

# Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 16, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: THR soldering, solder pin [P]: 2 mm, Sample values available under SAMPLE DMC...



The figure shows a 10-pos. version with 20 contacts

## Your advantages

- ✓ Gold-plated contacts ensure transfer quality remains stable over the long term
- ✓ 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
- ✓ Supplied in tape-on-reel packing according to IEC 60286-3 for automated mounting



## Key Commercial Data

Packing unit	300 pc
Minimum order quantity	300 pc
GTIN	
GTIN	4046356964234

## Technical data

### Item properties

Brief article description	Feed-through header
Plug-in system	MICRO COMBICON - DFMC 0,5
Type of contact	Male connector
Range of articles	DMC 0,5/...G1-THR
Pitch	2.54 mm
Number of positions	16
Mounting type	THR soldering
Locking	without

# Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

## Technical data

### Item properties

Number of levels	2
Number of connections	32
Number of potentials	32

### Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage	32 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV

### 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 (0.25 Au)
Metal surface contact area (middle layer)	Nickel (2 - 4 µm Ni),
Metal surface soldering area (top layer)	Gold (0.25 Au)
Metal surface soldering area (middle layer)	Nickel (2 - 4 µm Ni)

### 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 for the product

Length [ l ]	9.64 mm
Width [ w ]	41.94 mm
Height [ h ]	9.39 mm
Pitch	2.54 mm
Height (without solder pin)	7.39 mm
Solder pin [P]	2 mm
Pin spacing	2.54 mm
Pin dimensions	0.64 x 0.64 mm

### Dimensions for PCB design

# Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

## Technical data

### Dimensions for PCB design

Hole diameter	1.2 mm
Pin spacing	2.54 mm

### Packaging information

Type of packaging	72 mm wide tape
Pieces per package	300
Denomination packing units	Pcs.
[W] tape width	72 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	78.4 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07

### Processing notes

Process	Reflow/wave soldering
Specification	Following IPC/JEDEC J-STD-020D.1:2008-03
	Following IEC 61760-1:2006-04
	Following IEC 60068-2-58:2005-02
Moisture Sensitive Level	MSL 1
Classification temperature T <sub>c</sub>	260 °C
Solder cycles in the reflow	3

### Ambient conditions

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

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	1.3 mm
Minimum creepage distance value (III/2)	1.6 mm
Minimum creepage distance value (II/2)	1.6 mm

### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	1 N

# Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

## Technical data

### Mechanical tests (A)

Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

### Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Insertion/withdrawal cycles	100
Contact resistance R <sub>2</sub> 1st level	2.9 mΩ
Contact resistance R <sub>2</sub> 2nd level	3.1 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV
Insulation resistance, neighboring positions	> 2 GΩ

### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	16
Conductor cross section	0.5 mm <sup>2</sup>
Test current	6 A
Upper limiting temperature requirements <100 °C	Test passed

### Climatic tests (D)

Specification	DIN 50018:2013-05
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	1.0 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/3 cycles
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

### Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

### Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 500 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5g (60.1 - 500 Hz)
Test duration per axis	2 h

### Standards and Regulations

Connection in acc. with standard	EN-VDE
----------------------------------	--------

# Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

## Technical data

### Standards and Regulations

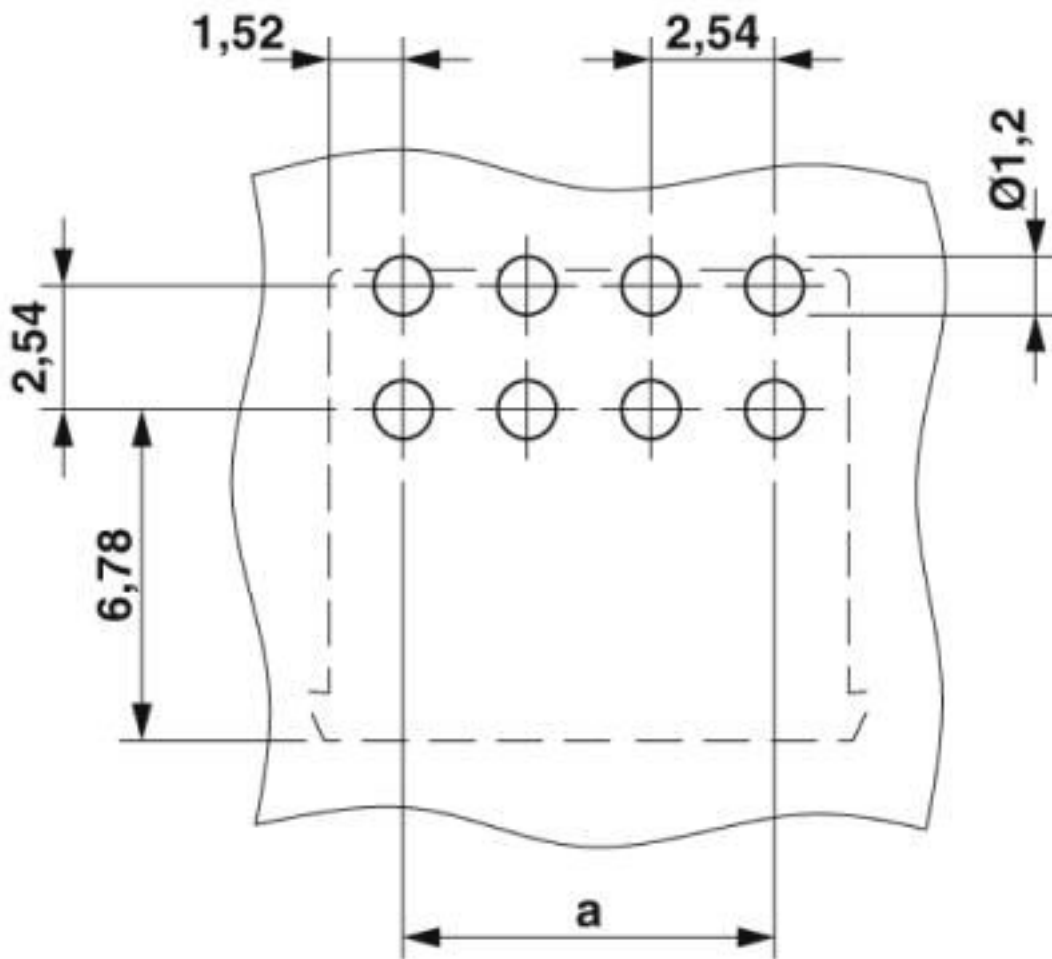
Flammability rating according to UL 94	V0
--	----

