

PCB header - IMCV 1,5/11-G-3,5 RN P20 THR



1830951

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PCB headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: IMCV 1,5/...-G-RN-THR, pitch: 3.5 mm, pin layout: Linear pinning, solder pin [P]: 1.9 mm, number of solder pins per potential: 2, plug-in system: COMBICON MC 1,5, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting: Engagement nose, type of packaging: packed in cardboard

Your advantages

- Designed for integration into the SMT soldering process
- Intuitive locking mechanism prevents accidental disconnection
- Vertical connection enables multi-row arrangement on the PCB
- Inverted header with socket contacts for touch-proof device outputs or PCB/PCB connections

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Commercial Data

Item number	1830951
Packing unit	1 pc
Minimum order quantity	50 pc
Sales Key	A01
Product Key	AABTIC
Catalog Page	Page 17 (NTK-2014)
GTIN	4046356888561
Weight per Piece (including packing)	3.884 g
Weight per Piece (excluding packing)	3.884 g
Customs tariff number	85366930
Country of origin	DE

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Technical Data

Product properties

Type	Inverted
Product line	COMBICON Connectors S
Product type	PCB headers
Number of positions	11
Pitch	3.5 mm
Number of connections	11
Number of rows	1
Mounting flange	Engagement nose
Number of potentials	11
Pin layout	Linear pinning

Electrical properties

Nominal current I_N	8 A
Nominal voltage U_N	160 V
Pollution degree	3
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

Mounting

Mounting type THR soldering	THR soldering
Mounting type	THR soldering

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 (2 - 4 μm Sn)
Metal surface soldering area (top layer)	Tin (2 - 4 μm Sn)

Material data - housing

Housing color	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

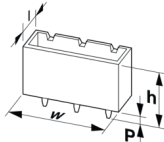
Dimensions

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1830951

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Dimensional drawing	
Pitch	3.5 mm
Width [w]	39.3 mm
Height [h]	16.35 mm
Length [l]	6.3 mm
Installed height	14.45 mm
Solder pin length [P]	1.9 mm

PCB design

Pin spacing	3.81 mm
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Electrical tests

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	IIIa
Comparative tracking index (IEC 60112)	CTI 175
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)	2.5 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)	1.6 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)	3.2 mm

