

Printed-circuit board connector - PC 5/ 2-ST2-7,62 - 1777943

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm², number of positions: 2, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Integrated double steel spring provides additional safety in the event of temperature and power fluctuations
- 600 V UL approval in the smallest of dimensions



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 50 pc |
| GTIN |  4 046356 523080 |
| GTIN | 4046356523080 |

Technical data

Item properties

| | |
|---------------------------|---|
| Brief article description | Printed-circuit board connector |
| Plug-in system | POWER COMBICON 5 |
| Type of contact | Female connector |
| Range of articles | PC 5/..-ST2 |
| Pitch | 7.62 mm |
| Number of positions | 2 |
| Connection method | Screw connection with tension sleeve |
| Drive form screw head | Philipps recess with slotted Torx (H1L) |
| Screw thread | M3 |
| Locking | without |
| Number of levels | 1 |

Printed-circuit board connector - PC 5/ 2-ST2-7,62 - 1777943

Technical data

Item properties

| | |
|-----------------------|---|
| Number of connections | 2 |
| Number of potentials | 2 |

Electrical parameters

| | |
|-----------------------------|--------|
| Nominal current | 41 A |
| Nom. voltage | 1000 V |
| Rated voltage | 1000 V |
| Rated voltage (III/2) | 1000 V |
| Rated voltage (II/2) | 1000 V |
| Rated surge voltage (III/3) | 8 kV |
| Rated surge voltage (III/2) | 8 kV |
| Rated surge voltage (II/2) | 6 kV |

Connection capacity

| | |
|---|--|
| Connection method | Screw connection with tension sleeve |
| pluggable | Yes |
| Conductor cross section solid | 0.2 mm ² ... 10 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 6 mm ² |
| Conductor cross section AWG / kcmil | 24 ... 10 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 6 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² ... 4 mm ² |
| 2 conductors with same cross section, solid | 0.2 mm ² ... 2.5 mm ² |
| 2 conductors with same cross section, flexible | 0.2 mm ² ... 4 mm ² |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 1.5 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.25 mm ² ... 2.5 mm ² |
| Cylindrical gauge a x b / diameter | 3.6 mm x 3.1 mm / 3.4 mm |
| Stripping length | 10 mm |
| Torque | 0.5 Nm ... 0.8 Nm ($\leq 4 \text{ mm}^2$ is 0.5 Nm to 0.6 Nm, $> 4 \text{ mm}^2$ is 0.7 Nm to 0.8 Nm) |

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

| | |
|---------------------------|--------------|
| Housing color | green (6021) |
| Insulating material | PA |
| Insulating material group | I |

Printed-circuit board connector - PC 5/ 2-ST2-7,62 - 1777943

Technical data

Material data - housing

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

Dimensions for the product

| | |
|-----------------------------|----------|
| Length [l] | 35.25 mm |
| Width [w] | 15.24 mm |
| Height [h] | 19.7 mm |
| Pitch | 7.62 mm |
| Height (without solder pin) | 19.7 mm |

Packaging information

| | |
|----------------------------|---------------------|
| Type of packaging | packed in cardboard |
| Pieces per package | 50 |
| Denomination packing units | Pcs. |

Ambient conditions

| | |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 100 °C (dependent on the derating curve) |

Termination and connection method

| | |
|--|---------------------|
| Test for conductor damage and slackening | IEC 60999-1:1999-11 |
| | Test passed |

Pull-out test

| | |
|--|---|
| Pull-out test | IEC 60999-1:1999-11 |
| | Test passed |
| Conductor cross section / conductor type / tensile force | 0.2 mm ² / solid / > 10 N |
| | 0.2 mm ² / flexible / > 10 N |
| | 10 mm ² / solid / > 90 N |
| | 6 mm ² / flexible / > 80 N |

