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PCB connector, nominal current: 5 A, rated voltage (III/2): 160 V, nominal cross section: 0.34 mm², number of positions: 2, pitch: 2.54 mm, connection method: Crimp connection, color: black

#### Your advantages

- Contacts arranged in a double row enable high packing density in a compact area
- Gold-plated contacts ensure transfer quality remains stable over the long term
- ▼ Tools for manual and automatic crimping available as an option















## **Key Commercial Data**

Packing unit	1
GTIN	4 063151 057138
GTIN	4063151057138
Custom tariff number	85366990

#### Technical data

#### Item properties

Plug-in system	MICRO COMBICON - DFMC 0,5 shielded
Type of contact	Female connector
Electrical characteristic	shielded
Range of articles	DMCC 0,5/ST-SH
Number of positions	2
Connection method	Crimp connection
Number of levels	2

#### Electrical parameters



## Technical data

### Electrical parameters

Nominal current	5 A
Nom. voltage	160 V
Rated voltage	50 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	250 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 AWG / kcmil	22
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	Selective coating
Metal surface terminal point (top layer)	Tin (3 - 6 µm Sn)
Metal surface contact area (top layer)	Gold (0.25 Au)
Metal surface contact area (middle layer)	Nickel (2 - 4 µm Ni),

#### Material data - housing

Housing color	black (9005)
Insulating material	PA
Insulating material group	
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

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [1]	26.5 mm
Width [w]	7.1 mm
Height [ h ]	7.4 mm
Pitch	2.54 mm



### Technical data

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
Denomination packing units	Pcs.

#### General product information

Type of note	Notes on operation
Note	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

#### Ambient conditions

Ambient temperature (storage/transport)	-30 °C 70 °C
Ambient temperature (assembly)	-5 °C 80 °C
Ambient temperature (installation)	-40 °C 80 °C (dependent on the derating curve)
Ambient temperature (mobile installation)	-30 °C 80 °C dependent on the derating curve

#### Termination and connection method

#### Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	100
Insertion strength per pos. approx.	3 N
Withdraw strength per pos. approx.	3 N
Polarization and coding	IEC 60512-13-5:2006-02
Contact holder in insert	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)	1.5 mm
Minimum creepage distance value (III/2)	1.5 mm
Minimum creepage distance value (II/2)	1.25 mm



### Technical data

### Current carrying capacity / derating curves

Caption	Type: DMCC 0,5/ST-SH-2,54 with DMC 0,5/G1-SH-2,54PTHRR	
Specification	IEC 61984:2008-10	
Reduction factor	0.8	
Note	Representation based on IEC 60512-5-2:2002-02	
	For conductor cross section, see diagram	

#### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	3 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>	4.8 mΩ
Insertion/withdrawal cycles	100
Contact resistance R <sub>2</sub>	4.9 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	2
Test current	5 A
Upper limiting temperature requirements <100 °C	Test passed

### Climatic tests (D)

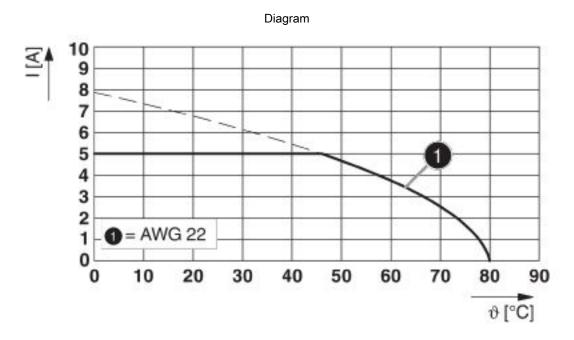
Specification	ISO 6988:1985-02	
Cold stress	-40 °C/2 h	
Thermal stress	80 °C/168 h	
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle	
Impulse withstand voltage at sea level	2.95 kV	
Power-frequency withstand voltage	1.39 kV	

#### Environmental and durability tests (E)

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

## **Drawings**





Type: DMCC 0,5/...-ST-SH-2,54 with DMC 0,5/...-G1-SH-2,54P...THRR...

#### Classifications

#### eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

**ETIM** 

ETIM 5.0	EC002638

## Approvals

Approvals

Approvals

cULus Recognized

Ex Approvals

Approval details



### Approvals

cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/L	ISEXT/1FRAME/index.htm E60425-19920306
	В	D
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

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

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



#### Accessories

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



Crimp contact, type of contact: Female connection, connection method: Crimp connection, contact surface: Gold, Conductor cross section flexible: 0.34 ...0.75 mm²

#### 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 - DMC 0,5/ 2-G1SH-2,54P20THR24 - 1097546



PCB headers, nominal current: 5 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 2.54 mm, color: black, contact surface: Gold, solder pin [P]: 2 mm

Accessories - DMCC 0,5/ 2-SHIELD 7,0-2,54 - 1097555



Accessories, number of positions: 2, pitch: 2.54 mm

Accessories - DMCC 0,5/ 2-ST-WOSH1-2,54 - 1097476



PCB connector, number of positions: 2, pitch: 2.54 mm, color: black



## Accessories

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