### Environmental Product Compliance

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

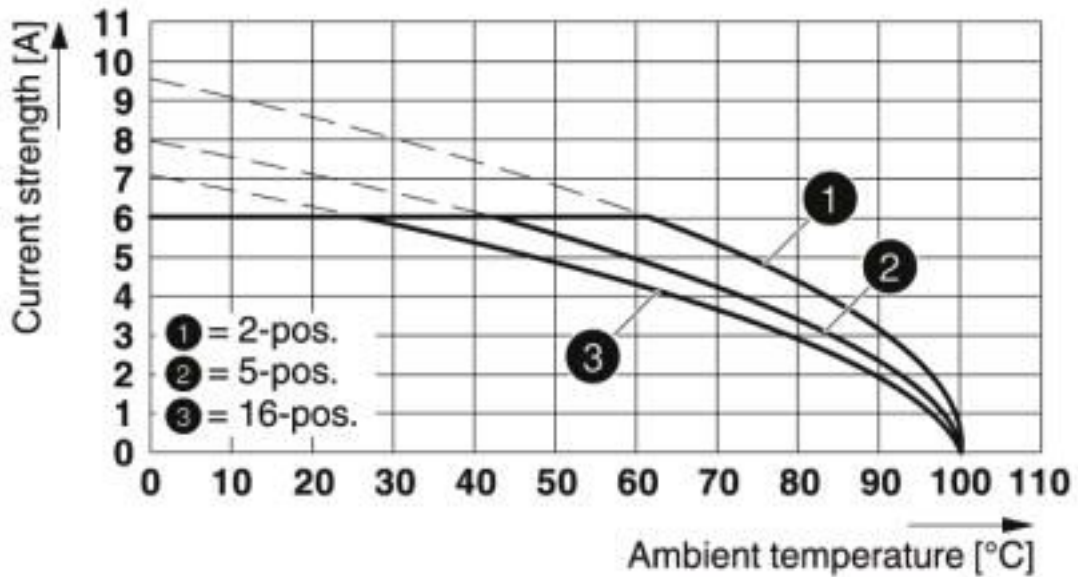
## Drawings

Drilling diagram



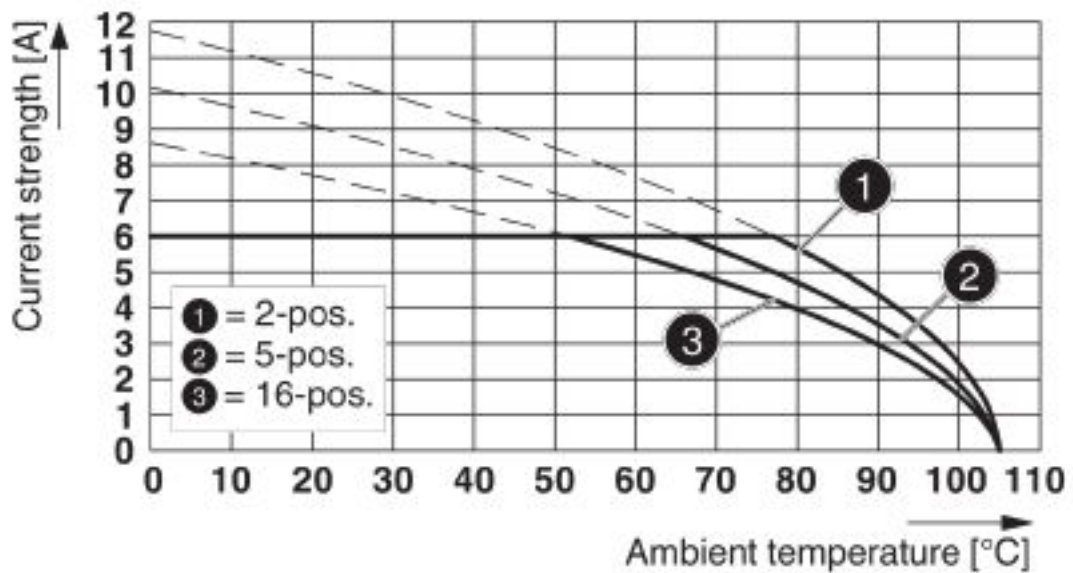
# Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

Diagram



Type: DFMC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P...THR R...

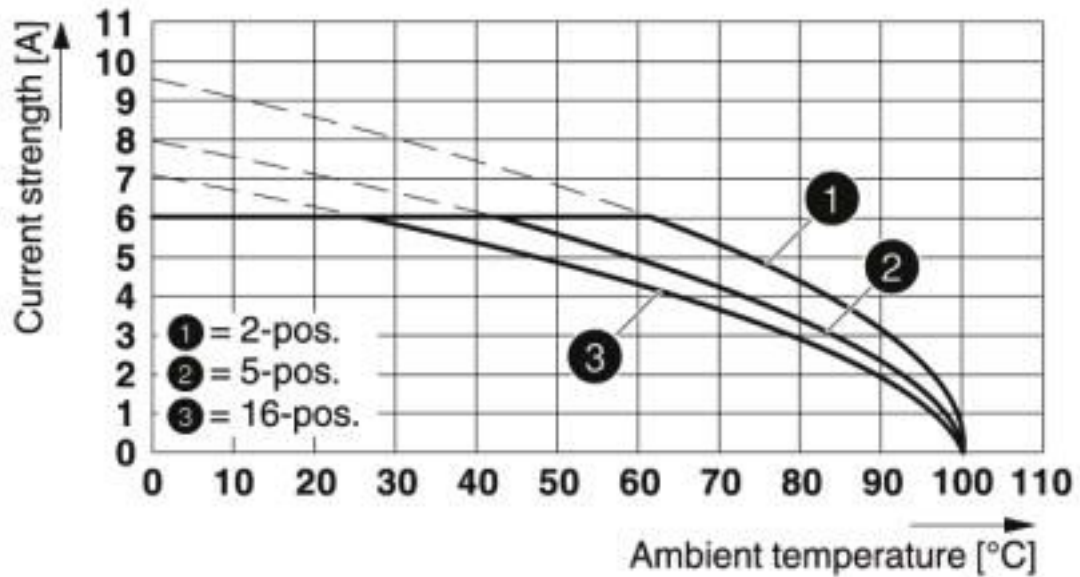
Diagram



Type: DMCC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P...THR R...