Mechanical tests according to standard

| | |
|-------------------------------------|------------------------|
| Test specification | IEC 61984 |
| Visual inspection | IEC 60512-1-1:2002-02 |
| Dimension check | IEC 60512-1-2:2002-02 |
| Resistance of inscriptions | IEC 60068-2-70:1995-12 |
| Insertion and withdrawal force | IEC 60512-13-2:2006-02 |
| No. of cycles | 50 |
| Insertion strength per pos. approx. | 8 N |
| Withdraw strength per pos. approx. | 6 N |

Printed-circuit board connector - PC 5/ 2-ST2-7,62 - 1777943

Technical data

Mechanical tests according to standard

| | |
|--------------------------|------------------------|
| Polarization and coding | IEC 60512-13-5:2006-02 |
| Contact holder in insert | IEC 60512-15-1:2008-05 |
| Test force per pos. | 20 N |

Air clearances and creepage distances

| | |
|---|---------------------|
| Clearances and creepage distances | IEC 60664-1:2007-04 |
| Specification | IEC 60664-1:2007-04 |
| Minimum clearance - inhomogeneous field (III/3) | 8 mm |
| Minimum clearance - inhomogeneous field (III/2) | 8 mm |
| Minimum clearance - inhomogeneous field (II/2) | 5.5 mm |
| Minimum creepage distance value (III/3) | 12.5 mm |
| Minimum creepage distance value (III/2) | 5 mm |
| Minimum creepage distance value (II/2) | 5 mm |

Current carrying capacity / derating curves

| | |
|------------------|--|
| Caption | Type: PC 5/...-ST2-7,62 with PC 4/...-G-7,62 Conductor cross section: 4 mm ² |
| Specification | IEC 61984:2008-10 |
| Reduction factor | 0.8 |
| Note | Representation based on IEC 60512-5-2:2002-02 |
| | For number of positions, see diagram |

Mechanical tests (A)

| | |
|--|-------------|
| Test specification | IEC 61984 |
| Insertion strength per pos. approx. | 8 N |
| Withdraw strength per pos. approx. | 6 N |
| Polarization when inserted requirement >20 N | Test passed |
| Contact holder in insert requirements >20 N | Test passed |

Durability tests (B)

| | |
|--|---------------------|
| Specification | IEC 60512-5:1992-08 |
| Contact resistance R ₁ | 0.45 mΩ |
| Insertion/withdrawal cycles | 50 |
| Contact resistance R ₂ | 0.6 mΩ |
| Impulse withstand voltage at sea level | 7.3 kV |
| Power-frequency withstand voltage | 3.31 kV |
| Insulation resistance, neighboring positions | >10 ¹² Ω |

Thermal tests (C)

| | |
|---|-----------------------|
| Specification | IEC 60512-5-1:2002-02 |
| Number of positions | 12 |
| Conductor cross section | 6 mm ² |
| Test current | 32 A |
| Upper limiting temperature requirements <100 °C | Test passed |

Printed-circuit board connector - PC 5/ 2-ST2-7,62 - 1777943

Technical data

Climatic tests (D)

| | |
|--|---|
| Specification | ISO 6988:1985-02 |
| Cold stress | -40 °C/2 h |
| Thermal stress | 100 °C/168 h |
| Corrosive stress | 0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle |
| Impulse withstand voltage at sea level | 7.3 kV |
| Power-frequency withstand voltage | 3.31 kV |

Environmental and durability tests (E)

