

MDSTB 2,5/ 8-G1-5,08 AU - PCB header

1783902

<https://www.phoenixcontact.com/us/products/1783902>

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The figure shows a 10-pos. version with 20 contacts

PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Au, contact connection type: Pin, number of potentials: 16, number of rows: 2, number of positions: 8, number of connections: 16, product range: MDSTB 2,5/..-G1, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.3 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting method: no, type of packaging: packed in cardboard

Your advantages

- Gold-plated contacts ensure transfer quality remains stable over the long term
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Easy PCB replacement thanks to plug-in modules
- Well-known mounting principle allows worldwide use
- Conductor connection on several levels enables higher contact density

Commercial data

Item number	1783902
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA03
Product key	AACSFA
GTIN	4017918122218
Weight per piece (including packing)	14.702 g
Weight per piece (excluding packing)	13.821 g
Customs tariff number	85366930
Country of origin	GR

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Technical data

Product properties

Product type	PCB headers
Product family	MDSTB 2,5/...-G1
Product line	COMBICON Connectors M
Number of positions	8
Pitch	5.08 mm
Number of connections	16
Number of rows	2
Number of potentials	16
Mounting type	without
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Properties

Nominal current I_N	10 A
Nominal voltage U_N	320 V
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 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	Completely gold-plated
Metal surface contact area (top layer)	Gold (0.8 μm - 1.4 μm Au)
Metal surface contact area (middle layer)	Nickel (2 μm - 4 μm Ni)
Metal surface soldering area (top layer)	Gold (0.8 μm - 1.4 μm Au)
Metal surface soldering area (middle layer)	Nickel (2 μm - 4 μm Ni)

Material data - housing

Color (Housing)	green (6021)
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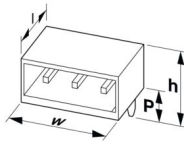
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Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Notes

Notes on operation	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.
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Dimensions

Dimensional drawing	
Pitch	5.08 mm
Width [w]	42.2 mm
Height [h]	31.8 mm
Length [l]	22 mm
Installed height	28.5 mm
Solder pin length [P]	3.3 mm
Pin dimensions	1 x 1 mm

PCB design

Hole diameter	1.4 mm
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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)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm

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Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

Environmental and real-life conditions

Ambient conditions

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

Packaging specifications

Type of packaging	packed in cardboard
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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1783902>

 cULus Recognized Approval ID: E60425-19931011				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	300 V	15 A	-	-
D	300 V	10 A	-	-

 VDE approval of drawings Approval ID: 40050648				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	250 V	10 A	-	-

 CSA Approval ID: 2585950				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	300 V	15 A	-	-
D	300 V	15 A	-	-

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Classifications

ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

ETIM

ETIM 10.0	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
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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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