LPC 16 HC/ 6-STL4-10,16 - PCB connector

1716841

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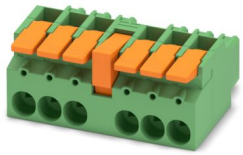


PCB connector, nominal cross section: 16 mm^2, color: green, nominal current: 76 A, rated voltage (III/2): 1000 V, contact surface: Sn, contact connection type: Socket, number of rows: 1, number of positions: 6, product range: LPC 16 HC/..-STL, pitch: 10.16 mm, connection method: Lever Push-in connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 16 advanced, 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
- Increased touch protection in accordance with IEC/UL 61800-5-1
- Time-saving push-in connection when lever is closed
- Intuitive locking mechanism prevents accidental disconnection
- Defined contact force ensures that contact remains stable over the long term

Commercial data

Item number	1716841
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	AA05
Product key	AAEBAE
GTIN	4055626685281
Weight per piece (including packing)	130.6 g
Weight per piece (excluding packing)	2.22 g
Customs tariff number	85366990
Country of origin	SK

Technical data

Product properties

Product type	PCB connector
Product family	LPC 16 HC/..-STL
Product line	COMBICON Connectors XL
Number of positions	6
Pitch	10.16 mm
Number of rows	1
Mounting type	Latching flange

Fitting of components

Partial assembly	No

Electrical properties

Properties

Nominal current I_N	76 A
Nominal voltage U_N	1000 V
Contact resistance	0.235 mΩ
Rated voltage (III/3)	1000 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 16 advanced
Nominal cross section	16 mm²
Contact connection type	Socket

Interlock

Locking type	Snap-in locking
Mounting type	Latching flange

Conductor connection

Connection method	Lever Push-in connection
Conductor/PCB connection direction	0 °
Conductor cross-section rigid	0.75 mm² ... 16 mm²
Conductor cross-section flexible	0.75 mm² ... 16 mm²
Conductor cross-section AWG	18 ... 4
Conductor cross-section, flexible, with ferrule, without plastic sleeve	0.75 mm² ... 16 mm²

Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.75 mm² ... 16 mm²
Cylindrical gauge a x b / diameter	- / 5.4 mm
Stripping length	18 mm

Specifications for ferrules without insulating collar

recommended crimping tool	1108767 CRIMPFOX VARIO 16S

Specifications for ferrules with insulating collar

recommended crimping tool	1108767 CRIMPFOX VARIO 16S

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	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (10 µm - 16 µm Sn)
Metal surface contact area (top layer)	Tin (10 µm - 16 µm Sn)

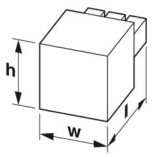
Material data - housing

Color (Housing)	green (6021)
Insulating material	PA
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

Dimensions

Dimensional drawing	
Pitch	7.62 mm
Width [w]	74.32 mm
Height [h]	32.2 mm
Length [l]	56.3 mm

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.

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

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
	16 mm² / solid / > 100 N
	16 mm² / flexible / > 100 N

Insertion and withdrawal forces

Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N

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

Environmental and real-life conditions

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	9.8 kV
Contact resistance R_1	0.235 mΩ
Contact resistance R_2	0.212 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	105 °C/168 h
Power-frequency withstand voltage	4.26 kV

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.15 mm (10 Hz ... 60.1 Hz)
Acceleration	20 m/s² (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

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)

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	6

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 | 1. Insulation coordination

Specification	IEC 61984:2008-10
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600

Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 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 | 2. Insulation coordination

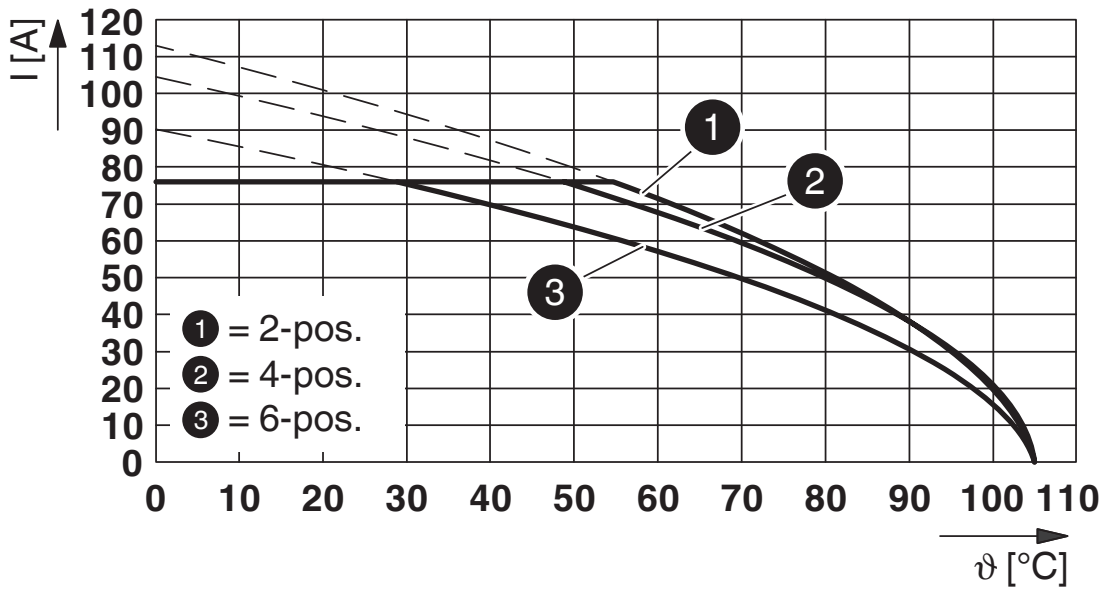
Specification	IEC 60664-1:2020-05
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V AC/DC
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 mm
Rated insulation voltage (III/2)	1500 V DC
Rated surge voltage (III/2)	10 kV
minimum clearance value - non-homogenous field (III/2)	11 mm
minimum creepage distance (III/2)	11 mm
Rated insulation voltage (II/2)	1500 V DC
Rated surge voltage (II/2)	8 kV
minimum clearance value - non-homogenous field (II/2)	8 mm
minimum creepage distance (II/2)	8 mm

Packaging specifications

Type of packaging	packed in cardboard

Drawings

Diagram



Type: LPC 16 HC/...-ST(L...)-10,16 with PC 16 HC/...-G(L...)-10,16

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1716841

cULus Recognized
Approval ID: E60425-20040202

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
Only flexible conductors	600 V	66 A	18 - 4	-
Only rigid conductors	600 V	48 A	18 - 8	-
C				
Only flexible conductors	600 V	66 A	18 - 4	-
Only rigid conductors	600 V	48 A	18 - 8	-

VDE Zeichengenehmigung
Approval ID: 40057494

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	76 A	-	0.75 - 16

UL Recognized
Approval ID: E60425-20040202

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
F				
Only flexible conductors	1000 V	66 A	18 - 4	-
Only rigid conductors	1000 V	48 A	18 - 8	-

Classifications

ECLASS

ECLASS-13.0	27460202
ECLASS-15.0	27460202

ETIM

ETIM 10.0	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%

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