

Order No.: 1119811

Type: LPT 16/ 3-10,0-ZB

PCB terminal block, Lever Push-in connection



1 Main features



- | | | | |
|---------------------------|--------------------------|------------------------|---------------------|
| • No. of pos. | 3 | • Nominal current | 76 A |
| • Conductor cross section | 16 mm ² | • Nominal voltage | 1000 V |
| • Color | green (6021) | • Connection direction | 0° |
| • Pitch | 10 mm | • Type of packaging | packed in cardboard |
| • Connection method | Lever Push-in connection | | |

2 Your advantages

- ✓ Tool-free lever principle enables time-saving connection and release of conductors with/without ferrules
- ✓ Clear lever positions provide reliable feedback on opened or closed clamping spaces
- ✓ Defined contact force ensures that contact remains stable over the long term
- ✓ Time-saving push-in connection when lever is closed
- ✓ Intuitive operation, thanks to a color-coded actuation lever



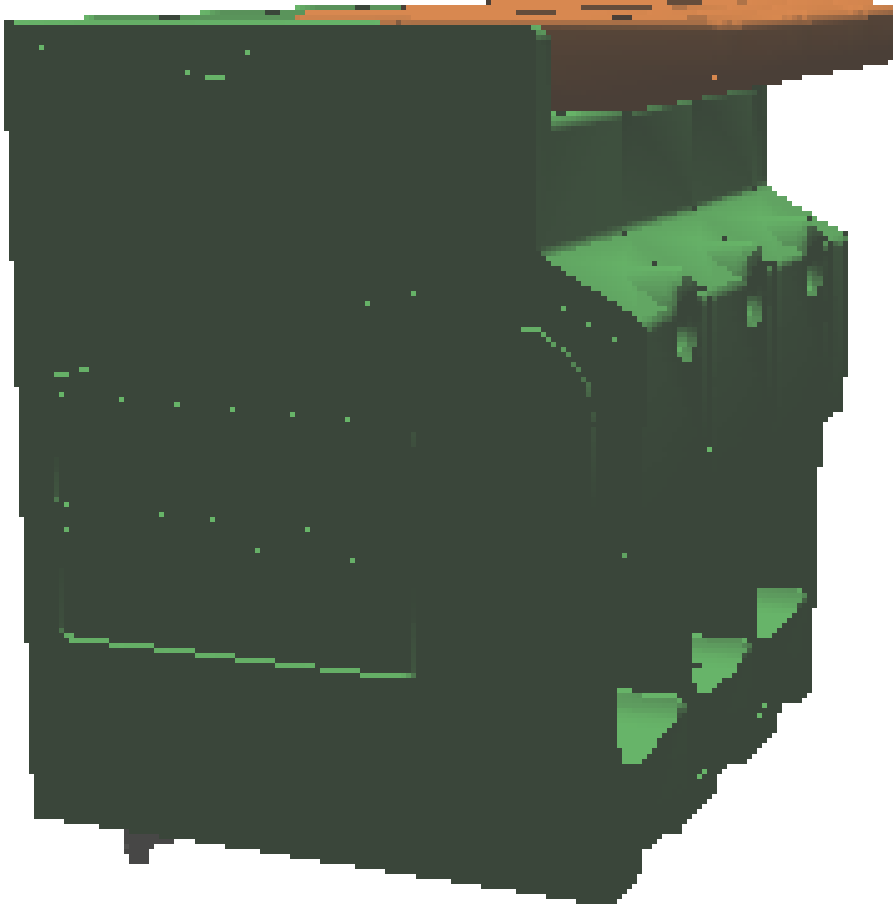
Make sure you always use the latest documentation.
It can be downloaded at: phoenixcontact.net/product/1119811

3 Table of contents

| | | |
|----|---|----|
| 1 | Main features..... | 1 |
| 2 | Your advantages | 1 |
| 3 | Table of contents | 2 |
| 4 | 3D model in PDF can be activated (Acrobat Reader only)..... | 3 |
| 5 | General Technical Data | 4 |
| 6 | Conductor connection | 5 |
| 7 | Material properties..... | 5 |
| 8 | Dimensions..... | 6 |
| 9 | Series drawing..... | 7 |
| 10 | Application..... | 8 |
| 11 | Packaging information | 8 |
| 12 | Mechanical tests..... | 9 |
| 13 | Electrical tests | 10 |
| 14 | Current carrying capacity/derating curves | 12 |
| 15 | Environmental and durability tests | 13 |
| 16 | Commercial Data..... | 14 |

1119811 LPT 16/ 3-10,0-ZB

4 3D model in PDF can be activated (Acrobat Reader only)



