

# QC 1/ 2-ST-BUS - PCB connector



1921670

<https://www.phoenixcontact.com/us/products/1921670>

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PCB connector, nominal cross section: 1 mm<sup>2</sup>, color: green, nominal current: 10 A, rated voltage (III/2): 630 V, contact surface: Sn, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: QC 1/..-ST-BUS, pitch: 5 mm, connection method: Displacement connection, conductor/PCB connection direction: 90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard, The plug allows conductors to be looped through from module to module, without interruption

## Your advantages

- Connection without conductor pretreatment for huge time savings
- Can be combined with the MSTB 2,5 range

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1921670             |
| Packing unit                         | 50 pc               |
| Minimum order quantity               | 50 pc               |
| Sales key                            | AA03                |
| Product key                          | AACQAA              |
| Catalog page                         | Page 291 (C-1-2013) |
| GTIN                                 | 4017918606244       |
| Weight per piece (including packing) | 4.266 g             |
| Weight per piece (excluding packing) | 3.906 g             |
| Customs tariff number                | 85366990            |
| Country of origin                    | PL                  |

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## Technical data

### Product properties

|                       |                       |
|-----------------------|-----------------------|
| Product type          | PCB connector         |
| Product family        | QC 1/...-ST-BUS       |
| Product line          | COMBICON Connectors M |
| Type                  | Bus plug component    |
| Number of positions   | 2                     |
| Pitch                 | 5 mm                  |
| Number of connections | 2                     |
| Number of rows        | 1                     |
| Number of potentials  | 2                     |
| Mounting flange       | without               |

### Data management status

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

### Electrical properties

|                             |        |
|-----------------------------|--------|
| Nominal current $I_N$       | 10 A   |
| Nominal voltage $U_N$       | 630 V  |
| Rated voltage (III/3)       | 500 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)        | 1000 V |
| Rated surge voltage (II/2)  | 6 kV   |

### Connection data

#### Connection technology

|                         |                    |
|-------------------------|--------------------|
| Type                    | Bus plug component |
| Connector system        | COMBICON MSTB 2,5  |
| Nominal cross section   | 1 mm <sup>2</sup>  |
| Contact connection type | Socket             |

#### Interlock

|                 |         |
|-----------------|---------|
| Locking type    | without |
| Mounting flange | without |

#### Conductor connection

|                                    |   |
|------------------------------------|---|
| Connection method                  | Displacement connection                   |
| Conductor/PCB connection direction | 90 °                                      |
| Conductor cross section flexible   | 0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup> |
| Conductor cross section AWG        | 20 ... 18                                 |

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## 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                  | hot-dip tin-plated   |
| Metal surface terminal point (top layer) | Tin (4 - 8 µm Sn)  |
| Metal surface contact area (top layer)   | Tin (4 - 8 µm Sn)  |

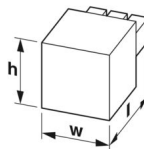
### Material data - housing

|   |              |
|---|--------------|
| 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       |

### Material data – actuating element

|                           |               |
|---------------------------|---------------|
| Color (Actuating element) | orange (2003) |
|---------------------------|---------------|

## Dimensions

|                     |  |
|---------------------|--|
| Dimensional drawing |  |
| Pitch               | 5 mm   |
| Width [w]           | 10.9 mm  |
| Height [h]          | 15 mm  |
| Length [l]          | 37.8 mm  |

## Notes

|         |  |
|---------|--|
| General | 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. |
|---------|--|

## 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                                    |

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

## 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)                       | 500 V               |
| Rated surge voltage (III/3)                            | 6 kV                |
| minimum clearance value - non-homogenous field (III/3) | 5.5 mm              |
| minimum creepage distance (III/3)                      | 6.3 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)                      | 5.5 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)                       | 5.5 mm              |

## 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/1921670>

|  |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>VDE Zeichengenehmigung</b><br>Approval ID: 40050648 |                       |                       |                   |                             |
|  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|  | 250 V                 | 10 A                  | -                 | 0.75 - 1                    |

|   |                       |                       |                   |                             |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>cULus Recognized</b><br>Approval ID: E60425-20000125 |                       |                       |                   |                             |
|   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| Use group B   |                       |                       |                   |                             |
|   | 300 V                 | 10 A                  | 20 - 16           | -                           |
| Use group C   |                       |                       |                   |                             |
|   | 300 V                 | 10 A                  | 20 - 16           | -                           |

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27460202 |
| ECLASS-12.0 | 27460202 |
| ECLASS-13.0 | 27460202 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002638 |
|----------|----------|

### 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%               |
| EF3.0 Climate Change                    |  |
| CO2e kg                                 | 0.062 kg CO2e                            |

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