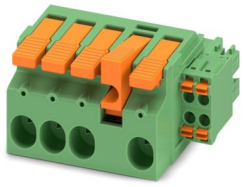
LPCH 6/ 4+4-STL4-7,62 - PCB hybrid connector

1716987

https://www.phoenixcontact.com/pc/products/1716987

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PCB hybrid connector, nominal cross section: 6 mm^2, color: green, nominal current: 41 A, 8 A, rated voltage (III/2): 1000 V, contact surface: Sn, contact connection type: Socket, number of potentials: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: LPCH 6/..+4-STL, pitch: 7.62 mm, connection method: Lever Push-in connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PC 6 hybrid, locking: Snap-in locking, mounting method: Latching 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

Commercial data

Item number	1716987
Packing unit	25 pc
Minimum order quantity	25 pc
Product key	AADBAG
GTIN	4055626514925
Weight per piece (including packing)	36.504 g
Weight per piece (excluding packing)	34.33 g
Customs tariff number	85366990
Country of origin	SK

Technical data

Product properties

Product type	PCB hybrid connector
Product family	LPCH 6/..+4-STL
Product line	COMBICON Connectors L
Number of positions	8
Pitch	7.62 mm
Number of connections	8
Number of rows	1
Number of potentials	8
Mounting type	Latch mechanism/latching at position 4

Electrical properties

Properties

Nominal current I_N	41 A
Nominal voltage U_N	1000 V
Contact resistance	0.42 mΩ
Rated voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Connection data

Connection technology

Connector system	COMBICON PC 6 hybrid
Nominal cross section	6 mm²
Contact connection type	Socket

Interlock

Locking type	Snap-in locking
Mounting type	Latching flange

Conductor connection Power

Connection method	Lever Push-in connection
Connection direction of the conductor to plug-in direction	0 °
Conductor cross-section rigid	0.75 mm² ... 10 mm²
Conductor cross-section flexible	0.75 mm² ... 6 mm²
Conductor cross-section AWG	18 ... 8
Conductor cross-section flexible, with ferrule without plastic sleeve	0.75 mm² ... 6 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.75 mm² ... 6 mm²

Cylindrical gauge a x b / diameter	4.3 mm x 4.0 mm / 4.0 mm
Stripping length	18 mm

Conductor connection Signal

Connection method	Push-in spring connection
Connection direction of the conductor to plug-in direction	0 °
Conductor cross-section rigid	0.2 mm² ... 1.5 mm²
Conductor cross-section flexible	0.2 mm² ... 1.5 mm²
Conductor cross-section AWG	24 ... 16
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm² ... 1.5 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1 mm²
Cylindrical gauge a x b / diameter	2.4 mm x 1.5 mm / 1.5 mm
Stripping length	10 mm

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	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

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

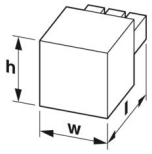
Material data – actuating element

Color (Actuating element)	orange (2003)
Insulating material	PA GF
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

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.

Dimensions

Dimensional drawing	
Pitch	7.62 mm
	3.81 mm
Width [w]	47.92 mm
Height [h]	24.3 mm
Length [l]	48 mm

Mechanical tests

Conductor connection

Specification	IEC 60999-1:1999-11
Result	Test passed

Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

Repeated connection and disconnection

Specification	IEC 60999-1:1999-11
Result	Test passed

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross-section/conductor type/tractive force setpoint/actual value	0.75 mm² / solid / > 30 N
	0.75 mm² / flexible / > 30 N
	10 mm² / solid / > 90 N
	6 mm² / flexible / > 80 N

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross-section/conductor type/tractive force setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N

Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	7 N

Withdraw strength per pos. approx.	4 N

Contact holder in insert

Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Specification	IEC 60512-13-5:2006-02
Result	Test passed

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	4

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Temperature cycles

Specification	IEC 60999-1:1999-11
Result	Test passed

Air clearances and creepage distances | Power

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	10 mm
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm

minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

Air clearances and creepage distances | Signal

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.5 mm
Rated insulation voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 mm

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	7.3 kV
Contact resistance R_1	0.42 mΩ
Contact resistance R_2	0.46 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Thermal stress	100 °C/168 h

Power-frequency withstand voltage	3.31 kV

Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	30g
Shock duration	18 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

Ambient conditions

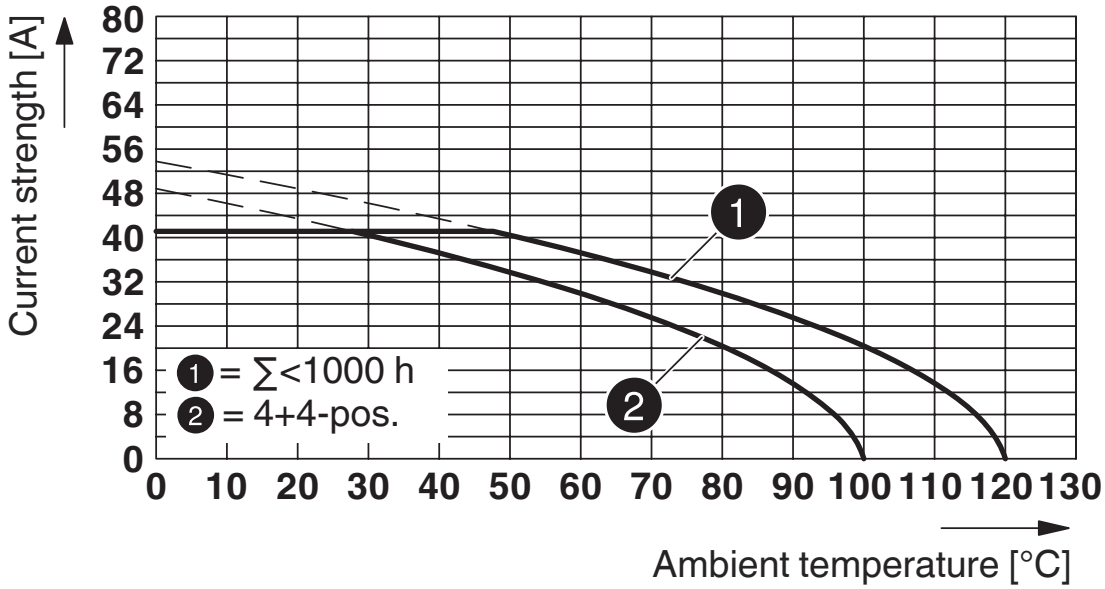
Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard

