

# Printed-circuit board connector - DMC 1,5/ 8-G1F-3,5-LR P20THR - 1787072

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>)

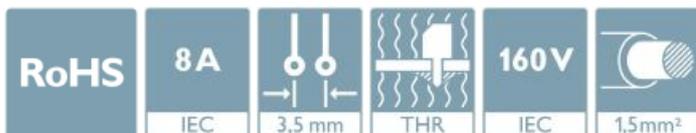


The figure shows a 10-pos. version with 20 contacts

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: Tin, type of contact: Male connector, Number of potentials: 16, Number of rows: 2, Number of positions per row: 8, number of connections: 16, product range: DMC 1,5/...-G1F-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Stecksystem: MINI COMBICON - DFMC 1,5, Locking: Snap-in locking, type of packaging: packed in cardboard

## Your advantages

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



## Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4046356596688

## Technical data

### Item properties

Brief article description	Feed-through header
Plug-in system	MINI COMBICON - DFMC 1,5
Type of contact	Male connector
Range of articles	DMC 1,5/...-G1F-THR
Pitch	3.5 mm
Number of positions	8
Mounting type	THR soldering
Pin layout	Linear pinning

# Printed-circuit board connector - DMC 1,5/ 8-G1F-3,5-LR P20THR - 1787072

## Technical data

### Item properties

Locking	Lock & release threaded flange
Number of levels	2
Number of connections	16
Number of potentials	16

### Electrical parameters

Nominal current	8 A
Nom. voltage	160 V
Rated voltage	160 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	250 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	Tin-plated
Metal surface contact area (top layer)	Tin (3 - 5 µm Sn)
Metal surface contact area (middle layer)	Nickel (1 - 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

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

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	11.6 mm
Width [ w ]	35 mm
Height [ h ]	12.8 mm
Pitch	3.5 mm
Height (without solder pin)	10.8 mm
Solder pin [P]	2 mm
Pin spacing	2.50 mm

# Printed-circuit board connector - DMC 1,5/ 8-G1F-3,5-LR P20THR - 1787072

## Technical data

### Dimensions for the product

Pin dimensions	0.8 x 0.8 mm
----------------	--------------

### Dimensions for PCB design

Hole diameter	1.4 mm
Pin spacing	2.50 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

### Processing notes

Process	Reflow/wave soldering
Specification	Following IPC/JEDEC J-STD-020D.1:2008-03
	Following IEC 60068-2-54:2006-04
	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)	2.5 mm
Minimum creepage distance value (III/2)	1.6 mm
Minimum creepage distance value (II/2)	2.5 mm

### Standards and Regulations

Connection in acc. with standard	EN-VDE
	CUL
Flammability rating according to UL 94	V0

