# PCB header - PCV 6/ 4-G-7,62 P26THR

1192627

https://www.phoenixcontact.com/us/products/1192627

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PCB headers, nominal cross section: 6 mm$^2$, color: black, nominal current: 41 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Male connector, number of rows: 1, number of positions: 4, product range: PCV 6/..-G-THR, pitch: 7.62 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 3, plug-in system: COMBICON PC 6, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

## Your advantages

- Designed for integration into the SMT soldering process
- Increased touch protection in the pin connector pattern for maximum safety even when not plugged in
- Easy PCB replacement thanks to plug-in modules

## Commercial Data

| | |
|---|---|
| Item number | 1192627 |
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| Sales Key | A02 |
| Product Key | AADTDI |
| GTIN | 4063151245412 |
| Weight per Piece (including packing) | 8.793 g |
| Weight per Piece (excluding packing) | 8.793 g |
| Customs tariff number | 85366930 |
| Country of origin | CN |

## Technical Data

### Product properties

| | |
|---|---|
| Product line | COMBICON Connectors L |
| Product type | PCB headers |
| Number of positions | 4 |
| Pitch | 7.62 mm |
| Number of rows | 1 |
| | 1 |
| Mounting flange | without |
| Pin layout | Linear pinning |

### Electrical properties

| | |
|---|---|
| Nominal current $I_N$ | 41 A |
| Nominal voltage $U_N$ | 630 V |
| Pollution degree | 3 |
| Contact resistance | 0.8 mΩ |
| Rated voltage (III/3) | 630 V |
| Rated surge voltage (III/3) | 6 kV |
| Rated voltage (III/2) | 630 V |
| Rated surge voltage (III/2) | 6 kV |

### Mounting

| | |
|---|---|
| Mounting type | THR soldering |

Processing notes

| | |
|---|---|
| Process | Reflow/wave soldering |
| Moisture Sensitive Level | MSL 1 |
| Classification temperature $T_c$ | 260 °C |
| Solder cycles in the reflow | 3 |

### 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 |
| Surface characteristics | Tin-plated |
| Metal surface contact area (top layer) | Tin (3 - 6 µm Sn) |
| Metal surface contact area (middle layer) | Nickel (1.3 - 3 µm Ni) |
| Metal surface soldering area (top layer) | Tin (3 - 6 µm Sn) |
| Metal surface soldering area (middle layer) | Nickel (1.3 - 3 µm Ni) |

Material data - housing

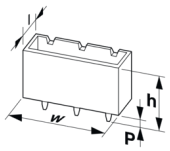
| | |
|---|---|
| Housing color | black (9005) |

| | |
|---|---|
| Insulating material | LCP |
| Insulating material group | IIIa |
| CTI according to IEC 60112 | 175 |
| Flammability rating according to UL 94 | V0 |

## 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 | 7.62 mm |
| Width [w] | 30.88 mm |
| Height [h] | 30.8 mm |
| Length [l] | 13 mm |
| Installed height | 28.2 mm |
| Solder pin length [P] | 2.6 mm |

## Mechanical tests

Test for conductor damage and slackening

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

Repeated connection and disconnection

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

Pull-out test

| | |
|---|---|
| Specification | IEC 60999-1:1999-11 |
| Conductor cross section/conductor type/tractive force setpoint/actual value | 0.75 mm² / solid / > 30 N |
| | 0.75 mm² / flexible / > 30 N |
| | 10 mm² / solid / > 90 N |
| | 6 mm² / flexible / > 80 N |

Insertion and withdrawal forces

| | |
|---|---|
| Result | Test passed |
| No. of cycles | 25 |
| Insertion strength per pos. approx. | 5 N |
| Withdraw strength per pos. approx. | 6 N |

Contact holder in insert

| | |
|---|---|
| Specification | IEC 60512-15-1:2008-05 |
| Contact holder in insert<br>Requirements >20 N | Test passed |

Resistance of inscriptions

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

Polarization and coding

| | |
|---|---|
| Specification | IEC 60512-13-5:2006-02 |
| Result | Test passed |

