

2199663
<https://www.phoenixcontact.com/us/products/2199663>

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PCB headers, nominal cross section: 2.5 mm², color: black, nominal current: 16 A, rated voltage (III/2): 630 V, contact surface: Sn, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: GMSTBO 2,5 HV, pitch: 7.25 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.1 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5 advanced, Pin connector pattern alignment: Orthogonal, locking: without, mounting: without, type of packaging: packed in cardboard, Product with pin output on left side

Your advantages

- Suitable for reflow soldering processes

Commercial data

Item number	2199663
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC08
Product key	ACHADB
Catalog page	Page 510 (C-1-2013)
GTIN	4046356495295
Weight per piece (including packing)	3.998 g
Weight per piece (excluding packing)	3.998 g
Customs tariff number	85366930
Country of origin	PL

GMSTBO 2,5 HV/ 3-GL-7,25 THR - PCB header



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Technical data

Product properties

Product type	PCB headers
Product family	GMSTBO 2,5 HV
Type	Standard
Number of positions	3
Pitch	7.25 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Pin layout	Linear pinning
Solder pins per potential	1

Data management status

Article revision	02
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Electrical properties

Nominal current I_N	16 A
Nominal voltage U_N	400 V
Contact resistance	1.3 m Ω
Rated voltage (III/3)	400 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)	630 V
Rated surge voltage (II/2)	6 kV

Mounting

Mounting type	THR soldering
Pin layout	Linear pinning

Material specifications

Material data - contact

Contact material	Cu alloy
Surface characteristics	Tin-plated

Material data - housing

Color (Housing)	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

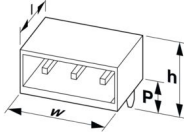
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Dimensions

Dimensional drawing		
Pitch		7.25 mm
Width [w]		19.95 mm
Height [h]		23.37 mm
Length [l]		15.65 mm
Installed height		21.27 mm
Solder pin length [P]		2.1 mm
Pin dimensions		1 x 1 mm

PCB design	
Hole diameter	1.5 mm

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
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.	5 N
Withdraw strength per pos. approx.	3.5 N

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Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	3

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 10 TΩ

Air clearances and creepage distances |

Insulating material group	IIIa
Rated insulation voltage (III/3)	400 V
Rated surge voltage (III/3)	6 kV
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	6 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
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	7.3 kV
Contact resistance R ₁	1.3 mΩ
Contact resistance R ₂	1.5 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 10 TΩ

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	3.31 kV

Ambient conditions

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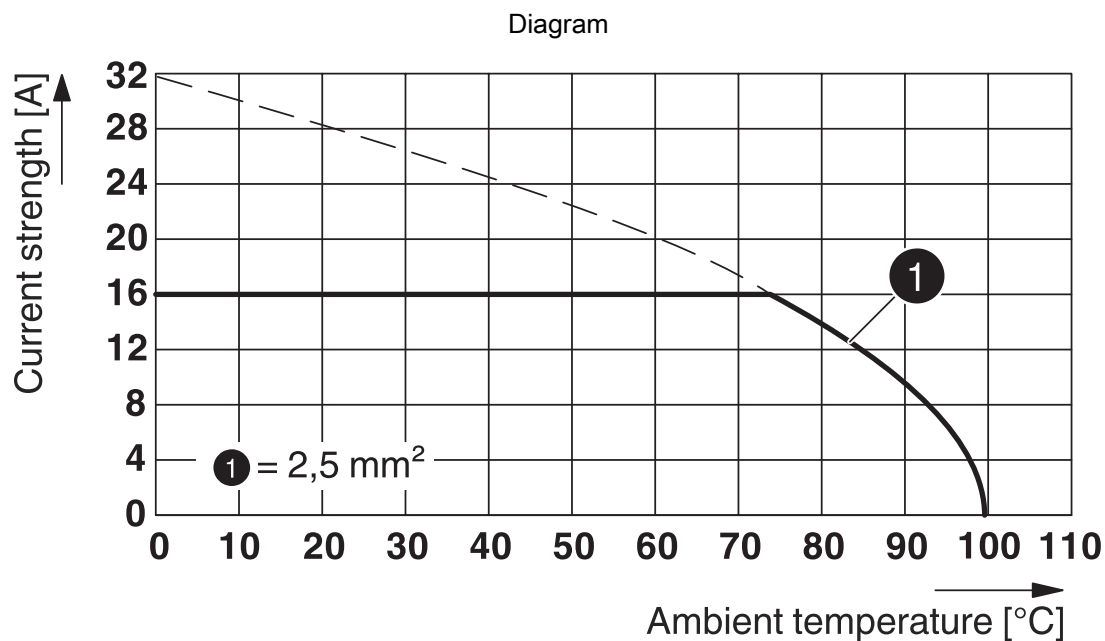
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Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard
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Drawings



Type: GMSTBT 2,5 HV/...-ST-7,25 GY7035 with GMSTBO 2,5 HV/...-GR(L)-7,25 THR

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2199663>

 cULus Recognized Approval ID: E60425-19931013				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	16 A	-	-
Use group C	150 V	16 A	-	-
Use group D	300 V	10 A	-	-

 VDE Gutachten mit Fertigungsüberwachung Approval ID: 40037875				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	630 V	16 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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