

PC 5/ 6-STF-SHL1-7,62BKBDW2,BR - PCB connector



1702013

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PCB connector, nominal cross section: 6 mm², color: black, nominal current: 32 A, rated voltage (III/2): 1000 V, contact surface: Sn, contact connection type: Socket, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: PC 5/-STF1-SH, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: H1L Slotted Phillips recess, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, Electrical properties: shielded, locking: Screw locking mechanism, mounting method: Screw flange, type of packaging: packed in cardboard

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
- Shield for adherence to the EMC requirements and an optional strain relief
- Screwable flange for superior mechanical stability

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1702013 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | AA04 |
| Product key | AADABD |
| GTIN | 4046356572422 |
| Weight per piece (including packing) | 67.958 g |
| Weight per piece (excluding packing) | 67.5 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

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Technical data

Product properties

| | |
|---------------------------|-----------------------|
| Product type | PCB connector |
| Product family | PC 5/...-STF1-SH |
| Product line | COMBICON Connectors L |
| Number of positions | 6 |
| Pitch | 7.62 mm |
| Number of connections | 6 |
| Number of rows | 1 |
| Number of potentials | 6 |
| Mounting type | Screw flange |
| Electrical characteristic | shielded |

Electrical properties

Properties

| | |
|-----------------------------|----------|
| Nominal current I_N | 32 A |
| Nominal voltage U_N | 1000 V |
| Rated voltage (III/3) | 1000 V |
| Rated surge voltage (III/3) | 8 kV |
| Rated voltage (III/2) | 1000 V |
| Rated surge voltage (III/2) | 8 kV |
| Rated voltage (II/2) | 1000 V |
| Rated surge voltage (II/2) | 6 kV |
| Electrical characteristic | shielded |

Connection data

Connection technology

| | |
|-------------------------|-------------------|
| Type | Standard |
| Connector system | COMBICON PC 5 |
| Nominal cross section | 6 mm ² |
| Contact connection type | Socket |

Interlock

| | |
|-------------------|-------------------------|
| Locking type | Screw locking mechanism |
| Mounting type | Screw flange |
| Tightening torque | 0.3 Nm ... 0.7 Nm |

Conductor connection

| | |
|------------------------------------|--|
| Connection method | Screw connection with tension sleeve |
| Conductor/PCB connection direction | 0 ° |
| Conductor cross-section rigid | 0.2 mm ² ... 10 mm ² |
| Conductor cross-section flexible | 0.2 mm ² ... 6 mm ² |

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| | |
|---|--|
| Conductor cross-section AWG | 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, rigid | 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 |
| Drive form screw head | Slotted Phillips recess (H1L) |
| Tightening torque | 0.5 Nm ... 0.8 Nm (≤ 4 mm ² is 0.5 Nm to 0.6 Nm, > 4 mm ² is 0.7 Nm to 0.8 Nm) |

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 μm - 8 μm Sn) |
| Metal surface contact area (top layer) | Tin (4 μm - 8 μm Sn) |

Material data - housing

| | |
|---|--------------|
| Color (Housing) | black (9005) |
| 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 |

Dimensions

| | |
|---------------------|---------|
| Dimensional drawing | |
| Pitch | 7.62 mm |
| Width [w] | 62 mm |

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| | |
|------------|----------|
| Height [h] | 27.28 mm |
| Length [l] | 120 mm |

Mounting

Flange

| | |
|-------------------|-------------------|
| Tightening torque | 0.3 Nm ... 0.7 Nm |
|-------------------|-------------------|

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. |
|--------------------|--|

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) |

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) | 1000 V |
| Rated surge voltage (III/3) | 8 kV |
| minimum clearance value - non-homogenous field (III/3) | 8 mm |
| minimum creepage distance (III/3) | 12.5 mm |
| Rated insulation voltage (III/2) | 1000 V |
| Rated surge voltage (III/2) | 8 kV |
| minimum clearance value - non-homogenous field (III/2) | 8 mm |
| minimum creepage distance (III/2) | 8 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

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|  cULus Recognized Approval ID: E60425-19920722 | | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|---|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| B | | | | | |
| Multi-conductor connection | 600 V | 41 A | 24 - 12 | - | |
| Screw connection | 600 V | 41 A | 24 - 8 | - | |
| C | | | | | |
| Multi-conductor connection | 600 V | 41 A | 24 - 12 | - | |
| Screw connection | 600 V | 41 A | 24 - 8 | - | |

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Classifications

ECLASS

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

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | 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% |
|-------------------------------------|----------------------------|

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 0.742 kg CO2e |
|---------|---------------|

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