

# Printed-circuit board connector - DMCC 0,5/ 2-ST-SHL 7,0-2,54 - 1150807

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PCB connector, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.34 mm<sup>2</sup>, number of positions: 2, pitch: 2.54 mm, color: black


The figure shows a 2-pos. version with 4 contacts

## 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                 | <br>4 063151 148409 |
| GTIN                 | 4063151148409   |
| Custom tariff number | 85366990  |

## Technical data

### Item properties

|                           |   |
|---------------------------|---|
| Plug-in system            | MICRO COMBICON - DFMC 0,5 lock & shielded |
| Electrical characteristic | shielded                                  |
| Range of articles         | DMCC 0,5/...-ST-SHL                       |
| Number of positions       | 2   |
| Number of levels          | 2   |

### Electrical parameters

|                 |     |
|-----------------|-----|
| Nominal current | 6 A |
|-----------------|-----|

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## Technical data

### Electrical parameters

|                             |        |
|-----------------------------|--------|
| 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

|                                     |                   |
|-------------------------------------|-------------------|
| 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   | 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

|              |  |
|--------------|--|
| Caption      | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [ l ] | 33 mm  |
| Width [ w ]  | 7.14 mm  |
| Height [ h ] | 7.85 mm  |
| Pitch        | 2.54 mm  |

### Packaging information

|                   |                     |
|-------------------|---------------------|
| Type of packaging | packed in cardboard |
|-------------------|---------------------|

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## Technical data

### Packaging information

|                            |      |
|----------------------------|------|
| Pieces per package         | 100  |
| Denomination packing units | Pcs. |

### Ambient conditions

|   |  |
|---|--|
| Ambient temperature (storage/transport)   | -20 °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) | -20 °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. | 2 N                    |
| Withdraw strength per pos. approx.  | 1 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)         | 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

|                  |  |
|------------------|--|
| Caption          | Type: DMCC 0,5/...-ST-SHL 7,0-2,54 with DMC 0,5/...-G1SHL-2,54P20THRR... |
| Specification    | IEC 61984:2008-10  |
| Reduction factor | 0.8  |
| Note             | Representation based on IEC 60512-5-2:2002-02                            |

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## Technical data

### Current carrying capacity / derating curves

|  |                                      |
|--|--------------------------------------|
|  | For number of positions, see diagram |
|--|--------------------------------------|

### Mechanical tests (A)

|  |             |
|--|-------------|
| Test specification                           | IEC 61984   |
| Insertion strength per pos. approx.          | 2 N         |
| Withdraw strength per pos. approx.           | 1 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>            | 5.2 mΩ                |
| Insertion/withdrawal cycles                  | 100                   |
| Contact resistance R <sub>2</sub>            | 4.6 mΩ                |
| Impulse withstand voltage at sea level       | 2.95 kV               |
| Power-frequency withstand voltage            | 1.39 kV               |
| Insulation resistance, neighboring positions | > 1.4 TΩ              |

### Thermal tests (C)

|   |                       |
|---|-----------------------|
| Specification                                   | IEC 60512-5-1:2002-02 |
| Number of positions                             | 2                     |
| Conductor cross section                         | 0.34 mm <sup>2</sup>  |
| Test current                                    | 6 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   |

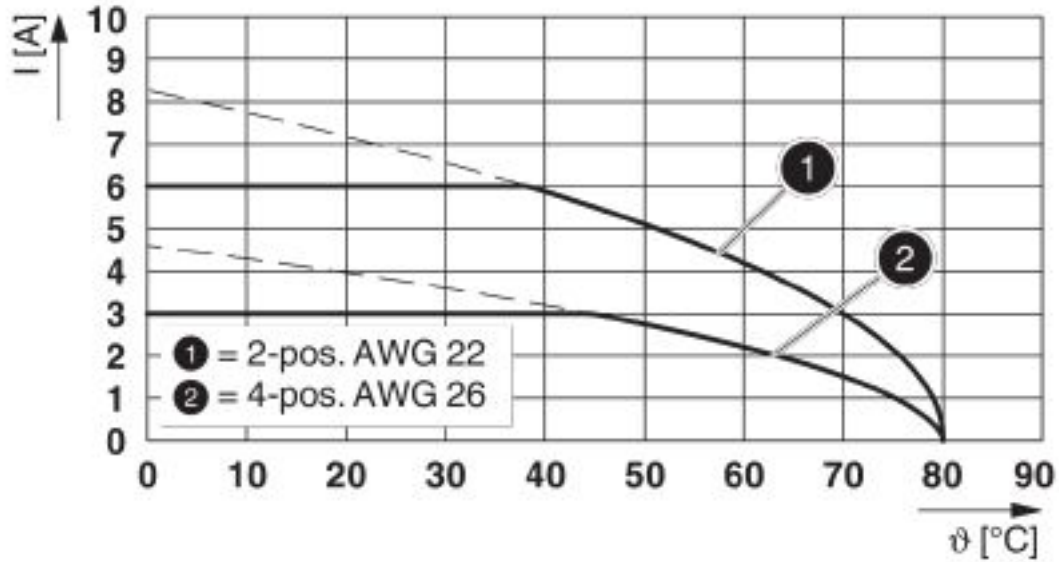
### Environmental and durability tests (E)

