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PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Au, contact connection type: Socket, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: SMSTB 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -45 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: no, type of packaging: packed in cardboard

Your advantages

- · Gold-plated contacts ensure transfer quality remains stable over the long term
- · Well-known connection principle allows worldwide use
- · Optimized for tight installation situations: operation and conductor connection from one direction
- · Angled conductor connection enables operation and conductor connection from one direction
- · Low temperature rise, thanks to maximum contact force

Commercial data

| Item number | 1920231 |
|--------------------------------------|--------------------------------|
| Packing unit | 50 рс |
| Minimum order quantity | 50 pc |
| Note | Made to order (non-returnable) |
| Sales key | AA03 |
| Product key | AACAGL |
| GTIN | 4017918348984 |
| Weight per piece (including packing) | 9.86 g |
| Weight per piece (excluding packing) | 9.279 g |
| Customs tariff number | 85366990 |
| Country of origin | PL |

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Technical data

Product properties

| Product type | PCB connector |
|-----------------------|-----------------------|
| Product family | SMSTB 2,5/ST |
| Product line | COMBICON Connectors M |
| Number of positions | 5 |
| Pitch | 5.08 mm |
| Number of connections | 5 |
| Number of rows | 1 |
| Number of potentials | 5 |
| Mounting flange | without |

Electrical properties

| Properties |
|------------|
|------------|

| Nominal current I _N | 12 A |
|--------------------------------|-------|
| Nominal voltage U _N | 320 V |
| Rated voltage (III/3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 320 V |
| Rated surge voltage (III/2) | 4 kV |
| Rated voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |

Connection data

| Connection technology | |
|---|--|
| Туре | Standard |
| Connector system | COMBICON MSTB 2,5 |
| Nominal cross section | 2.5 mm ² |
| Contact connection type | Socket |
| Interlock | |
| Locking type | without |
| Mounting flange | no |
| Conductor connection | |
| Connection method | Screw connection with tension sleeve |
| Conductor/PCB connection direction | -45 ° |
| Conductor cross section rigid | 0.2 mm ² 2.5 mm ² |
| Conductor cross section flexible | 0.2 mm ² 2.5 mm ² |
| Conductor cross section AWG | 24 12 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm² 2.5 mm² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² 2.5 mm ² |





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| 2 conductors with same cross section, solid | 0.2 mm ² 1 mm ² |
|---|---|
| 2 conductors with same cross section, flexible | 0.2 mm ² 1.5 mm ² |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 0.25 mm ² 1 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm² 1.5 mm² |
| Stripping length | 7 mm |
| Drive form screw head | Slotted (L) |
| Tightening torque | 0.5 Nm 0.6 Nm |
| pecifications for ferrules without insulating collar | |
| recommended crimping tool | 1212034 CRIMPFOX 6 |
| | |
| pecifications for ferrules with insulating collar | |

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 - 8 μm Sn) |
| Metal surface contact area (top layer) | Gold (0.8 - 1 µm Au) |
| Metal surface contact area (middle layer) | Nickel (2 - 3 µm Ni) |

Material data - housing

| Color (Housing) | green (6021) |
|---|--------------|
| Insulating material | PA |
| Insulating material group | 1 |
| 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 | h w |
|---------------------|---------|
| Pitch | 5.08 mm |
| Width [w] | 25.4 mm |

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| Height [h] | 15.5 mm |
|------------|---------|
| Length [I] | 25.6 mm |

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 (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 |

Electrical tests

Air clearances and creepage distances |

| Specification | IEC 60664-1:2007-04 |
|--|---------------------|
| Insulating material group | 1 |
| Comparative tracking index (IEC 60112) | CTI 600 |
| Rated insulation voltage (III/3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| minimum clearance value - non-homogenous field (III/3) | 3 mm |
| minimum creepage distance (III/3) | 3.2 mm |
| Rated insulation voltage (III/2) | 320 V |
| Rated surge voltage (III/2) | 4 kV |
| minimum clearance value - non-homogenous field (III/2) | 3 mm |
| minimum creepage distance (III/2) | 3 mm |
| Rated insulation voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |
| minimum clearance value - non-homogenous field (II/2) | 3 mm |
| minimum creepage distance (II/2) | 3.2 mm |

Packaging specifications

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Approvals

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| CSA Approval ID: 13631-2585951 | | | | |
|--------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| Use group B | | | | |
| | 300 V | 15 A | 28 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 A | 28 - 12 | - |

| Approval ID: E60425-19931011 | | | | |
|------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| Use group B | | | | |
| | 300 V | 15 A | 30 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 A | 30 - 12 | - |

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Classifications

ECLASS

| | ECLASS-13.0 | 27460202 | |
|---|-------------|----------|--|
| E | ГІМ | | |
| | ETIM 9.0 | EC002638 | |
| U | NSPSC | | |
| | 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 | |
| | |

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