

ZEC 1,0/12-LPV-3,5 C1 - PCB connector



1915754

<https://www.phoenixcontact.com/us/products/1915754>

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 documentation. Our general terms of use for downloads are valid.



PCB connector, nominal cross section: 1 mm², color: green, nominal current: 8 A, rated voltage (III/2): 200 V, contact surface: Sn, contact connection type: Socket, number of potentials: 12, number of rows: 1, number of positions: 12, number of connections: 12, product range: ZEC 1,0/.-LPV, pitch: 3.5 mm, mounting: Direct plug-in method, conductor/PCB connection direction: 0 °, number of solder pins per potential: 2, plug-in system: ZEC, locking: without, mounting method: without, type of packaging: packed in cardboard

Your advantages

- Easy component connection
- Inexpensive direct plug-in connection with just one component

Commercial data

Item number	1915754
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA02
Product key	AABEBA
GTIN	4017918181420
Weight per piece (including packing)	8.202 g
Weight per piece (excluding packing)	7.65 g
Customs tariff number	85366930
Country of origin	GR

ZEC 1,0/12-LPV-3,5 C1 - PCB connector



1915754

<https://www.phoenixcontact.com/us/products/1915754>

Technical data

Product properties

Product type	PCB connector
Product family	ZEC 1,0/...-LPV
Product line	COMBICON Connectors S
Type	PCB connector
Number of positions	12
Pitch	3.5 mm
Number of connections	12
Number of rows	1
Number of potentials	12
Mounting type	without
Solder pins per potential	2

Electrical properties

Properties

Nominal current I_N	8 A
Nominal voltage U_N	200 V
Contact resistance	1.2 mΩ
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	200 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV

Mounting

Mounting type	Direct plug-in method
---------------	-----------------------

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 contact area (top layer)	Tin (4 - 8 μm Sn)

Material data - housing

Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600

ZEC 1,0/12-LPV-3,5 C1 - PCB connector



1915754

<https://www.phoenixcontact.com/us/products/1915754>

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

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	3.5 mm
Width [w]	43.4 mm
Height [h]	7 mm
Length [l]	22.9 mm

Mechanical tests

Insertion and withdrawal forces

Result	Test passed
No. of cycles	20
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	5 N

Resistance of inscriptions

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

Visual inspection

Specification	IEC 60512-2:1985-00
Result	Test passed

Dimension check

Specification	IEC 60512-2:1985-00
Result	Test passed

Electrical tests

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
---------------	---------------------

ZEC 1,0/12-LPV-3,5 C1 - PCB connector



1915754

<https://www.phoenixcontact.com/us/products/1915754>

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)	200 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 60068-2-6:1995-03
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 60512-5:1992-08
Contact resistance R_1	1.2 mΩ
Contact resistance R_2	1.5 mΩ
Insertion/withdrawal cycles	20

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	1.39 kV

Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °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
-------------------	---------------------

ZEC 1,0/12-LPV-3,5 C1 - PCB connector

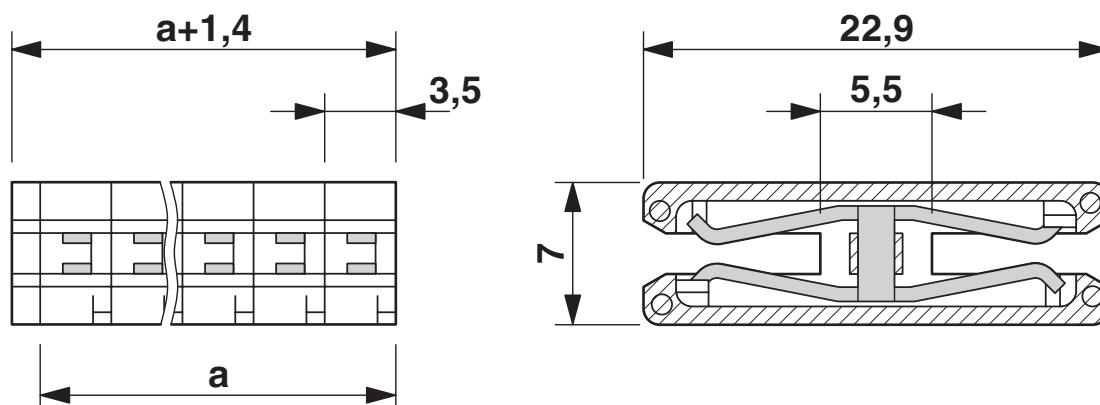


1915754

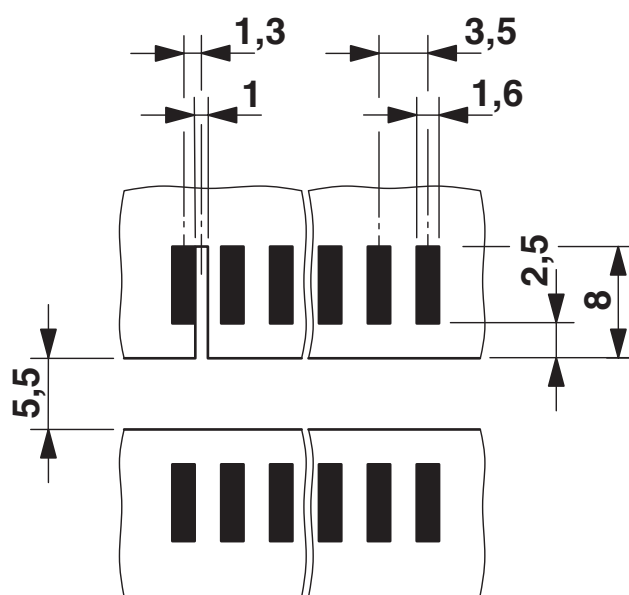
<https://www.phoenixcontact.com/us/products/1915754>

Drawings

Dimensional drawing



Drilling plan/solder pad geometry



Size of the PCB: 1.6 ± 0.2 mm

ZEC 1,0/12-LPV-3,5 C1 - PCB connector



1915754

<https://www.phoenixcontact.com/us/products/1915754>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1915754>

 cULus Recognized Approval ID: E60425-19941111				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	150 V	8 A	-	-

 VDE report with production monitoring Approval ID: 40020343				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	160 V	8 A	-	-

ZEC 1,0/12-LPV-3,5 C1 - PCB connector



1915754

<https://www.phoenixcontact.com/us/products/1915754>

Classifications

ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

ETIM

ETIM 9.0	EC002637
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

ZEC 1,0/12-LPV-3,5 C1 - PCB connector



1915754
<https://www.phoenixcontact.com/us/products/1915754>

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%

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com