

BCH-350H- 6 BK - PCB header



5452012

<https://www.phoenixcontact.com/us/products/5452012>

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PCB headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, contact connection type: Pin, number of potentials: 6, number of rows: 1, number of positions: 6, number of connections: 6, product range: BCH-H, pitch: 3.5 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: without, mounting: without, type of packaging: packed in cardboard

Commercial data

Item number	5452012
Packing unit	100 pc
Minimum order quantity	100 pc
Note	Made to order (non-returnable)
Sales key	AA02
Product key	AABSXA
GTIN	4046356855693
Weight per piece (including packing)	1.547 g
Weight per piece (excluding packing)	1.22 g
Customs tariff number	85366930
Country of origin	CN

BCH-350H- 6 BK - PCB header



5452012

<https://www.phoenixcontact.com/us/products/5452012>

Technical data

Product properties

Type	Standard
Product line	COMBICON Connectors S
Product type	PCB headers
Product family	BCH-H
Number of positions	6
Pitch	3.5 mm
Number of connections	6
Number of rows	1
Mounting flange	without
Number of potentials	6
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
Contact resistance	2 mΩ
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

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 μm Sn)
Metal surface contact area (middle layer)	Nickel (1.5 - 4 μm Ni)
Metal surface soldering area (top layer)	Tin (4 - 8 μm Sn)
Metal surface soldering area (middle layer)	Nickel (1.5 - 4 μm Ni)

Material data - housing

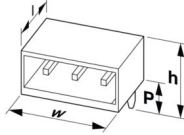
BCH-350H- 6 BK - PCB header

5452012

<https://www.phoenixcontact.com/us/products/5452012>

Color (Housing)	black (9005)
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

Dimensional drawing	
Pitch	3.5 mm
Width [w]	22.4 mm
Height [h]	10.8 mm
Length [l]	9.2 mm
Installed height	7.4 mm
Solder pin length [P]	3.4 mm
Pin dimensions	0.8 x 0.8 mm

PCB design

Hole diameter	1.2 mm
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Mechanical tests

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Specification	IEC 60512-7:1993-08 (Polarization)
Result	Test passed

Contact holder in insert

BCH-350H- 6 BK - PCB header



5452012

<https://www.phoenixcontact.com/us/products/5452012>

Specification	IEC 60512-8:1993-01
Contact holder in insert Requirements >20 N	Test passed

Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	7 N
Withdraw strength per pos. approx.	4 N

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	20

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	$10^{12} \Omega$

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

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

BCH-350H- 6 BK - PCB header



5452012

<https://www.phoenixcontact.com/us/products/5452012>

Durability test

Specification	IEC 60512-5:1992-08
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	2 mΩ
Contact resistance R ₂	2.5 mΩ
Insertion/withdrawal cycles	25