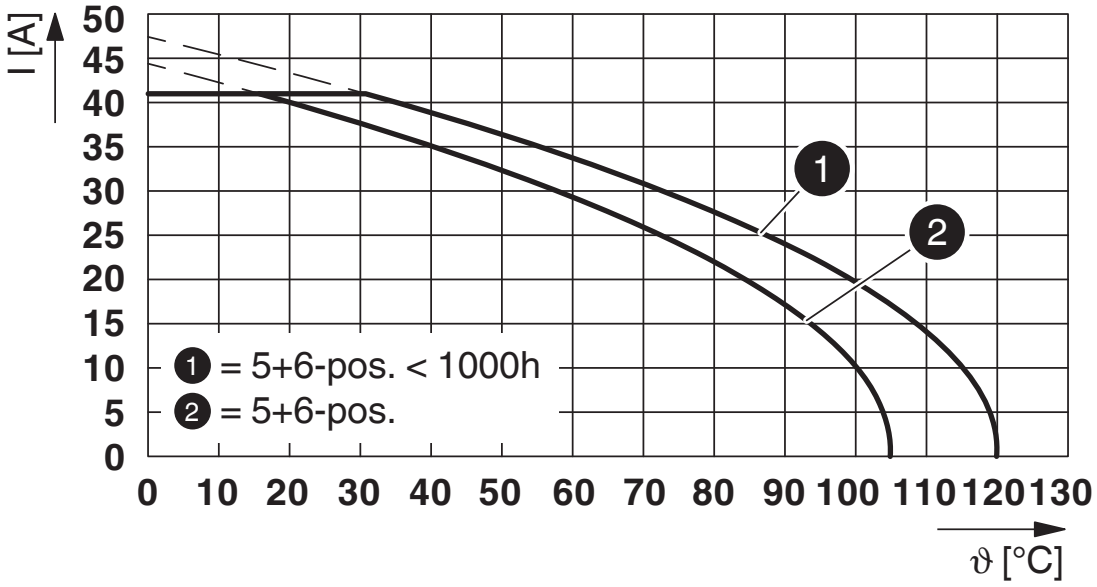
Drawings

Diagram



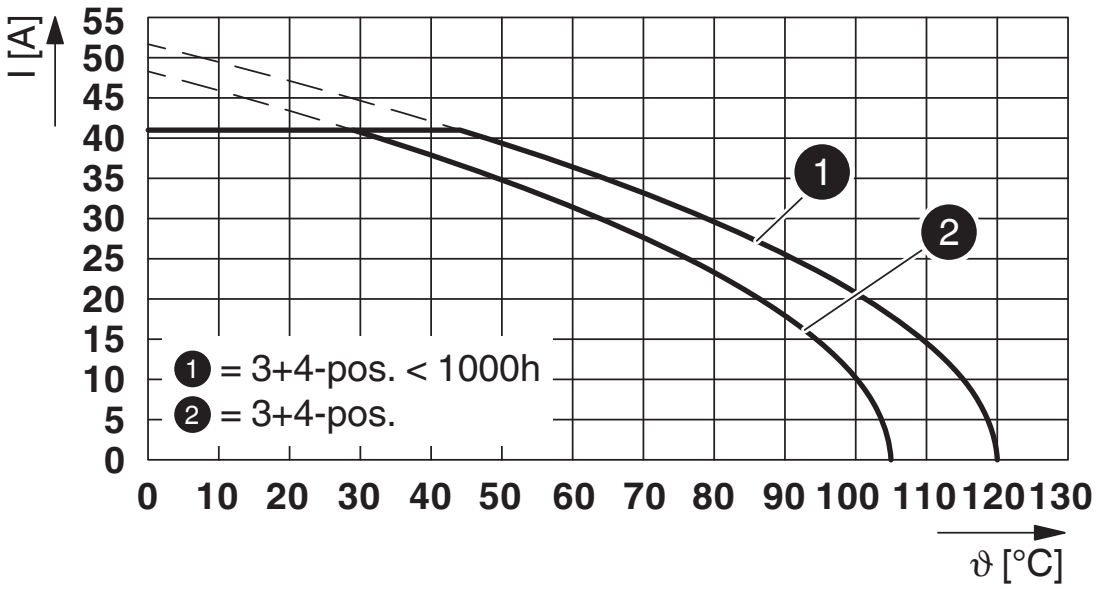
Type: LPCH 6/...+...-STL...-7,62 with PCH 6/...+...-GL...-7,62

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

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1716987

cULus Recognized
Approval ID: E60425-20010727

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
Power	600 V	35 A	18 - 8	-
Signal	150 V	8 A	24 - 16	-
C				
Power	600 V	35 A	18 - 8	-
Signal	50 V	8 A	24 - 16	-

VDE approval of drawings
Approval ID: 40050635

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	630 V	41 A	-	0.75 - 6
Signal	160 V	8 A	-	0.2 - 1.5

UL Recognized
Approval ID: E60425-20010727

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
F				
Power	600 V	35 A	18 - 8	-
Signal	160 V	8 A	24 - 16	-

Classifications

ECLASS

ECLASS-13.0	27460302
ECLASS-15.0	27460302

ETIM

ETIM 9.0	EC002638

UNSPSC

UNSPSC 21.0	39121400

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

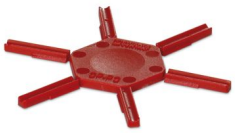
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

Accessories

CP-PC RD - Coding profile

1701967

https://www.phoenixcontact.com/pc/products/1701967



Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red

AI 6 -18 YE - Ferrule

3200603

https://www.phoenixcontact.com/pc/products/3200603



Ferrule, Length contact range: 18 mm, sleeve length: 26 mm, color: yellow

CRIMPFOX CENTRUS 6S - Crimping pliers

1213144

https://www.phoenixcontact.com/pc/products/1213144



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

WIREFOX 10 - Stripping tool

1212150

https://www.phoenixcontact.com/pc/products/1212150



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

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

1128867

https://www.phoenixcontact.com/pc/products/1128867

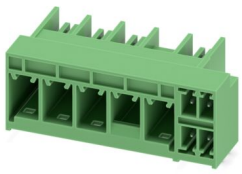
Shroud, product range: EMC shielding, width: 46 mm



PCH 6/ 4+4-GL4-7,62 - PCB hybrid header

1054545

https://www.phoenixcontact.com/pc/products/1054545



PCB hybrid header, nominal cross section: 6 mm^2, color: green, nominal current: 41 A, 8 A, rated voltage (III/2): 630 V, contact surface: Sn, contact connection type: Pin, number of potentials: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: PCH 6/..+4-GL, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.1 mm, plug-in system: COMBICON PC 6 hybrid, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting method: Latching flange, type of packaging: packed in cardboard

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

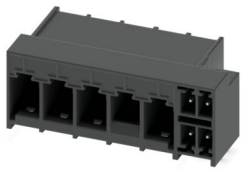
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PCH 6/ 4+4-GL4-7,62 P26THR - PCB hybrid header

1192616

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PCB hybrid header, nominal cross section: 6 mm^2, color: black, nominal current: 41 A, 8 A, rated voltage (III/2): 630 V, contact surface: Sn, contact connection type: Pin, number of rows: 1, number of positions: 8, product range: PCH 6/..+4-GL-THR, pitch: 7.62 mm, mounting: THR soldering / wave soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 3, plug-in system: COMBICON PC 6 hybrid, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting method: Latching flange, type of packaging: packed in cardboard

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