

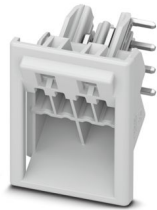
ICC20-H/4R3,5-7035 - PCB header



1084012

<https://www.phoenixcontact.com/us/products/1084012>

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PCB headers, color: light grey, nominal current: 8 A, rated voltage (III/2): 150 V, contact surface: Tin, contact connection type: Pin, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...H/...R3,5, pitch: 3.5 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.65 mm, number of solder pins per potential: 1, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting: without, type of packaging: Box packaging, Product with pin output on right side

Your advantages

- Variable coding, for reliable protection against incorrect connection
- Designed for integration into the wave soldering process
- Easy and fast push-in mounting of assembled printed-circuit boards, thanks to stable guide rails
- Quick and easily coded when initially connecting the connector and header

Commercial data

Item number	1084012
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC09
Product key	ACHAFB
GTIN	4055626820828
Weight per piece (including packing)	3.903 g
Weight per piece (excluding packing)	2.56 g
Customs tariff number	85366930
Country of origin	PL

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Technical data

Product properties

Product type	PCB headers
Product family	ICC...-H/..R3,5
Type	Header perpendicular to the PCB
Number of positions	4
Pitch	3.5 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Nominal current I_N	8 A
Degree of pollution	3
Contact resistance	1.76 mΩ
Rated voltage (III/3)	150 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	150 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	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 terminal point (top layer)	Tin (2 - 4 μm Sn)
Metal surface terminal point (middle layer)	Nickel (1.3 - 3 μm Ni)
Metal surface contact area (top layer)	Tin (2 - 4 μm Sn)
Metal surface contact area (middle layer)	Nickel (1.3 - 3 μm Ni)
Metal surface soldering area (top layer)	Tin (2 - 4 μm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 μm Ni)

Material data - housing

Color (Housing)	light grey (7035)
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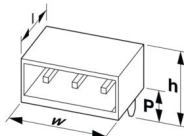
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Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Notes

Assembly instruction:	Refer to the data sheet for the range in the download area.
General	Further information and detailed dimensions are available in the download area.

Dimensions

Dimensional drawing	
Pitch	3.5 mm
Width [w]	20 mm
Height [h]	22.4 mm
Length [l]	20.22 mm
Solder pin length [P]	3.65 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 60512-13-5:2006-02
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Result	Test passed
Contact holder in insert	
Specification	IEC 60512-15-1:2008-05
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.	7.2 N
Withdraw strength per pos. approx.	5.4 N

Electrical tests

Thermal test Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	5

Insulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 3 TΩ

Air clearances and creepage distances	
Insulating material group	I
Rated insulation voltage (III/3)	150 V
Rated surge voltage (III/3)	2.5 kV
Rated insulation voltage (III/2)	150 V
Rated surge voltage (III/2)	2.5 kV
Rated insulation voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 kV

Environmental and real-life conditions

Vibration test	
Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

Durability test	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	1.76 mΩ
Contact resistance R ₂	1.82 mΩ
Insertion/withdrawal cycles	25

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Insulation resistance, neighboring positions	> 3 TΩ
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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	1.54 kV

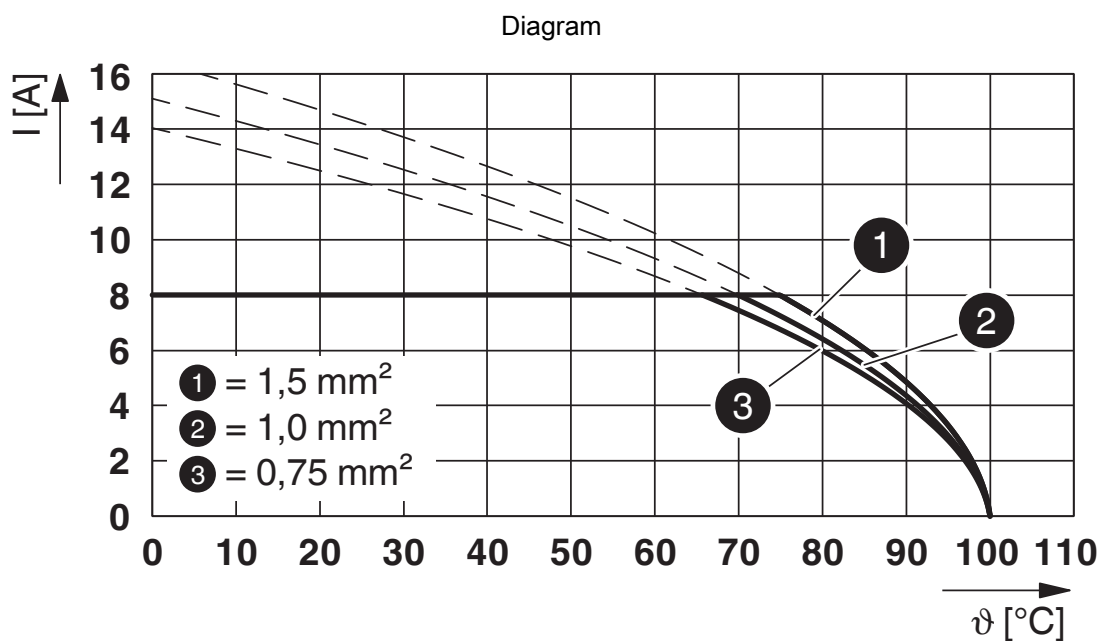
Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 55 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	Box packaging
Outer packaging type	Carton

Drawings



Type: ICC20(25)-PSC1,5/...-3,5-... with ICC20(25)-H/...L(R)3,5-...

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1084012>

<div> cULus Recognized Approval ID: E60425-20181123</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 C				
	50 V	8 A	-	-

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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC002637
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UNSPSC

UNSPSC 21.0	39121400
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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%

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Accessories

ICC20-PSC1,5/4-3,5-AA-7035 - PCB connectors

1084020

<https://www.phoenixcontact.com/us/products/1084020>



PCB connector, nominal cross section: 1.5 mm², color: light grey, nominal current: 8 A, rated voltage (III/2): 150 V, contact surface: Tin, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: ICC...-PSC1,5/...-3,5, pitch: 3.5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, locking: without, mounting: without, type of packaging: packed in cardboard

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