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	1.39 kV

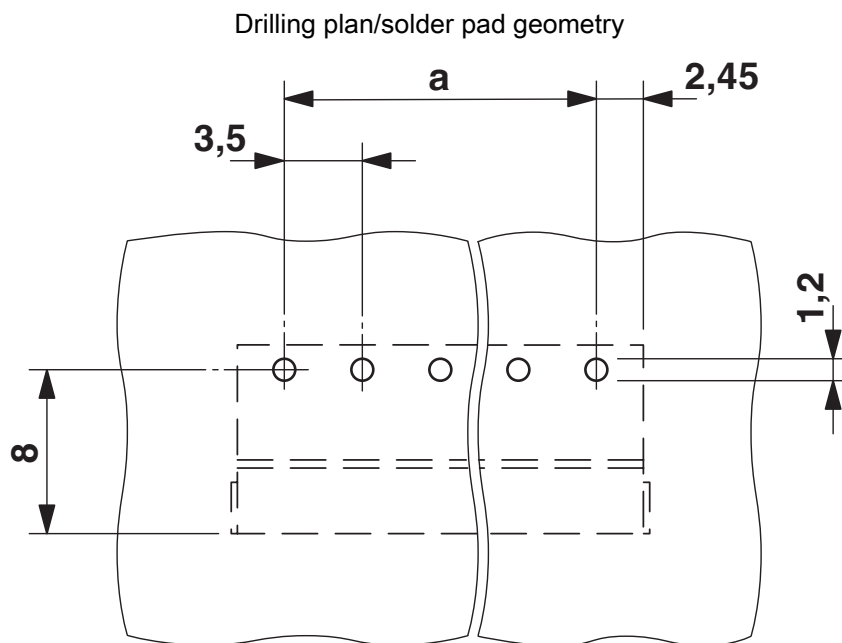
Ambient conditions

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

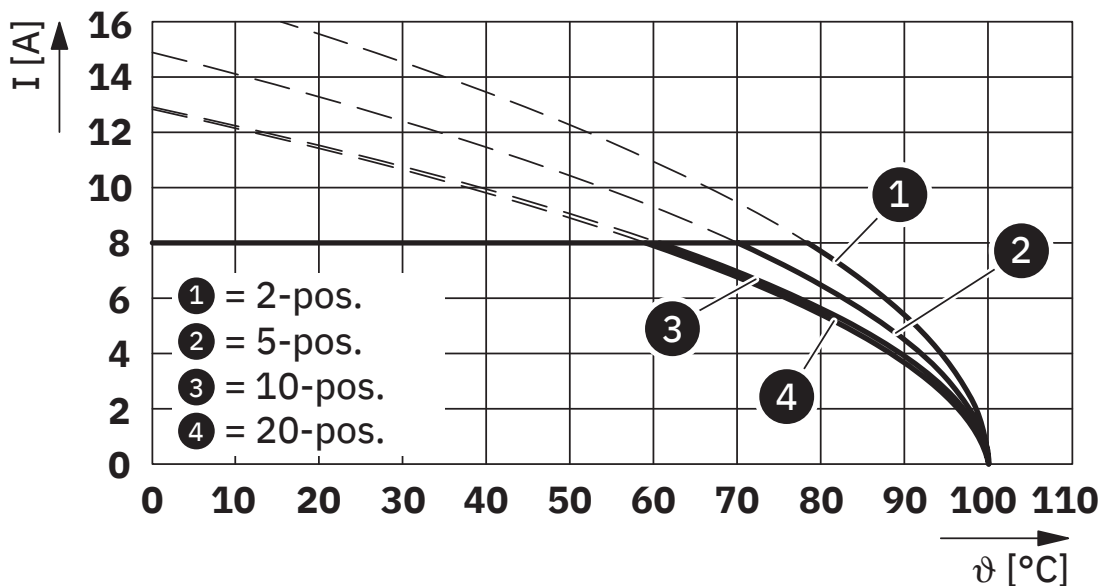
Packaging specifications

Type of packaging	packed in cardboard
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Drawings



Diagram



Type: BCP-350-... with BCH-350H-...

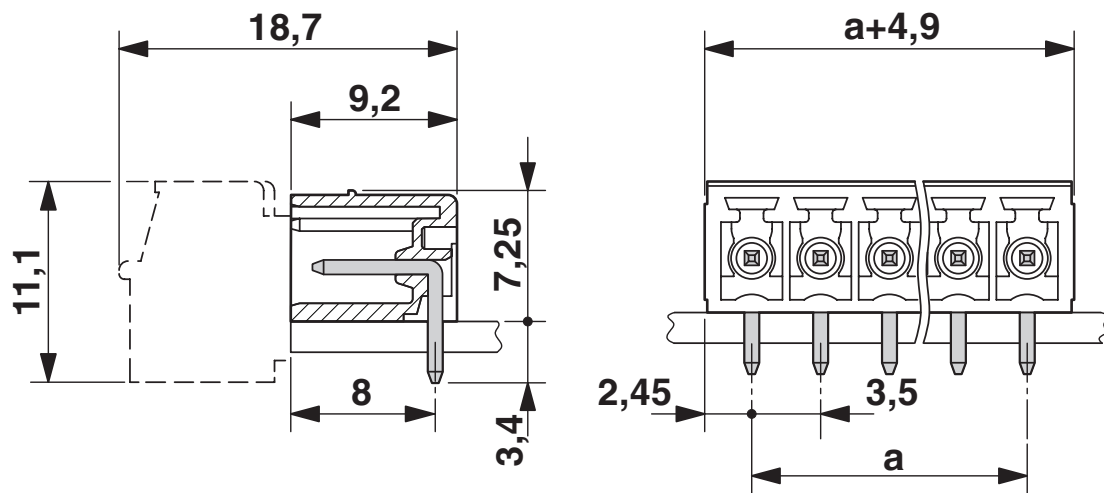
BCH-350H- 6 BK - PCB header



5452012

<https://www.phoenixcontact.com/us/products/5452012>

Dimensional drawing



BCH-350H- 6 BK - PCB header





5452012

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/5452012>

 cULus Recognized Approval ID: E60425-20071007				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	250 V	8 A	-	-
Use group D	300 V	8 A	-	-

 VDE Gutachten mit Fertigungsüberwachung Approval ID: 40040694				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	160 V	8 A	-	0.2 - 1.5

BCH-350H- 6 BK - PCB header



5452012

<https://www.phoenixcontact.com/us/products/5452012>

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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BCH-350H- 6 BK - PCB header



5452012

<https://www.phoenixcontact.com/us/products/5452012>

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e No hazardous substances above threshold values
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BCH-350H- 6 BK - PCB header

5452012

<https://www.phoenixcontact.com/us/products/5452012>



Accessories

CP-BC-M - Coding profile

5436160

<https://www.phoenixcontact.com/us/products/5436160>

Coding profile



B-STIFT - Marker pen

1051993

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



BCH-350H- 6 BK - PCB header

5452012

<https://www.phoenixcontact.com/us/products/5452012>



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

0804073

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Marker card, Sheet, 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, Number of individual labels: 14

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

0803883

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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 2.8 mm, Number of individual labels: 3600

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