Visual inspection

| | |
|---|---|
| Specification | IEC 60512-1-1:2002-02 |
| Result | Test passed |

Dimension check

| | |
|---|---|
| Specification | IEC 60512-1-2:2002-02 |
| Result | Test passed |

## Electrical tests

Thermal test | Test group C

| | |
|---|---|
| Specification | IEC 60512-5-1:2002-02 |
| Tested number of positions | 6 |

Insulation resistance

| | |
|---|---|
| Specification | IEC 60512-3-1:2002-02 |
| Insulation resistance, neighboring positions | > 5 MΩ |

Temperature cycles

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

Air clearances and creepage distances |

| | |
|---|---|
| Specification | IEC 60664-1:2007-04 |
| Insulating material group | IIIa |
| Comparative tracking index (IEC 60112) | CTI 175 |
| Rated insulation voltage (III/3) | 630 V |
| Rated surge voltage (III/3) | 6 kV |
| minimum clearance value - non-homogenous field (III/3) | 5.5 mm |
| minimum creepage distance (III/3) | 10 mm |
| Rated insulation voltage (III/2) | 630 V |
| Rated surge voltage (III/2) | 6 kV |
| minimum clearance value - non-homogenous field (III/2) | 5.5 mm |
| minimum creepage distance (III/2) | 6.3 mm |
| Rated insulation voltage (II/2) | 1000 V |

| | |
|---|---|
| Rated surge voltage (II/2) | 6 kV |
| minimum clearance value - non-homogenous field (II/2) | 5.5 mm |
| minimum creepage distance (II/2) | 10 mm |

## Environmental and real-life conditions

Vibration test

| | |
|---|---|
| Specification | IEC 60068-2-6:2007-12 |
| 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 60512-9-1:2010-03 |
| Impulse withstand voltage at sea level | 7.3 kV |
| Contact resistance $R_1$ | 0.8 mΩ |
| Contact resistance $R_2$ | 0.7 mΩ |
| Insertion/withdrawal cycles | 25 |
| Insulation resistance, neighboring positions | > 5 MΩ |

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 | 3.31 kV |

Ambient conditions

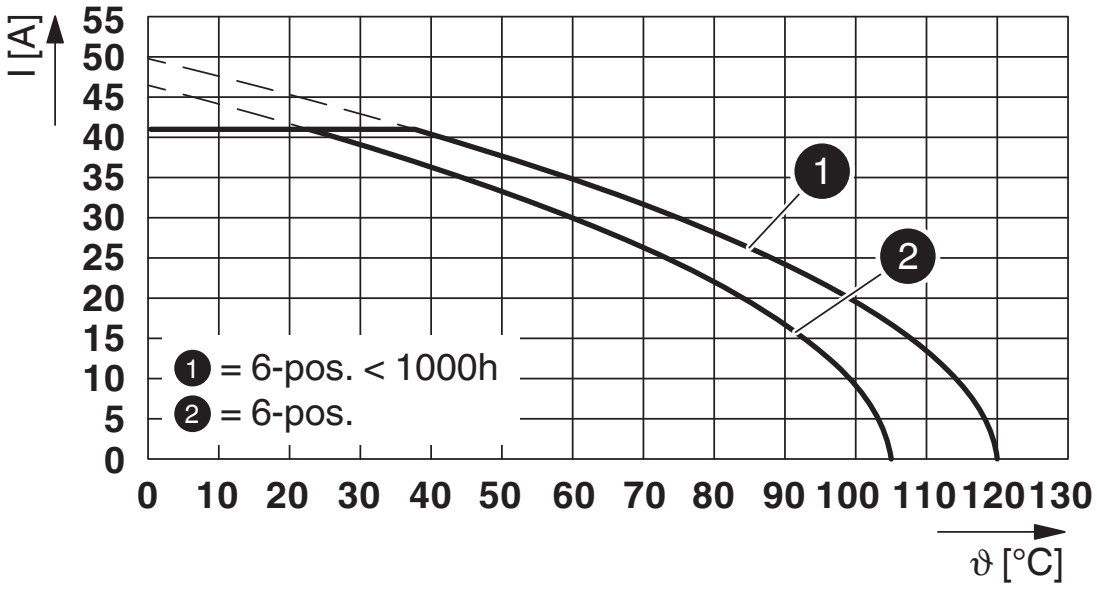
| | |
|---|---|
| Ambient temperature (operation) | -40 °C ... 105 °C (dependent on the derating curve) |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Relative humidity (storage/transport) | 30 % ... 70 % |
| Ambient temperature (assembly) | -5 °C ... 100 °C |

