

# BCH-381HF- 8 GN - PCB header



5444518

<https://www.phoenixcontact.com/in/products/5444518>

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PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: pastel green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Pin, number of potentials: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: BCH-HF, pitch: 3.81 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, number of solder pins per potential: 1, plug-in system: BASICLINE 1,5, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

## Commercial Data

Item number	5444518
Packing unit	100 pc
Minimum order quantity	100 pc
Note	Made to Order (non-returnable)
Sales Key	AAB
Product Key	AABSYB
GTIN	4046356834407
Weight per Piece (including packing)	2.756 g
Weight per Piece (excluding packing)	2.4 g
Customs tariff number	85366930
Country of origin	CN

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## Technical Data

### Product properties

Type	Standard
Product line	COMBICON Connectors S
Product type	PCB headers
Product family	BCH-HF
Number of positions	8
Pitch	3.81 mm
Number of connections	8
Number of rows	1
Mounting flange	Threaded flange
Number of potentials	8
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)	320 V
Rated surge voltage (II/2)	2.5 kV

### Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

### Flange

Tightening torque	0.3 Nm
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### 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 (4 - 8 $\mu\text{m}$ Sn)
Metal surface contact area (middle layer)	Nickel (1.5 - 4 $\mu\text{m}$ Ni)
Metal surface soldering area (top layer)	Tin (4 - 8 $\mu\text{m}$ Sn)
Metal surface soldering area (middle layer)	Nickel (1.5 - 4 $\mu\text{m}$ Ni)

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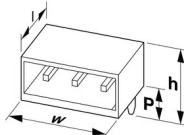
## Material data - housing

Color (Housing)	pastel green (6019)
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

## Material data – actuating element

Color ( )	( )
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## Dimensions

Dimensional drawing	
Pitch	3.81 mm
Width [w]	40.87 mm
Height [h]	10.55 mm
Length [l]	9.2 mm
Installed height	7.15 mm
Solder pin length [P]	3.4 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)	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 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)	1.5 mm
Rated insulation voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV

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minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 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
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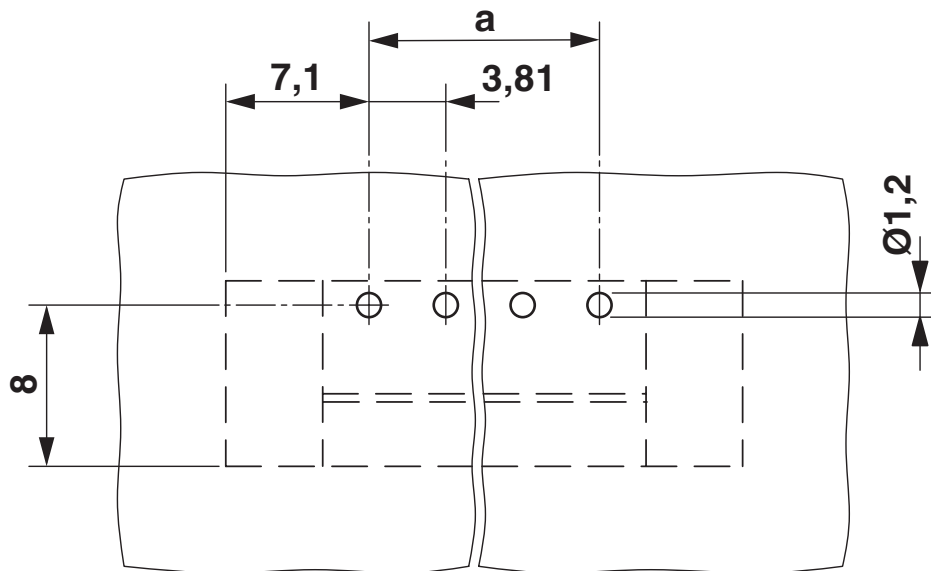


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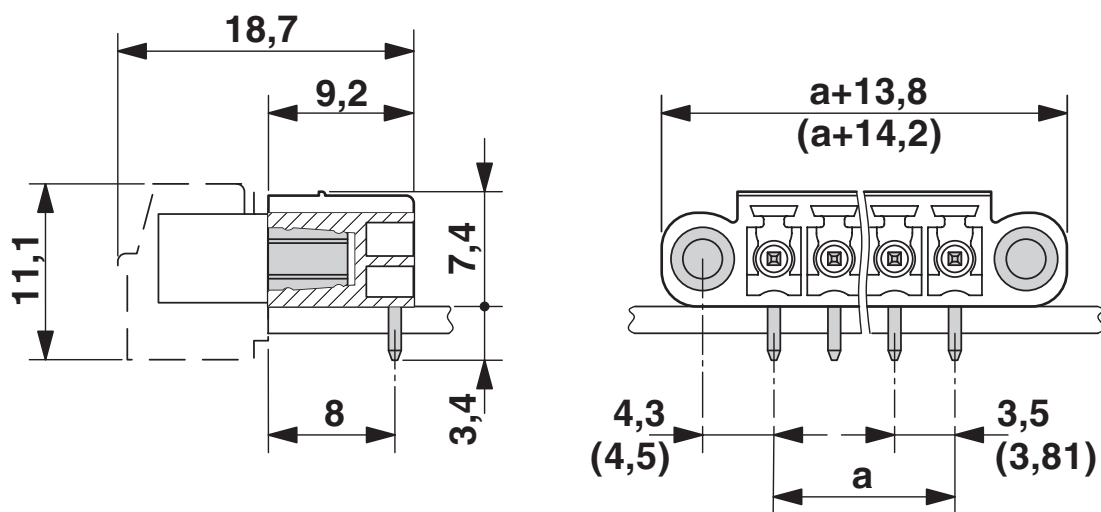
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## Drawings

Drilling plan/solder pad geometry



Dimensional drawing




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## Approvals

 **IECEE CB Scheme**  
Approval ID: DE1-65479

 **cULus Recognized**  
Approval ID: E60425-20071007

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
Use group B				
	250 V	8 A	-	-
Use group D				
	300 V	8 A	-	-

 **EAC**  
Approval ID: B.01687

 **VDE report with production monitoring**  
Approval ID: 40040694

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	160 V	8 A	-	0.2 - 1.5

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## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC002637
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental Product Compliance

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



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## Accessories

### CP-BC-M - Coding profile

5436160

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Coding profile



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### B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/in/products/1051993>

Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm



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## SK 3,5/2,8:FORTL.ZAHLEN - Marker card

0804073

<https://www.phoenixcontact.com/in/products/0804073>



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 99, mounting type: adhesive, for terminal block width: 3.5 mm, lettering field size: 3.5 x 2.8 mm

## SK U/2,8 WH:UNBEDRUCKT - Marker card

0803883

<https://www.phoenixcontact.com/in/products/0803883>



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 2.8 mm, Number of individual labels: 3600

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