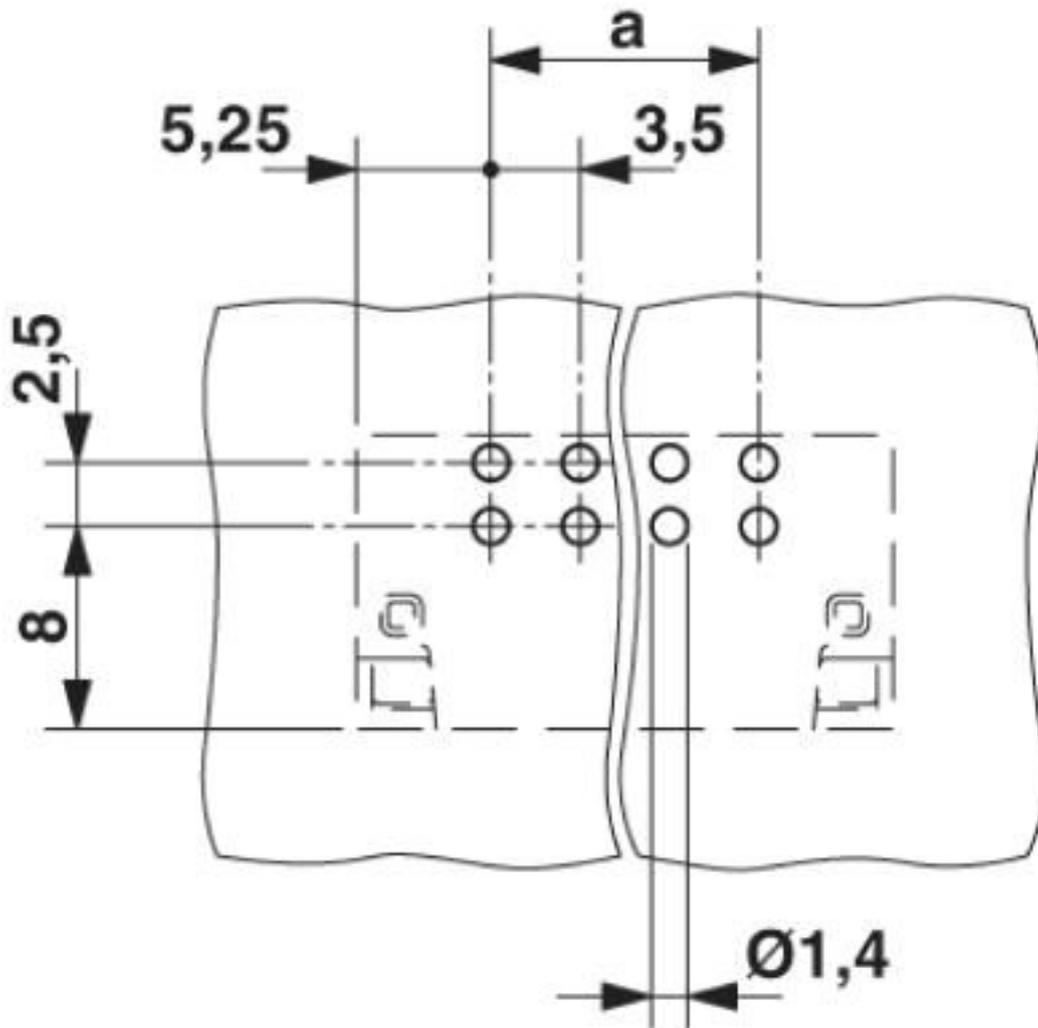
### Environmental Product Compliance

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

# Printed-circuit board connector - DMC 1,5/ 8-G1F-3,5-LR P20THR - 1787072

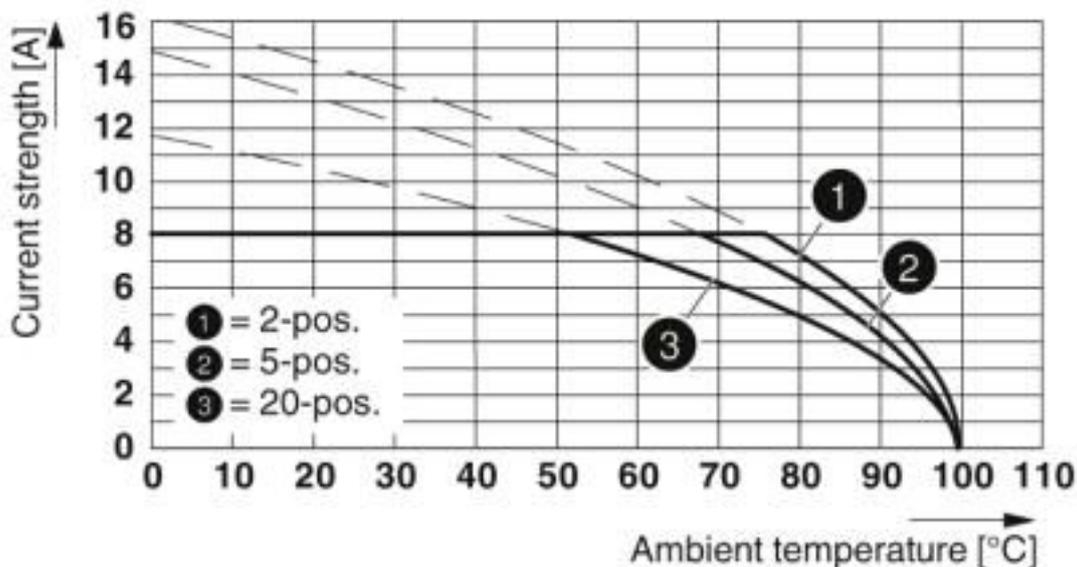
