

Printed-circuit board connector - PTCM 0,5/ 5-PL-2,5 WH - 1015461

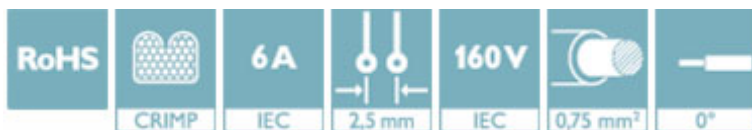
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PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.75 mm², number of positions: 5, pitch: 2.5 mm, connection method: Crimp connection, color: white, contact surface: Tin




Your advantages

- ✓ White design: Stable color when welding and during use
- ✓ High current carrying capacity of 6 A in very compact dimensions
- ✓ Intuitive locking mechanism prevents accidental disconnection
- ✓ 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 496443 |
| GTIN | 4055626496443 |

Technical data

Item properties

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

Electrical parameters

Printed-circuit board connector - PTCM 0,5/ 5-PL-2,5 WH - 1015461

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 mm ² ... 0.75 mm ² (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 - contact

| | |
|-------------------------|---|
| Note | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201 |
| Contact material | Cu alloy |
| Surface characteristics | hot-dip tin-plated |

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] | 16.2 mm |
| Width [w] | 21.96 mm |
| Height [h] | 3.9 mm |
| Pitch | 2.5 mm |
| Height (without solder pin) | 3.9 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 |
|---|------------------|

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Ambient conditions

| | |
|---------------------------------|---|
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 105 °C (dependent on the derating curve) |

Termination and connection method

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) | 1.5 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 | 2 mΩ |
| Insertion/withdrawal cycles | 25 |

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Technical data

Durability tests (B)

| | |
|--|------------------|
| Contact resistance R_2 | 2.1 m Ω |
| Impulse withstand voltage at sea level | 2.95 kV |
| Power-frequency withstand voltage | 1.39 kV |
| Insulation resistance, neighboring positions | > 0,4 T Ω |

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)

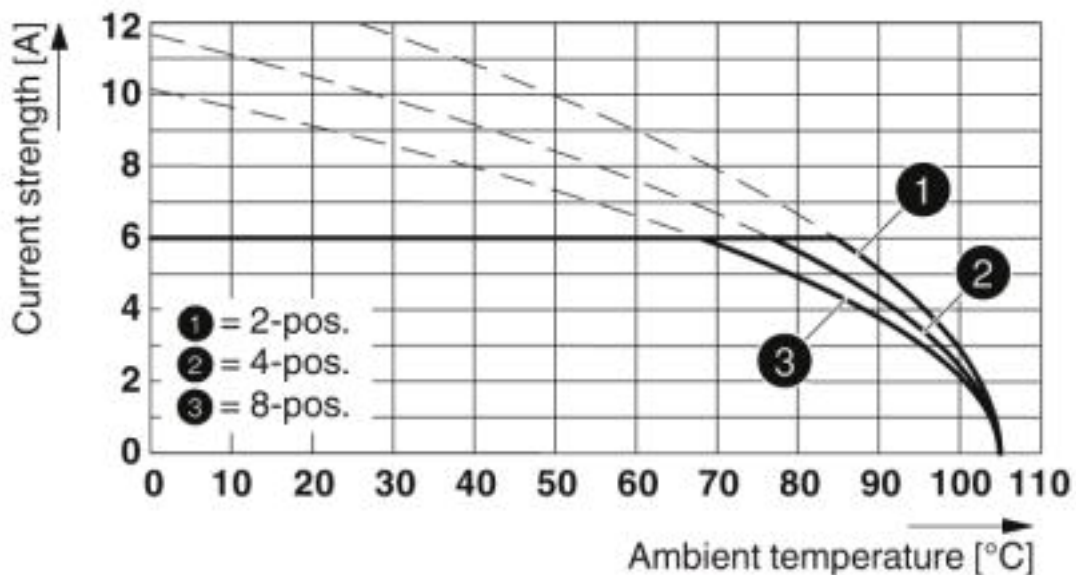
| | |
|---------------------------------------|--|
| Specification | IEC 61984:2008-10 |
| Result, degree of protection, IP code | Back of hand safety with IP10 access probe |

