

# DMC 1,5/ 2-G1-3,5-LR P20THR - PCB header



1535182

<https://www.phoenixcontact.com/sk/products/1535182>

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 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Sn, contact connection type: Pin, number of rows: 2, number of positions: 2, product range: DMC 1,5/..-G1-LR-THR, pitch: 3.5 mm, mounting: THR soldering / wave soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, number of solder pins per potential: 1, plug-in system: COMBICON DFMC 1,5, Pin connector pattern alignment: Standard, locking: Lock-and-release locking system, mounting: Lock + Release, type of packaging: packed in cardboard

## Your advantages

- Designed for integration into the SMT soldering process
- Conductor connection on several levels enables higher contact density
- Small component size for applications where space is at a premium
- Automatic locking and intuitive release through Lock and Release operating lever in contrasting color

## Commercial data

Item number	1535182
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AAB
Product key	AABTJE
GTIN	4067923006836
Weight per piece (including packing)	1.91 g
Weight per piece (excluding packing)	1.91 g
Customs tariff number	85366930
Country of origin	CN

1535182

<https://www.phoenixcontact.com/sk/products/1535182>

## Technical data

### Product properties

Product type	PCB headers
Product family	DMC 1,5/..-G1-LR-THR
Product line	COMBICON Connectors S
Type	Headers
Number of positions	2
Pitch	3.5 mm
Number of rows	2
Mounting flange	Lock & Release
Pin layout	Linear pinning
Solder pins per potential	1

### Data management status

Article revision	00
------------------	----

### Electrical properties

Nominal current $I_N$	8 A
Nominal voltage $U_N$	160 V
Contact resistance	2 m $\Omega$
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

### Processing notes

Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature $T_c$	260 °C
Solder cycles in the reflow	3

### 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	Tin-plated

# DMC 1,5/ 2-G1-3,5-LR P20THR - PCB header



1535182

<https://www.phoenixcontact.com/sk/products/1535182>

Metal surface contact area (top layer)	Tin (3 - 5 $\mu\text{m}$ Sn)
Metal surface contact area (middle layer)	Nickel (1.3 - 3 $\mu\text{m}$ Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 $\mu\text{m}$ Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 $\mu\text{m}$ Ni)

## Material data - housing

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

## Dimensions

Dimensional drawing	
Pitch	3.5 mm
Width [w]	14 mm
Height [h]	12.8 mm
Length [l]	11.6 mm
Installed height	10.8 mm
Solder pin length [P]	2 mm
Pin dimensions	0.8 x 0.8 mm

## PCB design

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

## Mechanical tests

### Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

### Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

### 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

# DMC 1,5/ 2-G1-3,5-LR P20THR - PCB header



1535182

<https://www.phoenixcontact.com/sk/products/1535182>

## Contact holder in insert

Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed

## Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	3 N
Withdraw strength per pos. approx.	2 N

## Electrical tests

### Thermal test | Test group C

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

### 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

### 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	5g (60.1 Hz ... 150 Hz)

# DMC 1,5/ 2-G1-3,5-LR P20THR - PCB header



1535182

<https://www.phoenixcontact.com/sk/products/1535182>

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	2.95 kV
Contact resistance R <sub>1</sub>	2 mΩ
Contact resistance R <sub>2</sub>	2 mΩ
Insertion/withdrawal cycles	25

## Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	1.39 kV

## Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

## 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

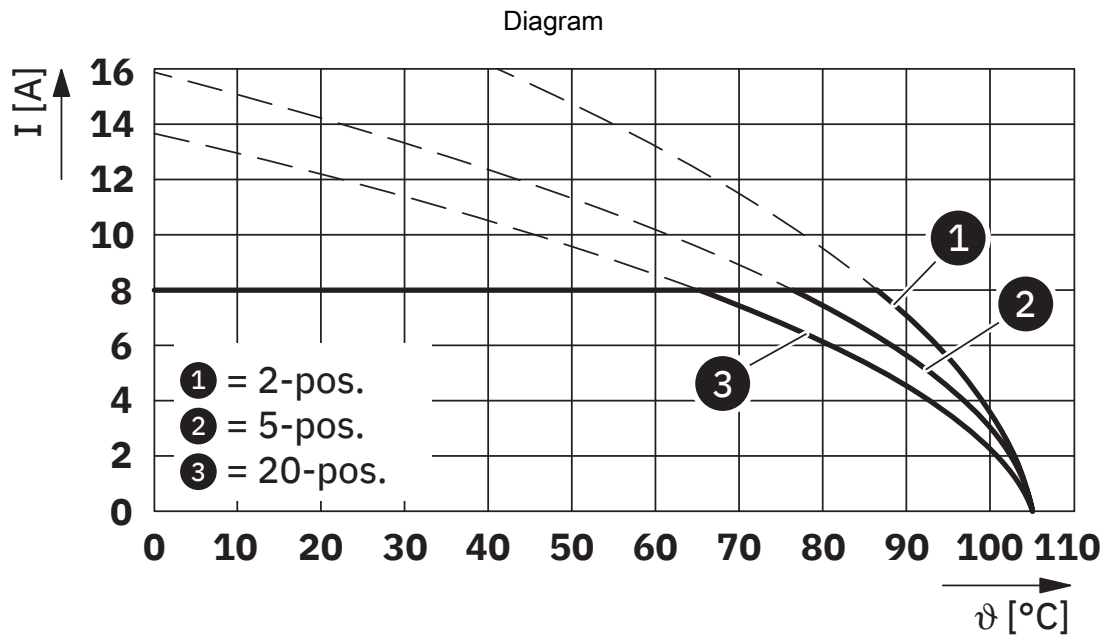
## Packaging specifications

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

1535182

<https://www.phoenixcontact.com/sk/products/1535182>

## Drawings



Type: DFMC 1,5/...-ST-3,5-LR with DMC 1,5/...-G1-3,5-LR P...THR

# DMC 1,5/ 2-G1-3,5-LR P20THR - PCB header





1535182

<https://www.phoenixcontact.com/sk/products/1535182>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/sk/products/1535182>

 <b>cULus Recognized</b> Approval ID: E60425-20110128				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B	300 V	8 A	-	-
Use group C	50 V	8 A	-	-
Use group D	300 V	8 A	-	-

 <b>VDE Gutachten mit Fertigungsüberwachung</b> Approval ID: 40038423				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	160 V	8 A	-	-

# DMC 1,5/ 2-G1-3,5-LR P20THR - PCB header



1535182

<https://www.phoenixcontact.com/sk/products/1535182>

## Classifications

### ECLASS

ECLASS-11.0	27460201
ECLASS-13.0	27460201

### ETIM

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



# DMC 1,5/ 2-G1-3,5-LR P20THR - PCB header



1535182

<https://www.phoenixcontact.com/sk/products/1535182>

## 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%
-------------------------------------	----------------------------

# DMC 1,5/ 2-G1-3,5-LR P20THR - PCB header



1535182

<https://www.phoenixcontact.com/sk/products/1535182>

## Accessories

### CP-DMC 1,5 NAT - Coding profile

1790647

<https://www.phoenixcontact.com/sk/products/1790647>

Coding profile, for insertion between the coding ribs of the connector and the header following the reflow soldering process, insulating material, color: natural



---

Phoenix Contact 2024 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT s.r.o.  
Námestie Mateja Korvína 1  
811 07 Bratislava  
+421 2 3210 1470  
[obchod.sk@phoenixcontact.com](mailto:obchod.sk@phoenixcontact.com)