## Drawings

Drilling diagram



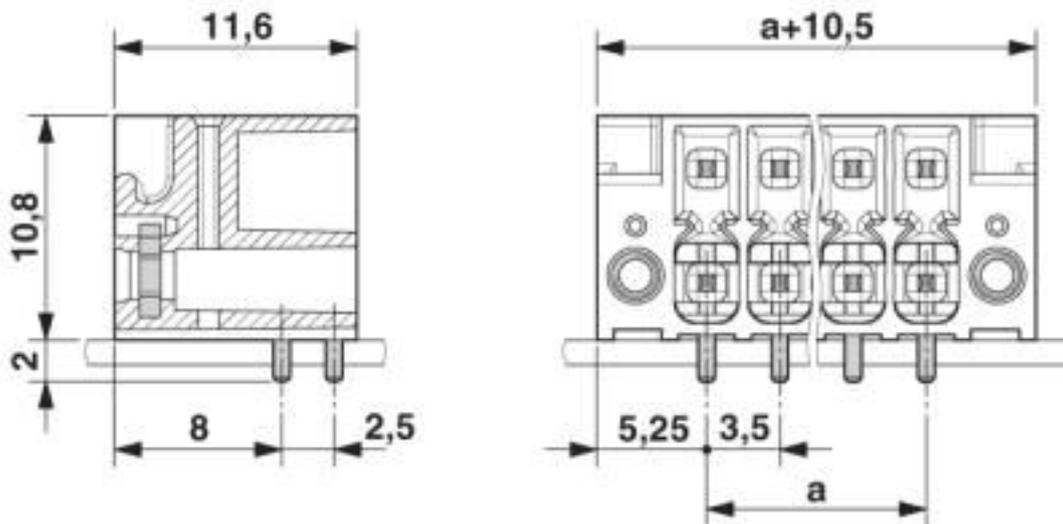
# Printed-circuit board connector - DMC 1,5/ 8-G1F-3,5-LR P20THR - 1787072

Diagram



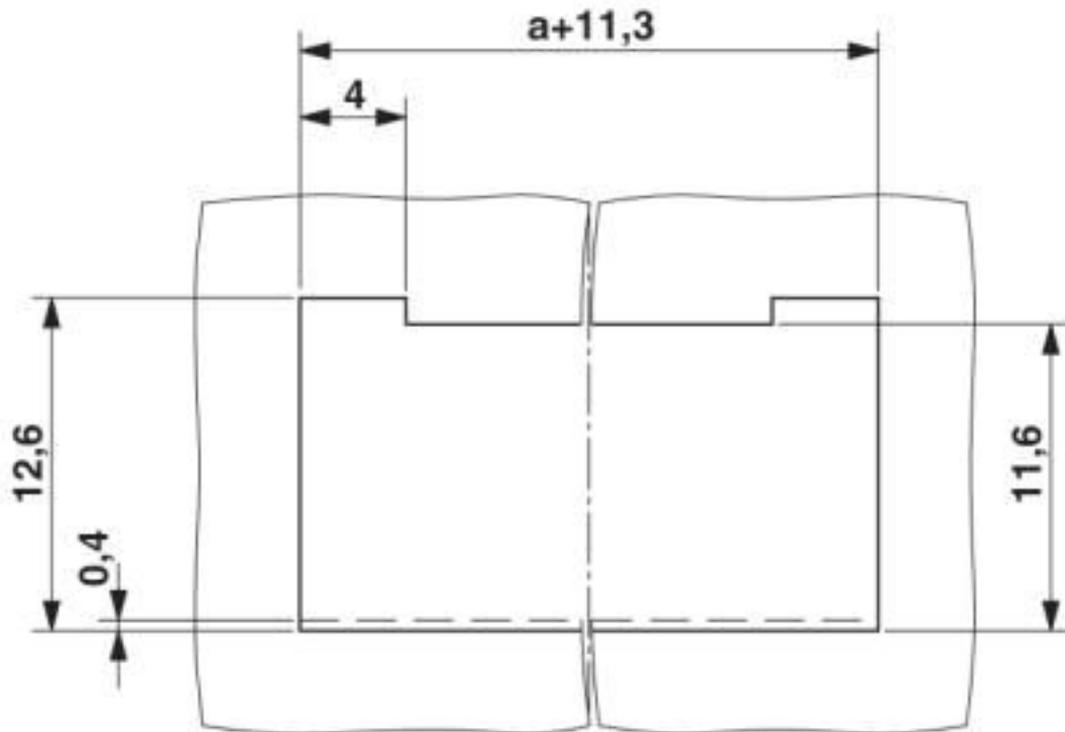
Type: DFMC 1,5/...-ST-3,5-LR with DMC 1,5/...-G1F-3,5-LR P20 THR

