

# Printed-circuit board connector - IMC 1,5/10-STGF-3,81 - 1858112

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

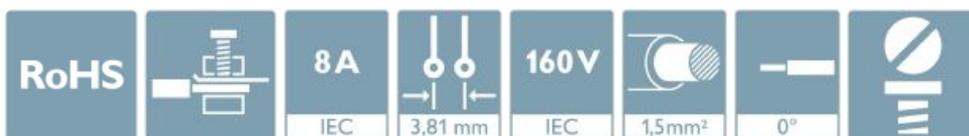
PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: IMC 1,5/..-STGF, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard



The figure shows a 10-position version of the product

## Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections
- Allows connection of two conductors
- Screwable flange for superior mechanical stability



## Key Commercial Data

|                        |   |
|------------------------|---|
| Packing unit           | 50 pc   |
| Minimum order quantity | 50 pc   |
| GTIN                   | <br>4 017918 144357 |
| GTIN                   | 4017918144357   |

## Technical data

### Item properties

|                           |                                 |
|---------------------------|---------------------------------|
| Brief article description | Printed-circuit board connector |
| Plug-in system            | MINI COMBICON                   |
| Type of contact           | Male connector                  |
| Range of articles         | IMC 1,5/..-STGF                 |
| Pitch                     | 3.81 mm                         |
| Number of positions       | 10                              |
| Drive form screw head     | Slotted (L)                     |
| Screw thread              | M2                              |
| Locking                   | Threaded flange                 |

# Printed-circuit board connector - IMC 1,5/10-STGF-3,81 - 1858112

## Technical data

### Item properties

|                       |    |
|-----------------------|----|
| Number of levels      | 1  |
| Number of connections | 10 |
| Number of potentials  | 10 |

### Electrical parameters

|                             |        |
|-----------------------------|--------|
| Nominal current             | 8 A    |
| 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

|   |   |
|---|---|
| Connection method   | Screw connection with tension sleeve          |
| pluggable   | Yes   |
| Conductor cross section solid   | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Conductor cross section flexible  | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Conductor cross section AWG / kcmil   | 28 ... 16                                     |
| Conductor cross section flexible, with ferrule without plastic sleeve                     | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Conductor cross section, flexible, with ferrule, with plastic sleeve                      | 0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, solid   | 0.08 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, flexible  | 0.08 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.2 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>  |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>   |
| Stripping length  | 7 mm  |
| Torque  | 0.22 Nm ... 0.25 Nm                           |

### Flange specifications

|                 |                 |
|-----------------|-----------------|
| Type of locking | Screw locking   |
| Mounting flange | Threaded flange |
| Torque          | 0.3 Nm          |

### 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                  | hot-dip tin-plated  |
| Metal surface terminal point (top layer) | Tin (5 - 7 µm Sn)   |
| Metal surface contact area (top layer)   | Tin (5 - 7 µm Sn)   |

### Material data - housing

# Printed-circuit board connector - IMC 1,5/10-STGF-3,81 - 1858112

## Technical data

### Material data - housing

|  |              |
|--|--------------|
| Housing color                          | green (6021) |
| Insulating material                    | PA           |
| Insulating material group              | I            |
| CTI according to IEC 60112             | 600          |
| Flammability rating according to UL 94 | V0           |

### Dimensions for the product

|                             |  |
|-----------------------------|--|
| Caption                     | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [ l ]                | 17.9 mm  |
| Width [ w ]                 | 48.49 mm   |
| Height [ h ]                | 11.1 mm  |
| Pitch                       | 3.81 mm  |
| Height (without solder pin) | 11.1 mm  |

### Packaging information

|                            |                     |
|----------------------------|---------------------|
| Type of packaging          | packed in cardboard |
| Pieces per package         | 50                  |
| 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 ... 100 °C (dependent on the derating curve) |

### 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              |

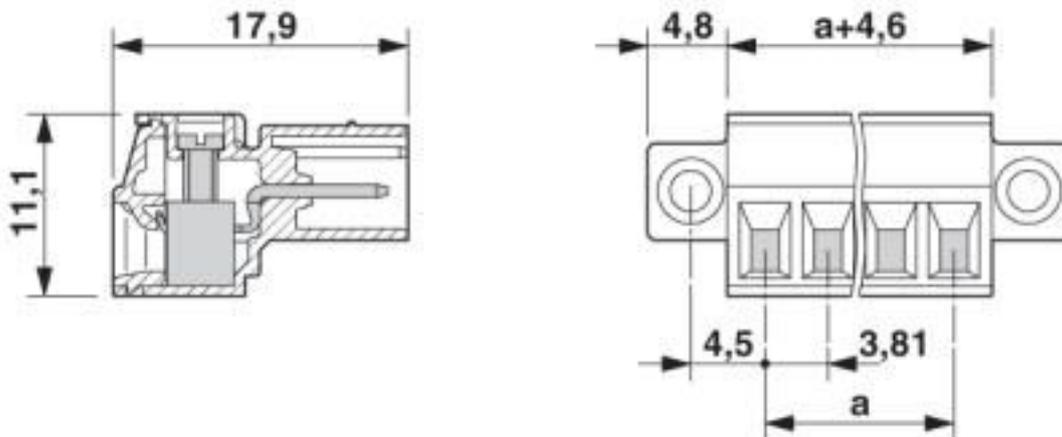
### Environmental Product Compliance

|            |   |
|------------|---|
| REACH SVHC | Lead 7439-92-1  |
| China RoHS | Environmentally Friendly Use Period = 50 years  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

