

PCB hybrid connector - LPCH 6/ 5+6-STL5-7,62 - 1717005

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PCB hybrid connector, nominal cross section: 6 mm², color: green, nominal current: 41 A, 8 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Female connector, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: LPCH 6/..+6-STL, pitch: 7.62 mm, connection method: Lever Push-in connection, conductor/PCB connection direction: 0 °, plug-in system: POWER COMBICON 6 Hybrid, Locking: Snap-in locking, mounting: Self-locking flange, type of packaging: packed in cardboard

Your advantages

- ✓ Tool-free lever principle enables time-saving connection and release of conductors with/without ferrules
- ✓ Clear lever positions provide reliable feedback on opened or closed clamping spaces
- ✓ Defined contact force ensures that contact remains stable over the long term
- ✓ Time-saving push-in connection when lever is closed



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| Minimum order quantity | 25 pc |
| GTIN |  4 055626 532592 |
| GTIN | 4055626532592 |
| Weight per Piece (excluding packing) | 46.400 g |
| Custom tariff number | 85366990 |
| Country of origin | Poland |

Technical data

Item properties

| | |
|---------------------------|-------------------------|
| Brief article description | PCB hybrid connector |
| Connector system | POWER COMBICON 6 Hybrid |
| Type of contact | Female connector |
| Range of articles | LPCH 6/...-STL |
| Pitch | 7.62 mm |
| | 3.81 mm |
| Number of positions | 11 |

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Item properties

| | |
|-----------------------|--|
| Locking | Latch mechanism/latching at position 5 |
| Number of rows | 1 |
| | 2 |
| Number of connections | 11 |
| Number of potentials | 11 |

Electrical parameters

| | |
|-----------------------------|--------|
| Nominal current | 41 A |
| Nom. voltage | 1000 V |
| Rated voltage (III/3) | 800 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 |

Power connection capacity

| | |
|---|---|
| Conductor cross section solid | 0.75 mm ² ... 10 mm ² |
| Conductor cross section flexible | 0.75 mm ² ... 6 mm ² |
| Conductor cross section AWG / kcmil | 18 ... 8 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.75 mm ² ... 6 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.75 mm ² ... 6 mm ² |
| Cylindrical gauge a x b / diameter | 4.3 mm x 4.0 mm / 4.0 mm |
| Stripping length | 18 mm |

Connection capacity signal

| | |
|---|--|
| Conductor cross section solid | 0.2 mm ² ... 1.5 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 1.5 mm ² |
| Conductor cross section AWG / kcmil | 24 ... 16 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 1.5 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² ... 1 mm ² |
| Cylindrical gauge a x b / diameter | 2.4 mm x 1.5 mm / 1.5 mm |
| Stripping length | 10 mm |

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 | Tin-plated |
| Metal surface terminal point (top layer) | Tin (4 - 8 μm Sn) |

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Material data - contact

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

Material data - housing

| | |
|--|--------------|
| Housing color | green (6021) |
| Insulating material | PA GF |
| Insulating material group | I |
| CTI according to IEC 60112 | 600 |
| Flammability rating according to UL 94 | V0 |

Material data – actuating element

| | |
|--|---------------|
| Color of the actuating lever | orange (2003) |
| Insulating material | PA GF |
| CTI according to IEC 60112 | 600 |
| Flammability rating according to UL 94 | V0 |

Dimensions for the product

| | |
|-----------------------------|--|
| Caption | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Length [l] | 48 mm |
| Width [w] | 59.35 mm |
| Height [h] | 27.5 mm |
| Pitch | 7.62 mm |
| Height (without solder pin) | 27.5 mm |

Packaging information

| | |
|----------------------------|---------------------|
| Type of packaging | packed in cardboard |
| Pieces per package | 25 |
| Denomination packing units | Pcs. |

General product information

| | |
|--------------|--|
| Type of note | Notes on operation |
| Note | 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. |

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 ... 105 °C (dependent on the derating curve) |

Termination and connection method

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Termination and connection method

| | |
|--|---|
| Conductor connection test | The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force. |
| Test result | Test passed |
| Test – repeated connection and release | IEC 60999-1:1999-11 |
| | Test passed |
| Test for conductor damage and slackening | IEC 60999-1:1999-11 |
| | Test passed |

Pull-out test

| | |
|--|--|
| Pull-out test | IEC 60999-1:1999-11 |
| Conductor cross section / conductor type / tensile force | 0.75 mm ² / solid / > 30 N |
| | 0.75 mm ² / flexible / > 30 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 | 25 |
| Insertion strength per pos. approx. | 7 N |
| Withdraw strength per pos. approx. | 4 N |
| 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) | 10 mm |
| Minimum creepage distance value (III/2) | 5 mm |
| Minimum creepage distance value (II/2) | 5 mm |

Electrical tests - Function

| | |
|---------------|---------------------|
| Specification | IEC 60999-1:1999-11 |
|---------------|---------------------|

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Temperature cycles

| | |
|---------------|---------------------|
| Specification | IEC 60999-1:1999-11 |
|---------------|---------------------|

Current carrying capacity / derating curves

| | |
|---------|--|
| Caption | Type: LPCH 6/...+...-STL...-7,62 with PCH 6/...+...-GL...-7,62 |
|---------|--|

Mechanical tests (A)

| | |
|--|-------------|
| Test specification | IEC 61984 |
| Insertion strength per pos. approx. | 7 N |
| Withdraw strength per pos. approx. | 4 N |
| Polarization when inserted requirement >20 N | Test passed |
| Contact holder in insert requirements >20 N | Test passed |

