# PCB connector - ZEC 1,5/11-LPV-5,0 C2

1898350

https://www.phoenixcontact.com/us/products/1898350

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PCB connector, nominal cross section: 1.5 mm$^2$, color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: ZEC 1,5/..-LPV, pitch: 5 mm, mounting: Direct plug-in method, conductor/PCB connection direction: 0 °, number of solder pins per potential: 2, plug-in system: ZEC, locking: without, mounting: without, type of packaging: packed in cardboard

## Your advantages

- Easy component connection
- Inexpensive direct plug-in connection with just one component

## Commercial Data

| | |
|---|---|
| Item number | 1898350 |
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| Note | Made to Order (non-returnable) |
| Sales Key | A01 |
| Product Key | AACEAA |
| GTIN | 4017918167066 |
| Weight per Piece (including packing) | 9.736 g |
| Weight per Piece (excluding packing) | 9.155 g |
| Customs tariff number | 85366930 |
| Country of origin | BG |

## Technical Data

### Product properties

| | |
|---|---|
| Type | PCB connector |
| Product line | COMBICON Connectors M |
| Product type | PCB connector |
| Number of positions | 11 |
| Pitch | 5 mm |
| Number of connections | 11 |
| Number of rows | 1 |
| Mounting flange | without |
| Number of potentials | 11 |
| Solder pins per potential | 2 |

### Electrical properties

| | |
|---|---|
| Nominal current $I_N$ | 10 A |
| Nominal voltage $U_N$ | 320 V |
| Degree of pollution | 3 |
| Contact resistance | 1.2 mΩ |
| Rated voltage (III/3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 320 V |
| Rated surge voltage (III/2) | 4 kV |

### Mounting

| | |
|---|---|
| Mounting type | Direct plug-in method |

### Material specifications

Material data - contact

| | |
|---|---|
| Note | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201 |
| Contact material | Cu alloy |
| Metal surface contact area (top layer) | Tin (5 - 7 µm Sn) |

Material data - housing

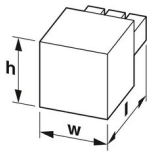
| | |
|---|---|
| Housing color | green (6021) |
| Insulating material | PA |
| Insulating material group | I |
| CTI according to IEC 60112 | 600 |
| Flammability rating according to UL 94 | V0 |
| Glow wire flammability index GWFI according to EN 60695-2-12 | 850 |
| Glow wire ignition temperature GWIT according to EN 60695-2-13 | 775 |

| | |
|---|---|
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C |

## Notes

| | |
|---|---|
| Notes on operation | 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. |

## Dimensions

| | |
|---|---|
| Dimensional drawing |  |
| Pitch | 5 mm |
| Width [w] | 56.37 mm |
| Height [h] | 7 mm |
| Length [l] | 22.9 mm |
| Installed height | 7 mm |

## Mechanical tests

Insertion and withdrawal forces

| | |
|---|---|
| Result | Test passed |
| No. of cycles | 20 |
| Insertion strength per pos. approx. | 6 N |
| Withdraw strength per pos. approx. | 3 N |

Resistance of inscriptions

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

Visual inspection

| | |
|---|---|
| Specification | IEC 60512-2:1985-00 |
| Result | Test passed |

Dimension check

| | |
|---|---|
| Specification | IEC 60512-2:1985-00 |
| Result | Test passed |

## Electrical tests

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) | 250 V |

| | |
|---|---|
| Rated surge voltage (III/3) | 4 kV |
| minimum clearance value - non-homogenous field (III/3) | 3 mm |
| minimum creepage distance (III/3) | 3.2 mm |
| Rated insulation voltage (III/2) | 320 V |
| Rated surge voltage (III/2) | 4 kV |
| minimum clearance value - non-homogenous field (III/2) | 3 mm |
| minimum creepage distance (III/2) | 3 mm |
| Rated insulation voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |
| minimum clearance value - non-homogenous field (II/2) | 3 mm |
| minimum creepage distance (II/2) | 3.2 mm |

## Environmental and real-life conditions

Vibration test

| | |
|---|---|
| Specification | IEC 60068-2-6:1995-03 |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Sweep speed | 5g (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |

Durability test

| | |
|---|---|
| Specification | IEC 60512-5:1992-08 |
| Contact resistance $R_1$ | 1.2 mΩ |
| Contact resistance $R_2$ | 1.5 mΩ |
| Insertion/withdrawal cycles | 20 |

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 | 100 °C/168 h |
| Power-frequency withstand voltage | 2.21 kV |

Ambient conditions

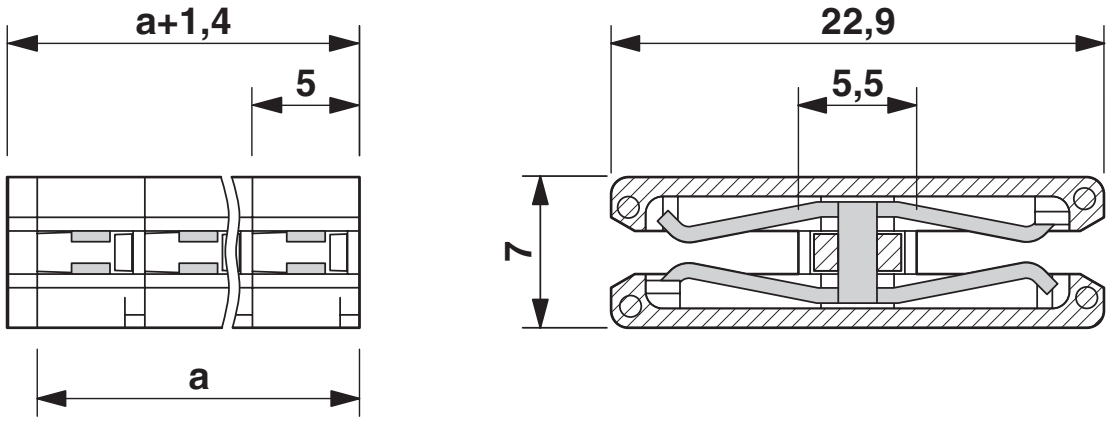
| | |
|---|---|
| Ambient temperature (operation) | -40 °C ... 100 °C (dependent on the derating curve) |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Relative humidity (storage/transport) | 30 % ... 70 % |
| Ambient temperature (assembly) | -5 °C ... 100 °C |

## Packaging specifications

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

## Drawings

Dimensional drawing



## Approvals

**IECEE CB Scheme**
Approval ID: DE1-51128

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|
| | 1000 V | 10 A | - | - |

**EAC**
Approval ID: B.01687

**cULus Recognized**
Approval ID: E60425-19941110

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|
| Use group B | | | | |
| | 300 V | 10 A | - | - |
| Use group D | | | | |
| | 300 V | 10 A | - | - |

**VDE Gutachten mit Fertigungsüberwachung**
Approval ID: 40020343

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|
| | 250 V | 10 A | - | - |

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-10.0.1 | 27440402 |
| ECLASS-9.0 | 27440402 |
| ECLASS-11.0 | 27460201 |

### ETIM

| | |
|---|---|
| ETIM 8.0 | EC002637 |

### UNSPSC

| | |
|---|---|
| UNSPSC 21.0 | 39121400 |

## Environmental Product Compliance

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


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