

PCB hybrid connector - LPCH 6/ 5+4-STL5-7,62 - 1717003

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 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: 9, number of rows: 1, number of positions: 9, number of connections: 9, product range: LPCH 6/..+4-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 532585 |
| GTIN | 4055626532585 |
| Weight per Piece (excluding packing) | 44.000 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 | 9 |

PCB hybrid connector - LPCH 6/ 5+4-STL5-7,62 - 1717003

Technical data

Item properties

| | |
|-----------------------|--|
| Locking | Latch mechanism/latching at position 5 |
| Number of rows | 1 |
| | 2 |
| Number of connections | 9 |
| Number of potentials | 9 |

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) |

PCB hybrid connector - LPCH 6/ 5+4-STL5-7,62 - 1717003

Technical data

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] | 55.54 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

PCB hybrid connector - LPCH 6/ 5+4-STL5-7,62 - 1717003

Technical data

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

PCB hybrid connector - LPCH 6/ 5+4-STL5-7,62 - 1717003

Technical data

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 |

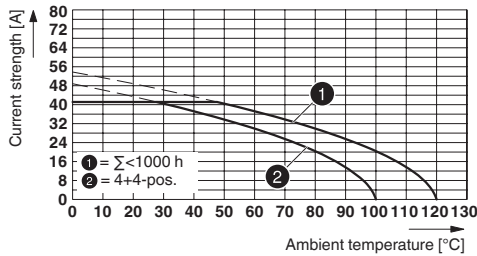
Environmental and durability tests (E)

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

Drawings

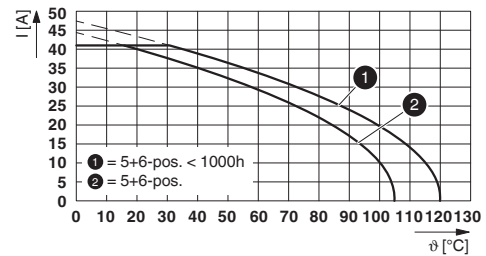
PCB hybrid connector - LPCH 6/ 5+4-STL5-7,62 - 1717003

Diagram



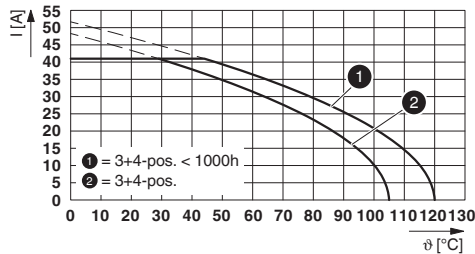
Type: LPCH 6/...+...-STL...-7,62 with PCH 6/...+...-GL...-7,62

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

PCB hybrid connector - LPCH 6/ 5+4-STL5-7,62 - 1717003

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+4-STL5-7,62 - 1717003

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

PCB hybrid connector - LPCH 6/ 5+4-STL5-7,62 - 1717003

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+4-GL5-7,62 - 1717151

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: 9, number of rows: 1, number of positions: 9, number of connections: 9, product range: PCH 6/..+4-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+4-GL5-7,62 P26THR - 1192617

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: 9, product range: PCH 6/..+4-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