Dimensional drawing



# Printed-circuit board connector - DMC 1,5/ 8-G1F-3,5-LR P20THR - 1787072

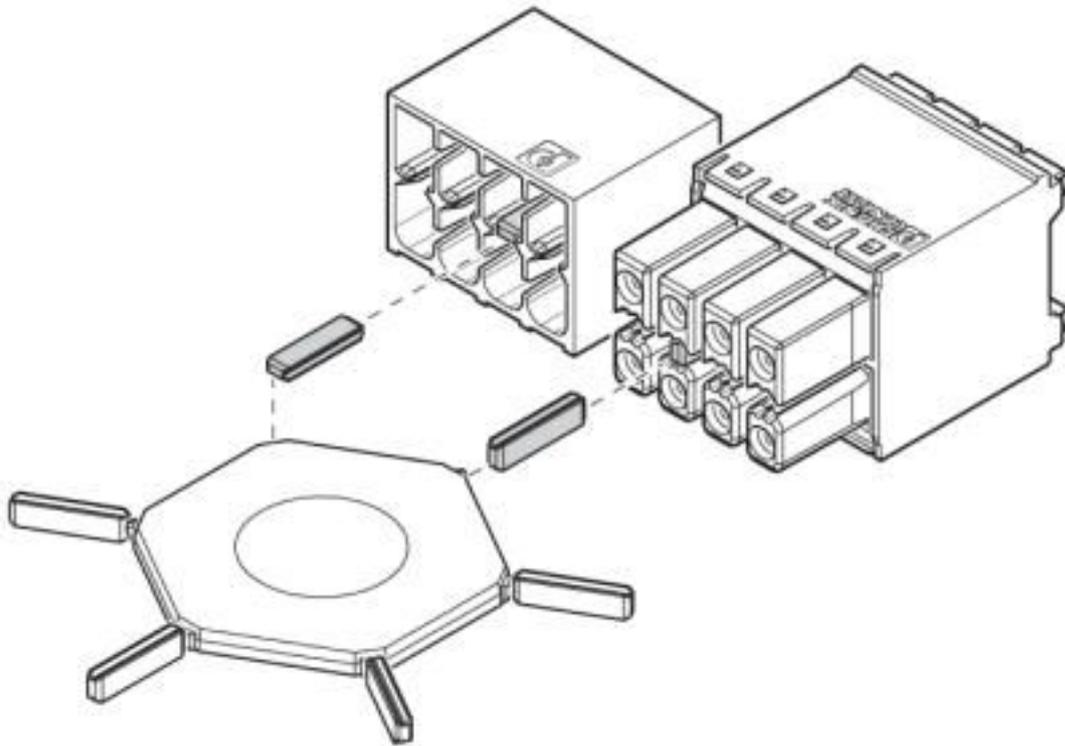
Schematic diagram



Panel cutout

# Printed-circuit board connector - DMC 1,5/ 8-G1F-3,5-LR P20THR - 1787072

Schematic diagram



Use of the CP-DMC... coding profile

## Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 11.0	27460201
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
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

# Printed-circuit board connector - DMC 1,5/ 8-G1F-3,5-LR P20THR - 1787072

## Classifications

### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
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>	DE1-60359_B1_B2
Nominal voltage UN	160 V		
Nominal current IN	8 A		

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>	40038423
Nominal voltage UN	160 V		
Nominal current IN	8 A		

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

# Printed-circuit board connector - DMC 1,5/ 8-G1F-3,5-LR P20THR - 1787072

## Approvals

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> E60425-20110128	
	B	C	D
Nominal voltage UN	150 V	50 V	300 V
Nominal current IN	8 A	8 A	8 A

## Accessories

### Accessories

#### Coding element

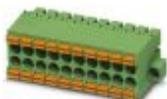
Coding profile - CP-DMC 1,5 NAT - 1790647

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



## Additional products

Printed-circuit board connector - DFMC 1,5/ 8-STF-3,5 - 1790357



Plug, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 8 with 16 contacts, pitch: 3.5 mm, connection method: spring-cage connection, color: green, contact surface: tin

Printed-circuit board connector - DFMC 1,5/ 8-ST-3,5-LR - 1790548



Plug, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 8 with 16 contacts, pitch: 3.5 mm, connection method: spring-cage connection, color: green, contact surface: tin

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>