PTCM 0,5/ 7-PL-2,5 WH - PCB connector

1015459

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PCB connector, nominal cross section: 0.75 mm^2, color: white, nominal current: 6 A, rated voltage (III/2): 160 V, contact connection type: Socket, number of potentials: 7, number of rows: 1, number of positions: 7, number of connections: 7, product range: PTCM 0,5/..-PL, pitch: 2.5 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PTSM, locking: Snap-in locking, mounting method: Latching flange, type of packaging: packed in cardboard

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

Commercial data

Item number	1015459
Packing unit	100 pc
Minimum order quantity	100 pc
Sales key	AA01
Product key	AAACPC
GTIN	4055626496436
Weight per piece (including packing)	1.084 g
Weight per piece (excluding packing)	1.074 g
Customs tariff number	85389099
Country of origin	DE

Technical data

Product properties

Product type	PCB connector
Product family	PTCM 0,5/..-PL
Product line	COMBICON Connectors XS
Number of positions	7
Pitch	2.5 mm
Number of connections	7
Number of rows	1
Number of potentials	7

Electrical properties

Properties

Nominal current I_N	6 A
Nominal voltage U_N	160 V
Contact resistance	2 mΩ
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV

Connection data

Connection technology

Type	Standard
Connector system	COMBICON PTSM
Nominal cross section	0.75 mm²
Contact connection type	Socket

Interlock

Locking type	Snap-in locking
Mounting type	Latching flange

Conductor connection

Connection method	Crimp connection
Conductor/PCB connection direction	0 °
Conductor cross-section flexible	0.14 mm² ... 0.75 mm² (Maximum external diameter of the insulation 1.9 mm)
Conductor cross-section AWG	26 ... 18 (Maximum external diameter of the insulation 1.9 mm)
Stripping length	4.1 mm ... 4.5 mm

Material specifications

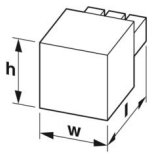
Material data - contact

Metal surface contact area (top layer)	Tin (Sn)

Material data - housing

Color (Housing)	white (9010)
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

Dimensional drawing	
Pitch	2.5 mm
Width [w]	16.96 mm
Height [h]	3.9 mm
Length [l]	16.2 mm

Notes

Note on the contact	The information on the basic material and the finish properties of the crimp contacts is to be found in the E-Shop in the technical data for the respective crimp contact.
Note on application	All laboratory tests are performed in combination with the crimp contacts specified as accessories.
Note on application	The current depends on the crimp contact and conductor cross-section used.
Note on application	The corresponding crimp contacts are to be found in the "Accessories" tab.
Note on application	The crimp contacts may only be processed with approved crimping tools.
Note on the contact	These connectors conform to DIN EN 61984, connectors without switching power (COC). When used for their intended purpose, they must not be plugged in or disconnected live or under load.

Mechanical tests

Tensile strength of crimp connections

Result	Test passed
Conductor cross-section/conductor type/tractive force	0.14 mm² / flexible / > 18 N

setpoint/actual value	

Insertion and withdrawal forces

Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	3 N
Withdraw strength per pos. approx.	2 N

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Specification	IEC 60512-13-5:2006-02
Result	Test passed

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R_1	2 mΩ
Contact resistance R_2	2.1 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Thermal stress	105 °C/168 h

Power-frequency withstand voltage	1.39 kV

Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	8

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

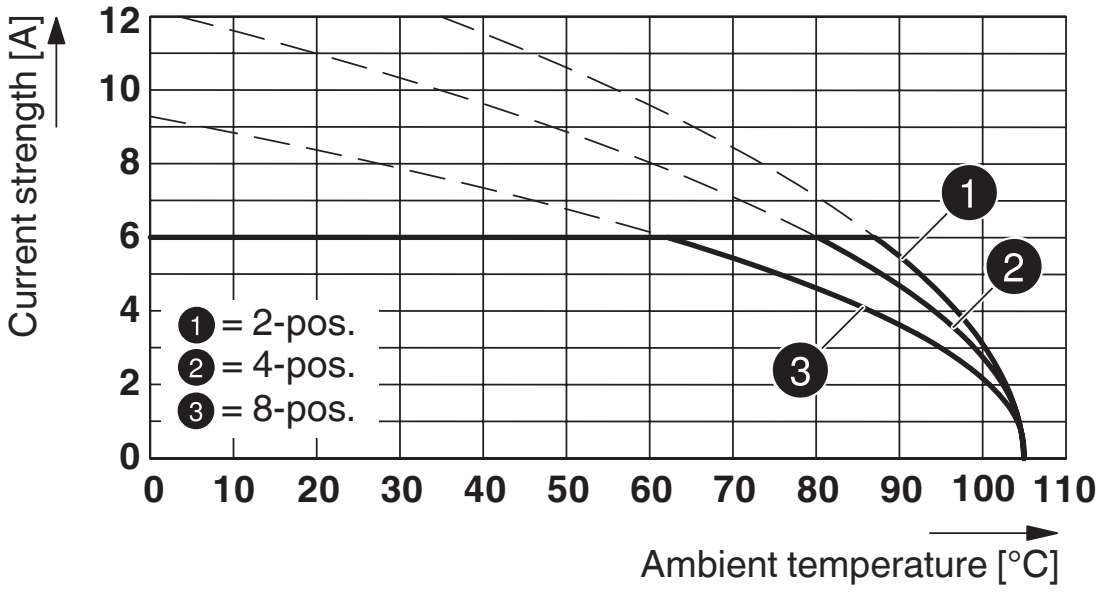
Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.5 mm
Rated insulation voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 mm

