

# Printed-circuit board connector - PTCM 0,5/ 2-PI-2,5 WH - 1015242

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

## 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	1 pc
Minimum order quantity	250 pc
GTIN	 4 055626 495644
GTIN	4055626495644
Weight per Piece (excluding packing)	0.400 g
Custom tariff number	85472000
Country of origin	Germany

## 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

# Printed-circuit board connector - PTCM 0,5/ 2-PI-2,5 WH - 1015242

## Technical data

### Item properties

Pitch	2.5 mm
Number of positions	2
Connection method	Crimp connection
Number of levels	1

### Electrical parameters

Rated current	6 A
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

### Connection capacity

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 - 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 ]	6.7 mm
Height [ h ]	5 mm
Pitch	2.5 mm
Height (without solder pin)	5 mm
Dimension a	2.5 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
Ambient temperature (assembly)	-5 °C ... 100 °C

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### Ambient conditions

Ambient temperature (operation)	-40 °C
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### Termination and connection method

### Mechanical tests according to standard

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

Specification	IEC 60664-1:2007-04
Insulating material group	I
Voltage	160 V
Rated insulation voltage (III/3)	160 V
Rated insulation voltage (III/2)	160 V
Rated insulation 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

### Current carrying capacity / derating curves

#### Mechanical tests (A)

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>	3.2 mΩ
Insertion/withdrawal cycles	25

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## Technical data

### Durability tests (B)

Contact resistance $R_2$	3.4 m $\Omega$
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

### 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)

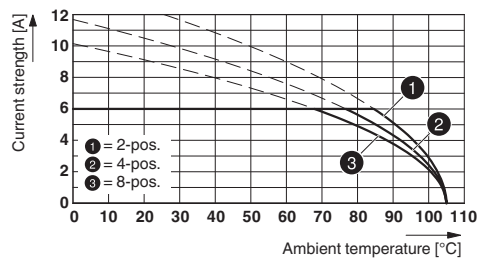
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

### 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 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 8.0	27440309

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## Classifications

eCl@ss

eCl@ss 9.0	27440309
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ETIM

ETIM 6.0	EC002638
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## Approvals

Approvals

Approvals

cULus Recognized

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
	D	B	
Nominal voltage UN	150 V	150 V	
Nominal current IN	5 A	5 A	
mm <sup>2</sup> /AWG/kcmil	22-18	22-18	

## Accessories

Accessories

Crimp contact

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



Crimp contact, type of contact: Male connector, connection method: Crimp connection, contact surface: Tin, type of packaging: Taped on roll

## Printed-circuit board connector - PTCM 0,5/ 2-PI-2,5 WH - 1015242

### Accessories

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



Crimp contact, type of contact: Male connector, connection method: Crimp connection, contact surface: Tin, type of packaging: Taped on roll

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



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

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



Crimp contact, type of contact: Male 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

Printed-circuit board connector - PTSM 0,5/ 2-P-2,5 WH - 1704853



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

## Printed-circuit board connector - PTCM 0,5/ 2-PI-2,5 WH - 1015242

### Accessories

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#### Feed-through header - PTSM 0,5/ 2-HHI-2,5-SMD WHR24 - 1707990



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering, Article with anti-rotation pin

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#### Feed-through header - PTSM 0,5/ 2-HHI0-2,5-SMD WHR24 - 1815196



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: SMD soldering

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#### Feed-through header - PTSM 0,5/ 2-HHI-2,5-THR WH R24 - 1814980



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 2.5 mm, color: white, contact surface: Tin, mounting: THR soldering

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#### Printed-circuit board connector - PTSM 0,5/ 2-PL-2,5 WH - 1709457



PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 2, 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/ 2-PL-2,5 WH - 1015464



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

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