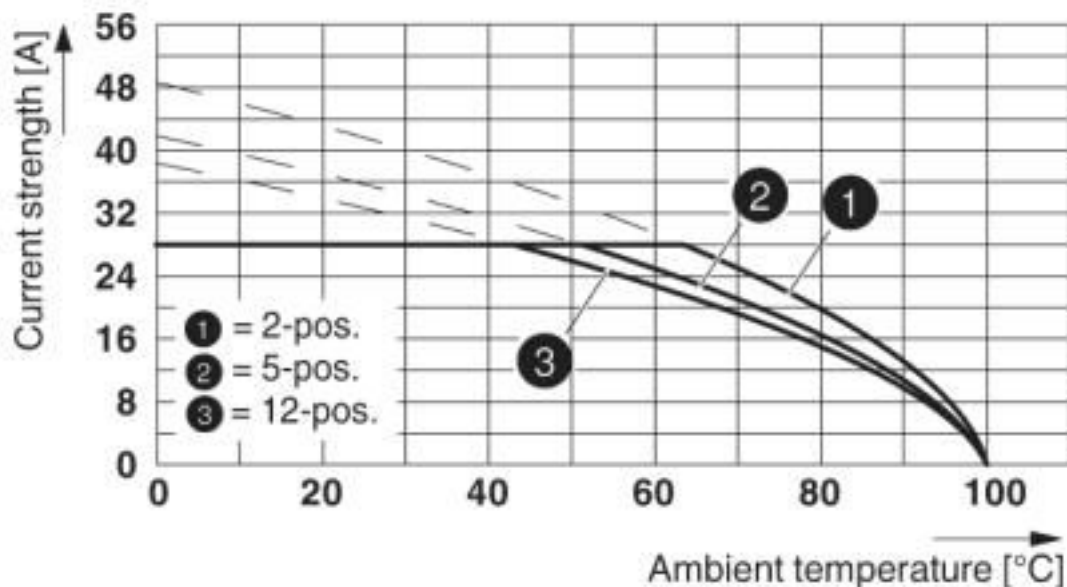
| | |
|---------------------------------------|--|
| Specification | IEC 61984:2008-10 |
| Result, degree of protection, IP code | Back of hand safety with IP10 access probe |

Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

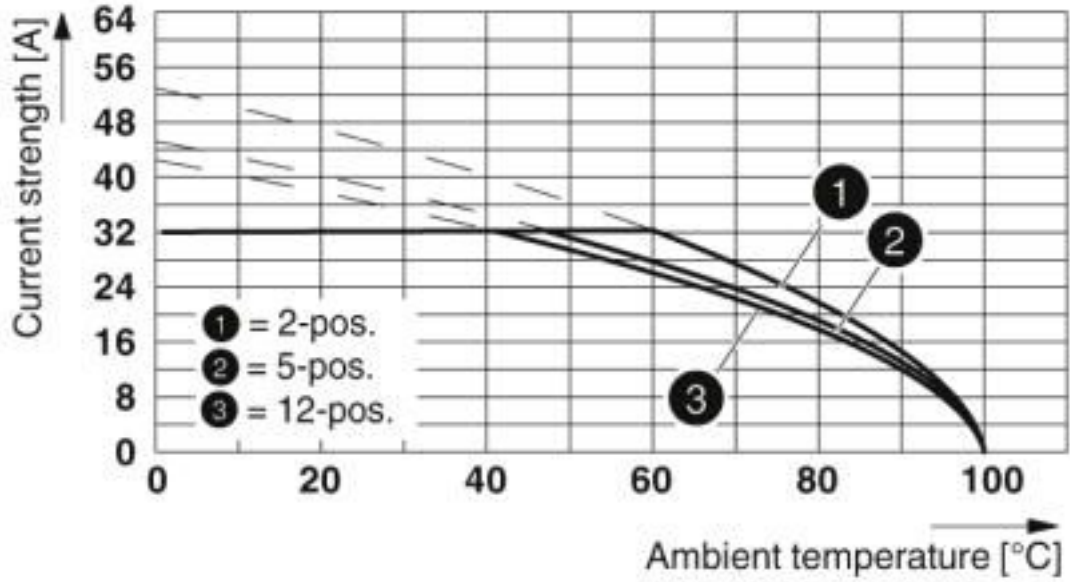
Diagram



Type: PC 5/...-ST2-7,62 with PC 4/...-G-7,62
 Conductor cross section: 4 mm²

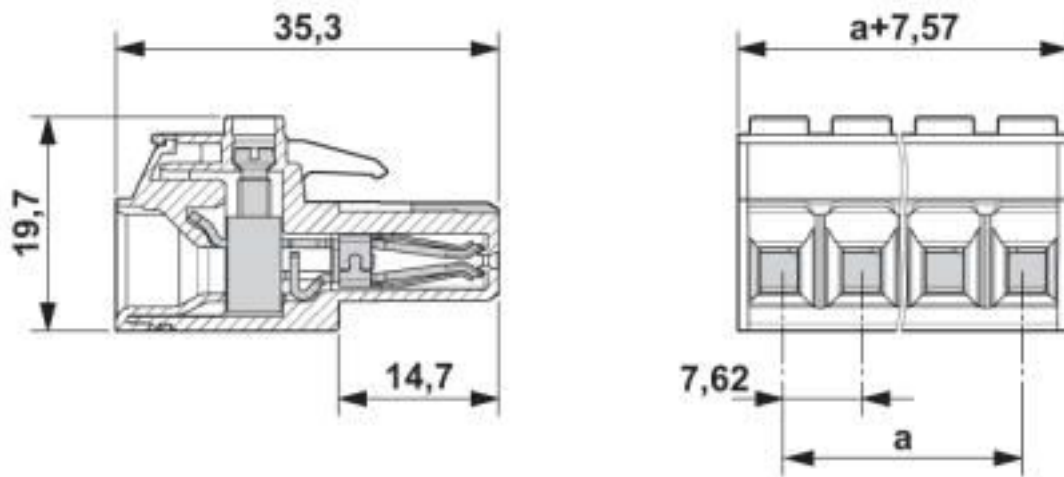
Printed-circuit board connector - PC 5/ 2-ST2-7,62 - 1777943

Diagram



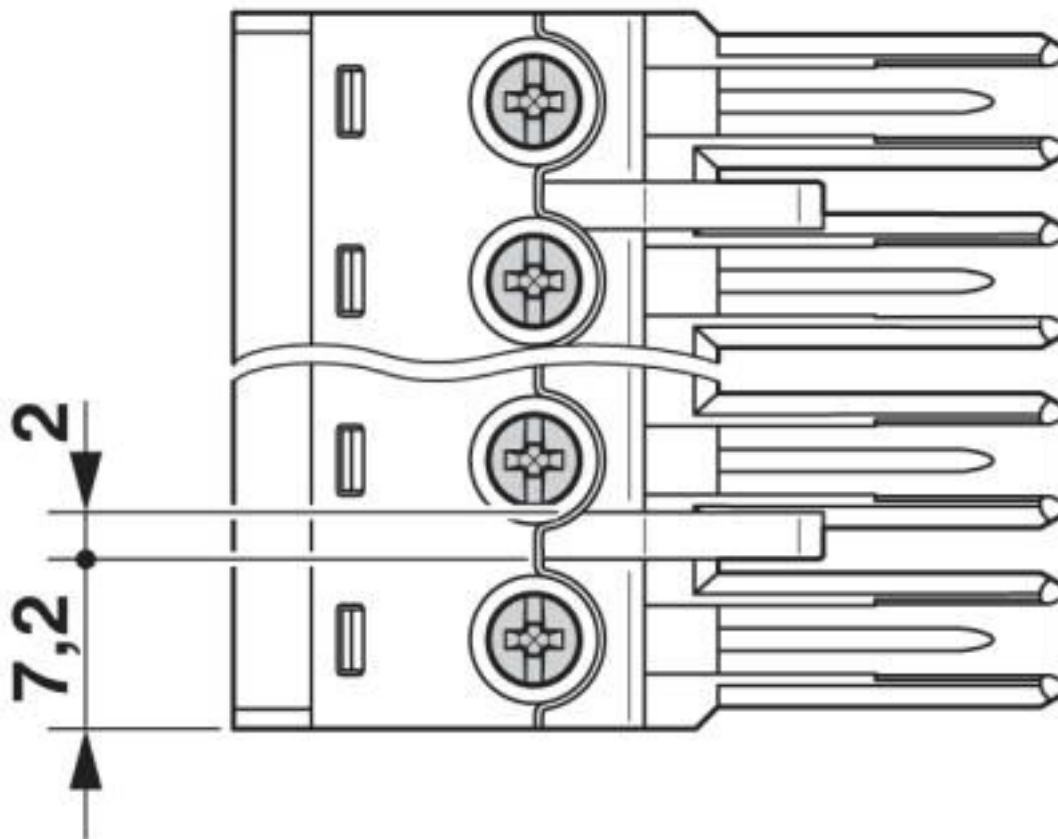
Type: PC 5/...-ST2-7,62 with PC 4/...-G-7,62
Conductor cross section: 6 mm²