Packaging specifications

Type of packaging	packed in cardboard

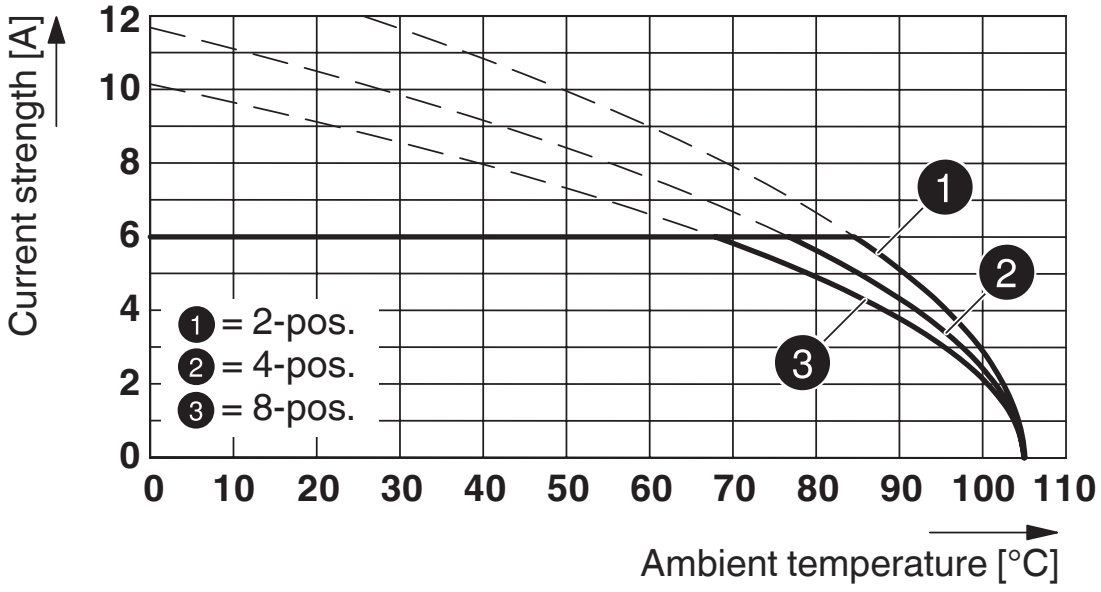
Drawings

Diagram



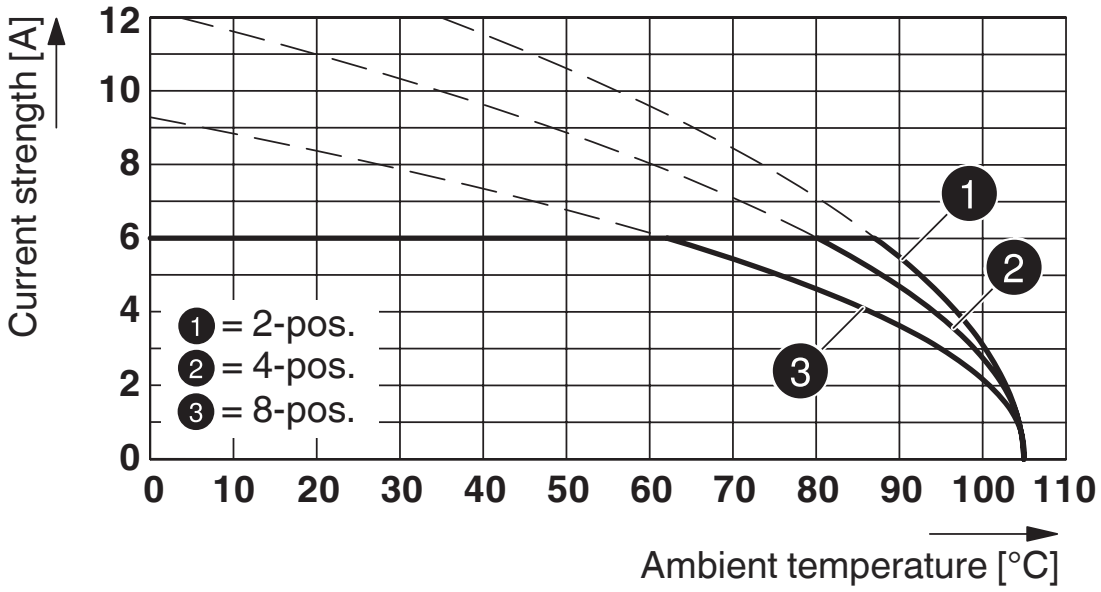
Type: PTCM 0,5/...-PL-2,5 WH with PTSM 0,5/...-HH-2,5-THR WH R...

Diagram



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

Diagram



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

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1015459

cULus Recognized
Approval ID: E60425-20101209

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	150 V	6 A	22 - 18	-
D				
	150 V	6 A	22 - 18	-

VDE approval of drawings
Approval ID: 40048497

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	160 V	6 A	-	0.14 - 0.75

Classifications

ECLASS

ECLASS-13.0	27460202
ECLASS-15.0	27460202

ETIM

ETIM 9.0	EC002638

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com