

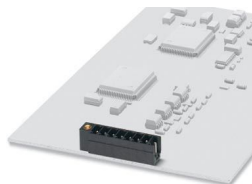
MCV 1,5/ 9-GFR-3,5 THT - PCB header



1961892

<https://www.phoenixcontact.com/us/products/1961892>

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^2 , color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 9, number of rows: 1, number of positions: 9, number of connections: 9, product range: MCV 1,5/..-GFR-THT, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard, Two-in-one – Pin strips must always be made up of a left (L) and a right (R) segment. Please allow for the corresponding counterpart from the accessories to complete the THR pin strip. User information and design recommendations on Through Hole Reflow Technology can be found at: "Downloads".

Your advantages

- Designed for integration into the SMT soldering process
- Vertical connection enables multi-row arrangement on the PCB
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies

Commercial data

Item number	1961892
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA02
Product key	AAB1GL
Catalog page	Page 97 (CC-2005)
GTIN	4017918916299
Weight per piece (including packing)	4.118 g
Weight per piece (excluding packing)	3.833 g
Customs tariff number	85366930
Country of origin	DE

MCV 1,5/ 9-GFR-3,5 THT - PCB header



1961892

<https://www.phoenixcontact.com/us/products/1961892>

Technical data

Product properties

Product type	PCB headers
Product family	MCV 1,5/...-GFR-THT
Product line	COMBICON Connectors S
Type	Component suitable for through hole reflow
Number of positions	9
Pitch	3.5 mm
Number of connections	9
Number of rows	1
Number of potentials	9
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
Degree of pollution	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
Rated voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 kV

Mounting

Mounting type	THR soldering
Pin layout	Linear pinning

Flange

Tightening torque	0.3 Nm
-------------------	--------

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
Metal surface contact area (top layer)	Tin (3 - 5 μm Sn)
Metal surface contact area (middle layer)	Nickel (1.3 - 3 μm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 μm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 μm Ni)

MCV 1,5/ 9-GFR-3,5 THT - PCB header

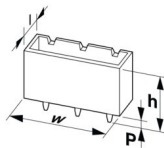
1961892

<https://www.phoenixcontact.com/us/products/1961892>

Material data - housing

Color (Housing)	black (9005)
Insulating material	PA
Insulating material group	IIIa
CTI according to IEC 60112	250
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Dimensions

Dimensional drawing	
Pitch	3.5 mm
Height [h]	12.6 mm
Length [l]	7.25 mm
Installed height	10 mm
Solder pin length [P]	2.6 mm
Pin dimensions	0.8 x 0.8 mm

PCB design

Pin spacing	3.50 mm
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 250
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

