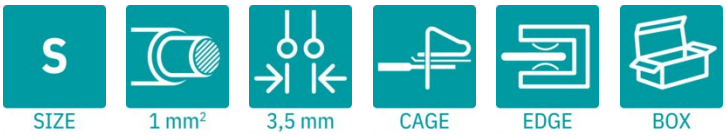
# ZEC 1,0/ 4-ST-3,5 GY35AUC1R1,4 - PCB connector

1751710

https://www.phoenixcontact.com/us/products/1751710

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The figure shows a 10-position version of the product

PCB direct plug, nominal cross section: 1 mm$^2$, color: light gray, nominal current: 8 A, rated voltage (III/2): 200 V, contact surface: Au, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ZEC 1,0/..-ST, pitch: 3.5 mm, connection method: Spring-cage connection, mounting: Direct plug-in method, conductor/PCB connection direction: 0 °, plug-in system: ZEC, locking: Snap-in locking, mounting method: without, type of packaging: packed in cardboard

## Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- Defined contact force ensures that contact remains stable over the long term
- Inexpensive direct plug-in connection with just one component
- Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- Plug-in direction parallel to the PCB

## Commercial data

| | |
|---|---|
| Item number | 1751710 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | AA02 |
| Product key | AABEAA |
| GTIN | 4046356316569 |
| Weight per piece (including packing) | 5.334 g |
| Weight per piece (excluding packing) | 4.771 g |
| Customs tariff number | 85366930 |
| Country of origin | GR |

# Technical data

## Product properties

| | |
|---|---|
| Product type | PCB direct plug |
| Product family | ZEC 1,0/..-ST |
| Product line | COMBICON Connectors S |
| Number of positions | 4 |
| Pitch | 3.5 mm |
| Number of connections | 4 |
| Number of rows | 1 |
| Number of potentials | 4 |
| Mounting type | without |

Fitting of components

| | |
|---|---|
| Partial assembly | No |

## Electrical properties

Properties

| | |
|---|---|
| Nominal current $I_N$ | 8 A |
| Nominal voltage $U_N$ | 200 V |
| Rated voltage (III/3) | 160 V |
| Rated surge voltage (III/3) | 2.5 kV |
| Rated voltage (III/2) | 200 V |
| Rated surge voltage (III/2) | 2.5 kV |
| Rated voltage (II/2) | 320 V |
| Rated surge voltage (II/2) | 2.5 kV |

## Connection data

Connection technology

| | |
|---|---|
| Type | Direct plug connector |
| Connector system | ZEC |
| Nominal cross section | 1 mm² |
| Contact connection type | Socket |

Interlock

| | |
|---|---|
| Locking type | Snap-in locking |
| Mounting type | without |

Conductor connection

| | |
|---|---|
| Connection method | Spring-cage connection |
| Connection direction of the conductor to plug-in direction | 0 ° |
| Conductor cross-section rigid | 0.2 mm² ... 1 mm² |
| Conductor cross-section flexible | 0.2 mm² ... 1 mm² |
| Conductor cross-section AWG | 24 ... 16 |

| | |
|---|---|
| Conductor cross-section, flexible, with ferrule, without plastic sleeve | 0.25 mm² ... 1 mm² |
| Conductor cross-section, flexible, with ferrule, with plastic sleeve | 0.25 mm² ... 0.75 mm² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm² ... 0.5 mm² |
| Stripping length | 7 mm |

Specifications for ferrules without insulating collar

| | |
|---|---|
| recommended crimping tool | 1212034 CRIMPFOX 6 |

Specifications for ferrules with insulating collar

| | |
|---|---|
| recommended crimping tool | 1212034 CRIMPFOX 6 |

## Mounting

| | |
|---|---|
| Mounting type | Direct plug-in method |

## 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 terminal point (top layer) | Tin (4 µm - 8 µm Sn) |
| Metal surface terminal point (middle layer) | Nickel (2 µm - 4 µm Ni) |
| Metal surface contact area (top layer) | Gold (0.8 µm - 1.4 µm Au) |
| Metal surface contact area (middle layer) | Nickel (2 µm - 4 µm Ni) |

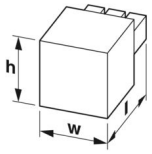
Material data - housing

| | |
|---|---|
| Color (Housing) | light gray (7035) |
| 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 | 3.5 mm |
| Width [w] | 15.4 mm |
| Height [h] | 17.5 mm |
| Length [l] | 24.05 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) | 160 V |
| Rated surge voltage (III/3) | 2.5 kV |
| minimum clearance value - non-homogenous field (III/3) | 1.5 mm |
| minimum creepage distance (III/3) | 2 mm |
| Rated insulation voltage (III/2) | 200 V |
| Rated surge voltage (III/2) | 2.5 kV |
| minimum clearance value - non-homogenous field (III/2) | 1.5 mm |
| minimum creepage distance (III/2) | 1.5 mm |
| Rated insulation voltage (II/2) | 320 V |
| Rated surge voltage (II/2) | 2.5 kV |
| minimum clearance value - non-homogenous field (II/2) | 1.5 mm |
| minimum creepage distance (II/2) | 1.6 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) | -40 °C ... 100 °C (dependent on the derating curve) |

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/1751710

**cULus Recognized**
Approval ID: E60425-19941111

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| B | | | | |
| | 150 V | 8 A | 26 - 16 | - |

**VDE report with production monitoring**
Approval ID: 40020343

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| keine | | | | |
| | 160 V | 8 A | - | 0.2 - 1 |

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-13.0 | 27460202 |
| ECLASS-15.0 | 27460202 |

### ETIM

| | |
|---|---|
| ETIM 10.0 | EC002638 |

### 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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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com