

PCB hybrid connector - LPCH 6/ 4+6-STL4-7,62 - 1716989

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PCB hybrid connector, nominal current: 41 A, number of positions: 10, 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	 4 055626 530444
GTIN	4055626530444
Weight per Piece (excluding packing)	37.600 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

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Technical data

Item properties

Pitch	7.62 mm
	3.81 mm
Number of positions	10
Connection method	Push-in spring connection
Locking	Latch mechanism/latching at position 4
Number of levels	1
	2
Number of connections	10
Number of potentials	10

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 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

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
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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]	51.73 mm
Height [h]	35.65 mm
Pitch	7.62 mm
Dimension a	30.48 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 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

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

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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
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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

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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
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 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

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

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Approvals

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cULus Recognized

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	

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

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Accessories

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

Stripping tool

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/ 4+6-GL4-7,62 - 1717138



PCB hybrid header, nominal current: 41 A, number of positions: 10, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering