

1796681

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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 potentials: 4, number of rows: 1, number of positions: 4, number of connections: 4, product range: GMSTBV 2,5/..-GF-EX, pitch: 7.62 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
- · Maximum flexibility when it comes to device design one header for connectors with different connection technologies
- · Well-known mounting principle allows worldwide use
- · Larger pitch for increased voltage requirements
- · Vertical connection enables multi-row arrangement on the PCB

### Commercial data

Item number	1796681
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA03
Product key	AACSJM
Catalog page	Page 383 (C-1-2013)
GTIN	4046356636803
Weight per piece (including packing)	3.375 g
Weight per piece (excluding packing)	3.09 g
Customs tariff number	85366930
Country of origin	DE



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# Technical data

## Product properties

Product type	PCB headers
Product family	GMSTBV 2,5/GF-EX
Product line	COMBICON Connectors M
Туре	Standard
Number of positions	4
Pitch	7.62 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Mounting flange	Threaded flange
Pin layout	Linear pinning
Solder pins per potential	1

# Electrical properties

### **Properties**

•	
Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	352 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	
Tightening torque	0.3 Nm
Attachment on the PCB	
Tightoning torque	0.2 Nm

### Tightening torque

righterming torque	0.0 11111
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



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Contact material	Cu alloy
Surface characteristics	Tin-plated
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

switching po	nce with IEC 61984, COMBICON connectors have no ower (COC). During designated use, they must not be or disconnected when carrying voltage or under load.
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## Dimensions

Dimensional drawing	h h
Pitch	7.62 mm
Width [w]	41.06 mm
Height [h]	12.5 mm
Length [I]	12 mm
Installed height	8.6 mm
Solder pin length [P]	3.9 mm
Pin dimensions	11 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



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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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# **Approvals**

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cULus Recognized Approval ID: E60425-19931013				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	15 A	-	-
Use group D				
	300 V	10 A	-	-

<b>(Ex</b> )	ATEX Approval ID: KEMA 10ATEX0196 U					
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>	
		352 V	12 A	-	0.2 - 2.5	

II ( IEĈEX	IECEx Approval ID: IECEx I	KEM 10.0093U			
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		352 V	12 A	-	0.2 - 2.5

<b>(II)</b>	CCC
w.	Approval ID: 2021122313114375



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# Classifications

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	ECLASS-13.0	27460201
ΕΊ	ГІМ	
	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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