Environmental Product Compliance

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

Drawings

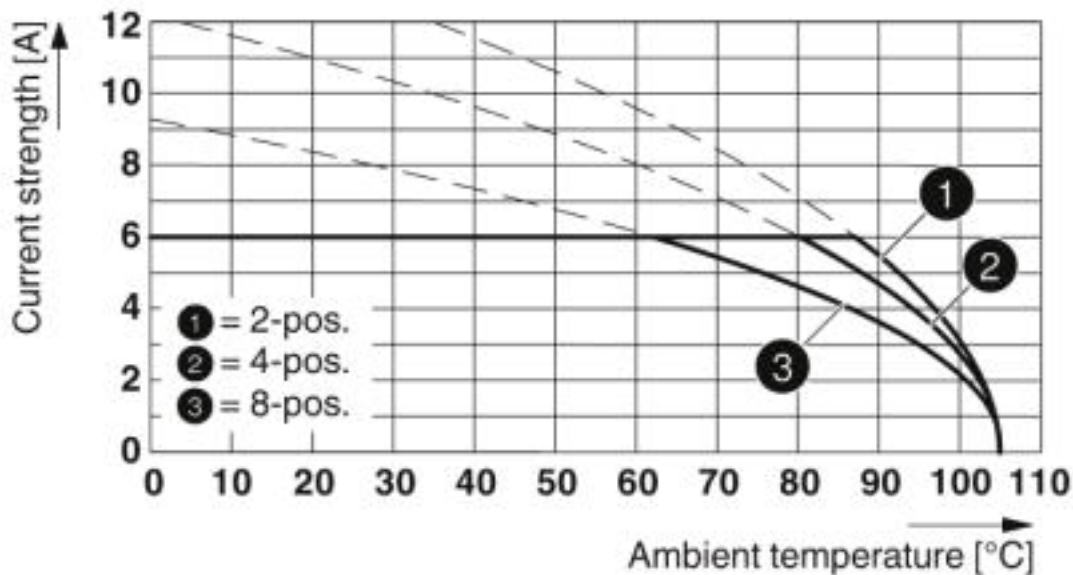
Diagram



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

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Diagram



Type: PTCM 0,5/...-PL-2,5 WH with PTSM 0,5/...-HH-2,5-THR WH R...

Classifications

eCl@ss

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

Printed-circuit board connector - PTCM 0,5/ 5-PL-2,5 WH - 1015461

Approvals

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 | 6 A | 6 A | |
| mm ² /AWG/kcmil | 22-18 | 22-18 | |

| | | |
|-----|--|---------|
| EAC | | B.01687 |
|-----|--|---------|

Accessories

Accessories

Crimp contact

Accessories - PTCM-MP-P 0,34-0,75 R - 1013777



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

Accessories - PTCM-MP-P 0,14-0,5 R - 1013778



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

Accessories - PTCM-MP-P 0,34-0,75 - 1013780



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

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Accessories

Accessories - PTCM-MP-P 0,14-0,5 - 1013781



Crimp contact, type of contact: Female 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

Feed-through header - PTSM 0,5/ 5-HH0-2,5-SMD WH R32 - 1814948



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry

Feed-through header - PTSM 0,5/ 5-HV-2,5-SMD WH R44 - 1778722



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, 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

Feed-through header - PTSM 0,5/ 5-HV0-2,5-SMD WH R44 - 1839224



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry

Printed-circuit board connector - PTCM 0,5/ 5-PL-2,5 WH - 1015461

Accessories

Feed-through header - PTSM 0,5/ 5-HTB-2,5-SMD WH R44 - 1830155



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry

Feed-through header - PTSM 0,5/ 5-HH-2,5-THR WH R32 - 1814870



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.1 mm

Feed-through header - PTSM 0,5/ 5-HV-2,5-THR WH R32 - 1815293



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm

Printed-circuit board connector - PTSM 0,5/ 5-PI-2,5 WH - 1709453



PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, pitch: 2.5 mm, connection method: Push-in spring connection, color: white, contact surface: Tin

Feed-through header - PTSM 0,5/ 5-HH-2,5-SMD WH R32 - 1708008



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of positions: 5, 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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Accessories

Printed-circuit board connector - PTCM 0,5/ 5-PI-2,5 WH - 1015245



PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.75 mm², number of positions: 5, pitch: 2.5 mm, connection method: Crimp connection, color: white, contact surface: Tin

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