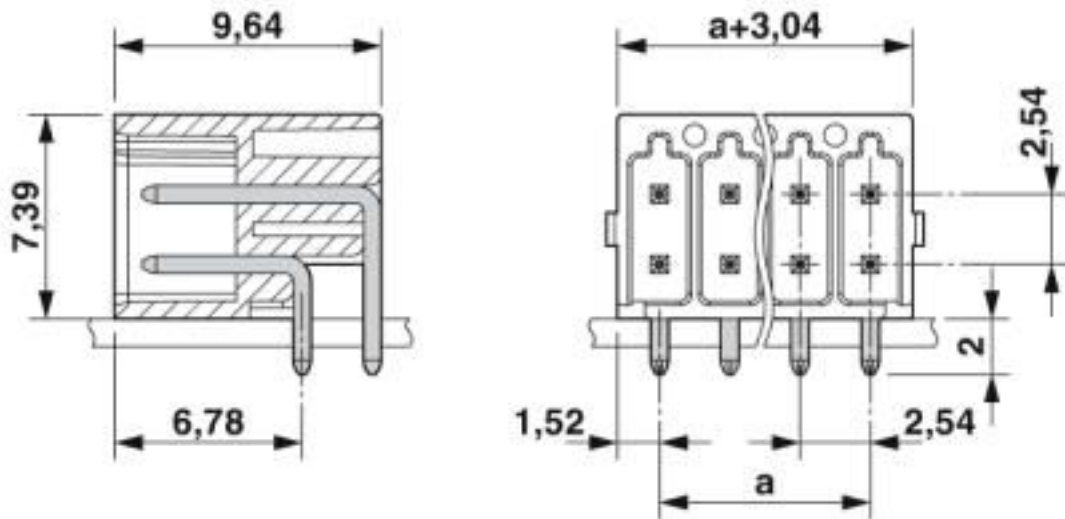
# Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

Diagram



Type: DFMC 0,5/...-ST-2,54-RF with DMC 1,5/...-G1-2,54 P...THR R...

Dimensional drawing



## Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700

# Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

## Classifications

### eCl@ss

eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

### ETIM

ETIM 4.0	EC002637
ETIM 5.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

### UNSPSC

UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

## Approvals

### Approvals

---

### Approvals

IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

---

### Ex Approvals

---

### Approval details

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-59151-M1
Nominal voltage UN	160 V		
Nominal current IN	6 A		



# Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

## Approvals

VDE Gutachten mit Fertigungsüberwachung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40042389
Nominal voltage UN		160 V	
Nominal current IN		6 A	

EAC		B.01687
-----	--	---------

cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-19920306
	B	C	
Nominal voltage UN	150 V	50 V	
Nominal current IN	6 A	6 A	

## Accessories

### Accessories

#### Labeled terminal marker

Marker card - SK 2,54/2,8:FORTL.ZAHLEN - 0804853



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 99, mounting type: adhesive, for terminal block width: 2.54 mm, lettering field size: 2.54 x 2.8 mm

## PCB headers

Sample set - SAMPLE DMC 0,5/16-G1-2,54 THR - 1859631



PCB headers, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of positions: 16, pitch: 2.54 mm, color: black, contact surface: Gold, mounting: THR soldering, solder pin [P]: 2 mm

## Additional products

## Printed-circuit board connector - DMC 0,5/16-G1-2,54 P20THR R72 - 1844866

### Accessories

Printed-circuit board connector - DFMC 0,5/16-ST-2,54 - 1844714



Plug, nominal current: 6 A, rated voltage (III/2): 160 V, number of positions: 16 with 32 contacts, pitch: 2.54 mm, connection method: spring connection, color: black, contact surface: gold

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Pluggable Terminal Blocks](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[57.510.0053](#) [MC 1.5/ 6-ST-3.5 GY AU](#) [734-104](#) [734-302](#) [8-141-P](#) [8426620000](#) [860505](#) [860810](#) [GBPACX-12](#) [93.731.4953.0](#) [PV05-5,08-K](#)  
[PVP02-5,00](#) [PVP03-3,50](#) [PVP04-3,50](#) [PVS02-5,00](#) [1-1986160-3](#) [1377680000](#) [1531000000](#) [1546228-5](#) [ELFH16150](#) [ELFP03110](#)  
[ELFP10210](#) [ELFT06250](#) [ELVP03100](#) [1700101](#) [1700410](#) [1700425](#) [1702246](#) [1705229](#) [1710175](#) [1714537](#) [1717806](#) [1719600](#) [1728941](#)  
[1734692](#) [1734795](#) [1736036](#) [1740194](#) [1740291](#) [1740628](#) [1740990](#) [1746952](#) [1750207](#) [1752441](#) [1752865](#) [1754115](#) [1754144](#) [1756913](#)  
[1760051](#) [1760336](#)