

## Printed-circuit board connector - MCC 0,5/ 6-ST-2,54 - 1012270

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PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 6, pitch: 2.54 mm, connection method: Crimp connection, color: black



The figure shows a 10-position version of the product

### Your advantages

- ✓ Cost-effective connection of crimped conductors in large quantities
- ✓ Gold-plated contacts ensure transfer quality remains stable over the long term
- ✓ Small component size for applications where space is at a premium
- ✓ Tools for manual and automatic crimping available as an option



### Key Commercial Data

Packing unit	100 pc
Minimum order quantity	100 pc
GTIN	
GTIN	4055626489322
Weight per Piece (excluding packing)	2.220 g
Custom tariff number	85366990
Country of origin	Germany

### Technical data

#### Item properties

Brief article description	Printed-circuit board connector
Plug-in system	MICRO COMBICON - FMC 0,5
Type of contact	Female connector
Range of articles	MCC 0,5/...ST
Pitch	2.54 mm
Number of positions	6
Connection method	Crimp connection

# Printed-circuit board connector - MCC 0,5/ 6-ST-2,54 - 1012270

## Technical data

### Item properties

Number of levels	1
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### 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 ]	16 mm
Width [ w ]	15.74 mm
Height [ h ]	3.95 mm
Pitch	2.54 mm
Height (without solder pin)	3.95 mm
Dimension a	12.7 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

### 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

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## Technical data

### Mechanical tests according to standard

Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	100
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	3 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

Specification	IEC 61984
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### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	3 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>	2.1 mΩ
Insertion/withdrawal cycles	100
Contact resistance R <sub>2</sub>	2.1 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV
Insulation resistance, neighboring positions	> 12 TΩ

### Climatic tests (D)

Specification	DIN 50018:2013-05
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## Technical data

### Climatic tests (D)

Cold stress	-55 °C/2 h
Thermal stress	105 °C/168 h
Corrosive stress	1.0 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)

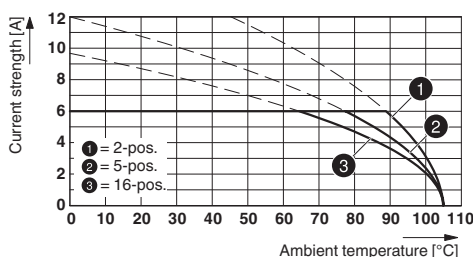
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Back of hand safety with IP10 access probe

### Environmental Product Compliance

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

## Drawings

Diagram



Type: MCC 0,5/...-ST-2,54 with MC 0,5/...-G-2,54 P20 THR R...

## Classifications

eCl@ss

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 5.0	EC002638
ETIM 6.0	EC002638

## Approvals

Approvals

# Printed-circuit board connector - MCC 0,5/ 6-ST-2,54 - 1012270

## Approvals

Approvals

cULus Recognized

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Ex Approvals

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## 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>	E60425-20110128
	D	B	
Nominal voltage UN	150 V	150 V	
Nominal current IN	6 A	6 A	
mm²/AWG/kcmil	26-18	26-18	

## Accessories

Accessories

Crimp contact

Accessories - MCC 0,5-MP AU 0,14-0,5 - 1013425



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Gold, Conductor cross section flexible: 0.14 ...0.5 mm² , type of packaging: packed in cardboard

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Accessories - MCC 0,5-MP AU 0,14-0,5 R - 1013420



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Gold, Conductor cross section flexible: 0.14 ...0.5 mm² , type of packaging: Taped on roll

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Accessories - MCC 0,5-MP AU 0,34-0,75 - 1013419



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Gold, Conductor cross section flexible: 0.34 ...0.75 mm² , type of packaging: packed in cardboard

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## Printed-circuit board connector - MCC 0,5/ 6-ST-2,54 - 1012270

### Accessories

Accessories - MCC 0,5-MP AU 0,34-0,75 R - 1013418



Crimp contact, type of contact: Female connector, connection method: Crimp connection, contact surface: Gold, Conductor cross section flexible: 0.34 ...0.75 mm<sup>2</sup>, type of packaging: Taped on roll

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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 - MC 0,5/ 6-G-2,54 P20 THR R44 - 1821287



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 6, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: THR soldering, Sample values available under SAMPLE MC...

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Printed-circuit board connector - MCV 0,5/ 6-G-2,54 P20 THR R44 - 1821436



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 6, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: THR soldering, Sample values available under SAMPLE MC...

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Printed-circuit board connector - MC 0,5/ 6-G-2,54 SMD R44 - 1821737



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 6, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: SMD soldering, Sample values available under SAMPLE MC...

## Printed-circuit board connector - MCC 0,5/ 6-ST-2,54 - 1012270

### Accessories

Printed-circuit board connector - MCV 0,5/ 6-G-2,54 SMD R44 - 1821588

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 6, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: SMD soldering, Sample values available under SAMPLE MC...



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