

MSTBV 2,5/12-GF-5,08 EX - PCB header



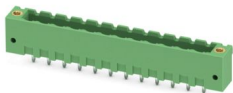
1796429

<https://www.phoenixcontact.com/us/products/1796429>

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PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, contact surface: Sn, contact connection type: Pin, number of rows: 1, number of positions: 12, product range: MSTBV 2,5/...-GF-EX, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5 EX, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting method: Threaded flange, type of packaging: packed in cardboard



Your advantages

- Satisfies the more stringent safety requirements of "Ex eb" protection according to IEC 60079-7 for potentially explosive areas
- Screwable flange for superior mechanical stability
- Vertical connection enables multi-row arrangement on the PCB
- Well-known mounting principle allows worldwide use
- Closed contour for optimum stability of the plug-in connection

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1796429 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Note | Made to order (non-returnable) |
| Sales key | AA03 |
| Product key | AACSMK |
| GTIN | 4046356636537 |
| Weight per piece (including packing) | 5.623 g |
| Weight per piece (excluding packing) | 5.16 g |
| Customs tariff number | 85366930 |
| Country of origin | DE |

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Technical data

Product properties

| | |
|---------------------------|-----------------------|
| Product type | PCB headers |
| Product family | MSTBV 2,5/..-GF-EX |
| Product line | COMBICON Connectors M |
| Type | Standard |
| Number of positions | 12 |
| Pitch | 5.08 mm |
| Number of rows | 1 |
| Mounting type | Threaded flange |
| Pin layout | Linear pinning |
| Solder pins per potential | 1 |

Electrical properties

Properties

| | |
|---|--------------------------|
| Nominal current I_N | 12 A |
| Nominal voltage U_N | 176 V |
| Rated current / conductor cross-section | 12 A/2.5 mm ² |

Ex data

Ex approval

| | |
|---------------------------------|---|
| Identification | 0344 [Ⓢ] II 2GD / Ex eb IIC Gb |
| EU-type examination certificate | KEMA 10ATEX0196 U |
| IECEx certificate | IECEx KEM 10.0093U |

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 | Tin-plated |

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| | |
|---|---------------------------|
| Metal surface contact area (top layer) | Tin (3 µm - 5 µm Sn) |
| Metal surface contact area (middle layer) | Nickel (1.3 µm - 3 µm Ni) |
| Metal surface soldering area (top layer) | Tin (3 µm - 5 µm Sn) |
| Metal surface soldering area (middle layer) | Nickel (1.3 µm - 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 | 5.08 mm |
| Width [w] | 71.12 mm |
| Height [h] | 15.9 mm |
| Length [l] | 8.6 mm |
| Installed height | 12 mm |
| Solder pin length [P] | 3.9 mm |
| Pin dimensions | 1 x 1 mm |

PCB design

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

Environmental and real-life conditions

Ambient conditions

| | |
|---|-------------------|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Relative humidity (storage/transport) | 30 % ... 70 % |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -60 °C ... 110 °C |

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Packaging specifications

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

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1796429>

|  ATEX Approval ID: KEMA 10ATEX0196 U | | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 176 V | 12 A | - | 0.2 - 2.5 |

|  IECEx Approval ID: IECEx KEM 10.0093U | | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 176 V | 12 A | - | 0.2 - 2.5 |

|  CCC Approval ID: 2021122313114375 | | | | |
|---|--|--|--|--|
|---|--|--|--|--|

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27460201 |
| ECLASS-15.0 | 27460201 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC002637 |
|-----------|----------|

UNSPSC

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

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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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