

1705815

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PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Au, contact connection type: Pin, number of potentials: 12, number of rows: 1, number of positions: 12, number of connections: 12, product range: CCA 2,5/..-G, pitch: 5.08 mm, mounting: THR soldering / wave soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting method: without, type of packaging: packed in cardboard

## Your advantages

- · Gold-plated contacts ensure transfer quality remains stable over the long term
- · Designed for integration into the SMT soldering process
- · Maximum flexibility when it comes to device design one header for connectors with different connection technologies
- Closed contour for optimum stability of the plug-in connection

#### Commercial data

Item number	1705815
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACTBC
GTIN	4046356802680
Weight per piece (including packing)	5.006 g
Weight per piece (excluding packing)	4.47 g
Customs tariff number	85366930
Country of origin	DE



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## Technical data

### Product properties

Product type	PCB headers
Product family	CCA 2,5/G
Product line	COMBICON Connectors M
Туре	Component suitable for through hole reflow
Number of positions	12
Pitch	5.08 mm
Number of connections	12
Number of rows	1
Number of potentials	12
Mounting flange	without
Pin layout	Linear pinning
Solder pins per potential	1

## Electrical properties

Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	320 V
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)	400 V
Rated surge voltage (II/2)	4 kV

## Mounting

Mounting type	THR soldering / wave soldering
Pin layout	Linear pinning

### 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	partially gold-plated
Metal surface contact area (top layer)	Gold (0.8 - 1.4 µm Au)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 μm Sn)
Metal surface soldering area (middle layer)	Nickel (1 - 3 µm Ni)

#### Material data - housing

Material data - Housing		
	Color (Housing)	black (9005)
	Insulating material	LCP



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Insulating material group	Illa
CTI according to IEC 60112	175
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	P <sub>Y</sub> <sup>A</sup> h
Pitch	5.08 mm
Width [w]	63.76 mm
Height [h]	11.17 mm
Length [I]	12 mm
Installed height	8.57 mm
Solder pin length [P]	2.6 mm
Pin dimensions	1 x 1 mm
PCB design	
Hole diameter	1.6 mm

### Electrical tests

#### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	Illa
Comparative tracking index (IEC 60112)	CTI 175
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)	4 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)	3.2 mm
Rated insulation voltage (II/2)	400 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	4 mm



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### Environmental and real-life conditions

#### 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



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## **Approvals**

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cULus Recognized Approval ID: E60425-19931011						
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>		
Use group B						
Standard	300 V	16 A	-	-		
Use group D						
Standard	300 V	10 A	-	-		
Alternative 1	150 V	15 A	-	-		

VDE approval of drawings Approval ID: 40050079				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	320 V	16 A	-	-



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## Classifications

UNSPSC 21.0

### **ECLASS**

EC	CLASS-11.0	27460201	
EC	CLASS-12.0	27460201	
EC	CLASS-13.0	27460201	
ETIM			
ET	TIM 9.0	EC002637	
UNSPSC			

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%			

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