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

## Drawings

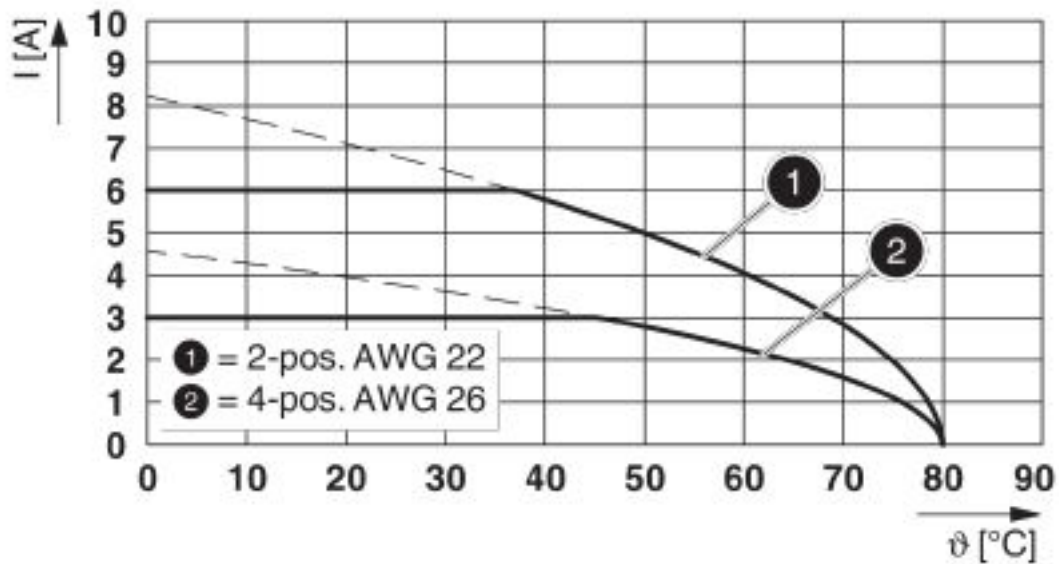
# Printed-circuit board connector - DMCC 0,5/ 2-ST-SHL 7,0-2,54 - 1150807

Diagram



Type: DMCC 0,5/...-ST-SHL 7,0-2,54 with DMC 0,5/...-G1SHL-2,54P20THRR...

Diagram



Type: DMCC 0,5/...-ST-SHL 7,0-2,54 with DMCV 0,5/...-G1SHL-2,54P20THR...

# Printed-circuit board connector - DMCC 0,5/ 2-ST-SHL 7,0-2,54 - 1150807

## 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

IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / cULus Recognized

#### Ex Approvals

### Approval details

|                            |   |   |              |
|----------------------------|---|---|--------------|
| IECEE CB Scheme            |  | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | DE1-59151-M1 |
| Nominal voltage UN         | 160 V   |   |              |
| Nominal current IN         | 6 A   |   |              |
| mm <sup>2</sup> /AWG/kcmil | 0.14-.75  |   |              |

|   |   |   |          |
|---|---|---|----------|
| VDE Gutachten mit Fertigungsüberwachung |  | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 40042389 |
| Nominal voltage UN                      | 160 V   |   |          |
| Nominal current IN                      | 6 A   |   |          |
| mm <sup>2</sup> /AWG/kcmil              | 0.14-.75  |   |          |

# Printed-circuit board connector - DMCC 0,5/ 2-ST-SHL 7,0-2,54 - 1150807

## Approvals

|                    |       |   |                 |
|--------------------|-------|---|-----------------|
| 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> | E60425-19920306 |
|                    | B     | 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

## Printed-circuit board connector - DMCC 0,5/ 2-ST-SHL 7,0-2,54 - 1150807

### 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>

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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 - DMC 0,5/ 2-G1SHL-2,54P20THRR24 - 1150791



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.34 mm<sup>2</sup>, number of positions: 2, pitch: 2.54 mm, color: black, contact surface: Gold, solder pin [P]: 2 mm

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Feed-through header - DMCV 0,5/ 2-G1SHL-2,54P20THR24 - 1150824



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.34 mm<sup>2</sup>, number of positions: 2, pitch: 2.54 mm, color: black, contact surface: Gold, solder pin [P]: 2 mm

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Accessories - DMCC 0,5/ 2-ST-WOSH-2,54 - 1150816



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



## Printed-circuit board connector - DMCC 0,5/ 2-ST-SHL 7,0-2,54 - 1150807

### Accessories

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Accessories - DMCC 0,5/ 2-SHIELD L 7,0-2,54 - 1150660



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

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