Dimensional drawing



Printed-circuit board connector - PC 5/ 2-ST2-7,62 - 1777943

Dimensional drawing



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440309 |
| eCl@ss 4.0 | 27260700 |
| eCl@ss 4.1 | 27260700 |
| eCl@ss 5.0 | 27260700 |
| eCl@ss 5.1 | 27260700 |
| eCl@ss 6.0 | 27260700 |
| eCl@ss 7.0 | 27440309 |
| eCl@ss 8.0 | 27440309 |
| eCl@ss 9.0 | 27440309 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC001638 |
| ETIM 5.0 | EC002637 |
| ETIM 6.0 | EC002638 |
| ETIM 7.0 | EC002638 |

Printed-circuit board connector - PC 5/ 2-ST2-7,62 - 1777943

Classifications

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211810 |
| UNSPSC 7.0901 | 39121409 |
| UNSPSC 11 | 39121409 |
| UNSPSC 12.01 | 39121409 |
| UNSPSC 13.2 | 39121409 |
| UNSPSC 18.0 | 39121409 |
| UNSPSC 19.0 | 39121409 |
| UNSPSC 20.0 | 39121409 |
| UNSPSC 21.0 | 39121409 |

Approvals

Approvals


Approvals

EAC / cULus Recognized

Ex Approvals

Approval details

| | | |
|-----|---|---------|
| EAC |  | B.01687 |
|-----|---|---------|

| | | | |
|----------------------------|---|---|-----------------|
| cULus Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E60425-19920722 |
| | B | C | |
| Nominal voltage UN | 600 V | 600 V | |
| Nominal current IN | 41 A | 41 A | |
| mm ² /AWG/kcmil | 24-8 | 24-8 | |

Accessories

Accessories

Coding element

Printed-circuit board connector - PC 5/ 2-ST2-7,62 - 1777943

Accessories

Coding profile - CP-PC RD - 1701967

Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red



Screwdriver tools

Screwdriver - SZS 0,6X3,5 - 1205053



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Pluggable Terminal Blocks](#) category:

Click to view products by [Phoenix Contact](#) manufacturer:

Other Similar products are found below :

[57.510.0053](#) [MC 1.5/ 6-ST-3.5 GY AU](#) [734-104](#) [734-302](#) [8-141-P](#) [8426620000](#) [860505](#) [860810](#) [GBPACX-12](#) [93.731.4953.0](#) [PV05-5,08-K](#)
[PVP02-5,00](#) [PVP03-3,50](#) [PVP04-3,50](#) [PVS02-5,00](#) [1-1986160-3](#) [1377680000](#) [1531000000](#) [1546228-5](#) [ELFH16150](#) [ELFP03110](#)
[ELFP10210](#) [ELFT06250](#) [ELVP03100](#) [1700101](#) [1700410](#) [1700425](#) [1702246](#) [1705229](#) [1710175](#) [1714537](#) [1717806](#) [1719600](#) [1728941](#)
[1734692](#) [1734795](#) [1736036](#) [1740194](#) [1740291](#) [1740628](#) [1740990](#) [1746952](#) [1750207](#) [1752441](#) [1752865](#) [1754115](#) [1754144](#) [1756913](#)
[1760051](#) [1760336](#)