/2) | 1.5 mm |
| Minimum creepage distance value (III/3) | 2 mm |
| Minimum creepage distance value (III/2) | 0.8 mm |
| Minimum creepage distance value (II/2) | 1.6 mm |

### Current carrying capacity / derating curves

| | |
|---|---|
| Specification | IEC 61984 |

### Mechanical tests (A)

| | |
|---|---|
| Test specification | IEC 61984 |
| Insertion strength per pos. approx. | 3 N |
| Withdraw strength per pos. approx. | 2 N |
| Polarization when inserted requirement >20 N | Test passed |
| Contact holder in insert requirements >20 N | Test passed |

### Durability tests (B)

| | |
|---|---|
| Specification | IEC 60512-9-1:2010-03 |
| Contact resistance $R_1$ | 3.2 mΩ |
| Insertion/withdrawal cycles | 25 |
| Contact resistance $R_2$ | 3.4 mΩ |
| Impulse withstand voltage at sea level | 2.95 kV |
| Power-frequency withstand voltage | 1.39 kV |

### Climatic tests (D)

# Printed-circuit board connector - PTCM 0,5/ 6-PI-2,5 WH - 1015246

## Technical data

### Climatic tests (D)

| | |
|---|---|
| Specification | ISO 6988:1985-02 |
| Cold stress | -55 °C/2 h |
| Thermal stress | 105 °C/168 h |
| Corrosive stress | 0.2 $dm^3$ $SO_2$ on 300 $dm^3$/40 °C/1 cycle |
| Impulse withstand voltage at sea level | 2.95 kV |
| Power-frequency withstand voltage | 1.39 kV |

### Environmental and durability tests (E)

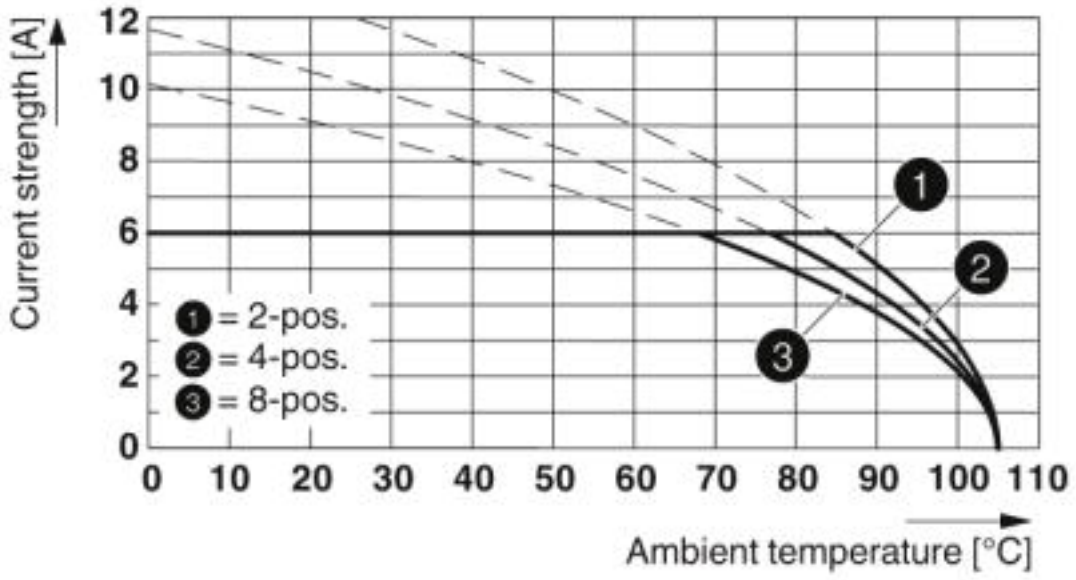
| | |
|---|---|
| Specification | IEC 61984:2008-10 |
| Result, degree of protection, IP code | Finger safety with IP20 test finger |

### Environmental Product Compliance

| | |
|---|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

## Drawings

Diagram




Type: PTCM 0,5/...-PL-2,5 WH with PTCM 0,5/...-PI-2,5 WH

## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 10.0.1 | 27440309 |
| eCl@ss 4.0 | 27260700 |
| eCl@ss 4.1 | 27260700 |

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## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 5.0 | 27260700 |
| eCl@ss 5.1 | 27260700 |
| eCl@ss 6.0 | 27260700 |
| eCl@ss 7.0 | 27440309 |
| eCl@ss 8.0 | 27440309 |
| eCl@ss 9.0 | 27440309 |

### ETIM

| | |
|---|---|
| ETIM 6.0 | EC002638 |
| ETIM 7.0 | EC002638 |

## Approvals

### Approvals

Approvals

cULus Recognized / EAC

Ex Approvals

### Approval details

cULus Recognized http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-20101209

| | B | D |
|---|---|---|
| Nominal voltage UN | 150 V | 150 V |
| Nominal current IN | 5 A | 5 A |
| mm²/AWG/kcmil | 22-18 | 22-18 |

EAC B.01687

## Accessories

### Accessories

Crimp contact

# Printed-circuit board connector - PTCM 0,5/ 6-PI-2,5 WH - 1015246

## Accessories

Accessories - PTCM-MP-PI 0,34-0,75 R - 1013987

Crimp contact, type of contact: Male connector, connection method: Crimp connection, contact surface: Tin

Accessories - PTCM-MP-PI 0,14-0,5 R - 1013988

Crimp contact, type of contact: Male connector, connection method: Crimp connection, contact surface: Tin

Accessories - PTCM-MP-PI 0,34-0,75 - 1013989

Crimp contact, type of contact: Male connector, connection method: Crimp connection, contact surface: Tin

Accessories - PTCM-MP-PI 0,14-0,5 - 1013990

Crimp contact, type of contact: Male connector, connection method: Crimp connection, contact surface: Tin

## Crimping tool

Crimping pliers - CRIMPFOX-P CC 0.75 L - 1064998

Crimping pliers, for COMBICON crimp connectors with cross section: 0.14 ... 0.75 mm². Unlockable pressure lock, precise parallel crimping, front entry, B crimp, incl. 2 positioning aids

## Additional products

# Printed-circuit board connector - PTCM 0,5/ 6-PI-2,5 WH - 1015246

## Accessories

Printed-circuit board connector - PTSM 0,5/ 6-P-2,5 WH - 1704859

PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 6, pitch: 2.5 mm, connection method: Push-in spring connection, color: white, contact surface: Tin

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Feed-through header - PTSM 0,5/ 6-HHI-2,5-SMD WHR44 - 1707998

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 6, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, Article with anti-rotation pin

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Feed-through header - PTSM 0,5/ 6-HHI0-2,5-SMD WHR44 - 1815235

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 6, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry

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Feed-through header - PTSM 0,5/ 6-HHI-2,5-THR WH R32 - 1815028

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 6, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: THR soldering, solder pin [P]: 2.1 mm

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Printed-circuit board connector - PTSM 0,5/ 6-PL-2,5 WH - 1709463

PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 6, pitch: 2.5 mm, connection method: Push-in spring connection, color: white, contact surface: Tin

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# Printed-circuit board connector - PTCM 0,5/ 6-PI-2,5 WH - 1015246

## Accessories

Printed-circuit board connector - PTCM 0,5/ 6-PL-2,5 WH - 1015460

PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.75 mm², number of positions: 6, pitch: 2.5 mm, connection method: Crimp connection, color: white, contact surface: Tin



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