

1796403

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PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, contact surface: Sn, contact connection type: Pin, number of rows: 1, number of positions: 10, product range: MSTBV 2,5/..-GF-EX, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5 EX, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting method: Threaded flange, type of packaging: packed in cardboard

Your advantages

- · Satisfies the more stringent safety requirements of "Ex eb" protection according to IEC 60079-7 for potentially explosive areas
- · Screwable flange for superior mechanical stability
- · Vertical connection enables multi-row arrangement on the PCB
- · Well-known mounting principle allows worldwide use
- · Closed contour for optimum stability of the plug-in connection

Commercial data

Item number	1796403
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA03
Product key	AACSMK
Catalog page	Page 375 (C-1-2013)
GTIN	4046356636513
Weight per piece (including packing)	4.678 g
Weight per piece (excluding packing)	4.031 g
Customs tariff number	85366930
Country of origin	DE



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Technical data

Product properties

Product type	PCB headers
Product family	MSTBV 2,5/GF-EX
Product line	COMBICON Connectors M
Туре	Standard
Number of positions	10
Pitch	5.08 mm
Number of rows	1
Mounting flange	Threaded flange
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Properties

Nominal current I _N	12 A
Nominal voltage U _N	176 V
Rated current / conductor cross section	12 A/2.5 mm²

Ex data

Ex approval

Identification	0344® II 2GD / Ex eb IIC Gb
EU-type examination certificate	KEMA 10ATEX0196 U
IECEx certificate	IECEx KEM 10.0093U

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning
Flange	

0.3 Nm

Tightening torque

Attachment on the PCB	
Tightening torque	0.3 Nm
Screw	Sheet metal screw ISO 1481-ST 2,2x6,5 C or ISO 7049-ST 2,2x6,5 C

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



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Metal surface contact area (top layer)	Tin (3 - 5 µm Sn)
Metal surface contact area (middle layer)	Nickel (1.3 - 3 μm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 µm Ni)

Material data - housing

Color (Housing)	green (6021)
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.

Dimensions

Dimensional drawing	h h
Pitch	5.08 mm
Width [w]	60.96 mm
Height [h]	15.9 mm
Length [I]	8.6 mm
Installed height	12 mm
Solder pin length [P]	3.9 mm
Pin dimensions	1 x 1 mm
PCB design	
Hole diameter	1.4 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-60 °C 110 °C
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C



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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/1796403

(Ex)	ATEX Approval ID: KEMA 10ATEX0196 U				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²	
	176 V	12 A	-	0.2 - 2.5	

II (IEĈEx	IECEx Approval ID: IECEx KEM 10.0093U				
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
		176 V	12 A	-	0.2 - 2.5

(III)	CCC Approval ID: 2021122313114375



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Classifications

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	ECLASS-13.0	27460201
ETIM		
	ETIM 9.0	EC002637
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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