Durability tests (B)

| | |
|--|-----------------------|
| Specification | IEC 60512-9-1:2010-03 |
| Contact resistance R ₁ | 0.42 mΩ |
| Insertion/withdrawal cycles | 25 |
| Contact resistance R ₂ | 0.46 mΩ |
| Impulse withstand voltage at sea level | 7.3 kV |
| Insulation resistance, neighboring positions | > 5 MΩ |

Thermal tests (C)

| | |
|---|-----------------------|
| Specification | IEC 60512-5-1:2002-02 |
| Number of positions | 4 |
| Upper limiting temperature requirements <100 °C | Test passed |

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 |

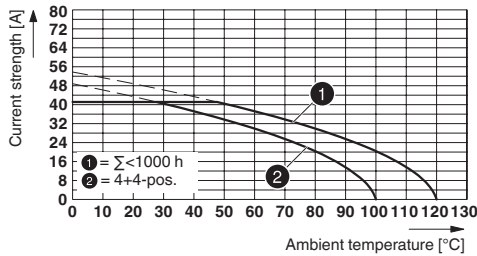
Environmental and durability tests (E)

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

Drawings

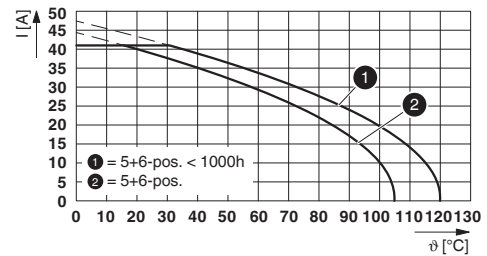
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Diagram



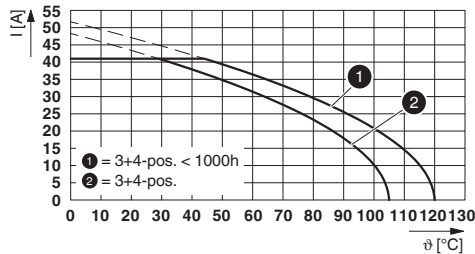
Type: LPCH 6/...+...-STL...-7,62 with PCH 6/...+...-GL...-7,62

Diagram



Type: LPCH 6/...+...-STL...-7,62 with PCH 6/...+...-GL...-7,62 P...THR

Diagram



Type: LPCH 6/...+...-STL...-7,62 with PCH 6/...+...-GL...-7,62 P...THR

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440309 |
| eCl@ss 11.0 | 27460302 |
| 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 9.0 | 27440309 |

ETIM

| | |
|----------|----------|
| ETIM 6.0 | EC002638 |
| ETIM 7.0 | EC002638 |

UNSPSC

| | |
|-------------|----------|
| UNSPSC 18.0 | 39121409 |
|-------------|----------|

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Classifications

UNSPSC

| | |
|-------------|----------|
| UNSPSC 19.0 | 39121409 |
| UNSPSC 20.0 | 39121409 |
| UNSPSC 21.0 | 39121409 |

Approvals

Approvals

Approvals

cULus Recognized / EAC / VDE Zeichengenehmigung

Ex Approvals

Approval details

| | | | |
|----------------------------|-------|---|-----------------|
| cULus Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E60425-20010727 |
| | B | C | |
| Nominal voltage UN | 600 V | 600 V | |
| Nominal current IN | 35 A | 35 A | |
| mm ² /AWG/kcmil | 18-8 | 18-8 | |

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

| | | | |
|----------------------------|--------|---|----------|
| VDE Zeichengenehmigung | | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40050635 |
| Nominal voltage UN | 630 V | | |
| Nominal current IN | 41 A | | |
| mm ² /AWG/kcmil | 0.75-6 | | |

PCB hybrid connector - LPCH 6/ 5+6-STL5-7,62 - 1717005

Accessories

Accessories

Coding element

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

Crimping tool

Crimping pliers - CRIMPFOX CENTRUS 6S - 1213144



Crimping pliers, for uninsulated and insulated ferrules, DIN 46228 Part 1 and 4, from 0.14 mm² ... 6 mm², also for TWIN ferrules up to 2 x 4 mm², automatic cross section adjustment, lateral insertion, equipped with fall protection

Ferrule

Ferrule - AI 6 -18 YE - 3200603



Ferrule, sleeve length: 18 mm, length: 26 mm, color: yellow

Shroud

Shield connection - PC 6-SH-PLATE 2-7,62 - 1128867



Shield connection, product range: EMV-SCHIRMUNG, width: 46 mm

Stripping tool

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Accessories

Stripping tool - WIREFOX 10 - 1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm², self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm² stranded/1.5 mm² solid, replaceable stripping blade

Additional products

PCB hybrid header - PCH 6/ 5+6-GL5-7,62 - 1717153

PCB hybrid header, nominal cross section: 6 mm², color: green, nominal current: 41 A, 8 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Male connector, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: PCH 6/..+6-GL, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, plug-in system: POWER COMBICON 6 Hybrid, Pin connector pattern alignment: Standard, Locking: Snap-in locking, mounting: Self-locking flange, type of packaging: packed in cardboard

PCB header - PCH 6/ 5+6-GL5-7,62 P26THR - 1192644

PCB hybrid header, nominal cross section: 6 mm², color: black, nominal current: 41 A, 8 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Male connector, number of rows: 1, number of positions: 11, product range: PCH 6/..+6-GL-THR, pitch: 7.62 mm, mounting: THR soldering / wave soldering, pin layout: Linear three-way pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 3, plug-in system: POWER COMBICON 6 Hybrid, Pin connector pattern alignment: Standard, Locking: Snap-in locking, mounting: Self-locking flange, type of packaging: packed in cardboard