

# Printed-circuit board connector - PTCM 0,5/ 3-PL-2,5 WH - 1015463

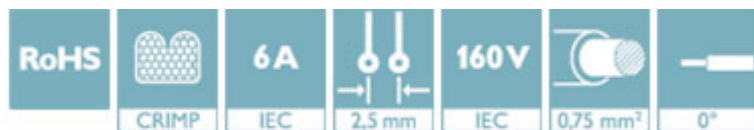
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PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.75 mm<sup>2</sup>, number of positions: 3, pitch: 2.5 mm, connection method: Crimp connection, color: white, contact surface: Tin

## 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	250 pc
GTIN	 4 055626 495965
GTIN	4055626495965

## 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	3
Connection method	Crimp connection
Number of levels	1
Number of connections	3
Number of potentials	3

### Electrical parameters

# Printed-circuit board connector - PTCM 0,5/ 3-PL-2,5 WH - 1015463

## 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 <sup>2</sup> ... 0.75 mm <sup>2</sup> (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 ]	26.96 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	250
Denomination packing units	Pcs.

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
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## Technical data

### 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
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### 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 <sub>1</sub>	2 mΩ
Insertion/withdrawal cycles	25

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## Technical data

### Durability tests (B)

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

### 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 <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /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)

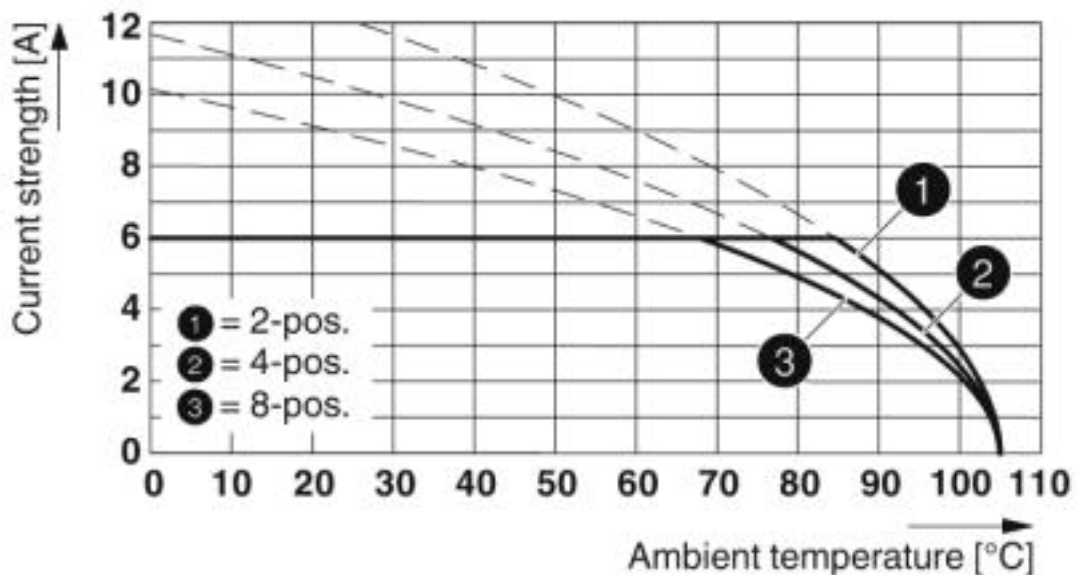
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Back of hand safety with IP10 access probe

### Environmental Product Compliance

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

## Drawings

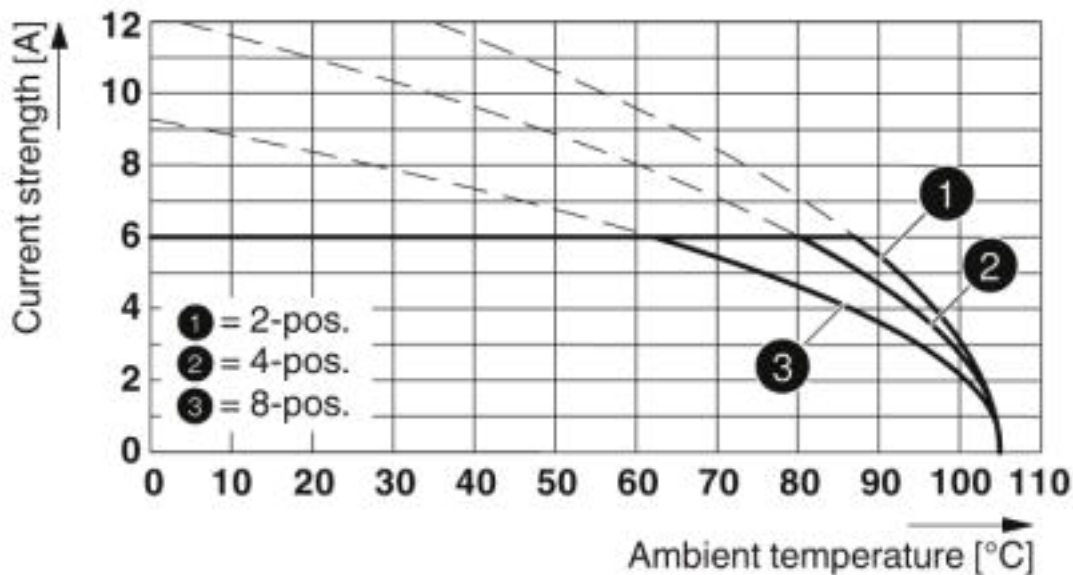
Diagram



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

# Printed-circuit board connector - PTCM 0,5/ 3-PL-2,5 WH - 1015463

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/ 3-PL-2,5 WH - 1015463

## Approvals

Ex Approvals

### Approval details

cULus Recognized						<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E60425-20101209		
			B			D		
Nominal voltage UN			150 V			150 V		
Nominal current IN			6 A			6 A		
mm <sup>2</sup> /AWG/kcmil			22-18			22-18		

EAC						B.01687		
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## 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

## Printed-circuit board connector - PTCM 0,5/ 3-PL-2,5 WH - 1015463

### Accessories

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



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

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### Crimping tool

Crimping pliers - CRIMPFOX-P CC 0.75 L - 1064998



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

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### Additional products

Feed-through header - PTSM 0,5/ 3-HH0-2,5-SMD WH R32 - 1814922



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 3, 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/ 3-HV-2,5-SMD WH R44 - 1778706



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 3, 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/ 3-HV0-2,5-SMD WH R44 - 1839208



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 3, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry

## Printed-circuit board connector - PTCM 0,5/ 3-PL-2,5 WH - 1015463

### Accessories

Feed-through header - PTSM 0,5/ 3-HTB-2,5-SMD WH R44 - 1830139



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 3, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, pin layout: Linear pad geometry

Feed-through header - PTSM 0,5/ 3-HH-2,5-THR WH R32 - 1814854



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 3, 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/ 3-HV-2,5-THR WH R32 - 1815277



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 3, 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/ 3-PI-2,5 WH - 1709451



PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 3, pitch: 2.5 mm, connection method: Push-in spring connection, color: white, contact surface: Tin

Feed-through header - PTSM 0,5/ 3-HH-2,5-SMD WH R32 - 1708005



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 3, 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



## Printed-circuit board connector - PTCM 0,5/ 3-PL-2,5 WH - 1015463

### Accessories

Printed-circuit board connector - PTCM 0,5/ 3-PI-2,5 WH - 1015243



PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.75 mm<sup>2</sup>, number of positions: 3, pitch: 2.5 mm, connection method: Crimp connection, color: white, contact surface: Tin

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