## Drawings

# Printed-circuit board connector - IMC 1,5/10-STGF-3,81 - 1858112

Dimensional drawing



## Classifications

### eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440309 |
| eCl@ss 11.0   | 27460202 |
| eCl@ss 4.0    | 27260700 |
| eCl@ss 4.1    | 27260700 |
| eCl@ss 5.0    | 27260700 |
| 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 3.0 | EC001121 |
| ETIM 4.0 | EC002638 |
| ETIM 5.0 | EC002638 |
| ETIM 6.0 | EC002638 |
| ETIM 7.0 | EC002638 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211810 |
| UNSPSC 7.0901 | 39121409 |
| UNSPSC 11     | 39121409 |
| UNSPSC 12.01  | 39121409 |
| UNSPSC 13.2   | 39121409 |
| UNSPSC 18.0   | 39121409 |
| UNSPSC 19.0   | 39121409 |
| UNSPSC 20.0   | 39121409 |

# Printed-circuit board connector - IMC 1,5/10-STGF-3,81 - 1858112

## Classifications

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121409 |
|-------------|----------|

### Approvals

#### Approvals

#### Approvals

IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

#### Ex Approvals

### Approval details

|                            |         |   |                |
|----------------------------|---------|---|----------------|
| IECEE CB Scheme            |         | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | DE1-60987-B1B2 |
| Nominal voltage UN         | 160 V   |   |                |
| Nominal current IN         | 8 A     |   |                |
| mm <sup>2</sup> /AWG/kcmil | 0.2-1.5 |   |                |

|   |         |   |          |
|---|---------|---|----------|
| 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> | 40011723 |
| Nominal voltage UN                      | 160 V   |   |          |
| Nominal current IN                      | 8 A     |   |          |
| mm <sup>2</sup> /AWG/kcmil              | 0.2-1.5 |   |          |

|     |  |         |
|-----|--|---------|
| EAC |  | B.01687 |
|-----|--|---------|

|                            |       |   |                 |
|----------------------------|-------|---|-----------------|
| 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 |
|                            | B     | D   |                 |
| Nominal voltage UN         | 300 V | 300 V   |                 |
| Nominal current IN         | 8 A   | 8 A   |                 |
| mm <sup>2</sup> /AWG/kcmil | 30-14 | 30-14   |                 |

## Printed-circuit board connector - IMC 1,5/10-STGF-3,81 - 1858112

### Accessories

#### Accessories

#### Cable housing

Cable housing - KGG-MC 1,5/10 - 1834424



Cable housing, pitch: 3.81 mm, number of positions: 10, dimension a: 40.49 mm, color: green

---

#### Coding element

Coding profile - CP-MSTB - 1734634



Coding profile, is inserted into the slot on the plug or inverted header, red insulating material

---

#### Labeled terminal marker

Marker card - SK 3,81/2,8:FORTL.ZAHLEN - 0804109



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 3.81 mm, lettering field size: 3.81 x 2.8 mm

---

#### Screwdriver tools

Screwdriver - SZS 0,4X2,5 VDE - 1205037



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

---

#### Additional products

## Printed-circuit board connector - IMC 1,5/10-STGF-3,81 - 1858112

### Accessories

#### Printed-circuit board connector - MCC 1/10-STZF-3,81 - 1852448



PCB connector, nominal cross section: 1 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 V, type of contact: Female connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MCC 1/..-STZF, pitch: 3.81 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm<sup>2</sup>] data: 5A/MCC-MT 0,2-0,35 (1859988); 8A/MCC-MT 0,5-1,0 (1859991)

#### Printed-circuit board connector - MC 1,5/10-STF-3,81 - 1827787



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MC 1,5/..-STF, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

#### Printed-circuit board connector - MCVW 1,5/10-STF-3,81 - 1828579



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MCVW 1,5/..-STF, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -90 °, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

#### Printed-circuit board connector - FK-MCP 1,5/10-STF-3,81 - 1851313



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: FK-MCP 1,5/..-STF, pitch: 3.81 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

#### Printed-circuit board connector - QC 0,5/10-STF-3,81 - 1897623



PCB connector, nominal cross section: 0.5 mm<sup>2</sup>, color: green, nominal current: 6 A, rated voltage (III/2): 200 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: QC 0,5/..-STF, pitch: 3.81 mm, connection method: Displacement connection, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

## Printed-circuit board connector - IMC 1,5/10-STGF-3,81 - 1858112

### Accessories

#### Printed-circuit board connector - FRONT-MC 1,5/10-STF-3,81 - 1850932



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: FRONT-MC 1,5/..-STF, pitch: 3.81 mm, connection method: Front screw connection, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

#### Printed-circuit board connector - MCVR 1,5/10-STF-3,81 - 1828427



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MCVR 1,5/..-STF, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 90 °, Stecksystem: MINI COMBICON, Locking: Screw locking, type of packaging: packed in cardboard

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>