

## PCB hybrid connector - LPCH 6/ 3+4-STL3-7,62 - 1716970

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 current: 41 A, number of positions: 7, pitch: 7.62 mm, connection method: Push-in spring connection, color: green

Figure shows a 4+4-pos. version with locking flange at position 4

### 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	
GTIN	4055626513324
Weight per Piece (excluding packing)	29.600 g
Custom tariff number	85366990
Country of origin	Poland

### Technical data

#### Item properties

Brief article description	PCB hybrid connector
Plug-in system	POWER COMBICON 6 Hybrid
Type of contact	Female connector
Range of articles	LPCH 6/...-STL

## PCB hybrid connector - LPCH 6/ 3+4-STL3-7,62 - 1716970

### Technical data

#### Item properties

Pitch	7.62 mm
	3.81 mm
Number of positions	7
Connection method	Push-in spring connection
Locking	Latch mechanism/latching at position 3
Number of levels	1
	2
Number of connections	7
Number of potentials	7

#### Electrical parameters

Rated current	41 A
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

#### Connection capacity

Conductor cross section solid	0.75 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Conductor cross section flexible	0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section AWG / kcmil	18 ... 8
Conductor cross section flexible, with ferrule without plastic sleeve	0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Cylindrical gauge a x b / diameter	4.3 mm x 4.0 mm / 4.0 mm
Stripping length	18 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)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

#### Material data - housing

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

Insulating material	PA GF
---------------------	-------

# PCB hybrid connector - LPCH 6/ 3+4-STL3-7,62 - 1716970

## Technical data

### Material data – actuating element

CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

### Dimensions for the product

Length [ l ]	48 mm
Width [ w ]	40.3 mm
Height [ h ]	35.65 mm
Pitch	7.62 mm
Dimension a	22.86 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	25
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

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
	Test passed
Conductor cross section / conductor type / tensile force	0.75 mm <sup>2</sup> / solid / > 30 N
	0.75 mm <sup>2</sup> / flexible / > 30 N
	10 mm <sup>2</sup> / solid / > 90 N
	6 mm <sup>2</sup> / flexible / > 80 N

### Mechanical tests according to standard

Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12

# PCB hybrid connector - LPCH 6/ 3+4-STL3-7,62 - 1716970

## Technical data

### Mechanical tests according to standard

Result	Test passed
Specification	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	Test passed IEC 60512-13-5:2006-02
Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	20 N

### Air clearances and creepage distances

Specification	IEC 60664-1:2007-04
Rated insulation voltage (III/3)	800 V
Rated insulation voltage (III/2)	1000 V
Rated insulation 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
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
---------------	---------------------

### Temperature cycles

Specification	IEC 60999-1:1999-11
Test current (minimum cross section)	9 A DC
Test current (maximum cross section)	41 A DC
Temperature cycles	192

### Mechanical tests (A)

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

## PCB hybrid connector - LPCH 6/ 3+4-STL3-7,62 - 1716970

### Technical data

#### Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R <sub>1</sub>	0.42 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	0.46 mΩ
Impulse withstand voltage at sea level	7.3 kV
Power-frequency withstand voltage	3.31 kV

#### 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 <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /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

### Classifications

#### eCl@ss

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 5.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

### Approvals

#### Approvals

---

# PCB hybrid connector - LPCH 6/ 3+4-STL3-7,62 - 1716970

## Approvals

Approvals

cULus Recognized

---

Ex Approvals

---

## Approval details

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

## Accessories

Accessories

Cable end sleeve

Ferrule - AI 6 -18 YE - 3200603



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

---

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

## PCB hybrid connector - LPCH 6/ 3+4-STL3-7,62 - 1716970

### Accessories

Crimping pliers - CRIMPFOX CENTRUS 6S - 1213144



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

---

### Stripping tool

Stripping tool - WIREFOX 10 - 1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

---

### Additional products

PCB hybrid header - PCH 6/ 3+4-GL3-7,62 - 1717119



PCB hybrid header, nominal current: 41 A, number of positions: 7, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering