

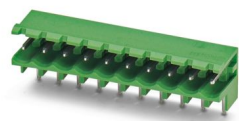
# MSTBW 2,5/ 3-G RD - PCB header



1714791

<https://www.phoenixcontact.com/us/products/1714791>

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PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: red, nominal current: 12 A, contact surface: Sn, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBW 2,5/-G, pitch: 5 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

## Your advantages

- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Well-known mounting principle allows worldwide use
- Stand-offs enable the PCB to be cleaned or sealed

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1714791                        |
| Packing unit                         | 50 pc                          |
| Minimum order quantity               | 50 pc                          |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | AA03                           |
| Product key                          | AACSGL                         |
| GTIN                                 | 4055626456409                  |
| Weight per piece (including packing) | 1.439 g                        |
| Weight per piece (excluding packing) | 1.179 g                        |
| Customs tariff number                | 85366930                       |
| Country of origin                    | DE                             |

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## Technical data

### Product properties

|                           |                       |
|---------------------------|-----------------------|
| Product type              | PCB headers           |
| Product family            | MSTBW 2,5/...-G       |
| Product line              | COMBICON Connectors M |
| Number of positions       | 3                     |
| Pitch                     | 5 mm                  |
| Number of connections     | 3                     |
| Number of rows            | 1                     |
| Number of potentials      | 3                     |
| Pin layout                | Linear pinning        |
| Solder pins per potential | 1                     |

### Data management status

|                  |    |
|------------------|----|
| Article revision | 00 |
|------------------|----|

### Electrical properties

|                       |      |
|-----------------------|------|
| Nominal current $I_N$ | 12 A |
|-----------------------|------|

### Mounting

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

### 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 (5 - 7 $\mu\text{m}$ Sn)                                                     |
| Metal surface contact area (middle layer)   | Nickel (2 - 3 $\mu\text{m}$ Ni)                                                  |
| Metal surface soldering area (top layer)    | Tin (5 - 7 $\mu\text{m}$ Sn)                                                     |
| Metal surface soldering area (middle layer) | Nickel (2 - 3 $\mu\text{m}$ Ni)                                                  |

#### Material data - housing

|                                                                |            |
|----------------------------------------------------------------|------------|
| Color (Housing)                                                | red (3001) |
| 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        |

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Temperature for the ball pressure test according to EN 60695-10-2

125 °C

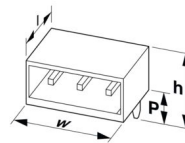
## Notes

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]             | 15 mm   |
| Height [h]            | 16.5 mm |
| Length [l]            | 12 mm   |
| Installed height      | 13 mm   |
| Solder pin length [P] | 3.5 mm  |
| Pin dimensions        | 11 mm   |

## PCB design

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

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1714791>

|  <b>cULus Recognized</b><br>Approval ID: E60425-19931011 |                       |                       |                   |                             |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                           | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| Use group B                                                                                                                               |                       |                       |                   |                             |
|                                                                                                                                           | 300 V                 | 15 A                  | -                 | -                           |
| Use group D                                                                                                                               |                       |                       |                   |                             |
|                                                                                                                                           | 300 V                 | 10 A                  | -                 | -                           |

|  <b>CSA</b><br>Approval ID: 13631-2585951 |                       |                       |                   |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                            | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| Use group B                                                                                                                |                       |                       |                   |                             |
|                                                                                                                            | 300 V                 | 15 A                  | -                 | -                           |
| Use group D                                                                                                                |                       |                       |                   |                             |
|                                                                                                                            | 300 V                 | 10 A                  | -                 | -                           |

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## Classifications

### ECLASS

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

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | 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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