Environmental and real-life conditions

Ambient conditions

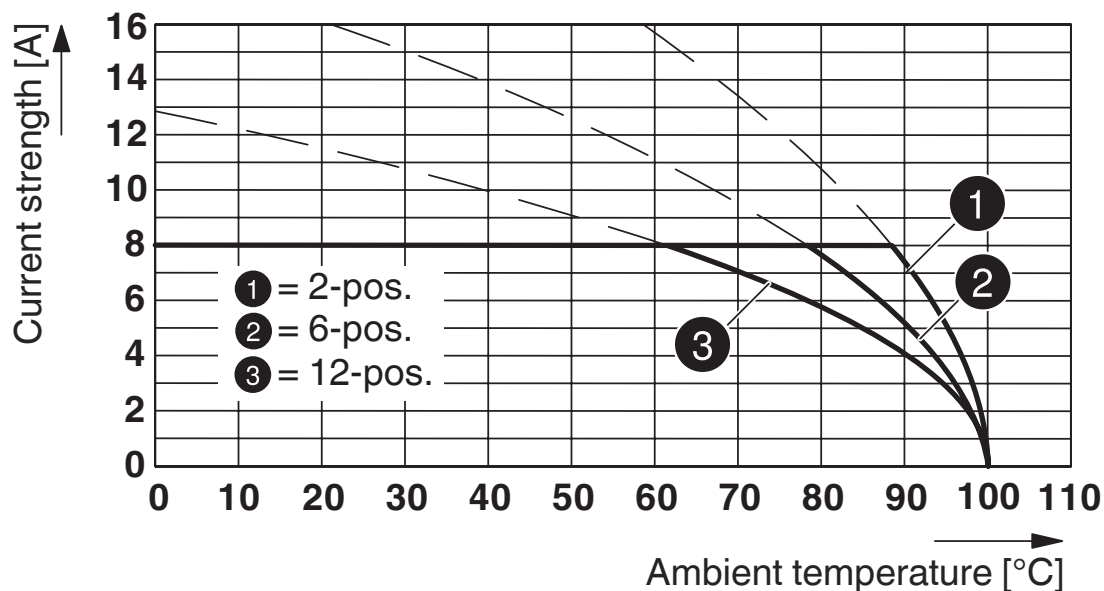
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard
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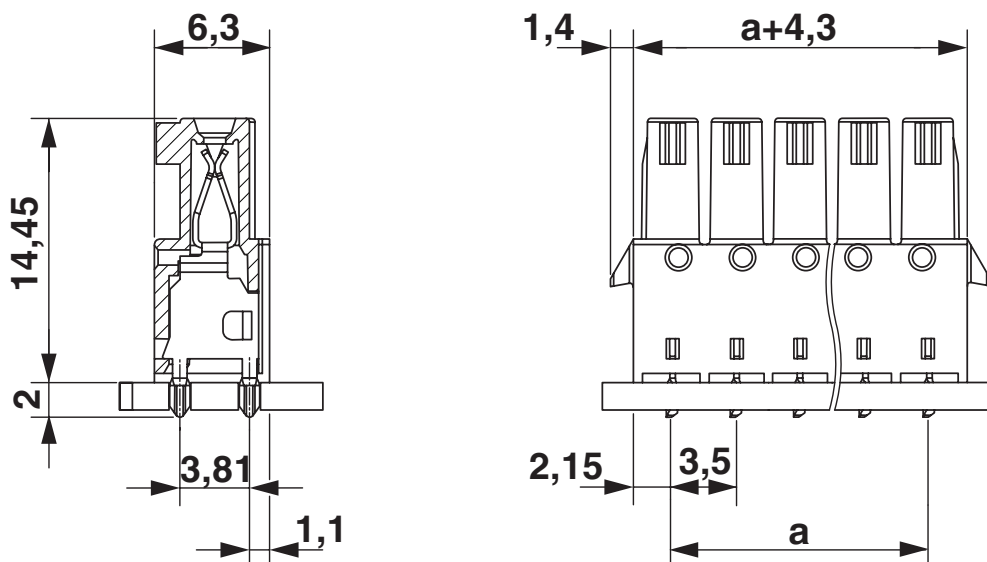
Drawings

Diagram



Type: IMC(V) 1,5/...-G-3,5 THR with MC(V) 1,5/...-G-3,5 THR

Dimensional drawing



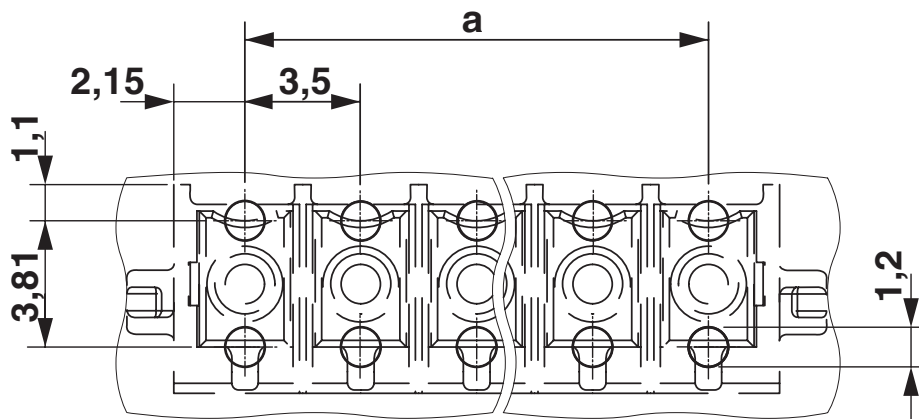
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Drilling plan/solder pad geometry



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Approvals

	IECEE CB Scheme			
	Approval ID: DE1-60987-B1B2			
		Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG
		160 V	8 A	-
				Cross Section mm ²
				-

	EAC
Approval ID: B.01687	

	cULus Recognized			
	Approval ID: E60425-20110128			
		Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG
Use group B				Cross Section mm ²
		300 V	8 A	-
Use group D				
		300 V	8 A	-
				-

	VDE report with production monitoring			
	Approval ID: 40011723			
		Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG
		160 V	8 A	-
				Cross Section mm ²
				-

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Classifications

ECLASS

ECLASS-9.0	27440402
ECLASS-10.0.1	27440402
ECLASS-11.0	27460201

ETIM

ETIM 8.0	EC002637
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UNSPSC

UNSPSC 21.0	39121400
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Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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