

MCDN 1,5/20-G1-3,5 4CRN26THRAU - PCB header



1811530

<https://www.phoenixcontact.com/us/products/1811530>

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 headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Au, contact connection type: Pin, number of potentials: 40, number of rows: 2, number of positions: 20, number of connections: 40, product range: MCDN 1,5/..-G1-RN-THR, pitch: 3.5 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 FMC 1,5 - MCDN 1,5, 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
- Conductor connection on several levels enables higher contact density

Commercial data

Item number	1811530
Packing unit	30 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA02
Product key	AABTGA
GTIN	4046356723763
Weight per piece (including packing)	15.99 g
Weight per piece (excluding packing)	12.9 g
Customs tariff number	85366930
Country of origin	DE

Technical data

Product properties

Product type	PCB headers
Product family	MCDN 1,5/..-G1-RN-THR
Product line	COMBICON Connectors S
Number of positions	20
Pitch	3.5 mm
Number of connections	40
Number of rows	2
Number of potentials	40
Mounting flange	Threaded flange
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Nominal current I_N	8 A
Nominal voltage U_N	160 V
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
Rated voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 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	Completely gold-plated
Metal surface contact area (top layer)	Gold (0.8 - 1.4 μm Au)
Metal surface contact area (middle layer)	Nickel (1 - 3 μm Ni)
Metal surface soldering area (top layer)	Gold (0.8 - 1.4 μm Au)
Metal surface soldering area (middle layer)	Nickel (1 - 3 μm Ni)

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

MCDN 1,5/20-G1-3,5 4CRN26THRAU - PCB header

1811530

<https://www.phoenixcontact.com/us/products/1811530>



CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Dimensions

Dimensional drawing	
Pitch	3.5 mm
Width [w]	73.7 mm
Height [h]	15.2 mm
Length [l]	13.3 mm
Installed height	16 mm
Solder pin length [P]	2.6 mm
Pin dimensions	0.8 x 0.8 mm

PCB design

Hole diameter	1.4 mm
---------------	--------

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)	250 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)	2.5 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 %

MCDN 1,5/20-G1-3,5 4CRN26THRAU - PCB header

1811530

<https://www.phoenixcontact.com/us/products/1811530>



Ambient temperature (assembly)	-5 °C ... 100 °C
--------------------------------	------------------

Packaging specifications

Type of packaging	packed in cardboard
-------------------	---------------------

Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1811530>

cULus Recognized				
Approval ID: E60425-20110128				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	150 V	8 A	-	-
Use group D	150 V	8 A	-	-

VDE approval of drawings				
Approval ID: 40011723				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	160 V	8 A	-	-

Classifications

ECLASS

ECLASS-11.0	27460201
ECLASS-12.0	27460201
ECLASS-13.0	27460201

ETIM

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

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%
-------------------------------------	----------------------------

EF3.0 Climate Change

CO2e kg	0.172 kg CO2e
---------	---------------

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