MCV 1,5/ 9-GFR-3,5 THT - PCB header



1961892

<https://www.phoenixcontact.com/us/products/1961892>

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

Packaging specifications

Type of packaging	packed in cardboard
Outer packaging type	Dry bag

MCV 1,5/ 9-GFR-3,5 THT - PCB header

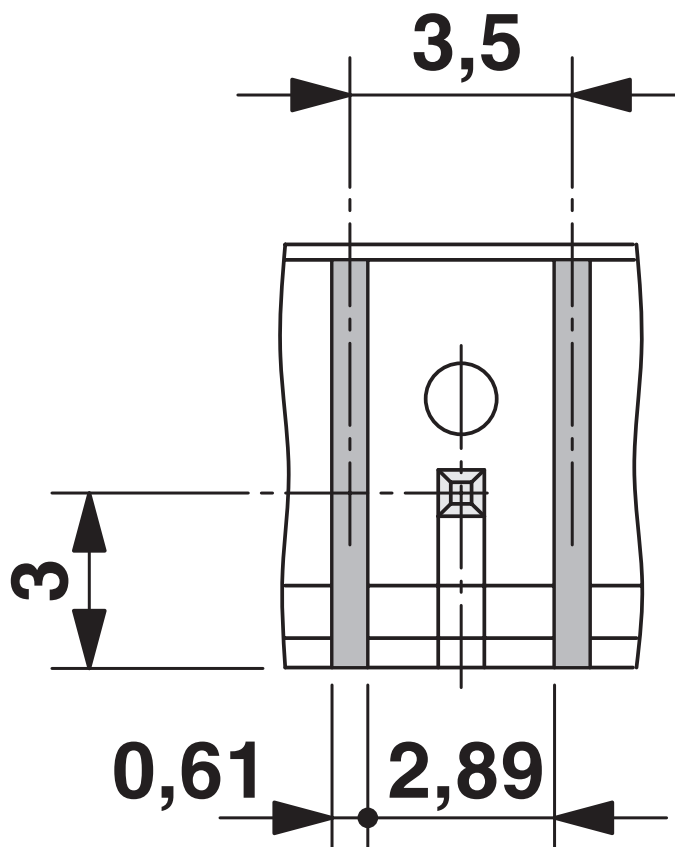
1961892

<https://www.phoenixcontact.com/us/products/1961892>

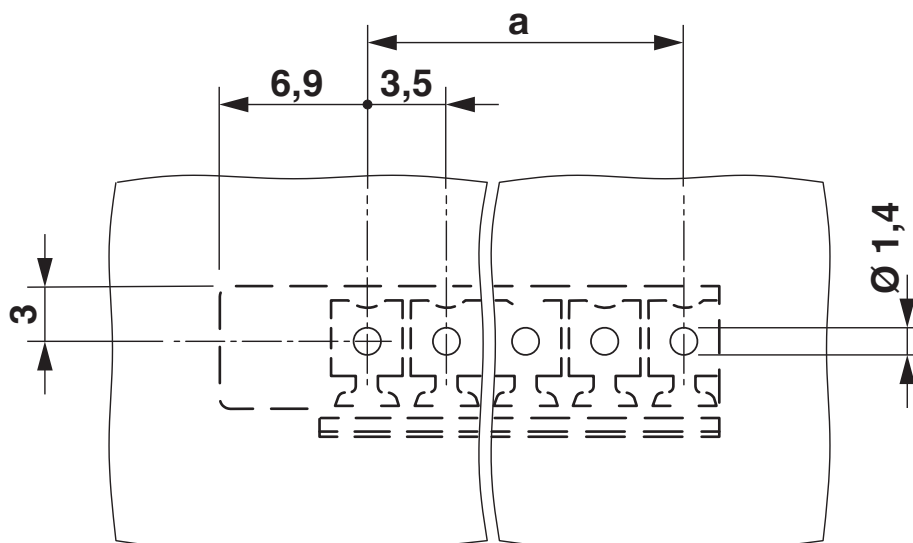


Drawings

Dimensional drawing



Drilling plan/solder pad geometry

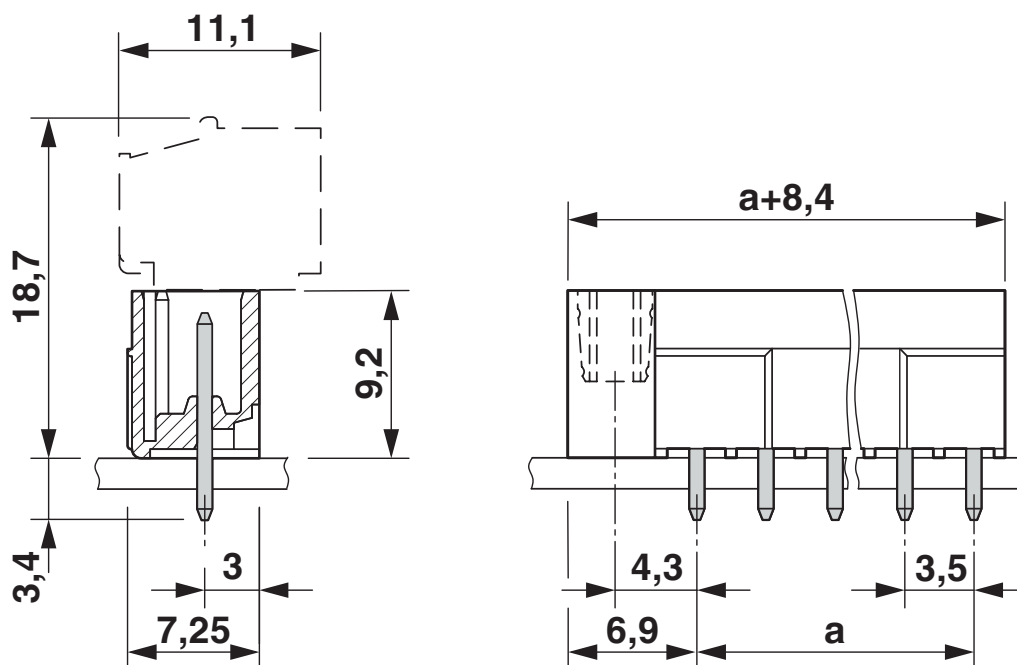


MCV 1,5/ 9-GFR-3,5 THT - PCB header

1961892

<https://www.phoenixcontact.com/us/products/1961892>

Dimensional drawing



MCV 1,5/ 9-GFR-3,5 THT - PCB header


1961892

<https://www.phoenixcontact.com/us/products/1961892>



Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1961892>

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

MCV 1,5/ 9-GFR-3,5 THT - PCB header



1961892

<https://www.phoenixcontact.com/us/products/1961892>

Classifications

ECLASS

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

ETIM

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

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

MCV 1,5/ 9-GFR-3,5 THT - PCB header



1961892

<https://www.phoenixcontact.com/us/products/1961892>

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%

MCV 1,5/ 9-GFR-3,5 THT - PCB header



1961892

<https://www.phoenixcontact.com/us/products/1961892>

Accessories

CP-MSTB - Coding profile

1734634

<https://www.phoenixcontact.com/us/products/1734634>

Coding profile, is inserted into the slot on the plug or inverted header, red insulating material



CP-MSTB NAT HT - Coding profile

1954359

<https://www.phoenixcontact.com/us/products/1954359>

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



MCV 1,5/ 9-GFR-3,5 THT - PCB header



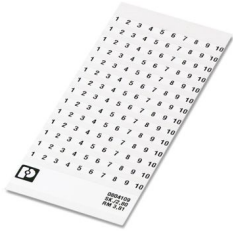
1961892

<https://www.phoenixcontact.com/us/products/1961892>

SK 3,81/2,8:FORTL.ZAHLEN - Marker card

0804109

<https://www.phoenixcontact.com/us/products/0804109>



Marker card, Sheet, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 .
.. 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width:
3.81 mm, lettering field size: 3.81 x 2.8 mm, Number of individual labels: 14

Phoenix Contact 2024 © - 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