## Packaging specifications

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

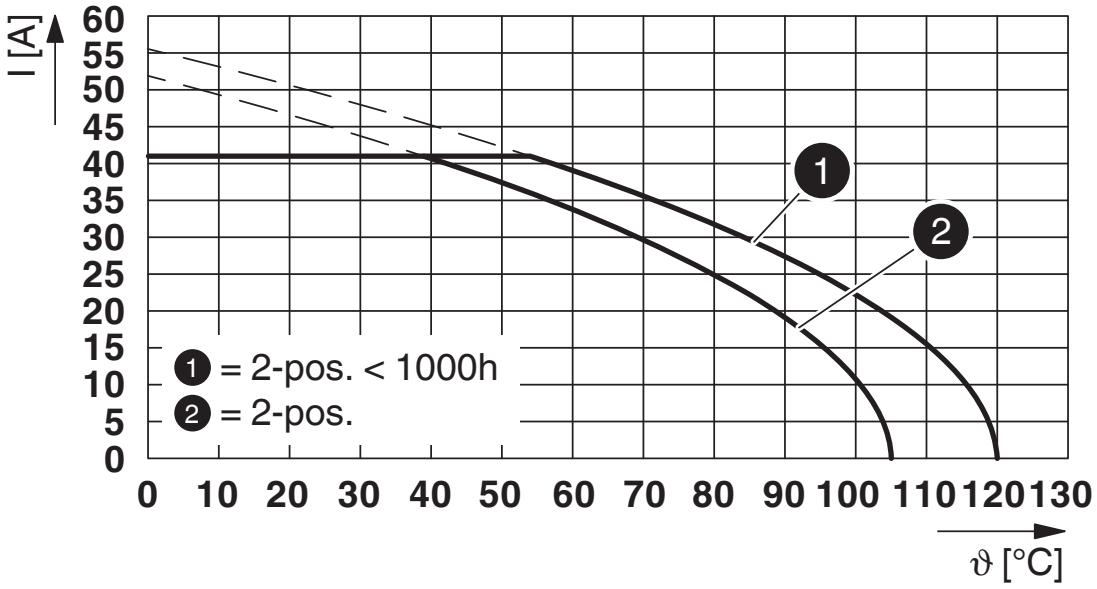
## Drawings

Diagram




Type: LPC 6/...-ST-7,62 with PCV 6/...-G-7,62 P...THR

Diagram




Type: LPC 6/...-ST-7,62 with PCV 6/...-G-7,62 P...THR

## Approvals

**VDE Zeichengenehmigung**
Approval ID: 40050635

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|
| | 630 V | 41 A | - | - |

**cULus Recognized**
Approval ID: E60425-20010727

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|
| Use group B | | | | |
| | 300 V | 35 A | - | - |
| Use group C | | | | |
| | 300 V | 35 A | - | - |
| Use group F | | | | |
| | 600 V | 35 A | - | - |
| Use group D | | | | |
| | 600 V | 5 A | - | - |

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-9.0 | 27440402 |
| ECLASS-10.0.1 | 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 |

## Accessories

### PCB connector

PCB connector - LPC 6/ 4-ST-7,62 - 1716923

https://www.phoenixcontact.com/us/products/1716923



PCB connector, nominal cross section: 6 $mm^2$, color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Female connector, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: LPC 6/..-ST, pitch: 7.62 mm, connection method: Lever Push-in connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 6, locking: without, mounting: without, type of packaging: packed in cardboard


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