

# Printed-circuit board connector - IPC 5/ 3-G-7,62 - 1708394

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PCB header, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: IPC 5/...-G, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm, plug-in system: POWER COMBICON 5, Locking: without, type of packaging: packed in cardboard

The figure shows a 5-pos. version of the product

## 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
- ✓ Integrated double steel spring provides additional safety in the event of temperature and power fluctuations



## Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4046356089173

## Technical data

### Item properties

Brief article description	Feed-through header
Plug-in system	POWER COMBICON 5
Type of contact	Female connector
Range of articles	IPC 5/...-G
Pitch	7.62 mm
Number of positions	3
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	1
Number of connections	3

# Printed-circuit board connector - IPC 5/ 3-G-7,62 - 1708394

## Technical data

### Item properties

Number of potentials	3
Pin connector pattern alignment	Standard

### Electrical parameters

Nominal current	41 A
Nom. voltage	630 V
Rated voltage (III/3)	630 V
Rated voltage (III/2)	630 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 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	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

Housing color	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

### Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	30.1 mm
Width [ w ]	22.86 mm
Height [ h ]	17.8 mm
Pitch	7.62 mm
Height (without solder pin)	12.8 mm
Solder pin [P]	5 mm
Pin spacing	7.62 mm
Pin dimensions	0.8 x 1.2 mm

### Dimensions for PCB design

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## Technical data

### Dimensions for PCB design

Hole diameter	1.3 mm
Pin spacing	7.62 mm

### Packaging information

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

### General product information

Type of note	Notes on operation
Note	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.

### 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)	5.5 mm
Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	8 mm
Minimum creepage distance value (III/2)	5.5 mm
Minimum creepage distance value (II/2)	5.5 mm

### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
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
Contact resistance R <sub>1</sub>	0.5 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	0.5 mΩ
Impulse withstand voltage at sea level	9.8 kV

### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
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## Technical data

### Thermal tests (C)

Number of positions	12
Upper limiting temperature requirements <100 °C	Test passed

### Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 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
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

### Standards and Regulations

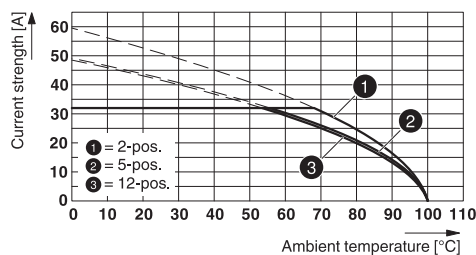
Connection in acc. with standard	EN-VDE
	CUL
Flammability rating according to UL 94	V0

### Environmental Product Compliance

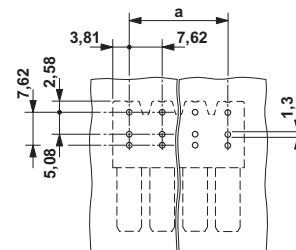
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Diagram



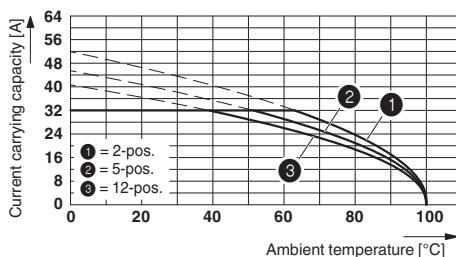
Drilling diagram



Type: IPC 5/...-ST-7,62 with IPC 5/...-G-7,62

# Printed-circuit board connector - IPC 5/ 3-G-7,62 - 1708394

Diagram



Type: ISPC 5/...-STGCL-7,62 with IPC 5/...-G-7,62

## 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 9.0	27440402

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

### 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

# Printed-circuit board connector - IPC 5/ 3-G-7,62 - 1708394

## Approvals

Approvals

EAC / cULus Recognized

Ex Approvals

## Approval details

EAC		B.01687
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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>	E60425-19920722
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	41 A	41 A	5 A

## Accessories

Accessories

Labeled terminal marker

Marker card - SK 7,62/3,8:FORTL.ZAHLEN - 0804549

Marker card, 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



Marker card - SK 3,8 REEL P7,62 WH CUS - 0825128

Marker card, 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



Shroud

## Printed-circuit board connector - IPC 5/ 3-G-7,62 - 1708394

### Accessories

Accessories - POWERCOMBICON PCB-SHIELD - 1968387



Accessories, number of positions: 1, pitch: 0 mm, contact surface: Tin

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### Terminal marking

Marker card - SK U/3,8 WH:UNBEDRUCKT - 0803906



Marker card, Sheet, 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

Marker strip - SK 3,8 WH:REEL - 0805218



Marker strip, Roll, white, unlabeled, can be labeled with: 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

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### Additional products

Printed-circuit board connector - IPC 5/ 3-ST-7,62 - 1709050



PCB connector, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: IPC 5/..-ST, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: POWER COMBICON 5, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - PC 5/ 3-G-7,62 - 1720479



PCB header, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: PC 5/..-G, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear three-way pinning, solder pin [P]: 5 mm, plug-in system: POWER COMBICON 5, Locking: without, type of packaging: packed in cardboard

## Printed-circuit board connector - IPC 5/ 3-G-7,62 - 1708394

### Accessories

#### Printed-circuit board connector - PC 5/ 3-GU-7,62 - 1720699



PCB header, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: PC 5/..-GU, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.2 mm, plug-in system: POWER COMBICON 5, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - PCV 5/ 3-G-7,62 - 1720589



PCB header, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: PCV 5/..-G, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 5 mm, plug-in system: POWER COMBICON 5, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - ISPC 5/ 3-STGCL-7,62 - 1748875



PCB connector, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: ISPC 5/..-STGCL, pitch: 7.62 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Locking clip: - without locking clip, plug-in system: POWER COMBICON 5, Locking: Clip locking, type of packaging: packed in cardboard

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