

1110638

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PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 16 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of rows: 1, number of positions: 10, product range: LPC 2,5/..-STF, pitch: 5.08 mm, connection method: Lever Push-in connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON MSTB 2,5, locking: Screw locking mechanism, mounting method: Screw 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
- · Time-saving push-in connection when lever is closed
- · Screwable flange for superior mechanical stability
- · Quick and convenient testing using integrated test option

Commercial data

Item number	1110638
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACBAB
GTIN	4063151027742
Weight per piece (including packing)	21.6 g
Weight per piece (excluding packing)	21.6 g
Customs tariff number	85366990
Country of origin	SK



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Technical data

Product properties

Product type	PCB connector
Product family	LPC 2,5/STF
Product line	COMBICON Connectors M
Number of positions	10
Pitch	5.08 mm
Number of rows	1

Electrical properties

Properties

•	
Nominal current I _N	16 A
Nominal voltage U _N	320 V
Contact resistance	1 mΩ
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm²
Contact connection type	Socket

Interlock

Locking type	Screw locking mechanism
Mounting type	Screw flange
Tightening torque	0.3 Nm

Conductor connection

Connection method	Lever Push-in connection
Connection direction of the conductor to plug-in direction	0 °
Conductor/PCB connection direction	0 °
Conductor cross-section rigid	0.2 mm ² 2.5 mm ²
Conductor cross-section flexible	0.2 mm² 2.5 mm²
Conductor cross-section AWG	26 12
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm ² 2.5 mm ²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN	0.5 mm² 1 mm²



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ferrule with plastic sleeve	
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.4 mm
Stripping length	10 mm
Specifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
ferrules without insulating collar, according to DIN 46228-1	Cross section: 0.25 mm²; Length: 7 mm
	Cross section: 0.34 mm²; Length: 7 mm
	Cross section: 0.5 mm²; Length: 8 mm 10 mm
	Cross section: 0.75 mm²; Length: 8 mm 10 mm
	Cross section: 1 mm²; Length: 8 mm 12 mm
	Cross section: 1.5 mm²; Length: 10 mm 12 mm
	Cross section: 2.5 mm²; Length: 10 mm 12 mm
Specifications for ferrules with insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
ferrules with insulating collar, according to DIN 46228-4	Cross section: 0.25 mm²; Length: 8 mm 10 mm
	Cross section: 0.34 mm²; Length: 8 mm 10 mm
	Cross section: 0.5 mm²; Length: 8 mm 10 mm
	Cross section: 0.75 mm²; Length: 10 mm 12 mm
	Cross section: 1 mm²; Length: 10 mm 12 mm
	Cross section. 1 mm , Length. 10 mm 12 mm
	Cross section: 1.5 mm²; Length: 10 mm 12 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	hot-dip 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

Waterial 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	
Glow wire flammability index GWFI according to EN 60695-2-12	850	
Glow wire ignition temperature GWIT according to EN 60695-2-13	775	
Temperature for the ball pressure test according to EN 60695-10-2	125 °C	

Material data – actuating element



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Color (Actuating element)	orange (2003)
Insulating material	PA GF
Insulating material group	1
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	h
Pitch	5.08 mm
Width [w]	60.98 mm
Height [h]	15.39 mm
Length [I]	27.37 mm

Mounting

Flange

·		
	Tightening torque	0.3 Nm

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	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N



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Insertion and	l withdrawal	forces
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Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	7 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

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	50 m/s² (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	4.8 kV
Contact resistance R ₁	1 mΩ
Contact resistance R ₂	1.2 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	$0.2~\mathrm{dm^3SO_2}$ on 300 dm 3 /40 °C/1 cycle
Thermal stress	105 °C/168 h
Power-frequency withstand voltage	2.21 kV



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Shocks	_
SHOCK	5

Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	200 m/s²
Shock duration	11 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

30 % ... 70 % -5 °C ... 100 °C

Electrical tests

Thermal test | Test group C

Relative humidity (storage/transport)

Ambient temperature (assembly)