1119811 LPT 16/ 3-10,0-ZB**5 General Technical Data****5.1 item properties**

| | |
|--|--------------------------|
| Order No. | 1119811 |
| Type | LPT 16/ 3-10,0-ZB |
| Product type | PCB terminal block |
| Range of articles | LPT 16/ |
| Pitch | 10 mm |
| Number of positions | 3 |
| Number of levels | 1 |
| Number of connections | 3 |
| Number of potentials | 3 |
| Connection method | Lever Push-in connection |
| Mounting type | Wave soldering |
| Connection direction of the conductor to the PCB | 0 ° |
| Pin layout | Zigzag pinning W |

1119811 LPT 16/ 3-10,0-ZB**6 Conductor connection****6.1 Connection capacity**

| | |
|--|---|
| Conductor cross section, rigid | 0.75 mm ² ... 16 mm ² (Conductor connection with open terminal point) |
| Conductor cross section, rigid | 1.5 mm ² ... 16 mm ² (Push-in connection) |
| Conductor cross section, multi-stranded | 0.75 mm ² ... 16 mm ² |
| Conductor cross section, flexible | 0.75 mm ² ... 25 mm ² |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.75 mm ² ... 16 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve | 0.75 mm ² ... 16 mm ² |
| 2 conductors with the same cross section flexible with TWIN ferrule and plastic sleeve | 4 mm ² ... 6 mm ² |
| Stripping length | 18 mm ... 20 mm |

6.2 Connection capacity AWG

| | |
|-----------------------------|----------|
| Conductor cross section AWG | 18 ... 4 |
|-----------------------------|----------|

7 Material properties**7.1 Material of metal parts**

| | |
|-------------------------|---|
| Note | WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201 |
| Contact material | Cu alloy |
| Terminal point surface | Tin (10 - 16 µm Sn) |
| Soldering area surface | Tin (10 - 16 µm Sn) |
| Surface characteristics | Tin-plated |

7.2 Material of plastic parts

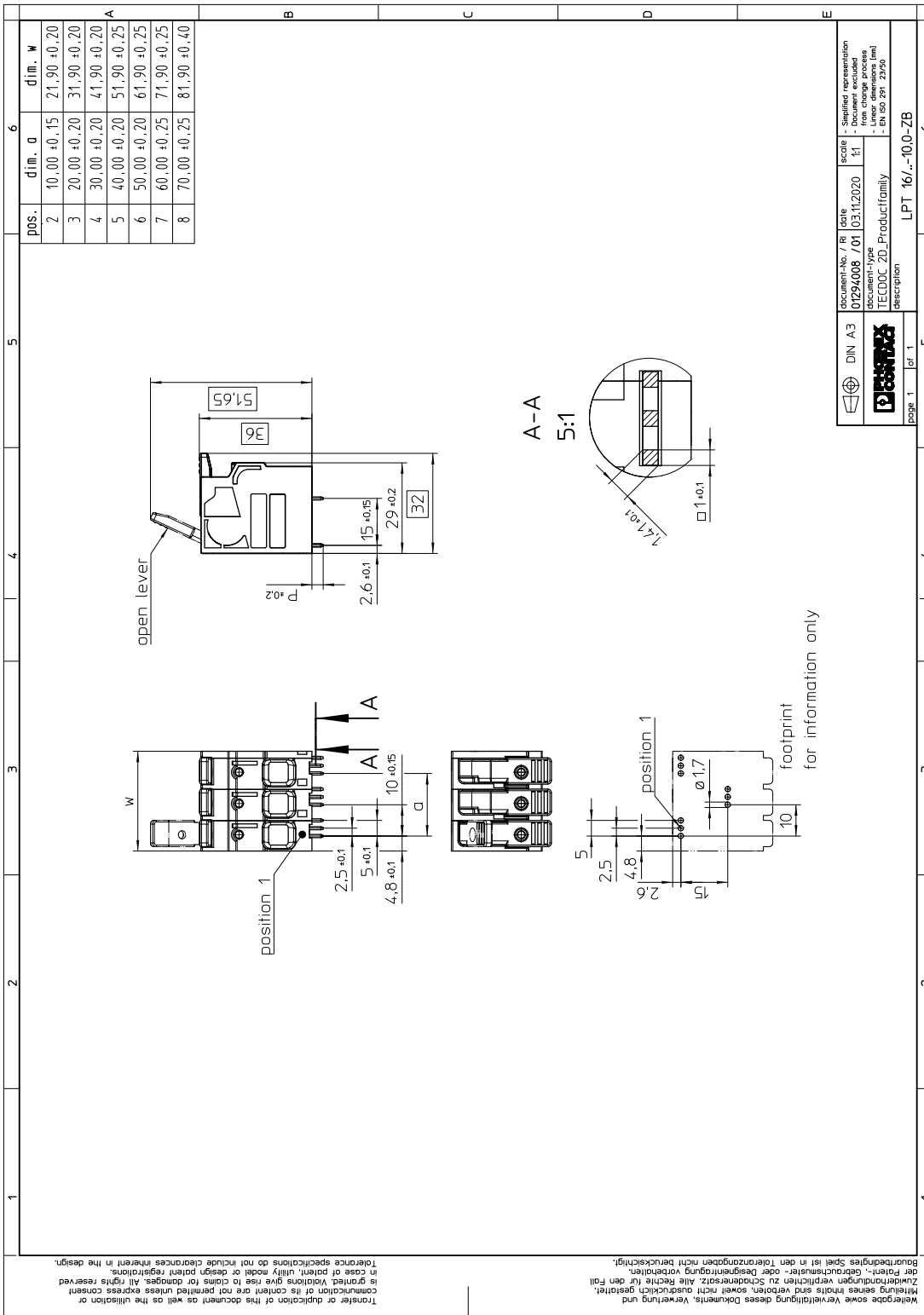
| | Housing | Actuation element |
|---|--------------|-------------------|
| Color | green (6021) | orange (2003) |
| Insulating material | PA | PA GF |
| Insulating material group | I | I |
| CTI according to IEC 60112 | 600 | 600 |
| Flammability rating according to UL 94 | V0 | V0 |
| Glow wire flammability 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 | |

