# GMSTB 2,5/ 6-GF-7,62 AU - PCB header

1892440

https://www.phoenixcontact.com/us/products/1892440

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PCB headers, nominal cross section: 2.5 mm$^2$, color: green, nominal current: 12 A, rated voltage (III/2): 630 V, contact surface: Gold, contact connection type: Pin, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: GMSTB 2,5/..-GF, pitch: 7.62 mm, mounting: Wave soldering, conductor/PCB connection direction: 0 °, pin layout: Linear pinning, solder pin [P]: 3.23 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

## Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Well-known mounting principle allows worldwide use
- Larger pitch for increased voltage requirements

## Commercial data

| | |
|---|---|
| Item number | 1892440 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Note | Made to order (non-returnable) |
| Sales key | AA03 |
| Product key | AACSJC |
| GTIN | 4017918369217 |
| Weight per piece (including packing) | 4.488 g |
| Weight per piece (excluding packing) | 4.488 g |
| Customs tariff number | 85366930 |
| Country of origin | DE |

## Technical data

### Product properties

| | |
|---|---|
| Product type | PCB headers |
| Product family | GMSTB 2,5/..-GF |
| Product line | COMBICON Connectors M |
| Number of positions | 6 |
| Pitch | 7.62 mm |
| Number of connections | 6 |
| Number of rows | 1 |
| Number of potentials | 6 |
| Mounting flange | Threaded flange |
| Pin layout | Linear pinning |
| Solder pins per potential | 1 |

### Electrical properties

| | |
|---|---|
| Nominal current $I_N$ | 12 A |
| Nominal voltage $U_N$ | 630 V |
| Degree of pollution | 3 |
| Rated voltage (III/3) | 400 V |
| Rated surge voltage (III/3) | 6 kV |
| Rated voltage (III/2) | 630 V |
| Rated surge voltage (III/2) | 6 kV |
| Rated voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 6 kV |

### Mounting

| | |
|---|---|
| Mounting type | Wave soldering |
| Pin layout | Linear pinning |

Flange

| | |
|---|---|
| Tightening torque | 0.3 Nm |

Attachment on the PCB

| | |
|---|---|
| Tightening torque | 0.3 Nm |
| Screw | Sheet metal screw ISO 1481-ST 2,2x6,5 C or ISO 7049-ST 2,2x6,5 C |

### 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 | partially gold-plated |

| | |
|---|---|
| Metal surface contact area (top layer) | Gold (0.8 - 1.4 µm Au) |
| Metal surface contact area (middle layer) | Nickel (2 - 3 µm Ni) |
| Metal surface soldering area (top layer) | Tin (3 - 5 µm Sn) |
| Metal surface soldering area (middle layer) | Nickel (1.3 - 3 µm Ni) |

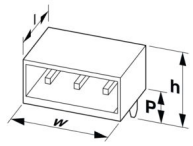
Material data - housing

| | |
|---|---|
| Color (Housing) | 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 | 7.62 mm |
| Width [w] | 56.3 mm |
| Height [h] | 11.8 mm |
| Length [l] | 12 mm |
| Installed height | 8.57 mm |
| Solder pin length [P] | 3.23 mm |
| Pin dimensions | 11 mm |

PCB design

| | |
|---|---|
| Hole diameter | 1.4 mm |

## 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) | 400 V |

| | |
|---|---|
| Rated surge voltage (III/3) | 6 kV |
| minimum clearance value - non-homogenous field (III/3) | 5.5 mm |
| minimum creepage distance (III/3) | 5 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) | 3.2 mm |
| Rated insulation voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 6 kV |
| minimum clearance value - non-homogenous field (II/2) | 5.5 mm |
| minimum creepage distance (II/2) | 3.2 mm |

## Environmental and real-life conditions

### 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 |

## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1892440

**cULus Recognized**
Approval ID: E60425-19931013

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| Use group B | | | | |
| | 300 V | 15 A | - | - |
| Use group D | | | | |
| | 300 V | 10 A | - | - |

**VDE Zeichengenehmigung**
Approval ID: 40050648

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| | 400 V | 12 A | - | - |

**CSA**
Approval ID: 13631-2585951

| | 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 | - | - |

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-11.0 | 27460201 |
| ECLASS-12.0 | 27460201 |
| ECLASS-13.0 | 27460201 |

### ETIM

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

### UNSPSC

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

## Environmental product compliance

EU RoHS

| | |
|---|---|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |

China RoHS

| | |
|---|---|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|---|---|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |


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