Specification	IEC 60512-5-1:2002-02	
Tested number of positions	20	
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 |

Air clearances and creepage distances		
Specification	IEC 60664-1:2007-04	
Insulating material group	I	
Comparative tracking index (IEC 60112)	CTI 600	
Rated insulation voltage (III/3)	250 V	
Rated surge voltage (III/3)	4 kV	
minimum clearance value - non-homogenous field (III/3)	3 mm	
minimum creepage distance (III/3)	3.2 mm	
Rated insulation voltage (III/2)	320 V	
Rated surge voltage (III/2)	4 kV	
minimum clearance value - non-homogenous field (III/2)	3 mm	
minimum creepage distance (III/2)	3 mm	
Rated insulation voltage (II/2)	630 V	
Rated surge voltage (II/2)	4 kV	
minimum clearance value - non-homogenous field (II/2)	3 mm	
minimum creepage distance (II/2)	3.2 mm	

Packaging specifications

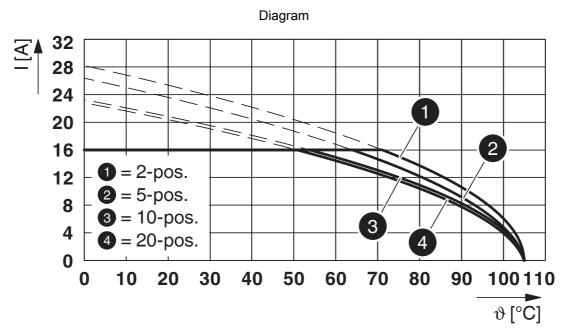
Type of packaging	packed in cardboard



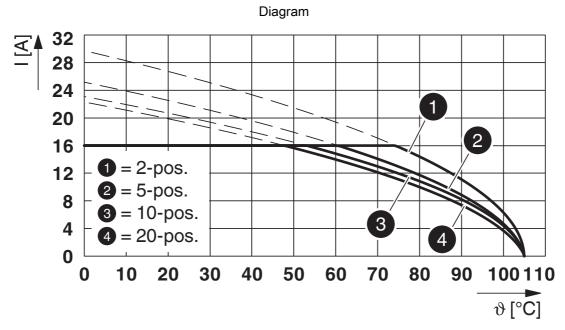
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Drawings



Type: LPC 2,5/...-STF-5,08 with CC 2,5/...-GF-5,08 P...THR

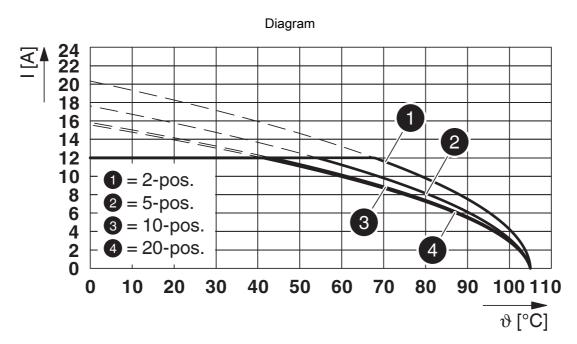


Type: LPC 2,5/...-STF-5,08 with CCV 2,5/...-GF-5,08 P...THR



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Type: LPC 2,5/...-STF-5,08 with MSTBV 2,5/...-GF-5,08



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1110638

	VDE Zeichengenehmigung Approval ID: 40053722				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine					
		320 V	16 A	-	0.2 - 2.5

UL Recognized Approval ID: E60425-20210715				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
F				
	320 V	16 A	26 - 12	-

e 912 us	cULus Recognized Approval ID: E60425-20210715				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
В					
		300 V	16 A	26 - 12	-
D					
		300 V	10 A	26 - 12	-



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Classifications

ECLASS

	ECLASS-13.0	27460202
	ECLASS-15.0	27460202
ΕI	TIM	
	ETIM 9.0	EC002638
1.18	NSPSC	
Ul	NSPSC	
	UNSPSC 21.0	39121400



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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%
EF3.0 Climate Change	
CO2e kg	0.688 kg CO2e

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