1119811 LPT 16/ 3-10,0-ZB**8 Dimensions****8.1 Dimensions for the product**

| | |
|-----------------------------|---------|
| Length | 32 mm |
| Width | 31.9 mm |
| Height (without solder pin) | 36 mm |
| Total height | 39.6 mm |
| Solder pin [P] | 3.6 mm |

1119811 LPT 16/ 3-10,0-ZB

9 Series drawing



| | | | | |
|--------|---------------------------|------------|-------|-----------------------------|
| DIN A3 | document-No. / Ri / title | date | scale | representation |
| | 01294008 / 01 | 03.11.2020 | 1:1 | - Simplified representation |
| | | | | - Reduced number of details |
| | | | | - Free choice of process |
| | | | | - Linear dimensions (mm) |
| | | | | - EN ISO 2951, 2950 |
| page 1 | of 1 | | | |
| | | | | LPT 16/-10,0-ZB |

10 Application

11 Packaging information

| | |
|--------------------|---------------------|
| Type of packaging | packed in cardboard |
| Pieces per package | 25 |

11.1 Temperature limit values

| | |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 105 °C (Depending on the current carrying capacity/derating curve) |

1119811 LPT 16/ 3-10,0-ZB**12 Mechanical tests****12.1 Pull-out test**

| | |
|--|--|
| Specification | IEC 60999-1:1999-11 |
| Result | Test passed |
| Conductor cross section/conductor type/tractive force actual value | 0.75 mm ² / solid / > 30 N |
| Conductor cross section/conductor type/tractive force actual value | 0.75 mm ² / flexible / > 30 N |
| Conductor cross section/conductor type/tractive force actual value | 16 mm ² / solid / > 100 N |
| Conductor cross section/conductor type/tractive force actual value | 25 mm ² / flexible / > 135 N |

12.2 Check for damage to conductor or loosening

| | |
|---------------|---------------------|
| Specification | IEC 60999-1:1999-11 |
| Result | Test passed |

1119811 LPT 16/ 3-10,0-ZB**13 Electrical tests****13.1 Electrical data**

| | |
|---|---------------------------|
| Rated current / conductor cross section | 76 A / 16 mm ² |
| Rated insulation voltage (III/2) | 1000 V |
| Rated surge voltage (III/2) | 8 kV |
| Contact resistance | 0.38 mΩ |
| Degree of pollution | 2 |

13.2 Air and creepage distances

| | | | |
|---|-----------------------|--------|--------|
| Component | PCB terminal block | | |
| Specification | IEC 60947-7-4:2019-01 | | |
| Mains type | unearthed mains | | |
| Insulating material group | I | | |
| Comparative tracking index (IEC 60112:2003-01) | CTI 600 | | |
| Rated insulation voltage | 1000 V | 1000 V | 1000 V |
| Rated surge voltage | 8 kV | 8 kV | 6 kV |
| Degree of pollution | 3 | 2 | 2 |
| Overvoltage category | III | III | II |
| Minimum clearance case A (inhomogeneous field) | 8 mm | 8 mm | 5.5 mm |
| Minimum value of the creepage path requirement in acc. with table | 12.5 mm | 8 mm | 5.5 mm |

