

IPC 5/ 6-GFU-7,62 - PCB header



1708750

<https://www.phoenixcontact.com/pc/products/1708750>

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: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Socket, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: IPC 5/..-GFU, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm, number of solder pins per potential: 3, plug-in system: COMBICON PC 5, Pin connector pattern alignment: reversed, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

Your advantages

- Well-known mounting principle allows worldwide use
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Inverted header with socket contacts for touch-proof device outputs or PCB/PCB connections
- Screwable flange for superior mechanical stability
- Integrated double steel spring provides additional safety in the event of temperature and power fluctuations

Commercial Data

Item number	1708750
Packing unit	50 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Product Key	AADSCD
Catalog Page	Page 541 (C-1-2013)
GTIN	4046356089678
Weight per Piece (including packing)	19.86 g
Weight per Piece (excluding packing)	19.86 g
Customs tariff number	85366930
Country of origin	PL

IPC 5/ 6-GFU-7,62 - PCB header



1708750

<https://www.phoenixcontact.com/pc/products/1708750>

Technical Data

Product properties

Type	Inverted
Product line	COMBICON Connectors L
Product type	PCB headers
Product family	IPC 5/...-GFU
Number of positions	6
Pitch	7.62 mm
Number of connections	6
Number of rows	1
Mounting flange	Threaded flange
Number of potentials	6
Pin layout	Linear pinning
Solder pins per potential	3

Electrical properties

Nominal current I_N	41 A
Nominal voltage U_N	630 V
Degree of pollution	3
Rated voltage (III/3)	630 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

Flange

Tightening torque	0.3 Nm ... 0.7 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	hot-dip tin-plated
Metal surface contact area (top layer)	Tin (4 - 8 μm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 μm Sn)

Material data - housing

IPC 5/ 6-GFU-7,62 - PCB header

1708750

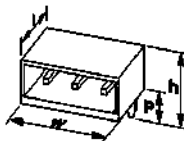
<https://www.phoenixcontact.com/pc/products/1708750>

Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
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

Notes

Notes on operation	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.
--------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Dimensions

Dimensional drawing	
Pitch	7.62 mm
Width [w]	45.72 mm
Height [h]	17.8 mm
Length [l]	30.1 mm
Installed height	12.8 mm
Solder pin length [P]	5 mm
Pin dimensions	1.2 x 0.8 mm

PCB design

Pin spacing	7.62 mm
Hole diameter	1.3 mm

Electrical tests

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	630 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	8 mm
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV

IPC 5/ 6-GFU-7,62 - PCB header



1708750

<https://www.phoenixcontact.com/pc/products/1708750>

minimum clearance value - non-homogenous field (III/2)	5.5 mm
minimum creepage distance (III/2)	5.5 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 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

IPC 5/ 6-GFU-7,62 - PCB header

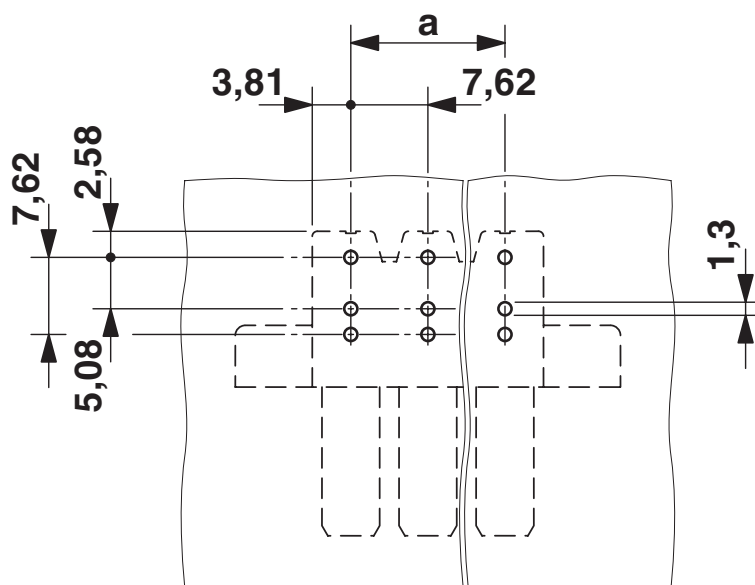
1708750

<https://www.phoenixcontact.com/pc/products/1708750>



Drawings

Drilling plan/solder pad geometry



IPC 5/ 6-GFU-7,62 - PCB header





1708750

<https://www.phoenixcontact.com/pc/products/1708750>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1708750>

 **EAC**
Approval ID: B.01687

 **cULus Recognized**
Approval ID: E60425-19920722

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
For 600 V applications, additional insulation is required on the solder pins	300 V	41 A	-	-
Use group C				
For 600 V applications, additional insulation is required on the solder pins	300 V	41 A	-	-
Use group D				
Alternative 1	600 V	5 A	-	-

 **UL Recognized**
Approval ID: E60425-19920722

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group F				
	600 V	41 A	-	-

IPC 5/ 6-GFU-7,62 - PCB header



1708750

<https://www.phoenixcontact.com/pc/products/1708750>

Classifications

ECLASS

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

ETIM

ETIM 8.0	EC002637
----------	----------

UNSPSC

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

IPC 5/ 6-GFU-7,62 - PCB header



1708750

<https://www.phoenixcontact.com/pc/products/1708750>

Environmental Product Compliance

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

IPC 5/ 6-GFU-7,62 - PCB header

1708750

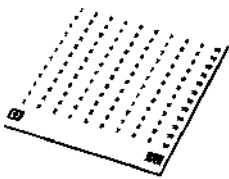
<https://www.phoenixcontact.com/pc/products/1708750>

Accessories

SK 7,62/3,8:FORTL.ZAHLEN - Marker card

0804549

<https://www.phoenixcontact.com/pc/products/0804549>

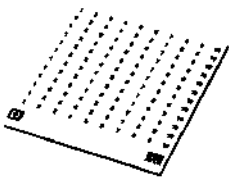


Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm

SK 3,8 REEL P7,62 WH CUS - Marker card

0825128

<https://www.phoenixcontact.com/pc/products/0825128>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: continuous x 3.8 mm

IPC 5/ 6-GFU-7,62 - PCB header

1708750

<https://www.phoenixcontact.com/pc/products/1708750>



SK U/3,8 WH:UNBEDRUCKT - Marker card

0803906

<https://www.phoenixcontact.com/pc/products/0803906>



Marker card, Din A4, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440

SK 3,8 WH:REEL - Marker strip

0805218

<https://www.phoenixcontact.com/pc/products/0805218>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 90000 mm, lettering field size: continuous x 3.8 mm, Number of individual labels: 210000

IPC 5/ 6-GFU-7,62 - PCB header

1708750

<https://www.phoenixcontact.com/pc/products/1708750>



IPC 5/ 6-STF-7,62 - PCB connector

1709199

<https://www.phoenixcontact.com/pc/products/1709199>



PCB connector, nominal cross section: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Pin, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: IPC 5/...-STF, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: Z1L Slotted Pozidriv, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

ISPC 5/ 6-STF-7,62 - PCB connector

1749010

<https://www.phoenixcontact.com/pc/products/1749010>



PCB connector, nominal cross section: 6 mm², color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Pin, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: ISPC 5/...-STF, pitch: 7.62 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: COMBICON PC 5, locking: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

Phoenix Contact 2023 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com