13.3 Short-time withstand current test

| | |
|--|----------------------------|
| Specification | IEC 60947-7-4:2019-01 |
| Result | Test passed |
| Conductor cross section/short-time current | 16 mm ² / 360 A |

13.4 Aging test (climatic impact and corrosion testing)

| | |
|--|------------------------------|
| Specification | IEC 60947-7-4:2019-01 |
| Result | Test passed |
| Contact resistance R ₁ | 0.38 mΩ / 16 mm ² |
| Test sequence 1: low temperature storage | -40 °C / 2 h |
| Test sequence 2: heat storage | 168 h/105 °C |
| Test sequence 3: noxious gas storage (ISO 6988) | KFW 0.2 S/1 cycle |
| Contact resistance R ₂ | 0.2 mΩ / 16 mm ² |
| Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs) | 9.8 kV |
| Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz) | 4.2 kV |

13.5 Insulation resistance

1119811 LPT 16/ 3-10,0-ZB

| | |
|--|-----------------------|
| Specification | IEC 60512-3-1:2002-02 |
| Result | Test passed |
| Insulation resistance, neighboring positions | > 5 M Ω |

13.6 Mechanical connection test for the PCB terminal block

| | |
|---------------|-----------------------|
| Specification | IEC 60947-7-4:2019-01 |
| Result | Test passed |

13.7 Temperature rise test

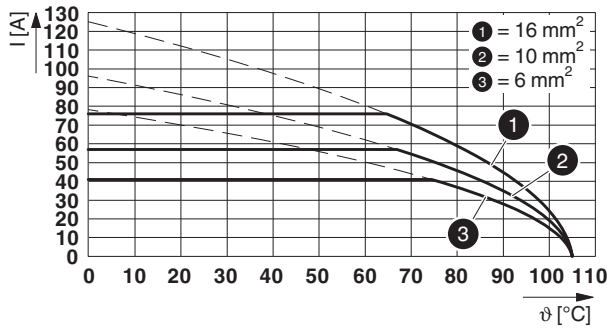
| | |
|---|--|
| Specification | IEC 60947-7-4:2019-01 |
| Result | Test passed |
| Requirement temperature-rise test | The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature. |
| Conductor cross section/test current/temperature rise | 16 mm ² / 76 A / 40.3 K |
| Conductor cross section/test current/temperature rise | 10 mm ² / 57 A / 38.1 K |
| Conductor cross section/test current/temperature rise | 6 mm ² / 41 A / 31.2 K |

1119811 LPT 16/ 3-10,0-ZB

14 Current carrying capacity/derating curves

| | |
|-------------------------|---|
| Specification | IEC 60947-7-4:2019-01 |
| Note | Representation based on IEC 60512-5-2:2002-02 |
| Reduction factor | 1 |
| Number of positions | 4 |
| Conductor cross section | 16 mm ² |

Type: LPT 16/...-10,0-ZB



1119811 LPT 16/ 3-10,0-ZB**15 Environmental and durability tests****15.1 Vibration test**

| | |
|------------------------|-------------------------------------|
| Specification | IEC 60068-2-6:2007-12 |
| Result | Test passed |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 50 m/s ² (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |
| Test directions | X-, Y- and Z-axis |
| Note | |

15.2 Assessment of fire risk (glow wire test)

| | | | |
|------------------|------------------------|--|--|
| Specification | IEC 60695-2-10:2013-04 | | |
| Result | Test passed | | |
| Temperature | 850 °C | | |
| Time of exposure | 5 s | | |

15.3 Shock protection

| | |
|---|---|
| Specification | Following IEC 60529:1989-11 + AMD 1:1999-11 + AMD 2:2013-08 |
| Back of the hand protection (Ball ø 50) | conditional guaranteed |
| Finger protection (movable test finger) | conditional guaranteed |
| Note | Contact protection above the PCB is only assured when a conductor with a cross-section of 6 mm ² is connected. |

1119811 LPT 16/ 3-10,0-ZB**16 Commercial Data**

| | |
|--------------------|--|
| Order No. | 1119811 |
| Type | LPT 16/ 3-10,0-ZB |
| Pieces per package | 25 |
| Net weight | 2.22 g |
| GTIN | 4063151065584 |
| | Information that applies locally, see link on page 1 |
| Country of origin | Information that applies locally, see link on page 1 |